

# AFRICA

## AIRWAY MANUAL

Issue Date 26 SEP 19

Regions covered in the E-AWM Africa coverage are:

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ALGERIA	GHANA	REUNION
ANGOLA	GUINEA REP.	RWANDA
ASCENSION I	KENYA	SEYCHELLES
BOTSWANA	LESOTHO	SIERRA LEONE
BURUNDI	LIBERIA	SOMALIA
CANARY IS	LIBYA	SOUTH AFRICAN REP.
CAPE VERDE	MADAGASCAR	SUDAN
CHAGOS ARCHIPELAGO	MALAWI	TANZANIA
COMOROS	MAURITIUS	TUNISIA
CONGO, D.R. OF	MAYOTTE	UGANDA
DAKHLA/LAAYOUNE	MELILLA (SPAIN)	WEST AFRICA
DJIBOUTI	MOROCCO	ZAMBIA
EGYPT	MOZAMBIQUE	ZIMBABWE
ERITREA	NAMIBIA	
ESWATINI	NIGERIA	
ETHIOPIA		

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# Change Notices



# Change Notices

## Chart Change Notices

**MID AREA**

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**ENROUTE CHARTS**
**GENERAL**

According to Amendment 85 to ICAO Annex 10 all ACAS units shall be compliant with version 7.1 after 1 January 2017.

**EGYPT**

ATS ROUTE SYSTEM revised within Cairo FIR. For details refer to SUPPL A (H/L)-2A.  
**ME HL-2, ME HI-1, A HL-2, A HL-4, A HI-5, A HI-7, ME HL-3.**

**GREECE**

Information published by Turkish NOTAMS A0035/19, A0038/19, A0039/19 and Greece NOTAMS A0024/19, A0025/19, A0026/19 are not incorporated in Jeppesen Charts ..

**MALTA**

FRA (Free Route Airspace) within Malta UIR. Lower limit FL305. **DTTA 10-1.**

**TURKEY**

Information published by Turkish NOTAMS A0035/19, A0038/19, A0039/19 and Greece NOTAMS A0024/19, A0025/19, A0026/19 are not incorporated in Jeppesen Charts ..

THE FOLLOWING AIRWAYS ARE SUSPENDED:

A/UA16, Yalova VORDME (YAA) to Afyon VORDME (KFK),

L/UL619, Afyon VORDME to YASEN,

L/UL620, Yalova VORDME to Afyon VORDME,

N/UN644, MOPIN (N4127.9 E02942.6) to ADUMU,

T/UT32, Cubuk VORDME (BUK) to EVNOT,  
T/UT327, RIMBO (N4122.9 E02833.1) - TUDBU,

T/UT338, EDASA (N3927.6 E03007.5) - TEKDO,

UL606, Tekirdag VORDME (EKI) to Afyon VORDME,

W/UW107, TEVNI (N4135.5 E03021.8) - GUMRU,

W/UW714, MISRO (N3957.2 E02948.1) to Afyon VORDME,

W/UW715, Yenisehir VORDME (BRY) to Afyon VORDME. **E HI-10, E HI-9, ME HL-1, ME HI-1, E LO-15, LTBA 10-1, LTAC 10-1.**

**ALGERIA**
**ATS ROUTES changed:**

A/UA29, TAGIG CRP estbld at N3100.0 W00121.8 and BESBA withdrawn; Beni Abbes VORDME (BBS) - TAGIG - AGREB - El Bayadh VORDME (BAY), 74/66/138NM. **A HL-1, A HI-2.**

B/UB727, TINVI CRP estbld at N2124.6 E00300.0; TERAS - TINVI - RAMAD, 77/37NM. **A HL-3, A HL-4, A HI-2.**

G/UG26, EKRAK CRP estbld at N3100.0 E00035.0 and GOLIB withdrawn; Timimoun VORDME (TIO) - EKRAK - El Bayadh VORDME (BAY), 108/165NM. **A HL-1, A HI-2.**

J/UJ8, AMTIK CRP estbld at N2751.3 E00300.0; In Salah VORDME (NSL) - AMTIK - SIHAR, 45/47NM. **A HL-1, A HL-3.**

J/UJ41, BASID CRP estbld at N2728.1 E00126.8 and ARSEM CRP at N2720.9

**MID AREA**

E00300.0; Adrar VORDME (ADR) - BASID - In Salah VORDME (NSL) - ARSEM - OUCIF, 90/58/27/109NM. **A HL-1, A HL-3, A HL-4.**

J/UJ60, DIVEM CRP estbld at N2201.9 E00300.0; Bordj Mokhtar VORDME (MOK) - DIVEM - Tamenghasset VORDME (TMS), 121/144NM. **A HL-3, A HL-4.**

J/UJ62, REKDA CRP estbld at N2629.6 E00300.0; In Salah VORDME (NSL) - REKDA - Tamenghasset VORDME (TMS), 53/258NM. **A HL-3, A HL-4.**

UB31, MOGIL (N3807.9 E00312.1) - Zemmouri VORDME (ZEM), S-bound MAA FL450; N-bound MAA FL280. **E HI-7, DAAG 10-1.**

UJ67 estbld; TAGIG CRP at N3100.0 W00121.8 - IBNOD CRP at N3146.2 E00130.0 - Noumerat VORDME (GHA) CRP, 072°/252°, 154/122NM, MEA FL110, cruising levels NON-standard, EVEN levels E-bound. **A HL-1.**

UM608, El Bayadh VORDME (BAY) to ROFER realigned; El Bayadh VORDME - MOGAR CRP at N3153.0 E00111.4 - TAMUZ CRP at N3100.0 E00114.5 - TISIR CRP at N3009.6 E00117.5 - ABDIT CRP at N2946.1 E00118.9 - BASID CRP at N2728.1 E00126.8 - ROFER, 110/53/51/24/138/240NM, EVEN levels S-bound. **A HL-1, A HL-3, A HI-2.**

UM629, SIRIN (N2915.0 W00500.2) withdrawn; BAGBO - MERAT, 157°/337°, 154NM. **A HL-1, A HL-3, A HI-2.**

UM986, TAGIG CRP estbld at N3100.0 W00121.8 and BESBA withdrawn; Beni Abbes VORDME (BBS) - TAGIG - AGREB - El Bayadh VORDME (BAY), 74/66/138NM. **A HL-1, A HI-2.**

UM999, MOGAR CRP estbld at N3153.0 E00111.4 and SEFRA withdrawn; MEZAB - MOGAR, 318°/138°, 24NM; MOGAR - ARIAM, 310°/129°, 186NM. **A HL-1, A HI-2.**

UR990, ABDIT CRP estbld at N2946.1 E00118.9; Timimoun VORDME (TIO) - ABDIT - RIAME, 64/11NM. **A HL-1, A HI-2.**

**ATS ROUTES (undesigned) changed:**

EXTENDED; TOBUK (N2156.1 E00918.0) CRP - Djanet VORDME (DJA), 002°/183°, 141NM; Djanet VORDME - TWARG, MORA withdrawn; TOBUK to TWARG, MEA FL260, MAA FL290, cruising levels NON-standard, EVEN levels N-bound, ufn. **A HL-4/5BD, A HI-3/4.**

ALGIERS CENTRAL SECTOR TMA redesignated to Class A/D Airspace. (N37 E001). **DAAG 10-1.**

ALGIERS CTA redesignated to TMA. (N36 E002). **DAAG 10-1.**

ALGIERS NORTHEAST SECTOR TMA redesignated to Class D Airspace. (N39 E008). **DAAG 10-1.**

**CANARY IS**
**ATS ROUTES changed:**

A873, Gran Canaria VORDME (GDV) to UDATI, cruising levels chgd to NON-standard, EVEN levels SW-bound. **A HL-1.**

UN871, AGUMO (N2542.6 W01835.8) - VIDRI, MEA FL150. **A HL-3.**

UZ526, Gran Canaria VORDME (GDV) - MERAN, cruising levels chgd to NON-standard, EVEN levels SW-bound. **A HL-1.**

**EGYPT**
**ATS ROUTES changed:**

G183, PASOS (N3213.0 E03306.0) to Taba VORDME (TBA), withdrawn ufn. **SUPPL A (HL)-2A.**

M872, El Daba VORDME (DBA) - Fayoum VORDME (FYM); SEMRU to Hurghada VORDME (HGD); above FL255 one-way SE-bound only. **E HI-10, SUPPL A HL-2A.**

**MID AREA**
**JORDAN**
**ATS ROUTES changed:**

- A412, DAXEN (N3244.7 E03741.1) - ZELAF, MEA FL220, until 01 Dec 19. **ME HL-2.**
- G662, ALKOT (N3132.9 E03711.4) to BUSRA, suspended until 01 Dec 19. **ME HL-2.**
- L200, DAXEN (N3244.7 E03741.1) to PASIP, MEA FL220, until 01 Dec 19. **ME HL-2.**

**LIBYA**
**ATS ROUTES changed:**

- L31, IVAKI CRP estbld at N3255.5 E1506.3; LOTIN - IVAKI - Misrata VORDME (MIS), 84/37NM. **HLLT 10-1.**
- M739, REXUN CRP estbld at N3332.1 E01415.7; VARIG - REXUN - Misrata VORDME (MIS), 55/84NM. **HLLT 10-1.**
- T424 estbld; RASNO CRP (N3420.0 E02128.0) - TERAM CRP at N3400.0 E02228.1 - RAKMU CRP, 108°, 53/107NM; RASNO to RAKMU, MORA 1000a, one-way SE-bound, ufn. **E HI-12/4to6, A HL-2/8AB, A HI-3/2, A HI-5/1.**
- T565 estbld; RAKMU CRP (N3318.3 E02427.7) - ELDIM CRP at N3400.0 E02307.8 - VALKI CRP, 298°, 78/38NM; RAKMU to VALKI, MEA FL300, MAA FL310, one-way NW-bound, ufn. **E HI-12/5,6, A HL-2/8B, A HI-5/1.**
- V200 estbld; BREAM CRP (N32 53.5 E01405.0) - IVAKI CRP at N3255.5 E01506.3 - SOLUN CRP; 087°/268°, 51/97NM, MEA FL70. **HLLT 10-1.**
- W852 estbld; LOTIN CRP (N3420.0 E01510.0) - REXUN CRP at N3332.1 E01415.7 - NAWRS CRP, 224°, 67/53NM, MEA FL70, one-way SW-bound. **HLLT 10-1.**
- W857, ODGAX CRP estbld at N3337.9 E01352.9; Misrata VORDME (MIS) - ODGAX - SARKI, 99/53NM. **HLLT 10-1.**

W863 estbld; Mitiga VORDME (MTG) CRP - DERKA CRP, 018°/198°, 16NM, MEA FL70; DEKRA - ODGAX CRP at N3337.9 E01352.9 - LUMED CRP, 042°, 39/57NM, MEA FL70; DERKA to LUMED, one-way NE-bound. **HLLT 10-1.**

**MOROCCO**
**ATS ROUTES changed:**

- B/UB11, FACAS CRP estbld at N3240.8 W00748.7; PELAX - FACAS - MABAP, 12/39NM. **E HI-5, A HL-1, A HI-1, A HI-2.**
- G/UG5, VONCI CRP estbld at N3245.6 W00824.8; RALEK - VONCI - BARAM, 19/39NM. **E HI-5, A HL-1, A HI-1, A HI-2.**
- H/UH119, LACAJ CRP estbld at N3308.2 W00651.0; GOVAS - LACAJ, 8NM, CDR status withdrawn; LACAJ - ERLAM, 27NM, CDR 1,2. **A HL-1.**
- R/UR722, FOBAC CRP estbld at N3243.2 W00806.0, Daourat NDB (CSD) - FOBAC - MABAP, 13/36 NM. **E HI-5, A HL-1, A HI-1, A HI-2.**
- R/UR975, SADIC CRP estbld at N3344.0 W00620.0, POBUB - SADIC - DONAS, 30/12NM; NIKZO CRP estbld at N3243.6 W00809.7, Daourat NDB (CSD) - NIKZO - BENOV, 13/41NM. **E HI-5, A HL-1, A HI-1, A HI-2.**
- UZ801, LOBMI CRP estbld; MABOG CRP estbld at N3238.3 W00730.2; VABNA - LOBMI - MABOG - VALBA, 13/1/33NM; VALBA chgd to CRP. **A HL-1.**
- Z801, LOBMI chgd to CRP; MABOG CRP estbld at N3238.3 W00730.2; LOBMI - MABOG, 1NM, CDR status withdrawn; MABOG - VALBA, 33NM, CDR 1,2; VALBA chgd to CRP. **A HL-1.**
- BENSLIMANE ATZ Class 'D' estbld. Altitudes GND-2000'. (N33 W007). **A HL-1.**
- CASABLANCA TMA 2 withdrawn. (N33 W007). **E HI-5, A HL-1, A HI-1, A HI-2.**



## MID AREA

CASABLANCA/MOHAMMED V ATZ Class 'D' estbld. Altitudes GND-2000'. (N33 W007). **A HL-1.**

CASABLANCA/MOHAMMED V CTA Class 'D' estbld. Altitudes 2000' - 6500'. (N33 W008). **A HL-1.**

CASABLANCA/MOHAMMED V TMA Altitudes 6500'-FL195. (N33 W006). **A HL-1.**

RABAT/SALE ATZ Class 'D' estbld. Altitudes GND-1500'. (N34 W006). **A HL-1.**

RABAT/SALE CTA Class 'D' estbld; Altitudes 1500' - 6500'. (N34 W007). **A HL-1.**

RABAT/SALE TMA withdrawn. (N34 W007). **A HL-1.**

Tit Mellil ATZ Class 'D' estbld. Altitudes GND-2000'. (N33 W007). **A HL-1.**

**SAUDI ARABIA****ATS ROUTES changed:**

A788, TOTAD (N2750.7 E04339.1) to SOROR, withdrawn, ufn. **ME HL-2/9D10C, ME HI-1/4,10, ME HL-7B/6BD7A.**

B417, EMARO (N2733.7 E04513.5) to BONIM, withdrawn, ufn. **ME HL-2/10AC, ME HI-1/4, ME HL-7B/6BD7A.**

B544, SODAR (N3156.0 E03843.4) to ORKAS, withdrawn, ufn. **ME HL-2/8BD, ME HI-1/3, A HI-7/1.**

G660 (HAJ-season), MIPOL (N2033.4 E03821.8) to King Abdulaziz VORTAC (JDW), chgd to two-way. **A HL-4, A HI-5, A HI-7, OEJN 10-1, ME HL-3.**

J852, Wejh VORTAC (WEJ) to Madinah VORDME (PMA), chgd to one-way SE-bound (N26 E036). **A HL-4, ME HL-3.**

L677, MUVAT replaced by RAGNO NCRP at N2516.3 E03711.4; Yenbo VORDME (YEN) - RAGNO - Wejh VORTAC (WEJ), 82/66NM. **ME HI-1, A HL-4, A HI-5, A HI-7, ME HL-3.**

M/UM872, Wejh VORTAC (WEJ) to Madinah VORDME (PMA), chgd to one-way SE-bound

(N26 E036). **ME HI-1, A HL-4, A HI-5, A HI-7, ME HL-3.**

M691extended; ITIXI (N2750.5 E04704.6) - KAPAG NCRP - GINVA CRP at N2819.8 E04607.8, 297°/117°, 27/32NM, MEA FL160, ufn. **ME HL-7B/6BD7AC.**

P/UP559, Turaif VORDME (TRF) replaced by TOMDA CRP at same position, ufn. **ME HL-2/8B, ME HI-1/3.**

Q54 estbld; Turaif VORDME (TRF) replaced by TOMDA CRP at same position; Arar VORDME (AAR) - TOMDA, MEA FL160; for other route details see V45, ufn. **ME HL-2/8B9A.**

Q714 estbld; Hafr Al-Batin VORTAC (HFR) replaced by GINVA CRP at same position; EMARO to BONIM, MEA FL160; for other route details see former B417, ufn. **ME HL-2/10AC, ME HI-1/4, ME HL-7B/6BD7A.**

Q887 estbld; Hafr Al-Batin VORTAC (HFR) replaced by GINVA CRP at same position; Hail VORTAC (HIL) to SOROR, MEA FL160; for other route details see former A788, ufn. **ME HL-2/9CD10C, ME HI-1/3,4,10, ME HL-3/3B.**

R23, Turaif VORDME (TRF) - NEVOL, withdrawn, ufn. **ME HL-2/8BD9C, ME HI-1/3.**

R652, Guriat VORTAC (GRY) to DAXAN, withdrawn, ufn. **ME HL-2/8BD, A HI-7/1.**

T32 estbld; Turaif VORDME (TRF) replaced by TOMDA CRP at same position; NEVOL - TOMDA, MEA FL160; for other route details refer to former R23, ufn. **ME HL-2/8BD9C, ME HI-1/3.**

T256 estbld; Turaif VORDME (TRF) replaced by TOMDA CRP at same position; Guriat VORTAC (GRY) - TOMDA, MEA FL160; OVANO - DAXAN, MOCA 4100T, MAA withdrawn, upper limit FL460; Guriat VORTAC to DAXAN, for other route details see former R652, ufn. **ME HL-2/8BD, A HI-7/1.**

**MID AREA**

T455 estbld; Turaif VORDME (TRF) replaced by TOMDA CRP at same position; SODAR to ORKAS, MEA FL160; for other route details see former B544, ufn. **ME HL-2/8BD, ME HI-1/3, A HI-7/1.**

UL573, Wejh VORTAC (WEJ) to Madinah VORDME (PMA), withdrawn (N26 E036). **ME HI-1, A HL-4, A HI-5, A HI-7, ME HL-3.**

UL768, Hafr Al-Batin VORTAC (HFR) replaced by GINVA CRP at same position, ufn. **ME HL-2/10C, ME HI-1/4, ME HL-7B/6BD.**

UN694, Hafr Al-Batin VORTAC (HFR) replaced by GINVA CRP at same position, ufn. **ME HL-2/10C, ME HI-1/4, ME HL-7B/6BD.**

V13 extended; Tabuk VORTAC (TBK) - Neom Bay VORDME (NEM) CRP, 246°/065°, 75NM, MOCA 8100T, MEA 12000'; Neom Bay VORDME - PASAM CRP, 214°/033°, 32NM, MOCA 1500T, MEA 12000'. **ME HL-2, A HI-5, A HI-7, ME HL-3.**

V17, Al Jouf VORTAC (AJF) - NIMAR, suspended, until 05 Sep 19. **ME HL-2/8D9C.**

V45, Hafr Al-Batin VORTAC (HFR) - VATIM and Arar VORDME (AAR) - Turaif VORDME (TRF), withdrawn, ufn. **ME HL-2/8B9AD10C.**

W600 estbld; Wejh VORTAC (WEJ) CRP - DARAX CRP, 310°/130°, 53NM, MOCA 1600T, MEA 12000'; DARAX - Neom Bay VORDME (NEM) CRP, 335°/155°, 73NM, MOCA 2000T, MEA 12000'. **ME HL-2, A HI-5, A HI-7, ME HL-3.**

Z712 estbld; SENBU CRP (N2533.5 E03853.5) - SIGRO CRP at N2600.3 E03748.7, 291°, 64NM; SIGRO - Wejh VORTAC (WEJ), 275°/ (095°), 72NM; SENBU to Wejh VORTAC, MEA FL160, one-way NW-bound. **A HL-4, ME HL-3.**

NEOM BAY VORDME (NEM) 112.6 cmsnd at N2755.9 E03517.5. **ME HL-2, A HI-5, A HI-7, ME HL-3.**

THE FOLLOWING WAYPOINTS within Jeddah FIR chgd:

ALPOT coords chgd to N2718.7 E04805.2  
ASNIS coords chgd to N2756.7 E04744.2  
GESOR coords chgd to N2703.4 E04757.9  
ITUDA coords chgd to N2734.5 E04816.8  
MEDGO coords chgd to N2644.6 E04753.0.  
**ME HI-1, ME HL-7B.**

**TUNISIA**

AIRSPACE 1 redesignated TUNIS CTA NORTH WEST, (N39 E008). **DTTA 10-1.**

AIRSPACE 3 redesignated TUNIS CTA SOUTH WEST, (N36 E008). **DTTA 10-1.**

SFAX VOR (SFX) chgd to Sfax VORDME (N34 E010). **A HL-2, A HI-3.**

TUNIS TMA redesignated TUNIS CTA NORTH EAST, (N38 E009). **DTTA 10-1.**

**TURKEY**
**ATS ROUTES changed:**

B/UB545, OSVEL NCRP estbld at N3828.9 E03101.1; HISAR - OSVEL - Afyon VORDME (KFK), 33/29NM. **ME HL-1.**

L/UL620, HISAR NCRP at N3806.9 E03132.5 and OSVEL NCRP estbld at N3828.9 E03101.1; OKLAM - HISAR - OSVEL - Afyon VORDME (KFK), 3/33/29NM. **ME HL-1.**

L/UL852, RIXUB (N4217.2 E03040.1) withdrawn; ODMAX - NEGEM, 71NM. **ME HL-1, E LO-15.**

N374 estbld; Igdir VORDME (GDR) CRP - GEZSO CRP at N3948.6 E04436.6, 100°/280°, 35NM; GEZSO - TUXAZ CRP at N3942.5 E04444.6, 128°/309°, 9NM; Igdir VORDME to TUXAZ, MEA 11000, MAA FL280. **ME HL-1.**

T/UT495, Milas Bodrum VORDME (BDR) - CENGO, 112°/292. **E HI-10, E HI-11, ME HL-1.**

W/UW95, Milas Bodrum VORDME (BDR) - CENGO, 112°/292. **E HI-10, E HI-11, ME HL-1.**

## MID AREA

**ATS ROUTES (undesignated) changed:**

ESTBLD; Van VORDME (VAN) CRP - RUPOM CRP at N3750.3 E04357.4 - Yuksekova VORDME (YKV) CRP, 137°/317°, 48/22NM; Van VORDME - RUPOM, MEA FL220 only; RUPOM - Yuksekova VORDME, MEA FL180, ufn. **ME HL-1.**

ISTANBUL Lctr (IS) decmsnd. **LTBA 10-1.**

LT(P)-UNDESIGNATED AREA 2 withdrawn. **LTAC 10-1.**

LT(P)-UNDESIGNATED PROHIBITED AREA 1 should read LT(P)-UNDESIGNATED AREA 4. **LTAC 10-1.**

MILAS BODRUM VORDME (BDR) coords chgd to N3715.5 E02738.3. **E HI-10, E HI-11, ME HL-1.**

**YEMEN****ATS ROUTES changed:**

UT707 estbld; DEMGO CRP (N1203.0 E04830.7) - ALMIL CRP at N1338.7 E05010.4, 045°/225°, 138NM; ALMIL - ORBAT CRP, 044°/224°, 40NM; ORBAT - KIRAD CRP at N1439.9 E05112.7 - NODLI CRP at N1503.0 E05135.8 - DAVRA CRP at N1559.3 E05232.2 - DATVO CRP at N1617.6 E05250.5 - KAPET CRP, 043°/223°, 47/33/77/26/22NM; DEMGO to KAPET, MEA FL280. **A HL-10, A HI-7, ME HL-4.**

**TERMINAL CHARTS****GENERAL****ALGERIA**

Alt Set to read hPa instead of MB.

**LIBYA**

Country name changed from SPLAJ to LIBYA.

**TERMINAL**

**Akrotiri**, Cyprus, (Akrotiri AB), (11-1) Auto coupled ILS approaches not authorized.

**Al Baha**, Saudi Arabia, (King Saud Bin Abdulaziz), All charted STD take-off minimums are visibilities.

Based on AIP AIRAC SUP 003/18, construction works in progress on airport area. Refer to temp chart 10-8 and latest NOTAMs.

Based on AIP AIRAC SUP 006/19, pilot exercise caution due to WIP on position N20 17.4 E041 36.8 - N20 17.9 E041 38.7 - N20 17.5 E041 37.1 - N20 18.2 E041 38.9 men and equipment on area.

**Al Kharij**, Saudi Arabia, (Prince Sultan AB), All charted STD take-off minimums are visibilities.

**Al Qaisumah**, Saudi Arabia, (Hafr Al Batin), Based on AIP AIRAC SUP 001/18 item S1 and AIP AIRAC SUP 010/19 item S7, construction works in progress on airport area. Refer to temp chart 10-8 and latest NOTAMs.

Operational procedures of new RWY 16/34 based on AIP AIRAC SUP 010/19 item S4: APT will be operational under VMC conditions. Take-off RWY 16 suspended. PAPI 3 degree available on both ends of new RWY16/34. PAPI slop seriously affected. HIALS (420m) available for RWY 34. Distance markers and guidance signs available. APT shall not be used or filing as alternate APT. Contact domestic APT operations on 00966535484005 minimum 12 hours prior to non-scheduled operations. Pilots shall exercise extreme caution when using RWY 34 due to obstacle.

**Aleppo**, Syria, (Aleppo Intl), (13-1) IAP VOR DME Rwy 09 missed apch turn to ALE VOR is LEFT.

(13-2) IAP VOR DME Rwy 27 missed apch under clarification, contact ATC.

**MID AREA**

(16-1) IAP NDB Rwy 27 ALE NDB position under clarification.

**Alexandria**, Egypt, (Borg El Arab), (20-3) RNAV SID rwy 32 suspended.

Rwy 14/32 and twys A, B, C, D, E and F closed and all procedures to rwy 14/32 suspended. Temporary rwy 14R/32L established on parallel twy A, refer to 20-8. Temporary procedures RNP Rwy 14R/32L available, refer to 22-01/22-02 (per AIRAC SUP 001/19).

**Algiers**, Algeria, (Houari Boumediene), (10-3F/3G) SIDs LABRO 1A, 1B, 1C & 1D under clarification.

**Amman**, (Marka Intl), (10-2D to 10-2G, 10-3F to 10-3L, 12-1, 12-2) RNAV STARs, SIDs and APP Procedures are subject to revision and validations. Pilots are required to report any variation and/or inaccurate data to: datm@carc.gov.jo an cc: ais.hq@carc.gov.jo. (Based on SUP 002/19)

(STARs/SIDs) All crossing altitudes/FLs to be considered as "At" altitudes/FLs.

**Amman**, (Queen Alia Intl), (20-2 to 20-2C, 20-3B/D/G/J/M/N, 22-1, 22-2) Following RNAV STARs, SIDs and APP Procedures for RWY 26L/08R are subject to revision and validations. Pilots are required to report any variation and/or inaccurate data to: datm@carc.gov.jo an cc: ais.hq@carc.gov.jo. (Based on SUP 002/19)

**Aqaba**, Jordan, (Aqaba Intl), (10-2/10-2A, 10-3/10-3A, 12-1) RNAV STARs, SIDs and APP Procedures are subject to revision and validations. Pilots are required to report any variation and/or inaccurate data to: datm@carc.gov.jo an cc: ais.hq@carc.gov.jo. (Based on SUP 002/19)

**Aradah**, Saudi Arabia, Charted 1600m take-off minimums are visibilities.

**Aswan**, Egypt, Ufn RNAV SIDs/STARs suspended.

**Asyut**, Egypt, Ufn RNAV SIDs/STARs suspended.

**Bejaia**, Algeria, (Soummam-Abane Ramdane), (10-9) PAPI-L angle rwy 26 changed to 3.18°.

**Bisha**, Saudi Arabia, All charted STD take-off minimums are visibilities.

**Casablanca**, Morocco, (Mohamed V), Construction works published by SUP 01-19 effective 28 FEB 19. Refer to (10-8/10-8A) and latest NOTAMs.

**Damascus**, Syria, (Damascus Intl), (11-4/11-4A, 16-1) NDB ILS 1 Rwy 23R and NDB Rwy 05R timing for reversal procedures not available.

Holdings for approach procedures under clarification, confirm with ATC.

**Dhahran**, Saudi Arabia, (King Abdulaziz AB), Based on AIP AIRAC SUP 010/19 item S6, RWY 16R/34L is closed.

**Djerba**, Tunisia, (Zarzis), (11-1/11-2) ILS Z or LOC Z Rwy 09/ILS Y or LOC Y Rwy 09, Circling MDA(H) CAT A/B raised to 540' (521').

(13-1) VOR Rwy 09, Straight in MDA(H) raised to 490'(481'), Circling MDA(H) CAT A/B raised to 540'(521').

(13-2) VOR Z Rwy 27 with D3.0, Straight in MDA(H) raised to 410'(391').

**Eilat**, Israel, Based on AIC A 1/19 airport will be permanently closed to all flights effective 18th of March 2019 at 17:30 local time.

**El Gora**, Egypt, First 657'(200m) of rwy 26 closed.

**Ghat**, Libya, (16-1) Circling VIS CAT A changed to 1900m, CAT B raised to 2800m, CAT C lowered to 3700m and CAT D to 4600m.

Add note not authorized east of airport and at night.

Rwy 06/24 length, TORA rwys 06/24 and LDA rwy 24 increased to 6562'/2000m. LDA rwy 06 is 4921'/1500m. Rwy 06 thresh displaced by 1641'/500m. Stopways for rwy 06/24

## MID AREA

established, length 197'/60m and for rwy 35, length 394'/120m.

**Hafr Al Batin**, Saudi Arabia, (King Saud AB), (12-1) Please disregard note: "(holding suspended during OE(R)-408 active)" in missed apch text.

Based on AIP AIRAC SUP 010/19 item S8, frequency 120.7 MHZ only in use.

**Hassi Messaoud**, Algeria, (Oued Irara), (10-9S) Airport name to read Krim Belkacem.

**Hatay**, Turkey, (10-3A) MSA is based on HTY NDB instead of HTY VOR

**Hodeidah**, Yemen, (Hodeidah Intl), APAPI-L rwy 03/21 chgd to PAPI-L.

**In Guezzam**, Algeria, 328'/100m swy both rwys established. AVASlrwy 08/26 withdrawn; PAPI-L rwy 26 established.

**Istanbul**, Turkey, (31-3) ILS Z Rwy 17L minimums for ILS approach raised as follows: DA(H) 505' (303'), with FULL lights RVR 700m, with TDZ or CL out RVR 700m (RVR 750m when a Flight Director or Autopilot or HUD to DA is not used), without lights RVR 1400m.

Based on AIP SUP 007/19, Apron V is located North-West to the TWY A1C.

**Izmir**, Turkey, (Adnan Menderes Intl), (20-1R) Sector between radial 105° - 225° and distance 10 NM - 20 NM SOUTH from Menderes RADAR - altitude 3900 to read 4000.

**Jazan**, Saudi Arabia, (King Abdullah Bin Abdulaziz), Based on AIP AIRAC SUP 006/19 item S14, pilot exercise caution due to WIP on position N16 54.9 E042 34.4 men and equipment on area.

Based on AIP AIRAC SUP 010/19 item S13, pilot exercise caution due to WIP area: N16 53.7 E042 35.0, N16 53.8 E042 35.1, N16 53.4 E042 35.3, N16 53.4 E042 35.2.

Based on AIP AIRAC SUP 013/18 item S23, pilot exercise caution when landing on RWY 15 due to temp hook trailer assembly located

39' (12m) from the edge of both sides of RWY, 112' (34m) from CL, 1312'(400m) from THR RWY15 (height 7' (2m), no lighted obstacle or marking available).

**Jeddah**, Saudi Arabia, (King Abdulaziz Intl), (10-9C, 10-9E) Parking stand 11-65 on Apron 11 renamed to 11-02. Under clarification.

(12-1) thru (12-5) All RNAV (GNSS) approach procedures suspended.

All charted STD take-off minimums are visible.

Based on AIP AIRAC SUP 010/19 items S10, S11, S12, S14, S15, S16, S17, S18, temporary closure of TWYs. Refer to temp chart 10-8 and latest NOTAMs.

Based on AIP SUP 003/18, construction works on apt, many cranes will be erected within apt airside. Pilots to exercise caution when landing and take-off. Temporary restriction will be published by NOTAM according to the progress of relevant work. All unserviceable areas of twys or aprons will be demarcated by marker boards. During the construction periods, pilots should pay attention when taxiing near the work areas.

**Kamishly**, Syria, (13-1) Confirm MDA(H) VOR DME Rwy 03 with ATC.

**Khashm Alan**, Saudi Arabia, (Riyadh), (30-2D) STARs RESUB 1E & 1F and SISOT 1E & 1F suspended based on NOTAM A1124/19.

**La Gomera**, Canary Is, (10-2, 10-3, 10-1R) LPC VORDME "Gran Canaria" renamed "Gran Canaria South".

**Lanzarote**, Canary Is, REIL RWY 03 unserviceable (based on SUP 61-19).

Works on apron area (based on SUP 151-18). Refer to temp charts 10-8 thru 10-8B and latest NOTAMs.

Works on TWYs E1 & R1 (based on SUP 01/18, with effective date 06 DEC 18 based on SUP 153/18). Refer to temporary chart 10-8D and latest NOTAMs.

## MID AREA

**Luxor**, Egypt, (10-3/3A) New MSA based on ARP established for RNAV SIDs RWY 02 with the following sectors:

Between 180° - 360° sector altitude 3700', 360° - 090° sector altitude 3300' and 090° - 180° sector altitude 2700'.

Expected MSA harmonization after suspension (until 01 MAY 19 EST) of RNAV SIDs & STARs.

Based on SUP 1/18 AIRAC, RWY 02/20 will be closed from 16 AUG 18 1700Z to 15 AUG 19 EST. TWY A will be used as main RWY 02L/20R during the WIP period. All the related charts, procedures and data are suspended. Following temp charts will be used during the shutdown period: (10-8) Airport, Parking, Airport Info, Take-off Mnms; (12-01) RNP RWY 02L; (12-02) RNP RWY 20R; (13-01) VOR RWY 02L and (10-9S2) Standard Minimums. For details refer to temp charts and latest NOTAMs.

Ufn RNAV SIDs/STARs suspended.

**Madinah**, Saudi Arabia, (Prince Mohammad Bin Abdulaziz Intl), Based on SUP 05/19 following charts are suspended:

-RNAV SID (10-3/A/B/C/D/E/F/G)

**Malatya**, Turkey, (Tulga), (20-3) RNAV SIDs temporary suspended.

**Milas**, Turkey, (Bodrum Intl), (11-1) ILS Z RWY 10L, (11-1A) CAT II ILS Y RWY 10L, (11-2) ILS X RWY 28R, (11-2A) CAT II ILS V RWY 28R, (11-3) ILS W RWY 28R incorrect due to BDR VOR displacement.

**Nejran**, Saudi Arabia, All charted STD take-off minimums are visibilities.

Based on AIP AIRAC SUP 006/19, (11-1) ILS DME Rwy 06 not to be used by civil ACFT. Non civil ACFT subject to self monitoring.

**Ovda**, Israel, (10-9, 11-1, 13-1, 19-10, 19-11) TVOR/DME 'OVD' completely withdrawn.

**Rafha**, Saudi Arabia, Based on AIP AIRAC SUP 09/19, item S03: ILS RWY 29 unserviceable.

Construction works on RWY 11/29 (based on SUP 004/17 AIRAC). Refer to temp chart 10-8 and latest NOTAMs.

**Riyadh**, (King Khaled Intl), All charted STD take-off minimums are visibilities.

**Riyadh**, (King Salman AB), All charted STD take-off minimums are visibilities.

Based on AIP AIRAC SUP 009/19, item S01: Heavy ACFT not allowed to use RWY 15/33. Medium and light ACFT expect delay when needed to use RWY 15/33.

**Sebha**, Libya, First 300m of Rwy 13 closed.

**Sharm El Sheikh**, Egypt, Ufn RNAV SIDs/STARs suspended.

**Sharurah**, Saudi Arabia, (Based on AIP AIRAC SUP 009/19 item S06) Exit sign in both end RWY and exit sign for RWY 26 not available. Follow-me services will be provided upon request. Aerodrome controlled by military ATC, contact Tower for clearances at 133.500 MHz.

**Suhag**, Egypt, (Suhag Intl), Procedure title changed for (13-1) to VOR Rwy 15, (13-2) to VOR Rwy 33. VAR changed to 4 °E and all bearings by minus 1°. MSA based on ARP.

**Taba**, Egypt, (Taba Intl), Ufn RNAV SIDs/STARs suspended.

**Tan Tan**, Morocco, (Plage Blanche), PAPI-L rwy 03/21, angle 3.0°, established.

**Tel Aviv**, Israel, (Ben Gurion), (Based on NOTAM A0994/19): (11-3) ILS Rwy 21. Minimums for LOC (GS out) approach raised as follows: MDA(H) 930' (796') for all categories, with lights RVR/VIS 1200m for CAT B, 2800m for CAT C, 3200m for CAT D, w/o lights RVR 1800m/VIS 2000m for CAT B, 3600m for CAT C, 4000m for CAT D.



**MID AREA**

(Based on NOTAM A1090/19): (12-4) RNP X Rwy 21. MDA(H) for LNAV procedure raised to 630' (496'). RVR/VIS remain unchanged.

**Tenerife-North**, Canary Is, For construction works on commercial apron refer to chart 20-8 and latest NOTAM (based on SUP 059-19).

**Tenerife-South**, Canary Is, (Reina Sofia), Works on movement area (based on SUP 051-19, with eff date 12 SEP 19 based on SUP 070-19). Refer to temporary charts 10-8B and 10-8C and latest NOTAMs.

**Tindouf**, Algeria, (10-9) Rwy 08L HIALS (420m) available.

**Tobruk**, Libya, (13-1) VOR DME RWY 02, (13-2) VOR DME RWY 20 procedures no longer under experimental basis.

**Tripoli**, (Mitiga), (10-9) Portion between twy A and twy H named as twy K.

**Tripoli**, (Tripoli Intl), (10-2B/2C, 10-2D/2E, 10-2F/2G, 10-3, 10-3B/3C, 10-3D/3E, 10-3G, 13-1, 13-2, 16-1) procedures suspended due to D Lctr perm withdrawn and TPI VORDME relocated to N32 39.8 E013 07.1, new freq 114.6MHz;(11-1) missed approach changed: Climbstraight ahead to 1500 feet, then turn right and proceed to PE Lctr climbing to 2000 feet and hold. Eff 17 Oct 13 following procedures withdrawn: STARs BENI WALID1B & 1F, MISRATA 1B & 1F, MIZDA 1B and SIDs BENI WALID 1D & 1H, GARUS 1G, MISRATA 1D & 1H, SARKI 1D.

TWR freq changed to 118.1MHz

**Turaif**, Saudi Arabia, Based on AIP AIRAC SUP 09/19, item S04: ILS RWY 28 radaiting XXX on test, do not use.

**Wejh**, Saudi Arabia, All charted STD take-off minimums are visibilities.

Based on AIP AIRAC SUP 010/19 item S19, (13-1) VOR DME Rwy 15 and (13-2) VOR Rwy 15 suspended.

**AFRICA**

Jeppesen CHART CHANGE NOTICES highlight only **significant** changes affecting Jeppesen Charts, also regularly updated at [www.jeppesen.com](http://www.jeppesen.com).

**IMPORTANT: CHECK FOR NOTAMS AND OTHER PERTINENT INFORMATION PRIOR TO FLIGHT.**

**ENROUTE CHARTS**
**GENERAL**

According to Amendment 85 to ICAO Annex 10 all ACAS units shall be compliant with version 7.1 after 1 January 2017.

**EGYPT**

ATS ROUTE SYSTEM revised within Cairo FIR. For details refer to SUPPL A (H/L)-2A. **A HL-2, A HL-4, A HI-5, A HI-7.**

**MALI**

GAT (General Air Traffic) IFR flights are authorized to use the following awys within the GA(P)- Area related to BARKHANE operation in Mali Airspace;

UA603 between BAKAB (N1614.3 W00001.6) and the intersection on Mali/Burkina Faso boundary at N1500.0 E00000.0;

UA612, BAKAB (N1614.3 W00001.6) - RIPUL;

UA614, IPOBA (N2228.6 W00102.9) - VOLBU;

UB727, SEPAT (N1412.5 W00600.5) - TERAS;

UB735, USRUT(N2339.4 W00243.3) and the Int on

Mali/Mauritania boundary at N1726.8 W00542.7;

UG615, Mopti VOR (MTI) - LITIL;

UG855 between INAMA (N1908.0 E00410.0) and the Int on the Mali/Niger boundary at N1521.0 E00250.8;

UG859 between MOKAT and the Int on the Mali/Burkina Faso

boundary at N1505.0 W00027.8;

UM114 between ZAWAT (N1900.2 E00332.9) and the Int on the Mali/Niger

boundary at N1522.0 E00329.0;

UM608 between TERAS (N2044.3 E00149.5) and the Int on the Mali/Niger

boundary at N1520.0 E00205.8;

UM629, USRUT (N2339.4 W00243.3) - EBVAP;

UM725, SBITA (N2505.6 W00500.1) - TISEN;

UM974, KOSIL (N1438.4 W00700.0) - VOLBU;

UQ596, UNAGA (N2024.2 W00612.9) - IPOBA;

UR866, AMSEN (N2200.0 W00607.0) - VOLBU;

UR981, TISEN (N2411.1 W00609.3) - DERON;

UT365, DERON (N1527.1 E00037.1) - UNAGA;

All Airways MEA FL320, MAA FL400. **CCN 305.**

PROHIBITED AREA with 12 Temporary ATS Routes therein estbld within Dakar FIR/UIR and Niamey FIR/UIR. For details refer to CCN 305 (N18 W001). **A HL-3, A HL-5, A HI-1, A HI-2.**

**MALTA**

FRA (Free Route Airspace) within Malta UIR. Lower limit FL305. **DTTA 10-1.**



## AFRICA

## PORTUGAL

ATS CONTINGENCY ROUTES revised within MADEIRA SECTOR. For details refer to CCN 307. **A HL-1, A HI-1.**

## ALGERIA

## ATS ROUTES changed:

A/UA29, TAGIG CRP estbld at N3100.0 W00121.8 and BESBA withdrawn; Beni Abbes VORDME (BBS) - TAGIG - AGREB - El Bayadh VORDME (BAY), 74/66/138NM. **A HL-1, A HI-2.**

B/UB727, TINVI CRP estbld at N2124.6 E00300.0; TERAS - TINVI - RAMAD, 77/37NM. **A HL-3, A HL-4, A HI-2.**

G/UG26, EKRAK CRP estbld at N3100.0 E00035.0 and GOLIB withdrawn; Timimoun VORDME (TIO) - EKRAK - El Bayadh VORDME (BAY), 108/165NM. **A HL-1, A HI-2.**

J/UJ8, AMTIK CRP estbld at N2751.3 E00300.0; In Salah VORDME (NSL) - AMTIK - SIHAR, 45/47NM. **A HL-1, A HL-3.**

J/UJ41, BASID CRP estbld at N2728.1 E00126.8 and ARSEM CRP at N2720.9 E00300.0; Adrar VORDME (ADR) - BASID - In Salah VORDME (NSL) - ARSEM - OUCIF, 90/58/27/109NM. **A HL-1, A HL-3, A HL-4.**

J/UJ60, DIVEM CRP estbld at N2201.9 E00300.0; Bordj Mokhtar VORDME (MOK) - DIVEM - Tamenghasset VORDME (TMS), 121/144NM. **A HL-3, A HL-4.**

J/UJ62, REKDA CRP estbld at N2629.6 E00300.0; In Salah VORDME (NSL) - REKDA - Tamenghasset VORDME (TMS), 53/258NM. **A HL-3, A HL-4.**

UB31, MOGIL (N3807.9 E00312.1) - Zemmouri VORDME (ZEM), S-bound MAA FL450; N-bound MAA FL280. **DAAG 10-1.**

UJ67 estbld; TAGIG CRP at N3100.0 W00121.8 - IBNOD CRP at N3146.2

E00130.0 - Noumerat VORDME (GHA) CRP, 072°/252°, 154/122NM, MEA FL110, cruising levels NON-standard, EVEN levels E-bound. **A HL-1.**

UM608, El Bayadh VORDME (BAY) to ROFER realigned; El Bayadh VORDME - MOGAR CRP at N3153.0 E00111.4 - TAMUZ CRP at N3100.0 E00114.5 - TISIR CRP at N3009.6 E00117.5 - ABDIT CRP at N2946.1 E00118.9 - BASID CRP at N2728.1 E00126.8 - ROFER, 110/53/51/24/138/240NM, EVEN levels S-bound. **A HL-1, A HL-3, A HI-2.**

UM629, SIRIN (N2915.0 W00500.2) withdrawn; BAGBO - MERAT, 157°/337°, 154NM. **A HL-1, A HL-3, A HI-2.**

UM986, TAGIG CRP estbld at N3100.0 W00121.8 and BESBA withdrawn; Beni Abbes VORDME (BBS) - TAGIG - AGREB - El Bayadh VORDME (BAY), 74/66/138NM. **A HL-1, A HI-2.**

UM999, MOGAR CRP estbld at N3153.0 E00111.4 and SEFRA withdrawn; MEZAB - MOGAR, 318°/138°, 24NM; MOGAR - ARIAM, 310°/129°, 186NM. **A HL-1, A HI-2.**

UR990, ABDIT CRP estbld at N2946.1 E00118.9; Timimoun VORDME (TIO) - ABDIT - RIAME, 64/11NM. **A HL-1, A HI-2.**

## ATS ROUTES (undesigned) changed:

EXTENDED; TOBUK (N2156.1 E00918.0) CRP - Djanet VORDME (DJA), 002°/183°, 141NM; Djanet VORDME - TWARG, MORA withdrawn; TOBUK to TWARG, MEA FL260, MAA FL290, cruising levels NON-standard, EVEN levels N-bound, ufn. **A HL-4/5BD, A HI-3/4.**

ALGIERS CENTRAL SECTOR TMA redesignated to Class A/D Airspace. (N37 E001). **DAAG 10-1.**

ALGIERS CTA redesignated to TMA. (N36 E002). **DAAG 10-1.**

## AFRICA

ALGIERS NORTHEAST SECTOR TMA redesignated to Class D Airspace. (N39 E008).  
**DAAG 10-1.**

## ANGOLA

## ATS ROUTES changed:

UG853 extended; TERBA (S0447.9 E00635.0) - OPAPO, 126°/306°, 344NM; TERBA to Luanda VORDME (VNA), MAA withdrawn. **A HL-11, A HI-2, A HI-4.**

## CANARY IS

## ATS ROUTES changed:

A873, Gran Canaria VORDME (GDV) to UDATI, cruising levels chgd to NON-standard, EVEN levels SW-bound. **A HL-1.**

UN871, AGUMO (N2542.6 W01835.8) - VIDRI, MEA FL150. **A HL-3.**

UZ526, Gran Canaria VORDME (GDV) - MERAN, cruising levels chgd to NON-standard, EVEN levels SW-bound. **A HL-1.**

## CONGO, DR OF

## ATS ROUTES changed:

55LUB (S1001.3 E02524.9) renamed APEBI. Eff 10 Oct 19. **A HL-11, A HL-12, A HI-4, A HI-6.**

DILMA (S0555.9 E02753.4) renamed MOMAG. Eff 10 Oct 19. **A HL-11, A HI-6.**

DIPTO (S0312.0 E02314.0) renamed KITMI. Eff 10 Oct 19. **A HL-8, A HI-3, A HI-4.**

IPOLU (S0318.6 E01607.6) renamed GUSAR. Eff 10 Oct 19. **A HL-11, A HI-3, A HI-4.**

KMI66 (S0508.6 E02825.4) renamed ARBAM. Eff 10 Oct 19. **A HL-11, A HI-6.**

KMI69 (S0634.8 E02819.3) renamed APIBO. Eff 10 Oct 19. **A HL-11, A HI-6.**

KSA80 (S0332.9 E01625.1) renamed LUSNO. Eff 10 Oct 19. **A HL-11.**

LUB45 (S1050.3 E02729.2) renamed VUBAX. Eff 10 Oct 19. **A HL-11, A HL-12.**

LUB46 (S1057.6 E02754.1) renamed MILVI. Eff 10 Oct 19. **A HL-11, A HL-12, A HI-6.**

NUSVU (S1117.0 E02650.0) renamed IVGOK. Eff 10 Oct 19. **A HL-11, A HL-12, A HI-4, A HI-6.**

UBOLO (S0512.6 E02159.6) renamed ANOBA. Eff 10 Oct 19. **A HL-11.**

UM214, APOSO (S0715.3 E02351.0) - ANOTO - AMROV, 48/72NM. **A HL-11, A HI-4, A HI-6.**

ANOTO coords chgd to S0802.3 E02401.8. **A HL-11, A HI-4, A HI-6.**

BLT29 (N0350.5 E02042.3) renamed AKDEV. **A HL-8, A HI-3.**

BLT34 (N0353.0 E02032.0) renamed EDBAS. **A HL-8, A HI-3.**

GBADOLITE VORDME (BLT) coords chgd to N0415.0 E02058.8. **A HL-8, A HI-3.**

## COTE D'IVOIRE

## ATS ROUTES changed:

B/UB600, [ADO11] should read [AFO11]. (N05 W002). **A HL-6.**

DI(P)-43EME BIMA, upper limit chgd to 6000'AGL, ufn. (N05 W003). **A HL-6/7B.**

## EGYPT

## ATS ROUTES changed:

G183, PASOS (N3213.0 E03306.0) to Taba VORDME (TBA), withdrawn ufn. **SUPPL A (HL)-2A.**

M872, El Daba VORDME (DBA) - Fayoum VORDME (FYM); SEMRU to Hurghada VORDME (HGD); above FL255 one-way SE-bound only. **SUPPL A HL-2A.**

## ETHIOPIA

## ATS ROUTES changed:

B535 extended; KOFTA (N0813.0 E03720.7) to DAGAP, for route details see UB535. **A HL-7, A HL-9.**

## AFRICA

- L432 extended; Gawasa VORDME (GWZ) - GISHE CRP at N1027.6 E03945.8 - TIBIT CRP at N1146.3 E04044.0 - TATGU CRP at N1253.4 E04134.4 - BOPSA CRP, 035°/215°, 100/97/83/24NM, MEA FL250. **A HI-5, A HI-7, A HL-9.**
- M308, Gawasa VORDME (GWZ) to KONET, MEA 17000' (N09 E038). **A HL-9.**
- N301, EPREK (N1024.8 E03732.3) and AXEBI withdrawn; MARCO - DAVIT - TIKAT, 103/68NM; Gawasa VORDME (GWZ) to TIKAT, MOCA withdrawn, cruising levels chgd to standard, EVEN levels NW-bound. **A HL-7, A HL-9.**
- R775, ALNAB (N0855.1 E04413.0) to SOLUL, withdrawn. **A HL-9.**
- T/UT111, LAKBE (N1102.4 E04209.7) to Mekele VORDME (QHA), cruising levels chgd to standard, EVEN levels NW-bound. **A HI-5, A HI-7, A HL-9.**
- T/UT112, ERDIR (N1147.8 E04059.0) to Mekele VORDME (QHA), cruising levels chgd to standard, EVEN levels NW-bound. **A HL-9.**
- T/UT113, DUKRI (N1106.6 E03943.6) to Mekele VORDME (QHA), cruising levels chgd to standard, EVEN levels N-bound. **A HI-5, A HI-7, A HL-9.**
- T/UT116, Gawasa VORDME (GWZ) to GESEL, cruising levels chgd to standard, EVEN levels NW-bound (N09 E038). **A HL-9.**
- T/UT117, DUKRI (N1106.6 E03943.6) to Bahir Dar VORDME (BDR), cruising levels chgd to standard, EVEN levels W-bound. **A HL-9.**
- T/UT118, LAKBE (N1102.4 E04209.7) to Bahir Dar VORDME (BDR), cruising levels chgd to standard, EVEN levels W-bound. **A HI-5, A HI-7, A HL-9.**
- T/UT222, Mekele VORDME (QHA) to Bahir Dar VORDME (BDR), cruising levels chgd to standard, EVEN levels SW-bound (N13 E039). **A HI-5, A HI-7, A HL-9.**
- T/UT223, IMKUM (N1408.8 E03846.4) to Bahir Dar VORDME (BDR), cruising levels chgd to standard, EVEN levels S-bound. **A HL-9.**
- T/UT224, TIMAG (N1405.2 E03815.9) to Bahir Dar VORDME (BDR), cruising levels chgd to standard, EVEN levels S-bound. **A HL-9.**
- T/UT225, GESEL (N1231.9 E03725.9) - Bahir Dar VORDME (BDR), cruising levels chgd to standard, EVEN levels S-bound. **A HL-7, A HL-9.**
- T/UT227, GESEL (N1231.9 E03725.9) to GERIG, cruising levels chgd to standard, EVEN levels NW-bound. **A HL-4, A HL-7, A HL-9.**
- T/UT333, IMKUM (N1408.8 E03846.4) to GESEL, cruising levels chgd to standard, EVEN levels S-bound. **A HL-9.**
- T/UT339, TIMAG (N1405.2 E03815.9) - GERIG, cruising levels chgd to standard, EVEN levels W-bound. **A HL-4, A HL-7, A HL-9.**
- T/UT448, ETBUN (N1158.4 E03859.5) to Bahir Dar VORDME (BDR), cruising levels chgd to standard, EVEN levels W-bound. **A HL-9.**
- T/UT500, Gawasa VORDME (GWZ) - DUKRI, withdrawn (N09 E038). **A HI-5, A HI-7, A HL-9.**
- T114, Mekele VORDME (QHA) to Gawasa VORDME (GWZ), MEA FL160 (N13 E039). **A HL-9.**
- T446, Gawasa VORDME (GWZ) to Bahir Dar VORDME (BDR), cruising levels chgd to standard, EVEN levels NW-bound. **A HL-7, A HL-9.**
- T449, Gawasa VORDME (GWZ) - DUKRI, withdrawn (N09 E038). **A HL-9.**
- UB403, Manderia VORDME (MAV) to MUSBI, MOCA 8000T (N03 E041). **A HI-7, A HL-9.**
- UG300, ETONI (N1000.6 E03717.5) - ETOKO - GETIN, MEAs FL160/FL250; GETIN to ETIVA MEA 16000'; ETIVA - GETOL, MEA

## AFRICA

- FL250; GETOL to UTSOR, MEA 16000'. **A HL-7, A HL-9.**
- UG657, Mandera VORDME (MAV) to ASKEN, withdrawn (N03 E041). **A HI-7, A HL-9.**
- UL432 estbld; EKBUL (N0400.2 E03605.0) to Gawasa VORDME (GWZ), MOCA 14500T, for other route details see L432; Gawasa VORDME - GISHE CRP at N1027.6 E03945.8 - TIBIT CRP at N1146.3 E04044.0 - TATGU CRPat N1253.4 E04134.4 - BOPSA CRP, 035°/215°, 100/97/83/24NM, MOCA 14500T, MEA FL250. **A HL-8, A HI-5, A HI-7, A HL-9.**
- UM220, Gambella VORDME (BRO) to AXOTI, MEA FL250 (N08 E034). **A HL-7, A HI-5.**
- UM310 extended; EGMES (N0657.0 E04305.0) - ASKEN, for route details see former UG657. **A HI-7, A HL-9.**
- UM997, UTANO (N0445.2 E04044.9) - IBTAN, MEA 9000'; NIGUS - ETLOT, MEA FL250; AXIDA - UVDOR, MEA 14000'; IMTED - ASTAR, MEA 15000'. **A HL-8, A HL-9.**
- UN301, Gawasa VORDME (GWZ) to TIKAT, cruising levels chgd to standard, EVEN levels NW-bound (N10 E038). **A HL-7, A HI-5, A HI-7, A HL-9.**
- UN304 extended; Dire Dawa VORDME (DWA) - NIDEG CRP - TIBIT CRP at N1146.3 E04044.0 - GETAR CRP at N1439.1 E03915.0, 332°/152°, 63/80/193NM, MEA FL250. **A HI-5, A HI-7, A HL-9.**
- UR775, ALNAB (N0855.1 E04413.0) to SOLUL, MEA 9000'. **A HL-9.**
- UR995 estbld; Gawasa VORDME (GWZ) CRP - OKLAT CRP at N1026.5 E03745.1, 323°/143°, 100NM, MOCA 17000T, MEA FL250; OKLAT - ERBUK CRP, 323°/143°, 182NM, MEA 9000'. **A HL-7, A HI-5, A HI-7, A HL-9.**
- UT124, Gawasa VORDME (GWZ) to Bahir Dar VORDME (BDR), cruising levels chgd to standard, EVEN levels NW-bound (N09 E038). **A HI-5, A HI-7.**
- UT139, Gambella VORDME (BRO) - KUTOP, MOCA 14000T, MEA FL160; KUTOP - DASTU, MEA FL290 (N08 E034). **A HL-7/4D, A HI-5.**
- UT446 should read UT124, Bahir Dar VORDME (BDR) to Gawasa VORDME (GWZ), cruising levels chgd to standard, EVEN levels NE-bound (N11 E037). **A HL-7, A HL-9.**
- UT449, Gawasa VORDME (GWZ) - DUKRI, MEA FL160 (N09 E038). **A HL-9.**
- W886 redesignated T/UT667, Gawasa VORDME (GWZ) to Gambella VORDME (BRO). **A HL-7/5C, A HL-9/2D3C.**

## GHANA

## ATS ROUTES changed:

- UG853, BIKOS (N0042.4 W00211.6), DIGRI, EDORO and GAPOX withdrawn; RASAD - TERBA, 677NM. **A HL-6/7D8C.**

## GUINEA REP

- LIPOG coords chgd to N0918.9 W01441.6. **A HL-5, A HI-1.**

## ITALY

## ATS ROUTES changed:

- M738, ERPEM NCRP estbld at N3856.5 E01139.0; RONAB - ERPEM - PININ, 57/62NM. **DTTA 10-1.**
- N163, OSDET (N3745.9 E01139.0) - Pantelleria VORDME (PAN), CDR 1,3. **DTTA 10-1.**

## KENYA

## ATS ROUTES changed:

- P312 estbld, Navex VORDME (NV) CRP - TEVIN CRP at S0042.0 E03732.0, 044°, 50NM; TEVIN - EPSIB CRP at N0003.4 E03818.2 - NETOV CRP at N0104.7 E03919.9, 045°, 65/87NM, NETOV - Wajir VORDME (WAV), CRP 048°, 60NM; Navex

## AFRICA

VORDME to Wajir VORDME, MEA FL100, one-way NE-bound.

**A HL-8/10BCD.**

T932 estbld; Wajir VORDME (WAV) CRP - AVESO CRP at N0057.9 E03932.2, 215°, 58NM; AVESO - OKRIT CRP at S0053.0 E03740.5, 225°, 157NM; OKRIT - Navex VORDME (NV) CRP, 239°, 50NM; Wajir VORDME to NavexVORDME, MEA FL100, one-way SW-bound. **A HL-8/10BCD.**

UP312, Navex VORDME (NV) to Wajir VORDME (WAV) realigned; Navex VORDME CRP - TEVIN CRP at S0042.0 E03732.0, 044°, 50NM; TEVIN - EPSIB CRP at N0003.4 E03818.2 - NETOV CRP at N0104.7 E03919.9, 045°, 65/87NM, NETOV - Wajir VORDME, 048°, 60NM; Navex VORDME to Wajir VORDME, one-way NE-bound. **A HL-8/10BCD.**

UT932 estbld; Wajir VORDME (WAV) CRP - AVESO CRP at N0057.9 E03932.2, 215°, 58NM; AVESO - OKRIT CRP at S0053.0 E03740.5, 225°, 157NM; OKRIT - Navex VORDME (NV) CRP, 239°, 50NM; Wajir VORDME to Navex VORDME, one-way SW-bound. **A HL-8/10BCD.**

UT939 estbld, UTATA CRP (S0241.1 E03702.6) - APMAY CRP at S0214.8 E03719.7 - ATUTA CRP at S0206.2 E03725.4 - UVOVA CRP, 034°/214°, 32/10/24NM; UVOVA - TIBIN CRP at S0127.2 E03751.8 - TIGEM CRP at S0051.8 E03816.3 - AVESO CRP at N0057.9 E03932 - Wajir VORDME (WAV) CRP, 035°/215°, 23/43/133/58NM. **A HL-8/10BD.**

UT947 estbld; APLOG CRP (S0130.1 E03455.3) - TIDAK CRP at S0100.7 E03559.1 - ETUNU CRP at S0050.5 E03621.1 - EPSIB CRP at N0003.4 E03818.2, 065°/245°, 70/24/129NM. **A HL-8/10CD.**

UTEPI coords should read S0202.2 E03721.1. **A HL-8/10CD.**

## LIBYA

**ATS ROUTES changed:**

L31, IVAKI CRP estbld at N3255.5 E1506.3; LOTIN - IVAKI - Misrata VORDME (MIS), 84/37NM. **HLLT 10-1.**

M739, REXUN CRP estbld at N3332.1 E01415.7; VARIG - REXUN - Misrata VORDME (MIS), 55/84NM. **HLLT 10-1.**

T424 estbld; RASNO CRP (N3420.0 E02128.0) - TERAM CRP at N3400.0 E02228.1 - RAKMU CRP, 108°, 53/107NM; RASNO to RAKMU, MORA 1000a, one-way SE-bound, ufn. **A HL-2/8AB, A HI-3/2, A HI-5/1.**

T565 estbld; RAKMU CRP (N3318.3 E02427.7) - ELDIM CRP at N3400.0 E02307.8 - VALKI CRP, 298°, 78/38NM; RAKMU to VALKI, MEA FL300, MAA FL310, one-way NW-bound, ufn. **A HL-2/8B, A HI-5/1.**

V200 estbld; BREAM CRP (N32 53.5 E01405.0) - IVAKI CRP at N3255.5 E01506.3 - SOLUN CRP; 087°/268°, 51/97NM, MEA FL70. **HLLT 10-1.**

W852 estbld; LOTIN CRP (N3420.0 E01510.0) - REXUN CRP at N3332.1 E01415.7 - NAWRS CRP, 224°, 67/53NM, MEA FL70, one-way SW-bound. **HLLT 10-1.**

W857, ODGAX CRP estbld at N3337.9 E01352.9; Misrata VORDME (MIS) - ODGAX - SARKI, 99/53NM. **HLLT 10-1.**

W863 estbld; Mitiga VORDME (MTG) CRP - DERKA CRP, 018°/198°, 16NM, MEA FL70; DERKA - ODGAX CRP at N3337.9 E01352.9 - LUMED CRP, 042°, 39/57NM, MEA FL70; DERKA to LUMED, one-way NE-bound. **HLLT 10-1.**

## MOROCCO

**ATS ROUTES changed:**

B/UB11, FACAS CRP estbld at N3240.8 W00748.7; PELAX - FACAS - MABAP, 12/39NM. **A HL-1, A HI-1, A HI-2.**

**AFRICA**

G/UG5, VONCI CRP estbld at N3245.6 W00824.8; RALEK - VONCI - BARAM, 19/39NM. **A HL-1, A HI-1, A HI-2.**

H/UH119, LACAJ CRP estbld at N3308.2 W00651.0; GOVAS - LACAJ, 8NM, CDR status withdrawn; LACAJ - ERLAM, 27NM, CDR 1,2. **A HL-1.**

R/UR722, FOBAC CRP estbld at N3243.2 W00806.0, Daourat NDB (CSD) - FOBAC - MABAP, 13/36 NM.

**A HL-1, A HI-1, A HI-2.**

R/UR975, SADIC CRP estbld at N3344.0 W00620.0, POBUB - SADIC - DONAS, 30/12NM; NIKZO CRP estbld at N3243.6 W00809.7, Daourat NDB (CSD) - NIKZO - BENOVA, 13/41NM. **A HL-1, A HI-1, A HI-2.**

UZ801, LOBMI CRP estbld; MABOG CRP estbld at N3238.3 W00730.2; VABNA - LOBMI - MABOG - VALBA, 13/1/33NM; VALBA chgd to CRP. **A HL-1.**

Z801, LOBMI chgd to CRP; MABOG CRP estbld at N3238.3 W00730.2; LOBMI - MABOG, 1NM, CDR status withdrawn; MABOG - VALBA, 33NM, CDR 1,2; VALBA chgd to CRP. **A HL-1.**

BARRECHID VORDME (BRC) decmsnd. (N33 W007). **A HL-1.**

BENSLIMANE ATZ Class 'D' estbld. Altitudes GND-2000'. (N33 W007). **A HL-1.**

CASABLANCA TMA 2 withdrawn. (N33 W007). **A HL-1, A HI-1, A HI-2.**

CASABLANCA/MOHAMMED V ATZ Class 'D' estbld. Altitudes GND-2000'. (N33 W007). **A HL-1.**

CASABLANCA/MOHAMMED V CTA Class 'D' estbld. Altitudes 2000' - 6500'. (N33 W008). **A HL-1.**

CASABLANCA/MOHAMMED V TMA Altitudes 6500'-FL195. (N33 W006). **A HL-1.**

RABAT/SALE ATZ Class 'D' estbld. Altitudes GND-1500'. (N34 W006). **A HL-1.**

RABAT/SALE CTA Class 'D' estbld; Altitudes 1500' - 6500'. (N34 W007). **A HL-1.**

RABAT/SALE TMA withdrawn. (N34 W007). **A HL-1.**

Tit Mellil ATZ Class 'D' estbld. Altitudes GND-2000'. (N33 W007). **A HL-1.**

**N'DJAMENA FIR-UIR**
**ATS ROUTES changed:**

UG858 (HAJ-season), DEKIL (N2200.0 E01228.1) to NEBRA, chgd to one-way S-bound. **A HL-4, A HI-3.**

UR778 (HAJ-season), SABSI (N1442.8 E01130.0) - DELIS, chgd to one-way NE-bound. **A HL-7, A HI-3.**

**NIAMEY FIR-UIR**
**ATS ROUTES changed:**

UG854 (HAJ-season), Zinder VOR (ZR) to POMPA and DOGON to Niamey VORDME (NY), chgd to one-way W-bound. (N19 E037). **A HL-5, A HL-7, A HI-2, A HI-3.**

UG858 (HAJ-season), NEBRA (N1828.6 E01100.4) to DETAR, chgd to one-way S-bound. **A HL-4, A HL-5, A HL-7, A HI-3.**

UR778 (HAJ-season), RISUB (N1250.0 E00922.8) to SABSI, chgd to one-way NE-bound; ULVAB - TAPAK, MAA FL290. **A HL-5, A HL-7, A HI-3.**

GANLA (N1345.1 E00819.8) renamed MOLIT. **A HL-5/5B, A HL-7/1A.**

**NIGERIA**
**ATS ROUTES changed:**

H335, RAMUL CRP (N0642.8 E00549.5) estbld; Benin VORDME (BEN) - RAMUL - VONSO, 30/92NM. **A HL- 5, A HL-6.**

UG854 (HAJ-season), POMPA (N1340.6 E00615.0) - DOGON, chgd to one-way W-bound. **A HL-5, A HI-2.**



## AFRICA

UG858 (HAJ-season), DETAR (N1253.0 E00848.5) - Kano VORDME (KAN), chgd to one-way S-bound. **A HL-5, A HL-7, A HI-2.**

UR778 (HAJ-season), Kano VORDME (KAN) - RISUB, chgd to one-way NE-bound. (N12 E008). **A HL-5, A HL-7, A HI-3.**

**ATS ROUTES (undesigned) changed:**

ESTBLD (HAJ-season), POMPA (N1340.2 E00615.0) CRP - Sokoto VORDME (SOK) CRP, 235°/(055°), 73NM, MORA 4100a, one-way S-bound. **A HL-5, A HI-2.**

BAYELSA CTR Class 'D' estbld; GND-3500'. (N04 E006). **A HL-6/9A.**

GBOKO VORDME (GB) coords chgd to N0715.3 E00900.3. **A HL-5, A HL-6, A HL-7, A HL-8, A HI-3.**

## OMAN

**ATS ROUTES changed:**

B400, NCRP KUKDI estbld at N1930.4 E05559.9; Haima VORDME (HAI) - KUKDI - ITUVO, 32/31NM. Eff 10 Oct 19. **A HL-10.**

G652, NCRP DEBAV estbld at N2215.5 E05546.3; DATBU - DEBAV - TOKRA, 15/13NM. Eff 10 Oct 19. **A HL-10.**

L556, KEDON NCRP estbld at N2005.1 E05559.0; OTISA - KEDON - Haima VORDME (HAI), 13/18NM. Eff 10 Oct 19. **A HL-10.**

L692, EMAVA NCRP estbld at N2142.1 E05549.6; DAPOL - EMAVA - ITSAG, 14/72NM. Eff 10 Oct 19. **A HL-10.**

L710 estbld: MEMTU CRP at N2325.5 E05524.8 - GOGMI NCRP at N2302.3 E05532.0 - ITKUN NCRP at N2237.5 E05539.6 - DEBAV NCRP at N2215.5 E05546.3, 162°, 24/26/23NM; DEBAV - EMAVA NCRP at N2142.1 E05549.6 - ITETA NCRP at N2116.3 E05552.1 - IVENI NCRP at N2052.0 E05554.5 - KASIN NCRP at N2018.9 E05557.7, 173°, 33/26/24/33NM; KASIN - KEDON NCRP at N2005.1

E05559.0, 174°, 14NM; KEDON - KUKDI NCRP at N1930.4 E05559.9, 177°, 35NM; KUKDI - DEDSO NCRP at N1858.2 E05600.7, 178°, 32NM; MEMTU to DEDSO, MEA FL150, one-way S-bound, cruising levels NON-standard, EVEN levels S-bound. Eff 10 Oct 19. **A HL-10.**

L883, ITETA NCRP estbld at N2116.3 E05552.1; ALNUN - ITETA - SITOL, 17/25NM. Eff 10 Oct 19. **A HL-10.**

M628, KUNGO NCRP estbld; TULBU - KUNGO - EGVAN, 18/37NM; GOGMI NCRP estbld at N2302.3 E05532.0; LABSA - GOGMI - LUDID, 21/13NM; TULBU to LUDID, MEA FL260, MOCA 5000T. Eff 10 Oct 19. **A HL-10.**

N315, IVENI NCRP estbld at N2051.0 E05554.5; VELIK - IVENI - SITOL, 28/36NM. Eff 10 Oct 19. **A HL-10.**

N569, SUTLI NCRP estbld at N2201.4 E05604.1; TOPSO - SUTLI - TOKRA, 16/29NM. **A HL-10.**

P304 realigned, DEMKI (N2249.7 E05623.1) - EMISO NCRP, 358°/178°, 28NM, MEA FL150, MOCA 8000T; VELIK to EMISO chgd to two-way. Eff 10 Oct 19. **A HL-10.**

Q730, DATBU (N2222.7 E05600.9) - EGVAN, withdrawn. Eff 10 Oct 19. **A HL-10.**

R401, KATAK NCRP (N2248.2 E05557.1) estbld; DATBU - KATAK - LABSA, 26/14NM. Eff 10 Oct 19. **A HL-10.**

R401, SUTLI NCRP estbld at N2201.4 E05604.1; ALNUN - SUTLI - DATBU, 45/22NM. **A HL-10.**

UB424, NCRP KASIN estbld at N2018.9 E05557.7; VELIK - KASIN - OTISA, 23/14NM. Eff 10 Oct 19. **A HL-10.**

Z515, ITKUN NCRP estbld at N2237.5 E05539.6; MIDGU - ITKUN - KATAK, 19/19NM. Eff 10 Oct 19. **A HL-10.**

## AFRICA

## PORTUGAL

ELRAD (N3330.5 W01619.9) withdrawn  
EVONI (N3211.8 W01610.7) withdrawn  
MAMUP (N3205.6 W01533.4) withdrawn  
NOKSO CRP estbld at N3705.0 W00856.8.  
**CCN 307.**

TIGGI CRP estbld at N3558.0 W01056.1. Eff  
10 Oct 19. **A HL-1, A HI-1, A HI-2.**

XINGA HOLDING estbld (N3303.0 W01708.6),  
inbound track 092°, RIGHT turns, MHA  
FL150. **CCN 307.**

## ROBERTS FIR

OVLG coords chgd to N0907.7 W01235.0. **A  
HL-5, A HL-6, A HI-1.**

## SAUDI ARABIA

## ATS ROUTES changed:

B544, SODAR (N3156.0 E03843.4) to ORKAS,  
withdrawn, ufn. **A HI-7/1.**

G660 (HAJ-season), MIPOL (N2033.4  
E03821.8) to King Abdulaziz VORTAC  
(JDW), chgd to two-way. **OEJN 10-1, A  
HL-4, A HI-5, A HI-7.**

J852, Wejh VORTAC (WEJ) to Madinah  
VORDME (PMA), chgd to one-way SE-bound  
(N26 E036). **A HL-4.**

L677, MUVAT replaced by RAGNO NCRP at  
N2516.3 E03711.4; Yenbo VORDME (YEN) -  
RAGNO - Wejh VORTAC (WEJ), 82/66NM.  
**A HL-4, A HI-5, A HI-7.**

M/UM872, Wejh VORTAC (WEJ) to Madinah  
VORDME (PMA), chgd to one-way SE-bound  
(N26 E036). **A HL-4, A HI-5, A HI-7.**

R652, Guriat VORTAC (GRY) to DAXAN, with-  
drawn, ufn. **A HI-7/1.**

T256 estbld; Turaif VORDME (TRF) replaced  
by TOMDA CRP at same position; Guriat  
VORTAC (GRY) - TOMDA, MEA FL160;  
OVANO - DAXAN, MOCA 4100T, MAA with-  
drawn, upper limit FL460; Guriat VORTAC to

DAXAN, for other route details see former  
R652, ufn. **A HI-7/1.**

T455 estbld; Turaif VORDME (TRF) replaced  
by TOMDA CRP at same position; SODAR to  
ORKAS, MEA FL160; for other route details  
see former B544, ufn. **A HI-7/1.**

UL573, Wejh VORTAC (WEJ) to Madinah  
VORDME (PMA), withdrawn (N26 E036). **A  
HL-4, A HI-5, A HI-7.**

V13 extended; Tabuk VORTAC (TBK) - Neom  
Bay VORDME (NEM) CRP, 246°/065°,  
75NM, MOCA 8100T, MEA 12000'; Neom  
Bay VORDME - PASAM CRP, 214°/033°,  
32NM, MOCA 1500T, MEA 12000'. **A HI-5, A  
HI-7.**

V46, RAKLI (N2015.2 E04242.5) - Al Baha  
VORTAC (BHA), 270°/089°. **A HL-9.**

W600 estbld; Wejh VORTAC (WEJ) CRP -  
DARAX CRP, 310°/130°, 53NM, MOCA  
1600T, MEA 12000'; DARAX - Neom Bay  
VORDME (NEM) CRP, 335°/155°, 73NM,  
MOCA 2000T, MEA 12000'. **A HI-5, A HI-7.**

Z712 estbld; SENBU CRP (N2533.5 E03853.5)  
- SIGRO CRP at N2600.3 E03748.7, 291°,  
64NM; SIGRO - Wejh VORTAC (WEJ), 275°/  
(095°), 72NM; SENBU to Wejh VORTAC,  
MEA FL160, one-way NW-bound. **A HL-4.**

NEOM BAY VORDME (NEM) 112.6 cmsnd at  
N2755.9 E03517.5. **A HI-5, A HI-7.**

## SEYCHELLES

## ATS ROUTES changed:

UB459 redesignated UL441, MIROV (S1000.0  
E05236.1) to CLAVA. **A HI-8.**

UG465 redesignated UM307, NESAM (S1000.0  
E04831.9) to OTKIR. **A HI-8.**

UR400 redesignated UM313, EGLOM  
(N0044.9 E04724.2) to ALRAN. **A HI-7, A  
HI-8, A HL-10.**

UR401 redesignated UM314, AXINA (N0649.8  
E05500.0) to AMBAN. **A HI-8, A HL-10.**



## AFRICA

UR780 redesignated UN304, APKAK (S0011.3 E04614.6) to DENLI. **A HI-7, A HI-8, A HL-10.**

UR782 redesignated UN305, BERIL (S1000.0 E04559.8) to Praslin VORDME (PRA). **A HI-8.**

UT386 redesignated UM432, EGLOM (N0044.9 E04724.2) to CLAVA. **A HI-7, A HI-8, A HL-10.**

UNKOP coords chgd to N0335.9 E05242.0. **A HI-7, A HI-8, A HL-10.**

## SOMALIA

## ATS ROUTES changed:

UB403G, BOMIX (N1210.0 E05028.0) to MUSBI, cruising levels chgd to standard, EVEN levels SW-bound. **A HL-10/8CD9C, A HL-9/2B3A.**

## SOUTH AFRICAN REP

ZONDERWATER VORDME (CZV) 114.3 cmsnd at S2541.4 E02833.0. **FAOR 10-1.**

## SPAIN

## ATS ROUTES changed:

R10, Vejer De La Frontera VORDME (VJF) - LINTO, MEA FL70. (N36 W005). **A HL-1.**

## SUDAN

## ATS ROUTES changed:

A410, IMSUT (N1420.8 E03122.5) to VATEN, MEA FL80; RADKA - VATEN, upper limit FL280. **A HL-4, A HL-7.**

A727, ALPOX (N1711.5 E03208.5) to GAGNI realigned; ALPOX - GOPDA CRP at N1611.3 E03251.6, 142°/322°, 73NM; GOPDA - GAGNI, 179°/359°, 136NM; Merowe VORDME (MRW) to Kenana VORDME (KNA), MEA FL80; NUBAR to AVONO, MAA FL240. **A HL-4, A HL-7, A HI-5.**

B407, Port Sudan VORDME (PSD) to KAROX, MAA FL240, chgd to one-way NE-bound,

cruising levels NON-standard, EVEN levels NE-bound. **A HL-4, A HI-5, A HI-7, A HL-9.**

B526, VATEN replaced by Khartoum VORDME (KTM) CRP; TABKO withdrawn; Khartoum VORDME - DENDI, 100NM, MORA 4100a, upper limit FL285; DENDI - Kassala VORDME (KSL), MAA FL240. **A HL-4, A HL-7, A HI-5, A HI-7.**

B527, VATEN replaced by Khartoum VORDME (KTM) CRP; SODAB withdrawn; Khartoum VORDME - SUVRI, 100NM, MEA FL80; Khartoum VORDME to OVELA, MAA FL240. **A HL-4, A HL-7, A HL-8, A HI-5.**

B535, DAGAP (N0624.0 E03412.0) - TAPOS, withdrawn. **A HL-7, A HL-8.**

B612, ORNAT (N2000.0 E02500.0) - SOGIN, 140°/320°; ALVOR - DELAM, 140°/321°; DELAM - El Obeid VORDME (OBD), 113NM; ORNAT to EPLAS, MEA FL250, upper limit UNL. **A HL-4, A HL-7, A HL-8, A HI-5.**

G656, Juba VORDME (JUB) - ATUGA, MAA FL240. **A HL-8.**

G660 (HAJ-season), Port Sudan VORDME (PSD) to MIPOL, chgd to two-way. (N19 E037). **A HL-4, A HI-5, A HI-7, A HL-9.**

G660, Sebara Geneina VORDME (GENE) - El Fashir VORDME (FSR), MEA FL80, 162NM; RADKA withdrawn; VATEN replaced by Khartoum VORDME (KTM) CRP; IMSUT - Khartoum VORDME, 100NM; El Fashir VORDME to Khartoum VORDME, MEA FL60; PASIL withdrawn; Khartoum VORDME - BOPID, 100NM, MEA FL60; BOPID to BOGUM, MEA FL60; Sebara Geneina VORDME to MIPOL, MAA FL240. **A HL-4, A HL-7, A HI-3, A HI-5, A HI-7, A HL-9.**

P751, Port Sudan VORDME (PSD) - TOKAR, MORA 8100a, MEA/MAA withdrawn, upper limit UNL. **A HL-4, A HI-5, A HI-7, A HL-9.**

R611, VATEN replaced by Khartoum VORDME (KTM) CRP; GERAP withdrawn; Khartoum VORDME - EMITA, 100NM, MEA FL80, MAA

## AFRICA

- FL240; EMITA - TIKAT, MAA FL240. **A HL-4, A HL-7, A HI-5.**
- UL311 (HAJ-season), KAFIA (N0844.0 E02331.0) to VATEN chgd to one-way E-bound. **A HL-4, A HL-7, A HI-5.**
- UL311, RADAG (N1103.7 E02700.3) should be CRP. **A HL-7.**
- UL317, AZAZA (N1730.8 E03350.2), ITGAL and KAPIB chgd to CRPs. **A HL-4, A HL-7, A HI-5, A HI-7.**
- UL320, HASAN (N1301.5 E02658.2) chgd to CRP. **A HL-7, A HI-5.**
- UL427, GIPSO (N1506.3 E02539.8) renamed GIPSA. **A HL-4, A HL-7, A HI-3, A HI-5.**
- UL554, SISOIR (N1245.7 E03139.0) - ITOXA, 177°/357°. **A HL-7, A HI-5.**
- UL558, DASTU (N0749.4 E03308.0) to EGBIM, 255°/075°; EGBIM - DASAG, 255°/074°; DASAG - ASKON, 254°/074°. **A HL-7, A HL-8, A HI-5.**
- UM568, UMIDA (N1851.3 E03117.1) chgd to CRP. **A HL-4, A HI-5.**
- UM863 (HAJ-season), KITOB (N1521.7 E02258.8) to GIBAP, MEA FL310. **A HL-4, A HL-7, A HI-3, A HI-5, A HI-7, A HL-9.**
- UN311, JEBRA (N1255.3 E02913.8) to NUBAR, cruising levels chgd to NON-standard, EVEN levels N-bound. **A HL-4, A HL-7, A HI-5.**
- UN321, NUBAR (N2200.0 E03138.1) - BILAL, 154°/335°; BILAL - BOPID, 155°/335°; BOPID - [68KT1], 154°/335°; [68KT1] - TIKAT, 155°/335°; NUBAR to TIKAT, chgd to two-way, cruising levels NON-standard, EVEN levels S-bound. Eff 09 Oct 19. **A HL-4, A HL-7, A HI-5, A HI-7.**
- UN321, NUBAR (N2200.0 E03138.1) to TIKAT, cruising levels NON-standard, EVEN levels S-bound. **A HL-4, A HL-7, A HI-5, A HI-7.**
- UP309, NUBAR (N2200.0 E03138.1) to AVONO, cruising levels chgd to NON-standard, EVEN levels S-bound. **A HL-4, A HL-7, A HI-5.**
- UP324 (HAJ-season), El Geniena VORDME (GNA) to DELAM chgd to one-way E-bound. (N13 E022). **A HL-4, A HL-7, A HI-5.**
- UP565 extended; GINKA CRP (N1247.0 E02508.5) - HAMID NCRP, 019°/199°, 83NM; HAMID - EGSUM NCRP - ATMUL CRP, 019°/200°, 316/197NM. **A HL-4, A HL-7, A HI-5.**
- UP566 (HAJ-season), DELAM (N1440.0 E02906.7) to VATEN chgd to one-way E-bound. **A HL-4, A HL-7, A HI-5.**
- UQ733, ALPOX (N1711.5 E03208.5) - KUVTI, MEA FL290. **A HL-4.**
- UT944, DANUD (N1714.2 E03227.8) - KUVTI, MEA FL290. **A HL-4.**
- ATS ROUTES (undesigned) changed:**
- ORNAT (N2000.0 E02500.0) to Port Sudan VORDME (PSD), withdrawn. **A HL-4, A HI-5, A HI-7.**
- DONGOLA CTR upper limit 2500' (N19 E030). **A HL-4.**
- DONGOLA TMA estbld, 2500'-FL105 (N19 E030). **A HL-4.**
- EL FASHIR CTR upper limit FL145 (N13 E025). **A HL-7.**
- EL FASHIR TMA estbld, 4800'-FL145 (N13 E025). **A HL-7.**
- EL GENIENA VORDME (GNA) name/ident chgd to Sebara Geneina 'GENE' (N13 E022). **A HL-4, A HL-7, A HI-3, A HI-5.**
- EL OBEID CTA withdrawn (N13 E030). **A HL-4, A HL-7.**
- EL OBEID CTR upper limit 3500' (N13 E030). **A HL-7.**
- EL OBEID TMA estbld, 3500'-FL145 (N13 E030). **A HL-7.**
- HS(P)-8 upper limit UNL (N11 E034). **A HL-7, A HI-5.**

**AFRICA**

JUBA CTR upper limit 3000' (N04 E031). **A HL-7, A HL-8.**

JUBA VORDME (JUB) freq chgd to 113.1 at N0452.6 E03136.0. **A HL-7, A HL-8.**

KHARTOUM FIR upper limit FL285. **A HL-3/COVER PANEL, A HL-7/COVER PANEL, A HL-9/COVER PANEL.**

KHARTOUM UIR lower limit FL285. **A HL-3/COVER PANEL, A HL-7/COVER PANEL, A HI-5/COVER PANEL, A HI-8/7, A HL-9/COVER PANEL.**

MEROWE CTR estbld, GND-2500' (N18 E031). **A HL-4.**

MEROWE NEW TMA estbld, 2500'-FL145 (N18 E031). **A HL-4.**

NYALA CTA withdrawn (N12 E024). **A HL-4, A HL-7.**

NYALA CTR upper limit 2500' (N12 E024). **A HL-7.**

NYALA TMA estbld, 4800'-FL145 (N12 E024). **A HL-7.**

PORT SUDAN CTR vertical limits 2500'-FL195 (N19 E037). **A HL-4, A HL-9.**

PORT SUDAN TMA estbld, 3500'-FL195 (N19 E037). **A HL-4, A HL-9.**

SEBARA GENEINA CTR estbld, GND-FL145 (N13 E022). **A HL-7.**

SEBARA GENEINA TMA estbld, 4400'-FL145 (N13 E022). **A HL-7.**

**TANZANIA**
**ATS ROUTES changed:**

L/UL432, OKTEX coords chgd to S0100.2 E03115.0. **A HL-11, A HL-8, A HI-5, A HI-6.**

UA401, EPLET CRP estbld at S0149.1 E03414.9, OKSIS - EPLET - NIBOT, 19/16NM. **A HL-11, A HL-8, A HI-5, A HI-6.**

UB531, GETON CRP estbld at S0245.1 E03413.8; MWANZA VORDME (MV) - GETON - AVATU, 80/74NM. **A HL-11, A HL-8, A HI-5, A HI-6.**

UG656, UTIBA estbld at S0346.9 E03252.0; IBMAR - UTIBA - USUBU, 63/42NM. **A HL-11, A HL-8, A HI-6.**

UL434, TIMAG estbld at S0117.6 E03414.4; XINDA - TIMAG - APDOT, 21/24NM. **A HL-11, A HL-8, A HI-5, A HI-6.**

UL442, EGMET CRP estbld at S0134.2 E03414.6; APDOT - EGMET - OKSIS, 20/13NM. **A HL-11, A HL-8, A HI-5, A HI-6.**

UM306, DUMTI CRP estbld at S0204.1 E03415.1; NIBOT - DUMTI - MWANZA VORDME (MV), 11/83NM. **A HL-11, A HL-8, A HI-5, A HI-6.**

UW305, IBLEN CRP estbld at S0311.5 E03402.3; MWANZA VORDME (MV) - IBLEN - EVASI, 80/56NM. **A HL-11, A HL-8, A HI-6.**

MWANZA TMA Class 'A & D' estbld. Altitudes 1500'AGL-FL245. (S01 E034). **A HL-11, A HL-8.**

TABORA VORDME (TV) 114.7 cmsnd at S0504.2 E03249.4. **A HL-11.**

**TUNISIA**

AIRSPACE 1 redesignated TUNIS CTA NORTH WEST, (N39 E008). **DTTA 10-1.**

AIRSPACE 3 redesignated TUNIS CTA SOUTH WEST, (N36 E008). **DTTA 10-1.**

SFAX VOR (SFX) chgd to Sfax VORDME (N34 E010). **A HL-2, A HI-3.**

TUNIS TMA redesignated TUNIS CTA NORTH EAST, (N38 E009). **DTTA 10-1.**

**UGANDA**
**ATS ROUTES changed:**

A401, BETAF (S0043.0 E03311.0) - LABAT, MEA 9000'. **A HL-8/9D.**

L432, Entebbe VORDME (NN) to OKTEX, MEA FL90. **A HL-8/9D.**

UM216, NABRO (N0149.6 E03415.0) to Entebbe VORDME (NN), MEA FL90;

**AFRICA**

Entebbe VORDME to OVPAP, MEA FL150.  
**A HL-8.**

**UNITED ARAB EMIRATES**
**ATS ROUTES changed:**

UM550 redesignated M550, RIBOT (N2308.7 E05224.5) - GOLGU, MEA FL270. **A HL-10/6D.**

UM628 redesignated M628, LUDID (N2302.5 E05518.0) to PEKEM. **A HL-10/6BD.**

**YEMEN**
**ATS ROUTES changed:**

UT707 estbld; DEMGO CRP (N1203.0 E04830.7) - ALMIL CRP at N1338.7 E05010.4, 045°/225°, 138NM; ALMIL - ORBAT CRP, 044°/224°, 40NM; ORBAT - KIRAD CRP at N1439.9 E05112.7 - NODLI CRP at N1503.0 E05135.8 - DAVRA CRP at N1559.3 E05232.2 - DATVO CRP at N1617.6 E05250.5 - KAPET CRP, 043°/223°, 47/33/77/26/22NM; DEMGO to KAPET, MEA FL280. **A HI-7, A HL-10.**

**ZAMBIA**

[VLS40] coords chgd to S1440.5 E02815.9. **A HL-12.**

[VLS81] coords chgd to S1400.3 E02806.5. **A HL-12.**

**ZIMBABWE**

MATETSI NDB (MT) 260 cmsnd at S1830.5 E02554.5. **A HL-12.**

<b>TERMINAL CHARTS</b>
------------------------

**GENERAL**
**ALGERIA**

Alt Set to read hPa instead of MB.

**LIBYA**

Country name changed from SPLAJ to LIBYA.

**TERMINAL**

**Abidjan**, Cote D'Ivoire, (Felix Houphouet-Boigny), NDB "AN" frequency 306 KHz withdrawn.

**Addis Abeba**, Ethiopia, (Bole Intl), (12-8, 12-10) For RNAV (GNSS) Rwy 25L and RNAV (GNSS) Rwy 25R apch procs caution is advised due to doubtful waypoint coordinates.

**Agades**, Niger, (Manu Dayak), (12-1) Based on AMDT 10-18: Waypoint ZA001, ZA002, DEMIM and ZA006 coordinates are doubtful. Please use extrem caution while using procedure.

**Alexandria**, Egypt, (Borg El Arab), (20-3) RNAV SID rwy 32 suspended.

Rwy 14/32 and twys A, B, C, D, E and F closed and all procedures to rwy 14/32 suspended. Temporary rwy 14R/32L established on parallel twy A, refer to 20-8. Temporary procedures RNP Rwy 14R/32L available, refer to 22-01/22-02 (per AIRAC SUP 001/19).

**Algiers**, Algeria, (Houari Boumediene), (10-3F/3G) SIDs LABRO 1A, 1B, 1C & 1D under clarification.

**Asmara**, Eritrea, (Asmara Intl), (12-1/12-2) RNAV (GPS) rwy 07 & 25 no longer trial procedures.

**Aswan**, Egypt, Ufn RNAV SIDs/STARs suspended.

**Asyut**, Egypt, Ufn RNAV SIDs/STARs suspended.

**Axum**, Ethiopia, (10-2) Holding tracks at waypoints AX001, AX002, AX003 and TIDEG under clarification, CAUTION advised.

**Bahir Dar**, Ethiopia, Following procedures suspended: (13-1) VOR DME Rwy 04 (CAT C & D) and (13-2) VOR DME Rwy 04.

**AFRICA**

**Bangui**, Central African Rep, (M'Poko), All SOMSI STARs suspended due to unclear source.

**Banjul**, Gambia, (Banjul Intl), NDB ND withdrawn. (11-3) NDB ILS Rwy 32, (16-1) NDB Rwy 14 and (16-2) NDB Rwy 32 no longer available.

**Bata**, Equatorial Guinea, PAPI-L rwy 03 installed, angle 3.00°. Rwy 03/21 CL spacing 30m established.

**Beira**, Mozambique, (10-9) SWY RWY 12 withdrawn.

**Bejaia**, Algeria, (Soummam-Abane Ramdane), (10-9) PAPI-L angle rwy 26 changed to 3.18°.

**Blantyre**, Malawi, (Chileka), (11-1) (11-2) Localizer ICL freq 110.3 withdrawn, procedures temporary unusable.

CIRCLING rwy 10/28 avbl, but not authorized south of rwy.

**Bujumbura**, Burundi, (Bujumbura Intl), Officially published variation of 3.0°W is doubtful, dynamic variation indicates a change towards 0°E. Jeppesen has contacted the authorities to obtain an official value.

**Bulawayo**, Zimbabwe, (Joshua Mqabuko Nkomo), Based on SUP 007-19: DME VBU 115.7 MHz unserviceable (13-1).

**Cape Town**, South African Rep, (Cape Town Intl), Based on AD 2.14: APCH lights for RWY's 01/19 must read HIALS-II instead of ALSF-II.

(STARs) Following note withdrawn: Only aircraft equipped to comply with part 91-34 RoA may accept procedures overflying the ocean.

**Casablanca**, Morocco, (Mohamed V), Construction works published by SUP 01-19 effective 28 FEB 19. Refer to (10-8/10-8A) and latest NOTAMs.

**Catumbela**, Angola, (10-9) Note withdrawn, see NOTAM A0070/19 : Airport not available for ACFT with max Take-off weight less than 23 tons.

**Cotonou**, Benin, (Cadjehoun), (16-1) MSA based on CO NDB.

**Djerba**, Tunisia, (Zarzis), (11-1/11-2) ILS Z or LOC Z Rwy 09/ILS Y or LOC Y Rwy 09, Circling MDA(H) CAT A/B raised to 540' (521').

(13-1) VOR Rwy 09, Straight in MDA(H) raised to 490'(481'), Circling MDA(H) CAT A/B raised to 540'(521').

(13-2) VOR Z Rwy 27 with D3.0, Straight in MDA(H) raised to 410'(391').

**Dodoma**, Tanzania, No IFR charts available.

**Durban**, South African Rep, (King Shaka Intl), Construction works on Aerodrome (based on SUP 047-18). Refer to temporary chart 20-8 and latest NOTAMs.

**El Gora**, Egypt, First 657'(200m) of rwy 26 closed.

**Gao**, Mali, (Korogoussou), Works on runway. Refer to temp charts 10-8/10-8A and latest NOTAMs.

**Garoua**, Cameroon, Rwy 27 HIALS 900m established, configuration unknown.

**George**, South African Rep, (10-2A, 2B, 2C) RNAV STARs GABGO 1A, GABGO 1B & XALIN 1B speed restrictions at UTELU & ATUDI under clarification CAUTION ADVISED.

Construction works on twys and apron. Refer to temp chart 10-8 and latest NOTAMs.

**Ghat**, Libya, (16-1) Circling VIS CAT A changed to 1900m, CAT B raised to 2800m, CAT C lowered to 3700m and CAT D to 4600m.

Add note not authorized east of airport and at night.

Rwy 06/24 length, TORA rwys 06/24 and LDA rwy 24 increased to 6562'/2000m. LDA rwy 06 is 4921'/1500m. Rwy 06 thresh displaced by 1641'/500m. Stopways for rwy 06/24 established, length 197'/60m and for rwy 35, length 394'/120m.

**AFRICA**

**Goma**, Congo, DR of, (Goma Intl), (10-2D) Crossings over XIBKI, D9.0 GOM and GOM VOR for XIBKI 1A and 1V under clarification, CAUTION advised.

**Gombe**, Nigeria, DME CH58X co-located with VOR withdrawn for maintenance.

**Harare**, Zimbabwe, (Robert Gabriel Mugabe Intl), Automatic Terminal Information Service (ATIS) on frequency 113.1MHz unserviceable.

Based on SUPs S008 to S012/19: Rwy 05/23 closed due to rwy rehabilitation night works. Decommissioning of bay 10 centre line. WIP at both edges of Twy P and extension of intl apron from South of bay 6. Twy N is restricted to light acft (7000kgs and below), except for medium and heavy acft taxiing to Aviation Ground Services (AGS) aprons. Pilots to exercise CAUTION. Refer also to latest NOTAMs.

Twy H not available for ACFT with code letters D, E and F.

**Hassi Messaoud**, Algeria, (Oued Irara), (10-9S) Airport name to read Krim Belkacem.

**Ilorin**, Nigeria, DME CH70X withdrawn for maintenance.

**In Guezzam**, Algeria, 328/100m swy both rwys established. AVASlrwy 08/26 withdrawn; PAPI-L rwy 26 established.

**Johannesburg**, South African Rep, Construction works on RWYs and HST (based on SUP 005-19), Refer to temp chart 10-8 and latest NOTAMs.

**Jos**, Nigeria, Lctr JS u/s ufn.

**Juba**, Sudan, (12-1) RNAV (GNSS) RWY 13 procedure suspended due to rwy extension in northern direction.

**Kariba**, Zimbabwe, (Kariba Intl), PAPIs RWY 27 unserviceable.

**Kassala**, Sudan, Kassala VOR DME KSL u/s.

**Khartoum**, Sudan, VOR DME KTM 112.1 MHz unserviceable.

**Kilimanjaro**, Tanzania, (Kilimanjaro Intl), Following airway connections are under clarification, (10-3A) Airway connection to EVATO, (10-3B) airway connection from GABSO & to GEREN, (10-3C) airway connection to MUMTU.

**Kimberley**, South African Rep, PAPI-L available for all rwys.

**Kindu**, Congo, DR of, RL and PAPI for rwys 18/36 installed.

**La Gomera**, Canary Is, (10-2, 10-3, 10-1R) LPC VORDME "Gran Canaria" renamed "Gran Canaria South".

**Lagos**, Nigeria, (Murtala Muhammed), Due to erection of a temporal fence, pilots are advised to exercise caution while taxiing to D31 thru D34. ACFT parked at D31 or D32 should be towed to D33 before applying engine power to avoid jet blast incident/accident.

Links B3 and B4 of TWY B are the only active links, while B1, B2 and B7 are not active. Pilots to adhere strictly to ATC instructions.

Taxiway C (Eastern Taxiway) only accessible to code C ACFT. Pilots should exercise caution while taxiing.

**Lanzarote**, Canary Is, REIL RWY 03 unserviceable (based on SUP 61-19).

Works on apron area (based on SUP 151-18). Refer to temp charts 10-8 thru 10-8B and latest NOTAMs.

Works on TWYs E1 & R1 (based on SUP 01/18, with effective date 06 DEC 18 based on SUP 153/18). Refer to temporary chart 10-8D and latest NOTAMs.

**Livingstone**, Zambia, (Harry Mwanga Nkumbula Intl), (10-3/3A) RNAV SIDs AVORO 1A & AVORO 1B coordinates for waypoint AVORO to read S17 50.0 E025 59.9.

Use of all SIDs and STARs with caution due to unclear source situation.



## AFRICA

**Lubumbashi**, Congo, DR of, (Lubumbashi Intl), (10-2B, 10-2C) Holding over BAPVA, DIKVO and GILEK under clarification, CAUTION advised.

(10-2B, 10-2C) MSA under clarification, CAUTION advised.

**Luxor**, Egypt, (10-3/3A) New MSA based on ARP established for RNAV SIDs RWY 02 with the following sectors:

Between 180° - 360° sector altitude 3700', 360° - 090° sector altitude 3300' and 090° - 180° sector altitude 2700'.

Expected MSA harmonization after suspension (until 01 MAY 19 EST) of RNAV SIDs & STARs.

Based on SUP 1/18 AIRAC, RWY 02/20 will be closed from 16 AUG 18 1700Z to 15 AUG 19 EST. TWY A will be used as main RWY 02L/20R during the WIP period. All the related charts, procedures and data are suspended. Following temp charts will be used during the shutdown period: (10-8) Airport, Parking, Airport Info, Take-off Mnms; (12-01) RNP RWY 02L; (12-02) RNP RWY 20R; (13-01) VOR RWY 02L and (10-9S2) Standard Minimums. For details refer to temp charts and latest NOTAMs.

Ufn RNAV SIDs/STARs suspended.

**Malindi**, Kenya, (13-1) VOR DME RWY 17 Note Procedure on operational trail withdrawn.

Unlighted mast at S031350.96 E0400600.31, 187'. Pilots departing RWY 17 and landing RWY 35 to exercise caution.

**Maputo**, Mozambique, (13-1) Racetrack outbound timing CAT A chgd to 2.5 Min.

**Mbandaka**, Congo, DR of, PAPI for rwy 18/36 installed.

Ufn RL u/s.

**Mbuji-Mayi**, Congo, DR of, (All SID charts) Climb gradient under clarification, Caution advised.

**Merowe**, Sudan, PAPI-L rwy 02/20 change to APAPI-L.

**Mombasa**, Kenya, (Moi), Due to rehabilitation works RWY 15/33, TWYs E, F, G, J, K, M and N closed. Pilots to follow marshaller instructions. Refer to latest NOTAMs

**Monrovia**, (Roberts Intl), Ufn twy A1 closed.

**Monrovia**, (Spriggs Payne), Scattered depressions on rwy between twy intersections. Pilots to exercise caution during t/o and ldg.

**Niamey**, Niger, (Diori Hamani), (10-9) Based on Notam A0909-19: Temporary TWYs named A, A1, B, B1, C, C1, D and F established South and parallel of Rwy 09R/27L. Refer also to latest Notams.

**Nouakchott**, Mauritania, (Oumtounsy), IATA code for Nouakchott - Oumtounsy (GQNO) is NKC.

Rwy 16/34 HIRL spacing changed to 45m.

**Ollombo**, Congo, Rep of, (Sassou N'Guesso), RL rwy 04/22 changed to HIRL.

**Pointe Noire**, Congo, Rep of, (10-9) Rwy 35 PAPI-L (angle 3.0°)

**Polokwane**, South African Rep, PAPIs rwys 01/19 withdrawn.

**Port Elizabeth**, South African Rep, (13-1) VOR Z Rwy 08: Following Caution note withdrawn: Descent below 2400' in the procedure turn may only be conducted on completion of the final INBD turn.

**Port Sudan**, Sudan, (New Port Sudan), Based on AIRAC AMDT 01-19: Approach lighting changed from HIALS to ALS.

**Sainte-Marie**, Madagascar, RL rwy 01/19, spacing 60m, estbld. PAPI rwy 01/19 changed to PAPI-L, angle 3.00°.

**Sebha**, Libya, First 300m of Rwy 13 closed.

**Sharm El Sheikh**, Egypt, Ufn RNAV SIDs/STARs suspended.

**St Pierre**, Reunion, (Pierrefonds AB), Based on SUP 002/18, constructions works on airport

**AFRICA**

area. Refer to temporary chart 10-8 and latest NOTAMs.

**Suhag**, Egypt, (Suhag Intl), Procedure title changed for (13-1) to VOR Rwy 15, (13-2) to VOR Rwy 33. VAR changed to 4 °E and all bearings by minus 1°. MSA based on ARP.

**Taba**, Egypt, (Taba Intl), Ufn RNAV SIDs/STARs suspended.

**Tan Tan**, Morocco, (Plage Blanche), PAPI-L rwy 03/21, angle 3.0°, established.

**Tenerife-North**, Canary Is, For construction works on commercial apron refer to chart 20-8 and latest NOTAM (based on SUP 059-19).

**Tenerife-South**, Canary Is, (Reina Sofia), Works on movement area (based on SUP 051-19, with eff date 12 SEP 19 based on SUP 070-19). Refer to temporary charts 10-8B and 10-8C and latest NOTAMs.

**Tindouf**, Algeria, (10-9) Rwy 08L HIALS (420m) available.

**Toamasina**, Madagascar, Based on AIP SUP A 028-19: (10-9) Grass runway 01/19 (2297/700m) is withdrawn.

**Tobruk**, Libya, (13-1) VOR DME RWY 02, (13-2) VOR DME RWY 20 procedures no longer under experimental basis.

**Tolagnaro**, Madagascar, (16-3) FAF D9.7 designation changed from FQ26 to FQ26-1.

PAPI-L rwy 26 available, angle 3.0°.

**Tripoli**, (Mitiga), (10-9) Portion between twy A and twy H named as twy K.

**Tripoli**, (Tripoli Intl), (10-2B/2C, 10-2D/2E, 10-2F/2G, 10-3, 10-3B/3C, 10-3D/3E, 10-3G, 13-1, 13-2, 16-1) procedures suspended due to D Lctr perm withdrawn and TPI VORDME relocated to N32 39.8 E013 07.1, new freq 114.6MHz;(11-1) missed approach changed: Climbstraight ahead to 1500 feet, then turn right and proceed to PE Lctr climbing to 2000 feet and hold. Eff 17 Oct 13 following procedures withdrawn: STARs BENI WALID1B &

1F, MISRATA 1B & 1F, MIZDA 1B and SIDs BENI WALID 1D & 1H, GARUS 1G, MISRATA 1D & 1H, SARKI 1D.

TWR freq changed to 118.1MHz

**Wajir**, Kenya, (Waghala), Construction works on twys A, B, C, D, E, F, G, H and apron. Refer to temp charts 10-8/10-8A and latest NOTAMs.





# Change Notices

## NavData Change Notices

**AFRICA**

Jeppesen NavData CHANGE NOTICES highlight only **significant** changes affecting Jeppesen navigation data that may be currently stored in your aircraft navigation system database.

**IMPORTANT: CHECK FOR NOTAMS AND OTHER PERTINENT INFORMATION PRIOR TO FLIGHT.**

**FOR NavData BASE**

**12 Sep 19 THRU 09 Oct 19 CYCLE 1910**

**10 Oct 19 THRU 06 Nov 19 CYCLE 1911**

**ENROUTE**
**ERITREA**

Ref common FIR boundary between Asmara (HHAA) and Addis Abeba (HAAA): respective authorities publish differing information. NavData contains the information as published by Ethiopia only. For complete information refer to Enroute Charts A H/L-7/4D5AC, A H/L-9/1CD2AC, A HI-5/4&5, A HI-7/3&4.

**ETHIOPIA**

Ref common FIR boundary between Asmara (HHAA) and Addis Abeba (HAAA): respective authorities publish differing information. NavData contains the information as published by Ethiopia only. For complete information refer to Enroute Charts A H/L-7/4D5AC, A H/L-9/1CD2AC, A HI-5/4&5, A HI-7/3&4.

**SOMALIA**

CPDLC within Mogadishu FIR with Data Link ADS HCSM operational on trial.

**TERMINAL**
**ALGERIA**
**DATM, Bordj Mokhtar**

**Bordj Mokhtar**, VOR Rwy 26 Final transition not usable due to displ threshold, ufn.

**CONGO, DR OF**
**FZNA, Goma Intl**

**Goma**, STARs XIBK1A/1V Crossings over XIBKI, D9.0 GOM and GOM VOR under clarification, CAUTION advised.

**EGYPT**
**HEAT, Asyut**

**Asyut**, RNAV SIDs and STARs for RWY31 and RWY13 suspended.

**HEAX, International**

**Alexandria**, SIDs and STARs suspended ufn.

**HEBA, Borg El Arab**

**Alexandria**, RNAV SID NOZ1B suspended.

**HELX, Luxor**

**Luxor**, RNAV SIDs and STARs for RWY02 and RWY20 suspended.

RNP Rwy 02/20, ILS or LOC Rwy 02/20 and VOR Rwy 02/20 apch proc not usable, ufn.

**HESH, Sharm El Sheikh**

**Sharm El Sheikh**, RNAV SIDs/STARs for RWY 22R, 22L, 04R, 04L suspended.

**HESN, Aswan**

**Aswan**, RNAV SIDs and STARs for RWY17 and RWY35 suspended.

**HETB, Taba Intl**

**Taba**, RNAV SIDs and STARs for RWY04 and RWY22 suspended.

## AFRICA

## ETHIOPIA

**HAAB, Bole Intl**

**Addis Abeba**, RNAV (GNSS) Rwy 25L (R25L) and RNAV (GNSS) Rwy 25R (R25R) apch procs usable but caution advised due to doubtful waypoint coordinates, ufn.

**HABD, Bahir Dar**

**Bahir Dar**, VOR DME Rwy 04 apch proc: Final transition unusable due to displ threshold, ufn.

**HADR, A.T.D. Yilma Intl**

**Dire Dawa**, VOR DME Rwy 15 apch proc not usable.

## GABON

**FOOL, Leon M'BA**

**Libreville**, RNAV STARs AGTEN, LUBRI, MERIG, ONANO and VABEG renumbering under clarification CAUTION ADVISED.

## KENYA

**HKLK, Lokichogio**

**Lokichogio**, RNP Rwy 27 Final transition not usable due to displ threshold, ufn.

**HKNL, Nanyuki**

**Nanyuki**, RNAV (GNSS) Rwy 03/21 apch proc not usable, ufn.

**HKWJ, Waghala**

**Wajir**, RNP Rwy 15 (R15) apch proc suspended. VOR/DME Rwy 15 (D15) Final transition not usable due to displ threshold, ufn.

RNP Rwy 33 (R33) apch proc suspended. VOR DME Rwy 33 (D33) final transition unusable due to displ threshold, ufn.

## LIBYA

**HLLS, Sebha**

**Sebha**, ILS DME Rwy 13 (I13) and VOR DME Rwy 13 (D13) caution advised for Final tran-

sition due to closure of first 984' (300m) of Rwy 13, ufn.

**HLLT, Tripoli Intl**

**Tripoli**, Due to perm suspension of D Lctr and TPI VORDME relocation all SIDs suspended. Only the following STARs avbl: ABRA1A, ABRA1E, GARU1E, GASR1A, MIS1E, TANL1A, VARI1A.

Locator Rwy 09 (N09) apch proc suspended, ufn.

## MALAWI

**FWCL, Chileka**

**Blantyre**, ILS RWY 10 (I10) apch proc not usable, ufn.

## MOROCCO

**GMMB, Benslimane**

**Benslimane**, VOR DME Rwy 32 apch proc not usable. (Until 09 OCT 19)

**GMME, Sale**

**Rabat**, SIDs BISM1C/TOLS1C/VARA1C suspended ufn.

**GMMN, Mohamed V**

**Casablanca**, CAE NDB holding should read as follows: inbound/outbound crs chgd from 260/080DEG to 261/081DEG (Until 09 OCT 19).

SIDs chg: LACA1D/3D do not use, LACA2D/4D omit crossing Altitude over GOVAS w/p.

VOR Z Rwy 35R (S35RZ) name and ident changed to VOR Rwy 35R (S35R). (Until 09 OCT 19)

## MOZAMBIQUE

**FQPB, Pemba**

**Pemba**, NDB Rwy 17 (N17) apch proc suspended, ufn.

**AFRICA**
**NIGER**
**DRZA, Manu Dayak**

**Agades**, RNAV (GNSS) Rwy 07 apch proc not available, ufn.

**NIGERIA**
**DNMN, Minna**

**Minna**, ILS Rwy 05 (I05) apch proc is not in NavData due to missing source information.

**SOUTH AFRICAN REP**
**FAWK, Waterkloof AB**

**Waterkloof**, All SIDs and STARs suspended.

**SUDAN**
**HSDZ, Damazin**

**Damazin**, RNAV (GNSS) Rwy 17/35 apch procs not usable. (Until 09 OCT 19)

**HSLI, Kadugli**

**Kadugli**, RNAV (GNSS) Rwy 06/24 apch procs not usable. (Until 09 OCT 19)

**H SOB, El Obeid**

**El Obeid**, RNAV (GNSS) Rwy 01/19 apch procs not usable. (Until 09 OCT 19)

**HSSG, Genena Sebera**

**Genena Sebera**, RNAV (GNSS) RWY 04/22 (R04/R22) apch proc suspended, ufn.

**HSSM, Malakal**

**Malakal**, RNAV (GNSS) Rwy 04/22 and VOR/DME Rwy 04/22 apch procs not usable. (Until 09 OCT 19)

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**Dongola**, VOR/DME Rwy 17 apch proc not usable. (Until 09 OCT 19)

**TANZANIA**
**HTMW, Mwanza**

**Mwanza**, RNAV (GNSS) Rwy 12 and DVOR/DME Rwy 12 Final transition not usable due to displ threshold, ufn.

**TUNISIA**
**DTTA, Carthage**

**Tunis**, All RNAV SIDs completely withdrawn.

**ZAMBIA**
**FLHN, Harry Mwanga Nkumbula Intl**

**Livingstone**, Use of SIDs and STARs with caution due to unclear source situation.

VOR Rwy 28 (S28) and NDB Rwy 28 (N28) apch proc suspended, ufn.



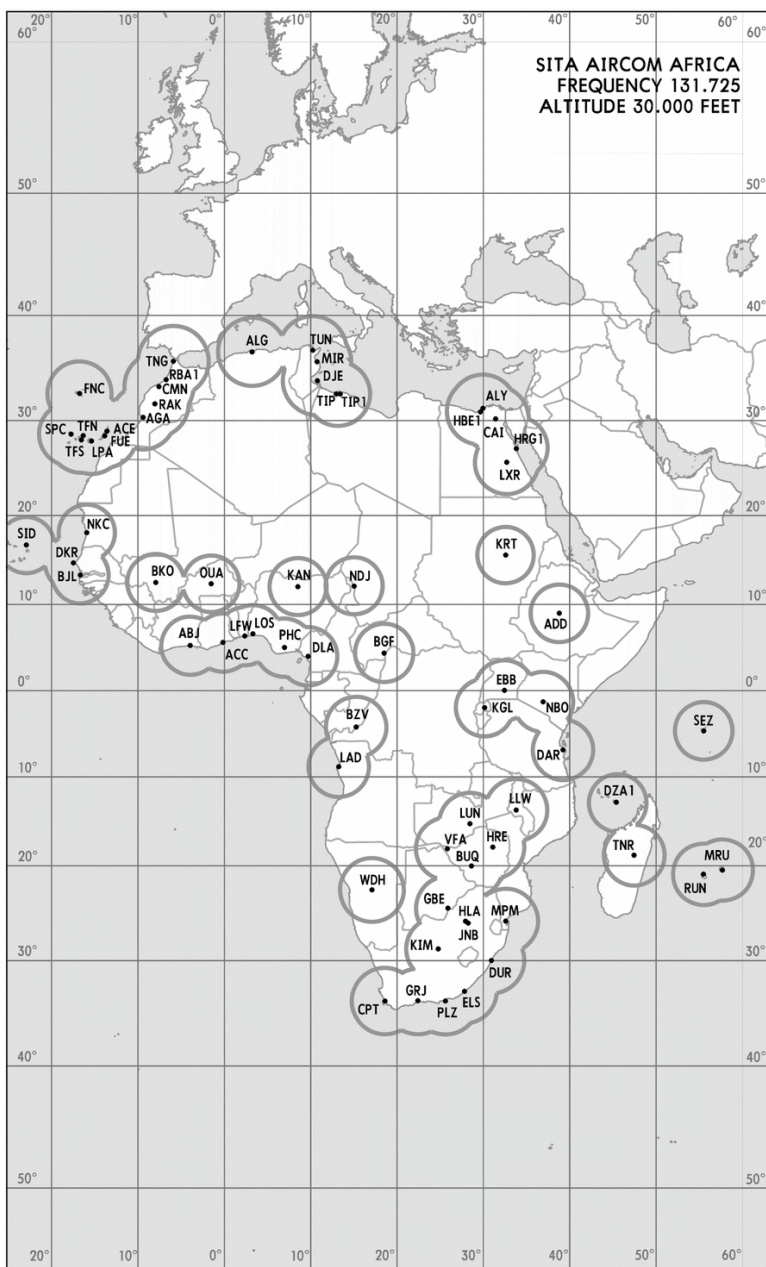
# Enroute



# Enroute

## Enroute Data - General

SITA



**SITA**
**REMOTE GROUND STATIONS**

<b>Ident</b>	<b>Location</b>
ABJ	Abidjan (Felix Houphouet-Boigny), Cote d'Ivoire
ACC	Accra (Kotoka Intl), Ghana
ACE	Lanzarote, Canary Is
ADD	Addis Ababa (Bole Intl), Ethiopia
AGA	Agadir (Al Massira Intl), Morocco
ALG	Algiers (Houari Boumediene), Algeria
ALY	Alexandria (Intl), Egypt
BGF	Bangui (M'Poko), Central African Rep.
BJL	Banjul (Intl), Gambia
BKO	Bamako (Senou), Mali
BUQ	Bulawayo (J. M. Nkomo), Zimbabwe
BZV	Brazzaville (Maya-Maya), Congo, Rep. of
CAI	Cairo (Intl), Egypt
CMN	Casablanca (Mohammed V Intl), Morocco
CPT	Cape Town (Intl), South African Rep.
DAR	Dar-Es-Salaam (Julius Nyerere Intl), Tanzania
DJE	Djerba (Zarzis), Tunisia
DKR	Dakar (Leopold Sedar Senghor), Senegal
DLA	Douala, Cameroon
DUR	Durban (King Shaka Intl), South African Rep.
DZA1	Dzaoudzi (Pamandzi), Mayotte
EBB	Entebbe (Intl), Uganda
ELS	East London, South African Rep.
FNC	Madeira, Portugal
FUE	Fuerteventura, Canary Is
GBE	Gaborone (Sir Seretse Khama Intl), Botswana
GRJ	George, South African Rep.
HBE1	Alexandria (Borg El Arab Intl), Egypt
HLA	Lanseria (Intl), South African Rep.



**SITA**
**REMOTE GROUND STATIONS (continued)**

<b>Ident</b>	<b>Location</b>
HRE	Harare (Intl), Zimbabwe
HRG1	Hurghada (Intl), Egypt
JNB	Johannesburg (O.R. Tambo Intl), South African Rep.
KAN	Kano (Mallam Aminu Kano), Nigeria
KIM	Kimberly, South African Rep.
KGL	Kigali (Intl), Rwanda
KRT	Khartoum, Sudan
LAD	Luanda (4th Of February), Angola
LFW	Lome (Gnassingbe Eyadema), Togo
LLW	Lilongwe (Kamuzu Intl), Malawi
LOS	Lagos (Murtala Muhammed), Nigeria
LPA	Gran Canaria, Canary Is
LUN	Lusaka (Kenneth Kaunda Intl), Zambia
LXR	Luxor (Intl), Egypt
MIR	Monastir (Habib Bourguiba), Tunisia
MPM	Maputo, Mozambique
MRU	Mauritius (Sir Seewoosagur Ramgoolam Intl), Mauritius
NBO	Nairobi (Jomo Kenyatta), Kenya
NDJ	N'Djamena (Hassan Djamous), Chad
NKC	Nouakchott, Mauretania
OUA	Ouagadougou, Burkina Faso
PHC	Port Harcourt, Nigeria
PLZ	Port Elizabeth (Intl), South African Rep.
RBA1	Rabat (Sale Intl), Morocco
RAK	Marrakech (Menara Intl), Morocco
RUN	La Reunion (Roland Garros), Reunion
SEZ	Seychelles (Intl), Seychelles
SID	Sal (Amilcar Cabral), Cape Verde
SPC	La Palma, Canary Is

## SITA

## REMOTE GROUND STATIONS (continued)

Ident	Location
TFN	Tenerife-North, Canary Is
TFS	Tenerife-South (Reina Sofia), Canary Is
TIP	Tripoli (Intl), Libya
TIP1	Tripoli (Intl), Libya
TNG	Tanger (Ibn Batouta), Morocco
TNR	Antananarivo (Ivato), Madagascar
TUN	Tunis (Carthage), Tunisia
VFA	Victoria Falls, Zimbabwe
WDH	Windhoek (Hosea Kutako Intl), Namibia



# Enroute

Enroute Data - Africa

AFRICA  
SECONDARY SURVEILLANCE RADAR - SSR

## RADAR BEACON ASSIGNMENT TO MODE 3/A CODED BEACON TRANSPONDER EQUIPPED AIRCRAFT

### STANDARD OPERATING PROCEDURES

- a. Aircraft equipped with Mode C shall squawk altimeter when operating transponder on Mode 3/A.
- b. After selection of the mode/code specified by ATC, the transponder should be adjusted on the "ON" (or normal operating) position as late as practicable prior to take-off and to "OFF" or "STANDBY" as soon as practicable after completing the landing roll.
- c. Select or reselect modes/codes only as directed by ATC, except in case of:
  - unlawful interference (hijacked) - squawk 7500
  - communication failure - squawk 7600
  - emergency - squawk 7700

***CAUTION: Squawking of 75.., 76.., 77.. plus any third or fourth figures will activate alarm system at some ground stations.***

- d. Squawk 2000 when entering a FIR/UIR from an adjacent region where operating a transponder has not been required or assigned.

### STANDARD TRANSPONDER FAILURE PROCEDURE

#### After Departure

- a. ATC units will endeavour to provide for flight to continue in accordance with flight plan.
- b. After landing pilot shall make every effort to have transponder restored to normal operation.

#### Before intended Departure

If transponder cannot be restored:

- a. Inform ATC, preferably before filing flight plan.
- b. Plan to fly by most direct route to nearest suitable airport where repair can be effected, and
- c. Insert appropriate code in Item 10 of ICAO flight plan.

General compliance with and additions to the above standard operating procedures or standard transponder failure procedures are as listed below.

ALGERIA	Standard operating procedures. Standard transponder failure procedures. Squawk 7000 as an uncontrolled flight.
ANGOLA	No SSR.

**AFRICA**  
**SECONDARY SURVEILLANCE RADAR - SSR**

BENIN	<p>Standard operating procedures.</p> <p>Standard transponder failure procedures.</p> <p>In case of the transponder failure during a flight that will enter Cotonou TMA, the concerned aircraft shall be obliged to inform Cotonou ACC at least 15 minutes before entering the concerned airspace.</p>
BOTSWANA	<p>Standard operating procedures.</p> <p>Standard transponder failure procedures.</p>
BURKINA FASO	<p>SSR within Ouagadougou TMA/UTA.</p> <p>Standard operating procedures.</p> <p>Standard transponder failure procedures.</p> <p>In case of the transponder failure during a flight that will enter the Ouagadougou TMA/UTA, the concerned aircraft shall be obliged to inform Ouagadougou ACC or Approach Control Center at least 15 minutes before entering the concerned airspace.</p>
BURUNDI	No SSR.
CAMEROON	<p>SSR within Douala TMA/UTA.</p> <p>Standard operating procedures.</p> <p>Standard transponder failure procedures.</p> <p>In case of the transponder failure during a flight that will enter Douala TMA/UTA, the concerned aircraft shall be obliged to inform Douala ACC or Approach Control Center at least 15 minutes before entering the concerned airspace.</p>
CANARY ISLANDS	<p>Standard operating procedures.</p> <p>Standard transponder failure procedures.</p> <p>Squawk 7000 as an uncontrolled flight unless otherwise instructed by ATC.</p>
CAPE VERDE	<p>Standard operating procedures.</p> <p>Standard transponder failure procedures.</p> <p>Squawk 7000 as a VFR flight within uncontrolled airspace.</p>
CENTRAL AFRICAN REPUBLIC	No SSR.
CHAD	<p>Standard operating procedures.</p> <p>Standard transponder failure procedures.</p>
COMOROS	No SSR.
CONGO, DR OF	No SSR.

**AFRICA**  
**SECONDARY SURVEILLANCE RADAR - SSR**

CONGO, REP OF	<p>SSR within Brazzaville TMA/UTA.</p> <p>Standard operating procedure.</p> <p>Standard transponder failure procedures.</p> <p>In case of the transponder failure during a flight that will enter Brazzaville TMA/UTA, the concerned aircraft shall be obliged to inform Brazzaville ACC or Approach Control Center at least 15 minutes before entering the concerned airspace.</p>
COTE D'IVOIRE	<p>Standard operating procedures.</p> <p>Standard transponder failure procedures.</p> <p>In case of the transponder failure during a flight that will enter Abidjan TMA/UTA, the concerned aircraft shall be obliged to inform Abidjan Approach or Abidjan Control at least 15 minutes before entering the concerned airspace.</p>
DJIBOUTI	<p>Standard operating procedures.</p> <p>Standard transponder failure procedures.</p> <p>Squawk 4300 within Djibouti TMA.</p>
EGYPT	<p>Standard operating procedures.</p> <p>Standard transponder failure procedures.</p> <p>Squawk 7000 as an uncontrolled flight.</p>
ERITREA	No SSR.
ESWATINI	<p>SSR within Matsapha TMA.</p> <p>Standard operating procedures.</p> <p>Standard transponder failure procedures.</p>
ETHIOPIA	<p>Standard operating procedures.</p> <p>Standard transponder failure procedures.</p>
GABON	No SSR.
GAMBIA	<p>Standard operating procedures.</p> <p>Standard transponder failure procedures.</p>
GHANA	<p>Standard operating procedures.</p> <p>Standard transponder failure procedures.</p>
GUINEA REP.	No SSR.

**AFRICA**  
**SECONDARY SURVEILLANCE RADAR - SSR**

GUINEA BISSAU	<p>SSR within Bissau TMA.</p> <p>Standard operating procedures.</p> <p>Standard transponder failure procedures.</p> <p>In case of the transponder failure during a flight that will enter Bissau TMA, the concerned aircraft shall be obliged to inform Bissau Approach Control Center at least 15 minutes before entering the concerned airspace.</p>
GUINEA EQUATORIAL	<p>No SSR.</p>
KENYA	<p>Standard operating procedures.</p> <p>Standard transponder failure procedures.</p>
LESOTHO	<p>No SSR.</p>
LIBERIA	<p>No SSR.</p>
LIBYA	<p>Standard operating procedures.</p> <p>Standard transponder failure procedures.</p>
MADAGASCAR	<p>Standard operating procedures.</p> <p>Standard transponder failure procedures.</p> <p>In case of the transponder failure during a flight that will enter Antananarivo TMA/UTA, the concerned aircraft shall be obliged to inform Antananarivo ACC at least 15 minutes before entering the concerned airspace.</p>
MALAWI	<p>No SSR.</p>
MALI	<p>SSR within Bamako TMA/UTA.</p> <p>Standard operating procedures.</p> <p>Standard transponder failure procedures.</p> <p>In case of the transponder failure during a flight that will enter Bamako TMA/UTA, the concerned aircraft shall be obliged to inform Bamako ACC or Approach Control Center at least 15 minutes before entering the concerned airspace.</p>

**AFRICA**  
**SECONDARY SURVEILLANCE RADAR - SSR**

MAURITANIA	<p>SSR within Nouakchott TMA/UTA.</p> <p>Standard operating procedures.</p> <p>Standard transponder failure procedures.</p> <p>In case of the transponder failure during a flight that will enter Nouakchott TMA/UTA, the concerned aircraft shall be obliged to inform Nouakchott ACC or Approach Control Center at least 15 minutes before entering the concerned airspace.</p>
MAURITIUS	No SSR.



**AFRICA**  
**SECONDARY SURVEILLANCE RADAR - SSR**

**MOROCCO**

Standard operating procedures.

Squawk 7000 as a VFR flight unless otherwise instructed by ATC.

SSR transponder failure procedures:

a. Failure before departure.

1. The failure only concerns the altitude transmission (mode C):  
The pilot shall:

- (a) inform ATC as early as possible and preferably before filing flight plan;

- (b) insert in item 10 of the FPL, under item SSR, letter "A", indicating to be equipped with a transponder answering in mode 4096 codes, only.

2. Complete transponder failure (mode A and C): The pilot shall:

- (a) imperatively obtain, before departure, a concession delivered by Casablanca ACC. The concession shall determine the requirements concerning the time of departure, authorized airspace, and flight levels attributed.

- (b) insert in item 10 of the FPL, under item SSR, letter "N" and in item 18 of the FPL the remark "RMK / CONCESSION/SSR FAILURE".

b. Failure after departure.

1. The failure only concerns the altitude transmission (mode C):

in this case, ATC of departing aerodrome and the concerned ACC shall ensure continuation of the flight.

2. Complete transponder failure (mode A and C):

Casablanca ACC may refuse continuation of the flight. In this case, the pilot may be requested to return to aerodrome of departure or to any alternate aerodrome. If repair is not possible, pilot shall follow the provisions as shown for "FAILURE BEFORE DEPARTURE".

c. Failure occurs enroute:

1. The failure only concerns the altitude transmission (mode C):

ATC shall ensure continuation of the flight.

2. Complete transponder failure (mode A and C):

ATC shall try to ensure continuation of the flight to the aerodrome of destination. In certain cases, the pilot may be re-

**AFRICA**  
**SECONDARY SURVEILLANCE RADAR - SSR**

	<p>quested to return to his aerodrome of departure or to any alternate aerodrome.</p> <p>d. The failure occurs before entering controlled airspace:</p> <ol style="list-style-type: none"> <li>1. The failure only concerns the altitude transmission (mode C): ATC shall ensure continuation of the flight according to flight plan.</li> <li>2. Complete transponder failure (mode A and C): ACC may refuse entry into the controlled airspace, even if an ATS clearance was previously delivered.</li> </ol>
MOZAMBIQUE	No SSR.
NAMIBIA	<p>Standard operating procedures.</p> <p>Standard transponder failure procedures.</p>
NIGER	<p>SSR within Niamey TMA/UTA.</p> <p>Standard operating procedures.</p> <p>Standard transponder failure procedures.</p> <p>In case of the transponder failure during a flight that will enter Niamey TMA/UTA, the concerned aircraft shall be obliged to inform Niamey ACC or Approach Control Center at least 15 minutes before entering the concerned airspace.</p>
NIGERIA	<p>Standard operating procedures.</p> <p>Standard transponder failure procedures.</p> <p>Squawk 1200 when conducting a VFR flight.</p>
REUNION	<p>Standard operating procedures.</p> <p>Standard transponder failure procedures.</p>
RWANDA	<p>Standard operating procedures.</p> <p>Standard transponder failure procedures.</p> <p>Squawk 2201 as a VFR flight.</p>
SENEGAL	<p>SSR within Dakar TMA/UTA.</p> <p>Standard operating procedures.</p> <p>Standard transponder failure procedures.</p> <p>In case of the transponder failure during a flight that will enter the Dakar TMA/UTA, the concerned aircraft shall be obliged to inform Dakar ACC or Approach control center at least 15 minutes before entering the concerned airspace.</p>

**AFRICA**  
**SECONDARY SURVEILLANCE RADAR - SSR**

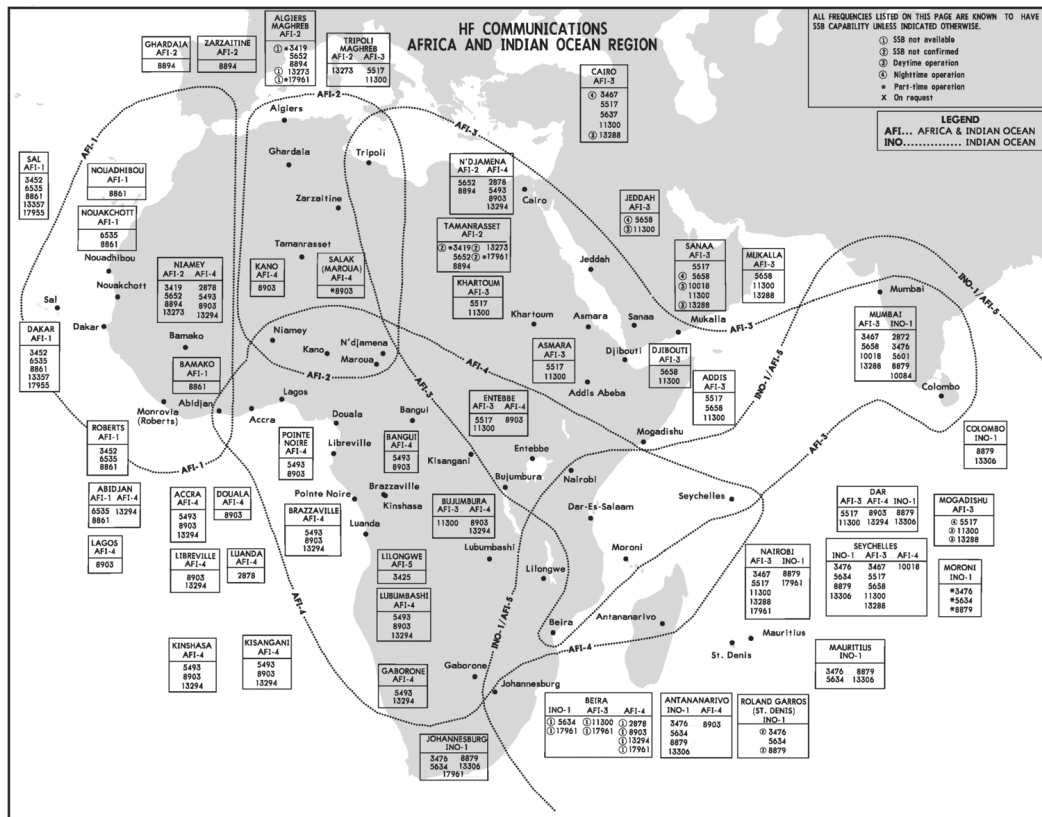
SEYCHELLES	No SSR.
SIERRA LEONE	No SSR.
SOMALIA	No SSR.
SOUTH AFR. REP.	Standard operating procedures. Standard transponder failure procedures.
SUDAN	Standard operating procedures. Standard transponder failure procedures.
TANZANIA	Standard operating procedures. Standard transponder failure procedures. Squawk 7000 as a VFR flight.
TOGO	Standard operating procedures. Standard transponder failure procedures. In case of the transponder failure during a flight that will enter Lome UTA, the concerned aircraft shall be obliged to inform Lome ACC at least 15 minutes before entering the concerned airspace.
TUNISIA	Standard transponder failure procedures. Squawk 7000 within uncontrolled airspace.
UGANDA	Standard operating procedures. Standard transponder failure procedures.

**AFRICA**  
**SECONDARY SURVEILLANCE RADAR - SSR**

ZAMBIA	<p>Standard operating procedures except in case of emergency:</p> <ol style="list-style-type: none"> <li>a. When entering Lusaka FIR, if already received specific instructions from ATC maintain that transponder setting until otherwise instructed.</li> <li>b. When entering Lusaka FIR and no specific transponder code received from ATC squawk 2400 before entry and maintain that code until otherwise instructed.</li> <li>c. If encountering a state of emergency and previously been directed by ATC to operate on a specific code, maintain that code until otherwise instructed.</li> <li>d. In all other circumstances squawk 7700. Notwithstanding the procedure in para a. above, squawk 7700 whenever the nature of the emergency is such that this appears to be the most suitable course of action.</li> </ol> <p>Departing traffic:</p> <ul style="list-style-type: none"> <li>– 1500</li> <li>– 0500 (domestic traffic)</li> </ul> <p>Arriving traffic:</p> <ul style="list-style-type: none"> <li>– inbound Lusaka TMA 4500 or 4600</li> <li>– inbound other TMAs 4700</li> </ul> <p>Overflying traffic:</p> <ul style="list-style-type: none"> <li>– 0400</li> <li>– 2100 (eastbound)</li> <li>– 0700 (westbound)</li> </ul> <p>Test and training flights:</p> <ul style="list-style-type: none"> <li>– 4700</li> </ul> <p>Standard transponder failure procedures.</p>
ZIMBABWE	No SSR.

# AFRICA HF COMMUNICATIONS - AFRICA AND INDIAN OCEAN REGION

## AFRICA AND INDIAN OCEAN REGION



**AFRICA**  
**IATA IN-FLIGHT BROADCAST PROCEDURE**

## **IATA IN-FLIGHT BROADCAST PROCEDURE (IFBP) ON 126.9 AFI REGION**

### **LISTENING WATCH**

A listening watch should be maintained on the designated frequency (126.9 MHz in AFI), 10 minutes before entering the designated airspace until leaving this airspace. For an aircraft taking off from an aerodrome located within the lateral limits of the designated airspace, listening watch should start as soon as appropriate and be maintained until leaving the airspace.

### **TIME OF BROADCAST**

A broadcast should be clearly pronounced in English:

- a. 10 minutes before entering or crossing an FIR within IFBP region;
- b. for a pilot taking off from an aerodrome located within the IFBP region as soon as appropriate;
- c. 10 minutes prior to crossing or joining an ATS route, report crossing airway or waypoint. In the interest of reducing congestion on the IFBP frequency, pilots may exercise discretion to omit closely spaced repetitive IFBP reports;
- d. at not less than 20 minute intervals;
- e. before a change in flight level;
- f. at any other time considered necessary by the pilot.

### **BROADCAST PROCEDURE**

A broadcast message should be structured as follows:

- ‘ALL STATIONS’
- ‘THIS IS AZ... (flight number) in the XXX (name FIR) FIR’
- ‘FL....’
- ‘North-eastbound on XXnnn (airway)’
- ‘Estimate XXXXX (or crossing airway if no waypoint) .....at ....UTC’
- ‘AZ.....’
- ‘FL....’
- ‘in the XXX FIR’

### **OPERATING PROCEDURES**

#### **Changes of Cruising Level**

- a. Changes of Cruising Level are considered necessary by pilots to avoid traffic conflicts, for weather avoidance, or for other valid operational reasons.

## AFRICA IATA IN-FLIGHT BROADCAST PROCEDURE

- b. When cruising level changes are unavoidable, all available aircraft lighting, which would improve the visual detection of the aircraft, should be displayed while changing levels.

### Collision Avoidance

If, on receipt of a traffic information broadcast from another aircraft, a pilot decides that immediate action is necessary to avoid an imminent collision risk to his aircraft, and this cannot be achieved in accordance with the right-of-way provisions of Annex 2, he should:

- a. unless an alternative manoeuvre appears more appropriate climb or descent 500ft;
- b. display all available aircraft lighting which would improve the visual detection of the aircraft;
- c. as soon as possible, reply to the broadcast advising action being taken;
- d. notify the action taken on the appropriate ATS frequency, and
- e. as soon as situation has been rectified, resume normal flight level, notifying the action on the appropriate ATS frequency.

### Normal Position Reporting Procedures

Normal position reporting procedures should be continued at all times, regardless of any action taken to initiate or acknowledge a traffic information broadcast.

### Operation of Transponders

Pilots shall ensure that transponder procedures as contained in ICAO PANS OPS Doc 8168 are complied with and in the absence of other directions from ATC, operate the transponder on Mode A and C Code 2000.

Pilots shall ensure operation of transponders even when outside radar coverage in order to enable TCAS equipped aircraft to identify conflicting traffic.

### Use of TCAS

In accordance with ICAO Regional Supplementary Procedures (Doc 7030), ACAS II shall be carried and operated in the AFI Region by all civil fixed-wing turbine-engined aircraft having a maximum take-off mass exceeding 5700kg or maximum approved passenger seating configuration of more than 19.

IATA therefore promotes the use of a working TCAS for aircraft when operating within the AFI Region; and pilots shall select TA/RA mode at maximum range.

### Use of SLOP

SLOP is promoted in AFI region.

### THE IFBP IN AFI

In many FIRs in the AFI Region communications both fixed and mobile have either not been implemented or operate well below the required reliability. This has an impact on the proper provision of Air Traffic Services, especially flight information service. Consequently, the AFI Regional Technical Conference has decided that the IATA In-Flight Broadcast Procedure (IFBP) should be

## AFRICA IATA IN-FLIGHT BROADCAST PROCEDURE

used within designated FIRs in the Region as an interim measure until such time as communications facilities affecting the FIRs in question have been improved.

### DESIGNATED FREQUENCY IN AFI

In the AFI Region the designated frequency for the IFBP is 126.9 MHz.

### AREA OF APPLICATION

In the AFI Region the IFBP should be applied in the following FIRs and airspaces:

- a. Asmara
- b. Brazzaville
- c. Kano
- d. Khartoum
- e. Kinshasa
- f. Luanda
- g. Mogadishu
- h. Niamey
- i. N'Djamena
- j. Tripoli

Even though some FIRs are removed from area of applicability, some FIRs will continue applying IFBP in case of contingency (Dakar Terrestrial, Dakar Oceanic...).

*NOTE: Brazzaville, Niamey and N'Djamena FIR provide Controller Pilot Data Link Communication (CPDLC) service, however these FIRs are maintained in IFBP area of applicability to accommodate user requirements for linear boundaries to the extent feasible.*

*Tripoli FIR mandated IFBP within their entire FIR, hence IFBP region extended from North of latitude 30 degrees N to cover entire Tripoli FIR.*

### ENFORCEMENT

All airlines operating in the AFI region are requested to:

- a. ensure that their air crews are fully briefed on the procedure and area of application described;
- b. ensure that their charts and flight documentation are fully amended to reflect the foregoing.

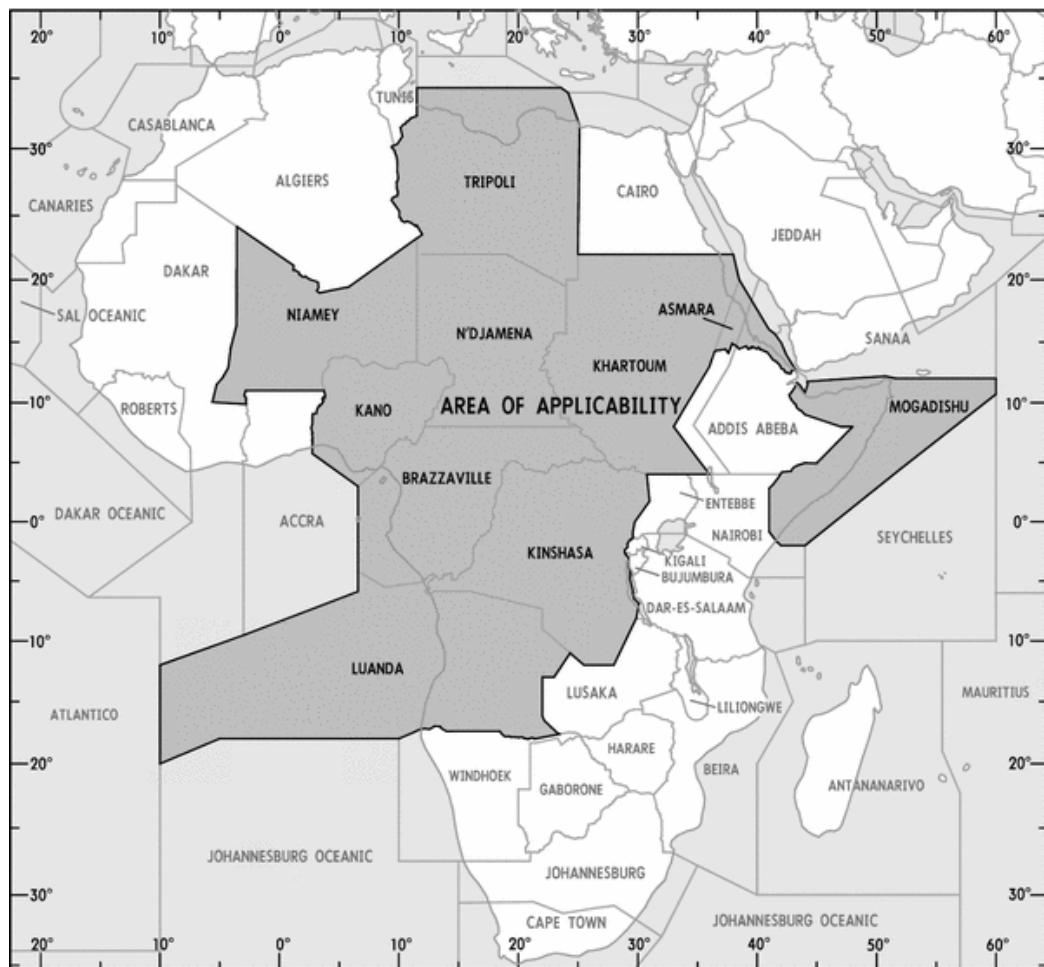
Any operator reported to IATA as not applying the procedure shall be contacted immediately, informed of the procedure, and requested to apply it.

Attention is drawn to the fact that during the Haj Pilgrimage period the number of east-west flights in the North-Central part of the AFI Region increases dramatically and with it the risk of ATS incidents and the importance of the In-Flight Broadcast Procedure.



# AFRICA IATA IN-FLIGHT BROADCAST PROCEDURE

## MAP



NOTE: IFBP Version 7: Publication Date 12 December 2013, Effective date: 9 January 2014

# AFRICA CPDLC COVERAGE

## CPDLC OVERVIEW



**AFRICA  
CPDLC COVERAGE**

**Data Link Services**

<b>Airspace</b>	<b>CPDLC</b>	<b>ADS-C</b>	<b>Logon</b>	<b>Remarks</b>
Abidjan FIS	O	O	DIII Logon should be initiated between 20 and 45 minutes prior to entry into Abidjan FIS.	
Accra (Oceanic portion) FIR	O	O	DGAC Logon should be initiated at least 10 minutes prior to entry into Accra FIR.	Commencement of full ADS-C/CPDLC operation in the oceanic portion of the FIR. Area of operation is South of 03N.
Algiers FIR	O	O	DAAA Logon should be initiated between 15 and 30 minutes prior to entry into Algiers FIR	
Antananarivo FIR/UIR	O	O	FMMM Logon should be initiated between 20 and 45 minutes prior to entry into Antananarivo FIR.	
Atlantico FIR	O	O	SBAO	
Brazzaville FIR	O	O	FCCC Logon should be initiated between 15 and 45 minutes prior to entry into Brazzaville FIR.	CPDLC will be the primary means of communication, VHF (HF) will be the secondary means of communication. To be applied in Brazzaville FIR excluding Douala, Libreville and Sao Tome UTA.

# AFRICA CPDLC COVERAGE

## Data Link Services (continued)

Airspace	CPDL C	ADS-C	Logon	Remarks
Canaries FIR/UIR	O	O	<p>GCCC</p> <p>FANS 1/A: Traffic with origin GC** exiting Canaries FIR/UIR via Santa Maria Oceanic FIR, Sal Oceanic FIR/UIR or Dakar FIR/UIR may logon when the aircraft is still on ground or as soon as possible after departure. Traffic with destination GC** entering Canaries FIR/UIR via Santa Maria Oceanic FIR, Sal Oceanic FIR/UIR or Dakar FIR/UIR or overflying traffic shall logon at least 30 minutes before entering Canaries UIR.</p> <p>ATN B1: Traffic with origin GC** exiting Canaries FIR/UIR may logon when the aircraft is still on ground or as soon as possible after departure. Traffic with destination GC** entering Canaries FIR/UIR may logon to the ATN CPDLC service any time, preferably 15 minutes, before entering Canaries UIR.</p>	<p>FANS 1/A and ATN B1.</p> <p>ATN CPDLC: Voice communications will remain as priority means of communication over CPDLC.</p> <p>FANS CPDLC: Compulsory in oceanic environment for equipped aircraft due to technical limitations of VHF or HF voice communication.</p> <p>ATN B1 data link services are available in Canaries UIR, in the area defined by the lateral limits of Canaries TMA to the north of 26N parallel and to the east of 19W meridian from FL285, and in Canaries FIR/UIR, within the same lateral limits, below that flight level, according to coverage and/or availability of VDL2 stations, subject to the established logon procedures.</p> <p>ATN B1 available for aircraft with contract with SITA and/or ARINC ACSP.</p>
Cape Town	O	O	FACT	
Dakar Oceanic FIR	O	O	<p>GOOO</p> <p>Logon should be initiated between 15 and 45 minutes prior to entry into Dakar Oceanic FIR.</p>	<p>CPDLC will be the primary means of communication. HF will be used as backup</p>

**AFRICA  
CPDLC COVERAGE**

**Data Link Services (continued)**

<b>Airspace</b>	<b>CPDLC</b>	<b>ADS-C</b>	<b>Logon</b>	<b>Remarks</b>
Dakar UTA	O	O	GOOO	VHF will be the primary means of communication. CPDLC will be used as back up (for CPDLC equipped aircraft).
Johannesburg Oceanic FIR	O	O	FAJO	Confirm CPDLC CDA: One CPDLC position report at FIR boundary.
Kano FIR	O	O	DNKN (Kano ACC) DNMM (Lagos sub-FIR) Logon should be initiated between 15 and 45 minutes prior to entry into Kano FIR.	
Karthoum FIR	O	O	HSSS Logon should be initiated 10 minutes prior to entry into Karthoum FIR.	CPDLC services are available for FANS 1/A equipped aircraft.
Lisbon FIR	O	N	LPPC	CPDLC services are available from FL285 and above for ATN VDL 2 equipped aircraft.
Luanda FIR/UIR	T	T	FNAN	
Mauritius FIR	O	O	FIMM Logon should be initiated between 15 and 45 minutes prior to entry into Mauritius FIR.	Confirm CPDLC CDA: One CPDLC position report at FIR boundary.
Mogadishu FIR	T	T	HCSM Logon should be initiated 10 minutes prior to entry into Mogadishu FIR.	CPDLC services are available from FL245 and above for FANS 1/A equipped aircraft. The services are in continental and oceanic area secondary means of communication.

**AFRICA**  
**CPDLC COVERAGE**

**Data Link Services (continued)**

<b>Airspace</b>	<b>CPDLC</b>	<b>ADS-C</b>	<b>Logon</b>	<b>Remarks</b>
Mumbai FIR	O	O	VABF Logon should be initiated 10 minutes prior to entry into Mumbai FIR.	
N'Djamena FIR	O	O	FTTT Logon should be initiated between 20 and 45 minutes prior to entry into N'Djamena FIR. Logon should be initiated 20 minutes prior to departure.	CPDLC primary – VHF will be used as back up.
Nairobi FIR	O	O	HKNA Logon should be initiated 15 minutes prior to entry into Nairobi FIR.	CPDLC will be the primary means of communication over the oceanic portion of the FIR above FL245. Elsewhere the services will be available as secondary means of communication.
Niamey FIR	O	O	DRRR Logon should be initiated between 15 and 45 minutes prior to entry into Niamey FIR.	CPDLC services are available within Niamey FIR excluding UTA Ouagadougou. On airways UB730, UM998 and UM108, CPDLC will be the primary means of communication, VHF (HF) will be the secondary means of communication. Elsewhere CPDLC will be used as backup.

**AFRICA  
CPDLC COVERAGE**

**Data Link Services (continued)**

<b>Airspace</b>	<b>CPDL C</b>	<b>ADS-C</b>	<b>Logon</b>	<b>Remarks</b>
Sal Oceanic FIR/UIR	O	O	<b>GVSC</b> Entering from Canaries, Dakar and Santa Maria ACC: – if 10 minutes before reaching the common boundary point the automatic logon with Sal Oceanic ACC has not been successful, pilots shall start a manual logon to Sal Oceanic ACC; – aircraft coming from airspace where FANS 1/A services have not been provided, pilots are requested to perform a manual logon between 15 and 45 minutes before the common boundary point.	
Santa Maria Oceanic FIR	O	O	<b>LPPO</b>	CPDLC is the primary means of communication for FANS 1/A equipped aircraft, with voice communications used as back-up. Confirm CPDLC CDA: CPDLC UM 160 (NDA). Report revised ETA: Next waypoint ETA error 3 minutes or more, use free text REVISED ETA [position] [time].
Seychelles FIR	O	O	<b>FSSS</b> Logon should be initiated at least 15 minutes prior to entry into Seychelles FIR.	

**NOTE:** O = Operational, T = Trial, N = Not available

**AFRICA**

----- Effective thru 09 Oct: -----

<b>ROUTE IDENT</b>	<b>START ID-ICAO</b>	<b>END ID-ICAO</b>	<b>RESTRICTION</b>
A1	CVO-HE	METRU-HE	RNAV (RNAV 5) required between FL160-FL460
A6	SURIB-LE	LABRO-LE	CDR 2: 0730-1530 Mon-Fri except Hol (Winter), 0630-1430 Mon-Fri except Hol (Summer). Alternate route: SURIB-G30-SADAF
A6	SURIB-LE	LABRO-LE	Not available during LE(D)-26 activity
A16	RASDA-HE	CVO-HE	RNAV (RNAV 5) required between FL160-FL460
A31	MAGAL-LE	LABRO-LE	CDR 2: 0730-1530 Mon-Fri except Hol (Winter), 0630-1430 Mon-Fri except Hol (Summer). Alternate route: SADAF-G30-VLC (N-bound), VLC-A34-HAMRA (S-bound)
A31	MAGAL-LE	LABRO-LE	Not available during LE(D)-26 activity
A400	EGSUD-FN	ETBOM-FL	FIS only below FL115
A400	ETBOM-FL	KEPOK-FQ	FIS only below FL75
A400	ETBOM-FL	VLS-FL	CTR01 not required above FL75
A400	VLS-FL	TIMAX-FL	CTR02 not required above FL75
A405	APKOL-HT	TMA02-FL	FIS only below FL115
A405	TMA01-FL	TEVAS-FQ	FIS only below FL115
A405	TMA02-FL	TMA01-FL	FIS only below FL75
A407	OKDAR-FL	TMA05-FL	FIS only below FL115
A407	TMA05-FL	OKDAR-FL	FIS only below FL75
A407	TMA05-FL	TMA06-FL	FIS only below FL75
A407	TMA06-FL	GIPVO-FL	FIS only below FL115
A407	VLS-FL	OKDAR-FL	VLS25 not required above FL75
A407	VLS-FL	VLS25-FL	FIS only below FL115
A407	VLS25-FL	OKDAR-FL	FIS only below FL75
A408	SALEH-OY	HDH-OY	RNAV (RNAV 5) required between FL170-FL460
A409	AVEKU-FL	EGSAR-FL	VND22, VND29 not required above FL75
A409	AVEKU-FL	VND29-FL	FIS only below FL75
A409	EGSAR-FL	SOBTO-FZ	FIS only below FL115



## AFRICA

ROUTE IDENT	START ID-ICAO	END ID-ICAO	RESTRICTION
A409	VLS-FL	AVEKU-FL	FIS only below FL115
A409	VND22-FL	EGSAR-FL	FIS only below FL75
A411	KEMIR-DT	ELJEM-DT	Cruising levels by ATC
A411	LOSUL-HL	BRN-HE	RNAV (RNAV 5) required between FL195-FL460
A606	TUC-DT	RATBA-DT	Cruising levels by ATC
A607	AOKDR-FL	AVIVA-FV	FIS only below FL115
A607	VND-FL	AOKDR-FL	FIS only below FL75
A607	VND-FL	VND66-FL	VND30 not required above FL75
A621	TTN-GM	ALM-GM	CDR 2: FL145 and above, 0600-1459, 1700-2159 Mon-Fri. CDR 1: other times
A725	OSMAR-LI	TUC-DT	DTTJ ARR/DEPs route DOPEL-TBK-JBA and vice versa unless otherwise instructed by ATC
A725	OSMAR-LI	TUC-DT	DTTZ ARR/DEPs route DOPEL-TBK-BAN-TON and vice versa unless otherwise instructed by ATC
A725	OSMAR-LI	TUC-DT	Not available for DTTA ARR/DEPs
A727	GESAD-HE	NOZ-HE	E-bound direction available for HEAX, HEBA ARR/DEPs
A727	LXR-HE	SML-HE	N-bound direction available above FL255 for HELX ARR/DEPs
A727	PAXIS-HE	NUBAR-HE	RNAV (RNAV 5) required between FL160-FL460
A743	TUC-DT	ABDAB-DT	Cruising levels by ATC
A743	TUC-DT	ABDAB-DT	Only available for DTTA ARR/DEPs
A857	KORNO-LE	SVL-LE	CDR 2. Alternate route: SVL-R10-VJF-G5-KORIS
A857	KORNO-LE	SVL-LE	Not available during LE(D)-122, LE(D)-128, LE(D)-129 activity
A868	TUC-DT	NOLSI-DT	Cruising levels by ATC
A868	TUC-DT	NOLSI-DT	Only available for DTTA ARR/DEPs
A873	LIMAL-GC	GDV-GC	Radar assistance available due to GDV VORDME restrictions
A873	LIMAL-GC	LOMAS-GC	CDR 1
A873	LIMAL-GC	LOMAS-GC	Not available during GC(D)-79T activity
ALR-PEC	ALR-DA	PECES-LE	Only available by ATC

**AFRICA**

<b>ROUTE IDENT</b>	<b>START ID-ICAO</b>	<b>END ID-ICAO</b>	<b>RESTRICTION</b>
B12	KATAB-HE	SML-HE	MAA raised to UNL when Radar not available
B12	TANSA-HE	SML-HE	RNAV (RNAV 5) required between FL160-FL460
B18	GDV-GC	BIMBO-GC	Radar assistance available due to GDV VORDME restrictions
B18	GDV-GC	KASAS-GC	Not available during GC(D)-53 activity
B31	MOGIL-LE	ZEM-DA	Only available for DAAA FIR overflights
B400	VEDET-HC	IMKAD-OO	RNAV (RNAV 5) required between FL160-FL460
B404	DEMGO-HC	RIGAM-OY	RNAV (RNAV 5) required between FL160-FL460
B413	KOBAS-OE	RIBOK-OY	FL310-FL450, open for aircraft registered in Yemen routing to/from OYAA
B413	RIBOK-OY	ZIZAN-OY	RNAV (RNAV 5) required between FL160-FL460
B413	TAZ-OY	KRA-OY	During the activation period of OY(D)-26 and the other related military areas around Aden Airport, Special Avoidance Procedures (SAP10)/level restriction is established to serve traffic landing/departing Aden Airport
B424	ITOLI-OY	SABEL-OY	RNAV (RNAV 5) required between FL160-FL460
B526	FARES-HH	TATNA-OY	RNAV (RNAV 5) required between FL160-FL460
B526	HDH-OY	IVORA-OY	During the activation period of OY(D)-5, OY(D)-50, OY(D)-52 traffic leveling within the vertical limits of these danger areas, alternative routing will be given by ATC
B530	NIDOT-FL	UTEMA-HT	FIS only below FL115
B530	VND-FL	NIDOT-FL	FIS only below FL75
B530	VND-FL	NIDOT-FL	VND17 not required above FL75
B535	KAPET-OO	TORBA-OY	RNAV (RNAV 5) required between FL160-FL460
B544	GEVEL-OY	KRA-OY	During the activation period of OY(D)-27 and the other related military areas around Aden Airport, Special Avoidance Procedures (SAP7A/7B)/level restriction is established to serve traffic landing/departing Aden Airport
B544	NOBSU-OE	KRA-OY	RNAV (RNAV 5) required between FL170-FL460
B549	THAMD-OY	PUTRA-OO	RNAV (RNAV 5) required between FL195-FL460
B600	GDV-GC	ROTUM-GC	CDR 2: 0800-2400 Mon-Fri except Hol. Alternate routes: GDV-A873-ODEGI-Z353-ROTUM, GDV-W279-LAY

## AFRICA

ROUTE IDENT	START ID-ICAO	END ID-ICAO	RESTRICTION
B600	GDV-GC	ROTUM-GC	Not available during GC(D)-79C/E/T/W activity
B979	TUC-DT	SUSIP-LI	Cruising levels by ATC
DIKBIS	DIKBA-GO	BIS-GG	AORRA transition route
DIPAPU	DIPLA-DI	APUMI-DG	Contingency route. Activated by NOTAM
G5	AGUMO-GC	GDV-GC	CDR 2: 0800-2400 Mon-Fri except Hol. Alternate routes: APASO-N866-GOMER, LIMAL-A873-GDV
G5	AGUMO-GC	GDV-GC	Not available during GC(D)-79D/T/W activity
G5	AGUMO-GC	KORAL-GC	Radar assistance available due to GDV VORDME restrictions
G650	RASKA-OE	JDW-OE	Available during Scatana activity, above FL160
G652	AVUPA-FL	GADBA-FV	FIS only below FL75
G652	AVUPA-FL	GADBA-FV	VLS35, CTR07 not required above FL75
G652	IMPOS-OY	DUDRI-OE	E-bound traffic FL330 only, W-bound traffic FL300 only
G652	KRA-OY	DUDRI-OE	RNAV (RNAV 5) required between FL160-FL460
G652	KRA-OY	IVORA-OY	During the activation period of OY(D)-23, OY(D)-51 Special Avoidance Procedures (SAP8)/level restriction is established to serve traffic landing/departing Aden Airport
G652	UDNOR-FN	AVUPA-FL	FIS only below FL115
G653	MOKAK-FY	ANTOR-FY	Class [G] FL145-FL195, HJ, 01 NOV-31 JAN
G655	CTR08-FL	TMA20-FL	FIS only below FL75
G655	MOTAM-FZ	VLS40-FL	FIS only below FL75
G655	TMA20-FL	RETAR-FL	FIS only below FL115
G655	VLS81-FL	TMA20-FL	VLS40, CTR08 not required above FL75
G659	MTG-HL	KDR-HL	Only available for HLLM ARR/DEPs
G660	WLD-HL	SRT-HL	Only available for HLGD ARR/DEPs
G661	HON-HL	MIS-HL	Only available for HLMS, HLON ARR/DEPs
G662	HON-HL	SRT-HL	Only available for HLGD, HLON ARR/DEPs
G664	ERA-GM	EVOXO-GM	CDR 2: 0600-1459, 1700-2159 Mon-Fri. CDR 1: other times. Alternate route: ERA-VANOP-PIXEB-BRF-UL-MAM-EVOXO/OJD
G667	PARIM-OY	NETAS-OY	RNAV (RNAV 5) required between FL160-FL460

## AFRICA

ROUTE IDENT	START ID-ICAO	END ID-ICAO	RESTRICTION
G727	NIBEL-DT	SIRVI-DT	Only available for DTTA, DTNH DEPs
G728	CBN-DT	TUPAL-LI	Cruising levels by ATC
G851	LOMAS-GC	CABOJ-GC	CDR 2: 0800-2400 Mon-Fri except Hol. Alternate routes: LOMAS-A873-ODEGI-UZ353-ROTUM, TFN-H274-GDV-W279-LAY
G851	LOMAS-GC	CABOJ-GC	Not available during GC(D)-79C/E/T/W activity
G851	SNT-LP	ORTIS-GC	Possible use as contingency route. Activated by Notam
G851	SNT-LP	ORTIS-GC	RNP10 only required when contingency routing is activated
G855	IZD-HL	GAD-HL	Domestic traffic only
G864	BELED-DT	TUC-DT	Cruising levels by ATC
G869	DERIV-DT	DOPEL-DT	Not available for DTTA ARRrS via DEC/CAR
GAKBIS	GAKSA-GO	BIS-GG	AORRA transition route
GARBIS	GARKI-GO	BIS-GG	AORRA transition route
GENGB V	GENUD-FB	GBV-FB	Only available for FBSK ARRrS
H104	BARIS-GM	ALM-GM	CDR 2: 0600-1459, 1700-2159 Mon-Fri. CDR 1: other times. Alternate routes: ALM-G850-FES-A411/R975
H119	LACAJ-GM	BRF-GM	CDR 2: 0600-1459, 1700-2159 Mon-Fri. CDR 1: other times
H372	ESAMI-LE	AMR-LE	CDR 2: 0700-1530 Mon-Fri except Hol. Alternate route: AMR-G850-BERUM
H372	ESAMI-LE	AMR-LE	Not available during LE(D)-168 activity
H400	ABDOR-GM	AGOVA-GM	CDR 2: 0600-1459, 1700-2159 Mon-Fri. CDR 1: other times
H770	LIMAL-GC	TFS-GC	CDR 2: 0800-2400 Mon-Fri except Hol. Alternate route: LIMAL-A873-GDV
H770	LIMAL-GC	TFS-GC	Not available during GC(D)-79D/T/W activity
J3	GRS-DA	FAROS-DA	Domestic traffic only
J4	MOS-DA	TGU-DA	Domestic traffic only
J5	JIL-DA	CSO-DA	Domestic traffic only
J7	LIMON-DA	CSO-DA	Domestic traffic only

**AFRICA**

<b>ROUTE IDENT</b>	<b>START ID-ICAO</b>	<b>END ID-ICAO</b>	<b>RESTRICTION</b>
J8	NSL-DA	HME-DA	Domestic traffic only
J9	BNA-DA	BTN-DA	Domestic traffic only
J10	BTN-DA	TBS-DA	Domestic traffic only
J13	NBA-DT	SIRVI-DT	Cruising levels by ATC
J13	NBA-DT	SIRVI-DT	Only available for DTNH DEPs
J14	BTN-DA	CSO-DA	Domestic traffic only
J24	GARBA-DA	IMN-DA	Domestic traffic only
J25	HME-DA	IMN-DA	Domestic traffic only
J26	MNA-DA	HME-DA	Domestic traffic only
J27	HME-DA	TGU-DA	Domestic traffic only
J28	TGU-DA	ELO-DA	Domestic traffic only
J30	HME-DA	TBS-DA	Domestic traffic only
J36	BSA-DA	TGU-DA	Domestic traffic only
J40	ADR-DA	TIO-DA	Domestic traffic only
J41	ADR-DA	IMN-DA	Domestic traffic only
J53	DJA-DA	IMN-DA	Domestic traffic only
J58	MON-DT	SORAB-DT	Cruising levels by ATC
J60	MOK-DA	DJA-DA	Domestic traffic only
J61	BOD-DA	DJA-DA	Domestic traffic only
J62	NSL-DA	IGZ-DA	Domestic traffic only
J63	ADR-DA	MOK-DA	Domestic traffic only
J64	LOUHA-DA	HRM-DA	Domestic traffic only
J65	HRM-DA	TGU-DA	Domestic traffic only
J66	ALR-DA	BSA-DA	Domestic traffic only
J92	LOBNA-DT	OMENI-LM	Cruising levels by ATC
J92	NBA-DT	OMENI-LM	E-bound direction only available for LMMM FIR ARRr/overflights
J215	NAVED-DT	NBA-DT	Cruising levels by ATC
J981	NWB-HE	DATOK-HE	RNAV (RNAV 5) required between FL255-FL460

**AFRICA**

<b>ROUTE IDENT</b>	<b>START ID-ICAO</b>	<b>END ID-ICAO</b>	<b>RESTRICTION</b>
KIRVOS	KIRVU-DI	VOSGA-DI	Contingency route. Activated by NOTAM
KOBBS	KOBTA-GO	BIS-GG	AORRA transition route
KOBYF	KOBTA-GO	YF-GO	AORRA transition route
KOR-RAS	KOROB-DI	RASAD-DG	Contingency route. Activated by NOTAM
KOR-VOS	KOROB-DI	VOSGA-DI	Contingency route. Activated by NOTAM
L44	ABDAB-DT	RATBA-DT	Cruising levels by ATC
L44	ABDAB-DT	TUC-DT	Only available for DTTA ARRrS
L58	BRF-GM	XAVOV-GM	CDR 2: 0600-1459, 1700-2159 Mon-Fri. CDR 1: other times. Alternate route: XAVOV-ULMAM-BRF
L102	ERA-GM	ARIAM-DA	CDR 2: 0600-1459, 1700-2159 Mon-Fri. CDR 1: other times. Alternate route: ERA-VANOP-PIXEB-BRF-ARIAM
L300	LXR-HE	GIBAL-OE	RNAV (RNAV 5) required between FL160-FL460
L315	CVO-HE	GIBAL-OE	RNAV (RNAV 5) required between FL160-FL460
L315	SOKOT-HE	GIBAL-OE	Only available for HESH, HEGN ARRrS
L433	ALKON-HK	NV-HK	For terrain clearance aircraft flying below FL120 shall route via NAROK
L433	ALKON-HK	NV-HK	RNAV (RNAV 5) required
L434	AVUNO-HT	MOV-HK	RNAV (RNAV 5) required
L550	PASOS-HE	KITOT-HE	RNAV (RNAV 5) required between FL255-FL460
L551	DBA-HE	ANTAR-HE	RNAV (RNAV 5) required between FL160-FL460
L564	TAZ-OY	PARIM-OY	RNAV (RNAV 5) required between FL160-FL460
L604	ASRAB-HE	IMRAD-HE	W-bound direction available for OEJD FIR DEP, HELX ARRrS, traffic overflying LXR to DITAR
L604	BRN-HE	KHG-HE	NW-bound direction only available for traffic inbound HLLL FIR via LOSUL
L604	SALUN-LG	IMRAD-HE	RNAV (RNAV 5) required between FL160-FL460
L607	NOZ-HE	GESAD-HE	E-bound direction available for HEAX, HEBA ARRrS
L607	NOZ-HE	PAXIS-HE	RNAV (RNAV 5) required between FL285-FL460
L612	BLT-HE	KUMBI-HE	Only available for HECA, HESH ARRrS

**AFRICA**

<b>ROUTE IDENT</b>	<b>START ID-ICAO</b>	<b>END ID-ICAO</b>	<b>RESTRICTION</b>
L612	BLT-HE	KUMBI-HE	RNAV (RNAV 5) required between FL160-FL460
L617	NOZ-HE	TANSA-HE	RNAV (RNAV 5) required between FL160-FL460
L677	CVO-HE	PASAM-OE	RNAV (RNAV 5) required between FL160-FL460
L677	MENLI-HE	SHM-HE	E-bound direction not available above FL255
L677	NABAN-OY	SAA-OY	RNAV (RNAV 5) required between FL160-FL460
L677	PASAM-OE	DARAX-OE	S-bound direction available for HESH DEPs, MAA FL170
L677	SHM-HE	PASAM-OE	Also available for HECC FIR DEPs/ARRs inbound/outbound OENN at FL160, FL170 only
L677	SHM-HE	PASAM-OE	Also available for HESH DEPs inbound OEJD FIR with MAA FL150
L869	CBN-DT	TUPAL-LI	Cruising levels by ATC
L869	TUPAL-LI	PAL-LI	Not available during LI(MOA)-TC-2 CORRIDOR segment 3 activity
L874	LOBNA-DT	OMENI-LM	Cruising levels by ATC
L874	NBA-DT	OMENI-LM	E-bound direction only available for LMMM FIR ARRr/overflights
L875	VUTAS-VA	MMV-VO	Higher levels available by ATC
LV72L	LV-FO	72LV-FO	AORRA transition route
M301	PURAD-HH	ASMAK-OY	RNAV (RNAV 5) required between FL170-FL460
M301	PURAD-HH	SAA-OY	During the activation period of OY(D)-4 alternative routing is established as follows: E-bound: B526 (PURAD-HDH)-A419 (HDH-SAA). W-bound: A419 (SAA-HDH)-B526 (HDH-PURAD)
M318	HDH-OY	NADKI-OY	RNAV (RNAV 5) required between FL160-FL460
M318	SAA-OY	NADKI-OY	During the activation period of OY(D)-1 route available only for traffic at flight levels above the upper limit of OY(D)-1
M318	SAA-OY	NADKI-OY	Traffic landing and/or departing Sana'a airport and other traffic below FL310 will be rerouted as follows: NADKI-M651-MEGPA-B424-ITOLI-M301-SAA and vice versa
M321	SILPA-OY	PUTRA-OO	RNAV (RNAV 5) required between FL160-FL460
M559	NISMI-OY	VEDET-HC	RNAV (RNAV 5) required between FL170-FL460

## AFRICA

ROUTE IDENT	START ID-ICAO	END ID-ICAO	RESTRICTION
M651	OKTOB-OY	KRA-OY	RNAV (RNAV 5) required between FL160-FL460
M686	GIBAL-OE	JDW-OE	Only available for HECC FIR overflights, HELX ARRrS
M686	LXR-HE	GIBAL-OE	RNAV (RNAV 5) required between FL160-FL460
M725	SUSIP-LI	TUC-DT	Cruising levels by ATC
M726	MTG-HL	DISOL-HL	Only available for HLLM ARRrS/DEPs
M731	OSMAR-LI	TEKSA-LI	CDR 3: N-bound direction, 0600-2100 (Winter), 0500-2100 (Summer)
M731	TUC-DT	OSMAR-LI	DTTJ ARRrS/DEPs route DOPEL-TBK-JBA and vice versa unless otherwise instructed by ATC
M731	TUC-DT	OSMAR-LI	DTTZ ARRrS/DEPs route DOPEL-TBK-BAN-TON and vice versa unless otherwise instructed by ATC
M731	TUC-DT	OSMAR-LI	Not available for DTTA ARRrS
M733	TUC-DT	OSMAR-LI	DTTJ ARRrS/DEPs route DOPEL-TBK-JBA and vice versa unless otherwise instructed by ATC
M733	TUC-DT	OSMAR-LI	DTTZ ARRrS/DEPs route DOPEL-TBK-BAN-TON and vice versa unless otherwise instructed by ATC
M733	TUC-DT	OSMAR-LI	Not available for DTTA ARRrS
M734	NBA-DT	NIBEL-DT	Cruising levels by ATC
M734	NBA-DT	NIBEL-DT	Only available for DTTA, DTNH DEPs
M735	TIRBO-DT	BABLO-DT	Cruising levels by ATC
M739	TABOT-LF	DOPEL-DT	CDR 3: Mon-Fri except Hol 1 Jan-6 Jan, 22 Jun-19 Sep, 22 Dec-31 Dec; FL250 and below, 0001-1200 Sat, 2300-2400 Sun except Hol (Winter); 0001-1100 Sat, 2200-2400 Sun except Hol (Summer) 7 Jan-21 Jun, 20 Sep-21 Dec
M872	FYM-HE	SEMRU-HE	MEA FL280 at night
M872	HGD-HE	SILKA-OE	W-bound direction available for HEGN ARRrS only
M872	METRU-HE	SILKA-OE	RNAV (RNAV 5) required between FL160-FL460
M978	TUC-DT	SONAK-DT	Cruising levels by ATC
M980	NAVED-DT	BASMO-LM	Cruising levels by ATC
M999	APDOS-OE	PURAD-HH	RNAV (RNAV 5) required between FL160-FL460



**AFRICA**

<b>ROUTE IDENT</b>	<b>START ID-ICAO</b>	<b>END ID-ICAO</b>	<b>RESTRICTION</b>
M999	DEDLI-HE	APDOS-OE	FL310-FL450, open for aircraft registered in Yemen routing to/from OYAA
M999	DITAR-HE	DEDLI-HE	RNAV (RNAV 5) required between FL245-FL460
M999	LXR-HE	DEDLI-HE	W-bound direction only available for HELX ARRs
MORTBK	MORJA-DT	TBK-DT	Only available for DTKA ARRs/DEPs
N303	RIBOK-OY	PARIM-OY	RNAV (RNAV 5) required between FL160-FL460
N307	MELDO-HE	LAKTO-HE	RNAV (RNAV 5) required between FL160-FL460
N315	KUTVI-OO	ASPUX-VA	RNAV (RNAV 5) required at or below FL460
N315	SITOL-OE	ASPUX-VA	FL280, FL300, FL320 not available for W-bound traffic via SITOL
N697	NARMI-OB	KITOT-HE	Available 1500-0300 Sun-Thu, H24 Fri, Sat, Hol. FL275 and above excluded for LDG and TKOF Tabuk AP
N697	NWB-HE	MENLI-HE	RNAV (RNAV 5) required between FL160-FL460
N764	NOBSU-OE	SOC-OY	RNAV (RNAV 5) required between FL160-FL460
ORA-LAB	ORA-DA	LABRO-LE	Only available by ATC
P126	LUMED-LM	SUSOM-LM	Not available during LI(R)-501, LI(R)-502, LI(R)-504A, LI(R)-504B activity. Alternate route: GZO-M622-MABOX-M726-PNZ
P161	ARNEB-DT	NOLSI-DT	Cruising levels by ATC
P161	TUC-DT	NOLSI-DT	Only available for DTTA ARRs
P312	NV-HK	WAV-HK	RNAV (RNAV 2) required
P312	TIMAD-OY	RIN-OY	RNAV (RNAV 5) required between FL160-FL460
P751	ARABO-OY	KRA-OY	During the activation period of OY(D)-25, OY(D)-37 Special Avoidance Procedures (SAP11)/level restriction is established to serve traffic landing/departing Aden Airport
P751	BRN-HE	ALEBA-HS	RNAV (RNAV 5) required between FL160-FL460
P751	DAPAB-OY	ANGAL-VA	RNAV (RNAV 10) required between FL160-FL460
P751	DEKRA-OY	DAPAB-OY	RNAV (RNAV 5) required between FL160-FL460
P868	MON-DT	NIGAT-LM	Cruising levels by ATC
Q143	GOSGA-LP	ORTIS-GC	Contingency route. Activated by NOTAM

**AFRICA**

<b>ROUTE IDENT</b>	<b>START ID-ICAO</b>	<b>END ID-ICAO</b>	<b>RESTRICTION</b>
Q315	ITGOT-HK	UTEPI-HK	RNAV (RNAV 2) required
Q401	RATVA-GM	BML-GM	CDR 2: 0500-1459 Mon-Fri 1 Jun-15 Sep; 0700-1700 Mon-Fri 16 Sep-31 May. CDR 1: other times
R2	DITAR-HE	ATMUL-HE	RNAV (RNAV 5) required between FL195-FL460
R400	PRA-FS	RERUS-FS	EVEN levels S-bound
R401	PRA-FS	UDLET-FS	EVEN levels S-bound
R401	SUHIL-OY	KIVEL-OO	RNAV (RNAV 5) required between FL160-FL460
R525	EVOLU-FL	RETAR-FL	VLS82, VLS68 not required below FL115
R525	KO-FL	RETAR-FL	FIS only below FL115
R722	LAKAM-GM	ABODA-GM	CDR 1. Alternate route: AMSEL-IBALU-SAK
R723	CBN-DT	SAMEK-DT	Cruising levels by ATC
R723	DOPEL-DT	TABOT-LF	DTTA ARRs route DOPEL-TBK-KEMIR-TUC unless otherwise instructed by ATC
R723	DOPEL-DT	TABOT-LF	Only available Sat, Italian Hol; 1-6 Jan, 22 Jun-19 Sep, 22-31 Dec; 1301LT Sat-2400LT Sun, Italian Hol; 7 Jan-21 Jun, 20 Sep-21 Dec
R775	APDOS-OE	PURAD-HH	RNAV (RNAV 5) required between FL160-FL460
R775	LXR-HE	DEDLI-HE	RNAV (RNAV 5) required between FL160-FL285
R775	LXR-HE	DEDLI-HE	W-bound direction only available for HELX ARRs
R775	SOKAR-FS	BERIL-FS	EVEN levels N-bound
R777	LAKNA-OY	TORBA-OY	RNAV (RNAV 5) required between FL160-FL460
R778	DITAR-HE	CVO-HE	RNAV (RNAV 5) required between FL195-FL460
R778	DITAR-HE	KATAB-HE	RNAV (RNAV 5) required between FL195-FL460
R778	FYM-HE	CVO-HE	Not available 0800-1700 on Mon, Wed
R778	FYM-HE	CVO-HE	RNAV (RNAV 5) required between FL195-FL460
R778	KATAB-HE	FYM-HE	RNAV (RNAV 5) required between FL160-FL460
R779	AVEKA-FL	TMA07-FL	FIS only below FL75
R779	EKBUG-FL	UPDOR-FL	FIS only below FL115
R779	KURMA-FL	CTR09-FL	UPDOR not required above FL115
R779	OKSIX-FL	AVEKA-FL	FIS only below FL115

**AFRICA**

<b>ROUTE IDENT</b>	<b>START ID-ICAO</b>	<b>END ID-ICAO</b>	<b>RESTRICTION</b>
R779	TMA07-FL	GESAT-HT	FIS only below FL115
R779	UPDOR-FL	CTR09-FL	FIS only below FL75
R779	UPDOR-FL	OKSIX-FL	VLS27, CTR09 not required above FL75
R779	VLI-FL	EKBUG-FL	VLI18 not required above FL65
R779	VLI18-FL	EKBUG-FL	FIS only below FL65
R779	VLS27-FL	OKSIX-FL	FIS only below FL75
R781	TUC-DT	SONAK-DT	Cruising levels by ATC
R782	CTR10-FL	IBNOP-FL	FIS only below FL75
R782	CTR10-FL	LABON-FW	FIS only below FL75
R782	IBNOP-FL	IXALU-FL	FIS only below FL115
R782	IXALU-FL	LABON-FW	FIS only below FL75
R782	LAGNA-FL	IXALU-FL	NESAK not required above FL115
R782	VLS-FL	IBNOP-FL	CTR10 not required above FL75
R783	NAVED-DT	BASMO-LM	Cruising levels by ATC
R845	ZAW-HL	GRT-HL	Only available for HLLS ARRs/DEPs
R987	LONOD-FY	KEBAT-FY	Class [G] FL145-FL195, HJ, 01 NOV-31 JAN
R987	VCA-FN	VNA-FN	Domestic traffic only
RANBIS	RANOV-GO	BIS-GG	AORRA transition route
SOVNA	SO-FN	VNA-FN	Only available for FNSO DEPs inbound FNLU
T55	KATAB-HE	GINDI-HE	Only available 2200-0500
T113	NORSI-FS	OKLIM-FS	Max IAS 250 Kts below 10000'
T114	OKLAB-FS	OKLIM-FS	Max IAS 250 Kts below 10000'
T115	KATEB-FS	OKLIM-FS	Max IAS 250 Kts below 10000'
T116	KATEB-FS	UNBED-FS	Max IAS 250 Kts below 10000'
T117	DANEL-FS	FS121-FS	Max IAS 250 Kts below 10000'
T118	DANEL-FS	FS122-FS	Max IAS 250 Kts below 10000'
T119	MOGUD-FS	FS123-FS	Max IAS 250 Kts below 10000'
T120	ANVIX-FS	NEVIN-FS	Max IAS 250 Kts below 10000'
T121	ATUTI-FS	FS123-FS	Max IAS 250 Kts below 10000'

**AFRICA**

<b>ROUTE IDENT</b>	<b>START ID-ICAO</b>	<b>END ID-ICAO</b>	<b>RESTRICTION</b>
T122	ATUTI-FS	ROUTY-FS	Max IAS 250 Kts below 10000'
T123	ROUTY-FS	UDLET-FS	Max IAS 250 Kts below 10000'
T124	UDLET-FS	UTALI-FS	Max IAS 250 Kts below 10000'
T125	UTALI-FS	ORLOM-FS	Max IAS 250 Kts below 10000'
T126	TILOM-FS	ORLOM-FS	Max IAS 250 Kts below 10000'
T127	FS124-FS	GITOP-FS	Max IAS 250 Kts below 10000'
T128	TILOM-FS	GITOP-FS	Max IAS 250 Kts below 10000'
T129	NESID-FS	RERUS-FS	Max IAS 250 Kts below 10000'
T130	RUBAM-FS	NESID-FS	Max IAS 250 Kts below 10000'
T131	FS120-FS	RERUS-FS	Max IAS 250 Kts below 10000'
T132	FS120-FS	RUBAM-FS	Max IAS 250 Kts below 10000'
T133	MOGUD-FS	FS122-FS	Max IAS 250 Kts below 10000'
T134	ANVIX-FS	ROUTY-FS	Max IAS 250 Kts below 10000'
T135	NORSI-FS	FS120-FS	Max IAS 250 Kts below 10000'
T136	OKLAB-FS	IMPOX-FS	Max IAS 250 Kts below 10000'
T137	ANVIX-FS	ROUTY-FS	Max IAS 250 Kts below 10000'
T139	MIRON-FS	IMPOX-FS	Max IAS 250 Kts below 10000'
T140	MIRON-FS	OKLIM-FS	Max IAS 250 Kts below 10000'
T141	FS124-FS	BOMOB-FS	Max IAS 250 Kts below 10000'
T142	UTALI-FS	BOMOB-FS	Max IAS 250 Kts below 10000'
T300	RAGNI-OY	ULBON-OE	RNAV (RNAV 5) required between FL160-FL460
T424	RASNO-LM	RAKMU-HE	Contingency route
T502	BANAR-OY	PEBIX-OY	RNAV (RNAV 5) required between FL160-FL460
T513	RASKA-OE	EGMEG-OE	Available during Scatana activity, above FL160
T513	RASKA-OE	JDW-OE	Only available by ATC
T543	TINTO-LI	NOLSI-DT	Available 0000-0700, 1900-2359 Mon-Thu; 0000-0700, 1400-2359 Fri; Sat, Sun, Hol. Alternate routes: L5-Q125-M732-P161, L12-M738-M725

**AFRICA**

<b>ROUTE IDENT</b>	<b>START ID-ICAO</b>	<b>END ID-ICAO</b>	<b>RESTRICTION</b>
T543	TINTO-LI	NOLSI-DT	CDR 1: FL270 and above, 0700-1900 Mon-Thu, 0700-1400 Fri. CDR 3: FL260 and below, 0700-1900 Mon-Thu, 0700-1400 Fri. Alternate routes: L5-Q125-M732-P161, L12-M738-M725
T565	RAKMU-HE	GESAD-HE	Available for OT registered aircraft flights between OLBA and North African Airports
T565	VALKI-HL	RAKMU-HE	Contingency route
T932	NV-HK	WAV-HK	RNAV (RNAV 2) required
TARYF	TAROT-GO	YF-GO	AORRA transition route
TOBT-WA	TOBUK-DA	TWARG-HL	Contact Algiers ACC on 124.10 Mhz or 8894Khz 10 mins before entering DAAA FIR
UA400	LOVLI-DG	GAPAK-FP	FL290-FL410 NOT AVBL
UA411	KEMIR-DT	ELJEM-DT	Cruising levels by ATC
UA560	KIDNI-DG	INAKA-DG	FL290-FL410 NOT AVBL
UA604	JOS-DN	IKPUV-DN	Flight levels by ATC
UA606	TUC-DT	RATBA-DT	Cruising levels by ATC
UA621	TTN-GM	ALM-GM	CDR 2: 0600-1459, 1700-2159 Mon-Fri. CDR 1: other times
UA725	OSMAR-LI	TUC-DT	Cruising levels by ATC
UA725	OSMAR-LI	TUC-DT	DTTJ ARR/DEPs route DOPEL-TBK-JBA and vice versa unless otherwise instructed by ATC
UA725	OSMAR-LI	TUC-DT	DTTZ ARR/DEPs route DOPEL-TBK-BAN-TON and vice versa unless otherwise instructed by ATC
UA725	OSMAR-LI	TUC-DT	Not available for DTTA ARRs
UA743	TUC-DT	ABDAB-DT	Cruising levels by ATC
UA743	TUC-DT	ABDAB-DT	Only available for DTTA ARRs, DTTC UIR overflights
UA868	TUC-DT	NOLSI-DT	Cruising levels by ATC
UA868	TUC-DT	NOLSI-DT	Only available for DTTA ARRs
UB31	MOGIL-LE	ZEM-DA	MAA FL280 for LEPA ARRs
UB31	MOGIL-LE	ZEM-DA	Only available for DAAA FIR overflights
UB403	BOMIX-HC	RIGAM-OY	RNAV (RNAV 5) required at or below FL460

**AFRICA**

<b>ROUTE IDENT</b>	<b>START ID-ICAO</b>	<b>END ID-ICAO</b>	<b>RESTRICTION</b>
UB600	KINBU-DG	EBULI-FP	FL290-FL410 NOT AVBL
UB979	TUC-DT	SUSIP-LI	Cruising levels by ATC
UG664	ERA-GM	OJD-GM	CDR 2: 0600-1459, 1700-2159 Mon-Fri. CDR 1: other times. Alternate route: ERA-VANOP-PIXEB-BRF-UL-MAM-OJD
UG727	NIBEL-DT	SIRVI-DT	Only available for DTTA, DTNH DEPs, DTTC UIR over-flights
UG728	CBN-DT	TUPAL-LI	Cruising levels by ATC
UG729	KAWKA-DT	DOPEL-DT	Cruising levels by ATC
UG850	TIXAL-GM	NEVEK-GM	CDR 2: 0600-1459, 1700-2159 Mon-Fri. CDR 1: other times
UG853	RASAD-DG	TERBA-DG	FL290-FL410 NOT AVBL
UG864	BELED-DT	TUC-DT	Cruising levels by ATC
UG869	DERIV-DT	DOPEL-DT	Not available for DTTA ARRs via DEC/CAR
UH104	BARIS-GM	ALM-GM	CDR 2: 0600-1459, 1700-2159 Mon-Fri. CDR 1: other times. Alternate routes: ALM-UG850-FES-UA411/UR975
UH119	LACAJ-GM	ERA-GM	CDR 2: 0600-1459, 1700-2159 Mon-Fri. CDR 1: other times
UJ3	GRS-DA	FAROS-DA	Domestic traffic only
UJ4	MOS-DA	TGU-DA	Domestic traffic only
UJ5	JIL-DA	CSO-DA	Domestic traffic only
UJ7	LIMON-DA	CSO-DA	Domestic traffic only
UJ8	NSL-DA	HME-DA	Domestic traffic only
UJ9	BNA-DA	BTN-DA	Domestic traffic only
UJ10	BTN-DA	TBS-DA	Domestic traffic only
UJ14	BTN-DA	CSO-DA	Domestic traffic only
UJ24	BAY-DA	IMN-DA	Domestic traffic only
UJ25	HME-DA	IMN-DA	Domestic traffic only
UJ26	MNA-DA	HME-DA	Domestic traffic only
UJ27	HME-DA	TGU-DA	Domestic traffic only
UJ28	TGU-DA	ELO-DA	Domestic traffic only

## AFRICA

ROUTE IDENT	START ID-ICAO	END ID-ICAO	RESTRICTION
UJ30	HME-DA	TBS-DA	Domestic traffic only
UJ36	BSA-DA	TGU-DA	Domestic traffic only
UJ40	ADR-DA	TIO-DA	Domestic traffic only
UJ41	ADR-DA	IMN-DA	Domestic traffic only
UJ53	DJA-DA	IMN-DA	Domestic traffic only
UJ60	MOK-DA	DJA-DA	Domestic traffic only
UJ61	BOD-DA	DJA-DA	Domestic traffic only
UJ62	NSL-DA	IGZ-DA	Domestic traffic only
UJ63	ADR-DA	MOK-DA	Domestic traffic only
UJ64	LOUHA-DA	HRM-DA	Domestic traffic only
UJ65	HRM-DA	TGU-DA	Domestic traffic only
UJ66	ALR-DA	BSA-DA	Domestic traffic only
UJ67	TAGIG-DA	GHA-DA	Domestic traffic only
UL27	KORIS-LE	MAR-LE	Not available during LE(TRA)-RETIN A1 activity
UL44	RATBA-DT	ABDAB-DT	Cruising levels by ATC
UL44	TUC-DT	ABDAB-DT	Only available for DTTA ARRs, DTTC UIR overflights
UL45	URIPO-LE	SADAF-LE	CDR 2: 0730-1530 Mon-Fri except Hol (Winter), 0630-1430 Mon-Fri except Hol (Summer). Alternate routes: SADAF-UN856-IZA-UM134-VLC (N-bound), LAS-PO-UZ224-RONDU-UN856-SADAF (S-bound)
UL45	URIPO-LE	SADAF-LE	Not available during LE(D)-26 activity
UL58	BERUM-LE	VIBAS-LE	CDR 1: FL265-FL375, 0700-1530 Mon-Fri except Hol. CDR 2: FL145-FL265, FL375-FL660, 0700-1530 Mon-Fri except Hol. Alternate route: VIBAS-UM985-PIMOS-UN869-GALTO
UL58	BERUM-LE	VIBAS-LE	CDR 2: FL155 and below, 0700-1530 Mon-Fri except Hol. Alternate route: VIBAS-B28-PIMOS-B11-GALTO
UL58	BERUM-LE	VIBAS-LE	Not available during LE(D)-167, LE(D)-169 activity
UL58	BRF-GM	XAVOV-GM	CDR 2: 0600-1459, 1700-2159 Mon-Fri. CDR 1: other times. Alternate route: XAVOV-ULMAM-BRF
UL82	IBALU-GM	RUNAX-LE	CDR 1

**AFRICA**

<b>ROUTE IDENT</b>	<b>START ID-ICAO</b>	<b>END ID-ICAO</b>	<b>RESTRICTION</b>
UL82	RUNAX-LE	VJF-LE	CDR 1: FL285-FL660. CDR 2: FL195-FL285. Alternate route: SVL-UN857-KORNO
UL82	RUNAX-LE	VJF-LE	Not available during LE(D)-90A/B activity
UL102	ERA-GM	ARIAM-DA	CDR 2: 0600-1459, 1700-2159 Mon-Fri. CDR 1: other times. Alternate route: ERA-VANOP-PIXEB-BRF-ARIAM
UL129	SURIB-LE	LABRO-LE	CDR 2: 0730-1530 Mon-Fri except Hol (Winter), 0630-1430 Mon-Fri except Hol (Summer). Alternate route: MJV-UN861-SADAF
UL129	SURIB-LE	LABRO-LE	Not available during LE(D)-26 activity
UL150	MAGAL-LE	LABRO-LE	CDR 2: 0730-1530 Mon-Fri except Hol (Winter), 0630-1430 Mon-Fri except Hol (Summer). Alternate routes: SADAF-UN856-IZA-UM134-VLC (N-bound), VLC-UP34-HAMRA (S-bound)
UL150	MAGAL-LE	LABRO-LE	Not available during LE(D)-26 activity
UL195	MGA-LE	LIGUM-LE	CDR 1: FL265-FL375, 0700-1530 Mon-Fri except Hol. CDR 2: FL265 and below, FL375-FL660, 0700-1530 Mon-Fri except Hol. Alternate route: MGA-UL112-AMR-UM192-TARIK
UL195	MGA-LE	LIGUM-LE	Not available during LE(D)-169 activity
UL303	NV-HK	KESOM-HK	RNAV (RNAV 5) required
UL314	NABAN-OY	GOMRI-OY	RNAV (RNAV 5) required at or below FL460
UL374	SENON-GO	KIKBO-GL	Contingency route. Activated by NOTAM
UL425	BOVOS-OO	ASPUX-VA	RNAV (RNAV 5) required at or below FL460
UL425	GOBRO-OO	ASPUX-VA	FL330 not available for E-bound traffic via ASPUX
UL425	GOBRO-OO	ASPUX-VA	W-bound traffic exiting OOMM FIR via GOBRO only FL340 and above
UL432	PATAR-HK	EKBUL-HK	RNAV (RNAV 5) required
UL433	ALKON-HK	NV-HK	RNAV (RNAV 5) required
UL434	AVUNO-HT	MOV-HK	RNAV (RNAV 5) required
UL442	APLOG-HK	NV-HK	RNAV (RNAV 5) required
UL445	NV-HK	LUDOL-HK	RNAV (RNAV 5) required
UL563	68KT1-HS	MAHDI-HS	Entering HAAA FIR via UN321-TIKAT



## AFRICA

ROUTE IDENT	START ID-ICAO	END ID-ICAO	RESTRICTION
UL564	RAGNI-OY	PARIM-OY	RNAV (RNAV 5) required between FL160-FL460
UL566	DATEG-OY	ASMAK-OY	RNAV (RNAV 5) required at or below FL460
UL683	KIGRA-DN	APRUN-DN	Flight levels by ATC
UL874	LOBNA-DT	OMENI-LM	Cruising levels by ATC
UL874	NBA-DT	OMENI-LM	E-bound direction only available for LMMM FIR ARRr/overflights
UM126	KAWKA-DT	DOPEL-DT	Cruising levels by ATC
UM143	GALTO-LE	AMR-LE	CDR 1: FL265-FL375, 0700-1530 Mon-Fri except Hol. Alternate route: YES-UM985-PIMOS-UN869-GALTO
UM143	GALTO-LE	AMR-LE	CDR 2: FL155-FL265, FL375-FL660, 0700-1530 Mon-Fri except Hol. Alternate route: YES-UM985-PIMOS-UN869-GALTO
UM143	GALTO-LE	AMR-LE	Not available during LE(D)-169 activity
UM216	PATAR-HK	RUDOL-HK	RNAV (RNAV 5) required
UM304	NAK-HK	EPLAS-HK	RNAV (RNAV 5) required
UM306	PARIN-HK	KESOM-HK	RNAV (RNAV 5) required
UM308	NV-HK	RUDOL-HK	RNAV (RNAV 5) required
UM310	UVUKO-HT	ENABO-HK	RNAV (RNAV 5) required
UM311	NV-HK	NETAR-HK	RNAV (RNAV 5) required
UM314	PRA-FS	UDLET-FS	EVEN levels S-bound
UM315	NV-HK	EVATO-HK	RNAV (RNAV 5) required
UM372	ESAMI-LE	AMR-LE	CDR 1: FL265-FL375, 0700-1530 Mon-Fri except Hol. CDR 2: FL265 and below, FL375-FL660, 0700-1530 Mon-Fri except Hol. Alternate routes: AMR-UL112-MGA-UN869-GALTO, AMR-UM192-TARIK
UM372	ESAMI-LE	AMR-LE	Not available during LE(D)-169 activity
UM441	XAKRI-HK	LOTAS-HK	RNAV (RNAV 5) required
UM551	KIVEL-OO	ANGAL-VA	E-bound traffic FL310 only
UM551	KIVEL-OO	ANGAL-VA	RNAV (RNAV 10) required at or below FL460
UM570	NUBAR-HE	ERBUK-HS	Temporary suspended
UM574	BOTEM-OY	NABIL-OY	RNAV (RNAV 10) required at or below FL460

**AFRICA**

<b>ROUTE IDENT</b>	<b>START ID-ICAO</b>	<b>END ID-ICAO</b>	<b>RESTRICTION</b>
UM574	NOBSU-OE	BOTEM-OY	RNAV (RNAV 5) required at or below FL460
UM634	BOTEM-OY	ANGAL-VA	RNAV (RNAV 10) required at or below FL460
UM634	VEDET-HC	BOTEM-OY	RNAV (RNAV 5) required at or below FL460
UM651	NADKI-OY	KRA-OY	RNAV (RNAV 5) required at or below FL460
UM660	ROTUM-GC	GDV-GC	CDR 2: 0800-2400 Mon-Fri except Hol. Alternate routes: GDV-UN873-ODEGI-UZ353-ROTUM, GDV-UQ279-LAY
UM660	ROTUM-GC	GDV-GC	Not available during GC(D)-79C/E/T/W activity
UM725	TUC-DT	SUSIP-LI	Cruising levels by ATC
UM731	TUC-DT	OSMAR-LI	DTTJ ARR/DEPs route DOPEL-TBK-JBA and vice versa unless otherwise instructed by ATC
UM731	TUC-DT	OSMAR-LI	DTTZ ARR/DEPs route DOPEL-TBK-BAN-TON and vice versa unless otherwise instructed by ATC
UM731	TUC-DT	OSMAR-LI	Not available for DTTA ARR/DEPs
UM733	TUC-DT	OSMAR-LI	DTTJ ARR/DEPs route DOPEL-TBK-JBA and vice versa unless otherwise instructed by ATC
UM733	TUC-DT	OSMAR-LI	DTTZ ARR/DEPs route DOPEL-TBK-BAN-TON and vice versa unless otherwise instructed by ATC
UM733	TUC-DT	OSMAR-LI	Not available for DTTA ARR/DEPs
UM734	ADRIL-DT	NIBEL-DT	Only available for DTNA, DTTA DEP/DEPs, DTTT UIR overflights
UM734	NBA-DT	ADRIL-DT	Only available for DTNH DEP/DEPs
UM734	NBA-DT	NIBEL-DT	Cruising levels by ATC
UM735	TIRBO-DT	BABLO-DT	Cruising levels by ATC
UM738	ELJEM-DT	TUNEX-LI	Cruising levels by ATC
UM738	SFX-DT	MON-DT	Only available for DTMB, DTNH, DTTX, DTTJ ARR/DEPs
UM739	SAMEK-DT	SONAK-DT	Cruising levels by ATC
UM739	TABOT-LF	DOPEL-DT	DTTA ARR/DEPs route DOPEL-TBK-KEMIR-TUC unless otherwise instructed by ATC
UM739	TABOT-LF	DOPEL-DT	MEA FL260 0001-1200Z Sat, 2300-2400Z Sun (Winter), 0001-1100Z Sat, 2200-2400Z Sun (Summer)
UM739	TABOT-LF	DOPEL-DT	Only available Sat, Italian Hol; Sun 7 Jan-21 Jun, 20 Sep-21 Dec; by ATC

**AFRICA**

<b>ROUTE IDENT</b>	<b>START ID-ICAO</b>	<b>END ID-ICAO</b>	<b>RESTRICTION</b>
UM858	TBK-DT	DOPEL-DT	Not available for DTTA ARRrS via DEC/CAR
UM978	KEMIR-DT	SONAK-DT	Cruising levels by ATC
UM980	DARIP-HL	LOSUL-HL	E-bound traffic within RVSM level band cross LOSUL at FL290, FL330, FL370, FL410
UM980	NAVED-DT	BASMO-LM	Cruising levels by ATC
UM997	WAV-HK	AVEDI-HK	RNAV (RNAV 5) required
UM999	APDOS-OE	PURAD-HH	RNAV (RNAV 5) required between FL160-FL460
UM999	DITAR-HE	APDOS-OE	RNAV (RNAV 5) required at or above FL160
UM999	MGA-LE	PODES-LE	CDR 1: FL265-FL375, 0700-1530 Mon-Fri except Hol. CDR 2: FL265 and below, FL375-FL660, 0700-1530 Mon-Fri except Hol. Alternate route: MGA-UN869-GAL-TO
UM999	MGA-LE	PODES-LE	Not available during LE(D)-169 activity
UN10	LINTO-LE	SVL-LE	Not available during LE(TRA)-RETIN A1 activity
UN157	ABDAB-DT	MON-DT	Cruising levels by ATC
UN157	ABDAB-DT	MON-DT	Only available for DTTTC UIR overflights
UN301	MOV-HK	ALEMU-HK	RNAV (RNAV 5) required
UN303	RIBOK-OY	PARIM-OY	RNAV (RNAV 5) required at or below FL460
UN316	PASAM-OE	HLF-OE	Only available 1500-0300
UN493	MGA-LE	BERUM-LE	CDR 1: FL265-FL375, 0700-1530 Mon-Fri except Hol. CDR 2: FL265 and below, FL375-FL660, 0700-1530 Mon-Fri except Hol. Alternate route: MGA-UN869-GAL-TO
UN493	MGA-LE	BERUM-LE	Not available during LE(D)-169 activity
UN553	PATAR-HK	LOV-HK	RNAV (RNAV 5) required
UN554	AKUMU-HK	RUDOL-HK	RNAV (RNAV 5) required
UN556	GONGU-HK	NV-HK	RNAV (RNAV 5) required
UN697	NARMI-OB	KITOT-HE	Available 1500-0300 Sun-Thu, H24 Fri, Sat, Hol. FL275 and above excluded for LDG and TKOF Tabuk AP
UN726	ORTOP-LE	BAMBA-LE	CDR 2
UN726	ORTOP-LE	BAMBA-LE	Not available during LE(D)-122 activity

## AFRICA

ROUTE IDENT	START ID-ICAO	END ID-ICAO	RESTRICTION
UN728	CABOJ-GC	LOMAS-GC	CDR 2: 0800-2400 Mon-Fri except Hol. Alternate routes: GDV-UN873-ODEGI-UZ27-BIPET, GDV-UQ279-LAY
UN728	CABOJ-GC	LOMAS-GC	Not available during GC(D)-79C/E/N/T activity
UN729	CABEL-GC	GDV-GC	CDR 2: 0800-2400 Mon-Fri except Hol. Alternate routes: GDV-UQ729-LAY, GDV-UN873-ODEGI-UZ27-BIPET
UN729	CABEL-GC	GDV-GC	Not available during GC(D)-79C/E/N/T activity
UN729	GDV-GC	KASAS-GC	Not available during GC(D)-53 activity
UN764	SOC-OY	SUHIL-OY	RNAV (RNAV 5) required at or below FL460
UN857	BIPET-GC	DEREV-GC	CDR 2: 0800-2400 Mon-Fri except Hol. Alternate route: LZR-UN871-GDV-UN873-LIMAL
UN857	BIPET-GC	DEREV-GC	Not available during GC(D)-79C/E/T/W activity
UN857	DEREV-GC	LZR-GC	CDR 2: 0800-2400 Mon-Fri except Hol. Alternate routes: LZR-UL27-GDV-UN873-LIMAL, LZR-UL27-GDV-UN873-ODEGI-UZ27-BIPET
UN857	DEREV-GC	LZR-GC	Not available during GC(D)-79A/C/E/N/T activity
UN857	KORNO-LE	SVL-LE	CDR 1: FL245-FL460. CDR2: FL245 and below. Alternate route: SVL-UN10-VJF-UL82-RUNAX
UN857	KORNO-LE	SVL-LE	Not available during LE(D)-122, LE(D)-128, LE(D)-129 activity
UN860	AMR-LE	BERUM-LE	CDR 1: FL265-FL375, 0700-1530 Mon-Fri except Hol. CDR 2: FL265 and below, FL375-FL660, 0700-1530 Mon-Fri except Hol. Alternate routes: AMR-UL112-MGA-UN869-GALTO, AMR-UM192-TARIK
UN860	AMR-LE	BERUM-LE	Not available during LE(D)-169 activity
UN866	KONBA-GC	OSDIV-GM	Only available for aircraft with ADS-B equipment. Alternate route: BEXAL-NEVTU-SAMAR
UN871	ADUBI-LE	MAR-LE	Not available during LE(TRA)-RETIN A1 activity
UN871	APASO-GC	GDV-GC	CDR 2: 0800-2400 Mon-Fri except Hol. Alternate routes: APASO-UN866-GOMER, LIMAL-UN873-GDV, BIPET-UN857-DEREV-UN729-GDV
UN871	APASO-GC	VIDRI-GC	Not available during GC(D)-79T/W activity
UN871	VIDRI-GC	GDV-GC	Not available during GC(D)-79D/T/W activity
UN872	BEXAL-LP	ESP-LP	N-bound direction only available for LPPT TMA ARRs

## AFRICA

ROUTE IDENT	START ID-ICAO	END ID-ICAO	RESTRICTION
UN873	BAROK-LP	BIRBA-LP	CDR 1. Alternate route: by ATC
UN873	GDV-GC	SAMAR-GC	Not available during GC(D)-53 activity
UN873	LIMAL-GC	LOMAS-GC	CDR 1. Alternate routes by ATC
UN873	LIMAL-GC	LOMAS-GC	Not available during GC(D)-79T activity
UN975	ORTIS-GC	SNT-LP	RNP10 only required when contingency routing is activated
UN975	ORTIS-GC	SNT-LP	Upper limit raised to UNL when contingency routing is active in the Madeira Sector of LPPC FIR. Activated by NOTAM
UP128	LAB-HL	LOSUL-HL	E-bound traffic within RVSM level band cross LOSUL at FL290, FL330, FL370, FL410
UP161	ARNEB-DT	NOLSI-DT	Cruising levels by ATC
UP161	TUC-DT	NOLSI-DT	Only available for DTTA ARRrs
UP301	VEDRY-FY	GENUD-FB	FBSK ARRrs at FL245 and above route FYWH-VEDRY-UP301-GENUD-ETBED-GBV-FBSK
UP312	EVATO-HK	MAV-HK	RNAV (RNAV 2) required
UP312	TIMAD-OY	RIN-OY	RNAV (RNAV 5) required at or below FL460
UP323	ALNES-OY	DAPAB-OY	RNAV (RNAV 5) required at or below FL460
UP323	DAPAB-OY	GIDAS-VA	RNAV (RNAV 10) required at or below FL460
UP552	DATEG-OY	IMPOS-OY	RNAV (RNAV 5) required at or below FL460
UP676	MAGAD-HT	NV-HK	RNAV (RNAV 5) required
UP868	KOTOB-DT	NIGAT-LM	Cruising levels by ATC
UQ52	OKLOK-FA	EGPOP-FA	Required for RNAV equipped aircraft for FACT TMA DEPs inbound FAGC, FAWB, FASK, FAWK
UQ135	NAK-HK	MOKAD-HK	RNAV (RNAV 2) required
UQ143	GOSGA-LP	ORTIS-GC	Contingency route. Activated by NOTAM
UQ315	MOKAD-HK	NAK-HK	RNAV (RNAV 2) required
UQ589	AKLIS-DN	NEMSA-DN	Flight levels by ATC
UQ589	APVOT-DN	ERTOT-DN	Flight levels by ATC
UR603	STM-FP	SABSO-DG	FL290-FL410 NOT AVBL
UR674	DEMGO-HC	SABEL-OY	RNAV (RNAV 5) required at or below FL460

**AFRICA**

<b>ROUTE IDENT</b>	<b>START ID-ICAO</b>	<b>END ID-ICAO</b>	<b>RESTRICTION</b>
UR722	ABODA-GM	LAKAM-GM	CDR 1. Alternate route: AMSEL-IBALU-SAK
UR723	DOPEL-DT	TABOT-LF	DTTA ARRrS route DOPEL-TBK-KEMIR-TUC unless otherwise instructed by ATC
UR723	DOPEL-DT	TABOT-LF	MEA FL260 0001-1200Z Sat, 2300-2400Z Sun (Winter), 0001-1100Z Sat, 2200-2400Z Sun (Summer)
UR723	DOPEL-DT	TABOT-LF	Only available Sat, Italian Hol; Sun 7 Jan-21 Jun, 20 Sep-21 Dec; by ATC
UR723	SONAK-DT	SAMEK-DT	Cruising levels by ATC
UR775	APDOS-OE	PURAD-HH	RNAV (RNAV 5) required at or below FL460
UR775	SOKAR-FS	BERIL-FS	EVEN levels N-bound
UR778	KAN-DN	TAPAK-DR	DNKN DEPs cross TAPAK at or below FL290
UR778	KFR-HL	DITAR-HE	E-bound traffic within RVSM level band cross DITAR at FL290, FL330, FL370, FL410
UR781	TUC-DT	SONAK-DT	Cruising levels by ATC
UR783	NAVED-DT	BASMO-LM	Cruising levels by ATC
UR799	IMPOS-OY	ENADO-OY	E-bound traffic restricted to FL350, W-bound traffic restricted to FL320
UR799	IMPOS-OY	ENADO-OY	RNAV (RNAV 5) required at or below FL460
UR979	BUGRI-DG	SIRPA-FP	FL290-FL410 NOT AVBL
UR983	KINBU-DG	GAPAK-FP	FL290-FL410 NOT AVBL
UR986	TUC-DT	ARNEB-DT	Cruising levels by ATC
UT124	ALRAP-HA	GWZ-HA	Strictly follow route centerline
UT457	LUKRO-DN	APIRO-DN	Flight levels by ATC
UT458	OVRAP-DN	AKLIS-DN	Flight levels by ATC
UT475	DIRVA-DN	ENIDA-DN	Flight levels by ATC
UT702	TIMAD-OY	NODMA-OY	RNAV (RNAV 5) required at or below FL460
UT770	LIMAL-GC	TFS-GC	CDR 2: 0800-2400 Mon-Fri except Hol. Alternate routes: GDV-UN873-LIMAL, APASO-UN866-GOMER, BIPET-UN857-DEREV-UN729-GDV
UT770	LIMAL-GC	VIDRI-GC	Not available during GC(D)-79T/W activity
UT770	VIDRI-GC	TFS-GC	Not available during GC(D)-79D/T/W activity

## AFRICA

ROUTE IDENT	START ID-ICAO	END ID-ICAO	RESTRICTION
UT900	FES-GM	ARIAM-DA	CDR 2: 0600-1459, 1700-2159 Mon-Fri. CDR 1: other times. Alternate route: FES-UA411-DOTIV-ARIAM
UT912	APDIK-HT	NV-HK	RNAV (RNAV 5) required
UT913	GABSO-HK	EPTTEL-HT	RNAV (RNAV 5) required
UT932	NV-HK	WAV-HK	RNAV (RNAV 2) required
UT939	UTATA-HK	AVESO-HK	RNAV (RNAV 5) required
UT946	ANTAX-HK	UTATA-HK	RNAV (RNAV 5) required
UT947	APLOG-HK	EPSIB-HK	RNAV (RNAV 5) required
UV203	TOGMA-GM	FES-GM	CDR 2: 0600-1459, 1700-2159 Mon-Fri. CDR 1: other times
UV236	ARNEB-DT	MON-DT	Cruising levels by ATC
UV310	TBK-DT	MON-DT	Cruising levels by ATC
UW240	ERA-GM	FES-GM	CDR 2: 0600-1459, 1700-2159 Mon-Fri. CDR 1: other times
UW240	FES-GM	IXODA-GM	CDR 2: 0600-1459, 1700-2159 Mon-Fri. CDR 1: other times. Alternate route: TNG-VARAS-A411-FES
UW254	TISRI-DT	TUC-DT	Cruising levels by ATC
UW255	FES-GM	BRF-GM	CDR 2: 0600-1459, 1700-2159 Mon-Fri. CDR 1: other times. Alternate route: FES-DOTIV-ULMAM-BRF
UW302	TOBIB-DT	SAKET-DT	Only available by ATC
UW302	TOBIB-DT	TORPI-DT	Cruising levels by ATC
UW411	TUC-DT	ARNEB-DT	Cruising levels by ATC
UW850	PASOS-HE	GITLA-LL	Only available for traffic to HECA FIR
UW868	KOTOB-DT	MON-DT	Cruising levels by ATC
UY422	VIDRI-GC	BIPET-GC	CDR 2: 0800-2400 Mon-Fri except Hol. Alternate routes: ODEGI-UZ27-BIPET, REMGI-UN729-DEREV-UN857-BIPET, HIE-ORVEK-LIMAL-ETIBA, ETIBA-LIMAL-ORVEK-HIE
UY422	VIDRI-GC	BIPET-GC	Not available during GC(D)-79E/T/W activity
UY611	HIE-GC	VIDRI-GC	CDR 2: 0800-2400 Mon-Fri except Hol. Alternate routes: HIE-UZ526-MERAN-UY39-LOMAS-UN728-CABOJ, HIE-UZ526-GDV-UQ279-LAY

**AFRICA**

<b>ROUTE IDENT</b>	<b>START ID-ICAO</b>	<b>END ID-ICAO</b>	<b>RESTRICTION</b>
UY611	HIE-GC	VIDRI-GC	Not available during GC(D)-79T/W activity
UY611	VIDRI-GC	CABOJ-GC	CDR 2: 0800-2400 Mon-Fri except Hol. Alternate routes: HIE-UZ526-MERAN-UY39-LOMAS-UN728-CABOJ, HIE-UZ526-GDV-UQ279-LAY, HIE-ORVEK-LIMAL-ETIBA, ETIBA-LIMAL-ORVEK-HIE
UY611	VIDRI-GC	CABOJ-GC	Not available during GC(D)-79C/E/T/W activity
UZ2	TETAN-FA	NIBEX-FA	Required for RNAV equipped aircraft for FACT TMA DEPs inbound FAGM
UZ4	BAROK-LP	NAKOS-LP	CDR 1. Alternate route: by ATC
UZ27	BIPET-GC	ODEGI-GC	CDR 2: 0800-2400 Mon-Fri except Hol. Alternate routes: VIDRI-UY422-BIPET, REMGI-UN729-DEREV-UN857-BIPET
UZ27	BIPET-GC	ODEGI-GC	Not available during GC(D)-79B/C/E/T activity
UZ53	ADKIM-LE	VJF-LE	Not available during LE(TRA)-RETIN A1 activity
UZ141	NOLSI-DT	SIRVI-DT	Only available for DTTTC UIR overflights
UZ218	BAROK-LP	ATECA-LP	CDR 1. Alternate route: by ATC
UZ218	MAGUM-LP	MOSEN-LE	CDR 1. Alternate route: by ATC
UZ223	BEXAL-LP	SOTEX-LP	CDR 1. Alternate route: by ATC
UZ234	ARNEB-DT	MON-DT	Cruising levels by ATC
UZ353	ODEGI-GC	ROTUM-GC	CDR 2: 0800-2400 Mon-Fri except Hol. Alternate routes: ROTUM-UM660-GDV, LAY-UQ279-GDV
UZ353	ODEGI-GC	ROTUM-GC	Not available during GC(D)-79B/C/E/T activity
V18	TBS-DA	DAFRI-DA	Only available for DTTZ ARR/DEPs
V191	TEGBI-DT	JBA-DT	MANED not required above FL105
V203	TOGMA-GM	FES-GM	CDR 2: 0600-1459, 1700-2159 Mon-Fri. CDR 1: other times
V236	ARNEB-DT	MON-DT	Cruising levels by ATC
V310	TBK-DT	MON-DT	Cruising levels by ATC
V500	ZAR-HL	MIS-HL	Domestic traffic only
V602	LONIR-HE	PSD-HE	Only available by ATC
V604	ALPAM-HE	PSD-HE	RNAV (RNAV 5) required between FL160-FL460



## AFRICA

ROUTE IDENT	START ID-ICAO	END ID-ICAO	RESTRICTION
V604	DEGDI-HE	PSD-HE	2230-0530 by ATC only
V606	LONIR-HE	ELIGI-HE	Only available by ATC
V608	AST-HE	TONTU-HE	RNAV (RNAV 5) required between FL160-FL460
V608	HGD-HE	NABED-HE	RNAV (RNAV 5) required between FL160-FL460
V700	GRT-HL	ABU-HL	Only available for HLLT ARR/DEPs
V730	HGD-HE	GETOS-HE	RNAV (RNAV 5) required between FL160-FL460
V738	ASN-HE	AST-HE	RNAV (RNAV 5) required between FL160-FL460
V738	BOVAR-HE	AST-HE	E-bound direction not available above FL255
V900	GAD-HL	ABU-HL	Domestic traffic only
V950	CLAMS-HL	GARUS-HL	Only available for HLLM ARR/DEPs
VCAV-NA	VCA-FN	VNA-FN	Only available for FNCA DEPs inbound FNLU
W8	KHG-HE	CVO-HE	RNAV (RNAV 5) required between FL160-FL460
W240	ERA-GM	FES-GM	CDR 2: 0600-1459, 1700-2159 Mon-Fri. CDR 1: other times
W240	FES-GM	IXODA-GM	CDR 2: 0600-1459, 1700-2159 Mon-Fri. CDR 1: other times. Alternate route: TNG-VARAS-A411-FES
W254	TISRI-DT	TUC-DT	Cruising levels by ATC
W255	FES-GM	BRF-GM	CDR 2: 0600-1459, 1700-2159 Mon-Fri. CDR 1: other times. Alternate route: FES-DOTIV-ULMAM-BRF
W302	TOBIB-DT	SAKET-DT	Only available by ATC
W302	TOBIB-DT	TORPI-DT	Cruising levels by ATC
W411	TUC-DT	ARNEB-DT	Cruising levels by ATC
W601	TONTU-HE	MB-HE	RNAV (RNAV 5) required between FL160-FL460
W605	TONTU-HE	LXR-HE	RNAV (RNAV 5) required between FL160-FL460
W615	NAKDO-HE	AST-HE	RNAV (RNAV 5) required between FL195-FL460
W725	DBA-HE	BRN-HE	Available for HEMM ARR/DEPs
W725	RASDA-HE	DBA-HE	RNAV (RNAV 5) required between FL160-FL460
W850	MELDO-HE	PASOS-HE	E-bound direction available for HEAR, HEGR domestic ARRs

**AFRICA**

<b>ROUTE IDENT</b>	<b>START ID-ICAO</b>	<b>END ID-ICAO</b>	<b>RESTRICTION</b>
W850	MELDO-HE	PASOS-HE	RNAV (RNAV 5) required between FL160-FL460
W850	PASOS-HE	GITLA-LL	Only available for traffic to HECA FIR
W854	WLD-HL	SEB-HL	Only available for HLON ARR/DEPs
W860	MTG-HL	KHOMS-HL	Only available for HLLM ARR/DEPs
W861	TAMIT-HL	CILBA-HL	Only available for HLGD ARR/DEPs
W900	MOGVA-GM	MOGBI-GM	CDR 2: 0500-1459, 1700-2159 Mon-Fri 1 Jun-15 Sep; 0600-2159 Mon-Fri 16 Sep-31 May. CDR 1: other times
Z234	ARNEB-DT	MON-DT	Cruising levels by ATC
Z801	ABDOR-GM	MABOG-GM	CDR 2: 0600-1459, 1700-2159 Mon-Fri. CDR 1: other times
ZEM-LAB	ZEM-DA	LABRO-LE	Only available by ATC

----- **Effective 10 Oct:** -----

<b>ROUTE IDENT</b>	<b>START ID-ICAO</b>	<b>END ID-ICAO</b>	<b>RESTRICTION</b>
A1	CVO-HE	METRU-HE	RNAV (RNAV 5) required between FL160-FL460
A6	SURIB-LE	LABRO-LE	CDR 2: 0730-1530 Mon-Fri except Hol (Winter), 0630-1430 Mon-Fri except Hol (Summer). Alternate route: SURIB-G30-SADAF
A6	SURIB-LE	LABRO-LE	Not available during LE(D)-26 activity
A16	RASDA-HE	CVO-HE	RNAV (RNAV 5) required between FL160-FL460
A31	MAGAL-LE	LABRO-LE	CDR 2: 0730-1530 Mon-Fri except Hol (Winter), 0630-1430 Mon-Fri except Hol (Summer). Alternate route: SADAF-G30-VLC (N-bound), VLC-A34-HAMRA (S-bound)
A31	MAGAL-LE	LABRO-LE	Not available during LE(D)-26 activity
A400	EGSUD-FN	ETBOM-FL	FIS only below FL115
A400	ETBOM-FL	KEPOK-FQ	FIS only below FL75
A400	ETBOM-FL	VLS-FL	CTR01 not required above FL75
A400	VLS-FL	TIMAX-FL	CTR02 not required above FL75

**AFRICA**

<b>ROUTE IDENT</b>	<b>START ID-ICAO</b>	<b>END ID-ICAO</b>	<b>RESTRICTION</b>
A405	APKOL-HT	TMA02-FL	FIS only below FL115
A405	TMA01-FL	TEVAS-FQ	FIS only below FL115
A405	TMA02-FL	TMA01-FL	FIS only below FL75
A407	OKDAR-FL	TMA05-FL	FIS only below FL115
A407	TMA05-FL	OKDAR-FL	FIS only below FL75
A407	TMA05-FL	TMA06-FL	FIS only below FL75
A407	TMA06-FL	GIPVO-FL	FIS only below FL115
A407	VLS-FL	OKDAR-FL	VLS25 not required above FL75
A407	VLS-FL	VLS25-FL	FIS only below FL115
A407	VLS25-FL	OKDAR-FL	FIS only below FL75
A408	SALEH-OY	HDH-OY	RNAV (RNAV 5) required between FL170-FL460
A409	AVEKU-FL	EGSAR-FL	VND22, VND29 not required above FL75
A409	AVEKU-FL	VND29-FL	FIS only below FL75
A409	EGSAR-FL	SOBTO-FZ	FIS only below FL115
A409	VLS-FL	AVEKU-FL	FIS only below FL115
A409	VND22-FL	EGSAR-FL	FIS only below FL75
A411	KEMIR-DT	ELJEM-DT	Cruising levels by ATC
A411	LOSUL-HL	BRN-HE	RNAV (RNAV 5) required between FL195-FL460
A606	TUC-DT	RATBA-DT	Cruising levels by ATC
A607	AOKDR-FL	AVIVA-FV	FIS only below FL115
A607	VND-FL	AOKDR-FL	FIS only below FL75
A607	VND-FL	VND66-FL	VND30 not required above FL75
A621	TTN-GM	ALM-GM	CDR 2: FL145 and above, 0600-1459, 1700-2159 Mon-Fri. CDR 1: other times
A725	OSMAR-LI	TUC-DT	DTTJ ARR/DEPs route DOPEL-TBK-JBA and vice versa unless otherwise instructed by ATC
A725	OSMAR-LI	TUC-DT	DTTZ ARR/DEPs route DOPEL-TBK-BAN-TON and vice versa unless otherwise instructed by ATC
A725	OSMAR-LI	TUC-DT	Not available for DTTA ARR/DEPs
A727	GESAD-HE	NOZ-HE	E-bound direction available for HEAX, HEBA ARR/DEPs

**AFRICA**

<b>ROUTE IDENT</b>	<b>START ID-ICAO</b>	<b>END ID-ICAO</b>	<b>RESTRICTION</b>
A727	LXR-HE	SML-HE	N-bound direction available above FL255 for HELX ARRrS
A727	PAXIS-HE	NUBAR-HE	RNAV (RNAV 5) required between FL160-FL460
A743	TUC-DT	ABDAB-DT	Cruising levels by ATC
A743	TUC-DT	ABDAB-DT	Only available for DTTA ARRrS
A857	KORNO-LE	SVL-LE	CDR 2. Alternate route: SVL-R10-VJF-G5-KORIS
A857	KORNO-LE	SVL-LE	Not available during LE(D)-122, LE(D)-128, LE(D)-129 activity
A868	TUC-DT	NOLSI-DT	Cruising levels by ATC
A868	TUC-DT	NOLSI-DT	Only available for DTTA ARRrS
A873	LIMAL-GC	GDV-GC	Radar assistance available due to GDV VORDME restrictions
A873	LIMAL-GC	LOMAS-GC	CDR 1
A873	LIMAL-GC	LOMAS-GC	Not available during GC(D)-79T activity
ALR-PEC	ALR-DA	PECES-LE	Only available by ATC
B12	KATAB-HE	SML-HE	MAA raised to UNL when Radar not available
B12	TANSA-HE	SML-HE	RNAV (RNAV 5) required between FL160-FL460
B18	GDV-GC	BIMBO-GC	Radar assistance available due to GDV VORDME restrictions
B18	GDV-GC	KASAS-GC	Not available during GC(D)-53 activity
B31	MOGIL-LE	ZEM-DA	Only available for DAAA FIR overflights and LEPA ARRrS
B400	VEDET-HC	IMKAD-OO	RNAV (RNAV 5) required between FL160-FL460
B404	DEMGO-HC	RIGAM-OY	RNAV (RNAV 5) required between FL160-FL460
B413	KOBAS-OE	RIBOK-OY	FL310-FL450, open for aircraft registered in Yemen routing to/from OYAA
B413	RIBOK-OY	ZIZAN-OY	RNAV (RNAV 5) required between FL160-FL460
B413	TAZ-OY	KRA-OY	During the activation period of OY(D)-26 and the other related military areas around Aden Airport, Special Avoidance Procedures (SAP10)/level restriction is established to serve traffic landing/departing Aden Airport
B424	ITOLI-OY	SABEL-OY	RNAV (RNAV 5) required between FL160-FL460

**AFRICA**

<b>ROUTE IDENT</b>	<b>START ID-ICAO</b>	<b>END ID-ICAO</b>	<b>RESTRICTION</b>
B526	FARES-HH	TATNA-OY	RNAV (RNAV 5) required between FL160-FL460
B526	HDH-OY	IVORA-OY	During the activation period of OY(D)-5, OY(D)-50, OY(D)-52 traffic leveling within the vertical limits of these danger areas, alternative routing will be given by ATC
B530	NIDOT-FL	UTEMA-HT	FIS only below FL115
B530	VND-FL	NIDOT-FL	FIS only below FL75
B530	VND-FL	NIDOT-FL	VND17 not required above FL75
B535	KAPET-OO	TORBA-OY	RNAV (RNAV 5) required between FL160-FL460
B544	GEVEL-OY	KRA-OY	During the activation period of OY(D)-27 and the other related military areas around Aden Airport, Special Avoidance Procedures (SAP7A/7B)/level restriction is established to serve traffic landing/departing Aden Airport
B544	NOBSU-OE	KRA-OY	RNAV (RNAV 5) required between FL170-FL460
B549	THAMD-OY	PUTRA-OO	RNAV (RNAV 5) required between FL195-FL460
B600	GDV-GC	ROTUM-GC	CDR 2: 0800-2400 Mon-Fri except Hol. Alternate routes: GDV-A873-ODEGI-Z353-ROTUM, GDV-W279-LAY
B600	GDV-GC	ROTUM-GC	Not available during GC(D)-79C/E/T/W activity
B979	TUC-DT	SUSIP-LI	Cruising levels by ATC
DIKBIS	DIKBA-GO	BIS-GG	AORRA transition route
DIPAPU	DIPLA-DI	APUMI-DG	Contingency route. Activated by NOTAM
G5	AGUMO-GC	GDV-GC	CDR 2: 0800-2400 Mon-Fri except Hol. Alternate routes: APASO-N866-GOMER, LIMAL-A873-GDV
G5	AGUMO-GC	GDV-GC	Not available during GC(D)-79D/T/W activity
G5	AGUMO-GC	KORAL-GC	Radar assistance available due to GDV VORDME restrictions
G650	RASKA-OE	JDW-OE	Available during Scatana activity, above FL160
G652	AVUPA-FL	GADBA-FV	FIS only below FL75
G652	AVUPA-FL	GADBA-FV	VLS35, CTR07 not required above FL75
G652	IMPOS-OY	DUDRI-OE	E-bound traffic FL330 only, W-bound traffic FL300 only
G652	KRA-OY	DUDRI-OE	RNAV (RNAV 5) required between FL160-FL460

## AFRICA

ROUTE IDENT	START ID-ICAO	END ID-ICAO	RESTRICTION
G652	KRA-OY	IVORA-OY	During the activation period of OY(D)-23, OY(D)-51 Special Avoidance Procedures (SAP8)/level restriction is established to serve traffic landing/departing Aden Airport
G652	UDNOR-FN	AVUPA-FL	FIS only below FL115
G653	MOKAK-FY	ANTOR-FY	Class [G] FL145-FL195, HJ, 01 NOV-31 JAN
G655	CTR08-FL	TMA20-FL	FIS only below FL75
G655	MOTAM-FZ	VLS40-FL	FIS only below FL75
G655	TMA20-FL	RETAR-FL	FIS only below FL115
G655	VLS81-FL	TMA20-FL	VLS40, CTR08 not required above FL75
G659	MTG-HL	KDR-HL	Only available for HLLM ARR/DEPs
G660	WLD-HL	SRT-HL	Only available for HLGD ARR/DEPs
G661	HON-HL	MIS-HL	Only available for HLMS, HLON ARR/DEPs
G662	HON-HL	SRT-HL	Only available for HLGD, HLON ARR/DEPs
G664	ERA-GM	EVOXO-GM	CDR 2: 0600-1459, 1700-2159 Mon-Fri. CDR 1: other times. Alternate route: ERA-VANOP-PIXEB-BRF-UL-MAM-EVOXO/OJD
G667	PARIM-OY	NETAS-OY	RNAV (RNAV 5) required between FL160-FL460
G727	NIBEL-DT	SIRVI-DT	Only available for DTTA, DTNH DEPs
G728	CBN-DT	TUPAL-LI	Cruising levels by ATC
G851	LOMAS-GC	CABOJ-GC	CDR 2: 0800-2400 Mon-Fri except Hol. Alternate routes: LOMAS-A873-ODEGI-UZ353-ROTUM, TFN-H274-GDV-W279-LAY
G851	LOMAS-GC	CABOJ-GC	Not available during GC(D)-79C/E/T/W activity
G851	SNT-LP	ORTIS-GC	Possible use as contingency route. Activated by Notam
G851	SNT-LP	ORTIS-GC	RNP10 only required when contingency routing is activated
G855	IZD-HL	GAD-HL	Domestic traffic only
G864	BELED-DT	TUC-DT	Cruising levels by ATC
G869	DERIV-DT	DOPEL-DT	Not available for DTTA ARR/DEPs via DEC/CAR
GAKBIS	GAKSA-GO	BIS-GG	AORRA transition route
GARBIS	GARKI-GO	BIS-GG	AORRA transition route

**AFRICA**

<b>ROUTE IDENT</b>	<b>START ID-ICAO</b>	<b>END ID-ICAO</b>	<b>RESTRICTION</b>
GENGB V	GENUD-FB	GBV-FB	Only available for FBSK ARRrs
H104	BARIS-GM	ALM-GM	CDR 2: 0600-1459, 1700-2159 Mon-Fri. CDR 1: other times. Alternate routes: ALM-G850-FES-A411/R975
H119	LACAJ-GM	BRF-GM	CDR 2: 0600-1459, 1700-2159 Mon-Fri. CDR 1: other times
H372	ESAMI-LE	AMR-LE	CDR 2: 0700-1530 Mon-Fri except Hol. Alternate route: AMR-G850-BERUM
H372	ESAMI-LE	AMR-LE	Not available during LE(D)-168 activity
H400	ABDOR-GM	AGOVA-GM	CDR 2: 0600-1459, 1700-2159 Mon-Fri. CDR 1: other times
H770	LIMAL-GC	TFS-GC	CDR 2: 0800-2400 Mon-Fri except Hol. Alternate route: LIMAL-A873-GDV
H770	LIMAL-GC	TFS-GC	Not available during GC(D)-79D/T/W activity
J3	GRS-DA	FAROS-DA	Domestic traffic only
J4	MOS-DA	TGU-DA	Domestic traffic only
J5	JIL-DA	CSO-DA	Domestic traffic only
J7	LIMON-DA	CSO-DA	Domestic traffic only
J8	NSL-DA	HME-DA	Domestic traffic only
J9	BNA-DA	BTN-DA	Domestic traffic only
J10	BTN-DA	TBS-DA	Domestic traffic only
J13	NBA-DT	SIRVI-DT	Cruising levels by ATC
J13	NBA-DT	SIRVI-DT	Only available for DTNH DEPs
J14	BTN-DA	CSO-DA	Domestic traffic only
J24	GARBA-DA	IMN-DA	Domestic traffic only
J25	HME-DA	IMN-DA	Domestic traffic only
J26	MNA-DA	HME-DA	Domestic traffic only
J27	HME-DA	TGU-DA	Domestic traffic only
J28	TGU-DA	ELO-DA	Domestic traffic only
J30	HME-DA	TBS-DA	Domestic traffic only
J36	BSA-DA	TGU-DA	Domestic traffic only

**AFRICA**

<b>ROUTE IDENT</b>	<b>START ID-ICAO</b>	<b>END ID-ICAO</b>	<b>RESTRICTION</b>
J40	ADR-DA	TIO-DA	Domestic traffic only
J41	ADR-DA	IMN-DA	Domestic traffic only
J53	DJA-DA	IMN-DA	Domestic traffic only
J58	MON-DT	SORAB-DT	Cruising levels by ATC
J60	MOK-DA	DJA-DA	Domestic traffic only
J61	BOD-DA	DJA-DA	Domestic traffic only
J62	NSL-DA	IGZ-DA	Domestic traffic only
J63	ADR-DA	MOK-DA	Domestic traffic only
J64	LOUHA-DA	HRM-DA	Domestic traffic only
J65	HRM-DA	TGU-DA	Domestic traffic only
J66	ALR-DA	BSA-DA	Domestic traffic only
J92	LOBNA-DT	OMENI-LM	Cruising levels by ATC
J92	NBA-DT	OMENI-LM	E-bound direction only available for LMMM FIR ARRr/overflights
J215	NAVED-DT	NBA-DT	Cruising levels by ATC
J981	NWB-HE	DATOK-HE	RNAV (RNAV 5) required between FL255-FL460
KIRVOS	KIRVU-DI	VOSGA-DI	Contingency route. Activated by NOTAM
KOBBIS	KOBT-A-GO	BIS-GG	AORRA transition route
KOBYF	KOBT-A-GO	YF-GO	AORRA transition route
KOR-RAS	KOROB-DI	RASAD-DG	Contingency route. Activated by NOTAM
KOR-VOS	KOROB-DI	VOSGA-DI	Contingency route. Activated by NOTAM
L44	ABDAB-DT	RATBA-DT	Cruising levels by ATC
L44	ABDAB-DT	TUC-DT	Only available for DTTA ARRr
L58	BRF-GM	XAVOV-GM	CDR 2: 0600-1459, 1700-2159 Mon-Fri. CDR 1: other times. Alternate route: XAVOV-ULMAM-BRF
L102	ERA-GM	ARIAM-DA	CDR 2: 0600-1459, 1700-2159 Mon-Fri. CDR 1: other times. Alternate route: ERA-VANOP-PIXEB-BRF-ARIAM
L300	LXR-HE	GIBAL-OE	RNAV (RNAV 5) required between FL160-FL460



**AFRICA**

<b>ROUTE IDENT</b>	<b>START ID-ICAO</b>	<b>END ID-ICAO</b>	<b>RESTRICTION</b>
L315	CVO-HE	GIBAL-OE	RNAV (RNAV 5) required between FL160-FL460
L315	SOKOT-HE	GIBAL-OE	Only available for HESH, HEGN ARRrS
L433	ALKON-HK	NV-HK	For terrain clearance aircraft flying below FL120 shall route via NAROK
L433	ALKON-HK	NV-HK	RNAV (RNAV 5) required
L434	AVUNO-HT	MOV-HK	RNAV (RNAV 5) required
L550	PASOS-HE	KITOT-HE	RNAV (RNAV 5) required between FL255-FL460
L551	DBA-HE	ANTAR-HE	RNAV (RNAV 5) required between FL160-FL460
L564	TAZ-OY	PARIM-OY	RNAV (RNAV 5) required between FL160-FL460
L604	ASRAB-HE	IMRAD-HE	W-bound direction available for OEJD FIR DEPs, HELX ARRrS, traffic overflying LXR to DITAR
L604	BRN-HE	KHG-HE	NW-bound direction only available for traffic inbound HLLL FIR via LOSUL
L604	SALUN-LG	IMRAD-HE	RNAV (RNAV 5) required between FL160-FL460
L607	NOZ-HE	GESAD-HE	E-bound direction available for HEAX, HEBA ARRrS
L607	NOZ-HE	PAXIS-HE	RNAV (RNAV 5) required between FL285-FL460
L612	BLT-HE	KUMBI-HE	Only available for HECA, HESH ARRrS
L612	BLT-HE	KUMBI-HE	RNAV (RNAV 5) required between FL160-FL460
L617	NOZ-HE	TANSA-HE	RNAV (RNAV 5) required between FL160-FL460
L677	CVO-HE	PASAM-OE	RNAV (RNAV 5) required between FL160-FL460
L677	MENLI-HE	SHM-HE	E-bound direction not available above FL255
L677	NABAN-OY	SAA-OY	RNAV (RNAV 5) required between FL160-FL460
L677	PASAM-OE	DARAX-OE	S-bound direction available for HESH DEPs, MAA FL170
L677	SHM-HE	PASAM-OE	Also available for HECC FIR DEPs/ARRrS inbound/outbound OENN at FL160, FL170 only
L677	SHM-HE	PASAM-OE	Also available for HESH DEPs inbound OEJD FIR with MAA FL150
L869	CBN-DT	TUPAL-LI	Cruising levels by ATC
L869	TUPAL-LI	PAL-LI	Not available during LI(MOA)-TC-2 CORRIDOR segment 3 activity
L874	LOBNA-DT	OMENI-LM	Cruising levels by ATC

## AFRICA

ROUTE IDENT	START ID-ICAO	END ID-ICAO	RESTRICTION
L874	NBA-DT	OMENI-LM	E-bound direction only available for LMMM FIR ARRr/overflights
L875	VUTAS-VA	MMV-VO	Higher levels available by ATC
LV72L	LV-FO	72LV-FO	AORRA transition route
M301	PURAD-HH	ASMAK-OY	RNAV (RNAV 5) required between FL170-FL460
M301	PURAD-HH	SAA-OY	During the activation period of OY(D)-4 alternative routing is established as follows: E-bound: B526 (PURAD-HDH)-A419 (HDH-SAA). W-bound: A419 (SAA-HDH)-B526 (HDH-PURAD)
M318	HDH-OY	NADKI-OY	RNAV (RNAV 5) required between FL160-FL460
M318	SAA-OY	NADKI-OY	During the activation period of OY(D)-1 route available only for traffic at flight levels above the upper limit of OY(D)-1
M318	SAA-OY	NADKI-OY	Traffic landing and/or departing Sana'a airport and other traffic below FL310 will be rerouted as follows: NADKI-M651-MEGPA-B424-ITOLI-M301-SAA and vice versa
M321	SILPA-OY	PUTRA-OO	RNAV (RNAV 5) required between FL160-FL460
M559	NISMI-OY	VEDET-HC	RNAV (RNAV 5) required between FL170-FL460
M651	OKTOB-OY	KRA-OY	RNAV (RNAV 5) required between FL160-FL460
M686	GIBAL-OE	JDW-OE	Only available for HECC FIR overflights, HELX ARRr
M686	LXR-HE	GIBAL-OE	RNAV (RNAV 5) required between FL160-FL460
M725	SUSIP-LI	TUC-DT	Cruising levels by ATC
M726	MTG-HL	DISOL-HL	Only available for HLLM ARRr/DEPs
M731	OSMAR-LI	TEKSA-LI	CDR 3: N-bound direction, 0600-2100 (Winter), 0500-2100 (Summer)
M731	TUC-DT	OSMAR-LI	DTTJ ARRr/DEPs route DOPEL-TBK-JBA and vice versa unless otherwise instructed by ATC
M731	TUC-DT	OSMAR-LI	DTTZ ARRr/DEPs route DOPEL-TBK-BAN-TON and vice versa unless otherwise instructed by ATC
M731	TUC-DT	OSMAR-LI	Not available for DTTA ARRr
M733	TUC-DT	OSMAR-LI	DTTJ ARRr/DEPs route DOPEL-TBK-JBA and vice versa unless otherwise instructed by ATC

## AFRICA

ROUTE IDENT	START ID-ICAO	END ID-ICAO	RESTRICTION
M733	TUC-DT	OSMAR-LI	DTTZ ARR/DEPs route DOPEL-TBK-BAN-TON and vice versa unless otherwise instructed by ATC
M733	TUC-DT	OSMAR-LI	Not available for DTTA ARRs
M734	NBA-DT	NIBEL-DT	Cruising levels by ATC
M734	NBA-DT	NIBEL-DT	Only available for DTTA, DTNH DEPs
M735	TIRBO-DT	BABLO-DT	Cruising levels by ATC
M739	TABOT-LF	DOPEL-DT	CDR 3: Mon-Fri except Hol 1 Jan-6 Jan, 22 Jun-19 Sep, 22 Dec-31 Dec; FL250 and below, 0001-1200 Sat, 2300-2400 Sun except Hol (Winter); 0001-1100 Sat, 2200-2400 Sun except Hol (Summer) 7 Jan-21 Jun, 20 Sep-21 Dec
M872	FYM-HE	SEMRU-HE	MEA FL280 at night
M872	HGD-HE	SILKA-OE	W-bound direction available for HEGN ARRs only
M872	METRU-HE	SILKA-OE	RNAV (RNAV 5) required between FL160-FL460
M978	TUC-DT	SONAK-DT	Cruising levels by ATC
M980	NAVED-DT	BASMO-LM	Cruising levels by ATC
M999	APDOS-OE	PURAD-HH	RNAV (RNAV 5) required between FL160-FL460
M999	DEDLI-HE	APDOS-OE	FL310-FL450, open for aircraft registered in Yemen routing to/from OYAA
M999	DITAR-HE	DEDLI-HE	RNAV (RNAV 5) required between FL245-FL460
M999	LXR-HE	DEDLI-HE	W-bound direction only available for HELX ARRs
MORTBK	MORJA-DT	TBK-DT	Only available for DTKA ARRs/DEPs
N303	RIBOK-OY	PARIM-OY	RNAV (RNAV 5) required between FL160-FL460
N307	MELDO-HE	LAKTO-HE	RNAV (RNAV 5) required between FL160-FL460
N315	KUTVI-OO	ASPUX-VA	RNAV (RNAV 5) required at or below FL460
N315	SITOL-OE	ASPUX-VA	FL280, FL300, FL320 not available for W-bound traffic via SITOL
N697	NARMI-OB	KITOT-HE	Available 1500-0300 Sun-Thu, H24 Fri, Sat, Hol. FL275 and above excluded for LDG and TKOF Tabuk AP
N697	NWB-HE	MENLI-HE	RNAV (RNAV 5) required between FL160-FL460
N764	NOBSU-OE	SOC-OY	RNAV (RNAV 5) required between FL160-FL460

## AFRICA

ROUTE IDENT	START ID-ICAO	END ID-ICAO	RESTRICTION
ORA-LAB	ORA-DA	LABRO-LE	Only available by ATC
P126	LUMED-LM	SUSOM-LM	Not available during LI(R)-501, LI(R)-502, LI(R)-504A, LI(R)-504B activity. Alternate route: GZO-M622-MABOX-M726-PNZ
P161	ARNEB-DT	NOLSI-DT	Cruising levels by ATC
P161	TUC-DT	NOLSI-DT	Only available for DTTA ARRs
P312	NV-HK	WAV-HK	RNAV (RNAV 2) required
P312	TIMAD-OY	RIN-OY	RNAV (RNAV 5) required between FL160-FL460
P751	ARABO-OY	KRA-OY	During the activation period of OY(D)-25, OY(D)-37 Special Avoidance Procedures (SAP11)/level restriction is established to serve traffic landing/departing Aden Airport
P751	BRN-HE	ALEBA-HS	RNAV (RNAV 5) required between FL160-FL460
P751	DAPAB-OY	ANGAL-VA	RNAV (RNAV 10) required between FL160-FL460
P751	DEKRA-OY	DAPAB-OY	RNAV (RNAV 5) required between FL160-FL460
P868	MON-DT	NIGAT-LM	Cruising levels by ATC
Q143	GOSGA-LP	ORTIS-GC	Contingency route. Activated by NOTAM
Q315	ITGOT-HK	UTEPI-HK	RNAV (RNAV 2) required
Q401	RATVA-GM	BML-GM	CDR 2: 0500-1459 Mon-Fri 1 Jun-15 Sep; 0700-1700 Mon-Fri 16 Sep-31 May. CDR 1: other times
R2	DITAR-HE	ATMUL-HE	RNAV (RNAV 5) required between FL195-FL460
R400	PRA-FS	RERUS-FS	EVEN levels S-bound
R401	PRA-FS	UDLET-FS	EVEN levels S-bound
R401	SUHIL-OY	KIVEL-OO	RNAV (RNAV 5) required between FL160-FL460
R525	EVOLU-FL	RETAR-FL	VLS82, VLS68 not required below FL115
R525	KO-FL	RETAR-FL	FIS only below FL115
R722	LAKAM-GM	ABODA-GM	CDR 1. Alternate route: AMSEL-IBALU-SAK
R723	CBN-DT	SAMEK-DT	Cruising levels by ATC
R723	DOPEL-DT	TABOT-LF	DTTA ARRs route DOPEL-TBK-KEMIR-TUC unless otherwise instructed by ATC

**AFRICA**

<b>ROUTE IDENT</b>	<b>START ID-ICAO</b>	<b>END ID-ICAO</b>	<b>RESTRICTION</b>
R723	DOPEL-DT	TABOT-LF	Only available Sat, Italian Hol; 1-6 Jan, 22 Jun-19 Sep, 22-31 Dec; 1301LT Sat-2400LT Sun, Italian Hol; 7 Jan-21 Jun, 20 Sep-21 Dec
R775	APDOS-OE	PURAD-HH	RNAV (RNAV 5) required between FL160-FL460
R775	LXR-HE	DEDLI-HE	RNAV (RNAV 5) required between FL160-FL285
R775	LXR-HE	DEDLI-HE	W-bound direction only available for HELX ARRs
R775	SOKAR-FS	BERIL-FS	EVEN levels N-bound
R777	LAKNA-OY	TORBA-OY	RNAV (RNAV 5) required between FL160-FL460
R778	DITAR-HE	CVO-HE	RNAV (RNAV 5) required between FL195-FL460
R778	DITAR-HE	KATAB-HE	RNAV (RNAV 5) required between FL195-FL460
R778	FYM-HE	CVO-HE	Not available 0800-1700 on Mon, Wed
R778	FYM-HE	CVO-HE	RNAV (RNAV 5) required between FL195-FL460
R778	KATAB-HE	FYM-HE	RNAV (RNAV 5) required between FL160-FL460
R779	AVEKA-FL	TMA07-FL	FIS only below FL75
R779	EKBUG-FL	UPDOR-FL	FIS only below FL115
R779	KURMA-FL	CTR09-FL	UPDOR not required above FL115
R779	OKSIX-FL	AVEKA-FL	FIS only below FL115
R779	TMA07-FL	GESAT-HT	FIS only below FL115
R779	UPDOR-FL	CTR09-FL	FIS only below FL75
R779	UPDOR-FL	OKSIX-FL	VLS27, CTR09 not required above FL75
R779	VLI-FL	EKBUG-FL	VLI18 not required above FL65
R779	VLI18-FL	EKBUG-FL	FIS only below FL65
R779	VLS27-FL	OKSIX-FL	FIS only below FL75
R781	TUC-DT	SONAK-DT	Cruising levels by ATC
R782	CTR10-FL	IBNOP-FL	FIS only below FL75
R782	CTR10-FL	LABON-FW	FIS only below FL75
R782	IBNOP-FL	IXALU-FL	FIS only below FL115
R782	IXALU-FL	LABON-FW	FIS only below FL75
R782	LAGNA-FL	IXALU-FL	NESAK not required above FL115

## AFRICA

ROUTE IDENT	START ID-ICAO	END ID-ICAO	RESTRICTION
R782	VLS-FL	IBNOP-FL	CTR10 not required above FL75
R783	NAVED-DT	BASMO-LM	Cruising levels by ATC
R845	ZAW-HL	GRT-HL	Only available for HLLS ARRrS/DEPs
R987	LONOD-FY	KEBAT-FY	Class [G] FL145-FL195, HJ, 01 NOV-31 JAN
R987	VCA-FN	VNA-FN	Domestic traffic only
RANBIS	RANOV-GO	BIS-GG	AORRA transition route
SOVNA	SO-FN	VNA-FN	Only available for FNSO DEPs inbound FNLU
T55	KATAB-HE	GINDI-HE	Only available 2200-0500
T113	NORSI-FS	OKLIM-FS	Max IAS 250 Kts below 10000'
T114	OKLAB-FS	OKLIM-FS	Max IAS 250 Kts below 10000'
T115	KATEB-FS	OKLIM-FS	Max IAS 250 Kts below 10000'
T116	KATEB-FS	UNBED-FS	Max IAS 250 Kts below 10000'
T117	DANEL-FS	FS121-FS	Max IAS 250 Kts below 10000'
T118	DANEL-FS	FS122-FS	Max IAS 250 Kts below 10000'
T119	MOGUD-FS	FS123-FS	Max IAS 250 Kts below 10000'
T120	ANVIX-FS	NEVIN-FS	Max IAS 250 Kts below 10000'
T121	ATUTI-FS	FS123-FS	Max IAS 250 Kts below 10000'
T122	ATUTI-FS	ROUTY-FS	Max IAS 250 Kts below 10000'
T123	ROUTY-FS	UDLET-FS	Max IAS 250 Kts below 10000'
T124	UDLET-FS	UTALI-FS	Max IAS 250 Kts below 10000'
T125	UTALI-FS	ORLOM-FS	Max IAS 250 Kts below 10000'
T126	TILOM-FS	ORLOM-FS	Max IAS 250 Kts below 10000'
T127	FS124-FS	GITOP-FS	Max IAS 250 Kts below 10000'
T128	TILOM-FS	GITOP-FS	Max IAS 250 Kts below 10000'
T129	NESID-FS	RERUS-FS	Max IAS 250 Kts below 10000'
T130	RUBAM-FS	NESID-FS	Max IAS 250 Kts below 10000'
T131	FS120-FS	RERUS-FS	Max IAS 250 Kts below 10000'
T132	FS120-FS	RUBAM-FS	Max IAS 250 Kts below 10000'
T133	MOGUD-FS	FS122-FS	Max IAS 250 Kts below 10000'

**AFRICA**

<b>ROUTE IDENT</b>	<b>START ID-ICAO</b>	<b>END ID-ICAO</b>	<b>RESTRICTION</b>
T134	ANVIX-FS	ROUTY-FS	Max IAS 250 Kts below 10000'
T135	NORSI-FS	FS120-FS	Max IAS 250 Kts below 10000'
T136	OKLAB-FS	IMPOX-FS	Max IAS 250 Kts below 10000'
T137	ANVIX-FS	ROUTY-FS	Max IAS 250 Kts below 10000'
T139	MIRON-FS	IMPOX-FS	Max IAS 250 Kts below 10000'
T140	MIRON-FS	OKLIM-FS	Max IAS 250 Kts below 10000'
T141	FS124-FS	BOMOB-FS	Max IAS 250 Kts below 10000'
T142	UTALI-FS	BOMOB-FS	Max IAS 250 Kts below 10000'
T300	RAGNI-OY	ULBON-OE	RNAV (RNAV 5) required between FL160-FL460
T424	RASNO-LM	RAKMU-HE	Contingency route
T502	BANAR-OY	PEBIX-OY	RNAV (RNAV 5) required between FL160-FL460
T513	RASKA-OE	EGMEG-OE	Available during Scatana activity, above FL160
T513	RASKA-OE	JDW-OE	Only available by ATC
T543	TINTO-LI	NOLSI-DT	Available 0000-0700, 1900-2359 Mon-Thu; 0000-0700, 1400-2359 Fri; Sat, Sun, Hol. Alternate routes: L5-Q125-M732-P161, L12-M738-M725
T543	TINTO-LI	NOLSI-DT	CDR 1: FL270 and above, 0700-1900 Mon-Thu, 0700-1400 Fri. CDR 3: FL260 and below, 0700-1900 Mon-Thu, 0700-1400 Fri. Alternate routes: L5-Q125-M732-P161, L12-M738-M725
T565	RAKMU-HE	GESAD-HE	Available for OT registered aircraft flights between OLBA and North African Airports
T565	VALKI-HL	RAKMU-HE	Contingency route
T932	NV-HK	WAV-HK	RNAV (RNAV 2) required
TARYF	TAROT-GO	YF-GO	AORRA transition route
TOBT-WA	TOBUK-DA	TWARG-HL	Contact Algiers ACC on 124.10 Mhz or 8894Khz 10 mins before entering DAAA FIR
UA400	LOVLI-DG	GAPAK-FP	FL290-FL410 NOT AVBL
UA411	KEMIR-DT	ELJEM-DT	Cruising levels by ATC
UA560	KIDNI-DG	INAKA-DG	FL290-FL410 NOT AVBL
UA604	JOS-DN	IKPUV-DN	Flight levels by ATC

**AFRICA**

<b>ROUTE IDENT</b>	<b>START ID-ICAO</b>	<b>END ID-ICAO</b>	<b>RESTRICTION</b>
UA606	TUC-DT	RATBA-DT	Cruising levels by ATC
UA621	TTN-GM	ALM-GM	CDR 2: 0600-1459, 1700-2159 Mon-Fri. CDR 1: other times
UA725	OSMAR-LI	TUC-DT	Cruising levels by ATC
UA725	OSMAR-LI	TUC-DT	DTTJ ARR/DEPs route DOPEL-TBK-JBA and vice versa unless otherwise instructed by ATC
UA725	OSMAR-LI	TUC-DT	DTTZ ARR/DEPs route DOPEL-TBK-BAN-TON and vice versa unless otherwise instructed by ATC
UA725	OSMAR-LI	TUC-DT	Not available for DTTA ARRs
UA743	TUC-DT	ABDAB-DT	Cruising levels by ATC
UA743	TUC-DT	ABDAB-DT	Only available for DTTA ARRs, DTTC UIR overflights
UA868	TUC-DT	NOLSI-DT	Cruising levels by ATC
UA868	TUC-DT	NOLSI-DT	Only available for DTTA ARRs
UB31	MOGIL-LE	ZEM-DA	Only available for DAAA FIR overflights and LEPA ARRs
UB403	BOMIX-HC	RIGAM-OY	RNAV (RNAV 5) required at or below FL460
UB600	KINBU-DG	EBULI-FP	FL290-FL410 NOT AVBL
UB979	TUC-DT	SUSIP-LI	Cruising levels by ATC
UG664	ERA-GM	OJD-GM	CDR 2: 0600-1459, 1700-2159 Mon-Fri. CDR 1: other times. Alternate route: ERA-VANOP-PIXEB-BRF-UL-MAM-OJD
UG727	NIBEL-DT	SIRVI-DT	Only available for DTTA, DTNH DEPs, DTTC UIR overflights
UG728	CBN-DT	TUPAL-LI	Cruising levels by ATC
UG729	KAWKA-DT	DOPEL-DT	Cruising levels by ATC
UG850	TIXAL-GM	NEVEK-GM	CDR 2: 0600-1459, 1700-2159 Mon-Fri. CDR 1: other times
UG853	RASAD-DG	TERBA-DG	FL290-FL410 NOT AVBL
UG853	TERBA-DG	OPAPO-FN	FL290-FL410 NOT AVBL
UG864	BELED-DT	TUC-DT	Cruising levels by ATC
UG869	DERIV-DT	DOPEL-DT	Not available for DTTA ARRs via DEC/CAR



## AFRICA

ROUTE IDENT	START ID-ICAO	END ID-ICAO	RESTRICTION
UH104	BARIS-GM	ALM-GM	CDR 2: 0600-1459, 1700-2159 Mon-Fri. CDR 1: other times. Alternate routes: ALM-UG850-FES-UA411/UR975
UH119	LACAJ-GM	ERA-GM	CDR 2: 0600-1459, 1700-2159 Mon-Fri. CDR 1: other times
UJ3	GRS-DA	FAROS-DA	Domestic traffic only
UJ4	MOS-DA	TGU-DA	Domestic traffic only
UJ5	JIL-DA	CSO-DA	Domestic traffic only
UJ7	LIMON-DA	CSO-DA	Domestic traffic only
UJ8	NSL-DA	HME-DA	Domestic traffic only
UJ9	BNA-DA	BTN-DA	Domestic traffic only
UJ10	BTN-DA	TBS-DA	Domestic traffic only
UJ14	BTN-DA	CSO-DA	Domestic traffic only
UJ24	BAY-DA	IMN-DA	Domestic traffic only
UJ25	HME-DA	IMN-DA	Domestic traffic only
UJ26	MNA-DA	HME-DA	Domestic traffic only
UJ27	HME-DA	TGU-DA	Domestic traffic only
UJ28	TGU-DA	ELO-DA	Domestic traffic only
UJ30	HME-DA	TBS-DA	Domestic traffic only
UJ36	BSA-DA	TGU-DA	Domestic traffic only
UJ40	ADR-DA	TIO-DA	Domestic traffic only
UJ41	ADR-DA	IMN-DA	Domestic traffic only
UJ53	DJA-DA	IMN-DA	Domestic traffic only
UJ60	MOK-DA	DJA-DA	Domestic traffic only
UJ61	BOD-DA	DJA-DA	Domestic traffic only
UJ62	NSL-DA	IGZ-DA	Domestic traffic only
UJ63	ADR-DA	MOK-DA	Domestic traffic only
UJ64	LOUHA-DA	HRM-DA	Domestic traffic only
UJ65	HRM-DA	TGU-DA	Domestic traffic only
UJ66	ALR-DA	BSA-DA	Domestic traffic only

## AFRICA

ROUTE IDENT	START ID-ICAO	END ID-ICAO	RESTRICTION
UJ67	TAGIG-DA	GHA-DA	Domestic traffic only
UL27	KORIS-LE	MAR-LE	Not available during LE(TRA)-RETIN A1 activity
UL44	RATBA-DT	ABDAB-DT	Cruising levels by ATC
UL44	TUC-DT	ABDAB-DT	Only available for DTTA ARRrS, DTTC UIR overflights
UL45	URIPO-LE	SADAF-LE	CDR 2: 0730-1530 Mon-Fri except Hol (Winter), 0630-1430 Mon-Fri except Hol (Summer). Alternate routes: SADAF-UN856-IZA-UM134-VLC (N-bound), LAS-PO-UZ224-RONDU-UN856-SADAF (S-bound)
UL45	URIPO-LE	SADAF-LE	Not available during LE(D)-26 activity
UL58	BERUM-LE	VIBAS-LE	CDR 1: FL265-FL375, 0700-1530 Mon-Fri except Hol. CDR 2: FL145-FL265, FL375-FL660, 0700-1530 Mon-Fri except Hol. Alternate route: VIBAS-UM985-PIMOS-UN869-GALTO
UL58	BERUM-LE	VIBAS-LE	CDR 2: FL155 and below, 0700-1530 Mon-Fri except Hol. Alternate route: VIBAS-B28-PIMOS-B11-GALTO
UL58	BERUM-LE	VIBAS-LE	Not available during LE(D)-167, LE(D)-169 activity
UL58	BRF-GM	XAVOV-GM	CDR 2: 0600-1459, 1700-2159 Mon-Fri. CDR 1: other times. Alternate route: XAVOV-ULMAM-BRF
UL82	IBALU-GM	RUNAX-LE	CDR 1
UL82	RUNAX-LE	VJF-LE	CDR 1: FL285-FL660. CDR 2: FL195-FL285. Alternate route: SVL-UN857-KORNO
UL82	RUNAX-LE	VJF-LE	Not available during LE(D)-90A/B activity
UL102	ERA-GM	ARIAM-DA	CDR 2: 0600-1459, 1700-2159 Mon-Fri. CDR 1: other times. Alternate route: ERA-VANOP-PIXEB-BRF-ARIAM
UL129	SURIB-LE	LABRO-LE	CDR 2: 0730-1530 Mon-Fri except Hol (Winter), 0630-1430 Mon-Fri except Hol (Summer). Alternate route: MJV-UN861-SADAF
UL129	SURIB-LE	LABRO-LE	Not available during LE(D)-26 activity
UL150	MAGAL-LE	LABRO-LE	CDR 2: 0730-1530 Mon-Fri except Hol (Winter), 0630-1430 Mon-Fri except Hol (Summer). Alternate routes: SADAF-UN856-IZA-UM134-VLC (N-bound), VLC-UP34-HAMRA (S-bound)
UL150	MAGAL-LE	LABRO-LE	Not available during LE(D)-26 activity

## AFRICA

ROUTE IDENT	START ID-ICAO	END ID-ICAO	RESTRICTION
UL195	MGA-LE	LIGUM-LE	CDR 1: FL265-FL375, 0700-1530 Mon-Fri except Hol. CDR 2: FL265 and below, FL375-FL660, 0700-1530 Mon-Fri except Hol. Alternate route: MGA-UL112-AMR-UM192-TARIK
UL195	MGA-LE	LIGUM-LE	Not available during LE(D)-169 activity
UL303	NV-HK	KESOM-HK	RNAV (RNAV 5) required
UL314	NABAN-OY	GOMRI-OY	RNAV (RNAV 5) required at or below FL460
UL374	SENON-GO	KIKBO-GL	Contingency route. Activated by NOTAM
UL425	BOVOS-OO	ASPUX-VA	RNAV (RNAV 5) required at or below FL460
UL425	GOBRO-OO	ASPUX-VA	FL330 not available for E-bound traffic via ASPUX
UL425	GOBRO-OO	ASPUX-VA	W-bound traffic exiting OOMM FIR via GOBRO only FL340 and above
UL432	PATAR-HK	EKBUL-HK	RNAV (RNAV 5) required
UL433	ALKON-HK	NV-HK	RNAV (RNAV 5) required
UL434	AVUNO-HT	MOV-HK	RNAV (RNAV 5) required
UL442	APLOG-HK	NV-HK	RNAV (RNAV 5) required
UL445	NV-HK	LUDOL-HK	RNAV (RNAV 5) required
UL563	68KT1-HS	MAHDI-HS	Entering HAAA FIR via UN321-TIKAT
UL564	RAGNI-OY	PARIM-OY	RNAV (RNAV 5) required between FL160-FL460
UL566	DATEG-OY	ASMAK-OY	RNAV (RNAV 5) required at or below FL460
UL683	KIGRA-DN	APRUN-DN	Flight levels by ATC
UL874	LOBNA-DT	OMENI-LM	Cruising levels by ATC
UL874	NBA-DT	OMENI-LM	E-bound direction only available for LMMM FIR ARRr/overflights
UM126	KAWKA-DT	DOPEL-DT	Cruising levels by ATC
UM143	GALTO-LE	AMR-LE	CDR 1: FL265-FL375, 0700-1530 Mon-Fri except Hol. Alternate route: YES-UM985-PIMOS-UN869-GALTO
UM143	GALTO-LE	AMR-LE	CDR 2: FL155-FL265, FL375-FL660, 0700-1530 Mon-Fri except Hol. Alternate route: YES-UM985-PIMOS-UN869-GALTO
UM143	GALTO-LE	AMR-LE	Not available during LE(D)-169 activity

## AFRICA

ROUTE IDENT	START ID-ICAO	END ID-ICAO	RESTRICTION
UM216	PATAR-HK	RUDOL-HK	RNAV (RNAV 5) required
UM304	NAK-HK	EPLAS-HK	RNAV (RNAV 5) required
UM306	PARIN-HK	KESOM-HK	RNAV (RNAV 5) required
UM308	NV-HK	RUDOL-HK	RNAV (RNAV 5) required
UM310	UVUKO-HT	ENABO-HK	RNAV (RNAV 5) required
UM311	NV-HK	NETAR-HK	RNAV (RNAV 5) required
UM314	PRA-FS	UDLET-FS	EVEN levels S-bound
UM315	NV-HK	EVATO-HK	RNAV (RNAV 5) required
UM372	ESAMI-LE	AMR-LE	CDR 1: FL265-FL375, 0700-1530 Mon-Fri except Hol. CDR 2: FL265 and below, FL375-FL660, 0700-1530 Mon-Fri except Hol. Alternate routes: AMR-UL112-MGA-UN869-GALTO, AMR-UM192-TARIK
UM372	ESAMI-LE	AMR-LE	Not available during LE(D)-169 activity
UM441	XAKRI-HK	LOTAS-HK	RNAV (RNAV 5) required
UM551	KIVEL-OO	ANGAL-VA	E-bound traffic FL310 only
UM551	KIVEL-OO	ANGAL-VA	RNAV (RNAV 10) required at or below FL460
UM570	NUBAR-HE	ERBUK-HS	Temporary suspended
UM574	BOTEM-OY	NABIL-OY	RNAV (RNAV 10) required at or below FL460
UM574	NOBSU-OE	BOTEM-OY	RNAV (RNAV 5) required at or below FL460
UM634	BOTEM-OY	ANGAL-VA	RNAV (RNAV 10) required at or below FL460
UM634	VEDET-HC	BOTEM-OY	RNAV (RNAV 5) required at or below FL460
UM651	NADKI-OY	KRA-OY	RNAV (RNAV 5) required at or below FL460
UM660	ROTUM-GC	GDV-GC	CDR 2: 0800-2400 Mon-Fri except Hol. Alternate routes: GDV-UN873-ODEGI-UZ353-ROTUM, GDV-UQ279-LAY
UM660	ROTUM-GC	GDV-GC	Not available during GC(D)-79C/E/T/W activity
UM725	TUC-DT	SUSIP-LI	Cruising levels by ATC
UM731	TUC-DT	OSMAR-LI	DTTJ ARR/DEPs route DOPEL-TBK-JBA and vice versa unless otherwise instructed by ATC
UM731	TUC-DT	OSMAR-LI	DTTZ ARR/DEPs route DOPEL-TBK-BAN-TON and vice versa unless otherwise instructed by ATC
UM731	TUC-DT	OSMAR-LI	Not available for DTTA ARRs

**AFRICA**

<b>ROUTE IDENT</b>	<b>START ID-ICAO</b>	<b>END ID-ICAO</b>	<b>RESTRICTION</b>
UM733	TUC-DT	OSMAR-LI	DTTJ ARR/DEPs route DOPEL-TBK-JBA and vice versa unless otherwise instructed by ATC
UM733	TUC-DT	OSMAR-LI	DTTZ ARR/DEPs route DOPEL-TBK-BAN-TON and vice versa unless otherwise instructed by ATC
UM733	TUC-DT	OSMAR-LI	Not available for DTTA ARR/DEPs
UM734	ADRIL-DT	NIBEL-DT	Only available for DTNA, DTTA DEP/DEPs, DTTU UIR overflights
UM734	NBA-DT	ADRIL-DT	Only available for DTNH DEP/DEPs
UM734	NBA-DT	NIBEL-DT	Cruising levels by ATC
UM735	TIRBO-DT	BABLO-DT	Cruising levels by ATC
UM738	ELJEM-DT	TUNEX-LI	Cruising levels by ATC
UM738	SFX-DT	MON-DT	Only available for DTMB, DTNH, DTTX, DTTJ ARR/DEPs
UM739	SAMEK-DT	SONAK-DT	Cruising levels by ATC
UM739	TABOT-LF	DOPEL-DT	DTTA ARR/DEPs route DOPEL-TBK-KEMIR-TUC unless otherwise instructed by ATC
UM739	TABOT-LF	DOPEL-DT	MEA FL260 0001-1200Z Sat, 2300-2400Z Sun (Winter), 0001-1100Z Sat, 2200-2400Z Sun (Summer)
UM739	TABOT-LF	DOPEL-DT	Only available Sat, Italian Hol; Sun 7 Jan-21 Jun, 20 Sep-21 Dec; by ATC
UM858	TBK-DT	DOPEL-DT	Not available for DTTA ARR/DEPs via DEC/CAR
UM978	KEMIR-DT	SONAK-DT	Cruising levels by ATC
UM980	DARIP-HL	LOSUL-HL	E-bound traffic within RVSM level band cross LOSUL at FL290, FL330, FL370, FL410
UM980	NAVED-DT	BASMO-LM	Cruising levels by ATC
UM997	WAV-HK	AVEDI-HK	RNAV (RNAV 5) required
UM999	APDOS-OE	PURAD-HH	RNAV (RNAV 5) required between FL160-FL460
UM999	DITAR-HE	APDOS-OE	RNAV (RNAV 5) required at or above FL160
UM999	MGA-LE	PODES-LE	CDR 1: FL265-FL375, 0700-1530 Mon-Fri except Hol. CDR 2: FL265 and below, FL375-FL660, 0700-1530 Mon-Fri except Hol. Alternate route: MGA-UN869-GAL-TO
UM999	MGA-LE	PODES-LE	Not available during LE(D)-169 activity

## AFRICA

ROUTE IDENT	START ID-ICAO	END ID-ICAO	RESTRICTION
UN10	LINTO-LE	SVL-LE	Not available during LE(TRA)-RETIN A1 activity
UN157	ABDAB-DT	MON-DT	Cruising levels by ATC
UN157	ABDAB-DT	MON-DT	Only available for DTTC UIR overflights
UN301	MOV-HK	ALEMU-HK	RNAV (RNAV 5) required
UN303	RIBOK-OY	PARIM-OY	RNAV (RNAV 5) required at or below FL460
UN316	PASAM-OE	HLF-OE	Only available 1500-0300
UN493	MGA-LE	BERUM-LE	CDR 1: FL265-FL375, 0700-1530 Mon-Fri except Hol. CDR 2: FL265 and below, FL375-FL660, 0700-1530 Mon-Fri except Hol. Alternate route: MGA-UN869-GAL-TO
UN493	MGA-LE	BERUM-LE	Not available during LE(D)-169 activity
UN553	PATAR-HK	LOV-HK	RNAV (RNAV 5) required
UN554	AKUMU-HK	RUDOL-HK	RNAV (RNAV 5) required
UN556	GONGU-HK	NV-HK	RNAV (RNAV 5) required
UN697	NARMI-OB	KITOT-HE	Available 1500-0300 Sun-Thu, H24 Fri, Sat, Hol. FL275 and above excluded for LDG and TKOF Tabuk AP
UN726	ORTOP-LE	BAMBA-LE	CDR 2
UN726	ORTOP-LE	BAMBA-LE	Not available during LE(D)-122 activity
UN728	CABOJ-GC	LOMAS-GC	CDR 2: 0800-2400 Mon-Fri except Hol. Alternate routes: GDV-UN873-ODEGI-UZ27-BIPET, GDV-UQ279-LAY
UN728	CABOJ-GC	LOMAS-GC	Not available during GC(D)-79C/E/N/T activity
UN729	CABEL-GC	GDV-GC	CDR 2: 0800-2400 Mon-Fri except Hol. Alternate routes: GDV-UQ279-LAY, GDV-UN873-ODEGI-UZ27-BIPET
UN729	CABEL-GC	GDV-GC	Not available during GC(D)-79C/E/N/T activity
UN729	GDV-GC	KASAS-GC	Not available during GC(D)-53 activity
UN764	SOC-OY	SUHIL-OY	RNAV (RNAV 5) required at or below FL460
UN857	BIPET-GC	DEREV-GC	CDR 2: 0800-2400 Mon-Fri except Hol. Alternate route: LZR-UN871-GDV-UN873-LIMAL
UN857	BIPET-GC	DEREV-GC	Not available during GC(D)-79C/E/T/W activity
UN857	DEREV-GC	LZR-GC	CDR 2: 0800-2400 Mon-Fri except Hol. Alternate routes: LZR-UL27-GDV-UN873-LIMAL, LZR-UL27-GDV-UN873-ODEGI-UZ27-BIPET

**AFRICA**

<b>ROUTE IDENT</b>	<b>START ID-ICAO</b>	<b>END ID-ICAO</b>	<b>RESTRICTION</b>
UN857	DEREV-GC	LZR-GC	Not available during GC(D)-79A/C/E/N/T activity
UN857	KORNO-LE	SVL-LE	CDR 1: FL245-FL460. CDR2: FL245 and below. Alternate route: SVL-UN10-VJF-UL82-RUNAX
UN857	KORNO-LE	SVL-LE	Not available during LE(D)-122, LE(D)-128, LE(D)-129 activity
UN860	AMR-LE	BERUM-LE	CDR 1: FL265-FL375, 0700-1530 Mon-Fri except Hol. CDR 2: FL265 and below, FL375-FL660, 0700-1530 Mon-Fri except Hol. Alternate routes: AMR-UL112-MGA-UN869-GALTO, AMR-UM192-TARIK
UN860	AMR-LE	BERUM-LE	Not available during LE(D)-169 activity
UN866	KONBA-GC	OSDIV-GM	Only available for aircraft with ADS-B equipment. Alternate route: BEXAL-NEVTU-SAMAR
UN871	ADUBI-LE	MAR-LE	Not available during LE(TRA)-RETIN A1 activity
UN871	APASO-GC	GDV-GC	CDR 2: 0800-2400 Mon-Fri except Hol. Alternate routes: APASO-UN866-GOMER, LIMAL-UN873-GDV, BIPET-UN857-DEREV-UN729-GDV
UN871	APASO-GC	VIDRI-GC	Not available during GC(D)-79T/W activity
UN871	VIDRI-GC	GDV-GC	Not available during GC(D)-79D/T/W activity
UN872	BEXAL-LP	ESP-LP	N-bound direction only available for LPPT TMA ARRs
UN873	BAROK-LP	BIRBA-LP	CDR 1. Alternate route: by ATC
UN873	GDV-GC	SAMAR-GC	Not available during GC(D)-53 activity
UN873	LIMAL-GC	LOMAS-GC	CDR 1. Alternate routes by ATC
UN873	LIMAL-GC	LOMAS-GC	Not available during GC(D)-79T activity
UN975	ORTIS-GC	SNT-LP	RNP10 only required when contingency routing is activated
UN975	ORTIS-GC	SNT-LP	Upper limit raised to UNL when contingency routing is active in the Madeira Sector of LPPC FIR. Activated by NOTAM
UP128	LAB-HL	LOSUL-HL	E-bound traffic within RVSM level band cross LOSUL at FL290, FL330, FL370, FL410
UP161	ARNEB-DT	NOLSI-DT	Cruising levels by ATC
UP161	TUC-DT	NOLSI-DT	Only available for DTTA ARRs

## AFRICA

ROUTE IDENT	START ID-ICAO	END ID-ICAO	RESTRICTION
UP301	VEDRY-FY	GENUD-FB	FBSK ARRs at FL245 and above route FYWH-VEDRY-UP301-GENUD-ETBED-GBV-FBSK
UP312	EVATO-HK	MAV-HK	RNAV (RNAV 2) required
UP312	TIMAD-OY	RIN-OY	RNAV (RNAV 5) required at or below FL460
UP323	ALNES-OY	DAPAB-OY	RNAV (RNAV 5) required at or below FL460
UP323	DAPAB-OY	GIDAS-VA	RNAV (RNAV 10) required at or below FL460
UP552	DATEG-OY	IMPOS-OY	RNAV (RNAV 5) required at or below FL460
UP676	MAGAD-HT	NV-HK	RNAV (RNAV 5) required
UP868	KOTOB-DT	NIGAT-LM	Cruising levels by ATC
UQ52	OKLOK-FA	EGPOP-FA	Required for RNAV equipped aircraft for FACT TMA DEPs inbound FAGC, FAWB, FASK, FAWK
UQ135	NAK-HK	MOKAD-HK	RNAV (RNAV 2) required
UQ143	GOSGA-LP	ORTIS-GC	Contingency route. Activated by NOTAM
UQ315	MOKAD-HK	NAK-HK	RNAV (RNAV 2) required
UQ589	AKLIS-DN	NEMSA-DN	Flight levels by ATC
UQ589	APVOT-DN	ERTOT-DN	Flight levels by ATC
UR603	STM-FP	SABSO-DG	FL290-FL410 NOT AVBL
UR674	DEMGO-HC	SABEL-OY	RNAV (RNAV 5) required at or below FL460
UR722	ABODA-GM	LAKAM-GM	CDR 1. Alternate route: AMSEL-IBALU-SAK
UR723	DOPEL-DT	TABOT-LF	DTTA ARRs route DOPEL-TBK-KEMIR-TUC unless otherwise instructed by ATC
UR723	DOPEL-DT	TABOT-LF	MEA FL260 0001-1200Z Sat, 2300-2400Z Sun (Winter), 0001-1100Z Sat, 2200-2400Z Sun (Summer)
UR723	DOPEL-DT	TABOT-LF	Only available Sat, Italian Hol; Sun 7 Jan-21 Jun, 20 Sep-21 Dec; by ATC
UR723	SONAK-DT	SAMEK-DT	Cruising levels by ATC
UR775	APDOS-OE	PURAD-HH	RNAV (RNAV 5) required at or below FL460
UR775	SOKAR-FS	BERIL-FS	EVEN levels N-bound
UR778	KFR-HL	DITAR-HE	E-bound traffic within RVSM level band cross DITAR at FL290, FL330, FL370, FL410
UR781	TUC-DT	SONAK-DT	Cruising levels by ATC



## AFRICA

ROUTE IDENT	START ID-ICAO	END ID-ICAO	RESTRICTION
UR783	NAVED-DT	BASMO-LM	Cruising levels by ATC
UR799	IMPOS-OY	ENADO-OY	E-bound traffic restricted to FL350, W-bound traffic restricted to FL320
UR799	IMPOS-OY	ENADO-OY	RNAV (RNAV 5) required at or below FL460
UR979	BUGRI-DG	SIRPA-FP	FL290-FL410 NOT AVBL
UR983	KINBU-DG	GAPAK-FP	FL290-FL410 NOT AVBL
UR986	TUC-DT	ARNEB-DT	Cruising levels by ATC
UR991	GAPEL-DG	UDMON-FN	FL290-FL410 NOT AVBL
UT124	ALRAP-HA	GWZ-HA	Strictly follow route centerline
UT457	LUKRO-DN	APIRO-DN	Flight levels by ATC
UT458	OV RAP-DN	AKLIS-DN	Flight levels by ATC
UT475	DIRVA-DN	ENIDA-DN	Flight levels by ATC
UT702	TIMAD-OY	NODMA-OY	RNAV (RNAV 5) required at or below FL460
UT770	LIMAL-GC	TFS-GC	CDR 2: 0800-2400 Mon-Fri except Hol. Alternate routes: GDV-UN873-LIMAL, APASO-UN866-GOMER, BIPET-UN857-DEREV-UN729-GDV
UT770	LIMAL-GC	VIDRI-GC	Not available during GC(D)-79T/W activity
UT770	VIDRI-GC	TFS-GC	Not available during GC(D)-79D/T/W activity
UT900	FES-GM	ARIAM-DA	CDR 2: 0600-1459, 1700-2159 Mon-Fri. CDR 1: other times. Alternate route: FES-UA411-DOTIV-ARIAM
UT912	APDIK-HT	NV-HK	RNAV (RNAV 5) required
UT913	GABSO-HK	EPTEL-HT	RNAV (RNAV 5) required
UT932	NV-HK	WAV-HK	RNAV (RNAV 2) required
UT939	UTATA-HK	AVESO-HK	RNAV (RNAV 5) required
UT946	ANTAX-HK	UTATA-HK	RNAV (RNAV 5) required
UT947	APLOG-HK	EPSIB-HK	RNAV (RNAV 5) required
UV203	TOGMA-GM	FES-GM	CDR 2: 0600-1459, 1700-2159 Mon-Fri. CDR 1: other times
UV236	ARNEB-DT	MON-DT	Cruising levels by ATC
UV310	TBK-DT	MON-DT	Cruising levels by ATC

**AFRICA**

<b>ROUTE IDENT</b>	<b>START ID-ICAO</b>	<b>END ID-ICAO</b>	<b>RESTRICTION</b>
UW240	ERA-GM	FES-GM	CDR 2: 0600-1459, 1700-2159 Mon-Fri. CDR 1: other times
UW240	FES-GM	IXODA-GM	CDR 2: 0600-1459, 1700-2159 Mon-Fri. CDR 1: other times. Alternate route: TNG-VARAS-A411-FES
UW254	TISRI-DT	TUC-DT	Cruising levels by ATC
UW255	FES-GM	BRF-GM	CDR 2: 0600-1459, 1700-2159 Mon-Fri. CDR 1: other times. Alternate route: FES-DOTIV-ULMAM-BRF
UW302	TOBIB-DT	SAKET-DT	Only available by ATC
UW302	TOBIB-DT	TORPI-DT	Cruising levels by ATC
UW411	TUC-DT	ARNEB-DT	Cruising levels by ATC
UW850	PASOS-HE	GITLA-LL	Only available for traffic to HECA FIR
UW868	KOTOB-DT	MON-DT	Cruising levels by ATC
UY422	VIDRI-GC	BIPET-GC	CDR 2: 0800-2400 Mon-Fri except Hol. Alternate routes: ODEGI-UZ27-BIPET, REMGI-UN729-DEREV-UN857-BIPET, HIE-ORVEK-LIMAL-ETIBA, ETIBA-LIMAL-ORVEK-HIE
UY422	VIDRI-GC	BIPET-GC	Not available during GC(D)-79E/T/W activity
UY611	HIE-GC	VIDRI-GC	CDR 2: 0800-2400 Mon-Fri except Hol. Alternate routes: HIE-UZ526-MERAN-UY39-LOMAS-UN728-CABOJ, HIE-UZ526-GDV-UQ279-LAY
UY611	HIE-GC	VIDRI-GC	Not available during GC(D)-79T/W activity
UY611	VIDRI-GC	CABOJ-GC	CDR 2: 0800-2400 Mon-Fri except Hol. Alternate routes: HIE-UZ526-MERAN-UY39-LOMAS-UN728-CABOJ, HIE-UZ526-GDV-UQ279-LAY, HIE-ORVEK-LIMAL-ETIBA, ETIBA-LIMAL-ORVEK-HIE
UY611	VIDRI-GC	CABOJ-GC	Not available during GC(D)-79C/E/T/W activity
UZ2	TETAN-FA	NIBEX-FA	Required for RNAV equipped aircraft for FACT TMA DEPs inbound FAGM
UZ4	BAROK-LP	NAKOS-LP	CDR 1. Alternate route: by ATC
UZ27	BIPET-GC	ODEGI-GC	CDR 2: 0800-2400 Mon-Fri except Hol. Alternate routes: VIDRI-UY422-BIPET, REMGI-UN729-DEREV-UN857-BIPET
UZ27	BIPET-GC	ODEGI-GC	Not available during GC(D)-79B/C/E/T activity

**AFRICA**

<b>ROUTE IDENT</b>	<b>START ID-ICAO</b>	<b>END ID-ICAO</b>	<b>RESTRICTION</b>
UZ53	ADKIM-LE	VJF-LE	Not available during LE(TRA)-RETIN A1 activity
UZ141	NOLSI-DT	SIRVI-DT	Only available for DTTU UIR overflights
UZ218	BAROK-LP	ATECA-LP	CDR 1. Alternate route: by ATC
UZ218	MAGUM-LP	MOSEN-LE	CDR 1. Alternate route: by ATC
UZ223	BEXAL-LP	SOTEX-LP	CDR 1. Alternate route: by ATC
UZ234	ARNEB-DT	MON-DT	Cruising levels by ATC
UZ353	ODEGI-GC	ROTUM-GC	CDR 2: 0800-2400 Mon-Fri except Hol. Alternate routes: ROTUM-UM660-GDV, LAY-UQ279-GDV
UZ353	ODEGI-GC	ROTUM-GC	Not available during GC(D)-79B/C/E/T activity
V18	TBS-DA	DAFRI-DA	Only available for DTTZ ARR/DEPs
V191	TEGBI-DT	JBA-DT	MANED not required above FL105
V203	TOGMA-GM	FES-GM	CDR 2: 0600-1459, 1700-2159 Mon-Fri. CDR 1: other times
V236	ARNEB-DT	MON-DT	Cruising levels by ATC
V310	TBK-DT	MON-DT	Cruising levels by ATC
V500	ZAR-HL	MIS-HL	Domestic traffic only
V602	LONIR-HE	PSD-HE	Only available by ATC
V604	ALPAM-HE	PSD-HE	RNAV (RNAV 5) required between FL160-FL460
V604	DEGDI-HE	PSD-HE	2230-0530 by ATC only
V606	LONIR-HE	ELIGI-HE	Only available by ATC
V608	AST-HE	TONTU-HE	RNAV (RNAV 5) required between FL160-FL460
V608	HGD-HE	NABED-HE	RNAV (RNAV 5) required between FL160-FL460
V700	GRT-HL	ABU-HL	Only available for HLLT ARR/DEPs
V730	HGD-HE	GETOS-HE	RNAV (RNAV 5) required between FL160-FL460
V738	ASN-HE	AST-HE	RNAV (RNAV 5) required between FL160-FL460
V738	BOVAR-HE	AST-HE	E-bound direction not available above FL255
V900	GAD-HL	ABU-HL	Domestic traffic only
V950	CLAMS-HL	GARUS-HL	Only available for HLLM ARR/DEPs
VCAV-NA	VCA-FN	VNA-FN	Only available for FNCA DEPs inbound FNLU

## AFRICA

ROUTE IDENT	START ID-ICAO	END ID-ICAO	RESTRICTION
W8	KHG-HE	CVO-HE	RNAV (RNAV 5) required between FL160-FL460
W240	ERA-GM	FES-GM	CDR 2: 0600-1459, 1700-2159 Mon-Fri. CDR 1: other times
W240	FES-GM	IXODA-GM	CDR 2: 0600-1459, 1700-2159 Mon-Fri. CDR 1: other times. Alternate route: TNG-VARAS-A411-FES
W254	TISRI-DT	TUC-DT	Cruising levels by ATC
W255	FES-GM	BRF-GM	CDR 2: 0600-1459, 1700-2159 Mon-Fri. CDR 1: other times. Alternate route: FES-DOTIV-ULMAM-BRF
W302	TOBIB-DT	SAKET-DT	Only available by ATC
W302	TOBIB-DT	TORPI-DT	Cruising levels by ATC
W411	TUC-DT	ARNEB-DT	Cruising levels by ATC
W601	TONTU-HE	MB-HE	RNAV (RNAV 5) required between FL160-FL460
W605	TONTU-HE	LXR-HE	RNAV (RNAV 5) required between FL160-FL460
W615	NAKDO-HE	AST-HE	RNAV (RNAV 5) required between FL195-FL460
W725	DBA-HE	BRN-HE	Available for HEMM ARR/DEPs
W725	RASDA-HE	DBA-HE	RNAV (RNAV 5) required between FL160-FL460
W850	MELDO-HE	PASOS-HE	E-bound direction available for HEAR, HEGR domestic ARRs
W850	MELDO-HE	PASOS-HE	RNAV (RNAV 5) required between FL160-FL460
W850	PASOS-HE	GITLA-LL	Only available for traffic to HECA FIR
W854	WLD-HL	SEB-HL	Only available for HLON ARRs/DEPs
W860	MTG-HL	KHOMS-HL	Only available for HLLM ARRs/DEPs
W861	TAMIT-HL	CILBA-HL	Only available for HLGD ARRs/DEPs
W900	MOGVA-GM	MOGBI-GM	CDR 2: 0500-1459, 1700-2159 Mon-Fri 1 Jun-15 Sep; 0600-2159 Mon-Fri 16 Sep-31 May. CDR 1: other times
Z234	ARNEB-DT	MON-DT	Cruising levels by ATC
Z801	ABDOR-GM	MABOG-GM	CDR 2: 0600-1459, 1700-2159 Mon-Fri. CDR 1: other times
ZEM-LAB	ZEM-DA	LABRO-LE	Only available by ATC



# Radio Aids



# Radio Aids

Radio Data - Africa

## ALGERIA

Name	Ident	Freq.	Class	INS	Coordinates	VAR/Stn Decl	Elev.
Adrar	ADR	112.6	V D H W	N27 49.2	W000 12.2	W001	952
Ahmed Benbella	ORA	114.0	V D H W	N35 36.8	W000 39.3	E000	295
Ain Ediss	BSA	335.0	H W	N35 21.0	E004 13.5	E001	
Algiers	HBM	117.05	V U W	N36 41.4	E003 17.3	W002	
Annaba	ANB	113.5	V D H W	N36 49.9	E007 48.9	E002	16
Annaba	BO	392.0	H M W	N36 49.1	E007 48.1	E002	
Batna	BTN	115.7	V D H W	N35 46.3	E006 20.6	E002	2700
Bechar	BCR	113.9	V D H W	N31 41.1	W002 15.7	E000	2661
Bechar	BCR	407.0	H W	N31 40.0	W002 14.5	E000	
Bejaia	BJA	113.0	V D L W	N36 42.9	E005 04.8	E001	36
Bejaia	BJA	423.0	H W	N36 42.9	E005 04.6	E001	
Beni Abbes	BBS	115.3	V D H W	N30 01.4	W002 13.8	W002	1740
Beni Abbes	BBS	320.0	H W	N30 01.6	W002 14.1	W002	1740
Beni Amrane	BNA	353.0	H W	N36 39.1	E003 35.5	E001	
Biskra	BIS	115.0	V D H W	N34 46.6	E005 45.8	E000	289
Bordj Mokhtar	MOK	114.0	V D H W	N21 23.0	E000 57.0	W000	1289
Bordj Mokhtar	MOK	304.0	H W	N21 22.3	E000 55.2	W000	
Bordj Omar Driss	BOD	114.3	V D H W	N28 08.0	E006 50.4	E000	1207
Bou Saada	BSA	115.9	V D H W	N35 19.9	E004 12.5	E001	1506
Boufatis	ON	415.0	H M W	N35 42.9	W000 21.1	E000	
Cherchell	CHE	397.0	H W	N36 36.1	E002 11.6	E001	
Chlef	CLF	117.0	V D L W	N36 12.8	E001 19.3	E001	535
Constantine	CNE	397.0	H H W	N36 11.4	E006 43.6	E002	
Constantine	CSO	115.5	V D H W	N36 17.6	E006 36.5	E002	2316
Dar El Beida	ALR	112.5	V D H W	N36 41.5	E003 12.9	E001	118
Djanet	DJA	114.1	V D H W	N24 17.3	E009 27.2	E001	3176
El Bayadh	BAY	114.8	V D H W	N33 42.6	E001 04.8	E001	4500
El Golea	MNA	112.1	V D H W	N30 33.5	E002 51.7	E001	1306
El Oued	ELO	117.6	V D H W	N33 30.6	E006 46.8	E002	203
El Oued	ELO	358.0	H W	N33 30.4	E006 47.3	E002	
Ghriss	GRS	113.1	V H W	N35 12.6	E000 08.9	E000	

**ALGERIA**

Name	Ident	Freq.	Class		INS Coordinates		VAR/Stn Decl	Elev.
Ghriss	GRS	424.0	H	M W	N35 12.7	E000 09.5	E000	
Hammam Bou Hadjar	HMB	432.0	H	W	N35 21.8	W000 58.1	W000	
Hassi Khebi	HKI	419.0	H	H W	N29 11.3	W005 04.9	W001	
Hassi Messaoud	HMD	390.0	H	W	N31 38.9	E006 08.3	E001	
Hassi Messaoud	HME	114.7	V	D H W	N31 41.5	E006 08.5	E001	489
Hassi R'Mel	HRM	115.4	V	D H W	N32 56.2	E003 21.4	W000	
Hassi R'Mel	HRM	331.0	H	W	N32 55.7	E003 16.2	W000	
Illizi	ILZ	115.6	V	D H W	N26 43.2	E008 38.1	E001	1778
In Guezzam	IGZ	113.4	V	H W	N19 33.3	E005 43.3	E000	
In Guezzam	IGZ	435.0	H	W	N19 34.4	E005 45.7	E000	
In Salah	NSL	113.1	V	D H W	N27 14.8	E002 30.2	E000	
In Salah	SAH	373.0	H	W	N27 15.3	E002 30.8	E000	
Jijel	JIL	117.9	V	D H W	N36 47.9	E005 52.5	E000	56
Marmora	MAR	416.0	H	M W	N36 41.1	E002 46.9	E001	
Mostaganem	MOS	112.2	V	D H W	N35 53.9	E000 08.2	W001	750
Noumerat	GHA	114.9	V	D H W	N32 23.6	E003 46.7	E001	1581
Noumerat	GHA	340.0	H	M W	N32 22.5	E003 47.7	E001	
Ouargla	OU	356.5	H	M W	N31 56.9	E005 25.1	E000	
Ouargla	OUR	112.7	V	D H	N31 56.5	E005 25.0	E000	
Reggan	RGN	310.0	H	H W	N26 41.0	E000 17.0	W000	
Reghaia (Algiers)	OA	342.0	H	M W	N36 46.9	E003 21.7	W000	82
Semar	SMR	370.0	H	M W	N36 41.6	E003 05.4	E001	
Setif	STF	114.6	V	D L W	N36 10.6	E005 17.3	E001	3238
Sidi M'Hamed (Algiers)	SDM	113.9	V	D H W	N36 37.8	E002 58.4	E001	82
Tamenghasset	TMS	112.5	V	D H W	N22 48.5	E005 26.8	E001	
Tebessa	TBS	114.5	V	D H W	N35 27.4	E008 04.1	E002	2605
Tiaret	TRB	116.3	V	D H W	N35 20.9	E001 30.9	E001	3245
Timimoun	TIO	112.8	V	D H W	N29 13.6	E000 15.5	E000	1024
Timimoun	TIO	383.0	H	W	N29 14.4	E000 15.5	E000	
Tindouf	TDF	114.2	V	D H W	N27 42.6	W008 07.9	W004	1427
Tindouf	TDF	339.0	H	W	N27 42.4	W008 08.1	W004	1500



**ALGERIA**

Name	Ident	Freq.	Class	INS	Coordinates	VAR/Stn Decl	Elev.
Tlemcen	TLM	116.5	V D H W	N35 00.9	W001 26.8	W000	843
Tlemcen	TLM	346.0	H W	N35 00.9	W001 27.3	W000	
Touggourt	TGU	113.2	V D H W	N33 03.4	E006 05.3	E002	279
Zarzaitine	IMN	112.9	V D H W	N28 04.0	E009 39.7	E002	1870
Zarzaitine	ZAR	268.0	H W	N28 03.0	E009 37.9	E002	
Zarzaitine	ZIN	117.0	V D L W	N28 03.0	E009 38.7	E002	1847
Zemmouri	ZEM	116.6	V D H W	N36 47.7	E003 34.3	E001	750
Zemmouri	ZEM	359.0	H W	N36 47.8	E003 34.3	E001	
Algiers (Houari Boume- diene)	HB	108.5	LOC	RWY 09		E001	
			OM	N36 41.6	E003 05.4		
	AG	110.3	LOC	RWY 23		E001	
			OM	N36 45.1	E003 18.9		
	AL	109.5	LOC	RWY 27		E001	
Annaba (Rabah Bitat)	AN	109.7	LOC	RWY 18		E002	
Bechar (Boudghene Ben Ali Lotfi)	BC	108.1	LOC	RWY 18		E000	
Bejaia (Soummam- Abane Ramdane)	BJ	110.5	LOC	RWY 26		E001	
Biskra (Mohamed Khider)	BI	110.9	LOC	RWY 31		E000	
Constantine (Mohamed Boudiaf)	CT	109.3	LOC	RWY 31		E002	
	CS	108.3	LOC	RWY 34		E002	
Ghardaia (Noumerat- Moufdi Zakaria)	GH	109.5	LOC	RWY 30		E001	
Hassi Messaoud (Krim Belkacem)	HM	109.1	LOC	RWY 36		E001	
Jijel (Ferhat Abbas)	JL	108.1	LOC	RWY 17		E000	
Oran (Ahmed Benbella)	OR	109.9	LOC	RWY 25L		E000	
	RN	108.9	LOC	RWY 25R		E000	
Ouargla (Ain Beida)	OG	108.9	LOC	RWY 36		E000	

**ALGERIA**

Name	Ident	Freq.	Class	INS Coordinates	VAR/Stn Decl	Elev.
Setif (8 Mai 45)	ST	110.9	LOC	RWY 27	E001	
Sidi-Chami (Ahmed Ben-bella)	OO	265.0	LO	N35 39.2 W000 31.9	E000	
Tamenghasset (Ague-nar-Hadj Bey Akhamok)	TM	108.5	LOC	RWY 20	E001	

**ANGOLA**

Name	Ident	Freq.	Class		INS Coordinates		VAR/Stn Decl	Elev.
Cabinda	CA	280.0	H	H W	S05 35.1	E012 11.4	W004	
Cabinda	VCA	114.3	V D H W		S05 38.1	E012 11.4	W004	
Cafunfo	CF	275.0	H	H W	S08 46.0	E018 00.0	W004	2500
Catumbela	VCT	115.1	V D H W		S12 30.2	E013 29.0	W011	115
Cuito Cuanavale	CV	387.0	H	H W	S15 10.0	E019 09.0	W005	4000
Kuito	KU	320.0	H	W	S12 24.7	E016 55.9	W006	4500
Luanda	LU	258.0	H	W	S08 47.6	E013 18.2	W007	
Luanda	VNA	112.7	V D H W		S08 50.7	E013 14.9	W007	259
Lubango	UB	335.0	H	H W	S14 55.4	E013 35.9	W007	
Lubango	VUB	112.3	V D H W		S14 55.0	E013 36.0	W007	
Luena	VUE	113.7	V	H W	S11 46.0	E019 53.9	W004	4446
Malange	MA	293.0	H	H W	S09 31.6	E016 22.0	W004	4000
Namibe	VMO	114.1	V D H W		S15 15.2	E012 09.9	W009	251
Saurimo	VSA	117.1	V D H W		S09 41.3	E020 26.1	W003	3559
Soyo	SO	310.0	H	W	S06 08.4	E012 22.3	W004	50
Uige	VUG	112.9	V D L W		S07 35.8	E015 01.6	W002	2727
Luanda (4th Of Febru- ary)	ILD	110.3	LOC		RWY 23		W007	

**ASCENSION I.**

Name	Ident	Freq.	Class	INS Coordinates	VAR/Stn Decl	Elev.
Ascension Aux	ASI	112.2	V T H W	S07 58.2 W014 23.8	W016	
Ascension Aux	ASN	360.0	H H W	S07 56.8 W014 24.6	W016	

**BOTSWANA**

Name	Ident	Freq.	Class	INS	Coordinates	VAR/Stn Decl	Elev.
Francistown	FNV	113.0	V D H W	S21 08.1	E027 25.6	W011	3283
Francistown	FRW	375.0	H L W	S21 09.9	E027 29.3	W011	
Gaborone	GBE	311.0	H W	S24 31.1	E025 59.6	W015	3291
Gaborone	GBV	113.7	V D U W	S24 35.9	E025 49.9	W015	3400
Gaborone	GSV	114.0	V D H W	S24 33.1	E025 55.3	W015	
Kang	KGV	115.1	V U W	S23 40.8	E022 49.2	W014	
Kasane	KAS	287.0	H W	S17 49.4	E025 09.4	W007	3500
Kasane	KSV	113.3	V D H W	S17 50.0	E025 10.2	W007	3269
Maun	MNV	112.7	V D H W	S19 59.4	E023 23.3	W009	3100
Orapa	OR	295.0	H M W	S21 16.1	E025 18.2	W011	3100
Selebi-Phikwe	SP	303.0	H W	S22 03.2	E027 49.2	W012	
Gaborone (Sir Seretse Khama Intl)	GBW	109.9	LOC	RWY 08		W015	

## BURUNDI

Name	Ident	Freq.	Class	INS	Coordinates	VAR/Stn Decl	Elev.
Bujumbura	BJA	112.3	V D H W	S03 20.8	E029 19.3	W003	2605
Bujumbura	BN	255.0	H M W	S03 14.9	E029 18.4	W003	
Bujumbura	BS	285.0	H M W	S03 20.9	E029 19.3	W003	2582
Bujumbura	KW	385.0	H M W	S03 07.9	E029 17.3	W003	
Gitega	GI	360.0	H M W	S03 25.2	E029 54.9	E001	
Kirundo	DO	295.0	H M W	S02 32.7	E030 06.3	E001	
Muyinga	GA	345.0	H M W	S02 50.6	E030 20.8	E001	
Nyanza-Lac	NL	375.0	H M W	S04 20.8	E029 35.8	E001	
Ruyigi	YI	275.0	H M W	S03 28.5	E030 14.9	E001	
Rwegura	RG	305.0	H M W	S02 55.0	E029 31.1	E001	
Bujumbura (Melchior Ndadaye Intl)	BJ	110.1	LOC	RWY 17		W003	
			OM	S03 14.9	E029 18.4		

**CANARY IS**

Name	Ident	Freq.	Class		INS Coordinates		VAR/Stn Decl	Elev.
El Hierro	HIE	376.0	H	W	N27 49.0	W017 53.2	W006	
El Hierro	HR	113.2	D	L	N27 49.0	W017 53.2		98
Fuerteventura	FTV	114.1	V	D H W	N28 25.8	W013 51.9	W004	
Fuerteventura	FUE	108.0	D	L	N28 22.9	W013 52.0		98
Fuerteventura	FV	397.0	H	L W	N28 23.0	W013 52.0	W004	
Gran Canaria	GDV	112.9	V	D H W	N28 04.6	W015 25.7	W005	
Gran Canaria	TGN	115.6	T	L	N27 55.4	W015 23.4	W005	128
Gran Canaria	VR	365.0	H	L W	N27 51.4	W015 25.2	W005	
Gran Canaria South	LPC	115.0	V	D H W	N27 49.7	W015 25.9	W005	
La Gomera	LGM	116.0	V	D L W	N28 01.7	W017 12.9	W006	
La Palma	BV	112.4	D	H	N28 36.1	W017 45.4		197
La Palma	BX	389.0	H	W	N28 36.1	W017 45.4	W006	
Lanzarote	LZ	310.0	H	W	N28 57.3	W013 36.7	W004	
Lanzarote	LZR	115.2	V	D H W	N29 10.0	W013 30.6	W004	
Lanzarote	TLZ	114.7	T	L	N28 56.7	W013 36.4	W004	65
Lanzarote Aeropuerto	LTE	114.4	V	D H W	N28 56.9	W013 36.1	W004	
Tenerife-Los Rodeos	LRO	116.2	V	D L W	N28 29.1	W016 21.1	W005	
Tenerife-North	FP	420.0	H	M W	N28 29.5	W016 22.2	W005	
Tenerife-North	TFN	117.7	V	D H W	N28 32.2	W016 16.1	W005	
Tenerife-South	TES	317.0	H	M W	N28 03.3	W016 33.8	W005	
Tenerife-South	TFS	116.4	V	D H W	N28 00.1	W016 41.3	W005	
Fuerteventura	IFV	109.5	LOC		RWY 01		W004	
	IFA	111.3	LOC		RWY 19		W004	
Gran Canaria	ILP	109.9	LOC		RWY 03L		W005	
	RLP	110.7	LOC		RWY 21R		W005	
Lanzarote	IRR	109.1	LOC		RWY 03		W004	
Tenerife-North	INOR	108.7	LOC		RWY 12		W005	
	ITF	110.3	LOC		RWY 30		W005	
Tenerife-South (Reina Sofia)	ITS	109.7	LOC		RWY 07		W005	

**CANARY IS**

Name	Ident	Freq.	Class	INS Coordinates	VAR/Stn Decl	Elev.
	ISUR	110.9	LOC	RWY 25	W005	



**CAPE VERDE**

Name	Ident	Freq.	Class		INS Coordinates		VAR/Stn Decl	Elev.
Boa Vista	BVT	341.0	H	W	N16 08.1	W022 53.3	W010	
Praia	PRA	349.0	H	W	N14 55.5	W023 29.5	W011	241
Praia	SNT	116.6	V D H W		N14 56.3	W023 28.9	W011	
Sal	CVS	115.3	V D H W		N16 44.2	W022 57.1	W010	
Sal	SAL	274.0	H H W		N16 42.1	W022 56.9	W010	
Sao Vicente	SVT	333.0	H M W		N16 49.7	W025 03.9	W011	52
Sal (Amilcar Cabral)	SL	109.9	LOC		RWY 01		W010	
Sao Pedro (Cesaria Evora Intl)	SP	109.7	LOC		RWY 07		W011	

**CHAGOS ARCHIPELAGO**

Name	Ident	Freq.	Class		INS Coordinates		VAR/Stn Decl	Elev.
Diego Garcia	NDG	300.0	H	H W	S07 17.5	E072 23.1	W008	
Diego Garcia	NKW	112.0	V T	U W	S07 19.0	E072 24.7	W008	33
Diego Garcia (Diego Garcia Navy)	KNW	109.3	LOC		RWY 31		W008	

**COMOROS**

Name	Ident	Freq.	Class	INS Coordinates	VAR/Stn Decl	Elev.
Moroni	HAI	114.7	V D U W	S11 30.9 E043 16.6	W006	103
Moroni (Prince Said Ibra- him)	HA	110.3	LOC	RWY 02	W006	

**CONGO, D.R. OF**

Name	Ident	Freq.	Class		INS Coordinates		VAR/Stn Decl	Elev.
Bukavu	BKV	514.0	H	W	S02 19.0	E028 48.7	E001	
Bunia	BUN	114.0	V D H W		N01 34.0	E030 13.4	E002	
Buta-Zega	BUT	116.9	V U W		N02 49.1	E024 48.6	E001	1380
Gbadolite	BLT	112.1	V D H W		N04 15.0	E020 58.8	E001	
Gemena	GEM	420.0	H W		N03 14.3	E019 46.2	E001	
Goma	GOM	116.5	V D H W		S01 40.7	E029 14.4	E001	4999
Inongo	INO	385.0	H W		S01 57.0	E018 16.5	W002	
Isiro-Matari	IRO	116.7	V D U W		N02 48.8	E027 36.1	E001	2438
Isiro-Matari	IRO	405.0	H W		N02 50.6	E027 34.3	E001	2438
Kalemie	KMI	116.3	V U W		S05 52.0	E029 15.0	W001	
Kamina Base	KMB	114.7	V H W		S08 37.6	E025 14.9	W001	
Kananga	KNG	380.0	H W		S05 53.9	E022 28.6	W000	
Kikwit	KKW	321.0	H W		S05 02.0	E018 49.0	W002	
Kindu	KIN	115.1	V D L W		S02 55.0	E025 54.0	E000	
Kinshasa	KSA	115.0	V D H W		S04 24.1	E015 25.1	W002	1079
Kisangani	KGI	114.5	V D H W		N00 29.8	E025 19.1	E001	1434
Kolwezi	KWZ	264.0	H W		S10 45.8	E025 29.3	W002	
Kotakoli	KOT	340.0	H W		N04 10.0	E021 45.0	W004	
Libenge	LIB	336.0	H W		N03 38.0	E018 38.0	W001	
Lisala	LIS	324.0	H W		N02 10.2	E021 29.8	W000	
Lodja	LJA	285.0	H W		S03 25.0	E023 27.0	W001	
Lubumbashi	LUB	116.7	V D H W		S11 36.1	E027 30.3	W003	4314
Matadi-Tshimpi	MTI	380.0	H W		S05 50.0	E013 28.0	W005	1116
Mbandaka	MBA	115.7	V D H W		N00 02.5	E018 17.2	W001	
Mbuji-Mayi	MBY	112.9	V D H W		S06 07.1	E023 33.9	W001	2221
Tshikapa	TKP	511.0	H W		S06 26.0	E020 48.0	W002	
Kamina (Kamina Base)	BE	278.0	LO		S08 39.0	E025 17.0	W007	
Kinshasa (N'Djili Intl)	OK	340.0	LO		S04 20.4	E015 30.9	W002	
	NDJ	110.3	LOC		RWY 24		W002	
Kolwezi	KW	285.0	LO		S10 45.5	E025 29.3	W004	

**CONGO, D.R. OF**

Name	Ident	Freq.	Class	INS Coordinates	VAR/Stn Decl	Elev.
Lubumbashi (Lubumba-shi Intl)	LNO	109.9	LOC	RWY 07	W003	
Mbandaka	MS	255.0	LO	N00 01.0 E018 18.0	W001	

**DAKHLA/LAAYOUNE**

Name	Ident	Freq.	Class	INS	Coordinates	VAR/Stn Decl	Elev.
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**DAKHLA/LAAYOUNE**

Dakhla	DKH	115.8	V	D	H	W	N23 44.7	W015 55.2	W005	56
Laayoune	LAY	112.1	V	D	H	W	N27 08.6	W013 13.1	W005	223
Laayoune (Hassan I)	AUN	110.7	LOC				RWY 02		W005	

**MOROCCO**

Smara	SMA	401.0	H	L	W		N26 44.5	W011 41.3	W004	815
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**DJIBOUTI**

Name	Ident	Freq.	Class	INS Coordinates	VAR/Stn Decl	Elev.
Djibouti	ABI	114.6	T L	N11 33.0 E043 09.3	E002	49
Djibouti	DJ	386.0	H W	N11 32.8 E043 10.8	E001	27
Djibouti	DTI	113.9	V D H W	N11 32.9 E043 05.6	E002	
Djibouti (Ambouli)	DJI	110.3	LOC	RWY 27	E002	

## EGYPT

Name	Ident	Freq.	Class	INS	Coordinates	VAR/Stn Decl	Elev.
Abu Simbel	SML	113.5	V D H W	N22 21.3	E031 37.3	E004	
Alexandria	NOZ	115.9	V D H W	N31 11.3	E029 57.0	E004	
Almaza	A	490.0	H M W	N30 04.4	E031 21.6	E004	
Almaza	MXR	116.3	T L	N30 05.5	E031 21.4	E004	304
Aswan	ASN	112.3	V D H W	N23 58.3	E032 49.0	E004	
Asyut	AST	117.7	V D H W	N27 01.9	E031 01.9	E004	
Baltim	BLT	116.9	V D H W	N31 31.7	E031 07.4	E004	
Cairo	ALI	310.0	H M W	N30 10.0	E031 23.1	E004	
Cairo	CAI	112.5	V D H W	N30 09.1	E031 25.4	E004	
Cairo	CVO	115.2	V D H W	N30 05.5	E031 23.3	E004	
Dakhla	MB	387.0	H M W	N25 25.2	E029 00.1	E004	
El Arish	ARH	113.6	V D H	N31 04.4	E033 49.9	E004	
El Daba	DBA	115.7	V D H W	N31 00.7	E028 28.0	E004	110
El Kharga	KHG	113.8	V D U W	N25 26.9	E030 35.4	E004	
Fayoum	FYM	117.3	V D H W	N29 23.9	E030 23.6	E004	
Hurghada	HGD	116.5	V D U W	N27 10.7	E033 47.8	E004	70
Luxor	LO	364.0	H M W	N25 44.3	E032 44.3	E004	
Luxor	LXR	114.4	V D H W	N25 45.0	E032 46.1	E004	
Marsa Alam	MAK	115.5	V D L W	N25 35.0	E034 34.0	E004	
Mersa Matruh	MMA	116.4	V D H	N31 19.2	E027 13.3	E004	93
Moquattam	MKT	317.0	H M W	N30 02.5	E031 16.5	E004	
Nuweibaa	NWB	288.0	H W	N29 01.9	E034 40.3	E004	
October	OCT	340.0	H W	N29 48.7	E030 49.8	E004	
Port Said	PSD	113.2	V D H W	N31 16.7	E032 14.3	E004	
Sharm El Sheikh	SHM	114.2	V D H W	N27 59.9	E034 24.8	E004	130
Sidi Barrani	BRN	116.2	V D H W	N31 34.5	E026 00.3	E004	
Suhag	SHG	115.3	V D H W	N26 21.7	E031 43.8	E004	
Taba	TBA	114.5	V D H W	N29 36.4	E034 47.8	E004	
Abu Simbel	IABS	109.7	LOC	RWY 33		E004	



## EGYPT

Name	Ident	Freq.	Class	INS Coordinates	VAR/Stn Elev. Decl
Alexandria (Borg El Arab Intl)	BIL	111.3	LOC	RWY 32L	E004
Almaza (Almaza AB)	IALZ	109.3	LOC	RWY 36	E004
Aswan (Aswan Intl)	IAIL	109.5	LOC	RWY 35	E004
Asyut (Asyut Intl)	IASU	111.3	LOC	RWY 31	E004
Cairo (Cairo Intl)	IZFC	109.9	LOC	RWY 05C	E004
	IZFL	110.9	LOC	RWY 05L	E004
	IZFR	108.9	LOC	RWY 05R	E004
	ITTC	109.5	LOC	RWY 23C	E004
	ITTL	108.7	LOC	RWY 23L	E004
	ITTR	110.3	LOC	RWY 23R	E004
Cairo (Capital Intl)	IKTM	109.7	LOC	RWY 01L	E004
Giza (Sphinx Intl)	IPSX	111.5	LOC	RWY 34L	E004
Hurghada (Hurghada Intl)	HIL	110.3	LOC	RWY 34R	E004
Luxor (Luxor Intl)	ILUX	108.5	LOC	RWY 02	E004
	XIL	111.1	LOC	RWY 20	E004
Sharm El Sheikh (Sharm El Sheikh Intl)	KIL	109.5	LOC	RWY 04L	E004
Taba (Taba Intl)	ITBA	109.5	LOC	RWY 04	E004

**ERITREA**

Name	Ident	Freq.	Class		INS Coordinates		VAR/Stn Decl	Elev.
Asmara	AS	305.0	H	H W	N15 16.9	E038 53.1	E002	
Assab	SB	345.0	H	M W	N13 04.0	E042 38.0	E002	
Massawa	MS	230.0	H	W	N15 39.8	E039 20.8	E002	
Asmara (Asmara Intl)	IAS	110.3	LOC		RWY 07		E002	
Massawa (Massawa Intl)	IMS	110.5	LOC		RWY 07		E002	

## ESWATINI

Name	Ident	Freq.	Class			INS Coordinates		VAR/Stn Decl	Elev.
Matsapha	OM	240.0	H	H	W	S26 34.5	E031 14.4	W020	
Matsapha (Manzini)	MS	262.5	H		W	S26 30.6	E031 20.1	W020	
Matsapha (Manzini)	MW	408.0	H		W	S26 37.5	E031 10.0	W020	
Matsapha (Manzini)	VMS	112.3		D	H	S26 30.8	E031 19.4		2196
Sikhuphe	VSK	117.1	V	D	H W	S26 22.8	E031 43.0	W020	
Manzini (Matsapha)	IMS	109.7	LOC			RWY 07		W020	
Sikhuphe (Sikhuphe Intl)	ISK	111.5	LOC			RWY 20		W020	

## ETHIOPIA

Name	Ident	Freq.	Class	INS	Coordinates	VAR/Stn Decl	Elev.
Addis (Addis Abeba)	ADS	112.9	V D U W	N08 58.5	E038 48.0	E002	
Addis Abeba	AB	333.0	H W	N08 59.8	E038 51.8	E002	
Addis Abeba	BL	352.0	H M W	N08 59.1	E038 49.2	E002	
Arba Minch	AM	275.0	H	N06 03.5	E037 36.1	E002	
Axum	AX	440.0	H W	N14 08.8	E038 46.6	E002	6960
Bahir Dar	BDR	114.4	V D H W	N11 36.4	E037 19.0	E002	5976
Bahir Dar	TN	420.0	H W	N11 35.5	E037 18.3	E002	6015
Debre Marcos	DM	235.0	H W	N10 12.5	E037 45.1	E002	
Dire Dawa	AY	241.0	H W	N09 38.8	E041 50.5	E002	
Dire Dawa	DWA	117.7	V D H W	N09 38.6	E041 50.7	E002	
Gambella	BRO	114.5	V D H W	N08 07.7	E034 33.7	E002	
Gawasa	GWZ	115.9	V D H W	N09 06.4	E038 46.2	E002	
Gode	GO	382.0	H W	N05 55.9	E043 34.3	E001	
Gonder	AZZ	349.0	H W	N12 29.9	E037 26.3	E002	
Jimma	JM	263.0	H W	N07 40.1	E036 49.3	E002	
Lake Awasa	LA	215.0	H H W	N07 04.0	E038 30.0	E002	
Lalibella	LLB	390.0	H W	N11 58.7	E038 59.0	E002	
Mekele	MK	256.0	H W	N13 28.6	E039 30.6	E003	
Mekele	QHA	116.6	V D H W	N13 28.4	E039 31.5	E003	
Addis Abeba (Bole Intl)	IAA	111.5	LOC	RWY 25L		E002	
Mekele (Alula Aba Nega)	IMK	111.7	LOC	RWY 29		E003	

**GHANA**

Name	Ident	Freq.	Class		INS Coordinates		VAR/Stn Decl	Elev.
Accra	AA	409.0	H	M W	N05 40.6	W000 08.3	W004	126
Accra	ACC	113.1	V D H W		N05 38.0	W000 09.3	W004	250
Accra	AL	258.0	H	L W	N05 34.2	W000 10.9	W004	126
Kumasi	KSI	113.9	V D H W		N06 42.5	W001 35.4	W004	942
Pampa	PAM	115.9	V D H W		N08 00.9	E000 33.7	W003	1550
Sunyani	SN	357.0	H	W	N07 22.6	W002 17.8	W004	
Takoradi	TI	375.0	H	M W	N04 54.8	W001 45.9	W005	
Tamale	TLE	116.9	V D H W		N09 34.4	W000 50.8	W003	505
Accra (Kotoka Intl)	IACA	109.9	LOC		RWY 21		W004	
Kumasi	IKU	108.9	LOC		RWY 20		W004	

**GUINEA REP**

Name	Ident	Freq.	Class			INS Coordinates		VAR/Stn Decl	Elev.
Boke	OK	382.0	H		W	N10 57.4	W014 18.4	W010	
Conakry	CY	395.0	H	L	W	N09 35.4	W013 35.8	W008	61
Faranah	FH	350.0	H		W	N10 03.1	W010 45.6	W010	
Faranah	FRH	112.1	V	U	W	N10 03.1	W010 45.6	W010	
Gbenko (Banankoro)	GK	286.0	H		W	N09 14.7	W009 17.7	W009	
Gbessia (Conakry)	GIA	114.9	V	D	H W	N09 34.1	W013 37.2	W008	90
Kamsar	KAM	308.0	H		W	N10 39.8	W014 36.4	W011	
Kankan	KN	276.0	H		W	N10 22.6	W009 17.0	W010	
Kissidougoui	KU	387.0	H		W	N09 10.2	W010 07.3	W009	
Labe	LB	340.0	H		W	N11 19.6	W012 17.2	W010	
Macenta	MA	395.0	H		W	N08 29.1	W009 32.2	W010	
N'Zerekore	NZ	382.0	H		W	N07 49.2	W008 42.5	W010	
Sambailo	SB	395.0	H		W	N12 34.4	W013 21.5	W011	
Sangaredi	SG	332.0	H		W	N11 07.8	W013 50.1	W010	
Siguiro	SI	282.0	H		W	N11 24.1	W009 11.2	W009	
Conakry (Gbessia)	CKY	110.3	LOC			RWY 06		W008	

**KENYA**

Name	Ident	Freq.	Class		INS Coordinates		VAR/Stn Decl	Elev.
Athi River (Nairobi)	TH	329.5	H	W	S01 30.1	E037 01.2	E001	
Eldoret	ELD	114.7	V D H W		N00 24.4	E035 13.9	E001	6880
Garissa	GAR	115.7	V D H W		S00 28.3	E039 39.1	E000	
Kisumu	KIV	114.1	V D H W		S00 05.5	E034 43.4	E001	3764
Lanet	NAK	115.1	V D H W		S00 18.3	E036 09.3	E001	
Lodwa	LOV	114.3	V D H W		N03 06.5	E035 36.8	E002	
Malindi	MLD	113.3	V D H W		S03 14.0	E040 06.2	W001	100
Mandera	MAV	113.7	V D H W		N03 56.4	E041 51.9	E000	805
Movex	MOV	112.3	V D H W		S03 56.9	E039 38.6	W001	207
Nairobi	NO	278.0	H	W	S01 22.0	E036 51.8	E001	
Navex	NV	113.1	V D H W		S01 18.0	E036 57.3	E001	5282
Ngong	GV	115.9	V	H W	S01 23.8	E036 38.3	E001	7875
Stony	TV	115.5	V	H W	S01 30.2	E037 01.3	E001	5218
Wajir	WAV	112.5	V D H W		N01 44.8	E040 04.9	E001	788
Eldoret (Eldoret Intl)	ELL	110.5	LOC		RWY 08		E001	
Mombasa (Moi Intl)	MI	110.1	LOC		RWY 21		W001	
Nairobi (Jomo Kenyatta Intl)	NL	110.3	LOC		RWY 06		E001	

**LESOTHO**

Name	Ident	Freq.	Class		INS Coordinates		VAR/Stn Decl	Elev.
Berea (Maseru)	ME	255.0	H	W	S29 25.2	E027 34.0	W021	
Mazenod (Maseru)	MZV	117.2	V D H W		S29 30.0	E027 32.5	W021	5577
Mejametalana (Maseru)	MU	317.0	H	W	S29 18.2	E027 30.2	W021	
Morija (Maseru)	MR	215.0	H	W	S29 35.6	E027 29.6	W021	
Maseru (Moshoeshoe I Intl)	ILM	108.9	LOC		RWY 22		W021	
			OM		S29 20.5 E027 35.6			



**LIBERIA**

Name	Ident	Freq.	Class			INS Coordinates		VAR/Stn Decl	Elev.
Roberts (Monrovia)	FOR	263.0	H	M	W	N06 12.1	W010 23.0	W011	
Roberts (Monrovia)	ROB	113.8	V	D	U W	N06 13.9	W010 21.9	W012	148
Spriggs Payne (Monrovia)	SM	315.0	H		W	N06 19.6	W010 44.0	W012	
Monrovia (Roberts Intl)	SK	110.3	LOC			RWY 04		W011	

## LIBYA

Name	Ident	Freq.	Class	INS	Coordinates	VAR/Stn Decl	Elev.
Abu Argub	ABU	115.1	V D H W	N32 27.8	E013 10.2	E002	489
Amal	VA	310.0	H W	N29 29.8	E021 06.7	E002	
Beda M3	XS	365.0	H W	N28 30.0	E019 00.0	E002	
Beni Walid	WLD	115.9	V D U W	N31 47.0	E014 00.6	E000	1000
Beni Walid	WLD	265.0	H W	N31 44.0	E014 01.0	E001	
Benina (Benghazi)	BNA	117.4	V D H W	N32 07.5	E020 15.2	E003	349
Benina (Benghazi)	BNR	278.0	H M W	N32 10.3	E020 13.2	E003	433
Benina (Benghazi)	BS	257.0	H M W	N32 01.5	E020 19.0	E003	433
Booster	XY	325.0	H W	N29 54.0	E023 16.0	E002	
Bu Attifel A100	ZT	400.0	H W	N28 51.0	E022 07.0	E003	
Dahra	DHR	116.1	V D H W	N29 28.0	E017 55.9	E002	1086
Dahra	DHR	374.0	H W	N29 28.1	E017 56.3	E002	1086
Eddib V7	VG	405.0	H W	N28 58.8	E017 35.2	E002	
El Sharara	ROO	450.0	H M W	N26 33.5	E012 13.7	E001	
Essider	OJ	300.0	H W	N30 37.5	E018 21.1	E003	
Gazala (Tripoli)	PE	390.0	H O L W	N32 39.9	E013 14.9	E002	263
Ghadames	GAD	115.8	V D H W	N30 09.8	E009 44.5	E001	1110
Ghadames	GAD	287.0	H H W	N30 10.0	E009 44.9	E001	1151
Ghararah (Tripoli)	TW	301.0	H M W	N32 39.7	E013 03.1	E002	263
Ghat	GHT	114.8	V D H W	N25 08.8	E010 08.3	E001	2296
Ghat	GHT	435.0	H M W	N25 11.3	E010 08.3	E001	2296
Gheriat	GRT	337.0	H W	N30 23.7	E013 35.2	E002	
Gialo	GAL	273.0	H W	N28 41.6	E021 26.4	E003	
Gialo (Warehouse 59-E)	OB	261.0	H W	N28 40.1	E021 26.5	E002	
Hamada NC-8	CW	327.0	H W	N29 32.0	E012 50.0	E002	2047
Hateiba	KH	326.0	H W	N29 44.1	E019 41.5	E002	
Hon	HON	397.0	H W	N29 08.0	E015 57.0	E002	
Joday	TRO	328.0	H M W	N32 47.8	E012 49.7	E002	
Jufra	JUF	113.9	V L W	N29 12.8	E015 59.3	E001	850
Kadra	KDR	429.0	H W	N32 22.0	E013 37.0	E002	
Kufra	KFR	113.2	V D H W	N24 09.2	E023 18.5	E003	1376

**LIBYA**

Name	Ident	Freq.	Class		INS Coordinates		VAR/Stn Decl	Elev.
Kufra	KFR	317.0	H	W	N24 10.9	E023 19.3	E003	1367
Labraq (El Beida)	LAB	392.0	H	W	N32 46.7	E022 01.2	E002	2157
Marsa Brega	MB	403.0	H	L W	N30 25.1	E019 34.4	E003	50
Misrata	MIS	117.1	V D H W		N32 18.9	E015 04.7	E002	22
Mitiga	MTG	113.4	V D H W		N32 53.6	E013 16.4	E002	
Mizda	IZD	116.5	V D H W		N31 27.2	E013 00.6	E001	1910
Mizda	IZD	378.0	H	W	N31 26.8	E012 58.4	E002	
N 29c	STF	317.0	H	W	N29 44.0	E017 57.0	E002	
Nafoora M4	OV	390.0	H	W	N29 14.0	E021 33.0	E003	
Oxy 103 A	OXY	334.0	H	W	N29 02.1	E020 46.9	E003	
Raguba	RAG	413.0	H	W	N29 06.0	E019 02.4	E002	
Ras Lanuf V 40	VR	385.0	H	W	N30 30.0	E018 31.8	E003	
Sabah	PRB	245.0	H	W	N28 12.8	E018 07.0	E002	
Sahil	SAH	445.0	H	M W	N29 32.7	E020 10.3	E003	
Samah	OA	330.0	H	W	N28 09.9	E019 05.8	E002	
Sarir C-4	GS	305.0	H	W	N27 39.0	E022 30.0	E003	398
Sebha	SEB	114.7	V D H W		N26 59.7	E014 27.6	E002	1405
Sebha	SEB	283.0	H	H W	N27 00.8	E014 30.1	E002	
Sirte	SRT	117.0	V D H W		N31 03.5	E016 35.9	E002	267
Sirte	SRT	407.0	H	H W	N31 03.7	E016 35.2	E002	267
Tagrift V10	VH	410.0	H	W	N29 22.6	E018 00.5	E002	
Tajoura (Tripoli)	RJ	357.0	H	L W	N32 52.9	E013 19.7	E002	62
Tazerbo	TZR	269.0	H	W	N25 40.1	E021 05.6	E003	
Tebesty V-9	VO	295.0	H	W	N28 36.6	E019 18.5	E003	
Tobruk	TBQ	112.3	V D H		N31 51.4	E023 54.7	E003	
Tripoli	D	435.0	H	M W	N32 39.8	E013 07.1	E002	263
Tripoli	G	365.0	H M M W		N32 39.8	E013 10.7	E002	263
Tripoli	TPI	114.6	V D H W		N32 39.8	E013 07.1	E002	
Ubari	UBR	417.0	H	H W	N26 35.9	E012 46.8	E002	2000
Wafa	WF	470.0	H	M W	N28 53.5	E010 05.0	E001	
Waha 59-A	OR	280.0	H	W	N28 17.7	E019 56.9	E003	

**LIBYA**

Name	Ident	Freq.	Class	INS	Coordinates	VAR/Stn Decl	Elev.
Zawia	ZAW	117.7	V D U W	N32 46.7	E012 38.8	E000	100
Zella 74	PRC	395.0	H W	N28 34.6	E017 19.6	E002	
Zelten	ZEL	363.0	H W	N28 57.2	E019 46.3	E003	
Zueitina	ZUE	369.0	H W	N30 54.0	E020 04.1	E003	
Zwara	ZAR	432.0	H H W	N32 57.1	E012 01.4	E001	3
Benghazi (Benina Intl)	BN	362.0	LO	N32 10.3	E020 13.2	E003	
	IBNI	110.3	LOC	RWY 33L		E003	
El Beida (Labraq)	ILB	109.5	LOC	RWY 28		E002	
Sebha	ISBH	110.3	LOC	RWY 13		E002	
Sirte (Ghardabiya Intl)	ISIT	109.9	LOC	RWY 36		E002	
Tripoli (Tripoli Intl)	IIWT	109.5	LOC	RWY 27		E002	
			OM	N32 39.9	E013 14.9		

**MADAGASCAR**

Name	Ident	Freq.	Class		INS Coordinates		VAR/Stn Decl	Elev.
Ankazobe	TN	385.0	H	W	S18 19.0	E047 06.8	W014	
Antalaha	AH	321.0	H	W	S14 59.9	E050 19.1	W012	
Antananarivo	TNV	115.1	V D H W		S18 48.2	E047 31.1	W015	4134
Antanetibe (Antananarivo)	TAN	276.0	H	W	S18 50.1	E047 28.3	W015	
Antsiranana	DI	112.1	D H		S12 21.0	E049 17.7		374
Antsohihy	AT	374.0	H	M W	S14 54.2	E047 59.7	W011	
Arrachart	DO	390.0	H	W	S12 20.8	E049 17.4	W009	
Fascene	VSN	381.0	H	W	S13 19.2	E048 18.6	W009	
Fianarantsoa	VSF	322.0	H	W	S21 26.4	E047 06.6	W018	
Ivato (Antananarivo)	NT	370.0	H	M W	S18 48.9	E047 36.3	W015	
Mahajanga	MA	285.0	H	M W	S15 41.0	E046 22.2	W011	
Mahajanga	MG	112.5	V D H W		S15 39.5	E046 20.4	W011	
Mananjary	MJ	376.0	H	M W	S21 12.5	E048 21.4	W018	
Maroantsetra	VSL	402.0	H	W	S15 26.0	E049 41.0	W012	
Maromamy	MMY	267.0	H	W	S18 48.3	E049 01.9	W015	
Moramanga	TE	371.0	H	W	S18 57.1	E048 13.5	W015	
Morondava	VSO	397.0	H	W	S20 17.3	E044 19.0	W016	
Nosy-Be	NSB	117.5	V D H W		S13 18.3	E048 19.4	W009	
Sainte-Marie	SM	290.0	H	W	S17 05.3	E049 49.0	W014	
Sambava	SA	376.0	H	W	S14 16.7	E050 10.6	W011	
Sambava	SB	113.5	D L		S14 16.7	E050 10.6		20
Soavinandriana	TW	350.0	H	W	S19 10.3	E046 44.1	W015	
Toamasina	MT	113.1	V	H W	S18 07.5	E049 23.7	W015	
Tolagnaro	FDN	115.3	D H		S25 02.3	E046 57.2		98
Tolagnaro	VSP	282.0	H	W	S25 02.3	E046 57.2	W024	
Toliary	TU	114.5	V D H W		S23 23.4	E043 43.3	W020	30
Toliary	VSQ	367.0	H	W	S23 23.4	E043 43.3	W020	
Antananarivo (Ivato)	IO	305.0	LO		S18 47.0	E047 23.6	W015	
	IO	109.5	LOC		RWY 11		W015	

**MADAGASCAR**

Name	Ident	Freq.	Class	INS Coordinates		VAR/Stn Decl	Elev.
Toamasina	TO	394.0	LO	S18 02.4	E049 23.1	W015	
	TO	110.3	LOC	RWY 19		W015	

**MALAWI**

Name	Ident	Freq.	Class			INS Coordinates		VAR/Stn Decl	Elev.
Chileka (Blantyre)	NC	356.0	H	L	W	S15 40.6	E034 57.2	W005	2555
Chileka (Blantyre)	VCL	113.3	V	D	H W	S15 40.4	E034 55.0	W005	
Karonga	KA	245.0	H		W	S09 57.1	E033 53.7	W003	
Karonga	VKA	115.3	V	D	H W	S09 57.2	E033 53.5	W003	
Lilongwe	DVL	114.9	V	D	H W	S13 48.7	E033 48.5	W003	
Lilongwe	LH	378.0	H	H	W	S13 50.6	E033 50.9	W003	
Mzuzu	UU	227.0	H		W	S11 26.6	E034 00.8	W004	
Mzuzu	VMZ	116.1	V	D	H W	S11 24.8	E034 00.1	W004	
Blantyre (Chileka Intl)	ICL	110.3	LOC			RWY 10		W005	
			OM			S15 40.2 E034 53.7			
Lilongwe (Kamuzu Intl)	KG	305.0	LOM			S13 44.2	E033 43.0	W003	
	KM	109.9	LOC			RWY 14		W003	

**MAURITIUS**

Name	Ident	Freq.	Class			INS Coordinates		VAR/Stn Decl	Elev.
Flic En Flac (Mauritius)	FF	258.0	H	H	W	S20 16.9	E057 22.3	W019	
Grand Bay	GBY	114.8	V	D	L W	S20 00.9	E057 36.1	W018	100
Plaisance (Mauritius)	MS	343.0	H		W	S20 26.4	E057 41.4	W019	
Plaisance (Mauritius)	PLS	113.7	V	D	H W	S20 25.2	E057 39.7	W019	183
Rodrigues	RS	302.0	H		W	S19 45.6	E063 21.6	W018	
Mauritius (Sir Seewoosa- gur Ramgoolam Intl)	IPL	109.9	LOC			RWY 14		W019	



**MAYOTTE**

Name	Ident	Freq.	Class				INS Coordinates		VAR/Stn Decl	Elev.
Dzaoudzi	DZP	113.5	V	D	H	W	S12 48.7	E045 16.9	W008	42
Dzaoudzi	FJO	341.0	H		H	W	S12 48.7	E045 16.8	W008	55

**MELILLA (SPAIN)**

Name	Ident	Freq.	Class	INS Coordinates	VAR/Stn Decl	Elev.
Melilla	MEL	114.25	V D L W	N35 16.8 W002 57.5	W001	197
Melilla	MIA	292.0	H M W	N35 18.5 W002 57.3	W001	394
Melilla	MLL	117.4	D T	N35 18.4 W002 57.3		394

**MOROCCO**

Name	Ident	Freq.	Class	INS	Coordinates	VAR/Stn Decl	Elev.
Al Hoceima	ALM	115.0	V D H W	N35 11.5	W003 50.5	W001	46
Al Hoceima	ALU	401.0	H W	N35 10.9	W003 50.7	W001	
Al-Massira (Agadir)	ADM	117.2	V D H W	N30 19.3	W009 23.0	W003	
Al-Massira (Agadir)	ALS	396.0	H M W	N30 19.2	W009 19.2	W003	
Al-Massira (Agadir)	AML	402.0	H M W	N30 19.4	W009 27.3	W003	
Anfa	CBA	116.9	D H	N33 31.3	W007 40.6		365
Anfa	SAK	413.0	H W	N33 31.3	W007 40.6	W001	
Benguerir	BGR	115.4	V D H W	N32 09.5	W007 52.9	W002	1476
Beni Mellal	BML	113.1	V D H W	N32 25.0	W006 17.9	W001	1772
Benslimane	BNS	117.45	V D L W	N33 38.5	W007 12.5	W001	689
Benslimane	CAE	275.0	H M W	N33 37.0	W007 06.8	W001	
Bouarfa	BRF	117.0	V D H W	N32 30.9	W002 01.8	W001	3650
Daourat	CSD	345.0	H M W	N32 56.0	W008 03.9	W003	500
El Hank	HA	301.0	M W	N33 36.9	W007 39.9	W002	
Errachidia	ERA	117.1	V D U W	N31 55.5	W004 21.6	W002	3445
Errachidia	KSR	293.0	H M W	N31 55.5	W004 21.7	W002	3428
Essaouira	ESS	112.7	V D H W	N31 24.1	W009 41.2	W002	394
Fes	FES	115.7	V D H W	N33 55.6	W005 00.8	W002	
Guelmime	GLM	114.3	V D H W	N29 00.6	W010 04.2	W003	1083
Ifrane	IFN	409.0	H L W	N33 30.0	W005 09.6	W002	5508
Inezgane	AZR	371.0	H M W	N30 22.2	W009 27.1	W003	
Kenitra	CNL	380.0	H W	N34 17.2	W006 37.2	W003	135
Marrakech	MAK	113.3	V D H W	N31 36.8	W008 06.2	W003	1470
Meknes	MKS	116.3	V L W	N33 52.9	W005 31.0	W002	1500
Nador	ARI	116.0	V D H W	N34 59.2	W003 01.8	W001	619
Nouasseur (Casablanca)	NUA	255.0	H L W	N33 25.8	W007 36.6	W001	
Ouarzazate	ORZ	384.0	H M W	N30 55.6	W006 52.9	W002	
Ouarzazate	OZT	116.7	V D H W	N30 56.4	W006 54.3	W002	3839
Oujda	OJD	117.5	V D H W	N34 46.4	W001 57.0	W000	1575
Oujda	VDO	115.65	V D L W	N34 48.9	W001 57.6	W000	1575
Rabat	RBT	116.5	V D H W	N34 03.0	W006 44.8	W001	316

## MOROCCO

Name	Ident	Freq.	Class	INS	Coordinates	VAR/Stn Decl	Elev.
Sidi Khedim (Casa- blanca)	SLK	112.5	V D H W	N33 06.9	W007 30.4	W001	988
Sidi Slimane	SMN	115.5	V D U W	N34 14.1	W006 03.1	W004	
Tan Tan	TNA	274.0	H M W	N28 25.9	W011 10.3	W004	653
Tan Tan	TNN	112.3	V D H W	N28 25.7	W011 10.4	W004	682
Tanger	TAN	374.0	H W	N35 43.3	W005 48.3	W001	
Tanger	TNG	115.9	V D H W	N35 43.7	W005 53.4	W001	98
Tetouan	TTN	117.3	V D H W	N35 35.7	W005 19.5	W001	43
Touahar	CNV	270.0	H M W	N34 12.0	W004 10.8	W004	
Agadir (Al Massira Intl)	ADA	110.3	LOC	RWY 27		W003	
Agadir (Inezgane)	AGI	109.5	LOC	RWY 28		W003	
Casablanca (Mohammed V Intl)	CAS	108.3	LOC	RWY 17R		W001	
	INL	110.7	LOC	RWY 35L		W001	
	INR	109.9	LOC	RWY 35R		W001	
	NSR	282.0	LO	N33 16.4	W007 33.3	W001	
			OM	N33 16.4	W007 33.3		
Errachidia (Moulay Ali Cherif Intl)	ERR	109.3	LOC	RWY 31		W002	
Fes (Saiss Intl)	FEZ	315.0	LO	N33 55.6	W004 53.5	W002	
	LFA	109.7	LOC	RWY 27		W002	
Guelmime	GUM	110.5	LOC	RWY 05		W003	
Marrakech (Menara Intl)	MAR	109.7	LOC	RWY 10		W003	
Nador (El Aroui Intl)	TZN	108.7	LOC	RWY 08		W001	
Ouarzazate (Ouarzazate Intl)	IRZ	110.3	LOC	RWY 30		W002	
Oujda (Angads Intl)	ODA	110.1	LOC	RWY 06		W000	
	ANG	108.1	LOC	RWY 13		W000	
Rabat (Sale Intl)	RS	110.9	LOC	RWY 21		W001	
Tetouan (Saniat R'mel)	ITN	110.1	LOC	RWY 24		W001	

**MOZAMBIQUE**

Name	Ident	Freq.	Class		INS Coordinates		VAR/Stn Decl	Elev.
Beira	BR	327.0	H	W	S19 46.9	E034 51.0	W011	
Beira	VBR	113.7	V D U W		S19 47.2	E034 52.3	W011	
Chimoio	CH	282.0	H	W	S19 06.2	E033 26.0	W011	
Inhambane	IN	400.0	H	M W	S23 52.5	E035 24.3	W018	30
Lichinga	LC	345.0	H	W	S13 17.2	E035 13.9	W005	
Lichinga	VLC	117.1	V D H W		S13 16.8	E035 15.0	W005	4491
Maputo	VMA	112.7	V D H W		S25 52.1	E032 36.3	W018	
Nacala	VNC	116.5	V D H W		S14 27.8	E040 42.9	W008	316
Nampula	VNP	113.9	V D H W		S15 05.3	E039 18.0	W008	
Pemba	PB	280.0	H	W	S12 57.6	E040 30.8	W007	
Quelimane	QL	267.0	H	W	S17 49.8	E036 52.0	W010	
Quelimane	VQL	112.3	V D H W		S17 50.4	E036 52.0	W010	
Songo	SO	290.0	H	L W	S15 34.9	E032 46.0	W006	2904
Tete	VTZ	114.1	V	H W	S16 07.5	E033 38.4	W007	525
Vilankulo	VL	370.0	H	W	S21 58.0	E035 17.0	W015	46
Beira	BR	110.3	LOC		RWY 12		W011	
Maputo (Maputo Intl)	MA	110.3	LOC		RWY 23		W018	
Nacala	NC	110.3	LOC		RWY 19		W008	

**NAMIBIA**

Name	Ident	Freq.	Class	INS Coordinates	VAR/Stn Decl	Elev.
Grootfontein	GFV	115.7	V D L W	S19 36.3 E018 07.1	W009	
Keetmanshoop	KTV	112.9	V D H W	S26 32.2 E018 06.8	W017	
Ondangwa	OAV	116.3	V D H W	S17 52.7 E015 56.9	W008	
Walvis Bay	WBV	113.6	V D H W	S22 58.9 E014 38.7	W013	
Windhoek	WHV	114.5	V D H W	S22 28.6 E017 28.2	W012	
Walvis Bay	WBI	109.3	LOC	RWY 27	W013	
Windhoek (Hosea Kutako Intl)	WD	110.3	LOC	RWY 26	W012	

**NIGERIA**

Name	Ident	Freq.	Class	INS	Coordinates	VAR/Stn Decl	Elev.
Abuja	ABC	116.3	V D H W	N09 02.3	E007 17.1	W002	1191
Akure	AK	276.0	H M W	N07 13.6	E005 17.5	W002	
Akwa Ibom	AI	397.0	H M W	N04 50.9	E008 04.9	W002	
Akwa Ibom	AKW	113.8	V D H W	N04 53.7	E008 06.3	W002	201
Asaba	SAB	112.6	V D H W	N06 11.8	E006 41.4	W002	298
Bauchi	BCH	115.6	V D L W	N10 27.4	E009 44.9	W001	2008
Bauchi	BU	323.0	H M W	N10 30.5	E009 44.4	W001	
Benin	BEN	116.5	V D H W	N06 17.0	E005 33.5	W003	218
Bida	BDA	112.7	V D H W	N09 06.1	E006 01.1	W001	583
Birnin Kebbi	BIK	112.2	V D H W	N12 29.5	E004 23.4	W001	779
Calabar	CAL	114.1	V D H W	N04 55.3	E008 19.2	W001	46
Calabar	CR	317.0	H M W	N04 58.0	E008 20.9	W001	
Dutse	DUT	116.9	V D H W	N11 48.4	E009 19.2	W001	1355
Enugu	ENG	115.7	V D H W	N06 28.9	E007 36.1	W002	453
Finima	FB	332.0	H M W	N04 24.2	E007 10.6	W002	
Gboko	GB	115.9	V D H W	N07 15.3	E009 00.3	W001	500
Gombe	GME	112.1	V D H W	N10 16.8	E010 52.5	W001	1555
Ibadan	IBA	112.1	V D H W	N07 20.8	E003 57.9	W002	748
Ibadan	IN	400.0	H L W	N07 22.7	E003 59.5	W002	
Ilorin	ILR	112.3	V D H W	N08 23.3	E004 25.9	W002	1270
Jos	JOS	113.1	V D H W	N09 38.5	E008 51.8	W001	4262
Jos	JS	270.0	H L W	N09 38.3	E008 53.6	W001	
Kaduna	KDA	115.3	V D H W	N10 40.8	E007 18.1	W001	2034
Kaduna	KUA	114.7	V H W	N10 35.8	E007 26.8	W001	2113
Kano	AO	340.0	H W	N12 03.5	E008 32.5	W001	1470
Kano	KAN	112.5	V D H W	N12 02.2	E008 29.8	W001	1588
Katsina	KAT	113.7	V D H W	N13 01.9	E007 41.1	W001	1685
Kishi	KIS	114.3	V D H W	N09 05.5	E003 49.8	W001	1331
Lagos	LA	336.0	H M W	N06 36.4	E003 19.7	W004	115
Lagos	LAG	113.7	V D H W	N06 42.5	E003 19.6	W003	217
Maiduguri	MIU	113.7	V D H W	N11 53.3	E013 07.0	E000	1066

**NIGERIA**

Name	Ident	Freq.	Class	INS	Coordinates	VAR/Stn Decl	Elev.
Minna	MNA	115.1	V D H W	N09 38.6	E006 27.0	W001	898
Okitipupa	OK	345.0	H M W	N06 30.4	E004 47.5	W002	
Osubi	OS	325.0	H L W	N05 36.5	E005 50.0	W002	
Osubi	OSB	117.1	V D H W	N05 36.0	E005 49.1	W002	47
Owerri	OW	320.0	H M W	N05 24.4	E007 12.6	W002	
Owerri	OWR	114.9	V D H W	N05 26.9	E007 12.1	W002	399
Port Harcourt	POT	113.5	V D H W	N05 02.1	E006 57.6	W002	118
Potiskum	PO	112.1	V D L W	N11 42.3	E011 02.3	W001	1500
Sokoto	SOK	113.9	V D H W	N12 55.3	E005 13.8	W001	1040
Yola	YOL	115.5	V D H W	N09 17.5	E012 25.5	W000	515
Abuja (Nnamdi Azikiwe Intl)	IAC	111.9	LOC	RWY 04		W002	
	IAB	109.3	LOC	RWY 22		W002	
Bauchi (Sir Abubakar Tafawa Balewa)	IBT	111.3	LOC	RWY 35		W001	
Benin	IBE	109.7	LOC	RWY 23		W003	
Birnin Kebbi (Sir Ahmadu Bello)	IRK	110.5	LOC	RWY 06		W001	
Calabar (Margaret Ekpo)	ICL	109.1	LOC	RWY 21		W001	
Dutse	IDT	108.5	LOC	RWY 06		W001	
Enugu (Akanu Ibiam)	IEN	108.3	LOC	RWY 26		W002	
Gombe	IGM	108.1	LOC	RWY 05		W001	
Ilorin	IIL	109.9	LOC	RWY 05		W002	
Jos (Yakubu Gowon)	IJS	110.7	LOC	RWY 10		W001	
Kaduna (New Kaduna)	IKA	110.1	LOC	RWY 05		W001	
Kano (Mallam Aminu Kano)	IKN	109.5	LOC	RWY 06		W001	
	IKK	111.1	LOC	RWY 24		W001	
Katsina	IKT	108.1	LOC	RWY 05		W001	
Lagos (Murtala Muham- med)	ILA	110.3	LOC	RWY 18L		W003	



**NIGERIA**

Name	Ident	Freq.	Class	INS Coordinates	VAR/Stn Decl	Elev.
	ILB	108.1	LOC	RWY 18R	W003	
Maiduguri	IMA	110.3	LOC	RWY 05	E000	
Owerri (Sam Mbakwe)	IOW	110.9	LOC	RWY 17	W002	
Port Harcourt	IPC	110.3	LOC	RWY 21	W002	
Sokoto (Saddiq Abubakar III Intl)	ISK	109.5	LOC	RWY 08	W001	
Uyo (Victor Attah Intl)	IAK	108.9	LOC	RWY 21	W002	
Yola	IYL	109.9	LOC	RWY 17	W000	

**REUNION**

Name	Ident	Freq.	Class		INS Coordinates		VAR/Stn Decl	Elev.
La Reunion	FXR	382.0	H	W	S20 53.6	E055 31.6	W019	
La Reunion	SDG	112.9	V	D H W	S20 53.1	E055 30.6	W019	
St Pierre (Pierrefonds)	SP	352.0	H	W	S21 16.7	E055 21.7	W019	
La Reunion (Roland Garros)	SD	110.3	LOC		RWY 14		W019	

**RWANDA**

Name	Ident	Freq.	Class			INS Coordinates		VAR/Stn Decl	Elev.
Butare	BU	340.0	H	M	W	S02 36.0	E029 44.0	E001	
Kigali	KNM	114.9	V	D	H W	S01 58.1	E030 08.9	E001	4892
Kigali	LO	255.0	H	L	W	S01 59.6	E030 16.9	E001	
Kigali (Kigali Intl)	IKNB	109.9	LOC			RWY 28		E001	

**SEYCHELLES**

Name	Ident	Freq.	Class	INS Coordinates	VAR/Stn Decl	Elev.
Praslin	PRA	115.7	V D H W	S04 18.4 E055 42.4	W005	1106
Seychelles (Seychelles Intl)	SIA	110.3	LOC	RWY 31	W005	

**SIERRA LEONE**

Name	Ident	Freq.	Class			INS Coordinates		VAR/Stn Decl	Elev.
Aberdeen Hill	FF	296.5	H	H	W	N08 30.1	W013 17.2	W011	
Lungi (Freetown)	LGI	115.5	V	D	H W	N08 37.0	W013 11.5	W008	
Lungi (Freetown)	LGI	339.0	H	H	W	N08 37.1	W013 11.5	W008	
Freetown (Lungi)	ISH	109.9	LOC			RWY 30		W008	

## SOUTH AFRICAN REP

Name	Ident	Freq.	Class	INS	Coordinates	VAR/Stn Decl	Elev.
Aggeneys	AGV	116.7	V D H W	S29 28.9	E018 33.7	W020	
Alexander Bay	ABV	112.1	V D H W	S28 34.2	E016 32.0	W019	
Bethlehem	BM	342.5	H W	S28 15.0	E028 20.0	W020	
Bhisho	BOV	112.4	V D L W	S32 54.4	E027 16.2	W029	2000
Bloemfontein	BLV	114.1	V T H W	S29 06.0	E026 18.0	W022	4416
Bronkhorstspuit	MEV	114.3	V D H W	S25 47.5	E028 33.7	W018	
Caledon	CDV	114.9	V H W	S34 06.8	E019 28.7	W026	
Cape Town	CB	462.5	H H W	S33 52.6	E018 34.4	W024	211
Cape Town	CTV	115.7	V D H B	S33 58.2	E018 36.3	W024	
Ceres	CSV	114.2	V D H W	S33 15.1	E019 26.3	W025	
East London	ELV	114.5	V D H B	S33 02.2	E027 49.4	W027	406
Ellisras	ER	345.0	H W	S23 44.9	E027 37.4	W013	
Ellisras	ERV	116.3	V D H W	S23 37.5	E027 57.9	W015	
George	GRV	116.6	V D H W	S34 00.4	E022 22.6	W026	
Grand Central	GC	372.5	H W	S25 59.6	E028 08.4	W018	5325
Grasmere	GAV	115.5	V H W	S26 30.9	E027 40.6	W018	
Greefswald	GWV	117.9	V H W	S22 14.7	E029 24.6	W013	
Greytown	GWN	252.5	H W	S29 06.3	E030 36.2	W024	
Greytown	GYV	113.5	V D H W	S29 07.5	E030 35.1	W024	3639
Heidelberg	HGV	116.7	V H W	S26 41.8	E028 17.0	W019	5200
Hluhluwe	HL	375.0	H W	S28 01.6	E032 16.4	W022	249
Hoedspruit	HA	265.0	H W	S24 20.3	E031 02.1	W016	
Hoedspruit	HSV	114.0	V D H W	S24 20.8	E031 02.9	W016	
Hofmeyer	HMV	113.4	V D H W	S31 36.4	E025 50.6	W025	
Hotazel	HZ	257.5	H W	S27 13.5	E022 57.0	W018	
Johannesburg	JSV	115.2	V D H W	S26 09.4	E028 13.9	W018	5579
Kimberley	KYV	113.2	V D H W	S28 48.0	E024 45.6	W021	3950
King Shaka (Durban)	TGV	115.6	V D H W	S29 36.7	E031 07.5	W025	
Klerksdorp	KD	280.0	H W	S26 50.7	E026 42.6	W017	4444
Kruger Mpumalanga	PK	405.0	H W	S25 23.0	E031 06.5	W019	
Kruger Mpumalanga	PKV	112.5	V D H W	S25 22.9	E031 06.7	W019	2868

**SOUTH AFRICAN REP**

Name	Ident	Freq.	Class	INS Coordinates		VAR/Stn Decl	Elev.
Ladysmith	LYV	116.5	V D H W	S28 36.3	E029 41.7	W022	3825
Langebaanweg	LW	345.0	H H W	S32 58.9	E018 08.9	W024	
Langebaanweg	LWV	117.0	V D H W	S32 59.0	E018 09.8	W024	
Lanseria	LA	270.0	H W	S26 00.6	E027 50.4	W018	
Lanseria	LIV	117.4	V D H W	S25 56.9	E027 54.8	W018	
Louis Trichardt	LO	457.5	H W	S23 03.9	E029 50.4	W015	3025
Lusikisiki	SI	200.0	H W	S31 17.0	E029 31.0	W027	
Mafikeng	MMV	112.9	V D H W	S25 49.6	E025 32.1	W017	4160
Majuba	MAJ	512.5	H W	S27 03.6	E029 44.6	W019	5643
Makhado	LTV	115.0	V D H W	S23 09.5	E029 41.2	W014	
Margate	UR	485.0	H W	S30 48.3	E030 22.2	W026	
Mthatha	MHV	115.1	V D H W	S31 33.0	E028 40.4	W027	
Newcastle	NC	415.0	H W	S27 46.1	E029 58.6	W021	4057
Nieuwoudtville	NVV	116.1	V H W	S31 22.8	E019 04.3	W023	
Oudtshoorn	OH	367.0	H W	S33 36.1	E022 11.2	W024	
Overberg	OB	427.5	H W	S34 35.7	E020 17.1	W025	
Overberg	OBV	115.4	V T H W	S34 33.4	E020 14.8	W025	
Petrusville	PVV	112.7	V H W	S30 22.0	E024 41.7	W023	
Phalaborwa	PHV	115.3	V H W	S23 54.0	E031 09.1	W015	
Phalaborwa	PW	272.0	H W	S23 55.0	E031 09.2	W015	
Piet Retief	PRF	525.0	H W	S26 56.4	E030 46.2	W019	
Pietermaritzburg	OBI	280.0	H W	S29 36.6	E030 23.7	W024	2423
Pietermaritzburg	ORI	442.5	H W	S29 33.6	E030 26.9	W024	2423
Pietermaritzburg	PMV	117.9	V D H W	S29 38.9	E030 24.0	W024	2423
Pietermaritzburg	PU	407.0	H W	S29 39.7	E030 24.6	W024	2423
Pietermaritzburg	PZ	257.0	H W	S29 42.3	E030 27.0	W024	2423
Pilanesberg	PNV	112.6	V D H W	S25 23.8	E027 07.4	W016	3412
Plettenberg Bay	PY	277.5	H W	S34 05.4	E023 19.6	W027	
Polokwane	PPV	114.5	V D H W	S23 50.4	E029 27.6	W016	4023
Port Elizabeth	PEV	112.9	V D H W	S33 59.6	E025 36.3	W028	215
Port St Johns	PJV	115.9	V H W	S31 36.5	E029 31.2	W027	

**SOUTH AFRICAN REP**

Name	Ident	Freq.	Class		INS Coordinates		VAR/Stn Decl	Elev.
Rand	RA	337.5	H	W	S26 25.4	E028 15.8	W019	
Rand (Johannesburg)	RAV	117.7	V D H W		S26 14.7	E028 09.3	W019	5493
Rand (Johannesburg)	RD	307.5	H	W	S26 18.8	E028 05.4	W019	5268
Richards Bay	RBV	113.0	V D H W		S28 44.4	E032 05.6	W023	93
Robben Island	RIV	117.6	V D H W		S33 48.0	E018 21.9	W025	
Rustenburg	RG	452.5	H	W	S25 39.0	E027 17.0	W017	
Sishen	SSV	113.6	V D H W		S27 39.1	E023 00.2	W019	3887
Skukuza	SZN	233.0	H	W	S24 58.8	E031 35.9	W020	
Somersveld	SVV	113.0	V	H W	S33 15.0	E018 28.7	W024	
Standerton	STV	116.0	V	H W	S26 41.8	E028 52.0	W020	
Sutherland	SLV	113.3	V	H W	S32 27.0	E020 37.4	W024	
Thabazimbi	TB	397.5	H	W	S24 36.0	E027 25.0	W016	
Thohoyandou	THO	325.0	H	W	S22 58.0	E030 29.0	W015	
Thohoyandou	TOY	285.0	H	W	S23 04.5	E030 18.9	W015	
Tshikondeni	TSH	252.5	H	W	S22 30.6	E030 57.0	W014	
Tutuka	TU	352.5	H	W	S26 43.3	E029 21.5	W020	
Tzaneen	TZ	212.5	H	W	S23 48.1	E030 21.7	W015	
Ulundi	SMH	457.5	H	W	S28 14.1	E031 28.9	W021	
Ulundi	UD	267.5	H	W	S28 18.3	E031 25.8	W021	
Ulundi	UL	115.4	D L		S28 18.9	E031 25.2		1712
Ulundi	UL	422.0	H	W	S28 20.9	E031 23.7	W021	
Upington	UN	334.0	H	W	S28 28.7	E021 18.2	W019	
Upington	UPV	116.5	V D H W		S28 24.1	E021 15.6	W019	
Vaalhoek	VLH	390.0	H	M W	S24 47.0	E030 47.0	W017	
Venetia Mine	VM	417.5	H	M W	S22 27.4	E029 18.3	W013	
Vereeniging	VV	460.0	H	W	S26 34.0	E027 57.5	W018	
Victoria West	VWV	113.7	V	H W	S31 23.8	E023 06.5	W024	
Vryheid	VHD	230.0	H	W	S27 47.2	E030 42.8	W018	
Vryheid	VHL	350.0	H	W	S27 47.2	E030 47.2	W018	
Warden	WRV	112.8	V	H W	S27 46.5	E029 04.2	W021	
Waterkloof	WKV	116.9	V D H W		S25 50.0	E028 13.2	W018	4903



**SOUTH AFRICAN REP**

Name	Ident	Freq.	Class	INS Coordinates		VAR/Stn Decl	Elev.
Welkom	WMV	116.4	V D U W	S28 00.1	E026 39.7	W018	4399
Witbank	WIV	113.3	V H W	S25 49.8	E029 11.7	W017	5034
Wonderboom	DPV	112.2	V D H W	S25 39.4	E028 13.2	W018	
Wonderboom (Pretoria)	WB	257.5	H W	S25 39.4	E028 17.9	W018	
Wonderboom (Pretoria)	WR	230.0	H W	S25 39.3	E028 14.5	W018	
Worcester	WC	335.0	H W	S33 39.8	E019 25.0	W024	653
Zonderwater	CZV	114.3	V D H W	S25 41.4	E028 33.0	W018	4907
Bhisho	BOI	110.5	LOC	RWY 08		W029	
Cape Town (Cape Town Intl)	CTI	110.3	LOC	RWY 01		W024	
	KSI	109.1	LOC	RWY 19		W024	
Durban (King Shaka Intl)	TNI	111.3	LOC	RWY 06		W025	
	TGI	109.7	LOC	RWY 24		W025	
East London	BSI	110.9	LOC	RWY 11		W027	
			OM	S33 02.7	E027 44.4		
	ELI	109.9	LOC	RWY 29		W027	
			OM	S33 01.6	E027 54.0		
George	GEI	109.5	LOC	RWY 11		W026	
	GGI	110.1	LOC	RWY 29		W026	
Hoedspruit (Hoedspruit AB)	HSI	109.5	LOC	RWY 18		W016	
Johannesburg (O.R. Tambo Intl)	JSI	110.3	LOC	RWY 03L		W018	
	JNI	109.1	LOC	RWY 03R		W018	
	JAI	109.9	LOC	RWY 21L		W018	
	JB I	110.9	LOC	RWY 21R		W018	
Kruger Mpumalanga (Kruger Mpumalanga Intl)	PKI	109.1	LOC	RWY 05		W019	
Langebaanweg	LWI	108.9	LOC	RWY 20L		W024	
Lanseria (Lanseria Intl)	LAI	110.7	LOC	RWY 07		W018	

## SOUTH AFRICAN REP

Name	Ident	Freq.	Class	INS Coordinates	VAR/Stn Decl	Elev.
Mafikeng (George Dick Montshioa)	MM	290.0	LO	S25 52.6 E025 30.6	W017	
Makhado (Makhado AB)	LTI	111.1	LOC	RWY 10	W014	
Overberg (Overberg AB)	OBI	110.9	LOC	RWY 35	W025	
Polokwane (Polokwane Intl)	PPI	108.7	LOC	RWY 05	W016	
Port Elizabeth (Port Eliz- abeth Intl)	PEI	111.1	LOC	RWY 08	W028	
	PDI	109.5	LOC	RWY 26	W028	
Waterkloof	WKI	111.3	LOC	RWY 01	W018	

**ST. HELENA**

Name	Ident	Freq.	Class	INS Coordinates	VAR/Stn Decl	Elev.
St Helena	SH	112.9	V D H W	S15 57.6 W005 38.9	W017	
St Helena	ST	325.0	H W	S15 57.7 W005 38.6	W017	
St Helena	HE	109.3	LOC	RWY 20	W017	

**SUDAN**

Name	Ident	Freq.	Class	INS Coordinates		VAR/Stn Decl	Elev.
Dongola	DOG	112.3	V D L W	N19 11.0	E030 25.6	E003	803
El Fashir	FSR	115.0	V D H W	N13 35.9	E025 18.2	E003	2437
El Obeid	OBD	115.8	V D H W	N13 06.7	E030 13.6	E003	1937
Juba	JUB	113.1	V D H W	N04 52.6	E031 36.0	E002	1496
Kassala	KSL	114.8	V D H W	N15 24.5	E036 20.2	E003	
Kenana	KNA	115.4	V D H W	N13 01.7	E032 54.4	E003	
Khartoum	KTM	112.1	V D H W	N15 34.0	E032 33.2	E003	1281
Malakal	MLK	112.7	V D H W	N09 33.8	E031 39.2	E003	1316
Merowe	MRW	116.0	V D H W	N18 24.8	E031 49.8	E003	894
Nyala	NYL	116.3	V D H W	N12 04.3	E024 58.4	E003	2123
Port Sudan	PSD	113.1	V D U W	N19 24.1	E037 14.5	E003	159
Sebara Geneina	GEN E	116.3	V D L W	N13 28.4	E022 32.1	E003	2637
Khartoum	KIS	110.7	LOC	RWY 18		E003	
	KIN	109.7	LOC	RWY 36		E003	
Merowe	MIN	108.5	LOC	RWY 02		E003	
	MIS	109.5	LOC	RWY 20		E003	
Port Sudan	PIS	110.3	LOC	RWY 34		E003	

## TANZANIA

Name	Ident	Freq.	Class		INS Coordinates		VAR/Stn Decl	Elev.
Arusha	AR	391.0	H	W	S03 22.1	E036 37.2	E001	
Dar-Es-Salaam	DM	272.5	H	M W	S06 49.4	E039 15.5	W002	
Dar-Es-Salaam	DR	361.0	H	H W	S06 53.1	E039 12.3	W002	
Dar-Es-Salaam	DS	282.5	H	M W	S06 55.6	E039 09.2	W002	
Dar-Es-Salaam	DV	112.7	V D U	W	S06 53.3	E039 11.6	W002	
Dodoma	DO	373.0	H	H W	S06 10.1	E035 44.8	W001	
Iringa	IR	397.0	H	W	S07 40.6	E035 45.2	W002	
Kigoma	KG	394.0	H	W	S04 53.3	E029 40.1	E000	
Kilimanjaro	KB	293.0	H	H W	S03 34.9	E036 41.7	W000	
Kilimanjaro	KL	283.0	H	M W	S03 26.2	E036 55.5	W000	
Kilimanjaro	KO	298.0	H	M W	S03 26.0	E036 59.6	W000	
Kilimanjaro	KV	115.3	V D H	W	S03 25.7	E037 06.4	W000	
Mbeya	MB	320.0	H	H W	S08 55.4	E033 27.5	W002	
Mtwara	MT	336.0	H	H W	S10 19.9	E040 11.1	W005	
Musoma	MU	312.0	H		S01 29.8	E033 48.0	E000	
Mwanza	MV	115.7	V D H	W	S02 26.6	E032 56.0	E000	3730
Mwanza	MZ	403.0	H	W	S02 26.5	E032 55.4	E000	3816
Pemba	PA	345.0	H	H W	S05 15.5	E039 48.9	W002	
Songea	SG	352.0	H	H W	S10 40.9	E035 35.0	W003	
Tabora	TB	333.0	H	W	S05 03.9	E032 50.0	W000	
Tabora	TV	114.7	V D H	W	S05 04.2	E032 49.4	W000	3812
Tanga	TG	407.0	H	H W	S05 05.3	E039 04.4	W001	
Zanzibar	ZV	116.7	V D H	W	S06 14.7	E039 13.6	W002	
Zanzibar	ZZ	385.0	H	W	S06 13.0	E039 13.3	W002	
Dar-Es-Salaam (Julius Nyerere Intl)	DL	110.5	LOC		RWY 05		W002	
Kilimanjaro (Kilimanjaro Intl)	KK	110.9	LOC		RWY 09		W000	

**TUNISIA**

Name	Ident	Freq.	Class	INS	Coordinates	VAR/Stn Decl	Elev.
Bizerte	BIZ	114.2	V D H W	N37 14.2	E009 46.0	E002	200
Cap Blanc	BC	310.3	M H W	N37 19.8	E009 50.2	E002	
Cap Bon	CBN	112.7	V H W	N36 53.7	E011 05.3	E002	
Djerba	JBA	112.2	V D H W	N33 52.6	E010 46.3	E002	
El Attaya	KR	308.0	H H W	N34 44.6	E011 18.4	E002	
El Borma	BMA	405.0	H L W	N31 42.0	E009 15.4	E002	
El Borma	EBA	113.8	V H W	N31 42.4	E009 15.3	E002	
Enfidha	NBA	114.35	V D H W	N36 04.4	E010 26.1	E002	
Gabes	GAB	115.4	V D H	N33 43.9	E009 55.2	E002	
Gafsa	GAF	109.0	V D H W	N34 25.2	E008 49.5	E002	
Khereddine	KDN	385.5	H L W	N36 49.5	E010 18.6	E002	
Monastir	MON	113.1	V D H W	N35 45.3	E010 44.9	E002	
Raouad	TS	325.0	H M W	N36 56.4	E010 15.1	E002	
Sfax	SFX	114.0	V D H W	N34 43.0	E010 41.3	E002	100
Sidi Bel Abiod	BN	313.5	H H W	N37 04.3	E011 02.6	E002	
Sidi Ben Aoun	BAN	115.3	V H W	N34 51.8	E009 10.1	E002	
Tabarka	TBK	113.3	V D H W	N36 58.7	E008 53.0	E002	
Tabarka	TK	350.5	H W	N36 58.7	E008 52.7	E002	
Tozeur	TON	117.0	V D H W	N33 56.5	E008 06.0	E002	289
Tozeur	ZN	375.0	H W	N33 56.4	E008 00.3	E002	
Tunis	TUC	116.5	V D H W	N36 51.1	E010 13.9	E002	43
Djerba (Zarzis)	JAZ	109.5	LOC	RWY 09		E002	
Enfidha (Hammamet)	NZI	109.3	LOC	RWY 09		E002	
	EBI	108.1	LOC	RWY 27		E002	
Monastir (Habib Bourguiba)	MS	275.0	LO	N35 43.5	E010 37.4	E002	
	MIS	109.9	LOC	RWY 07		E002	
Tabarka (Ain Draham)	TAB	110.7	LOC	RWY 27		E002	
Tozeur (Nefta)	TOZ	110.5	LOC	RWY 09		E002	
Tunis (Carthage)	TBL	111.1	LOC	RWY 01		E002	

**TUNISIA**

Name	Ident	Freq.	Class	INS Coordinates	VAR/Stn Decl	Elev.
	TSI	110.3	LOC	RWY 19	E002	
	TKE	108.5	LOC	RWY 29	E002	

**UGANDA**

Name	Ident	Freq.	Class				INS Coordinates		VAR/Stn Decl	Elev.
Entebbe	EM	355.0	H		W		N00 08.3	E032 25.5	E000	
Entebbe	NN	117.5	V	D	H	W	N00 03.2	E032 26.3	E000	3782
Kasese	KA	273.0	H		W		N00 11.3	E030 05.9	E002	
Kisoro	KS	258.0	H		M	W	S01 17.0	E029 43.0	E001	
PortBell	PB	270.0	H		W		N00 17.7	E032 39.4	E001	
Soroti	SO	323.0	H		H	W	N01 43.3	E033 37.4	E000	
Soroti	SV	112.5	V	D	H	W	N01 43.6	E033 37.1	E000	
Entebbe (Entebbe Intl)	EL	110.7	LOC				RWY 17		E000	



**WEST AFRICA**

Name	Ident	Freq.	Class		INS Coordinates		VAR/Stn Decl	Elev.
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**BENIN**

Cotonou	CO	284.0	H	W	N06 22.2	E002 24.2	W003	
Cotonou	TYE	113.3	V D H W		N06 21.7	E002 23.6	W003	46
Kandi	TYK	366.0	H	W	N11 08.5	E002 56.5	W002	
Natitingou	TYN	309.0	H	W	N10 21.8	E001 21.1	W002	
Parakou	PA	112.8	V H W		N09 22.2	E002 37.1	W002	

Cotonou (Cadjehoun Intl)	CN	109.5	LOC		RWY 24		W003	
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**BURKINA FASO**

Bobo-Dioulasso	BD	114.7	V D H W		N11 08.7	W004 21.1	W004	1414
Ouagadougou	OG	112.9	V D U W		N12 20.8	W001 30.8	W003	1048
Ouagadougou	OG	305.0	H M W		N12 17.3	W001 33.3	W003	
Ouagadougou	OUA	333.0	H W		N12 20.0	W001 31.5	W003	

Bobo-Dioulasso	BO	109.7	LOC		RWY 06		W004	
Ouagadougou	OG	110.1	LOC		RWY 04		W003	

**CAMEROON**

Bafoussam	BF	116.5	V D H W		N05 32.1	E010 21.3	W001	
Douala	DLA	112.9	V D H W		N03 59.6	E009 44.6	W001	
Edea	DE	362.0	H W		N03 47.4	E010 08.3	W001	
Garoua	TJR	112.3	V D H W		N09 20.1	E013 20.7	E000	
Mamfe	MF	115.1	V H W		N05 42.3	E009 18.2	W001	
Maroua-Salak	MVR	113.0	V D H W		N10 27.0	E014 16.3	E001	
Maroua-Salak	TJL	364.0	H W		N10 27.7	E014 14.6	E001	
N'Gaoundere	TJN	112.7	V H W		N07 19.8	E013 32.9	W001	
Yaounde-Nsimalen	NLY	115.7	V D H W		N03 43.5	E011 33.4	W001	
Yaounde-Nsimalen	YNS	368.0	H W		N03 44.7	E011 33.4	W001	

Douala	DL	110.3	LOC		RWY 30		W001	
Garoua	GRA	109.5	LOC		RWY 09		E000	

## WEST AFRICA

Name	Ident	Freq.	Class	INS	Coordinates	VAR/Stn Decl	Elev.
Yaounde (Nsimalen)	YA	109.9	LOC	RWY 19		W001	

## CEN AFR REP

Bangui	BN	265.5	H	W	N04 29.4	E018 29.7	E001	
Bangui	MPK	117.3	V D H W		N04 22.7	E018 31.5	E001	1234
Berberati	BT	113.9	V	H W	N04 13.8	E015 47.0	E000	
Birao	BO	298.0	H	M W	N10 17.0	E022 47.0	E002	
Bouar	FBU	388.0	H	W	N05 56.9	E015 38.3	E000	
Bria	IA	113.5	V	H W	N06 31.6	E021 59.4	E002	
Kembe	KB	378.0	H	W	N04 37.0	E021 52.0	E001	
N'Dele	LE	113.1	V	H W	N08 23.8	E020 41.2	E002	

Bangui (M'Poko)	BGI	110.3	LOC	RWY 34		E001	
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## CHAD

Abeche	AB	350.0	H	W	N13 50.7	E020 50.7	E002	
Abeche	AE	114.5	V	H W	N13 50.8	E020 51.8	E002	
Fada	FD	314.0	H	W	N17 11.7	E021 29.5	E002	
Faya-Largeau	FLU	290.0	H	W	N17 55.1	E019 06.4	E002	
Faya-Largeau	FY	114.7	V D H W		N17 55.9	E019 08.1	E002	
Moundou	MN	315.0	H	W	N08 37.1	E016 04.4	E001	
Moundou	TD	114.7	V D H W		N08 38.2	E016 04.8	E001	1427
N'Djamena	FL	115.3	V D H W		N12 08.5	E015 02.3	E001	

N'Djamena (Hassan Dja-mous)	IFL	109.9	LOC	RWY 05		E001	
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## CONGO, REP OF

Brazzaville	BZ	113.1	V D H W		S04 15.1	E015 14.8	W002	1053
Dolisie	LO	267.0	H	W	S04 12.6	E012 40.1	W003	
Makoua	CF	112.5	V D H W		S00 01.3	E015 34.7	W001	1277
Ollombo	OTK	262.0	H	W	S01 12.6	E015 55.3	W001	

## WEST AFRICA

Name	Ident	Freq.	Class	INS	Coordinates	VAR/Stn Decl	Elev.
Pointe Noire	IT	114.1	V D H W	S04 49.4	E011 53.2	W004	85
Brazzaville (Maya-Maya)	IBV	111.7	LOC	RWY 05		W002	
Ollombo (Sassou N'Guessou)	ILB	110.9	LOC	RWY 04		W001	
Pointe Noire (Antonio Agostinho Neto)	PN	109.3	LOC	RWY 17		W004	

## COTE D'IVOIRE

Abidjan	AD	114.3	V D H W	N05 17.0	W003 55.0	W005	46
Abidjan	PB	294.2	M	W	N05 15.0	W003 57.5	W005
Afienou	AFO	393.0	H	W	N05 24.5	W002 55.0	W005
Bouake	BKY	115.1	V D H W	N07 44.8	W005 04.5	W005	1231
Korhogo	KRG	115.2	V D H W	N09 22.3	W005 38.7	W004	1260
Man	MAN	116.2	V D H W	N07 17.3	W007 34.8	W006	1070
Odienne	ODN	117.2	V D H W	N09 31.8	W007 34.4	W005	1392
San Pedro	SPO	114.9	V D H W	N04 45.4	W006 39.3	W006	20
Yamoussoukro	YAM	115.8	V D H W	N06 53.3	W005 22.7	W005	664

Abidjan (Felix Hou- phouet Boigny Intl)	AN	110.3	LOC	RWY 21		W005	
Yamoussoukro	YKS	109.5	LOC	RWY 05		W005	

## EQ GUINEA

Bata	BT	325.0	H	W	N01 54.3	E009 48.1	W002
Bata	BTA	115.4	V D H		N01 54.1	E009 48.5	W002 98
Malabo	MBO	114.5	V D H W	N03 46.1	E008 43.2	W002	56
Malabo	PA	342.0	H	W	N03 42.1	E008 54.7	W002
Mongomeyen	MGY	114.3	V D H W	N01 42.2	E011 01.4	W002	2205
Mongomeyen	MY	382.0	H	W	N01 39.8	E011 01.4	W002
Bata	BA	109.1	LOC	RWY 21		W002	

## WEST AFRICA

Name	Ident	Freq.	Class	INS	Coordinates	VAR/Stn Decl	Elev.
Malabo	MBO	109.7	LOC	RWY 22		W002	
Mongomeyen	MY	109.9	LOC	RWY 18		W002	

## GABON

Bitam	IM	264.0	H	W	N02 05.0	E011 29.0	W001	
Franceville	FRN	295.0	H	M W	S01 36.2	E013 24.0	W002	
Franceville	FRV	116.1	V D H W		S01 39.2	E013 26.6	W002	
Koulamoutou	KL	386.0	H	W	S01 10.2	E012 26.0	W002	
Lambarene	LB	310.0	H	M W	S00 42.8	E010 13.9	W002	
Libreville	LN	305.0	H	W	N00 32.1	E009 22.5	W002	
Libreville	LV	112.1	V D H W		N00 28.8	E009 24.1	W002	59
Makokou	KO	271.0	H	W	N00 34.8	E012 53.4	W002	
Moanda	ND	402.0	H	W	S01 31.8	E013 16.1	W002	59
Mouila	ML	263.0	H	W	S01 49.6	E011 02.8	W002	
Omboue	OB	328.0	H	M W	S01 35.0	E009 16.0	W003	
Oyem	OE	113.0	V D H W		N01 32.1	E011 34.5	W003	2156
Oyem	OY	353.0	H	W	N01 32.3	E011 34.6	W003	
Port Gentil	PG	112.3	V	H W	S00 43.7	E008 44.8	W003	
Port Gentil	PG	367.0	H	M W	S00 41.6	E008 45.7	W003	
Tchibanga	TC	376.0	H	W	S02 53.3	E010 57.3	W004	59
Franceville (M'Vengue)	FRA	110.1	LOC	RWY 15			W002	
Port Gentil	PO	109.1	LOC	RWY 21			W003	

## GAMBIA

Banjul	BJ	112.9	V D H W		N13 20.3	W016 39.3	W010	120
Banjul (Banjul Intl)	IYM	109.5	LOC	RWY 32			W010	

## GUINEA-BISSAU

Bissau	BIS	114.3	V D H W		N11 55.2	W015 38.7	W008	
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**WEST AFRICA**

Name	Ident	Freq.	Class	INS Coordinates	VAR/Stn Decl	Elev.
Bissau (Osvaldo Viera)	IBS	109.3	LOC	RWY 21	W008	

**MALI**

Bamako	BKO	113.7	V D H W	N12 32.8 W007 55.8	W004	1280
Kayes	KAY	116.7	V D H W	N14 28.7 W011 25.3	W006	197
Mopti	MO	395.0	H W	N14 30.7 W004 05.3	W003	935
Mopti	MTI	115.5	V H W	N14 31.6 W004 03.9	W003	925

Bamako (Modibo Keita/ Senou)	BS	109.5	LOC	RWY 06	W004	
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**MAURITANIA**

Nema	NM	115.3	V H W	N16 37.4 W007 17.8	W003	
Nouadhibou	PE	113.5	V D H W	N20 54.9 W017 02.1	W007	
Oumtounsy	OT	115.6	V D H W	N18 16.8 W015 57.1	W006	
Zouerate	ZRT	112.7	V H W	N22 45.5 W012 27.7	W004	

Nouadhibou	PN	110.3	LOC	RWY 02	W007	
Nouakchott (Oumtounsy)	SY	109.1	LOC	RWY 06	W006	
	TY	110.9	LOC	RWY 34	W006	

**NIGER**

Agadez	AS	113.5	V H W	N16 58.5 E008 01.4	E000	1702
Agadez	AS	340.0	H M W	N16 57.4 E007 58.5	E000	
Arlit	ARL	293.0	H M W	N18 47.0 E007 22.0	W000	
Dirkou	DIR	113.9	V D H W	N18 58.9 E012 52.8	E000	1266
Maradi	MY	284.0	H W	N13 30.0 E007 06.5	W000	
Niamey	NY	114.1	V D H W	N13 29.0 E002 12.4	W001	
Tahoua	TA	347.0	H M W	N14 52.8 E005 16.2	W001	
Zinder	IN	264.0	H W	N13 47.4 E008 59.9	W000	
Zinder	ZR	116.2	V H W	N13 46.2 E008 58.3	W000	1542

## WEST AFRICA

Name	Ident	Freq.	Class			INS Coordinates		VAR/Stn Decl	Elev.
Niamey (Diori Hamani)	NM	109.9	LOC			RWY 09R		W001	

## SAO TOME &amp; PRINCIPE

Principe	PR	311.0	H	L	W	N01 40.0	E007 24.7	W003	584
Sao Tome	SP	330.0	H	L	W	N00 22.5	E006 43.0	W004	33
Sao Tome	STM	117.3	V	D	H	W	N00 22.7	E006 43.0	W004 39

## SENEGAL

Cap Skirring	SKN	398.0	H	M	W	N12 23.2	W016 44.6	W008	
Dakar	SDS	323.0	H	M	W	N14 42.9	W017 28.5	W008	
Dakar	YF	113.1	V	D	H	W	N14 44.7	W017 28.5	W008
Dakar-Diass	DS	115.4	V	D	H	W	N14 38.7	W017 04.4	W008 285
Kedougou	SKG	320.0	H	M	W	N12 34.0	W012 13.0	W006	
Podor	SR	376.0	H		W	N16 39.0	W014 58.0	W006	
Simenti	SMI	314.0	H		W	N13 03.0	W013 18.0	W006	
St Louis	SLO	355.0	H	M	W	N16 02.9	W016 27.4	W007	
Tambacounda	STD	370.0	H		W	N13 44.1	W013 39.8	W007	197
Tambacounda	TD	114.5	V	H	W	N13 43.7	W013 39.8	W007	
Ziguinchor	ZG	112.5	V	L	W	N12 33.5	W016 16.4	W008	

Dakar (Leopold Sedar Senghor)	YF	110.3	LOC			RWY 36		W008	
Dakar-Diass (Blaise Diagne Intl)	IDS	110.1	LOC			RWY 01		W008	

## TOGO

Lome	LE	294.0	H	M	W	N06 13.8	E001 18.4	W004	86
Lome	LM	115.3	V	D	U	W	N06 11.0	E001 16.1	W004
Niamtougou	NT	113.2	V	D	H	W	N09 44.8	E001 05.0	W002

Lome (Gnassingbe Eya-dema)	LO	110.1	LOC			RWY 22		W004	
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**WEST AFRICA**

Name	Ident	Freq.	Class	INS Coordinates	VAR/Stn Decl	Elev.
Niamtougou (Niamtougou Intl)	NM	110.3	LOC	RWY 03	W002	

**ZAMBIA**

Name	Ident	Freq.	Class		INS Coordinates		VAR/Stn Decl	Elev.
Chipata	CP	218.0	H	H W	S13 33.8	E032 35.0	W005	3363
Kaoma	KO	349.0	H	H W	S14 47.8	E024 47.0	W006	
Kapiri Mposhi	KM	312.0	H	H W	S13 58.0	E028 41.4	W005	
Kasama	KS	367.0	H	W	S10 12.9	E031 08.6	W003	4542
Lilayi (Lusaka)	LY	235.0	H	H W	S15 29.6	E028 14.6	W006	3779
Livingstone	LZ	308.0	H	W	S17 49.2	E025 47.7	W008	3249
Livingstone	VLI	112.5	V D U W		S17 48.8	E025 49.2	W008	3280
Lusaka	LE	325.0	H	H W	S15 20.2	E028 32.1	W006	3749
Lusaka	LN	338.0	H	H W	S14 58.8	E028 22.4	W006	3781
Lusaka	LW	386.0	H	H W	S15 19.3	E028 22.2	W006	3782
Lusaka	VLS	113.5	V D U W		S15 19.6	E028 25.2	W006	3804
Mansa	MA	316.0	H	W	S11 08.0	E028 52.4	W004	4094
Mfuwe	MF	401.0	H	H W	S13 16.1	E031 53.9	W005	1841
Mfuwe	VMF	112.9	V D U W		S13 15.6	E031 54.9	W005	1871
Mongu	MG	391.0	H	W	S15 13.0	E023 09.0	W007	3585
Ndola	NW	240.0	H	W	S12 59.7	E028 35.2	W004	4167
Ndola	VND	112.1	V D H W		S12 59.9	E028 40.0	W004	4196
Solwezi	SW	415.0	H	H W	S12 10.2	E026 22.0	W004	4547
Southdowns (Kitwe)	KT	394.0	H	H W	S12 54.0	E028 09.0	W005	4145
Lusaka (Lusaka Intl)	LO	110.3	LOC		RWY 10		W006	
			OM		S15 19.4	E028 22.3		



**ZIMBABWE**

Name	Ident	Freq.	Class		INS Coordinates		VAR/Stn Decl	Elev.
Bromley (Harare)	BZ	284.0	H	W	S18 04.0	E031 20.4	W008	
Charles Prince (Harare)	CP	414.0	H	W	S17 45.1	E030 55.6	W008	
Chiredzi	BI	233.0	H	M W	S20 59.9	E031 33.9	W011	
Chiredzi	CZ	250.0	H	W	S20 57.8	E031 31.3	W011	
Esigodini (Bulawayo)	SZ	242.0	H	W	S20 18.0	E028 56.6	W010	
Fylde	FI	310.0	H	W	S18 09.1	E029 56.5	W008	
Fylde	FY	290.0	H	W	S18 07.2	E029 52.5	W008	
Gokwe	VGO	113.7	V D U W		S18 14.7	E028 58.2	W008	4200
Harare	VHA	113.1	V D H A		S17 54.4	E031 07.1	W008	4900
Hwange National Park	PO	377.0	H	W	S18 39.9	E026 55.7	W009	
Hwange National Park	VWN	114.5	V D H W		S18 38.4	E026 59.6	W009	
Hwange National Park	WN	393.0	H	W	S18 38.5	E026 59.5	W009	
Inyathi (Bulawayo)	YT	235.0	H	W	S19 40.5	E028 50.9	W010	
J.M. Nkomo (Bulawayo)	IL	226.0	H	M W	S20 00.6	E028 36.2	W010	
J.M. Nkomo (Bulawayo)	VBU	115.7	V D H W		S20 01.7	E028 38.6	W010	
J.M. Nkomo (Bulawayo)	WO	205.0	H	L W	S19 59.3	E028 33.2	W010	
Kariba	DW	300.0	H	L W	S16 31.6	E028 49.4	W008	
Kariba	KB	399.0	H	L W	S16 30.9	E028 53.1	W008	
Kwekwe	RC	385.0	H	W	S18 56.1	E029 48.3	W009	
Makumbi (Harare)	KU	363.0	H	W	S17 31.5	E031 15.5	W008	
Masvingo	MS	317.0	H	L W	S20 00.6	E030 50.6	W010	
Masvingo	VI	353.0	H	L W	S20 02.7	E030 51.3	W010	
Masvingo	VMV	115.1	V D U W		S20 03.4	E030 51.2	W010	
Matetsi	MT	260.0	H	W	S18 30.5	E025 54.5	W008	
Matopos	TP	341.0	H	L W	S20 32.2	E028 30.2	W010	
Mutare	GR	379.0	H	W	S18 58.5	E032 27.0	W009	
Mutare	MU	405.0	H	W	S18 56.4	E032 39.6	W009	
Norton (Harare)	NZ	373.0	H	W	S17 54.7	E030 41.1	W008	
Nyamandhlovu (Bulawayo)	NY	321.0	H	W	S19 51.5	E028 16.3	W010	
Solera	SL	341.0	H	W	S17 11.2	E029 31.8	W007	

## ZIMBABWE

Name	Ident	Freq.	Class		INS Coordinates		VAR/Stn Decl	Elev.
Thornhill (Gweru)	TI	278.0	H	W	S19 25.7	E029 50.7	W011	
Thornhill (Gweru)	TL	213.0	H	W	S19 26.7	E029 51.1	W011	
Thornhill (Gweru)	TO	268.0	H	W	S19 23.2	E029 47.3	W011	
Thornhill (Gweru)	VTL	114.3	V D U W		S19 26.4	E029 51.9	W008	4725
Victoria Falls	VFA	116.7	V D H W		S18 05.4	E025 48.9	W008	
Bulawayo (J.M. Nkomo)	IBU	109.5	LOC		RWY 13		W010	
Harare (Robert Gabriel Mugabe Intl)	OL	346.0	LO		S17 59.7	E031 01.7	W008	
	ISB	110.3	LOC		RWY 05		W008	
			OM		S17 59.7	E031 01.6		
Victoria Falls	IFA	110.7	LOC		RWY 12		W008	

**NAVIGATION AIDS LISTED BY IDENTIFIER - AFRICA**

(See end of listing for Localizers)

**A**

A Almaza AB (Almaza), Egypt  
 AA Accra, Ghana  
 AB Abeche, Chad  
 AB Addis Abeba, Ethiopia  
 ABC Abuja, Nigeria  
 ABI Djibouti, Djibouti  
 ABU Abu Argub, Libya  
 ABV Alexander Bay, S Afr Rep  
 ACC Accra, Ghana  
 AD Abidjan, Cote d'Ivoire  
 ADA Al Massira Intl (Agadir), Morocco  
 ADM Al-Massira (Agadir), Morocco  
 ADR Adrar, Algeria  
 ADS Addis (Addis Abeba), Ethiopia  
 AE Abeche, Chad  
 AFO Afienou, Cote d'Ivoire  
 AG Houari Boumediene (Algiers), Algeria  
 AGG Agalega, Mauritius  
 AGI Inezgane (Agadir), Morocco  
 AGV Aggeneys, S Afr Rep  
 AH Antalaha, Madagascar  
 AI Akwa Ibom, Nigeria  
 AK Akure, Nigeria  
 AKW Akwa Ibom, Nigeria  
 AL Accra, Ghana  
 AL Houari Boumediene (Algiers), Algeria  
 ALI Cairo, Egypt  
 ALM Al Hoceima, Morocco  
 ALR Dar El Beida, Algeria  
 ALS Al-Massira (Agadir), Morocco

ALU Al Hoceima, Morocco  
 AM Arba Minch, Ethiopia  
 AML Al-Massira (Agadir), Morocco  
 AN Felix Houphouet Boigny Intl (Abidjan), Cote d'Ivoire  
 AN Rabah Bitat (Annaba), Algeria  
 ANB Annaba, Algeria  
 ANG Angads Intl (Oujda), Morocco  
 AO Kano, Nigeria  
 AR Arusha, Tanzania  
 ARH El Arish, Egypt  
 ARI Nador, Morocco  
 ARL Arlit, Niger  
 AS Agadez, Niger  
 AS Asmara, Eritrea  
 ASI Ascension Aux, Ascension I  
 ASM Asmara, Eritrea  
 ASN Aswan, Egypt  
 AST Asyut, Egypt  
 AT Antsohihy, Madagascar  
 AUN Hassan I (Laayoune), Dakhla/Laayoune  
 AX Axum, Ethiopia  
 AY Dire Dawa, Ethiopia  
 AZR Inezgane, Morocco  
 AZZ Gonder, Ethiopia

**B**

BA Bata, Eq Guinea  
 BAN Sidi Ben Aoun, Tunisia  
 BAY El Bayadh, Algeria  
 BBS Beni Abbes, Algeria

**NAVIGATION AIDS LISTED BY IDENTIFIER - AFRICA**

(See end of listing for Localizers)

BC	Boudghene Ben Ali Lotfi (Bechar), Algeria	BM	Bethlehem, S Afr Rep
BC	Cap Blanc, Tunisia	BMA	El Borma, Tunisia
BCH	Bauchi, Nigeria	BML	Beni Mellal, Morocco
BCR	Bechar, Algeria	BN	Bangui, Cen Afr Rep
BD	Bobo-Dioulasso, Burkina Faso	BN	Benina Intl (Benghazi), Libya
BDA	Bida, Nigeria	BN	Bujumbura, Burundi
BDR	Bahir Dar, Ethiopia	BN	Sidi Bel Abiod, Tunisia
BE	Kamina Base (Kamina), Congo, Dr Of	BNA	Beni Amrane, Algeria
BEN	Benin, Nigeria	BNA	Benina (Benghazi), Libya
BF	Bafoussam, Cameroon	BNR	Benina (Benghazi), Libya
BGI	M'Poko (Bangui), Cen Afr Rep	BNS	Benslimane, Morocco
BGR	Benguerir, Morocco	BO	Annaba, Algeria
BI	Chiredzi, Zimbabwe	BO	Birao, Cen Afr Rep
BI	Mohamed Khider (Biskra), Algeria	BO	Bobo-Dioulasso, Burkina Faso
BIK	Birnin Kebbi, Nigeria	BOD	Bordj Omar Driss, Algeria
BIL	Borg El Arab Intl (Alexandria), Egypt	BOV	Bhisho, S Afr Rep
BIS	Biskra, Algeria	BR	Beira, Mozambique
BIS	Bissau, Guinea-Bissau	BRF	Bouarfa, Morocco
BIZ	Bizerte, Tunisia	BRN	Sidi Barrani, Egypt
BJ	Banjul, Gambia	BRO	Gambella, Ethiopia
BJ	Soummam-Abane Ramdane (Bejaia), Algeria	BS	Benina (Benghazi), Libya
BJA	Bejaia, Algeria	BS	Bujumbura, Burundi
BJA	Bujumbura, Burundi	BS	Modibo Keita/Senou (Bamako), Mali
BKO	Bamako, Mali	BSA	Ain Ediss, Algeria
BKV	Bukavu, Congo, Dr Of	BSA	Bou Saada, Algeria
BKY	Bouake, Cote d'Ivoire	BSI	East London, S Afr Rep
BL	Addis Abeba, Ethiopia	BT	Bata, Eq Guinea
BLT	Baltim, Egypt	BT	Berberati, Cen Afr Rep
BLT	Gbadolite, Congo, Dr Of	BTA	Bata, Eq Guinea
BLV	Bloemfontein, S Afr Rep	BTN	Batna, Algeria

**NAVIGATION AIDS LISTED BY IDENTIFIER - AFRICA**

(See end of listing for Localizers)

BU	Sir Abubakar Tafawa Balewa (Bauchi), Nigeria	CNZ	Menara Intl (Marrakech), Morocco
BU	Butare, Rwanda	CO	Cotonou, Benin
BUN	Bunia, Congo, Dr Of	CP	Charles Prince (Harare), Zimbabwe
BUT	Buta-Zega, Congo, Dr Of	CP	Chipata, Zambia
BV	La Palma, Canary Is	CR	Calabar, Nigeria
BVT	Boa Vista, Cape Verde	CS	Mohamed Boudiaf (Constantine), Algeria
BX	La Palma, Canary Is	CSD	Daourat, Morocco
BZ	Brazzaville, Congo, Rep Of	CSO	Constantine, Algeria
BZ	Bromley (Harare), Zimbabwe	CSV	Ceres, S Afr Rep
<b>C</b>		CT	Mohamed Boudiaf (Constantine), Algeria
CA	Cabinda, Angola	CTI	Cape Town Intl (Cape Town), S Afr Rep
CAE	Benslimane, Morocco	CTV	Cape Town, S Afr Rep
CAI	Cairo, Egypt	CV	Cuito Cuanavale, Angola
CAL	Calabar, Nigeria	CVO	Cairo, Egypt
CAS	Mohammed V Intl (Casablanca), Morocco	CVS	Sal, Cape Verde
CB	Cape Town, S Afr Rep	CW	Hamada NC-8, Libya
CBA	Anfa, Morocco	CY	Conakry, Guinea Rep
CBN	Cap Bon, Tunisia	CZ	Chiredzi, Zimbabwe
CDV	Caledon, S Afr Rep	CZV	Zonderwater, S Afr Rep
CF	Cafunfo, Angola	<b>D</b>	
CF	Makoua, Congo, Rep Of	D	Tripoli, Libya
CH	Chimoio, Mozambique	DBA	El Daba, Egypt
CHE	Cherchell, Algeria	DE	Edea, Cameroon
CKY	Gbessia (Conakry), Guinea Rep	DHR	Dahra, Libya
CLF	Chlef, Algeria	DI	Antsiranana, Madagascar
CN	Cadjehoun Intl (Cotonou), Benin	DIR	Dirkou, Niger
CNE	Constantine, Algeria	DJ	Ambouli (Djibouti), Djibouti
CNL	Kenitra, Morocco	DJA	Djanet, Algeria
CNV	Touahar, Morocco	DKH	Dakhla, Dakhla/Laayoune

**NAVIGATION AIDS LISTED BY IDENTIFIER - AFRICA**

(See end of listing for Localizers)

DKL Dakhla Intl (Dakhla), Dakhla/Laayoune  
 DL Douala, Cameroon  
 DL Julius Nyerere Intl (Dar-Es-Salaam), Tanzania  
 DLA Douala, Cameroon  
 DM Dar-Es-Salaam, Tanzania  
 DM Debre Marcos, Ethiopia  
 DO Arrachart, Madagascar  
 DO Dodoma, Tanzania  
 DO Kirundo, Burundi  
 DOG Dongola, Sudan  
 DPV Wonderboom, S Afr Rep  
 DR Dar-Es-Salaam, Tanzania  
 DS Dakar-Diass, Senegal  
 DS Dar-Es-Salaam, Tanzania  
 DTI Djibouti, Djibouti  
 DUT Dutse, Nigeria  
 DV Dar-Es-Salaam, Tanzania  
 DVL Lilongwe, Malawi  
 DW Kariba, Zimbabwe  
 DWA Dire Dawa, Ethiopia  
 DZP Dzaoudzi, Mayotte

**E**

EBA El Borma, Tunisia  
 EBI Hammamet (Enfidha), Tunisia  
 EL Entebbe Intl (Entebbe), Uganda  
 ELD Eldoret, Kenya  
 ELI East London, S Afr Rep  
 ELL Eldoret Intl (Eldoret), Kenya  
 ELO El Oued, Algeria  
 ELV East London, S Afr Rep

EM Entebbe, Uganda  
 ENG Enugu, Nigeria  
 ER Ellisras, S Afr Rep  
 ERA Errachidia, Morocco  
 ERR Moulay Ali Cherif Intl (Errachidia), Morocco  
 ERV Ellisras, S Afr Rep  
 ESS Essaouira, Morocco

**F**

FB Finima, Nigeria  
 FBU Bouar, Cen Afr Rep  
 FD Fada, Chad  
 FDN Tolagnaro, Madagascar  
 FES Fes, Morocco  
 FEZ Saiss Intl (Fes), Morocco  
 FF Aberdeen Hill, Sierra Leone  
 FF Flic En Flac (Mauritius), Mauritius  
 FH Faranah, Guinea Rep  
 FI Fylde, Zimbabwe  
 FJO Dzaoudzi, Mayotte  
 FL N'Djamena, Chad  
 FLU Faya-Largeau, Chad  
 FNV Francistown, Botswana  
 FOR Roberts (Monrovia), Liberia  
 FP Tenerife-North, Canary Is  
 FRA M'Vengue (Franceville), Gabon  
 FRH Faranah, Guinea Rep  
 FRN Franceville, Gabon  
 FRV Franceville, Gabon  
 FRW Francistown Intl (Francistown), Botswana

**NAVIGATION AIDS LISTED BY IDENTIFIER - AFRICA**

(See end of listing for Localizers)

FSR	El Fashir, Sudan	GH	Noumerat-Moufidi Zakaria (Ghardaia), Algeria
FTV	Fuerteventura, Canary Is	GHA	Noumerat, Algeria
FUE	Fuerteventura, Canary Is	GHT	Ghat, Libya
FV	Fuerteventura, Canary Is	GI	Gitega, Burundi
FXR	La Reunion, Reunion	GIA	Gbessia (Conakry), Guinea Rep
FY	Faya-Largeau, Chad	GK	Gbenko (Banankoro), Guinea Rep
FY	Fylde, Zimbabwe	GLM	Guelmime, Morocco
FYM	Fayoum, Egypt	GME	Gombe, Nigeria
<b>G</b>		GO	Gode, Ethiopia
G	Tripoli, Libya	GOM	Goma, Congo, Dr Of
GA	Muyinga, Burundi	GR	Mutare, Zimbabwe
GAB	Gabes, Tunisia	GRA	Garoua, Cameroon
GAD	Ghadames, Libya	GRS	Ghriss, Algeria
GAF	Gafsa, Tunisia	GRT	Gheriat, Libya
GAL	Gialo, Libya	GRV	George, S Afr Rep
GAR	Garissa, Kenya	GS	Sarir C-4, Libya
GAV	Grasmere, S Afr Rep	GSV	Gaborone, Botswana
GB	Gboko, Nigeria	GUM	Guelmime, Morocco
GBE	Gaborone, Botswana	GV	Ngong, Kenya
GBV	Gaborone, Botswana	GWN	Greytown, S Afr Rep
GBW	Sir Seretse Khama Intl (Gaborone), Botswana	GWV	Greefswald, S Afr Rep
GBY	Grand Bay, Mauritius	GWZ	Gawasa, Ethiopia
GC	Grand Central, S Afr Rep	GYV	Greytown, S Afr Rep
GDV	Gran Canaria, Canary Is	<b>H</b>	
GEI	George, S Afr Rep	HA	El Hank, Morocco
GEM	Gemena, Congo, Dr Of	HA	Hoedspruit, S Afr Rep
GENE	Sebara Geneina, Sudan	HA	Prince Said Ibrahim (Moroni), Comoros
GFV	Grootfontein, Namibia	HAI	Moroni, Comoros
GGI	George, S Afr Rep	HB	Houari Boumediene (Algiers), Algeria
		HBM	Algiers, Algeria

**NAVIGATION AIDS LISTED BY IDENTIFIER - AFRICA**

(See end of listing for Localizers)

HE	St Helena, St Helena	IASU	Asyut Intl (Asyut), Egypt
HGD	Hurghada, Egypt	IBA	Ibadan, Nigeria
HGV	Heidelberg, S Afr Rep	IBE	Benin, Nigeria
HIE	El Hierro, Canary Is	IBNI	Benina Intl (Benghazi), Libya
HIL	Hurghada Intl (Hurghada), Egypt	IBS	Osvaldo Viera (Bissau), Guinea-Bissau
HKI	Hassi Khebi, Algeria	IBT	Sir Abubakar Tafawa Balewa (Bauchi), Nigeria
HL	Hluhluwe, S Afr Rep	IBV	Maya-Maya (Brazzaville), Congo, Rep Of
HM	Krim Belkacem (Hassi Messaoud), Algeria	ICL	Margaret Ekpo (Calabar), Nigeria
HMB	Hammam Bou Hadjar, Algeria	IDS	Blaise Diagne Intl (Dakar-Diass), Senegal
HMD	Hassi Messaoud, Algeria	IDT	Dutse, Nigeria
HME	Hassi Messaoud, Algeria	IEN	Akanu Ibiam (Enugu), Nigeria
HMV	Hofmeyer, S Afr Rep	IFA	Fuerteventura, Canary Is
HON	Hon, Libya	IFA	Victoria Falls, Zimbabwe
HR	El Hierro, Canary Is	IFL	Hassan Djamous (N'Djamena), Chad
HRM	Hassi R'Mel, Algeria	IFN	Ifrane, Morocco
HSI	Hoedspruit AB, S Afr Rep	IFV	Fuerteventura, Canary Is
HSV	Hoedspruit, S Afr Rep	IGM	Gombe, Nigeria
HZ	Hotazel, S Afr Rep	IGZ	In Guezzam, Algeria
I		IIL	Ilorin, Nigeria
IA	Bria, Cen Afr Rep	IIWT	Tripoli Intl (Tripoli), Libya
IA	Ivato (Antananarivo), Madagascar	IJS	Yakubu Gowon (Jos), Nigeria
IAA	Bole Intl (Addis Abeba), Ethiopia	IKA	New Kaduna (Kaduna), Nigeria
IAB	Nnamdi Azikiwe Intl (Abuja), Nigeria	IKK	Mallam Aminu Kano (Kano), Nigeria
IABS	Abu Simbel, Egypt	IKN	Mallam Aminu Kano (Kano), Nigeria
IAC	Nnamdi Azikiwe Intl (Abuja), Nigeria	IKNB	Kigali Intl (Kigali), Rwanda
IACA	Kotoka Intl (Accra), Ghana	IKT	Katsina, Nigeria
IAIL	Aswan Intl (Aswan), Egypt	IKTM	Capital Intl (Cairo), Egypt
IAK	Victor Attah Intl (Uyo), Nigeria	IKU	Kumasi, Ghana
IALZ	Almaza AB (Almaza), Egypt	IL	Ilorin, Nigeria
IAS	Asmara Intl (Asmara), Eritrea		



**NAVIGATION AIDS LISTED BY IDENTIFIER - AFRICA**

(See end of listing for Localizers)

IL	J.M. Nkomo (Bulawayo), Zimbabwe	IR	Iringa, Tanzania
ILA	Murtala Muhammed (Lagos), Nigeria	IRK	Sir Ahmadu Bello (Birnin Kebbi), Nigeria
ILB	Labraq (El Beida), Libya	IRO	Isiro-Matari, Congo, Dr Of
ILB	Murtala Muhammed (Lagos), Nigeria	IRR	Lanzarote, Canary Is
ILB	Sassou N'Guesso (Ollombo), Congo, Rep Of	IRZ	Ouarzazate Intl (Ouarzazate), Morocco
ILD	4th Of February (Luanda), Angola	ISBH	Sebha, Libya
ILP	Gran Canaria, Canary Is	ISIT	Ghardabiya Intl (Sirte), Libya
ILR	Ilorin, Nigeria	ISK	Saddiq Abubakar III Intl (Sokoto), Nigeria
ILUX	Luxor Intl (Luxor), Egypt	ISK	Sikhuphe Intl (Sikhuphe), Eswatini
ILZ	Illizi, Algeria	ISUR	Reina Sofia (Tenerife-South), Canary Is
IM	Bitam, Gabon	IT	Pointe Noire, Congo, Rep Of
IMA	Maiduguri, Nigeria	ITBA	Taba Intl (Taba), Egypt
IMN	Zarzaitine, Algeria	ITF	Tenerife-North, Canary Is
IMS	Massawa Intl (Massawa), Eritrea	ITN	Saniat R'mel (Tetouan), Morocco
IMS	Matsapha (Manzini), Eswatini	ITS	Reina Sofia (Tenerife-South), Canary Is
IN	Ibadan, Nigeria	ITTC	Cairo Intl (Cairo), Egypt
IN	Inhambane, Mozambique	ITTL	Cairo Intl (Cairo), Egypt
IN	Zinder, Niger	ITTR	Cairo Intl (Cairo), Egypt
INL	Mohammed V Intl (Casablanca), Morocco	IYL	Yola, Nigeria
INO	Inongo, Congo, Dr Of	IZD	Mizda, Libya
INOR	Tenerife-North, Canary Is	IZFC	Cairo Intl (Cairo), Egypt
INR	Mohammed V Intl (Casablanca), Morocco	IZFL	Cairo Intl (Cairo), Egypt
IO	Ivato (Antananarivo), Madagascar	IZFR	Cairo Intl (Cairo), Egypt
IO	Ivato (Antananarivo), Madagascar		
IOW	Sam Mbakwe (Owerri), Nigeria	<b>J</b>	
IPC	Port Harcourt, Nigeria	JAI	O.R. Tambo Intl (Johannesburg), S Afr Rep
IPL	Sir Seewoosagur Ramgoolam Intl (Mauritius), Mauritius	JAZ	Zarzis (Djerba), Tunisia
IPX	Sphinx Intl (Giza), Egypt	JBA	Djerba, Tunisia
		JB	O.R. Tambo Intl (Johannesburg), S Afr Rep

**NAVIGATION AIDS LISTED BY IDENTIFIER - AFRICA**

(See end of listing for Localizers)

JIL	Jijel, Algeria	KGV	Kang, Botswana
JL	Ferhat Abbas (Jijel), Algeria	KH	Hateiba, Libya
JNI	O.R. Tambo Intl (Johannesburg), S Afr Rep	KHG	El Kharga, Egypt
JOS	Jos, Nigeria	KIL	Sharm El Sheikh Intl (Sharm El Sheikh), Egypt
JS	Jos, Nigeria	KIN	Khartoum, Sudan
JSI	O.R. Tambo Intl (Johannesburg), S Afr Rep	KIN	Kindu, Congo, Dr Of
JSV	Johannesburg, S Afr Rep	KIS	Khartoum, Sudan
JUB	Juba, Sudan	KIS	Kishi, Nigeria
JUF	Jufra, Libya	KIV	Kisumu, Kenya
<b>K</b>		KK	Kilimanjaro Intl (Kilimanjaro), Tanzania
KA	Karonga, Malawi	KKW	Kikwit, Congo, Dr Of
KA	Kasese, Uganda	KL	Kilimanjaro, Tanzania
KAM	Kamsar, Guinea Rep	KL	Koulamoutou, Gabon
KAN	Kano, Nigeria	KM	Kapiri Mposhi, Zambia
KAS	Kasane, Botswana	KMB	Kamina Base, Congo, Dr Of
KAT	Katsina, Nigeria	KMI	Kalemie, Congo, Dr Of
KAY	Kayes, Mali	KN	Kankan, Guinea Rep
KB	Kariba, Zimbabwe	KNA	Kenana, Sudan
KB	Kembe, Cen Afr Rep	KNG	Kananga, Congo, Dr Of
KB	Kilimanjaro, Tanzania	KNM	Kigali, Rwanda
KC	New Kaduna (Kaduna), Nigeria	KO	Kaoma, Zambia
KD	Klerksdorp, S Afr Rep	KO	Kilimanjaro, Tanzania
KDA	Kaduna, Nigeria	KO	Makokou, Gabon
KDN	Khereddine, Tunisia	KOT	Kotakoli, Congo, Dr Of
KDR	Kadra, Libya	KR	El Attaya, Tunisia
KFR	Kufra, Libya	KRG	Korhogo, Cote d'Ivoire
KG	Kamuzu Intl (Lilongwe), Malawi	KS	Kasama, Zambia
KG	Kigoma, Tanzania	KS	Kisoro, Uganda
KGI	Kisangani, Congo, Dr Of	KSA	Kinshasa, Congo, Dr Of
		KSI	Cape Town Intl (Cape Town), S Afr Rep

**NAVIGATION AIDS LISTED BY IDENTIFIER - AFRICA**

(See end of listing for Localizers)

KSI	Kumasi, Ghana	LC	Lichinga, Mozambique
KSL	Kassala, Sudan	LE	Lome, Togo
KSR	Errachidia, Morocco	LE	Lusaka, Zambia
KSV	Kasane, Botswana	LE	N'Dele, Cen Afr Rep
KT	Jimma, Ethiopia	LFA	Saiss Intl (Fes), Morocco
KT	Katsina, Nigeria	LGI	Lungi (Freetown), Sierra Leone
KT	Southdowns (Kitwe), Zambia	LGM	La Gomera, Canary Is
KTM	Khartoum, Sudan	LH	Lilongwe, Malawi
KTV	Keetmanshoop, Namibia	LIB	Libenge, Congo, Dr Of
KU	Kissidougou, Guinea Rep	LIS	Lisala, Congo, Dr Of
KU	Kuito, Angola	LIV	Lanseria, S Afr Rep
KU	Makumbi (Harare), Zimbabwe	LJA	Lodja, Congo, Dr Of
KUA	Kaduna, Nigeria	LLB	Lalibella, Ethiopia
KV	Kilimanjaro, Tanzania	LM	Lome, Togo
KW	Bujumbura, Burundi	LN	Libreville, Gabon
KW	Kolwezi, Congo, Dr Of	LN	Lusaka, Zambia
KWZ	Kolwezi, Congo, Dr Of	LNO	Lubumbashi Intl (Lubumbashi), Congo, Dr Of
KYV	Kimberley, S Afr Rep	LO	Dolisie, Congo, Rep Of
L		LO	Gnassingbe Eyadema (Lome), Togo
LA	Lagos, Nigeria	LO	Kigali, Rwanda
LA	Lake Awasa, Ethiopia	LO	Louis Trichardt, S Afr Rep
LA	Lanseria, S Afr Rep	LO	Luxor, Egypt
LAB	Labraq (El Beida), Libya	LOV	Lodwa, Kenya
LAG	Lagos, Nigeria	LPC	Gran Canaria South, Canary Is
LAI	Lanseria Intl (Lanseria), S Afr Rep	LRO	Tenerife-Los Rodeos, Canary Is
LAY	Laayoune, Dakhla/Laayoune	LTE	Lanzarote Aeropuerto, Canary Is
LB	Labe, Guinea Rep	LTI	Makhado AB (Makhado), S Afr Rep
LB	Lambarene, Gabon	LTV	Makhado, S Afr Rep
LB	Leon M'ba (Libreville), Gabon	LU	Luanda, Angola
LB	Lobito, Angola	LUB	Lubumbashi, Congo, Dr Of

**NAVIGATION AIDS LISTED BY IDENTIFIER - AFRICA**

(See end of listing for Localizers)

LV	Libreville, Gabon	MBO	Malabo, Eq Guinea
LW	Langebaanweg, S Afr Rep	MBY	Mbuji-Mayi, Congo, Dr Of
LW	Lusaka, Zambia	ME	Berea, Lesotho
LWI	Langebaanweg, S Afr Rep	MEL	Melilla, Spain
LWV	Langebaanweg, S Afr Rep	MEV	Bronkhorstspuit, S Afr Rep
LXR	Luxor, Egypt	MF	Mamfe, Cameroon
LY	Lilayi (Lusaka), Zambia	MF	Mfuwe, Zambia
LYV	Ladysmith, S Afr Rep	MG	Mahajanga, Madagascar
LZ	Harry Nkumbula, Zambia	MG	Mongu, Zambia
LZ	Lanzarote, Canary Is	MGY	Mongomeyen, Eq Guinea
LZR	Lanzarote, Canary Is	MHV	Mthatha, S Afr Rep
<b>M</b>		MI	Moi Intl (Mombasa), Kenya
MA	Macenta, Guinea Rep	MIA	Melilla, Melilla
MA	Mahajanga, Madagascar	MIN	Merowe, Sudan
MA	Maiduguri, Nigeria	MIS	Habib Bourguiba (Monastir), Tunisia
MA	Malange, Angola	MIS	Merowe, Sudan
MA	Mansa, Zambia	MIS	Misrata, Libya
MA	Maputo Intl (Maputo), Mozambique	MIU	Maiduguri, Nigeria
MAJ	Majuba, S Afr Rep	MJ	Mananjary, Madagascar
MAK	Marrakech, Morocco	MK	Mekele, Ethiopia
MAK	Marsa Alam, Egypt	MKS	Meknes, Morocco
MAN	Man, Cote d'Ivoire	MKT	Moquattam, Egypt
MAR	Marmora, Algeria	ML	Mouila, Gabon
MAR	Menara Intl (Marrakech), Morocco	MLD	Malindi, Kenya
MAV	Mandera, Kenya	MLK	Malakal, Sudan
MB	Dakhla, Egypt	MLL	Melilla, Spain
MB	Marsa Brega, Libya	MM	George Dick Montshioa (Mafikeng), S Afr Rep
MB	Mbeya, Tanzania	MMA	Mersa Matruh, Egypt
MBA	Mbandaka, Congo, Dr Of	MMV	Mafikeng, S Afr Rep
MBA	Smara, Morocco	MMY	Maromamy, Madagascar

**NAVIGATION AIDS LISTED BY IDENTIFIER - AFRICA**

(See end of listing for Localizers)

MN	Minna, Nigeria	MW	Matsapha (Manzini), Eswatini
MN	Moundou, Chad	MXR	Almaza, Egypt
MNA	El Golea, Algeria	MY	Maradi, Niger
MNA	Minna, Nigeria	MY	Mongomeyen, Eq Guinea
MNV	Maun, Botswana	MZ	Mwanza, Tanzania
MO	Mopti, Mali	MZV	Mazenod (Maseru), Lesotho
MOK	Bordj Mokhtar, Algeria		
MON	Monastir, Tunisia	<b>N</b>	
MOS	Mostaganem, Algeria	NAK	Lanet, Kenya
MOV	Movex, Kenya	NBA	Enfidha, Tunisia
MPK	Bangui, Cen Afr Rep	NC	Chileka (Blantyre), Malawi
MR	Morija, Lesotho	NC	Nacala, Mozambique
MRW	Merowe, Sudan	NC	Newcastle, S Afr Rep
MS	Habib Bourguiba (Monastir), Tunisia	NCL	S. Nicolau, Cape Verde
MS	Massawa, Eritrea	ND	Moanda, Gabon
MS	Masvingo, Zimbabwe	NDG	Diego Garcia, Chagos Archipelago
MS	Matsapha (Manzini), Eswatini	NDJ	N'Djili Intl (Kinshasa), Congo, Dr Of
MS	Mbandaka, Congo, Dr Of	NKW	Diego Garcia, Chagos Archipelago
MS	Plaisance (Mauritius), Mauritius	NL	Jomo Kenyatta Intl (Nairobi), Kenya
MT	Matetsi, Zimbabwe	NL	Nyanza-Lac, Burundi
MT	Mtwara, Tanzania	NLY	Yaounde-Nsimalen, Cameroon
MT	Toamasina, Madagascar	NM	Diori Hamani (Niamey), Niger
MTG	Mitiga, Libya	NM	Nema, Mauritania
MTI	Matadi-Tshimpi, Congo, Dr Of	NM	Niamtougou Intl (Niamtougou), Togo
MTI	Mopti, Mali	NN	Entebbe, Uganda
MU	Mejametalana, Lesotho	NO	Nairobi, Kenya
MU	Musoma, Tanzania	NOZ	Alexandria, Egypt
MU	Mutare, Zimbabwe	NSB	Nosy-Be, Madagascar
MV	Mwanza, Tanzania	NSL	In Salah, Algeria
MV	Toamasina, Madagascar	NSR	Mohammed V Intl (Casablanca), Morocco
MVR	Maroua-Salak, Cameroon	NT	Ivato (Antananarivo), Madagascar

**NAVIGATION AIDS LISTED BY IDENTIFIER - AFRICA**

(See end of listing for Localizers)

NT	Niamtougou, Togo	OJ	Essider, Libya
NUA	Nouasseur (Casablanca), Morocco	OJD	Oujda, Morocco
NV	Navex, Kenya	OK	Boke, Guinea Rep
NVV	Nieuwoudtville, S Afr Rep	OK	N'Djili Intl (Kinshasa), Congo, Dr Of
NW	Ndola, Zambia	OK	Okitipupa, Nigeria
NWB	Nuweibaa, Egypt	OL	Robert Gabriel Mugabe Intl (Harare), Zimbabwe
NY	Niamey, Niger	OM	Kambut (Burdi), Libya
NY	Nyamandhlovu (Bulawayo), Zimbabwe	OM	Matsapha, Eswatini
NYL	Nyala, Sudan	ON	Boufatis, Algeria
NZ	N'Zerekore, Guinea Rep	OO	Ahmed Benbella (Sidi-Chami), Algeria
NZ	Norton (Harare), Zimbabwe	OR	Ahmed Benbella (Oran), Algeria
NZI	Hammamet (Enfidha), Tunisia	OR	Orapa, Botswana
<b>O</b>		OR	Waha 59-A, Libya
OA	Reghaia (Algiers), Algeria	ORA	Ahmed Benbella, Algeria
OA	Samah, Libya	ORI	Pietermaritzburg, S Afr Rep
OAV	Ondangwa, Namibia	ORZ	Ouarzazate, Morocco
OB	Gialo (Warehouse 59-E), Libya	OS	Osubi, Nigeria
OB	Omboue, Gabon	OSB	Osubi, Nigeria
OB	Overberg, S Afr Rep	OT	Oumtounsy, Mauritania
OBD	El Obeid, Sudan	OTK	Ollombo, Congo, Rep Of
OBI	Overberg AB (Overberg), S Afr Rep	OU	Ouargla, Algeria
OBI	Pietermaritzburg, S Afr Rep	OUA	Ouagadougou, Burkina Faso
OBV	Overberg, S Afr Rep	OUR	Ouargla, Algeria
OCT	October, Egypt	OV	Nafoora M4, Libya
ODA	Angads Intl (Oujda), Morocco	OW	Sam Mbakwe (Owerri), Nigeria
ODN	Odienne, Cote d'Ivoire	OWR	Owerri, Nigeria
OE	Oyem, Gabon	OXY	Oxy 103 A, Libya
OG	Ain Beida (Ouargla), Algeria	OY	Oyem, Gabon
OG	Ouagadougou, Burkina Faso	OZT	Ouarzazate, Morocco
OH	Oudtshoorn, S Afr Rep		

**NAVIGATION AIDS LISTED BY IDENTIFIER - AFRICA**

(See end of listing for Localizers)

<b>P</b>		<b>PO</b>	Potiskum, Nigeria
<b>PA</b>	Malabo, Eq Guinea	<b>POT</b>	Port Harcourt, Nigeria
<b>PA</b>	Parakou, Benin	<b>PPI</b>	Polokwane Intl (Polokwane), S Afr Rep
<b>PA</b>	Pemba, Tanzania	<b>PPV</b>	Polokwane, S Afr Rep
<b>PAM</b>	Pampa, Ghana	<b>PR</b>	Principe, Sao Tome & Principe
<b>PB</b>	Abidjan, Cote d'Ivoire	<b>PRA</b>	Praia, Cape Verde
<b>PB</b>	Pemba, Mozambique	<b>PRA</b>	Praslin, Seychelles
<b>PB</b>	PortBell, Uganda	<b>PRB</b>	Sabah, Libya
<b>PDI</b>	Port Elizabeth Intl (Port Elizabeth), S Afr Rep	<b>PRC</b>	Zella 74, Libya
<b>PE</b>	Gazala (Tripoli), Libya	<b>PRF</b>	Piet Retief, S Afr Rep
<b>PE</b>	Nouadhibou, Mauritania	<b>PRF</b>	St Pierre (Pierrefonds), Reunion
<b>PEI</b>	Port Elizabeth Intl (Port Elizabeth), S Afr Rep	<b>PSD</b>	Port Said, Egypt
<b>PEV</b>	Port Elizabeth, S Afr Rep	<b>PSD</b>	Port Sudan, Sudan
<b>PG</b>	Port Gentil, Gabon	<b>PU</b>	Pietermaritzburg, S Afr Rep
<b>PHV</b>	Phalaborwa, S Afr Rep	<b>PVV</b>	Petrusville, S Afr Rep
<b>PIS</b>	Port Sudan, Sudan	<b>PW</b>	Phalaborwa, S Afr Rep
<b>PJV</b>	Port St Johns, S Afr Rep	<b>PY</b>	Plettenberg Bay, S Afr Rep
<b>PK</b>	Kruger Mpumalanga, S Afr Rep	<b>PZ</b>	Pietermaritzburg, S Afr Rep
<b>PKI</b>	Kruger Mpumalanga Intl (Kruger Mpumalanga), S Afr Rep	<b>Q</b>	
<b>PKV</b>	Kruger Mpumalanga, S Afr Rep	<b>QHA</b>	Mekele, Ethiopia
<b>PLS</b>	Plaisance (Mauritius), Mauritius	<b>QL</b>	Quelimane, Mozambique
<b>PMV</b>	Pietermaritzburg, S Afr Rep	<b>R</b>	
<b>PN</b>	Antonio Agostinho Neto (Pointe Noire), Congo, Rep Of	<b>RA</b>	Rand, S Afr Rep
<b>PN</b>	Nouadhibou, Mauritania	<b>RAG</b>	Raguba, Libya
<b>PN</b>	Tripoli Intl (Qizan), Libya	<b>RAV</b>	Rand (Johannesburg), S Afr Rep
<b>PNV</b>	Pilanesberg, S Afr Rep	<b>RBT</b>	Rabat, Morocco
<b>PO</b>	Hwange National Park, Zimbabwe	<b>RBV</b>	Richards Bay, S Afr Rep
<b>PO</b>	Port Gentil, Gabon	<b>RC</b>	Kwekwe, Zimbabwe
		<b>RD</b>	Rand (Johannesburg), S Afr Rep
		<b>RG</b>	Rustenburg, S Afr Rep

**NAVIGATION AIDS LISTED BY IDENTIFIER - AFRICA**

(See end of listing for Localizers)

RG	Rwegura, Burundi	SHG	Suhag, Egypt
RGN	Reggan, Algeria	SHM	Sharm El Sheikh, Egypt
RIV	Robben Island, S Afr Rep	SI	Lusikisiki, S Afr Rep
RJ	Tajoura (Tripoli), Libya	SI	Robert Gabriel Mugabe Intl (Harare), Zimbabwe
RLP	Gran Canaria, Canary Is	SI	Sigui, Guinea Rep
RN	Ahmed Benbella (Oran), Algeria	SIA	Seychelles Intl (Seychelles), Seychelles
ROB	Roberts (Monrovia), Liberia	SK	Roberts Intl (Monrovia), Liberia
ROO	El Sharara, Libya	SK	Saddiq Abubakar III Intl (Sokoto), Nigeria
RS	Rodrigues, Mauritius	SKG	Kedougou, Senegal
RS	Sale Intl (Rabat), Morocco	SKN	Cap Skirring, Senegal
<b>S</b>		SL	Solera, Zimbabwe
SA	Sambava, Madagascar	SLK	Sidi Khedim (Casablanca), Morocco
SAB	Asaba, Nigeria	SLO	St Louis, Senegal
SAH	In Salah, Algeria	SLV	Sutherland, S Afr Rep
SAH	Sahil, Libya	SM	Sainte-Marie, Madagascar
SAK	Anfa, Morocco	SMA	Smara, Morocco
SAL	Sal, Cape Verde	SMH	Ulundi, S Afr Rep
SB	Assab, Eritrea	SMI	Simenti, Senegal
SB	Sambailo, Guinea Rep	SML	Abu Simbel, Egypt
SB	Sambava, Madagascar	SMN	Sidi Slimane, Morocco
SBI	Sale Intl (Rabat), Morocco	SMR	Semar, Algeria
SD	Roland Garros (La Reunion), Reunion	SN	Sunyani, Ghana
SDG	La Reunion, Reunion	SNT	Praia, Cape Verde
SDM	Sidi M'Hamed (Algiers), Algeria	SO	Songo, Mozambique
SDS	Dakar, Senegal	SO	Soroti, Uganda
SEB	Sebha, Libya	SO	Soyo, Angola
SFX	Sfax, Tunisia	SOK	Sokoto, Nigeria
SG	Sangaredi, Guinea Rep	SP	Sao Tome, Sao Tome & Principe
SG	Songea, Tanzania	SP	Selebi-Phikwe, Botswana
SH	St Helena, St Helena	SP	St Pierre (Pierrefonds), Reunion



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(See end of listing for Localizers)

SPO	San Pedro, Cote d'Ivoire	TC	Tchibanga, Gabon
SR	Podor, Senegal	TD	Moundou, Chad
SRT	Sirte, Libya	TD	Tambacounda, Senegal
SSV	Sishen, S Afr Rep	TDF	Tindouf, Algeria
ST	8 Mai 45 (Setif), Algeria	TE	Moramanga, Madagascar
STD	Tambacounda, Senegal	TES	Tenerife-South, Canary Is
STF	N 29c, Libya	TFN	Tenerife-North, Canary Is
STF	Setif, Algeria	TFS	Tenerife-South, Canary Is
STM	Sao Tome, Sao Tome & Principe	TG	Tanga, Tanzania
STV	Standerton, S Afr Rep	TGI	King Shaka Intl (Durban), S Afr Rep
SV	Soroti, Uganda	TGN	Gran Canaria, Canary Is
SVT	Sao Vicente, Cape Verde	TGU	Touggourt, Algeria
SVV	Somersveld, S Afr Rep	TGV	King Shaka (Durban), S Afr Rep
SW	Solwezi, Zambia	TH	Athi River (Nairobi), Kenya
SY	Oumtounsy (Nouakchott), Mauritania	THO	Thohoyandou, S Afr Rep
SZ	Esigodini (Bulawayo), Zimbabwe	TI	Takoradi, Ghana
SZN	Skukuza, S Afr Rep	TI	Thornhill (Gweru), Zimbabwe
<b>T</b>		TIO	Timimoun, Algeria
TA	Tahoua, Niger	TJL	Maroua-Salak, Cameroon
TAB	Ain Draham (Tabarka), Tunisia	TJN	N'Gaoundere, Cameroon
TAG	Ibn Batouta Intl (Tanger), Morocco	TJR	Garoua, Cameroon
TAN	Antanetibe (Antananarivo), Madagascar	TK	Tabarka, Tunisia
TAN	Tanger, Morocco	TKE	Carthage (Tunis), Tunisia
TB	Tabora, Tanzania	TKP	Tshikapa, Congo, Dr Of
TB	Thabazimbi, S Afr Rep	TL	Thornhill (Gweru), Zimbabwe
TBA	Taba, Egypt	TLE	Tamale, Ghana
TBK	Tabarka, Tunisia	TLM	Tlemcen, Algeria
TBL	Carthage (Tunis), Tunisia	TLZ	Lanzarote, Canary Is
TBQ	Tobruk, Libya	TM	Aguenar-Hadj Bey Akhamok (Tamen-ghasset), Algeria
TBS	Tebessa, Algeria	TMS	Tamenghasset, Algeria

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(See end of listing for Localizers)

TN	Ankazobe, Madagascar	TZ	Tzaneen, S Afr Rep
TN	Bahir Dar, Ethiopia	TZN	El Aroui Intl (Nador), Morocco
TNA	Tan Tan, Morocco	TZR	Tazerbo, Libya
TNG	Tanger, Morocco		
TNI	King Shaka Intl (Durban), S Afr Rep	<b>U</b>	
TNN	Tan Tan, Morocco	UB	Lubango, Angola
TNV	Antananarivo, Madagascar	UBA	Ubari, Libya
TO	Thornhill (Gweru), Zimbabwe	UBR	Ubari, Libya
TO	Toamasina, Madagascar	UD	Ulundi, S Afr Rep
TON	Tozeur, Tunisia	UL	Ulundi, S Afr Rep
TOY	Thohoyandou, S Afr Rep	UN	Upington, S Afr Rep
TOZ	Nefta (Tozeur), Tunisia	UPV	Upington, S Afr Rep
TP	Matopos, Zimbabwe	UR	Margate, S Afr Rep
TPI	Tripoli, Libya	UU	Mzuzu, Malawi
TRB	Tiaret, Algeria	<b>V</b>	
TRO	Joday, Libya	VA	Amal, Libya
TS	Raouad, Tunisia	VBR	Beira, Mozambique
TSH	Tshikondeni, S Afr Rep	VBU	J.M. Nkomo (Bulawayo), Zimbabwe
TSI	Carthage (Tunis), Tunisia	VCA	Cabinda, Angola
TTN	Tetouan, Morocco	VCL	Chileka (Blantyre), Malawi
TU	Toliary, Madagascar	VCT	Catumbela, Angola
TU	Tutuka, S Afr Rep	VDO	Oujda, Morocco
TUC	Tunis, Tunisia	VFA	Victoria Falls, Zimbabwe
TV	Stony, Kenya	VG	Eddib V7, Libya
TV	Tabora, Tanzania	VGO	Gokwe, Zimbabwe
TW	Ghararah (Tripoli), Libya	VH	Tagrft V10, Libya
TW	Soavinandriana, Madagascar	VHA	Harare, Zimbabwe
TY	Oumtounsya (Nouakchott), Mauritania	VHD	Vryheid, S Afr Rep
TYE	Cotonou, Benin	VHL	Vryheid, S Afr Rep
TYK	Kandi, Benin	VI	Masvingo, Zimbabwe
TYN	Natitingou, Benin	VKA	Karonga, Malawi

**NAVIGATION AIDS LISTED BY IDENTIFIER - AFRICA**

(See end of listing for Localizers)

VL	Vilankulo, Mozambique	VUE	Luena, Angola
VLC	Lichinga, Mozambique	VUG	Uige, Angola
VLH	Vaalhoek, S Afr Rep	VV	Vereeniging, S Afr Rep
VLI	Harry Nkumbula, Zambia	VWN	Hwange National Park, Zimbabwe
VLS	Lusaka, Zambia	VWV	Victoria West, S Afr Rep
VM	Venetia Mine, S Afr Rep		
VMA	Maputo, Mozambique	<b>W</b>	
VMF	Mfuwe, Zambia	WAV	Wajir, Kenya
VMO	Namibe, Angola	WB	Wonderboom (Pretoria), S Afr Rep
VMS	Matsapha (Manzini), Eswatini	WBV	Walvis Bay, Namibia
VMV	Masvingo, Zimbabwe	WC	Worcester, S Afr Rep
VMZ	Mzuzu, Malawi	WF	Wafa, Libya
VNA	Luanda, Angola	WHV	Windhoek, Namibia
VNC	Nacala, Mozambique	WIV	Witbank, S Afr Rep
VND	Ndola, Zambia	WKI	Waterkloof, S Afr Rep
VNP	Nampula, Mozambique	WKV	Waterkloof, S Afr Rep
VO	Tebesty V-9, Libya	WLD	Beni Walid, Libya
VQL	Quelimane, Mozambique	WMV	Welkom, S Afr Rep
VR	Gran Canaria, Canary Is	WN	Hwange National Park, Zimbabwe
VR	Ras Lanuf V 40, Libya	WO	J.M. Nkomo (Bulawayo), Zimbabwe
VSA	Saurimo, Angola	WR	Wonderboom (Pretoria), S Afr Rep
VSF	Fianarantsoa, Madagascar	WRV	Warden, S Afr Rep
VSK	Sikhuphe, Eswatini	<b>X</b>	
VSL	Maroantsetra, Madagascar	XIL	Luxor Intl (Luxor), Egypt
VSN	Fascene, Madagascar	XS	Beda M3, Libya
VSO	Morondava, Madagascar	XY	Booster, Libya
VSP	Tolagnaro, Madagascar		
VSQ	Toliary, Madagascar	<b>Y</b>	
VTL	Thornhill (Gweru), Zimbabwe	YA	Nsimalen (Yaounde), Cameroon
VTZ	Tete, Mozambique	YAM	Yamoussoukro, Cote d'Ivoire
VUB	Lubango, Angola	YF	Dakar, Senegal

**NAVIGATION AIDS LISTED BY IDENTIFIER - AFRICA**

(See end of listing for Localizers)

YF Leopold Sedar Senghor (Dakar), Senegal  
 YI Ruyigi, Burundi  
 YKS Yamoussoukro, Cote d'Ivoire  
 YNS Yaounde-Nsimalen, Cameroon  
 YOL Yola, Nigeria  
 YT Inyathi (Bulawayo), Zimbabwe

**Z**

ZA Zaria, Nigeria  
 ZAR Zarzaitine, Algeria  
 ZAR Zwara, Libya  
 ZAW Zawia, Libya  
 ZEL Zelten, Libya  
 ZEM Zemmouri, Algeria  
 ZG Ziguinchor, Senegal  
 ZIN Zarzaitine, Algeria  
 ZN Tozeur, Tunisia  
 ZR Zinder, Niger  
 ZRT Zouerate, Mauritania  
 ZT Bu Attifel A100, Libya  
 ZUE Zueitina, Libya  
 ZV Zanzibar, Tanzania  
 ZZ Zanzibar, Tanzania

**LOCALIZERS LISTED BY IDENTIFIER**
**A**

ADA Agadir (Al Massira Intl), Morocco  
 AG Algiers (Houari Boumediene), Algeria  
 AGI Agadir (Inezgane), Morocco  
 AL Algiers (Houari Boumediene), Algeria  
 AN Abidjan (Felix Houphouet Boigny Intl), Cote d'Ivoire

AN Annaba (Rabah Bitat), Algeria  
 ANG Oujda (Angads Intl), Morocco  
 AUN Laayoune (Hassan I), Dakhla/Laayoune

**B**

BA Bata, Eq Guinea  
 BC Bechar (Boudghene Ben Ali Lotfi), Algeria  
 BGI Bangui (M'Poko), Cen Afr Rep  
 BI Biskra (Mohamed Khider), Algeria  
 BIL Alexandria (Borg El Arab Intl), Egypt  
 BJ Bujumbura (Melchior Ndadaye Intl), Burundi  
 BJ Bejaia (Soummam-Abane Ramdane), Algeria  
 BO Bobo-Dioulasso, Burkina Faso  
 BOI Bhisho, S Afr Rep  
 BR Beira, Mozambique  
 BS Bamako (Modibo Keita/Senou), Mali  
 BSI East London, S Afr Rep

**C**

CAS Casablanca (Mohammed V Intl), Morocco  
 CKY Conakry (Gbessia), Guinea Rep  
 CN Cotonou (Cadjehoun Intl), Benin  
 CS Constantine (Mohamed Boudiaf), Algeria  
 CT Constantine (Mohamed Boudiaf), Algeria  
 CTI Cape Town (Cape Town Intl), S Afr Rep

**D**

DJ Djibouti (Ambouli), Djibouti  
 DKL Dakhla (Dakhla Intl), Dakhla/Laayoune

**NAVIGATION AIDS LISTED BY IDENTIFIER - AFRICA**

(See end of listing for Localizers)

**DL** Douala, Cameroon

**DL** Dar-Es-Salaam (Julius Nyerere Intl), Tanzania

**E**
**EBI** Enfidha (Hammamet), Tunisia

**EL** Entebbe (Entebbe Intl), Uganda

**ELI** East London, S Afr Rep

**ELL** Eldoret (Eldoret Intl), Kenya

**ERR** Errachidia (Moulay Ali Cherif Intl), Morocco

**F**
**FRA** Franceville (M'Vengue), Gabon

**G**
**GBW** Gaborone (Sir Seretse Khama Intl), Botswana

**GEI** George, S Afr Rep

**GGI** George, S Afr Rep

**GH** Ghardaia (Noumerat-Moufdi Zakaria), Algeria

**GRA** Garoua, Cameroon

**GUM** Guelmim, Morocco

**H**
**HA** Moroni (Prince Said Ibrahim), Comoros

**HB** Algiers (Houari Boumediene), Algeria

**HE** St Helena, St Helena

**HIL** Hurghada (Hurghada Intl), Egypt

**HM** Hassi Messaoud (Krim Belkacem), Algeria

**HSI** Hoedspruit (Hoedspruit AB), S Afr Rep

**I**
**IAA** Addis Abeba (Bole Intl), Ethiopia

**IAB** Abuja (Nnamdi Azikiwe Intl), Nigeria

**IABS** Abu Simbel, Egypt

**IAC** Abuja (Nnamdi Azikiwe Intl), Nigeria

**IACA** Accra (Kotoka Intl), Ghana

**IAIL** Aswan (Aswan Intl), Egypt

**IAK** Uyo (Victor Attah Intl), Nigeria

**IALZ** Almaza (Almaza AB), Egypt

**IAS** Asmara (Asmara Intl), Eritrea

**IASU** Asyut (Asyut Intl), Egypt

**IBE** Benin, Nigeria

**IBNI** Benghazi (Benina Intl), Libya

**IBS** Bissau (Osvaldo Viera), Guinea-Bissau

**IBT** Bauchi (Sir Abubakar Tafawa Balewa), Nigeria

**IBU** Bulawayo (J.M. Nkomo), Zimbabwe

**IBV** Brazzaville (Maya-Maya), Congo, Rep Of

**ICL** Blantyre (Chileka Intl), Malawi

**ICL** Calabar (Margaret Ekpo), Nigeria

**IDS** Dakar-Diass (Blaise Diagne Intl), Senegal

**IDT** Dutse, Nigeria

**IEN** Enugu (Akanu Ibiam), Nigeria

**IFA** Fuerteventura, Canary Is

**IFA** Victoria Falls, Zimbabwe

**IFL** N'Djamena (Hassan Djamous), Chad

**IFV** Fuerteventura, Canary Is

**IGM** Gombe, Nigeria

**IIL** Ilorin, Nigeria

**IIWT** Tripoli (Tripoli Intl), Libya

**NAVIGATION AIDS LISTED BY IDENTIFIER - AFRICA**

(See end of listing for Localizers)

IJS	Jos (Yakubu Gowon), Nigeria	IPL	Mauritius (Sir Seewoosagur Ramgoolam Intl), Mauritius
IKA	Kaduna (New Kaduna), Nigeria	IPSX	Giza (Sphinx Intl), Egypt
IKK	Kano (Mallam Aminu Kano), Nigeria	IRK	Birnin Kebbi (Sir Ahmadu Bello), Nigeria
IKN	Kano (Mallam Aminu Kano), Nigeria	IRR	Lanzarote, Canary Is
IKNB	Kigali (Kigali Intl), Rwanda	IRZ	Ouarzazate (Ouarzazate Intl), Morocco
IKT	Katsina, Nigeria	ISB	Harare (Robert Gabriel Mugabe Intl), Zimbabwe
IKTM	Cairo (Capital Intl), Egypt	ISBH	Sebha, Libya
IKU	Kumasi, Ghana	ISH	Freetown (Lungi), Sierra Leone
ILA	Lagos (Murtala Muhammed), Nigeria	ISIT	Sirte (Ghardabiya Intl), Libya
ILB	El Beida (Labraq), Libya	ISK	Sokoto (Saddiq Abubakar III Intl), Nigeria
ILB	Lagos (Murtala Muhammed), Nigeria	ISK	Sikhuphe (Sikhuphe Intl), Eswatini
ILB	Ollombo (Sassou N'Guesso), Congo, Rep Of	ISUR	Tenerife-South (Reina Sofia), Canary Is
ILD	Luanda (4th Of February), Angola	ITBA	Taba (Taba Intl), Egypt
ILM	Maseru (Moshoeshe I Intl), Lesotho	ITF	Tenerife-North, Canary Is
ILP	Gran Canaria, Canary Is	ITN	Tetouan (Saniat R'mel), Morocco
ILUX	Luxor (Luxor Intl), Egypt	ITS	Tenerife-South (Reina Sofia), Canary Is
IMA	Maiduguri, Nigeria	ITTC	Cairo (Cairo Intl), Egypt
IMK	Mekele (Alula Aba Nega), Ethiopia	ITTL	Cairo (Cairo Intl), Egypt
IMS	Massawa (Massawa Intl), Eritrea	ITTR	Cairo (Cairo Intl), Egypt
IMS	Manzini (Matsapha), Eswatini	IYL	Yola, Nigeria
INKW	Diego Garcia (Diego Garcia Navy), Chagos Archipelago	IYM	Banjul (Banjul Intl), Gambia
INL	Casablanca (Mohammed V Intl), Morocco	IZFC	Cairo (Cairo Intl), Egypt
INOR	Tenerife-North, Canary Is	IZFL	Cairo (Cairo Intl), Egypt
INR	Casablanca (Mohammed V Intl), Morocco	IZFR	Cairo (Cairo Intl), Egypt
IO	Antananarivo (Ivato), Madagascar		
IOW	Owerri (Sam Mbakwe), Nigeria	<b>J</b>	
IPC	Port Harcourt, Nigeria	JAI	Johannesburg (O.R. Tambo Intl), S Afr Rep
		JAZ	Djerba (Zarzis), Tunisia

**NAVIGATION AIDS LISTED BY IDENTIFIER - AFRICA**

(See end of listing for Localizers)

**JB** Johannesburg (O.R. Tambo Intl), S Afr Rep

**JL** Jijel (Ferhat Abbas), Algeria

**JNI** Johannesburg (O.R. Tambo Intl), S Afr Rep

**JSI** Johannesburg (O.R. Tambo Intl), S Afr Rep

**K**

**KIL** Sharm El Sheikh (Sharm El Sheikh Intl), Egypt

**KIN** Khartoum, Sudan

**KIS** Khartoum, Sudan

**KK** Kilimanjaro (Kilimanjaro Intl), Tanzania

**KM** Lilongwe (Kamuzu Intl), Malawi

**KSI** Cape Town (Cape Town Intl), S Afr Rep

**L**

**LAI** Lanseria (Lanseria Intl), S Afr Rep

**LB** Libreville (Leon M'ba), Gabon

**LFA** Fes (Saiss Intl), Morocco

**LNO** Lubumbashi (Lubumbashi Intl), Congo, Dr Of

**LO** Lome (Gnassingbe Eyadema), Togo

**LO** Lusaka (Kenneth Kaunda Intl), Zambia

**LTi** Makhado (Makhado AB), S Afr Rep

**LWI** Langebaanweg, S Afr Rep

**M**

**MA** Maputo (Maputo Intl), Mozambique

**MAR** Marrakech (Menara Intl), Morocco

**MBO** Malabo, Eq Guinea

**MI** Mombasa (Moi Intl), Kenya

**MIN** Merowe, Sudan

**MIS** Monastir (Habib Bourguiba), Tunisia

**MIS** Merowe, Sudan

**MY** Mongomeyen, Eq Guinea

**N**

**NC** Nacala, Mozambique

**NDJ** Kinshasa (N'Djili Intl), Congo, Dr Of

**NL** Nairobi (Jomo Kenyatta Intl), Kenya

**NM** Niamey (Diori Hamani), Niger

**NM** Niamtougou (Niamtougou Intl), Togo

**NZI** Enfidha (Hammamet), Tunisia

**O**

**OBI** Overberg (Overberg AB), S Afr Rep

**ODA** Oujda (Angads Intl), Morocco

**OG** Ouargla (Ain Beida), Algeria

**OG** Ouagadougou, Burkina Faso

**OR** Oran (Ahmed Benbella), Algeria

**P**

**PDI** Port Elizabeth (Port Elizabeth Intl), S Afr Rep

**PEI** Port Elizabeth (Port Elizabeth Intl), S Afr Rep

**PIS** Port Sudan, Sudan

**PKI** Kruger Mpumalanga (Kruger Mpumalanga Intl), S Afr Rep

**PN** Pointe Noire (Antonio Agostinho Neto), Congo, Rep Of

**PN** Nouadhibou, Mauritania

**PO** Port Gentil, Gabon

**PPI** Polokwane (Polokwane Intl), S Afr Rep

**NAVIGATION AIDS LISTED BY IDENTIFIER - AFRICA**

(See end of listing for Localizers)

**R**

RLP Gran Canaria, Canary Is  
 RN Oran (Ahmed Benbella), Algeria  
 RS Rabat (Sale Intl), Morocco

**S**

SD La Reunion (Roland Garros), Reunion  
 SIA Seychelles (Seychelles Intl), Seychelles  
 SK Monrovia (Roberts Intl), Liberia  
 SL Sal (Amilcar Cabral), Cape Verde  
 SP Sao Pedro (Cesaria Evora Intl), Cape Verde  
 ST Setif (8 Mai 45), Algeria  
 SY Nouakchott (Oumtounsy), Mauritania

**T**

TAB Tabarka (Ain Draham), Tunisia  
 TAG Tanger (Ibn Batouta Intl), Morocco  
 TBL Tunis (Carthage), Tunisia  
 TGI Durban (King Shaka Intl), S Afr Rep  
 TKE Tunis (Carthage), Tunisia  
 TM Tamenghasset (Aguenar-Hadj Bey Akhamok), Algeria  
 TNI Durban (King Shaka Intl), S Afr Rep  
 TO Toamasina, Madagascar  
 TOZ Tozeur (Nefta), Tunisia  
 TSI Tunis (Carthage), Tunisia  
 TY Nouakchott (Oumtounsy), Mauritania  
 TZN Nador (El Aroui Intl), Morocco

**W**

WBI Walvis Bay, Namibia

WD Windhoek (Hosea Kutako Intl), Namibia

WKI Waterkloof, S Afr Rep

**X**

XIL Luxor (Luxor Intl), Egypt

**Y**

YA Yaounde (Nsimalen), Cameroon  
 YF Dakar (Leopold Sedar Senghor), Senegal  
 YKS Yamoussoukro, Cote d'Ivoire





# Meteorology



# Meteorology

## Meteorology Data - Africa

**AFRICA**  
**AVAILABILITY OF VOLMET BROADCASTS**

## RADIOTELEPHONY

Identify location for which weather is desired and find station(s) disseminating broadcast.

<b>Weather for</b>	<b>Available from Stations</b>
Abidjan (Felix Houphouet Boigny Intl)	Royal Air Force
Agadir (Al Massira Intl)	Casablanca, Las Palmas
Alexandria (Borg El Arab Intl)	Cairo
Alexandria (Intl)	Cairo
Algiers (Houari Boumediene)	Algiers, Royal Air Force
Annaba (Rabah Bitat)	Algiers
Antananarivo (Ivato)	Antananarivo
Antsiranana (Arrachart)	Antananarivo
Ascension I. (Ascension Aux AB)	Royal Air Force
Aswan (Intl)	Cairo
Bamako (Senou)	Royal Air Force
Bangui (M'Poko)	Brazzaville
Beirut (Rafic Hariri Intl)	Cairo
Benghazi (Benina Intl)	Cairo
Brazzaville (Maya-Maya)	Brazzaville
Cairo (Intl)	Cairo, Royal Air Force
Casablanca (Mohammed V Intl)	Casablanca, Las Palmas
Constantine (Mohamed Boudiaf)	Algiers
Dakar (Leopold Sedar Senghor)	Royal Air Force
Damascus (Intl)	Cairo
Djerba (Zarzis)	Tunis
Douala	Brazzaville
El Borma	Tunis
Enfidha (Hammamet)	Tunis
Fes (Saiss Intl)	Casablanca
Gabes (Matmata)	Tunis
Gafsa (Ksar)	Tunis

**AFRICA**  
**AVAILABILITY OF VOLMET BROADCASTS**

<b>Weather for</b>	<b>Available from Stations</b>
Gran Canaria	Casablanca
Hurghada (Intl)	Cairo
Jeddah (King Abdulaziz Intl)	Cairo
Kano (Mallam Aminu Kano)	Brazzaville
Khartoum	Cairo
Kinshasa (N'Djili Intl)	Brazzaville
La Reunion (Roland Garros)	Antananarivo
Lagos (Murtala Muhammed)	Brazzaville
Libreville (Leon M'Ba)	Brazzaville, Libreville
Luanda (4th of February)	Brazzaville
Luxor (Intl)	Cairo
Mahajanga (Philibert Tsiranana)	Antananarivo
Marrakech (Menara Intl)	Casablanca, Las Palmas
Mauritius (Sir Seewoosagur Ramgoolam Intl)	Antananarivo
Mombasa (Moi)	Royal Air Force
Monastir (Habib Bourguiba)	Tunis
Moroni (Prince Said Ibrahim)	Antananarivo
Nador (El Aroui Intl)	Casablanca
Nairobi (Jomo Kenyatta)	Royal Air Force
N'Djamena (Hassan Djamous)	Brazzaville
Nosy-Be (Fascene)	Antananarivo
Oran (Ahmed Benbella)	Algiers
Oujda (Angads Intl)	Casablanca
Rabat (Sale Intl)	Casablanca
Sainte-Marie	Antananarivo
Sfax (Thyna)	Tunis
Sharm El Sheikh (Intl)	Cairo
Tabarka (Ain Draham)	Tunis
Tanger (Ibn Batouta Intl)	Casablanca

**AFRICA**  
**AVAILABILITY OF VOLMET BROADCASTS**

<b>Weather for</b>	<b>Available from Stations</b>
Tenerife-South (Reina Sofia)	Royal Air Force
Toamasina	Antananarivo
Tolagnaro (Maurillac)	Antananarivo
Tozeur (Nefta)	Tunis
Tunis (Carthage)	Algiers, Tunis
Windhoek	Windhoek
Yaounde (Nsimalen)	Brazzaville

<b>STATION</b>	<b>IDENT</b>	<b>FREQS</b>	<b>BROADCAST TIMES</b>		<b>CON- TENT &amp; FORMAT</b>	<b>AERODROMES</b>
			<b>PERIOD</b>	<b>H+</b>		
Algiers	Radio	126.80	0500-2200	10-35 and 40-05	METAR QNH	Algiers (Houari Boume- diene), Annaba (Rabah Bitat), Constantine (Mo- hamed Boudiaf), Oran (Ahmed Benbella), Tunis (Carthage), Madrid (Bara- jas), Barcelona (El Prat), Palma de Mallorca, Mar- seille/Provence, Nice/ Cote D'Azur
Antananarivo	Volmet	5499 10057	H24	25-35 and 50-60	METAR SIGMET	Antananarivo (Ivato), Ant- siranana (Arrachart), La Reunion (Roland Garros), Mahajanga (Philibert Tsiranana), Mauritius (Sir Seewoosagur Ramgoo- lam Intl), Moroni (Prince Said Ibrahim), Nosy-Be (Fascene), Sainte-Marie, Toamasina, Tolagnaro (Maurillac)

**AFRICA**  
**AVAILABILITY OF VOLMET BROADCASTS**

STATION	IDENT	FREQS	BROADCAST TIMES		CON-TENT & FORMAT	AERODROMES
			PERIOD	H+		
Brazzaville	Volmet	10057	1800-0500	15-25 and 45-55	METAR TREND	Brazzaville (Maya-Maya), N'Djamena (Hassan Djamous), Douala, Bangui (M'Poko), Libreville (Leon M'Ba), Yaounde (Nsima-len), Kinshasa (N'Djili Intl), Kano (Mallam Aminu Kano) <sup>1</sup> , Lagos (Murtala Muhammed) <sup>1</sup> , Luanda (4th of February) <sup>1</sup>
Cairo	Volmet	126.20	H24	cont.	METAR TREND	Cairo (Intl), Alexandria (Intl), Alexandria (Borg El Arab Intl), Aswan (Intl), Hurghada (Intl), Luxor (Intl), Sharm El Sheikh (Intl), Athens (Eleftherios Venizelos Intl), Benghazi (Benina Intl), Beirut (Rafic Hariri Intl), Damascus (Intl), Jeddah (King Abdulaziz Intl), Khartoum, Larnaca (Intl)
Casablanca	Volmet	127.60	H24	cont.	METAR TREND QNH	Casablanca (Mohammed V Intl)
					METAR TREND	Agadir (Al Massira Intl), Fes (Saiss Intl), Marrakech (Menara Intl), Nador (El Aroui Intl), Rabat (Sale Intl), Seville
					METAR	Oujda (Angads Intl), Tanger (Ibn Batouta Intl), Gran Canaria, Lisbon, Malaga (Costa Del Sol)

**AFRICA**  
**AVAILABILITY OF VOLMET BROADCASTS**

STATION	IDENT	FREQS	BROADCAST TIMES		CON- TENT & FORMAT	AERODROMES
			PERIOD	H+		
Las Palmas	Volmet	126.20	H24	cont.	METAR QNH TREND	Gran Canaria, Tenerife-North, Tenerife-South (Reina Sofia), Fuerteventura, Lanzarote, Casa-blanca (Mohammed V Intl), Marrakech (Menara), Agadir (Al Massira Intl), Madrid (Adolfo Suarez Madrid-Barajas), Lisbon
Libreville	LV	112.10	0700-1800	cont.	METAR TREND	Libreville (Leon M'Ba)
Royal Air Force	Volmet	5450 11253	H24	13/43	METAR	Tenerife-South (Reina Sofia), Dakar (Leopold Sedar Senghor), Ascension I. (Ascension Aux AB), Mombasa (Moi), Nairobi (Jomo Kenyatta), Bamako (Senou), Algiers (Houari Boumediene), Abidjan (Felix Houphouet Boigny Intl)
				19/49		Cairo (Intl)
Tunis <sup>2</sup>	Volmet	126.60	H24	cont.	METAR TREND SPECI SIGMET	Tunis (Carthage), Djerba (Zarzis), Enfidha (Ham-mamet), Monastir (Habib Bourguiba), Sfax (Thyna), Tabarka (Ain Draham), Tozeur (Nefta), Gafsa (Ksar), Gabes (Matmata)
					METAR SPECI AIRMET TAF <sup>1</sup>	El Borma
Windhoek	WHV	114.50	H24	cont.	METAR	Windhoek

<sup>1</sup> as available

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**AFRICA**  
**AVAILABILITY OF VOLMET BROADCASTS**

<sup>2</sup> D-Volmet available





# Air Traffic Control



# Air Traffic Control

State Rules and Procedures - Africa

## AFRICA REDUCED VERTICAL SEPARATION MINIMUM (RVSM)

### AFI RVSM AIRSPACE

Reduced Vertical Separation Minimum (RVSM) is vertical separation of aircraft by 1000ft between FL290 and FL410. With effect from 0001 UTC, 25 SEP 2008, only RVSM approved aircraft and State aircraft will be cleared to operate in the following FIRs:

Accra, Addis Ababa, Algiers, Antananarivo, Asmara, Beira, Brazzaville, Cairo, Canaries, Cape Town, Casablanca, Dakar, Dakar Oceanic, Dar es Salaam, Entebbe, Gaborone, Harare, Johannesburg, Johannesburg Oceanic, Kano, Khartoum, Kinshasa, Lilongwe, Luanda, Lusaka, Mauritius, Mogadishu, Nairobi, N'Djamena, Niamey, Roberts, Sal Oceanic, Seychelles, Tripoli, Tunis, Windhoek.

There is no transition airspace in entire AFI RVSM airspace.

### AFI RVSM TRANSITION AIRSPACE

Transition tasks associated with the application of a 1000ft Vertical Separation Minimum (VSM) within the AFI RVSM Airspace shall be carried out in all, the adjacent FIRs/UIRs to the AFI RVSM airspace.

ATC units on the interface of AFI RVSM airspace shall:

- establish RVSM approved & non-RVSM approved State aircraft entering RVSM airspace at the appropriate RVSM FL;
- apply 1000ft VSM between RVSM approved aircraft, otherwise apply 2000ft RVSM;
- establish non-RVSM approved civil aircraft below FL290 if landing at an aerodrome below the RVSM airspace;
- establish non-RVSM approved civil aircraft above FL410 if transiting above the RVSM airspace & landing at an aerodrome outside AFI RVSM airspace;
- for aircraft leaving AFI RVSM airspace, apply 2000ft VSM and establish them at the appropriate non-RVSM levels.

### ICAO TABLE OF CRUISING LEVELS FOR AFI RVSM AIRSPACE

**Cruising levels as per direction of flight - FL280 to FL430**

Route from 180 degrees to 359 degrees	Route from 000 degrees to 179 degrees
FL430 (non RVSM level above RVSM airspace)	
	FL410
FL400	
	FL390
FL380	
	FL370
FL360	

**AFRICA**  
**REDUCED VERTICAL SEPARATION MINIMUM (RVSM)**

**Cruising levels as per direction of flight - FL280 to FL430 (continued)**

Route from 180 degrees to 359 degrees	Route from 000 degrees to 179 degrees
	FL350
FL340	
	FL330
FL320	
	FL310
FL300	
	FL290
FL280 ( non RVSM level below RVSM airspace)	

## FLIGHT OPERATIONS WITHIN THE AFI RVSM AIRSPACE

Except for State aircraft only RVSM approved aircraft shall be permitted to operate within the AFI RVSM airspace it should be noted that within the AFI RVSM airspace all cruising levels are equally assignable by ATC to all RVSM approved and State aircraft, provided that the applicable vertical separation minimum is applied.

ATC shall:

- only clear IFR RVSM approved aircraft & State aircraft into AFI RVSM airspace;
- provide a 1000ft VSM between RVSM approved aircraft;
- provide 2000ft VSM between all military formation flights and any other aircraft.

## RVSM PROCEDURES

Only approved State aircraft shall be entitled to operate within the AFI RVSM Airspace, regardless of the RVSM status of the aircraft.

All operators filing Repetitive Flight Plans (RPLs) shall include in item Q of the RPL all equipment and capability information in conformity with item 10 of the ICAO flight plan.

Operators of RVSM approved aircraft shall indicate the approval status by inserting the letter “W” in item 10 of the ICAO Flight Plan, and in item Q of the Repetitive Flight Plan (RPL), regardless of the requested flight level.

Operators of non-RVSM approved State aircraft with a requested flight level of FL290 or above shall insert “STS/NONRVSM” in item 18 of the ICAO flight plan.

Operators of RVSM approved aircraft and non-RVSM approved State aircraft intending to operate within the AFI RVSM Airspace shall include the following in item 15 of the ICAO flight plan:

- a. the entry point at the lateral limits of the AFI RVSM Airspace, and the requested flight level for that portion of the route commencing immediately after the RVSM entry point; and

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- b. the exit point at the lateral limits of the AFI RVSM Airspace, and the requested flight level for that portion of the route commencing immediately after the RVSM exit point.

**STATE AIRCRAFT OPERATING WITHIN AFI RVSM AIRSPACE**

All State aircraft operating in AFI RVSM Airspace will be considered as non-RVSM MASPS compliant and therefore non-RVSM approved. Therefore, the VSM required between State and other traffic shall be 2000ft. State aircraft, i.e. military aircraft, might be exempted from AFI RVSM requirements and where applicable, the indication that a non-RVSM approved aircraft is a State aircraft should be displayed.

**IN-FLIGHT CONTINGENCY PROCEDURES**

An in-flight contingency affecting flight in the AFI RVSM Airspace pertains to unforeseen circumstances, which directly impact on the ability of one or more aircraft to operate in accordance with the vertical navigation performance requirements of the AFI RVSM Airspace.

- The pilot shall inform ATC as soon as possible of any circumstances where the vertical navigation performance requirements for the AFI RVSM Airspace cannot be maintained;
- In above mentioned case, the pilot shall obtain a revised air traffic control clearance prior to initiating any deviation from the cleared route and/or flight level, whenever possible. Where a revised ATC clearance could not be obtained prior to such a deviation, the pilot shall obtain a revised clearance as soon as possible thereafter;
- ATC actions will be based on the intentions of the pilot, the overall air traffic situation, and the real-time dynamics;
- Suspension of RVSM refers to a discontinuance of the use of a vertical separation minimum of 1000ft between RVSM approved aircraft operating within the AFI RVSM Airspace;
- A VSM of 2000ft shall be applied between all aircraft operating within the portion of the AFI RVSM Airspace where RVSM has been suspended, regardless of the RVSM approval status of the aircraft.

**AIRSPACE USER REQUIREMENTS**

According to the ICAO Regional Supplementary Procedures - Doc 7030/5, AFI Part 1, the following compliance requirements apply:

Except for State aircraft, Operators intending to conduct flights will require an RVSM Approval either from the State in which the Operator is based or from the State in which the aircraft is registered. To obtain such an RVSM approval, Operators will need to satisfy the said State:

- a. That aircraft for which the RVSM Approval is sought have the vertical navigation performance capability required for RVSM operations through compliance with the criteria of the RVSM Minimum Aircraft Systems Performance Specifications (MASPS).
- b. That they have instituted procedures in respect of continued airworthiness (maintenance and repair) practices and programs; and
- c. That they have instituted flight crew procedures for operations in the AFI RVSM airspace.

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### REDUCED VERTICAL SEPARATION MINIMUM (RVSM)

*NOTE: An RVSM approval is not restricted to a specific region . Instead, it is valid globally on the understanding that any operating procedures specific to a given region, in this case the AFI region, should be stated in the operations manuals or appropriate crew guidance.*

## HEIGHT MONITORING

### Requirement for participation in the RVSM height monitoring program

The requirement for monitoring systems from the initial RVSM feasibility studies and associated guidance as developed by the ICAO Review of General Concept of Separation Panel (RGCSPP), and is specified in ICAO Doc 9574, “Manual on implementation of a 300m (1000ft) Vertical Separation Minimum between FL290 and FL410 inclusive”.

## MONITORING SYSTEMS

The AFI RVSM monitoring system consists of portable GPS Monitoring Units (GMUs), which collect the required data.

For aircraft operators, the primary contact for the AFI Monitoring Program will be the AFI RMA (ARMA). For the AFI RVSM program, the ARMA will support operators (and approval authorities) on any issue related to RVSM approval and monitoring. It is important for the ARMA to have an accurate record of a point of contact for any queries that might arise from ongoing height monitoring. Operators are therefore requested to include a completed ARMA Point of Contact details with their first reply to the ARMA. Thereafter there is no further requirement unless there has been a change to the details requested on the form.

## RVSM APPROVAL

Meeting the pre-requisites for monitoring, i.e. satisfying the appropriate RVSM airworthiness requirements and institute procedures in respect of continued airworthiness (maintenance and repair) practices and programs is not sufficient for RVSM approval.

## COMMUNICATION

### CONTROLLER/PILOT PHRASEOLOGY

Phrase	Purpose
<i>(call sign)</i> <b>CONFIRM RVSM APPROVED</b>	Used by the controller to ascertain the RVSM approval status of the acft.
<b>NEGATIVE RVSM<sup>1</sup></b>	Used by the pilot to report non-RVSM approval status. <ul style="list-style-type: none"> <li>a. on the initial call on any frequency within the CH RVSM air-space (controllers shall provide a read back with this same phrase), and</li> <li>b. in all requests for flight level changes</li> <li>c. in all read backs of flight level clearances pertaining to flight levels.</li> </ul>

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**REDUCED VERTICAL SEPARATION MINIMUM (RVSM)**

**CONTROLLER/PILOT PHRASEOLOGY (continued)**

Phrase	Purpose
<b>AFFIRM RVSM<sup>1</sup></b>	Used by the pilot to report RVSM approval status.
<b>CONFIRM WHEN ABLE TO RESUME RVSM<sup>1</sup></b>	Used by the controller to request confirmation that an aircraft has regained RVSM approved status or a pilot is ready to resume RVSM operations.
<i>(call sign)</i> <b>UNABLE ISSUE CLEARANCE INTO RVSM AIRSPACE, MAINTAIN [or DESCEND TO, or CLIMB TO] FLIGHT LEVEL (number)</b>	Used to deny ATC clearance into CH RVSM airspace.
<b>UNABLE RVSM DUE TURBULENCE<sup>1</sup></b>	Used by the pilot to report when severe turbulence affects the aircraft's capability to maintain the height-keeping requirements for RVSM.
<b>UNABLE RVSM DUE EQUIPMENT<sup>1</sup></b>	Used by the pilot to report that the aircraft's equipment has degraded below the minimum aircraft system performance specifications (MASPS).
<b>READY TO RESUME RVSM<sup>1</sup></b>	Used by the pilot to report the ability to resume operations within the CH RVSM airspace after an equipment or weather-related contingency.
<b>REPORT WHEN ABLE TO RESUME RVSM</b>	Used by the controller to confirm that an aircraft has regained its RVSM approval status or to confirm that the pilot is ready to resume RVSM operations.
<sup>1</sup> indicates a pilot transmission	

## INFORMATION

Further information on the RVSM program is available on the AFI RVSM Web site: [www.icao.int/esaf](http://www.icao.int/esaf)

For exchange of data on aircraft RVSM compliance status and for any information on the AFI RVSM approval and monitoring aspects, please contact:

ARMA

Address: Private Bag X15  
 South Africa  
 1622

Tel: +27 11 928 6506

Fax: +27 11 928 6420

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**AFRICA**  
**REDUCED VERTICAL SEPARATION MINIMUM (RVSM)**

E-Mail:           afirma@atns.co.za

Internet:        www.atns.co.za

For any further information on policy, planning and implementation issues for RVSM in the AFI RVSM area, please contact the:

AFI RVSM Program Office

ICAO Eastern and Southern Africa Office

Address:        Limuru Road, Gigiri  
                    United Nations Accomodation  
                    Nairobi  
                    Kenya

Tel:             +254 20 7622-378

Fax:             +254 20 7623-028

E-Mail:         Apolo.kharuga@icao.unon.org



**ALGERIA**  
**RULES AND PROCEDURES**

## GENERAL

In general, the air traffic rules and procedures in force and the organization of the air traffic services are in conformity with ICAO Standards, Recommended Practices and Procedures.

Units of measurement used in all air and ground operations are as listed in the following table.

MEASUREMENT OF	UNIT
Distance used in navigation, position reporting, etc.	Nautical Miles and Tenths
Relatively short distances such as those relating to aerodromes (e.g., runway lengths)	Meters
Altitude, elevations and heights	Meters
Horizontal speed including wind speed	Knots
Vertical speed	Meters per Second
Wind direction for landing and taking off	Degrees Magnetic
Wind direction except for landing and taking off	Degrees True
Visibility including runway visual range	Kilometers or Meters
Altimeter setting	Hectopascal
Temperature	Degrees Celsius
Weight	Metric Tons or Kilograms
Time	Hours and Minutes, the day of 24hrs beginning at midnight UTC

## WGS-84 IMPLEMENTATION STATUS

WGS-84 compliant.

## FLIGHT PROCEDURES

### HOLDING

Holding procedures comply with Jeppesen ATC-Chapter "Flight Procedures (DOC 8168) - Holding Procedures", Table IV-1-1, Holding Speeds.

### PROCEDURE LIMITATIONS AND OPTIONS

Instrument approach procedures are based on the PANS-OPS, Document 8168.

### AIRPORT OPERATING MINIMUMS

Algeria publishes State airport operating minimums (AOM) for landing and take-off.

Jeppesen published minimums are not below State minimums.

**ALGERIA**  
**RULES AND PROCEDURES**

## **ATS AIRSPACE CLASSIFICATION**

Algeria has adopted the ICAO ATS airspace classification as listed in ATC-Chapter "ICAO ATS Airspace Classifications - Annex 11".

Airspace classes "A", "D", "E" are used within Algiers FIR.

## **SPECIAL REQUIREMENTS AND REGULATIONS**

### **ALTIMETER SETTINGS**

Arrival and departure altimeter settings are provided as follows:

- international airports: QNH and QFE values;
- domestic airports: only QFE values (QNH on request).

### **COMMUNICATIONS**

All aircraft operating outside controlled airspace and within 27NM of restricted, prohibited or danger areas, shall maintain a listening watch on 121.5MHz, especially near the Algeria FIR boundary.

### **FLIGHT PLANNING**

A flight plan is required for all VFR and IFR flights.

Except for repetitive flight plans, a flight plan shall be submitted at least 30 minutes prior to departure.

### **Flight Plan Message Addressing**

Flight movement messages for IFR flights relating to traffic shall be addressed as follows:

Algiers FIR	DAAAZQZX
Algiers TMA	DAAGZAZX DAAGZPZX DAAGZTZX
Annaba TMA	DABBZAZX DABBZPZX DABBZTZX
Constantine TMA	DABCZAZX DABCZPZX DABCZTZX

**ALGERIA  
RULES AND PROCEDURES**

Oran TMA	DAOOZAZX DAOOZPZX DAOOZTZX
Hassi Messaoud TMA	DAUHZAZX DAUHZPZX DAUHZTZX

Flight Plans and related ATS Traffic Service (ATS) messages to aerodromes in Algeria shall be addressed as follows:

- ICAO location indicator followed by ZTZX and ZPZX.

For Flight Plans to destinations in Europe or transiting Europe add the following addresses:

- EUCHZMFP
- EUCBZMFP.

**ACAS/TCAS II REQUIREMENTS**

All civil fixed-wing turbine-engined aircraft having a maximum take-off mass exceeding 5700kg, or a maximum approved passenger seating configuration of more than 19 are required to be equipped with ACAS/TCAS II, version 7.1.

**DATA LINK SERVICES****General**

CPDLC services are available as an auxiliary mean of communication in Algiers FIR airspace.

**Flight Plan**

The operator is responsible for inserting the following items in ICAO flight plan:

- Item 10a - the letter “J” in order to indicate data link capability;
- Item 10b - the letter “D” in order to indicate ADS/C capability;
- Item 18 - DAT/ followed by one or more appropriate letters in order to indicate the type of data link equipment carried when the letter “J” is inserted in Item 10a;
- Item 18 - the aircraft registration shall be inserted preceded by the REG indicator if different from the identification mentioned in Item 7 of the flight plan.

**Logon**

Aircraft shall logon using DAAA between 15 and 30 minutes before entering Algiers FIR.

**Logoff**

The disconnection must take place no later than 5 minutes after leaving Algiers FIR, unless otherwise agreed between controller and pilot.

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**ALGERIA**  
**RULES AND PROCEDURES****DIFFERENCES FROM ICAO STANDARDS AND PROCEDURES****ICAO REFERENCE****Annex 2**

**3.3.1.2** Flight plans are additionally required for flights over desert regions and over the sea.

**5.1.2** IFR flights shall be conducted at a height of at least 1500ft (450m) above the highest obstacle located within 4.3NM (8km) of the estimated position of the aircraft in flight.

**ANGOLA**  
**RULES AND PROCEDURES**

## GENERAL

In general, the air traffic rules and procedures in force and the organization of the air traffic services are in conformity with ICAO Standards, Recommended Practices and Procedures.

Units of measurement used in all air and ground operations are as listed in the following table.

Measurement of	Unit
Distance used in navigation, position reporting, etc., generally in excess of 2 to 3 nautical miles	Nautical Miles and Tenths
Relatively short distances such as those relating to aerodromes (e.g., runway lengths)	Meters
Altitude, elevations and heights	Feet
Horizontal speed including wind speed	Knots
Vertical speed	Feet per Minute
Wind direction for landing and taking off	Degrees Magnetic
Wind direction except for landing and taking off	Degrees True
Visibility including runway visual range	Kilometers or Meters
Altimeter setting, atmospheric pressure	Hectopascals
Temperature	Degrees Celsius
Weight	Metric Tons or Kilograms
Time	Hours and Minutes, the day of 24hrs beginning at midnight UTC

## WGS-84 IMPLEMENTATION STATUS

WGS-84 compliant.

## FLIGHT PROCEDURES

### HOLDING

Holding procedures comply with Jeppesen ATC-Chapter "Flight Procedures (DOC 8168) - Holding Procedures", Table IV-1-1, Holding Speeds.

### PROCEDURE LIMITATIONS AND OPTIONS

Instrument approach procedures are based on the PANS-OPS, Document 8168.

### AIRPORT OPERATING MINIMUMS

Angola does not publish State airport operating minimums.

Angola publishes Obstacle Clearance Altitudes (Heights) [OCA(H)].

**ANGOLA  
RULES AND PROCEDURES****ATS AIRSPACE CLASSIFICATION**

Angola has adopted the ICAO ATS airspace classification as listed in Jeppesen ATC-Chapter "ICAO ATS Airspace Classifications - Annex 11".

Airspace classes "A", "C" and "G" are used within Luanda FIR.

**SPECIAL REQUIREMENTS AND REGULATIONS****COMMUNICATION**

Controlled flights and certain IFR flights operating outside controlled airspace to maintain a continuous listening watch on the appropriate radio frequency and establish two-way communication, as necessary, with the air traffic services unit providing FIS.

**POSITION REPORTING PROCEDURES**

On routes defined by designated significant points, position reports shall be made when over, as soon as possible after passing each compulsory reporting point. On routes not defined by designated significant points, position reports shall be made as soon as possible after the first half hour of flight and hourly intervals thereafter.

**FLIGHT PLANNING**

Flight plans are required for all flights.

**Flight Plan Message Addressing**

Flight movement messages for IFR flights relating to traffic shall be addressed to:

Luanda ARO: FNLUZPZX

**LONGITUDINAL SEPARATION**

Longitudinal time separation normally applied between aircraft at the same level on the same track in Luanda FIR is 20 minutes.

Longitudinal separation based on Mach Number Technique (MNT) between jet aircraft flying on the same track, maintaining cruising level, climbing or descending will be:

10 minutes or 9 to 5 minutes if the preceding aircraft is maintaining a faster Mach number than the following aircraft, the required separation shall be according the table below:

- a. 9 minutes if the preceding aircraft is maintaining a Mach number 0,02 faster than the following.
- b. 8 minutes if the preceding aircraft is maintaining a Mach number 0,03 faster than the following.
- c. 7 minutes if the preceding aircraft is maintaining a Mach number 0,04 faster than the following.
- d. 6 minutes if the preceding aircraft is maintaining a Mach number 0,05 faster than the following.

**ANGOLA  
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- e. 5 minutes if the preceding aircraft is maintaining a Mach number 0,06 faster than the following.

Once the minimum of 10 minutes longitudinal separation based on the MNT is provided, the preceding aircraft shall maintain a Mach number equal or faster than the following.

**REQUIRED NAVIGATION PERFORMANCE**

Following routes are designated as RNAV5:

- UG853, TERBA to VNA;
- UH600, VNA to VSA;
- UJ614, VNA to UB;
- UJ614F, UB to EVUVI;
- UL307, ABAPU to ONTAR;
- UN184, EVUVI to EGNAB;
- UN187, ANVAG to VNA;
- UN190, OKDOL to VNA;
- UQ7, VNA to KU;
- UR526, LIKAD to VNA;
- UT373, ANVAG to DUGRA;
- UT374, UB to EPMES;
- UT375, EVUVI to ETLOV;
- UT941, AGRAM to VNA;
- UT942, VNA to EPNON.

Following routes are designated RNP/RNAV10:

- UA400, ARAKI to EGSUD;
- UB528, VUE to APDAR;
- UG652, KOSOK to UDNOR;
- UH612, VNA to OKSOR;
- UM306, VNA to INUGA;
- UM731, DURNA to EPNUL;
- UM998, INUGA to BUGRO;
- UN190, VNA to OKDOL;
- UR991, GAPEL to UDMON;
- UT357, LIKAD to TETUX;

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- UT371, VNA to UTSAG;
- UT385, VCA to NIDUS;
- UT398, LIKAD to NIDUS;
- UT399, VNA to DUGRA;
- UT417, TILAP to TETUX;
- UT943, UNLOK to ITNEL.

### ATLANTIC OCEAN RANDOM ROUTING RNAV AREA (AORRA)

Angola has implemented the AORRA between FL290 and FL410.

Flights operating within the AORRA in Luanda FIR shall enter and exit AORRA via designated entry/exit gates.

No aircraft shall flight plan to operate in the AORRA airspace unless it is RNP10 certified, except in the following circumstances:

- the aircraft is being initially delivered to the State of registry or the State of the operator;
- the aircraft is certified but experienced navigation degradation and is being flown back to base or to a maintenance facility for repairs;
- the aircraft is engaged on a humanitarian or mercy flight;
- State aircraft.

RNP10 compliance shall be indicated placing a “R” in Item 10 of the ICAO flight plan form, in the case of repetitive flight plans RNP10 compliance shall be indicated placing an “R” in Item Q of the RPL.

Flight plans shall contain entry/exit point to AORRA when required and the estimated time for every 5° of longitude.

Position reporting shall be required at entry/exit gates, 10E, 05E, 00E/W, 05W, 10W as well as any other position required by ATC.

### DATA LINK SERVICES

The CPDLC AFTN logon address for Luanda FIR is FNAN.

## DIFFERENCES FROM ICAO STANDARDS AND PROCEDURES

### ICAO REFERENCE

#### Annex 2

**4.4 (a)** Unless authorized by the appropriate ATS authority, VFR flights shall not be operated above FL200.



**BOTSWANA  
RULES AND PROCEDURES**

## GENERAL

In general, the air traffic rules and procedures in force and the organization of the air traffic services are in conformity with ICAO Standards, Recommended Practices and Procedures.

Units of measurement used in all air and ground operations are as listed in the following table.

Measurement of	Unit
Distance used in navigation, position reporting, etc., generally in excess of 2 nautical miles	Nautical Miles and Tenths
Relatively short distances such as those relating to aerodromes (e.g., runway lengths)	Meters
Altitude, elevations and heights	Feet
Horizontal speed including wind speed	Knots
Vertical speed	Feet per Minute
Wind direction for landing and taking off	Degrees Magnetic
Wind direction except for landing and taking off	Degrees True
Visibility including runway visual range	Kilometers or Meters
Altimeter setting	Hectopascals
Temperature	Degrees Celsius
Weight	Metric Tons or Kilograms
Time	Hours and Minutes, the day of 24hrs beginning at midnight UTC

## WGS-84 IMPLEMENTATION STATUS

WGS-84 compliant.

## FLIGHT PROCEDURES

### HOLDING

Holding procedures comply with Jeppesen ATC-Chapter "Flight Procedures (DOC 8168) - Holding Procedures", Table IV-1-1, Holding Speeds.

## PROCEDURE LIMITATIONS AND OPTIONS

Instrument approach procedures are based on the PANS-OPS, Document 8168.

**BOTSWANA  
RULES AND PROCEDURES****Global Positioning System (GPS) Operations*****Enroute Operations***

GPS may be used for IFR guidance for enroute operations subject to the following provisions and limitations:

- a. The GPS navigation equipment must be approved in accordance with the requirements specified in Technical Standard Order (TSO) C129 or C129a (Class A1, A2, B1, B2, B3, B4, C1, C2, C3 or C4), installed and approved in accordance with the appropriate sections of the Airworthiness Manual, and operated in accordance with the aircraft flight manual or flight manual supplement.
- b. Aircraft using GPS equipment under IFR must be equipped with another approved and operational means of navigation. Should GPS navigation capability be lost, this equipment must allow navigation along the planned route or suitable alternate route.
- c. For flight plan purposes, the COM/NAV equipment suffix "G" must be used to indicate area navigation (RNAV) capability.

***RNAV (GNSS) Terminal and Approach Operations***

GPS shall be used for IFR flight guidance during RNAV (GNSS) procedures subject to the following terms and conditions:

- a. All aircraft operators shall be authorized by the State of registry to conduct terminal and approach procedures using the GPS.
- b. The GPS avionics shall meet FAA TSO C129 or C129A (Class A1, B1, B3, C1 or C3) or C1456/C146 requirements or equivalent criteria and shall be installed and approved in accordance with accepted standards and regulations.
- c. The avionics navigation database shall be current. All RNAV (GNSS) procedures shall be retrieved from the avionics navigation database, which shall store the location of all waypoints required to define the procedure and present them in the order depicted on the published procedure chart. Pilots shall verify procedure waypoints either by verifying coordinates or by ensuring that bearings and distances between waypoints are consistent with charted data.
- d. Receiver Autonomous Integrity Monitoring (RAIM) shall be available upon commencement of an RNAV (GNSS) procedure and throughout the procedure to provide integrity for the navigation guidance. If a RAIM warning is displayed when the aircraft is established on the final approach course, the pilot shall not continue the approach using GPS guidance. Aircraft with integrated GPS/IRS systems may meet this requirement by alternate means if such means are authorized by the State of registry. In the case of an instrument approach procedure, if an avionics RAIM prediction indicates that RAIM will not be available at the expected approach time, the pilot shall advise ATC of his/her intentions as soon as possible.
- e. Aircraft using GPS equipment under IFR shall be equipped with another approved and operational means of navigation. Should GPS navigation capability be lost, this equipment shall allow navigation along the planned route or a suitable alternate route.

## **BOTSWANA RULES AND PROCEDURES**

- f. GPS may be used to identify all DME and ADF fixes including fixes that are part of any instrument approach procedure when the applicable named and charted DME or ADF is selected as a GPS waypoint. Where ATC requests a position based on a distance from a DME facility for separation purposes, the pilot may report GPS distance from the DME facility, stating the DME facility name but omitting the term “DME” (e.g. “30 miles from Gaborone VOR”).
- g. Where a take-off and/or enroute alternate is required, at least 1 non-GPS based approach procedure is available at the alternate(s).
- h. When communicating with ATC, pilots shall identify and request a procedure by its published name, omitting the (GNSS) part of the name (e.g. “cleared for an RNAV RWY 08 approach”).

Application for approval to use RNAV (GNSS) should be made to:

The Chief Executive Officer

Address: Civil Aviation Authority of Botswana  
P.O. Box 250  
Gaborone  
Botswana

Tel: +267 3688200/3913236

Fax: +267 3913121

### **AIRPORT OPERATING MINIMUMS**

Botswana does not publish State airport operating minimums.

Botswana publishes Obstacle Clearance Altitudes (Heights) [OCA(H)].

### **ATS AIRSPACE CLASSIFICATION**

Botswana has adopted the ICAO ATS airspace classification as listed in Jeppesen ATC-Chapter “ICAO ATS Airspace Classifications - Annex 11”.

Airspace classes “A”, “C” and “D” are used within Gaborone FIR.

Within class “G” airspace radio communication is compulsory for all flights.

### **SPECIAL REQUIREMENTS AND REGULATIONS**

#### **FLIGHT PLANNING**

Flight plans shall be submitted at the aerodrome AIS units or Air Traffic Services Reporting Office (ARO) at the departure aerodrome. In the absence of such an office at the departure aerodrome, a flight plan shall be submitted by telephone to the nearest AIS unit/ARO as listed below:

Francistown AIS Unit

Tel: +267 2413420

+267 2450661

Fax: +267 2404555

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RULES AND PROCEDURES**

Sir Seretse Khama

AIS Briefing Office

Tel: +267 3975271

E-Mail: aiskhama@caab.co.bw

Switchboard Line

Tel: +267 3692558

Ghanzi ARO

Tel: +267 6596249

Fax: +267 6596160

Kasane AIS Unit

Tel: +267 6250133

Fax: +267 6251760

Maun AIS Unit

Tel: +267 6860238

Fax: +267 6864476

All traffic operating within and through the Gaborone FIR should indicate the operators contact details (e-mail and telephone) on Item 18 of the flight plan.

**Online filing of Flight Plan**

An online filing of a flight plan is available on:

Civil Aviation Authority of Botswana (CAAB)

Internet: [www.filefpl.caab.co.bw](http://www.filefpl.caab.co.bw)

**Flight Plan Message Addressing**

Flight movement messages for IFR flights shall be addressed as follows:

Into or via Gaborone FIR and, in addition for flights:	FBGRZQZX FBGRZRZX
– within the Gaborone FIR above FL250	FBSKYXYX FBSKZPZX FBSKZAZX
– into or via Francistown TMA below FL250	FBFTZTZX FBFTYFYX
– into or via Kasane TMA below FL250	FBKEZTZX FBKEZPZX

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– into or via Maun TMA below FL250	FBMNZTZX FBMNZPZX FBMNZAZX
Ghanzi (uncontrolled)	FBGRZRZX FBSKYXYX FBSKZPZX FBGZYFYX
Selibe Phikwe	FBGRZRZX FBSKYXYX FBSKZYZX FBSPZTZX FBSPYFYX

### **POSITION REPORTING PROCEDURES**

Position reports additional to those required by the general position reporting procedures shall be made:

- when entering or leaving the FIR;
- at least 10 minutes before entering controlled airspace;
- when leaving controlled airspace;
- as soon as possible after departing from an unmanned airfield;
- at hourly intervals with additional “Operation Normal” messages transmitted at half-hour intervals between such position reports;
- at other times when requested or required;
- at specified reporting points on advisory routes.

### **OPERATION AT UNMANNED AIRPORTS**

Pilots operating at or within 20NM radius of unmanned airports are required to broadcast position reports and intentions on frequency 125.50MHz and maintain a listening watch on this frequency.

### **REQUIRED NAVIGATION PERFORMANCE**

Following routes are designated RNAV5:

- UL307, AVOGU to UVLUK;
- UL435, BOPAN to GBV;
- UL437, GBV to KULBU;
- UM437, AVOGU to GENIX;

**BOTSWANA  
RULES AND PROCEDURES**

- UM438, GESAR to IMLIX;
- UM439, TIMED to TIKOK;
- UN183, GBV to XORAK;
- UN309, BONAL to ETMIT;
- UP301, USUNO to TETUS;
- UP303, DUMPO to ETMIT;
- UP305, GSV to APNEX;
- UT356, GESAR to IMLIX;
- UT358, TIMED to TIKOK;
- UT429, ETMIT to BONAL;
- UT433, ETMIT to AGRAM;
- UT916, UDLUM to BONAL;
- UT941, AGRAM to RUDAS;
- UT942, DUMPO to UTVIN;
- UT945, TAVAS to BONAL;
- UT950, MNV to DUGPA;
- UT969, GESEN to ESPUV;
- UY93, OKLAP to MNV;
- UY95, GBV to KSV;
- UY99, MNV to KSV.

Following route is designated RNP5:

- UM214, ETMIT to UDKOL;
- UM215, TAVLA to DANAM.

Following routes are designated RNAV10:

- UT431, USUNO to TETUS;
- UT434, GSV to APNEX;
- T/UT355, AVOGU to GENIX.

Following routes are designated RNP10:

- UM731, EPMAG to RUDAS;
- UM998, BUGRO to GBV;
- UN181, GABSI to TETUS;

## BOTSWANA RULES AND PROCEDURES

- UN182, GBV to UTRIS;
- UN184, DUPKI to GBV;
- UN559, EPMON to APDOV;
- UP682, GBV to EPMON;
- UP684, EPMON to IMLAN.

### SPECIAL ROUTING IN GABORONE FIR

Along UB540, aircraft routing UTRUK - Francistown 'FNV' VORDME to Victoria Falls (FVFA) will select eastbound flight levels and westbound flight from FVFA-FNV-UTRUK.

All traffic below FL245, routing from Johannesburg/Pretoria area to Victoria Falls and those to Sua-Pan are to route via Francistown 'FNV' VORDME and then request westbound flight levels overhead 'FNV'.

All direct routings to/from these areas are subject to request.

### ACAS/TCAS II REQUIREMENTS

All civil fixed-wing turbine-engined aircraft having a maximum take-off mass exceeding 5700kg, or a maximum approved passenger seating configuration of more than 19 are required to be equipped with ACAS/TCAS II version 7.1.

## DIFFERENCES FROM ICAO STANDARDS AND PROCEDURES

### ICAO REFERENCE

#### Annex 2

**3.3.1.2** A flight plan shall be submitted by all aircraft prior to operating, except local flights operated in the vicinity of an aerodrome.

**3.3.5.1** At an aerodrome at which ATSU/AFIS is in operation, the ATSU/AFIS unit automatically closes the flight plan on the arrival of an aircraft.

**3.3.5.3** When no ATSU/AFIS unit exists at the aerodrome of arrival, the arrival report shall be made as soon as possible to the local civil police office.

**3.3.5.4** Remote Airfields - where reporting facilities are difficult or entirely lacking, the time at which the pilot expects to be able to notify his arrival shall be indicated on the flight plan/flight notification message. As also shall be the time of intended departure if the stop is of short duration. In the foregoing circumstances, overdue action would only commence if the arrival or departure of the aircraft had not been notified to Gaborone ACC by the time specified in the flight plan/flight notification message.

**4.4** VFR flights shall not be operated above FL150.

**BURUNDI  
RULES AND PROCEDURES****GENERAL**

In general, the air traffic rules and procedures in force and the organization of the air traffic services are in conformity with ICAO Standards, Recommended Practices and Procedures.

Units of measurement used in all air and ground operations are as listed in the following table.

Measurement of	Unit
Distance used in navigation, position reporting, etc.	Nautical Miles and Tenths
Relatively short distances such as those relating to aerodromes (e.g., runway lengths)	Meters
Altitude, elevations and heights	Meters or Feet
Horizontal speed including wind speed	Knots
Vertical speed	Feet per Minute
Wind direction for landing and taking off	Degrees Magnetic
Wind direction except for landing and taking off	Degrees True
Visibility including runway visual range	Kilometers or Meters
Altimeter setting	Hectopascals
Temperature	Degrees Celsius
Weight	Metric Tons or Kilograms
Time	Hours and Minutes, the day of 24hrs beginning at midnight UTC

**WGS-84 IMPLEMENTATION STATUS**

WGS-84 partially compliant.

**FLIGHT PROCEDURES****HOLDING**

Up to 14000ft holding procedures comply with Jeppesen ATC-Chapter "Flight Procedures (DOC 8168) - Holding Procedures", Table IV-1-2, Holding Speeds, however the holding speed for Jet aircraft under normal conditions is based on maximum 390km/h (210kt) up to 13000ft.

Above 14000ft holding procedures comply with Jeppesen ATC-Chapter "Flight Procedures (DOC 8168) - Holding Procedures", Table IV-1-1, Holding Speeds.

**PROCEDURE LIMITATIONS AND OPTIONS**

Instrument approach procedures are based on the PANS-OPS, Document 8168.



**BURUNDI  
RULES AND PROCEDURES****AIRPORT OPERATING MINIMUMS**

Burundi publishes Obstacle Clearance Limits (OCL), visibility and ceiling for landing and visibility for take-off for Bujumbura (Melchior Ndadaye Intl).

Jeppesen charted minimums are not below State minimums.

**ATS AIRSPACE CLASSIFICATION**

Burundi has adopted the ICAO ATS airspace classification as listed in Jeppesen ATC-Chapter "ICAO ATS Airspace Classifications - Annex 11".

Airspace classes "A", "D" and "G" are used within Bujumbura FIR.

In class "G" airspace radio communication is not required for all flights.

**SPECIAL REQUIREMENTS AND REGULATIONS****FLIGHT PLANNING**

Repetitive Flight Plan (RPL) system is not used in Burundi.

**ACAS/TCAS II REQUIREMENTS**

All civil fixed-wing turbine-engine aircraft having a maximum take-off weight exceeding 5700kg or a maximum approved passenger seating configuration of more than 19 are required to be equipped with ACAS/TCAS II version 7.1.

**DIFFERENCES FROM ICAO STANDARDS AND PROCEDURES****ICAO REFERENCE****Annex 2**

**4.4 (a)** VFR flights shall not be operated above FL150.

## CANARY IS RULES AND PROCEDURES

### GENERAL

In general, the air traffic rules and procedures in force and the organization of the air traffic services are in conformity with ICAO Standards, Recommended Practices and Procedures.

Units of measurement used in all air and ground operations are as listed in the following table.

Measurement of	Unit
Distance used in navigation	Nautical Miles
Relatively short distances (less than 4000m)	Meters
Altitude, elevations and heights	Meters, Feet
Horizontal speed including wind speed	Knots, Mach
Vertical speed	Feet per Minute
Wind direction for landing and taking off	Degrees Magnetic
Wind direction except for landing and taking off	Degrees True
Visibility including runway visual range	Kilometers and Meters if less than 5km
Altimeter setting	Hectopascals (Millibars)
Temperature	Degrees Celsius
Weight	Kilograms
Time	Hours and Minutes, the day of 24hrs beginning at midnight UTC

### WGS-84 IMPLEMENTATION STATUS

WGS-84 compliant.

### FLIGHT PROCEDURES

#### HOLDING

Holding procedures comply with Jeppesen ATC-Chapter "Flight Procedures (DOC 8168) - Holding Procedures", Table IV-1-1, Holding Speeds.

#### PROCEDURE LIMITATIONS AND OPTIONS

Instrument approach procedures are based on the PANS-OPS, Document 8168.

#### AIRPORT OPERATING MINIMUMS

Spain does not publish State airport operating minimums.

Spain publishes Obstacle Clearance Altitudes (Heights) [OCA(H)].

## CANARY IS RULES AND PROCEDURES

### ATS AIRSPACE CLASSIFICATION

Spain has adopted the ATS airspace classification as listed in Jeppesen ATC-Chapter “SERA (Standardized European Rules of the Air) - Differences to ICAO”, Table “SERA ATS Airspace Classification - SERA.6001”.

Airspace classes “C”, “D”, “E”, “F” and “G” are used within Canaries FIR/UIR.

### SPECIAL REQUIREMENTS AND REGULATIONS

#### WAKE TURBULENCE CATEGORY

B-757 must be considered as:

- HEAVY when being followed by another aircraft, and
- MEDIUM when following another aircraft.

#### Wake Turbulence Separation between Arrivals and Departures

Every pilot or aircraft operator which considers that its take-off run could be lower than 300m, shall communicate so to the TWR controller (through the appropriate radio frequency).

TWR controller will establish a wake turbulence separation of 2 minutes to the departure of an aircraft with a take-off run lower than 300m, when following the arrival of a MEDIUM or HEAVY category aircraft.

### GLOBAL POSITIONING SYSTEM (GPS) OPERATIONS

#### General

GPS may be used as both primary means of navigation and as a supplemental navigation system only after receipt of both airworthiness and operational approval from the Direcccion General de Aviacion Civil or the aeronautical authority in the State of registry. Airworthiness shall be based on compliance with FAA TSO-C129 and FAA Notice 8110.60.

#### Flight Plan Information

Flight plans for operations oceanic/remote areas must include the entries “NAV/GPS” and “RMK/FDE AVAILABLE” in Item 18. RPLs should include “NAV/GPS” in Item “Q” if GPS navigation equipment is available on the aircraft.

#### GPS Usage

GPS may be used as a primary (sole) means of navigation in oceanic/remote areas subject to the following operational conditions:

- a. Integrity provided by RAIM: GPS may replace one of the 2 required means of navigation.
- b. Integrity not provided by RAIM:
  - ground-based aids on the route to be flown must be available;
  - aircraft equipment, other than GPS, suitable for the route to be flown must be available;
  - integrity monitoring equivalent to RAIM must be performed by the navigation system.

### CANARY IS RULES AND PROCEDURES

*NOTE: The appropriate Fault Detection and Exclusion (FDE) availability prediction program must be utilized no more than 2 hours prior to departure to determine the maximum duration of possible GPS outage due to the following:*

- *loss of navigation capability;*
- *loss of the failed satellite detection function (RAIM);*
- *loss of the failed satellite exclusion function.*

GPS may be used as a supplemental navigation system in domestic enroute areas subject to the following operational conditions:

a. Integrity provided by RAIM:

- ground-based aids approved for IFR on the route to be flown must be available when RAIM capability is lost;
- aircraft equipment, other than GPS, suitable for the route to be flown must be available when RAIM capability is lost.

b. Integrity not provided by RAIM:

- ground-based aids approved for IFR on the route to be flown must be available;
- aircraft equipment, other than GPS, suitable for the route to be flown must be available;
- integrity monitoring equivalent to RAIM must be performed by the navigation system.

GPS may be used as a supplemental navigation system in terminal areas subject to the following operational conditions:

a. Integrity provided by RAIM:

- ground-based aids approved for IFR on the route to be flown must be available when RAIM capability is lost;
- aircraft equipment, other than GPS, suitable for the route to be flown must be available when RAIM capability is lost;
- the terminal area procedure(s) must be available from the navigation data base;
- the terminal area procedure(s) must be approved by the Spanish Aeronautical Authority;
- the aircraft operator must be approved for the terminal area procedure(s) by the Direccion General de Aviacion Civil.

b. Integrity not provided by RAIM:

- ground-based aids approved for IFR on the route to be flown must be available;
- aircraft equipment, other than GPS, suitable for the route to be flown must be available;
- integrity monitoring equivalent to RAIM must be performed by the navigation system;
- the terminal procedure(s) must be available from the navigation data base;
- the terminal procedure(s) must be approved by the Spanish Aeronautical Authority;

## CANARY IS RULES AND PROCEDURES

- the aircraft operator must be approved for the terminal procedure(s) by the Direccion General de Aviacion Civil.

### GPS for Non-precision Approaches

GPS-based navigation equipment can be used as a supplemental navigation system to fly any part of instrument non-precision approaches provided each of the following conditions are met:

- Multi-sensor equipment using GPS as one sensor may be used to fly non-precision approaches where the State of operator/registry (as applicable) has authorized its use.
- The GPS procedure has to be approved by the Spanish Aeronautical Authority and published in AIP Spain for Spanish territory or by the Aeronautical Authority of the destination airport.
- The navigation database contains current information on the non-precision approach to be flown (actual AIRAC cycle).
- The approach to be flown is retrievable from the database and defines the location of all navigation aids and all waypoints required for the approach.
- The information stored in the data base is presented to the crew in the order depicted on the published non-precision approach plate.
- The navigation data base waypoints cannot be changed by the flight crew.
- The appropriate airborne equipment required for the route to be flown from the destination to any required alternate airport and for on approach at this airport must be installed in the aircraft and be operational. Also, the associated ground-based nav aids must be operational.
- The aircraft operator must be approved for such operations by the Direccion General de Aviacion Civil.
- The navigation data base must be accepted or approved by Spanish Aeronautical Authority.

### GPS Overlay Procedures

An overlay approach is one which allows a crew to use GPS equipment to fly an existing non-precision instrument approach procedure and is restricted to approaches based on VOR, VOR/DME, NDB or NDB/DME. In addition to the non-precision approach conditions, the following conditions shall also apply:

- GPS equipment where RAIM and approach function are provided, may be used to fly non-precision approaches without active monitoring by the flight crew of the applicable nav aid(s) which define the approach being used. However, the ground-based nav aid(s) and the associated airborne equipment required for the published approach procedure, must be available; or
- for multi-sensor navigation systems and approach function where RAIM is not used for approach integrity, the ground-based procedure nav aid must be used for monitoring the procedure.

## CANARY IS RULES AND PROCEDURES

### GPS Stand-alone Approaches

The term GPS stand-alone approach refers to a non-precision approach procedure not overlaid on a traditional instrument approach procedure based on ground nav aids. In addition to the non-precision approach conditions, the following conditions shall also apply:

- a. GPS equipments providing RAIM and approach function are required.
- b. The published approach procedure is identified as a GPS approach (e.g.: GPS RWY 27) and referenced to WGS-84 coordinates.
- c. The missed approach procedure is not based on GPS.
- d. During the pre-flight planning stage for an IFR flight:
  - where a destination alternate is required, a GPS stand-alone approach procedure may be used at the destination aerodrome provided that, at the alternate, a non-GPS based approach procedure is available;
  - where a destination alternate is not required, at least one non-GPS based approach procedure must be available at the destination aerodrome;
  - where a take off and/or enroute alternate is required, at least one non-GPS based approach procedure must be available at the alternate(s).

### Operational Restrictions

Flights in oceanic/remote areas shall be cancelled, delayed or re-routed for either of the following:

- a. any interruption of the navigation function on the predicted route caused by a predicted satellite outage;
- b. if the interval during which the fault exclusion function is unavailable exceeds the maximum acceptable duration for a specified route.

## FLIGHT PLANNING

### IFPS/NMOC Operations

The Integrated Initial Flight Plan Processing System element of the EUROCONTROL Network Management Operations Center (NMOC) is the sole source for the distribution of the IFR General Air Traffic (GAT) FPL and associated messages to ATS units within the IFPS. The only required addresses are those of the two IFPS units (IFPU) at Haren (Brussels) and Bretigny (Paris).

#### *Flight Plan Message Addressing*

AFTN: EUCHZMFP and EUCBZMFP

SITA: BRUEP7X and PAREP7X

Flight plans of mixed flights (IFR to VFR and GAT to OAT) shall be addressed to both IFPS units in addition to the addresses affected by the VFR/OAT stages.

### Content of Flight Plan

Item 10, additional notes published:

## **CANARY IS RULES AND PROCEDURES**

- Operators of flights in formation of State aircraft shall not insert the letter “W” in Item 10 of the ICAO flight plan form, whichever the RVSM approval situation of these aircraft is. When having the intention to operate within RVSM airspace as General Air Traffic (GAT), they shall insert STS/NONRVSM in Item 18 of the aforementioned form.
- Aircraft operators with P-RNAV approval, which only use VOR/DME for the determination of position, must insert the letter “Z” in Item 10 of the flight plan and the descriptor EURPRNAV in Item 18 of the flight plan, preceded by the indicator NAV/.

Item 15 ATC ROUTE (2 to 7 characters):

For IFR/GAT flight plans departing from any Spanish aerodrome, the first field of the route (after indicating the speed/ flight level group) must be the following:

- a. the designator of the first significant point of the SID used;
- b. If no SID is published for the aerodrome of departure, then the significant point where the first ATS route is joined. This point can be preceded by the DCT indicator.

The ROUTE Item shall never include the terms SID/STAR nor their descriptions. This instruction is due to IFPS operating requirements.

Item 18 REG/:

The nationality or common mark and registration mark of the aircraft, if different from the aircraft identification in Item 7 and if the letters “W” or “X” are included in Item 10.

### **REQUIRED NAVIGATION PERFORMANCE**

Required Navigation Performance in the EUR/SAM corridor within the Canaries UIR is RNP10.

### **OPERATIONS WITHIN EUR/SAM CORRIDOR RVSM AIRSPACE**

The area covering the airways UN741, UN866, UN873 and UN857 within the FIRs of Canary Is, Dakar Oceanic, Recife/Atlantic and Sal Oceanic is designated RVSM airspace (between FL290 and FL410 inclusive).

#### **Authorization for Flight in RVSM**

Non-RVSM approved State aircraft will be authorized to enter and to operate within this corridor.

In the Item ROUTE (Item 15 of FPL) insert the speed/flight level at the entry/exit point of EUR RVSM airspace.

Operators of formation flights of State aircraft intending to operate as GAT, and Non-RVSM approved aircraft operating in the EUR/SAM RVSM airspace shall include ‘STS/NONRVSM’ in item 18 of the FPL.

#### **Special Procedures for Crossing Traffic (East/West Operations)**

Crossing traffic shall include in Item 18 of the FPL the coordinates and estimated time at the entry/exit points and of crossing each of the fixed ATS routes.

Crossing traffic should plan to operate at conventional flight levels, e.g.:

East to West: FL310 - 350 - 390;

## CANARY IS RULES AND PROCEDURES

West to East: FL290 - 330 - 370.

### Wake Turbulence

An aircraft encountering wake turbulences should notify ATC and request a revised clearance.

If RVSM procedures are suspended the minimum vertical separation between aircraft will be 2000ft (600m).

### DATA LINK SERVICES

CPDLC (FANS 1/A and ATN B1) and ADS-C services are available in the Canaries FIR/UIR.

### Logon

The data link address for Canaries FIR/UIR is GCCC.

For ATN connections CDA (Current Data Authority) is automatically confirmed while in FANS connections crews shall respond ROGER to the CDA message "CURRENT ATC UNIT GCCC".

### FANS Logon

The following traffic shall logon when the aircraft is still on ground or as soon as possible after departure:

- Traffic with origin GC\*\* exiting Canaries FIR/UIR via Santa Maria Oceanic FIR, Sal Oceanic FIR/UIR or Dakar FIR/UIR.

The following traffic shall logon at least 30 minutes before entering Canaries UIR, except for those CPDLC connected to another Data Authority:

- Traffic with destination GC\*\* entering Canaries FIR/UIR via Santa Maria Oceanic FIR, Sal Oceanic FIR/UIR or Dakar FIR/UIR.
- Traffic overflying Canaries UIR.

For bilingual aircraft with independent FANS and ATN B1 functionality, crews shall select manually FANS 1/A Mode in CPDLC function.

For aircraft with FANS 1/A and ATN B1 integrated functionality, onboard equipment should automatically switch to ATN mode. In case of automatic logging in FANS mode due to lack of VDL2 coverage, pilots shall force logoff and logon to ATN B1 as soon as possible.

In order to avoid ATN priority connection of aircraft with integrated FANS and ATN equipment (COM/INTEGRATED in Item 18) with origin in GC\*\* or southbound overflight, an aircraft "blacklist" will be created to block undesired ATN connections and protect FANS connection.

### ATN Logon

The following traffic flows with origin Canaries FIR with requested cruising level above FL285 may logon when the aircraft is still on ground or as soon as possible after departure:

- Traffic with origin GC\*\* exiting Canaries FIR/UIR via Lisbon FIR or Casablanca FIR/UIR.
- Traffic without FANS equipment with origin GC\*\* exiting Canaries FIR/UIR via Santa Maria Oceanic FIR, Sal Oceanic FIR/UIR or Dakar FIR/UIR.



## CANARY IS RULES AND PROCEDURES

The following traffic flows with destination Canaries FIR may logon to the ATN CPDLC service any time before entering Canaries UIR, preferably 15 minutes before, except already logged to another Data Authority:

- Traffic with destination GC\*\* entering Canaries FIR/UIR via Lisbon FIR or Casablanca FIR/UIR.
- Traffic without FANS equipment with destination GC\*\* entering Canaries FIR/UIR via Santa Maria Oceanic FIR, Sal Oceanic FIR/UIR or Dakar FIR/UIR.

Traffic flows with FANS equipment with origin or destination GC\*\* entering or exiting Canaries FIR/UIR via Santa Maria Oceanic FIR, Sal Oceanic FIR/UIR or Dakar FIR/UIR will not logon ATN to GCCC.

For bilingual aircraft with independent FANS 1/A and ATN B1 functionality, pilots shall select manually ATN B1 Mode in CPDLC function.

For aircraft with FANS 1/A and ATN B1 integrated functionality, onboard equipment should automatically switch to ATN B1 Mode. In case of automatic logging in FANS 1/A mode due to lack of VDL2 coverage, pilots shall force logoff and logon to ATN B1 as soon as possible.

ATN CPDLC service provision to aircraft proceeding to/from Santa Maria Oceanic FIR, Sal Oceanic FIR/UIR or Dakar FIR/UIR will be limited by VDL2 ground stations coverage.

### **Specific Procedures**

#### ***FANS CPDLC***

FANS CPDLC use is compulsory in oceanic environment for equipped aircraft due to technical limitations of VHF or HF voice communication.

#### ***ATN CPDLC***

Voice communications will remain as priority mean of communication over CPDLC.

Initial contact by voice is compulsory before ATN CPDLC use. This initial contact by voice shall be accomplished with every frequency change.

### **Logoff**

#### ***FANS Logoff***

FANS CPDLC service LOG-OFF will be automatically completed with the CPDLC transfer to the next ATS unit.

Nevertheless, and in order to ensure ADS transmission termination, pilot shall logoff 10 minutes after exiting Canaries FIR/UIR.

#### ***ATN Logoff***

ATN CPDLC service LOG-OFF will be automatically executed with the CPDLC transfer to the next ATS unit.

For aircraft with origin GC\*\* exiting Canaries UIR via Santa Maria Oceanic FIR, Sal Oceanic FIR/UIR or Dakar FIR/UIR logoff will be automatically executed 6 minutes after exiting VDL2 coverage area.

## CANARY IS RULES AND PROCEDURES

### STRATEGIC LATERAL OFFSET PROCEDURES (SLOP)

SLOP will be usable throughout the Canaries FIR.

- a. SLOP shall be applied only by aircraft with automatic offset tracking capability.
- b. There are 3 positions that an aircraft may fly: centerline, 1 or 2NM right.
- c. Offsets shall not exceed 2NM right of centerline.
- d. There is no ATC clearance required and pilots are not required to inform ATC.

### SECONDARY SURVEILLANCE RADAR (SSR)

Unless otherwise authorized by the Direccion General de Aviacion Civil, the use of SSR transponder is compulsory for all aircraft flying within:

- a. Canary Islands FIR/UIR at FL145 or above;
- b. Canary Islands terminal maneuvering areas at any level; and
- c. zones for which the use of transponder is declared as mandatory (TMZ).

### ACAS/TCAS II REQUIREMENTS

All civil fixed-wing turbine-engined aircraft having a maximum take-off mass exceeding 5700kg, or a maximum approved passenger seating configuration of more than 19 and all other aircraft which are equipped with ACAS II on a voluntary basis are required to be equipped with ACAS/TCAS II version 7.1.

Flying with an inoperative ACAS/TCAS II is permitted, including within RVSM airspace, provided it is done in accordance with the applicable Minimum Equipment List (MEL).

The MEL for ACAS/TCAS II throughout Europe is Class A - 10 days (excluding the day of discovery).

### AUXILIARY POWER UNIT (APU)

The use of aircraft APU is forbidden in stand positions, that are supplied with 400Hz, for the period from 2 minutes after blocks-on for arrivals and 5 minutes before off-blocks for departures, except in particular cases applicable in each airport.

The aircraft APU will only be used, if neither the 400Hz current facilities nor the mobile units are operative, or if the air conditioning service is required and these air conditioning facilities are not available, except in particular cases applicable in each airport.

## DIFFERENCES FROM ICAO STANDARDS AND PROCEDURES

### ICAO REFERENCE

#### Annex 2, Appendix 3

- a. "from 090 degrees to 269 degrees" instead of "from 000 degrees to 179 degrees".
- b. "from 270 degrees to 089 degrees" instead of "from 180 degrees to 359 degrees".

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**CANARY IS  
RULES AND PROCEDURES**

For more differences to ICAO refer to ATC-Chapter “SERA (Standardized European Rules of the Air) - Differences to ICAO”.

**PANS-ATM (DOC 4444)**

**Appendix 2, Item 8** Civil aircraft carrying out State flights or special missions on behalf of the Department of defense, shall fill in Item 8 with the letter “X” and in Item 18 indicate, after the STS indicator, the aeronautical authority authorizing that flight and the authorization number.

## CAPE VERDE RULES AND PROCEDURES

### GENERAL

In general, the air traffic rules and procedures in force and the organization of the air traffic services are in conformity with ICAO Standards, Recommended Practices and Procedures.

Units of measurement used in all air and ground operations are as listed in the following table.

Measurement of	Unit
Distance used in navigation, position reporting, generally in excess of 2 nautical miles	Nautical Miles and Tenths
Relatively short distances such as those relating to aerodromes (e.g., runway lengths)	Meters
Altitude, elevations and heights	Feet
Horizontal speed including wind speed	Knots
Vertical speed	Feet per Minute
Wind direction for landing and taking off	Degrees Magnetic
Wind direction except for landing and taking off	Degrees True
Visibility including runway visual range	Kilometers or Meters
Altimeter setting	Hectopascals
Temperature	Degrees Celsius
Weight	Metric Tons or Kilograms
Time	Hours and Minutes, the day of 24hrs beginning at midnight UTC

### WGS-84 IMPLEMENTATION STATUS

WGS-84 compliant.

### FLIGHT PROCEDURES

#### HOLDING

Holding procedures comply with Jeppesen ATC-Chapter “Flight Procedures (DOC 8168) - Holding Procedures”, Table IV-1-1, Holding Speeds.

#### PROCEDURE LIMITATIONS AND OPTIONS

Instrument approach procedures are based on the PANS-OPS, Document 8168.

#### AIRPORT OPERATING MINIMUMS

Cape Verde does not publish State airport operating minimums.

Cape Verde publishes Obstacle Clearance Altitudes (Heights) [OCA(H)].

**CAPE VERDE  
RULES AND PROCEDURES****ATS AIRSPACE CLASSIFICATION**

Cape Verde has adopted the ICAO ATS airspace classification as listed on Jeppesen ATC-Chapter "ICAO ATS Airspace Classifications - Annex 11".

Airspace classes "A", "C" and "G" are used within Sal FIR/UIR.

**SPECIAL REQUIREMENTS AND REGULATIONS****FLIGHT PLANNING****Time of Submission**

Flight plans for non-repetitive flights to or via flow restricted areas shall be submitted at least 3 hours before EOBT. Changes in ETD of more than 20 minutes and/or cancellation of both repetitive and non-repetitive flight plans shall be reported immediately to the appropriate ARO.

**Place of Submission**

Flight plans shall be submitted at the Air Traffic Services Reporting Office (ARO) at the departure aerodrome.

In the absence of an ARO at the departure aerodrome, a flight plan shall be submitted by telephone, Fax or E-mail to the ARO below:

**Sal (Amilcar Cabral) ARO**

Tel: +238 241 1309

Mobile: +238 992 5214

Fax: +238 241 1309

**Praia (Mandela Intl) ARO**

Tel: +238 263 3471

Fax: +238 263 4000

**Rabil (Aristides Pereira Intl) ARO**

Tel: +238 251 1070

Fax: +238 251 1193

**Sao Pedro (Cesaria Evora Intl) ARO**

Tel: +238 232 3716

Fax: +238 232 3716

**Flight Plan Message Addressing**

Flight movement messages for IFR flights shall be addressed as follows:

**CAPE VERDE  
RULES AND PROCEDURES**

Into or via Sal Oceanic FIR	GVSCZQZX GVACYSYX GVACFDPX
Outbound from any of the International airports located within Sal TMA	GVACZPZX GVNPZPZX GVBAZPZX GVSVZPZX Depending on the aerodrome of departure

### **SLOT ALLOCATIONS**

A request for a departure slot shall be made, not earlier than 2 hours but not later than 30 minutes prior to ETD, to:

SAL ACC

Tel: +238 241 1970

### **LONGITUDINAL SEPARATION**

The minimum longitudinal separation applied within Sal Oceanic FIR/UIR is:

- a. 10 minutes or 150km (80NM) derived by RNAV, when the Mach Number Technique (MNT) is applied on designated controlled oceanic routes in the EUR/SAM corridor within the Dakar Oceanic, Recife, Sal Oceanic FIR's;
- b. 10 minutes on the portion of UR976 and on the portion of UA602 for traffic not destined to NAT region without application of the MNT;
- c. 10 minutes for crossing traffic within Sal Oceanic FIR;
- d. 20 minutes in all other cases.

### **OPERATIONS WITHIN EUR/SAM CORRIDOR RVSM AIRSPACE**

The EUR/SAM corridor is the airspace over the South Atlantic area within the FIRs of Canary Is, Dakar Oceanic, Atlantic and Sal Oceanic is designated RVSM/RNP10 airspace (between FL290 and FL410 inclusive).

Only RVSM approved aircraft are permitted to operate within this airspace except in the following circumstances:

- a. the aircraft is being initially delivered to the State of Registry or the State operator;
- b. the aircraft is approved/certified but experienced navigation degradation and is being flown back to base or to a maintenance facility for repairs;
- c. the aircraft is engaged on a humanitarian or mercy flight;
- d. State aircraft.

## CAPE VERDE RULES AND PROCEDURES

Aircraft under para a) and b) above shall not plan to operate between 2100 and 0900 UTC.

Aircraft operators of non compliant aircraft shall obtain a special authorization from the first ACC concerned. Authorization must be requested no more than 12 hours and no less than 4 hours before the intended time of departure. To State aircraft no restrictions apply.

In addition the operator shall notify by phone (Sal ACC +238 241 1970 or +238 241 1730) all other ACCs concerned of the following elements:

- a. aircraft identification;
- b. type of aircraft;
- c. departure aerodrome and ETD;
- d. route;
- e. position and estimated time over the entry and exit points of each FIR concerned;
- f. requested flight level;
- g. destination aerodrome and ETA.

Separation minimums to be applied to aircraft operating under these provisions are 2000ft vertically and/or 1000ft laterally as the case may be.

### **Special Procedures for Crossing Traffic (East/West Operations)**

Crossing traffic shall include in Item 18 of the FPL the coordinates and estimated time at the entry/exit points and of crossing each of the fixed ATS routes.

Pilots must be aware that it is their responsibility not to enter uncontrolled non-RVSM airspace at RVSM flight levels.

### **Strategic Lateral Offset Procedure (SLOP)**

Pilots should use the SLOP as standard operating practise in the course of normal operations to mitigate collision risk and wake turbulence.

Strategic Lateral Offsets shall be applied only by aircraft with automatic offset tracking capability.

There are 3 positions that an aircraft may fly: centerline, 1 or 2NM right of the centerline relative to the direction of flight. Offsets are not to exceed 2NM right of centerline.

There is no ATC clearance required for this procedure and it is not necessary that ATC be advised. Aircraft transiting radar-controlled airspace shall remain on their established offset position unless otherwise instructed.

### **Use of Geographic Coordinates**

All aircraft not equipped with ADS-C/CPDLC, crossing common FIR boundary Dakar Oceanic/Sal and vice versa on west of UN741 shall overfly the entry/exit compulsory reporting points established along that boundary. However, the use of any entry/exit waypoints, based on geographical coordinates is allowed for ADS-C/CPDLC-equipped aircraft only.

## CAPE VERDE RULES AND PROCEDURES

### REQUIRED NAVIGATION PERFORMANCE

Aircraft, other than State aircraft, operating on RNAV Routes within the Sal FIR/UIR shall be equipped with as minimum RNAV equipment meeting RNP10.

### ACAS/TCAS II REQUIREMENTS

All civil fixed-wing turbine-engined aircraft having a maximum take-off mass exceeding 5700kg, or a maximum approved passenger seating configuration of more than 19 are required to be equipped with ACAS/TCAS II version 7.1.

### FLEXIBLE TRACK SYSTEM

Flexible routings are implemented within Sal FIR/UIR (GVSC) above FL245. Within Sal airspace users will be able to plan user-preferred trajectories through the use of 5 letter waypoint name codes. Route portions between waypoints will be indicated by means of "DCT" instruction.

### ADS/CPDLC PROCEDURES

#### **Traffic Entering or Overflying Sal FIR/UIR coming from Canaries, Dakar and Santa Maria ACC's**

For aircraft coming from airspace where FANS1/A services have been provided, ADS-C and CPDLC will be transferred automatically to Sal ACC (GVSC) by the ACC responsible for the adjacent FIR.

If 10 minutes before reaching the common boundary point the automatic logon with Sal ACC has not been successful, pilots shall start a manual logon to Sal ACC, sending an AFN contact message (FN\_CON) containing the 4 character ICAO code of Sal FIR (GVSC).

Once the logon is accepted, the controller shall establish the CPDLC connection, which will remain inactive until the CPDLC connection with the transferring ACC is terminated.

Immediately after the reception of the logon, Sal ACC will establish the ADS-C connection setting 15 minutes reporting rate periodic contract and a waypoint change event contract.

The transferring ACC will terminate its CPDLC connection 5 minutes prior to the common boundary point.

For aircraft coming from airspace where FANS1/A services have not been provided, pilots are requested to perform a manual logon to Sal FANS1/A system using the FN\_CON message with the 4 character ICAO code of Sal FIR (GVSC) between 15 and 45 minutes before the common boundary point.

Once the logon is accepted, the controller shall establish the CPDLC and ADS-C connections, requesting a 15 minutes reporting rate periodic contract and a waypoint change event contract.

#### **Traffic Departing from Sal FIR/UIR towards Canaries, Dakar and Santa Maria ACC's**

Traffic departing from airports inside Sal FIR/UIR inbound to Canaries, Dakar and Santa Maria ACC's are requested to logon to Sal ACC FANS system before the departure using the FN\_CON message containing the 4 ICAO code of Sal FIR (GVSC).



## CAPE VERDE RULES AND PROCEDURES

Once the logon is accepted, the controller shall establish the CPDLC and the ADS-C connections, requesting a 15 minutes reporting rate periodic contract and a waypoint change event contract.

### **Traffic Exiting from Sal ACC towards Canaries, Dakar or Santa Maria ACC's**

Between 15 and 45 minutes before reaching the common boundary point, pilots overflying or departing Sal FIR/UIR towards Canaries, Dakar or Santa Maria ACC's are requested to manually logon (FN\_CON) to GCCC, GOOO or LPPO respectively.

Sal ACC will manually terminate the CPDLC connection to Sal FANS1/A system 5 minutes before reaching the common boundary point.

The flight crew shall ensure that there is no active connection with Sal ACC after crossing the boundary point.

### **CPDLC Procedures**

CPDLC is to be used as primary mean of communication in the portion of the Sal FIR airspace between TUTLO and the route UN741. However, on the route UN741 pilots connected to CPDLC will be advised by controllers as soon as the flight is entering in areas where suitable VHF radio communications can be established with the ATC. The assigned VHF/HF are to be used as secondary. In the remaining portion of Sal FIR airspace VHF is to be used as primary mean of communication. CPDLC/HF are to be used as secondary.

### **REQUIREMENTS FOR READ BACK OF ATC CLEARANCE**

The flight crew shall read back to controller safety related parts of ATC clearances and instructions which are transmitted by voice. Following items shall always be read back:

- ATC route clearances;
- clearances and instructions to enter, land on, take off from, hold short of, cross and back track on any runway;
- runway-in-use, altimeter settings, SSR code, level instructions, heading and speed instructions and, whether issued by controller or contained in ATIS broadcast, transition levels.

### **DIFFERENCES FROM ICAO STANDARDS AND PROCEDURES**

No differences published.

**COMOROS  
RULES AND PROCEDURES**

## GENERAL

In general, the air traffic rules and procedures in force and the organization of the air traffic services are in conformity with ICAO Standards, Recommended Practices and Procedures.

Units of measurement used in all air and ground operations are as listed in the following table.

Measurement of	Unit
Distance used in navigation, position reporting, etc., generally in excess of 2 to 3 nautical miles	Nautical Miles and Tenths
Relatively short distances such as those relating to aerodromes (e.g., runway lengths)	Meters
Altitude, elevations, and heights	Meters, Feet <sup>1</sup>
Horizontal speed including wind speed	Feet
Vertical speed	Feet per Minute
Wind direction for landing and taking off	Degrees Magnetic
Wind direction except for landing and taking off	Degrees True
Visibility including runway visual range	Kilometers or Meters
Altimeter setting, atmospheric pressure	Hectopascals
Temperature	Degrees Celsius
Weight	Metric Tons or Kilograms
Time	Hours and minutes, the day of 24 hrs beginning at midnight UTC
<sup>1</sup> Unit used on instrument approach charts.	

## WGS-84 IMPLEMENTATION STATUS

WGS-84 compliant.

## FLIGHT PROCEDURES

### HOLDING

Holding procedures comply with Jeppesen ATC-Chapter 'Flight Procedures (DOC 8168) - Holding Procedures', Table IV-1-1, Holding Speeds.

### PROCEDURE LIMITATIONS AND OPTIONS

Instrument Approach Procedures comply with the PANS-OPS, Document 8168.

### AIRPORT OPERATING MINIMUMS

Comoros publishes OCA(H)s and DA(H)s for landing.

## COMOROS RULES AND PROCEDURES

Jeppesen published minimums are not below State minimums.

### **SPEED RESTRICTIONS**

The maximal protection indicated air speed is generally 230kt. In case of turbulence, inform the controller on the indicated security speed requested. In the event of speed superior than 230kt, the aircraft must be at least to an altitude equal at least to the most elevated of the minimum sector altitudes of the aerodrome.

### **ATS AIRSPACE CLASSIFICATIONS**

Comoros has adopted the ICAO ATS airspace classification as listed in Jeppesen ATC-Chapter "ICAO ATS Airspace Classifications - Annex 11".

Within Comoros airspace, however, only the airspace classes "A", "D" and "G" are used.

No speed limitation is applied to IFR flights and VFR flights below FL100.

Within class "G" airspace two-way radio communication is also required for VFR flights.

### **SPECIAL REQUIREMENTS AND REGULATIONS**

#### **COMMUNICATIONS**

All aircraft on VFR flights, and aircraft on IFR flights outside controlled airspace, shall maintain a listening watch on the frequency of a radio station providing flight information service in the flight information region and file with that station information as to their position, unless otherwise authorized by the State overflown.

#### **POSITION REPORTING PROCEDURES**

Position reports additional to those required by the general position reporting procedures shall be made when entering or leaving controlled or advisory airspace.

The last position report before passing from one FIR to an adjacent FIR shall also be made to the ATS unit serving the airspace about to be entered.

#### **OPERATIONS AT UNCONTROLLED AIRPORTS**

##### **Arriving aircraft**

- a. Ten minutes prior to the ETA the pilot shall maintain a listening watch on frequency 118.1MHz and effect a blind transmission of the following message:
  1. Station (airport);
  2. Type of aircraft;
  3. Point of departure;
  4. Estimated time of arrival;
  5. Position and altitude.

## COMOROS RULES AND PROCEDURES

- b. Further position reports shall be transmitted till the last turn is effected. The listening watch shall be maintained till the aircraft has reached the parking apron;
- c. A straight-in approach is prohibited. After the pilot has identified the airport proceed to the central point of the runway at a right angle to the runway axis at a height of more than 500ft (150m) above the aerodrome traffic circuit height. Thereafter proceed to the beginning of the downwind leg of the runway/strip maintaining the initial height. Descend to the height of the aerodrome traffic circuit while keeping out of the traffic circuit, and then manoeuvre in such a way that the down-wind leg is rayed along a segment which is a 45° angle to the leg;

*NOTE: The procedures specified under c) are not applicable at certain airports due to the existence of controlled airspace in their proximity or because of special procedures. In such cases the competent ATC unit will establish procedures for integrating VFR flights into the aerodrome traffic circuit.*

- d. When the aerodrome traffic circuit height is not published, a height of 800ft (250m) shall be taken into consideration.

### Departing aircraft

- a. As soon as the engine has been started, the pilot must maintain a listening watch on frequency 118.1MHz and make a blind transmission of the following message:
  - 1. Station (airport);
  - 2. Type of aircraft;
  - 3. Aircraft identification/call sign;
  - 4. Position of aircraft on the ground;
  - 5. Ready to taxi for take-off (indicate runway or direction of take-off).
- b. This message shall be repeated prior to take-off and must be completed by the phrase: "Ready for take-off from (runway or direction)";
- c. Listening watch shall be maintained for at least 5 minutes after take-off.

### Aircraft without radio equipment

Pilots shall strictly adhere to the aforementioned procedures, except where instructions pertaining to listening watch and radio transmission are concerned.

### ACAS II/TCAS II REQUIREMENTS

All civil fixed-wing turbine-engined aircraft having a maximum take-off mass exceeding 5700kg, or a maximum approved passenger seating configuration of more than 19 are required to be equipped with ACAS/TCAS II version 7.1.

**COMOROS  
RULES AND PROCEDURES**

## **DIFFERENCES FROM ICAO STANDARDS AND PROCEDURES**

### **ICAO REFERENCE**

#### **Annex 2**

**3.3.1.2** Flight plans are required for all flights.

**3.3.1.4** Flight plans shall be submitted at least 30 minutes before departure.

**4.1** A flight visibility of 8km is also prescribed for VFR flights below FL100. Within class “G” airspace the lower reference level for different VMC criteria is established at FL30 or 300m (1000ft) above ground or water, whichever is higher. At and below this level a minimum flight visibility of 1.5km is required, except that helicopters may operate at a flight visibility of 800m.

**4.4** IFR compulsory for all flights at FL150 and above.

**4.6** Except when necessary for take-off or landing aircraft shall not be flown at a height less than 50m (170ft) above ground or water or any natural obstacle and at a distance of not less than 150m (500ft) from any persons and artificial obstacle, whether fixed or mobile.

**5.1.2** Except when necessary for take-off or landing aircraft shall not be flown below 1500ft (450m) above the highest obstacle located within 4.3NM (8km) of the estimated position of the aircraft in flight.

**CONGO, D.R. OF  
RULES AND PROCEDURES**

## GENERAL

In general, the air traffic rules and procedures in force and the organization of the air traffic services are in conformity with ICAO Standards, Recommended Practices and Procedures.

Units of measurement used in all air and ground operations are as listed in the following table.

Measurement of	Unit
Distance used in navigation, position reporting, etc., generally in excess of 2 nautical miles	Nautical Miles and Tenths
Relatively short distances such as those relating to aerodromes (e.g., runway lengths)	Meters
Altitude, elevations and heights	Meters, Feet
Horizontal speed including wind speed	Kilometers Per Hour, Knots
Vertical speed	Meters Per Second
Wind direction for landing and taking off	Degrees Magnetic
Wind direction except for landing and taking off	Degrees True
Visibility including runway visual range	Kilometers or Meters
Altimeter setting	Hectopascals
Temperature	Degrees Celsius
Weight	Metric Tons or Kilograms
Time	Hours and Minutes, the day of 24hrs beginning at midnight UTC

## WGS-84 IMPLEMENTATION STATUS

No information available.

## FLIGHT PROCEDURES

### HOLDING

Holding procedures comply with Jeppesen ATC-Chapter "Flight Procedures (DOC 8168) - Holding Procedures", Tables IV-1-1, Holding Speeds.

### PROCEDURE LIMITATIONS AND OPTIONS

Instrument approach procedures are based on the PANS-OPS, Document 8168.

### AIRPORT OPERATING MINIMUMS

The Democratic Republic of Congo publishes Decision Altitude (Height), Minimum Descent Altitude (Height), OCA(H) and visibility for landing.

## CONGO, D.R. OF RULES AND PROCEDURES

Jeppesen charted minimums are not below State minimums.

### **ATS AIRSPACE CLASSIFICATIONS**

The Democratic Republic of Congo has adopted the ICAO ATS airspace classification as listed on Jeppesen ATC-Chapter "ICAO ATS Airspace Classifications - Annex 11".

Airspace classes "A", "C", "D" and "G" are used within Kinshasa FIR/UIR.

### **SPECIAL REQUIREMENTS AND REGULATIONS**

#### **COMMUNICATIONS**

Aircraft carry out IFR flights shall maintain continuous two-way communication with the appropriate ATS unit.

#### **FLIGHT PLANNING**

Flight plans are required for all flights.

#### **STRATEGIC LATERAL OFFSET PROCEDURES (SLOP)**

Congo has implemented in its upper airspace the SLOP. Pilot must report to the controller when normal navigation is resumed after a lateral deviation of 1 or 2NM right of the axis of the nominal route. Pilots may contact other aircraft on the interпилot frequency 126.9MHz to coordinate offset.

#### **REQUIRED NAVIGATION PERFORMANCE**

The following routes are designated RNP10:

- UM214, ETOXO to OPDAK;
- UM215, MOTAM to MERON;
- UM216, OVPAP to MIRDA;
- UM731, EMSAT to DURNA;
- UM998, AMSIK to INUGA;
- UQ579, KIN to TAREM;
- UQ580, MERON to NUVIS;
- UT136, NALOS to BUN;
- UT139, GOPUR to ABAVO;
- UT143, KGI to BATVU;
- UT252, SOBTO to LUB;
- UT325, SIPKI to BOSKI;
- UT417, KSA to TILAP;
- UT419, MERON to AGTOM;

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**CONGO, D.R. OF  
RULES AND PROCEDURES**

– UT943, KSA to ITNEL.

**AUTOMATIC DEPENDENT SURVEILLANCE BROADCAST (ADS-B)**

ADS-B has been implemented to provide monitoring and assistance to aircraft within 250NM around the following airports:

Boende, Bukavu (Kavuma), Buta-Zega, Gbadolite, Ilebo, Isiro-Matari, Kalemie, Kamina, Kikwit, Kindu, Kinshasa (N'Djili Intl), Kisangani (Bangoka Intl), Lubumbashi (Intl), Matadi-Tshimpi, Mbandaka and Mbuji-Mayi.

**DIFFERENCES FROM ICAO STANDARDS AND PROCEDURES**

No differences published.



**DJIBOUTI**  
**RULES AND PROCEDURES**

## GENERAL

In general, the air traffic rules and procedures in force and the organization of the air traffic services are in conformity with ICAO Standards, Recommended Practices and Procedures.

Units of measurement used in all air and ground operations are as listed in the following table.

Measurement of	Unit
Distance used in navigation, position reporting, etc.	Nautical Miles and Tenths
Relatively short distances such as those relating to aerodromes (e.g., runway lengths)	Meters
Altitude, elevations and heights	Meters, Feet
Horizontal speed including wind speed	Knots
Vertical speed	Feet per Minute
Wind direction for landing and taking off	Degrees Magnetic
Wind direction except for landing and taking off	Degrees True
Visibility including runway visual range	Kilometers or Meters
Altimeter setting, atmospheric pressure	Hectopascals
Temperature	Degrees Celsius
Weight	Metric Tons or Kilograms
Time	Hours and Minutes, the day of 24hrs beginning at midnight UTC

## WGS-84 IMPLEMENTATION STATUS

WGS-84 compliant.

## FLIGHT PROCEDURES

### HOLDING

Flight Level	Category A and B aircraft	Jet Aircraft Normal Conditions	Jet Aircraft Turbulence Condition
up to FL90	170kt	210kt	
above FL90 up to FL200	240kt (445kmh)		280kt (520kmh) or 0,8 Mach whichever is less
above FL200	265kt (490kmh)		

## DJIBOUTI RULES AND PROCEDURES

### AIRPORT OPERATING MINIMUMS

Djibouti publishes OCH together with DA(H)/MDA(H), RVR and visibility.

Jeppesen charted minimums are not below State minimums.

### ATS AIRSPACE CLASSIFICATION

Djibouti has adopted the ICAO ATS airspace classification as listed on Jeppesen ATC-Chapter "ICAO ATS Airspace Classifications - Annex 11".

Within Djibouti airspace, however, only the airspace classes "A", "D" and "G" are used.

### SPECIAL REQUIREMENTS AND REGULATIONS

#### ALTIMETRY

QFE altimeter settings are provided to local flights and on request.

#### COMMUNICATION

Aircraft overflying the Republic of Djibouti are subject to prior permission.

Aircraft shall contact Djibouti Approach on 121.1MHz at least 10 minutes prior to entering Djibouti airspace and squawk 2000, if equipped, within 80NM of Djibouti VORDME 'DTI'.

Radio contact is compulsory on 122.1MHz or 121.1MHz while flying in uncontrolled airspace.

### FLIGHT PLANNING

#### Place of Submission

Flight plan shall be submitted at the Air Traffic Service Reporting Office (ARO) at the departure aerodrome.

In the absence of such an office at the departure aerodrome, a flight plan shall be submitted by telephone or by radio after being airborne to the aerodrome control tower.

#### Flight Plan Message Addressing

Category of Flight	Route (into or via FIR and/or TMA)	Message Address
IFR flights	Into or via DJIBOUTI TMA and in, addition for flights: <ul style="list-style-type: none"> <li>– within Addis FIR above FL245</li> <li>– into Djibouti TMA</li> <li>– via Djibouti TMA</li> </ul>	HAABZQZX HDAMZAZX HDAMZTZX
All flights	Djibouti (Ambouli) airport	HDAMZAZX HDAMZTZX HDAMZPZX

**DJIBOUTI  
RULES AND PROCEDURES****Repetitive Flight Plan System**

RPL lists relating to flights with a destination in the Djibouti TMA and to flights overflying the Djibouti TMA shall be submitted at least 2 weeks in advance, to the following address:

Office de l'Aviation Civile

Address: BP/P.O.BOX 2609  
Republique de Djibouti

Fax: +253 21 355975

AFS: HDAMYAYX

***Incidental Changes and Cancellations of RPL***

Incidental changes to and cancellations of RPL, relating to departures from Djibouti (Ambouli) airport shall be notified as early as possible and not later than 30 minutes before departure to the:

ATC

Tel: +253 21 340977

or

ARO

Tel: +253 21 341646

**ACAS/TCAS II REQUIREMENTS**

All civil fixed-wing turbine-engined aircraft having a maximum take-off mass exceeding 5700kg, or a maximum approved passenger seating configuration of more than 19 are required to be equipped with ACAS/TCAS II version 7.1.

**DIFFERENCES FROM ICAO STANDARDS AND PROCEDURES****ICAO REFERENCE****Annex 2**

**3.3.1.2** Flight plans are required for all VFR flights outside the CTR Djibouti (Ambouli).

**4.3** VFR flights are permitted at night within CTR Djibouti (Ambouli) under specified conditions (meteorology, aircraft equipment and crew qualification.)

**4.6** Except when necessary for take-off or landing, aircraft shall fly at a height of at least 150m (500ft) above the highest obstacle.

Overflying the city of Djibouti below 1000m (3000ft MSL) is prohibited unless authorized by competent authorities.

The minimum safe height over densely populated area and assemblies of persons shall be at least 300m (1000ft MSL).

**EGYPT  
RULES AND PROCEDURES**

## GENERAL

In general, the air traffic rules and procedures in force and the organization of the air traffic services are in conformity with ICAO Standards, Recommended Practices and Procedures.

Units of measurement used in all air and ground operations are as listed in the following table.

Measurement of	Unit
Distance used in navigation, position reporting, etc., generally in excess of 2 to 3 nautical miles	Nautical Miles and Tenths
Relatively short distances such as those relating to aerodromes (e.g., runway lengths)	Meters
Altitude, elevations and heights	Feet (Base clouds in Meters)
Horizontal speed including wind speed	Knots
Vertical speed	Feet per Minute
Wind direction for landing and taking off	Degrees Magnetic
Wind direction except for landing and taking off	Degrees True
Visibility including runway visual range	Kilometers or Meters
Altimeter setting	Hectopascals
Temperature	Degrees Celsius
Weight	Metric Tons or Kilograms
Time	Hours and Minutes, the day of 24hrs beginning at midnight UTC

## WGS-84 IMPLEMENTATION STATUS

WGS-84 compliant.

## FLIGHT PROCEDURES

### HOLDING

Holding procedures comply with Jeppesen ATC-Chapter "Flight Procedures (DOC 8168) - Holding Procedures", Table IV-1-1, Holding Speeds.

### PROCEDURE LIMITATIONS AND OPTIONS

Instrument approach procedures are based on the PANS-OPS, Document 8168.

The NDB DME RWY 36 instrument approach procedure for Almaza AB is based on the United States Standards for Terminal Procedures (TERPS).

## EGYPT RULES AND PROCEDURES

### **AIRPORT OPERATING MINIMUMS**

Egypt publishes Obstacle Clearance Altitudes (Heights) [OCA(H)] and for some airports DA/MDA. For the most airports RVR and for some airports visibility.

Jeppesen published minimums are not below State minimums.

### **ATS AIRSPACE CLASSIFICATION**

Egypt has adopted the ICAO ATS classification as listed on Jeppesen ATC-Chapter "ICAO ATS Airspace Classifications - Annex 11".

Airspace classes "A", "B" and "D" are used within Egypt airspace.

## **SPECIAL REQUIREMENTS AND REGULATIONS**

### **COMMUNICATIONS**

All traffic entering Cairo FIR must contact Cairo ACC 15 minutes prior to entry point.

### **FLIGHT PLANNING**

Flight plans are required for all flights.

#### **Time of Submission**

Except for repetitive flight plans, a flight plan shall be submitted at least:

- 60 minutes prior to EOBT and not more than 120 hours prior to EOBT.
- 3 hours prior to EOBT and not more than 120 hours prior to EOBT for all flights destined or overflying restricted areas daily imposed by NMOC in the EUR region.

*NOTE: On submitting such flight plans, requirements of ATS units in the airspace along the route to be flown for timely information (including requirements for early submission for ATFM purposes) are taken into account.*

#### **Content of Flight Plan**

In Item 18 of flight plan (except commercial flights) include permission number and name of authorized agent in Egypt.

#### **Maximum Cruising Levels for short-range Flights**

It is in generally recommended not to select levels above FL240 for flights up to a distance of 300NM. Traffic from Luxor (Intl) to Cairo (Intl) via AWY A727 should file MAX FL240.

## EGYPT RULES AND PROCEDURES

### Flight Plan Message Addressing

Route (into or via FIR and/or TMA)	Message address
into or via Cairo FIR and, in addition, for flights: <ul style="list-style-type: none"> <li>– within Cairo FIR above FL245;</li> <li>– into Cairo TMA;</li> <li>– via Cairo TMA.</li> </ul>	HECCZQZX
Egyptian controlled aerodromes additionally: <ul style="list-style-type: none"> <li>– Luxor (Intl) inbound;</li> <li>– Sharm El Sheikh (Intl) inbound;</li> <li>– Hurghada (Intl) inbound.</li> </ul>	ICAO location indicator + ZTZX HELXZAZR HESHZAZR HEGNZAZR
Outbound traffic: Traffic depart Abu Simbel, Alexandria (Intl), Almaza (AB), Aswan (Intl), Asyut (Intl), Al Alamain (Intl), Alexandria (Borg El Arab Intl), Cairo (Capital Intl), El Arish (Intl), El Kharga, El Tor, Hurghada (Intl), Luxor (Intl), Marsa Alam (Intl), Mersa Matruh (Intl), 6th of October, Port Said, Sharm El Sheikh (Intl), Suhag (Intl), Taba (Intl).	ICAO location indicator + ZIZX
Others	HECAZPZX

### AIR TRAFFIC FLOW MANAGEMENT PROCEDURES

Within the Cairo ATFM structure, the Cairo Air Traffic Flow Management Position (Cairo FMP) is considered as a cooperating position to the EUROCONTROL Network Management Operations Center (NMOC). The FMP is to cooperate with NMOC in the provision of air traffic flow management service for air traffic departing, arriving, any Egyptian airport or overflying Cairo FIR to or from European region. The FMP is responsible for the provision of ATFM service in the Cairo FIR.

#### Cairo FMP

#### Cairo Air Navigation Centre (CANC)

Address: Cairo Airport

Arab Republic of Egypt

Tel: +202 2268 7981

+202 2267 8883 and Cairo Intl Airport extension 4689

Fax: +202 2637 3950

Telex: 92443 CANC UN

AFS: HECCZQZX

## EGYPT RULES AND PROCEDURES

### REQUIRED NAVIGATION PERFORMANCE

Egypt RNAV5 airspace is all of that airspace within Cairo FIR above FL160/460, on area basis.

### ACAS/TCAS II REQUIREMENTS

All civil fixed-wing turbine-engined aircraft having a maximum take-off mass exceeding 5700kg, or a maximum approved passenger seating configuration of more than 19 are required to be equipped with ACAS/TCAS II 7.1.

Exemption: Aircraft that are away from their maintenance base may be dispatched with an inoperative ACAS/TCAS II for a period not exceeding 10 days. The exemption is valid until the first time the aircraft returns to its maintenance base airport. Aircraft operating with unserviceable ACAS/TCAS II under this exemption shall indicate the unserviceability in Item 18 of the flight plan.

### DIFFERENCES FROM ICAO STANDARDS AND PROCEDURES

#### ICAO REFERENCE

##### Annex 2

**4.4** VFR flights shall not be operated above FL150.

**ERITREA**  
**RULES AND PROCEDURES**

## GENERAL

In general, the air traffic rules and procedures in force and the organization of the air traffic services are in conformity with ICAO Standards, Recommended Practices and Procedures.

Units of measurement used in all air and ground operations are as listed in the following table.

Measurement of	Unit
Distance used in navigation, position reporting, etc., generally in excess of 2 to 3 nautical miles	Nautical Miles and Tenths
Relatively short distances such as those relating to aerodromes (e.g., runway lengths)	Meters
Altitude, elevations, and heights	Feet
Horizontal speed including wind speed	Knots
Vertical speed	Feet Per Minute
Wind direction for landing and taking off	Degrees Magnetic
Wind direction except for landing and taking off	Degrees True
Visibility including runway visual range	Kilometers or Meters
Altimeter setting	Hectopascal
Temperature	Degrees Celsius
Weight	Metric Tons or Kilograms
Time	Hours and Minutes, the day of 24hrs beginning at midnight UTC

## WGS-84 IMPLEMENTATION STATUS

WGS-84 compliant.

## FLIGHT PROCEDURES

### HOLDING

Holding procedures comply with Jeppesen ATC-Chapter “Flight Procedures (DOC 8168) - Holding Procedures”, Table IV-1-1, Holding Speeds.

### PROCEDURE LIMITATIONS AND OPTIONS

Instrument approach procedures are based on the PANS-OPS, Document 8168.

### AIRPORT OPERATING MINIMUMS

Eritrea does not publish State airport operating minimums.

Eritrea publishes Obstacle Clearance Altitudes (Heights) [OCA(H)].



**ERITREA  
RULES AND PROCEDURES****ATS AIRSPACE CLASSIFICATIONS**

Eritrea has adopted the ICAO ATS airspace classification as listed in Jeppesen ATC-Chapter "ICAO ATS Airspace Classifications - Annex 11".

Airspace classes "A", "B", "C", "E" and "G" are used within Eritrean airspace.

**SPECIAL REQUIREMENTS AND REGULATIONS****ALTIMETRY**

QNH altimeter setting is made available in approach clearance and in clearances to enter the traffic circuit.

QFE altimeter setting will be given on request.

**FLIGHT PLANNING**

Flight plans required for all flights.

**UNCOORDINATED FLIGHTS ALONG THE RED SEA AREA**

Uncoordinated flights operating across the Red Sea area shall comply with the following:

- a. Squawk the radar code A2000.
- b. Maintain a single flight level, namely FL300, while crossing the Red Sea from south to north.
- c. Maintain a single flight level, namely FL280, while crossing the Red Sea from north to south unless otherwise coordinated.
- d. Provide current flight details on the working frequencies of concerned ACCs, notifying on the following data:
  1. call sign;
  2. direction of flight;
  3. altitude;
  4. time of crossing reporting points along FIR boundaries.
- e. Transmit flight details 10 minutes prior to crossing FIR boundary and maintain listening on the appropriate FIR frequencies to identify other aircraft and avoid conflict including instant reporting to the nearest ACC.
- f. All flights maintaining RVSM flight levels (between FL290-FL410) should be RVSM approved.
- g. All flights being non-compliant with the relevant RVSM airspace requirements would be allocated either FL250 or FL260 as appropriate to the direction of flight.

**ARRIVING AND OVERFLYING AIRCRAFT**

Aircraft intending to fly in accordance with IFR within controlled airspace during the hours of operation of the relevant ATS units shall request ATC clearance from the appropriate ATC units.

## ERITREA RULES AND PROCEDURES

Request by radiotelephony should be made not later than 10 minutes out. The following information should be passed on initial contact:

- a. aircraft identification and type;
- b. present altitude, position and flight conditions;
- c. estimated time over position of entry into control zone and estimated time over the main navigational aid;
- d. aerodrome of destination and true airspeed.

### SPECIAL LOCAL PROCEDURES

All IFR flights departing from Asmara aerodrome during IMC shall shuttle between Asmara NDB 'AS' and a point 1 minute west to cross the 'AS' at 11500ft, then proceed according to ATC clearance.

## DIFFERENCES FROM ICAO STANDARDS AND PROCEDURES

### ICAO REFERENCE

#### Annex 2

**4.1** In class "G" airspace, below 10000ft, VFR flights (Special VFR excluded) require a minimum distance from clouds of 1500m horizontally and 1000ft (300m) vertically.

**4.8 (a)** VFR flight shall comply with the provisions of 3.6, when operated within classes "B", "C", "E" and "G" airspace.

**ESWATINI  
RULES AND PROCEDURES**

## GENERAL

In general, the air traffic rules and procedures in force and the organization of the air traffic services are in conformity with ICAO Standards, Recommended Practices and Procedures.

Units of measurement used in all air and ground operations are as listed in the following table.

Measurement of	Unit
Distance used in navigation, position reporting, etc.	Nautical Miles and Tenths
Relatively short distances such as those relating to aerodromes (e.g., runway lengths)	Meters
Altitude, elevations and heights	Feet
Horizontal speed including wind speed	Knots
Vertical speed	Feet per Minute
Wind direction for landing and taking off	Degrees Magnetic
Wind direction except for landing and taking off	Degrees True
Visibility including runway visual range	Kilometers or Meters
Altimeter setting	Hectopascals
Temperature	Degrees Celsius
Weight	Metric Tons or Kilograms
Time	Hours and Minutes, the day of 24hrs beginning at midnight UTC

## WGS-84 IMPLEMENTATION STATUS

WGS-84 partially compliant.

## FLIGHT PROCEDURES

### HOLDING

Holding procedures comply with Jeppesen ATC-Chapter “Flight Procedures (DOC 8168) - Holding Procedures”, Table IV-1-1, Holding Speeds.

### PROCEDURE LIMITATIONS AND OPTIONS

Instrument approach procedures are based on the PANS-OPS, Document 8168.

### AIRPORT OPERATING MINIMUMS

Eswatini does not publish State airport operating minimums.

Eswatini publishes Obstacle Clearance Altitudes (Heights) [OCA(H)].

**ESWATINI  
RULES AND PROCEDURES****ATS AIRSPACE CLASSIFICATIONS**

Eswatini has adopted the ICAO ATS airspace classification as listed on Jeppesen ATC-Chapter "ICAO ATS Airspace Classifications - Annex 11".

Airspace classes "A", "D" and "G" are used within Matsapha TMA.

In airspace class "D" for VFR only traffic information is provided as far as practical and VFR traffic is not subject to ATC clearance.

**SPECIAL REQUIREMENTS AND REGULATIONS****POSITION REPORTING PROCEDURES**

The last position report before passing from one FIR to an adjacent FIR shall also be made to the ATS unit serving the airspace to be entered.

**FLIGHT PLANNING**

Flight plans shall be submitted at the aerodrome AIS units or Air Traffic Services Reporting Office (ARO) at the departure aerodromes. In the absence of such offices at the departure aerodrome, a flight plan shall be submitted by telephone to the nearest AIS unit/ARO as listed below:

Sikhuphe ARO

Tel: +268 2 333 5160/5930

Fax: +268 2 333 5229

Matsapha ARO

Tel: +268 2 518 4455/4345/4365

Fax: +268 2 518 8446

For domestic flights from an uncontrolled to a controlled aerodrome, a flight plan shall be submitted by telephone or by use of an Airborne Flight Plan.

Flight plans shall be submitted at least 30 minutes prior to departure.

**PROCEDURES AT UNMANNED AERODROMES**

Unmanned procedures are available on weekends at Manzini (Matsapha) as follows:

a. Inbound traffic:

1. Before entering the control zone, traffic must broadcast their position, flight level, type of aircraft estimates overhead and intentions.
2. Traffic shall route overhead at a height above the aerodrome circuit. Avoid the approach or take-off areas.
3. While above the airfield, pilot should do the following:
  - (a) quick inspection of the runway left/right including approach/climb out areas;
  - (b) check for movement on the apron and the airside;

## ESWATINI RULES AND PROCEDURES

- (c) more importantly check the wind sock which will guide you into choosing the more suitable landing direction (not the landing T);
- (d) broadcast the runway selected based on the wind;
- (e) fly for final and landing;
- (f) move out of the runway as soon as possible.

b. Outbound traffic:

1. Pilot should broadcast position and intention before any movement and listen for possible traffic.
2. Based on wind direction, pilot should select the runway based on the wind sock.
3. The departure shall be commenced by back-tracking the departure runway which will serve as the runway inspection.
4. Pilot should give priority to the aircraft about to land.

*NOTE: These procedures are only valid for domestic flights.*

### SECONDARY SURVEILLANCE RADAR (SSR)

While operating in Matsapha TMA airspace all aircraft shall be equipped with and operate a serviceable SSR Mode A and C transponder when:

- a. operating within or transiting any controlled or advisory airspace;
- b. operating 1000ft above or below such controlled or advisory airspace;
- c. operating within 5NM (vicinity) of defined lateral limits of controlled or advisory airspace boundaries;
- d. any other airspaces where the operation of transponder have been prescribed by the Director General of Eswatini Civil Aviation Authority.

## DIFFERENCES FROM ICAO STANDARDS AND PROCEDURES

### ICAO REFERENCE

#### Annex 2

**4.2** Except when cleared by ATC, VFR flights shall not take-off or land at an aerodrome within a controlled zone, or enter the aerodrome traffic pattern when the cloud ceiling is less than 450m (1500ft) or when the ground visibility is less than 8km.

**4.4 (a)** VFR flights shall not be operated above FL145.

**ETHIOPIA**  
**RULES AND PROCEDURES**

## GENERAL

In general, the air traffic rules and procedures in force and the organization of the air traffic services are in conformity with ICAO Standards, Recommended Practices and Procedures.

Units of measurement used in all air and ground operations are as listed in the following table.

Measurement of	Unit
Distance used in navigation, position reporting, etc., generally in excess of 2 to 3 nautical miles	Nautical Miles and Tenths
Relatively short distances such as those relating to aerodromes (e.g., runway lengths)	Meters
Altitude, elevations and heights (cruising levels are given in flight level numbers and not in altitude)	Feet, Meters
Horizontal speed including wind speed	Knots, Kilometers per Hour
Vertical speed	Feet per Minute
Wind direction for landing and taking off	Degrees Magnetic
Wind direction except for landing and taking off	Degrees True
Visibility including runway visual range	Kilometers or Meters
Altimeter setting	Hectopascal
Temperature	Degrees Celsius
Weight	Metric Tons or Kilograms
Time	Hours and Minutes, the day of 24hrs beginning at midnight UTC

## WGS-84 IMPLEMENTATION STATUS

WGS-84 compliant.

## FLIGHT PROCEDURES

### HOLDING

Holding procedures comply with Jeppesen ATC-Chapter "Flight Procedures (DOC 8168) - Holding Procedures", Table IV-1-1, Holding Speeds.

Holding areas have been calculated for levels up to 20000ft and speeds up to 240kt, except those depicted on instrument approach charts which have been calculated for levels up to 14000ft and speeds up to 170kt for category A and B aircraft, and up to 230kt for category C and D aircraft. Aircraft wishing to hold at higher levels or speeds require ATC clearance.

## ETHIOPIA RULES AND PROCEDURES

### PROCEDURE LIMITATIONS AND OPTIONS

Instrument approach procedures are based on the PANS-OPS, Document 8168.

### AIRPORT OPERATING MINIMUMS

Ethiopia publishes OCA(H). Ceiling and visibility are published for landing at selected airports. Visibility or ceiling and visibility are published for take-off at selected airports.

Jeppesen charted minimums are not below State Minimums.

### ATS AIRSPACE CLASSIFICATION

Ethiopia has adopted the ICAO ATS airspace classification as listed in Jeppesen ATC-Chapter "ICAO ATS Airspace Classifications - Annex 11".

Airspace classes "A", "C", "D", "E" and "G" are used within Addis Abeba FIR.

### SPECIAL REQUIREMENTS AND REGULATIONS

#### FLIGHT PLANNING

##### Flight Plan Message Addressing

Flight movement messages for IFR flights relating to traffic shall be addressed as follows:

Into or via Addis Abeba FIR and, in addition, for flights <ul style="list-style-type: none"> <li>– within Addis Abeba FIR above FL245</li> <li>– into Addis Abeba TMA</li> <li>– via Addis Abeba TMA</li> </ul> Outbound traffic	HAAAZQZX
Ethiopian controlled aerodromes	HAAAYGYX

#### DIRE DAWA SPECIAL PROCEDURES

Pilots should establish VHF contact on the appropriate frequency for aerodrome meteorological and traffic information when at least 15NM out.

#### RESTRICTION FOR ROUTE UT124

All flights enter/exit Addis Abeba FIR via ATS route UT124 at ALRAP are strictly advised not to fly left of track while enter and not to fly right of track while exit due to prohibited area. If you encounter bad weather conditions at ATS route UT124, pilots are advised to use ATS route UN301 entry/exit point TIKAT.

**ETHIOPIA**  
**RULES AND PROCEDURES**

## **USE OF GPS AS PRIMARY ENROUTE AND AS SUPPLEMENTAL MEAN OF NAVIGATION IN TERMINAL AND APPROACH PHASES**

### **Continental Enroute and Terminal Area**

- a. The GPS navigation equipment must have been certified to comply with the requirements for any of the classes in FAA TSO C-129 or equivalent, be installed and approved with FAA AC 20-138 for stand-alone equipment or AC 20-130 for multi-sensor equipment and be operated in accordance with the approved flight manual or any supplement thereof.
- b. Aircraft using GPS equipment under IFR must be equipped with another approved and operational means of navigation.

Should GPS navigation capability be lost, this equipment must allow navigation along planned route or suitable alternate route.

Monitoring of the traditional navigation equipment is necessary when there are insufficient satellite in view for RAIM to operate.

- c. The appropriate airworthiness authority of the State of registry of the aircraft must have carried out the necessary check up and issued operational approval of the GPS operation to the operator concerned.
- d. The operator of the aircraft will be responsible for the training of pilots and inclusion in the approved flight manual, of the operating procedures of the GPS equipment.
- e. Pilots intending to use GPS navigation must consult current satellite outage prediction NOTAMs and plan their flight accordingly.

## **REQUIRED NAVIGATION PERFORMANCE**

Following route is designated as RNAV5:

- W888, GWZ to QHA.

Following routes are designated as RNP2:

- T/UT111, T/UT112, T/UT113, T/UT114, T/UT115, T/UT116, T/UT117, T/UT118, T/UT119, T/UT222, T/UT223, T/UT224, T/UT225, T/UT226, T/UT227, T/UT228, T/UT229, T/UT333, T/UT334, T/UT335, T/UT336, T/UT337, T/UT338, T/UT339, T/UT444, T/UT445, T/UT447, T/UT448, T/UT449, T/UT500, T/UT666, T/UT667.

Following routes are designated as RNP10:

- A/UA727, B/UB535, L/UL432, M/UM308, N/UN301, N/UN303, P/UP751, R/UR775, T446, UB403, UB736, UG300, UG651, UM216, UM220, UM310, UM997, UN304, UR995, UT124, UT129, UT139, W15, W885, ATS ROUTE, DWA to MAV.

## **COMMUNICATIONS AT UNMANNED AERODROMES**

Aircraft operating into or out of ATC unmanned aerodromes shall comply with the following communication procedures during landing and take-off and while operating within 25NM area around the aerodrome:



## ETHIOPIA RULES AND PROCEDURES

- during landing: broadcast on pilot-to-pilot frequency 126.9MHz aircraft call sign, position, altitude, approach direction, ETA and any other relevant information;
- before take-off: prior to taxiing to enter the active runway, broadcast pilot-to-pilot frequency 126.9MHz, aircraft call sign, take-off runway, take-off direction, altitude to be maintained, destination, turn direction and any other relevant information;
- within 25NM area around unmanned aerodromes, maintain listening watch on 126.9MHz.

Broadcasts shall be repeated as frequently as practicable until on final approach or after take-off until passing 25NM area boundary outbound.

### **SECONDARY SURVEILLANCE RADAR (SSR)**

Within Addis Abeba FIR (class “A” airspace above FL290 incl) and Bole Radar Approach Terminal Control area (60NM centered from ‘ADS’ VOR) all flights shall be equipped with SSR Mode S (1090MHz extended squitter) capability.

### **AUTOMATIC DEPENDENT SURVEILLANCE BROADCAST (ADS-B)**

#### **Area of Applicability**

The lateral dimension of the initial ADS-B transition air space will be the limits of the Addis Abeba FIR including the upper airspace over Djibouti between FL290-FL410 inclusive.

#### **ADS-B Aircraft Equipage and Approval**

The responsibility for transmitting accurate data by the transponder in an aircraft rests solely on the aircraft operators.

The following minimum parameters must be broadcast by the transponders:

- a. airborne position;
- b. navigation Uncertainty Category Position (UCP)  $\geq 5$ ; or
- c. Navigation Integrity Category (NIC)  $\geq 6$ ;
- d. flight ID;
- e. pressure altitude;
- f. Special Position Indicator (SPI);
- g. emergency status.

Operators are urged when selecting ADS-B avionics to consider the availability of future upgrades to the full ADS-B message set.

Aircraft unable to down link the minimum message set as indicated above will be provided revised altitude or route clearance to avoid entering ADS-B surveillance air space.

The GPS receiver, which must comply with Technical Standard Order (TSO) C-129, C-145 or C-146 generates position data with integrity, and aircraft should be equipped with receiver integrity monitoring system.

## ETHIOPIA RULES AND PROCEDURES

Operators and aircraft may be required to receive specific approval from their responsible State authority in order to qualify for operations in ADS-B surveillance air space.

The ADS-B installations on the aircraft shall comprise:

- a. ADS-B emitter, the SSR transponder or stand alone ADS-B emitter;
- b. data source of the position of the aircraft, speed vector (typically the FMS or GNSS receiver/navigate);
- c. data source of barometric altitude (typically the air data computer or a stand alone barometric pressure encoder);
- d. data source of flight identity; entered by the pilot into either the transponder control panel or the FMS which passes the data to the transponder;
- e. capability to operate transponders on 1090Mhz extended squitter;
- f. FMS with area navigation capability;
- g. stand alone sensor-GNSS receiver with RAIM capability (TSO C-129, C-145, or C-146) compliant.

### Separation Minimums based on ADS-B

Horizontal separation minimums based on ADS-B shall not be less than:

- a. enroute (outside TMAS) - 10NM;
- b. within the Addis Abeba TMA - 5NM.

Distance based wake turbulence separation minimums shall be applied to aircraft being provided with ATS surveillance service in the approach and departure phases.

### Operation of ADS-B Transmitters in an Emergency

To indicate a state of emergency or to transmit other urgent information, an aircraft equipped with ADS-B shall operate the emergency and/or urgency mode as follows:

- a. emergency;
- b. communication failure;
- c. unlawful interference;
- d. minimum fuel; and/or
- e. medical.

### Flight Planning

Aircraft intending to operate within the ADS-B airspace are required to file their flight plan in accordance with the new ICAO flight plan format.

Accordingly, flight plan Item 7 (flight identification) shall be entered correctly by the pilot into the transponder. This is done either directly or through the flight management system depending on the aircraft integration correlated to the unique ICAO 24-bit aircraft identifier.

**ETHIOPIA  
RULES AND PROCEDURES**

In addition, Item 10 and 18 of the ICAO flight plan shall also be entered with the correct coding.

**ACAS/TCAS II REQUIREMENTS**

All civil fixed-wing turbine-engined aircraft having a maximum take-off mass exceeding 5700kg, or a maximum approved passenger seating configuration of more than 19 are required to be equipped with ACAS/TCAS II version 7.1.

**DIFFERENCES FROM ICAO STANDARDS AND PROCEDURES****ICAO REFERENCE****Annex 2**

**3.3.1.1** In addition to ICAO specifications the submission of a flight plan is also required for all domestic flights.

**4.4** IFR compulsory for all flights:

- a. above FL145;
- b. between sunset and sunrise.

**GAMBIA  
RULES AND PROCEDURES**

## GENERAL

In general, the air traffic rules and procedures in force and the organization of the air traffic services are in conformity with ICAO Standards, Recommended Practices and Procedures.

Units of measurement used in all air and ground operations are as listed in the following table.

MEASUREMENT OF	UNIT
Distance used in navigation, position reporting, etc., generally in excess of 2 to 3 nautical miles	Nautical Miles and Tenths
Relatively short distances such as those relating to aerodromes (e.g., runway lengths)	Meters
Altitude, elevations, and heights	Meters, Feet
Horizontal speed including wind speed	Knots
Vertical speed	Feet per Minute
Wind direction for landing and taking off	Degrees Magnetic
Wind direction except for landing and taking off	Degrees True
Visibility including runway visual range	Kilometers or Meters
Altimeter setting, atmospheric pressure	Hectopascals
Temperature	Degrees Celsius
Weight	Metric Tons or Kilograms
Time	Hours and minutes, the day of 24 hrs beginning at midnight UTC

## WGS-84 IMPLEMENTATION STATUS

WGS-84 compliant.

## FLIGHT PROCEDURES

### HOLDING

Holding procedures comply with Jeppesen ATC-Chapter "Flight Procedures (DOC 8168) - Holding Procedures", Table IV-1-1, Holding Speeds.

### PROCEDURE LIMITATIONS AND OPTIONS

Instrument Approach Procedures comply with PANS-OPS, Document 8168.

### AIRPORT OPERATING MINIMUMS

Gambia publishes OCA(H) and DA(H)/MDA(H)s for landing, and additional visibilities for circling approaches.

## **GAMBIA RULES AND PROCEDURES**

Jeppesen published minimums are not below State minimums.

### **ARRIVING FLIGHTS**

IFR flights entering Banjul CTR for landing will normally be cleared by Dakar Control to FL60 and to contact Banjul Approach Control for further clearance.

When in contact with Banjul APP these flights are positively to indicate that they are released by Dakar Control. After that Banjul APP will clear such flights to a specified holding point at a definite level. If the clearance limit is reached before further instructions have been received, holding procedures will be carried out at the level last authorized.

### **DEPARTING FLIGHTS**

IFR flights departing from an aerodrome within the Banjul Control Zone will receive clearances from Banjul APP to the destination after coordination with Dakar Control or to a specified point as determined by Dakar Control.

When such coordination cannot be established with Dakar Control, such flights will be cleared to the Banjul CTR boundary at FL40 to contact Dakar Control for further clearance. Such clearances by Banjul APP are valid only to the clearance limits, which will be within the Banjul Control Zone.

### **ATS AIRSPACE CLASSIFICATIONS**

Gambia has adopted the ICAO ATS airspace classification as listed in ATC-Chapter "ICAO ATS Airspace Classifications-Annex 11". Airspace classes "A", "B", "E" and "G", however, are not used within Gambia airspace.

## **SPECIAL REQUIREMENTS AND REGULATIONS**

### **COMMUNICATIONS**

After entering runway, aircraft should maintain approach frequency (121.30MHz) unless when unserviceable. The tower frequency (118.30MHz) may be used whenever approach frequency is faulty.

### **ALTIMETRY**

QFE altimeter settings are available on request.

### **En-route Procedures**

En-route flights penetrating the Banjul CTR are not allowed within the transition layer between 2500ft and FL40 unless specifically instructed by ATC.

## **DIFFERENCES FROM ICAO STANDARDS AND PROCEDURES**

### **ICAO REFERENCE**

### **ANNEX 2**

**3.3.1.2** Flight plans are required for all flights.

**GHANA  
RULES AND PROCEDURES**

## GENERAL

In general, the air traffic rules and procedures in force and the organization of the air traffic services are in conformity with ICAO Standards, Recommended Practices and Procedures.

Units of measurement used in all air and ground operations are as listed in the following table.

Measurement of	Unit
Distance used in navigation, position reporting, etc., generally in excess of 2 to 3 nautical miles	Nautical Miles and Tenths
Relatively short distances such as those relating to aerodromes (e.g., runway lengths)	Meters
Altitude, elevations and heights	Feet and Flight Levels
Horizontal speed including wind speed	Knots
Vertical speed	Feet per Minute
Wind direction for landing and taking off	Degrees Magnetic
Wind direction except for landing and taking off	Degrees True
Visibility including runway visual range	Kilometers or Meters
Altimeter setting	Hectopascals
Temperature	Degrees Celsius
Weight/Mass	Metric Tons or Kilograms
Time	Hours and Minutes, the day of 24hrs beginning at midnight UTC

## WGS-84 IMPLEMENTATION STATUS

WGS-84 compliant.

## FLIGHT PROCEDURES

### HOLDING

Holding procedures comply with Jeppesen ATC-Chapter “Flight Procedures (DOC 8168) - Holding Procedures”, Table IV-1-1, Holding Speeds.

Unless otherwise specified by ATC, enroute holding shall be carried out in a 2 minutes standard racetrack procedure.

## PROCEDURE LIMITATIONS AND OPTIONS

Instrument approach procedures are based on the PANS-OPS, Document 8168.

**GHANA  
RULES AND PROCEDURES****AIRPORT OPERATING MINIMUMS**

Ghana publishes OCA(H)s and DA(H)/MDA(H)s for landing.

Jeppesen charted minimums are not below State minimums.

**ATS AIRSPACE CLASSIFICATIONS**

Ghana has adopted the ICAO ATS airspace classification as listed in Jeppesen ATC-Chapter "ICAO ATS Airspace Classifications - Annex 11".

Airspace classes "A", "B", "C", "D" and "F" are used within the Accra FIR.

**SPECIAL REQUIREMENTS AND REGULATIONS****FLIGHT PLANNING****Flight Plan Message Addressing**

Flight movement messages for IFR flights into or via Accra FIR shall be addressed to DGACFPLX.

**REQUIRED NAVIGATION PERFORMANCE**

The following routes are designated RNP2:

- Y1, ERPAD to TI;
- Y2, TI to IPEPU.

The following routes are designated RNP10:

- L433, POLTO to ACC;
- UL433, POLTO to ACC;
- UL683, TLE to GANDA;
- UM566, TLE to KELEX;
- UN121, ACC to ARMAR;
- UP685, ANUVO to LIREX;
- UQ583, EREGO to STM;
- UQ584, GAPAK to MOKOB;
- UQ592, KOBNA to BATIA;
- UY149, ACC to GANBI;
- UY252, TYE to GANBI;
- UZ136, TYE to KINBU.

## GHANA RULES AND PROCEDURES

### FLEXIBLE TRACK SYSTEM

Flexible routings are implemented within Accra FIR/UIR (DGAC) between FL245 and FL410. Within DGAC airspace users will be able to plan user-preferred trajectories through the use of 5-letter waypoint name codes. It is acceptable to file in ICAO flight plan Item 15a Direct (DCT) segment only from/to the following waypoints within the Accra FIR:

- ARABA DCT KIDNI and vice versa;
- ARABA DCT ARMAR and vice versa;
- ARABA DCT LOVLI and vice versa;
- ARABA DCT BUGRI and vice versa;
- ARABA DCT GANBI and vice versa;
- LIREX DCT KINBU and vice versa;
- LIREX DCT GANBI and vice versa;
- LIREX DCT BUGRI and vice versa;
- LIREX DCT ARABA and vice versa.

### ATLANTIC OCEAN RANDOM ROUTING RNAV AREA (AORRA)

The AORRA is the volume of airspace between FL290 and FL410 inclusive within the Atlantico, Dakar Oceanic, Comodoro Rivadavia, Ezeiza, Johannesburg Oceanic, Luanda, Montevideo and Accra Oceanic FIRs.

Flights operating within the AORRA shall enter and exit AORRA via particular gates, aircraft may track via a flight plan preferred track between these gates. Prior entering or after exiting the AORRA at a particular gate, aircraft are to comply with the fixed route structure, associated with that particular entry/exit points or as instructed by ATC, and are required to flight plan accordingly.

ADS/CPDLC will be utilized in AORRA airspace by suitably equipped service providers to provide an ATS service to aircraft able to take advantage of this form of communication. Operators are to note that in some sectors of the random routing airspace, ADS/CPDLC is the primary form of communication, with HF as secondary means of communication.

No aircraft shall flight plan to operate in the AORRA airspace unless it is RNP10 certified, except in the following circumstances:

- a. the aircraft is being initially delivered to the State of Registry or the State of the operator;
- b. the aircraft is certified but experienced navigation degradation and is being flown back;
- c. the aircraft is engaged on a humanitarian or mercy flight;
- d. State aircraft.

RNP10 compliance shall be indicated placing a “R” in Item 10 of the ICAO flight plan form, in the case of repetitive flight plans RNP10 compliance shall be indicated placing an “R” in Item Q of the RPL.



## **GHANA RULES AND PROCEDURES**

Flight plans shall contain entry and exit point to AORRA when required and the estimated time for every 5° of longitude.

Position reporting shall be required at entry/exit gates, 05E, 00E/W as well as any other position required by ATC.

### **ADS/CPDLC OPERATIONS IN ACCRA FIR**

All aircraft operating in the oceanic portion of the Accra FIR south of 03N outside radar and VHF coverage shall follow the procedure below:

Logon address for Accra FIR is DGAC.

a. Inbound procedures:

- logon to DGAC at least 10 minutes prior to the Accra FIR boundary;
- a SELCAL check should be made on the appropriate HF frequency 8903kHz;
- a CPDLC position report shall be made at the FIR boundary. Subsequent position reporting will be via ADS-C.

b. Outbound procedures:

- If next data authority does not work, pilots must manually logoff from DGAC and initiate a manual logon with the next data link FIR or via voice contact next FIR on appropriate frequencies.
- Crew can expect an uplink AT [POSITION] MONITOR (OR CONTACT) [ATSUNAME] [FREQUENCY] and then an END SERVICE message.
- If departing from Accra (Kotoka Intl) and aircraft will transverse the oceanic airspace, pilots shall logon to DGAC prior to departure.

*NOTE: In the Accra Oceanic airspace CPDLC is the primary means of communication. Back up communication will be HF VOICE, SATCOM, and VHF VOICE. Where there is SSR and VHF coverage ADS-C/CPDLC is the secondary means of communication.*

### **ACAS/TCAS II REQUIREMENTS**

All civil fixed-wing turbine-engined aircraft having a maximum take-off mass exceeding 5700kg, or a maximum approved passenger seating configuration of more than 19 are required to be equipped with ACAS/TCAS II version 7.1.

## **DIFFERENCES FROM ICAO STANDARDS AND PROCEDURES**

### **ICAO REFERENCE**

#### **Annex 2**

**4.4 (a)** VFR flights shall not be operated above FL150.

**GUINEA REP.  
RULES AND PROCEDURES**

## GENERAL

In general, the air traffic rules and procedures in force and the organization of the air traffic services are in conformity with ICAO Standards, Recommended Practices and Procedures.

Units of measurement used in all air and ground operations are as listed in the following table.

MEASUREMENT OF	UNIT
Distance used in navigation, position reporting, etc., generally in excess of 2 to 3 nautical miles	Nautical Miles and Tenths
Relatively short distances such as those relating to aerodromes (e.g., runway lengths)	Meters
Altitude, elevations and heights	Feet
Horizontal speed including wind speed	Knots
Vertical speed	Feet per Minute
Wind direction for landing and taking off	Degrees Magnetic
Wind direction except for landing and taking off	Degrees True
Visibility including runway visual range	Kilometers or Meters
Altimeter setting	Hectopascals
Temperature	Degrees Celsius
Weight	Metric Tons or Kilograms
Time	Hours and Minutes, the day of 24hrs beginning at midnight UTC

## WGS-84 IMPLEMENTATION STATUS

WGS-84 compliant.

## FLIGHT PROCEDURES

### HOLDING

Holding procedures comply with Jeppesen ATC-Chapter "Flight Procedures (DOC 8168) - Holding Procedures", Table IV-1-1, Holding Speeds.

### PROCEDURE LIMITATIONS AND OPTIONS

Instrument approach procedures are based on the PANS-OPS, Document 8168.

### AIRPORT OPERATING MINIMUMS

Guinea Rep. publishes OCA(H), DA(H), MDA(H) and visibilities for landing.

Jeppesen charted minimums are not below State minimums.

## GUINEA REP. RULES AND PROCEDURES

### ATS AIRSPACE CLASSIFICATIONS

Guinea Rep. has adopted the ICAO ATS airspace classification as listed on ATC-Chapter "ICAO ATS Airspace Classifications - Annex 11".

Airspace classes "A", "C", "D" and "G" are used within Roberts FIR.

### SPECIAL REQUIREMENTS AND REGULATIONS

#### POSITION REPORTING PROCEDURES

In addition to general position reporting procedures position reports shall be made when entering or leaving the Roberts FIR. The last position report before leaving the Roberts FIR shall also be made to the ATS unit serving the airspace about to be entered.

An IFR flight operating outside controlled airspace shall submit a flight plan, establish two-way communication with FIS and make position reports.

#### FLIGHTS AT UNCONTROLLED AERODROMES

Flights departing from aerodromes located outside controlled airspace (no aerodrome ATS units available) are to either: contact Roberts ACC using HF radio to provide flight plan details and obtain ATC clearance, if necessary while on the ground, or if not practicable, contact Roberts ACC as soon as possible after departure and obtain clearance, if necessary.

Transition altitudes have not been established for aerodromes outside controlled airspace. Pilots are advised to use 3000ft above aerodrome elevation.

#### CHANGES OF FLIGHT LEVELS

All changes of flight levels required by transition from the system of designated cruising levels for flights along controlled routes to the semi-circular system of cruising levels, or vice versa, shall be made at points within controlled airspace.

#### FLIGHT PLANNING

##### Contents of a Flight Plan

Flight plans are not required for local flights which operate entirely within the Guinea Rep., provided prior agreement has been concluded between the operator and the local ATS unit concerned and Roberts ATCC has been duly notified.

##### Time of Submission

Flight plans shall be submitted at least 30 minutes before requesting start-up or taxi clearance.

#### REQUIRED NAVIGATION PERFORMANCE

The following route is designated as RNP10 above FL245:

– UQ594, ROB to ERMIT.

**GUINEA REP.  
RULES AND PROCEDURES**

## **STRATEGIC LATERAL OFFSET PROCEDURES (SLOP)**

Strategic Lateral Offset Procedures (SLOP) are applicable on all enroute ATS routes within Roberts FIR between FL290 and FL410.

SLOP may only be applied by aircraft with automatic offset tracking capability.

The decision to apply SLOP is the responsibility of the flight crew and no ATC clearance is required.

The offsets shall be applied from top of climb to top of descent.

Pilots may contact other aircraft on the interпилot air-to-air frequency 123.45MHz to coordinate offsets.

The lateral separation minimums or spacing between most route center lines is 30NM or more, therefore offsets to the right of the center line relative to the direction of flight should be applied in tenths of 1NM up to a maximum of 2NM. (see Note)

A maximum of 2 NM offset is approved for most ATS routes therefore crew should, if the aircraft is equipped with a capability, to offset in tenths of 1NM then randomly choose an offset position of 0.1 NM or more up to 2 NM right of track. (see Note)

*NOTE: The lateral separation minima on routes UA612/UB727 and UB729/UV207 is 6NM to 30NM therefore offsets to the right of the center line relative to the direction of flight should randomly be selected in tenths of 1NM (0.1NM) up to a maximum of 0.5NM.*

If the aircraft is only equipped with a capability to offset in whole nautical miles then randomly choose an offset position of 1 NM right of track.

## **FLEXIBLE TRACK SYSTEM**

Flexible routings are implemented within Roberts FIR (GLRB) above FL245. Within Roberts FIR airspace users will be able to plan user-preferred trajectories through the use of 5 letter waypoint name codes. Route portions between waypoints will be indicated by means of "DCT" instruction.

## **DIFFERENCES FROM ICAO STANDARDS AND PROCEDURES**

### **ICAO REFERENCE**

#### **ANNEX 2**

#### **4.4 IFR compulsory for all flights above FL150.**

**KENYA**  
**RULES AND PROCEDURES**

## GENERAL

In general, the air traffic rules and procedures in force and the organization of the air traffic services are in conformity with ICAO Standards, Recommended Practices and Procedures.

Units of measurement used in all air and ground operations are as listed in the following table.

Measurement of	Unit
Distance used in navigation, position reporting, etc., generally in excess of 2 nautical miles	Nautical Miles and Tenths
Relatively short distances such as those relating to aerodromes (e.g., runway lengths)	Meters
Altitude, elevations and heights	Feet/Meters
Horizontal speed including wind speed	Knots
Vertical speed	Feet per Minute
Wind direction for landing and taking off	Degrees Magnetic
Wind direction except for landing and taking off	Degrees True
Visibility including runway visual range	Kilometers or Meters
Altimeter setting	Hectopascals
Temperature	Degrees Celsius
Weight	Metric Tons or Kilograms
Time	Hours and Minutes, the day of 24hrs beginning at midnight UTC

## WGS-84 IMPLEMENTATION STATUS

WGS-84 compliant.

## FLIGHT PROCEDURES

### HOLDING

Holding procedures comply with Jeppesen ATC-Chapter "Flight Procedures (DOC 8168) - Holding Procedures", Table IV-1-2, Holding Speeds.

### PROCEDURE LIMITATIONS AND OPTIONS

Instrument approach procedures are based on the PANS-OPS, Document 8168.

### Circling Approach Area

Circling altitudes are based on a minimum clearance of 300ft above all obstacles within a radius of 4NM of the relevant aerodrome reference point.

## KENYA RULES AND PROCEDURES

### AIRPORT OPERATING MINIMUMS

Kenya publishes OCA(H), or OCA(H) and DA(H)/MDA(H) in some cases.

Jeppesen charted minimums are not below State minimums.

### ATS AIRSPACE CLASSIFICATION

Kenya has adopted the ICAO ATS airspace classification as listed in Jeppesen ATC-Chapter "ICAO ATS Airspace Classifications - Annex 11".

Airspace classes "A", "C", "D", "E" and "G" are used within Nairobi FIR.

### SPECIAL REQUIREMENTS AND REGULATIONS

#### COMMUNICATION

##### RT Procedures at unmanned Aerodromes

All aircraft operating at, or into aerodromes where no Air Traffic Service (ATS) is provided must broadcast their position and intentions on VHF frequency 118.0MHz.

At aerodromes where ATS is normally provided but is temporarily unavailable for any reason, (i.e. outside promulgated hours, ATS temporarily withdrawn etc.) aircraft should broadcast their intentions on the promulgated aerodrome frequency and not on 118.0MHz.

To minimize interference with the communications of aircraft operating into adjacent aerodromes, position reports and intentions should not be broadcast outside a radius of 10NM from the aerodrome or at a greater height than 3000ft above ground level.

#### ALTIMETRY

Owing to the scarcity of reporting stations, adequate QNH altimeter setting reports to enable the pilot to determine the lowest flight level which will ensure terrain clearance cannot be provided. Therefore, lowest safe flight levels to afford adequate terrain clearance are based on the climatological method. Such method will permit the application of lowest safe flight levels incorporating a margin of safety to cover variations in the actual atmosphere over Kenya. The level nominated shall be that level which, in the standard atmosphere, lies 500ft above the minimum safe altitude for the route. For example, if the highest terrain enroute is 10000ft, the minimum safe altitude is 11000ft and the permanent lowest safe flight level is FL115. If this level is inappropriate the next higher level applies.

QFE will be provided in the landing instructions on request.

#### WAKE TURBULENCE CATEGORIES

For the purpose of wake turbulence separation, aircraft are divided into the following categories:

- SUPER HEAVY (J): A 380 and AN 225 aircraft;
- HEAVY (H): Aircraft type of MTOW of 136000kg or more;
- MEDIUM (M): Aircraft type of MTOW less than 136000kg but more than 7000kg;
- LIGHT (L): Aircraft type of MTOW less than 7000kg.

## KENYA RULES AND PROCEDURES

*NOTE: For aircraft in the HEAVY wake turbulence categories, the word HEAVY respectively must be included immediately after the aircraft call sign in the initial R/T contact between such aircraft and aerodrome control tower or the approach control unit.*

### OPERATIONS NORMAL PROCEDURE

All aircraft required to make air reports shall, in addition, transmit and receive acknowledgement for at least one message in the interval between any two air reports that are more than 40 minutes apart in time. The message may be sent by RTF in the form "Operations Normal".

### FLIGHT PLANNING

Flight plans should be filed at least 30 minutes before departure.

Because of the difficulties of search and rescue operations within Kenya pilots are strongly advised to file a flight plan for every flight. At aerodromes which are not manned by the Kenya Civil Aviation Authority the flight plan shall be filed with the reporting officer or with some other responsible person.

A pilot must file a flight plan:

- a. If he intends to fly in controlled airspace either under IFR or at night.
- b. If he intends to fly an aircraft operating as a public transport aircraft under VFR or IFR.
- c. If he intends to make an international flight.
- d. Nevertheless, irrespective of the flight rules under which an aircraft is to be flown, before an aircraft takes off from any aerodrome which is manned by the Kenya Civil Aviation Authority the commander of the aircraft shall cause a flight plan to be submitted thereto in respect of any flight which he intends to make outside the circuit of that aerodrome.

### Internet based Flight Planning and Briefing Service

An Internet based flight planning and briefing service URL is available on:

Internet: <https://aim.kcaa.or.ke/>

### Flight Plan Message Addressing

Flight movement messages for IFR flights relating to traffic shall be addressed as follows:

Into or via Nairobi FIR	HKNAZQZX HKNAZRZX HKNAZEZX
Within the Nairobi FIR above FL150	HKNAZEZX HKJKZAZX HKJKZTZX HKJKZPZX HKREZTZX

**KENYA**  
**RULES AND PROCEDURES**

Into Mombasa TMA	HKNAZQZX HKNAZRZX HKNAZEZX
Via Mombasa TMA	HKMOZAZX HKMOZTZX HKNAZEZX
Into Eldoret TMA	HKELZAZX HKELZTZX
Via Eldoret TMA	HKELZTZX HKNAZEZX
Into Nairobi (Wilson)	HKNWZTZX HKNWZPZX HKNAZEZX
Into Eastleigh	HKREZTZX HKNAZEZX
Into Kisumu	HKKIZTZX HKKIZPZX HKNAZEZX
Into Malindi	HKMLZTZX HKMLZPZX HKNAZEZX
Into Lokichogio	HKLKZTZX HKLKZPZX HKNAZEZX
Into Wajir	HKWJZTZX HKWJZPZX HKNAZEZX

### REQUIRED NAVIGATION PERFORMANCE

RNAV routes are designated as RNAV5, except the following routes, which are designated RNAV2 or RNP10:

The following routes are designated as RNAV2:

- P/UP312, NV to WAV;



## KENYA RULES AND PROCEDURES

- Q135, UVOVA to EGVOM;
- Q315, ITGOT to UTEPI;
- T/UT932, WAV to NV;
- UQ135, NAK to MOKAD;
- UQ315, MOKAD to NAK.

The following routes are designated as RNP10:

- UL431, UVUKO to GETAT;
- UL433, MOKAD to KISAK;
- UL434, MOV to XABON;
- UL437, ELAVA to ITMAR;
- UM220, AVAGI to LOV;
- UT914, ITSIR to AMSAD;
- UT940, AVIGO to ANVET.

### RNAV ROUTES

#### Nairobi-Mombasa Tracks

To enhance air safety, RNAV routes have been established between Nairobi and Mombasa. The routes are separated by at least 20NM. All eastbound traffic on U/UQ135 will operate 10NM offset routing ATUDU DCT UVOVA DCT NEREV DCT EGVOM. All westbound traffic on U/UQ315 will operate 10NM offset routing ITGOT DCT UTIKU DCT UTEPI DCT APNOM. All aircraft operating along the routes are considered separated provided that the flights are monitored on radar. Aircraft not able to comply are requested to notify ATC.

### DATA LINK SERVICES

CPDLC and ADS-C data link applications will be used to provide services to FANS 1/A equipped aircraft, in the designated oceanic area above FL245 as a primary means of communication.

Elsewhere the services will be available as secondary means of communication.

The AFN logon address for Nairobi FIR is HKNA.

The provision of Pre-Departure Clearance (PDC) via CPDLC will NOT be available.

Aircraft requesting data link services inbound to Nairobi FIR are required to logon 15 minutes prior to estimated time for entering the designated primary data link airspace.

Data link equipped aircraft departing from aerodromes within the Nairobi FIR and transiting through the designated primary data link airspace shall logon to HKNA as soon as possible after departure.

## KENYA RULES AND PROCEDURES

### AUTOMATIC DEPENDENT SURVEILLANCE BROADCAST (ADS-B)

ADS-B equipage is not mandatory in Kenya at the moment; however ADS-B ground infrastructure has been set up for implementation of ADS-B operations in the Kenyan airspace. The “ADS-B OUT” transmissions on 1090MHz Extended Squitter (1090ES) data link will be used for provision of ATS surveillance services to eligible aircraft within notified airspace(s).

#### ADS-B based Surveillance and Aircraft Operator Approval

An aircraft operator shall have the relevant operational approval from the Authority. The criteria for approval require the following:

- a. an aircraft shall be equipped with a Mode S-Transponder (1090ES) ADS-B transmitter; and
- b. the operational and technical personnel shall undertake appropriate training as determined by the Authority;
- c. comply with Flight planning requirements contained in the Civil Aviation (Rules Of The Air) Regulations, the Kenya Aeronautical Information Publication (AIP) ENR 1.10 and ICAO Doc 4444 (Procedures for Air Navigation Services - Air Traffic Management).

### USER PREFERRED ROUTES (UPR)

In order to reduce the environmental impact of aviation on the environment, members of the Indian Ocean and Arabian Sea Strategic Partnership to Reduce Emissions (INSPIRE) are collaborating to allow airspace users access to UPRs across the Indian and Southern Oceans and adjoining airspaces.

#### Procedure

The Indian Ocean UPR geographic zone is that airspace formed from contiguous portions of adjoining FIRs across the Indian Ocean and adjoining airspaces. Each participating FIR defines in their own AIP the portion of their airspace where the UPR geographic zone is established and advises of specific constraints that apply in that airspace.

#### Geographical Area

The UPR airspace for the Nairobi FIR is that airspace within:

- S043943 E0413001,
- S043940 E0413000,
- S040000 E0413000,
- S032028 E0421917,
- S024052 E0430954,
- S020000 E0440000,
- along Nairobi/Seychelles FIR boundary,
- along Nairobi/Dar-es-Salaam FIR boundary,
- to S043943 E0413001.

## KENYA RULES AND PROCEDURES

### Access to UPR

Airspace users may only flight plan a user preferred route in the UPR geographic zone if they meet the following minimum criteria:

- a. RNP10; and
- b. ADS-C/CPDLC equipped.

The minimum criteria listed above must be notified in the flight plan.

For further contact:

Air Traffic Services

Kenya Civil Aviation Authority

Address: P.O. Box 30163-00100  
Nairobi

Tel: +254 20 6827470–5 ext 1315/1317

E-Mail: ats@kcaa.or.ke

### STRATEGIC LATERAL OFFSET PROCEDURES (SLOP)

SLOP is not applicable in the Nairobi FIR due to efficient surveillance and communication systems.

### SPECIAL PROCEDURES FOR THE NAIROBI CTR, TMA AND NAIROBI ACC AIRSPACES

Aircraft operating into or from Nairobi (Wilson) will be provided with Nairobi (Jomo Kenyatta Intl) QNH. The Nairobi (Wilson) QNH will be provided on request for aircraft operating within the Aerodrome Traffic Zone.

Aircraft inbound to Nairobi under IFR will be cleared by the Area Control Center to descend to FL200 and expect further descent when in radio contact with Nairobi Approach.

Generally, aircraft are cleared to proceed as follows:

- a. aircraft approaching from the west of a line drawn north and south of Nairobi (Jomo Kenyatta Intl) will be cleared to Ngong VOR 'GV';
- b. aircraft approaching from the east of the line drawn north and south through Nairobi (Jomo Kenyatta Intl) will be cleared to Stony VOR 'TV' and Navex VORDME 'NV'.

### Minimum IFR Flight Level

Within the Nairobi Terminal Control Area, clearances issued by the Approach Control Unit to inbound aircraft take into account the minimum safe sector levels. The area is subdivided into six sectors based on radials from the Navex VORDME 'NV' and a minimum safe level is allocated to individual sectors as follows:

## KENYA RULES AND PROCEDURES

Sector	Radials	Safe Sector Flight Level (MNM)
A	003°-039°	FL190
B	040°-157°	FL100
C	158°-182°	FL210
D	183°-284°	FL100
E	285°-324°	FL120
F	325°-002°	FL150

Further descent may be authorized in sectors A, C, E and F to FL100 subsequent to a radar fix, DME range or a visual report as follows:

- Sector A at range 50NM or less;
- Sector C at range 80NM or less;
- Sector E at range 25NM or less;
- Sector F at range 25NM or less.

Aircraft inbound to Nairobi above FL150 should cross the 50NM Terminal Area Boundary not below FL150 in order to remain in controlled airspace.

Pilots operating between Nairobi/Nyeri or Nanyuki/Nairobi who request permission to operate below the sector levels will be cleared to fly not below FL120 provided the aircraft is equipped with a serviceable VOR receiver. Pilots are strongly advised to use this routing outbound only if the meteorological forecast for Nyeri and Nanyuki indicates that a VMC descent will be possible at their destination aerodrome.

### Departing Aircraft

Aircraft departing under IFR from Nairobi (Jomo Kenyatta Intl) or Nairobi (Wilson) will normally be issued with a composite control zone and control area clearance based on the flight plan. The clearance will be passed by RTF immediately before departure, whilst departure instructions based on the current traffic situation will sometimes be added. Both clearance and instructions must be read back verbatim to ensure correct reception.

A clearance issued from Nairobi Approach Control will, whenever possible, be in the form of a Standard Instrument Departure.

### ACAS/TCAS II REQUIREMENTS

All civil fixed-wing turbine-engine aircraft having a maximum take-off weight exceeding 5700kg or a maximum approved passenger seating configuration of more than 19 are required to be equipped with ACAS/TCAS II version 7.1.

**KENYA  
RULES AND PROCEDURES****DIFFERENCES FROM ICAO STANDARDS AND PROCEDURES****ICAO REFERENCE****Annex 2**

**4.1** Outside controlled airspace below 1000ft above ground or water, aircraft is flown clear of cloud and in sight of surface in a flight visibility of not less than 1.5km.

**4.4 (a)** VFR flights shall not be operated above FL150.

**4.7** VFR flights in level cruising flight when operated above 300m (1000ft) from the ground or water shall be conducted at a flight level as specified in the table of Cruising Levels in Appendix 3.

**LESOTHO  
RULES AND PROCEDURES****GENERAL**

In general, the air traffic rules and procedures in force and the organization of the air traffic services are in conformity with ICAO Standards, Recommended Practices and Procedures.

Units of measurement used in all air and ground operations are as listed in the following table.

Measurement of	Unit
Distance used in navigation, position reporting, etc.	Nautical Miles
Relatively short distances such as those relating to aerodromes (e.g., runway lengths)	Meters
Altitude, elevations and heights	Feet
Horizontal speed including wind speed	Knots
Vertical speed	Feet per Minute
Wind direction for landing and taking off	Degrees Magnetic
Wind direction except for landing and taking off	Degrees True
Visibility	Kilometers
Runway Visual Range	Meters
Altimeter setting, atmospheric pressure	Hectopascals
Temperature	Degrees Celsius
Weight	Kilograms
Time	Hours and Minutes, the day of 24hrs beginning at midnight UTC

**WGS-84 IMPLEMENTATION STATUS**

No information available.

**FLIGHT PROCEDURES****PROCEDURE LIMITATIONS AND OPTIONS**

Instrument approach procedures are in accordance with PANS-OPS, Document 8168.

**AIRPORT OPERATING MINIMUMS**

Lesotho does not publish State airport operating minimums.

Lesotho publishes Obstacle Clearance Altitudes (Heights) [OCA(H)].

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**LESOTHO  
RULES AND PROCEDURES****ATS AIRSPACE CLASSIFICATIONS**

Lesotho has adopted the ICAO ATS airspace classification as listed in Jeppesen ATC-Chapter "ICAO ATS Airspace Classifications - Annex 11".

Airspace classes "A", "C" and "G" are used within Lesotho airspace.

**SPECIAL REQUIREMENTS AND REGULATIONS****TRAFFIC INFORMATION BROADCAST FOR AIRCRAFT**

All aircraft flying within Lesotho territorial borders at or below 12500ft outside controlled airspace shall maintain a listening watch and make traffic information broadcasts on frequency 122.8MHz.

Aircraft flying into/out of aerodromes where AFIS or Aerodrome Control Service is established shall keep a listening watch and make necessary transmissions on radio frequencies allocated to such aerodromes.

**SPECIAL VFR FLIGHTS**

Special VFR flights are not permitted within Lesotho airspace.

**POSITION REPORTING PROCEDURES**

Position reports additional to those required by the general position reporting procedures shall be made when entering or leaving controlled or advisory airspace.

The last position report before passing from one FIR to an adjacent FIR shall also be made to the ATS unit serving the airspace about to be entered.

**DIFFERENCES FROM ICAO STANDARDS AND PROCEDURES****ICAO REFERENCE****Annex 2**

**3.3.1.4** Flight plans shall be submitted at least 30 minutes before departure.

**LIBERIA**  
**RULES AND PROCEDURES**

## **GENERAL**

In general, the air traffic rules and procedures in force and the organization of the air traffic services are in conformity with ICAO Standards, Recommended Practices and Procedures.

Units of measurement used in all air and ground operations are as listed in the following table.

<b>MEASUREMENT OF</b>	<b>UNIT</b>
Distance used in navigation, position reporting, etc., generally in excess of 2 to 3 nautical miles	Nautical Miles and Tenths
Relatively short distances such as those relating to aerodromes (e.g., runway lengths)	Meters
Altitude, elevations and heights	Feet
Horizontal speed including wind speed	Knots
Vertical speed	Feet per Minute
Wind direction for landing and taking off	Degrees Magnetic
Wind direction except for landing and taking off	Degrees True
Visibility including runway visual range	Kilometers or Meters
Altimeter setting	Hectopascals
Temperature	Degrees Celsius
Weight	Metric Tons or Kilograms
Time	Hours and Minutes, the day of 24hrs beginning at midnight UTC

## **WGS-84 IMPLEMENTATION STATUS**

WGS-84 compliant.

## **FLIGHT PROCEDURES**

### **HOLDING**

Holding procedures comply with Jeppesen ATC-Chapter "Flight Procedures (DOC 8168) Holding Procedures", Table IV-1-1, Holding Speeds.

### **PROCEDURE LIMITATIONS AND OPTIONS**

Instrument approach procedures are based on the PANS-OPS, Document 8168.

### **AIRPORT OPERATING MINIMUMS**

Liberia does not publish State airport operating minimums.

Liberia publishes Obstacle Clearance Altitudes (Heights) [OCA(H)].



**LIBERIA  
RULES AND PROCEDURES****ATS AIRSPACE CLASSIFICATIONS**

Liberia has adopted the ICAO ATS airspace classification as listed on ATC-Chapter "ICAO ATS Airspace Classifications - Annex 11".

Airspace classes "A", "C", "D" and "G" are used within Roberts FIR.

**SPECIAL REQUIREMENTS AND REGULATIONS****POSITION REPORTING PROCEDURES**

In addition to general position reporting procedures position reports shall be made when entering or leaving the Roberts FIR. The last position report before leaving the Roberts FIR shall also be made to the ATS unit serving the airspace about to be entered.

An IFR flight operating outside controlled airspace shall submit a flight plan, establish two-way communication with FIS and make position reports.

**FLIGHTS AT UNCONTROLLED AERODROMES**

Flights departing from aerodromes located outside controlled airspace (no aerodrome ATS units available) are to either: contact Roberts ACC using HF radio to provide flight plan details and obtain ATC clearance, if necessary while on the ground, or if not practicable, contact Roberts ACC as soon as possible after departure and obtain clearance, if necessary.

Transition altitudes have not been established for aerodromes outside controlled airspace. Pilots are advised to use 3000ft above aerodrome elevation.

**CHANGES OF FLIGHT LEVELS**

All changes of flight levels required by transition from the system of designated cruising levels for flights along controlled routes to the semi-circular system of cruising levels, or vice versa, shall be made at points within controlled airspace.

**FLIGHT PLANNING****Contents of a Flight Plan**

Flight plans are not required for local flights which operate entirely within Liberia, provided prior agreement has been concluded between the operator and the local ATS unit concerned and Roberts ATCC has been duly notified.

**Time of Submission**

Flight plans shall be submitted at least 30 minutes before requesting start-up or taxi clearance.

**REQUIRED NAVIGATION PERFORMANCE**

The following routes are designated as RNP10 routes above FL245:

- UQ592, UBUBI to DEVL1;
- UQ594, ROB to ERMIT.

**LIBERIA  
RULES AND PROCEDURES****STRATEGIC LATERAL OFFSET PROCEDURES (SLOP)**

Strategic Lateral Offset Procedures (SLOP) are applicable on all enroute ATS routes within Roberts FIR between FL290 and FL410.

SLOP may only be applied by aircraft with automatic offset tracking capability.

The decision to apply SLOP is the responsibility of the flight crew and no ATC clearance is required.

The offsets shall be applied from top of climb to top of descent.

Pilots may contact other aircraft on the interпилot air-to-air frequency 123.45MHz to coordinate offsets.

The lateral separation minimums or spacing between most route center lines is 30NM or more, therefore offsets to the right of the center line relative to the direction of flight should be applied in tenths of 1NM up to a maximum of 2NM. (see Note)

A maximum of 2 NM offset is approved for most ATS routes therefore crew should, if the aircraft is equipped with a capability, to offset in tenths of 1NM then randomly choose an offset position of 0.1 NM or more up to 2 NM right of track. (see Note)

*NOTE: The lateral separation minima on routes UA612/UB727 and UB729/UV207 is 6NM to 30NM therefore offsets to the right of the center line relative to the direction of flight should randomly be selected in tenths of 1NM (0.1NM) up to a maximum of 0.5NM.*

If the aircraft is only equipped with a capability to offset in whole nautical miles then randomly choose an offset position of 1 NM right of track.

**FLEXIBLE TRACK SYSTEM**

Flexible routings are implemented within Roberts FIR (GLRB) above FL245. Within Roberts FIR airspace users will be able to plan user-preferred trajectories through the use of 5 letter waypoint name codes. Route portions between waypoints will be indicated by means of "DCT" instruction.

**ATLANTIC OCEAN RANDOM ROUTING RNAV AREA (AORRA)**

The Atlantic Ocean Random Routing RNAV Area (AORRA) is established within Dakar Oceanic FIR and Roberts FIR south of 04N between FL290 and FL410 inclusive.

Flights operating within the Dakar Oceanic Random Routing RNP Area shall enter and exit AORRA via particular gates, aircraft may track via a flight plan preferred track between these gates. Prior entering or after exiting the AORRA at a particular gate, aircraft are to comply with the fixed route structure, published tracks associated with that particular entry/exit points or as instructed by ATC, and are required to flight plan accordingly.

ADS/CPDLC will be utilized in AORRA airspace by suitably equipped service providers to provide an ATS service to aircraft able to take advantage of this form of communication. Operators are to note that in some sectors of the random routing airspace, CPDLC is the primary form of communication, with HF as secondary means of communication.

No aircraft shall flight plan to operate in the AORRA airspace unless it is RNP10 certified, except in the following circumstances:

## LIBERIA RULES AND PROCEDURES

- the aircraft is being initially delivered to the State of Registry or the State of the operator;
- the aircraft is certified but experienced navigation degradation and is being flown back to base or to a maintenance facility for repairs;
- the aircraft is engaged on a humanitarian or mercy flight;
- State aircraft.

RNP10 compliance shall be indicated placing a “R” in Item 10 of the ICAO flight plan form, in the case of repetitive flight plans RNP10 compliance shall be indicated placing an “R” in Item “Q” of the RPL.

Flight plans shall contain entry and exit point to AORRA when required and the estimated time for every 5° of longitude.

Position reporting shall be required at entry/exit gates, 05W, 10W, 15W, 20W, 25W as well as any other position required by ATC.

## DIFFERENCES FROM ICAO STANDARDS AND PROCEDURES

### ICAO REFERENCE

#### ANNEX 2

**4.4** IFR compulsory for all flights above FL150.

**LIBYA**  
**RULES AND PROCEDURES**

## **GENERAL**

In general, the air traffic rules and procedures in force and the organization of the air traffic services are in conformity with ICAO Standards, Recommended Practices and Procedures.

Units of measurement used in all air and ground operations are as listed in the following table.

<b>Measurement of</b>	<b>Unit</b>
Distance used in navigation, position reporting, etc., generally in excess of 2 to 3 nautical miles	Nautical Miles and Tenths
Relatively short distances such as those relating to aerodromes (e.g., runway lengths)	Meters
Altitude, elevations and heights	Feet
Horizontal speed including wind speed	Knots
Vertical speed	Feet per Minute
Wind direction for landing and taking off	Degrees Magnetic
Wind direction except for landing and taking off	Degrees True
Visibility including runway visual range	Kilometers or Meters
Altimeter setting, atmospheric pressure	Millibar
Temperature	Degrees Celsius
Weight	Metric Tons or Kilograms
Time	Hours and Minutes, the day of 24hrs beginning at midnight UTC

## **WGS-84 IMPLEMENTATION STATUS**

WGS-84 compliant.

## **FLIGHT PROCEDURES**

### **HOLDING**

Holding procedures comply with Jeppesen ATC-Chapter "Flight Procedures (DOC 8168) - Holding Procedures", Table IV-1-2, "PANS-OPS Second Edition Holding Speeds".

### **PROCEDURE LIMITATIONS AND OPTIONS**

Instrument approach procedures comply with the PANS-OPS, Document 8168.

### **AIRPORT OPERATING MINIMUMS**

Libya publishes DA(H)/MDA(H) and visibilities for landing.

Jeppesen charted minimums are not below State minimums.

**LIBYA**  
**RULES AND PROCEDURES**

## **ATS AIRSPACE CLASSIFICATIONS**

Libya has adopted the ICAO ATS airspace classification as listed in Jeppesen ATC-Chapter "ICAO ATS Airspace Classifications - Annex 11".

Airspace classes "A", "C", "F" and "G" are used within Tripoli FIR.

## **SPECIAL REQUIREMENTS AND REGULATIONS**

### **FLIGHT RESTRICTIONS**

Foreign registered aircraft shall operate only along established ATS routes and within controlled airspace.

All international flights to/from Libyan airports are not available except HLLQ (El Beida), HLTQ (Tobruk), HLZW (Zwara), HLLM (Tripoli) and HLLB (Benghazi).

### **FLIGHT PLANNING**

Flight plans are required for all flights.

#### **Time of Submission**

A flight plan shall be submitted at least 30 minutes prior to EOBT, except flights destined for overflying restricted areas daily imposed by NMOC in the European Region. These flights submit their flight plans 3 hours before EOBT, taking into account the requirements of ATS units in the airspace along the route to be flown for timely information, including requirements for early submission for ATFM purposes.

#### **Place of Submission**

Flight plans shall be submitted at Tripoli ARO (HLLTZPZX), combined with international NOTAM office or at the ATS unit of the departure aerodrome.

In the absence of such a unit at the departure aerodrome, a flight plan shall be submitted by telephone or by any communication means available to the nearest ATS unit.

## **REQUIRED NAVIGATION PERFORMANCE**

Following routes are designated RNP5:

- A403, GRT to TUMMO;
- G662, NAGDA to HON;
- L31, LOTIN to MIS;
- M7, BONAR to MB;
- M/UM620, BONAR to KFR;
- M622, BNA to INDOT;
- M727, ABRAM to ZAW;
- M732, ELIMO to DOLFI;

**LIBYA**  
**RULES AND PROCEDURES**

- M739, VARIG to MIS;
- M740, SEB to SARKI;
- N68, MB to OLMAX;
- P126, MIS to LUMED;
- R2, BNA to DITAR;
- R845, GASRI to GRT;
- T297, VARIG to ABU;
- T299, VARIG to ZAW;
- W854, WLD to SEB;
- Z177, DARIP to LAB;
- Z178, RASNO to LAB;
- Z333, ELIMO to BNA;
- UL12, LOTIN to TONBA;
- UM215, TONBA to LUMED;
- UM727, ZAW to DEKIL;
- UM979, LAB to INDOT;
- UM980, BONAR to LOSUL;
- UN163, ABRAM to GRT;
- UP126, GARIN to LUMED;
- UP128, LOSUL to TANLI;
- UY751, RASNO to LOSUL;
- UZ178, RASNO to DITAR;
- UZ270, RAMLI to OLMAX.

## **DIFFERENCES FROM ICAO STANDARDS AND PROCEDURES**

### **ICAO REFERENCE**

#### **Annex 2**

**4.4** VFR flights shall not be operated within controlled airspace above FL145. Outside controlled airspace VFR shall not be operated above FL195.

**MADAGASCAR  
RULES AND PROCEDURES**

## GENERAL

In general, the air traffic rules and procedures in force and the organization of the air traffic services are in conformity with ICAO Standards, Recommended Practices and Procedures.

Units of measurement used in all air and ground operations are as listed in the following table.

Measurement of	Unit
Distance used in navigation, position reporting, etc., generally in excess of 2 to 3 nautical miles	Nautical Miles and Tenths
Relatively short distances such as those relating to aerodromes (e.g., runway lengths)	Meters
Altitude, elevations and heights	Meters, Feet <sup>1</sup>
Horizontal speed including wind speed	Feet
Vertical speed	Feet per Minute
Wind direction for landing and taking off	Degrees Magnetic
Wind direction except for landing and taking off	Degrees True
Visibility including runway visual range	Kilometers or Meters
Altimeter setting	Hectopascals
Temperature	Degrees Celsius
Weight	Metric Tons or Kilograms
Time	Hours and Minutes, the day of 24hrs beginning at midnight UTC
<sup>1</sup> Unit used on instrument approach charts.	

## WGS-84 IMPLEMENTATION STATUS

WGS-84 compliant.

## FLIGHT PROCEDURES

### HOLDING

Holding procedures comply with Jeppesen ATC-Chapter 'Flight Procedures (DOC 8168) - Holding Procedures', Table IV-1-1, Holding Speeds.

### PROCEDURE LIMITATIONS AND OPTIONS

Instrument Approach Procedures are based on the PANS-OPS, Document 8168.

### AIRPORT OPERATING MINIMUMS

Madagascar publishes OCA(H) and DA(H)/MDA(H)s for landing.

**MADAGASCAR  
RULES AND PROCEDURES**

RVR published for take-off.

Jeppesen published minimums are not below State minimums.

**ATS AIRSPACE CLASSIFICATION**

Madagascar has adopted the ICAO ATS airspace classification as listed in Jeppesen ATC-Chapter "ICAO ATS Airspace Classifications - Annex 11".

Airspace classes "A", "D" and "G" are used within Madagascar FIR.

Within class "G" airspace two-way radio communication is also required for VFR flights.

**SPECIAL REQUIREMENTS AND REGULATIONS****COMMUNICATIONS**

All aircraft on VFR flights, and aircraft on IFR flights outside controlled airspace, shall maintain a listening watch on the frequency of a radio station providing flight information service in the flight information region and file with that station information as to their position, unless otherwise authorized by the State overflown.

**POSITION REPORTING PROCEDURES**

Position reports additional to those required by the general position reporting procedures shall be made when entering or leaving controlled or advisory airspace.

The last position report before passing from one FIR to an adjacent FIR shall also be made to the ATS unit serving the airspace about to be entered.

**FLIGHT PLANNING**

For any flight plan to Antananarivo as destination or transiting in Antananarivo UTA, it should be inserted in Item 18 of the flight plan "EET/FMMM followed by the duration of the flight from the departure airport to Antananarivo UTA entrance". Example: EET/FMMM0500.

**ANTANANARIVO TMA**

IFR flights intending to enter TMA must request entry clearance from Antananarivo ACC 10 minutes before estimated time of entry. ACC must be informed about beginning of descent. Flights crossing TMA without landing must report over VOR 'TNV' and leave TMA as instructed by Antananarivo APP.

The minimum altitude for entering TMA is FL80 except in sector between 360° and 070° from Antananarivo VOR 'TAN' where the minimum altitude is FL110.

In Antananarivo TMA the indicated air speed is limited to 250kt below FL100, except explicit clearance at the initiative of the controller. However, for aircraft which, for technical reasons or flight quality, cannot maintain these speed, a higher speed may be granted by the controller.



**MADAGASCAR  
RULES AND PROCEDURES****TOAMASINA TMA**

IFR flights intending to enter TMA must request entry clearance from Toamasina Approach 15 minutes before estimated time of entry. Antananarivo ACC/FIC must be informed about beginning of descent.

The minimum altitude for entering TMA is FL40 for the eastern sector between 200° to Toamasina VOR 'MT' and 040° to Maromamy NDB 'MMY', FL50 for the southwestern sector between 040° and 095° to Maromamy NDB 'MMY', FL70 in western sector between 095° to Maromamy NDB 'MMY' and 200° to Toamasina VOR 'MT'. Minimum altitude within TMA is FL30.

**OPERATIONS AT UNCONTROLLED AIRPORTS****Arriving Aircraft**

- a. 10 minutes prior to the ETA the pilot shall maintain a listening watch on frequency 118.1MHz and effect a blind transmission of the following message:
  1. station (airport);
  2. type of aircraft;
  3. point of departure;
  4. estimated time of arrival;
  5. position and altitude.
- b. Further position reports shall be transmitted till the last turn is effected. The listening watch shall be maintained till the aircraft has reached the parking apron.
- c. A straight-in approach is prohibited. After the pilot has identified the airport proceed to the central point of the runway at a right angle to the runway axis at a height of more than 500ft (150m) above the aerodrome traffic circuit height. Thereafter proceed to the beginning of the downwind leg of the runway/strip maintaining the initial height. Descend to the height of the aerodrome traffic circuit while keeping out of the traffic circuit, and then maneuver in such a way that the down-wind leg is rayed along a segment which is a 45° angle to the leg.

*NOTE: The procedures specified under c) are not applicable at certain airports due to the existence of controlled airspace in their proximity or because of special procedures. In such cases the competent ATC unit will establish procedures for integrating VFR flights into the aerodrome traffic circuit.*

- d. When the aerodrome traffic circuit height is not published in the AIP, a height of 800ft (250m) shall be taken into consideration.

**Departing Aircraft**

- a. As soon as the engine has been started, the pilot must maintain a listening watch on frequency 118.1MHz and make a blind transmission of the following message:
  1. station (airport);
  2. type of aircraft;

## MADAGASCAR RULES AND PROCEDURES

3. aircraft identification/call sign;
  4. position of aircraft on the ground;
  5. ready to taxi for take-off (indicate runway or direction of take-off).
- b. This message shall be repeated prior to take-off and must be completed by the phrase: "Ready for take-off from (runway or direction)".
- c. Listening watch shall be maintained for at least 5 minutes after take-off.

### Aircraft without Radio Equipment

Pilots shall strictly adhere to the aforementioned procedures, except where instructions pertaining to listening watch and radio transmission are concerned.

### STRATEGIC LATERAL OFFSET PROCEDURES (SLOP)

Madagascar has implemented in its upper airspace between FL280 and FL460 the Strategic Lateral Offset Procedures (SLOP) in its entire continental Antananarivo FIR. The pilot must report to the controller when normal navigation is resumed after a lateral deviation of 1 or 2NM right of the axis of the nominal route. Pilots may contact other aircraft on the interпилot frequency 123.45MHz to coordinate offset.

### ADS-C/CPDLC OPERATIONS IN ANTANANARIVO FIR

Addresses:

- Antananarivo ICAO location indicator: FMMM
- Antananarivo ACARS address: TNRCAYA

If aircraft is coming from airspace not provided with ADS-C/CPDLC:

Logon should be initiated between 20 and 45 minutes prior to entry into Antananarivo FIR.

Logon should be initiated 20 minutes prior to departure.

CPDLC is the primary means of communication. VHF will be used as back up.

### ACAS/TCAS II REQUIREMENTS

All civil fixed-wing turbine-engined aircraft having a maximum take-off mass exceeding 5700kg, or a maximum approved passenger seating configuration of more than 19 are required to be equipped with ACAS/TCAS II version 7.1.

### REQUIRED NAVIGATION PERFORMANCE

The following routes are designated RNP10:

- UA665, AMBOD to ANKOR;
- UG652, EGMAD to IBMAT;
- UG661, TABNO to APLEM.

The following routes are designated RNAV10:

## MADAGASCAR RULES AND PROCEDURES

- UL433, ATOLA to APKOT;
- UL441, TNV to MIROV;
- UM307, NESAM to ENDEL;
- UN304, UVENA to DENLI;
- UN305, SOLAL to BERIL.

### USER PREFERRED ROUTES

To reduce the environmental impact of aviation on the environment the members of the Indian Ocean and Arabian Sea Strategic Partnership to Reduce Emissions (INSPIRE) are collaborating to allow airspace users access to User Preferred Routes (UPR) across the Indian and Southern Oceans airspace.

#### Procedure

INSPIRE airline partners that have received prior approval from INSPIRE, may use the following procedures within Antananarivo FIR.

For all other flights, the off air route is on the approval of the Antananarivo ACC on the working frequencies or CPDLC. The clearance for an off air route depend on the traffic in charge.

#### Flight Planning

- UPRs must be constructed via published waypoints, navigational aids or positions designated by latitudes and longitudes;
- UPRs may include existing air routes;
- time interval between waypoints must not exceed 30 minutes.

#### Access to UPR

Airspace users may only file a flight plan user preferred route in the UPR Geographic Zone if they meet the following minimum criteria:

- RNAV10; and
- ADS-C/CPDLC equipped.

The minimum criteria listed above must be notified in the flight plan.

Questions and assistance should be directed to

Mr Attoubounou Abdouramane

Tel: +261 33 2339168

+227 97 700756

E-Mail: ATTOUBOUNOUAbd@asecna.org

ABDOUA@b@yahoo.fr

or

Mr Rajafetra Rabehaja Nirina Daphine

**MADAGASCAR  
RULES AND PROCEDURES**

Tel: +261 33 2337014

E-Mail: RAJAFETRADaphine@asecna.org

**DIFFERENCES FROM ICAO STANDARDS AND PROCEDURES****ICAO REFERENCE****Annex 2**

**3.3.1.2** Flight plans are required for all flights.

**3.3.1.4** Flight plans shall be submitted at least 30 minutes before departure.

**4.1** A flight visibility of 8km is also prescribed for VFR flights below FL100. Within class “G” airspace the lower reference level for different VMC criteria is established at FL30 or 300m (1000ft) above ground or water, whichever is higher. At and below this level a minimum flight visibility of 1.5km is required, except that helicopters may operate at a flight visibility of 800m.

**4.4** IFR compulsory for all flights at FL150 and above.

**4.6** Except when necessary for take-off or landing aircraft shall not be flown at a height less than 50m (170ft) above ground or water or any natural obstacle and at a distance of not less than 150m (500ft) from any persons and artificial obstacle, whether fixed or mobile.

**5.1.2** Except when necessary for take-off or landing aircraft shall not be flown below 1500ft (450m) above the highest obstacle located within 4.3NM (8km) of the estimated position of the aircraft in flight.

**5.3.3** When operating in uncontrolled airspace (class “G” and outside of ATS routes) an IFR flight shall report position.

- when passing any common boundary of two airspaces;
- and at hourly intervals.

Furthermore, an intermediate radio contact (QRU) shall be established at half-hourly intervals.

**MALAWI  
RULES AND PROCEDURES**

## GENERAL

In general, the air traffic rules and procedures in force and the organization of the air traffic services are in conformity with ICAO Standards, Recommended Practices and Procedures.

Units of measurement used in all air and ground operations are as listed in the following table.

Measurement of	Unit
Distance used in navigation, position reporting, etc., generally in excess of 2 nautical miles	Nautical Miles and Tenths
Relatively short distances such as those relating to aerodromes (e.g., runway lengths)	Meters
Altitude, elevations and heights	Feet
Horizontal speed including wind speed	Knots
Vertical speed	Feet per Minute
Wind direction for landing and taking off	Degrees Magnetic
Wind direction except for landing and taking off	Degrees True
Visibility including runway visual range	Kilometers or Meters
Altimeter setting, atmospheric pressure	Hectopascal
Temperature	Degrees Celsius
Weight	Metric Tons or Kilograms
Time	Hours and Minutes, the day of 24hrs beginning at midnight UTC

## WGS-84 IMPLEMENTATION STATUS

WGS-84 partly compliant.

## FLIGHT PROCEDURES

### HOLDING

Holding procedures comply with Jeppesen ATC-Chapter “Flight Procedures (DOC 8168) - Holding Procedures”, Table IV-1-1, Holding Speeds.

### PROCEDURE LIMITATIONS AND OPTIONS

Instrument approach procedures are based on the PANS-OPS, Document 8168.

### AIRPORT OPERATING MINIMUMS

Malawi does not publish State airport operating minimums.

Malawi publishes Obstacle Clearance Altitudes (Heights) [OCA(H)].

## MALAWI RULES AND PROCEDURES

### ATS AIRSPACE CLASSIFICATIONS

Malawi has adopted the ICAO ATS airspace classification as listed in Jeppesen ATC-Chapter "ICAO ATS Airspace Classifications - Annex 11".

Airspace classes "A", "C" and "G" are used within Lilongwe FIR.

### SPECIAL REQUIREMENTS AND REGULATIONS

#### COMMUNICATIONS

All aircraft operating outside controlled airspace shall maintain a listening watch on the frequency of the radio station providing flight information service in the flight information region and file with that station information as to their position.

#### POSITION REPORTING PROCEDURES

Position reports additional to those required by the general position reporting procedures shall be made when entering or leaving controlled airspace.

The last position report before passing from one FIR to an adjacent FIR shall also be made to the ATS unit serving the airspace about to be entered.

#### ALTIMETRY

A transition altitude is specified for each aerodrome for which an instrument approach is approved. The height of the transition altitude above an aerodrome is normally 3000ft, rounded up to the nearest 1000ft, but increased when operational considerations so require.

The transition level is not included in approach clearance but is given on request and when QNH falls below 1013.2hPa.

### OPERATIONS AT UNCONTROLLED AIRPORTS

#### General

All VHF equipped aircraft operating into or at unmanned aerodromes should maintain listening watch on frequency 118.1MHz.

#### Arriving Aircraft

The pilot of a VHF radio equipment approaching unmanned aerodromes with the intention of landing, or of inspecting the landing area, should when estimating 5 minutes out from the aerodrome, broadcast on 118.1MHz as follows:

"..... (callsign) IS A ..... (type) APPROACHING ..... (aerodrome) FROM THE..... (direction) FOR LANDING (if appropriate) ESTIMATING IN ..... MINUTES - FLIGHT LEVEL ..... (or ALTITUDE ..... FEET) I SAY AGAIN (repeat message second time) - OUT" and should therefore listen out on 118.1MHz until landed and clear of the maneuvering area.

#### Departing Aircraft

Before taxiing out at an unmanned aerodrome the pilot should broadcast on 118.1MHz as follows:

## MALAWI RULES AND PROCEDURES

“..... (callsign) IS A ..... (type) TAXIING OUT AT..... (aerodrome) FOR TAKE OFF ON RUNWAY ..... I SAY AGAIN (repeat message a second time) - OUT” and should thereafter listen out on 118.1MHz until airborne and clear of the aerodrome traffic zone.

### Acknowledgment

Any aircraft on or approaching the named aerodrome and hearing any of the above transmissions, should acknowledge and transmit its own details in the above format.

### FLIGHT PLANNING

Flight plans shall be submitted at the Air Traffic Services Reporting Office (ARO) at the departure aerodrome. In the absence of such an office at the departure aerodrome, a flight plan shall be submitted to any ATS unit there or by telephone or teletype to the nearest ATS unit as listed below:

Chileka ARO or Tower

Tel: +265 (0)1692 244  
+265 (0)1692 319

Lilongwe/Kamuzu Int'l ARO, FIC or Tower

Tel: +265 (0) 1700 766  
+265 (0) 1700 063  
+265 (0) 1700 013

Mzuzu AFIS

Tel: +265 (0) 1312 666  
+265 (0) 1311 832

Karonga AFIS

Tel: +265 (0) 1362 288

For flights originating from unmanned aerodromes where no facilities exist to submit the flight plan, a flight plan may be filed in the air by transmitting on the appropriate frequency to the ATS unit the required flight plan details. The message shall be prefixed by the words:

“...(aircraft call sign)...I wish to file an airborne flight plan”.

Repetitive flight plan lists relating to flights in and to flights overflying the Lilongwe FIR shall be submitted in triplicate at least 14 days in advance to:

The Assistant Chief Air Traffic Control Officer

Address: Lilongwe/Kamuzu International Airport  
PO Box 44  
Lumbadzi  
Malawi

**MALAWI  
RULES AND PROCEDURES****Addressing of Flight Plan Messages**

All flight plans and departure messages for flights operating through or within the Lilongwe FIR: addresses must include the main addressee FWLLZQZX.

<b>Route (into or via FIR and/or TMA)</b>	<b>AFTN (AFS) message Address</b>
into or via Lilongwe FIR	FWLLZQZX
– into or via Lilongwe/Kamuzu Int TMA/CTR/CTA	FWKIZTZX FWKIZPZX
– into or via Chileka TMA/CTR	FWCLZTZX FWCLZPZX
– bound for Karonga aerodrome	FWKAYDYX
– bound for Mzuzu aerodrome	FWUUYDYX

**REQUIRED NAVIGATION PERFORMANCE**

Following routes are designated as RNAV10:

- UL431, ORLIM to GIPVO;
- L/UL437, NIBOR to ELEPA;
- M/UM315, ESPOP to IMKAL;
- N/UN305, LABON to KUSKI;
- T/UT481, KAVAL to LONON;
- UT933, DVL to UVBUS.

**ACAS/TCAS II REQUIREMENTS**

All civil fixed-wing turbine-engined aircraft having a maximum take-off mass exceeding 5700kg, or a maximum approved passenger seating configuration of more than 19 are required to be equipped with ACAS/TCAS II version 7.1.

**DIFFERENCES FROM ICAO STANDARDS AND PROCEDURES****ICAO REFERENCE****Annex 2**

**4.4** VFR flights shall not be operated above FL150.

**4.7** The Semi-Circular Rule shall apply to VFR flight operated outside controlled airspace in level flight above 3000ft mean sea level or 1000ft above terrain whichever is the higher.



**MALAWI  
RULES AND PROCEDURES****PANS-ATM (DOC 4444)****5.9 Clearance to fly maintaining own separation in VMC:**

When so requested by the pilot, an air traffic control unit may clear a controlled flight operating in VMC by day to fly subject to maintaining own separation in VMC for a specified portion of the flight. Essential traffic information is given where appropriate and, if there is a possibility that flight in VMC may become impracticable, an IFR flight shall be provided with alternative instruction to be complied with in the event that VMC cannot be maintained for the term of the clearance.

**Clearance to Descend subject to maintaining own separation in VMC:**

When so requested by the pilot, an air traffic control unit may clear a controlled flight operating in VMC by day to fly subject to maintaining own separation in VMC for a specified portion of the flight. Essential traffic information is given where appropriate and, if there is a possibility that flight in VMC may become impracticable, an IFR flight shall be provided with alternative instruction to be complied with in the event that VMC cannot be maintained for the term of the clearance.

**6.5.6.2.1 Timed approach procedures:**

Not implemented.

**9.1.4 Air traffic advisory service:**

Air traffic advisory service is not implemented.

**MAURITIUS  
RULES AND PROCEDURES**

## GENERAL

In general, the air traffic rules and procedures in force and the organization of the air traffic services are in conformity with ICAO Standards, Recommended Practices and Procedures.

Units of measurement used in all air and ground operations are as listed in the following table.

Measurement of	Unit
Distance used in navigation, position reporting, etc., generally in excess of 2 to 3 nautical miles	Nautical Miles and Tenths
Relatively short distances such as those relating to aerodromes (e.g., runway lengths)	Meters
Altitude, elevations and heights	Feet (Meters)
Horizontal speed including wind speed	Knots
Vertical speed	Feet per Minute, Meters per Second
Wind direction for landing and taking off	Degrees Magnetic
Wind direction except for landing and taking off	Degrees True
Visibility including runway visual range	Kilometers or Meters
Altimeter setting	Hectopascals
Temperature	Degrees Celsius
Weight	Metric Tons or Kilograms
Time	Hours and Minutes, the day of 24hrs beginning at midnight UTC

## WGS-84 IMPLEMENTATION STATUS

WGS-84 compliant.

## FLIGHT PROCEDURES

### HOLDING

Holding procedures comply with Jeppesen ATC-Chapter “Flight Procedures (DOC 8168) - Holding Procedures”, Table IV-1-1, Holding Speeds.

### PROCEDURE LIMITATIONS AND OPTIONS

Instrument approach procedures are based on the PANS-OPS, Document 8168.

### AIRPORT OPERATING MINIMUMS

Mauritius does not publish State airport operating minimums.

Mauritius publishes Obstacle Clearance Altitudes (Heights) [OCA(H)].

**MAURITIUS  
RULES AND PROCEDURES**

## **ATS AIRSPACE CLASSIFICATIONS**

Mauritius has adopted the ICAO ATS airspace classifications as listed in Jeppesen ATC-Chapter “ICAO ATS Airspace Classifications - Annex 11”.

Airspace classes “A”, “C” and “G” are used within Mauritius FIR.

## **SPECIAL REQUIREMENTS AND REGULATIONS**

### **FLIGHT PLANNING**

Flight plans shall be filed at least 30 minutes before departure.

#### **Flight Plan Message Addressing**

Flight movement messages relating to traffic into or via the Mauritius FIR shall be addressed to FIMPFDA and FIMPYFYX.

### **REQUIRED NAVIGATION PERFORMANCE**

Airspace class “A” (between FL245 and FL460) within the Mauritius FIR is designated as RNP10 airspace.

### **DATA LINK SERVICES**

ATS data link operations are implemented within class “A” and “C” airspace. The ATS data link applications which utilize the SITA AirCOM (VHF and Satellite) network will be addressed to FANS 1/A equipped aircraft.

#### **Logon Procedures**

The LOGON address for Mauritius FIR is FIMM.

To avoid automatic rejection of the logon, the flight identification number and the aircraft registration contained in the logon message must be identical to the flight identification number and tail number filed in the flight plan.

Aircraft proceeding inbound to Mauritius FIR from a non-CPDLC FIR and requesting data link services must logon between 45 and 15 minutes prior to estimate for entering the FIR.

Aircraft departing from airports in Mauritius, requesting data link services should logon as per following table:

<b>Airport</b>	<b>Address</b>	<b>Logon Timing</b>
FIMP	FIMM	at 40NM or more from 'PLS'
Other Airports	FIMM	On the ground or shortly after departure

Aircraft departing Mauritius airspace to an adjoining CPDLC - capable FIR can expect that address is forwarded to that FIR prior to passing the FIR boundary.

## MAURITIUS RULES AND PROCEDURES

Logons prior to departure must not occur earlier than 15 minutes prior to ETD to avoid automatic rejection of the logon.

The provision of Pre-Departure Clearance (PDC) via CDPLC to departing aircraft is not available as part of the initial stages of the Mauritius ATM program.

### CPDLC Applications

CPDLC is the primary means of communications between ATC and FANS 1/A equipped aircraft beyond the range of VHF voice.

A clearance issued by CPDLC requires only the appropriate CPDLC response, not a read back.

The downlink response "WILCO" indicates that the pilot accepts the full terms of the whole uplink message.

### Flight Planning

Aircraft planning to utilize data link communications must annotate the ICAO flight plan as follows:

- a. data link capability must be notified by inserting the designator J in item 10 (Communication and Navigation Equipment),
- b. data link equipment carried must be notified in item 18 by use of the prefix 'DAT/', followed by one or more letters as follows:
  1. DAT/S for satellite data link.
  2. DAT/H for HF data link.
  3. DAT/V for VHF data link.
  4. DAT/M for SSR mode S data link.
- c. serviceable ADS equipment carried must be annotated by adding the designator D to the SSR equipment carried.

### Data Link Failure

Flight crew recognizing a failure of a CPDLC connection must immediately establish communications on the appropriate voice frequency.

In the event of an unexpected CPDLC shutdown, the controller will advise all data link connected aircraft of the failure by voice. Instructions will continue to be issued by voice until the return of the data link system. The return of the system to an operational state will require a new AFN logon from affected aircraft.

### Emergency Procedures

Depending on the nature of the emergency condition experienced, flight crew should notify ATS of the circumstances by the most efficient means (voice or data link).

If a CPDLC MAYDAY or PAN message is received by the ground system, the controller will respond with the free text uplink message ROGER MAYDAY (PAN).

## MAURITIUS RULES AND PROCEDURES

### USER PREFERRED ROUTES (UPR)

To reduce the environmental impact of aviation on the environment the members of the Indian Ocean and Arabian Sea Strategic Partnership to Reduce Emissions (INSPIRE) are collaborating the allow airspace users access to UPR across within Mauritius FIR with the exception of the airspace above the lateral limits of the Mauritius TMA.

#### Procedure

The vertical limits of the Mauritius UPR geographic zone is FL245 to FL 460.

#### Flight Planning

- All flights shall enter or exit FIMM FIR via published waypoints or a position of latitude and longitude described in degrees and minutes;
- UPRs may include air routes;
- time intervals for position reports between waypoints should not exceed 60 minutes;
- all aircraft on UPR tracks across the airspace above the Mauritius TMA should plan to establish on VOR/DME tracks to and from Plaisance 'PLS' VOR/DME while within the airspace above the Mauritius TMA. However, direct tracks may be requested and will be granted subject to traffic at ATC discretion.

#### Access to UPR

Airspace users may only plan a UPR in the Mauritius UPR geographic zone if they meet the following minimum criteria:

- RNP10; and
- ADS-C/CPDLC equipped.

The minimum criteria listed above must be notified in the flight plan.

### ACAS/TCAS II REQUIREMENTS

All civil fixed-wing turbine-engined aircraft having a maximum take-off mass exceeding 5700kg, or a maximum approved passenger seating configuration of more than 19 are required to be equipped with ACAS/TCAS II version 7.1.

## DIFFERENCES FROM ICAO STANDARDS AND PROCEDURES

### ICAO REFERENCE

#### Annex 2

**3.3.1.2** In addition, a flight plan is required for any IFR flight and any VFR flight operated along designated routes in a TMA.

**3.9** In Class "C" airspace and in Class "G" airspace above 3000ft or 1000ft above terrain, whichever is higher, the minimum flight visibility is 8km.

**MAURITIUS  
RULES AND PROCEDURES**

In Class “G” airspace at and below 3000ft or 1000ft above terrain, whichever is higher, lower visibility to 1.5km is permitted for aircraft flying at an IAS of less than 140kt provided it remains clear of clouds and in sight of the surface.

**4.3** VFR flights shall not be operated between sunset and sunrise.

**4.4 (a)** VFR flights shall not be operated:

- above FL150;
- more than 20NM seaward from the shoreline, unless authorized by the appropriate ATS unit.

**4.5 (a)** Aircraft shall not be flown:

- over congested areas at a height of less than 1500ft within a radius of 2000ft from the aircraft;
- over an open air assembly of more than 1000 persons or within 3000ft of the assembly, except with special permission of the competent authority and at such a height that will permit a landing clear of the assembly in the event of a power failure.

**4.6** Unless otherwise indicated in ATC clearances VFR flights are advised to adopt the table of cruising levels for IFR flights.

**5.1.2 (a)** There is no mandatory requirement for an aircraft to maintain a minimum flight altitude of 2000ft above high terrain or mountainous areas.

## **Annex 11**

**Appendix 4** Within class “C” airspace no speed limitation is applied for VFR flights and within “G” airspace no speed limitation is applied for IFR and VFR flights. Continuous two-way communication is mandatory for VFR flights operating in class “G” airspace.

**MOROCCO**  
**RULES AND PROCEDURES**

## GENERAL

In general, the air traffic rules and procedures in force and the organization of the air traffic services are in conformity with ICAO Standards, Recommended Practices and Procedures.

Units of measurement used in all air and ground operations are as listed in the following table.

Measurement of	Unit
Distance used in navigation, position reporting, etc.	Nautical Miles and Tenths
Relatively short distances such as those relating to aerodromes (e.g., runway lengths)	Meters, Feet
Altitude, elevations and heights	Meters, Feet
Horizontal speed	Knots
Vertical speed	Feet per Minute
Wind direction for landing and taking off, Wind speed	Degrees Magnetic, Knots
Wind direction for all other use	Degrees True
Clouds altitude and height	Meters, Feet or Hundreds of Feet
Visibility	Kilometers or Meters
Altimeter setting	Hectopascal
Temperature	Degrees Celsius
Weight	Metric Tons or Kilograms
Time	Hours and Minutes, the day of 24hrs beginning at midnight UTC

## WGS-84 IMPLEMENTATION STATUS

WGS-84 compliant.

## FLIGHT PROCEDURES

### HOLDING

Holding procedures comply with Jeppesen ATC-Chapter "Flight Procedures (DOC 8168) - Holding Procedures", Table IV-1-1, Holding Speeds.

## PROCEDURE LIMITATIONS AND OPTIONS

Instrument approach procedures are based on the PANS-OPS, Document 8168.

## MOROCCO RULES AND PROCEDURES

### AIRPORT OPERATING MINIMUMS

Morocco does not publish State airport operating minimums.

Morocco publishes Obstacle Clearance Altitudes (Heights) [OCA(H)].

### ATS AIRSPACE CLASSIFICATION

Morocco has adopted the ICAO ATS airspace classifications as listed on Jeppesen ATC-Chapter “ICAO ATS Airspace Classifications - Annex 11”.

Airspace classes “C”, “D” and “G” are used within Casablanca FIR/UIR.

### SPECIAL REQUIREMENTS AND REGULATIONS

#### FLIGHT PLANNING

##### IFPS/NMOC Operations

The Integrated Initial Flight Plan Processing System element of the EUROCONTROL Network Management Operations Center (NMOC) is the sole source for the distribution of the IFR General Air Traffic (GAT) FPL and associated messages to ATS units within the IFPS. The only required addresses are those of the two IFPS Units (IFPU) at Haren (Brussels) and Bretigny (Paris).

##### *Flight Plan Message Addressing*

AFTN: EUCHZMFP and EUCBZMFP

SITA: BRUEP7X and PAREP7X

##### **Flight Plan Message Addressing within Casablanca FIR/UIR**

Flight movement messages relating to traffic into or via the Casablanca FIR/UIR shall be addressed as stated below in order to warrant correct relay and delivery.

For traffic to or via Europe the above mentioned addresses apply besides the usual addressees.

To or via Casablanca FIR/UIR and additionally for following destinations:	GMMMZQZX-GMMMZFZX
Casablanca CTA	GMMMZQZX
Agadir CTA	GMACZQZX
Agadir TMA	GMADZPZX
Casablanca TMA	GMMNZPZX
Dakhla TMA	GMMHZPZX
Laayoune TMA	GMLLPZX
Marrakech TMA	GMMXPZX
Ouarzazate TMA	GMMZZPZX
Oujda TMA	GMFOZPZX



## MOROCCO RULES AND PROCEDURES

Rabat TMA	GMMEZPZX
Tanger TMA	GMTTZPZX

### LATERAL AVOIDANCE OF AIRSPACE

Prohibited areas: at least 3NM from the limits of the area.

Danger areas: at least 5NM from the limits of the area.

Restricted areas: at least 5NM from the limits of the area without coordination with the ATS unit responsible for the area.

### REQUIRED NAVIGATION PERFORMANCE

All RNAV routes are designated as RNAV5.

### SECONDARY SURVEILLANCE RADAR (SSR)

Any aircraft in IFR flight within FIR Casablanca shall be equipped with a transponder working properly modes A+C.

### FREE ROUTE AIRSPACE MOROCCO (MORFRA)

----- Effective 10 Oct: -----  
**Title: FREE ROUTE AIRSPACE MOROCCO (MORFRA)**  
 -----

#### Area of Application

----- Effective 10 Oct: -----  
**Title: Area of Application**  
 -----

----- Effective 10 Oct: -----  
 Free Route Airspace Morocco (MORFRA) is available 2200-0600UTC within Agadir CTA from FL195 to FL460.  
 -----

#### Eligible Flights

----- Effective 10 Oct: -----  
**Title: Eligible Flights**  
 -----

----- Effective 10 Oct: -----  
 All overflying, arriving, departing aircraft that plan at least a portion of their route within the limits of MORFRA (time, lateral and vertical) will be eligible for MORFRA operations.  
 -----

#### Flight Planning

----- Effective 10 Oct: -----  
**Title: Flight Planning**  
 -----

**MOROCCO  
RULES AND PROCEDURES**

----- **Effective 10 Oct:** -----

Aircraft Operators may plan user-preferred trajectories by means of DCT between Free Route Airspace significant points or via the existing ATS Route Network or a combination of both.

----- **Effective 10 Oct:** -----

The use of LAT/LONG is not allowed.

**ATS Route Network**

----- **Effective 10 Oct:** -----

**Title: ATS Route Network**

----- **Effective 10 Oct:** -----

The existing ATS route network in Agadir CTA will be retained. The existing “Direct” (DCT) allowed options within Agadir CTA during Free Route Airspace operation will be suspended.

**ACAS/TCAS II REQUIREMENTS**

All civil fixed-wing turbine-engined aircraft having a maximum take-off mass exceeding 5700kg, or a maximum approved passenger seating configuration of more than 19 are required to be equipped with ACAS/TCAS II version 7.1.

**DIFFERENCES FROM ICAO STANDARDS AND PROCEDURES**

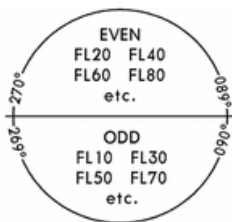
**ICAO REFERENCE**

**Annex 2**

**3.3.1.2** Flight plans are required for all flights.

**Annex 2, Appendix 3**

- a. “from 090 degrees to 269 degrees” instead of “from 000 degrees to 179 degrees”.
- b. “from 270 degrees to 089 degrees” instead of “from 180 degrees to 359 degrees”.



**MOZAMBIQUE  
RULES AND PROCEDURES**

## GENERAL

In general, the air traffic rules and procedures in force and the organization of the air traffic services are in conformity with ICAO Standards, Recommended Practices and Procedures.

Units of measurement used in all air and ground operations are as listed in the following table.

Measurement of	Unit
Distance used in navigation, position reporting, etc., generally in excess of 2 nautical miles	Nautical Miles and Tenths
Relatively short distances such as those relating to aerodromes (e.g., runway lengths)	Meters
Altitude, elevations and heights	Meters, Feet
Horizontal speed including wind speed	Knots
Vertical speed	Feet per Minute
Wind direction for landing and taking off	Degrees Magnetic
Wind direction except for landing and taking off	Degrees True
Visibility including runway visual range	Kilometers or Meters
Altimeter setting	Hectopascals
Temperature	Degrees Celsius
Weight	Metric Tons or Kilograms
Time	Hours and Minutes, the day of 24hrs beginning at midnight UTC

## WGS-84 IMPLEMENTATION STATUS

WGS-84 partially compliant.

## FLIGHT PROCEDURES

### HOLDING

Holding procedures comply with Jeppesen ATC-Chapter “Flight Procedures (DOC 8168) - Holding Procedures”, Table IV-1-1, Holding Speeds.

### PROCEDURE LIMITATIONS AND OPTIONS

Instrument approach procedures are based on the PANS-OPS, Document 8168.

### AIRPORT OPERATING MINIMUMS

Mozambique publishes Obstacle Clearance Altitudes (Heights) [OCA(H)] and for LNAV/VNAV procedures Decision Altitude (Height) [DA(H)].

## MOZAMBIQUE RULES AND PROCEDURES

Jeppesen charted minimums are not below State minimums.

### ATS AIRSPACE CLASSIFICATIONS

Mozambique has adopted the ICAO ATS airspace classification as listed in ATC-Chapter "ICAO ATS Airspace Classifications - Annex 11".

Airspace classes "A", "C" and "G" are used within Beira FIR/UIR.

### SPECIAL REQUIREMENTS AND REGULATIONS

#### FLIGHT PLANNING

##### Time of Submission

Except for repetitive flight plans, a flight plan shall be submitted at least 30 minutes prior to departure.

##### Place of Submission

- a. Flight plans shall be submitted at the Air Traffic Services Reporting Office (ARO) at the departure aerodrome.
- b. In the absence of such an office at the departure aerodrome, a flight plan shall be submitted by telephone or teletype to the nearest ARO as listed below (except as indicated under c. and d.):

Unit	Telephone Number	Fax Number
Beira	0258 3 301071/2	0258 3 302331
Chimoio	0258 51 22242	0258 51 22242
Inhambane	0258 23 20312	
Lichinga	0258 71 20127	0258 71 20127
Maputo	0258 1 465826/9	0258 1 466450
Nampula	0258 6 213138	0258 6 213164
Pemba	0258 72 21633	0258 72 20849
Quelimane	0258 4 213054	0258 4 212245
Tete	0258 52 20010	0258 52 20024
Vilankulo	0258 23 82207	0258 23 82207

- c. For VFR flights between uncontrolled aerodromes operating along designated VFR routes in the Terminal Area Control (TMA) a flight plan shall be submitted by telephone to the Beira ARO.
- d. For domestic flights from an uncontrolled to a controlled aerodrome, a flight plan shall be submitted by telephone to the ARO at destination.

## MOZAMBIQUE RULES AND PROCEDURES

### OPERATIONS AT UNCONTROLLED AIRPORTS

Pilots of RTF-equipped aircraft intending to land on or take-off from an aerodrome whose Aerodrome Flight Information Service (AFIS) is not in operation, or at which no such service is provided, are recommended to make blind transmissions.

#### Approaches

About 5 minutes before reaching the aerodrome make the following transmission: callsign, position, altitude and intention.

EXAMPLE: C9-REB 4000 FEET, APROACHING FOR LANDING IN MOCUBA.

then transmit following information:

EXAMPLE: C-EB OVERHEAD, WILL JOIN DOWNWIND RUNWAY 18.

C-EB DOWNWIND RUNWAY18.

C-EB FINAL RUNWAY 18.

#### Departures

Prior to take-off the pilot shall switch on his RTF equipment and ascertain that no RTF communications are conducted on the appropriate frequency. Then he shall transmit the following information concerning his departure:

EXAMPLE: C9-REB TAXIING TO HOLDING POINT RUNWAY 18.

C-EB READY FOR DEPARTURE RUNWAY 18.

When no call is being made by another pilot and the pilot ascertained that the approach sector is clear he may taxi onto the runway and take-off:

EXAMPLE: C-EB TAKING-OFF RUNWAY 18 DIRECTION NORTHWARDS TO ALTO MOLOQUE.

#### Traffic Information

Traffic information shall be transmitted on:

- the frequency of the appropriate AFIS that is in operation;
- the frequency 124.1MHz at other landing sites.

Transmitting traffic information does not cancel the pilot's obligation to watch the airspace.

### REQUIRED NAVIGATION PERFORMANCE

The following routes are designated as RNP5:

- UT122, ORNAD to SUNIR;
- UT125, ANVAK to VMA;
- UT444, SUNIR to DUTGI;
- UT446, EROPA to UNPEN;

**MOZAMBIQUE  
RULES AND PROCEDURES**

- UT512, ETLOP to VBR;
- UT513, GADNO to VBR;
- UT515, ETLEG to VBR;
- UT516, IMKIB to VBR;
- UT517, GEVUD to VL;
- UT518, IXEMA to VL;
- UT519, NERUL to VL;
- UT536, VMA to EROPA.

**STRATEGIC LATERAL OFFSET PROCEDURES (SLOP)**

SLOP is authorized in the Beira FIR between FL290 and FL410 inclusive on all enroute ATS routes.

SLOP may only be applied by aircraft equipped with automatic offset tracking capability and no ATC clearance is required.

Pilots may contact other aircraft on the inter pilot air-to-air frequency 123.45MHz to coordinate off-sets and are to note that frequency 126.90MHz is mostly used in the AFI region.

**DIFFERENCES FROM ICAO STANDARDS AND PROCEDURES****ICAO REFERENCE****Annex 2**

**4.4** VFR flights shall not be operated above FL145.

**NAMIBIA  
RULES AND PROCEDURES**

## GENERAL

In general, the air traffic rules and procedures in force and the organization of the air traffic services are in conformity with ICAO Standards, Recommended Practices and Procedures.

Units of measurement used in all air and ground operations are as listed in the following table.

Measurement of	Unit
Distance used in navigation, position reporting, etc., generally in excess of 2 to 3 nautical miles	Nautical Miles and Tenths
Relatively short distances such as those relating to aerodromes (e.g., runway lengths)	Meters
Altitude, elevations and heights	Feet
Horizontal speed including wind speed	Knots
Vertical speed	Feet per Minute
Wind direction for landing and taking off	Degrees Magnetic
Wind direction except for landing and taking off	Degrees True
Visibility including runway visual range	Kilometers or Meters
Altimeter setting	Hectopascals
Temperature	Degrees Celsius
Weight	Metric Tons or Kilograms
Time	Hours and Minutes, the day of 24hrs beginning at midnight UTC

## WGS-84 IMPLEMENTATION STATUS

WGS-84 compliant.

## FLIGHT PROCEDURES

### HOLDING

Holding procedures comply with Jeppesen ATC-Chapter “Flight Procedures (DOC 8168) ) - Holding Procedures”, Table IV-1-1, Holding Speeds.

### PROCEDURE LIMITATIONS AND OPTIONS

Instrument approach procedures are based on the PANS-OPS, Document 8168.

### Minimum Flight Altitudes

Minimum flight altitudes provide a vertical clearance of at least 1000ft (300m) above the highest obstacle within 2.2NM (4km) on each side of the centerline of the route.

## NAMIBIA RULES AND PROCEDURES

### AIRPORT OPERATING MINIMUMS

Namibia State minimums are in accordance with JAR-OPS 1 AOM (EU-OPS 1 Subpart E Appendix 1 to OPS 1.430 old).

Jeppesen published minimums are not below State minimums.

#### Approach Ban

An instrument approach may be commenced regardless of the reported RVR/VIS but the approach shall not be continued beyond the outer marker or equivalent position, if the reported RVR/VIS is less than the applicable minimums. Where RVR is not available, RVR values may be derived by converting the reported visibility. If, after passing the outer marker or equivalent position the reported RVR/VIS falls below the applicable minimum, the approach may be continued to DA(H) or MDA(H).

Where no outer marker or equivalent position exist, the pilot shall make the decision to continue or abandon the approach before descending below 1000ft above the aerodrome on the final approach segment. If the MDA(H) is 1000ft or more above aerodrome the operator shall establish a height for each approach procedure, below which the approach shall not be continued if RVR/VIS is less than the applicable minimum.

The approach may be continued below DA(H) or MDA(H) and the landing may be completed provided that the required visual reference is established at the DA(H) or MDA(H) and is maintained.

The touchdown zone RVR is always controlling. If reported and relevant, the mid-point and stop-end RVR are also controlling. The minimum RVR for the mid-point is 125m or the RVR required for the touchdown zone if less. The minimum RVR for the stop-end is 75m. For aircraft equipped with a roll-out guidance or control system, the minimum RVR value for the mid-point is 75m.

Relevant in this context means that part of the runway used during the high speed phase of the landing down to a speed of approximately 60kt.

### CLOUD BREAK PROCEDURE

A cloud break procedure may be approved by the Director of Civil Aviation when 1 or more of the following conditions apply:

- such procedure is conducted outside controlled airspace;
- such procedure is conducted inside controlled airspace;
- the runway and/or equipment does not comply with ICAO requirements for instrument approach procedures;
- the runway is not aligned with the final approach track;
- local QNH may not be available;
- any cloud break procedure outside controlled airspace is conducted at the discretion of the pilot-in-command.



## NAMIBIA RULES AND PROCEDURES

In the event that such runway and/or equipment does not comply with ICAO requirements the OCA/H will not be lower than that specified for circling minimums as applicable to the respective aircraft category.

### NOISE ABATEMENT PROCEDURES

In order to reduce or to restrict aircraft noise to the minimum all aircraft must, as far as possible,

- use the full length of runways for take-off to ensure that sufficient altitude is gained before crossing built-up areas. No jet aircraft are to use runway or taxiway intersections for take-off;
- avoid turnouts immediately after take-off maintaining a straight climb to a reasonable altitude;
- climb at and maintain the best angle of climb after take-off until all built-up areas are overflown;
- avoid testing and run-ups of aircraft engines outside normal working hours (run-ups are not allowed outside aerodrome operating hours if the aerodrome is located within a municipal area);
- after landing utilize minimum reverse thrust for purposes of braking;
- reduce propeller RPM to normal climb as soon as practically safe after take-off.

### ATS AIRSPACE CLASSIFICATIONS

Namibia has adopted the ICAO ATS airspace classification as listed in Jeppesen ATC-Chapter "ICAO ATS Airspace Classifications - Annex 11".

Airspace classes "A", "C", "D", "E" and "G" are used within Windhoek FIR.

**Class "C"** - Within Windhoek TMA a speed restriction of MAX IAS 250KT at and below FL150 apply.

### SPECIAL REQUIREMENTS AND REGULATIONS

#### ALTIMETRY

QFE altimeter setting will be given on request.

#### COMMUNICATIONS

Two-way radio contact with the responsible ATC unit shall be established before entering or crossing controlled airspace and continuous listening watch maintained while operating in such airspace.

#### FLIGHT PLANNING

##### Submission of Flight Plan

Flight plans are required for all flights for the purpose of the public transport of passengers or cargo.

Flight plans shall be submitted via the Internet Briefing Services (IBS).

Flight plans filed via the internet briefing services will only be validated from 0330 until 1900 UTC outside of these hours medevac flight plans can be filed with Windhoek Area Control Centre.

**NAMIBIA  
RULES AND PROCEDURES**

All airspace users including airlines and general aviation submitting their flight plans are encouraged to register for IBS at <https://ibs.ncaa.com.na/fwf-ncaa> to be able to submit flight plans via IBS.

In the absence of access to the IBS, a flight plan shall be submitted by telephone or fax to the aeronautical Information Services Centre (AISC) or to the near ARO as listed below.

The following fax and telephone numbers are available for filing:

Station	Fax Number	Telephone Number
Windhoek - AISC	+264 88 6561134	+264 61 702080/1/3/9
Hosea Kutako	+264 62 702499	+264 62 702490/1/2/3
Eros - FYWE		+264 61 702090/1
Katima Mulilo		+264 66 250202
Walvis Bay	+264 64 702699	+264 64 702690/1
Ondangwa	+264 65 703199	+264 65 703190/1
Luderitz	+264 63 703599	+264 63 703590/1 or +264 63 202228

**NOTE 1:**

*All foreign registered aircraft intending to fly through Namibian airspace must submit a request for over-flight and/or landing clearance not less than 24 hours prior to departure.*

*Requests can be faxed to: Namibia Civil Aviation Authority, Fax number 264 88 6561133 during office hours only.*

**NOTE 2:** *All civil aircraft intending to land at Grootfontein are hereby requested to file and forward flight plan two hours before departure to FYGF. ATC at FYGF must be informed two hours before arrival by Windhoek Area Control Centre of any inbound traffic so as for them to contact Army Headquarters.*

**Content of Flight Plan**

Every foreign aircraft intending to fly in or over Namibia must include the Namibian overflight and landing permit number in item 18 of the flight plan.

**Flight Plan Message Addressing**

The following AFTN address shall be used for all flight in Namibia originating/terminating at:

Windhoek (Hosea Kutako Intl)	FYZZNWDH
Windhoek (Eros)	FYZZNERS

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Ondangwa	FYZZNOND
Walvis Bay	FYZZNWVB
Luderitz	FYZZNLUD
Katima Mulilo	FYZZNMPA
Grootfontein	FYZZNGFN
Keetmanshoop	FYZZNKMP
Overflights only	FYZZNNMB

### **REQUIRED NAVIGATION PERFORMANCE**

All RNAV routes are designated RNAV5 between FL245 and FL460.

### **STRATEGIC LATERAL OFFSET PROCEDURES (SLOP)**

SLOP is not authorized in the Windhoek FIR due to adequate ATS surveillance coverage between FL245 and FL460 inclusive.

### **TRAFFIC INFORMATION BROADCAST BY AIRCRAFT (TIBA)**

The following procedures are implemented for aircraft operating outside of controlled airspace.

- a. Aircraft operating above 1500ft AGL outside of promulgated general flying areas should maintain a listening watch and should make regular position reports on the appropriate FIS frequency allocated to the area. In the event that no contact can be established with the appropriate FIS unit due to location or range a listening watch should be maintained and regular position reports/broadcasts should be made on the FIS frequency allocated for the area.
- b. To avoid the TIBA frequencies from being used for purposes other than essential traffic information broadcast, the general air-to-air aviation frequency 130.35MHz is available to pilots to discuss general matters.

Messages should be kept short and a listening watch should be maintained on the appropriate TIBA frequency.

- c. Aircraft operating within promulgated general flying areas or operating at unmanned aerodromes situated within such areas should operate on the allocated frequency 124.4MHz.
- d. Aerodromes without ATS units to which specific TIBA frequencies have been assigned are as follows:

Arandis	123.5MHz
Bitterwasser	123.6MHz
Kiripotib	120.25MHz
Mokuti Lodge	123.5MHz
Oranjemund	118.7MHz

## NAMIBIA RULES AND PROCEDURES

Pokweni	120.2MHz
Veronica	123.2MHz

*NOTE: All aircraft flying in/out of Oranjemund are to contact Alexander Bay Tower on 118.7MHz and if unmanned, remain on 118.7MHz and not change to 124.8MHz.*

- e. Pilots should make the appropriate broadcasts and take all the necessary collision avoidance action prior to entering or leaving an area.

### PROCEDURES AT UNMANNED AERODROMES

In addition to the prescribed communication procedures (TIBA) aircraft operating at unmanned aerodromes have strictly to observe the following procedures:

- a. Except in emergency no straight-in-approach to a runway may be made. When joining the circuit the aerodrome must be overflown and all information and signals that may be displayed must be observed.
- b. No right hand turns, either prior to landing or after take-off may be executed except when a differing procedure has been approved by the commissioner for Civil Aviation (CCA) in which case such procedure will be indicated by a traffic pattern indicator.
- c. All circuits at unmanned aerodromes have to be flown at 1000ft AGL except in the case of turbo-prop and turbo-jet aircraft, by which the circuit is to be flown at 1500ft AGL.

### SECONDARY SURVEILLANCE RADAR (SSR)

All aircraft operating within the Windhoek FIR, FL145 and above and in Windhoek TMA are required to be equipped with and operate SSR transponder Mode A and C.

### ACAS/TCAS II REQUIREMENTS

All civil fixed-wing turbine-engined aircraft having a maximum take-off mass exceeding 5700kg, or a maximum approved passenger seating configuration of more than 19 are required to be equipped with ACAS/TCAS II version 7.1.

## DIFFERENCES FROM ICAO STANDARDS AND PROCEDURES

### ICAO REFERENCE

#### Annex 2

**5.1.2** Except when necessary for take-off or landing aircraft flown at night, in IMC or under IFR, shall not be flown below 1500ft above the highest obstacle located within 5NM of the aircraft in flight.

**NIGERIA  
RULES AND PROCEDURES**

## GENERAL

In general, the air traffic rules and procedures in force and the organization of the air traffic services are in conformity with ICAO Standards, Recommended Practices and Procedures.

Units of measurement used in all air and ground operations are as listed in the following table.

Measurement of	Unit
Distance used in navigation, position reporting, etc.	Nautical Miles and Tenths
Relatively short distances such as those relating to aerodromes (e.g., runway lengths)	Meters
Altitude, elevations and heights	Feet
Horizontal speed including wind speed	Knots
Vertical speed	Feet per Minute
Wind direction for landing and taking off	Degrees Magnetic
Wind direction except for landing and taking off	Degrees True
Visibility including runway visual range	Kilometers or Meters
Altimeter setting	Millibars or Hectopascals
Temperature	Degrees Celsius
Weight	Metric Tons or Kilograms
Time	Hours and Minutes, the day of 24hrs beginning at midnight UTC

## WGS-84 IMPLEMENTATION STATUS

WGS-84 compliant.

## FLIGHT PROCEDURES

### HOLDING

Holding procedures comply with Jeppesen ATC-Chapter "Flight Procedures (DOC 8168) - Holding Procedures", Table IV-1-1, Holding Speeds.

### PROCEDURE LIMITATIONS AND OPTIONS

Instrument approach procedures are based on the PANS-OPS, Document 8168.

### AIRPORT OPERATING MINIMUMS

Nigeria publishes OCA(H)s and visibilities and RVR for landing and take-off.

Jeppesen charted minimums are not below State minimums.

**NIGERIA  
RULES AND PROCEDURES****ATS AIRSPACE CLASSIFICATION**

Nigeria has adopted the ICAO ATS airspace classification as listed on Jeppesen ATC-Chapter "ICAO ATS Airspace Classifications - Annex 11".

Airspace classes "A", "B", "D", "E" and "G" are used within Kano FIR.

Within class "E" and "G" airspace two-way radio communication is also required for VFR flights.

**SPECIAL REQUIREMENTS AND REGULATIONS****COMMUNICATION****Traffic through Kano TMA**

All aircraft southbound through Kano TMA, or landing at Kano, shall in addition to Niamey FIS contact Kano ACC not later than 10 minutes before crossing abeam Zinder or Zinder VOR 'ZR'. All aircraft overflying Jos VOR/DME 'JOS' westbound, northbound and eastbound shall contact Kano ACC prior to reaching the FIR boundary not later than 10 minutes before crossing Jos VOR/DME 'JOS'.

**FLIGHT PLANNING**

Flight plans are required for all flights.

All changes to a flight plan submitted for an IFR flight or a controlled VFR flight and significant changes to a flight plan submitted for an uncontrolled VFR flight shall be reported as soon as possible to the appropriate ATS unit. In the event of a delay in departure of 30 minutes or more for a flight for which a flight plan has been submitted, the flight plan shall be amended or a new flight plan shall be submitted after the old plan has been cancelled.

**E-flight Plan**

E-flight Planning is available for all airline operators on:

E-flight Plan Portal

Internet: <http://aisng-eflightplan.net>

**DATA LINK SERVICES****General**

The provision of ADS-C and CPDLC services shall be available in the Kano FIR for all FANS 1/A equipped flights electing to participate in the service that are operating or intending to operate at and above FL290.

ADS-C/CPDLC services would also be available to the following categories of FANS 1/A equipped flights operating or intending to operate between 5000ft to FL280:

- a. all international IFR flights;
- b. all IFR flights in remote continental or oceanic airspace;
- c. all aircraft experiencing voice communication failure or challenges;

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- d. all aircraft in urgency or emergency situations;
- e. all Nigerian security flights, when the need arises;
- f. search and rescue flights over remote areas, etc.

### Logon

The data link address for Kano ACC is DNKN.

The data link address for Lagos sub-FIR is DNMM.

Flights entering the Kano FIR ADS-C/CPDLC area should initiate logon as follows:

- 15 to 45 minutes prior to entering the CPDLC service airspace; or
- prior to departure if the departing aerodrome is adjacent to, or in close proximity to the Kano FIR ADS-C/CPDLC service airspace.

### AIRSPACE VIOLATION

Deviations from flight plan route or any ATS route without ATC clearance is prohibited.

Violations will be fined with 10000 US Dollars.

### REQUIRED NAVIGATION PERFORMANCE

Following routes are designated RNAV5:

- UN550, LUKRO to KAN;
- UQ592, NANOS to BOVDA.

Following routes are designated RNP10:

- L/UL433, POLTO to IKROP;
- UM998, EBNET to MOMIG;
- UN550, LUKRO to KAN;
- UQ589, LIREX to GATAG;
- UQ590, EDUKO to APVOT;
- UQ592, NANOS to BOVDA;
- UT416, ABC to USNAV;
- UT457, GATAG to LAG;
- UT458, SEVAX to DILPI;
- UT459, ONSEV to KAN;
- UT467, LAG to TEMSA;
- UT475, GADUV to ABC.

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**NIGERIA  
RULES AND PROCEDURES****STRATEGIC LATERAL OFFSET PROCEDURES (SLOP)**

SLOP is authorized in the Kano FIR between FL290 and FL410 inclusive on all enroute ATS routes.

**DIFFERENCES FROM ICAO STANDARDS AND PROCEDURES****ICAO REFERENCE****Annex 2**

**3.1.2** Flights over populous areas are not allowed below 1500ft above the highest obstacle located within a radius of 600m (2000ft) from the aircraft. Flights over open air assembly of persons are subject to specific permission of the Director General NCAA.



## REUNION RULES AND PROCEDURES

**This information also applies to Mayotte, as covered by common aeronautical publications.**

### GENERAL

In general, the air traffic rules and procedures in force and the organization of the air traffic services are in conformity with ICAO Standards, Recommended Practices and Procedures.

Units of measurement used in all air and ground operations are as listed in the following table.

Measurement of	Unit
Distance used in navigation, position reporting, etc., generally in excess of 2 to 3 nautical miles	Nautical Miles and Tenths
Relatively short distances such as those relating to aerodromes (e.g., runway lengths)	Meters
Altitude, elevations and heights	Meters, Feet <sup>1</sup>
Horizontal speed including wind speed	Knots
Vertical speed	Meters per Second
Wind direction for landing and taking off	Degrees Magnetic
Wind direction except for landing and taking off	Degrees True
Visibility including runway visual range	Kilometers or Meters
Altimeter setting	Hectopascals
Temperature	Degrees Celsius
Weight	Metric Tons or Kilograms
Time	Hours and Minutes, the day of 24hrs beginning at midnight UTC

<sup>1</sup> Unit used on IAC and TMA charts.

### WGS-84 IMPLEMENTATION STATUS

WGS-84 compliant.

### FLIGHT PROCEDURES

#### HOLDING

Holding procedures comply with Jeppesen ATC-Chapter "Flight Procedures (DOC 8168) - Holding Procedures", Table IV-1-1, Holding Speeds.

#### PROCEDURE LIMITATIONS AND OPTIONS

Instrument approach procedures are based on the PANS-OPS, Document 8168.

## REUNION RULES AND PROCEDURES

### Minimum Sector Altitudes

Minimum sector altitude is calculated with an obstacle clearance margin of 300m, however this margin can be increased to 300m when surface inequalities are considerable.

Minimum altitude on a specified arrival route is calculated:

- a. If the instrument approach procedure is outside of controlled airspace, from the last fix, within a radius of 25NM from the IAF, if not, from the point located at 25NM from IAF on the arrival route.
- b. If the instrument approach procedure is in controlled airspace, the minimum altitude is determined from the limit of that airspace, or from the nearest possible fix to this limit.

### Visual Maneuvering without Prescribed Track

For a circling approach with a visual maneuvering without prescribed track, the pilot should be in the circling area before the radio beacon approach path. The dimensions of the area associated with a circling (listed below) must therefore be noted, they vary with the aircraft category. The area is calculated by plotting an arc with a radius described below from the threshold of every usable runway. These are:

Cat A	2.2NM
Cat B	3.1NM
Cat C	4.5NM
Cat D	5.5NM

## VISUAL APPROACH PROCEDURES

Clearance for an aircraft operating in IFR to execute a visual approach may be requested by pilot or proposed by the controller. In the latter case, the consent of the flight crew is required.

*NOTE: A pilot can perform a visual approach even when no IFR procedure is provided.*

When performing a visual approach, the aircraft is still provided with the ATS corresponding to the class of the airspace within which it is flying. In particular, separation is ensured between an aircraft cleared to conduct a visual approach and other IFR aircraft on arrival and departure.

An aircraft in IFR flight may not perform a published or approved IFR approach, or not continue its execution to perform a visual approach with visual ground spotting when the following conditions are met:

- a. The pilot can keep visual contact with the ground;
- b. the pilot deems that the visibility and ceiling allow visual approach and estimates that landing is possible;
- c. within controlled airspace, the pilot has obtained a visual approach clearance. This clearance may be given by the controller:

## REUNION RULES AND PROCEDURES

- if the reported ceiling is at the level where the approved initial approach segment for that aircraft begins or higher; or
- at the level at which the initial approach segment begins or at any time during the instrument approach procedure, the pilot reports that the weather conditions are met for an approach and sight landing;
- d. in uncontrolled airspace, the pilot shall operate in VMC;
- e. the pilot complies with any specific instruction for the visual approach at the aerodrome under consideration and the flight restrictions issued by ATC.

A pilot can perform a visual approach even when no IFR procedure is provided.

When performing a visual approach, the aircraft is still provided with the air traffic services corresponding to the class of the airspace within which it is flying.

The visual approach clearance may be subject to the pilot's acceptance of the runway restrictions issued by ATC, regardless of any special instructions or local instructions specific to the approach at sight on the aerodrome considered.

In the case of successive sight approaches, a separation is maintained until the pilot-in-command of the following aircraft signals that he is seeing the preceding aircraft. Then he is instructed to follow this aircraft and to ensure separation himself. When both aircraft are in the same heavy wake turbulence category, or when the preceding aircraft is of a heavier wake turbulence category than the following aircraft, and the distance between the aircraft is less than the minimum based on wake turbulence, the controller warns of the possibility of wake turbulence. It is the responsibility of the pilot-in-command of the aircraft following an aircraft of a heavier wake turbulence category to ensure that separation from that aircraft is acceptable. If it is determined that additional separation is required, the pilot-in-command has to inform ATC, specifying his requirements.

### LOSS OF RNAV CAPABILITY

Without or in case of loss of the required RNAV capability, the pilot must:

- in case of a STAR or an initial instrument approach, either:
  - follow or join the appropriate conventional procedure published, if existing; or
  - report “unable RNAV [due (reason)]” upon the loss of RNAV capacity required in order to get a radar guidance;
- in the case of a SID;
  - report “unable RNAV [due (reason)]” in order to get a radar guidance or to be cleared to carry out a SID procedure.

### AIRPORT OPERATING MINIMUMS

#### General

Reunion State minimums are in accordance with EU-OPS, Appendix 1 (new) to Ops 1.430.

## REUNION RULES AND PROCEDURES

Jeppesen published minimums are not below State minimums.

### Using MDA(H) as a DA(H) - CDFA Flight Technique

The operational minimums published on Reunion non-precision approach charts have been determined based on the assumption that these approaches are flown using the CDFA flight technique unless otherwise stated by the authority for a particular approach to a particular runway.

The CDFA flight technique implies a continuous descent on final approach, without level-off at or above the MDA(H).

To avoid descending below the MDA(H) in case of a Missed Approach, the State Authority recommends to add following mean vertical margins to the published MDA(H) to use it as a DA(H):

Aircraft Category	Margin/Add-on
A	20ft
B	30ft
C	40ft
D	60ft

These margins, however, are not considered necessary by the State Authority, if it is ensured that all 3 criteria below are fulfilled:

- a. the visual segment surface (VSS) is not penetrated by an obstacle;
- b. protection of the initial missed approach complies with ICAO recommended rules;
- c. the MAP is located at or after the runway threshold.

Under these conditions, it is assumed that the obstacles will be cleared with sufficient margin if the go-around procedure is initiated at an altitude corresponding to the MDA, provided that the descent slope is strictly monitored and that the go-around maneuver complies with the normal use of the aeroplane.

*NOTE: The fulfillment of these criteria can be derived from the State source and will be considered on Jeppesen charts accordingly.*

### Jeppesen Charts

Based on the information above, Jeppesen non-precision approach charts will show the following if CDFA criteria fulfilled:

- a. *DA/MDA(H)* label:

This label indicates that the associated minimums (RVR/CMV) are to be used in conjunction with the CDFA flight technique and, in case a missed approach must be initiated, an immediate climb out without level-off shall be performed. The lateral part of the missed approach procedure must be flown via the MAP, unless otherwise stated on the approach chart.

## REUNION RULES AND PROCEDURES

- b. The published *DA/MDA(H)* values will not include an add-on to account for a height loss below the *MDA(H)*.
- c. CDFA label:  
Additional indication that the associated minimums can only be used when the CDFA technique is applied.
- d. If one or more of the three criteria previously mentioned are not fulfilled, an additional note will be published on the chart, referencing the recommendation to apply the add-on margins to the published *DA/MDA(H)* value, to use the *MDA(H)* as a *DA(H)*.

The note will read: "For add-on to the *MDA(H)*, see ATC pages REUNION"

Should the CDFA technique not be possible for a particular approach, the descent limit will be labeled *MDA(H)* and the minimums box will show the label non-CDFA, to indicate that the charted minimums have been increased following EU-OPS regulation (by 200m for CAT A/B aeroplanes and by 400m for CAT C/D aeroplanes, providing that the resulting *RVR/CMV* value does not exceed 5000m).

### Approach Ban

An instrument approach may be commenced regardless of the reported *RVR/VIS* but the approach shall not be continued beyond the outer marker or equivalent position, if the reported *RVR/VIS* is less than the applicable minimums. Where *RVR* is not available, *RVR* values may be derived by converting the reported visibility. If, after passing the outer marker or equivalent position the reported *RVR/VIS* falls below the applicable minimum, the approach may be continued to *DA(H)* or *MDA(H)*.

Where no outer marker or equivalent position exist, the pilot shall make the decision to continue or abandon the approach before descending below 1000ft above the aerodrome on the final approach segment. If the *MDA(H)* is 1000ft or more above aerodrome the operator shall establish a height for each approach procedure, below which the approach shall not be continued if *RVR/VIS* is less than the applicable minimum.

The approach may be continued below *DA(H)* or *MDA(H)* and the landing may be completed provided that the required visual reference is established at the *DA(H)* or *MDA(H)* and is maintained.

The touchdown zone *RVR* is always controlling. If reported and relevant, the mid-point and stop-end *RVR* are also controlling. The minimum *RVR* for the mid-point is 125m or the *RVR* required for the touchdown zone if less. The minimum *RVR* for the stop-end is 75m. For aircraft equipped with a roll-out guidance or control system, the minimum *RVR* value for the mid-point is 75m.

Relevant in this context means that part of the runway used during the high speed phase of the landing down to a speed of approximately 60kt.

### SPEED RESTRICTIONS

IFR flights operating at an altitude of less than 3050m (10000ft) AMSL on an ATS route or a standard route of departure and arrival or under radar guidance shall apply an airspeed limit (IAS) of 250kt unless clearance explicit on the initiative of the controller.

## REUNION RULES AND PROCEDURES

However, a speed of more than 250kt is permitted, subject to the approval of the air traffic control, for aircraft which for technical or flight quality reasons, cannot maintain speed of less or equal to 250kt.

### ATS AIRSPACE CLASSIFICATION

Reunion has adopted the ATS airspace classification as listed in Jeppesen ATC-Chapter "SERA (Standardized European Rules of the Air) - Differences to ICAO", Table "SERA ATS Airspace Classification - SERA.6001".

Airspace classes "A", "D", "E" and "G" are used within Reunion airspace.

### SPECIAL REQUIREMENTS AND REGULATIONS

#### ALTIMETRY

##### Reference Datum for QFE Altimeter Setting

The threshold of the runway is used as the QFE reference datum for precision and non-precision approaches when the threshold elevation is more than 5m (16ft) below the aerodrome elevation, otherwise the aerodrome elevation shall be used.

#### FLIGHT PLANNING

A flight plan is required for any IFR flight.

##### Closing a Flight Plan

Closing a Flight Plan The flight plan may be closed by telephone at the number indicated in the aeronautical information publications. In particular, a flight plan can be closed by calling the unique number +33 1 56 301 301, which allows a connection with the appropriate body of civil aviation services of metropolitan France, regardless of the location of the call.

#### USER PREFERRED ROUTES

To reduce the environmental impact of aviation on the environment the members of the Indian Ocean and Arabian Sea Strategic Partnership to Reduce Emissions (INSPIRE) are collaborating to allow airspace users access to User Preferred Routes (UPR) across the Indian and Southern Oceans airspace.

##### Procedure

INSPIRE airline partners that have received prior approval from INSPIRE, may use the following procedures within Antananarivo FIR.

For all other flights, the off air route is on the approval of the Antananarivo ACC on the working frequencies or CPDLC. The clearance for an off air route depend on the traffic in charge.

The vertical limit of the Antananarivo UPR Geographic Zone is FL245 to FL460.

## REUNION RULES AND PROCEDURES

### Flight Planning

- a. UPRs must be constructed via published waypoints, navigational aids or positions designated by latitudes and longitudes;
- b. UPRs may include existing air routes;
- c. time interval between waypoints must not exceed 30 minutes.

### Access to UPR

Airspace users may only file a flight plan user preferred route in the UPR geographic zone if they meet the following minimum criteria:

- a. RNAV10; and
- b. ADS-C/CPDLC equipped.

The minimum criteria listed above must be notified in the flight plan.

Questions and assistance should be directed to:

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### ACAS/TCAS II REQUIREMENTS

All civil fixed-wing turbine-engined aircraft having a maximum take-off mass exceeding 5700kg, or a maximum approved passenger seating configuration of more than 19 and all other aircraft which are equipped with ACAS II on a voluntary basis are required to be equipped with ACAS/TCAS II version 7.1.

Flying with inoperative ACAS/TCAS II is permitted, including within RVSM airspace, provided it is done in accordance with the applicable Minimum Equipment List (MEL).

The MEL for ACAS/TCAS II throughout Europe is Class A - 10 days (excluding the day of discovery).

**REUNION  
RULES AND PROCEDURES**

## **DIFFERENCES FROM ICAO STANDARDS AND PROCEDURES**

### **ICAO REFERENCE**

#### **Annex 2**

**3.2.2** New Provision. SERA.3210(b), specifies: An aircraft that is aware that the maneuverability of another aircraft is impaired shall give way to that aircraft.

**3.2.3.2 (b)** SERA.3215 (b) (2), specifies with the addition of the underlined text: unless stationary and otherwise adequately illuminated, all aircraft on the movement area of an aerodrome shall display lights intended to indicate the extremities of their structure, as far as practicable.

**3.3.1.2** ICAO Annex 2, 3.3.1.2 is replaced with point SERA.4001(b). The differences between that ICAO Standard and that Union regulation are as follows:

– With regards to VFR flights planned to operate across international borders, SERA.4001(b)(5) differs with the addition of the underlined text, as follows:

any flight across international borders, unless otherwise prescribed by the States concerned.

– With regard to VFR and IFR flights planned to operate at night, the following requirement is added to point SERA.4001(b)(6) as follows:

any flight planned to operate at night, if leaving the vicinity of an aerodrome.

**3.3.1.2 (b)** Filing of a flight plan is mandatory for any IFR flight.

**3.3.1.2 (e)** A flight plan shall be submitted at least 30 minutes before the estimated time of departure for cross-border flights.

**3.8 and Appendix 2** The words ‘in distress’ of Chapter 3 Part 3.8, are not included in Union law, thus enlarging the scope of escort missions to any type of flight requesting such service. Furthermore the provisions contained in Appendix 2 Parts 1.1 to 1.3 inclusive as well as those found in Attachment A, are not contained in Union law.

**3.9** Table 3-1 SERA.5001, note for airspace “F” and “G” at and below 900m (3000ft) AMSL, or 300m (1000ft) above terrain, whichever is higher modified as follows:

a. flight visibilities reduced to not less than 1500m may be permitted for flights operating:

1. at speeds of 140kts IAS or less to give adequate opportunity to observe other traffic or any obstacles in time to avoid collision; or
2. in circumstances in which the probability of encounters with other traffic would normally be low, e.g. in areas of low volume traffic and for aerial work at low levels.

b. Helicopters may be permitted to operate in less than 1500m but not less than 800m flight visibility, if maneuvered at a speed that will give adequate opportunity to observe other traffic or any obstacles in time to avoid collision. Flight visibilities lower than 800m may be permitted for special cases, such as medical flights, search and rescue operations and fire-fighting.

**4.5** VFR flights are not allowed above FL290, except for restricted airspace (TSA, TRA or CBA).

**4.6** SERA.5005, introducing the obstacle clearance criteria in (f), as follows:



## REUNION RULES AND PROCEDURES

Except when necessary for take-off or landing, or except by permission from the competent authority, a VFR flight shall not be flown:

- a. over the congested areas of cities, towns or settlements or over an open-air assembly of persons at a height less than 300m (1000ft) above the highest obstacle within a radius of 600m from the aircraft;
- b. elsewhere than as specified in (a.), at a height less than 150m (500ft) above the ground or water, or 150m (500ft) above the highest obstacle within a radius of 150m (500ft) from the aircraft.

**5.3.1** In uncontrolled airspace, the first usable flight level in IFR shall keep a margin of at least 500ft above the higher of the two following levels: 3000ft AMSL or 1000ft ASFC, in order to protect the IFRs with regard to the VFRs which may operate at the edges of the clouds below 3000ft AMSL and 1000ft ASFC.

**5.3.2** Any IFR out of controlled airspace must establish a communication with the organization ensuring flight information and stand by.

### Annex 10

**5.2.1.4.1** SERA.14035 differs from ICAO by stating that:

a. Transmission of numbers

1. All numbers used in the transmission of aircraft call sign, headings, runway, wind direction and speed shall be transmitted by pronouncing each digit separately.
  - (a) Flight levels shall be transmitted by pronouncing each digit separately except for the case of flight levels in whole hundreds.
  - (b) The altimeter setting shall be transmitted by pronouncing each digit separately except for the case of a setting of 1000 hPa which shall be transmitted as "ONE THOUSAND".
  - (c) All numbers used in the transmission of transponder codes shall be transmitted by pronouncing each digit separately except that, when the transponder codes contain whole thousands only, the information shall be transmitted by pronouncing the digit in the number of thousands followed by the word "THOUSAND".
2. All numbers used in transmission of other information than those described in point (a.) (1.) shall be transmitted by pronouncing each digit separately, except that all numbers containing whole hundreds and whole thousands shall be transmitted by pronouncing each digit in the number of hundreds or thousands followed by the word "HUNDRED" or "THOUSAND", as appropriate. Combinations of thousands and whole hundreds shall be transmitted by pronouncing each digit in the number of thousands followed by the word "THOUSAND", followed by the number of hundreds, followed by the word "HUNDRED".
3. In cases where there is a need to clarify the number transmitted as whole thousands and/or whole hundreds, the number shall be transmitted by pronouncing each digit separately.

## REUNION RULES AND PROCEDURES

4. When providing information regarding relative bearing to an object or to conflicting traffic in terms of the 12-hour clock, the information shall be given pronouncing the digits together such as "TEN O'CLOCK" or "ELEVEN O'CLOCK".
5. Numbers containing a decimal point shall be transmitted as prescribed in point (a.)(1.) with the decimal point in appropriate sequence indicated by the word "DECIMAL".
6. All six digits of the numerical designator shall be used to identify the transmitting channel in Very High Frequency (VHF) radiotelephony communications except in the case of both the fifth and sixth digits being zeros, in which case only the first four digits shall be used.

### 5.2.1.7.3.2.3 SERA.14055 (b)(2) specifies with the addition of the underlined text:

The reply to the above calls shall use the call sign of the station calling, followed by the call sign of the station answering, which shall be considered an invitation to proceed with transmission by the station calling. For transfers of communication within one ATS unit, the call sign of the ATS unit may be omitted, when so authorized by the competent authority.

## Annex 11

**2.6.1 Appendix 4** Exemption possibility. SERA.6001 allows aircraft to exceed the 250kt speed limit where approved by the competent authority for aircraft types, which for technical or safety reasons, cannot maintain this speed.

**2.26.5** SERA.3401(d)(1) differs from ICAO by stating that: 'Time checks shall be given at least to the nearest minute'.

**3.3.4** New provision. SERA.8005(b), specifies: Clearances issued by air traffic control units shall provide separation:

- a. between all flights in airspace classes "A" and "B";
- b. between IFR flights in airspace classes "C", "D" and "E";
- c. between IFR flights and VFR flights in airspace Class "C";
- d. between IFR flights and special VFR flights;
- e. between special VFR flights unless otherwise prescribed by the competent authority;

except that, when requested by the pilot of an aircraft and agreed by the pilot of the other aircraft and if so prescribed by the competent authority for the cases listed above in airspace classes "D" and "E", a flight may be cleared subject to maintaining own separation in respect of a specific portion of the flight below 3050m (10000ft) during climb or descent, during day in visual meteorological conditions.

**RWANDA  
RULES AND PROCEDURES****GENERAL**

In general, the air traffic rules and procedures in force and the organization of the air traffic services are in conformity with ICAO Standards, Recommended Practices and Procedures.

Units of measurement used in all air and ground operations are as listed in the following table.

Measurement of	Unit
Distance used in navigation, position reporting, etc., generally in excess of 2 nautical miles	Nautical Miles and Tenths
Relatively short distances such as those relating to aerodromes (e.g., runway lengths)	Meters
Altitude, elevations and heights	Feet
Horizontal speed including wind speed	Knots
Vertical speed	Feet per Minute
Wind direction for landing and taking off	Degrees Magnetic
Wind direction except for landing and taking off	Degrees True
Visibility	Kilometers or Meters
Altimeter setting	Hectopascals
Temperature	Degrees Celsius
Weight	Metric Tons or Kilograms
Time	Hours and Minutes, the day of 24hrs beginning at midnight UTC

**WGS-84 IMPLEMENTATION STATUS**

WGS-84 compliant.

**FLIGHT PROCEDURES****HOLDING**

Flight Level (FL)	Propeller Aircraft	Jet Aircraft	
		Normal Conditions	Turbulence Conditions
Above 6000ft up to FL140 (4250m) inclusive	170kt	230kt (425kmh)	280kt (520kmh) or Mach 0.5 whichever is less. <sup>1</sup>
Above FL140 (4250m) to FL200 (6100m)	175kt	240kt (445kmh)	

**RWANDA  
RULES AND PROCEDURES**

Flight Level (FL)	Propeller Aircraft	Jet Aircraft	
		Normal Conditions	Turbulence Conditions
Above FL200 (6100m) to FL340 (10350m) inclusive	265kt (490kmh)		
Above FL340 (10350m)	Mach 0.83		Mach 0.83

<sup>1</sup> The speed of 280kt (Mach 0.5) reserved for turbulence conditions shall be used for holding only after prior clearance with ATC.

## PROCEDURE LIMITATIONS AND OPTIONS

Instrument approach procedures based on the PANS-OPS, Document 8168.

## AIRPORT OPERATING MINIMUMS

Rwanda publishes OCA(H) together with DA(H), MDA(H), visibility for take-off and landing for Kigali Intl.

Jeppesen published minimums are not below State minimums.

## ARRIVING FLIGHTS

IFR flights entering and landing within Kigali CTR will be cleared to a specific holding point and instructed to commence the approach procedure. The terms of this clearance shall be adhered to until further instructions are received from approach control. If the clearance limit is reached before further instructions have been received, holding procedures shall continue until expected approach time.

Due to the limited airspace available, it is important that the approaches to the patterns and the holding procedures be carried out as precisely as possible. Pilots are strongly requested to inform ATC if for any reason the approach and/or holding cannot be performed as required.

## DEPARTING FLIGHTS

IFR flights departing from controlled airports will receive initial ATC clearance from the local tower. The clearance limit will normally be the airport of destination.

Flights departing from non-controlled airports shall join the IFR traffic after receiving an ATC clearance if requested, when the flight plan items are given by radio to ATC.

Detailed instructions with regards to routes, turn etc. will be part of the clearance.

## ATS AIRSPACE CLASSIFICATION

Rwanda has adopted the ICAO ATS airspace classification as listed in Jeppesen ATC-Chapter "ICAO ATS Airspace Classifications - Annex 11".

Airspace classes "A", "C", "D" and "G" are used within Kigali FIR.

**RWANDA  
RULES AND PROCEDURES**

## **SPECIAL REQUIREMENTS AND REGULATIONS**

### **COMMUNICATIONS**

A permanent watch on appropriate ATC radio frequencies is mandatory for all flights within controlled and uncontrolled airspace. All aircraft flying IFR or VFR must establish a suitable radio communication with Kigali Approach as soon as possible before entering in Kigali FIR.

#### **Position Reporting Procedure**

When crossing the Kigali FIR boundary all IFR flights shall make position reports to Kigali APP and specify the departure aerodrome and the position over the boundary.

### **FLIGHT PLANNING**

No flight plans shall be filed for routes deviating from ATS route structure unless prior permission has been obtained from Kigali ATC authorities.

Special flights, e.g. survey flights, scientific research flights etc. may be exempted from the restriction mentioned above. A request for exemption shall be requested at least 1 week before intended day of flight from Kigali ATC authorities.

#### **Time of Submission**

A flight plan shall be submitted at least 30 minutes prior to departure, taking into account the requirements of ATS units in the airspace along the route to be flown for timely information.

#### **Place of Submission**

Flight plans shall be submitted at the Air Traffic Services Reporting Office (ARO) at the departure aerodrome. If departing from an aerodrome which has no communication with the international airport, the pilot has to transmit as soon as possible the items of his flight plan through the air-to-ground radio frequencies to approach control office.

### **MAXIMUM CRUISING FLIGHT LEVELS WITHIN GREAT LAKE REGION**

Along the following ATS routes, flight levels for non-coordinated flights are assigned as listed below:

<b>A408</b>	
Bujumbura - Kigali	FL150
Kigali - Bujumbura	FL160
<b>B531</b>	
Goma - Kigali	FL150
Kigali - Goma	FL160

**RWANDA  
RULES AND PROCEDURES**

<b>B607</b>	
Bujumbura - Goma	FL150
Goma - Bujumbura	FL160

*NOTE: Instructions are given to departing aircraft to contact the approach control unit of the receiving FIR/TMA as soon as possible.*

### **MINIMUM HORIZONTAL RADAR SEPARATION**

The minimum horizontal radar separations are:

- a. 10NM when SSR only;
- b. 10NM when using primary radar only.

### **DIFFERENCES FROM ICAO STANDARDS AND PROCEDURES**

#### **ICAO REFERENCE**

##### **Annex 2**

**4.3** No VFR flights allowed between sunset and sunrise.

**4.4 (a)** VFR shall not be operated above FL145.

**4.6** Flights in VFR cruising at a height of 300 meters (1000ft) or higher, above the ground or water surface will comply with the semi-circular rule, below FL145.

## SAO TOME AND PRINCIPE RULES AND PROCEDURES

### GENERAL

In general, the air traffic rules and procedures in force and the organization of the air traffic services are in conformity with ICAO Standards, Recommended Practices and Procedures.

Units of measurement used in all air and ground operations are as listed in the following table.

MEASUREMENT OF	UNIT
Distance used in navigation, position reporting, generally in excess of 4000 m	Kilometers, Nautical Miles <sup>1</sup>
Relatively short distances such as those relating to aerodromes (e.g., runway lengths)	Meters
Altitude, elevations, and heights	Meters, Feet <sup>1</sup>
Horizontal speed including wind speed	Kilometers per Hour, Knots <sup>1</sup>
Vertical speed	Meters per Second, Feet per Minute <sup>1</sup>
Wind direction for landing and taking off	Degrees Magnetic
Wind direction except for landing and taking off	Degrees True
Visibility including runway visual range	Kilometers <sup>2</sup> or Meters
Altimeter setting, atmospheric pressure	Hectopascals
Temperature	Degrees Celsius
Weight	Kilograms
Time	Hours and Minutes, the day of 24hrs beginning at midnight UTC

<sup>1</sup> Alternative units used temporarily.

<sup>2</sup> 5km and greater.

### WGS-84 IMPLEMENTATION STATUS

WGS-84 compliant.

### FLIGHT PROCEDURES

#### HOLDING

Holding procedures comply with Jeppesen ATC-Chapter "Flight Procedures (DOC 8168) - Holding Procedures", Table IV-1-1, Holding Speeds.

#### PROCEDURE LIMITATIONS AND OPTIONS

Instrument approach procedures are in accordance with the PANS-OPS, Document 8168.

**SAO TOME AND PRINCIPE  
RULES AND PROCEDURES****AIRPORT OPERATING MINIMUMS**

Sao Tome and Principe does not publish State airport operating minimums. Sao Tome and Principe publishes Obstacle Clearance Altitude (Height) [OCA(H)]. An approach-to-land as well as a landing clearance will be issued regardless of weather conditions.

There are no weather requirements for take-off, except that the pilot shall have sufficient visibility to continually align the aircraft with the axis of the runway.

Operators shall establish their own meteorological minima for Sao Tome airport and shall report them to the National Institute of Civil Aviation:

INAC - Instituto Nacional de Aviacao Civil

Address: Caixa Postal No 97  
Sao Tome  
Sao Tome and Principe

Tel: +239 241 450

Fax: +239 221 848

+239 225 218

E-Mail: [inac@cstome.net](mailto:inac@cstome.net)

AFS: FPSTYAYX

**ATS AIRSPACE CLASSIFICATIONS**

Sao Tome and Principe has adopted the ICAO ATS airspace classification as listed on ATC-Chapter "ICAO ATS Airspace Classifications - Annex 11". Within Sao Tome TMA, however, only the airspace classes "A" and "C" are used.

Speed restriction 250kt below FL100 does not apply to VFR traffic in airspace class "C".

**SPECIAL REQUIREMENTS AND REGULATIONS****FLIGHT PLANNING**

In absence on an Air Traffic Services Reporting Office (ARO) at the departure aerodrome a flight plan shall be submitted to the nearest ARO as listed below:

SAO TOME International

Tel: +239 2222561 (AIS Briefing Office)

Fax: +239 2221154

E-Mail: [ais.fpst@gmail.com](mailto:ais.fpst@gmail.com)

AFS: FPSTZPZX

**REQUIRED NAVIGATION PERFORMANCE**

Following routes are designated RNP10:

- UA616, STM to KOPUB;
- UQ360, TENTA to IL DAN;



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**SAO TOME AND PRINCIPE  
RULES AND PROCEDURES**

- UQ558, XURUT to TUREX;
- UQ559, POSAG to VORET;
- UQ583, EREGO to GULEP;
- UQ584, GAPAK to MURIM.

**DIFFERENCES FROM ICAO STANDARDS AND PROCEDURES****ICAO REFERENCE****ANNEX 2**

**3.3.1.4** Except for repetitive flight plans, a flight plan shall be submitted at least 30 minutes before departure.

**4.4** VFR flights are not allowed to operate above FL150.

## SEYCHELLES RULES AND PROCEDURES

### GENERAL

In general, the air traffic rules and procedures in force and the organization of the air traffic services are in conformity with ICAO Standards, Recommended Practices and Procedures.

Units of measurement used in all air and ground operations are as listed in the following table.

Measurement of	Unit
Distance used in navigation, position reporting, etc.	Nautical Miles and Tenths
Relatively short distances such as those relating to aerodromes (e.g., runway lengths)	Meters
Altitude, elevations and heights	Feet, Meters
Horizontal speed including wind speed	Knots
Vertical speed	Feet per Minute
Wind direction for landing and taking off	Degrees Magnetic
Wind direction except for landing and taking off	Degrees True
Visibility including runway visual range	Kilometers or Meters
Altimeter setting	Hectopascals
Temperature	Degrees Celsius
Weight	Metric Tons or Kilograms
Time	Hours and Minutes, the day of 24hrs beginning at midnight UTC

### WGS-84 IMPLEMENTATION STATUS

WGS-84 compliant.

### FLIGHT PROCEDURES

#### HOLDING

Holding procedures comply with Jeppesen ATC-Chapter "Flight Procedures (DOC 8168) - Holding Procedures", Table IV-1-1, Holding Speeds.

#### PROCEDURE LIMITATIONS AND OPTIONS

Instrument approach procedures are based on the PANS-OPS, Document 8168.

#### VISUAL APPROACH PROCEDURE

IFR flights may be cleared to execute visual approaches provided the pilot has the destination aerodrome in sight and can maintain visual references to the terrain and:

## **SEYCHELLES RULES AND PROCEDURES**

- a. the ground visibility reported is 5km or more;
- b. the reported cloud ceiling is not below the approved initial approach level for the aircraft so cleared; and
- c. reports at the initial approach level or at any time during the instrument approach procedure indicates that the visibility will permit a visual approach and there is reasonable assurance that the landing can be accomplished.

### **AIRPORT OPERATING MINIMUMS**

Seychelles State minimums are in accordance with EU-OPS, Appendix 1 (new) to OPS 1.430.

Jeppesen published minimums are not below State minimums.

#### **Approach Ban**

An instrument approach may be commenced regardless of the reported RVR/VIS but the approach shall not be continued beyond the outer marker or equivalent position, if the reported RVR/VIS is less than the applicable minimum. Where RVR is not available, RVR values may be derived by converting the reported visibility. If, after passing the outer marker or equivalent position the reported RVR/VIS falls below the applicable minimum, the approach may be continued to DA(H) or MDA(H).

Where no outer marker or equivalent position exist, the pilot shall make the decision to continue or abandon the approach before descending below 1000ft above the aerodrome on the final approach segment. If the MDA(H) is 1000ft or more about aerodrome the operator shall establish a height for each approach procedure, below which the approach shall not be continued if RVR/VIS is less than the applicable minimum.

The approach may be continued below DA(H) or MDA(H) and the landing may be completed provided that the required visual reference is established at the DA(H) or MDA(H) and is maintained.

The touchdown zone RVR is always controlling. If reported and relevant, the mid-point and stop-end RVR are also controlling. The minimum RVR for the mid-point is 125m or the RVR required for the touchdown zone if less. The minimum RVR for the stop-end is 75m. For aircraft equipped with a roll-out guidance or control system, the minimum RVR value for the mid-point is 75m.

Relevant in this context means that part of the runway used during the high speed phase of the landing down to a speed of approximately 60kt.

### **ATS AIRSPACE CLASSIFICATION**

Seychelles have adopted the ICAO ATS airspace classification as listed in Jeppesen ATC-Chapter "ICAO ATS Airspace Classifications - Annex 11".

Airspace classes "A", "D", "E" and "G" are used within Seychelles FIR.

**SEYCHELLES  
RULES AND PROCEDURES****SPECIAL REQUIREMENTS AND REGULATIONS****FLIGHT PLANNING**

Except for repetitive flight plans, a flight plan shall be submitted at least 30 minutes prior to departure, taking into account the requirements for timely exchange of information between ATS units in the airspace along the route to be flown.

For departures from Mahe, flight plans shall be submitted to the Air Traffic Services Reporting Office (ARO) which is currently located at the AIS Office.

In the absence of such an office at the departure aerodrome, a flight plan shall be submitted by telephone to the aerodrome control tower at Mahe.

Aircraft planning to utilize data link communication must annotate the flight plan as follows:

- a. CPDLC capability must be notified by inserting the alphanumeric designator J5 or J6 in Item 10 Field 10a;
- b. ADS-C capability must be notified by inserting the alphanumeric designator D1 in Item 10 Field 10b;
- c. aircraft registration must be inserted in Item 18 as the ground system uses the information during the AFN logon.

**Flight Plan Message Addressing**

Flight movement messages for IFR flights shall be addressed as follows:

Into or via Seychelles FIR	FSSSZQZX
Into Seychelles TMA, to Seychelles International Airport and within Seychelles territory	FSIAZTZX

**MAXIMUM CRUISING LEVELS FOR SHORT-RANGE FLIGHTS**

It is generally recommended not to select levels above FL240 for flights up to a distance of 300NM.

Traffic from the Seychelles TMA with a destination within the Seychelles CTA should file maximum FL250.

**IMPLEMENTATION OF ADS-B-NRA WITHIN SEYCHELLES FIR**

The Seychelles FIR is non radar airspace (NRA), the plan is to implement surveillance services throughout the FIR using a combination of space-based and ground based ADS-B.

**Airworthiness Considerations**

For the purposes of the ADS-B-NRA application, the ADS-B System installed in the aircraft needs to be designed to deliver data that satisfy the airborne domain requirements to meet the requirements of the Seychelles Civil Aviation (Safety) Regulations, 2017, Part 3 regulation 8, and EASA Acceptable Means of Compliance (AMC) 20-24.

## SEYCHELLES RULES AND PROCEDURES

### Applicable Dates

New aircraft that will be incorporated on Seychelles register after 15th April 2019 must be suitably equipped.

Aircraft already on Seychelles register at 15th April 2019 and all foreign registered aircraft operating within the Seychelles FIR shall be equipped by the 7th June 2020.

### STRATEGIC LATERAL OFFSETS (SLOP) IN OCEANIC AIRSPACE

Offsets may be applied beyond 200NM radius from the DME 'PRA' and above FL290 in the oceanic airspace of the Seychelles FIR by aircraft with automatic offset tracking capability. The following requirement may apply to the use of the offset:

- a. The decision to apply a strategic lateral offset is the responsibility of the flight crew.
- b. The offset shall be established at a distance of 1 or 2NM to the right of the centerline relative to the direction of flight. Offset are not to exceed 2NM right of the centerline.

If wake turbulence needs to be avoided, one of the three available options (centerline, 1NM or 2NM offset to the right) shall be used. Pilots may contact other aircraft on the air to air frequency 123.45MHz or IATA IFBP frequency 126.9MHz, as necessary, to coordinate the best wake turbulence offset option.

- c. In airspace where SLOP has been authorized, pilots are not required to inform ATC that an offset is being applied.
- d. Position reports are based on the current ATC clearance and not the exact coordinates of the offset position.

### DATA LINK SERVICES

Controller Pilot Data Link Communications (CPDLC) and Automatic Dependent Surveillance-Contract (ADS-C) applications will be used to provide data link services on a 24hrs basis to FANS1/A equipped aircraft operating in the Seychelles FIR.

The provision of Pre-Departure Clearance (PDC) via CPDLC is not available.

### Logon Procedures

The AFN logon address for Seychelles FIR is FSSS.

To avoid automatic rejection of the logon, the flight identification number must be identical to the number filed in the flight plan.

Aircraft requesting data link services inbound to Seychelles FIR are required to manually logon to FSSS at least 15 minutes prior to the estimated time for entering the Seychelles FIR.

Data link equipped aircraft departing from aerodromes within the Seychelles FIR shall logon to FSSS as soon as possible after departure.

Pilots who are unable to establish data link connection shall inform ATC on VHF or HF radio.

### CPDLC Application

A clearance issued by CPDLC requires only the appropriate CPDLC response, not a read back.

## SEYCHELLES RULES AND PROCEDURES

The downlink response WILCO indicates that the pilot accepts the full terms of the whole uplink message.

To avoid ambiguity in message handling and response, a CPDLC downlink message should not contain more than one clearance request.

If any ambiguity exists as to the intent of a particular message, clarification must be sought by voice.

The use of free text should be kept to a minimum.

### General Procedures

When CPDLC connection has been established, pilots will be instructed to transfer from voice to CPDLC.

Seychelles requires an initial CPDLC (position report) at FIR boundary entry point then ADS reporting only.

CPDLC connections will be terminated at the FIR boundary position or when entering VHF coverage. The CONTACT [unit name] [frequency] message and the END SERVICE message will be sent as separate messages. The END SERVICE message will be sent as soon as possible after receipt of the WILCO response message to the CONTACT message.

### Data Link Failure

Pilots recognizing a failure of a CPDLC connection must immediately establish communications on the appropriate voice frequency.

In the event of an unexpected CPDLC shutdown, all data link connected aircraft will be immediately advised of the failure by voice. Instructions will continue to be issued by voice until the return of data link system. The return of the system to an operational state will require a new AFN logon from the affected aircraft.

### Emergency Procedures

Pilots should notify ATC of emergency situations by the most appropriate means (voice or CPDLC). If the pilot send a CPDLC MAYDAY/PAN message, he will immediately receive free text message ROGER MAYDAY/PAN.

Normal emergency procedures shall be followed.

## REQUIRED NAVIGATION PERFORMANCE

Following routes are designated RNP1:

- T113, OKLIM to NORSI;
- T114, OKLIM to OKLAB;
- T115, OKLIM to KATEB;
- T116, KATEB to UNBED;
- T117, FS121 to DANEL;

**SEYCHELLES  
RULES AND PROCEDURES**

- T118, DANEL to FS122;
- T119, FS123 to MOGUD;
- T120, NEVIN to ANVIX;
- T121, FS123 to ATUTI;
- T122, ATUTI to ROUTY;
- T123, UDLET to ROUTY;
- T124, UTALI to UDLET;
- T125, ORLOM to UTALI;
- T126, TILOM to ORLOM;
- T127, GITOP to FS124;
- T128, TILOM to GITOP;
- T129, NESID to RERUS;
- T130, NESID to RUBAM;
- T131, RERUS to FS120;
- T132, RUBAM to IMPOX;
- T133, FS122 to MOGUD;
- T134, ROUTY to ANVIX;
- T135, NORSI to FS120;
- T136, OKLAB to IMPOX;
- T137, ANVIX to ROUTY;
- T138, MOGUD to FS122;
- T139, MIRON to IMPOX;
- T140, OKLIM to MIRON;
- T141, BOMOB to FS124;
- T142, UTALI to BOMOB.

**RNP10 Navigation Requirements**

10 minutes (or 100NM) lateral separation minimums is applied to aircraft which are approved for RNP10 operations on all ATS routes implemented within the Seychelles FIR. Pilots must advise ATC of any deterioration or failure of their navigation systems below the navigation requirements for RNP10. An aircraft that is unable to meet the minimum navigational requirements for RNP10 must file a flight plan at or below FL280.

## SEYCHELLES RULES AND PROCEDURES

### USER PREFERRED ROUTES (UPR)

The Indian Ocean Partnership to Reduce Emissions (INSPIRE) is a partnership between Air services, Airports Authority of India, and ATNS of South Africa. The partners are collaborating with a large number of peer ANSPs across the Arabian Sea and Indian Ocean, and a number of airline partners, to establish a UPR geographical zone that will make UPRs available across this entire oceanic area.

#### Procedure

INSPIRE airline partners that have prior approval from INSPIRE may use the following procedures within the Seychelles FIR.

#### Flight Planning

UPRs must be constructed via published waypoints, navigational aids or positions designated by latitudes and longitudes.

UPRs may include existing air routes.

Time interval between waypoints must not exceed 30 minutes.

#### Access to UPR

Airspace users may only file a flight plan user preferred route in the UPR Geographic Zone if they meet the following minimum criteria:

- RNAV10; and
- ADS-C/CPDLC equipped.

The minimum criteria listed above must be notified in the flight plan plus the actual routing of the flight.

Questions and assistance should be directed to:

Ms. Lineda Samson

Tel: +248 2527207

E-Mail: lsamson@scaa.sc

### ACAS/TCAS II REQUIREMENTS

All civil fixed-wing turbine-engined aircraft having a maximum take-off mass exceeding 5700kg, or a maximum approved passenger seating configuration of more than 19 are required to be equipped with ACAS/TCAS II version 7.1.

## DIFFERENCES FROM ICAO STANDARDS AND PROCEDURES

### ICAO REFERENCE

#### Annex 2

**3.9** At indicated speeds of 140kt or less, that, in the prevailing visibility, will give adequate opportunity to observe other traffic or any obstacles in time to avoid collision; or



**SEYCHELLES  
RULES AND PROCEDURES**

In circumstances in which the probability or encounters with other traffic would normally below, e.g. in areas of low volume traffic and for aerial work at low levels.

**4.4 (a)** VFR flights shall not be operated above FL145.

**4.6 (a)** Aircraft shall not be flown:

- over a congested area of a city, town or settlement at a height of less than 1500ft above the highest obstacle within a radius of 600m (2000ft) from the aircraft;
- over an open air assembly of more than 1000 persons or within 3000ft of the assembly, except with special permission of the competent authority and at such a height that will permit a landing clear of the assembly in the event of a power failure.

## SIERRA LEONE RULES AND PROCEDURES

### GENERAL

In general, the air traffic rules and procedures in force and the organization of the air traffic services are in conformity with ICAO Standards, Recommended Practices and Procedures.

Units of measurement used in all air and ground operations are as listed in the following table.

MEASUREMENT OF	UNIT
Distance used in navigation, position reporting, etc., generally in excess of 2 to 3 nautical miles	Nautical Miles and Tenths
Relatively short distances such as those relating to aerodromes (e.g., runway lengths)	Meters
Altitude, elevations and heights	Feet
Horizontal speed including wind speed	Knots
Vertical speed	Feet per Minute
Wind direction for landing and taking off	Degrees Magnetic
Wind direction except for landing and taking off	Degrees True
Visibility including runway visual range	Kilometers or Meters
Altimeter setting	Hectopascals
Temperature	Degrees Celsius
Weight	Metric Tons or Kilograms
Time	Hours and Minutes, the day of 24hrs beginning at midnight UTC

### WGS-84 IMPLEMENTATION STATUS

WGS-84 compliant.

### FLIGHT PROCEDURES

#### HOLDING

Holding procedures comply with Jeppesen ATC-Chapter "Flight Procedures (DOC 8168) Holding Procedures", Table IV-1-1, Holding Speeds.

#### PROCEDURE LIMITATIONS AND OPTIONS

Instrument approach procedures are based on the PANS-OPS, Document 8168.

#### AIRPORT OPERATING MINIMUMS

Sierra Leone does not publish State airport operating minimums.

Sierra Leone publishes Obstacle Clearance Altitudes (Heights) [OCA(H)].

**SIERRA LEONE  
RULES AND PROCEDURES****ATS AIRSPACE CLASSIFICATIONS**

Sierra Leone has adopted the ICAO ATS airspace classification as listed on ATC-Chapter "ICAO ATS Airspace Classifications - Annex 11".

Airspace classes "A", "C", "D" and "G" are used within Roberts FIR.

**SPECIAL REQUIREMENTS AND REGULATIONS****POSITION REPORTING PROCEDURE**

In addition to general position reporting procedures position reports shall be made when entering or leaving the Roberts FIR. The last position report before leaving Roberts FIR shall also be transmitted to the ATS unit serving the airspace to be entered.

An IFR flight operating outside controlled airspace shall submit a flight plan, establish two-way communication with FIS and make position reports.

**FLIGHTS AT UNCONTROLLED AIRPORTS**

Flights departing from aerodromes located outside controlled airspace (no aerodrome ATS units available) are to either: contact Roberts ACC using HF radio to provide flight plan details and obtain ATC clearance, if necessary while on the ground, or if not practicable, contact Roberts ACC as soon as possible after departure and obtain clearance, if necessary.

Transition altitudes have not been established for aerodromes outside controlled airspace. Pilots are advised to use 3000ft above aerodrome elevation.

**CHANGES OF FLIGHT LEVELS**

All changes of flight levels required by transition from the system of designated cruising levels for flights along controlled routes to the semi-circular system of cruising levels, or vice versa, shall be made at points within controlled airspace.

**FLIGHT PLANNING****Contents of a Flight Plan**

Flight plans are not required for local flights which operate entirely within Sierra Leone, provided prior agreement has been concluded between the operator and the local ATS unit concerned and Roberts ATCC has been duly notified.

**Time of Submission**

Flight plans shall be submitted at least 30 minutes before requesting start-up or taxi clearance.

**STRATEGIC LATERAL OFFSET PROCEDURES (SLOP)**

Strategic Lateral Offset Procedures (SLOP) are applicable on all enroute ATS routes within Roberts FIR between FL290 and FL410.

SLOP may only be applied by aircraft with automatic offset tracking capability.

The decision to apply SLOP is the responsibility of the flight crew and no ATC clearance is required.

## SIERRA LEONE RULES AND PROCEDURES

The offsets shall be applied from top of climb to top of descent.

Pilots may contact other aircraft on the interпилot air-to-air frequency 123.45MHz to coordinate off-sets.

The lateral separation minimums or spacing between most route center lines is 30NM or more, therefore offsets to the right of the center line relative to the direction of flight should be applied in tenths of 1NM up to a maximum of 2NM. (see Note)

A maximum of 2 NM offset is approved for most ATS routes therefore crew should, if the aircraft is equipped with a capability, to offset in tenths of 1NM then randomly choose an offset position of 0.1 NM or more up to 2 NM right of track. (see Note)

*NOTE: The lateral separation minimums on routes UA612/UB727 and UB729/UV207 is 6NM to 30NM therefore offsets to the right of the center line relative to the direction of flight should randomly be selected in tenths of 1NM (0.1NM) up to a maximum of 0.5NM.*

If the aircraft is only equipped with a capability to offset in whole nautical miles then randomly choose an offset position of 1 NM right of track.

### FLEXIBLE TRACK SYSTEM

Flexible routings are implemented within Roberts FIR (GLRB) above FL245. Within Roberts FIR airspace users will be able to plan user-preferred trajectories through the use of 5 letter waypoint name codes. Route portions between waypoints will be indicated by means of "DCT" instruction.

## DIFFERENCES FROM ICAO STANDARDS AND PROCEDURES

### ICAO REFERENCE

#### ANNEX 2

**4.4** IFR compulsory for all flights above FL150.

**SOMALIA  
RULES AND PROCEDURES****GENERAL**

In general, the air traffic rules and procedures in force and the organization of the air traffic services are in conformity with ICAO Standards, Recommended Practices and Procedures.

Units of measurement used in all air and ground operations are listed in the following table.

Measurement of	Unit
Distance used in navigation, position reporting, etc.	Nautical Miles
Relatively short distances such as those relating to aerodromes (e.g. runway lengths)	Metres
Altitudes, elevations and heights	Feet
Horizontal speed including wind speed	Knots
Vertical speed	Feet per minute
Wind direction for landing and taking off	Degrees Magnetic
Wind direction except for landing and taking off	Degrees True
Visibility including runway visual range	Kilometres or Metres
Altimeter setting	Hectopascal
Temperature	Degrees Celsius
Weight	Kilograms
Time	Hours and minutes, the day of 24hrs beginning at midnight UTC

**WGS-84 IMPLEMENTATION STATUS**

WGS-84 compliant.

**FLIGHT PROCEDURES****HOLDING**

Holding procedures basically comply with Jeppesen ATC-Chapter "Flight Procedures (DOC 8168) - Holding Procedures", Table IV-1-1, Holding Speeds.

Holding speeds in Turbulence conditions 280kt (520kmh) or 0.8 Mach, whichever is less applies for all Flight Levels up to FL340 inclusive.

**PROCEDURE LIMITATIONS AND OPTIONS**

Instrument approach procedures are based on the PANS-OPS, Document 8168.

## SOMALIA RULES AND PROCEDURES

### AIRPORT OPERATING MINIMUMS

None published.

### ATS AIRSPACE CLASSIFICATION

Somalia has adopted the ICAO ATS airspace classification as listed in Jeppesen ATC-Chapter "ICAO ATS Airspace Classifications - Annex 11".

Airspace classes "D" and "G" are used within Mogadishu FIR.

Mogadishu FIR is class "G" airspace, where only Flight Information Services is provided. Pilots are to maintain a high level alertness when transiting through Mogadishu FIR RVSM airspace and take appropriate action to ensure safety of flight by maintaining continuous listening watch on VHF emergency frequency 121.5MHz and IFBP frequency 126.9MHz at all times.

### SPECIAL REQUIREMENTS AND REGULATIONS

#### COMMUNICATIONS

All aircraft are required to contact Mogadishu FIC at least 10 minutes prior to the estimated time over the entry point of the Mogadishu FIR.

All inbound from Asmara FIR are required to call Mogadishu FIC 30 minutes before LUBAR or entering the Mogadishu FIR.

Aircraft landing at airfields within Mogadishu FIR where AFIS is not provided are to make a position report to FIC before changing to the unmanned aerodrome frequency 127.45MHz.

Due to HF communication difficulties at Mogadishu FIC, all aircraft with the capability of Satellite communication are requested to contact Mogadishu FIC on SATCOM when transiting Mogadishu FIR. Mogadishu INMARSAT code is 466601 or on telephone lines +252 18 57390, +252 18 57391, +252 18 57392 or +252 18 57393.

#### POSITION REPORTING PROCEDURE

Aircraft unable to make position reports direct to Mogadishu FIC are to request ground stations or other aircraft to relay the information.

#### IFR Flights operating outside Controlled Airspace

An IFR flight operating outside controlled airspace but within or into areas, or along routes, shall maintain an air-ground voice communication watch on the appropriate communication channel and establish two-way communication, as necessary, with the ATS unit providing FIS.

#### FLIGHT PLANNING

Because of the great difficulties of Search and Rescue operations within Somalia, the pilot is strongly advised, regardless of his formal obligations, to file a Flight Plan for every flight. At aerodromes which are not manned by the Somali Civil Aviation Authority (SCAA), the Flight Plan should be filed with Reporting Officer, if established, or with some other responsible person.

Aircraft departing from airfields within Mogadishu FIR where AFIS is not provided are to file an airborne flight plan with the FIC as soon as airborne.

**SOMALIA  
RULES AND PROCEDURES****Flight Plan Message Addressing**

MOGADISHU FIC: HCSMZQZX

MOGADISHU BOF: HCMMZPZX

**LONGITUDINAL SEPARATION**

10 minutes longitudinal separation will apply between aircraft flying at the same level on the same tracks or crossing tracks.

**REQUIRED NAVIGATION PERFORMANCE**

The following routes are designated as RNP10:

- UM216, HARGA to AXAPO;
- UM313, EGLOM to MAV;
- UM634G, DAROT to VEDET;
- UM651G, ESTOK to OKTOB;
- UM665G, ITLOX to MAV;
- UN303G, NAPGO to HARGA;
- UN764G, SUHIL to LOXIN;
- UT253, KESOM to ESTOK;
- UT382, HARGA to ORLID;
- UT383, AVEDA to UNRED;
- UT384, DAROT to AXINA;
- UT386, KESOM to EGSAP.

**STRATEGIC LATERAL OFFSET PROCEDURES (SLOP)**

SLOP is applicable on all enroute ATS routes within Mogadishu FIR between FL290 and FL410.

The lateral separation minimums or spacing between route center lines is 30NM or more, therefore offsets to the right of the center line relative to the direction of the flight should be applied in tenths of a nautical mile up to a maximum of 2NM.

On maximum of 2NM offset is approved therefore crew should, if the aircraft is equipped with a capability, to offset in tenths of a nautical mile then randomly choose an offset position of 0.1NM or more up to 2NM right of track.

If the aircraft is only equipped with capability to offset in whole nautical miles then randomly choose an offset position of 1NM or 2NM right of track.

## SOMALIA RULES AND PROCEDURES

### ACAS/TCAS II REQUIREMENTS

All civil fixed-wing turbine-engined aircraft having a maximum take-off mass exceeding 5700kg, or a maximum approved passenger seating configuration of more than 19 are required to be equipped with and operate ACAS/TCAS II version 7.1.

### DATA LINK SERVICES

Data link services are available on trial to FANS1/A equipped aircraft operating in the Mogadishu FIR. CPDLC and ADS-C data link applications will be used to provide services to FANS 1/A equipped aircraft, in both continental and oceanic area as a secondary means of communication.

#### Logon

The data link address for Mogadishu FIR is HCSM.

Logon should be initiated 10 minutes prior to enter Mogadishu FIR. Data link equipped aircraft departing from aerodromes within the Mogadishu FIR and operating from FL245 and above shall logon to HCSM as soon as possible after departure. Pilots who are unable to establish data link connection are to inform ATC on HF/SATCOM communications.

#### CPDLC Applications

A clearance issued by CPDLC requires only the appropriate CPDLC response, not a read back.

The downlink response "WILCO" indicates that the pilot accepts the full terms of the whole uplink message.

#### Flight Planning

Aircraft planning to utilize data link communications must annotate the ICAO flight plan as follows:

- data link capability must be notified by inserting the designator J4 in Item 10 field 10a (Communication and Navigation Equipment);
- ADS-C capability must be notified by inserting the alphanumeric designator D1 in Item 10 field 10b;
- aircraft registration must be inserted in Item 18 as the ground system uses the information during the AFN logon.

#### Data Link Failure

In case of unavailability or technical failure of CPDLC services, pilots shall immediately establish voice communication on the appropriate frequency.

In the event of an unexpected CPDLC shutdown, the controller will advise all data link connected aircraft of the failure by voice. Instructions will continue to be issued by voice until the return of the data link system. The return of the system to an operational state will require a new AFN logon from affected aircraft.

#### Emergency Procedures

Depending on the nature of the emergency condition experienced, flight crew should notify ATS of the circumstances by the most efficient means (voice or data link).



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**SOMALIA**  
**RULES AND PROCEDURES**

If a CPDLC MAYDAY or PAN message is received by the ground system, the controller will respond with the free text uplink message ROGER MAYDAY (PAN).

**DIFFERENCES FROM ICAO STANDARDS AND PROCEDURES**

No differences published.

**SOUTH AFRICAN REP.  
RULES AND PROCEDURES**

## GENERAL

In general, the air traffic rules and procedures in force and the organization of the air traffic services are in conformity with ICAO Standards, Recommended Practices and Procedures.

Units of measurement used in all air and ground operations are as listed in the following table.

Measurement of	Unit
Distance used in navigation, position reporting, etc., generally in excess of 2 to 3 nautical miles	Nautical Miles and Tenths
Relatively short distances such as those relating to aerodromes (e.g., runway lengths)	Meters
Altitude, elevations and heights	Feet
Horizontal speed including wind speed	Knots
Vertical speed	Feet per Minute
Wind direction for landing and taking off	Degrees Magnetic
Wind direction except for landing and taking off	Degrees True
Visibility including runway visual range	Kilometers or Meters
Altimeter setting	Hectopascals
Temperature	Degrees Celsius
Weight	Metric Tons or Kilograms
Time	Hours and Minutes, the day of 24hrs beginning at midnight UTC

## WGS-84 IMPLEMENTATION STATUS

WGS-84 compliant.

## FLIGHT PROCEDURES

### HOLDING

Holding procedures comply with Jeppesen ATC-Chapter "Flight Procedures (DOC 8168) - Holding Procedures", Table IV-1-1, Holding Speeds.

### PROCEDURE LIMITATIONS AND OPTIONS

Instrument approach procedures are based on the PANS-OPS, Document 8168.

### Minimum Sector Altitudes (MSA)/Terminal Arrival Altitudes (TAA)

Minimum Sector Altitudes are established for each aerodrome and provide at least 1500ft obstacle clearance within 25NM of the radio navigation aid associated with the approach procedure for that aerodrome.

**SOUTH AFRICAN REP.  
RULES AND PROCEDURES**

RNAV based Minimum Sector Altitudes or Terminal Arrival Altitudes are established for each aerodrome and provide at least 1000ft obstacle clearance within 25NM of the significant point, the aerodrome reference point (ARP) or the heliport reference point (HRP) associated with the approach procedure for that aerodrome.

### **Minimum Heights**

Except when necessary for taking off or landing, or except with prior written approval of the commissioner, no aircraft

- a. shall be flown over built-up areas or over an open-air assembly of persons at a height less than 1000ft above the highest obstacle, within a radius of 2000ft from the aircraft;
- b. when flown elsewhere than specified in para above, shall be flown at a height less than 500ft above the ground or water, unless the flight can be made without hazard or nuisance to persons or property on the ground or water; and
- c. shall circle over or do repeated overflights over an open-air assembly of persons at a height less than 3000ft above the surface.

Except when necessary for take-off or landing, or with the express permission of the commissioner, an aircraft shall at night, in IMC, or when operated in accordance with IFR, be flown at:

- a. a height of at least 1000ft above the highest terrain or obstacle where the height of such terrain or obstacle does not exceed 5000ft above sea level within 5NM of the aircraft in flight; or
- b. a height of at least 2000ft above the highest terrain or obstacle located within 5NM of the aircraft in flight where the height of such terrain or obstacle exceeds 5000ft above sea level:

Provided that within areas determined by the commissioner the minimum height may be reduced to 1000ft above the highest terrain or obstacle located within 5NM of the aircraft in flight, and provided furthermore that the aircraft is flown in accordance with such procedures as the commissioner may determine.

### **Speed Restrictions**

Unless advised by ATC, all aircraft inbound to Johannesburg (O.R. Tambo Intl), Lanseria (Intl), Bloemfontein (Bram Fischer Intl), East London, Port Elizabeth (Intl), Durban (King Shaka Intl) and Cape Town (Intl) airports, not on a STAR, will comply with the following speed restrictions, unless advised otherwise by ATC:

- a. within 50DME JSV/PEV/CTV/TGV/BLV/ELV: 250kt or less;
- b. within 15DME JSV/PEV/CTV/TGV/BLV/ELV: 210kt or less.

In addition, all aircraft at or below FL100 will fly a speed not exceeding 250KIAS. If the speed is below minimum safe operating speed, the minimum safe operating speed will be flown and ATC advised.

### **AIRPORT OPERATING MINIMUMS**

South African Republic State minimums and Approach Ban Information are in accordance with JAR-OPS 1 AOM (EU-OPS 1 Subpart E Appendix 1 to OPS 1.430 old).

**SOUTH AFRICAN REP.  
RULES AND PROCEDURES**

Jeppesen published minimums are not below State minimums.

**NOISE ABATEMENT PROCEDURES**

The Noise Abatement Take-off Procedure as shown in Jeppesen ATC-Chapter "Flight Procedures (DOC 8168) Appendix to Chapter 3 - Noise Abatement" will be in force at the airports listed below.

NADP1:

Durban (King Shaka Intl)

NADP2:

Bloemfontein (Bram Fischer Intl), Cape Town (Intl), East London, George, Kimberley, Lanseria (Intl), Johannesburg (O.R. Tambo Intl), Port Elizabeth (Intl), Pretoria (Wonderboom), Upington (Intl).

**CLOUD BREAK PROCEDURE (CBP)**

A CBP may be approved by the Director of Civil Aviation when 1 or more of the following conditions apply:

- a. the runway and/or equipment does not comply with ICAO requirements for instrument approach procedures;
- b. the runway is not aligned with the final approach track;
- c. local QNH may not be available.

In the event that such runway and/or equipment does not comply with ICAO requirements the OCA/H will not be lower than that specified for circling minimums as applicable to aircraft category.

Any procedure conducted outside controlled airspace is conducted entirely at the discretion of the pilot-in-command.

**ILS CAT II/GNSS OPERATIONS**

Pilots wishing to practise a CAT II ILS approach or a GNSS approach must either request it on the flight plan in Item 18 and at least 1 hour before by phone, or by radio at 100NM DME 'JSV', 'TGV' or 'CTV'.

**ATS AIRSPACE CLASSIFICATION**

South African Republic has adopted the ICAO ATS airspace classification as listed in Jeppesen ATC-Chapter "ICAO ATS Airspace Classifications - Annex 11".

Airspace classes "A", "B", "C", "D", "F" and "G" are used within South African Republic.

Within classes "F" and "G" airspace radio communication is also required for VFR flights.

**SOUTH AFRICAN REP.  
RULES AND PROCEDURES****SPECIAL REQUIREMENTS AND REGULATIONS****COMMUNICATION**

All aircraft entering Johannesburg FIR west sector area from Windhoek FIR to call Johannesburg FIR west sector area 10 minutes before Johannesburg FIR on 118.50MHz for an inbound clearance due to non-liaison from FL200 to FL460.

**TRAFFIC INFORMATION BROADCAST BY AIRCRAFT (TIBA)**

The following procedures for aircraft operating outside of controlled airspace within the boundary of the RSA have been implemented:

- a. All aircraft operating at or below 1500ft AGL outside the lateral limits of:
  1. the Johannesburg Special Rules Area;
  2. the Port Elizabeth Special Rules Area;
  3. the East London Special Rules Area;
  4. the Hoedspruit Special Rules Area; and
  5. all promulgated General Flying Areas.

should maintain a listening watch and broadcast regular position reports on frequency 124.8MHz.

Aircraft operating within 5NM of an aerodrome where an ATS unit is not in operation and where no specific frequency has been allocated should make regular position reports relative to the aerodrome on frequency 124.8MHz (excluding those aerodromes situated within promulgated General Flying Areas).

Where a specific frequency has been allocated for such an aerodrome the position reports relative to the aerodrome should be made on the appropriate frequency within 5NM of the aerodrome.

Enroute position reports should be made at regular intervals containing information useful for collision avoidance, e.g. identification, route, position/time, level/altitude, next position and estimate. These position reports should be made with reference to prominent landmarks and/or navigational facilities.

- b. Aircraft operating above 1500ft AGL outside of the areas mentioned in para a) 1.-5. should maintain a listening watch and should make regular position reports on the appropriate ATC FIS frequency allocated for that area. In the event that due to location or range, no contact can be established with the appropriate ATSU FIS a listening watch should be maintained an regular position reports/broadcasts should be made on the frequency allocated for that area.
- c. Aircraft operating within the boundaries of the Johannesburg Special Rules Area shall maintain a listening watch and broadcast regular position reports on frequency 125.4MHz (eastern sector), 125.6MHz (southern sector) and 125.8MHz (western sector).

**SOUTH AFRICAN REP.  
RULES AND PROCEDURES**

- d. Aircraft operating below the lateral limits of the Hoedspruit TMA must contact LASS on frequency 119.0MHz.
- e. Aircraft operating in the Durban Special Rules Area shall maintain a listening watch and broadcast regular position reports on frequency 124.2MHz.
- f. Aircraft operating in the East London Special Rules Area should maintain a listening watch and broadcast regular position reports on frequency 125.2MHz.
- g. Aircraft operating in the Port Elizabeth Special Rules Areas shall maintain a listening watch and broadcast regular position reports on frequency 130.35MHz.
- h. Aircraft operating within the boundaries of the Cape Town Special Rules Area shall maintain a listening watch and broadcast regular position reports on frequency 125.8MHz (western sector) and 124.8MHz (eastern sector).
- i. Aircraft operating within the boundaries of the George Special Rules Area shall maintain a listening watch and broadcast regular position reports on frequency 124.2MHz (western sector), 124.8MHz (eastern sector).
- j. Aircraft operating in the Kruger Special Rules Area should maintain a listening watch and broadcast regular position reports on frequency 130.35MHz.
- k. Aircraft within promulgated General Flying Areas should operate on frequency 124.4MHz.
  - l. Aircraft operating at unmanned aerodromes situated within established General Flying Areas should use frequency 124.4MHz.
- m. To avoid the TIBA frequencies from being used for purposes, other than essential traffic information broadcast, the frequency 123.45MHz is available to pilots to discuss general matters.

Messages should be kept short and a listening watch should be maintained on the appropriate TIBA frequency.

**FLIGHT PLANNING**

Unless otherwise authorized by the responsible ATS unit, a flight plan for a flight to be conducted in controlled or advisory airspace shall be filed not less than 30 minutes before departure.

Flight plans shall be filed by one of the following methods with the:

Aeronautical Information Management (AIM) Service Center

Tel: 0860 359 669 (FLY NOW)  
+27 11 928 6517/8 (for international dialing)  
Fax: +27 11 928 6514  
Internet: <https://file2fly.atns.co.za>  
SITA: JNBXTYF  
AFTN: FAORZPZX

Aeronautical Information Management Unit (AIMU)

**SOUTH AFRICAN REP.  
RULES AND PROCEDURES**

Tel: +27 10 225 2002 (Emergency)  
+27 11 970 7078 (Emergency)

*NOTE: These numbers are only to be used when the AIM Service Center telephone numbers are unserviceable.*

**Content of Flight Plan**

In Item 15 of flight plan EVUKI and RIV are not to be used for arrivals to FACT. ASPIK, ERDAS or GETEN are to be used instead.

**Foreign Airlines**

All foreign airlines operating in terms of Class I and Class IV foreign operators permits or under a 'No Objection' clearance number are required to quote the clearance number in Item 18 of the flight plan.

**Flight Plan Message Addressing**

Flight plan shall be addressed as follows:

All Flight Plan and related Air Traffic Service (ATS) messages shall be addressed to FAORZPZX, who shall be responsible for further distribution of such messages within South Africa.

South African ENROUTE addresses:

<b>FIR/Sector</b>	<b>ICAO Location Indicator</b>	<b>Address</b>
Johannesburg FIR	FAJA	FAORZPZX
Cape Town FIR	FACA	FAORZPZX
Lowveld Military Airspace Sector	FAMR	FAMRYVYX
Oceanic FIR	FAJO	FAORZPZX

**RADAR SEPARATION ASSURANCE**

Radar is the primary aid for separation assurance between Johannesburg TMA and Cape Town TMA above FL195. Enroute separation of 10 minutes may be reduced to 10NM demanding appropriate vigilance, R/T discipline and accuracy.

**ATLANTIC OCEAN RANDOM ROUTING AREA (AORRA) OPERATIONS****General**

South Africa has the delegated responsibility of providing service over the high seas in those areas of airspace which have been identified as part of and included within the South African Oceanic FIR. These areas have variously been identified as the Atlantic Ocean Random Routing Area (AORRA). Operating within these areas facilitate freedom to flight plan and operate along random tracks according to operational requirements, thereby contributing to operational and economic efficiency and at the same time advancing the quest to reduce carbon emissions.

**SOUTH AFRICAN REP.  
RULES AND PROCEDURES**

South Africa has implemented the AORRA between FL290 and FL410.

**Flight Planning**

Prior to entering or after exiting the AORRA from/to Angolan Oceanic airspace, operators are to flight plan so as to cross the Angolan Oceanic FIR boundary at the significant point established on the FIR boundary and which is associated with the fixed route on which they intended operating while in that airspace.

Flight plans shall contain entry and exit point to AORRA and estimated time for every 5 degrees of longitude.

**Required Navigations Performance**

Aircraft certified for RNAV/RNP10 operations would be permitted to operate within the AORRA.

No aircraft shall flight plan to operate in the AORRA airspace unless it is RNP10 certified to operate in this airspace by the State of registry or the State of operator, as the case may be, except in the following circumstances:

- a. the aircraft is being initially delivered to the State of registry or State of the operator;
- b. the aircraft is certified but experienced navigation degradation and is being flown back to base or to a maintenance facility for repairs;
- c. the aircraft is engaged on a humanitarian or mercy flight;
- d. State aircraft.

Operators not RNP10 certified, shall insert STS/NON RNP10, in Item 18 of the ICAO FPL.

**Data Link Service**

ADS/CPDLC will be utilized in AORRA airspace by suitably equipped service providers to provide an ATS service to aircraft able to take advantage of this form of communication. Operators are to note that in some sectors of the random routing airspace, ADS/CPDLC is the primary form of communication, with HF as secondary means of communication.

**STRATEGIC LATERAL OFFSET PROCEDURE (SLOP)**

SLOP is not authorized in the Johannesburg and Cape Town FIRs due to adequate ATS surveillance coverage between FL290 and FL410 inclusive.

In the Johannesburg Oceanic FIR SLOP is not authorized due to the IORRA and AORRA random routing employed.

**USER PREFERRED ROUTES**

The Indian Ocean Strategic Partnership to Reduce Emissions (INSPIRE) is a partnership between Air Traffic and Navigation Services (ATNS) of South Africa, Air Services Australia and Airports Authority of India. These partners are collaborating with peer Air Navigation Service Providers (ANSPs) across the Arabian Sea and Indian Ocean and a number of airline partners, to establish a User Preferred Route (UPR) Geographic Zone that will make UPRs available across the entire Indian Ocean area.



**SOUTH AFRICAN REP.  
RULES AND PROCEDURES****Procedure**

INSPIRE airline partners that have received prior approval from INSPIRE, may use the following procedures within the Johannesburg Oceanic FIR:

- a. Flights must enter or exit the Johannesburg Oceanic FIR via published waypoints or position of whole degrees of latitude and longitude described in degrees and minutes.
- b. UPRs must be constructed via published waypoints, navigation aids, or whole degrees of latitude and longitude.
- c. UPRs may include air routes.

**Access to UPR**

Airspace users may only file a flight plan user preferred route in the UPR Geographic Zone if they meet the following minimum criteria:

- RNAV10; and
- ADS-C/CPDLC equipped.

The minimum criteria listed above must be notified in the flight plan.

Questions and assistance should be directed to:

Mr. Martin Cooper

Tel: +27 11 928 6436  
+27 79 500 8871

E-Mail: martinc@atns.co.za

or

Mr. Sibusiso Nkabinde

Tel: +27 11 928 6526  
+27 83 706 8406

E-Mail: sibusison@atns.co.za

**AUTOMATIC DEPENDENT SURVEILLANCE BROADCAST (ADS-B)**

From 1 January 2018 all new registered aircraft operating under IFR must carry a serviceable Mode S and ADS-B transponder.

From 1 April 2020 all aircraft operating under IFR must carry a serviceable Mode S and ADS-B transponder.

Any aircraft that is first registered or modified by having its transponder replaced on or after 1 April 2020, and is operated in airspace class "A", "B", "C" or "E" must carry a serviceable ADS-B and Mode S transponder.

The equipment must meet the current standard 1090ES ADS-B Link Version 2 (RTCA/DO-260B/EUROCAE ED-102A) for transponders fitted to aircraft operating in South African airspace.

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**SOUTH AFRICAN REP.  
RULES AND PROCEDURES****ACAS/TCAS II REQUIREMENTS**

All civil fixed-wing turbine-engined aircraft having a maximum take-off mass exceeding 5700kg, or a maximum approved passenger seating configuration of more than 19 are required to be equipped with ACAS/TCAS II version 7.1.

**DIFFERENCES FROM ICAO STANDARDS AND PROCEDURES****ICAO REFERENCE****Annex 2**

**3.6.2.2 c)** If the time estimate for the next applicable reporting point, flight information region boundary or destination aerodrome, whichever comes first, is found to be in error in excess of 3 minutes from that notified to air traffic services, or such other period of time as is prescribed by the appropriate ATS authority or on the basis of air navigation regional agreements, a revised estimated time shall be notified as soon as possible to the appropriate air traffic service unit.

**Appendix 1**

**4.2** Of the visual signals contained in Annex 2 none have significance in the South African Republic, with the exception of the white cross for closed runways and taxiways.

The signal for a left or right hand circuit is replaced by “L” shaped rectangular markings displayed around the wind cone circle.

**ST HELENA  
RULES AND PROCEDURES****GENERAL**

In general, the air traffic rules and procedures in force and the organization of the air traffic services are in conformity with ICAO Standards, Recommended Practices and Procedures.

Units of measurement used in all air and ground operations are as listed in the following table.

Measurement of	Unit
Distances used for navigation, position reports, etc.	Nautical Miles and Tenths
Relatively short distances relating to aerodromes (e.g., runway length)	Meters
Altitudes, elevations and heights	Feet and Flight Levels
Horizontal speed including wind speed	Knots
Vertical speed	Feet per Minute
Wind direction to landing and taking off	Degrees Magnetic
Wind direction except to landing and taking off	Degrees True
Visibility including runway visual range	Meters
Altimeter settings	Hectopascals
Temperature	Degrees Celsius
Weight	Metric Tons or Kilogram
Date and Time	Day, Month, Year Hour and Minute the day of 24hrs beginning at midnight UTC

**WGS-84 IMPLEMENTATION STATUS**

WGS-84 compliant.

**FLIGHT PROCEDURES****PROCEDURE LIMITATIONS AND OPTIONS**

Instrument approach procedures are in accordance with the PANS-OPS, Document 8168.

**AIRPORT OPERATING MINIMUMS**

St Helena does not publish State airport operating minimums.

St Helena publishes Obstacle Clearance Altitudes (Heights) [OCA(H)].

**ST HELENA  
RULES AND PROCEDURES****ATS AIRSPACE CLASSIFICATION**

St Helena has adopted the ICAO ATS airspace classifications as listed in Jeppesen ATC-Chapter "ICAO ATS Airspace Classifications - Annex 11".

Airspace class "D" is used within Luanda FIR.

**SPECIAL REQUIREMENTS AND REGULATIONS****FLIGHT PLANNING****Addressing of Flight Plan Messages**

Flight plans shall be filed by telephone or AFTN with the:

St Helena ATC (St Helena TWR)

Tel: +290 22112

+290 22182

Category of Flight	Route	Message Address
IFR	Into or via FNAN	FNLUZQZX FNLUZPZX
IFR	Into or via FAJO	FAJOZQZX
All flights	St Helena TMA/CTR	FHSHZTX

**St Helena as Alternate Airport**

48 hours prior notice required before nominating St Helena as alternate airport.

Aircraft CAT C PPR is required.

**DIFFERENCES FROM ICAO STANDARDS AND PROCEDURES**

No differences published.

**SUDAN**  
**RULES AND PROCEDURES**

## **GENERAL**

In general, the air traffic rules and procedures in force and the organization of the air traffic services are in conformity with ICAO Standards. Recommended Practices and Procedures.

Units of measurement used in all air and ground operations are as listed in the following table.

<b>Measurement of</b>	<b>Unit</b>
Distance used in navigation, position reporting, etc., generally in excess of 2 to 3 nautical miles	Nautical Miles and Tenths
Relatively short distances such as those relating to aerodromes (e.g., runway lengths)	Meters
Altitude, elevations and heights	Feet
Horizontal speed including wind speed	Knots
Vertical speed	Feet per Minute
Wind direction for landing and taking off	Degrees True
Visibility including runway visual range	Kilometers or Meters
Altimeter setting, atmospheric pressure	Hectopascals
Temperature	Degrees Celsius
Weight	Metric Tons or Kilograms
Time	Hours and Minutes, the day of 24hrs beginning at midnight UTC

## **WGS-84 IMPLEMENTATION STATUS**

WGS-84 compliant.

## **FLIGHT PROCEDURES**

### **HOLDING**

Holding procedures are based on the Jeppesen ATC-Chapter "Flight Procedures (DOC 8168) - Holding Procedures", Table IV-1-1, Holding Speeds.

### **PROCEDURE LIMITATIONS AND OPTIONS**

Instrument approach procedures are based on the PANS-OPS, Document 8168.

### **AIRPORT OPERATING MINIMUMS**

Sudan does not publish State airport operating minimums.

Sudan publishes Obstacle Clearance Altitudes (Heights) [OCA(H)].

**SUDAN  
RULES AND PROCEDURES****ATS AIRSPACE CLASSIFICATION**

Sudan has adopted the ICAO ATS airspace classification as listed on Jeppesen ATC-Chapter "ICAO ATS Airspace Classifications - Annex 11".

Airspace classes "A", "B", "C", "F" and "G" are used within Khartoum FIR.

**SPECIAL REQUIREMENTS AND REGULATIONS****COMMUNICATIONS**

All traffic departing from Juba Airport to Nairobi FIR should contact Nairobi ACC on frequency 121.3MHz or 120.5Mhz and Khartoum ACC on frequency 127.3MHz or 11300KHz immediately after departure.

All traffic departing from Juba Airport to Entebbe FIR should contact Entebbe ACC on frequency 128.5MHz and Khartoum ACC on frequency 127.3MHz or 11300KHz immediately after departure.

**ALTIMETRY**

QFE is available on request only.

**FLIGHT PLANNING**

A flight plan shall be submitted prior to operate any IFR or any VFR flight.

A flight plan shall be submitted at least 30 minutes prior to departure. A flight plan submitted prior to departure should be submitted in person to AIS briefing unit at Khartoum airport for other airports a flight plan should be submitted to the aerodrome control tower or to the aerodrome officer. Flight plans will not be accepted by telephone at controlled aerodromes except for local and test flights and Sudan Air Force military flights in military necessity.

**Flight Plan Message Addressing**

Route (into or via FIR and/or TMA)	Message Address
Traffic overflying	HSSSZQZX HSSSATSX
Traffic landing and/or departing	HSSSZQZX HSSSZTZX HSSSZPZX HSSSATSX

**DATA LINK SERVICES**

CPDLC services are available to FANS 1/A equipped aircraft operating in the Khartoum FIR.

Ligon address is HSSS.

ACARS Khartoum address: KRTCAYA.

Aircraft requesting data link services inbound to Khartoum FIR are required to logon 10 minutes prior to the estimated time for entering the FIR.

**REQUIRED NAVIGATION PERFORMANCE**

All RNAV routes are designated RNAV5.

**SUDAN  
RULES AND PROCEDURES****SUSPENSION OF RVSM**

East-bound RVSM levels FL310, FL350 and FL390 are suspended.

**GPS FAILURE**

All traffic flying within Khartoum FIR along RNAV routes or during GNSS approach navigating by GPS satellite encountering GPS signal interferences shall report immediately to Khartoum ACC on frequency 127.5MHz, 127.3MHz or 11300KHz or on the appropriate approach frequency.

**ACAS/TCAS II REQUIREMENTS**

All civil fixed-wing turbine-engined aircraft having a maximum take-off mass exceeding 5700kg, or a maximum approved passenger seating configuration of more than 19 are required to be equipped with ACAS/TCAS II version 7.1.

**DIFFERENCES FROM ICAO STANDARDS AND PROCEDURES****ICAO REFERENCE****Annex 2**

**3.1.2** Except when necessary for take-off or landing, or except by permission from the DGCA, aircraft shall not be flown over the congested areas of cities, towns or settlements, an open air assembly of persons, or over national parks, game reserves or bird sanctuaries at a height of less than 2000ft, or such a height that will permit a landing to be made without undue hazard to persons or property on the surface, whichever is higher.

**5.3.2** All flights shall comply with the communication procedures, whether flown in accordance with IFR or VFR.

**TANZANIA  
RULES AND PROCEDURES**

## **GENERAL**

In general, the air traffic rules and procedures in force and the organization of the air traffic services are in conformity with ICAO Standards, Recommended Practices and Procedures.

Units of measurement used in all air and ground operations are as listed in the following table.

<b>Measurement of</b>	<b>Unit</b>
Distance used in navigation, position reporting, etc., generally in excess of 2 nautical miles	Nautical Miles and Tenths
Relatively short distances such as those relating to aerodromes (e.g., runway lengths)	Meters
Altitude, elevations and heights	Feet
Horizontal speed including wind speed	Knots
Vertical speed	Feet per Minute
Wind direction for landing and taking off	Degrees Magnetic
Wind direction except for landing and taking off	Degrees True
Visibility including runway visual range	Kilometers or Meters
Altimeter setting	Hectopascals
Temperature	Degrees Celsius
Weight	Metric Tons or Kilograms
Time	Hours and Minutes, the day of 24hrs beginning at midnight UTC

## **WGS-84 IMPLEMENTATION STATUS**

WGS-84 compliant.

## **FLIGHT PROCEDURES**

### **HOLDING**

Holding procedures comply with Jeppesen ATC-Chapter “Flight Procedures (DOC 8168) - Holding Procedures”, Table IV-1-1, Holding Speeds.

### **PROCEDURE LIMITATIONS AND OPTIONS**

Instrument approach procedures are based on the PANS-OPS, Document 8168.

### **AIRPORT OPERATING MINIMUMS**

Tanzania publishes OCA(H) and additionally DA(H) for RNAV approaches at Kilimanjaro (Intl) and Dar-es-Salaam (Julius Nyerere Intl) airports.



**TANZANIA  
RULES AND PROCEDURES**

Jeppesen charted minimums are not below State minimums.

## **ATS AIRSPACE CLASSIFICATIONS**

Tanzania has adopted the ICAO ATS airspace classification as listed in Jeppesen ATC-Chapter "ICAO ATS Airspace Classifications - Annex 11".

Airspace classes "A", "D" and "G" are used within Dar-es-Salaam FIR.

In class "G" airspace, continuous two-way communication is required for all flights.

## **SPECIAL REQUIREMENTS AND REGULATIONS**

### **COMMUNICATIONS**

All aircraft on VFR flights, and aircraft on IFR flights outside controlled airspace, shall maintain a listening watch on the frequency of a radio station providing flight information service in the flight information region and file with that station information as to their position, unless otherwise authorized by the State overflown.

### **POSITION REPORTING PROCEDURE**

Position reports additional to those required by the general position reporting procedures shall be made when entering or leaving controlled or advisory airspace.

The last position report before passing from one FIR to an adjacent FIR shall also be made to the ATS unit serving the airspace about to be entered.

### **FLIGHT PLANNING**

A pilot must file a flight plan, if intending to:

- a. fly in controlled airspace under IFR or at night;
- b. fly under IFR;
- c. make an international flight;
- d. take off from a TCAA manned aerodrome, except for a flight to a local flying area within 30NM of the aerodrome.

Flight plan should be filed at least 30 minutes before departure for a VFR flight and 60 minutes before for IFR flight, or as soon as possible after departure, or upon entering a FIR.

### **Flight Plan Message Addressing**

<b>Category of Flight</b>	<b>Route</b>	<b>Message Address</b>
IFR	Into or via Dar-es-Salaam FIR	HTDCZQZX
	– and in addition for flights within the Dar-es-Salaam FIR above FL145	HTDCZQZX HTDAZPZX

**TANZANIA  
RULES AND PROCEDURES**

Category of Flight	Route	Message Address
	– into Dar-es-Salaam TMA	HTDCZQZX HTDAZPZX
	– via Dar-es-Salaam TMA	HTDCZTZX
	– into Kilimanjaro TMA	HTKJZTZX HTKJZPZX
	– via Kilimanjaro TMA	HTDCZQZX HTKJZTZX

### REQUIRED NAVIGATION PERFORMANCE

Following ATS routes are designated RNP10:

- UL431, UVUKO to ORLIM;
- L432, OKTEX to ALSAR;
- UL432, OKTEX to GAVDA;
- L434, KV to AVUNO;
- UL434, NESAL to AVUNO;
- UL437, NIDED to ROVUM;
- UL442, APLOG to BOSAD;
- UL445, GABSO to DV;
- UM306, PARIN to GETAB;
- UM310, DV to BONAP;
- UM315, LOSIN to UTINA;
- UM441, XAKRI to LOSIN;
- N306, DV to DUSKA;
- UN306, KV to DUSKA;
- UN308, KS to SINGI;
- UP312, EVATO to APKOL;
- UT146, AKUMU to MV;
- UT252, MAGAD to ESRES;
- UT910, DUDGA to TIKAN;
- UT911, LOSIN to BILAK;
- UT912, APDIK to DO;

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**TANZANIA**  
**RULES AND PROCEDURES**

- UT913, EPTel to KINAN;
- UT914, DV to AMSAD.

## **DIFFERENCES FROM ICAO STANDARDS AND PROCEDURES**

### **ICAO REFERENCE**

#### **Annex 2**

**Definitions** — Special VFR flight. The conditions for special VFR flight also apply at night.

**4.4 (a)** VFR is prohibited above FL145.

**TUNISIA**  
**RULES AND PROCEDURES**

## GENERAL

In general, the air traffic rules and procedures in force and the organization of the air traffic services are in conformity with ICAO Standards, Recommended Practices and Procedures.

Units of measurement used in all air and ground operations are as listed in the following table.

Measurement of	Unit
Distance used in navigation, position reporting, etc., generally in excess of 2 to 3 nautical miles	Nautical Miles and Tenths
Relatively short distances such as those relating to aerodromes (e.g., runway lengths)	Meters
Altitude, elevations and heights	Feet
Horizontal speed including wind speed	Knots
Vertical speed	Meters per Second
Wind direction for landing and taking off	Degrees Magnetic
Wind direction except for landing and taking off	Degrees True
Visibility including runway visual range	Kilometers or Meters
Altimeter setting, atmospheric pressure	Hectopascals
Temperature	Degrees Celsius
Weight	Metric Tons or Kilograms
Time	Hours and Minutes, the day of 24hrs beginning at midnight UTC

## WGS-84 IMPLEMENTATION STATUS

WGS-84 compliant.

## FLIGHT PROCEDURES

### HOLDING

Holding procedures comply with Jeppesen ATC-Chapter "Flight Procedures (DOC 8168) - Holding Procedures", Table IV-1-1, Holding Speeds.

### PROCEDURE LIMITATIONS AND OPTIONS

Instrument approach procedures are based on an earlier version of PANS-OPS, Document 8168.

### Arriving Flights

Due to the limited airspace available, it is necessary that the approaches to the patterns and the holding procedures be carried out as precisely as possible. Pilots are strongly requested to inform ATC if, for any reason, the approach and/or holding can not be performed as required.

## TUNISIA RULES AND PROCEDURES

### AIRPORT OPERATING MINIMUMS

Tunisia publishes OCA(H) together with DA(H)/MDA(H), RVR and visibility for circling.

Jeppesen charted minimums are not below State minimums.

### ATS AIRSPACE CLASSIFICATIONS

Tunisia has adopted the ICAO ATS Airspace Classification as listed in Jeppesen ATC-Chapter "ICAO ATS Airspace Classifications - Annex 11".

Airspace classes "A", "D", "F" and "G" are used within Tunis FIR.

### SPECIAL REQUIREMENTS AND REGULATIONS

#### ALTIMETRY

A QNH altimeter setting is made available in approach clearance and in clearance to enter the traffic circuit.

QFE is available on request at the TWR.

#### FLIGHT PLANNING

The flight plan is compulsory prior to operate any flight entirely or partly within the Tunisian airspace.

Except for repetitive flight plan, a flight plan shall be submitted at least 30 minutes prior to the expected departure time taking into account the requirement of an earlier submission for ATFM purposes.

Flight plans shall be submitted at the ARO at the departure aerodrome. In the absence of an ARO at the departure aerodrome, a flight plan shall be submitted by telephone to the nearest ARO.

#### Repetitive Flight Plan System

Repetitive flight plans are to be forwarded in two copies to the address hereafter:

Service de la planification du trafic

Centre de la Navigation Aerienne

Address:           Aéroport International de Tunis-Carthage

137-147

Tunis Cedex

1080

Fax:               +216 71 783 126

+216 71 754 433

AFS:               DTTCZDZO

An initial submission shall be send not later than 2 weeks before the intended first flight, permanent amendments not later than 1 week before the affected flight.

## TUNISIA RULES AND PROCEDURES

### IFPS/NMOC Operations

The Integrated Initial Flight Plan Processing System element of the EUROCONTROL Network Management Operations Center (NMOC) is the sole source for the distribution of the IFR General Air Traffic (GAT) FPL and associated messages to ATS units within the IFPS. The only required addresses are those of the two IFPS Units (IFPU) at Haren (Brussels) and Bretigny (Paris).

A flight plan shall be submitted at least 3 hours prior to the EOBT.

### *Flight Plan Message Addressing*

AFTN: EUCHZMFP and EUCBZMFP

SITA: BRUEP7X and PAREP7X

### *Procedure for requesting Authorization for the Use of STS/ATFMX*

Operators wishing to use the ATFMX descriptor must obtain authorization before the flight, by forwarding their requests to the Air Traffic Planning Service of the Air Navigation Directorate with the supporting documents.

The request must be made at least 48 hours (during working days) before the flight as follows:

- Fax (ACC): +216 71783126
- Fax (DNA): +216 70729201

### REQUIRED NAVIGATION PERFORMANCE

All RNAV routes are designated as RNP5.

### SECONDARY SURVEILLANCE RADAR (SSR)

The carriage of transponder is required for all IFR flights within class “A” and “D” airspace and all VFR flights within class “D” airspace. The aircraft is required to be equipped with mode 3A+C transponder.

### AUTOMATIC DEPENDENT SURVEILLANCE BROADCAST (ADS-B)

Tunisia will introduce the ADS-B services in Tunis FIR/ UIR on trial basis.

Within the Tunisian FIR/UIR and during the trial period, aircraft operators are not subject to any specific requirement regarding ADS-B.

The implementation date will be notified by NOTAM.

### ACAS/TCAS II REQUIREMENTS

All civil fixed-wing turbine-engined aircraft having a maximum take-off mass exceeding 5700kg, or a maximum approved passenger seating configuration of more than 19 are required to be equipped with and operate ACAS/TCAS II version 7.1.

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**TUNISIA**  
**RULES AND PROCEDURES****DIFFERENCES FROM ICAO STANDARDS AND PROCEDURES****ICAO REFERENCE****Annex 2**

**5.1.2** IFR flights shall be executed at a height of at least 1500ft (450m) above the highest obstacle located within a radius of 8km of the estimated position of the aircraft in flight.

**UGANDA  
RULES AND PROCEDURES**

## **GENERAL**

In general, the air traffic rules and procedures in force and the organization of the air traffic services are in conformity with ICAO Standards, Recommended Practices and Procedures.

Units of measurement used in all air and ground operations are as listed in the following table.

<b>Measurement of</b>	<b>Unit</b>
Distance used in navigation, position reporting, etc., generally in excess of 2 nautical miles	Nautical Miles and Tenths
Relatively short distances such as those relating to aerodromes (e.g., runway lengths)	Meters
Altitude, elevations and heights	Feet
Horizontal speed including wind speed	Knots
Vertical speed	Feet per Minute
Wind direction for landing and taking off	Degrees Magnetic
Wind direction except for landing and taking off	Degrees True
Visibility including runway visual range	Kilometers or Meters
Altimeter setting, atmospheric pressure	Hectopascals
Temperature	Degrees Celsius
Weight	Metric Tons or Kilograms
Time	Hours and Minutes, the day of 24hrs beginning at midnight UTC

## **WGS-84 IMPLEMENTATION STATUS**

WGS-84 partially compliant.

## **FLIGHT PROCEDURES**

### **HOLDING**

Holding procedures comply with Jeppesen ATC-Chapter “Flight Procedures (DOC 8168) - Holding Procedures”, Table IV-1-1, Holding Speeds.

### **PROCEDURE LIMITATIONS AND OPTIONS**

Instrument approach procedures are based on the PANS-OPS, Document 8168.

### **AIRPORT OPERATING MINIMUMS**

Uganda publishes for Entebbe airport MDA(H) or MDA(H)/DA(H) and visibility or RVR for landing. For other airports Uganda publishes OCA(H).



## UGANDA RULES AND PROCEDURES

Jeppesen charted minimums are not below State minimums.

### ATS AIRSPACE CLASSIFICATION

Uganda has adopted the ICAO ATS airspace classification as listed on Jeppesen ATC-Chapter "ICAO ATS Airspace Classifications - Annex 11".

Airspace classes "A", "C", "D", "E" and "G" are used within Entebbe FIR.

### SPECIAL REQUIREMENTS AND REGULATIONS

#### ALTIMETRY

QFE is available on request only.

#### FLIGHT PLANNING

##### Submission of a Flight Plan

Due to difficulties of SAR operations within Entebbe FIR, pilots are strongly advised to file a flight plan for every flight. At all aerodromes, the flight plan should be filed with the ATS Reporting Officer, if established, or on the:

AIM website

Internet: <https://aim.caa.co.ug>

by the pilot or a qualified dispatcher.

Flight plans should be filed at least 30 minutes before departure, or as soon as possible after departure, or upon entering a FIR, as may be appropriate. Airborne flight plans must be filed in good time for an air traffic clearance to be issued before the controlled airspace is reached (normally 10 minutes if filed by RTF).

Where is no other possibility, the flight plan can be submitted by phone:

Entebbe (Briefing Office)

Tel: +256 414 320926

Soroti (Control Tower)

Tel: +256 454 461198

Soroti (Briefing Office)

Tel: +256 454 461264

Gulu (Control Tower)

Tel: +256 474 132339

Alternatively, if the aircraft is appropriately equipped, an airborne flight plan may be filed by radio immediately after departure.

#### *Flight Plan Message Addressing*

Flight movement messages into or via the Entebbe FIR shall be addressed as stated below in order to warrant correct relay and delivery.

## UGANDA RULES AND PROCEDURES

Route (into or via FIR and/or TMA)	Message Address
into or via Entebbe FIR and, in addition, for flights into Entebbe TMA	HUECZQZX HUENZTZX HUENZA ZX
Entebbe	HUENZPZX HUENZTZX
Soroti	HUSOZPZX
Gulu	HUGUZPZX
Kasese	HUKSZPZX
Kisoro	HUKIZPZX
Mbarara	HUMAZPZX
Arua	HUARZPZX

### COMMUNICATIONS

An IFR flight operating outside controlled airspace but within or into areas, or along routes, designated by the appropriate ATS authority in accordance with paragraph 3.3.1.2 c) or d) of ICAO Annex 2 shall maintain a listening watch on the appropriate radio frequency and establish two-way communication, as necessary, with the air traffic services unit providing flight information services.

### OPERATIONS AT UNCONTROLLED AERODROMES

All aircraft operating at, or into aerodromes at which no Air Traffic Service is provided must broadcast their position and intentions on frequency 118.20MHz when approaching, departing, or moving on the maneuvering area. At aerodromes where Air Traffic Service is normally provided but is temporarily not available, pilots should broadcast their intentions on the published aerodrome frequency and not on 118.20MHz.

### PROCEDURES WITHIN ENTEBBE CTR

All aircraft operating in controlled airspace are required to carry a serviceable transponder.

Two-way communication is required as soon as possible prior to operate within Entebbe CTR on Entebbe APP/RDR 126.6MHz (primary) or Entebbe CTL 128.5MHz (secondary).

### ACAS/TCAS II REQUIREMENTS

All turbine-engined aircraft having a maximum take-off mass exceeding 5700kg, or a maximum approved passenger seating configuration of more than 19 are required to be equipped with and operate ACAS/TCAS II version 7.1.

### REQUIRED NAVIGATION PERFORMANCE

All ATS routes are designated as RNP10, except A401.

**UGANDA  
RULES AND PROCEDURES**

## **DIFFERENCES FROM ICAO STANDARDS AND PROCEDURES**

### **ICAO REFERENCE**

#### **Annex 2**

**4.4** Flight under VFR is prohibited:

- a. above FL150;
- b. at night.

**4.7** The height specified for the application of semi-circular cruising levels is 1000ft (300m).

**5.3.3** All controlled flights shall report to the appropriate ATS unit at least 10 minutes before estimating the controlled airspace boundary.

#### **Appendix 1**

A white letter “H” displayed in the signal area indicates that the aerodrome is available for use by helicopters. A similar signal is displayed on the aerodrome to indicate the helicopter landing area.

## WEST AFRICA RULES AND PROCEDURES

The term **WEST AFRICA** covers following States which are provided with a common **Aeronautical Information Service** by the **Agence pour la Securite de la Navigation Arienne en Afrique (ASECNA)**: Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Republic of Congo, Cote d'Ivoire, Equatorial Guinea, Gabon, Guinea Bissau, Mali, Mauritania, Niger, Senegal, Togo.

### GENERAL

In general, the air traffic rules and procedures in force and the organization of the air traffic services are in conformity with ICAO Standards, Recommended Practices and Procedures.

Units of measurement used in all air and ground operations are as listed in the following table.

Measurement of	Unit
Distance used in navigation, position reporting, etc., generally in excess of 2 to 3 nautical miles	Nautical Miles and Tenths
Relatively short distances such as those relating to aerodromes (e.g., runway lengths)	Meters
Altitude, elevations and heights	Meters, Feet <sup>1</sup>
Horizontal speed including wind speed	Knots
Vertical speed	Feet per Minute
Wind direction for landing and taking off	Degrees Magnetic
Wind direction except for landing and taking off	Degrees True
Visibility including runway visual range	Kilometers or Meters
Altimeter setting	Hectopascals
Temperature	Degrees Celsius
Weight	Metric Tons or Kilograms
Time	Hours and Minutes, the day of 24hrs beginning at midnight UTC

<sup>1</sup> Unit used on instrument approach charts.

### WGS-84 IMPLEMENTATION STATUS

WGS-84 compliant.

### FLIGHT PROCEDURES

#### HOLDING

Holding procedures comply with Jeppesen ATC-Chapter "Flight Procedures (DOC 8168) - Holding Procedures", Table IV-1-1, Holding Speeds.

## WEST AFRICA RULES AND PROCEDURES

### PROCEDURE LIMITATIONS AND OPTIONS

Instrument approach procedures are based on the PANS-OPS, Document 8168.

### AIRPORT OPERATING MINIMUMS

ASECNA publishes OCA(H), DA(H)/MDA(H). RVR for straight-in and visibilities for circling approaches. RVR is published for take-off.

**Exceptions:** Minimums for Dakar, Douala and Lome airports are in accordance with JAR-OPS 1 AOM (EU-OPS 1 Subpart E Appendix 1 to OPS 1.430 old).

Jeppesen published minimums are not below State minimums.

### ATS AIRSPACE CLASSIFICATION

ASECNA States have adopted the ICAO ATS airspace classification as listed in Jeppesen ATC-Chapter "ICAO ATS Airspace Classifications - Annex 11".

Airspace classes "A", "D" and "G" are used within ASECNA airspace.

The limitation of indicated airspeed of MAX IAS 250kt below FL100 is not applied within Rep. of Congo airspace, except for Brazzaville TMA.

Within airspace class "G" two-way radio communication is also required for VFR flights.

### SPECIAL REQUIREMENTS AND REGULATIONS

#### COMMUNICATIONS

All aircraft flights outside controlled airspace, shall maintain a listening watch on the frequency of a radio station providing Flight Information Service (FIS) in the FIR and file with that station information as to their position, unless otherwise authorized by the State overflown.

#### POSITION REPORTING PROCEDURES

Position reports additional to those required by the general position reporting procedures shall be made when entering or leaving controlled or advisory airspace.

The last position report before passing from one FIR to an adjacent FIR shall also be made to the ATS unit serving the airspace about to be entered.

#### FLIGHT PLANNING

Flight plans are required for all flights and shall be submitted at least 30 minutes before departure.

#### Content of Flight Plan

For flights destined for an aerodrome located in a FIR not managed by ASECNA the FPL is established in accordance with DOC 4444 except the following:

Item 15:

- The air speeds will be expressed in Knots.
- The positions in relation with a radio navigation station will be provided under the following form:

## WEST AFRICA RULES AND PROCEDURES

(Abeam East NDB Tessalit for example) ABM E/TZE.

Item 18:

The name of operator and the flight number should be mentioned under the form OPR/three letters code company and flight number: OPR/UTA 1524

### Flight Plan Message Addressing

Route	Message Address
Dakar FIR	GOZZZQZX
Niamey FIR	DRZZZQZX
Brazzaville FIR	FCZZZQZX
Abidjan FIS	DIIIZQZX
to/from Abidjan (Felix Houphouet Boigny Intl)	DIIIZQZX, DIAPZPZX, DIAPZTZX
Niamey FIR	DRRRZQZX, DRRRZIZX
N'Djamena FIR	FTTTZQZX
to/from N'Djamena (Hassan Djamous)	FTTTZQZX, FTTJZPZX, FTTJZTZX

## OPERATIONS AT UNCONTROLLED AIRPORTS

### Arriving Aircraft

- a. 10 minutes prior to the ETA the pilot shall maintain a listening watch on frequency 118.1MHz and effect a blind transmission of the following message:
  1. station (airport);
  2. type of aircraft;
  3. point of departure;
  4. estimated time of arrival;
  5. position and altitude.
- b. Further position reports shall be transmitted till the last turn is effected. The listening watch shall be maintained till the aircraft has reached the parking apron.
- c. A straight-in approach is prohibited. After the pilot has identified the airport proceed to the central point of the runway at a right angle to the runway axis at a height of more than 500ft (150m) above the aerodrome traffic circuit height. Thereafter proceed to the beginning of the downwind leg of the runway/strip maintaining the initial height. Descend to the height of the aerodrome traffic circuit while keeping out of the traffic circuit, and then maneuver in such a way that the downwind leg is rayed along a segment which is a 45° angle to the leg.

*NOTE: The procedures specified under c) are not applicable at certain airports due to the existence of controlled airspace in their proximity or because of special procedures. In such*

## WEST AFRICA RULES AND PROCEDURES

*cases the competent ATC unit will establish procedures for integrating VFR flights into the aerodrome traffic circuit.*

- d. When the aerodrome traffic circuit height is not published, a height of 800ft (250m) shall be taken into consideration.

### Departing Aircraft

- a. As soon as the engine has been started, the pilot must maintain a listening watch on frequency 118.1MHz and make a blind transmission of the following message:
  1. station (airport);
  2. type of aircraft;
  3. aircraft identification/call sign;
  4. position of aircraft on the ground;
  5. ready to taxi for take-off (indicate runway or direction of take-off).
- b. This message shall be repeated prior to take-off and must be completed by the phrase: "Ready for take-off from (runway or direction)".
- c. Listening watch shall be maintained for at least 5 minutes after take-off.

### Aircraft without Radio Equipment

Pilots shall strictly adhere to the aforementioned procedures, except where instructions pertaining to listening watch and radio transmission are concerned.

## COORDINATION OF AIR TRAFFIC ALONG G857

In the absence of previous coordination between the ACCs of Abidjan and Accra, the following ATS procedures will be applied to aircraft operating flights along route Libreville-Douala and vice-versa.

### Assignment of Routes to be used on Route G857 (Northbound)

- a. Departures from Libreville to Douala at cruising level above FL120, shall operate their climbing on Libreville VORDME 'LV' R-030 and shall maintain this route until radio communication is established with the Douala ACC.
- b. Departures from Libreville to Douala at cruising level FL120 and below, shall operate their climbing on Libreville VORDME 'LV' R-021 and shall maintain this route with a minimum climb rate of minimum 500ft per minute until radio communication is established with Douala ACC.

Traffic unable to comply with a minimum climb rate of 500ft per minute will be rerouted on 'LV' R-030 until radio communication is established with Douala ACC.

- c. Traffic overflying TMA and operating on G857 N-bound, will be submitted to the same arrangements as described in para a) and b) taking into consideration their flight level.

## WEST AFRICA RULES AND PROCEDURES

In any case, aircraft departing from Libreville or after overflying Libreville VORDME 'LV' shall contact Douala as soon as possible.

### **Assignment of Routes to be used on Route G857 (Southbound)**

- Departures from Douala to Libreville at cruising level above FL120, shall operate their climbing on Douala VORDME 'DLA' R-195 and shall maintain this route until radio communication is established with Libreville ACC.
- Departures from Douala to Libreville at cruising level FL120 and below, shall operate their climbing on Douala VORDME 'DLA' R-186 and shall maintain this route with a minimum climb rate of minimum 500ft per minute until radio communication is established with Libreville ACC.

Traffic unable to comply with a minimum climb rate of 500ft per minute will be rerouted on 'DLA' R-195 until radio communication is established with Libreville ACC.

- Traffic overflying TMA and operating on G857 S-bound, will be submitted to the same arrangements as described in para a) and b) taking into consideration their flight level.

In any case, aircraft departing from Douala or after overflying Douala VORDME 'DLA' shall contact Libreville as soon as possible.

### **COORDINATION BETWEEN LIBREVILLE AND PORT GENTIL ATS UNITS**

#### **Aircraft planning a Flight Level below FL145 and operating on ATS Routes A616, H520 and B737**

These aircraft shall proceed as follows:

- Remain on a flight level in compliance with the semi-circular cruising level system at the latest at 20NM or 5 minutes before the transfer point.
- This level shall be maintained until reaching the transfer point.

#### **Aircraft planning a Flight Level above FL145 and operating on ATS Route A616, H520 and UB737**

Aircraft climbing and coming from Sao Tome TMA shall proceed as follows:

- Initial climb to FL130 with the authorization of Sao Tome Control.
- Contact as soon as possible Libreville Control (A616 and H520) or Libreville Info (B737 and UB737) in order to obtain control authorization (Libreville TMA) or traffic information (Libreville FIS) above FL145.
- Inform Sao Tome about control authorization or traffic information received to continue climb to FL145 with the authorization of Sao Tome Control.
- When reaching FL145, operate transfer communication with Libreville with authorization of Sao Tome.

Aircraft descending to Sao Tome TMA shall proceed as follows:



## WEST AFRICA RULES AND PROCEDURES

- a. Initial descent with authorization of Libreville Control (A616 and H520) or in communication with Libreville Info (B737 and UB737) to FL160.
- b. Contact as soon as possible Sao Tome Control in order to obtain control authorization below FL145 (Sao Tome TMA).
- c. Inform Libreville about authorization delivered by Sao Tome to continue descent to FL145 with the authorization of Libreville Control or in communication with Libreville Info.
- d. Operate transfer communication with Sao Tome when approaching FL145 on descent and with authorization of Libreville.

### STRATEGIC LATERAL OFFSET PROCEDURES (SLOP)

#### ASECNA Remote Continental Airspace

ASECNA has implemented in its upper airspace between FL280 and FL460 the SLOP in its entire continental Antananarivo, Brazzaville, N'Djamena, Dakar and Niamey FIRs. Pilot must report to the controller when normal navigation is resumed after a lateral deviation of 1 or 2NM right of the axis of the nominal route. Pilots may contact other aircraft on the interpilot frequency to coordinate offset:

- Antananarivo, Dakar, Niamey: 123.45MHz;
- Brazzaville and N'Djamena: 126.9MHz.

#### Dakar Oceanic FIR

Pilots should use the SLOP as standard operating practise in the course of normal operations to mitigate collision risk and wake turbulence.

Strategic lateral offsets shall be applied only by aircraft with automatic offset tracking capability.

There are 3 positions that an aircraft may fly:

- centerline;
- 1NM right;
- 2NM right.

Offset are not exceed 2NM right of centerline.

There is no ATC clearance required for this procedure and it is not necessary that ATC is advised. Aircraft transiting radar-controlled airspace shall remain on their established offset position unless otherwise instructed.

### OPERATIONS WITHIN EUR/SAM CORRIDOR RVSM AIRSPACE

The area covering the airways UN741, UN866, UN873 and UN857 within the FIRs of Canary Is, Dakar Oceanic, Recife/Atlantic and Sal Oceanic is designated RVSM airspace (between FL290 and FL410 inclusive).

#### Authorization for Flight in RVSM Airspace

Non-RVSM approved State aircraft will be authorized to enter and to operate within this corridor.

## WEST AFRICA RULES AND PROCEDURES

In the Item ROUTE (Item 15 of FPL) insert the speed/flight level at the entry/exit point of EUR RVSM airspace.

Operators of formation flights of State aircraft intending to operate as GAT, and non-RVSM approved aircraft operating in the EUR/SAM RVSM airspace shall include 'STS/NONRVSM' in Item 18 of the FPL.

### Wake Turbulence

An aircraft encountering wake turbulences should notify ATC and request a revised clearance. If RVSM procedures are suspended the minimum vertical separation between aircraft will be 2000ft (600m).

### AUTOMATIC DEPENDENT SURVEILLANCE BROADCAST (ADS-B)

ADS-B has been implemented to provide monitoring and assistance to aircraft within 250NM around Ndjamen VOR 'FL'. The following area is concerned:

- a. Lateral limit: 250NM around Ndjamen VOR 'FL', within N'Djamena FIR;
- b. Vertical limit: from 900m AGL to UNL.

### DATA LINK SERVICES

#### ADS-C/CPDLC operations in Abidjan FIS

Addresses:

- Abidjan location indicator: DIII.
- Abidjan ACC call sign: Abidjan Control.
- Abidjan ACARS address: ABJCAYA.

If aircraft coming from airspace not provided with ADS-C/CPDLC:

Logon should be initiated between 20 and 45 minutes prior to entry into Abidjan FIS.

#### ADS-C/CPDLC operations in Brazzaville FIR

Addresses:

- Brazzaville FIR location indicator: FCCC.
- Brazzaville ACC call sign: Brazzaville Control.
- Brazzaville ACARS address: BZVCAYA.

If aircraft is coming from airspace not provided with ADS-C/CPDLC:

Logon should be initiated between 15 and 45 minutes prior to entry into Brazzaville FIR.

All aircraft entering in Brazzaville FIR via the UTAs of Douala, Libreville or Sao Tome, though CPDLC connected with Brazzaville ATS center, should contact on VHF respectively, Douala (129.5MHz), Libreville (126.5MHz) or Sao Tome and Principes (127.9MHz) at least 10 minutes before passing the boundary and remain in VHF contact during the flight within the above mentioned airspaces.

## WEST AFRICA RULES AND PROCEDURES

CPDLC primary - VHF (HF) secondary means of communication.

### **ADS-C/CPDLC operations in Dakar Oceanic FIR**

Addresses:

- Dakar location indicator: GOOO.
- Dakar ACC call sign: Dakar Control.
- ACARS Dakar address: DKRCAYA.

If aircraft is coming from airspace not provided with ADS-C/CPDLC:

Logon should be initiated between 15 and 45 minutes prior to entry into Dakar Oceanic FIR.

CPDLC is the primary means of communication. HF will be used as back up.

### **ADS-C/CPDLC operations in Dakar UTA**

Addresses:

- Dakar location indicator: GOOO.
- Dakar ACC call sign: Dakar Control.
- Dakar ACARS address: DKRCAYA.

VHF frequencies will be the primary means of communication. CPDLC will be used as back up (for CPDLC equipped aircraft).

### **ADS-C/CPDLC operations in N'Djamena FIR**

Addresses:

- N'Djamena FIR location indicator: FTTT.
- N'Djamena ACC call sign: N'Djamena Control.
- N'Djamena ACARS address NDJCAYA.

If aircraft is coming from airspace not provided with ADS-C/CPDLC:

Logon should be initiated between 20 and 45 minutes prior to entry into N'Djamena FIR.

Logon should be initiated 20 minutes prior to departure.

CPDLC is the primary means of communication. VHF will be used as back up.

### **ADS-C/CPDLC operations in Niamey FIR**

Addresses:

- Niamey FIR location indicator: DRRR.
- Niamey ACC call sign: Niamey Control.
- Niamey ACARS address: NIMCAYA.

If aircraft is coming from airspace not provided with ADS-C/CPDLC:

Logon should be initiated between 15 to 45 minutes prior to entry into Niamey FIR.

## WEST AFRICA RULES AND PROCEDURES

When a CPDLC equipped aircraft is operating within Niamey airspace on UB730, UM998 and UM108, CPDLC will be the primary means of communication and HF or VHF frequencies will be used as back up. Within the rest of the Niamey airspace, VHF and HF will be primary means of communication and CPDLC will be used as back up.

Aircraft flying via Ouagadougou UTA:

- All aircraft entering in Niamey FIR via the UTA of Ouagadougou, though ADS/CPDLC connected with Niamey centre, must contact Ouagadougou control on 129.5MHz at least 10 minutes before passing the UTA boundary and remain in VHF contact with Ouaga control during the flight within the above mentioned airspace.
- All aircraft, CPDLC connected with Niamey control, that will exit Niamey FIR via the UTA of Ouagadougou, CPDLC connection shall be ended 5 minutes before passing the above mentioned UTA Boundary. The aircraft shall establish VHF contact with Ouagadougou control at least 10 minutes before passing the UTA boundary and remain in VHF contact with Ouaga control during his flight within the above mentioned airspace.

### REQUIRED NAVIGATION PERFORMANCE

The following routes are designated RNP10:

- UA616, STM to LV;
- UA665, AMBOD to ANKOR;
- UB535, INALO to EBNON;
- UB623, ONOBI to RAKUD;
- UG652, EGMAD to IBMAT;
- UG661, TABNO to APLEM;
- UL433, EREKA to MPK;
- UL434, NLY to AXUVI;
- UL435, IRELA to BUVUK;
- UL441, TNV to MIROV;
- UM104, IPOBA to AD;
- UM108, USRUT to BKO;
- UM114, ZAWAT to LITAK;
- UM122, BULIS to BKO;
- UM214, GARIN to OPDAK;
- UM215, TONBA to MERON;
- UM307, NESAM to ENDEL;
- UM372, BULIS to BUMBI;

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- UM608, TERAS to NY;
- UM629, USRUT to KELEX;
- UM725, SBITA to YF;
- UM731, DEKIL to EMSAT;
- UM863, ASKOL to FL;
- UM974, YF to NY;
- UM998, TOBUK to AMSIK;
- UN304, UVENA to DENLI;
- UN305, SOLAL to BERIL;
- UN741, KENOX to NANIK;
- UN857, BOTNO to ERETU;
- UN866, AMDOL to DEKON;
- UN873, POMAT to TASIL;
- UP685, BKO to DLA;
- UQ360, TENTA to LV;
- UQ558, XURUT to LV;
- UQ559, GARLA to LV;
- UQ560, TIMAK to POLAR;
- UQ561, NERUP to SAVON;
- UQ562, EKBOB to SAVON;
- UQ580, TIMAK to BAMAV;
- UQ581, NERUP to KENEX;
- UQ582, ARKOS to INOKA;
- UQ583, EREGO to KITEK;
- UQ584, GAPAK to KISAL;
- UQ589, GATAG to IPONO;
- UQ592, DEVL I to KOBNA;
- UQ592, ARLEX to ILDOR;
- UQ594, ERMIT to LIGAT;
- UQ596, YF to IPOBA;
- UT139, ASKON to MPK;

## WEST AFRICA RULES AND PROCEDURES

- UT142, KURAM to FL;
- UT143, BATVU to LV;
- UT237, INISA to FL;
- UT258, ERKEL to NANOS;
- UT325, BOSKI to FL;
- UT365, BOVDA to MIYEC;
- UT419, ARKOS to ASKON;
- UT475, GADUV to MPK;
- UV207, AD to AMPAS.

### FLEXIBLE TRACK SYSTEM

Flexible routings are implemented within Dakar Oceanic airspace (GOOO) between FL245 and FL410. Within GOOO airspace users will be able to plan user-preferred trajectories through the use of 5 letter waypoint name codes. Route portions between waypoints will be indicated by means of “DCT” instruction.

*NOTE: From/to SEPOM it is acceptable to file DCT to/from Dakar VOR ‘YF’ only.*

### ATLANTIC OCEAN RANDOM ROUTING RNAV AREA (AORRA)

The AORRA is established within Dakar Oceanic FIR between FL290 and FL410 inclusive.

Flights operating within the Dakar Oceanic Random Routing RNP Area shall enter and exit AORRA via particular gates, aircraft may track via a flight plan preferred track between these gates. Prior entering or after exiting the AORRA at a particular gate, aircraft are to comply with the fixed route structure, published tracks associated with that particular entry/exit points or as instructed by ATC, and are required to flight plan accordingly.

ADS-C/CPDLC will be utilized in AORRA airspace by suitably equipped service providers to provide an ATS service to aircraft able to take advantage of this form of communication. Operators are to note that in some sectors of the random routing airspace, CPDLC is the primary form of communication, with HF as secondary means of communication.

No aircraft shall flight plan to operate in the AORRA airspace unless it is RNP10 certified, except in the following circumstances:

- a. the aircraft is being initially delivered to the State of registry or the State of the operator;
- b. the aircraft is certified but experienced navigation degradation and is being flown back to base or to a maintenance facility for repairs;
- c. the aircraft is engaged on a humanitarian or mercy flight;
- d. State aircraft.

## WEST AFRICA RULES AND PROCEDURES

RNP10 compliance shall be indicated placing a “R” in Item 10 of the ICAO flight plan form, in the case of repetitive flight plans RNP10 compliance shall be indicated placing an “R” in Item “Q” of the RPL.

Flight plans shall contain entry and exit point to AORRA when required and the estimated time for every 5° of longitude.

Position reporting shall be required at entry/exit gates, 05W, 10W, 15W, 20W, 25W as well as any other position required by ATC.

### Use of Geographical Coordinates

Aircraft not equipped with ADS-C/CPDLC, crossing common FIR boundary Dakar Oceanic/Sal and vice-versa on west of UN741 shall overfly the entry/exit compulsory reporting points established along that boundary. However, the use of any entry/exit waypoints, based on geographical coordinates is allowed for ADS-C/CPDLC-equipped aircraft only.

Waypoints must be inserted in Item 15 of the flight plan.

### ACAS/TCAS II REQUIREMENTS

All civil fixed-wing turbine-engined aircraft having a maximum take-off mass exceeding 5700kg, or a maximum approved passenger seating configuration of more than 19 are required to be equipped with ACAS/TCAS II version 7.1.

### SECONDARY SURVEILLANCE RADAR (SSR)

The carriage of a secondary radar transponder over the Togolese and Benin territory is required for the following General Air Traffic (GAT):

- a. Any aircraft flying IFR in Class “A” and “D” airspace.
- b. Any aircraft flying VFR in Class “D” airspace.

The carriage of a secondary radar transponder is mandatory over Cameroon, Cote d'Ivoire and Congolese territories.

## DIFFERENCES FROM ICAO STANDARDS AND PROCEDURES

### ICAO REFERENCE

#### Annex 2

**3.1.3 (b)** For Rep. of Congo: The cruise levels are expressed in altitude (or in height):

- for VFR flights operating below FL30;
- for IFR flights operating in the proximity of an aerodrome when the aircraft operates below the transition altitude/height.

**3.2.2.3 (d)** For Rep. of Congo: The power-driven aircraft shall give way to aircraft towing other aircraft or objects, or formations with more than two aircraft.

**3.2.4** For Rep. of Congo: This type of flight can also be operated by an aircraft radio-controlled by an instructor pilot flying in another aircraft in formation with the first one or flying in proximity.

**WEST AFRICA  
RULES AND PROCEDURES**

**3.3.1.4** For Mauritania: Unless otherwise prescribed by the appropriate ATS authority, a flight plan for a flight to be provided with air traffic control service or air traffic advisory service shall be submitted at least 60 minutes before departure, or, if submitted during flight, at a time which will ensure its receipt by the appropriate air traffic services unit at least 20 minutes before the aircraft is estimated to reach:

- the intended point of entry into a control area or advisory area;
- the point of crossing an airway or advisory route.

**3.6.1** For Rep. of Congo: The following complementary precisions are added:

- An air traffic control clearance must be obtained prior to operating a controlled flight, or a portion of a flight as a controlled flight. As far as possible, this clearance must be a general authorization valid for the complete flight or for the part of flight where the aircraft can benefit from air traffic control services and facilities.
- Before departure, the transmission of a flight plan is equivalent to an application for clearance of control for the part of flight in controlled airspace.
- During the flight, when no previous control authorization has been obtained prior the departure, the pilot-in-command must apply for an authorization of the appropriate air traffic control unit as soon as possible before the estimated time of crossing the limit of airspace in which the control service is being provided.

**3.6.5.2.2** Information as shown in Jeppesen EMERGENCY-Chapter “INTERNATIONAL CIVIL AVIATION ORGANIZATION (ICAO)”, para 6.1.2.2) for Mauritania b) 1. 2. 3. and c) are not valid.

**4.1** A flight visibility of 8km is also prescribed for VFR flights below FL100. Within class “G” airspace the lower reference level for different VMC criteria is established at FL30 or 300m (1000ft) above ground or water, whichever is higher. At and below this level a minimum flight visibility of 1.5km is required, except that helicopters may operate at a flight visibility of 800m.

**4.4** IFR compulsory for all flights at FL150 and above.

**4.6** Except when necessary for take-off or landing aircraft shall not be flown at a height less than 50m (170ft) above ground or water or any natural obstacle and at a distance of not less than 150m (500ft) from any persons and artificial obstacle, whether fixed or mobile.

**5.1.2** Except when necessary for take-off or landing aircraft shall not be flown below 1500ft (450m) above the highest obstacle located within 8km of the estimated position of the aircraft in flight.

**5.3.2** For Rep. of Congo: The maintain of a listening radio-communication watch is obligatory for all IFR flight.

**5.3.3** When operating in uncontrolled airspace class “G” and outside of ATS routes an IFR flight shall report position:

- a. when passing any common boundary of 2 airspaces; and
- b. at hourly intervals.

Furthermore, an intermediate radio contact (QRU) shall be established at half-hourly intervals.



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**WEST AFRICA  
RULES AND PROCEDURES****Appendix 1**

**4.2** For Rep. of Congo: A white signal in the H form arranged horizontally indicates that the aerodrome is available or used by helicopters.

A white signal, formed by an half-circle and an isoscele triangle representing a parachute, indicates that some parachute jumps are in operation in the proximity or on the aerodrome.

**ZAMBIA  
RULES AND PROCEDURES****GENERAL**

In general, the air traffic rules and procedures in force and the organization of the air traffic services are in conformity with ICAO Standards, Recommended Practices and Procedures.

Units of measurement used in all air and ground operations are as listed in the following table.

Measurement of	Unit
Distance used in navigation	Nautical Miles and Tenths
Relatively short distances	Meters
Altitude, elevations and heights	Feet, Meters
Horizontal speed	Knots
Vertical speed	Feet per Minute, Meters per Second
Wind direction for landing and taking off	Degrees Magnetic
Wind direction except for landing and taking off	Degrees True
Visibility	Kilometers or Meters
Altimeter setting	Hectopascals
Temperature	Degrees Celsius
Weight	Kilograms
Time	Hours and Minutes, the day of 24hrs beginning at midnight UTC

**WGS-84 IMPLEMENTATION STATUS**

WGS-84 partially compliant.

**FLIGHT PROCEDURES****HOLDING**

Holding procedures comply with Jeppesen ATC-Chapter "Flight Procedures (DOC 8168) - Holding Procedures", Table IV-1-1, Holding Speeds.

**PROCEDURE LIMITATIONS AND OPTIONS**

Instrument approach procedures are based on the PANS-OPS, Document 8168.

**AIRPORT OPERATING MINIMUMS**

Zambia publishes OCA(H) and visibility, and additionally DA(H)/MDA(H) for Lusaka (Kenneth Kaunda Intl).

Jeppesen charted minimums are not below State minimums.

**ZAMBIA  
RULES AND PROCEDURES****ATS AIRSPACE CLASSIFICATION**

Zambia has adopted the ICAO ATS airspace classification as listed in Jeppesen ATC-Chapter "ICAO ATS Airspace Classifications - Annex 11".

Airspace classes "A", "C" and "G" are used within Lusaka FIR.

No speed limitation is applied to IFR and VFR flights.

**SPECIAL REQUIREMENTS AND REGULATIONS****COMMUNICATIONS**

An IFR flight operating outside controlled airspace but within or into areas, or along routes, designated by the appropriate ATS authority shall maintain a listening watch on the appropriate radio frequency and establish two-way communication, as necessary, with the air traffic services unit providing flight information service.

**FLIGHT PLANNING****Time of Submission**

A flight plan shall be submitted at least 30 minutes prior to departure for a domestic flight.

**Place of Submission**

Flight plans shall be submitted at the ATS Reporting Office (ARO) at the departure aerodrome. In the absence of such office at the departure aerodrome, a flight plan shall be submitted by telephone or teletype to the nearest ARO as listed below:

**Lusaka ARO**

Tel: +260 211 271044

**Ndola ARO**

Tel: +260 212 611195

**Livingstone ARO**

Tel: +260 213 321153

**Mfuwe ARO**

Tel: +260 216 245083/245006

**Closing a Flight Plan**

A report of arrival shall be made at the earliest possible moment after landing, to the appropriate ATS unit at the arrival aerodrome, by any flight for which a flight plan has been submitted.

After a diversionary landing, the pilot is responsible for passing the arrival report to the destination aerodrome. Arrival reports shall contain the following information:

- a. aircraft identification;
- b. departure aerodrome;
- c. destination aerodrome;

**ZAMBIA  
RULES AND PROCEDURES**

d. time of arrival.

### **Flight Plan Message Addressing**

Flight movement messages for IFR flights relating to traffic shall be addressed as follows:

Into or via Lusaka FIR and in addition for flights: – into Lusaka TMA; – within the Lusaka FIR.	FLLSZQZX FLLSZQZX FLLSZTZX
Into or via Ndola TMA	FLNDZTZX
Into or via Livingstone CTA	FLLIZTZX
Into the Lusaka FIR and flying either to/from: – Lusaka (Kenneth Kaunda Intl); – Livingstone (Harry Mwaanga Nkumbula Intl).	FLKKZAZX FLHNZAZX
Controlled aerodrome	4-letter ICAO code + ZTZX
Uncontrolled aerodrome	4-letter ICAO code + ZPZX

### **REQUIRED NAVIGATION PERFORMANCE**

All lower ATS routes are designated as RNP4.

Upper ATS route UM437, MOTAM to TIGEL is designated as RNAV5.

### **STRATEGIC LATERAL OFFSET PROCEDURES (SLOP)**

SLOP is authorized in Zambia between FL290 and FL410 inclusive on all enroute ATS routes.

Pilots may contact other aircraft on the inter-pilot air-to-air frequency 123.45MHz to coordinate off-sets.

The lateral separation minimums or spacing between route centerlines are 30NM, therefore off-sets to the right of the centerline relative to the direction of flight should be applied in tenths of a nautical mile up to a maximum of 1NM.

A maximum of 1NM offset is approved therefore crew should, if the aircraft is equipped with a capability, to offset in tenths of a nautical mile then randomly choose an offset position of 0.1NM or more up to 1NM right of track.

If the aircraft is only equipped with a capability to offset in whole nautical miles then randomly choose an offset position of 1NM right of track.

### **SECONDARY SURVEILLANCE RADAR (SSR)**

Unless otherwise directed by ATC, the last assigned identity (Mode A) code in flight shall be retained. After landing pilots to ensure that Mode A 2000 is selected. If no identity code is assigned, Mode A 2000 shall be selected and retained.

## ZAMBIA RULES AND PROCEDURES

While operating within Zambian airspace all aircraft shall be equipped and operate a serviceable Mode A, C or S transponder to prevent occurrences of AIRPROX when:

- a. operating within or transiting any controlled airspace as listed below;
- b. operating within 2000ft above or below such controlled airspace;
- c. operating below or within 5NM (vicinity) of defined lateral limits of controlled airspace boundaries; and
- d. any other airspace where the operation of transponders have been prescribed by the Director General of Civil Aviation.

All aircraft operating within the below mentioned airspaces are to be equipped with Mode A, C or S transponder equipment:

- a. Lusaka FIR/UTA/TMA/CTR;
- b. Livingstone Control Area CTA/CTR.

## DIFFERENCES FROM ICAO STANDARDS AND PROCEDURES

### ICAO REFERENCE

#### Annex 2

**4.4 (a)** VFR flights shall not be operated at and above FL150.

**ZIMBABWE  
RULES AND PROCEDURES**

## GENERAL

In general, the air traffic rules and procedures in force and the organization of the air traffic services are in conformity with ICAO Standards, Recommended Practices and Procedures.

Units of measurement used in all air and ground operations are as listed in the following table.

Measurement of	Unit
Distance used in navigation, position reporting, etc., generally in excess of 2 to 3 nautical miles	Nautical Miles and Tenths
Relatively short distances such as those relating to aerodromes (e.g., runway lengths)	Meters
Altitude, elevations and heights	Feet
Horizontal speed including wind speed	Knots
Vertical speed	Feet per Minute
Wind direction for landing and taking off	Degrees Magnetic
Wind direction except for landing and taking off	Degrees True
Visibility including runway visual range	Kilometers or Meters
Altimeter setting	Hectopascals
Temperature	Degrees Celsius
Weight	Metric Tons or Kilograms
Time	Hours and Minutes, the day of 24hrs beginning at midnight UTC

## WGS-84 IMPLEMENTATION STATUS

WGS-84 partially compliant.

## FLIGHT PROCEDURES

### HOLDING

#### Maximum Speeds

Propeller aircraft:

FL140 and below 170kt IAS

Above FL140 175kt IAS

Jet aircraft:

FL60 and below 210kt IAS<sup>1</sup>

## ZIMBABWE RULES AND PROCEDURES

FL60 to FL140 inclusive	220kt IAS <sup>1</sup>
Above FL140	240kt IAS <sup>1</sup>

<sup>1</sup> In conditions of turbulence, 280kt or 0.8 Mach, whichever is less, with notification to ATC.

### PROCEDURE LIMITATIONS AND OPTIONS

Instrument approach procedures comply with the PANS-OPS, Document 8168.

### AIRPORT OPERATING MINIMUMS

Zimbabwe publishes OCA(H)s together with DA(H)/MDA(H), and visibilities for landing.

Jeppesen charted minimums are not below State minimums.

### ATS AIRSPACE CLASSIFICATION

Zimbabwe has adopted the ICAO ATS airspace classification as listed in Jeppesen ATC-Chapter "ICAO ATS Airspace Classifications - Annex 11".

Airspace classes "A", "C", "D" and "G" are used in Harare FIR.

## SPECIAL REQUIREMENTS AND REGULATIONS

### POSITION REPORTING PROCEDURE

Position reports shall be transmitted to the appropriate ATS unit:

- a. as soon as practicable after departure from an uncontrolled aerodrome for activation of flight plan;
- b. when entering or leaving the FIR;
- c. when entering or leaving controlled airspace;
- d. at hourly intervals with additional "Operations Normal" messages transmitted every half hour between such reports;
- e. at any other time as required by ATS.

### COMMUNICATIONS

All aircraft flying within the Harare FIR are required to establish two-way communication on the appropriate frequency.

All aircraft about to enter Harare FIR are required to establish two-way communication with Harare ACC or FIS not later than 5 minutes before entering the FIR.

Low flying aircraft unable to establish contact on an appropriate Harare FIS frequency are required to contact an ATS unit in the vicinity of their position in order to relay information to FIS.

## ZIMBABWE RULES AND PROCEDURES

### SPECIAL APPLICATION OF SEMI-CIRCULAR RULE

Between Harare (Charles Prince) and Chiredzi (Buffalo Range) where the magnetic track varies between 179° and 182° the southbound track will be deemed to be 182° and the northbound track 002°.

### STRATEGIC LATERAL OFFSET PROCEDURES (SLOP)

SLOP are applicable on all ATS routes within Harare FIR from FL245 to FL460.

- a. SLOP are strictly pilot elected procedures.
- b. The offsets shall be applied from the time aircraft reaches its cruising level until top of descent.
- c. Automatic offsets are restricted to a maximum of 2NM (3.7km) right of centerline.
- d. The use of SLOP by aircraft does not affect the application of prescribed separation standards and controller responsibility.
- e. The pilot must report to the controller when applying SLOP and when normal navigation is resumed.
- f. Pilots may contact other aircraft on the inter-pilot frequency 123.45MHz to coordinates offset.

*NOTE 1: Automatic offsets shall only be allowed for aircraft equipped with automatic offset tracking capability.*

*NOTE 2: The decision to apply Strategic Lateral Offset shall be the responsibility of the flight crew.*

### PROCEDURE AT UNMANNED AERODROMES

Pilots must broadcast on 118.7MHz their position and intentions as well as the name of the aerodrome when operating at unmanned aerodromes. Such broadcast should be restricted to a radius of 10NM of the intended destination at and below 2500ft AGL to minimize interference with aircraft operating at controlled aerodromes. Pilots should listen out on this frequency when in the proximity of such aerodromes. Any relevant message intercepted should be acknowledged and a course of action adopted to ensure safe operation.

*NOTE: Pilots are reminded that where an unmanned aerodrome lies within a CTR they should broadcast their position and intentions and listen out on the relevant frequency for that control zone.*

### FLIGHT PLANNING

A flight plan shall be submitted at least 6 hours prior to departure.

#### Place of Submission

In the absence of an Air Traffic Services Reporting Office (ARO) at the departure aerodrome, a flight plan shall be submitted by telephone or teletype to the nearest ARO as listed below:

Bulawayo (J.M. Nkomo) Airport



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**ZIMBABWE**  
**RULES AND PROCEDURES**

Tel: +263 (292) 296423/4/5

+263 772 132 750

Fax: +263 (292) 296146

Chiredzi (Buffalo Range) Airport

Tel: +263 (31) 2444/2819

+263 772 132 745

Fax: +263 (31) 4122

Harare (Charles Prince) Airport

Tel: +263 (242) 302199

+263 (242) 302832

+263 772 132 734

Fax: +263 (242) 335543

Harare (Robert Gabriel Mugabe Intl ) Airport

Tel: +263 (242) 585006 (DCT)

+263 (242) 575164/6

+263 (242) 585009 17

+263 (242) 585073 83

Fax: +263 (242) 575163

Hwange National Park Airport

Tel: +263 (81) 28313/4

+263 772 132 753

Fax: +263 (81) 338

Kariba (Intl) Airport

Tel: +263 (61) 2142912, 2467

+263 772 132 744

Fax: +263 (61) 2427

Masvingo (Intl) Airport

Tel: +263 (392) 262106, 266213

+263 772 132 742

Fax: +263 (392) 262505

Victoria Falls Airport

Tel: +263 (83) 2844260

+263 (83) 2841575/6

+263 772 132 739

Fax: +263 (83) 2844394

**ZIMBABWE  
RULES AND PROCEDURES****Closing a Flight Plan**

When communication facilities at the arrival aerodrome are known to be inadequate and alternate arrangements for the handling of arrival reports on the ground are not immediately available, the time at which the pilot expects to be able to notify arrival should be indicated in the flight plan. In these circumstances search and rescue action will only be undertaken if the arrival message has not been received by this time. No search and rescue will be provided for flights into unmanned airfields unless specifically requested in the remark section of the flight plan form.

***Flight Plan Message Addressing***

Flight movement messages relating to traffic into or via the Harare FIR shall be addressed as stated below in order to ensure correct relay and delivery.

<b>Route</b>	<b>Message address</b>
Harare FIR	FVHFZQZX FVRDYXYX FVRGZPZX FVTLZTZX FVTLYXYX

**REQUIRED NAVIGATION PERFORMANCE**

Following routes are designated RNAV10:

- UT356, IMLIX to VSB;
- UT429, BONAL to VFA;
- UT434, APNEX to VBU.

**SECONDARY SURVEILLANCE RADAR (SSR)**

When operating in airspace class “C” above transition altitude within Harare FIR/UIR, power driven aircraft shall be equipped with a serviceable SSR Mode A transponder.

**ACAS/TCAS II REQUIREMENTS**

All civil fixed-wing turbine-engined aircraft having a maximum take-off mass exceeding 5700kg, or a maximum approved passenger seating configuration of more than 19 are required to be equipped with ACAS/TCAS II version 7.1.

**DIFFERENCES FROM ICAO STANDARDS AND PROCEDURES****ICAO REFERENCE****Annex 2**

**3.3.1.2.** A flight plan shall be submitted prior to operating any flight within Zimbabwe airspace.

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**ZIMBABWE  
RULES AND PROCEDURES**

**4.1** Within class “G” airspace at and below 900m (3000ft) AMSL or 300m (1000ft) GND, whichever is higher, a flight visibility of at least 3km is required.

Exceptions:

- flights in the aerodrome traffic circuit operating with aerodrome in sight a flight visibility of at least 1.5km is required.
- helicopters may operate in lower flight visibility if manoeuvred at a speed that will give adequate opportunity to observe other traffic or any obstacles in time to avoid collision.

**4.4 a)** VFR flights shall not be operated at or above FL150.



# Entry Requirements



# Entry Requirements

State Rules and Procedures - Africa

**ALGERIA**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

## **VISA**

Required, except from aliens of States having signed reciprocal visa abolition agreements with Algeria. Visas for visitors are valid for one or more entries during a period of 3 months starting from the first utilization. In general, a re-entry visa is required from resident aliens.

*NOTE: Additional requirements may exist. Please contact the appropriate authority to confirm information.*

## **AIRCRAFT ENTRY REQUIREMENTS**

### **GENERAL**

Ministere des Transports

Address: Direction de l'Aviation Civile et de la Meteorologie  
01, Chemin Ibn Badiss El Mouiz (ex Poirsson) El Biar  
Algiers  
Algeria

Tel: +213 21 9298 85-89

Fax: +213 21 9298 94

Telex: 66129-66063  
66129-66137

AFTN: DAALYAYA

### **SCHEDULED FLIGHTS**

Scheduled operations are governed by international or bilateral air agreements or by special authorization.

### **NON-SCHEDULED FLIGHTS**

Prior approval is required for landings of all commercial flights. Requests for approval shall be submitted at least 15 days before the first flight to the Ministere des Transports.

### **OVERFLIGHT CLEARANCES FOR FOREIGN STATE AIRCRAFT**

The request for overflight permission with or without landing shall include the following information:

- a. identification from the issuing authority;
- b. identification from the recipient authority;
- c. flight patterns;
- d. nature of loading;
- e. types of aircraft and their registrations;
- f. selected routes;
- g. selected airfields for landing;

**ALGERIA**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

- h. dates of flights;
- i. Information on scheduled overflights and landings;
- j. number of passengers and their status.

**Permissions**

- a. Permanent permissions:
  - 90 days before beginning of requested period.
- b. Occasional permissions:
  - 21 days before the date of execution of the proposed flight when it concerns all military aircraft including those carrying personnel, equipment and military equipment;
  - 15 working days before the date of execution of the proposed flight when it concerns VIP aircraft government staff or the diplomatic courier, technical and humanitarian flights;
  - 10 days before the date of execution of flights when it relates to aircraft performing missions other than those referred to previous cases. Overflight permission with or without landing are valid 72 hours after the proposed date of execution of the flight.

**AIRPORT(S) OF ENTRY**

Adrar (Touat-Cheikh Sidi Mohamed Belkebir), Algiers (Houari Boumediene), Annaba (Rabah Bitat), Constantine (Mohamed Boudiaf), Ghardaia (Noumerat-Moufdi Zakaria), Hassi Messaoud (Oued Irara-Krim Belkacem), Oran (Ahmed Benbella), Tamenghasset (Aguenar-Hadj Bey Akhamok), Tebessa (Cheikh Larbi Tebessi), Tlemcen (Zenata-Messali El Hadj), Zarzaitine (In Amenas).

**SPECIAL NOTICES**

Foreign civil commercial overflights or aircraft making a non-commercial traffic stop, are not required to obtain overflight permission from the Algerian authorities responsible for civil aviation.

Overflight clearances with or without stopovers are valid 72 hours after the scheduled flight. Any other change elements of the application must be notified in advance before execution of the flight.

Aircraft neither registered in an ICAO State nor in a country having interstate air agreements with Algeria have to adhere to State Aircraft regulations.

The Algerian authorities reserve the following rights:

- a. to refuse authorizations given for the execution of flights in Algerian territory;
- b. to prohibit overflying of certain zones;
- c. to demand that aircraft carry out their flights according to authorized itineraries or to direct them to an alternate aerodrome;
- d. to demand that all aircraft overflying Algerian territory land at a designated aerodrome.

## ANGOLA

### NATIONAL REGULATIONS AND REQUIREMENTS

## PASSPORT

Required, except for the following:

- passengers arriving and departing on the same flight or transferring to another flight at the same airport, on the same day;
- citizens from countries with which Angola has agreements which permit them entry into Angola with an identity card or equivalent document;
- holders of Laissez-passer issued by the authorities of the State from which they are citizens or where they usually reside, as well as issued by any international organization of which Angola is member;
- holders of crew license certificate in accordance with the Convention of the International Work Organization, if only travelling on duty;
- foreigners holding a residence authorization duly up-dated are exempted from entry visa as well.

## VISA

Required, except for the following:

- nationals from the Portuguese speaking countries community, holding a valid service or diplomatic passports;
- nationals from Russia, Cuba and SADC countries, holding a valid service or diplomatic passports;
- holders of valid residence authorizations when returning to Angola.

*NOTE: Additional requirements may exist. Please contact the appropriate authority to confirm information.*

## AIRCRAFT ENTRY REQUIREMENTS

### GENERAL

Instituto Nacional da Aviacao Civil

Address: Caixa Postal 569

Luanda

Angola

Tel: +244 222 338596 or 335936

Fax: +244 222 390529 or 339356

E-Mail: [inavic@inavic.gov.ao](mailto:inavic@inavic.gov.ao)

AFS: FNLUYAYX



**ANGOLA**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

**SCHEDULED FLIGHTS**

For regular international flights operated by foreign airlines into, or in transit across Angola, the following requirements must be met:

- a. The airline must have been designated pursuant to a bilateral or multilateral agreement signed by Angola and the State in which the airline is registered.
- b. The airlines permitted to operate into, from or in transit across Angola should notify in time the Civil Aviation Authority about their intended scheduled flights or alteration of them.

Application for such permits shall be submitted to the Civil Aviation Authority.

The following information is required in Item 18 of the ICAO Flight Plan for overflying traffic:

- a. complete postal and telegraphic address of operator or owner of the aircraft;
- b. type of aircraft, registration of aircraft and call sign, if different from the registration;
- c. colour(s) and nationality of aircraft;
- d. number of crew and passenger(s);
- e. date and time of arrival at, and departure from Luanda FIR;
- f. purpose of flight.

**NON-SCHEDULED FLIGHTS**

If an operator intends to perform a (series of) non-scheduled flights into Angola for the purpose of taking on or discharging passengers, cargo or mail, it is necessary for the operator to apply to Civil Aviation Authority for permission to carry out such operations.

The applications must reach the Civil Aviation Authority not less than 3 days (72 hours) of the intended date of operation.

The applications to perform such flights must include the following information in the order shown hereunder:

- a. name of operator/owner of aircraft; (Complete postal and telegraphic address);
- b. type of aircraft, registration of aircraft and call sign, if different from the registration;
- c. point of departure and destination;
- d. date and time of arrival at and departure from the airport concerned;
- e. purpose of flight and number of passengers and/ or description and weight of cargo;
- f. point of entry into Angola FIR;
- g. point of exit from Angola FIR;
- h. colour(s) of the aircraft;
- i. date and time of arrival at, and departure from Angola.

Additionally, the following information is required in Item 18 of the ICAO Flight Plan:

**ANGOLA**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

- a. Overflying traffic: Same as for scheduled flights above.
- b. Landing traffic:
  - 1. complete postal and telegraphic address of operator or owner of aircraft;
  - 2. type of aircraft, registration of aircraft and call sign if different from the registration.

**PRIVATE FLIGHTS**

All aircraft overflying or landing in Angola for the purpose of pleasure, meetings, emergency or humanitarian needs, and non-profit business activities, have to request permission at least 3 days in advance. The request should include the same items as for non-scheduled flights.

**AIRPORT(S) OF ENTRY**

Catumbela, Luanda (4th of February), Lubango (Mukanka).

**BENIN**  
**NATIONAL REGULATIONS AND REQUIREMENTS****PASSPORT**

Required.

**VISA**

Required, except for nationals of France and the CEDEAO States. No formalities are required for passengers in direct transit.

*NOTE: Additional requirements may exist. Please contact the appropriate authority to confirm information.*

**HEALTH**

A valid international certificate of vaccination against yellow fever is required.

**AIRCRAFT ENTRY REQUIREMENTS****SCHEDULED FLIGHTS**

International scheduled flights are governed by bilateral air agreements or a special and temporary authorization. Requests to carry out regular international air services in accordance with international conventions or requests for special authorization submitted by an air-carrier registered in a State which has not concluded an air agreement with Benin are to be submitted directly to the Ministry in charge of Civil Aviation.

The application must contain the following details:

- a. name of the airline intending to provide regular air services;
- b. type of aircraft and registration marks;
- c. schedule of air services (route of flight(s), frequency of flights planned, exact time-table of landings and take-offs).

The application shall be submitted in form of a letter or AFTN message, or a prepaid reply telegram.

**NON-SCHEDULED FLIGHTS**

Foreign civil aircraft intending to carry out non-scheduled international flights over the territory of Benin with commercial landings on its territory must obtain prior authorization. Applications for permission shall be submitted at least 10 workdays before the commencement of the flight(s) to:

Agence Nationale de l'Aviation Civile

Address: Boîte Postale 305  
Cotonou

Tel: +229 21301098  
+229 21301099

Fax: +229 21304571

AFTN: DBBBYAYX

**BENIN**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

The request shall comprise the following details:

- a. name of operator and charterer, when applicable;
- b. type of aircraft;
- c. aircraft nationality, registration marks and flight's identification;
- d. complete route (aerodrome of departure, intermediate landings and final destination);
- e. purpose of flight;
- f. number, departure and destination of passengers;
- g. nature, weight, origin and destination of freight;
- h. sender or recipient of the freight embarked or disembarked in Benin;
- i. date of flight(s).

Requests shall be submitted in form of a letter or AFTN message, or a prepaid reply telegram.

### **STATE AIRCRAFT FLIGHTS**

No foreign State aircraft is permitted to overfly the territory of Benin or land therein except if an authorization has been obtained by way of a special agreement. Requests shall reach the Ministry of Foreign Affairs and Cooperation at least four work-days before the commencement of the flight(s). The flight(s) shall be carried out in accordance with the stipulations of the authorization.

### **PRIVATE FLIGHTS**

Prior permission is required for private flights. The application must be submitted to the Direction de l'Aviation Civile at least 10 workdays before the commencement of the flight.

The application shall comprise the following details:

- a. name of operator;
- b. type and registration marks of aircraft;
- c. date and expected hours of overflight or landing;
- d. crew members;
- e. number of persons aboard;
- f. purpose of flight;
- g. complete route.

### **AIRPORT(S) OF ENTRY**

Cotonou (Cadjehoun), Parakou.

**BOTSWANA  
NATIONAL REGULATIONS AND REQUIREMENTS****PASSPORT**

Required.

**VISA**

Required if no visa abolition agreement exists.

*NOTE: Additional requirements may exist. Please contact the appropriate authority to confirm information.*

**AIRCRAFT ENTRY REQUIREMENTS****SCHEDULED FLIGHTS**

Regularly scheduled international flights by foreign airlines into or overflying Botswana are governed by bilateral and multilateral agreements. Advance application notification is required at least 60 days before the beginning of operations.

**NON-SCHEDULED FLIGHTS**

No prior permission is required for overflights and non-traffic stops. Every operator of an aircraft intending to perform non-scheduled flights for hire or reward has to apply for a Temporary Air Service Permit at least 48 hours before commencing the flight. Applications should be addressed to:

Civil Aviation Authority of Botswana (CAAB)

Address: P.O. Box 250  
Gaborone  
Botswana  
Tel: +267 368 8200  
Fax: +267 391 3121  
E-Mail: CAAB@caab.co.bw  
AFS: FBHQYAYX

Application for a Temporary Air Service Permit shall include the following information in the sequence shown:

- a. name and address of operator;
- b. aircraft type, registration and/or flight number;
- c. date and time of departure on journey to Botswana, route and estimated time of arrival at destination;
- d. date and time of departure from Botswana, route and destination;
- e. name of captain and nationality;
- f. general nature of freight and weight;
- g. number and nationality of passengers;

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**BOTSWANA**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

- h. name of charterer(s);
- i. if not already provided, Aircraft Operating Minima for airports intended to be used or selected as alternates.

### **PRIVATE FLIGHTS**

For private flights the information contained in the flight plan is accepted as adequate advance notification of the intended flight. The flight plan must be transmitted so that it will be received by the authorities concerned in advance of arrival.

No passengers will be carried for hire or reward.

### **STATE OR MILITARY AIRCRAFT FLIGHTS**

Foreign military flights must apply for an entry and/or transit clearance to:

Permanent Secretary

Ministry of Foreign Affairs

Address: Private Bag 00368  
Gaborone  
Botswana

Fax: +267 391 3366

or through:

Civil Aviation Authority of Botswana (CAAB)

Address: P.O. Box 250  
Gaborone  
Botswana

Fax: +267 391 3121

Applications should be made by letter or telefax and must reach the Permanent Secretary or CAAB at least 7 days prior to the date of the intended flight.

Foreign diplomatic flights should apply for diplomatic clearance from the Permanent Secretary, Ministry of Foreign Affairs.

Applications for both military and diplomatic flights must contain the following:

- a. operator's name and address;
- b. type of aircraft and registration marks;
- c. date of flight and place of origin;
- d. complete routing of aircraft with entry and exit points including dates and times in UTC;
- e. number and details of all persons intended to be on board the aircraft;
- f. full details of freight to be offloaded or unloaded.

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**BOTSWANA**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

## **AIRPORT(S) OF ENTRY**

Francistown, Gaborone (Sir Seretse Khama Intl), Kasane, Maun, Selebi-Phikwe.

## **SPECIAL NOTICES**

An aircraft shall not take-off or land at any place in Botswana other than at:

- a government aerodrome notified as being available for public use;
- an aerodrome licensed for public use;
- a private aerodrome registered with the Civil Aviation Authority of Botswana (CAAB). Prior permission must be granted by the registered owner.

It is the pilot's responsibility to obtain information regarding the state of serviceability and the suitability of the airfields physical characteristics for the landing and take-off of the aircraft concerned.

**BURKINA FASO**  
**NATIONAL REGULATIONS AND REQUIREMENTS****PASSPORT**

Required.

**VISA**

Required except for nationals of Economic Cooperation Organization of West African States (ECOWAS), the Council of Entente States, Central African Republic and Cuba.

*NOTE: Additional requirements may exist. Please contact the appropriate authority to confirm information.*

**HEALTH**

Passengers on intercontinental flights are required to hold an international certificate of vaccination against yellow fever.

**AIRCRAFT ENTRY REQUIREMENTS****GENERAL**

All operations are governed by interstate air agreements or special authorization.

Application for overflight or landing shall be submitted at least 7 working days before the expected arrival date to:

Agence Nationale de l'Aviation Civile

Address: 01 Boite Postale 1158  
Ouagadougou 1

Tel: +226 25 306488  
+226 25 316332  
+226 25 339500

Fax: +226 25 314544

E-Mail: [info@anacburkina.org](mailto:info@anacburkina.org)

Internet: [www.anacburkina.org](http://www.anacburkina.org)

AFTN: DFFVYAYX

or via diplomatic channels 7 working days in advance, or by way of AFTN 72 working hours in advance. The application has to contain the following details:

- a. type of aircraft;
- b. registration number;
- c. flight number or call sign;
- d. name and address of operator;
- e. holder of the aircraft (in case of charter flight);
- f. name and nationality of the commander;



**BURKINA FASO**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

- g. name, number and nationality of crew members;
- h. complete route (departure, intermediate landings, arrival/departure in Burkina Faso, final destination);
- i. cargo (nature and quantity of cargo; number of passengers);
- j. purpose of flight.

**STATE AIRCRAFT FLIGHTS**

Application for overflight or landing shall be submitted through diplomatic channels to the Ministère des Affaires Etrangères 7 working days before date of arrival in Burkina Faso. Transportation of ammunition is forbidden, except a request for authorization has been submitted via diplomatic channels 15 working days before the estimated date of departure.

**AIRPORT(S) OF ENTRY**

Bobo-Dioulasso, Ouagadougou.

**BURUNDI**  
**NATIONAL REGULATIONS AND REQUIREMENTS****PASSPORT & VISA**

A valid passport and visa are required. (Not required of passengers in transit). Crew members may use valid licences or crew member certificates in lieu of passport and visa for temporary admission into Burundi.

*NOTE: Additional requirements may exist. Please contact the appropriate authority to confirm information.*

**HEALTH**

Certificates of vaccination against yellow fever are required when arriving from or departing to infected areas.

**AIRCRAFT ENTRY REQUIREMENTS****GENERAL**

Autorite de l'Aviation Civile

Direction Generale

Address: B.P. 694

Bujumbura

Burundi

Tel: +257 222 03101

+257 222 03102

Fax: +257 222 23428

E-Mail: aacb@aacb.bi

Internet: www.aacb.bi

AFTN: HBBAYAYX

**SCHEDULED FLIGHTS**

Scheduled flights are governed by interstate agreements.

**NON-SCHEDULED FLIGHTS****Overflights**

Aircraft registered in an ICAO member State have to send their application 2 working days in advance of overflight to the Autorite de l'Aviation Civile and shall include the following information:

- a. name and address of the operator;
- b. purpose of flight;
- c. type, nationality and registration mark of aircraft;
- d. radio call-sign;
- e. itinerary;

**BURUNDI**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

- f. date of overflight, point and time of entry and exit of Burundi airspace.

**Technical Landings**

Aircraft of ICAO member States have to send their request 8 days in advance to the Autorite de l'Aviation Civile and shall include the following information:

- a. name and address of the operator;
- b. purpose of flight;
- c. type, nationality and registration mark of aircraft;
- d. radio call-sign;
- e. date and place of origin of flight;
- f. complete itinerary plus dates and UTC times;
- g. name of pilot-in-command and number of crew members;
- h. number of passengers.

**Commercial Landings**

Aircraft of ICAO member States have to apply 15 days in advance by letter to the:

Ministre de Transports

Postes et Telecommunications

Address: B.P. 2000

Bujumbura

Burundi

Fax: +257 226 900

The application must include the following information:

- a. name and address of the operator;
- b. purpose of flight;
- c. type, nationality and registration mark of aircraft;
- d. radio call-sign;
- e. date and place of origin of flight;
- f. complete itinerary plus dates and UTC times;
- g. name of pilot-in-command and number of crew members;
- h. number of passengers and/or nature and amount of freight.

**STATE AIRCRAFT AND AIRCRAFT OF NON-ICAO MEMBER STATES**

The application for authorization to execute an overflight, technical or commercial landing by State aircraft or aircraft of non-ICAO member States should be submitted via diplomatic channels to the Ministry of Foreign Affairs by applying the regulations under Technical Landings.

**BURUNDI****NATIONAL REGULATIONS AND REQUIREMENTS****AIRPORT(S) OF ENTRY**

Bujumbura (Melchior Ndadaye Intl).

**CAMEROON  
NATIONAL REGULATIONS AND REQUIREMENTS****PASSPORT**

Required.

**VISA**

Required, including resident aliens who have a residence permit.

The maximum validity for temporary visitors is:

- Tourists: 3 months with multiple entries;
- Business: 3 months once renewable;
- Transit: 1 to 3 days for single passengers, 10 days for passengers in group.

*NOTE: Additional requirements may exist, please contact the appropriate authority to confirm information.*

**HEALTH**

An international certificate of vaccination must be presented upon arrival. A vaccination against cholera, smallpox or yellow fever may be required if arriving directly from an infected area.

**AIRCRAFT ENTRY REQUIREMENTS****GENERAL**

Cameroon Civil Aviation Authority (CCAA)

Address: Boite Postale 6998

Yaounde

Tel: +237 222 303011

+237 222 302692

+237 222 303484

+237 222 303090

Fax: +237 222 303362

Telex: AEROCIVILE YAOUNDE

AFTN: FKKKYAYX, FKYSYFYX, FKYSZPZX

**SCHEDULED FLIGHTS**

Scheduled flights are governed by international and bilateral or multilateral air agreements. Requests to carry out regular international air services in accordance with international conventions shall be submitted to the CCAA.

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**CAMEROON**  
**NATIONAL REGULATIONS AND REQUIREMENTS****NON-SCHEDULED FLIGHTS****General**

The submission of flight plan data is not acceptable as an entry notification. Special authorization is required for overflight, with or without intermediate landing. Requests shall be submitted to the CCAA at least 7 days prior to the proposed flight.

Authorization requests shall contain the following:

- a. name of operator or charterer;
- b. type of aircraft and registration mark;
- c. date and time of arrival at and departure;
- d. place of embarkation or disembarkation abroad, as the case may be, of passengers and/or freight;
- e. purpose of flight and number of passengers and/or nature and amount of freight;
- f. name, address and business of the charterer;
- g. name of pilot-in-command;
- h. number of crew members and their nationality;
  - i. departure and destination aerodromes;
  - j. aerodromes at which landings within Cameroon are intended;
- k. aerodrome of departure from Cameroon;
- l. other information.

**PRIVATE FLIGHTS**

Prior permission required for all overflights and landings and a flight plan shall be submitted. Application must be submitted to the CCAA at least 2 days, but not more than 7 days, prior to the commencement of the flight.

**AIRPORT(S) OF ENTRY**

Douala, Garoua, Yaounde (Nsimalen).

**CANARY IS**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

## **PASSPORT & VISA**

Required unless exempted by Schengen Agreement. Crew member certificates or pilot licenses are accepted in lieu of a passport or visa provided the crew member is on duty and remains at the airport of landing or is in transit to another airport located within the contracting party.

*NOTE: Additional requirements may exist. Please contact the appropriate authority to confirm information.*

## **AIRCRAFT ENTRY REQUIREMENTS**

### **GENERAL**

Any aircraft registered in a State party to the Free Transit Agreement or in a State having signed a bilateral agreement with Spain, will have the privilege to fly across the Spanish territory and land for non-commercial purposes without any notification in advance or without permission.

### **SCHEDULED FLIGHTS**

International scheduled operations are governed by bilateral air agreements or by special authorization.

### **NON-SCHEDULED FLIGHTS**

Airlines of third countries (non EU) may operate international non-scheduled flights in Spain provided that such countries, by virtue of principle of reciprocity, should grant equivalent traffic rights to Spanish airlines should they try to perform similar operations.

To perform non-scheduled commercial air operations it is compulsory to get previous authorization of AESA.

### **STATE AIRCRAFT FLIGHTS**

The overfly and stopover in Spain of foreign State aircraft require a specific authorization.

The manage, control and assignation of these authorizations depend on:

- Ministerio de Asuntos Exteriores y de Cooperacion (MEAC): Unidad de sobrevuelos y escalas dependiente de la Vocalia Asesora de Relaciones Institucionales.
- Ministerio de Defensa (MD): Estado Mayor del Aire, Secretaria General-Seccion de Relaciones Internacionales (SERIN) y Direccion General de Politica de Defensa (DIGNPOL).

Some of the following types of flights need a special authorization:

- a. the use of territory and airspace sovereignty for arrivals and departures of aircraft to/from Gibraltar aerodrome;
- b. overflying of prohibited or restricted areas;
- c. not previously agreed air exercises, maneuvers and lowflying flights;
- d. overflying of armed aircraft or equipped with cameras or other reconnaissance sensors installed on board for its use;

## CANARY IS NATIONAL REGULATIONS AND REQUIREMENTS

- e. electronic counter-measure flights;
- f. flights carrying chemical or bacteriological weapons, or radioactive materials;
- g. flights carrying dangerous cargoes such as armaments, munitions and explosives;
- h. air refuelling over Spanish territory.

It is a Spanish government policy not to allow overflying of Spanish territory to aircraft with armament and nuclear material on board.

The foreign State aircraft will not be able to perform VFR flights in Spanish airspace without prior authorization. In the same way, they will not be authorized to change their flight plan from IFR to VFR. Therefore, foreign State aircraft wanting to overfly Spanish territory and its territorial waters, must do so with an IFR or OIFR flight plan, being the latter only used upon agreement. This does not exempt from the obligation of sending the corresponding PPR. Besides the diplomatic authorization that could be necessary, foreign State aircraft will request a PPR to their base, owing to the restrictions it may have. The PPR number will be adjusted to the Julian calendar day adding a number 1, 2, 3, etc. to every request of the day.

## SCHEDULE AND AIRPORT COORDINATION

### SCHEDULING COORDINATION

The contact details and opening hours of AENA's Airport Slot Coordination Office are as follows:

Airport Slot Coordination Office

Address: Calle Peonias, 12  
Madrid  
28042

Tel: +34 913 211 044/24

Fax: +34 913 211 348

E-Mail: slot.coord@aena.es

SITA: MADGSYA (slot request)  
MADCHYA (other matters)

Public Hours: MON-THU 0800-1700LT (0800-1500LT from June to September), FRI  
0800-1500LT, except HOL

### Classification of Airports

Coordinated airports:

Fuerteventura, Gran Canaria, La Palma, Lanzarote, Tenerife-North and Tenerife-South (Reina Sofia).

Schedules facilitated airports:

Hierro.



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NATIONAL REGULATIONS AND REQUIREMENTS**

**Procedure for Requesting Operating Slots/Schedules**

The following procedure applies to all passenger and goods flights operating at Spanish airports designated as coordinated or schedules facilitated airports.

***Commercial Flights***

- a. The scheduled arrival and departure times (on-block time) for all commercial flights that operate in airports designated as coordinated or schedules facilitated airports must be requested at AENA's Airport Slot Coordination Office, so that they may be allocated an available airport slot at airports declared as coordinated, or to confirm or propose an alternative schedule at schedules facilitated airports.
- b. The allocation of an airport slot at the scheduled operation time is an essential prerequisite for all flights arriving at and departing from Spanish airports declared as coordinated.
- c. Requests for slots or operating times at airports where these are required must be made in accordance with the instructions specified in the Standard Schedules Information Manual (SSIM) of the IATA.
- d. Requests to the Airport Slot Coordination Office should preferably be made through the SITA network or by e-mail. If this is not possible they may be sent by fax or presented in person.
- e. Replies to the requests received by the Airport Slot Coordination Office will be issued via the same channel used by the interested party, within three working days from the date of the request.
- f. The arrival and departure schedules for all flights that operate in Spanish airports which are coordinated and schedules facilitated have to be confirmed by the Airport Slot Coordination Office before they can be published by the airlines.
- g. The allocation of an airport slot or the confirmation of an operating schedule by the Airport Slot Coordination Office in no way substitutes:
  1. the authorization of traffic rights;
  2. the presentation of the flight plan;
  3. an ATFM slot allocation where necessary;
  4. the corresponding diplomatic authorization.
- h. Notifications of changes to and cancellations of flights which are already coordinated (or authorized) at airports declared as coordinated (or schedules facilitated) must be addressed to the Airport Slot Coordination Office, which will be responsible for authorizing them.
- i. The Airport Slot Coordination Office may request additional information on the operation from the airline at any time.
- j. The Airport Slot Coordination Office will only allocate slots (in the case of coordinated airports) or authorize scheduled operating times (in the case of schedules facilitated airports)

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**NATIONAL REGULATIONS AND REQUIREMENTS**

within the operating hours of each airport, unless the airline has permission from the airport management to operate outside the operating hours.

- k. At airports designated as coordinated or schedules facilitated, notification of isolated, exceptional operations, which constitute a new flight, or changes to and cancellations of flights which are already coordinated or authorized which occur outside the opening hours of the Airport Slot Coordination Office on the working day prior to the flight date (real time in H24 mode)<sup>1</sup> should be sent, using the standard format, directly to the operations center of each airport. This center will be responsible for authorizing or refusing the isolated flight operation in question in accordance with the airport's available capacity. This operation will be classed as an incident for the Airport Slot Coordination Office.

*NOTE: <sup>1</sup> At Tenerife-South (Reina Sofia) airport this real time period is from 1200 LT on the working day prior to the flight date (H36 mode).*

Airlines must send copies of all their communications with the airports to the Airport Slot Coordination Office.

- l. At coordinated airports, the ARO offices are authorized not to accept flight plans for which the EOBT or ETA do not match the previously allocated airport slot.

***Non-Commercial flights***

All general aviation, business, air taxi, test and training flights must adhere to the following procedure:

- a. At airports declared as coordinated the procedure to be followed by general aviation, business, air taxi, testing and training flights is exactly the same as the procedure which applies to commercial flights at coordinated airports.
- b. At schedules facilitated airports, the procedure for general aviation, business, airtaxi, test and training flights will be as follows:
- The flight operator will request authorization directly from the operations center of each airport a minimum of three hours before the ETA and/or the ETD, providing the following information:
    - flight date and time;
    - flight identification (flight number and registration mark);
    - type of aircraft;
    - origin airport and arrival time;
    - destination airport and departure time.
  - Based on the level of congestion at the airport, the operations center will decide whether or not to authorize the requested operation schedule. At busy times they may offer alternative schedules.
  - A series of training flights will be coordinated by the operations center of each airport.

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**CANARY IS**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

***Exemptions to the Procedure***

The following flight categories are exempt from the procedure described above for requesting slots/operating times at Spanish airports:

- flights which are diverted to an alternative aerodrome for technical or meteorological reasons;
- flights undertaken for humanitarian reasons;
- flights on search and rescue missions;
- State flights;
- other flights which are granted exemption by the competent authority.

**AIRPORT(S) OF ENTRY**

Fuerteventura, Gran Canaria, Lanzarote, Tenerife-South (Reina Sofia).

**CAPE VERDE**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

## **PASSPORT & VISA**

Required.

*NOTE: Additional requirements may exist. Please contact the appropriate authority to confirm information.*

## **HEALTH**

Vaccination certificates required only when coming directly from an area infected with yellow fever.

## **AIRCRAFT ENTRY REQUIREMENTS**

### **SCHEDULED FLIGHTS**

Scheduled flights are governed by bilateral or multilateral agreements or special authorization through diplomatic channels.

### **NON-SCHEDULED FLIGHTS**

#### **General**

Ministerio das Infraestruturas e Economia Maritima

Civil Aviation Agency (AAC)

Address: P.O. Box 371

Praia

Republica de Cabo Verde

Tel: +238 2603430/31/32

Fax: +238 2611075

E-Mail: [dgeral@acivil.gov.cv](mailto:dgeral@acivil.gov.cv)

AFS: GVPRYAYX

#### **Overflights and Non-commercial Stops**

For aircraft registered in ICAO-Member-States a flight plan suffices, subject however to reciprocal treatment granted to Cape Verde aircraft. Aircraft of Non-ICAO-Member-States have to apply for prior permission through diplomatic channels. Application has to contain following information:

- a. name of operator;
- b. type of aircraft and registration marks;
- c. date and time of arrival and departure from the airport concerned;
- d. itinerary;
- e. purpose of flight, nature and amount of cargo carried on board.

**CAPE VERDE  
NATIONAL REGULATIONS AND REQUIREMENTS**

**Commercial Stops**

Aircraft of ICAO-Member-States carrying out Single Entity, Humanitarian, Emergency or Passenger Taxi Flights have to send prior notification one working day in advance to the AAC.

Notification has to contain information:

- a. name of operator;
- b. type of aircraft and registration marks;
- c. date and time of arrival and departure from the airport concerned;
- d. place of embarkation/disembarkation of passengers and/or freight;
- e. purpose of flight and number of passengers and/or nature and amount of freight;
- f. name, address and business of charterer, if any.

Applications and notifications required above shall be addressed to the AAC.

For other general charter flights prior authorization from the AAC is required. Aircraft of Non-ICAO-Member States have to send their application for prior permission through diplomatic channels, stating details above.

**PRIVATE FLIGHTS**

For aircraft registered in a non-ICAO Member State, or in a case where reciprocity may not exist, a special permission is required, which must be applied through diplomatic channels.

Applications should contain the following items:

- a. name of aircraft owner/operator and full address;
- b. type of aircraft and registration marks;
- c. date and time of arrival and departure from the airport;
- d. itinerary;
- e. purpose of flight and nature of cargo when carried;
- f. any other relevant information such as amount and type of fuel required and special/specific handling requirements.

Aircraft registered in an ICAO-Member State do not need prior permission, the flight plan is accepted as an advance notification (subject to reciprocal treatment), which must be received by the aeronautical authorities at least two hours in advance of arrival. However for reasons of flight safety and compliance with airport regulations, landing permits are required for Private Non-commercial flights. Applications must be submitted to President of ASA via AFS (GVACYGDG) or Fax +238 2411570. On weekends, after 1600 UTC of every working day and national public holidays, urgent applications must be addressed to GVACYNYX for the attention of the Duty Airport Operations Supervisor Tel/Fax: +238 2411309.

**CAPE VERDE  
NATIONAL REGULATIONS AND REQUIREMENTS**

## **STATE OR MILITARY AIRCRAFT FLIGHTS**

Foreign State aircraft are subject to prior permission for overflying the territory or landing at Cape Verde. Applications for overflight or landing must be submitted to the Ministry of Foreign Affairs through the usual diplomatic channels. For expedition of the diplomatic clearance the use of Telefax number +238 2611960 is recommended. The request must reach the Ministry Office at least three working days prior to the flight. A flight must not be started unless confirmation of the clearance has been received by the applicant. The request must contain the following information:

- a. state of registry;
- b. owner or aircraft operator, including address;
- c. type and number of aircraft;
- d. registration mark;
- e. radio call sign;
- f. point of departure and final destination;
- g. exact route of flight;
- h. information about crew and passengers:
  - for military aircraft: name, rank and nationality of pilot-in-command; crew graduation; number of crew members and passengers for each flight;
  - for civil aircraft: name and nationality of the pilot-in-command; number of crew members and passengers for each flight.
- i. exact purpose of the flight and nature of freight, when carried;
- j. information deemed necessary to support the required assistance on the ground, i.e. amount and type of fuel/oil grades;
- k. declaration that the pilot-in-command is familiar with the air navigation procedures applied within Cape Verde airspace, and that the aircraft operator will comply with the national legislation regarding indemnities to third parties for damages on the ground.

## **SCHEDULE AND AIRPORT COORDINATION**

The following airports are fully coordinated airports:

Sal (Amilcar Cabral), Praia (Mandela Intl), Rabil (Pereira Intl).

All air carriers operating to and from these coordinated airports shall always submit a request for the allocation of available landing and/or take-off slots to the coordinator and receive approval before operating.

Requests for slot shall be filled in standard IATA format to:

slot.coordination@asa.cv and copied to correspondent handling agent.

Mon-Fri (0800-1600LT)

**CAPE VERDE  
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Out of office hours and weekends, service is provided by Airport Operations for short term and ad-hoc schedule changes and request only. Contacts in the table below.

The Slot Coordination must be copied in all messages.

<b>Airport</b>	<b>Telephone</b>	<b>Fax</b>	<b>E-mail</b>
<b>Rabil</b>	+238 251 10 70	+238 251 11 93	soica.abv@asa.cv
<b>Praia</b>	+238 263 34 71 +238 260 87 28	+238 263 40 00	soica.adp@asa.cv
<b>Sal</b>	+238 241 13 09	+238 241 13 09	soa@asa.cv

### **AIRPORT(S) OF ENTRY**

First landing and final departure must be made at Sal (Amilcar Cabral), Praia (Mandela Intl), Rabil (Pereira Intl) or Sao Pedro (Evora Intl) airport.

**CENTRAL AFRICAN REP.  
NATIONAL REGULATIONS AND REQUIREMENTS**

## **PASSPORT & VISA**

Required.

*NOTE: Additional requirements may exist. Please contact the appropriate authority to confirm information.*

## **HEALTH**

An international vaccination certificate against yellow fever is required.

## **AIRCRAFT ENTRY REQUIREMENTS**

### **GENERAL**

The overflight and landing authorization of State aircraft or civil foreign aircraft are delivered by the Minister of Defence and the Minister of Public Security and Territory Administration, after advice of the:

Ministre des Transports et de l'Aviation Civile

Address: Boite Postale 941  
Bangui  
Central African Republic  
Tel: +236 21 617049  
+236 21 610054  
Fax: +236 21 614628  
Telex: MINISTRANS AVIACIVIL  
Internet: [www.dgca.cf](http://www.dgca.cf)

### **SCHEDULED FLIGHTS**

Scheduled operations are governed by interstate air agreements or special authorization.

### **NON-SCHEDULED FLIGHTS**

Request for authorization shall be submitted at least 72 hours prior to the date of flight to the Minister of Defence:

The request for authorization must comprise the following information:

- a. type of aircraft;
- b. aircraft registration marks and call sign;
- c. name and address of aircraft owner;
- d. name and address of aircraft operator or charterer;
- e. name and nationality of pilot-in-command and number of crew members;
- f. purpose of flight;



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- g. aircraft load (number of passengers, weight and nature of freight, origin and final destination of loading);
- h. itinerary (including entry and exit points, and possible aerodromes of intended landing);
- i. dates and times of all portions of flight and possible delays.

**Non-scheduled Commercial Flights**

Application for authorization shall be submitted in writing at least 15 days in advance of the intended operations to the Minister of Defence. It shall contain the information as for non-traffic operations and in addition the following items:

- a. copy of operation licences;
- b. number of flights to be executed;
- c. transport fares of passengers or freight;
- d. origin, destination and number of passengers;
- e. origin, destination, nature and quantity of freight.

**PRIVATE FLIGHTS**

Prior notice request must be submitted at least 2 days, but not earlier than 3 days, prior to the planned date of the flight.

**STATE AIRCRAFT FLIGHTS**

Request for authorization shall be submitted as laid down for Non-scheduled Commercial Flights.

**AIRPORT(S) OF ENTRY**

Bangui (M'Poko).

**CHAD**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

## **PASSPORT & VISA**

Required, except for nationals of the OCAM (Common African and Madagascar Organization) may travel with a national identity card or with an expired passport, since less than 5 years.

*NOTE: Additional requirements may exist. Please contact the appropriate authority to confirm information.*

## **HEALTH**

International certificates of vaccination against cholera and yellow fever are required of all persons arriving from or departing for the following areas: Central Europe, Egypt, Guinea Rep., Iran, Israel, Jordan, Kuwait, Lebanon, Northern Africa, Southern Africa, Sudan, Syria, Turkey.

## **AIRCRAFT ENTRY REQUIREMENTS**

### **SCHEDULED FLIGHTS**

Commercial landings are governed by bilateral or multilateral air agreements.

For overflights and technical landings a request for authorization has to be submitted through diplomatic channels to the Ministry of Foreign Affairs of the Republic of Chad at least 15 days prior to first expected flight.

All modifications to submitted time table shall be addressed to the Ministry of Public Works in charge of Civil Aviation at least 10 days before the expected modification:

Ministere des Infrastructures, de Desenclavement et de l'Aviation Civile

Address: Boite Postale 886  
N'Djamena  
Tel: +235 2251 1343  
Fax: +235 2252 5117  
E-Mail: [mtpt@intnet.td](mailto:mtpt@intnet.td)

### **NON-SCHEDULED FLIGHTS**

For overflights and technical landings of aircraft whose operator is a citizen of an ICAO Member State, no prior permission is required provided the operator's country grants reciprocal rights to Chad aircraft. However, a prior notification shall be submitted in French language 72 hours in advance to:

Autorite de l'Aviation Civile (ADAC)

Address: Boite Postale 96  
N'Djamena  
Tel: +235 2252 5414  
+235 2252 4426  
+235 2252 0068  
Fax: +235 2252 2909

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AFTN: FTTVYAYX

This notification shall include the following information:

- a. name and address of operator;
- b. type of aircraft and registration marks;
- c. dates and times of departure;
- d. airports of embarkation/disembarkation;
- e. purpose of flight, number and nationality of passengers, nature and amount of cargo;
- f. names and nationality of pilot and crew members;
- g. name, address and business of charterer, if any.

For commercial flights prior permission is required. Application shall be submitted in French language to the Ministry in Charge of Transportation 10 days in advance and shall include the same information as for overflights and technical landings.

### **PRIVATE FLIGHTS**

Same requirements as for non-scheduled overflights and technical landings.

### **OTHER FLIGHTS**

If a military or a state aircraft or a non-scheduled commercial flight or private flight registered in a non-ICAO Member State intends to overfly the territory of Chad or to effect a technical landing at an aerodrome in Chad, a request for authorization has to be submitted in French language through diplomatic channels to the Ministry of Foreign Affairs at least 15 days before the planned flight. The request shall include the following details:

- a. type of aircraft;
- b. aircraft registration marks;
- c. designation of the military unit or of the civil service operating the aircraft;
- d. number, nationality and ranks of passengers;
- e. nature of cargo;
- f. purpose of flight;
- g. aircraft's complete flight route, including itinerary of return flight;
- h. projected dates of overflight and/or landing(s).

### **AIRPORT(S) OF ENTRY**

N'Djamena (Hassan Djamous) and Sarh.

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## **PASSPORT & VISA**

Required.

*NOTE: Additional requirements may exist. Please contact the appropriate authority to confirm information.*

## **HEALTH**

Passengers are required to present on arrival an international vaccination certificate in accordance with international regulation in force.

When arriving from infected or endemic areas some vaccinations (against cholera, smallpox, etc.) can be required.

## **GENERAL**

Agence Nationale de l'Aviation Civile et de la Meteorologie (ANACM)

Address: Boite Postale 72

Moroni

Union des Comores

Tel: +269 7738003

Fax: +269 7730948

Telex: AVIACIVIL MORONI

E-Mail: anacm@comorestelecom.km

AFTN: FMCIYAYX

## **AIRCRAFT ENTRY REQUIREMENTS**

### **SCHEDULED FLIGHTS**

For regular international scheduled flights operated by foreign air transportation company, the following requirements must be satisfied:

- a. The state of the airline must be a party to the International Air Services Transit Agreement and/or the International Air Transportation;
- b. The airline must be eligible to make the flights under the provisions of a bilateral or multilateral agreement between the contracting parties (states affected). This one must have an operating licence allowing to perform the flights. The licence request must be addressed to the authorities concerned.

### **NON-SCHEDULED FLIGHTS**

The requests for authorization to operate a series of non-scheduled commercial flights inbound for or outbound from the Union of the Comoros must be done in writing (mail, fax or AFTN message) no later than 45 days before the scheduled date of the first flight and include the following elements:

- a. type and registration of the aircraft;

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- b. the nature and limit of validity of the airworthiness certificate;
- c. references of the insurance policy and limit of validity;
- d. flight number;
- e. name of the owner and/or the operator;
- f. name of the pilot in command, the number of crew members, number of passengers, the identity and quality of the personalities on board;
- g. complete itinerary (with the entry and exit points of the comorian territory), estimated days and hours of arrival and departure;
- h. nature of the cargo, quantity, weight;
  - i. charterer and consignee;
  - j. object and purpose of the landing;
- k. copy of the air operation licence;
- l. copy of the insurance policy, airworthiness certificates, registration certificate and operation certificate of the on-board radioelectric instruments of the operated aircrafts;
- m. number of flights;
- n. price of the flights and per seat;
- o. period;
- p. charterer;
- q. partner in the Union of the Comoros:
  - name and full address of the person or entity representing the airline companies in the Union of the Comoros.

The requests of punctual commercial flights must be introduced no later than 10 days before.

**NON-COMMERCIAL OVERFLIGHT AND/OR LANDING**

The requests of authorization for non-commercial overflight and/or landing must be submitted to ANACM in writing, 10 days before the scheduled date of the flight, and by fax, email or AFTN message, no later than 3 days before the scheduled date of the overflight and/or landing in the Union of Comoros and include the following elements:

- a. type and registration of the aircraft;
- b. the nature and limit of validity of the airworthiness certificate;
- c. references of the insurance policy and limit of validity;
- d. flight number;
- e. name of the owner and/or the operator;

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- f. name of the pilot in command, the number of crew members, number of passengers, the identity and quality of the personalities on board;
- g. complete itinerary (with the entry and exit points of the comorian territory), estimated days and hours of arrival and departure;
- h. nature of the cargo, quantity, weight;
- i. charterer and consignee;
- j. object and purpose of the landing.

### **STATE AIRCRAFT FLIGHTS**

The requests for authorization of overflight and/or landing concerning the aircrafts of State, the military aircrafts or aircrafts equipped with field view cameras, weapons or electronic warfare equipments are introduced through diplomatic channels.

They must include the elements listed in “Non-commercial Overflight and/or Landing”.

The diplomatic authorizations that are permanent, special or punctual are granted to any diplomatic mission or international institution regularly accredited which applies the requests to the Ministry of Foreign Affairs under the conditions and required details.

The different types of requests for authorization are:

- a. the requests for annual authorization (permanent), covering the period from 1 January to 31 December of the year, granted to the aircrafts of State;
- b. the requests notice that inform the National Agency of Civil Aviation and Meteorology and the air traffic services the next arrival of a State aircraft which has already obtained a permanent authorization;
- c. the special, punctual or occasional requests, applied for the State aircrafts, military aircrafts or aircrafts equipped with field view cameras, weapons or electronic warfare equipments.

The issuance of these authorizations is the sole responsibility of the Ministry of Foreign Affairs, after coordination with the relevant departments of the Ministry in charge of the transports.

### **AIRPORT(S) OF ENTRY**

All aircraft performing an international flight into or departing from a national aerodrome should make their first landing at, or their final departure from an airport provided with Customs Service, except special derogation.

**CONGO, D.R. OF  
NATIONAL REGULATIONS AND REQUIREMENTS**

## **PASSPORT & VISA**

Required.

*NOTE: Additional requirements may exist. Please contact the appropriate authority to confirm information.*

## **HEALTH**

Vaccinations against yellow fever is required. Vaccinations against cholera, typhoid fever or paratyphoid fever are required of passengers arriving from infected areas. Vaccinations against these diseases are recommended in any case.

## **AIRCRAFT ENTRY REQUIREMENTS**

### **GENERAL**

Authorization is required for all flights landing and overflying the Democratic Republic of Congo, applications shall be submitted at least 72 hours before the intended flight to:

Autorite de l'Aviation Civile

Address: 117, Blvd du 30 Juin, Immeuble SCTP  
Kinshasa/Gombe  
Republique Democratique du Congo

Tel: +243 812237602

E-Mail: [info@aacrdc.org](mailto:info@aacrdc.org)

Internet: [www.aacrdc.org](http://www.aacrdc.org)

### **SCHEDULED FLIGHTS**

Scheduled operations are governed by interstate air agreements or are subject to special authorization.

### **NON-SCHEDULED FLIGHTS**

The application must include the following information:

- a. name of aircraft operator;
- b. aircraft type and registration marks;
- c. dates and times of arrival and departure;
- d. place or places of embarkation or disembarkation abroad, as the case may be, of passengers and/or freight;
- e. purpose of flight and number of passengers and/or nature and amount of freight;
- f. name, address and business of the charterer, if any.

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**CONGO, D.R. OF**  
**NATIONAL REGULATIONS AND REQUIREMENTS****PRIVATE FLIGHTS**

Prior permission is required. A flight plan received by the qualified authority at least 2 hours prior to arrival is accepted as adequate advance notification. First landing must be at an international aerodrome.

**AIRPORT(S) OF ENTRY**

Goma (Intl), Kinshasa (N'Djili Intl), Kisangani (Bangoka Intl) and Lubumbashi (Intl).



**CONGO, REP. OF**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

## **PASSPORT**

Required.

## **VISA**

Required.

Not required of French-speaking African States, except Mali.

Nationals of Germany are requested to present a visa after a stay of 15 days and nationals of Romania for a stay of more than 3 month.

*NOTE: Additional requirements may exist. Please contact the appropriate authority to confirm information.*

## **HEALTH**

An international certificate of vaccination against yellow fever is required. A certificate of vaccination against cholera and meningitis is required if arriving from an infected area.

## **AIRCRAFT ENTRY REQUIREMENTS**

### **GENERAL**

Ministere Charge de l'Aviation

Telex: AVIACIVIL BRAZZAVILLE

AFTN: FCBVYAYX

### **SCHEDULED FLIGHTS**

Scheduled flights are governed by bilateral or multilateral air agreements or special authorization.

### **NON-SCHEDULED FLIGHTS**

Prior authorization is required for overflights and technical landings. French state aircraft and state aircraft of African countries, or flights based on commercial rights, do not need such authorization.

The request for prior permission is to be submitted 5 days before the day of overflight or landing to the Ministere Charge de l'Aviation and must include following information:

- a. type of aircraft;
- b. registration marks of aircraft;
- c. nationality;
- d. owner or charterer of aircraft;
- e. address of owner or charterer;
- f. name, surname of the pilot and nationality (for a private flight pilot must also provide place and date of birth);
- g. crew members;

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**CONGO, REP. OF**  
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- h. number of passengers;
- i. purpose of flight;
- j. date and itinerary of flight.

**PRIVATE FLIGHTS**

An authorization request must be submitted to the authority concerned at least 2 days, but not earlier than 7 days before flight.

**AIRPORT(S) OF ENTRY**

Brazzaville (Maya-Maya), Ollombo (Sassou N'Guesso), Pointe Noire (Antonio Agostinho Neto).

**SPECIAL NOTICES**

Antonov 12 and Antonov 26 operations are prohibited within Republic of Congo territory.

**COTE D'IVOIRE**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

## **PASSPORT**

Required, except for citizens of France or French speaking African states, for whom national identity cards or passports which have expired since less than 5 years are accepted.

## **VISA**

Required, except for:

- citizens of Germany for a stay less than one month;
- foreigners and their spouses with an administration employment contract, provided they possess a mission order and a transportation requisition;
- a “stop-over visa”, which is valid for 7 days, is accepted from nationals of the following countries, provided those passengers are in possession of an onward ticket: Andorra, Belgium, Bolivia, Brazil, Canada, Chile, Colombia, Cuba, Denmark, Ireland, Iceland, Italy, Liechtenstein, Luxembourg, Monaco, the Netherlands, New Zealand, Norway, Paraguay, Peru, San Marino, Sweden, Switzerland, United Kingdom, Uruguay, USA and Venezuela;
- for tourists traveling in groups organized by travel agencies or transportation companies the same regulation applies.

*NOTE: Additional requirements may exist. Please contact the appropriate authority to confirm information.*

## **HEALTH**

Smallpox certificate is required. Yellow fever certificate is only required if the stay exceeds 15 days.

## **AIRCRAFT ENTRY REQUIREMENTS**

### **GENERAL**

For landing and overfly permission contact the following office:

Bureau Autorisation Survol et Atterrissage

Tel: +225 2158 6900 post 3106

Fax: +225 2158 8173

E-Mail: [survolatterrissage@anac.ci](mailto:survolatterrissage@anac.ci)

[anacsvat@yahoo.fr](mailto:anacsvat@yahoo.fr)

AFTN: DIAPYAYX

### **SCHEDULED FLIGHTS**

Scheduled air traffic is governed by international and bilateral or multilateral air agreements. Requests to carry out regular international air services in accordance with international conventions shall be submitted to the Bureau Autorisation Survol et Atterrissage.

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**COTE D'IVOIRE**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

### **NON-SCHEDULED FLIGHTS**

Foreign civil aircraft intending to carry out non-scheduled overflights, as well as commercial or non-commercial landings, must obtain prior authorization. Requests for authorization shall be submitted directly to the Bureau Autorisation Survol et Atterrissage and shall contain the following information:

- a. name of operator;
- b. type of aircraft and registration mark;
- c. date and time of arrival and departure;
- d. place of embarkation or disembarkation abroad, as the case may be, of passengers and/or cargo;
- e. purpose of flight and number of passengers and/or nature and amount of cargo;
- f. name, address and business of charterer;
- g. other information.

### **PRIVATE FLIGHTS**

Prior permission required for all overflights and landings and a flight plan shall be submitted. Application must be submitted to the Bureau Autorisation Survol et Atterrissage (see before) at least 2 days, but not more than 7 days, prior to the commencement of the flight.

### **AIRPORT(S) OF ENTRY**

Abidjan (Felix Houphouet-Boigny), Yamoussoukro.

**DJIBOUTI**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

## **PASSPORT & VISA**

All foreign passengers arriving in Republic of Djibouti intending to entry, must be in possession of a valid passport and an entry or transit visa.

*NOTE: Additional requirements may exist. Please contact the appropriate authority to confirm information.*

## **HEALTH**

Disembarking passengers and crew are not required to present any certificates of vaccination except when coming directly from an area infected with cholera, yellow fever or small pox.

## **AIRCRAFT ENTRY REQUIREMENTS**

### **GENERAL**

Office de l'Aviation Civile

Ministere de l'equipement et des Transports

Address: B.P. 2609

Republique de Djibouti

Tel: +253 21 340151

Fax: +253 21 340169

E-Mail: civilaviation@intnet.dj

AFTN: HDAHYYX

### **SCHEDULED FLIGHTS**

#### **Overflights and technical stops**

Aircraft belonging to a State being a party of the international Air Services Transit Agreement or benefiting from a bilateral air agreement may overfly the Territory of Djibouti or make technical stops under provisions prescribed in these agreements.

#### **Commercial stops**

The operation of scheduled flight for commercial purpose must be done under cover of either provisions contained in the air transport bilateral agreements concluded between Djibouti and the State to which the operating carrier belongs, or specific permissions granted by the Ministere de l'equipement et des Transports.

An application for permission accompanied with detailed schedule must be transmitted to the Ministry mentioned herein above, at least 6 weeks before the beginning of flights.

**DJIBOUTI**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

## **NON-SCHEDULED FLIGHTS**

### **Overflying and technical stops**

If an operator intends to carry out a non - scheduled flight for purpose of transiting or making technical stops at Republic of Djibouti territory, he shall apply to the Ministère de l'équipement et des Transports, for permission, no less than 72 hours in advance of the intended flight.

### **Commercial stops**

If an operator intends to perform non-scheduled flights in Djibouti International Airport for purpose of embarking or disembarking passengers, cargo or mail, he shall apply to the Ministry of Transport for permission at least six (6) weeks in advance of the intended date of operation. Exceptionally, ten days before the date of the flight, for the following countries: Somalia, Yemen, Ethiopia, and Saudi Arabia.

Approval must be confirmed before flight.

The application must include the following information in the order shown below:

- a. name of operator;
- b. call sign, type of aircraft and registration marks;
- c. date and time of arrival and departure from Djibouti/Ambouli International Airport;
- d. point of departure or destination as the case may be of passengers and/or cargo;
- e. purpose of the flight, number of passengers and/or nature and amount of freight;
- f. name, address and business of charterer, if any;
- g. responsible authority for air navigation, landing, and parking charges: full billing address (postal address, Tel, Fax and e-mail address).

## **PRIVATE FLIGHTS**

An application of permission must be addressed to the Ministère de l'équipement et des Transports at least 72 hours before the estimated time of arrival.

## **AIRPORT(S) OF ENTRY**

Djibouti (Ambouli).

## EGYPT NATIONAL REGULATIONS AND REQUIREMENTS

### PASSPORT

Required.

A crew member certificate is accepted in lieu of passport or visa.

### VISA

Required, except of passengers in direct transit.

*NOTE: Additional requirements may exist. Please contact the appropriate authority to confirm information.*

### AIRCRAFT ENTRY REQUIREMENTS

#### GENERAL

Applications for flights from or to or overflying or within Egyptian territory should be submitted to the Head of Central Air Transport Department through authorized agents or companies' office in Egypt:

Head of Central Air Transport Department

Address: Egyptian Civil Aviation Building  
Airport Road  
Cairo  
Egypt  
11776

Tel: +202 22678541

Fax: +202 22688231

AFS: HECAYAYX

Any civilian aircraft carrying passengers or military equipments or dangerous goods is not permitted to overfly Egyptian territory or land or take off unless a special request for the flight/flights is submitted to Central Air Transport Department and completing the forms prepared for that purpose at least 15 days before operation to get the necessary permissions.

Terms and conditions regarding the designation of foreign carriers to operate regular flights to and from Egypt:

- a. a bilateral air services agreement is held with the State of the operator on condition that the article of designation permits so;
- b. submitting the request of designation through Civil Aviation Authority of the operator's State or through diplomatic channels according to what is stipulated in the bilateral agreement attached by the following:
  1. the establishment contract of the company including essential ownership;
  2. a copy of the air operator certificate;
  3. a copy of the operation specifications of the company;

**EGYPT**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

4. a list of the aircraft fleet;
5. a copy of registration certificates;
6. a copy of airworthiness certificates;
7. a copy of noise certificates;
8. a copy of insurance certificates including insurance on passenger, cargo, mail, third party and crew;
9. documents proving the air carriers' authorization in ICAO;
10. documents proving the air carriers' membership in IATA;
11. the address of the sales' carrier office, or the name and address of the Sales General Agent and both a copy of his contract and the authorization bearing that the sales address must be located in Egypt.

### **SCHEDULED FLIGHTS**

Procedures to be followed in case of operating regular international flights to, from or over Egyptian territory:

- a. Airlines must operate their flights according to bilateral or collective agreement which Egypt and the carrier's State is a party in it. It must get a permission for operation in advance and according to the conditions contained therein from Civil Aviation Authority.
- b. Regular operation requests must be submitted to Civil Aviation Authority at least 30 days prior operation in order to issue the necessary permits.
- c. Regular operation requests must include the following data:
  1. carrier's name and nationality;
  2. aircraft type, registrations and seats' capacity;
  3. period of operation according to IATA (winter/summer season);
  4. route(s);
  5. days of operation;
  6. flight frequency;
  7. number of flights;
  8. arrival/departure time in UTC;
  9. price list for each route.
- d. A permission must be obtained from Civil Aviation Authority regarding any amendment to regular flights a week prior operation mentioning reasons for this amendment.
- e. Any designated regular carriers willing to operate to/from Cairo (Intl) airport should fulfill the following requirements:
  1. to be an IATA member with IATA operating code and accounting number;



## EGYPT NATIONAL REGULATIONS AND REQUIREMENTS

2. operating aircraft with different classes to serve different categories of passengers according to the following conditions:
  - (a) physical separation between two different classes in two different places on board aircraft;
  - (b) airline marketing for the premium service considering it a privileged class and not just offering additional services in return for extra fees;
  - (c) offering different price categories for the privileged class and not just procuring extra fees;
  - (d) taxes procurement according to imposed rules related to different class service.
3. submitting their implemented fares to the ECAA upon request;
4. making a contract with one of the international GDS' and selling through it;
5. the importance of having at least one agreement for the exchange of flight documents with one of the operating carriers to/from Cairo (Intl) airport.
- f. A committee of inspectors from Central Air Transport Department should inspect (internally and externally) on air carriers willing to operate regular flights to Cairo (Intl) airport on the expense of the investor to determine the constituents of operation for these companies and comply with the necessary requirements.

## NON-SCHEDULED FLIGHTS

### Public Charter Flights

Applications must be submitted according to procedures established at least 1 week before operation, including the following data:

- a. carrier's name and its nationality;
- b. aircraft type, registration and seats capacity;
- c. route(s);
- d. days of operation;
- e. flight frequency;
- f. arrival/departure time in UTC;
- g. flight levels in Cairo FIR;
- h. purpose of flight;
- i. copy of contract between air carrier and leased party of flight;
- j. nature of load;
- k. nationality and number of passengers;
  - l. names of passengers on flights less than 10 passengers;
- m. name and address of passengers' representative in Egypt.

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**EGYPT**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

**Overflying, Technical Landing and Ambulance Flights**

Applications must be submitted early enough prior operation, including the following data:

- a. carrier's name and nationality;
- b. aircraft type, registration and seats capacity;
- c. route(s);
- d. days of operation;
- e. flights frequency;
- f. arrival departure time in UTC;
- g. flight levels in Cairo FIR;
- h. purpose of flight;
- i. copy of contract between air carrier and leased party of flight;
- j. nature of load;
- k. passengers' nationality.

**Special Flights**

For flights under special flight permit from the country of registration, the applicant shall submit the documents mentioned at Overflying, Technical Landing and Ambulance Flights and following documents:

- a. requests for flights to/from or over flying or into Egyptian territory;
- b. copy of special flight issued by the country of registration includes the limitations;
- c. any further requirements by the ECAA.

**Cargo Flights**

Applications must be submitted at least 1 week before operation, including the following data:

- a. carrier's name and nationality;
- b. aircraft type, registration and maximum capacity;
- c. route(s);
- d. days of operation;
- e. flights frequency;
- f. shipping agent name;
- g. arrival/departure time in UTC;
- h. purpose of flight;
- i. copy of contract between air carrier and leased party of flight;
- j. nature of load;

**EGYPT**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

- k. amount of cargo to/from Egypt.

**Air Taxi Flights**

Applications must be submitted at least 1 week prior operation, including the following data:

- a. carrier's name and nationality;
- b. aircraft type, registration and seats capacity;
- c. route(s);
- d. days of operation;
- e. flights frequency;
- f. arrival/departure time in UTC;
- g. flight levels in Cairo FIR;
- h. purpose of flight;
  - i. copy of the contract between air carrier and leased party of flight;
  - j. nationality and number of passengers;
- k. passengers name on flights less than 10 passengers;
  - l. name and address of passengers' representative in Egypt.

**Inclusive Tourist Flights (Charter)**

The following rules shall be applied on the charter flights to and from Egypt operated by Egyptian and foreign airlines:

- a. Permission may be granted to Egyptian and foreign air carriers operating charter tourist flights to carry international tourists
  - 1. without restrictions from any foreign airports to land at all civilian airports in Egyptian territory except Cairo (Intl) airport;
  - 2. to land at Cairo (Intl) airport carrying the same tourist group from the first destination airport in Egypt and back to point of origin;
  - 3. to land at Cairo (Intl) airport if these flights departing from countries not served by Egyptian company.
- b. Foreign air carriers operating charter tourist flights are not allowed to operate flights within the Egyptian territory and this is limited only for Egyptian air carriers.
- c. Inspectors from Central Air Transport Department at Civil Aviation Authority shall ensure that international departing tourists by charter flights are those who had been arrived within a tourist group. All of this is done according to determined regulations and to make sure that those flights are carrying tourist groups (not individual passengers) according to charter program submitted by air carriers.

**EGYPT**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

- d. Requests for inclusive tourist flights to or from Egypt must be submitted by operators or their authorized agents at least 15 days before operation.
- e. Operations requests for inclusive tourist flights must include the following data:
  - 1. name, address and nationality of the air carrier;
  - 2. name, address and nationality of the foreign company organizing the flights;
  - 3. name, address, telephone and fax number of the Egyptian agent for air services;
  - 4. name, address, telephone and fax number of the Egyptian tourist agent;
  - 5. beginning and end date of the program with the price per person;
  - 6. copy of the contract between air carrier and travel agent;
  - 7. aircraft type;
  - 8. capacity and number of passengers;
  - 9. lease price for round trip flight;
  - 10. period of operation;
  - 11. route(s);
  - 12. days of operation;
  - 13. number of flights for each route;
  - 14. arrival/departure time in UTC;
  - 15. tourist program;
  - 16. number of tourist nights per tourist group;
  - 17. hotel reservations in the different cities and the period of reservation;
  - 18. means of internal transportation.
- f. The air carrier will not be permitted to sell individual tickets or deal directly with the passengers but through tourist groups within a program including travel and accommodation, in this sequence the Central Administration of Air Transport shall be provided with a model of travel tickets or travel coupon used at the beginning of every operation.
- g. The air carrier is obliged to return tourists groups which are carried to/from Egypt to the State of origin.
- h. A permission must be obtained from Civil Aviation Authority for any amendment to the approved flight program for the inclusive tourist flights. Passengers are not permitted to be carried except those who had been reserved their seats through the designated tourist agents or concerned air carrier and who paid the total price including air transport, hotel accommodation and ground transportation.
- i. The air carrier is obliged to strictly adhere to limits and conditions of the permission concerning either timing or aircraft types or capacity or routes.

**EGYPT**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

**PRIVATE FLIGHTS**

Applications must be submitted before operation including the following data:

- a. aircraft type, registration and seats capacity;
- b. route(s);
- c. days of operation;
- d. flights frequency;
- e. arrival/departure time in UTC;
- f. purpose of flight;
- g. passengers' nationality.

**AIRPORT(S) OF ENTRY**

Al Alamain (Intl), Alexandria (Borg El Arab Intl), Alexandria (Intl), Almaza (AB), Aswan (Intl), Asyut (Intl), Cairo (Intl), Capital (Intl), El Arish (Intl), Hurghada (Intl), Luxor (Intl), Marsa Alam (Intl), Mersa Matruh (Intl), Sharm El Sheikh (Intl), Suhag (Intl), Taba (Intl).

**SPECIAL NOTICES**

Permission number and name of authorized agent in Egypt must be included in Item 18 of FPL (except commercial flights).

All aircraft registered in the state of Qatar are not authorized to overfly Egyptian airspace, depart or land at Egyptian aerodromes. Operators not registered in A.R.E. intending to use Egyptian airspace from or to the state of Qatar require prior approval from ECAA on the following contact:

ECAA

Tel: +202 22678535  
+202 24175605

AFTN: HECAYAYX

**ERITREA  
NATIONAL REGULATIONS AND REQUIREMENTS****PASSPORT**

Required.

**VISA**

Required except for the following:

- a. nationals of Eritrea residing abroad and holding a national identity card;
- b. holders of an Eritrean passport;
- c. nationals of China, Kenya and Uganda holding a national passport;
- d. holders of a re-entry permit issued in Eritrea;
- e. passengers who booked an onward flight within 72 hours;
- f. flight crews members on duty, however, if duration of stay is longer than on flight information papers.

*NOTE: Additional requirements may exist. Please contact the appropriate authority to confirm information.*

**HEALTH**

A valid certificate of vaccination against yellow fever, cholera and small pox is required of passengers and crew members coming from infected areas.

**AIRCRAFT ENTRY REQUIREMENTS****GENERAL**

Application for overflight and landing shall be directed to the attention of:

Ministry of Transport and Communications

Address: Civil Aviation Authority (CAA)  
Eghrimekel Avenue 759  
P.O. Box 252  
Asmara  
Eritrea

Tel: +291 1 181424  
+291 1 189670

Fax: +291 1 181520

Applications for overflying the Eritrean airspace should be submitted to the CAA at least 72 hours prior to the flight operation.

Overflights and landing requests are handled during holidays and outside office hours by:

Asmara Air Traffic Control Center (ACC)

Address: Asmara International Airport

**ERITREA**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

P.O. Box 5846

Asmara

Eritrea

Tel: +291 1 152758

+291 1 152122 ext. 216, 302

AFTN: HHAAZQZX

## **SCHEDULED FLIGHTS**

### **General**

Scheduled international operations are governed by bilateral or multilateral air agreement and require a permit. Application for permission accompanied with detailed schedule must be transmitted to the Eritrean CAA at least 30 days before the flight and shall include the following documents:

- a. copy of air operator certificate;
- b. copy of aircraft registration certificate;
- c. copy of aircraft airworthiness certificate;
- d. copy of aircraft noise certificate;
- e. copy of aircraft insurance certificate;
- f. original letter of undertaking (company letter head) stating that the company will take full responsibility for the aircraft in the event of violation, incident or accident or whatsoever aviation occurrence with the authorized signature and company stamp affixed;
- g. copy of aircraft lease agreement if applicable.

### **Overflights and Technical Stops**

Aircraft belonging to a State being a party of the international Air Services Transit Agreement or benefiting from a bilateral air agreement may overfly the territory of Eritrea or make technical stops under provisions prescribed in these agreements.

### **Commercial Stops**

The operation of scheduled flight for commercial purpose must be done under cover of:

- either provisions contained in the air transport bilateral agreements concluded between Eritrea and the State to which the operating carrier belongs; or
- specific permissions granted by the CAA.

## **NON-SCHEDULED FLIGHTS**

If an operator intends to carry out the following flights, he must be in possession of a valid permit to do so before departure from the preceding stop:

- a. non-scheduled flights in transit across or non-traffic stops in the territory of Eritrea;

**ERITREA**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

- b. non-scheduled flights into Eritrea for the purpose of taking on or discharging passengers.

The application must reach the CAA not less than 3 working days in advance of the intended date of operation.

The details of the application for non-scheduled flights to either land in or overfly the Eritrean airspace, should include the following information:

- a. name of the aircraft operator/owner (complete address of the operator or owner of the aircraft);
- b. type and registration mark of the aircraft;
- c. call sign of the aircraft;
- d. point of departure and destination;
- e. point of entry and exit;
- f. purpose of flight;
- g. date and time of intended flight;
- h. type of cargo and weight and number of passengers;
- i. billing address for air navigation charges.

*NOTE: No foreign aircraft shall be permitted to overfly the Eritrean airspace unless the aircraft and/or operator has a confirmed address which should be responsible for the payment of air navigation service charges.*

### **STATE OR MILITARY AIRCRAFT FLIGHTS**

No foreign military aircraft or civil aircraft flying military persons or equipment is permitted to enter, leave or overfly the Eritrean airspace unless applications have been submitted through diplomatic channels approved by the designated authorities and notified to the CAA.

The application for permits must be submitted 15 days in advance to:

Ministry of Foreign Affairs

Address: P.O. Box 190  
Asmara  
Eritrea

Tel: +291 1 125152

Fax: +291 1 125127

The details of the application for permission are the same as shown for NON-SCHEDULED FLIGHTS.

### **EMERGENCY FLIGHT OPERATION**

The details of the application for permission are the same as for NON-SCHEDULED FLIGHTS.



**ERITREA**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

**PRIVATE FLIGHTS**

All private flights are subject to the requirements described hereafter:

- a. An application of permission must be addressed to the CAA at least 72 hours before the ETA.
- b. A flight plan must be filed, even for VFR flights and sent within required time.
- c. Establish communication with the control tower at least 10 minutes before entering Asmara TMA.
- d. Arriving and departure must be carried out at Asmara (Intl) airport.

Application for permission must be sent to the CAA and should include the following:

- a. copy of aircraft registration certificate;
- b. copy of aircraft airworthiness certificate;
- c. copy of aircraft noise certificate;
- d. aircraft insurance certificate;
- e. copy of aircraft lease agreement if applicable.

Further requirements will be as for NON-SCHEDULED FLIGHTS but with the following additional documents:

- a. copy of airmen certificate and medical certificate for each flight crew member involved;
- b. copy of currency check for each flight crew member involved;
- c. operational hours related to request for overflying and landing.

**CIVIL USE OF MILITARY AIR BASES**

Use of military air bases in Eritrea by other than State registered aircraft may be made solely when prior permission has been obtained. The use of military air bases as alternate aerodromes may likewise be made solely when prior permission has been obtained.

**AIRPORT(S) OF ENTRY**

Asmara (Intl), Massawa (Intl), Assab (Intl).

**ESWATINI**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

## **PASSPORT**

Required.

## **VISA**

Required, except for the following:

- holders of a valid temporary Residence or Entry Permit;
- holders of a valid Entry Permit;
- citizens of the following countries: Andorra, Anguilla, Antigua and Barbuda, Argentina, Australia, Austria, Azerbaijan, Bahamas, Barbados, Belgium, Belize, Bermuda, Bosnia-Herzegovina, Botswana, Brazil, British Indian Ocean Territory, British Virgin Islands, Brunei, Bulgaria, Burkina Faso, Canada, Cayman Islands, Channel Islands, Chile, Cook Islands, Croatia, Cyprus, Czech Republic, Denmark, Dominican Republic, Estonia, Falkland Islands, Faroe Islands, Finland, France, Gambia, Germany, Ghana, Gibraltar, Greece, Greenland, Grenada, Guernsey, Guyana, Hungary, Ireland, Isle of Man, Israel, Italy, Jamaica, Japan, Jersey, Kenya, Kuwait, Latvia, Lesotho, Liechtenstein, Lithuania, Luxembourg, Madagascar, Malawi, Malaysia, Maldives, Malta, Mauritius, Monaco, Montenegro, Montserrat, Mozambique, Namibia, Nauru, Netherlands, New Zealand, Niue, Norfolk Islands, North Mariana Islands, Norway, Palestine, Papua New Guinea, Pitcairn Islands, Poland, Portugal, Qatar, Reunion, Romania, Russia, St. Helena, St. Lucia, St. Pierre and Miquelon, San Marino, Sark, Serbia, Seychelles, Sierra Leone, Singapore, Slovakia, Slovenia, Solomon Islands, South African Republic, Spain, Svalbard and Jan Mayen Islands, Sweden, Switzerland, Taiwan, Tanzania, Timor-Leste, Tokelau, Tonga, Trinidad, Turks and Caicos Islands, Tuvalu, Uganda, Ukraine, U.A.E., United Kingdom, Uruguay, USA, Vanuatu, Vatican State, Wallis and Futuna Islands, Western Samoa, Zambia, Zimbabwe.

*NOTE: Additional requirements may exist. Please contact the appropriate authority to confirm information.*

## **HEALTH**

Disembarking passengers above the ages of 1 year must have a valid vaccination certificate against yellow fever, if arriving within 6 days after leaving or transiting infected areas.

## **AIRCRAFT ENTRY REQUIREMENTS**

### **GENERAL**

Eswatini Civil Aviation Authority

Address: P.O. Box D361  
The Gables  
Eswatini

Tel: +268 2518 4390  
+268 2518 4047  
+268 2518 4081

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**ESWATINI**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

Fax: +268 2518 4199  
E-Mail: [info@swacaa.co.sz](mailto:info@swacaa.co.sz)  
Internet: [www.swacaa.co.sz](http://www.swacaa.co.sz)

### **SCHEDULED FLIGHTS**

Scheduled operations are governed by bilateral or multilateral agreements.

### **NON-SCHEDULED FLIGHTS**

No prior permission is required for overflights and non-traffic stops. Prior permission is required for a series of commercial flights. The application shall be submitted 24 hours (the 24 hours shall not include Saturdays, Sundays and Public holidays) in advance to Eswatini Civil Aviation Authority.

The following information shall be submitted:

- a. name of operator;
- b. type of aircraft and registration marks;
- c. date and time of arrival at, and departure from Eswatini;
- d. place or places of embarkation/disembarkation abroad, as the case may be of passengers and/or freight;
- e. purpose of flight and number of passengers and/or nature and amount of freight;
- f. name, address and business of charterer, if any.

### **PRIVATE FLIGHTS**

Prior notification is required for private flights. The information contained in the flight plan is accepted as adequate advance notification of the arrival of incoming aircraft.

### **AIRPORT(S) OF ENTRY**

Manzini (Matsapha Intl), Sikhuphe (Intl).

**ETHIOPIA**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

## PASSPORT

Required, except for:

- a. holders of a Laissez-passer issued by the United Nations, the Organization of African Unity and the African Development Bank and if traveling on duty;
- b. holders of a Seaman Book issued by any country and if traveling on duty.

*NOTE: Crew member licenses or certificates are accepted instead of a passport for crew members on scheduled or non-scheduled air service.*

## VISA

Required, except for:

- a. citizens of Kenya and Djibouti who intend to stay in Ethiopia for a maximum of three (3) months;
- b. citizens of Djibouti holding diplomatic, special and official passports issued by the government of Djibouti, when traveling on duty;
- c. citizens of Algeria holding diplomatic or service passports provided the mission stay in Ethiopia is less than 90 days;
- d. foreign nationals of Ethiopia origin who are in possession of ID cards of nationals of Ethiopian origin.

*NOTE: Additional requirements may exist. Please contact the appropriate authority to confirm information.*

## HEALTH

A valid certificate of vaccination against yellow fever is required of passengers over one year of age coming from infected areas and also when leaving Ethiopia.

*NOTE: Transit passengers not leaving the airport are exempted.*

## AIRCRAFT ENTRY REQUIREMENTS

### GENERAL

Applications for overflights and landing shall be directed to the attention of:

Ethiopian Civil Aviation Authority

Address: P.O. Box 978  
Addis Ababa  
Ethiopia

Tel: +251 11 66 50 252  
+251 11 66 50 200 Ext 293, 349

Fax: +251 11 66 50 515  
+251 11 66 50 281

**ETHIOPIA**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

+251 11 66 50 269

E-Mail: civil.aviation@ethionet.et

AFTN: HAAAYAYX

### **SCHEDULED FLIGHTS**

Scheduled operations are governed by bilateral or multilateral air traffic agreements. For regular international scheduled flights operated by foreign airlines into, from or in transit across Ethiopia prior notification has to be sent to the Ethiopian Civil Aviation Authority.

### **NON-SCHEDULED FLIGHTS**

Prior permission is required for all non-scheduled commercial, non-commercial and private flights. The application shall be submitted not less than 24hr in advance.

Application shall include the following information:

- a. operator and owner of aircraft (complete address of operator or charterer of the aircraft);
- b. call sign, registration marks and type of aircraft;
- c. point of destination and departure;
- d. date and time of arrival at and of departure from the airport concerned;
- e. purpose of flight and number of passengers and/or description and weight of cargo;
- f. point of entry into Ethiopia and route;
- g. point of exit from Ethiopia and route;
- h. postal address of the operator for billing.

Emergency medical evacuation flights shall request flight permission in the form of a telefax, AFTN message or a telephone call from the Civil Aviation Authority Air Operations & Nav Aids Department or, during weekends, holidays and outside working hours, the:

Addis Ababa Area Control Center (ACC)

Tel: 180789

AFTN: HAAAZQZX

For charter flights a charter licence is required in addition. Application shall reach the Ethiopian Civil Aviation Authority at least 7 days prior to the proposed flight and shall include the following information:

- a. operator and owner of aircraft (complete address of the operator or charterer of the aircraft) and local agent, if any;
- b. call sign, registration marks and type of aircraft;
- c. point of departure and destination.
- d. date and time of arrival at and departure from the airport concerned;
- e. type of charter;

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**ETHIOPIA**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

- f. conformity or non-conformity with IATA Resolution 045;
- g. complete itinerary, including date, times (UTC) and places;
- h. number of crew and number of passengers and/or description and weight of cargo;
- i. copy of a completed charter application using the form shown as attachment to IATA Resolution 045;
- j. names of passengers if charter originated in Ethiopia.

### **STATE AIRCRAFT FLIGHTS**

A permission of the Ministry of Foreign Affairs is required. Application should be directed to:

Ministry of Foreign Affairs

Address: P.O. Box 393

Addis Ababa

Tel: +251 11 551 4300

Fax: +251 11 551 1244

+251 11 551 4300

E-Mail: mfa.addis@ethionet.et

Particulars in NON-SCHEDULED FLIGHTS shall be applicable.

### **AIRPORT(S) OF ENTRY**

Aircraft landing in or departing from Ethiopia must first land at or finally depart from an international aerodrome.

**GABON**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

## **PASSPORT**

Required.

## **VISA**

Required, except from nationals of CEMAC (ex-UDEAC) countries, France and Germany.

*NOTE: Additional requirements may exist. Please contact the appropriate authority to confirm information.*

## **HEALTH**

International certificate of vaccination against yellow fever is required. Vaccinations against plague and cholera are only necessary if passengers arrive from areas infected by this disease.

## **AIRCRAFT ENTRY REQUIREMENTS**

### **GENERAL**

Ministere des Transports

Address: B.P. 2087

Libreville

Tel: +241 01 77 2032

Fax: +241 01 72 1965

### **SCHEDULED FLIGHTS**

International scheduled flights are governed by interstate air agreements or special authorization.

### **NON-SCHEDULED FLIGHTS**

Permission is required for one or series of non-scheduled flights for overflights and landings. The permission request is required 2 days in advance before aircraft arrival and must contain the following:

- a. name of operator;
- b. aircraft type and registration marks;
- c. arrival/departure date and time;
- d. place of passenger/cargo embarkation/disembarkation abroad, if necessary;
- e. name, address and business of charterer;
- f. name of pilot-in-command;
- g. number of crew members;
- h. number of passengers;
- i. nature of cargo;
- j. purpose of flight;

**GABON**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

k. complete itinerary.

Additional information may be required.

### **STATE AIRCRAFT FLIGHTS**

Foreign State aircraft which intend to land on or overfly Gabon territory are subject to special authorization granted by the Minister for Public Works and Transport in charge of Civil Aviation in consultation with the Minister of Home Office. Applications shall reach the Minister of Foreign Affairs 5 work days in advance.

Additionally the Minister of Public Works and Transport must be informed 48 hours in advance through diplomatic channels.

The application must contain the following:

- a. type of aircraft;
- b. registration marks;
- c. date and time of intended overflight or landing;
- d. purpose of flight;
- e. owner or charterer of aircraft;
- f. complete itinerary.

### **AIRPORT(S) OF ENTRY**

Libreville (Leon M'ba), Port Gentil, Moanda (Bangombe), Franceville (M'Vengue).



**GAMBIA**  
**ENTRY DATA - STATE PAGES**

## **PASSPORT**

Required. A valid official identity document such as a national registration card or alien resident permit is accepted in lieu of a passport.

## **VISA**

Required. Visa is being issued by a Consulate of The Gambia abroad.

*NOTE: Additional requirements may exist. Please contact the appropriate authority to confirm information.*

## **HEALTH**

A valid certificate of vaccination required only when arriving from an infected or endemic area.

## **AIRCRAFT ENTRY REQUIREMENTS**

### **SCHEDULED FLIGHTS**

Scheduled operations are governed by international bilateral or multilateral agreements and require an operating permit. Application shall be submitted to:

The Director General

Gambia Civil Aviation Authority

Address: Banjul International Airport  
Yundum

Tel: +220 4472831  
+220 4472730

Fax: +220 4472190

Telex: 22342 CAA BJL GV  
CIVILAIR BANJUL

AFS: GBYDYAYX

### **NON-SCHEDULED FLIGHTS**

Non-scheduled operations for the purpose of embarking or disembarking passengers, cargo or mail require prior permission. Applications shall be submitted to the Gambia Civil Aviation Authority (see address above) not less than 72 hours before landing and shall contain the following information in the order shown:

- a. name of operator;
- b. type of aircraft and registration marks;
- c. purpose of flight, number of passengers and/or nature and amount of freight;
- d. dates and times of arrival and intended departure;
- e. name, address and business of the charterer, if any.

**GAMBIA**  
**ENTRY DATA - STATE PAGES**

**PRIVATE FLIGHTS**

The information contained in the FPL is accepted as adequate advance notification of arrival.

Requests for overflight and technical landing of civil aircraft are to be addressed to the Gambia Civil Aviation Authority (see address above).

**AIRPORT(S) OF ENTRY**

Aircraft must first land at or finally depart from Banjul Intl.

**SPECIAL NOTICES****LANDING OTHER THAN AT BANJUL INTL AIRPORT**

If landing is made other than at Banjul Intl Airport, the pilot-in-command will report the landing to Banjul Tower by any convenient communication link. The pilot-in-command is responsible for ensuring that:

- a. contact between passengers and crewmembers to other persons is avoided;
- b. cargo, baggage and mail are not removed from the aircraft except as provided below;
- c. any food, agricultural products or plants are not removed from the aircraft except supplying the persons on board the aircraft due to the lack of local food.

**GHANA**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

## **PASSPORT & VISA**

Required.

*NOTE: Additional requirements may exist. Please contact the appropriate authority to confirm information.*

## **HEALTH**

Disembarking passengers are required to present their vaccination certificates for examination. On departure vaccination and inoculation certificates are normally required.

## **AIRCRAFT ENTRY REQUIREMENTS**

### **GENERAL**

Director General

Ghana Civil Aviation Authority

Address: Private Mail Bag  
Kotoka International Airport  
Accra  
Ghana

Tel: +233 302 770329

Fax: +233 302 770329

E-Mail: [ais@caa.com.gh](mailto:ais@caa.com.gh)

SITA: ACCXTYF

AFS: DGAAYNYX

### **Customer and Permit Administration Web Portal**

With the introduction of the Customer and Permit Administration software by the Ghana Civil Aviation Authority (GCAA) for the processing of landing and overflight permit requests, all airlines are to use the software in all permit applications by logging on to <https://portal.caa.com.gh>.

## **SCHEDULED FLIGHTS**

Scheduled operations are governed by bilateral or multilateral agreements and are subject to prior permission. Application for such permits shall be submitted to Director General of Ghana Civil Aviation Authority.

## **NON-SCHEDULED FLIGHTS**

Prior authorization is required for non-scheduled flights into Ghana for the purpose of taking on or discharging passengers, cargo or mail or fly over Ghana. The application shall be submitted to the Director General of Ghana Civil Aviation Authority.

The application shall be submitted at least 2 days in advance to the above address, and shall include the following information:

**GHANA**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

- a. name of operator and address;
- b. type of aircraft;
- c. registration of aircraft;
- d. estimated date and time of arrival/departure;
- e. point of departure and destination;
- f. name and address of charterer or local agent;
- g. pilots name and nationality;
- h. number of persons on board;
- i. purpose of flight;
- j. type of cargo on board;
- k. type of arms and ammunition, if any on board;
  - l. postal address of the organization settling the tariff;
- m. full itinerary in airspace; point of entry and point of exit;
- n. base of aircraft.

In addition to above, applications for landing permit to any airport in Ghana for non-scheduled flights should include the crew and passenger bio-data including:

- a. dates and place of birth;
- b. nationalities;
- c. passport numbers;
- d. dates and place of issue; and
- e. expiry dates.

Non-scheduled flights operating within the Accra FIR must include the name and billing address of the Operator/Agency on the flight plan submitted for the flight.

### **PRIVATE FLIGHTS**

Prior permission is required. A flight plan received by the Public Authorities concerned at least 2 hours prior to arrival is accepted as adequate advance notification.

### **DIPLOMATIC FLIGHTS**

Application for permission must be submitted to the Ministry of Foreign Affairs (Protocol Division), Accra, Ghana, at least 48 hours in advance of entry into Ghana airspace.

### **AIRPORT(S) OF ENTRY**

Aircraft shall first land at and finally depart from Accra (Kotoka).

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**GUINEA BISSAU**  
**NATIONAL REGULATIONS AND REQUIREMENTS****AIRCRAFT ENTRY REQUIREMENTS****GENERAL**

Agence Nationale de l'Aviation Civile de Guinee Bissau (AACGB)

Address: Boite Postale 77

Tel: +245 325 6275

Fax: +245 320 1265

AFTN: GGOVYAYX

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**GUINEA REP.  
NATIONAL REGULATIONS AND REQUIREMENTS**

## **PASSPORT**

Required.

Crew member licenses or certificates are accepted in lieu of passport and visa.

## **VISA**

Required, except of passengers in transit and aliens of countries having signed reciprocal agreements with Guinea.

## **HEALTH**

Vaccination certificate against yellow fever is required.

## **AIRCRAFT ENTRY REQUIREMENTS**

### **SCHEDULED FLIGHTS**

Scheduled operations are governed by interstate air agreements and must have a permit to operate into or in transit across the territory of Guinea. Requests for such permits shall be submitted 8 days in advance to the:

Civil Aviation Authority

Address:        P.O. Box 95  
                    Conakry  
                    Guinea

### **NON-SCHEDULED FLIGHTS**

If an operator intends to effect non-scheduled flights across Guinean territory or to land he has to give telex information to the Department of Civil Aviation at least 3 days in advance. This notice shall include the following data:

- a. name of operator;
- b. type of aircraft and call sign;
- c. arrival date and time of departure;
- d. origin and destination of flight;
- e. purpose of the flight.

Commercial landings at Conakry are subject to prior permission 8 days in advance from the:

Civil Aviation Authority

Address:        P.O. Box 95  
                    Conakry  
                    Guinea

Tel:              +224 656888106  
                    +224 664449889

**GUINEA REP.  
NATIONAL REGULATIONS AND REQUIREMENTS**

+224 657544323

Telex: Civil Aviation Conakry

E-Mail: Diakisekou@yahoo.fr

Tolnofara1@yahoo.fr

AFTN: GUCYYAYX

### **PRIVATE FLIGHTS**

For overflights and landings of private aircraft a request for overflight or landing clearance shall be submitted at least 72 hours in advance to the Civil Aviation Administration. This request shall include the following details:

- a. date of flight;
- b. type of aircraft and registration marks;
- c. name of pilot;
- d. names and nationality of passengers;
- e. aerodrome of technical landing;
- f. estimated time of arrival;
- g. itinerary of flight.

### **AIRPORT(S) OF ENTRY**

First landing shall be made at and final departure from Conakry (Gbessia) airport.

**KENYA**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

## **PASSPORT**

Any person entering Kenya must hold a passport which is valid for a period of at least 6 months.

Exceptions:

- a. Expired passports issued to Nationals of Kenya.
- b. Identity cards issued to Nationals of Kenya.
- c. Identity cards issued to Nationals of East Africa provided they are entering directly from East Africa.
- d. Laissez-passer issued by the Kenya government, provided the document is valid for onward and return travel.
- e. Laissez-passer issued by the United Nations, provided that they must hold tickets and other documents (including visa, if required) for onward and return travel.
- f. Military identity card (with movements to leave order) issued to the Deterrent, Emergency, UN interim (UNIFILL) and UN Security Forces.
- g. Seaman book (traveling on duty) issued by any country.

*NOTE: This application should be sent to the airport immigration authority at least 48 hours before the time of arrival.*

- h. Travel document (Titre de Voyage) for refugees according to the London Convention of 1946 and the Geneva Convention of 1951, issued by any country. They must have prior permission from the immigration department and the travel document should have a valid return visa from the issuing country.

## **VISA**

Required except as follows:

- a. Nationals of Kenya and members of the Commonwealth countries and Ireland, excluding nationals of Nigeria, Australia and British passport holders.
- b. Children under 15 years of age accompanied by their parents:
  - those whose father is a Kenyan national; or
  - those whose parents are residents of Kenya, who are business owners and/or company managers holding an entry visa.
- c. Holders of diplomatic passports, provided they are accredited in Kenya.
- d. Persons of Kenya descent provided they are holding a Kenya identity card or expired Kenya passport.
- e. UN staff, being diplomats, holding diplomatic cards, issued by the Kenyan Ministry of Foreign Affairs.
- f. Alien residents in possession of a valid resident permit card.



## KENYA NATIONAL REGULATIONS AND REQUIREMENTS

- g. Members of the Deterrent, Emergency, UN Interim Forces in Kenya and UN Security Forces, holding military identity cards.
- h. Nationals of countries with which Kenya has a reciprocal visa abolition agreement: Denmark, Ethiopia, Germany, Finland, Italy, Norway, San Marino, Spain, Sweden, Turkey and Uruguay.
- i. Persons in transit through Kenya arriving and leaving by the same aircraft or transferring to another aircraft for a destination other than Tanzania and Uganda, provided they hold confirmed onward bookings. Such persons must also have the appropriate entry facilities for the country of final destination and will not leave the transit lounge at Nairobi (Jomo Kenyatta Intl), Mombasa (Moi Intl) and Eldoret (Intl) airports.

*NOTE: Additional requirements may exist. Please contact the appropriate authority to confirm information.*

## HEALTH

All departing or arriving passengers are required to hold vaccination certificates against yellow fever, cholera, smallpox on arrival from the infected areas.

*NOTE: Children under the age of 1 year are exempted from this requirement in respect of yellow fever and cholera.*

At present, infected areas for yellow fever include:

Africa: Angola, Benin, Burkina Faso, Burundi, Cameroon, Comoros, Central African Rep., Chad, Rep. of Congo, D.R. of Congo, Cote d'Ivoire, Ethiopia, Gabon, Gambia, Ghana, Guinea Rep., Guinea-Bissau, Equatorial Guinea, Liberia, Mali, Mauritania, Mozambique, Niger, Nigeria, Somalia, South Sudan, Sudan, Rwanda, Sao Tome and Principe, Senegal, Sierra Leone, Tanzania, Togo, Uganda.

America: Argentina, Bolivia, Brazil, Colombia, Ecuador, French Guiana, Guyana, Panama, Paraguay, Peru, Suriname, Trinidad and Tobago, Venezuela.

Disembarking passengers arriving directly from an area infected with plague, cholera and/or yellow fever are required to present an appropriate vaccination certificate.

## AIRCRAFT ENTRY REQUIREMENTS

### GENERAL

Director General

Kenya Civil Aviation Authority (KCAA)

Address: P. O. Box 30163-00100  
Nairobi

Tel: +254 20 6827470-5

Fax: +254 20 6822300

E-Mail: info@kcaa.or.ke

## KENYA

### NATIONAL REGULATIONS AND REQUIREMENTS

airtransport@kcaa.or.ke (non-scheduled flights)

AFS: HKNCYAYD

Ministry of Transport and Infrastructure, Housing and Urban Development

Address: P. O. Box 52692-00200

Nairobi

Tel: +254 20 2729200

Fax: +254 20 2730330

E-Mail: motc@insightkenya.com

## SCHEDULED FLIGHTS

### General

The State of the airline must be a party to the International Air Services transit Agreement and/or International Air Transport Agreement.

Application for bilateral or multilateral agreement should be made to the Ministry of Transport and Infrastructure, Housing and Urban Development

### Air Service License

Application for air service license for scheduled flights should be submitted to the Director General of Ministry of Transport and Infrastructure, Housing and Urban Development.

The application shall be addressed no less than 28 days prior to the proposed date of operation and must contain the following:

- a. name of the operator;
- b. address of the operator;
- c. type of flight (e.g. inclusive tour);
- d. type of aircraft;
- e. registration marks;
- f. date and place of origin of the flight;
- g. complete route itinerary including dates and times (UTC);
- h. number of passengers and/or freight details;
  - i. whether in conformity with IATA Resolution 045;
- j. name of local agents (if any);
- k. full details of passengers and/or freight to be uplifted or dropped in Kenya.

*NOTE 1: In case of air service licenses required for a period of validity of not more than 7 days, applications should reach the Director General of Civil Aviation not less than 14 days prior to the required date of issue the license except in most circumstances.*

*NOTE 2: Applications made via AFTN circuits will not be actioned.*

**KENYA**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

## **NON-SCHEDULED FLIGHTS**

### **General**

A clearance is required for:

- a. non-commercial flights;
- b. commercial flights landing for commercial purposes;
- c. non-commercial and commercial flights overflying or landing purely for technical reasons.

Application should be made at least 72 hours prior to the intended flight through the Authority's online system:

Advanced Air Transport Information System (AATIS)

Internet: <http://aatis.kcaa.or.ke/>  
<http://www.kcaa.or.ke/> (selecting AATIS under the column e-services)

The applicable processing fee of US \$50 only shall be paid before processing and grant of clearance.

In case the type of aircraft, registration mark, route, point of departure or destination is changed by the operating company or aircraft owner due to technical or other reasons, a new application shall be required.

## **CHARTER FLIGHTS**

When considering applications for charter flights, KCAA, as a Licensing Authority, must in all cases satisfy itself that the following policy is observed:

- a. Only charter flights, which do not harm scheduled services, will be permitted.
- b. Such charter flights, save in exceptional circumstances, shall only be operated by an airline of the country of origin or destination of the traffic.
- c. Such charters shall comply in all respects with the relevant IATA resolutions from time to time in force, whether or not the operator is a member of IATA.
- d. Scheduled operators concerned shall be given an opportunity to object to any particular application, which may affect them and may draw the attention of the KCAA to any grounds upon which they think the application should be refused.

*NOTE: Application for scheduled international licences and for longer period non-scheduled international licences must be made on the appropriate form of application obtainable from the KCAA.*

## **PRIVATE FLIGHTS**

### **Non-commercial Flights**

All private non-commercial flights into or overflying the Nairobi FIR must apply for and obtain a clearance in writing at least 72 hours prior to the flights. The request should be sent to the Director General of Civil Aviation and must contain the following:

- a. name and address of the owner/operator;

**KENYA**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

- b. type of aircraft;
- c. aircraft registration marks and callsign;
- d. date of place of origin of the flight;
- e. complete route itinerary including dates and times;
- f. number of passengers and crew;
- g. purpose of flight.

**Domestic Flights with Foreign registered Aircraft**

Approval is required to operate private and non-commercial foreign registered aircraft on domestic flights and has to be requested at the Director General of Civil Aviation.

The application requires the operator to provide the following details:

- a. Operations of 14 days and less:
  - 1. aircraft registration marks and type;
  - 2. serial number;
  - 3. date of entry into and exit Kenya;
  - 4. desired flights in Kenya within the 14 days after the entry;
  - 5. number of passengers on every intended flights;
  - 6. copies of the following documents:
    - (a) current certificate of airworthiness;
    - (b) copy of insurance certificate against third party risks;
    - (c) copy of pilots licence.
- b. Operations of more than 14 days:
  - 1. In addition to details specified above, the operator is required to obtain from the licensing section of Civil Aviation Authority of Kenya, application forms for operating a domestic flight using a foreign registered aircraft for completion.
  - 2. A clearance is issued upon payment of fees.

**STATE OR MILITARY AIRCRAFT FLIGHTS**

Foreign military aircraft flights should obtain clearance from:

The Principal Secretary

Ministry of Foreign Affairs and International Trade

Address: P. O. Box 30551-00100

Nairobi

Kenya

Tel: +254 20 318888

**KENYA**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

Fax: +254 20 240066

+254 20 341935

E-Mail: info@mfa.go.ke

The application should be made by letter and must reach the permanent secretary 72 hours prior to the date of the intended flight and shall contain the information as specified for SCHEDULED FLIGHTS without paras c. and i..

*NOTE: Applications made via AFTN circuits will not be actioned.*

## **AIRPORT(S) OF ENTRY**

Eldoret (Intl), Kisumu, Malindi, Mombasa (Moi Intl), Nairobi (Jomo Kenyatta Intl).

## **SPECIAL NOTICES**

### **PERMISSION FOR REFUELING AT NON-CUSTOMS AERODROMES**

Aircraft not exceeding 2722kg (6000lbs) in all up weight flying between any point in:

- Kenya and Mogadishu, Somalia; or
- Kenya and any place in Ethiopia

may land at Garissa or Lodwar as may be appropriate, and are subject to the following conditions:

- a. landing shall only be made for the purpose of refueling;
- b. 72 hours notice shall be given to the District Commissioner at either Garissa or Lodwar as may be appropriate and approval obtained in writing or in any manner that in himself provides proof of the notification required;
- c. the duration to be spent on ground by such an aircraft shall not be in excess of 60 minutes;
- d. no persons or goods (other than fuel) shall be picked up or set down at the aerodrome;
- e. no passenger or member of the crew of the aircraft shall leave the aerodrome;
- f. customs and immigration clearance must be obtained at Nairobi (Jomo Kenyatta Intl), Eldoret (Intl), Nairobi (Wilson), Mombasa (Moi Intl), Kisumu, Malindi, Lokichogio or Wajir Airports, as maybe appropriate;
- g. the aircraft shall not depart from the aerodrome without permission of the Administrative Officer in Charge or such other person as he/she may delegate for this purpose;
- h. upon landing either at Garissa or Lodwar as may be applicable, the pilot of the aircraft must furnish the County Commissioner or his/her delegated officer with evidence that Customs or Immigration Clearance formalities were carried out at either of the airports as mentioned above.

This proof must be presented to the ATS unit when filing the flight plan at aerodrome of initial departure. The notification shall contain the following information:

- a. aircraft registration marks and nationality;

**KENYA**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

- b. country and initial origin of the flight;
- c. names, nationalities and identities of all persons on the flight;
- d. country and airport of final destination.

The District Commissioner addresses are:

The District Commissioner - Garissa

Address: P. O. Box 1

Garissa

Tel: +254 46 2623

+254 46 2010

+254 46 2720

+254 46 2131

Fax: +254 46 3224

The District Commissioner - Turkana

Address: P. O. Box 1

Lodwar

Tel: +254 54 21620

Fax: +254 54 21467

**FLIGHTS BETWEEN KENYA AND SOMALIA**

Application for clearance to operate from Somalia into Kenya and vice versa will be required to obtain monthly clearance 7 days before the expected date of flight and shall be obtained from the:

The Principal Secretary

Ministry of Interior and Coordination of National Government

Address: P. O. Box 30510-00100

Nairobi

Kenya

Tel: +254 20 2227411

- a. Applications shall contain names of the crew members, Pax Manifest including details of their travel documents and the reason for travel.
- b. All scheduled designated flights between Nairobi (Jomo Kenyatta Intl) and Mogadishu Airport and vice versa are authorized.
- c. Authorized flights (other than scheduled flights) from Somalia must first land at Wajir Airport for customs, immigration and compulsory security clearance before proceeding to their destinations in Kenya (exemption see below).
- d. All passenger aircraft and cargo flights carrying more than the required flight crew originating from Kenya to Somalia and vice versa shall use Nairobi (Jomo Kenyatta Intl) as exit/entry point.

## KENYA NATIONAL REGULATIONS AND REQUIREMENTS

- e. Cargo flights operating from Somalia to Nairobi (Wilson) and vice versa will only be allowed to take off or land at Nairobi (Wilson) during daylight hours.
- f. Cargo flights including miraa-khat flights can fly directly to Somalia once cleared from any exit point in Kenya.
- g. The mandatory security checks are applicable to the aircraft, crew, passengers, baggage and cargo.
- h. Violation of the above orders by any party including aircraft operators will be dealt with in accordance with the law.
- i. Any airline intending to airlift Diplomats to and from Somalia must first seek for authorization from the Ministry of Foreign Affairs and International Trade.
- j. Cargo flights returning from Somalia through Wajir are allowed to carry passengers from Wajir to Nairobi provided they have seats that conform to the safety standards as per the certificate of the aircraft.
- k. All International flights in addition to those to and from Somalia are allowed to use Wajir Airport.

### **Direct Flights from Mogadishu (Aden Adde Intl) to Nairobi (Jomo Kenyatta Intl)**

Operators intending to operate direct flight from Mogadishu (Aden Adde Intl) to Nairobi (Jomo Kenyatta Intl) must request approval from Director General of Somalia Civil Aviation Authority and file a flight plan. All flights departing from other airfields in Somalia are still required to go through Wajir Airport for security vetting.

Somalia Civil Aviation Authority (SCAA)

Tel: +252 18 53675

+252 18 53676

E-Mail: [scaa@scaa.gov.so](mailto:scaa@scaa.gov.so)

### **CHARTER FLIGHTS TO SOUTHERN SUDAN**

All charter flights intending to operate into Southern Sudan originating from Kenya must obtain clearance prior to making the flight. The clearance shall be obtained from:

The Embassy of the Republic of South Sudan

Address: P. O. Box 73699-00200

Nairobi

Kenya

Tel: +254 20 2711382/4

+254 20 2711390

+254 729 790144

+254 737 488599

Fax: +254 20 2711387

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**KENYA**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

E-Mail: goss@iconnet.co.ke

**AIRCRAFT NETWORK SECURITY PROGRAM (ANSP)**

The operator shall submit the application for authorization of the ANSP, along with the program documents, at least 60 days prior to planned operation of the e-Enabled aircraft. The application shall be evaluated and, upon approval, the authorization shall be included in the operator's Operations Specifications (OpSpecs).



**LESOTHO**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

## **PASSPORT**

Required.

## **VISA**

Required, except from passengers in transit and from temporary visitors of the following countries:

- citizens of the United Kingdom and Northern Ireland;
- citizens of Commonwealth countries (except Ghana, India, Madagascar and Nigeria), Ireland, British protectorates, colonies and British protected persons;
- citizens of Belgium, Denmark, Finland, Greece, Iceland, Israel, Italy, Luxembourg, Netherlands, Norway, San Marino, Sweden, USA and South African Republic.

*NOTE: Crew member licences or certificates are accepted in lieu of passport and visa for temporary admission into Lesotho.*

*NOTE: Additional requirements may exist. Please contact the appropriate authority to confirm information.*

## **HEALTH**

Valid certificate of vaccination against yellow fever is required of all persons arriving within 60 days after leaving or transiting infected areas.

## **AIRCRAFT ENTRY REQUIREMENTS**

### **SCHEDULED FLIGHTS**

Scheduled flights are governed by interstate air agreements, bilateral and multilateral agreements and must have a permit to operate into or in transit across Lesotho. Applications for such permits shall be submitted to the:

Director of Civil Aviation (D.C.A.)

Address: P.O. Box 629  
Maseru 100  
Lesotho

### **NON-SCHEDULED FLIGHTS**

Prior permission is required for non-scheduled flights. For overflights and non-traffic stops in Lesotho the information contained in the flight plan is accepted as adequate notice on the intended operation. Foreign civil aircraft operated for commercial purposes in Lesotho territory have to obtain prior permits in respect of the following categories of non-scheduled flights and shall be subject to the provisions governing each category.

Application for permits shall be submitted by letter, reply-paid telegram or telex to the:

Director of Civil Aviation

Address: P.O. Box 629

**LESOTHO**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

Maseru 100

Lesotho

Fax: +266 22 310188

Telex: 4321 CVLAIR LO

CIVIL-AIR MASERU

AFTN: FXMMYAYX

at least 48 working hours before the intended flight in respect of the following categories:

- a. taxi-class passenger flights of occasional character;
- b. flights operated in connection with any trade or business;
- c. flights on which the entire space is hired by one single person (individual, firm or corporation) for the carriage of its staff or goods;
- d. flights for the purpose of meeting humanitarian or emergency needs.

Applications shall be submitted 15 days in advance in respect of the following categories:

- a. flights on which the entire space is hired for members of affinity groups;
- b. flights for the transportation of students;
- c. flights for the sole transportation of goods/cargo flights;
- d. special event charter flights.

Applications for permits must contain the following information:

- a. name and address of the aircraft operator;
- b. type of aircraft and registration marks;
- c. name of pilot-in-command;
- d. date and time of arrival at and departure from Lesotho airports;
- e. place(s) of embarkation/disembarkation abroad of passengers and/or freight;
- f. purpose of flight, including name, address and business of charterer, number of passengers and/or number and amount of freight to be loaded or unloaded.

Application for inclusive tour charter flights to or from Lesotho shall be submitted by letter at least 6 months before operation.

Applications for special inclusive tour charter flights shall include the following information:

- a. name and address of the aircraft operator;
- b. name and address of the charterer or travel agent by whom the tour is organized;
- c. route, all places to be served and ultimate destination;
- d. frequency and period of flights;
- e. type(s) of aircraft and capacity;

## LESOTHO NATIONAL REGULATIONS AND REQUIREMENTS

- f. provisional time table;
- g. number of passengers;
- h. minimum tour price per passenger in details (including tour fare, minimum stay price);
- i. minimum stay period.

Any request for permits to operate non-scheduled flights mentioned above must further contain information on aircraft maximum take-off weight for the purpose of calculating navigation fees by D.C.A.

Flight operation from foreign countries to Lesotho shall not be started before having received the required permit from the D.C.A. The pilot-in-command must carry a copy of the permission granted by telex, telegram or letter.

### PRIVATE FLIGHTS

The information contained in the flight plan is accepted as adequate notice of the arrival of incoming aircraft.

### MILITARY AIRCRAFT FLIGHTS

No foreign military aircraft is permitted to enter, exit or overfly Lesotho territory unless application has been submitted to the Ministry of Foreign Affairs via diplomatic channels and approval has been received by the Royal Lesotho Defence Force.

### AIRPORT(S) OF ENTRY AND DEPARTURE

ENTRY: Maseru (Moshoeshe I Intl); landing at Mokhotlong or Qacha's Nek with special arrangement only.

DEPARTURE: Maseru (Moshoeshe I Intl), Qacha's Nek, Mokhotlong.

**LIBERIA**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

## **PASSPORT**

Required, except for holders of:

- Official travel order;
- Seaman Discharge Book (travelling on duty)

Issued to/by:

Members of US Armed Forces

## **VISA**

Required, except for:

- a. Nationals of Liberia;
- b. ECOWAS (Economic Community of West African States) Member States;
- c. Members of US Armed Forces traveling on official order;
- d. Holders of diplomatic and official passports who are accredited to Liberia;
- e. Those holding a re-entry permit;
- f. Those arriving at Roberts International Airport and continuing their journey from there to a third country on the first available flight, provided they are holding confirmed seats and other documents. Passengers may be allowed to leave the Roberts International Airport for over-night accommodation in Monrovia.

Nationals of the South African Republic are allowed to transit Liberia by the same aircraft, but they are not allowed to leave aircraft during its transit stop.

*NOTE: Additional requirements may exist. Please contact the appropriate authority to confirm information.*

## **HEALTH**

Passengers leaving or enter Liberia are required to present a yellow fever vaccination certificate. Any passenger not vaccinated against yellow fever will not be allowed to enter or depart the Republic of Liberia.

## **AIRCRAFT ENTRY REQUIREMENTS**

### **GENERAL**

Liberia Civil Aviation Authority

Address: P.O. Box 68  
Harbel Margibi County  
Republic of Liberia

Tel: +231 7727 3689

E-Mail: [liberia@liberiacao.com](mailto:liberia@liberiacao.com)

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**LIBERIA**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

AFTN: GLMCYAYX

### **SCHEDULED FLIGHTS**

Scheduled operations are governed by interstate air agreements, bilateral and multilateral agreements and they are subject to prior permission 72 hours in advance from the Liberia Civil Aviation Authority.

### **NON-SCHEDULED FLIGHTS**

Prior permission is required for non-scheduled flights. Applications shall be submitted not less than 72 hours in advance of the intended landing to the Liberia Civil Aviation Authority.

The application shall include the following information:

- name of operator;
- type of aircraft and registration marks;
- date and time of arrival at and departure;
- place(s) of embarkation or disembarkation abroad, as the case may be, of passengers and/or freight;
- purpose of flight and number of passengers and/or nature and amount of freight;
- name, address and business of charterer, if any;
- additional pertinent information.

### **AIRPORT(S) OF ENTRY**

Monrovia (Roberts Intl).

**LIBYA**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

## **PASSPORT**

Required.

## **VISA**

Required, except from nationals of Arab states (except Iraq, Lebanon and Sudan). Admission or transit will be refused to holders of Israeli passports or passports containing any Israeli visa.

Crew member license or certificate is accepted in lieu of a passport or visa.

*NOTE: Additional requirements may exist. Please contact the appropriate authority to confirm information.*

## **HEALTH**

Disembarking passengers are not required to present vaccination certificates except when coming directly from an area infected with cholera, yellow fever or smallpox.

## **AIRCRAFT ENTRY REQUIREMENTS**

### **GENERAL**

Civil Aviation Authority

Fax: +218 21 3605322

+218 21 3618075

Telex: 20353 CAA LY

SITA: TIPYAXS

AFTN: HLLTYAYA

### **SCHEDULED FLIGHTS**

Scheduled operations are governed by interstate bilateral agreements or are subject to prior permission. The initial request for operating scheduled flights shall be submitted through diplomatic channels. Airlines desiring to operate international scheduled flights in transit across Libyan territory or to land in Libya shall obtain prior permission. Application to the Civil Aviation Authority shall be made in ample time. Application by reply-prepaid telegram should be made at least 72 hours before commencement of any proposed flight.

### **NON-SCHEDULED FLIGHTS**

If and operator intends to perform a (series of) non-scheduled flights into Libya for the purpose of taking on or discharging passengers, cargo or mail, it is necessary for the operator to apply to the Civil Aviation Authority.

The application shall be submitted not less than 72 hours in advance of the intended landing.

The application must include the following information in the order shown hereunder:

- a. name of aircraft operator;
- b. aircraft type and registration marks;

**LIBYA**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

- c. date and time of arrival at and departure from Libyan aerodromes;
- d. place(s) of embarkation/disembarkation of passengers or of freight;
- e. purpose of flight and, where applicable, the nature of cargo;
- f. name and address of charterer in Libya.

### **PRIVATE FLIGHTS**

The information contained in the flight plan is accepted as adequate advance notification of the arrival of incoming aircraft. Information must be transmitted to the authorities concerned at least two hours in advance of arrival. The landing must be carried out at a previously designated international aerodrome.

For reasons of flight safety a special permission is required in addition to the filling of a flight plan.

Application for special permission must be submitted to CAA Libya at least three days in advance of the entry into the airspace over Libya FIR.

### **AIRPORT(S) OF ENTRY**

First landing shall be made at and final departure from an international aerodrome.

### **SPECIAL NOTICES**

Aircraft registered in Israel and any other aircraft destined for or departing from Israel are not permitted to fly over Libyan airspace or land in Libya.

**MADAGASCAR  
NATIONAL REGULATIONS AND REQUIREMENTS**

## **AIRCRAFT ENTRY REQUIREMENTS**

### **GENERAL**

Requests for authorization shall be submitted directly to:

Direction Generale de l'Aviation Civile de Madagascar (ACM)

Address:       Boite Postale 4414  
                  Antananarivo  
                  Madagascar  
                  101

Tel:            +261 20 2222438  
                  +261 20 2222162  
                  +261 32 0722162  
                  +261 33 0201327

Fax:            +261 20 2224726

Telex:          ACM TANA

E-Mail:        acm@acm.mg

AFTN:          FMMDYAYX

### **SCHEDULED FLIGHTS**

Scheduled air traffic is governed by international and bilateral or multilateral air agreements and require an operating authorization. Requests for authorization shall be submitted directly to the ACM.

### **NON-SCHEDULED FLIGHTS**

Foreign civil aircraft intending to carry out non-scheduled overflights, as well as commercial or non-commercial landings, must obtain prior authorization. Requests for authorization shall be submitted directly to the ACM and shall contain the following information:

- a. name of operator;
- b. type of aircraft and registration mark;
- c. date and time of arrival and departure;
- d. place(s) of embarkation or disembarkation abroad, as the case may be, of passengers and/or cargo;
- e. purpose of flight and number of passengers and/or nature and amount of cargo;
- f. name, address and business of charterer;
- g. other information.



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**MADAGASCAR**  
**NATIONAL REGULATIONS AND REQUIREMENTS****PRIVATE FLIGHTS**

Prior permission is required for all overflights and landings and a flight plan shall be submitted. Application must be sent to the ACM at least 2 days, but not more than 7 days, prior to the commencement of the flight.

**AIRPORT(S) OF ENTRY**

Antananarivo (Ivato), Antsiranana (Arrachart), Mahajanga (Philibert Tsiranana), Nosy-Be (Fas-cene), Sainte-Marie, Toamasina, Tolagnaro.

**SPECIAL NOTICES**

International air traffic is allowed on every international airport of the Republic of Madagascar except flight from the Comores.

**MALAWI**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

## **PASSPORT**

All persons entering Malawi, including passengers in direct transit, are required to have in their possession a valid passport or other recognized document of identity. Crew member licences are accepted in lieu of passport.

## **VISA**

The passports or documents of identity of all aliens who desire to enter Malawi must bear a visa for Malawi, with the exception of the citizens of the following:

Belgium, Commonwealth countries, Denmark, Republic of Ireland, Finland, Germany, Iceland, Luxemburg, Holders of Israeli (Service or Diplomatic) passports, Madagascar, Mozambique, Namibia, Netherlands, Norway, Portugal, San Marino, South Africa, Sweden, USA (for visits not exceeding 12 months). For visits exceeding 12 months duration a visa is required which is issued free of charge. Holders of United Nations "Laissez Passer" travelling on United Nations duties require neither visa nor passport provided they are British Nationals or Nationals of one of the countries listed above. All other Nationals require visas.

*NOTE: Additional requirements may exist. Please contact the appropriate authority to confirm information.*

## **HEALTH**

- a. Valid certificate of vaccination against cholera is required.
- b. Valid certificate of vaccination against yellow fever is required of passengers arriving from infected areas.

## **AIRCRAFT ENTRY REQUIREMENTS**

### **GENERAL**

Department of Civil Aviation

Address: Private Bag B311  
Lilongwe 3  
Malawi

Tel: +265 01 770 577

Fax: +265 01 774 986

+265 01 770 006

+265 01 773 279

Telex: Aviation Lilongwe

E-Mail: aishq@civilaviation.gov.mw  
director@civilaviation.gov.mw

AFTN: FWHQYAYX

Lilongwe Flight Information Center

**MALAWI**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

Kamuzu Intl Airport

Address: P.O. Box 44  
Lumbadzi  
Malawi

Tel: +265 01 700 766  
+265 01 701 013

Fax: +265 01 700 849  
+265 01 700 294

Telex: CIVAIR LILONGWE

E-Mail: liacommandant@malawi.net  
aiskia2@gmail.com

AFTN: FWLLZIZX

### **SCHEDULED FLIGHTS**

Scheduled operations are governed by bilateral or multilateral agreements or are subject to prior permission from Department of Civil Aviation.

### **NON-SCHEDULED FLIGHTS**

Aircraft (also Malawi registered aircraft) wishing to overfly or land in Malawi must apply to the Director of Civil Aviation for permission to carry out such operation not less than 48 hours prior to the intended flight. All applications will be addressed to Lilongwe Flight Information Center.

The following information shall be submitted:

- a. name of operator and all members of crew;
- b. aircraft type, nationality and registration marks;
- c. departure point before entering Malawi airspace and point of first intended landing;
- d. route and timings including, in case of overflight, position and time of entry into and exit from Malawi airspace;
- e. purpose of flight (if business visit, nature of business and name, address and telephone number of organization being visited in Malawi);
- f. number and names of passengers and status of VIP carried; Agent in Malawi.

All flights having received permission to overfly Malawi in accordance with the aforementioned requirements must include the permit number in Item 18 of the flight plan, e.g. "RMK/PERMIT NR 205/03".

### **PRIVATE FLIGHTS**

Same requirements as for NON-SCHEDULED FLIGHTS.

Application should be made at least 6 days before the proposed flight is to take place.

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**STATE OR MILITARY AIRCRAFT FLIGHTS**

If not governed by special agreements, authorization is required prior to the proposed flight to:

The Secretary for Foreign Affairs and International Co-operation

Address: P.O. Box 30315

Lilongwe 3

Malawi

Tel: +265 01 789 088

+265 01 789 323

Fax: +265 01 788 482

+265 01 788 516

Telex: FOREIGN LILONGWE

The application shall include the items mentioned under NON-SCHEDULED FLIGHTS and additionally, the type and amount of any military equipment to be carried.

**AIRPORT(S) OF ENTRY**

Blantyre (Chileka Intl), Lilongwe (Kamuzu Intl).

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**NATIONAL REGULATIONS AND REQUIREMENTS**

## **PASSPORT**

Required. National identity cards, resident permits or expired passports suffice for citizens of Algeria, Benin, Burkina Faso, Cote d'Ivoire, France, Guinea Rep., Niger, Mauritania, Senegal.

Crew member licenses are accepted in lieu of passports.

## **VISA**

Required except from citizens of Algeria, Benin, Burkina Faso, France, Guinea Rep., Cote d'Ivoire, Mauritania, Niger and Senegal. No visa required of passengers in transit.

*NOTE: Additional requirements may exist. Please contact the appropriate authority to confirm information.*

## **HEALTH**

International certificates of vaccination conforming to international regulations are required.

## **AIRCRAFT ENTRY REQUIREMENTS**

### **SCHEDULED FLIGHTS**

Scheduled air services are governed by interstate air agreements or special authorization.

### **NON-SCHEDULED FLIGHTS**

All foreign aircraft making one (or a series of) non-scheduled flight(s) in transit without landing, or making commercial and non-commercial landings at airports in the territory of the Republic, shall obtain permission at least 72 working hours prior to the flight.

The application (by letter or message) for overflights and landings in Mali when, directly concerning civil aircraft, must be addressed exclusively to:

Contact autorisation Survol et Atterrissage

Tel: +223 20 20 5524

Fax: +223 20 20 2905

E-Mail: [anacmali@anac-mali.org](mailto:anacmali@anac-mali.org)

Internet: [www.anac-mali.org](http://www.anac-mali.org)

The application (by letter or message) for overflights and landings in Mali, when concerning state aircraft, must be addressed to le Ministere des Affaires Etrangeres et de la Cooperation Internationale (Protocole de la Republique).

All applications for overflights and landings in Mali shall contain the following information:

- a. type of aircraft, serial number, call sign;
- b. nationality, registration number, type of employment;
- c. proprietor, operator or charterer;
- d. nature of flight;

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- e. planned dates of overflights and possible landings in Mali;
- f. complete itinerary;
- g. aircraft capacity;
- h. airports of landing;
- i. pilot-in-command (name, nationality, rank);
- j. number of crew members.

**AIRPORT(S) OF ENTRY**

Bamako (Senou), Gao (Korogoussou), Kayes (Dag Dag), Mopti (Ambodedjo), Sikasso (Dignangan) and Tombouctou.

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## **PASSPORT & VISA**

Required.

*NOTE: Additional requirements may exist. Please contact the appropriate authority to confirm information.*

## **HEALTH**

Certificates of vaccination according to international regulations are required.

International certificate of vaccination against cholera is required for all passengers and crew arriving from infected areas.

## **AIRCRAFT ENTRY REQUIREMENTS**

### **GENERAL**

The requests for authorization are to be addressed to:

Agence Nationale de l'Aviation Civile (ANAC)

Address:        Boite Postale 91  
                  Nouakchott  
                  Mauritania

Tel:             +222 4524 4005

Fax:             +222 4525 3578

E-Mail:         anac@anac.mr

Internet:       www.anac.mr

AFTN:           GQNVYAYX

### **SCHEDULED FLIGHTS**

Scheduled operations are governed by interstate air agreements or are subject to special authorization. The requests for authorization are to be addressed at least one month before starting the air service by letter, prepaid reply telegram or via AFTN to the ANAC.

The request must include the following information:

- a. name of the airline;
- b. type of aircraft used;
- c. air services timetables (routes, flights frequency, times of arrival and departure);
- d. other useful information.

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## **NON-SCHEDULED FLIGHTS**

### **Overflights and Non-commercial Landings**

Only prior notice via AFTN is required for overflights or non-commercial landings of civil aircraft. The notice has to be sent 48 hours in advance to the ANAC and must include the following information:

- a. name of air carrier and charterer, if any;
- b. type of aircraft;
- c. nationality, registration marks and call sign of aircraft;
- d. flight number;
- e. complete route itinerary including final destination aerodrome;
- f. purpose of flight;
- g. date of flight.

Copies of the prior notice have to be sent to the airport commander where landing is planned. Non-receipt of a reply message is to be considered as an authorization.

### **Commercial Landings**

A request for authorization has to be submitted by letter, prepaid reply telegram or via AFTN 72 hours before the date of flight to the ANAC with the following information:

- a. name of air carrier and charterer, if any;
- b. type of aircraft;
- c. nationality, registration marks and call sign of aircraft;
- d. complete route itinerary (aerodrome of departure, intermediate landings and final destination aerodromes);
- e. purpose of flight;
- f. number, origin and destination of passengers;
- g. nature, weight, origin and destination of freight;
- h. sender or recipient of freight loaded or unloaded in Mauritania;
- i. date of flight;
- j. required enroute facilities and landing services.

Copies of the request have to be sent to the airport commander where landing is planned.

## **PRIVATE FLIGHTS**

Only prior notice via AFTN is required for overflights or non-commercial landings of civil aircraft. The notice has to be sent 48 hours in advance to the ANAC and must include the following information:



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- a. name of air carrier and charterer, if any;
- b. type of aircraft;
- c. nationality, registration marks and call sign of aircraft;
- d. flight number;
- e. complete route itinerary including final destination aerodrome;
- f. purpose of flight;
- g. date of flight.

Copies of the prior notice have to be sent to the airport commander where landing is planned. Non-receipt of a reply message is to be considered as an authorization.

### **STATE AIRCRAFT FLIGHTS**

For overflights or technical landings prior authorization is required 10 days in advance. Request for authorization has to be sent via diplomatic channels to Ministere des Affaires Etrangeres.

### **OTHER FLIGHTS**

To operate aerial work flights request for authorization has to be submitted by letter, prepaid reply telegram or via AFTN 72 hours before the date of flight to the ANAC with the following information:

- a. name and address of the applicant;
- b. type of aircraft;
- c. nationality, registration marks and call sign of aircraft;
- d. purpose of flight;
- e. Mauritanian organization in favour of which aerial work will be performed;
- f. complete route itinerary or working area;
- g. date of flights and aerodromes on which landings are expected.

Copies of the request have to be sent to the airport commander where landing is planned.

### **AIRPORT(S) OF ENTRY**

Nouadhibou, Nouakchott (Oumtounsy).

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## **PASSPORT**

A passport is required except for holders of:

- a. travel document and certificate of identity issued by the Government of Mauritius;
- b. Laissez-Passer issued by the United Nations or any other internationally recognized organization;
- c. a valid Seaman Book (traveling on duty).

## **VISA**

Visas are not required from the following:

- a. citizens of Mauritius;
- b. persons who are residents of Mauritius under the Immigration Act;
- c. the spouse of a citizen of Mauritius;
- d. a child or step child or lawfully adopted child of persons referred to at a. and b.;
- e. holders of diplomatic passports other than those issued by the Government of Afghanistan, Algeria, Democratic Republic of Congo, Iran, Iraq, Liberia, Libya, Nigeria, Sudan and Yemen;
- f. holders of Laissez-Passer by the UN, SADC or other internationally recognized organizations;
- g. holders of passports of Antigua and Barbuda, Australia, Austria, Bahamas, Bahrain, Barbados, Belgium, Belize, Botswana, Brunei, Bulgaria, Canada, Cyprus, Czech Republic, Denmark, Dominica, Estonia, Finland, France, Gambia, Germany, Ghana, Greece, Grenada, Guyana, Hungary, Ireland, Israel, Italy, Jamaica, Japan, Kenya, Kiribati, Kuwait, Latvia, Lesotho, Liechtenstein, Lithuania, Luxembourg, Malawi, Malaysia, Maldives, Malta, Monaco, Nauru, Netherlands, New Zealand, Norway, Oman, Papua New Guinea, Poland, Portugal, Qatar, Reunion Island, Romania, Samoa (Western), San Marino, Saudi Arabia, Seychelles, Sierra Leone, Singapore, Slovakia, Slovenia, Solomon Is., South African Republic, Spain, St. Kitts and Nevis, St. Lucia, St. Vincent and Grenadines, Sweden, Switzerland, Tanzania, Tonga, Trinidad and Tobago, Tunisia, Turkey, Tuvalu, Uganda, United Arab Emirates, United Kingdom, United States of America, Vanuatu, Vatican, Zambia and Zimbabwe.

Following additional rules apply:

- a. holders of passports of Albania, Comoros and Madagascar may be granted a visa of 2 weeks on arrival;
- b. a visa for a maximum period of 3 month may be granted on arrival to nationals of Argentina, Brazil, Chile and Paraguay;
- c. a visa of 16 days may be granted on arrival to nationals of South Korea;

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- d. a visa for a maximum period of 60 days may be granted on arrival to nationals of Armenia, Azerbaijan, Belarus, Fiji, Georgia, Iceland, India, Jordan, Kazakhstan, Kyrgyzstan, Lebanon, Moldova, P.R. of China, Russia, Tajikistan, Turkmenistan, Ukraine and Uzbekistan;
- e. no visa is required for 90 days from nationals of Hong Kong;
- f. no visa is required for 60 days in a calendar year. Not more than 30 days may be granted on each trip to nationals of Mozambique and Swaziland;
- g. no visa is required for 90 days in a calendar year. Not more than 60 days may be granted on each visit to nationals of Namibia.

*NOTE: Additional requirements may exist. Please contact the appropriate authority to confirm information.*

## HEALTH

Certificates of vaccination against cholera and yellow fever are required of arriving passengers coming from infected areas.

## DISINSECTION REQUIREMENTS

WHO Blocks Away disinsection is acceptable for all aircraft arriving at Sir Seewoosagur Ramgoolam International Airport. Details of accepted procedures are found in Annex 6 of the International Health Regulations and can be obtained from the port and airport Unit, Ministry of Health and Quality of Life. If accepted procedures have not been followed as laid down as above, or if an insect is detected inside the aircraft, disinsection will be done on the ground prior to the disembarkation of passengers and crew.

## AIRCRAFT ENTRY REQUIREMENTS

### GENERAL

Applications and relevant documents of all flights shall be submitted to:

Department of Civil Aviation

Aeronautical Information Service

Address: Sir Seewoosagur Ramgoolam International Airport  
Plaine Magnien  
Republic of Mauritius

Tel: +230 6032000

Fax: +230 6032079

E-Mail: ais@govmu.org

AFS: FIMPYOYX

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## **SCHEDULED FLIGHTS**

### **General**

For regular international scheduled flights operated by a foreign airline into or transit across the Republic of Mauritius, the airline must be eligible to make the flights under the provisions of a bilateral or multilateral agreement to which the State of the airline and the Republic of Mauritius are contracting parties, and must have a permit to operate into or transit across the Republic of Mauritius. Applications for such permits shall be submitted to the Director of Civil Aviation at least 2 months in advance of the intended date of operation.

### **First Time Applicant**

Operators wishing to start schedule operations to Mauritius should apply to the Director of Civil Aviation at least 2 months from the date of start of operations and should include the following information:

- a. name and postal billing address of operator;
- b. type of aircraft and registration marks;
- c. capacity/configuration of aircraft;
- d. aircraft call sign;
- e. schedule: route(s), date(s), timing(s) of operations;
- f. copy of certification of airworthiness;
- g. air operator certificate;
- h. copy of insurance certificate;
- i. copy of designation letter;
- j. maximum take-off weight (MTOW) of the aircraft;
- k. name and address of the representative in Mauritius, if any;
  - l. name and contact details of the handling agent in Mauritius;
- m. copy of the certificate of registration;
- n. copy of airworthiness review certificate, (if applicable);
- o. noise certificate;
- p. radio licenses of aircraft station licenses;
- q. minimum equipment list (MEL);
- r. duly filled foreign air operator certificate (FAOC) form;
- s. copy of the airline security program;
- t. dangerous goods manual, if applicable;
- u. copy of RVSM approval for the aircraft; and

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- v. copy of carriage of dangerous goods approval.

*NOTE: If the validity of the documents expires during the approved operations, aircraft operators shall submit new valid document.*

### **Renewal of Schedule Operations**

Application for the renewal of schedule operations (IATA Summer and Winter Schedule) to Mauritius should be submitted at least 2 months in advance of the intended date of operation with the same information as above, except para m. to v..

In addition to the above, aircraft operators should comply with the following while sending their applications for renewal of schedule operations:

- a. resubmit any document listed in para above (m) to (v), which have been reviewed;
- b. confirm in writing on list of documents that have not been reviewed and which need not be submitted again; and
- c. aircraft operators shall comply with the note above.

### **Overflying**

Operators wishing to operate scheduled overflights in the territory of the Republic of Mauritius should submit their applications to the Director of Civil Aviation at least 2 weeks prior to operations of the flights. Application should include the following information:

- a. name and postal billing address of operator;
- b. type of aircraft and registration marks;
- c. aircraft call sign;
- d. schedule: route(s), date(s), timing(s) of operations;
- e. copy of insurance certificate; and
- f. maximum take-off weight (MTOW) of the aircraft.

### **Supplementary Flights**

Applications for operating supplementary flights both for landing in Mauritius and overflying the Mauritius FIR should be forwarded with the following information preferably 1 week prior to operations of the flights:

- a. name and postal billing address of operator;
- b. type of aircraft and registration marks;
- c. capacity/configuration of aircraft;
- d. aircraft call sign; and
- e. schedule: route(s), date(s) and timing(s) of operations.

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## **NON-SCHEDULED FLIGHTS**

### **Charter / Special Flights - Landing**

Prior permission is required. Application shall be submitted to the Director of Civil Aviation at least 7 days in advance of the intended landing. The application shall include the following information:

- a. name and postal billing address of operator;
- b. purpose of flight;
- c. type of aircraft and registration marks;
- d. aircraft call sign;
- e. number and nationality of crew and passengers;
- f. schedule: route(s), date(s), timing(s) of operations;
- g. general description of goods carried, if any;
- h. copy of certificate of airworthiness;
- i. copy of insurance certificate;
- j. MTOW of aircraft.

### **Charter / Special Flights - Series of Flights - Landing**

If an operator intends to carry out a (series of) non-scheduled flight(s) into the Republic of Mauritius he shall apply to the Director of Civil Aviation for permission to carry out such operations not less than 2 months in advance of the intended date of operations. Requirements for processing of applications are as follows:

- a. name and postal billing address of operator;
- b. name and full address of owner;
- c. name and full address of the charterer;
- d. purpose of flight;
- e. type of aircraft and registration marks;
- f. capacity/configuration of aircraft;
- g. aircraft call sign;
- h. number of crew and passenger;
- i. schedule: route(s), date(s), timing(s) of operations;
- j. air operator certificate (AOC) with allocated routes;
- k. copy of wet/dry lease agreement as applicable;
- l. letter from State of AOC issuer authorizing these flights;
- m. last heavy maintenance carried out and copy of maintenance release;

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- n. general description of goods carried, if any;
- o. copy of certificate of airworthiness;
- p. copy of insurance certificate;
- q. security of flight crew compartment (as per ICAO Annex 6, part one);
- r. MTOW of the aircraft; and
- s. contact details of local representative in Mauritius in case of emergency.

**Charter / Special Flights - Overflight and Technical Stop**

Prior permission is required. The operator should make an application to the Director of Civil Aviation at least 24 hours in advance of the intended landing and should submit the following information:

- a. name and postal billing address of operator;
- b. type of aircraft and registration marks;
- c. aircraft call sign;
- d. schedule: route(s), date(s), timing(s) of operations;
- e. copy of insurance certificate; and
- f. MTOW of the aircraft.

**PRIVATE FLIGHTS**

**Landing**

If an operator intends to carry out a non-scheduled private flight into the Republic of Mauritius, he shall apply to the Director of Civil Aviation for permission to carry out such operations not less than:

- a. 2 working days in advance of the intended date of operations, for passengers/crew members travelling from the countries whose citizens do NOT require a visa;
- b. 3 working days in advance of the intended date of operations for passengers/crew members travelling from the countries whose citizens require a visa.

**Requirements for Processing of Applications**

Aircraft operators shall ensure that their applications are submitted together with the following documents/information:

- a. name and address of aircraft operator;
- b. name, telephone number, e-mail and postal billing address of agent/operator;
- c. purpose of flight, e.g., tourism, business meeting;
- d. type of aircraft and registration marks;
- e. aircraft call sign;

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- f. names, nationality, date of birth, passport number and passport expiry date of all passengers and crew members;
- g. name, nationality, date of birth, passport number, and passport expiry date of all inbound and outbound passengers;
- h. all surnames of passengers and crew members should be given in capital letters;
  - i. photocopies of the passports of all crew members and passengers;
  - j. status of passengers, for example, VVIP, businessmen or government officials, if any
- k. business contact in Mauritius (except for tourism);
  - l. schedule: route(s), date(s), timing(s) of operations;
- m. name of local representative, if any;
- n. name and address of handling agent in Mauritius;
- o. copy of insurance certificate;
- p. MTOW of aircraft;
- q. statement from operator/pilot as to whether any arms/ammunitions will be carried on board the aircraft;
- r. statement from operator/pilot as to whether any visiting royalty, head of States or diplomatic passport holders are on board.

No private aircraft shall take-off for Mauritius until a flight clearance is granted by the Department of Civil Aviation.

The flight clearance number of the flight clearance granted by the Department of Civil Aviation to aircraft operators should be included in Item 18 of the flight plan and pilots should communicate this flight clearance number to Mauritius ATC on first radio contact. In case of change of aircraft, passengers or crew, operators should apply for a revised flight clearance.

It may happen that there are changes in: aircraft, itinerary, passengers or crew after the original application is made. In such cases the aircraft operator shall apply for a revised flight clearance because the previous flight clearance issued will no longer be valid. Aircraft operator shall ensure that he has obtained the revised flight clearance and the aircraft shall not take off for Mauritius until the revised flight clearance is obtained.

Operators shall make mention of the inbound as well as the outbound passengers.

The purpose of the flight/visit to Mauritius shall be clearly specified.

### **Overflying**

Prior permission is necessary for overflying the Mauritius FIR. The operator shall apply to the Director of Civil Aviation at least 24 hours in advance of the aircraft's entry into the Mauritius airspace.

Requirements for processing of applications are as follows:

- a. name and postal billing address of operator;



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- b. purpose of flight;
- c. type of aircraft and registration marks;
- d. aircraft call sign;
- e. copy of insurance certificate;
- f. schedule: route(s), date(s), timing(s) of operations; and
- g. MTOW of the aircraft.

### **Technical Stops for Private Flights**

The requirements for application for technical stop of private flight in Mauritius are similar to Section above “Private Flights - Overflying”. The operator shall apply to the Director of Civil Aviation at least 24 hours in advance of the flight.

## **CARGO FLIGHTS**

### **Landing**

If an operator intends to operate a cargo flight to Mauritius, he shall apply to the Director of Civil Aviation at least 3 days in advance prior to operations of the flight if carrying general cargo and live animals and at least 2 weeks in advance if carrying dangerous goods on board.

If an operator intends to operate a series of cargo flights to Mauritius, the operator shall apply to the Director of Civil Aviation at least 2 months in advance of the start of operations.

The requirements for processing the application for a cargo flight are as follows:

- a. name and postal billing address of operator;
- b. type of aircraft and registration marks;
- c. aircraft call sign;
- d. type of cargo on board (including UN numbers in case dangerous goods are carried;
- e. aerodrome/country of origin;
- f. aerodrome/country of destination;
- g. ETA/ETD;
- h. copy of insurance certificate;
- i. handling agent/operator’s representative (if any); and
- j. MTOW of aircraft.

The following additional information are required for series of cargo flights:

- a. air operators certificate (AOC) with allocated routes;
- b. copy of wet/dry lease agreement as applicable;
- c. letter from State of AOC issuer authorizing these flights;

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- d. last heavy maintenance carried out and copy of maintenance release;
- e. general description of goods carried, if any;
- f. copy of certificate of airworthiness; and
- g. contact details of local representative in Mauritius in case of an emergency.

**Overflying**

If an operator intends to overfly the Mauritius airspace with a cargo flight, he shall apply to the Director of Civil Aviation at least 1 day prior to operations of the flight.

Requirements for processing of applications are as follows:

- a. name and address of operator;
- b. type of aircraft and registration marks;
- c. aircraft call sign;
- d. purpose of flight;
- e. type of cargo on board;
- f. aerodrome/country of origin;
- g. aerodrome/country of destination;
- h. schedule: route(s), date(s), timing(s) of operations;
- i. MTOW of aircraft; and
- j. copy of insurance certificate.

**Technical Stop**

If an operator intends to make a technical stop at Mauritius (Sir Seewoosagur Ramgoolam Intl) with a cargo flight, he shall apply to the Director of Civil Aviation at least 1 day prior to operations of the flight.

**STATE AIRCRAFT FLIGHTS**

Foreign State, VVIP and Military aircraft intending to land at Mauritius (Sir Seewoosagur Ramgoolam Intl) or overfly the Mauritius airspace are to obtain diplomatic clearance for such landings or overflights from:

Ministry of Foreign Affairs, Regional Integration and International Trade

The Secretary for Foreign Affairs

Address: 9th Floor Newton Tower

Port Louis

Republic of Mauritius

Tel: +230 4052500

Fax: +230 2088087

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Application should be made at least 15 days in advance of the intended date of operations. Requirements for processing of applications are as follows:

- a. name, nationality of crew members and passengers on board;
- b. type of aircraft and registration marks;
- c. place of flight origin with intermediate stops, and times;
- d. ETA/ETD to/from Mauritius (Sir Seewoosagur Ramgoolam Intl);
- e. purpose of flight; and
- f. services required on ground, e.g. handling, fuel, catering etc.

### MEDICAL EVACUATION OR MERCY FLIGHTS

If an operator intends to carry out a medical evacuation or mercy flight into the Republic of Mauritius to carry patient to/from Mauritius, he shall apply to the Director of Civil Aviation for permission to carry out such operations. Clearances for such flights can be granted within 3 hours of the request.

Requirements for processing of applications are as follows:

- a. name and address of operator;
- b. type of aircraft and registration marks;
- c. aircraft call sign;
- d. purpose of flight;
- e. name, nationality, date of birth, passport number and passport expiry date of crew;
- f. name, nationality, date of birth, passport number and passport expiry date of patient, accompanying passenger, doctor, nurse etc;
- g. whereabouts of patients (clinic/hospital);
- h. aerodrome/country of origin;
- i. aerodrome/country of destination;
- j. ETA/ETD;
- k. MTOW of aircraft;
- l. copy of insurance certificate; and
- m. handling agent/operator's representative (if any).

No medical evacuation or mercy flight shall take off for Mauritius until a flight clearance is granted by the Department of Civil Aviation.

The flight clearance number to aircraft operators should be included in Item 18 of the flight plan and pilots should communicate this flight clearance number to Mauritius ATC on first radio contact. In case of change of aircraft, passengers or crew, operators should apply for a revised flight clearance.

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## **AIRPORT(S) OF ENTRY**

Mauritius (Sir Seewoosagur Ramgoolam Intl).

## **SPECIAL NOTICES**

### **PROVISION OF OPERATIONAL CONTACT DETAILS OF AIRCRAFT OPERATORS**

All aircraft operators currently operating or intending to operate within the Mauritius ion (FIR) shall provide the H24 contact details of their operations control centres or the purpose of SAR response. These all times up-to-date informations shall concerning:

- landline and mobile telephone numbers (including country and area codes);
- fax numbers;
- email addresses;
- AFTN addresses; and
- SITA addresses.

Scheduled aircraft operators shall provide these information when applying for the approval of their seasonal schedules. Non-scheduled aircraft operators including, private flights, medical evacuation/mercy flights, charter flights and State flights shall provide these information together with their application for permission to operate such flights.

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## **PASSPORT & VISA**

Required.

*NOTE: Additional requirements may exist. Please contact the appropriate authority to confirm information.*

## **HEALTH**

No vaccination certificate is required for entering Morocco.

Except when coming directly from an area infected with smallpox, poliomyelitis due to wild-type poliovirus, human influenza caused by a new subtype, Severe Acute Respiratory Syndrome (SARS), cholera, pneumonic plague, yellow fever, viral hemorrhagic fever (Ebola, Lassa, Marburg), West Nile fever, dengue fever, Rift Valley.

And other meningococcal disease, with significant implications on public health and which may spread internationally.

## **AIRCRAFT ENTRY REQUIREMENTS**

### **GENERAL**

Director of Air Transport

Address: Avenue Azzaitoune Hay Riad Rabat  
P.O. 1073  
Rabat Principal  
Morocco

AFTN: GMMRADTA

Civil Aviation Directorate

Address: Avenue Azzaitoune Hay Riad Rabat  
P.O. 1073  
Agdal-Rabat  
Morocco

Tel: +212 (0)5 37679367

Fax: +212 (0)5 37773074

### **SCHEDULED FLIGHTS**

The following documents shall be on board of each aircraft and be presented to any accredited authority:

- a. certificate of registration;
- b. certificate airworthiness;
- c. licence, qualifications and appropriate certificates for each crew member;
- d. journey logbook or equivalent document;

**MOROCCO**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

- e. licence of airborne radio communication on board if the aircraft is radio equipped;
- f. civil liability assurance certificate covering damage to third parties on the surface and passengers carried.

**Overflights and Technical Stopovers**

Unless agreement or convention an authorization including following information is obligatory:

- a. name or name of the operation company;
- b. the aircraft owner;
- c. name of the pilot;
- d. type and registration of the aircraft;
- e. date, route and full schedule of the flight;
- f. purpose of the transport;
- g. cargo of the aircraft:
  - 1. number of passengers;
  - 2. tonnage and nature of freight;
  - 3. sender of freight;
  - 4. recipient of freight.

For ICAO member States write directly to the Direction of Air Transport.

By letter for groups of flight exceeding 4 flights in a delay of 1 month and by AFTN for the short groups or isolated flight in a delay of 10 days.

Applications for aircraft registered in other than ICAO member States shall be submitted via diplomatic channels.

**Commercial Stopovers**

Scheduled operations are governed by bilateral or multilateral agreements.

**NON-SCHEDULED FLIGHTS****Overflights and Technical Stopovers**

Same procedure as published for Scheduled Overflights and Technical Stopovers.

**Non-scheduled Commercial Flights (Charter Flights)**

Requests for permission to operate Inclusive Tour Charter (ITC) flights, along with an attached form duly filled out and signed, must be forwarded by the carriers, and not the charterers, to the Civil Aviation Directorate.

An information copy shall also be submitted to the destination airports.

The request form contains the following:

**MOROCCO**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

- a. date, day, month and year;
- b. copy of contract between airline and charterer;
- c. copy of operational authorization (AOC) granted by the competent authority of the country of origin indicating type of aircraft and registration marks;
- d. date, route of flight and flight time;
- e. copy of insurance policy;
- f. formal obligation to repatriate the passengers to whom transport has been ensured.

Lead times for request submission are as follows:

- a. 30 workdays before the planned date of the first flight for a series of 10 flights or more within 2 civil months;
- b. 15 workdays before the planned date of the first flight for a series of less than 10 flights within 2 civil months;
- c. 72 hours before the flight operation for a single flight.

Air carriers are authorized to make double stops in Morocco.

**PRIVATE FLIGHTS (OVERFLIGHT AND LANDING)**

Requests for authorization shall include the same information as for Scheduled Overflights and Technical Stopovers.

For aircraft registered in ICAO member States a prior authorization is not required.

However, a flight plan shall be submitted at least 6 hours for IFR flights and 12 hours for VFR flights prior to departure to the:

- a. Air Transport Authority: GMMRADTA
- b. ACC Casablanca: GMMMZQZX
- c. ACC Agadir: GMACZQZX
- d. expected airport stopovers and international airports in Morocco.

Flights in the vicinity of the cities of Laayoune, Dakhla, Guelmime, Bouarfa and Tan-Tan requires prior authorization from the Air Transport Authority.

Aircraft registered in non-ICAO member States require special authorization for which the request shall be submitted through diplomatic channels.

**Utilization of Runways with limited use**

The concerned is required to submit, 20 days before the requested date, an application with attachments for overflight and landing permission to the Civil Aviation Directorate.

The application must include the following information:

- a. the day or days requested for the flight;
- b. type of aircraft and registration marks;

## MOROCCO

### NATIONAL REGULATIONS AND REQUIREMENTS

- c. geographical coordinates of the runway requested;
- d. organizer contact information (address, email and fax).

Attachments shall contain the following documents for each aircraft:

- a. copy of pilot's license in a valid status;
- b. copies of passengers and pilots' passports;
- c. copies of registration and airworthiness certificates;
- d. copies of insurance policies including those of aircraft and damage to third parties on the surface.

### STATE AIRCRAFT FLIGHTS

Flights through the airspace of Morocco and/or in the airspace over the high seas within Casablanca FIR are subject to a prior authorization. The application must reach the Ministry of Foreign Affairs through diplomatic channels at least 10 days before the beginning of the flight(s).

The following information shall be included:

- a. type and call sign of aircraft;
- b. name of pilot-in-command;
- c. number of persons aboard;
- d. nature and purpose of flight;
- e. date of flight;
- f. route of flight;
- g. intended landing(s);
- h. frequency of flights;
- i. any complementary information considered to be useful.

### AIRPORT(S) OF ENTRY

Agadir (Al Massira Intl), Al Hoceima (Cherif El Idrissi Intl), Beni Mellal (Intl), Casablanca (Mohammed V Intl), Dakhla (Intl), Errachidia (Moulay Ali Cherif Intl), Essaouira (Mogador Intl), Fes (Saiss Intl), Laayoune (Hassan I), Marrakech (Menara Intl), Nador (El Aroui Intl), Ouarzazate (Intl), Oujda (Angads Intl), Rabat (Sale Intl), Tanger (Ibn Batouta Intl), Tan-Tan (Plage Blanche Intl), Tetouan (Saniat R'mel).

### SCHEDULE AND AIRPORT COORDINATION

From the IATA summer season 2014, the airports of Casablanca (Mohammed V Intl) and Rabat (Sale Intl) are designated as IATA Level 3 fully coordinated airports every day between 0600 and 2300 LT.



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**MOROCCO**  
**NATIONAL REGULATIONS AND REQUIREMENTS****SPECIAL NOTICES**

All traffic from Libyan airports is neither allowed to land in Moroccan airports nor to overfly Moroccan airspace.

Aircraft registered in Libyan are neither allowed to land in Moroccan airports nor to overfly Moroccan airspace.

Departures from Moroccan airports to Libyan airports are not allowed.

## MOZAMBIQUE

### NATIONAL REGULATIONS AND REQUIREMENTS

## PASSPORT

Required.

## VISA

Required.

Crew member licences or certificates are accepted in lieu of passport and visa for temporary admission into Mozambique.

*NOTE: Additional requirements may exist. Please contact the appropriate authority to confirm information.*

## HEALTH

Disembarking passengers are required to present vaccination certificates when coming directly from an area infected with cholera, yellow fever or smallpox. Passenger or crew arriving within 6 days after leaving or children under 1 year are exempted.

## AIRCRAFT ENTRY REQUIREMENTS

### GENERAL

Instituto de Aviacao Civil de Mocambique

Alameda do Aeroporto

Address: P.O.Box 227

Maputo

Mozambique

Tel: +258 21 465728

+258 21 465915

+258 82 3021250

+258 82 3021270

+258 82 3021340

+258 21 465685

+258 21 468900

Fax: +258 21 465415

+258 21 466272

E-Mail: iacm@tvcabo.co.mz

iacm@iacm.gov.mz

Internet: www.iacm.gov.mz

AFTN: FQHQYAYX

**MOZAMBIQUE**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

**SCHEDULED FLIGHTS**

Scheduled operations are governed by interstate air agreements or are subject to special authorization. Applications for such authorizations shall be submitted to the address above at least 30 days in advance.

**NON-SCHEDULED FLIGHTS**

No prior permission is required for carrying out a (series of) non-scheduled flight(s) in transit across, or for making non-traffic stops in the territory of Mozambique.

Permission is required for performing a (series of) non-scheduled flight(s) into Mozambique for the purpose of taking on or discharging passengers, cargo or mail. The application must be forwarded to the Civil Aviation Authority not less than 24 hours in advance of the intended landing and must include the following information in the order shown here under:

- a. name and complete address of operator/owner of the aircraft;
- b. type of aircraft;
- c. registration mark;
- d. call sign;
- e. point of departure and destination;
- f. flight route;
- g. date, point and time of entry into the Beira FIR and/or of arrival at and departure from a Mozambique international airport;
- h. information about the crew;
- i. information about passengers and/or cargo;
- j. purpose of flight.

**PRIVATE FLIGHTS**

Permission to carry out private flights is required not less than 24 hours in advance of the intended flight. The application must be forwarded to the Civil Aviation Authority and must contain the same information as listed under NON-SCHEDULED FLIGHTS.

**AIRPORT(S) OF ENTRY**

All airports including Inhambane, Chimoio, Quelimane, Mocimboa da Praia and Lichinga are designated as International Entry Points for non-scheduled operations.

Maputo (Maputo Intl), Beira and Nacala are designated as International Airports to be used by scheduled airlines.

Vilankulos, Pemba, Tete and Nampula are designated as Regional Airports to be operated solely by SADC member States scheduled airlines.

**NAMIBIA**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

## **PASSPORT**

Required.

*NOTE: Crew member licenses or certificates are accepted instead of passport and visa only on scheduled flights. A crew member entering Namibia as a passenger in order to join another aircraft must be in possession of a passport and visa, when required.*

## **VISA**

Required except for passengers arriving or departing on the same through flight or in transit for another flight at the same airport. Additionally, visitors or persons seeking entry must satisfy the immigration officer at the "Port of Entry" that he/she:

- a. is in possession of a fully paid-up return or onward airline ticket;
- b. has sufficient means to sustain him-/herself for a reasonable period of time after arrival;
- c. has never been refused entry into or ordered to leave Namibia;
- d. has never been convicted of any crime in any country.

*NOTE: Additional requirements may exist. Please contact the appropriate authority to confirm information.*

## **HEALTH**

Disembarking passengers coming directly from an area infected with cholera, smallpox or yellow fever are required to present vaccination certificates.

## **DISINSECTION REQUIREMENTS**

Aircraft arriving from endemic yellow fever areas may land at international airports in Namibia provided that the aircraft has been disinfected approximately thirty minutes before arrival at the airport. This action must be properly recorded in the Health Section of the General Declaration. The insecticide to be used must conform to the specifications of the World Health Organisation.

## **AIRCRAFT ENTRY REQUIREMENTS**

### **GENERAL**

Pilots and operators of all foreign registered aircraft, intending to fly through Namibian airspace or within Namibian airspace must submit a request to obtain an overflight and landing clearance.

Requests should be submitted at least 24 hours prior to departure (weekdays), and 48 hours prior to departure when submitted over a weekend or public holiday to the Namibian Executive Director of CAA. The official application form can be downloaded from the CAA website (Fees and Forms section):

Namibia Civil Aviation Authority

Tel: +264 61 702086

+264 61 702081

+264 61 702083

**NAMIBIA**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

Fax: +264 61 702088 (during office hours)  
+264 62 702499 (for emergency only, after hours and on weekend)

E-Mail: [overflight@dca.com.na](mailto:overflight@dca.com.na)  
[clearance@dca.com.na](mailto:clearance@dca.com.na)  
[aisc@dca.com.na](mailto:aisc@dca.com.na)

Internet: [www.dca.com.na/pubs/Files/Other/ovrf-land-app](http://www.dca.com.na/pubs/Files/Other/ovrf-land-app)

AFS: FYHQYAYX

Director, Customs and Excise

Address: Private Bag 13185  
Windhoek

Tel: +264 61 2099111

Fax: +264 61 239278

### **SCHEDULED FLIGHTS**

In case of arrival the pilot shall:

- report at the designated airport to the nearest police officer, immigration officer or customs officer;
- ensure that no goods are unloaded and no passenger will leave the aerodrome without the permission of such officer;
- not take-off from the aerodrome without written permission of such officer.

Before departure from a designated airport the pilot shall:

- report to the nearest police officer, immigration officer or customs officer with all the information in relation to the journey:
  - aircraft, passengers, crew and cargo;
- not depart without the written permission of such officer;
- not land at any other place in Namibia after such departure.

### **PRIVATE FLIGHTS**

Pilots and operators of all foreign registered aircraft, intending to fly through Namibian airspace or within Namibian airspace must submit a request to obtain an overflight and landing clearance. Such requests must be submitted via Fax to the DCA no later than 24 hours prior to departure.

### **CIVIL USE OF MILITARY AIR BASES**

Prior permission for the use of military aerodromes must be obtained from the:

Chief of the Defence Force

Address: Private Bag 13307  
Windhoek

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**NAMIBIA**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

Fax: +26461 258 215

**AIRPORT(S) OF ENTRY**

Keetmanshoop, Walvis Bay, Windhoek (Eros), Windhoek (Hosea Kutako Intl).

**SPECIAL PERMISSION AIRPORTS**

Following airports have facilities for limited customs services and are designated as special permission airports:

Gobabis, Katima Mulilo, Luderitz, Ondangwa, Oranjemund, Rundu.

**NIGER**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

## **PASSPORT**

Required.

## **VISA**

Required, except if reciprocity agreement exists and stay not exceeds 3 months. A disembarkation card needs to be provided on arrival, respectively an embarkation card on departure.

*NOTE: Additional requirements may exist. Please contact the appropriate authority to confirm information.*

## **HEALTH**

Certificate of vaccination against yellow fever is required.

## **AIRCRAFT ENTRY REQUIREMENTS**

### **GENERAL**

For all overflights, the following documents must be provided:

- a. airworthiness certificate or a navigation pass, under validity;
- b. registration certificate;
- c. licences of flight crew member;
- d. flight register ("Air Book");
- e. licence of airborne radio communication station;
- f. general loading declaration;
- g. receipt and declarations of loading if it transports some goods.

The application for overflight authorization shall be submitted to:

Ministere des Transports

Address: Boite Postale 12130  
Niamey  
Niger

Tel: +227 20 734782

Fax: +227 20 735489

and must include the following information:

- a. type and registration marks of aircraft;
- b. name of the pilot in command;
- c. number of passengers;
- d. exact itinerary of flight including stopover aerodromes;
- e. exact date and time of flight;

## NIGER

### NATIONAL REGULATIONS AND REQUIREMENTS

- f. purpose of flight and nature of cargo.

### SCHEDULED FLIGHTS

Scheduled commercial operations are governed by bilateral agreements or are subject to prior authorization from Ministere des Transports. A request for approval must reach the Ministere des Transports at least 30 days before the expected date planned for the first landing.

### NON-SCHEDULED FLIGHTS

Non-scheduled commercial flights are governed by bilateral agreements or are subject to prior permission at least 4 days before the date planned for the first landing.

For inclusive tour charter flight, request for authorization must arrive the Ministere des Transports as follows:

- More than 3 flights: 30 days in advance,
- 3 or less flights: 15 days in advance.

### PRIVATE FLIGHTS

Private aircraft registered in a member state of ICAO must address a request for a flight authorization to the Ministere des Transports, 4 working days in advance.

Private aircraft registered in a non ICAO member state must obtain the authorization of Foreign Affairs Ministry, following a request addressed by diplomatic way, 4 working days in advance.

### STATE AIRCRAFT FLIGHTS

State aircraft flights must obtain the authorization of Foreign Affairs Ministry, following a request addressed by diplomatic way, 4 working days in advance.

### AIRPORT(S) OF ENTRY

First landing and final departure should be made at one of the following airports: Agades (Manu Dayak), Niamey (Diori Hamani), Zinder.

### SPECIAL NOTICES

For tourist and utility aircraft prior permission from the Ministere des Transports (for address see above) is necessary when intending to overfly or to land within the following regions:

- Departments of Agades and Diffa;
- the south-eastern region of Niamey Department up to the border of Benin and Burkina Faso.

The application has to be received at least 96 working hours in advance and must include following details:

- a. type and registration marks of aircraft;
- b. name and address of owner;
- c. name of pilot;



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**NIGER**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

- d. number and names of crew members;
- e. number and names of passengers;
- f. exact itinerary of flight;
- g. exact date of flight;
- h. purpose of flight.

**NIGERIA**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

## **PASSPORT**

Required.

## **VISA**

Required.

No visa, but entry permit is required for:

- British subject;
- British protected persons;
- citizens of Commonwealth countries;
- citizens of Ireland;
- citizens of countries covered by Visa Abolition Agreements (Benin, Cameroon, Chad, Morocco, Niger, Togo).

*NOTE: Additional requirements may exist. Please contact the appropriate authority to confirm information.*

## **HEALTH**

International certificate of vaccination against cholera is required of all persons entering Nigeria.

International certificates of vaccination against yellow fever and cholera are required of persons departing from Nigeria. For pilgrims departing for Saudi Arabia a vaccination certificate against cholera, smallpox and yellow fever is required.

## **DISINSECTION REQUIREMENTS**

No public health measures are required to be carried out in respect of aircraft entering Nigeria with the following exception:

Aircraft arriving from an infected area or an epidemic area such as plague, cholera, typhus, smallpox or yellow-fever, may land at any international airport in Nigeria provided that the aircraft has been disinfected approximately 30 minutes before arrival at the airport. This action must be properly recorded in the Health Section of the General Declaration. If in special circumstances, a second spraying of the aircraft is deemed necessary by the public health authorities to be carried out on the ground, passengers and crew are permitted to disembark beforehand.

## **AIRCRAFT ENTRY REQUIREMENTS**

### **GENERAL**

Federal Ministry of Aviation

Federal Government Secretariat

Address:       Shehu Shagari Way  
                  Private Mail Bag 5012  
                  Wuse, Abuja

**NIGERIA**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

Nigeria

AFTN: DNAAYAYX

Director General

Nigerian Civil Aviation Authority (NCAA)

Aviation House

Murtala Muhammed Airport

Address: Private Mail Bag 21029

Ikeja, Lagos

Nigeria

### **SCHEDULED FLIGHTS**

For regular international scheduled flights operated by foreign airlines into or in transit across Nigeria, the following requirements must be met:

- a. The State of the airline must be a party to the International Air Services Transit Agreement and/or the International Air Transport Agreement.
- b. The airline must be eligible to make the flights under the provisions of bilateral or multilateral agreement to which the State of the airline and Nigeria are contracting parties, and must have a permit to operate into or transit across Nigeria. Applications for such permits shall be submitted to the Federal Ministry of Aviation.

### **NON-SCHEDULED FLIGHTS**

If an operator intends to carry out a (series of) non-scheduled flight(s) in transit across, or making non-traffic stops in the territory of Nigeria, he may do so after obtaining prior permission in writing from the Director General of NCAA.

If an operator intends to perform a (series of) non-scheduled flight(s) into Nigeria for the purpose of taking on or discharging passengers, cargo or mail, he shall apply to the Director General of NCAA for permission to carry out such operations not less than 48 hours in advance of the intended landing.

The application must include the following information in the order shown hereunder:

- a. name of operator;
- b. type of aircraft and registration marks;
- c. date and time of arrival at, and departure from the airport or airports concerned;
- d. place or places of embarkation or disembarkation abroad, as the case may be, of passengers and/or freight;
- e. purpose of a flight and number of passengers and/or nature and amount of freight;
- f. name, address and business of charterer, if any.

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**NIGERIA**  
**NATIONAL REGULATIONS AND REQUIREMENTS****PRIVATE FLIGHTS**

All overflying and landing private flights require prior written permission. Applications shall be submitted as for non-scheduled traffic above. Landings in Nigeria are restricted to the aerodrome's published normal hours of operation.

**AIRPORT(S) OF ENTRY**

Abuja (Nnamdi Azikiwe Intl), Calabar (Margaret Ekpo), Enugu (Akanu Ibiam), Gombe, Ilorin, Kaduna (New Kaduna), Kano (Mallam Aminu Kano), Lagos (Murtala Muhammed), Maiduguri, Port Harcourt, Sokoto (Saddiq Abubakar III Intl), Yola.

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**REUNION**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

## **PASSPORT & VISA**

Required.

*NOTE: Additional requirements may exist. Please contact the appropriate authority to confirm information.*

## **HEALTH**

Certificate of vaccination against smallpox is required for passengers arriving from infected areas, or from States in Africa, Asia or America, excluding United States and Canada. Certificates of vaccination against yellow fever and cholera are required for passengers arriving from infected areas.

## **AIRCRAFT ENTRY REQUIREMENTS**

### **SCHEDULED FLIGHTS**

Scheduled operations are governed by interstate bilateral air agreements or special authorization delivered by the French Government.

### **NON-SCHEDULED FLIGHTS**

The non-scheduled flight request should contain the following information:

- a. name of operator and of aircraft owner (if different from the operator);
- b. aircraft type and capacity;
- c. dates, route and complete timetable of flight;
- d. flight category:
  - if charter flight:
    - a. name and address of the charterer;
    - b. transport price;
    - c. number of passengers;
    - d. purpose of charterer (other than travel).
  - if inclusive tour:
    - a. name and address of the charterer;
    - b. the minimum price paid by each passenger for the whole tour;
    - c. the exact tour of the complete tour;
    - d. the total tour duration and the estimated stay duration.

All foreign aircraft staying more than 7 days on the Reunion territory are subject to the requirement for a temporary importation document, without bail, delivered by the customs services.

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**REUNION**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

## **AIRPORT(S) OF ENTRY**

La Reunion (Roland Garros), St Pierre (Pierrefonds).

## **SPECIAL NOTICES**

### **TRAFFIC TO/FROM STATES OUTSIDE THE EUROPEAN ECONOMIC AREA**

Third Country Operators (TCO) engaging in scheduled or non-scheduled commercial air transport operations into, within or out of a territory subject to the provisions of the treaty of the EU, must hold a safety authorization issued by the European Aviation Safety Agency (EASA) in accordance with Regulation (EU) No 452/2014.

This TCO authorization is not required for operators only overflying without a planned landing.

Applications for TCO authorization should be submitted to EASA at least 30 days before the intended starting date of operation.

For more information contact:

Internet: <http://easa.europa.eu/TCO>

**RWANDA  
NATIONAL REGULATIONS AND REQUIREMENTS****PASSPORT**

Required.

An applicant shall be holder of a valid passport or another acceptable travel document. The document must have a validity of at least 6 months on the day of entry in Rwanda.

**VISA**

Required, except for:

- passengers arriving and departing on the same flight or transferring to another flight at the same airport;
- nationals of the following countries are allowed to visit Rwanda without a visa for a period up to 90 days: Benin, Central African Republic, Chad, Democratic Republic of Congo, Ghana, Guinea, Haiti, Indonesia, Mauritius, Philippines, Sao Tome and Principe, Senegal, Seychelles and Singapore;
- nationals of East African Community Partner States (Burundi, Kenya, South Sudan, Tanzania and Uganda) are allowed to visit Rwanda without visa for a period up to 6 months.

Citizens of all countries get Visa-on-arrival valid for 30 days without prior application.

*NOTE: Additional requirements may exist. Please contact the appropriate authority to confirm information.*

**HEALTH**

A vaccination certificate may be required at the border post. In the event of a major disease outbreak, specific requirements could be set and put to the knowledge of the applicants.

**AIRCRAFT ENTRY REQUIREMENTS****GENERAL**

Director General of Civil Aviation

Address: P.O. Box 1122  
Kigali International Airport  
Kigali  
Rwanda

Tel: +250 724 123015

E-Mail: [clearance@caa.gov.rw](mailto:clearance@caa.gov.rw)

**SCHEDULED FLIGHTS**

For regular international scheduled flights operated by foreign airlines into or in transit across Rwanda an application for authorization shall be submitted to the Director General of Civil Aviation.

**RWANDA**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

**NON-SCHEDULED FLIGHTS**

Prior permission is required for all overflights and non-traffic stops.

Applications for requesting permission for commercial flights shall be submitted at least 3 work-days before the commencement of the flight to the Director General of Civil Aviation.

The application form can be found on:

Internet: [www.caa.gov.rw](http://www.caa.gov.rw)

The request shall comprise the following details:

- a. name of the operator;
- b. name of registered owner of aircraft;
- c. registration of aircraft;
- d. call sign;
- e. type and registration mark of aircraft;
- f. MTOW;
- g. airdropping capability and ACAS/TCAS equipped;
- h. registration, insurance, airworthiness and noise certification(s) of aircraft;
- i. routing, including dates and times in UTC of entry/exit in Kigali FIR;
- j. purpose of flight;
- k. aerodrome and estimated time of departure;
  - l. estimated time of leaving Rwanda and destination;
- m. name of pilot-in-command;
- n. billing address of the operator;
- o. details of cargo and/or passengers;

*NOTE: Scanned passport copies for inbound and/or outbound passengers are required.*

- p. address of local agent/contact person;
- q. payment information.

**STATE OR MILITARY AIRCRAFT FLIGHTS**

Foreign military aircraft must obtain diplomatic and administrative clearance from the Government. Applications should be submitted to:

Ministry of Foreign Affairs

Address: P.O. Box 179  
Kigali  
Rwanda

Tel: +250 252 573797



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**RWANDA**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

E-Mail: info@minafet.gov.rw

Prior permission for both military and State aircraft should be made at least 14 days before the aircraft is due to overfly or land Rwanda and should contain the following information:

- a. type of aircraft;
- b. registration or identity marks;
- c. call sign;
- d. itinerary;
- e. place of landing in Rwanda, arrivals and departures or if overflying, estimated times of arrivals and departures from Rwanda and dates;
- f. name of pilot-in-command;
- g. purpose of flight.

## **AIRPORT(S) OF ENTRY**

Kigali (Intl).

## **SPECIAL NOTICES**

All flights for aircraft registered in non-ICAO member States within Rwanda airspace and to its aerodromes are subject to special permission to be negotiated through diplomatic means.

## SAO TOME AND PRINCIPE NATIONAL REGULATIONS AND REQUIREMENTS

### PASSPORT

Required, except for passengers arriving or departing on the same through flight or transferring to another flight at the same airport.

A crew member license or certificate is accepted in lieu of passport or visa for temporary admission provided the crew member is on a scheduled service and remains at the airport where the aircraft has stopped or within the confines of the adjacent city(ies), and departs on the same aircraft or on his/her next regularly scheduled flight. This provision also applies to crew members entering Sao Tome and Principe by other means of transport for the purpose of joining an aircraft.

### VISA

Required, except for the following:

- a. nationals of Sao Tome and Principe provided they are holding a safe conduct or diplomatic or service passport;
- b. persons holding a re-entry permit;
- c. nationals of Angola, Cape Verde Islands, Guinea-Bissau and Mozambique, provided they are holding a diplomatic or service passport;
- d. transit passengers holding tickets with reserved seats and other documents for onward or return travel on the same day.
- e. flight crew members on scheduled services or joining an aircraft (see PASSPORTS above).

Passengers arriving from a country without Sao Tome and Principe diplomatic representation may obtain a visa upon arrival.

*NOTE: Additional requirements may exist. Please contact the appropriate authority to confirm information.*

### HEALTH

Disembarking passengers coming directly from an area infected with cholera or yellow fever are required to present vaccination certificates.

### AIRCRAFT ENTRY REQUIREMENTS

#### SCHEDULED FLIGHTS

Scheduled operations are governed by bilateral air traffic or international air services transit agreements. During negotiations for a bilateral agreement, the air carrier may obtain a temporary authorization for overflight and landing through diplomatic channels.

#### NON-SCHEDULED FLIGHTS

##### General

All non-scheduled flight require prior authorization. Application for authorization shall be sent to:  
President of National Institute of Civil Aviation

**SAO TOME AND PRINCIPE  
NATIONAL REGULATIONS AND REQUIREMENTS**

Aeroporto Internacional de Sao Tome

Address: Caixa Postal 97  
Sao Tome  
Sao Tome and Principe  
Fax: +239 224450  
E-Mail: [inac@cstome.net](mailto:inac@cstome.net)  
AFS: FPSTYAYX

**Overflights and non-traffic stops**

Aircraft registered in an ICAO Member State may overfly or land without prior authorization provided that a FPL is submitted at least 2 weekdays before landing containing the following details:

- name of operator;
- aircraft type and registration marks;
- date and time of arrival at and departure from the airport concerned;
- itinerary;
- purpose of flight;
- nature and amount of cargo, and

the territory of the operator accords the same treatment to Santomean aircraft.

Aircraft of non-ICAO Member States require prior authorization. Application shall be submitted through diplomatic channels and contain the details mentioned above.

**Traffic stops**

Operators of aircraft registered in ICAO Member States may operate non-scheduled traffic flights. Applications for authorization shall be submitted with sufficient notice prior to landing date. Applications for single-entity, humanitarian or taxi flights shall contain the following details:

- name of operator;
- aircraft type and registration marks;
- date and time of arrival at and departure from Sao Tome airport;
- place(s) of embarkation or disembarkation abroad of passengers and/or freight;
- purpose of flight and number of passengers and/or nature and amount of freight;
- name, address and business of charterer, if any.

*NOTE: additional information may be required.*

Applications for other flights shall be submitted on the prescribed form. Foreign operators may have to comply with the following requirements:

- being registered with the Civil Aviation Institute;

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**SAO TOME AND PRINCIPE  
NATIONAL REGULATIONS AND REQUIREMENTS**

- having established a bank guarantee;
- having filed a limit of liability for damages.

**PRIVATE FLIGHTS**

For flights of aircraft registered in an ICAO Member State, a FPL is accepted as advance notification provided it is submitted so as to be received by the aeronautical authority at least 2 hours in advance of landing.

For flights of aircraft not registered in an ICAO Member State or in any case where reciprocity does not exist, an application for permission shall be submitted through diplomatic channels.

**AIRPORT(S) OF ENTRY**

Aircraft shall first land at and finally depart from Sao Tome (Intl). In specially permitted cases, aircraft may first land and finally depart also from Principe.

## SENEGAL NATIONAL REGULATIONS AND REQUIREMENTS

### PASSPORT

Required, except children under 15 years of age accompanied by their parents.

### VISA

Required, except from nationals of the OCAM (Common African and Madagascar Organization) member States, nationals of Mali, Morocco and France.

Freedom of circulation, without a visa, within Senegal for transit and short stays, is guaranteed to nationals of Belgium, Germany, Italy, Luxembourg, Netherlands and Tunisia.

Crew member licences or certificates are accepted instead of passport and visa.

*NOTE: Additional requirements may exist. Please contact the appropriate authority to confirm information.*

### HEALTH

An international certificate of vaccination must be presented upon arrival.

A vaccination against cholera, smallpox or yellow fever may be required if arriving directly from an infected area.

### AIRCRAFT ENTRY REQUIREMENTS

#### GENERAL

Agence Nationale de l'Aviation Civile et de la Meteorologie (ANACIM)

Aéroport Intl L.S. SENGHOR

Address: Boite Postale 8184  
Dakar/Yoff  
Senegal

Tel: +221 33 865 6000  
+221 33 869 5050

Fax: +221 33 820 0403  
+221 33 820 3967

Telex: 51206 SG

E-Mail: [anacim@anacim.sn](mailto:anacim@anacim.sn)

Internet: [www.anacim.sn](http://www.anacim.sn)

AFTN: GOOYYAYX

#### SCHEDULED FLIGHTS

Scheduled flights are governed by international and bilateral or multilateral air agreements. Requests to carry out regular international air services in accordance with international conventions shall be submitted directly to the ANACIM.

**SENEGAL**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

**NON-SCHEDULED FLIGHTS**

Special authorization is required for overflight, with or without intermediate landing. Requests shall be submitted to the ANACIM.

Authorization requests shall contain the following:

- a. name of operator;
- b. type of aircraft and registration mark;
- c. date and time of arrival at and departure;
- d. place of embarkation or disembarkation abroad, as the case may be, of passengers and/or freight;
- e. purpose of flight and number of passengers and/or nature and amount of freight;
- f. name, address and business of the charterer;
- g. other information.

**PRIVATE FLIGHTS**

Prior permission required for all overflights and landings and a flight plan shall be submitted. Application must be submitted to the ANACIM at least 2 days, but not more than 7 days, prior to the commencement of the flight.

**AIRPORT(S) OF ENTRY**

Cap Skirring, Dakar-Diass (Blaise Diagne Intl), St Louis, Ziguinchor.

**SEYCHELLES**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

## **PASSPORT & VISA**

Required.

## **AIRCRAFT ENTRY REQUIREMENTS**

### **SCHEDULED FLIGHTS**

Scheduled Air Services are governed by bilateral or multilateral agreements and are subject to prior permission from the:

Chief Executive Officer

Seychelles Civil Aviation Authority

Address: P.O. Box 181  
Victoria, Mahe  
Seychelles

Tel: +248 4384000

Fax: +248 4384009

AFS: FSIAYAYX

### **NON-SCHEDULED FLIGHTS**

Prior permission is required from the Chief Executive Officer (see address above). The application should reach the authority 72 hours in advance and shall include the following information:

- a. name of operator, full postal address including telephone, fax and email contacts;
- b. type of aircraft;
- c. MTOW expressed in kgs or lbs;
- d. previous aerodrome of departure prior to arrival in Seychelles, including arrival date and time in UTC;
- e. number of crew and passenger arriving. If in transit, indicate number of passengers disembarking or joining;
- f. date of departure, time in UTC and next destination aerodrome;
- g. number of crew and passenger departing;
- h. if flight is exchanging passengers with cruise ship in Port Victoria, to submit the following:
  - name of cruise ship;
  - number of passengers being exchanged;
  - name of local tour operator in Seychelles (with contact person) assisting with passenger exchange.
- i. if flight is chartered to bring in large group of passengers, to submit:
  - number of passengers arriving and departing including crew;

## SEYCHELLES NATIONAL REGULATIONS AND REQUIREMENTS

– name of local tour operator in Seychelles (with contact person) assisting with passenger arrival and departure.

j. names of hotel establishments for passengers and crew.

### PRIVATE FLIGHTS

Prior permission to operate private flights whether overflying or landing in Seychelles is to be submitted 72 hours in advance to the following contacts:

Civil Aviation Authority

Fax: +248 4384128 or +248 4384009

E-Mail: [fltclearance@scaa.sc](mailto:fltclearance@scaa.sc) or [acmc@scaa.sc](mailto:acmc@scaa.sc)

Operators of private jets remaining on ground for more than 24 hours are required to carry a complete and fully serviceable tow-bar onboard their aircraft in case relocation is required.

Documents to apply for such flights can be downloaded from website: [www.scaa.sc](http://www.scaa.sc)

### AIRPORT(S) OF ENTRY

Seychelles (Intl).

If a landing is made other than at the international airport or a designated alternate airport, the pilot-in-command shall report the landing as soon as practicable to the health, taxation (Import Control) and immigration authorities at the international airport at which the landing was scheduled to take place. This notification may be made through any available communication link.

### SPECIAL NOTICES

Aircraft must be disinfected "blocks away" using WHO approved insecticide from last point of departure. Passengers & crew who embark from a yellow fever endemic area should be notified prior to disembarkation to present their valid yellow fever vaccination card to the Public Health Officer within the arrival lounge for verification.



**SIERRA LEONE  
NATIONAL REGULATIONS AND REQUIREMENTS**

## **PASSPORT**

Required.

## **VISA**

Required, except for passengers in direct transit not leaving the Freetown International airport transit area and for ECOWAS citizens.

*NOTE: Additional requirements may exist. Please contact the appropriate authority to confirm information.*

## **HEALTH**

International certificate of vaccination against yellow fever is required. Persons arriving from cholera infected areas shall hold an international certificate of inoculation against cholera.

## **AIRCRAFT ENTRY REQUIREMENTS**

### **GENERAL**

Director General

Address: Sierra Leone Civil Aviation Authority (SLCAA)  
National Development Bank Building, 3rd Floor  
21/23 Siaka Stevens Street  
Freetown  
Sierra Leone

Tel: +232 (033) 612 288

Mobile: +232 78 575 361

E-Mail: mtbaio@slcaa.gov.sl  
info@slcaa.net

AFTN: GFLLYAYX

### **SCHEDULED FLIGHTS**

Scheduled operations are governed by interstate air agreements or special authorization. Applications shall be submitted 120 hours in advance to The Director of Civil Aviation.

### **NON-SCHEDULED FLIGHTS**

Prior permission required for all overflights and landings from The Director of Civil Aviation.

The application shall be submitted at least 120 hours in advance and shall include the following information:

- a. name of operator;
- b. type of aircraft and registration marks;
- c. date and time of arrival at and departure;

**SIERRA LEONE  
NATIONAL REGULATIONS AND REQUIREMENTS**

- d. place or places of embarkation or disembarkation abroad (as the case may be) of passengers and/or freight;
- e. purpose of flight, number of passengers and/or nature and amount of freight;
- f. name, address and business of charterer, if any;
- g. any useful supplementary information.

**PRIVATE FLIGHTS**

The information contained in the flight plan is accepted as adequate advance notification on the arrival of incoming aircraft. The notification shall be submitted so as to reach the appropriate authorities at least 2 hours in advance. The landing shall be carried out at Freetown (Lungi).

**AIRPORT(S) OF ENTRY**

Freetown (Lungi).

**SOMALIA**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

## **AIRCRAFT ENTRY REQUIREMENTS**

### **GENERAL**

Passengers and crew are advised to contact the relevant State authorities responsible for the entry, transit and departure of passengers and crew at a particular airport of entry/exit.

Aden Adde Intl:

Director General

Somali Civil Aviation Authority (SCAA)

Address: Aden Adde International Airport  
Mogadishu  
Somalia

Tel: +252 18 53675  
+252 18 53676

E-Mail: [scaa@scaa.gov.so](mailto:scaa@scaa.gov.so)

Internet: [www.scaa.gov.so](http://www.scaa.gov.so)

Egal, Berbera and Burao:

Somaliland Civil Aviation and Airports Authority

Tel: +252 63 4428402

E-Mail: [slncaapa@gmail.com](mailto:slncaapa@gmail.com)

Internet: [www.somalilandaviation.com](http://www.somalilandaviation.com)

Bosaso Airport, Airports at Garowe (Garowe Airport, New Garowe (Muglotagtag) and Conoco Airfields):

Ministry of Civil Aviation and Airports Authority Puntland Somalia

Tel: +252 90 7791233

E-Mail: [moocaadgen@gmail.com](mailto:moocaadgen@gmail.com)

Internet: [www.plmocaa.so](http://www.plmocaa.so)

### **Closure of Aerodromes**

All airports in Mogadishu FIR are closed except all airports in Somaliland, all airports in Puntland, Beletuen, Dussa Mareb, Adado and Guryael. Humanitarian flights intending to operate to airports not mentioned above must obtain clearance at least 48 hours prior to the date of operation from:

Somali Civil Aviation Authority (SCAA)

Tel: +252 18 53675  
+252 18 53676

Fax: +252 59 30002

E-Mail: [scaa@scaa.gov.so](mailto:scaa@scaa.gov.so)

All requests for clearance should include the following:

**SOMALIA**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

- a. aircraft type;
- b. aircraft callsign;
- c. aircraft registration;
- d. purpose of flight;
- e. date of operation;
- f. route;
- g. operator.

**Status of Airfields in Somalia**

All operators intending to operate to any airfield in Somalia are advised to verify the status of the airfield to which they intend to operate from local authorities or Flight Information Services for Somalia:

FIS Somalia

Tel: +252 18 57394

E-Mail: [Ainformationservice@fp.icao.int](mailto:Ainformationservice@fp.icao.int)

**SCHEDULED FLIGHTS**

For regular international scheduled flights operated by foreign airlines into or in transit across Mogadishu FIR, the following requirements must be met:

- a. the State of the airline must be a party to the International Air Services Transit Agreement and/or the International Air Transport Agreement Somalia is a party to both Agreements;
- b. the airline must be eligible to make the flights under the provisions of a bilateral or multilateral agreement to which the State of the airline and Somalia are contracting parties and must have a permit to operate into or in transit across Somalia.

Applications for such permits shall be submitted to the Director General of SCAA.

**ENTRY/OVERFLIGHT CLEARANCE**

Application for entry/overflight clearance shall be addressed to the:

Flight Information Services for Somalia

Tel: +252 18 57389

+252 18 57394

E-Mail: [MNOF@fp.icao.int](mailto:MNOF@fp.icao.int)

including details listed below:

- a. name of the operator
- b. address of the operator;
- c. type of aircraft;

**SOMALIA**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

- d. registration mark;
- e. date and place of origin of flight;
- f. complete route itinerary including dates and times (UTC).

### **AIRPORT(S) OF ENTRY**

Aircraft flying into or departing from Somalia territory shall make their first landing at, or final departure from an airport where customs and immigration services are available.

### **SPECIAL NOTICES**

#### **Direct Flights from Aden Adde Intl to Nairobi (Jomo Kenyatta Intl)**

Operators intending to operate direct flights from Aden Adde Intl to Nairobi (Jomo Kenyatta Intl) must request approval from Director General of SCAA and subsequently file a flight plan. All flights departing from other airfields in Somalia are still required to go through Wajir Airport in Kenya for security vetting.

**SOUTH AFRICAN REP.  
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## **PASSPORT**

Required.

The crew members licence or certificate is accepted in lieu of passport or visa.

## **VISA**

Required except:

- a. citizens of the United Kingdom and Ireland;
- b. citizens of Switzerland and Liechtenstein for temporary visits;
- c. nationals of Botswana and Swaziland for visits of 90 days or less;
- d. nationals of Lesotho for visits of 30 days or less.

*NOTE: Additional requirements may exist. Please contact the appropriate authority to confirm information.*

## **HEALTH**

Yellow fever or cholera vaccination certificate is required of passengers arriving from endemic or infected areas.

## **AIRCRAFT ENTRY REQUIREMENTS**

### **SCHEDULED FLIGHTS**

Scheduled operations are governed by bilateral air agreements. Foreign operators must possess a valid Foreign Operator's Permit issued by the Chairperson of the International Air Services Council.

### **NON-SCHEDULED FLIGHTS**

Foreign operators engaged in the carriage of passengers, cargo or mail for remuneration or hire must obtain a Foreign Operator's Permit.

Permits are not required for class IV international air services if:

- a. not more than eight passengers or 1000 kilograms of cargo or mail is transported on the inbound and outbound flight; and
- b. no passengers, cargo or mail is taken on at any point in South Africa for discharge at any other point in South Africa, except those passengers or that cargo or mail referred to above.

Applications must be forwarded by the air carrier concerned or the air carrier's agent to:

Chairperson of the International Air Services Licensing Council

Address: Private Bag X193  
Pretoria  
0001

**SOUTH AFRICAN REP.  
NATIONAL REGULATIONS AND REQUIREMENTS**

or by prepaid telegram to TRANSPORT, PRETORIA to reach the Chairperson of the International Air Services Licensing Council at least 5 full business days before commencement of the flight.

The following guidance for submitting applications or amendments thereof shall apply:

- a. applications for a permit or amendment thereof must be on a form as prescribed;
- b. a separate application is required for each class of international air service requested;
- c. when requesting an amendment, the permit holder must also submit the original permit to the Commissioner for Civil Aviation for cancellation, whereupon a new permit will be issued.

Additionally, the applicant may be required to submit the following to substantiate fitness and ability to perform international air service:

- a. a plan detailing the manner in which the applicant will ensure that a safe and reliable international air service is operated;
- b. proof of compliance with the other requirements mentioned in section 25(2) of the International Air Services Act of 1993;
- c. a certified true copy of the existing valid foreign license pertaining to the international air service for which the permit application, or amendment thereof, is being made;
- d. a certified true copy of the memorandum and articles of association or any other founding document of the applicant if the applicant is not a natural person;
- e. a valid guarantee, security or insurance policy in respect of the obligations and liabilities of the applicant which may arise from the operation of the international air service concerned;
- f. any other document in support of the applicant's ability to operate the international air service concerned;
- g. an application fee must accompany the application for a Foreign Operators Permit.

## **PRIVATE FLIGHTS**

The information contained in the flight plan is accepted as adequate notification of the arrival of incoming aircraft.

## **SCHEDULE AND AIRPORT COORDINATION**

In South Africa, the coordinated airports are Johannesburg (O.R.Tambo Intl), Cape Town (Intl) and Durban (King Shaka Intl). Any change or addition to this will be communicated via the relevant aeronautical publication. The airport slot coordination service is being provided by the following facility:

Central Airspace Management Unit

Address: ATNS Operations Complex, Bonaero Park

Tel: +27 11 928 6433

Fax: +27 11 928 6565

E-Mail: [coord@atns.co.za](mailto:coord@atns.co.za)

Internet: <http://www.atns.com/atfm/php>

**SOUTH AFRICAN REP.  
NATIONAL REGULATIONS AND REQUIREMENTS**

Normal Hours of Duty will be Weekdays between 0600UTC and 1400UTC (excluding Public Holidays).

## **AIRPORTS OF ENTRY**

Bloemfontein (Bram Fischer Intl), Cape Town (Intl), Durban (King Shaka Intl), Johannesburg (O.R. Tambo Intl), Kruger Mpumalanga (Intl), Lanseria (Intl), Pilanesberg (Intl), Polokwane (Intl), Port Elizabeth (Intl), Upington (Intl).

## **SPECIAL NOTICES**

### **AUTHORIZATION FOR SPECIAL FLIGHTS**

Pilots filing flight plans for non-scheduled flights to Angola are to present the plans to both the customs and immigration offices for approval and stamping prior submission to ATC.

Pilots filing flight plans for non-scheduled flights to any over-border destination are to quote the CAA number of the applicable RSA Air Services License number on the flight plan prior to submission to ATC.

### **PORT ELIZABETH and UPINGTON PROCEDURES**

#### **International Arrivals**

The pilot in charge of an arriving international flight must ensure that Customs and Excise, Immigration, Border Police and the Department of Health, as well as the Airport Manager, are informed of the flight at least 1 hour before landing.

The following shall be reported:

- a. aircraft registration;
- b. pilot name;
- c. point of origin;
- d. landing clearance Reference No.;
- e. number of people on board;
- f. time of arrival.

Representatives from the relevant authorities will meet the aircraft at the parking bay. Neither the pilot, nor any passenger or cargo, may leave the aircraft prior to the relevant authorities being present.

#### **International Departures**

All international flights will depart from the main apron and then only after having been cleared by the relevant authorities.

The pilot in charge of a departing international flight must ensure that the clearing authorities, as well as the Airport Manager, have been informed of the planned flight at least 1 ½ hour prior to the planned time departure.



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**SOUTH AFRICAN REP.  
NATIONAL REGULATIONS AND REQUIREMENTS**

The following shall be reported:

- a. aircraft registration;
- b. pilot name;
- c. point of destination;
- d. number of people on board;
- e. cargo shipped;
- f. time of departure (ETD).

**ST HELENA  
NATIONAL REGULATIONS AND REQUIREMENTS****PASSPORT**

Required.

Crew member may use a valid crew licence or crew member certificate which includes a certification that the holder may at all times re-enter the State of issuance.

*NOTE: Additional requirements may exist. Please contact the appropriate authority to confirm information.*

**AIRCRAFT ENTRY REQUIREMENTS****GENERAL**

Access rights for non-UK airlines within the European Union (EU) and European Economic Area (EEA) are not applicable to flights to and from St Helena.

**SCHEDULED FLIGHTS**

Commercial aircraft belonging to countries that are not contracting States to ICAO must request diplomatic clearance, for operations into St Helena at least 7 days in advance of the planned flight, from the:

Head of the Governor's Office

Address:       The Castle  
                  Jamestown  
                  St Helena Island  
                  STHL 1ZZ

Tel:             +290 22869

Fax:             +290 22869

**NON-SCHEDULED FLIGHTS**

Non-scheduled flight operators, for hire or reward with either passengers or cargo to or from St Helena, shall submit an Operating Permit Application to the St Helena Government Airport Contracts Manager. The Operating Permit Application form is available from the St Helena Government Airport Contracts Manager:

Airport Contracts Manager

Address:       St Helena Government  
                  The Castle  
                  Jamestown  
                  St Helena Island  
                  STHL 1ZZ

Tel:             +290 22477

Fax:             +290 22598

E-Mail:         alan.shaw@sthelenaairport.aero

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**ST HELENA**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

## **TRANSIT FLIGHTS**

Notification of intent should be submitted to the Airport Contracts Manager as soon as possible for transit flights requesting landing and requiring only technical services. Permission for a technical landing may be refused if it appears that normal scheduled services cannot be properly accommodated.

## **STATE AND MILITARY AIRCRAFT FLIGHTS**

All military flights must obtain PPR approval from the:

Head of Operations (Accountable Manager)

Address: Prosperous Bay Plain  
St Helena Island  
STHL 1ZZ

Tel: +290 25175

E-Mail: [operations@sthelenaairport.aero](mailto:operations@sthelenaairport.aero)

AFS: FSHSZTZX

For military aircraft belonging to countries that are not contracting States to ICAO same diplomatic clearance requirements apply as for SCHEDULED FLIGHTS at least 7 calendar days in advance of the planned flight.

## **DANGEROUS GOODS FLIGHTS**

The United Nations classification of dangerous goods and munitions of war carried on any military aircraft must be declared to the Airport Contracts Manager.

## **AIRPORT(S) OF ENTRY**

St Helena.

## **SPECIAL EQUIPMENT TO BE CARRIED**

### **EMERGENCY LOCATOR TRANSMITTER (ELT)**

Aircraft conducting long-range over-water flights must be equipped with at least 2 ELTs, 1 of which shall be automatic, when the flight distance away from land suitable for making an emergency landing corresponds to more than:

- 120 minutes at cruising speed or 740km (400NM), whichever is lesser, for aircraft having 2 or more engines; or
- 30 minutes at cruising speed or 185km (100NM), whichever is lesser, for all other aircraft.

## **SPECIAL NOTICES**

### **THIRD COUNTRY OPERATOR (TCO)**

A TCO can fly to St Helena without holding a TCO authorization.

## SUDAN

### NATIONAL REGULATIONS AND REQUIREMENTS

## PASSPORT

Required.

## VISA

A valid visa is required except for the following:

- a. diplomatic mission personnel (including international organization personnel);
- b. visitors leaving the Sudan within a period not exceeding 3 months from the date of entry;
- c. passengers arriving and departing on the same through flight or transferring to another flight at the same airport;
- d. flight crew members on scheduled services who keep possession of licenses when embarking or disembarking, remain at the airport where the aircraft has stopped or within the confines of cities adjacent thereto, and depart on the same aircraft or on their next regularly scheduled flight, the crew member license or certificate is accepted in lieu of passport or visa for temporary admission into Sudan. This provision is also applicable if crew members enters Sudan by other means of transport for joining an aircraft.

*NOTE: Additional requirements may exist. Please contact the appropriate authority to confirm information.*

## HEALTH

Disembarking passengers are not required to present vaccination certificates, except when coming directly from areas infected with cholera, yellow fever or smallpox. On departure, health formalities are required.

## DISINSECTION

Aircraft arriving from abroad may land at any international aerodrome in Sudan provided that the aircraft has been disinfested approximately 30 minutes before arrival at the aerodrome. This action must be properly recorded in the Health Section of the General Declaration. The insecticide to be used is aerosol. If, in special circumstances, a second spraying of the aircraft to be carried out on the ground is deemed necessary by the public health authorities, passengers and crew are permitted to disembark beforehand.

## AIRCRAFT ENTRY REQUIREMENTS

### GENERAL

Civil Aviation Authority (CAA)

Address: P.O. Box 165

Khartoum

Sudan

Tel: +249 1 8377 2360

+249 1 8377 0617

## SUDAN

### NATIONAL REGULATIONS AND REQUIREMENTS

Fax: +249 1 8377 9715

AFTN: HSSSYAYG

### SCHEDULED FLIGHTS

Scheduled operations are governed by interstate air agreements or special authorization. The airline must be eligible to make the flights under the provision of a bilateral or multilateral agreement. Applications shall be submitted at least 3 workdays in advance to the CAA.

### NON-SCHEDULED FLIGHTS

Prior permission is required of any foreign civil aircraft intending to carry out a non-scheduled or a series of non-scheduled flights in transit across or making no traffic stops in the territory of Sudan.

If an operator intends to perform a (series of) non-scheduled flight(s) for the purpose of taking or discharging passengers, cargo or mail, it is necessary for the operator to apply to the CAA for permission to carry out such operations not less than 24 hours in advance of the intended landing.

The application for permission must include following information:

- a. name of the operator;
- b. type of aircraft and registration marks;
- c. date and time of arrival at, and departure from (aerodrome);
- d. place or places of embarkation or disembarkation aboard, as the case may be, of passengers and/or freight;
- e. purpose of flight and number of passengers and/or nature and amount of freight; and
- f. name, address and business of charterer; if any
- g. for cargo:
  1. nature of load;
  2. consignor;
  3. consignee.
- h. business flight need receiving party;
- i. permission valid for  $\pm 72$  hours.

### PRIVATE FLIGHTS

The information contained in the flight plan is accepted as adequate advance notification of the arrival of the aircraft. The landing must be carried out at a previously designated international aerodrome.

### AIRPORT(S) OF ENTRY

El Obeid, Juba, Khartoum, Nyala, Port Sudan.

**TANZANIA**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

## **PASSPORT**

### **REQUIREMENTS FOR TANZANIA MAINLAND**

All passengers except holders of Inter-State Passes are required to be in possession of valid passports. Recognized passes are: Visitors Passes, Dependants Passes, Special Passes, Re-Entry Passes, Landing Passes.

A visitor's pass or transit pass may be issued provided the person seeking entry is in possession of an onward or return ticket.

### **REQUIREMENTS FOR ZANZIBAR**

All persons, except citizens of Tanzania, Kenya, Uganda and Zambia holding valid passports or Interstate passes are required to be in possession of a valid entry permit as well as a valid passport duly endorsed with necessary visas. An entry permit may be obtained from:

The Principal Immigration Officer

Address: P.O. Box 1354

Zanzibar

Tel: +255 24 223 1161

+255 24 223 1162

+255 24 223 1621

Fax: +255 24 223 3677

+255 24 223 4973

## **VISA**

### **REQUIREMENTS FOR TANZANIA MAINLAND**

Any person, other than a British subject, a British protected person, a national of a Commonwealth state, a national of Iceland, Sudan, Scandinavian countries, Pakistan and Madagascar who is traveling through Tanzania in transit is required to be in possession of a transit visa as well as a visa for the country of his ultimate destination.

However, a visa is not required for:

- a. aliens whose passports bear valid Immigration Re-entry passes or Residents Certificates;
- b. holders of United Nations laissez-passer, when traveling on official business;
- c. passengers entering in the course of a continuous and uninterrupted journey and leaving by the same aircraft, except stateless persons;
- d. resident aliens of one of the following territories holding valid Immigration Inter-State Passes issued by the governments of Kenya, Uganda and Tanzania;
- e. members of African Tribes indigenous to Kenya, Uganda, Rwanda, Zambia and Malawi.

**TANZANIA**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

**REQUIREMENTS FOR ZANZIBAR**

Any person other than a British subject or a British protected person who is traveling through Zanzibar in transit is required to be in possession of a transit visa as well as a visa for the country of his ultimate destination.

However, a visa is not required for:

- a. citizens of Belgium, Denmark, Spain, Sweden, Netherlands, Turkey, Liechtenstein, Luxembourg, San Marino, Iceland, Italy, Switzerland, Norway, Australia (for a stay not exceeding 3 months);
- b. aliens whose passport bears valid Immigration Re-entry passes or who possess certificates of permanent residence;
- c. resident aliens of Kenya, Uganda or Tanzania holding valid Immigration Inter-State Passes issued by the governments of the respective countries;

*NOTE: Holders of United Nations laissez-passer who travel to Zanzibar on official business should obtain an entry permit from:*

*The Principal Secretary*

*Ministry of External Affairs*

*Address: P.O. Box 239*  
*Zanzibar*

*NOTE: Additional requirements may exist. Please contact the appropriate authority to confirm information.*

**HEALTH**

Disembarking passengers coming directly from an area infected with cholera, smallpox or yellow fever are required to present vaccination certificates.

**AIRCRAFT ENTRY REQUIREMENTS****GENERAL**

All flights require prior permission to overfly or land in Tanzania. Such permission can be obtained from:

Director General

Tanzania Civil Aviation Authority (TCAA)

Aviation House

*Address: Nyerere/Kituna Road Junction*  
*P.O. Box 2819*  
*Dar-Es-Salaam*  
*Tanzania*

*Tel: +255 22 219 8100*

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Fax: +255 22 284 4300  
+255 22 284 4302  
+255 22 284 4304

E-Mail: [tcaa@tcaa.go.tz](mailto:tcaa@tcaa.go.tz)

Internet: [www.tcaa.go.tz](http://www.tcaa.go.tz)

AFS: HTDQYAYA

and for non-scheduled overflights for Zanzibar from:

Principal Secretary

Office of the President

Address: P.O. Box 2422  
Zanzibar

Tel: +255 24 2230 814  
+255 24 2230 815

Fax: +255 24 2232 388

### **SCHEDULED FLIGHTS**

Scheduled operations are governed by interstate air agreements or special authorization.

### **NON-SCHEDULED FLIGHTS**

For non-scheduled flights into Tanzania for the purpose of taking on or discharging passengers, cargo or mail (commercial flights involving traffic rights) application must be made to the Director General of Tanzania Civil Aviation.

Application for flights intending to operate for more than 7 days should be submitted so as to be received not less than 14 days before the intended date of operation.

Application for flights intending to operate for less than 7 days shall be submitted as to be received at least 48 hours before the intended date of operation.

All applications must contain the following information:

- a. name and address of operator;
- b. type of flight;
- c. type of aircraft, registration marks;
- d. date and place of origin of flight;
- e. complete route itinerary, including dates and times (UTC);
- f. name of captain and number of crew;
- g. number of passenger and/or freight;
- h. whether in conformity with IATA resolution 045;
- i. name address and business of character if any;



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- j. name of local agent, if any;
- k. full details of passengers and or freight to be uplifted or set-down in Tanzania and details of the cost of the charter.

Applications for longer periods non-scheduled international licence must be made on the appropriate application form obtainable from the Director General of Tanzania Civil Aviation Authority.

Applications should not be made via AFTN. Any application received via AFTN will not be processed.

Request for permit to overfly Tanzania airspace and landing in Tanzania mainland made from MON-FRI, between 1330-0430 UTC, SAT/SUN and Public Holidays daily 24 Hours service should be forwarded to:

TCAA Fax: +255 22 2844204.

Request for prior permission for landing in Tanzania Zanzibar after obtaining a Landing Permit from Tanzania Civil Aviation Authority shall be made from MON-FRI, between 0430-1330 UTC, SAT/SUN and Public Holidays daily 24 Hours service should be forwarded to:

ZAA

Fax: +255 24 2231 653

### **PRIVATE FLIGHTS**

Permission is required and must be obtained from the Director General of Civil Aviation (for Mainland see address under General and for Zanzibar see below) giving 48 hours notice.

Director General

Zanzibar Airports Authority

Ministry of Infrastructure and Communications

Address: P.O. Box 4742

Zanzibar

Tel: +255 24 223 1653

+255 24 223 1654

Fax: +255 24 223 1653

E-Mail: dazia11@yahoo.com

zaa@zaa.go.tz

Application for permission must include the following particulars:

- a. name and address of operator;
- b. type of aircraft and registration marks;
- c. type of flight;
- d. date and place of origin of flight;
- e. complete route itinerary, including dates and times (UTC);

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- f. name of captain and number of crew;
- g. number of passengers and/or freight;
- h. purpose of flight.

### **STATE OR MILITARY AIRCRAFT FLIGHTS**

Diplomatic and administrative clearance for military flights must be obtained at least 14 days in advance. The application shall be submitted to (Tanzania Mainland):

The Principal Secretary

Ministry of Foreign Affairs and International Cooperation

Address: Kivukoni Front  
P.O. Box 9000  
Dar-Es-Salaam  
Tanzania

Tel: +255 22 211 1906 12  
+255 22 211 1937 41

Fax: +255 22 211 6600

Telex: FOREIGN

E-Mail: mfa@intafrica.com

or to (Zanzibar):

Principal Secretary

Office of the President

Address: P.O. Box 2422  
Zanzibar

Tel: +255 24 223 0814  
+255 24 223 0815

Fax: +255 24 223 2388

Applications for both military and State flights shall contain the following information:

- a. type of aircraft;
- b. registration or identification marks;
- c. radio call-sign;
- d. itinerary;
- e. place of landing in Tanzania (Mainland), arrivals and departures, or if overflying, estimated times of arrival and departure from Tanzania (Mainland) and dates;
- f. name of captain;
- g. purpose of flight.

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**TANZANIA**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

## **AIRPORT(S) OF ENTRY**

Dar-Es-Salaam (Julius Nyerere Intl), Kilimanjaro Intl and Zanzibar (Abeid Amani Karume Intl).

Dodoma, Kigoma, Mtwara, Musoma, Mwanza, Pemba (Chake Chake), Songwe, Tabora and Tanga are secondary international airports. These airports are designated for aircraft of maximum certificated take-off mass of 60000kg or less and available for use by both international and domestic air traffic, where the formalities of customs immigration, health and similar procedures are made available with prior notice.

**TOGO**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

## **PASSPORT**

Required.

## **VISA**

Required; except for nationals of the CEDEAO States. No formalities are required for passengers in direct transit.

*NOTE: Additional requirements may exist. Please contact the appropriate authority to confirm information.*

## **HEALTH**

International certificate of vaccination against yellow fever is required.

## **AIRCRAFT ENTRY REQUIREMENTS**

### **GENERAL**

Agence Nationale de l'Aviation Civile

Address: Boite Postale 2699

Lome

Togo

Tel: +228 2226 3740

Fax: +228 2226 0860

AFTN: DXXXYAYX

### **SCHEDULED AND NON-SCHEDULED FLIGHTS**

All foreign aircraft overflying or landing in Togo must obtain prior permission at least 72 hours before the flight from the Agence Nationale de l'Aviation Civile.

The request shall contain the following information:

- a. type and registration mark of the aircraft;
- b. name of operator;
- c. aerodrome of departure;
- d. date and time of arrival;
- e. purpose of flight;
- f. name and nationality of pilot-in-command;
- g. number and names of crew members;
- h. number of passengers;
- i. type and quantity of cargo;
- j. name and address of the cargo recipient.

**TOGO**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

*NOTE: Request for a landing between 0000UTC and 0600UTC must be avoided.*

**STATE OR MILITARY AIRCRAFT FLIGHTS**

Special permission has to be obtained from Ministere des Affaires Etrangeres.

**AIRPORT(S) OF ENTRY**

The first landing must be operated on an aerodrome authorized to receive aircraft arriving from foreign countries. The landing on an aerodrome of Togo, another one that Lome (Gnassingbe Eyadema), will be subordinated to a previous notice of 12 hours that should be addressed, either to the authorities of Customs, Immigration and Health of the airport locality and to the Agence Nationale de l'Aviation Civile in Lome.

Lome (Gnassingbe Eyadema), Niamtougou (Intl).

**TUNISIA**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

## PASSPORT

Required.

## VISA

Required, except as follows:

- a. passengers in direct transit;
- b. citizens of Algeria and Morocco for an unlimited period of stay;
- c. citizens of Canada, Germany, Ghana and USA for a stay not exceeding 4 months;
- d. citizens of Chile, Cote D'Ivoire, Denmark, Finland, France, Guinea, Ireland, Iceland, Italy, Japan, Kuwait, Luxembourg, Malaysia, Mali, Mauritania, Monaco, Netherlands, Niger, Norway, Romania, Senegal, Serbia and Montenegro, Spain, Sweden, Switzerland, Turkey, U.K. for a stay not exceeding 3 months;
- e. citizens of Greece, Hong Kong and Rep. of Korea for a stay not exceeding 1 month.

Nationals of the following countries must have visa for entry to Tunisia:

Pakistan, Iran, Bulgaria, Liberia.

*NOTE: Crew members licences or certificates are accepted in lieu of visa for a stay not exceeding 24 hours.*

*NOTE: Additional requirements may exist. Please contact the appropriate authority to confirm information.*

## AIRCRAFT ENTRY REQUIREMENTS

### GENERAL

Applications for landing shall be directed to the following address:

Ministere du Transport

Direction Generale de l'Aviation Civile

Direction du Transport Aerien

Address: B.P. 179-2035 Tunis Cedex

Tel: +216 71 155800

Extensions: 34349 and 34351

Fax: +216 71 893649

+216 71 752022

Telex: CIVILAIR TUNIS

SITA: TUNXYXH

TUNOAXH

AFTN: DTTVYAYX

DTTVYAYF

**TUNISIA**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

**SCHEDULED FLIGHTS**

Scheduled operations are governed by interstate air agreements or are subject to special authorization.

Commercial landings are subject to prior authorization. A detailed program has to be sent to the Ministere du Transport 30 days before the intended flight. If it is the first flight to Tunisia, also a special Form No. 1 (obtainable from the Direction de l'Aviation Civile) has to be enclosed. Also every modification must be advised to the authority.

**NON-SCHEDULED FLIGHTS**

Aircraft registered in states which have concluded a bilateral agreement with Tunisia may overfly Tunisian territory or execute technical landings under conditions stipulated in the agreement concerned. In all other cases an application to the Ministere du Transport has to be submitted at least 3 days in advance.

A request for authorization of Inclusive Tour Flights and a special Form No. 2 has to be submitted by the air carrier to the Ministere du Transport within the following period:

- for programmed operations of more than 3 flights 30 days prior to the date of planned first flight;
- for programmed operations of 3 or less flights 10 days prior to the date of the planned first flight.

Occasional unplanned or emergency flights: Applications for permission must be sent by mail or message at least 3 working days in advance to Ministere du Transport.

During holidays, the request may be sent directly via FAX, AFS or SITA to the concerned airport authorities:

<b>Airports</b>	<b>Communication</b>
Djerba (Zarzis)	AFS: DTTVYAYF SITA: TUNOAXH FAX: +216 75 650 843
Enfidha (Hammamet)	AFS: DTTVYAYF SITA: TUNOAXH FAX: +216 73 103 099
Gafsa (Ksar)	AFS: DTTVYAYF SITA: TUNOAXH FAX: +216 71 752 022
Monastir (Habib Bourguiba)	AFS: DTTVYAYF SITA: TUNOAXH FAX: +216 73 521 375

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<b>Airports</b>	<b>Communication</b>
Sfax (Thyna)	AFS: DTTVYAYF SITA: TUNOAXH FAX: +216 74 278 360
Tabarka (Ain Draham)	AFS: DTTVYAYF SITA: TUNOAXH FAX: +216 71 752 022
Tozeur (Nefta)	AFS: DTTVYAYF SITA: TUNOAXH FAX: +216 76 461 844
Tunis (Carthage)	AFS: DTTVYAYF SITA: TUNOAXH FAX: +216 71 752 022
Gabes (Matmata)	AFS: DTTVYAYF SITA: TUNOAXH FAX: +216 71 752 022

Health service or ambulance flights, emergency flights and rescue flights in case of natural disasters are exempted from the regulation above. In this case, the flight plan is considered as a prior request.

### **STATE AIRCRAFT, VIP, SPECIAL AND EMERGENCY FLIGHTS**

The overflight of the Tunisian airspace and landing are subject to a permission delivered according to the following conditions:

**Permanent permission:** Subject to prior agreement made on the basis of reciprocity exists between Tunisia and the government concerned. A request for permanent authorization may be sent to the Ministry of Foreign Affairs not later than the 31st October of each year as a firm deadline.

**Provisional permission:** Foreign State, VIP and special flights are subject to a special permission through diplomatic channels. Applications should reach the Ministry of Foreign Affairs 15 days before the expected date. In case of actual urgency, prior notice is accepted 72 hours beforehand.

### **AIRPORT(S) OF ENTRY**

Aircraft shall first land at or finally depart from Djerba (Zarzis), Enfidha (Hammamet), Gabes (Matmata), Gafsa (Ksar), Monastir (Habib Bourguiba), Sfax (Thyna), Tabarka (Ain Draham), Tozeur (Nefta), Tunis (Carthage).



**TUNISIA**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

## **SCHEDULE AND AIRPORT COORDINATION**

The Tunis (Carthage Intl) aerodrome is a coordinated airport (Level 3 according to IATA).

For every take-off and landing of an IFR flight, a slot shall be requested and obtained from the coordinator before the filing of a flight plan:

Kais Besbes

Address: 18 Rue des Entrepreneurs

Charguia 2

Tunis

Tunisia

2035

Tel: +216 98201861

E-Mail: [kais.besbes@tunisairhandling.com.tn](mailto:kais.besbes@tunisairhandling.com.tn)

[tunisia-sked@tunisairhandling.com.tn](mailto:tunisia-sked@tunisairhandling.com.tn) (SCRs only)

Internet: [www.tunisia-sked.org](http://www.tunisia-sked.org)

**UGANDA**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

## **PASSPORT**

Required.

## **VISA**

Required of all nationals except:

- a. East African Community nationals;
- b. nationals of Common Market for Eastern and Southern Africa (COMESA/PTA) countries;
- c. citizens of Antigua, Bahamas, Barbados, Belize, Cyprus, Fiji, Gambia, Grenada, Hong Kong, Ireland, Jamaica, Lesotho, Libya, Malaysia, Malta, Sierra Leone, Singapore, Solomon Islands, St. Vincent and the Grenadines, Tonga, Tuvalu, Vanuatu, Vatican;
- d. any person whose passport contains a valid re-entry pass issued by the Uganda government.

Transit visas are not required provided the passenger:

- a. does not leave the airport;
- b. is continuing on the same or next available flight;
- c. possesses the appropriate entry and transit documents required by the destination and enroute countries;
- d. is booked to travel by air throughout Uganda.

Crew members are exempted from immigration control on arrival provided their names are on the manifest and they will be leaving as crew members of the same aircraft or of an aircraft of the same company.

*NOTE: Additional requirements may exist. Please contact the appropriate authority to confirm information.*

## **HEALTH**

Disembarking passengers are not required to present vaccination certificates except when coming directly from an area infected with cholera, yellow fever or smallpox.

## **AIRCRAFT ENTRY REQUIREMENTS**

### **GENERAL**

Directorate of Safety, Security and Economic Regulation

Civil Aviation Authority (CAA)

Address: P.O. Box 5536

Kampala

Uganda

Tel: +256 41 4321173

+256 41 4321016

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Fax: +256 41 4321401  
E-Mail: dat@caa.co.ug  
aircraftpermits@caa.co.ug  
Internet: www.caa.go.ug  
AFS: HUENYAYX

### **SCHEDULED FLIGHTS**

Scheduled operations are governed by the International Air Services Transit Agreement and/or International Air Transport Agreement and bilateral or multilateral agreements between Uganda and the State concerned and require a permit.

Applications for such permits shall be submitted at least 3 hours before the proposed flight to the Air Transport Office of the Directorate of Safety, Security and Economic Regulation. The clearance is valid for 48 hours of travel.

### **NON-SCHEDULED FLIGHTS**

If an operator intends to carry out a (series of) non-scheduled flight(s) in transit across, or making non-traffic stops in the territory of Uganda, he must be in possession of a valid permit to do before departure from the preceding stop.

Applications for permits in respect of civil aircraft must be received by the Managing Director of CAA at least 3 hours in advance of a proposed flight.

Clearance is valid for 48 hours of travel.

Applications must be made by letter, e-mail or fax. Applications received via the AFTN will not be actioned except in cases of emergency or extreme urgency.

The applications shall contain the following information:

- a. name and address of operator;
- b. name of registered owner;
- c. aircraft registration marks;
- d. flight call sign;
- e. aircraft type;
- f. route of flight;
- g. entry and exit point;
- h. arrival/overhead date of flight;
- i. date of departure from Entebbe (Intl);
- j. type and purpose of flight;
- k. name of flight commander;
- l. brief details of cargo and/or passengers;

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**NATIONAL REGULATIONS AND REQUIREMENTS**

- m. name of local agent;
- n. consigner and consignee;
- o. the operator confirms that all the information given above is true and correct.

**PRIVATE FLIGHTS**

Same requirements as for scheduled flights.

**STATE OR MILITARY AIRCRAFT FLIGHTS**

Applications for permits in respect of military, diplomatic and government aircraft must be submitted at least 15 days in advance to:

Ministry of Foreign Affairs

Address:           P.O. Box 7048  
                      Kampala  
                      Uganda

**AIRPORT(S) OF ENTRY**

Entebbe (Intl).

**ZAMBIA  
NATIONAL REGULATIONS AND REQUIREMENTS****PASSPORT**

Required.

**VISA**

Required, except of citizens of the United Kingdom, Ireland and all Commonwealth countries.

Valid Crew Member Licenses or certificates are accepted instead of visa.

*NOTE: Additional requirements may exist. Please contact the appropriate authority to confirm information.*

**HEALTH**

Yellow fever and cholera vaccination certificates are required of persons arriving from infected areas. Vaccination against smallpox is necessary in any case.

**AIRCRAFT ENTRY REQUIREMENTS****GENERAL****Electronic Passenger Manifests**

The Zambia Immigration Department requires that all airlines share Electronic Passenger Manifests with the Department of Immigration via the Zambia Immigration Management Systems (ZIMS) web environment platform with the following details:

- a. flight name;
- b. flight number;
- c. passengers prefix (Prof. Dr. Mr. Mrs. etc);
- d. passengers first and last names;
- e. passengers passport number;
- f. passengers nationality;
- g. gender;
- h. aerodrome of departure;
- i. destination airport;
- j. expected date and time of arrival;
- k. passengers origin.

For further details, contact:

Chief Immigration Officer

Department of Immigration

Address: 50300

Lusaka

**ZAMBIA**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

Zambia

Tel: +260 (211) 252622  
+260 (211) 252650  
Fax: +260 (211) 251725  
+260 (211) 254393

## **SCHEDULED FLIGHTS**

For regular international scheduled flights operated by foreign airlines into or in transit across Zambia, the following requirements must be met:

- a. the State of the airline must be a party to the International Air Service Transit Agreement and/or International Air Transport Agreement;
- b. the airline must be eligible to make the flight under the provisions of a Bilateral or Multilateral Agreement to which the State of the airline and Zambia are contracting parties and must have a permit to operate into or in transit across Zambia.

Application for such permits shall be submitted to:

The Permanent Secretary  
Ministry of Communication and Transport  
Address: P.O Box 50065  
Lusaka 15101  
Zambia

with a copy to:

The Director  
Civil Aviation Authority  
Address: P.O Box 50137  
Lusaka 15101  
Zambia

Tel: +260 (211) 251861  
+260 (211) 251677  
+260 (211) 253250  
Fax: +260 (211) 251841  
AFS: FLHQYAYA

## **NON-SCHEDULED FLIGHTS**

If an operator intends to carry out a (series of) non-scheduled flight(s) in transit across, on non traffic stops in the territory of Zambia, it is necessary for the operator to obtain prior permission.

If an operator intends to perform a single or a (series of) non-scheduled flight(s) in Zambia for the purpose of taking on or discharging passengers, cargo or mail, it is necessary for the operator to apply for Temporary Air Service Permit (TASP) for permission to carry out such operations not

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less than 24 hours in advance of intended landing. Application address is the same than for scheduled flights.

The application must include the following information in the order shown hereunder:

- a. name of operator;
- b. type of aircraft and registration mark;
- c. date and time of arrival at and departure from destination aerodrome;
- d. place or places of embarkation or disembarkation abroad, as the case may be, of passengers and/or freight;
- e. purpose of flight and number of passengers and/or nature and amount of freight;
- f. name, address and business of charterer, if any.

The applicant of a Temporary Air Service Permit (TASP) shall not commence his flight until he has received a TASP.

**PRIVATE FLIGHTS**

All private international flights requiring to land or overfly Zambia and all domestic private flights (except where a special agreement exists) must have prior permission and applications must be addressed to the Director of Civil Aviation (see SCHEDULED FLIGHTS for address).

The application must include the same information as for non-scheduled flights.

Confirmation of approval must be received before commencement of flight for either international or local flight.

**AIRPORT(S) OF ENTRY**

----- **Effective thru 09 Oct:** -----  
 Chipata, Kasama, Livingstone (Harry Mwaanga Nkumbula Intl), Lusaka (Kenneth Kaunda Intl),  
 Mfuwe, Ndola (Simon Mwansa Kapwepwe Intl).  
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----- **Effective 10 Oct:** -----  
 Chipata, Kasama, Livingstone (Harry Mwaanga Nkumbula Intl), Lusaka (Kenneth Kaunda Intl),  
 Mfuwe, Ndola.  
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**ZIMBABWE**  
**NATIONAL REGULATIONS AND REQUIREMENTS**

## **PASSPORT**

Required.

## **VISA**

Required.

Countries whose nationals do not require visas to Zimbabwe are:

Antigua & Barbuda	Malta
Angola	Mauritius
Aruba	Montserrat
Bahamas	Mozambique
Barbados	Namibia
Belize	Nauru
Botswana	Seychelles
Cayman Islands	Singapore
Cyprus	Solomon Islands
DR. of Congo	South Africa
Fiji	St Kitts & Nevis
Ghana	St Lucia
Grenada	St Vincent & the Grenadines
Hong Kong	Swaziland
Jamaica	Tanzania
Kenya	Tonga Island
Kiribati	Trinidad & Tobago
Leeward Islands	Turks & Caicos Islands
Lesotho	Tuvalu
Madagascar	Uganda
Malawi	Vanuatu
Malaysia	Western Samoa
Maldives	Zambia

An airline crew member's license or certificate of a scheduled international air service will be accepted in lieu of passport and visa, provided the crew member remains at the airport where the aircraft has stopped or within the confines of cities adjacent thereto, and departs on the same aircraft or on the next scheduled flight. Flight crews not member of a scheduled international air service have to adhere to normal immigration requirements.



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**NATIONAL REGULATIONS AND REQUIREMENTS**

*NOTE: Additional requirements may exist. Please contact the appropriate authority to confirm information.*

## **HEALTH**

Yellow fever vaccination certificates are required from all persons over 1 year of age arriving from the infected areas.

## **AIRCRAFT ENTRY REQUIREMENTS**

### **GENERAL**

Secretary for Transport, and Infrastructural Development

Address: Kaguvi Building, 4th Street  
Box 8109  
Causeway  
Harare  
Zimbabwe

Tel: +263 (242) 702121 9  
+263 (242) 700991 9  
+263 (242) 700693 9

Fax: +263 (242) 708225

Civil Aviation Authority of Zimbabwe (CAAZ)

Address: Private Bag 7716  
Causeway  
Harare  
Zimbabwe

Tel: +263 (242) 585009 17  
+263 (242) 585019 20  
+263 (242) 585073 83  
+263 (242) 585073 88  
+263 (242) 585018 (DCT for private flights)

Fax: +263 (242) 585100

E-Mail: [fltpermits@caaz.co.zw](mailto:fltpermits@caaz.co.zw)

AFS: FVRGHQYX

### **SCHEDULED FLIGHTS**

Scheduled flights are governed by interstate air agreements, bilateral and multilateral agreements and must have a permit to operate into or in transit across Zimbabwe.

Applications for air service permits shall be submitted 3 days in advance to the Secretary for Transport, Communications and Infrastructural Development.

## ZIMBABWE NATIONAL REGULATIONS AND REQUIREMENTS

### NON-SCHEDULED FLIGHTS

When carrying out a (series of) non-scheduled flight(s) in transit across or when making non-traffic stops in the territory of Zimbabwe, prior permission is needed 24 hours in advance of the intended flight(s).

When performing a (series of) non-scheduled flight(s) into Zimbabwe for the purpose of taking on or discharging passengers, cargo or mail, prior permission is needed 24 hours in advance, issued by the Head Air Transport Development. Operator also needs to apply to the CAAZ.

The application must include the information in the following order:

- a. name and address of operator;
- b. pilot's name and nationality;
- c. number of passengers for landing clearance. Names and nationalities for a landing clearance;
- d. aircraft registration, type, maximum all up weight (MAUW) and colors;
- e. estimated time of departure at departure point. Route, Entry and Exit points. Estimated time of arrival and destination and itinerary after first destination;
- f. purpose of flight, type of business, name, address and e-mail address (if available) of company, if on holiday, name of hotel or other accommodation.

If an already approved flight is postponed by more than 72 hours, submission of a new application is required.

### PRIVATE FLIGHTS

Private aircraft operating into Zimbabwe, weighing less than 7001kg and carrying less than 8 passengers do not require PPR but should submit a normal ATC flight plan only. Private aircraft overflying Zimbabwe airspace are required to submit applications 72 hours before the flight to the CAAZ.

During weekends or public holidays or after hours (for emergency cases only) contact the:

Civil Aviation Authority of Zimbabwe (CAAZ)

AIM Briefing Office

Tel: +263 (242) 585006 (DCT)

Fax: +263 (242) 575163

E-Mail: [flightbriefing@caaz.co.zw](mailto:flightbriefing@caaz.co.zw)

### MILITARY AIRCRAFT FLIGHTS

No foreign military aircraft shall fly over or land in Zimbabwe except on the express invitation or with the express permission of the Ministry of Defence and having satisfied all the requirements of the CAAZ.

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**ZIMBABWE****NATIONAL REGULATIONS AND REQUIREMENTS****AIRPORT(S) OF ENTRY**

Bulawayo (J. M. Nkomo), Chiredzi (Buffalo Range), Harare (Robert Gabriel Mugabe Intl), Kariba (Intl), Masvingo (Intl), Victoria Falls.



# Emergency



# Emergency

## Emergency Procedures - Africa

**AFRICA  
CONTINGENCY PLANS - AFRICA**

## **CONTINGENCY PLANS FOR ABIDJAN UTA, BAMAKO UTA, BRAZZAVILLE UTA, DAKAR UTA, GHANA AIRSPACE, KANO FIR, LIBREVILLE UTA, LOME UTA, N'DJAMENA UIR AND NOUAKCHOTT UTA**

In the Western and Central African Region (WACAF) following classification of Contingencies are applicable:

- **Level 1 Contingency:** Partial system failure or degradation of ATM system that can be managed within the FIR or ACC with the local contingency plan facilities.
- **Level 2 Contingency:** Total failure of the entire ATM system or air navigation system requiring the assistance or intervention of adjacent FIRs for the provision of ATS.
- **Level 3 Contingency:** Total system failure of the entire ATM system of air navigation system requiring the avoidance of the concerned FIR or portion of airspace due to conflict or war.

### **LEVEL 2 CONTINGENCY PLAN (REQUIRING INTERVENTION OF ADJACENT FIR)**

This Contingency Plan is designed to accommodate the flow of international air traffic with a minimum of disturbance for aircraft transiting the airspace under the responsibility of:

- Abidjan ACC;
- Accra ACC;
- Bamako ACC;
- Brazzaville ACC;
- Dakar ACC;
- Kano ACC;
- Libreville ACC;
- Lome ACC;
- N'Djamena ACC;
- Nouakchott ACC.

Routes and flight levels are limited.

### **Air Traffic Management And Contingency Procedures**

A NOTAM will be issued 48 hours in advance if this contingency plan is activated in the concerned airspace.

### **Aircraft Separation**

Longitudinal separation of 15 minutes for aircraft maintaining the same cruising flight level shall be applied or 20NM radar separation where radar services are available.

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### ***Aircraft Position Reporting***

The primary means of communication will be by VHF or HF radio. When CPDLC has been authorized for use by the relevant ATC authority this will become the primary means of communication, with HF as secondary. ADS-C shall replace any requirement for voice position reporting to ATC for aircraft so equipped, and in this case, CPDLC or HF will be the secondary means of communication.

Traffic Information Broadcast by Aircraft (TIBA) procedures shall apply in the concerned airspaces during periods of contingency. TIBA frequency is 126.9MHz.

### **Provision of Air Traffic Services and Contingency ATS Route Network**

In the event of disruption of air traffic services within the concerned airspace, aircraft operators should file flight plans using alternative contingency routes listed in the tables below:

*NOTE: ATS routes not included in the tables below are temporarily unavailable.*

### ***Abidjan UTA***

The responsibility for ensuring the provision of air traffic services within Abidjan UTA is transferred to Dakar ACC on 6535KHz or any optimum HF Frequency in use and Bamako ACC on 125.4MHz.

### **Contingency ATS Route Network within Abidjan UTA**

Contingency Route	FIR	Flight Levels	Entry/Exit Point	Communication
DKCR9: UB600	Roberts FIR	Eastbound: FL270, FL330, FL390 Westbound: FL260, FL300, FL380	AD/MEGOT	128.1MHz
DKCR10: UB600	Accra FIR	Eastbound: FL270, FL330, FL390 Westbound: FL260, FL300, FL380	AD/AFO	130.9MHz
DKCR11: UG851	Dakar FIR/ Bamako ACC	Southbound: FL270, FL310, FL370 Northbound: FL260, FL280, FL340, FL360, FL380, FL400	GUREL/AD	125.4MHz
DKCR18: UG853	Roberts FIR	Northwestbound: FL280, FL340, FL400	DEVLI/TESKI	128.1MHz
	Accra FIR	Southeastbound: FL290, FL310, FL370	TESKI/RASAD	8903KHz

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**Contingency ATS Route Network within Abidjan UTA (continued)**

<b>Contingency Route</b>	<b>FIR</b>	<b>Flight Levels</b>	<b>Entry/Exit Point</b>	<b>Communication</b>
DKCR19: UA560	Roberts FIR	Southwestbound: FL320, FL340, FL360, FL380 Northeastbound: FL290, FL310, FL370, FL390	IPEKA/TESKI	128.1MHz
	Accra FIR		TESKI/INAKA	130.9MHz
DKCR20: UA400	Accra FIR	Eastbound: FL370, FL390, FL410 Westbound: FL300, FL320, FL360, FL400	AD/EGADU	130.9MHz
DKCR21: UL435	Dakar FIR	Northwestbound: FL320, FL340, FL400 Southeastbound: FL310, FL330, FL390, FL410	ATANI/URAPI	6535KHz or any optimum HF
	Accra FIR			8903KHz
DKCR22: UA614	Niamey FIR/ Ouagadougou ACC	Northbound: FL250, FL290, FL350, FL370, FL410 Southbound: FL280, FL320, FL360, FL380	AD/BIGOM	120.3MHz

***Bamako UTA***

The responsibility for ensuring the provision of air traffic services within Bamako UTA is transferred first to Dakar ACC. In the event that Dakar ACC will not be available, the responsibility for ensuring the provision of air traffic services will be transferred to Abidjan ACC.

**Contingency ATS Route Network within Bamako UTA**

<b>Contingency Route</b>	<b>FIR</b>	<b>Flight Levels</b>	<b>Entry/Exit Point</b>	<b>Communication</b>
DKCR10: UR977/UM122	Dakar FIR (Nouakchott UTA)	Northbound: FL250, FL370 Southbound: FL280, FL360	EREMO/BKO	Dakar ACC: 129.5MHz, 8861KHz,
DKCR11: UG851	Dakar FIR (Abidjan UTA)	Northwestbound: FL320, FL380 Southeastbound: FL310, FL330, FL390	GUREL/BKO	6535KHz, 6673KHz or Abidjan ACC: 129.1MHz, 8861KHz, 6673KHz



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**Contingency ATS Route Network within Bamako UTA (continued)**

<b>Contingency Route</b>	<b>FIR</b>	<b>Flight Levels</b>	<b>Entry/Exit Point</b>	<b>Communication</b>
DKCR12: UA600	Dakar FIR (Nouakchott UTA)	Northwestbound: FL340, FL380, FL400 Southeastbound: FL290, FL310, FL390	KIMGA/BKO	
DKCR14: UG860	Niamey FIR (Ougadougou UTA)	Eastbound: FL260, FL400 Westbound: FL290, FL330, FL350	EDGIB/BKO	
DKCR15: UA601	Dakar FIR (Dakar UTA)	Northwestbound: FL260, FL380, FL400 Southeastbound: FL330, FL350	GATIL/BKO	
DKCR16: UA612	Roberts FIR	Northeastbound: FL270, FL350 Southwestbound: FL280, FL340	BKO/NEGLO	

***Brazzaville UTA***

The responsibility for ensuring the provision of ATS within Brazzaville UTA is transferred to Libreville ACC and Ndjamenen ACC according to the following considerations:

- a. Libreville ACC will ensure the provision of air traffic services for traffic operating in airspace or along the two contingency ATS routes on the sub-west part of the FIR:
  - BZCR15: UG856;
  - BZCR16: UG861.

HF frequencies of Brazzaville ACC (6559KHz and 8903KHz) will be used.
- b. Ndjamenen ACC will ensure the provision of air traffic services for traffic operating in airspace or along the rest of the following contingency ATS routes of the FIR:
  - BZCR11: UR984;
  - BZCR12: UG727;
  - BZCR13: UA607;
  - BZCR14: UM215;
  - BZCR17: UA410 (BZ - MPK - ONUDA);
  - BZCR18: UG857.

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**Contingency ATS Route Network within Brazzaville UTA**

<b>Contingen- cy Route</b>	<b>FIR</b>	<b>Flight Levels</b>	<b>Entry/Exit Point</b>	<b>Communica- tion</b>
BZCR11: UR984	Kinshasa FIR	Westbound: FL300, FL400 Eastbound: FL290, FL390	DEREP - MPK	CPDLC and HF: 8873KHZ, 8903KHZ, 13294KHZ, 5493KHZ, 8894KHZ
BZCR12: UG727	Kinshasa FIR N'Djamena FIR	Northbound: FL340, FL360 Southbound: FL330, FL350, FL370	BZ - TJN	
BZCR13: UA607	Kinshasa FIR N'Djamena FIR	Northbound: FL340, FL360 Southbound: FL330, FL350, FL370	MPK - RULDO	
BZCR14: UM215	Kinshasa FIR N'Djamena FIR	Northbound: FL300, FL340, FL360, FL400 Southbound: FL330, FL350, FL370, FL390	ONUDA - MERON	
BZCR15: UG856	Kinshasa FIR	Northbound: FL300, FL400 Southbound: FL290, FL390	BZ - KOPOV	HF: 6559KHZ, 8903KHZ
BZCR16: UG861	Luanda FIR	Northbound: FL340, FL360 Southbound: FL330, FL350, FL370	KOPOV - LI- KAD	
BZCR17: UA410	Kinshasa FIR N'Djamena FIR	Northbound: FL270, FL310, FL410 Southbound: FL280, FL320, FL380	BZ - ONUDA	CPDLC and HF: 8873KHZ, 8903KHZ, 13294KHZ, 5493KHZ, 8894KHZ
BZCR18: UG857	N'Djamena FIR	Northbound: FL270, FL310 Southbound: FL280, FL320	DELOR - INA- SU	

**Dakar UTA**

The responsibility for ensuring the provision of air traffic services within Dakar UTA is transferred to Nouakchott ACC and Bamako ACC on following considerations:

- a. Bamako ACC will ensure the provision of air traffic services for traffic operating along contingency ATS routes as follows:
  - UA601 between (DS - GATIL);
  - UB600 between (DS - GULAV).

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b. Nouakchott ACC will ensure the provision of air traffic services for traffic operating along contingency ATS routes as follows:

- UR976 (DS - LUMPO);
- UR975 (DS - NEVDI);
- UA302 (DS - TAROT).

**Contingency ATS Routes Network within Dakar UTA**

<b>Contingency Route</b>	<b>FIR</b>	<b>Flight Levels</b>	<b>Entry/Exit Point</b>	<b>Communication</b>
UR975	Dakar FIR	Northbound: FL290, FL370, FL390, FL410 Southbound: FL280, FL300, FL380	DS - NEVDI	6535KHz, 8861KHz
UA601	Dakar FIR	Eastbound: FL310, FL350 Westbound: FL260, FL340, FL360, FL400	DS - GATIL	6673KHz, 8861KHz
UR976	Dakar FIR	Eastbound: FL310, FL350 Westbound: FL260, FL320, FL340, FL360	DS - LUMPO	6535KHz, 8861KHz
UA302	Dakar FIR	Northbound: FL290, FL370, FL390, FL410 Southbound: FL280, FL300, FL380	DS - TAROT	6535KHz, 8861KHz
UB600	Dakar FIR	Northbound: FL260, FL300, FL380 Southbound: FL330, FL390	DS - /GULAV	6673KHz, 8861KHz

***Ghana Airspace***

In the event of disruption of air traffic services within GHANA AIRSPACE, aircraft operators should file flight plans using alternative contingency routes and FLAS listed below:

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**Contingency ATS Routes Network within Ghana Airspace**

<b>Contingen- cy Route</b>	<b>Adjacent FIR/ATS Unit</b>	<b>Flight Levels</b>	<b>Routing</b>	<b>Communi- cation</b>
CR1: UA560/ UL433	Abidjan	Eastbound: FL230, FL290, FL350, FL390, FL410	INAKA - MEPON - BIPEX - LISOR - ACC - KETAT	121.1MHz, 129.1MHz, 8861KHz or optimum HF
	Lome	Westbound: FL240, FL260, FL320, FL380, FL420		124.6MHz
CR2: UB600/ UL433	Abidjan	Eastbound: FL210, FL250, FL270, FL310, FL330	AFO11 - TEMBI - MIMTI - ACC - KETAT	129.1MHz, 121.1MHz, 8861KHz or optimum HF
	Lome	Westbound: FL180, FL200, FL220, FL300, FL320, FL360		124.6MHz
CR3: UA601/ UL683	Ouagadou- gou	Eastbound: FL270, FL310, FL350, FL410	NANGA - BUGBU - TLE - EBTOB - IPORI	120.3MHz
	Lome	Westbound: FL280, FL320, FL400		124.6MHz
CR4: UG855	Abidjan	Eastbound: FL230, FL290, FL370	TUSEK - SN - TLE - NASIA - TAMIL - GAPAG	129.1MHz, 121.1MHz, 8861KHz or optimum HF
	Niamey	Westbound: FL220, FL260, FL300		131.3MHz, 8861KHz
CR5: UR979	Abidjan	Eastbound: FL290, FL330, FL370	SESIG - BIPEX - INOSA	129.1MHz, 121.1MHz, 8861KHz or optimum HF
	Luanda	Westbound: FL300, FL340, FL360		CPDLC, 8888KHz
CR6: UR991	Abidjan	Eastbound: FL310, FL330, FL350, FL370, FL410	EMTAL - GAPEL	129.1MHz, 121.1MHz, 8861KHz or optimum HF, CPDLC
		Westbound: FL300, FL320, FL340, FL360, FL400		

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**Contingency ATS Routes Network within Ghana Airspace (continued)**

<b>Contingen- cy Route</b>	<b>Adjacent FIR/ATS Unit</b>	<b>Flight Levels</b>	<b>Routing</b>	<b>Communi- cation</b>
	Luanda			8888KHz, 5565KHz
CR7: UR853	Abidjan	Eastbound: FL290, FL310, FL350, FL370 Westbound: FL280, FL340, FL360, FL400	RASAD - TERBA	129.1MHz, 121.1MHz, 8861KHz or optimum HF, CPDLC
	Luanda			8888KHz, 5565KHz
CR8: UP685	Abidjan	Eastbound: FL290, FL310, FL370 Westbound: FL280, FL340, FL400	ANUVO - SN - KEMOK - ACC - METUS - ENEVO - EDBET - LIREX	129.1MHz, 121.1MHz, 8861KHz or optimum HF
	Lagos			127.3MHz, 8903KHz

**Kano FIR**

The responsibility for ensuring the provision of air traffic services within Kano FIR is transferred to ATS units in adjacent FIRs to the following considerations:

- a. Lome and Niamey ACC shall ensure the provision of air traffic services for traffic operating along contingency route CR1 (UL433/UR778) between POLTO - RISUB
- b. N'Djamena ACC shall ensure the provision of air traffic services for traffic operating along contingency route CR2 (UG727) between RAVOT - TJR.
- c. Douala and Niamey ACC shall ensure the provision of air traffic services for traffic operating along contingency route CR3 (UA604) between OBUDU - MIMBA.
- d. Lome and Accra shall ensure the provision of air traffic services for traffic operating along contingency route CR4 (UM114/UB731) between LITAK - LIREX.
- e. Douala and Lome ACC shall ensure the provision of air traffic services for traffic operating along contingency route CR5 (UL433) between IKROP - POLTO.
- f. N'Djamena ACC shall ensure the provision of air traffic services for traffic operating along contingency route CR6 (UG854) between FL - KORUT.
- g. Douala and Lome ACC shall ensure the provision of air traffic services for traffic operating along contingency route CR7 (UA601) between ARDEX - KIPSA.

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**Contingency ATS Routes Network within Kano FIR**

<b>Contingency Route</b>	<b>Contingency Routing (Entry &amp; Exit Points)</b>	<b>Flight Levels</b>	<b>ACC in charge</b>
CR1: L/UL433, R/ UR778	POLTO - LAG - IBA - BDA - KUA - KAN - RI- SUB	Eastbound FL330 and below  Westbound FL340 and below	Lome & Niamey (VHF & CPDLC)
CR2: G/UG727	RAVOT - MIU - EBIMU - TJR	Eastbound FL350 and above  Westbound FL360 and above	N'Djamena (VHF & CPDLC)
CR3: A/UA604	OBUDU - AKLIS - JOS - KAN - MIMBA	Eastbound FL350 and above  Westbound FL360 and above	Douala & Niamey (VHF & CPDLC)
CR4: UM114, B/ UB731, UR603	LITAK - NASTO - KI- GRA - UB731 - LAG - UR603 - ETVOV - LIR- EX	Eastbound FL350 and above  Westbound FL360 and above	Lome & Accra (VHF & CPDLC)
CR5: L/UL433	IKROP - APVOT - EV- BEN - LAG - POLTO	Eastbound FL350 and above  Westbound FL360 and above	Lome & Douala (VHF & HF)
CR6: UG854	FL - SIGAL - UG854 - KORUT	Eastbound FL330 and below  Westbound FL340 and below	N'Djamena (VHF & CPDLC)
CR7: UA601	ARDEX - UA601 - KIP- SA	Eastbound FL330 and below  Westbound FL340 and below	Douala & Lome (VHF & HF)

**Libreville UTA**

The responsibility for ensuring the provision of air traffic services within Libreville UTA is transferred to Brazzaville ACC and Douala ACC according to the following considerations:

- a. Brazzaville ACC will ensure the provision of air traffic services for traffic operating in airspace or along the 2 contingency ATS routes on the east-west and south-north part of the FIR:

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- BZCR07: UG856;
  - BZCR08: UG861.
- b. Douala ACC will ensure the provision of air traffic services for traffic operating in airspace or along the rest of the following contingency ATS routes of the FIR:
- BZCR09: UB737.

**Contingency ATS Routes Network within Libreville UTA**

<b>Contingency Route</b>	<b>FIR</b>	<b>Flight Levels</b>	<b>Entry/Exit Point</b>	<b>Communication</b>
BZCR7: UG856	Brazzaville FIR	Northwestbound: FL300, FL400  Southeastbound: FL290, FL390	ERACA - KOPOV	CPDLC and HF: 8873KHz, 8903KHz, 13294KHz, 5493KHz, 8894KHz
BZCR8: UG861	Brazzaville FIR	Northwestbound: FL340, FL360  Southeastbound: FL330, FL350, FL370	KOPOV - ARASI	CPDLC and HF: 8873KHz, 8903KHz, 13294KHz, 5493KHz, 8894KHz
BZCR9: UB737	Brazzaville FIR	Northeastbound: FL270, FL310  Southwestbound: FL280, FL320	IPOVO - ARKOT	CPDLC and HF: 8903KHz

**Lome UTA**

The responsibility for ensuring the provision of air traffic services within Lome UTA is transferred to Cotonou Approach on 125.9MHz or 6586KHz except for ATS route UM114 which is delegated to Niamey ACC on 131.3MHz or 8903KHz.

In case Cotonou Approach is not operational, the responsibility for ensuring the provision of air traffic services within Lome UTA is transferred to Niamey ACC on 131.3MHz or 8903KHz.

In the event of disruption of air traffic services within Lome UTA, aircraft operators should file flight plans using alternative contingency routes listed in the table below:

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**Contingency ATS Route Network within Lome UTA**

<b>Contingency Route</b>	<b>FIR</b>	<b>Flight Levels</b>	<b>Entry/Exit Point</b>	<b>Communication</b>
LMCR1: UA608	Accra FIR Niamey FIR	Northbound: FL370, FL390  Southbound: FL360, FL380	EPITI - TATAT	Cotonou: 125.9MHz or 6586KHz
LMCR1: UM114	Kano FIR Niamey FIR	Northbound: FL330, FL370  Southeastbound: FL340, FL360, FL380	NASTO - LITAK	Niamey: 131.3MHz or 8903KHz
LMCR3: UL433	Kano FIR Accra FIR	Eastbound: FL 250, FL270, FL290, FL310, FL330, FL350  Westbound: FL260, FL280, FL300, FL320, FL340	POLTO - KETAT	Cotonou: 125.9MHz or 6586KHz
LMCR4: UL683	Kano FIR Accra FIR	Eastbound: FL350  Westbound: FL400	GANDA - IPORI	Cotonou: 125.9MHz or 6586KHz

***N'Djamena UIR***

The responsibility for ensuring the provision of air traffic services within N'Djamena UIR is transferred to Brazzaville ACC and Niamey ACC according to the following considerations:

- a. Niamey ACC will ensure the provision of air traffic services for traffic operating in airspace or along contingency ATS routes north of the 14th north parallel.
- b. Brazzaville ACC will ensure the provision of air traffic services for traffic operating in airspace or along the contingency ATS routes south of the 14th north parallel.
- c. N'Djamena ACC will also review current coordination requirements in light of contingency operations or short notice of disruption of air traffic services.
- d. Niamey ACC and Brazzaville ACC must ensure that flights northbound and southbound on routes UM998 and UG727 are appropriately coordinated with Kano ACC to ensure longitudinal separation from the northern N'Djamena FIR and Niamey FIR boundary all the way to the southern N'Djamena FIR and Brazzaville FIR boundary and vice versa.



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In the event of disruption of air traffic services within N'Djamena UIR, aircraft operators should file flight plans using alternative contingency routes listed in the table below:

**Contingency ATS Route Network within N'Djamena UIR**

<b>Contingency Route</b>	<b>FIR</b>	<b>Flight Levels</b>	<b>Entry/Exit Point</b>	<b>Communication</b>
NDCR1: UG8588	Niamey FIR	Southwestbound: FL300, FL340 Northeastbound: FL350, FL390	DEKIL - RAKOM	HF 8903KHz, 8873KHz and CPDLC if applica- ble
NDCR2: UR778	Niamey FIR Tripoli FIR	Northeastbound: FL290, FL350 Southwestbound: FL280, FL340	SABSI - TONBA	
NDCR3: UG660	Brazzaville FIR Kano FIR Khartoum FIR	Westbound: FL280, FL340 Eastbound: FL290, FL310, FL350, FL430	GNA - KELAK	
NDCR4: UB730	Niamey FIR	Northbound: FL300, FL380 Southbound: FL310, FL370	DIR - RAKOM	
NDCR5: UA607	Brazzaville FIR Niamey FIR	Northbound: FL300, FL380 Southbound: FL290, FL370	DIR - RULDO	
NDCR6: UG727	Brazzaville FIR Kano FIR Niamey FIR	Northbound: FL320, FL340, FL360 Southbound: FL330, FL390	TJN - DEKIL	
NDCR7: UG857	Brazzaville FIR	Southwestbound: FL280, FL340 Northeastbound: FL310, FL350	INASU - FL	

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**Contingency ATS Route Network within N'Djamena UIR (continued)**

<b>Contingency Route</b>	<b>FIR</b>	<b>Flight Levels</b>	<b>Entry/Exit Point</b>	<b>Communication</b>
NDCR8: UG655	Brazzaville FIR Tripoli FIR	Northbound: FL300, FL320  Southbound: FL290, FL330	GARIN - ONUDA	
NDCR9: UA410	Brazzaville FIR Khartoum FIR	Northeastbound: FL270, FL310, FL350  Southwestbound: FL300, FL340	ONUDA - KAFIA	
NDCR10: UM215	Brazzaville FIR Tripoli FIR	Northbound: FL380, FL400  Southbound: FL370, FL390	TONBA - ONUDA	
NDCR11: UB736	Brazzaville FIR Kano FIR Khartoum FIR	Westbound: FL300, FL320, FL360  Eastbound: FL310, FL330, FL370, FL410	MONAN - ETRIS	

***Nouakchott UTA***

The responsibility for ensuring the provision of air traffic services within Nouakchott UTA is transferred to Dakar ACC and Bamako ACC according to the following considerations:

- a. Bamako ACC will ensure the provision of air traffic services for traffic operating along the contingency ATS: UA600 (KIMGA-PE) HF frequencies of Bamako (6673-8861) will be used;
- b. Dakar ACC will ensure the provision of air traffic services for traffic operating along the following contingency ATS routes:
  - UR975 (NEVDI - ECHED);
  - UA854 (ARDAR - BRENA);
  - UR866 (BULIS - OPULU);
  - UR977 (BULIS - EREMO);
  - UG851 (BIMAN - MIYEC);
  - UB600 (LIMAX - PE);

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– UB735 (POTOL - ONTOL).

- c. Nouakchott ACC will also review current coordination requirements in light of contingency operations or short notice of disruption of air traffic services.

**Contingency ATS Route Network within Nouakchott UTA**

<b>Contingency Route</b>	<b>Flight Levels</b>	<b>Entry/Exit Point</b>
DKCR1: UR975	EVEN: FL280, FL320, FL380 ODD: FL290, FL330, FL410	NEVDI - ECHED
DKCR7: UR866	EVEN: FL340, FL400 ODD: FL350	BULIS - OPULU
DKCR8: UA854	EVEN: FL280, FL320, FL380 ODD: FL290, FL330, FL410	ARDAR - BRENA
DKCR9: UB600	ODD: FL290, FL330 EVEN: FL280, FL320, FL340	LIMAX - PE
DKCR10: UR977	EVEN: FL300, FL360 ODD: FL310, FL370	BULIS - EREMO
DKCR11: UG851	EVEN: FL360, FL400 ODD: FL350, FL370	BIMAN - MIYEC
DKCR12: UA600	EVEN: FL300, FL340, FL360 ODD: FL310, FL390	KETAS - KIMGA
DKCR13: UA600	EVEN: FL300, FL340, FL360 ODD: FL310, FL390	KETAS - PE
DKCR14: UB735	EVEN: FL260, FL280, FL320, FL360 ODD: FL250, FL270, FL290, FL330, FL370, FL410	POTOL - ONTOL

**Pilot and Operator Procedures**

***Overflight Approval***

Aircraft operators must obtain overflight approval from the [STATE AUTHORITY] prior to operating flights through the [STATE AIRSPACE AFFECTED]. During the period of activation of this Contingency Plan the adjacent [ATS UNIT] will provide normal ATC clearances for aircraft to enter the [STATE AIRSPACE]. The adjacent [ATS UNIT] is not responsible for coordination or provision of overflight clearances for the [STATE AIRSPACE]. The operator must ensure any required overflight approval has been obtained.

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***Pilots Operating Procedure***

All aircraft transiting through [STATE AIRSPACE] shall strictly comply with the following:

- a. Maintain contact with [ADJACENT ATS UNIT DESIGNATED] according to the "AIR TRAFFIC MANAGEMENT AND CONTINGENCY PROCEDURES" above.
- b. Operate along or as close as possible to the centerline of the assigned contingency air traffic route.
- c. Reach the flight level assigned by [ATS UNIT DESIGNATED] for the transit of [STATE AIRSPACE] at least 10 minutes before entering [STATE AIRSPACE].
- d. Maintain the flight level assigned by the last adjacent ACC while operating within [STATE AIRSPACE], unless an emergency or flight safety reason exists.
- e. Maintain a continuous listening watch on the VHF frequency 126.9MHz, and transmit blind in English on 126.9MHz position reports 5 minutes before and overhead each compulsory reporting point established along the respective air traffic route.
- f. Include in the last position report to the competent adjacent ACC the estimated time of arrival over the entry and exit points of [STATE AIRSPACE].
- g. Whenever emergencies and/or flight safety reasons make it impossible to maintain the flight level assigned for the transit of [STATE AIRSPACE], climb or descend well to the right of the centerline of the air traffic route being flown but remaining within [STATE AIRSPACE], and to inform immediately, by blind broadcast on the VHF frequency 126.9MHz, all other aircraft likely to be affected by transmitting a relevant emergency level change message (comprising the aircraft call-sign, the aircraft position, the flight levels being left and crossed, etc.).
- h. Contact the competent adjacent ACC as soon as possible and at least 10 minutes before the estimated time of arrival over the relevant exit point of [STATE AIRSPACE] to obtain clearance for entering the adjacent airspace concerned.
  - i. Display navigation and anti-collision lights always during the transit of contingency airspace.
  - j. The application of SLOP is strongly encouraged.
- k. Transponders should be set on a discrete code assigned by ATC or select code A2000 if ATC has not assigned a code.

***Communication Procedure******Degradation of Communication - Pilot Radio Procedures***

When operating within the contingency airspace, pilots should use normal radio communication procedures.

In the absence of communication with ATC, the pilot should continue to make routine position reports on the assigned frequency and also broadcast positions in accordance with the TIBA procedures.

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**Interception of Civil Aircraft**

Pilots need to be aware that in light of current international circumstances, a contingency routing requiring aircraft to operate off of normal traffic flows, could result in an intercept by military aircraft. Aircraft operators must therefore be familiar with international intercept procedures as shown in Jeppesen EMERGENCY-Chapter "INTERNATIONAL CIVIL AVIATION ORGANIZATION (ICAO)", section 7 (Interception).

**CONTINGENCY PLAN LEVEL 3 (REQUIRING AVOIDANCE OF AFFECTED AIRSPACE)**

In the event that the total disruption of Air Traffic Services does not allow to fly in the airspace affected, users are invited to circumvent the airspace.

Users may also choose to avoid the affected airspace by flight planning via any alternative ATS routes provided by adjacent ATS unit.

Users are advised to circumnavigate the affected airspace and try to establish contact with the ATS unit responsible for the provision of air traffic service as soon as possible.

**Unavailability of Brazzaville UTA**

State	Avoidance Routing	FIR concerned
D.R. of Congo	KSA - MBA - TUSOX - UA607 - MPK - UR984 - NLY - UH455 - LV - DINDA - UA400 - ARAKI - VCA - BUDEL - KSA	Brazzaville FIR Luanda FIR Kinshasa FIR
Gabon	DLA - NLY - UL434 - AMPIL - UG727 - BZ - VCA - ARAKI - UA400 - STM - UB737 - DLA	Brazzaville FIR Luanda FIR Accra FIR
Cameroon	LV - UT143 - BATVU - UA410 - USKAV - UM731 - FL - TANAD	Brazzaville FIR N'Djamena FIR
	TANAD - MIU - AKLIS - ONTAL - ARDEX - IPOVO - LV	N'Djamena FIR Kano FIR Brazzaville FIR
Central African Republic	GODAL - UTAKA - KEDOT - BUT - ISIRO - DEKUM - ALMAM - ILBIB - TJR - UG727 - GODAL	Brazzaville FIR N'Djamena FIR Khartoum FIR Kinshasa FIR

**AFRICA**  
**CONTINGENCY PLANS - AFRICA**

<b>State</b>	<b>Avoidance Routing</b>	<b>FIR concerned</b>
Equatorial Guinea	DLA - NLY - UR986 - AGTIR - NEBEX - LV - UG856 - ERAVA - ARDEX - ONTAL - DLA	Brazzaville FIR Kano FIR
EXAMPLE 1: Flights from north to south: Join N'Djamena VOR "FL" and follow instructions from N'Djamena ACC.		
EXAMPLE 2: Flights from east to west: Join the Kisangani VOR "KGI" and follow instructions from Kisangani/Kinshasa ACC.		

**Ghana Airspace**

Users are advised to circumnavigate Ghana Airspace and try to establish contact with the ATS unit responsible for the provision of service as soon as possible according to the table below.

<b>FIR/Airspace</b>	<b>Routing</b>	<b>Communication</b>
Abidjan Sub	UA601: PAM - NANGA	126.7MHz
	UA560: ACC - INAKA	130.9MHz
Lome UTA	UG855: TUSEK - GAPAG	126.7MHz
	UP685: ACC - LIREX	130.9MHz
Ouagadougou UTA	UA603: ACC - ENOXO	130.9MHz, 126.7MHz
	UP685: ACC - ANUVO	130.9MHz
Luanda	UR991: EMTAL - GAPEL	CPDLC, 8903KHz
Brazzaville	UG853: RASAD - TERBA	CPDLC, 8903KHz
Niamey	UR982: ACC - NAVON	130.9MHz, 126.7MHz

**Unavailability of Libreville UTA**

Users are advised to circumnavigate Libreville UTA and try to establish contact with the ATS unit responsible for the provision of service as soon as possible according to the table below.

## AFRICA CONTINGENCY PLANS - AFRICA

State	Avoidance Routing	FIR concerned
Gabon	DLA - NLY - UL434 - AMPIL - UG727 - BZ - VCA - ARAKI - UA400 - STM - UB737 - DLA	Brazzaville FIR Luanda FIR Accra FIR
EXAMPLE 1: Flights from north to south: Join Douala VOR "DLA" and follow instructions from Douala ACC.		
EXAMPLE 2: Flights from east to west: Join the point UTAKA on ATS route UT143 and follow instructions from Brazzaville ACC.		

## CONTINGENCY PLAN FOR ADDIS ABEBA FIR

### ATS Contingency Routes

In the case of disruption or non-availability of air traffic services, a system of contingency ATS routes has been established as follows:

- CR1: G650/UG650  
Westbound: FL180, FL220, FL350  
Eastbound: FL170, FL210, FL330
- CR2: UB535  
Eastbound: FL270, FL410  
Westbound: FL260, FL390
- CR3: UM997  
Eastbound: FL290, FL450  
Westbound: FL260, FL390
- CR4: A727/UA727  
Eastbound: FL170, FL330  
Westbound: FL180, FL350
- CR5: UG300  
Eastbound: FL370  
Westbound: FL310
- CR6: R775/UR775  
Eastbound: FL170, FL330, FL230  
Westbound: FL180, FL350, FL220
- CR7: UB736

**AFRICA**  
**CONTINGENCY PLANS - AFRICA**

Eastbound: FL290

Westbound: FL280

### **PROCEDURES TO BE FOLLOWED BY AIRCRAFT**

Pilots shall strictly adhere to the IATA In-Flight Broadcast Procedures (IFBP) supplemented as follows:

- a. Maintain a continuous listening watch on VHF frequency 126.9MHz and also on VHF 125.1/125.2MHz and/or on HF daytime 11300KHz, nighttime 5517KHz.
- b. Display navigation and anti-collision lights at all times during the transit of Addis Abeba FIR.
- c. Maintain own longitudinal separation of 20 minutes from preceding aircraft at the same cruising level.
- d. If not in contact with an ATS unit, maintain own separation from aircraft at the same cruising level.

### **CONTINGENCY PLAN FOR ALGIERS FIR**

During period of uncertainty and when the implementation of emergency measures seem necessary contingency routes will be activated by NOTAM.

### **CONTINGENCY ATS ROUTE NETWORK**

- UM114-UB726-UJ66-UN855 (ZAWAT - BUYAH)  
Northbound: FL350, FL370 and FL410  
Southbound: FL290, FL310 and FL330
- UB735-UG26-UA604-UA34 (USRUT - HAMRA)  
Northbound: FL330 and FL370  
Southbound: FL290 and FL310
- UM629 (USRUT - BAGBO)  
Northbound: FL360  
Southbound: FL390
- UG864-UG26-UA604-UA34 (BRENA - HAMRA)  
Northbound: FL350 and FL410  
Southbound: FL290 and FL310
- UR978 (ERKEL - KAMER)  
Northbound: FL340, FL360, FL380 and FL400  
Southbound: FL350, FL370 and FL410
- UR985-UR978 (IMN - KAMER)



**AFRICA**  
**CONTINGENCY PLANS - AFRICA**

Northbound: FL280

Southbound: FL350, FL370 and FL410

- UJ60-UB727 (TWARG - TERAS)

Westbound: FL300 and F320

Eastbound: FL390

- UA411 (MORJA - ORSUP)

Westbound: FL260, FL300 and FL320

Eastbound: FL270 and FL390

**PROCEDURES TO BE FOLLOWED BY AIRCRAFT**

Longitudinal separation between aircraft is 15 minutes.

Rerouting away from published ATS routes could result in an intercept by military aircraft. Aircraft operators must therefore be familiar with international interception procedures.

Maintain a continuous listening watch on the emergency frequency 121.5MHz and appropriate frequencies of each airfield along the routing.

Use transponder code 2000 if no other code assigned by ATC.

**CONTINGENCY PLAN FOR ANTANANARIVO UIR**

This contingency plan is designed to accommodate the flow of international air traffic with a minimum of disturbance for aircraft transiting the airspace under the responsibility of Antananarivo ACC. Routes and flight levels are limited.

A NOTAM will be issued if this contingency plan is activated.

Aircraft on long-haul international flights and special operations shall be afforded priority for levels starting from FL290 and above.

**CONTINGENCY ATS ROUTE NETWORK**

**ATS Contingency Routes**

- CR1: UA401 (KINAN - UNKIK)

Westbound: FL300, FL320

Eastbound: FL310, FL330

- CR2: UB790 (KINAN - DOBUT)

Westbound: FL340, FL360

Eastbound: FL350, FL370

- CR3: UA609 (ATOLA - APKOT)

Westbound: FL340, FL360

**AFRICA**  
**CONTINGENCY PLANS - AFRICA**

Eastbound: FL350, FL370

- CR4: UA665 (ANKOR - AMBOD)

Northbound: FL280, FL300, FL320

Southbound: FL290, FL310, FL330

- CR5: UR782 (SOLAL - BERIL)

Westbound: FL380, FL400

Eastbound: FL390, FL410

- CR6: UB536 (EROPA - TNV)

Westbound: FL380, FL400

Eastbound: FL390, FL410

- CR7: UG465 (ENDEL - NESAM)

Westbound: FL380, FL400

Eastbound: FL390, FL410

- CR8: UG653 (SUNIR - GERAG)

Westbound: FL280, FL320, FL340, FL360

Eastbound: FL310, FL330, FL350, FL370

- CR9: UA402 (ETGUN - GETIR)

Westbound: FL300, FL400

Eastbound: FL290, FL410

- CR10: UR348 (TNV - RUPIG)

Westbound: FL380, FL400

Eastbound: FL390, FL410

The longitudinal separation will be 15 minutes.

***Track to join the Contingency Routes***

- CR1/CR2: UA401/UB790

Westbound: from NIBIS on UG661 DCT TIGUS on UB790

Eastbound: from DASTA on UG661 DCT KINAN

- CR8: UG653

Eastbound: from a point on UG652 or UG654, DCT SUNIR

## AFRICA CONTINGENCY PLANS - AFRICA

### CONTINGENCY ROUTE STRUCTURE DURING UNAVAILABILITY OF MADAGASCAR TERRITORIAL AIRSPACE

From Northeast Africa to La Reunion (Roland Garros) or Indian Ocean	TABNO or other waypoint-DCT-BIRAL-DCT-IXEBU-(UR780)	CAR...	FPL as FL	As per LOP	HTDC/ FMEE/ FSSS
From Northeast Africa to Mauritius (Sir Seewoosagur Ramgoolam Intl) or Indian Ocean	TABNO or other waypoint-DCT-BIRAL-DCT-IXEBU-TSARA-(UA665)	CAR...	FPL as FL	As per LOP	HTDC/ FIMM/ FSSS
From East Africa to southeast of Indian Ocean	Any entry point-DCT-KE-DOM-DCT-AXOTA-DCT-GETIR or GERAG	CAR...	FPL as FL	As per LOP	FQBE/ FMEE

### PROCEDURES TO BE FOLLOWED BY AIRCRAFT

All aircraft overflying Antananarivo FIR shall follow the following procedures:

- a. All aircraft proceeding along the contingency routes will comply with IFR and will be assigned a flight level in accordance with the FLAS applicable to the contingency Routes being flown as specified above;
- b. flights are to file flight plans using the contingency routes as specified above, according to their airport of origin, routing and destination;
- c. pilots are to keep a continuous watch on the specified contingency radio frequencies and transmit position information and estimates in accordance with normal ATC position reporting procedures using the english language;
- d. pilots are to maintain during their entire flight time within Antananarivo FIR, the flight level last assigned by the last ACC or ATS unit responsible for the provision of ATC service, prior to the aircraft entering the Antananarivo FIR. In the event that the last assigned flight level does not correspond to the FLAS applicable to the Antananarivo contingency plans, the pilot should establish contact with the ATS unit responsible for the provision of service to clarify, and if unable, shall adjust to the FLAS as soon as possible once in the contingency airspace. The pilot shall, under no circumstances, change this level and Mach number, except in cases of emergency and for flight safety reasons. In addition, the last SSR transponder assigned shall be maintained or, if no transponder has been assigned, transmit on SSR code 2000;
- e. aircraft are to reach the flight level last assigned by the responsible ACC at least 10 minutes before entering the Antananarivo FIR or as otherwise instructed by the appropriate ATC unit;
- f. pilots are to include in their last position report prior to entering the Antananarivo FIR, the estimated time over the entry point of the Antananarivo FIR and ETA over the relevant exit points of the Antananarivo FIR;

**AFRICA**  
**CONTINGENCY PLANS - AFRICA**

- g. pilots are to contact the next adjacent ACC as soon as possible, and at the latest, 10 minutes before ETA over the FIR boundary exit points of Antananarivo FIR;
- h. whenever in-flight emergencies and/or flight safety reasons make it impossible to maintain the flight level assigned for transit of Antananarivo FIR, pilots are to climb or descend well to the right of the centerline of the contingency route, and if deviating outside the Antananarivo FIR, to immediately inform the ACC responsible for that airspace. Pilots are to make blind transmissions on 121.5MHz and 126.9MHz of the relevant emergency level change message, indicating the aircraft call sign, the aircraft position, the flight levels being vacated and crossed, etc);
- i. pilots should recognize that not all operational circumstances can be addressed by this contingency plan, pilots are to maintain a high level of alertness when operating in the Antananarivo contingency airspace and take appropriate action to ensure safety of flight;
- j. pilots should maintain continuous listening watch on VHF emergency frequency 121.5MHz and IFBP frequency 126.9MHz at all times when operating in the Antananarivo contingency airspace.

## **CONTINGENCY PLAN FOR BEIRA FIR**

In the case of disruption or non-availability of air traffic services, a system of contingency ATS routes has been established.

### **ATS CONTINGENCY ROUTES**

The traffic will be routed via the following contingency routes and in accordance with the flight level allocation scheme indicated in order to provide strategic separation in the FIR:

- CR1: UA400 (KEPOK - MIROS - MELNA - GADNO)  
Eastbound: FL370  
Westbound: FL320
- CR2: UP312 (MAKIR - ETUMA - TEVAS)  
Eastbound: FL290, FL310  
Westbound: FL360, FL380
- CR3: UL437 (KOBOD - ELEPA - NIBOR - ROVUM)  
Eastbound: FL350, FL410  
Westbound: FL340, FL400
- CR4: UB529 (EPRET - VMA - KURLA)  
Eastbound: FL410  
Westbound: FL400
- CR5: UB529/UG656 (EPRET - VMA - GESAS - MUTAR)  
Eastbound: FL330

## AFRICA CONTINGENCY PLANS - AFRICA

Westbound: FL300

- CR6: UT122 (ORNAD - VMA - APLAR - SUNIR)

Eastbound: FL350

Westbound: FL340

- CR7: UM310/UG656 (TONKA - VMA - GESAS - MUTAR)

Eastbound: FL310

Westbound: FL380

- CR8: UB529/UM310 (EPRET - VMA - EXETU - VBR - EPNOM - BONAP)

Eastbound: FL290

Westbound: FL360

- CR9: UM307 (EPSEK - VBR - ENDEL)

Eastbound: FL390

Westbound: FL340

- CR10: UA402 (ETMOS - ETGUN)

Eastbound: FL310, FL330, FL350, FL370, FL390, FL410

Westbound: FL300, FL320, FL340, FL360, FL380

Minimum 15 minutes longitudinal separation shall be applicable.

## CONTINGENCY PLAN FOR CASABLANCA UIR

The Contingency Plan provides the ATS procedures and contingency route structure using existing airways in most cases that will allow aircraft operators to transit the Casablanca UIR.

During the contingency critical period, ATS including ATC, may not be available, particularly with regard to availability of communications and radar services. In cases where service are not available, a NOTAM will be issued providing the relevant information, including an expected date and time of resumption of service. The contingency plan provides for limited flight information and alerting services to be provided by adjacent ACCs.

VFR flights shall not operate in the Casablanca airspace if there are extensive disruptions to ATC facilities, except in special cases such as State aircraft, MEDIVAC flights, and any other essential flights authorized by the General Civil Aviation Authority (GCAA).

## CONTINGENCY ATS ROUTE NETWORK

### ATS Contingency Routes

The traffic will be routed via the following contingency routes and in accordance with the flight level allocation scheme indicated in order to provide strategic separation in the UIR:

**AFRICA  
CONTINGENCY PLANS - AFRICA**

***Northbound traffic***

- CRC1: KONBA - UN866 - BEXAL  
FL300, FL320, FL340, FL360 and FL380.  
ACC/VHF Freq: Canaries 126.50MHz and Lisbon 131.32MHz
- CRC3: VASTO - UN858 - AKUDA  
FL300, FL320, FL340, FL360 and FL400  
ACC/VHF Freq: Canaries 129.10MHz and Lisbon 125.55MHz
- CRC6: KORAL - UN871 - ADUBI  
FL300, FL320, FL340, FL360 and FL400  
ACC/VHF Freq: Canaries 129.10MHz and Seville 134.80MHz
- CRC11: BULIS - RUTAL - MAK - CBA - TNG  
FL280  
ACC/VHF Freq: Nouakchott 124.20MHz and Seville 132.47MHz
- CRC15: BERUM - UG850 - FES - UM372 - MAK - UG850 - ADM - UN869 - RUSIK  
FL350  
ACC/VHF Freq: Seville 132.47MHz and Canaries 129.10MHz/133.00MHz
- CRC16: BERUM - UG850 - FES - UM372 - MAK - UG850 - ADM - UA600 - SOLNA  
FL350  
ACC/VHF Freq: Canaries 129.10MHz/133.00MHz and Nouakchott 124.20MHz
- CRC17: BERUM - UG850 - FES - UM372 - MAK - ADM - UR975 - ECHED  
FL350  
ACC/VHF Freq: Nouakchott 124.20MHz
- CRC18: ECHED - ESS - IBALU - OSLAD  
FL380  
ACC/VHF Freq: Nouakchott 124.20MHz and Lisbon 125.55MHz

***Southbound traffic***

- CRC2: BAROK - UN873 - SAMAR  
FL310, FL330, FL350, FL370, FL390 and FL410  
ACC/VHF Freq: Canaries 130.95MHz and Lisbon 125.55MHz
- CRC4: KORNO - UN857 - TERTO  
FL310, FL330, FL350 and FL370

**AFRICA**  
**CONTINGENCY PLANS - AFRICA**

ACC/VHF Freq: Canaries 129.10MHz and Seville 132.92MHz

- CRC5: OSLAD - UN857 - TERTO

FL310 and FL350

ACC/VHF Freq: Canaries 129.10MHz and Lisbon 125.55MHz

- CRC7: GALTO - UB11 - MAK - ADM - UR975 - ECHED

FL290 and FL410

ACC/VHF Freq: Nouakchott 124.20MHz and Seville 134.80MHz

- CRC8: GALTO - UN869 - ADM - UA600 - SOLNA

FL290 and FL410

ACC/VHF Freq: Canaries 133.00MHz and Seville 132.47MHz

- RC9: GALTO - UN869 - RUSIK

FL290

ACC/VHF Freq: Canaries 129.1MHz and Seville 132.47MHz

- CRC12: ORSUP - UA411 - FES - UM372 - MAK - UG850 - ADM - UR975 - ECHED

FL270

ACC/VHF Freq: Algiers 125.70MHz, Canaries 133.00MHz and Nouakchott 124.20MHz

- CRC13: ORSUP - UA411 - FES - UM372 - MAK - UG850 - ADM - UA600 - SOLNA

FL270

ACC/VHF Freq: Canaries 133.00MHz

- CRC14: ORSUP - UA411 - FES - UM372 - MAK - UG850 - ADM - UN869 - RUSIK

FL270

ACC/VHF Freq: Canaries 133.0MHz

***Eastbound traffic***

- CRC10: KORAL - SONSO - MAK - BEDUX - ARIAM

FL320

ACC/VHF Freq: Canaries 129.1MHz and Algiers 125.7MHz

All aircraft should be maintained a listening watch on the designated frequency from 10 minutes before entering the designated airspace until leaving this airspace. For an aircraft taking off from an aerodrome located within the designated airspace, the listening watch should start as soon as appropriate and be maintained until leaving the airspace.

**AFRICA**  
**CONTINGENCY PLANS - AFRICA**

**PROCEDURES TO BE FOLLOWED BY AIRCRAFT**

- a. All aircraft proceeding along the ATS routes established in this contingency plan will comply with the Instrument Flight Rules (IFR) and will be assigned a flight level in accordance with the flight level allocation scheme applicable to the route(s) being flown.
- b. Flights are to file a flight plan using the contingency routes, according to their airport of origin and destination.
- c. Pilots are to keep a continuous watch on the specified contingency frequency and transmit in English position information and estimates line with normal ATC position reporting procedures.
- d. Pilots are to maintain during their entire flight time within the Casablanca UIR, the flight level last assigned by the last ACC responsible prior to the aircraft entering the Casablanca UIR, and under no circumstances change this level and Mach number, except in cases of emergency and for flight safety reasons. In addition, the last SSR transponder assigned shall be maintained or, if no transponder has been assigned, transmit on SSR code 2000.
- e. Aircraft are to reach the flight level last assigned by the responsible ACC at least 10 minutes before entering the Casablanca UIR.
- f. Pilots are to include in their last position report prior to entering the Casablanca UIR, the estimated time over the entry point of the Casablanca UIR and the estimated time of arrival over the relevant exit point of the Casablanca airspace.
- g. Pilots are to contact the next adjacent ACC as soon as possible, and at the latest, 10 minutes before the estimated time of arrival over the contingency TCP point.
- h. Whenever emergencies and/or flight safety reasons make it impossible to maintain the flight level assigned for transit of the Casablanca UIR, pilots are to climb or descend well to the right of the centerline of the contingency route, and if deviating outside the Casablanca UIR, to inform immediately the ACC responsible for that airspace. Pilots are to make blind broadcast on 121.5MHz of the relevant emergency level change message (comprising the aircraft call sign, the aircraft position, the flight levels being vacated and crossed, etc).
- i. Not all operational circumstances can be addressed by this contingency plan and pilots are to maintain a high level of alertness when operating in the contingency airspace and take appropriate action to ensure safety of flight.

**INTERCEPTION OF CIVIL AIRCRAFT**

- a. Pilots need to be aware that in light of current international circumstances, a contingency routing requiring aircraft to operate off normal traffic flows, could result in an intercept by military aircraft. Aircraft operators must therefore be familiar with international intercept procedures.
- b. The Moroccan Air Force may intercept civil aircraft over the territory of Morocco in the event that a flight may not be known to and identified by the military authority. In such cases, the ICAO intercept procedures will be followed by the Moroccan Air Force, and pilots are to



## AFRICA CONTINGENCY PLANS - AFRICA

comply with instructions given by the pilot of the intercepting aircraft. In such circumstances, the pilot of the aircraft being intercepted shall broadcast information on the situation.

- c. If circumstances lead to the closure of the Moroccan airspace and no contingency routes are available through the Casablanca UIR, aircraft will be required to route around the Moroccan airspace. As much warning as possible will be provided by the appropriate ATS authorities in the event of the complete closure of Moroccan airspace.
- d. Pilots need to continuously guard the VHF emergency frequency 121.5MHz and should operate their transponder at all times during flight, regardless of whether the aircraft is within or outside airspace where Secondary Surveillance Radar (SSR) is used for ATS purposes. The transponders should be set on a discrete code assigned by ATC or select code 2000 if ATC has not assigned a code.

## CONTINGENCY PLAN FOR DAKAR OCEANIC FIR

The general contingency procedures described hereafter are applicable in Dakar Oceanic in the event of interruption of the air traffic services caused by a total radio failure, security evacuation or possible social conflicts.

A NOTAM will be issued if this contingency plan is activated.

## CONTINGENCY PLAN FOR EUR/SAM CORRIDOR

During a contingency situation of one specific ACC, the collateral ACCs of the one in contingency will allocate the air traffic flows towards the one in contingency using exclusively the ATS routes and flight levels listed below.

### ATS Contingency Routes

- a. UN741:  
Southbound: FL300, FL340, FL360, FL380
- b. UN866:  
Northbound: FL290, FL330, FL350, FL370, FL390
- c. UN873:  
Southbound: FL300, FL340, FL360, FL380
- d. UN857:  
Northbound: FL290, FL330, FL350, FL370, FL390
- e. RANDOM route:  
Traffic flying the RANDOM Route will not be accepted and must be allocated in one of the ATS routes described above
- f. Crossing traffic (East - West):  
Westbound: FL320  
Eastbound: FL310

## AFRICA CONTINGENCY PLANS - AFRICA

The longitudinal separation will be 20 minutes with Mach number technique.

### CONTINGENCY PLAN OUT OF EUR/SAM CORRIDOR

During a contingency situation of one specific ACC, the neighboring ACC of the one in contingency will allocate the air traffic flows towards the one in contingency using exclusively the ATS routes and flight levels listed below.

#### ATS Contingency Routes

- a. UA302/UL206:  
Northbound: FL330, FL370  
Southbound: FL350, FL390.
- b. UA572/UL330:  
Northbound: FL330, FL370  
Southbound: FL350, FL390
- c. UG433/UL327:  
Northbound: FL330, FL370  
Southbound: FL350, FL390
- d. UA560/UL335:  
Northbound: FL330, FL370  
Southbound: FL350, FL390
- e. RANDOM route:  
Traffic flying the RANDOM Route will not be accepted and must be allocated in one of the ATS routes described above.
- f. Crossing traffic (East - West):  
Westbound: FL320  
Eastbound: FL310

The longitudinal separation will be 20 minutes with Mach number technique.

### PROCEDURES TO BE FOLLOWED BY AIRCRAFT

Pilots flying in a contingency airspace should follow IFBP as specified below:

- a. Must be in permanent contact on the interpilot air-to-air frequency 123.45MHz.
- b. Reports positions or estimates and the beginning and the end of the climb/descent phases.
- c. Maintain a watch for conflicting traffic, both visually and by reference to ACAS.
- d. Turn on all aircraft exterior lights.
- e. Keep the SSR transponder on all times.

## AFRICA CONTINGENCY PLANS - AFRICA

- f. Climb and descend phases must be clearly performed at the right side of the route axis. They are also required to apply the lateral deviation off-set procedures.

### CONTINGENCY PLAN FOR DOUALA UTA

This contingency plan is designed to accommodate the flow of international air traffic with a minimum of disturbance for aircraft transiting the airspace under the responsibility of Douala ACC. Routes and flight levels are limited.

A NOTAM will be issued if this contingency plan is activated.

### CONTINGENCY ATS ROUTE NETWORK

#### ATS Routes temporarily unavailable

The following ATS routes will be temporarily unavailable for overflight traffic:

- UL433 (KEMOX - IKROP);
- UL434 (DESAM - NLY);
- UH455 (KEMOX - ARASI);
- UA604 (DLA - ETNOM).

#### ATS Contingency Routes

The traffic will be routed via the following contingency routes and in accordance with the flight level allocation scheme indicated in order to provide strategic separation in the FIR.

#### *Northbound/Southbound traffic*

- BZCR1: UA604 (OBUDU - DLA)

Northbound: FL280, FL320 and FL360

Southbound: FL290, FL350 and FL370

#### *Northwestbound/southeastbound traffic*

- BZCR2: UR986 (TAPEK - TAKUM)

Northwestbound: FL280, FL320 and FL360

Southeastbound: FL290, FL350 and FL370

- BZCR3: UG861 (DLA - ARASI)

Northwestbound: FL280, FL320 and FL360

Southeastbound: FL290, FL350 and FL370

#### *Northeastbound/southwestbound traffic*

- BZCR4: UG857 (DLA - PONDO)

Northeastbound: FL250, FL270, FL310, FL330 and FL370

**AFRICA**  
**CONTINGENCY PLANS - AFRICA**

Southwestbound: FL260 and FL340

– BZCR6: UB737 (DLA - IPOVO)

Northeastbound: FL270 and FL310

Southwestbound: FL260, FL300, FL340, FL380 and FL400

***Eastbound/westbound traffic***

– BZCR5: UR984 (RALIN - DLA - NLY - DEREP)

Eastbound: FL330 and FL390

Westbound: FL300, FL380 and FL400

**PROCEDURES TO BE FOLLOWED BY AIRCRAFT**

All aircraft transiting through Douala UTA shall strictly comply with the following procedures:

- a. Operate along or as close as possible to the centerline of the assigned contingency air traffic route.
- b. Reach the flight level assigned by adjacent ACC for the transit of Douala UTA at least 10 minutes before entering Douala UTA.
- c. Maintain the flight level assigned by the last adjacent ACC while operating within Douala UTA, unless an emergency situation or flight security reason exists.
- d. Maintain a continuous listening watch on the VHF frequency 126.9MHz, and transmit blind in English on 126.9MHz position reports 5 minutes before and overhead each compulsory reporting point established along the respective air traffic route.
- e. Include in the last position report to the competent adjacent ACC the estimated time of arrival over the entry point of Douala UTA and the estimated time and point at which to exit the Douala UTA.
- f. Whenever emergencies and/or flight safety reasons make it impossible to maintain the flight level assigned for the transit of Douala UTA, climb or descend well to the right of the centerline of the air traffic route being flown but remaining within Douala UTA, and to inform immediately, by blind broadcast on the VHF frequency 126.9MHz, all other aircraft likely to be affected by transmitting a relevant emergency level change message (comprising the aircraft call sign, the aircraft position, the flight levels being left and crossed, etc.).
- g. Contact the competent adjacent ACC as soon as possible and at least 10 minutes before the estimated time of arrival over the relevant exit point of Douala UTA in order to obtain clearance for entering the adjacent airspace concerned.
- h. Display navigation and anti-collision lights at all times during the transit of contingency airspace.
- i. Maintain own longitudinal separation of 20 minutes with proceeding aircraft maintaining the same cruising flight level.

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## **CONTINGENCY PLAN FOR GABORONE FIR**

### **CONTINGENCY ATS ROUTE NETWORK**

#### **ATS Contingency Routes**

During partial or total unavailability of the Gaborone FIR following contingency route structure has been established.

#### ***Eastbound/Westbound traffic***

- CR1: UM731  
Eastbound: FL370, FL410  
Westbound: FL300, FL380
- CR3: UM215  
Eastbound: FL310, FL350, FL390  
Westbound: FL280, FL320, FL360
- CR4: UN181  
Eastbound: FL310, FL330, FL350  
Westbound: FL300, FL320, FL340
- CR5: UL307  
Eastbound: FL330, FL370, FL410  
Westbound: FL300, FL340
- CR6: UA404  
Eastbound: FL310, FL330  
Westbound: FL280, FL340

Minimum 15 minutes longitudinal separation shall be applicable.

## **CONTINGENCY PLAN FOR HARARE FIR**

### **CONTINGENCY ATS ROUTE NETWORK**

#### **ATS Contingency Routes**

The traffic will be routed via the following contingency routes and in accordance with the flight level allocation scheme indicated in order to provide strategic separation in the FIR.

#### ***Eastbound/Westbound traffic***

- CR1: UM214 (UDKOL - XOSIV)  
Eastbound: FL290, FL310, FL330, FL350, FL370, FL390, FL410  
Westbound: FL300, FL320, FL340, FL360, FL380, FL400

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- CR2: UM215 (DANAM - VBU - RETAR)  
Eastbound: FL290, FL330, FL350, FL370, FL390, FL410  
Westbound: FL320, FL340, FL360, FL380, FL400
- CR3: UA405/UR409 (GWV - VMV - USUBI)  
Eastbound: FL330, FL350, FL370, FL390, FL410  
Westbound: FL320, FL340, FL360, FL380, FL400
- CR4: UM652/UR525 (MENSO - VSB - RETAR)  
Eastbound: FL310  
Westbound: FL300

### ATS Contingency Avoidance Routes

In the event of total unavailability of the Harare FIR necessitating the avoidance of the airspace, the following routings will be used:

- CAR8: Routing east of the Harare FIR northbound traffic to join at EPSEK and proceed via UG465 to GESAS then via UG656 to VTZ or vice versa when routing to the south.
- CAR9: Routing west of Harare FIR - northbound traffic join at OKLAP via UM214 or UR544, continue on UR544 to AMBIT then re-join preferred routing north or vice versa when routing to the south.

## CONTINGENCY PLAN FOR KIGALI FIR

The Contingency Plan will come into effect as and when a contingency arises due to partial or total disruption of Air Traffic Services with an objective of providing safe and orderly passage to the flying traffic through the Kigali FIR.

The Plan will be activated by promulgation of a NOTAM issued by the International NOTAM Office (NOF) of Kigali as far in advance as is practicable.

## CONTINGENCY ATS ROUTE NETWORK

### ATS Contingency Routes

- CR1: A408 (GAVDA - KNM - OKTEX)  
Westbound FL240  
Eastbound FL230
- CR2: B532 (KAROS - KNM - BOSAD)  
Westbound FL220  
Eastbound FL210
- CR3: B531 (RANAG - KNM - DATAN)  
Westbound FL200

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Eastbound FL190

– CR4: B527 (KNM - EGREK)

Westbound FL180

Eastbound FL170

The minimum longitudinal separation will be 20 minutes.

**PROCEDURES TO BE FOLLOWED BY AIRCRAFT**

Aircraft over flying the Kigali FIR shall follow the following procedures:

- a. All aircraft proceeding along the ATS routes established in this contingency plan will comply with the Instrument Flight Rules (IFR) and will be assigned a flight level in accordance with the flight level allocation scheme applicable to the route(s) being flown as specified above;
- b. aircraft are to operate as close as possible to the centerline of the assigned contingency route;
- c. pilots are to keep a continuous watch on the specified contingency frequency and transmit the aircraft's position in line with normal ATC position reporting procedures;
- d. keep navigation and anti-collision lights on while overflying the Kigali FIR;
- e. pilots are to maintain during their entire flight time within Kigali FIR, the last assigned flight level by the last ACC responsible prior to the aircraft entering the Kigali FIR, and under no circumstances change this level except in cases of emergency and for flight safety reasons. In addition, the last assigned SSR transponder shall be maintained or, if no transponder has been assigned, transmit on SSR code 2000;
- f. aircraft are to reach the last assigned flight level by the responsible ACC at least 10 minutes before entering the Kigali FIR or as otherwise instructed by the ATC unit in accordance with the LOA with Kigali;
- g. pilots are to include in their last position report prior to entering the Kigali FIR, the estimated time over the entry point of the Kigali FIR and the estimated time of arrival over the relevant exit point of the Kigali FIR;
- h. pilots are to contact the next adjacent ACC as soon as possible, and at the latest, 10 minutes before the estimated time of arrival over the relevant exit point of Kigali FIR;
- i. pilots are to strictly adhere to the ICAO Traffic Information Broadcasts by Aircraft (TIBA) maintain a continuous listening watch on the international air to air VHF frequency 126.9MHz, as well as on the specified VHF on 121.5MHz. When necessitated by emergency conditions, pilots are to transmit blind on these frequencies, their current circumstances and the commencement and completion of any climb and descent or deviation from the cleared contingency route;
- j. whenever emergencies and/or flight safety reasons make it impossible to maintain the assigned flight level for transit of Kigali FIR, pilots are to climb or descend well to the right of

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the centerline of the contingency route, and if deviating outside the Kigali FIR, to inform immediately the ACC responsible.

## **CONTINGENCY PLAN FOR KINSHASA FIR**

### **CONTINGENCY ATS ROUTE NETWORK**

#### **ATS Contingency Routes**

- CR1: UM998 (INUGA - AMSIK)  
Westbound FL340, FL360  
Eastbound FL350, FL370
- CR2: UM731 (DURNA - EMSAT)  
Westbound FL340, FL360  
Eastbound FL350, FL370
- CR3: UM214 (ETOXO - OPDAK)  
Westbound FL340, FL360  
Eastbound FL350, FL370
- CR4: UM215 (MOTAM - MERON)  
Westbound FL340, FL360  
Eastbound FL350, FL370
- CR5: UM306 (BJA - INUGA)  
Westbound FL300, FL320  
Eastbound FL310, FL330
- CR6: UB531/UL434 (GOM - KIG - PIPLO)  
Westbound FL300, FL320  
Eastbound FL310, FL330
- CR 7: UA613 (BJA - KIN - KSA - BZ)  
Westbound FL280  
Eastbound FL270

The longitudinal separation will be 15 minutes.

## **CONTINGENCY PLAN FOR KHARTOUM FIR**

In the event that ACC becoming inoperative, this plan will be activated catering for the worst case scenario of a total disruption in ATS for the upper airspace of Khartoum FIR.

A NOTAM will be issued if this contingency plan is activated.



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CONTINGENCY PLANS - AFRICA****CONTINGENCY ATS ROUTE NETWORK****ATS Routes temporarily unavailable**

The following ATS routes will be temporarily unavailable for overflight traffic:

- UA727 (SML - NUBAR - MRW);
- UA410 (KAFIA - RADAG - OBD);
- UB535 (DAGAP - TAPOS - JUB - SAGBU);
- UB607 (DEKUM - BOTAR - OBD);
- UT139 (DASTU - IMDUR - EGBIM - DASAG - ASKON).

**ATS Contingency Routes**

International route structure for transit of the Khartoum FIR when no ATS available in Sudan airspace:

*NOTE: During the activation of the contingency plan pilots are requested to contact Cairo ACC within the north sector and to contact Nairobi ACC within the south sector.*

**Northbound/Southbound traffic**

- CRK1: UR611 (ATMUL - MRW - ALPOX - KTM - TIKAT)  
Southbound: FL330, FL350 and FL370
- CRK2: UB612 (ORNAT - DELAM - OBD - MLK - EPLAS)  
Northbound: FL320 and FL360  
Southbound: FL330 and FL350
- CRK3: UP751 (ALEBA - PSD - TOKAR)  
Northbound: FL300  
Southbound: FL330, FL350 and FL370
- CRK6: UT124 (ALRAP - GIDAR - IMTAR - DARIB - NUBAR)  
Northbound: FL320 and FL360
- CRK8: UB527 (JUB - MLK - RABAK - KTM)  
Northbound: FL380  
Southbound: FL370

**Eastbound/Westbound traffic**

- CRK4: UG660 (PSD - BOPID - KTM - OBD - FSR - GENEINA)  
Eastbound: FL290 and FL310  
Westbound: FL280, FL340 and FL400

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- CRK5: UM863 (GIBAP - TOMRU - DARIB - SOMAK - SOGIN - ASKOL - KITOB - IPONO)  
Westbound: FL280, FL340 and FL400
- CRK7: UB736 (AVONO - MLK - ALMAM - MONAN)  
Eastbound: FL390 and FL410  
Westbound: FL260 and FL340

## AIR TRAFFIC MANAGEMENT AND CONTINGENCY PROCEDURES

### Reduced ATS and provision of Flight Information Service (FIS)

During the contingency critical period, ATS including ATC may not be available, particularly with regard to availability of communications and radar services. In cases where service are not available, a NOTAM will be issued providing the relevant information, including an expected date and time of resumption of service. The contingency plan provides for limited flight information and alerting services to be provided by adjacent ACCs.

The primary means of communication will be by VHF or HF radio except for aircraft operating Automatic Dependent Surveillance (ADS) and Controller/Pilot Data Link Communication (CPDLC) systems. When CPDLC has been authorized for use by the relevant ATC authority, this will become the primary means of communication with HF as secondary. In the case of ADS automatic position reporting, this replaces voice position reporting and CPDLC or HF will become the secondary means.

### Aircraft Separation

The longitudinal separation will be 15 minutes. However, this may be reduced to 10 minutes in conjunction with application of the Mach number technique in light of developments and as authorized by the DGCA by the appropriate OCA.

The route structure provides for lateral separation of 100NM and in cases where this is less, and for crossing routes, a standard minimum vertical separation will be applied.

### Aircraft Position Reporting

Pilots will continue to make routine position reports in line with normal ATC reporting procedures.

## PROCEDURES TO BE FOLLOWED BY AIRCRAFT

Aircraft overflying Khartoum FIR shall follow the following procedures:

- a. All aircraft proceeding along the ATS routes established in this contingency plan will comply with the instrument flight rules (IFR) and will be assigned a flight level in accordance with the flight level allocation scheme applicable to the route(s) being flown as specified in “ATS Contingency Routes” above.
- b. Flights are to file a flight plan using the contingency routes specified in “ATS Contingency Routes” above, according to their airport of origin and destination.

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- c. Pilots are to keep a continuous watch on the specified contingency frequency and transmit in English position information and estimates in line with normal ATC position reporting procedures.
- d. Pilots are to maintain during their entire flight time within Khartoum FIR, the flight level last assigned by the last ACC responsible prior to the aircraft entering Khartoum FIR, and under no circumstances change this level and Mach number, except in cases of emergency and for flight safety reasons. In addition, the last SSR transponder assigned shall be maintained or, if no transponder has been assigned, transmit on SSR code 2000.
- e. Aircraft are to reach the flight level last assigned by the responsible ACC at least 10 minutes before entering Khartoum FIR or as otherwise instructed by the ATC unit in accordance with the OCA with Sudan.
- f. Pilots are to include in their last position report prior to entering Khartoum FIR, the estimated time over the entry point of Khartoum FIR and the estimated time of arrival over the relevant exit point of Khartoum FIR.
- g. Pilots are to contact the next adjacent ACC as soon as possible, and at the latest, 10 minutes before the estimated time of arrival over the entry point.
- h. Whenever emergencies and/or flight safety reasons make it impossible to maintain the flight level assigned for transit of Khartoum FIR, pilots are to climb or descend well to the right of the centerline of the contingency route, and if deviating outside the Khartoum FIR, to inform immediately the ACC responsible for that airspace. Pilots are to make blind broadcast on 121.5MHz of the relevant emergency level change message (comprising the aircraft call sign, the aircraft position, the flight levels being vacated and crossed, etc).

## CONTINGENCY PLAN FOR LUANDA FIR

This contingency plan contains arrangements to ensure the continued safety of air navigation in the event of partial or total disruption of air traffic services in the Luanda FIR (FNAN).

A NOTAM will be issued if this contingency plan is activated.

## CONTINGENCY ATS ROUTE NETWORK

The longitudinal separation for all routes will be 15 minutes.

### ATS Contingency Routes for Flights through FNAN

#### *Flights from FYWH through FNAN and vice versa*

- CR1: UN190/UN184 (OKDOL - EGNAB)

Northbound: FL340

Southbound: FL350

- CR3: UL 307 (ABAPU - ONTAR)

Northwestbound: FL320

Southeastbound: FL330

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***Flights from FYWH through FNAN to FZZA and vice versa***

- CR2: UN187/UR526 (ANVAG - LIKAD)  
Northbound: FL340  
Southbound: FL350
- CR9: UN187/UA611 (ANVAG - VNA - BUDEL)  
Northbound: FL300/FL310  
Southbound: FL310/FL300

***Flights from FLFI through FNAN and vice versa***

- CR4: UA400 (ARAKI - EGSUD)  
Northwestbound: FL410  
Southeastbound: FL400

***Flights from FZZA through FNAN and vice versa***

- CR5: UM371 (EPNUL - DURNA)  
Southbound: FL330, FL350 and FL370  
Northbound: FL340, FL360 and FL380
- CR7: UL340/UM306 (ONTAR - INUGA)  
Eastbound: FL380  
Westbound: FL390

***Flights from FZZA through FNAN to FBGR and vice versa***

- CR6: UM998 (INUGA - BUGRO)  
Southbound: FL300, FL320, FL340, FL360 and FL380  
Northbound: FL310, FL330, FL350 and FL370

***Flights from AORRA Airspace through FNAN to FZZA and vice versa***

- CR8: UL340/UA611 (ONTAR - BUDEL)  
Northeastbound: FL370  
Southwestbound: FL360

**ATS Contingency Routes for Flights to and from Luanda FIR (FNAN)**

***Flights from AORRA Airspace to Luanda (FNLU) and vice versa***

- AORRA Airspace (ONTAR - VNA)

To Luanda: ONTAR at FL290, the descent to Luanda will be made in a holding pattern at ONTAR.

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From Luanda: The aircraft should arrange the flight in order to reach ONTAR position at FL300.

***Flights from DGAC Oceanic Airspace to Luanda (FNLU) and vice versa***

- UG853 (TERBA - VNA)

To Luanda: TERBA at FL290, the descent to Luanda will be made in a holding pattern at OPAPO.

From Luanda: The aircraft should arrange the flight in order to cross OPAPO position at FL300.

***Flights from FCCC to Luanda (FNLU) and vice versa***

- UR526 (LIKAD - VNA)

To Luanda: LIKAD at FL260, the descent to Luanda will be made in a holding pattern at EXITO.

From Luanda: The aircraft should arrange the flight in order to cross EXITO position at FL280.

***Flights from FZZA to Luanda (FNLU) and vice versa***

- UA611 (BUDEL - VNA)

To Luanda: BUDEL at FL280, the descent to Luanda will be made in a holding pattern at DISPO.

From Luanda: The aircraft should arrange the flight in order to cross DISPO position at FL290.

- UM306 (INUGA - VNA)

To Luanda: INUGA at FL290, the descent to Luanda will be made in a holding pattern at IBKOK.

From Luanda: The aircraft should arrange the flight in order to cross IBKOK position at FL290.

***Flights from FLFI to Luanda (FNLU) and vice versa***

- UA400 (EGSUD - VNA)

To Luanda: EGSUD at FL280, the descent to Luanda will be made in a holding pattern at VOTAL.

From Luanda: The aircraft should arrange the flight in order to cross VOTAL position at FL290.

***Flights from FBGR and Johannesburg (FAOR) to Luanda (FNLU) and vice versa***

- UT941 (AGRAM - VNA)

To Luanda: AGRAM at FL300, the descent to Luanda will be made in a holding pattern at BIGUL.

From Luanda: The aircraft should arrange the flight in order to cross BIGUL position at FL310.

***Flights from FYWH to Luanda (FNLU) and vice versa***

- UN187 (ANVAG - VNA)

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To Luanda: ANVAG at FL280, the descent to Luanda will be made in a holding pattern at UVAMO.

From Luanda: The aircraft should arrange the flight in order to cross UVAMO position at FL310.

**Alternative Contingency Routes**

***Alternative Contingency Route to UN187 Route***

- UG853 (VNA - TIBAD)
- UT943 (TIBAD - UNLOK)

***Alternative Contingency Route to UG853F Route***

- UA400 (VNA - VUE)
- UM998 (VUE - BUGRO)

***Alternative Contingency Route to UT372 Route***

- UT943 (IMVEX - UNLOK)

**PROCEDURES TO BE FOLLOWED BY AIRCRAFT**

- a. All aircraft proceeding along the ATS routes established in this contingency plan will comply with the instrument flight rules (IFR) and will be assigned a flight level in accordance with the flight level allocation scheme (FLAS) applicable to the route(s) being flown as listed above;
- b. flights are to file flight plans using the contingency routes listed above, according to their airport of origin, routing and destination;
- c. pilots are to keep a continuous watch on the specified contingency radio frequencies as specified in the Letters of Agreement and transmit position information and estimates in accordance with normal ATC position reporting procedures using the English language;
- d. pilots are to maintain during their entire flight time within Luanda FIR, the last assigned flight level by the last ACC or ATS unit responsible for the provision of ATC service, prior to the aircraft entering the Luanda FIR. In the event that the last assigned flight level does not correspond to the FLAS applicable to the Luanda contingency plan, the pilot should establish contact with the ATS unit responsible for the provision of service to clarify, and if unable, shall adjust to the FLAS as soon as possible once in the contingency airspace. The pilot shall, under no circumstances, change this level and Mach number, except in cases of emergency and for flight safety reasons;
- e. aircraft are to reach the last assigned flight level by the responsible ACC at least 10 minutes before entering the Luanda FIR or as otherwise instructed by the appropriate ATC unit;
- f. pilots are to include in their last position report prior to entering the Luanda FIR, the estimated time over the entry point of the Luanda FIR and the estimated time of arrival over the relevant exit points of the Luanda FIR;

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- g. pilots are to contact the next adjacent ACC as soon as possible, and at the latest, 10 minutes before the estimated time of arrival over the FIR boundary exit points of Luanda FIR;
- h. whenever in-flight emergencies and/or flight safety reasons make it impossible to maintain the assigned flight level for transit of Luanda FIR, pilots are to climb or descend well to the right of the centerline of the contingency route, and if deviating outside the Luanda FIR, to immediately inform the ACC responsible for that airspace. Pilots are to make blind transmissions on 121.5MHz and 126.9MHz of the relevant emergency level change message, indicating the aircraft call-sign, the aircraft position, the flight levels being vacated and crossed, etc.);
- i. recognizant of the fact that not all operational circumstances can be addressed by this contingency plan, pilots are to maintain a high level of alertness when operating in the Luanda contingency airspace and take appropriate action to ensure safety of flight; and
- j. pilots should maintain continuous listening watch on VHF emergency frequency 121.5MHz and IFBP frequency 126.9MHz at all times when operating in the Luanda contingency airspace.

## **INTERCEPTION OF CIVIL AIRCRAFT**

Should conditions prevailing in the airspace over the territory and territorial waters of Angola during contingency period result in the interception of civil aircraft by military aircraft, the pilot shall immediately take the following action:

- a. Follow the instructions given by the intercepting aircraft, interpreting and responding to visual signals in accordance with international procedures;
- b. notify, if possible, the appropriate ATS unit;
- c. attempt to establish radio communication with the intercepting aircraft or with the appropriate intercept control unit, by making a general call on the emergency frequency 121.5MHz, giving the identity of the intercepted aircraft and the nature of the flight. If no contact has been established and if practicable, repeat this call on the emergency frequency 243MHz;
- d. if equipped with SSR transponder, select Mode A, Code 7700, unless otherwise instructed by the appropriate ATS unit;
- e. if equipped with ADS-B or ADS-C, select the appropriate emergency functionality, if available, unless otherwise instructed by the appropriate air traffic services unit;
- f. if any instructions received by radio from any sources conflict with those given by the intercepting aircraft by visual signals or by radio, the intercepted aircraft shall request immediate clarification while continuing to comply with the visual or radio instructions given by the intercepting aircraft.

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## **CONTINGENCY PLAN FOR LUSAKA FIR**

### **CONTINGENCY ATS ROUTE NETWORK**

#### **ATS Contingency Routes**

Contingency route structure during partial or total unavailability of the Lusaka FIR:

- CR1: UM214 (XOSIV - ETOXO)  
Westbound: FL340, FL360  
Eastbound: FL350, FL370
- CR2: UM731 (EPMAG - EPNUL)  
Westbound: FL340, FL360  
Eastbound: FL350, FL370
- CR3: UA405 (TEVAS - MB)  
Westbound: FL340, FL360  
Eastbound: FL350, FL370
- CR4: UA607 (AVIVA - BESHO)  
Westbound: FL320  
Eastbound: FL350
- CR5: UG424 (SONPO - IBROP)  
Westbound: FL320  
Eastbound: FL330
- CR6: UA409 (SOBTO - ESTAK)  
Westbound: FL380, FL400  
Eastbound: FL370, FL390
- CR7: UR525/UA400 (RETAR - EGSUD)  
Westbound: FL320  
Eastbound: FL330

The longitudinal separation will be 15 minutes.

#### **Domestic Contingency Routes (Departure/Arrival)**

- DCR1: UG655 (MOTAM - RETAR)  
Arrival: FL310 via MOTAM  
Departure: FL300 via MOTAM  
Arrival: FL290 via RETAR



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Departure: FL280 via RETAR

- DCR2: UR779 (MB - VLI)

Arrival: FL300 via MB

Departure: FL310 via MB

Arrival: FL310 via VLI

Departure: FL300 via VLI

- DCR3: UA400 (EGSUD - KEPOK)

Arrival/Departure: FL310 to the East

Arrival/Departure: FL300 to the West

The longitudinal separation will be 15 minutes.

### CONTINGENCY PLAN FOR MAURITIUS FIR

This contingency plan will be activated by promulgation of a NOTAM issued by the Mauritius NOTAM Office as far as practicable. However, when such prior notification is impracticable for any reason, this plan will be put into effect through notification by the designated authority, as approved by the Director of Civil Aviation Mauritius or the United Nations. In the event that this is also not practical, notification may be made by ICAO in accordance with arrangements made with Mauritius.

### ATM CONTINGENCY PLAN FOR INTERNATIONAL FLIGHTS TO TRANSIT THE UPPER AIRSPACE OF THE MAURITIUS FIR

This contingency plan provides the ATS procedures and contingency route structure using existing airways in most cases that will allow aircraft operators to transit the Mauritius FIR.

This contingency plan does not address arrangements for aircraft arriving and departing Mauritius, or for domestic flight operations within the territory of Mauritius.

### AIR TRAFFIC MANAGEMENT AND CONTINGENCY PROCEDURES

The primary means of air-ground communication will be by VHF or HF radio except for aircraft operating Automatic Dependent Surveillance (ADS) and Controller/Pilot Data Link Communication (CPDLC) systems where this has been established and is fully operational. Where CPDLC has been established, this will become the primary means of communication, with HF as secondary. In the case of ADS automatic position reporting, this will replace voice position reporting and CPDLC and/or HF will become the secondary means of communication.

#### Aircraft Separation

The minimum longitudinal separation applicable will be 15 minutes.

The route structure provides for a minimum lateral separation of 100NM. In cases where this is less, and for crossing routes, a minimum vertical separation of 2000ft shall be applied between all aircraft transiting the Mauritius FIR.

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In the event that Mauritius ATC services are terminated, RVSM operations will be suspended and 2000ft vertical separation minimum will be provided within Mauritius airspace using the RVSM flight levels.

## **PILOT OPERATING PROCEDURE**

Aircraft overflying the Mauritius FIR shall follow the following procedures:

- a. All aircraft proceeding along the ATS routes established in this contingency plan will comply with the instrument flight rules (IFR) and will be assigned a flight level in accordance with the Flight Level Allocation Scheme (FLAS) applicable to the route(s) being flown as specified in this document.
- b. Flights are to file flight plans using the contingency routes specified in this document, according to their airport of origin, routing and destination.
- c. Aircraft are to operate as close as possible to the centerline of the assigned contingency route.
- d. Pilots are to keep a continuous watch on the specified contingency radio frequencies as specified in the Letters of Agreement and transmit position information and estimates in accordance with normal ATC position reporting procedures using the English language.
- e. Pilots are to maintain during their entire flight time within Mauritius FIR, the flight level last assigned by the last ACC or ATS unit responsible for the provision of ATC service, prior to the aircraft entering the Mauritius FIR. In the event that the last assigned flight level does not correspond to the FLAS applicable to the Mauritius contingency plan, the pilot should establish contact with the ATS unit responsible for the provision of service to clarify, and if unable, shall adjust to the FLAS as soon as possible once in the contingency airspace. The pilot shall under no circumstances, change this level and Mach number, except in cases of emergency and for flight safety reasons. In addition, the last SSR transponder assigned shall be maintained or, if no transponder has been assigned, transmit on SSR code 2000.
- f. Aircraft are to reach the flight level last assigned by the responsible ACC at least 10 minutes before entering the Mauritius FIR or as otherwise instructed by the appropriate ATC unit in accordance with the Letters of Agreement.
- g. Pilots are to include in their last position report prior to entering the Mauritius FIR, the estimated time over the entry point of the Mauritius FIR and the ETA over the relevant exit points of the Mauritius FIR.
- h. Pilots are to contact the next adjacent ACC as soon as possible, and at the latest 10 minutes before the ETA over the FIR boundary exit points of the Mauritius FIR.
- i. Whenever in-flight emergencies and/or flight safety reasons make it impossible to maintain the flight level assigned for transit of Mauritius FIR, pilots are to climb or descend well to the right of the centerline of the contingency route, and if deviating outside the Mauritius FIR, to immediately inform the ACC responsible for that airspace. Pilots are to make blind transmissions on 121.5MHz and 126.9MHz of the relevant emergency level change message, indi-

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cating the aircraft call sign, the aircraft position, the flight levels being vacated and crossed, etc.

- j. Recognizant of the fact that not all operational circumstances can be addressed by this contingency plan, pilots are to maintain a high level of alertness when operating in the Mauritius contingency airspace and take appropriate action to ensure safety of flight.
- k. Pilots should maintain continuous listening watch on VHF emergency frequency 121.5MHz and IFBP frequency 126.9MHz at all times when operating in the Mauritius contingency airspace.

### CONTINGENCY ATS ROUTE NETWORK

In the event of disruption of air traffic services within Mauritius FIR, aircraft operators should file their flight plans using contingency routes as listed below:

- CR1: PEDPI - N633 - PLS - UA401F - SOBAT  
Eastbound: FL350, FL390  
Westbound: FL320, FL380, FL400
- CR2: MABAD - UG595F - PLS - UM665F - AMBOD  
Eastbound: FL330, FL370  
Westbound: FL300, FL340
- CR3: LATEP - R348 - RUPIG  
Eastbound: FL350, FL390  
Westbound: FL360, FL380, FL400
- CR4: SUNKI - G451 - RAXES  
Eastbound: FL350, FL390  
Westbound: FL360, FL380, FL400

### CONTINGENCY PLAN FOR NIAMEY UIR

This contingency plan is designed to accommodate the flow of international air traffic with a minimum of disturbance for aircraft transiting the airspace under the responsibility of Niamey ACC. Routes and flight levels are limited.

A NOTAM will be issued if this contingency plan is activated.

### CONTINGENCY ATS ROUTE NETWORK

#### ATS Routes to be temporarily unavailable

The following ATS routes will be temporarily unavailable for overflight traffic:

- UA600 (NUREX - NY);
- UA612 (MTI - GAO);

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- UB726 (BATIA - NY);
- UB730 (IKTAV - EPNON);
- UG616 (RIPOL - KORUT);
- UG854 (NY - POMPA);
- UG855 (GAPAG - NY - INAMA);
- UM974 (MTI - NY);
- UM998 (TOBUK - INISA);
- UR978 (AS - ERKEL);
- UR981 (POTOL - NY - SIRTO).

**ATS Contingency Routes**

The traffic will be routed via the following contingency routes and in accordance with the flight level allocation scheme indicated in order to provide strategic separation in the FIR.

***Northbound/Southbound traffic***

- NYCR11: UM114 (LITAK - ZAWAT)  
Northbound: FL250, FL310, FL330 and FL370  
Southbound: FL280, FL340, FL360 and FL380
- NYCR12: UA608 (TATAT - NY - TERAS)  
Northbound: FL330, FL370, FL390 and FL410  
Southbound: FL280, FL320, FL360 and FL380
- NYCR13: UA603 (ENOXO - GAO)  
Northbound: FL330 and FL350  
Southbound: FL280, FL320, FL360 and FL380
- NYCR14: UG859 (MOKAT - GAO)  
Northbound: FL270, FL290, FL310, FL330, FL350, FL370 and FL410  
Southbound: FL280, FL320, FL360 and FL380
- NYCR15: UB735/UM108 (POTOL - USRUT)  
Northbound: FL250, FL270, FL290, FL330, FL370 and FL410  
Southbound: FL260, FL280, FL320 and FL360
- NYCR16: UA604 (EREBO - AS - MOLIT - MIMBA)  
Northbound: FL260, FL300, FL360 and FL380  
Southbound: FL270, FL310, FL330, FL350 and FL390

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- NYCR17: UA614 (TAVOT - IPOBA)  
Northbound: FL330, FL350, FL370 and FL410  
Southbound: FL280 and FL360
- NYCR18: UG859 (Ouagadougou UTA boundary - GAO)  
Northbound: FL270, FL310, FL370 and FL410  
Southbound: FL280, FL320, FL360 and FL380

***Eastbound/Westbound traffic***

- NYCR5: UG660 (NY - GULEN)  
Eastbound: FL270 and FL290  
Westbound: FL260 and FL300
- NYCR6: UG854 (Ouagadougou UTA boundary - NY)  
Northeastbound: FL260 and FL300  
Southwestbound: FL270 and FL290
- NYCR7: UG858 (DETAR - N'Djamena FIR boundary - EPNON)  
Northeastbound: FL250, FL290, FL370 and FL410  
Southwestbound: FL260, FL300, FL360 and FL380
- NYCR8: UR778 (SABSI - RISUB)  
Northeastbound: FL250, FL270, FL290, FL310, FL330, FL370 and FL410  
Southwestbound: FL260, FL320 and FL340
- NYCR9: UB731 (NANOS - AS - TOBUK)  
Northeastbound: FL250, FL290, FL370 and FL410  
Southwestbound: FL320 and FL340
- NYCR10: UB727 (OPULU - TAVIL - TERAS)  
Northeastbound: FL250 and FL390  
Southwestbound: FL260 and FL340
- NYCR19: UR866 (OPULU - NUREX)  
Southeastbound: FL270 and FL310  
Northwestbound: FL260, FL300 and FL340

**PROCEDURES TO BE FOLLOWED BY AIRCRAFT**

All aircraft transiting through Niamey UIR shall strictly comply with the following procedures:

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- a. Operate along or as close as possible to the centerline of the assigned contingency air traffic route.
- b. Reach the flight level assigned by adjacent ACC for the transit of Niamey UIR at least 10 minutes before entering Niamey UIR.
- c. Maintain the flight level assigned by the last adjacent ACC while operating within Niamey UIR, unless an emergency situation or flight security reason exists.
- d. Maintain a continuous listening watch on the VHF frequency 126.9MHz, and transmit blind in English on 126.9MHz position reports 5 minutes before and overhead each compulsory reporting point established along the respective air traffic route.
- e. Include in the last position report to the competent adjacent ACC the estimated time of arrival over the entry point of Niamey UIR and the estimated time and point at which to exit the Niamey UIR.
- f. Whenever emergencies and/or flight safety reasons make it impossible to maintain the flight level assigned for the transit of Niamey UIR, climb or descend well to the right of the centerline of the air traffic route being flown but remaining within Niamey UIR, and to inform immediately, by blind broadcast on the VHF frequency 126.9MHz, all other aircraft likely to be affected by transmitting a relevant emergency level change message (comprising the aircraft call sign, the aircraft position, the flight levels being left and crossed, etc.).
- g. Contact the competent adjacent ACC as soon as possible and at least 10 minutes before the estimated time of arrival over the relevant exit point of Niamey UIR in order to obtain clearance for entering the adjacent airspace concerned.
- h. Display navigation and anti-collision lights at all times during the transit of contingency airspace.
- i. Maintain own longitudinal separation of 20 minutes with proceeding aircraft maintaining the same cruising flight level.

## **CONTINGENCY PLAN FOR OUAGADOUGOU UTA**

This contingency plan is designed to accommodate the flow of international air traffic with a minimum of disturbance for aircraft transiting the airspace under the responsibility of Ouagadougou ACC. Routes and flight levels are limited.

A NOTAM will be issued if this contingency plan is activated.

## **CONTINGENCY ATS ROUTE NETWORK**

### **ATS Routes to be temporarily unavailable**

The following ATS routes will be temporarily unavailable for overflight traffic:

- UA600 (TAREN - ONUSI);
- UA601 (NANGA - EBSUD);
- UR984 (OXIDU - OG);

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- UR866 (NUREX - OG);
- UR983 (OG - UMOVO);
- UG854 (ANIXA - OG);
- UR982 (OG - NAVON).

**ATS Contingency Routes**

The traffic will be routed via the following contingency routes and in accordance with the flight level allocation scheme indicated in order to provide strategic separation in the FIR.

***Northbound/Southbound traffic***

- NYCR3: UM104/UA614 (BIGOM - TAVOT)  
Northbound: FL250, FL290, FL350, FL370 and FL410  
Southbound: FL280, FL320, FL360 and FL380
- NYCR4: UG859 (TUMUT - Ouagadougou UTA boundary)  
Northbound: FL250, FL310, FL330 and FL350  
Southbound: FL280, FL320, FL360, FL380 and FL400

***Eastbound/Westbound traffic***

- NYCR1: UR860 (EDGIB - OG)  
Westbound: FL260 and FL300  
Eastbound: FL270
- NYCR2: UG854 (OG - DEKAS)  
Westbound: FL260 and FL300  
Eastbound: FL270

**PROCEDURES TO BE FOLLOWED BY AIRCRAFT**

All aircraft transiting through Ouagadougou UTA shall strictly comply with the following procedures:

- a. Operate along or as close as possible to the centerline of the assigned contingency air traffic route.
- b. Reach the flight level assigned by adjacent ACC for the transit of Ouagadougou UTA at least 10 minutes before entering Ouagadougou UTA.
- c. Maintain the flight level assigned by the last adjacent ACC while operating within Ouagadougou UTA, unless an emergency situation or flight security reason exists.
- d. Maintain a continuous listening watch on the VHF frequency 126.9MHz, and transmit blind in English on 126.9MHz position reports 5 minutes before and overhead each compulsory reporting point established along the respective air traffic route.

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- e. Include in the last position report to the competent adjacent ACC the estimated time of arrival over the entry point of Ouagadougou UTA and the estimated time and point at which to exit the Ouagadougou UTA.
- f. Whenever emergencies and/or flight safety reasons make it impossible to maintain the flight level assigned for the transit of Ouagadougou UTA, climb or descend well to the right of the centerline of the air traffic route being flown but remaining within Ouagadougou UTA, and to inform immediately, by blind broadcast on the VHF frequency 126.9MHz, all other aircraft likely to be affected by transmitting a relevant emergency level change message (comprising the aircraft call sign, the aircraft position, the flight levels being left and crossed, etc.).
- g. Contact the competent adjacent ACC as soon as possible and at least 10 minutes before the estimated time of arrival over the relevant exit point of Ouagadougou UTA in order to obtain clearance for entering the adjacent airspace concerned.
- h. Display navigation and anti-collision lights at all times during the transit of contingency airspace.
- i. Maintain own longitudinal separation of 20 minutes with proceeding aircraft maintaining the same cruising flight level.

## CONTINGENCY PLAN FOR ROBERTS FIR

In the event of disruption of the ATC services provided by Roberts ACC, contingency routes will be introduced to ensure safety of flight and to facilitate limited flight operations commensurate with the prevailing conditions. Existing ATS routes form the basis of the contingency routes to be used, and a flight level allocation scheme (FLAS) introduced to minimize potential points of conflict and to limit the number of aircraft operating simultaneously in the system under reduced ATS.

Aircraft on long-haul international flights and special operations (e.g. SAR, State aircraft, humanitarian flights etc.) shall be afforded priority for levels at FL290 and above. Regional operators should plan on the basis that FL290 and above may not be available.

A NOTAM will be issued 48 hours in advance if this contingency plan is activated.

## CONTINGENCY ATS ROUTE NETWORK

### Contingency Routes (Level 2)

Contingency Route	Routes	Flight Level Eastbound	Flight Level Westbound	TOC Point
RCR1	UB600 (GULAV - MEGOT)	FL270, FL330, FL390	FL260, FL300, FL380	UB600 (GULAV - MEGOT)
RCR2	UG853 (AKDAK - DEVL1)	FL290, FL310, FL370	FL280, FL340, FL400	UG853 (AKDAK - DEVL1)



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Contingency Route	Routes	Flight Level Eastbound	Flight Level Westbound	TOC Point
RCR3	UA612/UB614/ UA572 (NEGLO - TINIS)	FL250, FL350, FL410	FL320, FL360	UA612/UB614/ UA572 (NEGLO - TINIS)  <i>NOTE: No level change between LGI and GIA</i>
RCR4	UQ594/UG433 (ERMIT - TUROT)	FL250, FL350, FL410	FL320, FL360	UQ594/UG433 (ERMIT - TUROT)

**Contingency Routes to avoid State Territories within the Roberts FIR (Level 3)**

**Guinea Territory Avoidance Contingency Routes**

SN	Direction of Flight	Joining Route	Remarks
AVR1	North and west of airspace	UG853 (AKDAK - DEVL1)	<ul style="list-style-type: none"> <li>– Inbound/outbound Freetown (Lungi) route via UG853/UA72</li> <li>– Inbound/outbound Monrovia (Roberts Intl) route via UG853/UG433</li> </ul>
AVR2	Northeast and east of airspace	UB600/UB614 (MEGOT - LGI)	<ul style="list-style-type: none"> <li>– Inbound/outbound Freetown (Lungi) route via MEGOT - UB600/UB614</li> <li>– Inbound/outbound Monrovia (Roberts Intl) route via MEGOT - UB600</li> </ul>

**Sierra Leone Territory Avoidance Contingency Routes**

SN	Direction of Flight	Joining Route	Remarks
AVR3	West of airspace	UR979 (BADIA)	– Inbound/outbound Monrovia (Roberts Intl) route via UR979/UG852
	East of airspace	UR979 (ERMIT)	– Inbound/outbound Monrovia (Roberts Intl) route via UR979/UA612
AVR4	Bi-directional	UG853 (AKDAK - DEVL1)	– Inbound/outbound Monrovia (Roberts Intl) route via UG853/UG433

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**Sierra Leone Territory Avoidance Contingency Routes (continued)**

SN	Direction of Flight	Joining Route	Remarks
AVR5	Bi-directional	UG433/UG852 (TUROT - MOPAL)	– Inbound/outbound Monrovia (Roberts Intl) route via RIRAK - DCT - GIA
AVR6	South airspace	TINIS - DCT - GIA	

**Liberia Territory Avoidance Contingency Routes**

SN	Direction of Flight	Joining Route	Remarks
AVR7	Bi-directional	UR979 (ERMIT-BADIA)	– Inbound/outbound Conakry (Gbesia) route via UR979 (NANAN - GIA)  – Inbound/outbound Freetown (Lungi) route via UR979 (NANAN - LGI)
AVR8	Bi-directional	UR991/UG853 (AR-LEM-AKDAK)	– Inbound/outbound Conakry (Gbesia) and Freetown (Lungi) route via UR991/UG853/UA572/UB614

## **AIR TRAFFIC MANAGEMENT AND CONTINGENCY PROCEDURES**

### **Reduced ATS and Provision of Flight Information Services**

During the contingency period ATS may not be available, particularly communications and ATS surveillance services. In case where services are not available, a NOTAM will be issued providing the relevant information. The contingency plan provided for limited flight information and alerting services to be provided by Roberts ACC. Domestic civil flights and all international flights to and from Roberts FIR airspace will be suspended.

### **Aircraft Separation**

The longitudinal separation will be 20 minutes in conjunction with application of the Mach number technique. Differential Mach number technique with faster aircraft behind slower aircraft will not be permitted.

The contingency route structure provides for lateral separation of 100NM, in cases where the lateral spacing of contingency routes is less than 100NM, and for crossing routes, a minimum vertical separation of 1000ft will be applied.

Where possible, aircraft on long-haul international flights shall be afforded priority for cruising levels assigned in accordance with the FLAS.

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### Aircraft Position Reporting

Primary means of communication will be VHF or HF radio. Communication frequencies are VHF 128.1MHz and HF 8861KHz.

### Overflight Approval

Aircraft operators must obtain overflight approval from the Civil Aviation Authorities of the Roberts FIR States prior to operating flights through the Roberts FIR airspace. During the period of activation of this contingency plan, the designated ATS authority will approve aircraft to center the Roberts FIR on the basis that operators have obtained prior approval, and the responsibility remains with the operator to ensure that such approval has been obtained.

### Pilot Operating Procedures

Pilots operating in the Roberts FIR airspace during contingency operations shall comply with the following procedures:

- a. All aircraft proceeding along the ATS route established during the contingency will comply with the IFR and will be assigned a flight level in accordance with the FLAS applicable to the route(s) being flown as specified above.
- b. Flight are to flight plan using the contingency routes specified above, according to their airport of origin and destination.
- c. Aircraft are to operate as close as possible to the centerline of assigned contingency route.
- d. Pilots are to keep a continuous communication watch on VHF 128.1MHz and HF 8861KHz and transmit the aircraft's position in line with normal ATC position reporting procedures.
- e. Aircraft position reports and other information as necessary shall be broadcast in accordance with the IFBP VHF frequency 123.45MHz.
- f. Aircraft navigation and anti-collision light shall be kept on.
- g. SLOP is authorized in the Roberts FIR, and remained in force during contingency.
- h. Except in cases of emergency or for reasons of flight safety, pilots shall maintain during their entire flight within Roberts FIR, the last assigned flight level and Mach number.
- i. Aircraft are to reach the last assigned flight level by the responsible ACC at least 10 minutes before entering the Roberts FIR or as otherwise instructed by the ATC unit in accordance with the LOA with ASECNA.
- j. Pilots are to include in their last position report prior to entering Roberts FIR, the estimated times over the entry and exit points of the Roberts FIR.
- k. Pilots are to contact the next adjacent ACC as soon as possible, and in any event not later than 10 minutes before the estimated time of arrival over the relevant exit point of the Roberts FIR.
- l. Pilot are to strictly adhere to the IFBP, and maintain a continuous listening watch on the international air-to-air VHF frequency 123.45MHz, as well as on VHF frequency 128.1MHz and HF 8861KHz. When necessitated by emergency conditions, pilots are to transmit blind

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on these frequencies, their current circumstances and the commencement and completion of any climb and descent or deviation from the cleared contingency route and level.

- m. Whenever emergencies and/or flight safety reasons make it impossible to maintain the last assigned flight level for transit through Roberts FIR airspace, pilots are to climb or descend well to the right of the centerline of the contingency route, and if deviation outside Roberts FIR airspace, to inform Roberts ACC immediately. Pilots are to make blind broadcast on the IFBP VHF frequency 123.45MHz of the relevant emergency level change message (comprising the aircraft call sign, position, flight level being vacated and crossed, etc).;
- n. Pilots are to maintain own longitudinal separation of 20 minutes from proceeding aircraft at the same cruising level.
- o. Not all operational circumstances can be addressed by this contingency plan and pilots are to maintain a high level of alertness when operating in the contingency airspace and take appropriate action to ensure safety of flight.

### **Communication Procedures**

When operating within the contingency airspace, pilots should use normal radio communication procedures where ATS services are available. Where limited or no ATS is available. Communications will be conducted in accordance with the procedures in this plan, or as otherwise notified by NOTAM.

### ***Loss of Radio Communication***

If communication are lost unexpectedly on the normal ATS frequencies, pilots should try the next applicable frequency, that is, the next normal hand over frequency. Pilots should also consider attempting to contact ATC on the last frequency where two-way communication had been established. In the absence of communication with ATC, the pilot should continue to make routine reports on the assigned frequency, and also broadcast positions in accordance with the IFBP procedures.

### ***Communication Frequencies***

Abidjan ACC will provide FIS and air-ground communication monitoring for Roberts FIR for the contingency routes on frequencies (VHF 129.1MHz, HF 8861KHz and CPDLC).

## **CONTINGENCY PLAN FOR SEYCHELLES FIR**

### **CONTINGENCY ATS ROUTE NETWORK**

#### **ATS Contingency Routes**

In the case that Seychelles is temporarily unable to provide ATS in the entire airspace within the Seychelles FIR all aircraft shall comply with requirement to select specific contingency routes and flight levels applicable to the contingency routes in accordance with the FLAS detailed here below:

- CR1: UM665 (ITLOX - MITCH - ANTIS - UVESO - ANKOR)

Westbound: FL300, FL320, FL360, FL380, FL400

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Eastbound: FL310, FL330, FL370, FL390, FL410

- CR2: UL433 (KISAK - ATOLA)

Westbound: FL300, FL320, FL360, FL380, FL400

Eastbound: FL310, FL330, FL370, FL390, FL410

- CR3: UR401/UR400 (AXINA - IMKOT - GILID - UTRON - IMTIP - UDLET - PRA - RERUS - ALRAN)

Westbound: FL300, FL320, FL360, FL400

Eastbound: FL310, FL370, FL390, FL410

- CR4: UB459 (MIROV - NORSE - PRA - BOMOB - CLAVA)

Westbound: FL340

Eastbound: FL350

- CR5: UT386 (EGLOM - AVARI - EPVIG - IMTIP - CLAVA)

Westbound: FL380

Eastbound: FL330

***Other Contingency Routes***

In the case that Seychelles has temporary unavailability of territorial airspace and the unable to provide ATS within the Seychelles FIR. All aircraft shall comply with the requirement to select specific contingency routes and flight levels applicable to the contingency routes in accordance with the FLAS detailed here below:

- CAR1: UT386 (EGLOM - AVARI - EPVIG - IMTIP - CLAVA)

Westbound: FL380

Eastbound: FL330

- CAR2 (NESAM - DCT - CLAVA)

Westbound: FL340

Eastbound: FL350

- CAR3 (AXINA - UR401 - IMKOT - DCT - ATUTI - DCT - ALRAN)

Westbound: FL300, FL320, FL360, FL400

Eastbound: FL310, FL370, FL390, FL410

- CAR4 (MIROV - DCT - OTKIR)

Westbound: FL340, FL380

Eastbound: FL330

- CAR5: UM665 (ITLOX - MITCH - ANTIS - UVESO - ANKOR)

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Westbound: FL300, FL320, FL360, FL380, FL400

Eastbound: FL310, FL330, FL370, FL390, FL410

– CAR6: UL433 (KISAK - ATOLA)

Westbound: FL300, FL320, FL360, FL380, FL400

Eastbound: FL310, FL330, FL370, FL390, FL410

### PROCEDURES TO BE FOLLOWED BY AIRCRAFT

During the contingency period ATS may not be available, particularly with regard to availability of communications (VHF/HF/CPDLC) and surveillance (ADS-C) services. In cases where such services are not available, a NOTAM will be issued providing the relevant information, including an expected date and time of resumption of services. The contingency plan provides for limited flight information and alerting services to be provided by adjacent FIRs ACC/FIS.

Flight information service (FIS) and/or flight monitoring will be provided by the designated ATS authorities for the adjacent FIRs on the contingency routes that enter their respective FIRs in accordance with the routes listed above.

#### Aircraft Separation

The minimum longitudinal separation applicable will be 15 minutes.

The route structure provides for a minimum lateral separation of 50NM. In cases where this is, and for crossing routes, RVSM shall be applied between all aircraft transiting the Seychelles FIR.

In the event that ATS are terminated, a FLAS utilizing, where necessary, RVSM shall be apply. Non RVSM approved aircraft shall not operate in contingency airspace.

#### Aircraft Position Reporting

Pilots will continue to make routine position reports in line with normal ATC reporting procedures. Pilots shall also use the IFBP VHF frequency 126.9MHz when making routine position reports. The primary means of air-ground communication will be by HF radio except for aircraft operating ADS-C and CPDLC systems. Where CPDLC has been established, this will become the primary means of communication, with HF as secondary. In the case of automatic position reporting, this will replace voice position reporting and CPDLC and/or HF will become the secondary means of communication.

#### Overflight Approval

In a contingency situation, flights may be rerouted at short notice and it may not be possible for operators to give the required advanced notice in a timely manner to obtain overflight approval. However, the current requirements and procedures for overflight approval of the Seychelles FIR shall continue to be applicable.

With regard to other FIRs, aircraft operators are to obtain overflight approval from States responsible for such airspaces in accordance with the procedures and requirements of such States

Coordination for special arrangements to expedite flight approvals for aircraft transiting the Seychelles FIR in a contingency situation may be coordinated with Seychelles CAA and adjacent ATS

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units on a case by case basis, as addressed in the Letters of Agreement. Aircraft operators should note however that overflight approval remains the responsibility of the State whose territory is to be overflown.

**Pilot Operating Procedures**

Aircraft overflying the Seychelles FIR shall follow the following procedures:

- a. all aircraft proceeding along the ATS routes established in this contingency plan will comply with the IFR and will be assigned a flight level in accordance with the FLAS applicable to the route(s) being flown as listed above;
- b. all flights are to file flight plans using the contingency routes as listed above, according to their airport of origin, routing and destination;
- c. pilots are to keep a continuous watch on the specified contingency radio frequencies as instructed by the last ACC or ATS (as specified in the Letters of Agreements) and transmit position information and estimates in accordance with normal ATC position reporting procedures using the english language;
- d. pilots are to maintain during their entire flight time within Seychelles FIR, the flight level last assigned by the last ACC or ATS unit responsible for the provision of ATC service, prior to the aircraft entering the Seychelles FIR;
- e. in the event that the last assigned flight level does not correspond to the FLAS applicable to the Seychelles contingency plan, the pilot should establish contact with the ATS unit responsible for the provision of service to clarify, and if unable, shall adjust to the FLAS as soon as possible once in the contingency airspace;
- f. the pilot shall, under no circumstances, change the last assigned level and Mach number, except in cases of emergency and for flight safety reasons. In addition, the last SSR transponder assigned shall be maintained or, if no transponder has been assigned, transmit on SSR code 2000;
- g. when adjusting to the FLAS upon entering the Seychelles contingency airspace, if the adjacent FIR was unable to assign level corresponding to the FLAS, the pilots shall offset a minimum of 15NM right of track prior to adjusting to the FLAS level. Such action shall be broadcasted by the pilot on VHF 121.5MHz and 126.9MHz prior to commencing it;
- h. in cases of emergency and for flight safety reasons that the pilot need to change the level from the FLAS, procedures to be followed shall be those listed in Jeppesen Emergency-Chapter "SPECIAL PROCEDURES FOR IN-FLIGHT CONTINGENCIES IN OCEANIC AIRSPACE OF MAURITIUS AND SEYCHELLES FIR";
- i. aircraft are to reach the flight level last assigned by the responsible ACC at least 10 minutes before entering the Seychelles FIR;
- j. pilots are to include in their last position report prior to entering the Seychelles FIR, the estimated time over the entry point of the Seychelles FIR and the estimated time of arrival over the relevant exit points of the Seychelles FIR;

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- k. pilots are to contact the next adjacent ACC as soon as possible, and at the latest, 10 minutes before the estimated time of arrival over the FIR boundary exit points of Seychelles FIR;
- l. recognizing of the fact that not all operational circumstances can be addressed by this contingency plan, pilots are to maintain a high level of alertness when operating in the Seychelles contingency airspace and take appropriate action to ensure safety of flight; and
- m. pilots should maintain continuous listening watch on VHF emergency frequency 121.5MHz and IFBP frequency 126.9MHz at all times when operating in the Seychelles contingency airspace.

### Communication Procedures

#### *Reduced/Loss of Radio Communication*

When operating within the contingency airspace of Seychelles FIR, pilots should use normal radio communication procedures where ATS services are available or as otherwise notified by NOTAM.

If communication is lost on the normal ATS frequencies allocated, pilots should try the next applicable frequency, e.g. if enroute contact is lost then try the next appropriate handover frequency. It should be expected that loss of communication may be temporary. As such, if following the loss of communication pilots are still unable to establish two-way radio communication on other frequencies, pilots should consider periodic attempts on the frequency on which two-way radio communication was lost. In any case, in the absence of two-way communication with ATC, pilots should continue to make routine position reports on the appropriate frequencies, and broadcast positions on the specified contingency frequencies.

#### *Communication frequencies*

Traffic operating within the Seychelles airspace should contact adjacent FICs: Nairobi, Somalia, Antananarivo, Mumbai or Mauritius on the frequencies:

- Day: 11300KHz, 5517KHz, 10018KHz, 13288KHz or 8879 KHz
- Night: 11300KHz, 5634KHz, 3476KHz, 8879KHz, 3467KHz, 5517KHz or 6661KHz for relay purposes by phone to Seychelles Control.

Aircraft equipped with ADS/CPDLC operating within this airspace are to contact Seychelles on ADS/CPDLC.

### CONTINGENCY PLAN FOR WINDHOEK FIR

This contingency plan contains arrangements to ensure the continued safety of air navigation in the event of disruptions of ATS and related supporting services within the Windhoek FIR. This contingency plan shall be activated by NOTAM

### CONTINGENCY ATS ROUTE NETWORK

In the case of total failure of VHF radio communication equipment or complete disruptions of ATS within the Windhoek FIR, a system of ATS contingency routes will be established and available as follows:



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**Contingency ATS Route Network**

<b>Contingency Route</b>	<b>Direction of Flight</b>	<b>Flight Levels</b>	<b>FIRs involved</b>
CR1: DUPKI - UN184 - EVUVI	Bi-directional	Westbound: FL300, FL320, FL380 Eastbound: FL350, FL370, FL410	Gaborone Luanda Windhoek
CR2: BOPAN - UL435 - IBLOK	Bi-directional	Westbound: FL300, FL320, FL380 Eastbound: FL350, FL370, FL410	Gaborone Johannesburg Oceanic Windhoek
CR3: XORAK - UN183 - XALVI - NIBEK	Uni-directional	Westbound: FL300, FL320, FL380	
CR4: NIBEK - UN183 - XALVI - UN181 - GABSI	Uni-directional	Eastbound: FL350, FL370, FL410	
CR5: AVOGU - UL307 - ABAPU	Bi-directional	Westbound: FL300, FL340, FL360 Eastbound: FL330, FL370, FL390, FL410	Gaborone Luanda Windhoek
CR6: ANVAG - UN187 - VEDRY - UL686 - EGNOR	Bi-directional	Northbound: FL280, FL340 Southbound: FL310, FL330, FL390	Johannesburg Luanda Windhoek
CR7: XUDAN - UN188 - XALVI - UN190 - OKDOL	Bi-directional	Northbound: FL280, FL340, FL360 Southbound: FL330, FL390 <i>NOTE: Traffic from XUDAN to OKDOL shall fly at an even level and from OKDOL to XUDAN at an odd level.</i>	

**PROCEDURES TO BE FOLLOWED BY AIRCRAFT**

**Pilot Operating Procedures**

All aircraft transiting through the Windhoek FIR shall strictly comply with the following procedures:

- a. Pilots shall strictly adhere to the IATA In-flight Broadcast Procedures (IFBP) and shall maintain a continuous listening watch on VHF frequency 126.9MHz (day or night);

**AFRICA**  
**CONTINGENCY PLANS - AFRICA**

- b. To reach the appropriate flight level assigned by the competent adjacent ACCs of the Windhoek FIR at least 10 minutes before entering the Windhoek FIR;
- c. Maintain during the entire flight time within the Windhoek FIR, the last flight level assigned by the competent adjacent ACC and in no way change the assigned flight level, including Mach Number, where assigned, except in cases of emergencies or for reasons of flight safety;
- d. Report position when over compulsory reporting points for the ATS contingency route being flown;
- e. Operate along or as close as possible to the centerline of the assigned ATS contingency route;
- f. To display navigation and anti-collision lights at all times during their transit through the Windhoek FIR;
- g. To maintain own longitudinal separation of 15 minutes from preceding aircraft operating at the same cruising level on the same ATS contingency route;
- h. To contact the next adjacent competent ACC at least 10 minutes before the estimated time of arrival over the relevant exit point of the Windhoek FIR;
- i. Whenever an emergency or flight safety reasons make it impossible for an aircraft to maintain the last flight level assigned for the transit through the Windhoek FIR, it shall position itself at least 5NM to the right of the centerline of the contingency ATS route being flown before climbing or descending, but remaining within the Windhoek FIR and inform other aircraft being affected by the descent by broadcasting an emergency level change message on the IFBP VHF frequency 126.9MHz and emergency frequency 121.5MHz. The message shall contain the aircraft call sign, aircraft position, flight level being vacated or crossed and new intended flight level.

## **CONTINGENCY PLAN FOR DAR-ES-SALAAM ACC (DAR ACC) AND BEIRA ACC**

Objective of this Contingency Routes (CRs) are to give directives on the air traffic operation in the event of an aircraft unable to establish or maintain radio communication with the ATS unit responsible and or when the ATS unit unable to communicate with the aircraft or responsible ACC unit within the airspace. It is intended to provide harmonized procedures agreed in the Letter of Procedures between the DAR ACC and BEIRA ACC.

### **FLIGHT LEVELS**

#### **DAR FIR**

Contingency routes structure and flight levels allocation scheme (FLAS) during partial or total unavailability of communication within the DAR FIR.

**AFRICA**  
**CONTINGENCY PLANS - AFRICA**

ATS ROUTE	CONTINGEN- CY ROUTE	REPORTING POINT	FLAS	MINIMUM LONGITUDI- NAL SEPA- RATION	ADJACENT FIR
UL437	CR3	ROVUM	FL340/400	15 minutes	Dar-es-Salaam
UM310	CR7	BONAP	FL360	15 minutes	Dar-es-Salaam
UM310	CR9	BONAP	FL320	15 minutes	Dar-es-Salaam

### BEIRA FIR

Contingency routes structure and flight levels allocation scheme (FLAS) during partial or total unavailability of communication within the Beira FIR.

ATS ROUTE	CONTINGEN- CY ROUTE	REPORTING POINT	FLAS	MINIMUM LONGITUDI- NAL SEPA- RATION	ADJACENT FIR
UM310	CR2	BONAP	FL330	15 minutes	Beira
<i>NOTE: All other traffic from UL437, UB533 UN306 be rerouted via exit Point BONAP</i>					

### ALTERNATE MEANS OF COMMUNICATION

If dedicated means of communication are not available, the following alternative means shall be used in the order of priority:

#### Dar-es-Salaam ACC

Tel: +255 22 2110 254  
+255 22 2110 223  
+255 22 2110 410  
+255 754 211 254  
+255 754 870 871  
+255 754 110 410  
Fax: +255 22 2 110 264  
E-Mail: camjnia@tcaa.go.tz

#### Beira ACC

Tel: +258 23 301 626  
+258 23 301 071  
+258 23 301 072

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**AFRICA  
CONTINGENCY PLANS - AFRICA**

+258 23 302 330 (SAR)

Fax: +258 23 301 625

E-Mail: [Adm.civ@aeroportos.co.mz](mailto:Adm.civ@aeroportos.co.mz)

**AFRICA**  
**SPECIAL PROCEDURES FOR IN-FLIGHT CONTINGENCIES**

## **SPECIAL PROCEDURES FOR IN-FLIGHT CONTINGENCIES IN OCEANIC AIRSPACE OF MAURITIUS AND SEYCHELLES FIR**

### **INTRODUCTION**

Although all possible contingencies cannot be covered, the procedures outlined below provide for the more frequent cases such as:

- a. inability to maintain assigned flight level due to meteorological conditions, aircraft performance or pressurization failure;
- b. enroute diversion across the prevailing traffic flow; and
- c. loss of, or significant reduction in, the required navigation capability when operating in an airspace where the navigation performance accuracy is a prerequisite to the safe conduct of flight operations.

With regard to a. and b. above, the procedures are applicable primarily when rapid descent and/or turn-back or diversion is required. The pilot's judgment shall determine the sequence of actions to be taken, having regard to the prevailing circumstances. ATC shall render all possible assistance.

### **GENERAL PROCEDURES WITHIN SEYCHELLES FIR**

If an aircraft is unable to continue the flight in accordance with its ATC clearance and/or an aircraft is unable to maintain the navigation performance accuracy specified for the airspace, a revised clearance shall be obtained, whenever possible, prior to initiating any action.

The radiotelephony distress signal (MAYDAY) or urgency signal (PAN-PAN) preferably spoken three times shall be used as appropriate. Subsequent ATC action with respect to that aircraft shall be based on the intentions of the pilot and the overall air traffic situation.

If prior clearance cannot be obtained, until a revised clearance is received the following contingency procedures should be employed and the pilot shall advise ATC as soon as practicable, reminding them of the type of aircraft involved and the nature of the problem. In general terms, the aircraft should be flown at a flight level and on an offset track where other aircraft are least likely to be encountered. Specifically, the pilot shall:

- a. Leave the assigned route or track by initially turning at least 45 degrees to the right or to the left, in order to acquire a same or opposite direction track offset 15NM (28km) from the assigned track centerline. When possible, the direction of the turn should be determined by the position of the aircraft relative to any organized route or track system. Other factors which may affect the direction of the turn are:
  1. the direction to an alternate airport;
  2. terrain clearance;
  3. any strategic lateral offset being flown; and
  4. the flight levels allocated on adjacent routes or tracks;
- b. having initiated the turn:

**AFRICA**  
**SPECIAL PROCEDURES FOR IN-FLIGHT CONTINGENCIES**

1. if unable to maintain the assigned flight level, initially minimize the rate of descent to the extent that is operationally feasible (pilots should take into account the possibility that aircraft below on the same track may be flying a 1 or 2 NM strategic lateral offset procedure (SLOP)) and select a final altitude which differs from those normally used by 150m (500ft) if at or below FL410, or by 300m (1000ft) if above FL410; or
2. if able to maintain the assigned flight level, once the aircraft has deviated 10NM (19km) from the assigned track centerline, climb or descend to select a flight level which differs from those normally used by 150m (500ft), if at or below FL410, or by 300m (1000ft) if above FL410;
- c. establish communications with and alert nearby aircraft by broadcasting, at suitable intervals: aircraft identification, flight level, position (including the ATS route designator or the track code, as appropriate) and intentions, on the frequencies in use and on 121.5MHz (or a backup, or the inter-pilot air to air frequency 123.45MHz);
- d. maintain a watch for conflicting traffic visually and by reference to ACAS (if equipped);
- e. turn on all aircraft exterior lights (commensurate with appropriate operating limitations);
- f. keep the SSR transponder on at all times; and
- g. take action as necessary to ensure the safety of the aircraft.

*NOTE: When leaving the assigned track to acquire and maintain the track laterally separated by 10NM (19km), the pilot should, where practicable avoid bank angles that would result in overshooting the track to be acquired.*

**GENERAL PROCEDURES WITHIN MAURITIUS FIR**

If an aircraft is unable to continue the flight in accordance with its ATC clearance and/or an aircraft is unable to maintain the navigation performance accuracy specified for the airspace, a revised clearance shall be obtained, whenever possible, prior to initiating any action.

The radiotelephony distress signal (MAYDAY) or urgency signal (PAN-PAN) preferably spoken three times shall be used as appropriate. Subsequent ATC action with respect to that aircraft shall be based on the intentions of the pilot and the overall air traffic situation.

If prior clearance cannot be obtained, an ATC clearance shall be obtained at the earliest possible time and, until a revised clearance is received, the pilot shall:

- a. Leave the assigned route or track by initially turning 90 degrees to the right or to the left. When possible the direction of the turn should be determined by the position of the aircraft relative to any organized route or track system. Other factors which may affect the direction of the turn are:
  1. the direction to an alternate airport;
  2. terrain clearance;
  3. any strategic lateral offset being flown; and
  4. the flight levels allocated on adjacent routes or tracks;

## AFRICA

### SPECIAL PROCEDURES FOR IN-FLIGHT CONTINGENCIES

- b. Following the turn, the pilot should:
1. if unable to maintain the assigned flight level, initially minimize the rate of descent to the extent that is operationally feasible;
  2. take account of other aircraft be laterally offset from its track;
  3. acquire and maintain in either direction a track laterally separated by 10NM (19km) from the assigned route; and
  4. once established on the offset track, climb or descend to select a flight level which differs from those normally used by 500ft (150m), if at or below FL410 or by 1000ft (300m) if above FL410;
- c. establish communications with and alert nearby aircraft by broadcasting, at suitable intervals: aircraft identification, flight level, position (including the ATS route designator or the track code, as appropriate) and intentions, on the frequencies in use and on 121.5MHz (or a backup, or the inter-pilot air to air frequency 123.45MHz);
- d. maintain a watch for conflicting traffic visually and by reference to ACAS (if equipped);
- e. turn on all aircraft exterior lights (commensurate with appropriate operating limitations);
- f. keep the SSR transponder on at all times; and
- g. take action as necessary to ensure the safety of the aircraft.

*NOTE: When leaving the assigned track to acquire and maintain the track laterally separated by 10NM (19km), the pilot should, where practicable avoid bank angles that would result in overshooting the track to be acquired.*

### EXTENDED RANGE OPERATIONS BY AEROPLANES WITH TWO-TURBINE POWER-UNITS (ETOPS)

If the contingency procedures are employed by a twin-engine aircraft as a result of an engine shutdown or failure of an ETOPS critical system, the pilot should advise ATC as soon as practicable of the situation, reminding ATC of the type of aircraft involved and request expeditious handling.

### WEATHER-DEVIATION PROCEDURES

#### General

*NOTE: The following procedures are intended for deviations around adverse meteorological conditions.*

When the pilot initiates communications with ATC, rapid response may be obtained by stating **“WEATHER DEVIATION REQUIRED”** to indicate that priority is desired on the frequency and for ATC response when necessary, the pilot should initiate the communications using the urgency call **“PAN PAN”** (preferably spoken three times).

The pilot shall inform ATC when weather deviation is no longer required, or when a weather deviation has been completed and aircraft has returned to its cleared route.

**AFRICA**  
**SPECIAL PROCEDURES FOR IN-FLIGHT CONTINGENCIES**

### **ACTIONS TO BE TAKEN IF CONTROLLER-PILOT COMMUNICATIONS ARE ESTABLISHED**

The pilot should notify ATC and request clearance to deviate from track, advising, when possible, the extent of the deviation expected.

The pilot should take the following actions:

- a. comply with the ATC clearance issued; or
- b. advise ATC of intentions and execute the procedures detailed in para below.

### **ACTIONS TO BE TAKEN IF A REVISED ATC CLEARANCE CANNOT BE OBTAINED**

*NOTE: The provision of this section apply to situations where a pilot needs to exercise the authority of pilot-in-command under the provisions of Annex 2, para 2.3.1.*

If the aircraft is required to deviate from track to avoid adverse meteorological conditions and prior clearance cannot be obtained, an ATC clearance shall be obtained at the earliest possible time. Until an ATC clearance is received, the pilot shall take the following actions:

- a. if possible, deviate away from an organized track or route system;
- b. establish communications with and alert nearby aircraft by broadcasting, at suitable intervals: aircraft identification, flight level, position (including the ATS route designator or the track code) and intentions, on the frequency in use and on 121.5MHz (or, as a backup, on the inter-pilot air-to-air frequency 123.45MHz);
- c. watch for conflicting traffic both visually and by reference to ACAS ( if equipped);

*NOTE: If, as a result of action taken under the provisions of b. and c. above, the pilot determines that there is another aircraft at or near the same flight level with which a conflict may occur, then the pilot is expected to adjust the path of the aircraft, as necessary, to avoid conflict.*

- d. turn on all aircraft exterior lights (commensurate with appropriate operating limitations);
- e. for deviations of less than 10NM (19km) remain at a the level assigned by ATC;
- f. for deviations of greater than 10NM (19km), when the aircraft is approximately 10NM (19km) from track, initiate a level change in accordance with Table I below.
- g. when returning to track, be at its assigned flight level, when the aircraft is within approximately 10NM (19km) of the centerline, and
- h. if contact was not established prior to deviating, continue to attempt to contact ATC to obtain a clearance. If contact was established, continue to keep ATC advised of intentions and obtain essential traffic information.



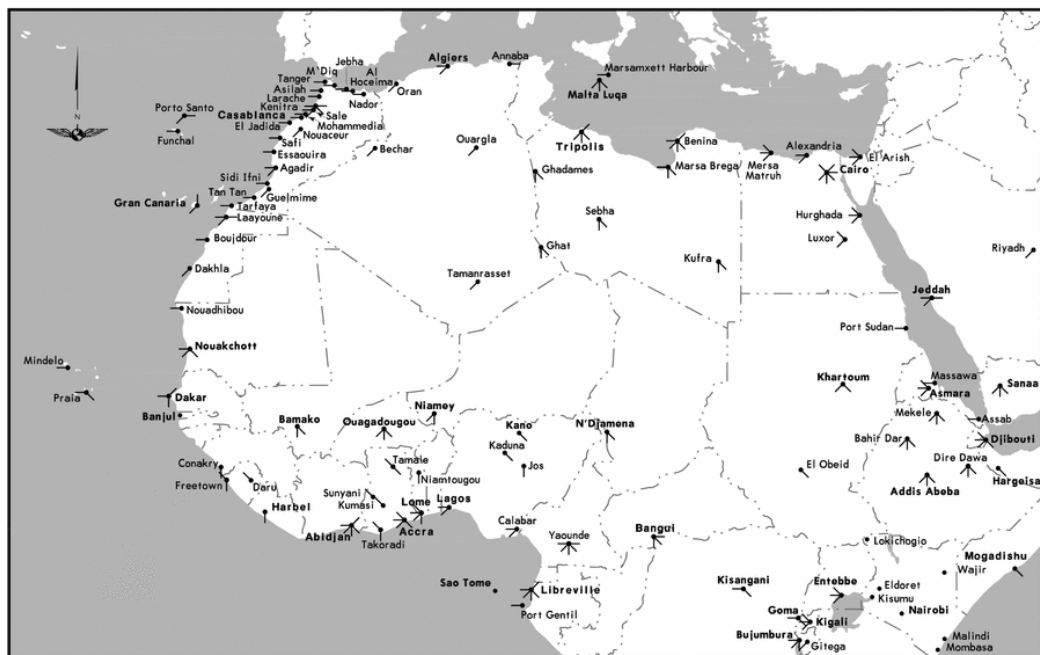
**AFRICA**  
**SPECIAL PROCEDURES FOR IN-FLIGHT CONTINGENCIES**

**Table I**

<b>Route Center Line Track</b>	<b>Deviations &gt;10NM</b>	<b>Level Change</b>
EAST 000-179° magnetic	LEFT RIGHT	DESCEND 90m (300ft) CLIMB 90m (300ft)
WEST 180-359° magnetic	LEFT RIGHT	CLIMB 90m (300ft) DESCEND 90m (300ft)

# AFRICA SEARCH AND RESCUE FACILITIES

## AFRICA (NORTHERN PART)



# AFRICA SEARCH AND RESCUE FACILITIES

## AFRICA (SOUTHERN PART)





# Emergency

## State Rules and Procedures - Africa

**BOTSWANA**  
**ICAO DIFFERENCES OR STATE SPECIAL PROCEDURES**

## **GENERAL**

In general, the Emergency, Unlawful Interference, Communications Failure, Interception and Search and Rescue procedures are in conformity with the Standards, Recommended Practices and Procedures in ICAO Annexes and Documents.

## **COMMUNICATIONS FAILURE**

In VMC: ICAO Procedure

In IMC: If unable to continue in VMC, the aircraft shall:

- a. Proceed according to the current flight plan to the appropriate designed navigational aid serving the aerodrome of intended landing. If the clearance for levels covers only part of the route, maintain the last assigned and acknowledged cruising level(s) to the point(s) specified in the clearance and thereafter the cruising level(s) in the current flight plan; and,
- b. Hold over this aid until commencement of descent;
- c. Commence descent from the navigational aid at, or as close as possible to the expected approach time last received and acknowledged; or, if no expected approach time has been received and acknowledged; at, or as close as possible to, the estimated time of arrival as indicated in the filed flight plan and revised in accordance with the current flight plan;
- d. Complete a normal Instrument approach procedure as specified for the designated navigational aid; and
- e. Land, if possible, within thirty minutes after the estimated time of arrival or the last acknowledged expected approach time, whichever is later.

**BURKINA FASO**  
**ICAO DIFFERENCES OR STATE SPECIAL PROCEDURES**

## **GENERAL**

In general, the Emergency, Unlawful Interference, Communications Failure, Interception and Search and Rescue procedures are in conformity with the Standards, Recommended Practices and Procedures in ICAO Annexes and Documents.

## **COMMUNICATIONS FAILURE**

ICAO Procedures, supplemented as follows:

### **OUAGADOUGOU TMA/UTA**

#### **Under Radar Control**

If two-way radio communication is interrupted, the pilot shall proceed as follows:

- set transponder to Code 7600 and listen to ATC instructions;
- if the pilot has not set transponder to Code 7600, the radar controller will have to determine whether or not the on-board receiver is operational.

For that, the controller shall:

- a. ask the pilot, on the current channel used, to acknowledge by performing a specified maneuver, and then observe the aircraft's track, or give the aircraft an IDENT instruction;
- b. repeat the measure prescribed in para a. via any other available channel on which the aircraft could be monitoring.

In both cases, any maneuvering's instructions shall be such as after having been complied with, the aircraft should be back on the trajectory that it was instructed to follow.

- If it can be determined through the procedures by the measure prescribed in paras a. and b. above that the on-board radio receiver is operating, the radar controller shall continue to control the aircraft by requesting to SQUAWK IDENT to acknowledge the authorizations given to him;
- If the aircraft does not indicate that it is capable of receiving and acknowledging transmissions, an appropriate separation shall be maintained between this aircraft and the other aircraft. The pilot of the aircraft with radio communication failure shall maintain the last assigned speed and level (or minimum flight altitude if it is higher than the minimum safe altitude) for 7 minutes from:
  - a. the time he has reached the last assigned level or the minimum flight altitude; or
  - b. the time the transponder has been set to 7600 code; or
  - c. the time he should have indicated his position over a compulsory reporting point; and thereafter modify flight level and speed in accordance with the filed flight plan.

**CAMEROON**  
**ICAO DIFFERENCES OR STATE SPECIAL PROCEDURES**

## **GENERAL**

In general, the Emergency, Unlawful Interference, Communications Failure, Interception and Search and Rescue procedures are in conformity with the Standards, Recommended Practices and Procedures in ICAO Annexes and Documents.

## **COMMUNICATIONS FAILURE**

ICAO Procedures, supplemented as follows:

### **DOUALA UTA AND TMA**

#### **Under Radar Control**

If two-way radio communication is interrupted, the pilot shall proceed as follows:

- set transponder to Code 7600 and listen to ATC instructions;
- if the pilot has not set transponder to Code 7600, the radar controller will have to determine whether or not the on-board receiver is operational.

For that, the controller shall:

- a. ask the pilot, on the current channel used, to acknowledge by performing a specified maneuver, and then observe the aircraft's track, or give the aircraft an IDENT instruction;
- b. repeat the measure prescribed in para a. via any other available channel on which the aircraft could be monitoring.

In both cases, any maneuvering's instructions shall be such as after having been complied with, the aircraft should be back on the trajectory that it was instructed to follow.

- If it can be determined through the procedures by the measure prescribed in paras a. and b. above that the on-board radio receiver is operating, the radar controller shall continue to control the aircraft by requesting to SQUAWK IDENT to acknowledge the authorizations given to him.
- If the aircraft does not indicate that it is capable of receiving and acknowledging transmissions, an appropriate separation shall be maintained between this aircraft and the other aircrafts. The pilot of the aircraft with radio communication failure shall maintain the last assigned speed and level (or minimum flight altitude if it is higher than the minimum safe altitude) for 7 minutes from:
  - a. the time he has reached the last assigned level or the minimum flight altitude; or
  - b. the time the transponder has been set to 7600 code; or
  - c. the time he should have indicated his position over a compulsory reporting point; and thereafter modify flight level and speed in accordance with the filed flight plan.

**CANARY IS**  
**ICAO DIFFERENCES OR STATE SPECIAL PROCEDURES**

## **GENERAL**

In general, the Emergency, Unlawful Interference, Communications Failure, Interception and Search and Rescue procedures are in conformity with the Standards, Recommended Practices and Procedures in ICAO Annexes and Documents.

## **COMMUNICATIONS FAILURE**

### **VISUAL METEOROLOGICAL CONDITIONS**

A controlled flight experiencing communication failure in VMC shall:

- a. set transponder to Code 7600;
- b. continue fly in VMC;
- c. land at the nearest suitable aerodrome, and
- d. report its arrival time by the most expeditious means to the appropriate ATS unit.

### **INSTRUMENT METEOROLOGICAL CONDITIONS WITHIN CANARIES TMA**

A controlled flight experiencing communication failure in IMC, or where it does not appear feasible to continue in VMC shall:

- a. set transponder to code 7600;
- b. maintain for a period of 7 minutes the last assigned speed and level or the minimum flight altitude, if the minimum flight altitude is higher than the assigned level. The period of 7 minutes commences:
  - at the time the last assigned level or minimum flight altitude is reached, or
  - at the time the transponder is set to Code 7600, or
  - at the time the last assigned level or minimum flight altitude is reached, or
  - at the time of a failed position report over a compulsory reporting point, whichever is later;thereafter, adjust level and speed in accordance with the filed flight plan, which is the flight plan as filed with an ATS unit by the pilot or a designated representative without any subsequent changes.
- c. if being radar vectored or proceeding offset according to RNAV without a specified limit, proceed in the most direct manner possible to rejoin the current flight plan route no later than the next significant point, taking into consideration the applicable minimum flight altitude;
- d. proceed according to the current flight plan route to the appropriate designated navigation aid serving the destination airport and, when required to ensure compliance with para e) below, hold over this aid until commencement of descent;
- e. commence descent from the navigational aid specified in para d) above at, or as close as possible to, the expected approach time last received and acknowledged or, if no expected approach time has been received and acknowledged, at or as close as possible to, the estimated time of arrival resulting in the current flight plan;



**CANARY IS**  
**ICAO DIFFERENCES OR STATE SPECIAL PROCEDURES**

- f. complete a normal instrument approach procedure as specified for the designated navigation aid, and
- g. land, if possible, within 30 minutes after the estimated time of arrival specified in para e) above or the last acknowledged expected approach time, whichever is later.

**INSTRUMENT METEOROLOGICAL CONDITIONS OUTSIDE CANARIES TMA**

A controlled flight experiencing communication failure in IMC, or where it does not appear feasible to continue in VMC shall:

- a. set transponder to code 7600;
- b. unless otherwise prescribed on the basis of a regional air navigation agreement, maintain the last assigned speed and level, or minimum flight altitude if higher, for a period of 20 minutes from the time the aircraft fails to report its position when passing over a compulsory reporting point and, thereafter this 20 minutes period, adjust level and speed in accordance with the filed flight plan;
- c. proceed according to the current flight plan route to the appropriate designated navigation aid or reference fix serving the destination aerodrome and, when required to ensure compliance with the requirements indicated in d) below, hold over this aid or reference fix until commencement of descent;
- d. commence descent from the navigation aid or reference fix specified in c) at the last expected approach time received and acknowledged, or as close as possible to this time; or if no expected approach time has been received and acknowledged, commence descent at the estimated time of arrival as stated in the current flight plan or as close as possible to this time;
- e. accomplish a normal instrument approach procedure as specified for the designated navigation aid or reference fix; and
- f. land, if possible, within the next 30 minutes after the estimated time of arrival specified in d) or the last acknowledged expected approach time, whichever is later.

**GRAN CANARIA AIRPORT**

In case of communications failure pilots should contact following phone number:

TWR

Tel:               +34 928 577 143  
                      +34 928 577 204

**LA PALMA AIRPORT**

In case of communications failure pilots should contact following phone numbers:

TWR

Tel:               +34 922 967 043

**CAPE VERDE**  
**ICAO DIFFERENCES OR STATE SPECIAL PROCEDURES**

## **GENERAL**

In general, the Emergency, Unlawful Interference, Communications Failure, Interception and Search and Rescue procedures are in conformity with the Standards, Recommended Practices and Procedures in ICAO Annexes and Documents.

## **COMMUNICATIONS FAILURE**

In VMC: ICAO Procedure.

In IMC: ICAO Procedure.

## **EMERGENCY AND SURVIVAL**

### **EQUIPMENT TO BE CARRIED ON ALL INTERNAL FLIGHTS AND ON CERTAIN FLIGHTS**

On all internal flights and on flights with single-engined and multi-engined aircraft not capable to maintain the prescribed minimum safe altitude in the event of engine failure the following emergency equipment shall be carried:

- a. Signaling Equipment
  1. an emergency locator transmitter (ELT);
  2. two signal flares of the day and night type;
  3. eight red signal cartridges and a means of firing them;
  4. a signal sheet (minimum 1x1m) in a reflecting colour;
  5. an electric hand torch.
- b. Survival Equipment
  1. a compass;
  2. a knife;
  3. a sleeping bag with a waterproof inner lining or a rescue blanket (Astron) per person;
  4. four boxes of matches in waterproof containers;
  5. a ball of string;
  6. a cooking stove with fuel and the accompanying cooking and eating utensils.

**CONGO, REP. OF**  
**ICAO DIFFERENCES OR STATE SPECIAL PROCEDURES**

## **GENERAL**

In general, the Emergency, Unlawful Interference, Communications Failure, Interception and Search and Rescue procedures are in conformity with the Standards, Recommended Practices and Procedures in ICAO Annexes and Documents.

## **COMMUNICATIONS FAILURE**

ICAO Procedures, supplemented as follows:

### **BRAZZAVILLE UTA AND TMA**

#### **Under Radar Control**

If two-way radio communication is interrupted, the pilot shall proceed as follows:

- set transponder to Code 7600 and listen to ATC instructions;
- if the pilot has not set transponder to Code 7600, the radar controller will have to determine whether or not the on-board receiver is operational.

For that, the controller shall:

- a. ask the pilot, on the current channel used, to acknowledge by performing a specified maneuver, and then observe the aircraft's track, or give the aircraft an IDENT instruction;
- b. repeat the measure prescribed in para a. via any other available channel on which the aircraft could be monitoring.

In both cases, any maneuvering's instructions shall be such as after having been complied with, the aircraft should be back on the trajectory that it was instructed to follow.

- If it can be determined through the procedures by the measure prescribed in paras a. and b. above that the on-board radio receiver is operating, the radar controller shall continue to control the aircraft by requesting to SQUAWK IDENT to acknowledge the authorizations given to him.
- If the aircraft does not indicate that it is capable of receiving and acknowledging transmissions, an appropriate separation shall be maintained between this aircraft and the other aircrafts. The pilot of the aircraft with radio communication failure shall maintain the last assigned speed and level (or minimum flight altitude if it is higher than the minimum safe altitude) for 7 minutes from:
  - a. the time he has reached the last assigned level or the minimum flight altitude; or
  - b. the time the transponder has been set to 7600 code; or
  - c. the time he should have indicated his position over a compulsory reporting point; and thereafter modify flight level and speed in accordance with the filed flight plan.

**COTE D'IVOIRE**  
**ICAO DIFFERENCES OR STATE SPECIAL PROCEDURES**

## **GENERAL**

In general, the Emergency, Unlawful Interference, Communications Failure, Interception and Search and Rescue procedures are in conformity with the Standards, Recommended Practices and Procedures in ICAO Annexes and Documents.

## **COMMUNICATIONS FAILURE**

ICAO Procedures, supplemented as follows:

### **Abidjan TMA/UTA**

#### **Under Radar Control**

If two-way radio communication is interrupted, the pilot shall proceed as follows:

- set transponder to Code 7600 and listen to ATC instructions;
- if the pilot has not set transponder to Code 7600, the radar controller will have to determine whether or not the on-board receiver is operational.

For that, the controller shall:

- a. ask the pilot, on the current channel used, to acknowledge by performing a specified maneuver, and then observe the aircraft's track, or give the aircraft an IDENT instruction;
- b. repeat the measure prescribed in para a. via any other available channel on which the aircraft could be monitoring.

In both cases, any maneuvering's instructions shall be such as after having been complied with, the aircraft should be back on the trajectory that it was instructed to follow.

- If it can be determined through the procedures by the measure prescribed in paras a. and b. above that the on-board radio receiver is operating, the radar controller shall continue to control the aircraft by requesting to SQUAWK IDENT to acknowledge the authorizations given to him;
- If the aircraft does not indicate that it is capable of receiving and acknowledging transmissions, an appropriate separation shall be maintained between this aircraft and the other aircraft. The pilot of the aircraft with radio communication failure shall maintain the last assigned speed and level (or minimum flight altitude if it is higher than the minimum safe altitude) for 7 minutes from:
  - a. the time he has reached the last assigned level or the minimum flight altitude; or
  - b. the time the transponder has been set to 7600 code; or
  - c. the time he should have indicated his position over a compulsory reporting point; and thereafter modify flight level and speed in accordance with the filed flight plan.

## EGYPT

### ICAO DIFFERENCES OR STATE SPECIAL PROCEDURES

## GENERAL

In general, the Emergency, Unlawful Interference, Communications Failure, Interception and Search and Rescue procedures are in conformity with the Standards, Recommended Practices and Procedures in ICAO Annexes and Documents.

## EMERGENCY

### RESCUE AND FIRE FIGHTING SERVICE

Aircraft may communicate with the Rescue and Fire Fighting Service at the following aerodromes:

Aerodrome	Call Sign	Time	Frequency
Abu Simel	Abu Simbel Fire	H24	121.90
Aswan	Aswan Fire		
Asyut	Asyut Fire		
Marsa Alam	Marsa Alam Fire		120.10

## COMMUNICATIONS FAILURE

### GENERAL

#### Departure Procedure

A departing controlled IFR flight operating in instrument meteorological conditions, having acknowledged an initial or intermediate clearance to climb to a level other than the one specified in the current flight plan for the enroute phase of the flight, and experiencing two-way radio communication failure shall, if no clearance limit was included in the climb clearance, maintain for a period of 7 minutes the level to which it was cleared and then commence climb to the last acknowledged current flight plan level.

*NOTE: The current flight plan level means the level included in the enroute clearance.*

#### Under Radar Control

A departing controlled IFR flight being vectored by radar away from the route specified in its current flight plan and experiencing two-way radio communication failure should proceed in the most direct manner to the route specified in the current flight plan.

## CAIRO (INTL) AIRPORT

#### Arrival Procedure

In case of complete communication failure, pilots should contact the following telephone numbers:

Cairo TWR

Tel: +20 (2) 22677179

Cairo APP

**EGYPT****ICAO DIFFERENCES OR STATE SPECIAL PROCEDURES**

Tel: +20 (2) 22693750

## ERITREA

## ICAO DIFFERENCES OR STATE SPECIAL PROCEDURES

**GENERAL**

In general, the Emergency, Unlawful Interference, Communications Failure, Interception and Search and Rescue procedures are in conformity with the Standards, Recommended Practices and Procedures in ICAO Annexes and Documents.

**COMMUNICATIONS FAILURE**

In VMC: ICAO Procedure.

In IMC: ICAO Procedure, supplemented as follows:

**DEPARTURE PROCEDURE**

A departing controlled IFR flight flying away from the route specified in its current flight plan and experiencing two-way radio communication failure should proceed to the route specified in the current flight plan.

A departing controlled IFR flight operating in Instrument Meteorological Conditions, having acknowledged an initial clearance expressed in time or distance to climb to a level other than the one specified in the current flight plan for the enroute phase of the flight, and experiencing two-way radio communication failure should maintain the level to which it was cleared and then continue its flight in accordance with the current flight plan.

**EQUIPMENT TO BE CARRIED ON ALL INTERNAL AND CERTAIN FLIGHTS****a. Signaling Equipment**

1. an Emergency Location Transmitter (ELT);
2. two signal flares of the day and night type;
3. signal sheet (1x1m) in a reflecting color;
4. signal mirror;
5. an electric hand torch.

**b. Survival Equipment**

1. a knife;
2. 4 boxes of matches in waterproof containers;
3. a compass;
4. a ball of string.

**ETHIOPIA**
**ICAO DIFFERENCES OR STATE SPECIAL PROCEDURES**

## **GENERAL**

In general, the Emergency, Unlawful Interference, Communications Failure, Interception and Search and Rescue procedures are in conformity with the Standards, Recommended Practices and Procedures in ICAO Annexes and Documents.

## **COMMUNICATIONS FAILURE**

### **ARRIVAL PROCEDURE**

#### **Addis Abeba**

In the radio communication failure procedures the expression 'EAT' will mean either an EAT given by the appropriate ATC unit or the ETA over the holding point, if the pilot has been told "No delay expected".

If "Delay not determined" has been received and communication failure occurs before an EAT is given, pilots shall not attempt to land, but should fly to another aerodrome in accordance with the following procedures.

#### **a. Arrivals from North, Northwest or West:**

1. Above FL330 - continue to VORDME 'ADS' maintaining last assigned flight level and route. Establish 'ADS' R-188 and at 'ADS' 25 DME start descent to FL330. Upon reaching FL330, proceed on track 061° to Dire Dawa airport. At position N0851.0 E04025.5 ('DWA' 97 DME), start descent to FL150 and land visually.
2. Below FL330 - continue to VORDME 'ADS' maintaining last assigned flight level and route. Establish 'ADS' R-188 and at 'ADS' 25 DME climb to FL330 and proceed to 'ADS' 65 DME and turn left heading 061° to Dire Dawa airport. If unable to reach FL330 at 'ADS' 65 DME, make a circling climb to the right between R-188 and R-198, limiting DME 65-75. Upon reaching FL330, proceed on track 061° to Dire Dawa airport. At position N0851.0 E04025.5 ('DWA' 97 DME), start descent to FL150 and land visually.
3. At FL330 - continue to VORDME 'ADS'. Thereafter, establish 'ADS' R-188 and at 'ADS' 25 DME turn left and track 061° to Dire Dawa airport. At position N0851.0 E04025.5 ('DWA' 97 DME), start descent to FL150 and land visually.

#### **b. Arrivals from South, Southeast or East:**

1. Above FL330 - follow procedure in a.1) above.
2. Below FL330 - continue to VORDME 'ADS' maintaining last assigned flight level and route. Enter the holding. Thereafter, establish R-188 and follow procedure in a.2) above.



## GAMBIA

## ICAO - ICAO DIFFERENCES OR STATE SPECIAL PROCEDURES

**GENERAL**

In general, the Emergency, Unlawful Interference, Communications Failure, Interception and Search and Rescue procedures are in conformity with the Standards, Recommended Practices and Procedures in ICAO Annexes and Documents.

**COMMUNICATIONS FAILURE**

In VMC: ICAO Procedure.

In IMC: ICAO Procedure.

**EQUIPMENT TO BE CARRIED ON ALL INTERNAL AND CERTAIN FLIGHTS**

On all internal flights and on flights with single and multi-engine aircraft which are not capable of maintaining the prescribed minimum safe altitude in the event of an engine failure, the following emergency equipment shall be carried:

a. Signaling Equipment:

1. an Emergency Locator Transmitter (ELT);
2. flares and/or signal cartridges and a firing device;
3. a signal sheet (e.g., alu-foil or in a reflecting color);
4. a signal mirror;
5. an electric hand torch.

b. Survival Equipment:

1. a compass;
2. a knife;
3. matches in waterproof container;
4. a ball of string.

*NOTE: It is recommended that a rifle and the necessary ammunition be carried when overflying areas where wild animals can be expected (carriage of guns only according to the ruling State laws of The Gambia).*

**GUINEA-BISSAU**  
**ICAO DIFFERENCES OR STATE SPECIAL PROCEDURES**

## **GENERAL**

In general, the Emergency, Unlawful Interference, Communications Failure, Interception and Search and Rescue procedures are in conformity with the Standards, Recommended Practices and Procedures in ICAO Annexes and Documents.

## **COMMUNICATIONS FAILURE**

ICAO Procedures, supplemented as follows:

### **BISSAU TMA**

#### **Under Radar Control**

If two-way radio communication is interrupted, the pilot shall proceed as follows:

- set transponder to Code 7600 and listen to ATC instructions;
- if the pilot has not set transponder to Code 7600, the radar controller will have to determine whether or not the on-board receiver is operational.

For that, the controller shall:

- a. ask the pilot, on the current channel used, to acknowledge by performing a specified maneuver, and then observe the aircraft's track, or give the aircraft an IDENT instruction;
- b. repeat the measure prescribed in para a. via any other available channel on which the aircraft could be monitoring.

In both cases, any maneuvering's instructions shall be such as after having been complied with, the aircraft should be back on the trajectory that it was instructed to follow.

- If it can be determined through the procedures by the measure prescribed in paras a. and b. above that the on-board radio receiver is operating, the radar controller shall continue to control the aircraft by requesting to SQUAWK IDENT to acknowledge the authorizations given to him;
- If the aircraft does not indicate that it is capable of receiving and acknowledging transmissions, an appropriate separation shall be maintained between this aircraft and the other aircrafts. The pilot of the aircraft with radio communication failure shall maintain the last assigned speed and level (or minimum flight altitude if it is higher than the minimum safe altitude) for 7 minutes from:
  - a. the time he has reached the last assigned level or the minimum flight altitude; or
  - b. the time the transponder has been set to 7600 code; or
  - c. the time he should have indicated his position over a compulsory reporting point; and thereafter modify flight level and speed in accordance with the filed flight plan.

## KENYA

## ICAO DIFFERENCES OR STATE SPECIAL PROCEDURES

**GENERAL**

In general, the Emergency, Unlawful Interference, Communications Failure, Interception and Search and Rescue procedures are in conformity with the Standards, Recommended Practices and Procedures in ICAO Annexes and Documents.

**COMMUNICATIONS FAILURE****BASIC PROCEDURE**

- a. Continue the flight in accordance with the current flight plan to the holding point at the aerodrome of first intended landing. Maintain the last acknowledged cruising levels for the portion of the route for which levels have been assigned, and thereafter maintain the cruising levels shown in the flight plan.
- b. Arrange the flight so as to arrive over the holding point at, or as close as possible to the ETA as indicated in the filed flight plan and revised in accordance with the current flight plan. Pilots must follow the appropriate inbound route for the Control Zone (CTR) or Control Area (CTA) concerned.
- c. If the aircraft's transmitter is still functioning, transmit position reports on the appropriate frequency when over the routine reporting points.
- d. After arrival over the holding point, commence descent at, or as close as possible to the EAT last received and acknowledged, or, if no EAT has been received and acknowledged, at or as close as possible to the ETA specified for the appropriate navigational aid.

If delay not determined has been given and no EAT, do not attempt to land at the destination aerodrome but fly to another aerodrome following the procedure as stated in para e. 2. below.

- e. Land within 30 minutes of the time descent should have been started (i.e. the EAT or ETA referred to in para d. above). If unable to land within this time, but able to complete on approach and landing visually, do so. If not able to land within the specified time, nor to approach and land visually, leave the vicinity of the aerodrome and any associated controlled airspace at the specified altitude and on the specified route as outlined under LEAVING PROCEDURE. If no altitude or route is specified, fly at the last assigned altitude or minimum sector altitude, whichever is the higher, and avoid areas of dense traffic. Then, either:
  1. fly to an area in which flight may be continued in VMC and land at a suitable aerodrome there; or (if this is not possible)
  2. select a suitable area in which to descend through cloud, fly visually to a suitable aerodrome and land as soon as practicable.

In either case, inform the ATC service as soon as possible after landing.

**KENYA**  
**ICAO DIFFERENCES OR STATE SPECIAL PROCEDURES**

## **ARRIVAL PROCEDURE**

### **Nairobi TMA**

Aircraft inbound to Nairobi under IFR will be cleared by the Area Control Center into the TMA and descended up to FL200, and will be given descent instructions when in radio contact with Nairobi ACC. Aircraft experiencing loss of radio contact with ATC prior to receiving descent instructions, will comply with the following procedures:

- a. aircraft approaching from the west of a line drawn north and south through Nairobi (Jomo Kenyatta Intl) will fly to Ngong VOR 'GV';
- b. aircraft approaching from the east of a line drawn north and south through Nairobi (Jomo Kenyatta Intl) will fly to Stony VOR 'TV'.

## **LEAVING PROCEDURE**

In the event of a missed approach:

- land at the aerodrome of destination if this can be achieved within 30 minutes of the time descent from the holding point should have started; or (if this is impossible)
- leave controlled airspace at once in accordance with the following procedures:

- In the Malindi and Mombasa CTR:

Leave the CTR on the prescribed missed approach track for the procedure used, and proceed to the nominated alternative destination selecting levels as follows depending on the direction of flight:

- low performance aircraft FL30, FL40;
- medium performance aircraft FL70, FL80;
- high performance aircraft FL200, FL210.

- In the Nairobi CTR and Nairobi TMA:

- If the alternate aerodrome is Entebbe (Intl), climb on the runway heading 056° to FL100 or above, then turn left to intercept Navex VORDME 'NV' R-288 at FL100 (low performance; aircraft must route via position NAROK), FL160 (medium performance), FL300 (high performance), FL280 (non RVSM), FL300 (for RVSM).
- If the alternate aerodrome is Mombasa (Moi Intl), turn right, climb to 8500ft to Stony VOR 'TV' after passing the position and intercept magnetic track 138° from Navex VORDME 'NV' maintaining 8500ft for 7 minutes from Stony VOR 'TV' or Navex 35 DME fix, then climb to FL90 (low performance), FL170 (medium performance), FL250 (high performance).

## **RADIO NAVIGATION EQUIPMENT FAILURE**

If part of an aircraft's radio navigation equipment fails but two-way communication can be still be maintained with the ATC service, the pilot must inform the ATC service of the failure and report

## KENYA

## ICAO DIFFERENCES OR STATE SPECIAL PROCEDURES

his altitude and approximated position. The ATC unit may, at its discretion authorize the pilot to continue his flight in or into controlled airspace.

### **ADDITIONAL PROCEDURE TO BE ADOPTED IF OPERATING UNDER A “RLCE” OR RADAR TYPE CLEARANCE**

The additional radio failure procedures described below will be adopted for use in the case of radio failure while operating under a “RLCE” type clearance where the pilot has informed ATC that the assigned cruising level is unacceptable or, under a radar type clearance, when no instructions by the radar controller to climb to the assigned cruising level have been received before the failure occurred, or exceptionally where a radar and “RLCE” clearance are combined, e.g. climb under radar control to FL150, request level change enroute to FL190.

In the event of radio failure the pilot should:

- a. After passing the compulsory reporting point at which he first failed to contact ATC turn 60° left or right and leave controlled airspace, maintaining the last cleared level. (The last cleared level is that given in the departure basic procedural clearance or, as may be amended subsequently enroute, e.g. “GG 110 climb under radar control to FL150”, 110 is the last cleared level).
- b. If the radio failure occurs inside a CTR or TMA, he should proceed as cleared to the reporting point nearest to the boundary of the CTR or TMA before leaving controlled airspace as described above.
- c. When clear of controlled airspace or advisory route, climb to either:
  - the cruising level requested in the filed flight plan if operating on a “RLCE” clearance; or
  - the accepted cruising level given with a radar clearance (which may be the level requested in the original filed flight plan), on a heading that will keep the aircraft clear of controlled airspace for a minimum period of five minutes and is also compatible with rejoining the intended airway or advisory route when cruising level is reached.
- d. When at cruising level, return to controlled airspace and proceed in accordance with normal radio failure procedure.

If, by day, the climb can be made in VMC there is, of course, no need for the pilot to leave controlled airspace or an advisory route, but he should still make 60° turns as this will serve to identify the aircraft with the radio failure to the radar controller when radar surveillance is being carried out. Should it be necessary to cross an airway during the climb, the airway should be crossed at right angles at an intermediate 500ft level.

## MADAGASCAR

## ICAO DIFFERENCES OR STATE SPECIAL PROCEDURES

**GENERAL**

In general, the Emergency, Unlawful Interference, Communications Failure, Interception and Search and Rescue procedures are in conformity with the Standards, Recommended Practices and Procedures in ICAO Annexes and Documents.

**COMMUNICATIONS FAILURE****ANTANANARIVO TMA**

In IMC and when landing at aerodrome of destination is impossible:

Fly away from the aerodrome and leave the region within 30 minutes while applying the following procedure:

- Aircraft to destination IVATO: proceed to fly in VMC conditions with magnetic track 300 degrees.

**TOAMASINA TMA**

A descent rate of 500 ft/minute (150 m/minute) should be respected during the approach procedure.

## MALAWI

## ICAO DIFFERENCES OR STATE SPECIAL PROCEDURES

**GENERAL**

In general, the Emergency, Unlawful Interference, Communications Failure, Interception and Search and Rescue procedures are in conformity with the Standards, Recommended Practices and Procedures in ICAO Annexes and Documents.

**COMMUNICATIONS FAILURE****BASIC PROCEDURE**

- a. Continue the flight in accordance with the current flight plan to the holding point at the aerodrome of first intended landing. Maintain the last acknowledged cruising level for the portion of the route for which levels have been assigned, and thereafter maintain the cruising levels shown in the flight plan.
- b. Arrange the flight so as to arrive over the holding point at, or as close as possible to the estimated time of arrival as indicated in the flight plan and revised in accordance with the current flight plan. Pilots must follow the appropriate inbound route for the Control Area concerned.
- c. After arrival over the holding point, commence descent at or as close as possible to the expected approach time last received and acknowledged, or if no expected approach time has been received and acknowledged, at or as close as possible to the estimated time of arrival specified for the appropriate navigational aid. If "Delay not Determined" has been given and no expected approach time, do not attempt to land at the destination aerodrome but fly to another aerodrome in accordance with the leaving procedure outlined in para d).
- d. Land within 30 minutes of the time descent should have been started. If unable to land within this time, but able to complete an approach and landing visually, do so. If not able to land within the specified time, nor to approach and land visually, leave the vicinity of the aerodrome and any associated controlled airspace at the specified route and altitude. If no altitude or route is specified, fly at the last assigned altitude or minimum sector altitude, whichever is the higher, and avoid areas of dense traffic.

Then either:

- fly to an area in which flight may be continued in VMC and land at a suitable aerodrome there, (if this is not possible);
- select a suitable area in which to descend through cloud, fly visually to a suitable aerodrome and land as soon as practicable.

In either case, inform ATC Service as soon as possible after landing.

- e. In the event of a missed approach:
  - land at the aerodrome of destination if this can be achieved within 30 minutes of the time descent from the holding point should have started, or (if this is impossible):
  - leave controlled airspace at once.

## MALAWI

## ICAO DIFFERENCES OR STATE SPECIAL PROCEDURES

**ADDITIONAL PROCEDURE TO BE ADOPTED IF OPERATING UNDER A “RLCE” OR RADAR TYPE CLEARANCE**

The additional radio failure procedure described below will be adopted for use in the case of radio failure while operating under a “RLCE” type clearance where the pilot has informed ATC that the assigned cruising level is unacceptable or, under radar type clearance when no instructions by the radar controller to climb to the assigned cruising level have been received before the failure occurred, or exceptionally where a radar and “RLCE” clearance are combined, e.g. climb when instructed by radar to FL130, request level change enroute to FL210. In the event of radio failure the pilot should:

- a. after passing the compulsory reporting point at which he first failed to contact ATC turn 60° left or right and leave controlled airspace maintaining the last cleared level. (The last cleared level is that given in the departure basic procedural clearance or, as may be amended subsequently enroute, e.g. “VCL FL90 climb under radar to FL130”. 90 is the last cleared level);
- b. if the radio failure occurs inside a Control Zone or TMA, he should proceed as cleared to the reporting point nearest to the boundary of the Control Zone or TMA before leaving controlled airspace as described above;
- c. when clear of controlled airspace climb to either:
  - the cruising level requested in the filed flight plan if operating on a “RLCE” clearance, or
  - the accepted cruising level given with a radar clearance (which may not necessarily be the level requested in the original filed flight plan) on a heading that will keep the aircraft clear of controlled airspace for a minimum period of five minutes and is also compatible with rejoining the intended route when cruising level is reached;
- d. when at cruising level, return to controlled airspace and proceed in accordance with normal radio failure procedure.

If, by day, the climb can be made in VMC there is of course, no need for the pilot to leave controlled airspace but he should still make 60° turns as this will serve to identify the aircraft with the radio failure to the radar controller when radar surveillance is being carried out.

**PROCEDURES FOR AIRCRAFT WITHIN SOUTHERN SECTOR OF CHILEKA TMA UNABLE TO COMMUNICATE WITH CHILEKA APP OR LILONGWE FIC****General**

Due to the presence of high ground to the south of Blantyre (Chileka), aircraft operating within Chileka TMA within a sector bounded by R-134 to R-234 of Chileka (Blantyre) VORDME may be unable to communicate with Chileka APP or Lilongwe FIC on VHF when the extended range VHF installation on Zomba Plateau is inoperative.

**Prior to Entering TMA**

Approaching aircraft unable to contact Chileka APP or Lilongwe FIC on VHF should 10 minutes before entering TMA attempt to establish radio contact on HF or by relay of other stations.



## MALAWI

## ICAO DIFFERENCES OR STATE SPECIAL PROCEDURES

**Landing and Northbound Overflying Aircraft**

- a. Landing aircraft able to descend in uninterrupted VMC should carry out a VMC descent and should transmit blind position reports on VHF frequencies of Chileka APP, TWR and Lilongwe FIC. Continue with normal communication procedures when aerodrome in sight.
- b. Landing aircraft unable to descend in uninterrupted VMC and all northbound overflying aircraft should maintain the flight level last notified to ATC and should transmit blind position reports at the TMA boundary and when 25NM from Blantyre (Chileka) on VHF frequencies of Chileka APP, TWR and Lilongwe FIC. Continue with normal communication procedures when overhead the facility.

**Departing or Southbound Overflying Aircraft**

If the extended range VHF installation fails, aircraft will proceed in accordance with ATC clearance and should transmit blind position reports when radio contact is lost and when over the TMA boundary on the VHF frequencies of Chileka APP, TWR and Lilongwe FIC.

## MALI

## ICAO DIFFERENCES OR STATE SPECIAL PROCEDURES

**GENERAL**

In general, the Emergency, Unlawful Interference, Communications Failure, Interception and Search and Rescue procedures are in conformity with the Standards, Recommended Practices and Procedures in ICAO Annexes and Documents.

**COMMUNICATIONS FAILURE**

ICAO Procedures, supplemented as follows:

**BAMAKO TMA/UTA****Under Radar Control**

If two-way radio communication is interrupted, the pilot shall proceed as follows:

- set transponder to Code 7600 and listen to ATC instructions;
- if the pilot has not set transponder to Code 7600, the radar controller will have to determine whether or not the on-board receiver is operational.

For that, the controller shall:

- a. ask the pilot, on the current channel used, to acknowledge by performing a specified maneuver, and then observe the aircraft's track, or give the aircraft an IDENT instruction;
- b. repeat the measure prescribed in para a. via any other available channel on which the aircraft could be monitoring.

In both cases, any maneuvering's instructions shall be such as after having been complied with, the aircraft should be back on the trajectory that it was instructed to follow.

- If it can be determined through the procedures by the measure prescribed in paras a. and b. above that the on-board radio receiver is operating, the radar controller shall continue to control the aircraft by requesting to SQUAWK IDENT to acknowledge the authorizations given to him;
- If the aircraft does not indicate that it is capable of receiving and acknowledging transmissions, an appropriate separation shall be maintained between this aircraft and the other aircrafts. The pilot of the aircraft with radio communication failure shall maintain the last assigned speed and level (or minimum flight altitude if it is higher than the minimum safe altitude) for 7 minutes from:
  - a. the time he has reached the last assigned level or the minimum flight altitude; or
  - b. the time the transponder has been set to 7600 code; or
  - c. the time he should have indicated his position over a compulsory reporting point; and thereafter modify flight level and speed in accordance with the filed flight plan.

**MAURITANIA**  
**ICAO DIFFERENCES OR STATE SPECIAL PROCEDURES**

## **GENERAL**

In general, the Emergency, Unlawful Interference, Communications Failure, Interception and Search and Rescue procedures are in conformity with the Standards, Recommended Practices and Procedures in ICAO Annexes and Documents.

## **COMMUNICATIONS FAILURE**

ICAO Procedures, supplemented as follows:

### **NOUAKCHOTT UTA AND TMA**

#### **Under Radar Control**

If two-way radio communication is interrupted, the pilot shall proceed as follows:

- set transponder to Code 7600 and listen to ATC instructions;
- if the pilot has not set transponder to Code 7600, the radar controller will have to determine whether or not the on-board receiver is operational.

For that, the controller shall:

- a. ask the pilot, on the current channel used, to acknowledge by performing a specified maneuver, and then observe the aircraft's track, or give the aircraft an IDENT instruction;
- b. repeat the measure prescribed in para a. via any other available channel on which the aircraft could be monitoring.

In both cases, any maneuvering's instructions shall be such as after having been complied with, the aircraft should be back on the trajectory that it was instructed to follow.

- If it can be determined through the procedures by the measure prescribed in paras a. and b. above that the on-board radio receiver is operating, the radar controller shall continue to control the aircraft by requesting to SQUAWK IDENT to acknowledge the authorizations given to him.
- If the aircraft does not indicate that it is capable of receiving and acknowledging transmissions, an appropriate separation shall be maintained between this aircraft and the other aircrafts. The pilot of the aircraft with radio communication failure shall maintain the last assigned speed and level (or minimum flight altitude if it is higher than the minimum safe altitude) for 7 minutes from:
  - a. the time he has reached the last assigned level or the minimum flight altitude; or
  - b. the time the transponder has been set to 7600 code; or
  - c. the time he should have indicated his position over a compulsory reporting point; and thereafter modify flight level and speed in accordance with the filed flight plan.

## MOROCCO

## ICAO DIFFERENCES OR STATE SPECIAL PROCEDURES

**GENERAL**

In general, the Emergency, Unlawful Interference, Communications Failure, Interception and Search and Rescue procedures are in conformity with the Standards, Recommended Practices and Procedures contained in ICAO Annexes and Documents.

**COMMUNICATIONS FAILURE**

ICAO Procedures, supplemented as follows:

**GENERAL PROCEDURES WITHIN TMA**

**Agadir (Al Massira Intl), Casablanca (Mohammed V Intl), Marrakech (Menara Intl), Ouarzazate (Intl), Oujda (Angads Intl), Rabat (Sale Intl) TMAs**

Set transponder to code 7600 and maintain for a period of 7 minutes the last assigned speed and flight level or the Minimum Flight Altitude, if it is higher than the last assigned flight level, at the time:

- the last assigned level or minimum flight altitude is reached; or
- the transponder is set to code 7600; or
- of a failed position report over a compulsory reporting point, whichever is later.

Thereafter adjust level and speed in accordance with the filed flight plan.

## NAMIBIA

## ICAO DIFFERENCES OR STATE SPECIAL PROCEDURES

**GENERAL**

In general, the Emergency, Unlawful Interference, Communications Failure, Interception and Search and Rescue procedures are in conformity with the Standards, Recommended Practices and Procedures in ICAO Annexes and Documents.

**EMERGENCY****INTERCEPT AND ESCORT**

Series 5 and 6 of INTERCEPTED Aircraft Signals are not used.

Non-standard visual signals used during interception are shown below.

**Signals initiated by Intercepting Aircraft and responses by Intercepted Aircraft:**

<b>SERIES</b>	<b>INTERCEPTING Aircraft Signals</b>	<b>MEANING</b>	<b>INTERCEPTED Aircraft Responds</b>	<b>MEANING</b>
1A	DAY: Rocking wings while in front and to the LEFT of the intercepted aircraft.  NIGHT: As for day, and in addition flashing navigational and, if available, landing lights at irregular intervals.	Follow me away from a prohibited area.	DAY: Rocking wings.  NIGHT: Rocking wings if considered safe and showing steady landing light if carried.	Understood, will comply.
1B	DAY: Rocking wings while in front and to the RIGHT of the intercepted aircraft.  NIGHT: As for day, and in addition, flashing navigational and, if available, landing lights at irregular intervals.	Follow me to a landing terrain.		

**NAMIBIA**
**ICAO DIFFERENCES OR STATE SPECIAL PROCEDURES**
**Signals initiated by Intercepting Aircraft and responses by Intercepted Aircraft: (continued)**

<b>SERIES</b>	<b>INTERCEPTING Aircraft Signals</b>	<b>MEANING</b>	<b>INTERCEPTED Aircraft Responds</b>	<b>MEANING</b>
1C	DAY: When 1A and 1B have been acknowledged, making a slow level turn into desired course.  NIGHT: As for day, and in addition flashing navigational and, if available, landing lights at irregular intervals when 1A and 1B have been acknowledged.	—	Follow intercepting aircraft.	
2	DAY or NIGHT: An abrupt break-away maneuver of 90 degrees or more without crossing the line of flight of the intercepted aircraft.	You may proceed.	DAY or NIGHT: Rocking wings if considered safe and at night showing steady landing light if carried.	Understood, will comply.
3	DAY: Circling landing area, lowering landing gear and overflying in direction of landing.  NIGHT: As for day and showing steady landing light.	Land on this landing area.	DAY: Same as interceptor and proceed to land (where applicable) if considered safe.  NIGHT: As for day, and showing steady landing light if carried.	Understood, will comply.

## NAMIBIA

## ICAO DIFFERENCES OR STATE SPECIAL PROCEDURES

## Signals initiated by Intercepted Aircraft and responses by Intercepting Aircraft:

SERIES	INTERCEPTED Aircraft Signals	MEANING	INTERCEPTING Aircraft Responds	MEANING
4	DAY or NIGHT: Rocking wings (if fixed landing gear) or raising gear (whichever is applicable) while passing over landing terrain at a height exceeding 1000ft but not exceeding 2000ft.	Landing terrain unsuitable.	First or second series dependent on what further action intercepting aircraft requires to be taken either:  a. "FOLLOW ME" or  b. "YOU MAY PROCEED".	Understood, follow me or you may proceed.

## COMMUNICATIONS FAILURE

## ARRIVAL PROCEDURE FOR KEETMANSHOOP AND WALVIS BAY

In IMC and VMC:

- Join overhead the aerodrome at 2000ft AGL.
- Observe and join the aerodrome traffic pattern.
- Make all turns to the left whenever possible.
- Land as soon as possible and report to the ATC unit.

## NIGER

## ICAO DIFFERENCES OR STATE SPECIAL PROCEDURES

**GENERAL**

In general, the Emergency, Unlawful Interference, Communications Failure, Interception and Search and Rescue procedures are in conformity with the Standards, Recommended Practices and Procedures in ICAO Annexes and Documents.

**COMMUNICATIONS FAILURE**

ICAO Procedures, supplemented as follows:

**NIAMEY TMA/UTA****Under Radar Control**

If two-way radio communication is interrupted, the pilot shall proceed as follows:

- set transponder to Code 7600 and listen to ATC instructions;
- if the pilot has not set transponder to Code 7600, the radar controller will have to determine whether or not the on-board receiver is operational.

For that, the controller shall:

- a. ask the pilot, on the current channel used, to acknowledge by performing a specified maneuver, and then observe the aircraft's track, or give the aircraft an IDENT instruction;
- b. repeat the measure prescribed in para a. via any other available channel on which the aircraft could be monitoring.

In both cases, any maneuvering's instructions shall be such as after having been complied with, the aircraft should be back on the trajectory that it was instructed to follow.

- If it can be determined through the procedures by the measure prescribed in paras a. and b. above that the on-board radio receiver is operating, the radar controller shall continue to control the aircraft by requesting to SQUAWK IDENT to acknowledge the authorizations given to him;
- If the aircraft does not indicate that it is capable of receiving and acknowledging transmissions, an appropriate separation shall be maintained between this aircraft and the other aircrafts. The pilot of the aircraft with radio communication failure shall maintain the last assigned speed and level (or minimum flight altitude if it is higher than the minimum safe altitude) for 7 minutes from:
  - a. the time he has reached the last assigned level or the minimum flight altitude; or
  - b. the time the transponder has been set to 7600 code; or
  - c. the time he should have indicated his position over a compulsory reporting point; and thereafter modify flight level and speed in accordance with the filed flight plan.



## NIGERIA

## ICAO DIFFERENCES OR STATE SPECIAL PROCEDURES

**GENERAL**

In general, the Emergency, Unlawful Interference, Communications Failure, Interception and Search and Rescue procedures are in conformity with the Standards, Recommended Practices and Procedures in ICAO Annexes and Documents.

**COMMUNICATIONS FAILURE****BASIC PROCEDURE**

- a. Continue the flight in accordance with the current flight plan to the holding point at the aerodrome of first intended landing. Maintain the last acknowledged cruising levels for the portion of the route for which levels have been assigned, and thereafter maintain the cruising levels shown in the flight plan.
- b. Arrange the flight so as to arrive over the holding point as closely as possible to the ETA last acknowledged by ATC, or if no ETA has been acknowledged, at an ETA computed from the last acknowledged position report and subsequent portions of the flight.
- c. If the aircraft's transmitter is thought to be still functioning, transmit position reports on the appropriate frequency when over the routine reporting points. After arrival over the holding point, commence descent at the last acknowledged EAT, or if no EAT has been received and acknowledged, at the ETA used in b) above. The rate of descent to the lowest level of the holding stack must not be less than 500ft per minute. A descent may only be commenced within 10 minutes following the time that it ought to have begun. If 'Delay not Determined' has been given, and no subsequent EAT has been issued, do not attempt to land at the destination aerodrome but proceed to another aerodrome following the Leaving Procedure outlined in para below.
- d. Land within 30 minutes of the time descent should have been started (i.e. the EAT or ETA). If unable to land within this time, but able to complete on approach and landing visually, do so. If not able to land within the specified time, nor to approach and land visually, leave the vicinity of the aerodrome and any associated controlled airspace at the last assigned altitude or minimum sector altitude, whichever is the higher, and avoid areas of dense traffic. Then either:
  - fly to an area in which flight may be continued in VMC and land at a suitable aerodrome there; or
  - select a suitable area in which to descend through cloud, fly visually to a suitable aerodrome and land as soon as practicable.

In either case, inform the ATC unit concerned as soon as possible after landing.

**PROCEDURES IN THE EVENT OF MISSED APPROACH**

- a. Land at the aerodrome of destination if this can be achieved within 30 (thirty) minutes of the time descent from the holding point should have started, or (if this is impossible).
- b. Fly to another aerodrome following the procedure prescribed in d) above.

**NIGERIA**
**ICAO DIFFERENCES OR STATE SPECIAL PROCEDURES**
**PROCEDURES TO BE ADOPTED IN VARIOUS CIRCUMSTANCES**

If in IMC communication failure occurs after take-off from an aerodrome within a control zone and sufficient navigational assistance is obtainable to adhere to the current flight plan and

- a. the aircraft has been cleared to contact ACC: the pilot shall adopt the basic procedure;
- b. the aircraft has not been cleared to contact ACC: the pilot shall maintain visual contact to the ground and return to the departure aerodrome, avoiding known traffic routes, or, if this is not practicable, leave the control zone in accordance with the last ATC clearance received, and adopt the basic procedure.

If in IMC the flight is not within nor planned to enter controlled airspace the pilot shall adopt the basic procedure.

If in IMC after communication failure sufficient navigational assistance is not obtainable to adhere to the current flight plan, the pilot shall leave or avoid controlled airspace and areas of dense traffic and, taking into account obstacle clearance and latest meteorological information either:

- a. fly to an area in which flight may be continued in VMC; or (if this is not possible)
- b. select a suitable area in which descent through cloud can be carried out, proceed visually to a suitable aerodrome and land as soon as practicable. Inform ATC as soon as possible after landing.

In IMC if the flight is within or planned to enter controlled airspace, navigational aids enable the current flight plan to be adhered to, and the pilot is qualified for flight in controlled airspace.

In visual meteorological conditions (VMC)

- a. If VFR flight can be maintained:
  - the pilot shall continue the flight in VMC to the point of first intended landing.
- b. If VFR cannot be maintained:
  - the pilot shall adopt the IFR procedure appropriate to the circumstances.

**EMERGENCY AND SURVIVAL**
**EQUIPMENT TO BE CARRIED ON ALL INTERNATIONAL AND ON CERTAIN FLIGHTS**

On all internal flights and on flights with single-engined and multi-engined aircraft which are not capable of maintaining the prescribed minimum safe altitude in the event of engine failure, the following emergency equipment shall be carried.

- a. Signaling equipment:
  1. an emergency locator transmitter (ELT);
  2. two signal flares of the day and night type;
  3. eight red signal cartridges and a means of firing them;
  4. a signal sheet (minimum 1x1m) a reflecting color;

**NIGERIA****ICAO DIFFERENCES OR STATE SPECIAL PROCEDURES**

- 5. a signal mirror; and
- 6. an electric hand torch.
- b. Survival equipment:
  - 1. a compass;
  - 2. a knife;
  - 3. a sleeping bag with waterproof inner lining or a rescue blanket (Astron) per person;
  - 4. four boxes of matches in waterproof containers;
  - 5. a ball of string;
  - 6. a cooking stove with fuel and the accompanying cooking and eating utensils.

**REUNION****ICAO DIFFERENCES OR STATE SPECIAL PROCEDURES**

**This information also applies to Mayotte, as covered by common aeronautical publications.**

**GENERAL**

In general, the Emergency, Unlawful Interference, Communications Failure, Interception and Search and Rescue procedures are in conformity with the Standards, Recommended Practices and Procedures in ICAO Annexes and Documents.

**COMMUNICATIONS FAILURE**

In VMC: ICAO Procedure.

In IMC: ICAO Procedure, supplemented as follows:

If communication failure occurred during the arrival phase (STAR), the approach procedure phase to an airport, or the departure phase from an airport (SID), the pilot will comply with the specific procedures published for that airport, if any.

## RWANDA

## ICAO DIFFERENCES OR STATE SPECIAL PROCEDURES

**GENERAL**

In general, the Emergency, Unlawful Interference, Communications Failure, Interception and Search and Rescue procedures are in conformity with the Standards, Recommended Practices and Procedures in ICAO Annexes and Documents.

**COMMUNICATIONS FAILURE**

ICAO Procedures, supplemented as follows:

**GISENYI AIRPORT****Procedures between Goma (Intl) and Gisenyi**

In case of communication failure between Goma (Intl) and Gisenyi aerodromes, the following procedures will be applied for aircraft departing or landing at Gisenyi.

***Arrival Procedure*****a. IMC:**

After having executed IFR approach at Goma (Intl), when on downwind or in base leg, contact Gisenyi TWR for landing clearance.

**b. VMC:**

After entering the aerodrome circuit, contact Gisenyi TWR for landing clearance.

***Departure Procedure*****a. IMC:**

IFR and special VFR flights are only authorized if the pilot can obtain prior clearance by Goma TWR before take-off. State aircraft requesting special VFR flights toward the east sector are exceptionally authorized by Gisenyi Control Tower. The pilots must maintain VMC and must monitor Goma TWR until departing the TMA.

**b. VMC:**

To the east and south sectors, aircraft may be cleared to take-off by Gisenyi TWR and must remain east the axis of the RWY 19/01 at Gisenyi. To the west and north, aircraft may be cleared to take-off by Gisenyi TWR and must remain east of the axis of the RWY 01/19 at Gisenyi. Aircraft can fly towards the west and north sectors after being cleared by Goma TWR. In case of total communication failure at one of the aerodrome [Gisenyi or Goma (Intl)] the remaining operational tower will assume the responsibility of the other.

**EMERGENCY AND SURVIVAL**

In the event of engine failure the following emergency equipment shall be carried:

**a. Signalling Equipment**

1. an emergency locator transmitter (ELT);
2. 2 signal flares of the day and night type;

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3. 8 red signal cartridges and a means of firing them;
  4. a signal sheet (minimum 1x1m) in a reflecting colour;
  5. an electric hand torch.
- b. Survival Equipment
1. a compass;
  2. a knife;
  3. 4 boxes of matches in waterproof containers;
  4. a ball of string.

## SENEGAL

## ICAO DIFFERENCES OR STATE SPECIAL PROCEDURES

**GENERAL**

In general, the Emergency, Unlawful Interference, Communications Failure, Interception and Search and Rescue procedures are in conformity with the Standards, Recommended Practices and Procedures in ICAO Annexes and Documents.

**COMMUNICATIONS FAILURE**

IICAO Procedures, supplemented as follows:

**DAKAR UTA AND TMA****Under Radar Control**

If two-way radio communication is interrupted, the pilot shall proceed as follows:

- set transponder to Code 7600 and listen to ATC instructions;
- if the pilot has not set transponder to Code 7600, the radar controller will have to determine whether or not the on-board receiver is operational.

For that, the controller shall:

- a. ask the pilot, on the current channel used, to acknowledge by performing a specified maneuver, and then observe the aircraft's track, or give the aircraft an IDENT instruction;
- b. repeat the measure prescribed in para a. via any other available channel on which the aircraft could be monitoring.

In both cases, any maneuvering's instructions shall be such as after having been complied with, the aircraft should be back on the trajectory that it was instructed to follow.

- If it can be determined through the procedures by the measure prescribed in paras a. and b. above that the on-board radio receiver is operating, the radar controller shall continue to control the aircraft by requesting to SQUAWK IDENT to acknowledge the authorizations given to him;
- If the aircraft does not indicate that it is capable of receiving and acknowledging transmissions, an appropriate separation shall be maintained between this aircraft and the other aircrafts. The pilot of the aircraft with radio communication failure shall maintain the last assigned speed and level (or minimum flight altitude if it is higher than the minimum safe altitude) for 7 minutes from:
  - a. the time he has reached the last assigned level or the minimum flight altitude; or
  - b. the time the transponder has been set to 7600 code; or
  - c. the time he should have indicated his position over a compulsory reporting point; and thereafter modify flight level and speed in accordance with the filed flight plan.

## SEYCHELLES

## ICAO DIFFERENCES OR STATE SPECIAL PROCEDURES

**GENERAL**

In general, the Emergency, Unlawful Interference, Communications Failure, Interception and Search and Rescue procedures are in conformity with the Standards, Recommended Practices and Procedures in ICAO Annexes and Documents.

**COMMUNICATIONS FAILURE****PROCEDURE IN THE FIR AND TMA UP TO THE TERMINATION OF THE TRANSITION ROUTES**

The procedures to be followed by aircraft in the FIR, CTA and TMA, up to the termination of the transition routes, which are required to maintain two-way radio communications experiencing radio equipment failure, shall conform to those specified in ICAO Annex 2 applicable to IFR as follows:

- a. Attempt shall be made to establish contact on another frequency appropriate to the route or area. If this attempt fails, attempt to establish communication with other aircraft or other aeronautical stations on frequencies appropriate to the route or area.
- b. If the attempts specified above fail, the aircraft station shall transmit its message twice on the designated frequency(ies), preceded by the phrase "TRANSMITTING BLIND" and, if necessary, include the addressee(s) for which the message is intended.
- c. When an aircraft station is unable to establish communication due to receiver failure, it shall transmit reports at the scheduled times, or positions, on the frequency in use, preceded by the phrase "TRANSMITTING BLIND DUE TO RECEIVER FAILURE". The aircraft station shall transmit the intended message, following this by a complete repetition. During this procedure, the aircraft shall also advise the time of its next intended transmission and transmit information regarding the intention of the pilot-in-command with respect to the continuation of the flight of the aircraft.
- d. Maintain last assigned speed and level, or minimum flight altitude if higher, for a period of 20 minutes following the aircraft's failure to report its position over a compulsory reporting point and thereafter adjust level and speed in accordance with filed flight plan.
- e. At the TMA, proceed according to flight plan route and relevant transition route to the terminating waypoint.

**SEYCHELLES (INTL) AIRPORT****Procedure beyond the Transition Routes**

The procedures to be followed for IFR flights by aircraft at the termination of the transition routes, which are required to maintain two-way radio communications experiencing radio equipment failure, shall conform to those specified in ICAO Annex 2 as follows:

- a. Proceed according to flight plan route along the relevant STAR to the initial approach fix or waypoint serving the destination aerodrome and runway-in-use and, when required to comply with procedure below, hold over this fix or waypoint until commencement of descent.



**SEYCHELLES**  
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- b. Commence descent from fix or waypoint specified above at, or as close as possible to, the expected approach time last received and acknowledged; or, if no expected approach time has been received and acknowledged, at or as close as possible to, the estimated time of arrival resulting from the current flight plan.
- c. Complete a normal instrument approach procedure as specified for the designated fix or waypoint associated with the current runway-in-use.
- d. Land, if possible within 30 minutes after the estimated time of arrival specified above or last acknowledged expected approach time, whichever is later.

**VFR Flights**

If contact has previously been established:

Continue to destination aerodrome maintaining VMC, land and contact Seychelles Control Tower or Area Control Center by telephone. Where the destination is Mahe, route via Harrison Rock and continue towards Seychelles (Intl) airport. Seychelles Control Tower will keep a lookout and give light signals as appropriate. On receipt of a green light the pilot will land on the runway-in-use. If ATC wishes the aircraft to circle between Harrison Rock and the airport at 1000ft QNH, it will give the pilot a steady red light and the pilot will watch out for further instructions.

If contact has not been established with ATC:

The pilot will return to the aerodrome of departure or suitable alternate maintaining VMC and shall contact Seychelles Control Tower or Area Control Center by telephone. The pilot should not enter the controlled zone without an ATC clearance except in the case of an emergency whereby the pilot will keep clear of the instrument letdown paths and approach via Harrison Rock below 1000ft maintaining VMC and keeping vigilant lookout for any other traffic and comply with light signals from Seychelles Control Tower.

*NOTE: All aerodromes have telephone contact with Mahe.*

**PRASLIN AIRPORT**

- a. If contact has not been established with Seychelles approach after departure from Praslin, continue to destination aerodrome, maintaining VMC and follow procedures as prescribed above for Seychelles (Intl).
- b. If contact has not been established with Praslin Tower (arriving aircraft), continue to Praslin aerodrome maintaining VMC. Proceed overhead the DVOR 'PRA', not below 2500ft QNH, maintaining a vigilant look out for other inbound traffic. From overhead join the traffic pattern by making a downwind leg and land if possible within 15 minutes of the last acknowledged estimated time of arrival.
- c. If contact has previously been established with Praslin Tower (arriving aircraft) and an aircraft had initially been cleared to a visual holding point prior to landing, it shall leave such visual holding point at the last acknowledged expected onward clearance time and comply with (a) and (b) above and land within 30 minutes. If no onward clearance time had been given, hold at the visual holding point for at least 10 minutes before commencing the approach.

**SEYCHELLES**  
**ICAO DIFFERENCES OR STATE SPECIAL PROCEDURES**

- d. In the event where an inbound traffic to Praslin cannot land due to poor visibility, it shall:
1. proceed to nearest suitable aerodrome and land; and
  2. contact Seychelles Approach Control as soon as possible.

**EMERGENCY SATELLITE VOICE CALLS FROM AIRCRAFT**

In case of HF/VHF communications failure within the Seychelles FIR, airlines operators who have aircraft equipped with satellite telephone (SATPHONE) can contact:

Seychelles Air Traffic Control Center

Tel: +248 4384193

+248 4384000

**EQUIPMENT TO BE CARRIED ON ALL INTERNAL AND ON CERTAIN FLIGHTS**

Signaling equipment:

- a. at least one Emergency Locator Transmitter (ELT) preferably 406MHz.

Survival equipment:

- a. first aid equipment;
- b. life jacket for each person on board;
- c. additional flotation equipment capable of supporting one fifth of the number of persons on board;
- d. life rafts sufficient to accommodate all persons on board;
- e. for aircraft flying 400NM from the nearest aerodrome, life raft sufficient to accommodate all persons on board the flying machine.

**SIERRA LEONE****ICAO DIFFERENCES OR STATE SPECIAL PROCEDURES****GENERAL**

In general, the Emergency, Unlawful Interference, Communications Failure, Interception and Search and Rescue procedures are in conformity with the Standards, Recommended Practices and Procedures in ICAO Annexes and Documents.

**EMERGENCY****INTERCEPT AND ESCORT**

Series 5 and 6 of INTERCEPTED Aircraft Signals are not used.

**SOMALIA****ICAO DIFFERENCES OR STATE SPECIAL PROCEDURES****GENERAL**

In general, the Emergency, Unlawful Interference, Communications Failure, Interception and Search and Rescue procedures are in conformity with the Standards, Recommended Practices and Procedures in ICAO Annexes and Documents.

**COMMUNICATIONS FAILURE**

Pilots experiencing HF radio communication failure while operating in Mogadishu FIR are requested to contact Mogadishu FIC on SATCOM using INMARSAT code 466601 or FIC telephone lines +252 18 57390 or +252 18 57391 or +252 18 57392 or +252 18 57393 and/or comply with normal procedures for Radio Communication Failure in accordance with ICAO provisions as may be applicable.

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ICAO DIFFERENCES OR STATE SPECIAL PROCEDURES**

## **GENERAL**

In general, the Emergency, Unlawful Interference, Communications Failure, Interception and Search and Rescue procedures are in conformity with the Standards, Recommended Practices and Procedures in ICAO Annexes and Documents.

## **EMERGENCY**

### **INTERCEPT AND ESCORT**

Series 5 and 6 of INTERCEPTED Aircraft Signals are not used.

## **COMMUNICATIONS FAILURE**

### **GENERAL**

When an aircraft fails to establish contact with the aeronautical station on the designated frequency, it shall attempt to establish contact on another frequency appropriate to the route. If this attempt fails, the aircraft shall attempt to establish communication with another aircraft or other aeronautical stations on frequencies appropriate to the route. In addition, an aircraft shall monitor the appropriate VHF frequency for calls from nearby aircraft or aeronautical stations.

If these attempts fail, the aircraft station shall continue to transmit position reports and its intentions as appropriate on the designated frequencies, preceded by the phrase "Transmitting blind". Such messages shall be transmitted twice and, if necessary, include the addressee(s) for which the message is intended.

If no communication is received or other indication that one-way communications are possible, the aircraft shall set its transponder to Code 7600 and proceed with the lost communications procedures.

In any case, whereby an aircraft having suffered a communication failure in flight arrives at an aerodrome, it shall keep watch for such instructions as may be issued by visual signals for the aerodrome control tower or other facility.

### **VFR PROCEDURES**

If the communications failure occurs while operating in accordance with VFR, the aircraft shall continue to fly in visual meteorological conditions (VMC) and land at the nearest suitable aerodrome using

- a. the Standard Radio Communication Procedures - VFR Arrivals shown below; or
- b. if other procedures have been published for a specific aerodrome, in accordance with such procedures.

The operator shall report its arrival by the most expeditious means to the appropriate air traffic services unit (ATSU).

### **IFR PROCEDURES**

If the communications failure occurs while operating in accordance with IFR and VMC are encountered, the aircraft shall

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- a. continue to fly in VMC; land at the nearest suitable aerodrome in accordance with
  - the Standard Radio Communication Procedures - VFR Arrivals shown below; or
  - if other procedures have been published for a specific aerodrome, in accordance with such procedures, and
- b. report its arrival by the most expeditious means to the appropriate ATSU; or
- c. if unable to ensure VMC conditions exist to a suitable aerodrome, complete an IFR flight in accordance with procedures below.

If the communications failure occurs while operating in accordance with IFR while In IMC or, if in VMC but unable to maintain VMC, the aircraft shall

- a. in airspace where an ATS surveillance system is not used in the provision of air traffic control, maintain the last assigned speed and level, or minimum flight altitude if higher, for a period of 20 minutes following the aircraft's failure to report its position over a compulsory reporting point and thereafter adjust level and speed in accordance with the filed flight plan;
- b. in airspace where an ATS surveillance system is used in the provision of air traffic control, maintain the last assigned speed and level, or minimum flight altitude if higher, for a period of 7 minutes following
  - the time the last assigned level or minimum flight altitude was reached;
  - the time the transponder was set to Code 7600; or
  - the aircraft's failure to report its position over a compulsory reporting point,whichever is later; and thereafter adjust level and speed in accordance with the filed flight plan;
- c. when being radar vectored or having been directed by ATC to proceed offset using area navigation (RNAV) without a specified limit, rejoin the current flight plan route no later than the next significant point, taking into consideration the applicable minimum flight altitude;
- d. proceed according to the current flight plan route to the appropriate designated navigation aid or fix serving the destination aerodrome and, when required to ensure compliance with subparagraph (e), hold over this aid or fix until commencement of descent;
- e. commence descent from the navigation aid or fix specified in subparagraph (d) at, or as close as possible to, the expected approach time last received and acknowledged or, If no expected approach time has been received and acknowledged, at, or as close as possible to, the estimated time of arrival resulting from the current flight plan;
- f. complete a normal instrument approach procedure as specified for the designated navigation aid or fix; and
- g. land, if possible, within 30 minutes after the estimated time of arrival specified in (e) or the last acknowledged expected approach time, whichever is later.

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**STANDARD RADIO COMMUNICATIONS FAILURE PROCEDURE - VFR ARRIVALS**

- a. Maintain squawk of 7600.
- b. Make a relevant blind broadcast to traffic in the area advising of the probability of a radio communication failure, position and intentions.
- c. Select landing lights on.
- d. Approaching the aerodrome, make a relevant blind broadcast to traffic on the controlled airfields frequency to indicate the probability of a radio communication failure, position and intentions.
- e. Join overhead the aerodrome at a height of 1000ft above circuit altitude to ascertain which is the active runway in use.
- f. Conform to the circuit pattern while joining, preferably on the downwind leg.
- g. Continue to make blind broadcasts on the controlled airfields frequency to indicate the position in the circuit pattern.
- h. Land and vacate the runway expeditiously and safely.
  - i. Taxi to the nearest parking area and shutdown.
  - j. Inform the owner or operator and ATC.
- k. Make the relevant entry in the aircraft's flight folio.

*NOTE: This procedure is to be used in the event the aerodrome at which the landing is to take place does not have specific procedures to be followed.*

**COMMUNICATION CONTINGENCY MEASURES WITHIN FAJO FIR**

In the possible event of the Johannesburg HF system becoming unserviceable, aircraft operating into the Johannesburg Oceanic FIR are to comply with the following:

Airborne traffic is required to maintain last assigned flight level until clearing the Johannesburg Oceanic area of responsibility unless a level change has been approved through one of the communication sources listed:

- Luanda FIC on freq: 8903kHz, 8960kHz, 5565kHz, 3461 & 2878kHz or
- Springbok Johannesburg on freq: 5532kHz, 8933kHz, 11354kHz, 13330kHz, 17925kHz, 21943kHz for relay purposes to Johannesburg Oceanic.

**EMERGENCY SATELLITE VOICE CALLS FROM AIRCRAFT**

In the event that all other means of communication have failed, dedicated satellite voice telephone numbers for various ATS units have been programmed into the aeronautical Ground Earth Stations of the Inmarsat Signatories. The allocated airborne numbers for use via the aircraft satellite voice equipment are as follows:

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ICAO DIFFERENCES OR STATE SPECIAL PROCEDURES**

**Primary number**

Johannesburg Oceanic	+27 11 928 6456
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**Secondary numbers**

Johannesburg Filter	+27 11 928 6454
Cape Town Filter	+27 21 937 1116
King Shaka Tower	+27 32 436 5002
Bloemfontein Tower	+27 51 503 7201/6
Port Elizabeth	+27 41 51 3585

It must be emphasized that these numbers are for emergency only, when all other airborne means of communication with the appropriate ATS unit have failed.



## SUDAN

## ICAO DIFFERENCES OR STATE SPECIAL PROCEDURES

**GENERAL**

In general, the Emergency, Unlawful Interference, Communications Failure, Interception and Search and Rescue procedures are in conformity with the Standards, Recommended Practices and Procedures in ICAO Annexes and Documents.

**EMERGENCY****BASIC PROCEDURE**

- a. Continue the flight in accordance with the current flight plan to the holding point at the aerodrome of first intended landing. Maintain the last acknowledged cruising level(s) shown in the flight plan.
- b. Arrange the flight so as to arrive over the holding point at, or as close as possible to the ETA last acknowledged by ATC. If no ETA has been acknowledged, arrange the flight so as to arrive over the holding point at, or as close as possible to the ETA as indicated in the filed flight plan and revised in accordance with the current flight plan.
- c. After passing the CRP where the contact to ATC failed, commence turn by 60 degree left or right of track and leave controlled airspace or advisory route at the last acknowledged cruising level.
- d. If radio failure occurs inside a CTR or TMA, proceed as cleared to the reporting point nearest to the boundary of the CTR or TMA before leaving controlled airspace as described above.
- e. When clear of controlled airspace or advisory route, climb either:
  1. to the cruising level requested in the filed flight plan if operating on a Request Level Change Enroute (RLCE) clearance; or
  2. to the accepted level on a heading that will keep the aircraft clear of controlled airspace and/or advisory route for a minimum period of 5 minutes and is also compatible with rejoining the intended airway or advisory route when the cruising level is reached.
- f. After reaching cruising level, return to controlled airspace or advisory route and proceed in accordance with normal radio failure procedure.

During day, the climb can be made in VMC; there is no need for the pilot to leave controlled airspace or an advisory route.

Should it be necessary to cross an airway during the climb, the airway should be crossed at right angles at an intermediate 500ft level.

## TUNISIA

## ICAO DIFFERENCES OR STATE SPECIAL PROCEDURES

**GENERAL**

In general, the Emergency, Unlawful Interference, Communications Failure, Interception and Search and Rescue procedures are in conformity with the Standards, Recommended Practices and Procedures in ICAO Annexes and Documents.

**COMMUNICATIONS FAILURE****SPECIAL PROCEDURE**

As soon as it is known that two-way communication has failed, ATC shall maintain separation between the aircraft having the communication failure and other aircraft based on the assumption that the aircraft will operate in accordance with VMC or IMC.

**VISUAL METEOROLOGICAL CONDITIONS (VMC)**

A controlled flight experiencing communication failure in VMC shall:

- a. set transponder to code 7600;
- b. continue to fly in VMC;
- c. land at the nearest suitable aerodrome;
- d. report its arrival time by the most expeditious means to the appropriate ATS unit.

**INSTRUMENT METEOROLOGICAL CONDITIONS (IMC)**

A controlled flight experiencing communication failure in IMC, or where it does not appear feasible to continue in VMC shall:

- a. Set transponder to code 7600.
- b. Maintain for a period of 7 minutes the last assigned speed and level or the minimum flight altitude, whichever is higher.

The period of 7 minutes commences:

1. If operating on a route without compulsory reporting points or if instructions have been received to omit position reports:
  - at the time the last assigned level or minimum flight altitude is reached; or
  - at the time the transponder is set to code 7600;whichever is later.
2. If operating on a route with compulsory reporting points and no instruction to omit position report has been received:
  - at the time the last assigned level or minimum flight altitude is reached; or
  - at the previously reported pilot estimate for the compulsory reporting point; or
  - at the previously of a failed report of position over a compulsory reporting point;whichever is later.

## TUNISIA

## ICAO DIFFERENCES OR STATE SPECIAL PROCEDURES

*NOTE: The period of 7 minutes is to allow the necessary Air Traffic Control and coordination measures.*

- c. Thereafter, adjust level and speed in accordance with the filed flight plan.

*NOTE: With regard to changes to level and speed, the filed flight plan, which is the flight plan as filed with an ATS unit by the pilot or a designated representative without any subsequent changes, will be used.*

- d. If being radar vectored or proceeding offset according to RNAV without a specified limit, proceed in the most direct manner possible to rejoin the current flight plan route no later than the next significant point, taking into consideration the applicable minimum flight altitude.

*NOTE: With regard to the route to be flown or the time to begin descend to the arrival aerodrome, the current flight plan, which is the flight plan including changes, if any, brought about by subsequent clearances, will be used.*

- e. Proceed according to the current flight plan route to the appropriate designated navigation aid serving the destination airport and, when required to ensure compliance with para f. below, hold over this aid until commencement of descent.
- f. Commence descent from the navigational aid specified in para e. above at, or as close as possible to, the EAT last received and acknowledged or, if no EAT has been received and acknowledged, at or as close as possible to, the ETA resulting in the current flight plan.
- g. Complete a normal instrument approach procedure as specified for the designated navigation aid.
- h. Land, if possible, within 30 minutes after the ETA specified in para f. above or the last acknowledged EAT, whichever is later.

*NOTE: Pilots are reminded that the aircraft may not be in an area of secondary surveillance radar coverage.*

## UGANDA

## ICAO DIFFERENCES OR STATE SPECIAL PROCEDURES

**GENERAL**

In general, the Emergency, Unlawful Interference, Communications Failure, Interception and Search and Rescue procedures are in conformity with the Standards, Recommended Practices and Procedures in ICAO Annexes and Documents.

**COMMUNICATIONS FAILURE****BASIC PROCEDURE**

- a. Continue the flight in accordance with the current flight plan to the holding point at the aerodrome of first intended landing. Maintain the last acknowledged cruising level(s) shown in the flight plan.
- b. Arrange the flight so as to arrive over the holding point at, or as close as possible to the estimated time of arrival last acknowledged by ATC. If no ETA has been acknowledged, arrange the flight so as to arrive over the holding point at, or as close as possible to the ETA as indicated in the filed flight plan and revised in accordance with the current flight plan. Pilots must follow the appropriate inbound route for the Control Zone or Control Area concerned.
- c. After arrival over the holding point, commence descent at, or as close as possible to, the expected approach time last received and acknowledged at, or as close as possible to, the expected approach time as indicated in the filed flight plan and revised in accordance with the current flight plan.
- d. Complete a normal instrument approach procedure as specified for the appropriate navigational aid. If delay not determined has been given and no EAT, do not attempt to land at the destination aerodrome but fly to another aerodrome following the Leaving Procedures outlined below.
- e. Land within 30 minutes of the time descent should have been started (i.e. the EAT or ETA referred to in c) above). If unable to land within this time, but able to complete an approach and landing visually, do so. If unable to land within the specified time, nor to approach and land visually, leave the vicinity of the aerodrome and any associated controlled airspace at the altitude and on the route specified on the instrument approach chart and as outlined under Leaving Procedures below. If no altitude or route is specified, fly at the last assigned altitude or minimum sector altitude, whichever is the higher, and avoid areas of dense traffic. Then, either
  - fly to an area in which flight may be continued in VMC and land at a suitable aerodrome there; or (if this is not possible)
  - select a suitable area in which to descend through cloud, fly visually to a suitable aerodrome and land as soon as practicable.

In either case, inform the ATC Service as soon as possible after landing.

**LEAVING PROCEDURE**

In the event of a missed approach:

## UGANDA

## ICAO DIFFERENCES OR STATE SPECIAL PROCEDURES

- land at the aerodrome of destination if this can be achieved within 30 minutes of the time descent from the holding point was commenced; or (if this is not possible)
- leave controlled airspace at once on the prescribed missed approach track for the procedure used as specified on the instrument approach chart, and proceed to the nominated alternate, climbing to and maintaining an appropriate flight level selected as follows:
  - Low performance aircraft: FL90, FL100;
  - Medium performance aircraft: FL160, FL170;
  - High performance aircraft: FL290, FL300.

**ADDITIONAL PROCEDURE TO BE ADOPTED IF OPERATING UNDER A “RLCE” CLEARANCE**

The additional radio failure procedures described below will be adopted for use in the case of radio failure while operating under a “RLCE” clearance where the pilot has informed ATC that the assigned cruising level is unacceptable for the whole duration of the flight.

In the event of radio failure the pilot should:

- a. After passing the compulsory reporting point at which he first failed to contact ATC turn 60° left or right and leave controlled airspace, maintaining the last cleared level.
- b. If the radio failure occurs inside a control zone or terminal control area, he should proceed as cleared to the reporting point nearest to the boundary of the control zone or terminal control area before leaving controlled airspace as described above.
- c. When clear of controlled airspace climb to either
  - the cruising level requested in the filed flight plan if operating on a “RLCE” clearance; or
  - the accepted cruising level on a heading that will keep the aircraft clear of controlled airspace for a minimum period of five minutes and is also compatible with rejoining the intended airway when cruising level is reached.
- d. When at cruising level, return to controlled airspace and proceed in accordance with normal radio failure procedure.

If, by day, the climb can be made in VMC there is no need for the pilot to leave controlled airspace.

Should it be necessary to cross an airway during the climb, the airway should be crossed at right angles at an intermediate 500ft level.

## ZAMBIA

## ICAO DIFFERENCES OR STATE SPECIAL PROCEDURES

**GENERAL**

In general, the Emergency, Unlawful Interference, Communications Failure, Interception and Search and Rescue procedures are in conformity with the Standards, Recommended Practices and Procedures in ICAO Annexes and Documents.

**EMERGENCY AND SURVIVAL****PUBLIC TRANSPORT AIRCRAFT**

The following minimum emergency and survival equipment to be carried in all public transport aircraft and other flights, engaged in flights across notified areas where search and rescue would be especially difficult:

- a. Four White Fabric Strips, 2.5 x 0.6m (8 x 2ft) for making the ground signals;
- b. Very pistol and at least six cartridges or six hand held flares;
- c. Emergency rations and water sufficient to sustain all occupants of the aircraft for at least three days;
- d. Heliograph or signalling mirror;
- e. Marching compass;
- f. Axe and large knife;
- g. Flashing light;
- h. Water proof matches;
  - i. Insect repellent;
  - j. Water bag;
- k. Water purifying tablets;
- l. First-aid kit;
- m. Portable survival radio equipment stored so as to facilitate its ready use in an emergency and must operate on VHF.

**PRIVATE AIRCRAFT**

Whilst there is no regulation for compulsory carriage of survival and first aid equipment in private category aircraft, it is strongly recommended that such equipment particularly first aid kit and white signalling strips listed above be carried by private aircraft whilst on cross country flights across areas where search and rescue is difficult.

## ZIMBABWE

## ICAO DIFFERENCES OR STATE SPECIAL PROCEDURES

**GENERAL**

In general, the Emergency, Unlawful Interference, Communications Failure, Interception and Search and Rescue procedures are in conformity with the Standards, Recommended Practices and Procedures in ICAO Annexes and Documents.

**COMMUNICATIONS FAILURE****Flights in Instrument Meteorological Conditions (IMC)**

If in instrument meteorological conditions, or when weather conditions are such that it does not appear feasible to complete the flight in accordance to flight plan, the aircraft shall:

- a. proceed according to the current flight plan to the appropriate designated navigation aid serving the aerodrome of intended landing and, when required to ensure compliance with b) below, hold over this aid until commencement of descent;
- b. commence descent from the navigational aid specified in a) at, or as close as possible to, the expected approach time of arrival resulting from the current flight plan;
- c. complete a normal instrument approach as specified for the designated navigation aid, and
- d. land, if possible, within 30 minutes after the estimated time of arrival specified in b) or the last acknowledged expected approach time, whichever is later.



# Airport Directory





# Airport Directory

Airport Decode Listings - Africa

**AFRICA**  
**IATA LOCATION IDENTIFIERS DECODE**

<b>A</b>		APL	Nampula, Mozambique
AAC	El Arish (El Arish Intl), Egypt	ARK	Arusha, Tanzania
AAE	Annaba (Rabah Bitat), Algeria	ASA	Assab (Assab Intl), Eritrea
ABJ	Abidjan (Felix Houphouet Boigny Intl), Cote d'Ivoire	ASI	Ascension I. (Ascension Aux AB), Ascension I
ABS	Abu Simbel, Egypt	ASK	Yamoussoukro, Cote d'Ivoire
ABV	Abuja (Nnamdi Azikiwe Intl), Nigeria	ASM	Asmara (Asmara Intl), Eritrea
ACC	Accra (Kotoka Intl), Ghana	ASV	Amboseli, Kenya
ACE	Lanzarote, Canary Is	ASW	Aswan (Aswan Intl), Egypt
ADD	Addis Abeba (Bole Intl), Ethiopia	ATB	Atbara, Sudan
ADI	Arandis, Namibia	ATJ	Antsirabe, Madagascar
AEH	Abeche, Chad	ATR	Atar, Mauritania
AFD	Port Alfred, S Afr Rep	ATV	Ati, Chad
AGA	Agadir (Al Massira Intl), Morocco	ATZ	Asyut (Asyut Intl), Egypt
AHU	Al Hoceima (Cherif El Idrissi Intl), Morocco	AXU	Axum, Ethiopia
AIG	Yalinga, Cen Afr Rep	AZR	Adrar (Touat Cheikh Sidi Mohamed Belkebir), Algeria
AJY	Agadez (Mano Dayak), Niger	<b>B</b>	
AKF	Kufra, Libya	BBK	Kasane (Kasane Intl), Botswana
AKR	Akure, Nigeria	BBO	Berbera, Somalia
ALG	Algiers (Houari Boumediene), Algeria	BBT	Berberati, Cen Afr Rep
ALJ	Alexander Bay, S Afr Rep	BDT	Gbadolite, Congo, Dr Of
ALY	Alexandria (Alexandria Intl), Egypt	BEN	Benghazi (Benina Intl), Libya
AMB	Ambilobe, Madagascar	BEW	Beira, Mozambique
AMC	Am-Timan, Chad	BFN	Bloemfontein (Bram Fischer Intl), S Afr Rep
AMH	Arba Minch, Ethiopia	BFO	Chiredzi (Buffalo Range), Zimbabwe
AMO	Mao, Chad	BFX	Bafoussam, Cameroon
AMP	Ampanihy, Madagascar	BGF	Bangui (M'Poko), Cen Afr Rep
ANJ	Zanaga, Congo, Rep Of	BGH	Boghe, Mauritania
ANM	Antalaha (Antsirabato), Madagascar	BIY	Bhisho, S Afr Rep
ANO	Angoche, Mozambique		

**AFRICA**  
**IATA LOCATION IDENTIFIERS DECODE**

BJA	Bejaia (Soummam-Abane Ramdane), Algeria	BUX	Bunia, Congo, Dr Of
BJL	Banjul (Banjul Intl), Gambia	BVC	Rabil (Aristides Pereira Intl), Cape Verde
BJM	Bujumbura (Melchior Ndadaye Intl), Burundi	BXE	Bakel, Senegal
BJR	Bahir Dar (Bahir Dar Intl), Ethiopia	BYK	Bouake, Cote d'Ivoire
BKJ	Boke (Baralande), Guinea Rep	BZU	Buta-Zega, Congo, Dr Of
BKO	Bamako (Modibo Keita/Senou), Mali	BZV	Brazzaville (Maya-Maya), Congo, Rep Of
BKR	Bokoro, Chad	<b>C</b>	
BKY	Bukavu (Kavuma), Congo, Dr Of	CAB	Cabinda, Angola
BLC	Bali, Cameroon	CAI	Cairo (Cairo Intl), Egypt
BLJ	Batna (Mostepha Ben Boulaid), Algeria	CBH	Bechar (Boudghene Ben Ali Lotfi), Algeria
BLZ	Blantyre (Chileka Intl), Malawi	CBQ	Calabar (Margaret Ekpo), Nigeria
BMW	Bordj Mokhtar, Algeria	CBT	Catumbela, Angola
BNI	Benin, Nigeria	CFK	Chlef, Algeria
BOP	Bouar, Cen Afr Rep	CIP	Chipata, Zambia
BOY	Bobo-Dioulasso, Burkina Faso	CKY	Conakry (Gbessia), Guinea Rep
BOZ	Bozoum, Cen Afr Rep	CMK	Club Makokola, Malawi
BPC	Bamenda, Cameroon	CMN	Casablanca (Mohammed V Intl), Morocco
BPY	Besalampy, Madagascar	COO	Cotonou (Cadjehoun Intl), Benin
BSA	Bosaso (Bosaso Intl), Somalia	CPA	Harper (Cape Palmas), Liberia
BSG	Bata, Eq Guinea	CPT	Cape Town (Cape Town Intl), S Afr Rep
BSK	Biskra (Mohamed Khider), Algeria	CSK	Cap Skirring, Senegal
BSN	Bossangoa, Cen Afr Rep	CZL	Constantine (Mohamed Boudiaf), Algeria
BTE	Bonthe, Sierra Leone	<b>D</b>	
BTQ	Butare, Rwanda	DAK	Dakhla, Egypt
BUG	Benguela (17th of September), Angola	DAR	Dar-Es-Salaam (Julius Nyerere Intl), Tanzania
BUJ	Bou Saada, Algeria		
BUO	Burao, Somalia		
BUQ	Bulawayo (J.M. Nkomo), Zimbabwe		

**AFRICA**  
**IATA LOCATION IDENTIFIERS DECODE**

DBB	Al Alamain (Al Alamain Intl), Egypt	ERH	Errachidia (Moulay Ali Cherif Intl), Morocco
DGU	Dedougou, Burkina Faso	ERS	Windhoek (Eros), Namibia
DIE	Antsiranana (Arrachart), Madagascar	ESU	Essaouira (Mogador Intl), Morocco
DIR	Dire Dawa (Dire Dawa Intl), Ethiopia	EUN	Laayoune (Hassan I), Dakhla/Laayoune
DIS	Dolisie, Congo, Rep Of	EYL	Yelimane, Mali
DJE	Djerba (Zarzis), Tunisia	EYS	Eliye Springs, Kenya
DJG	Djanet (Tiska), Algeria		
DKA	Katsina, Nigeria	<b>F</b>	
DKR	Dakar (Leopold Sedar Senghor), Senegal	FAA	Faranah (Badala), Guinea Rep
DLA	Douala, Cameroon	FBM	Lubumbashi (Lubumbashi Intl), Congo, Dr Of
DOD	Dodoma, Tanzania	FER	Kalokol (Ferguson's Gulf), Kenya
DOG	Dongola, Sudan	FEZ	Fes (Saiss Intl), Morocco
DSC	Dschang, Cameroon	FIG	Fria (Katourou), Guinea Rep
DSE	Combolcha, Ethiopia	FIH	Kinshasa (N'Djili Intl), Congo, Dr Of
DSS	Dakar-Diass (Blaise Diagne Intl), Senegal	FKI	Kisangani (Bangoka Intl), Congo, Dr Of
DUR	Durban (King Shaka Intl), S Afr Rep	FMI	Kalemie, Congo, Dr Of
DZA	Dzaoudzi (Pamandzi), Mayotte	FNA	Freetown (Lungi), Sierra Leone
<b>E</b>		FNG	Fada N'Gourma, Burkina Faso
EBB	Entebbe (Entebbe Intl), Uganda	FOM	Foumban (Nkounja), Cameroon
EBD	El Obeid, Sudan	FRW	Francistown (Francistown Intl), Botswana
EBH	El Bayadh, Algeria	FTU	Tolagnaro, Madagascar
EBM	El Borma, Tunisia	FUE	Fuerteventura, Canary Is
EDL	Eldoret (Eldoret Intl), Kenya	FYT	Faya-Largeau, Chad
ELF	El Fashir, Sudan		
ELG	El Golea, Algeria	<b>G</b>	
ELS	East London, S Afr Rep	GAE	Gabes (Matmata), Tunisia
ELT	El Tor, Egypt	GAF	Gafsa (Ksar), Tunisia
ELU	El Oued (Guemar), Algeria	GAQ	Gao (Korogoussou), Mali
ENU	Enugu (Akanu Ibiam), Nigeria		

**AFRICA**  
**IATA LOCATION IDENTIFIERS DECODE**

GAS	Garissa, Kenya	HBE	Alexandria (Borg El Arab Intl), Egypt
GBE	Gaborone (Sir Seretse Khama Intl), Botswana	HDS	Hoedspruit (Hoedspruit AB), S Afr Rep
GBK	Gbangbatoke, Sierra Leone	HGA	Egal, Somalia
GCJ	Grand Central, S Afr Rep	HGO	Korhogo, Cote d'Ivoire
GDQ	Gonder, Ethiopia	HGS	Hastings, Sierra Leone
GFY	Grootfontein, Namibia	HLA	Lanseria (Lanseria Intl), S Afr Rep
GGM	Kakamega, Kenya	HLW	Hluhluwe, S Afr Rep
GHA	Ghardaia (Noumerat-Moufdi Zakaria), Algeria	HMB	Suhag (Suhag Intl), Egypt
GHT	Ghat, Libya	HME	Hassi Messaoud (Krim Belkacem), Algeria
GID	Gitega, Burundi	HOA	Hola, Kenya
GII	Siguiri, Guinea Rep	HRE	Harare (Robert Gabriel Mugabe Intl), Zimbabwe
GJL	Jijel (Ferhat Abbas), Algeria	HRG	Hurghada (Hurghada Intl), Egypt
GLN	Guelmim, Morocco	HVA	Analalava, Madagascar
GMA	Gemena, Congo, Dr Of	HWN	Hwange (Hwange National Park), Zimbabwe
GMB	Gambella, Ethiopia		
GMD	Benslimane, Morocco		
GMO	Gombe, Nigeria	<b>I</b>	
GMZ	La Gomera, Canary Is	IAM	Zarzaitine (In Amenas), Algeria
GNZ	Ghanzi, Botswana	IBA	Ibadan, Nigeria
GOB	Goba (Robe), Ethiopia	IHC	Inhaca, Mozambique
GOM	Goma (Goma Intl), Congo, Dr Of	IHO	Ihosy, Madagascar
GOU	Garoua, Cameroon	ILK	Ilaka (Atsinanana), Madagascar
GRJ	George, S Afr Rep	ILR	Ilorin, Nigeria
GSQ	Shark El Oweinat, Egypt	ILU	Kilaguni, Kenya
GUD	Goundam, Mali	IMO	Zemio, Cen Afr Rep
GYI	Gisenyi, Rwanda	INF	In Guezzam, Algeria
		INH	Inhambane, Mozambique
<b>H</b>		INZ	In Salah, Algeria
HAH	Moroni (Prince Said Ibrahim), Comoros	IRI	Iringa, Tanzania

**AFRICA**  
**IATA LOCATION IDENTIFIERS DECODE**

IRO	Birao, Cen Afr Rep	KGL	Kigali (Kigali Intl), Rwanda
IRP	Isiro-Matari, Congo, Dr Of	KHW	Khwai River, Botswana
<b>J</b>		KIM	Kimberley, S Afr Rep
JIB	Djibouti (Ambouli), Djibouti	KIS	Kisumu, Kenya
JIM	Jimma (Aba Jifar), Ethiopia	KIW	Kitwe (Southdowns), Zambia
JNB	Johannesburg (O.R. Tambo Intl), S Afr Rep	KLC	Kaolack, Senegal
JOS	Jos (Yakubu Gowon), Nigeria	KLI	Kotakoli, Congo, Dr Of
JRO	Kilimanjaro (Kilimanjaro Intl), Tanzania	KME	Kamembe, Rwanda
JUB	Juba, Sudan	KMN	Kamina (Kamina Base), Congo, Dr Of
JVA	Ankavandra, Madagascar	KMP	Keetmanshoop, Namibia
JWA	Jwaneng, Botswana	KMS	Kumasi, Ghana
<b>K</b>		KMU	Kisimayu, Somalia
CAA	Kasama, Zambia	KND	Kindu, Congo, Dr Of
KAB	Kariba (Kariba Intl), Zimbabwe	KNN	Kankan (Diankana), Guinea Rep
KAD	Kaduna (New Kaduna), Nigeria	KNZ	Kenieba, Mali
KAN	Kano (Mallam Aminu Kano), Nigeria	KRE	Kirundo, Burundi
KBA	Kabala, Sierra Leone	KRT	Khartoum, Sudan
KBS	Bo, Sierra Leone	KSE	Kasese, Uganda
KCU	Masindi, Uganda	KSI	Kissidougou, Guinea Rep
KDA	Kolda (Sare Bidji), Senegal	KSL	Kassala, Sudan
KDX	Kadugli, Sudan	KSS	Sikasso (Dignangan), Mali
KEN	Kenema, Sierra Leone	KTL	Kitale, Kenya
KEO	Odiene, Cote d'Ivoire	KTX	Koutiala, Mali
KEU	Masai Mara (Keekorok), Kenya	KWZ	Kolwezi, Congo, Dr Of
KEY	Kericho, Kenya	KYS	Kayes (Dag Dag), Mali
KFA	Kiffa, Mauritania	<b>L</b>	
KGA	Kananga, Congo, Dr Of	LAD	Luanda (4th Of February), Angola
KGJ	Karonga, Malawi	LAQ	El Beida (Labraq), Libya
		LAY	Ladysmith, S Afr Rep
		LBV	Libreville (Leon M'ba), Gabon

**AFRICA**  
**IATA LOCATION IDENTIFIERS DECODE**

LEK	Labe (Tata), Guinea Rep	MBQ	Mbarara, Uganda
LFW	Lome (Gnassingbe Eyadema), Togo	MCA	Macenta, Guinea Rep
LIX	Likoma, Malawi	MDK	Mbandaka, Congo, Dr Of
LKG	Lokichogio, Kenya	MFC	Mafeteng, Lesotho
LLE	Malelane, S Afr Rep	MFF	Moanda (Bangombe), Gabon
LLI	Lalibella, Ethiopia	MFQ	Maradi, Niger
LLW	Lilongwe (Kamuzu Intl), Malawi	MFU	Mfuwe, Zambia
LMQ	Marsa Brega S21, Libya	MGH	Margate, S Afr Rep
LOK	Lodwar, Kenya	MGQ	Mogadishu (Aden Adde Intl), Somalia
LOS	Lagos (Murtala Muhammed), Nigeria	MIR	Monastir (Habib Bourguiba), Tunisia
LOY	Loyangalani, Kenya	MIU	Maiduguri, Nigeria
LPA	Gran Canaria, Canary Is	MJA	Manja, Madagascar
LRB	Leribe, Lesotho	MJC	Man, Cote d'Ivoire
LRL	Niamtougou (Niamtougou Intl), Togo	MJI	Tripoli (Mitiga Intl), Libya
LTA	Tzaneen, S Afr Rep	MJL	Mouila (Mouila Ville), Gabon
LTD	Ghadames, Libya	MJM	Mbuji-Mayi, Congo, Dr Of
LUD	Luderitz, Namibia	MJN	Mahajanga (Philibert Tsiranana), Madagascar
LUN	Lusaka (Kenneth Kaunda Intl), Zambia	MKH	Mokhotlong, Lesotho
LUO	Luena, Angola	MKI	Obo (M'Boki), Cen Afr Rep
LVI	Livingstone (Harry Mwaanga Nkumbula Intl), Zambia	MKJ	Makoua, Congo, Rep Of
LXR	Luxor (Luxor Intl), Egypt	MLN	Melilla, Melilla
LXU	Lukulu, Zambia	MLW	Monrovia (Spriggs Payne), Liberia
<b>M</b>			
MAK	Malakal, Sudan	MMF	Mamfe, Cameroon
MAT	Matadi-Tshimpi, Congo, Dr Of	MMO	Maio, Cape Verde
MAX	Matam (Ouro Sogui), Senegal	MNC	Nacala, Mozambique
MBA	Mombasa (Moi Intl), Kenya	MNJ	Mananjary, Madagascar
MBD	Mafikeng (George Dick Montshioa), S Afr Rep	MNR	Mongu, Zambia
		MNS	Mansa, Zambia
		MOM	Moudjeria (Letfotar), Mauritania
		MOQ	Morondava, Madagascar

**AFRICA**  
**IATA LOCATION IDENTIFIERS DECODE**

MPA	Katima Mulilo, Namibia	<b>N</b>	
MPM	Maputo (Maputo Intl), Mozambique	NBE	Enfidha (Hammamet), Tunisia
MQP	Kruger Mpumalanga (Kruger Mpu- malanga Intl), S Afr Rep	NBO	Nairobi (Jomo Kenyatta Intl), Kenya
MQQ	Moundou, Chad	NCS	Newcastle, S Afr Rep
MQX	Mekele (Alula Aba Nega), Ethiopia	NDB	Nouadhibou, Mauritania
MRA	Misrata (Misrata Intl), Libya	NDE	Mandera, Kenya
MRU	Mauritius (Sir Seewoosagur Ram- goolam Intl), Mauritius	NDJ	N'Djamena (Hassan Djamous), Chad
MSU	Maseru (Moshoeshoe I Intl), Lesotho	NDL	N'Dele, Cen Afr Rep
MSW	Massawa (Massawa Intl), Eritrea	NDR	Nador (El Aroui Intl), Morocco
MSZ	Namibe (Welwitschia Mirabilis), An- gola	NDU	Rundu, Namibia
MTS	Manzini (Matsapha), Eswatini	NGE	N'Gaoundere, Cameroon
MUB	Maun (Maun Intl), Botswana	NIA	Nimba (Lamco), Liberia
MUH	Mersa Matruh (Mersa Matruh Intl), Egypt	NIM	Niamey (Diori Hamani), Niger
MUW	Ghriss, Algeria	NIX	Nioro, Mali
MUZ	Musoma, Tanzania	NKC	Nouakchott (Oumtounsy), Mauritania
MVB	Franceville (M'Vengue), Gabon	NLA	Ndola, Zambia
MVO	Mongo, Chad	NLO	Kinshasa (N'Dolo), Congo, Dr Of
MVR	Maroua-Salak, Cameroon	NOS	Nosy-Be (Fascene), Madagascar
MVZ	Masvingo (Masvingo Intl), Zimbabwe	NOV	Huambo (Albano Machado), Angola
MWE	Merowe, Sudan	NRM	Nara (Keibane), Mali
MWZ	Mwanza, Tanzania	NSI	Yaounde (Nsimalen), Cameroon
MXJ	Minna, Nigeria	NTY	Pilanesberg (Pilanesberg Intl), S Afr Rep
MXM	Morombe, Madagascar	NUU	Nakuru (Lanet), Kenya
MXT	Maintirano, Madagascar	NYE	Nyeri, Kenya
MYD	Malindi, Kenya	NYI	Sunyani, Ghana
MYW	Mtwara, Tanzania	NYK	Nanyuki, Kenya
MZI	Mopti (Ambodedjo), Mali	NZE	Nzerekore (Konia), Guinea Rep
		<b>O</b>	
		ODA	Ouadda, Cen Afr Rep
		ODJ	Ouanda-Djalle, Cen Afr Rep



**AFRICA**  
**IATA LOCATION IDENTIFIERS DECODE**

OGX	Ouargla (Ain Beida), Algeria	PKO	Parakou, Benin
OKN	Okondja, Gabon	PKW	Selebi-Phikwe, Botswana
OLL	Ollombo (Sassou N'Guesso), Congo, Rep Of	PLF	Pala, Chad
OMB	Omboue (Omboue Hospital), Gabon	PLZ	Port Elizabeth (Port Elizabeth Intl), S Afr Rep
OMD	Oranjemund, Namibia	PMA	Pemba (Chake Chake), Tanzania
OND	Ondangwa, Namibia	PNR	Pointe Noire (Antonio Agostinho Neto), Congo, Rep Of
ORN	Oran (Ahmed Benbella), Algeria	POD	Podor, Senegal
ORP	Orapa, Botswana	POG	Port Gentil, Gabon
OUA	Ouagadougou, Burkina Faso	POL	Pemba, Mozambique
OUD	Oujda (Angads Intl), Morocco	PRI	Praslin, Seychelles
OUE	Ouessou, Congo, Rep Of	PRY	Pretoria (Wonderboom), S Afr Rep
OUH	Oudtshoorn, S Afr Rep	PSD	Port Said, Egypt
OUR	Batouri, Cameroon	PTG	Polokwane (Polokwane Intl), S Afr Rep
OUT	Bouso, Chad	PZB	Pietermaritzburg, S Afr Rep
OUZ	Zouerate (Tazadit), Mauritania	PZU	Port Sudan, Sudan
OVA	Bekily, Madagascar	<b>Q</b>	
OVG	Overberg (Overberg AB), S Afr Rep	QOW	Owerri (Sam Mbakwe), Nigeria
OXB	Bissau (Osvaldo Viera), Guinea-Bissau	QRA	Johannesburg (Rand), S Afr Rep
OYE	Oyem, Gabon	QSF	Setif (8 Mai 45), Algeria
OZG	Zagora, Morocco	QUB	Ubari, Libya
OZZ	Ouarzazate (Ouarzazate Intl), Morocco	QUO	Uyo (Victor Attah Intl), Nigeria
<b>P</b>		<b>R</b>	
PAF	Pakuba, Uganda	RAI	Praia (Mandela Intl), Cape Verde
PBZ	Plettenberg Bay, S Afr Rep	RAK	Marrakech (Menara Intl), Morocco
PCP	Principe, Sao Tome & Principe	RBA	Rabat (Sale Intl), Morocco
PDD	Ponta De Ouro, Mozambique	RBT	Marsabit, Kenya
PHC	Port Harcourt, Nigeria	RCB	Richards Bay, S Afr Rep
PHW	Phalaborwa (Kruger Park Gateway), S Afr Rep	RDT	Richard Toll, Senegal

**AFRICA**  
**IATA LOCATION IDENTIFIERS DECODE**

RHG	Ruhengeri, Rwanda	SPC	La Palma, Canary Is
RMF	Marsa Alam (Marsa Alam Intl), Egypt	SPY	San Pedro, Cote d'Ivoire
ROB	Monrovia (Roberts Intl), Liberia	SRH	Sarh, Chad
RRG	Rodrigues (Plaine Corail), Mauritius	SRT	Soroti, Uganda
RSS	Damazin, Sudan	SRX	Sirte (Ghardabiya Intl), Libya
RUN	La Reunion (Roland Garros), Reunion	SSG	Malabo, Eq Guinea
RVA	Farafangana, Madagascar	SSH	Sharm El Sheikh (Sharm El Sheikh Intl), Egypt
<b>S</b>		SVB	Sambava (Sambava South), Madagascar
SBI	Koundara (Sambailo), Guinea Rep	SWP	Swakopmund, Namibia
SDB	Langebaanweg, S Afr Rep	SWX	Shakawe, Botswana
SDD	Lubango (Mukanka), Angola	SZK	Skukuza, S Afr Rep
SEB	Sebha, Libya	<b>T</b>	
SEZ	Seychelles (Seychelles Intl), Seychelles	TBJ	Tabarka (Ain Draham), Tunisia
SFA	Sfax (Thyna), Tunisia	TBO	Tabora, Tanzania
SGX	Songea, Tanzania	TBY	Tshabong, Botswana
SHK	Sehonghong, Lesotho	TCH	Tchibanga, Gabon
SHY	Shinyanga (Ibadakuli), Tanzania	TCP	Taba (Taba Intl), Egypt
SIB	Sibiti, Congo, Rep Of	TEE	Tebessa (Cheikh Larbi Tebessi), Algeria
SID	Sal (Amilcar Cabral), Cape Verde	TET	Tete (Chingozi), Mozambique
SIS	Sishen, S Afr Rep	TFN	Tenerife-North, Canary Is
SKO	Sokoto (Saddiq Abubakar III Intl), Nigeria	TFS	Tenerife-South (Reina Sofia), Canary Is
SKV	St Catherine, Egypt	TGR	Touggourt (Sidi Mahdi), Algeria
SLI	Solwezi, Zambia	TGT	Tanga, Tanzania
SMS	Sainte-Marie, Madagascar	THC	Tchien, Liberia
SMY	Simenti, Senegal	THI	Tichitt, Mauritania
SNE	Preguica, Cape Verde	THT	Tamchakett, Mauritania
SNI	Greenville (Sinoe), Liberia	THZ	Tahoua, Niger
SOK	Semonkong, Lesotho		

**AFRICA**  
**IATA LOCATION IDENTIFIERS DECODE**

TID	Tiaret (Abdelhafid Boussouf Bou Chekif), Algeria	UAS	Samburu South (Buffalo Spring), Kenya
TIN	Tindouf, Algeria	UCN	Buckanan, Liberia
TIP	Tripoli (Tripoli Intl), Libya	UEL	Quelimane, Mozambique
TKC	Tiko, Cameroon	ULD	Ulundi (Prince Mangosuthu Buthelezi), S Afr Rep
TKD	Takoradi, Ghana	ULU	Gulu, Uganda
TKQ	Kigoma, Tanzania	UNE	Qacha's Nek, Lesotho
TLD	Limpopo Valley, Botswana	UTN	Upington (Upington Intl), S Afr Rep
TLE	Toliary, Madagascar	UTT	Mthatha, S Afr Rep
TLM	Tlemcen (Zenata-Messali El Hadj), Algeria	UVL	El Kharga, Egypt
TMD	Timbedra, Mauritania	UYL	Nyala, Sudan
TML	Tamale, Ghana	<b>V</b>	
TMM	Toamasina, Madagascar	VDE	Hierro, Canary Is
TMR	Tamenghasset (Aguenar-Hadj Bey Akhamok), Algeria	VFA	Victoria Falls, Zimbabwe
TMS	Sao Tome (Sao Tome Intl), Sao Tome & Principe	VHC	Saurimo, Angola
TMX	Timimoun, Algeria	VIL	Dakhla (Dakhla Intl), Dakhla/Laayoune
TNG	Tanger (Ibn Batouta Intl), Morocco	VIR	Durban (Virginia), S Afr Rep
TNR	Antananarivo (Ivato), Madagascar	VNX	Vilankulo, Mozambique
TOB	Tobruk, Libya	VPE	Ondjiva (11th of November), Angola
TOE	Tozeur (Nefta), Tunisia	VPY	Chimoio, Mozambique
TOM	Tombouctou, Mali	VVB	Mahanoro, Madagascar
TTA	Tan Tan (Plage Blanche Intl), Morocco	VVZ	Illizi (Takhamalt), Algeria
TTU	Tetouan (Saniat R'mel), Morocco	VXC	Lichinga, Mozambique
TUD	Tambacounda, Senegal	VXE	Sao Pedro (Cesaria Evora Intl), Cape Verde
TUN	Tunis (Carthage), Tunisia	<b>W</b>	
TXU	Tabou, Cote d'Ivoire	WAI	Antsohihy (Ambalabe), Madagascar
<b>U</b>		WAM	Ambatondrazaka, Madagascar
UAR	Bouarfa, Morocco	WAQ	Antsalova, Madagascar

**AFRICA**  
**IATA LOCATION IDENTIFIERS DECODE**

WBO	Beroroha (Antsoa), Madagascar	XLS	St Louis, Senegal
WDH	Windhoek (Hosea Kutako Intl), Namibia	XMI	Masasi, Tanzania
WFI	Fianarantsoa, Madagascar	<b>Y</b>	
WHF	Wadi Halfa, Sudan	YAO	Yaounde/Ville, Cameroon
WIL	Nairobi (Wilson), Kenya	YOL	Yola, Nigeria
WJR	Wajir, Kenya	<b>Z</b>	
WKF	Waterkloof, S Afr Rep	ZAR	Zaria, Nigeria
WMA	Mandritsara, Madagascar	ZEC	Secunda, S Afr Rep
WMD	Mandabe, Madagascar	ZIG	Ziguinchor, Senegal
WMN	Maroantsetra, Madagascar	ZND	Zinder, Niger
WUU	Wau, Sudan	ZNZ	Zanzibar (Abeid Amani Karume Intl), Tanzania
WVB	Walvis Bay, Namibia	ZSE	St Pierre (Pierrefonds), Reunion
WVK	Manakara, Madagascar	ZSS	Sassandra, Cote d'Ivoire
WYE	Yengema, Sierra Leone	ZWA	Andapa, Madagascar
<b>X</b>		ZZU	Mzuzu, Malawi
XGA	Amilcar Cabral De Gaoua, Burkina Faso		

**AFRICA**  
**JEPPESSEN NAVDATA (ICAO) LOCATION IDENTIFIERS DECODE**

<b>DA</b>	<b>FIR/UIR</b>	<b>DAOV</b>	Ghriss	<b>DFOG</b>	Amilcar Cabral De Gaoua
DAAA	Algiers FIR	DAOY	El Bayadh	<b>DFOO</b>	Bobo-Dioulasso
<b>DA</b>	<b>Algeria</b>	DATG	In Guezzam	<b>DG</b>	<b>FIR/UIR</b>
DAAD	Bou Saada	DATM	Bordj Mokhtar	DGAC	Accra FIR
DAAE	Bejaia (Soummam-Abane Ramdane)	DAUA	Adrar (Touat Cheikh Sidi Mohamed Bel-kebir)	<b>DG</b>	<b>Ghana</b>
DAAG	Algiers (Houari Bou-medienne)	DAUB	Biskra (Mohamed Khider)	DGAA	Accra (Kotoka Intl)
DAAJ	Djanet (Tiska)	DAUE	El Golea	DGLE	Tamale
DAAP	Illizi (Takhamalt)	DAUG	Ghardaia (Noumer-at-Moufdi Zakaria)	DGLN	Navrongo
DAAS	Setif (8 Mai 45)	DAUH	Hassi Messaoud (Krim Belkacem)	DGLW	Wa
DAAT	Tamenghasset (Aguenar-Hadj Bey Akhamok)	DAUI	In Salah	DGSI	Kumasi
DAAV	Jijel (Ferhat Abbas)	DAUK	Touggourt (Sidi Mahdi)	DGSN	Sunyani
DABB	Annaba (Rabah Bitat)	DAUO	El Oued (Guemar)	DGTK	Takoradi
DABC	Constantine (Mohamed Boudiaf)	DAUT	Timimoun	<b>DI</b>	<b>Cote d'Ivoire</b>
DABS	Tebessa (Cheikh Larbi Tebessi)	DAUU	Ouargla (Ain Beida)	DIAP	Abidjan (Felix Houphouet Boigny Intl)
DABT	Batna (Mostepha Ben Boulaid)	DAUZ	Zarzaitine (In Amenas)	DIBI	Boundiali
DAOB	Tiaret (Abdelhafid Boussouf Bou Chekif)	<b>DB</b>	<b>Benin</b>	DIBK	Bouake
DAOF	Tindouf	DBBB	Cotonou (Cadjehoun Intl)	DIBN	Bouna (Tehini)
DAOI	Chlef	DBBP	Parakou	DIBU	Bondoukou (Soko)
DAON	Tlemcen (Zenata-Messali El Hadj)	<b>DF</b>	<b>Burkina Faso</b>	DIDB	Dabou
DAOO	Oran (Ahmed Ben-bella)	DFFD	Ouagadougou	DIDK	Dimbokro (Ville)
DAOR	Bechar (Boudghene Ben Ali Lotfi)	DFOD	Dedougou	DIGL	Guiglo
				DIGN	Grand Bereby (Nero-Mer)
				DIKO	Korhogo
				DIMN	Man
				DIOD	Odienne
				DISG	Seguela
				DISP	San Pedro

**AFRICA**  
**JEPPESSEN NAVDATA (ICAO) LOCATION IDENTIFIERS DECODE**

DISS	Sassandra	DNIL	Ilorin	DRRC	Dogondoutchi
DITB	Tabou	DNIM	Owerri (Sam Mbakwe)	DRRG	Gaya
DITM	Touba (Mahana)	DNJO	Jos (Yakubu Gowon)	DRRM	Maradi
DIYO	Yamoussoukro	DNKA	Kaduna (New Kaduna)	DRRN	Niamey (Diori Hamani)
<b>DN</b>	<b>FIR/UIR</b>	DNKN	Kano (Mallam Aminu Kano)	DRRP	La Tapoa
DNKK	Kano FIR	DNKT	Katsina	DRRT	Tahoua
<b>DN</b>	<b>Nigeria</b>	DNMA	Maiduguri	DRZA	Agadez (Mano Dayak)
DNAA	Abuja (Nnamdi Azikiwe Intl)	DNMM	Lagos (Murtala Muhammed)	DRZD	Dirkou
DNAI	Uyo (Victor Attah Intl)	DNMN	Minna	DRZF	Diffa
DNAK	Akure	DNPO	Port Harcourt	DRZG	Goure
DNAS	Asaba	DNPS	Port Harcourt (Port Harcourt Shell Industrial Area Heliport)	DRZI	Iferouane
DNBC	Bauchi (Sir Abubakar Tafawa Balewa)	DNSK	Soku (Soku Heliport)	DRZR	Zinder
DNBE	Benin	DNSO	Sokoto (Saddiq Abubakar III Intl)	<b>DT</b>	<b>FIR/UIR</b>
DNBK	Birnin Kebbi (Sir Ahmadu Bello)	DNSU	Osubi	DTTC	Tunis FIR
DNBY	Bayelsa	DNWI	Warri (Warri Industrial Area Heliport)	DTTC	Tunis UIR
DNCA	Calabar (Margaret Ekpo)	DNYO	Yola	<b>DT</b>	<b>Tunisia</b>
DNDS	Dutse	DNZA	Zaria	DTKA	Tabarka (Ain Draham)
DNEK	Eket	<b>DR</b>	<b>FIR/UIR</b>	DTMB	Monastir (Habib Bourguiba)
DNEN	Enugu (Akanu Ibiam)	DRRR	Niamey FIR	DTNH	Enfidha (Hammamet)
DNES	Escravos	DRRR	Niamey UIR	DTTA	Tunis (Carthage)
DNFB	Bonny (Finima)	<b>DR</b>	<b>Niger</b>	DTTF	Gafsa (Ksar)
DNFD	Forcados (Forcados Terminal)	DRRA	Tessaoua	DTTG	Gabes (Matmata)
DNGB	Gbaran Ubie			DTTI	Borj El Amri
DNGO	Gombe			DTTJ	Djerba (Zarzis)
DNIB	Ibadan			DTTR	El Borma

**AFRICA**  
**JEPPESSEN NAVDATA (ICAO) LOCATION IDENTIFIERS DECODE**

DTTX	Sfax (Thyna)	FADL	Delareyville	FAKS	Kroonstad
DTTZ	Tozeur (Nefta)	FAEC	Umtshezi	FAKT	Boschkop (Kitty Hawk Aero Estate)
<b>DX</b>	<b>Togo</b>	FAEL	East London	FAKU	Kuruman (Johan Pienaar)
DXNG	Niamtougou (Niamtougou Intl)	FAEM	Empangeni	FAKZ	Kleinsee
DXXX	Lome (Gnassingbe Eyadema)	FAFB	Ficksburg Sentraoes	FAKZ	Kleinsee
		FAFK	Fisantekraal	FALA	Lanseria (Lanseria Intl)
<b>FA</b>	<b>FIR/UIR</b>	FAFO	Fort Beaufort	FALE	Durban (King Shaka Intl)
		FAFW	Freeway	FALI	Lichtenburg
FACA	Cape Town FIR	FAGC	Grand Central	FALL	Lydenburg
FAJA	Johannesburg FIR	FAGG	George	FALM	Makhado (Makhado AB)
FAJO	Johannesburg Oceanic FIR	FAGL	Grobblersdal (Kobus De Villiers)	FALO	Louis Trichardt
<b>FA</b>	<b>South African Rep</b>	FAGM	Johannesburg (Rand)	FALW	Langebaanweg
FAAB	Alexander Bay	FAGR	Graaff-Reinet	FALY	Ladysmith
FAAG	Aggeneys	FAGT	Grahamstown	FAMB	Middelburg
FAAN	Aliwal North	FAGY	Greytown	FAMC	Middelburg
FABB	Brakpan-Benoni	FAHC	Howick	FAMD	Malamala
FABD	Burgersdorp	FAHG	Heidelberg	FAMG	Margate
FABE	Bhisho	FAHJ	Harding	FAMI	Marble Hall
FABL	Bloemfontein (Bram Fischer Intl)	FAHL	Hluhluwe	FAMJ	Majuba Power Station
FABM	Bethlehem	FAHR	Harrismith	FAMM	Mafikeng (George Dick Montshioa)
FABW	Karoo Gateway	FAHS	Hoedspruit (Hoedspruit AB)	FAMN	Malelane
FACF	St Francis Field	FAHV	Gariep Dam	FAMO	Mossel Bay
FACN	Carnarvon	FAKD	Klerksdorp (P.C. Pelser)	FAMU	Mkuzi
FACO	Alkantpan	FAKM	Kimberley	FANC	Newcastle
FACT	Cape Town (Cape Town Intl)	FAKN	Kruger Mpumalanga (Kruger Mpumalanga Intl)	FANS	Nelspruit
FACV	Calvinia	FAKR	Krugersdorp	FAOB	Overberg (Overberg AB)
FADA	De Aar				
FADB	Dwaalboom				

**AFRICA**  
**JEPPESSEN NAVDATA (ICAO) LOCATION IDENTIFIERS DECODE**

FAOH	Oudtshoorn	FASH	Stellenbosch	FAWM	Welkom
FAOI	Orient	FASI	Springs	FAYP	Ysterplaat (Ysterplaat AB)
FAOR	Johannesburg (O.R. Tambo Intl)	FASK	Swartkop	FAZR	Zeerust
FAPA	Port Alfred	FASS	Sishen	<b>FB</b>	<b>FIR/UIR</b>
FAPE	Port Elizabeth (Port Elizabeth Intl)	FASW	Slurry	FBGR	Gaborone FIR
FAPF	Piet Retief	FASX	Swellendam (Hendrik Swellengrebel)	<b>FB</b>	<b>Botswana</b>
FAPG	Plettenberg Bay	FASZ	Skukuza	FBFT	Francistown (Francistown Intl)
FAPH	Phalaborwa (Kruger Park Gateway)	FATF	Tommy's Field	FBGM	Gumare
FAPI	Pietersburg	FATP	New Tempe	FBGZ	Ghanzi
FAPK	Prieska	FATT	Tutuka Power Station	FBJW	Jwaneng
FAPL	Pongola	FATW	Tswalu	FBKE	Kasane (Kasane Intl)
FAPM	Pietermaritzburg	FATZ	Tzaneen	FBKG	Kang
FAPN	Pilanesberg (Pilanesberg Intl)	FAUH	Uitenhage	FBKR	Khwai River
FAPP	Polokwane (Polokwane Intl)	FAUL	Ulundi (Prince Mangosuthu Buthelezi)	FBKY	Kanye
FAPS	Potchefstroom	FAUP	Upington (Upington Intl)	FBLV	Limpopo Valley
FAPT	Postmasburg	FAUT	Mthatha	FBMM	Makalamabedi
FAPZ	Progress	FAVG	Durban (Virginia)	FBMN	Maun (Maun Intl)
FAQT	Queenstown	FAVM	Venetia	FBNN	Nokaneng
FARB	Richards Bay	FAVR	Vredendal	FBNT	Nata
FARG	Rustenburg	FAVV	Vereeniging	FBOR	Orapa
FARI	Reivilo	FAVW	Victoria West	FBPY	Palapye
FARS	Robertson	FAWA	Warmbaths	FBSK	Gaborone (Sir Seretse Khama Intl)
FASB	Springbok	FAWB	Pretoria (Wonderboom)	FBSN	Sua
FASC	Secunda	FAWC	Worcester	FBSP	Selebi-Phikwe
FASD	Saldanaha-Vredenburg	FAWI	Witbank	FBSW	Shakawe
FASE	Sabi Sabi	FAWK	Waterkloof	FBTS	Tshabong
FASG	Schweizer Reneke	FAWL	Williston	FBXG	Xugana



**AFRICA**  
**JEPPESSEN NAVDATA (ICAO) LOCATION IDENTIFIERS DECODE**

<b>FC</b>	<b>FIR/UIR</b>	FEFG	Bangassou	<b>FI</b>	<b>Mauritius</b>
FCCC	Brazzaville FIR/UIR	FEFI	Birao	FIMP	Mauritius (Sir See-woosagur Ramgoolam Intl)
<b>FC</b>	<b>Congo, Rep Of</b>	FEFM	Bambari		
FCBB	Brazzaville (Maya-Maya)	FEFN	N'Dele	FIMR	Rodrigues (Plaine Corail)
FCBS	Sibiti	FEFR	Bria	<b>FJ</b>	<b>Chagos Archipelago</b>
FCBY	N'Kayi (Yokangassi)	FEFS	Bossangoa		
FCBZ	Zanaga	FEFT	Berberati	FJDG	Diego Garcia (Diego Garcia Navy)
FCMM	Mossendjo	FEFW	Ouadda		
FCOD	Ollombo (Sassou N'Guesso)	FEFY	Yalinga	<b>FK</b>	<b>Cameroon</b>
FCOE	Ewo	FEFZ	Zemio	FKAB	Banyo
FCOI	Impfondo	FEFE	Obo (M'Boki)	FKKB	Kribi
FCOM	Makoua	FEGO	Ouanda-Djalle	FKKC	Tiko
FCOO	Owando	FEGZ	Bozoum	FKKD	Douala
FCOU	Ouessou	<b>FG</b>	<b>Equatorial Guinea</b>	FKKE	Eseka
FCPD	Dolisie	FGAN	Annobon (San Antonio De Pale)	FKKF	Mamfe
FCPP	Pointe Noire (Antonio Agostinho Neto)	FGBT	Bata	FKKG	Bali
<b>FD</b>	<b>Eswatini</b>	FGMY	Mongomeyen	FKKI	Batouri
FDMS	Manzini (Matsapha)	FGSL	Malabo	FKKL	Maroua-Salak
FDNH	Nhlangano	<b>FH</b>	<b>Ascension</b>	FKKM	Foumban (Nkounja)
FDSK	Sikhuphe (Sikhuphe Intl)	FHAW	Ascension I. (Ascension Aux AB)	FKKN	N'Gaoundere
FDSM	Simunye	<b>FH</b>	<b>St Helena</b>	FKKO	Bertoua
FDTM	Tambankulu	FHSH	St Helena	FKKR	Garoua
<b>FE</b>	<b>Central African Rep</b>	<b>FI</b>	<b>FIR/UIR</b>	FKKS	Dschang
FEFA	Alindao	FIMM	Mauritius FIR	FKKT	Tibati
FEFB	Obo (Poste)			FKKU	Bafoussam
FEFF	Bangui (M'Poko)			FKKV	Bamenda
				FKKY	Yaounde/Ville
				FKYS	Yaounde (Nsimalen)

**AFRICA**  
**JEPPESSEN NAVDATA (ICAO) LOCATION IDENTIFIERS DECODE**

<b>FL</b>	<b>FIR/UIR</b>	FLLE	Lesa	FLWB	West Two
FLFI	Lusaka FIR	FLLG	Luwingu	FLWC	West Three
<b>FL</b>	<b>Zambia</b>	FLLK	Lukulu	FLWD	West Four
FLAT	Katete	FLLO	Kalomo	FLWE	West Five
FLCH	Choma	FLMA	Mansa	FLWF	West Six
FLCP	Chipata	FLMB	Maamba	FLWW	Wakawaka
FLCS	Chinsali	FLMF	Mfuwe	<b>FM</b>	<b>FIR/UIR</b>
FLEB	East Two	FLMG	Mongu	FMMM	Antananarivo FIR/UIR
FLEC	East Three	FLMK	Mkushi	<b>FM</b>	<b>Comoros</b>
FLED	East Four	FLML	Mufulira	FMCH	Moroni (Prince Said Ibrahim)
FLEE	East Five	FLMO	Monze	FMCI	Moheli (Bandares- salam)
FLEF	East Six	FLMP	Mpika	FMCV	Anjouan (Ouani)
FLEG	East Seven	FLMU	Mulobezi	<b>FM</b>	<b>Madagascar</b>
FLHN	Livingstone (Harry Mwaanga Nkumbula Intl)	FLMW	Mwinilunga	FMME	Antsirabe
FLIK	Isoka	FLNA	Ngoma	FMMG	Antsalova
FLKB	Kawambwa	FLND	Ndola	FMMH	Mahanoro
FLKE	Kasompe	FLNL	Namwala	FMMI	Antananarivo (Ivato)
FLKJ	Kanja	FLNY	Nyimba	FMMK	Ankavandra
FLKK	Lusaka (Kenneth Kaunda Intl)	FLPE	Petauke	FMMO	Maintirano
FLKL	Kalabo	FLPK	Mporokoso	FMMQ	Ilaka (Atsinanana)
FLKO	Kaoma	FLPO	Kabompo	FMMS	Sainte-Marie
FLKS	Kasama	FLRO	Rosa	FMMT	Toamasina
FLKU	Kanyau	FLRU	Rufunsa	FMMV	Morondava
FLKW	Kabwe (Milliken)	FLSE	Serenje	FMMZ	Ambatondrazaka
FLKY	Kasaba Bay	FLSH	Shiwa Ngandu	FMNA	Antsiranana (Arra- chart)
FLKZ	Lukuzi	FLSN	Senanga	FMNC	Mananara (Avara- tra)
FLLA	Luanshya	FLSO	Kitwe (Southdowns)		
FLLD	Lundazi	FLSS	Sesheke		
		FLSW	Solwezi		
		FLSY	Sakeji		
		FLWA	West One		

**AFRICA**  
**JEPPESSEN NAVDATA (ICAO) LOCATION IDENTIFIERS DECODE**

FMND	Andapa	<b>FM</b>	<b>Reunion</b>	FOOD	Moanda (Bangombe)
FMNE	Ambilobe	FMEE	La Reunion (Roland Garros)	FOOG	Port Gentil
FMNH	Antalaha (Antsirabato)	FMEP	St Pierre (Pierrefonds)	FOOH	Omboue (Omboue Hospital)
FMNL	Analalava			FOOL	Libreville (Leon M'ba)
FMNM	Mahajanga (Philibert Tsiranana)	<b>FN</b>	<b>FIR/UIR</b>	FOON	Franceville (M'Vengue)
FMNN	Nosy-Be (Fascene)	FNAN	Luanda FIR/UIR	FOOT	Tchibanga
FMNQ	Besalampy	<b>FN</b>	<b>Angola</b>		
FMNR	Maroantsetra	FNBG	Benguela (17th of September)	<b>FP</b>	<b>Sao Tome and Principe</b>
FMNS	Sambava (Sambava South)	FNCA	Cabinda	FPPR	Principe
FMNW	Antsohihy (Ambalabe)	FNCT	Catumbela	FPST	Sao Tome (Sao Tome Intl)
FMNX	Mandritsara	FNDU	Dundo (Kamakenzo)		
FMSA	Ambalavao	FNGI	Ondjiva (11th of November)	<b>FQ</b>	<b>FIR/UIR</b>
FMSB	Beroroha (Antsoa)	FNHU	Huambo (Albano Machado)	FQBE	Beira FIR
FMSC	Mandabe			<b>FQ</b>	<b>Mozambique</b>
FMSD	Tolagnaro	FNLU	Luanda (4th Of February)	FQAG	Angoche
FMSF	Fianarantsoa	FNME	Menongue	FQBI	Bilene
FMSG	Farafangana	FNMO	Namibe (Welwitschia Mirabilis)	FQBR	Beira
FMSI	Ihosal			FQCH	Chimoio
FMSJ	Manja	FNSA	Saurimo	FQIA	Inhaca
FMSK	Manakara	FNUB	Lubango (Mukanka)	FQIN	Inhambane
FMSL	Bekily	FNUE	Luena	FQLC	Lichinga
FMSM	Mananjary			FQLU	Lumbo
FMSR	Morombe	<b>FO</b>	<b>Gabon</b>	FQMA	Maputo (Maputo Intl)
FMST	Toliary	FOGM	Mouila (Mouila Ville)	FQNC	Nacala
FMSY	Ampanihy	FOGO	Oyem	FQNP	Nampula
<b>FM</b>	<b>Mayotte</b>	FOGQ	Okondja	FQPB	Pemba
FMCZ	Dzaoudzi (Pamandzi)	FOGR	Lambarene		

**AFRICA**  
**JEPPESSEN NAVDATA (ICAO) LOCATION IDENTIFIERS DECODE**

FQPO	Ponta De Ouro	FTTS	Bousso	FWKA	Karonga
FQQL	Quelimane	FTTU	Mao	FWKG	Kasungu
FQSG	Songo	FTTY	Faya-Largeau	FWKI	Lilongwe (Kamuzu Intl)
FQTT	Tete (Chingozi)	FTTZ	Bardai (Zougra)	FWLK	Likoma
FQUG	Ulongwe	<b>FV</b>	<b>FIR/UIR</b>	FWSJ	Nsanje
FQVL	Vilankulo	FVHF	Harare FIR/UIR	FWSU	Nchalo (Sucoma)
<b>FS</b>	<b>FIR/UIR</b>	<b>FV</b>	<b>Zimbabwe</b>	FWTK	Mtakataka
FSSS	Seychelles FIR	FVCI	Chinhoyi	FWUU	Mzuzu
<b>FS</b>	<b>Seychelles</b>	FVCP	Harare (Charles Prince)	<b>FX</b>	<b>Lesotho</b>
FSIA	Seychelles (Seychelles Intl)	FVCZ	Chiredzi (Buffalo Range)	FXKA	Katse
FSPF	Praslin	FVFA	Victoria Falls	FXLR	Leribe
<b>FT</b>	<b>FIR/UIR</b>	FVGM	Mhangura	FXLT	Letseng
FTTT	N'Djamena FIR	FVGO	Gokwe	FXMF	Mafeteng
FTTT	N'Djamena UIR	FVJN	Bulawayo (J.M. Nkomo)	FXMK	Mokhotlong
<b>FT</b>	<b>Chad</b>	FVKB	Kariba (Kariba Intl)	FXMM	Maseru (Moshoe-shoe I Intl)
FTTA	Sarh	FVMV	Masvingo (Masvingo Intl)	FXMU	Maseru (Mejametallana AB)
FTTC	Abeche	FVRG	Harare (Robert Gabriel Mugabe Intl)	FXQN	Qacha's Nek
FTTD	Moundou	FVWN	Hwange (Hwange National Park)	FXSH	Sehonghong
FTTF	Fada	<b>FY</b>	<b>FIR/UIR</b>	FXSM	Semonkong
FTTG	Goz-Beida	<b>FY</b>	<b>FIR/UIR</b>	<b>FY</b>	<b>FIR/UIR</b>
FTTI	Ati	FWLL	Lilongwe FIR	FYWH	Windhoek FIR
FTTJ	N'Djamena (Hassan Djamous)	<b>FW</b>	<b>FIR/UIR</b>	<b>FY</b>	<b>Namibia</b>
FTTK	Bokoro	<b>FW</b>	<b>Malawi</b>	FYAR	Arandis
FTTM	Mongo	FWCL	Blantyre (Chileka Intl)	FYGB	Gobabis
FTTN	Am-Timan	FWCM	Club Makokola	FYGF	Grootfontein
FTTP	Pala	FWDW	Dwangwa	FYKM	Katima Mulilo
FTTR	Zouar			FYKT	Keetmanshoop

**AFRICA**  
**JEPPESSEN NAVDATA (ICAO) LOCATION IDENTIFIERS DECODE**

FYLZ	Luderitz	FZMA	Bukavu (Kavuma)	GASO	Sikasso (Dignan-gan)
FYML	Mariental	FZNA	Goma (Goma Intl)	GATB	Tombouctou
FYMO	Mokuti Lodge	FZOA	Kindu	GATS	Tessalit
FYOA	Ondangwa	FZQA	Lubumbashi (Lu-bumbashi Intl)	GAYE	Yelimane
FYOG	Oranjemund	FZQM	Kolwezi	<b>GB</b>	<b>Gambia</b>
FYRU	Rundu	FZRF	Kalemie	GBYD	Banjul (Banjul Intl)
FYSA	Skorpion Mine	FZSA	Kamina (Kamina Base)	<b>GC</b>	<b>FIR/UIR</b>
FYSM	Swakopmund	FZUA	Kananga	GCCC	Canaries FIR
FYWB	Walvis Bay	FZWA	Mbuji-Mayi	GCCC	Canaries UIR
FYWE	Windhoek (Eros)	<b>GA</b>	<b>Mali</b>	<b>GC</b>	<b>Canary Is</b>
FYWH	Windhoek (Hosea Kutako Intl)	GAAO	Ansongo	GCFV	Fuerteventura
<b>FZ</b>	<b>FIR/UIR</b>	GABD	Bandiagara	GCGM	La Gomera
FZZA	Kinshasa FIR	GABF	Bafoulabe	GCHI	Hierro
FZZA	Kinshasa UIR	GABR	Bourem	GCLA	La Palma
<b>FZ</b>	<b>Congo, Dr Of</b>	GABS	Bamako (Modibo Keita/Senou)	GCLB	El Berriel
FZAA	Kinshasa (N'Djili Intl)	GAGM	Goundam	GCLP	Gran Canaria
FZAB	Kinshasa (N'Dolo)	GAGO	Gao (Korogoussou)	GCRR	Lanzarote
FZAG	Muanda	GAKA	Kenieba	GCTS	Tenerife-South (Reina Sofia)
FZAM	Matadi-Tshimpi	GAKD	Kayes (Dag Dag)	GCXO	Tenerife-North
FZEA	Mbandaka	GAKL	Kidal	<b>GE</b>	<b>Melilla</b>
FZFD	Gbadolite	GAKO	Koutiala	GEML	Melilla
FZFK	Gemena	GAKT	Kita	<b>GF</b>	<b>Sierra Leone</b>
FZFP	Kotakoli	GAMA	Markala	GFBN	Bonthe
FZIA	Kisangani (Simisimi)	GAMB	Mopti (Ambodedjo)	GFBO	Bo
FZIC	Kisangani (Bangoka Intl)	GAMK	Menaka	GFGK	Gbangbatoke
FZJH	Isiro-Matari	GANF	Niafunke	GFHA	Hastings
FZKA	Bunia	GANK	Nara (Keibane)	GFKB	Kabala
FZKJ	Buta-Zega	GANR	Nioro		

**AFRICA**  
**JEPPESEN NAVDATA (ICAO) LOCATION IDENTIFIERS DECODE**

GFKE	Kenema	GMAD	Agadir (Al Massira Intl)	<b>GO</b>	<b>FIR/UIR</b>
GFLI	Freetown (Lungi)			GOOO	Dakar FIR
GFYE	Yengema	GMAG	Guelmime	GOOO	Dakar Oceanic FIR/UIR
<b>GG</b>	<b>Guinea-Bissau</b>	GMAT	Tan Tan (Plage Blanche Intl)	GOOO	Dakar UIR
GGOV	Bissau (Osvaldo Viera)	GMAZ	Zagora	<b>GO</b>	<b>Senegal</b>
		GMFB	Bouarfa	GOBD	Dakar-Diass (Blaise Diagne Intl)
<b>GL</b>	<b>FIR/UIR</b>	GMFF	Fes (Saiss Intl)	GOGG	Ziguinchor
GLRB	Roberts FIR	GMFI	Ifrane	GOGK	Kolda (Sare Bidji)
<b>GL</b>	<b>Liberia</b>	GMFK	Errachidia (Moulay Ali Cherif Intl)	GOGS	Cap Skirring
GLBU	Buckanan	GMFO	Oujda (Angads Intl)	GOOK	Kaolack
GLCP	Harper (Cape Palmas)	GMMB	Benslimane	GOOY	Dakar (Leopold Sedar Senghor)
GLGE	Greenville (Sinoe)	GMMD	Beni Mellal (Beni Mellal Intl)	GOSM	Matam (Ouro Sogui)
GLLB	Buchanan (Lamco)	GMME	Rabat (Sale Intl)	GOSP	Podor
GLMR	Monrovia (Spriggs Payne)	GMMI	Essaouira (Mogador Intl)	GOSR	Richard Toll
GLNA	Nimba (Lamco)	GMMN	Casablanca (Mohammed V Intl)	GOSS	St Louis
GLRB	Monrovia (Roberts Intl)	GMMT	Casablanca (Tit Mellil)	GOTB	Bakel
GLTN	Tchien	GMMW	Nador (El Aroui Intl)	GOTS	Simenti
<b>GM</b>	<b>FIR/UIR</b>	GMMX	Marrakech (Menara Intl)	GOTT	Tambacounda
GMMM	Casablanca FIR/UIR			<b>GQ</b>	<b>Mauritania</b>
		GMMZ	Ouarzazate (Ouarzazate Intl)	GQNC	Tichitt
<b>GM</b>	<b>Dakhla And Laayoune</b>	GMTA	Al Hoceima (Cherif El Idrissi Intl)	GQNE	Boghe
GMMH	Dakhla (Dakhla Intl)			GQNF	Kiffa
GMMI	Laayoune (Hassan I)	GMTN	Tetouan (Saniat R'mel)	GQNH	Timbedra
		GMTT	Tanger (Ibn Batouta Intl)	GQNK	Kaedi
<b>GM</b>	<b>Morocco</b>			GQNL	Moudjeria (Letfotar)
GMAA	Agadir (Inezgane)			GQNM	Timbedra (Dahara)
				GQNO	Nouakchott (Oumtounsy)

**AFRICA**  
**JEPPESSEN NAVDATA (ICAO) LOCATION IDENTIFIERS DECODE**

GQNT	Tamchakett	GVMT	Mosteiros	HASO	Asosa (Hidase)
GQPA	Atar	GVNP	Praia (Mandela Intl)	HASR	Shire (Major General Haelom)
GQPP	Nouadhibou	GVSF	Sao Filipe		
GQPT	Bir Mogrein	GVSN	Preguica	<b>HB</b>	<b>FIR/UIR</b>
GQPZ	Zouerate (Tazadit)	GVSV	Sao Pedro (Cesaria Evora Intl)	HBBA	Bujumbura FIR
<b>GU</b>	<b>Guinea Rep</b>			<b>HB</b>	<b>Burundi</b>
GUCY	Conakry (Gbessia)	<b>HA</b>	<b>FIR/UIR</b>	HBBA	Bujumbura (Melchior Ndadaye Intl)
GUFA	Fria (Katourou)	HAAA	Addis Abeba FIR		
GUFH	Faranah (Badala)	<b>HA</b>	<b>Ethiopia</b>	HBBE	Gitega
GUGO	Banankoro (Gbenko)	HAAB	Addis Abeba (Bole Intl)	HBBO	Kirundo
GUKR	Kamsar (Kawass)	HAAM	Arba Minch	<b>HC</b>	<b>FIR/UIR</b>
GUKU	Kissidougou	HAAX	Axum	HCSM	Mogadishu FIR
GULB	Labe (Tata)	HABD	Bahir Dar (Bahir Dar Intl)	<b>HC</b>	<b>Somalia</b>
GUMA	Macenta			HCMF	Bosaso (Bosaso Intl)
GUNZ	Nzerekore (Konia)	HADC	Combolcha	HCMH	Egal
GUOK	Boke (Baralande)	HADR	Dire Dawa (Dire Dawa Intl)	HCMH	Egal
GUSA	Sangaredi	HAGB	Goba (Robe)	HCMH	Berbera
GUSB	Koundara (Sambailo)	HAGM	Gambella	HCMK	Kisimayu
GUSI	Sigui	HAGN	Gonder	HCMH	Mogadishu (Aden Adde Intl)
GUXD	Kankan (Diankana)	HAGO	Gode	HCMV	Burao
		HAHU	Humera		
<b>GV</b>	<b>FIR/UIR</b>	HAJJ	Jigjiga (Garad Wilwal)	<b>HD</b>	<b>Djibouti</b>
GVSC	Sal Oceanic FIR			HDAM	Djibouti (Ambouli)
GVSC	Sal Oceanic UIR	HAJM	Jimma (Aba Jifar)		
		HAKD	Kebri Dehar	<b>HE</b>	<b>FIR/UIR</b>
<b>GV</b>	<b>Cape Verde</b>	HALA	Hawassa	HECC	Cairo FIR
GVAC	Sal (Amilcar Cabral)	HALL	Lalibella		
GVBA	Rabil (Aristides Pereira Intl)	HAMK	Mekele (Alula Aba Nega)	<b>HE</b>	<b>Egypt</b>
GVMA	Maio			HEAL	Al Alamain (Al Alamain Intl)
		HASM	Semera		

**AFRICA**  
**JEPPESSEN NAVDATA (ICAO) LOCATION IDENTIFIERS DECODE**

HEAR	El Arish (El Arish Intl)	HETB	Taba (Taba Intl)	HKKG	Kakamega
HEAT	Asyut (Asyut Intl)	HETR	El Tor	HKKI	Kisumu
HEAX	Alexandria (Alexandria Intl)	<b>HH</b>	<b>FIR/UIR</b>	HKKL	Kilaguni
HEAZ	Almaza (Almaza AB)	HHAA	Asmara FIR	HKKR	Kericho
HEBA	Alexandria (Borg El Arab Intl)	<b>HH</b>	<b>Eritrea</b>	HKKS	Kisii (Suneka)
HEBL	Abu Simbel	HHAS	Asmara (Asmara Intl)	HKKT	Kitale
HECA	Cairo (Cairo Intl)	HHMS	Massawa (Massawa Intl)	HKLG	Lokitaung
HECP	Cairo (Capital Intl)	HHSB	Assab (Assab Intl)	HKLU	Lokichogio
HEDK	Dakhla	<b>HK</b>	<b>FIR/UIR</b>	HKLY	Loyangalani
HEGN	Hurghada (Hurghada Intl)	HKNA	Nairobi FIR	HKMA	Mandera
HEGR	El Gora	<b>HK</b>	<b>Kenya</b>	HKMB	Marsabit
HEKG	El Kharga	HKAM	Amboseli	HKMG	Magadi
HELX	Luxor (Luxor Intl)	HKBR	Bura East	HKMI	Maralal (Kisima)
HEMA	Marsa Alam (Marsa Alam Intl)	HKBU	Bungoma	HKMK	Meru (Mulika Lodge)
HEMM	Mersa Matruh (Mersa Matruh Intl)	HKED	Eldoret	HKML	Malindi
HEOC	6th of October (October)	HKEL	Eldoret (Eldoret Intl)	HKMO	Mombasa (Moi Intl)
HEOW	Shark El Oweinat	HKEM	Embu	HKMR	Mackinnon Road
HEPS	Port Said	HKES	Eliye Springs	HKMT	Mtito Andei
HESC	St Catherine	HKFG	Kalokol (Ferguson's Gulf)	HKMU	Makindu
HESG	Suhag (Suhag Intl)	HKGA	Garissa	HKNI	Nyeri
HESH	Sharm El Sheikh (Sharm El Sheikh Intl)	HKGT	Garba Tula	HKNK	Nakuru (Lanet)
HESN	Aswan (Aswan Intl)	HKHB	Homa Bay	HKNL	Nanyuki
HESX	Giza (Sphinx Intl)	HKHO	Hola	HKNO	Narok
		HKJK	Nairobi (Jomo Kenyatta Intl)	HKNV	Naivasha
		HKKE	Masai Mara (Kee-korok)	HKNW	Nairobi (Wilson)
				HKOK	Olkiombo
				HKRE	Nairobi (Eastleigh)
				HKSB	Samburu South (Buffalo Spring)



**AFRICA**  
**JEPPESSEN NAVDATA (ICAO) LOCATION IDENTIFIERS DECODE**

HKVO	Voi	HLUB	Ubari	HSSJ	Juba
HKWJ	Wajir	HLWF	Wafa	HSSM	Malakal
<b>HL</b>	<b>FIR/UIR</b>	HLZA	Zella Z74	HSSS	Khartoum
HLLL	Tripoli FIR	HLZG	Oxy 103A	HSSW	Wadi Halfa
<b>HL</b>	<b>Libya</b>	HLZN	Zintan	HSWW	Wau
		HLZW	Zwara	<b>HT</b>	<b>FIR/UIR</b>
HLAM	Amal V12	<b>HR</b>	<b>FIR/UIR</b>	HTDC	Dar-Es-Salaam FIR
HLBD	Beda M3	HRYR	Kigali FIR	HTDC	Dar-Es-Salaam UIR
HLBK	Burdi (Kambut)	<b>HR</b>	<b>Rwanda</b>	<b>HT</b>	<b>Tanzania</b>
HLFL	Bu-Attifl A100	HRYG	Gisenyi	HTAR	Arusha
HLGD	Sirte (Ghardabiya Intl)	HRYI	Butare	HTBU	Bukoba
HLGT	Ghat	HRYN	Nemba	HTDA	Dar-Es-Salaam (Julius Nyerere Intl)
HLHM	Hamada NC5	HRYR	Kigali (Kigali Intl)	HTDO	Dodoma
HLKF	Kufra	HRYU	Ruhengeri	HTGW	Songwe
HLLB	Benghazi (Benina Intl)	HRZA	Kamembe	HTIR	Iringa
HLLM	Tripoli (Mitiga Intl)	<b>HS</b>	<b>FIR/UIR</b>	HTKA	Kigoma
HLLQ	El Beida (Labraq)	HSSS	Khartoum FIR/UIR	HTKJ	Kilimanjaro (Kilimanjaro Intl)
HLLS	Sebha	<b>HS</b>	<b>Sudan</b>	HTKU	Kasulu
HLLT	Tripoli (Tripoli Intl)	HSAT	Atbara	HTLD	Loliondo
HLMB	Marsa Brega S21	HSDN	Dongola	HTLM	Manyara
HLMS	Misrata (Misrata Intl)	HSDZ	Damazin	HTMA	Mafia
HLNF	Raslanuf V40	HSFS	El Fashir	HTMG	Morogoro
HLNR	Nafoora M4	HSKA	Kassala	HTMI	Masasi
HLRA	Dahra WH32	HSLI	Kadugli	HTMP	Mpanda
HLSD	Essider OJ	HSMN	Merowe	HTMT	Mtwara
HLSH	Sahil	HSNN	Nyala	HTMU	Musoma
HLTD	Ghadames	HSOB	El Obeid	HTMW	Mwanza
HLTQ	Tobruk	HSPN	Port Sudan	HTNR	Ngara
HLTS	Tebisty V9	HSSG	Sebara Geneina		

**AFRICA**  
**JEPPESSEN NAVDATA (ICAO) LOCATION IDENTIFIERS DECODE**

HTPE	Pemba (Chake Chake)	<b>HU</b>	<b>FIR/UIR</b>	HUKK	Kakira
		HUEC	Entebbe FIR	HUKO	Kotido
HTSN	Seronera			HUKS	Kasese
HTSO	Songea	<b>HU</b>	<b>Uganda</b>	HULI	Lira
HTSU	Sumbawanga	HUAR	Arua	HUMA	Mbarara
HTSW	Kishwa	HUEN	Entebbe (Entebbe Intl)	HUMI	Masindi
HTSY	Shinyanga (Ibada-kuli)	HUGU	Gulu	HUMO	Moroto
HTTB	Tabora	HUJI	Jinja	HUPA	Pakuba
HTTG	Tanga	HUKD	Kidepo	HUSO	Soroti
HTZA	Zanzibar (Abeid Amani Karume Intl)	HUKJ	Kajjansi	HUTO	Tororo



# Airport Directory

Airport Data - Africa

## ALGERIA

----- Effective thru 09 Oct: -----

**8 Mai 45 see Setif****Abdelhafid Boussouf Bou Chekif see Tiaret****Adrar (Touat Cheikh Sidi Mohamed Belk)**

Apt of Entry

919' DAUA AZR +01:00 N27 50.3 W000 11.1

Apt Administration (049)969156. Apt Operator  
Fax (049)969319.**04/22** 9843' CONC/BITU. PCN 60/F/A/W/T.  
ASDA 04 10171'. ASDA 22 10171'. RL.

H24. Customs.

Jet A-1.

ABN. Fire 7.

**Aguenar-Hadj Bey Akhamok see  
Tamenghasset****Ahmed Benbella see Oran****Ain Beida see Ouargla****Algiers (Houari Boumediene)** Apt of Entry

82' DAAG ALG +01:00 N36 41.7 E003 13.0

Apt Administration (021)509211; Fax  
(021)509211.**05/23** 11483' CONC/BITU. PCN 75/F/D/W/T.  
HIRL. ALS 23.

Rwy 23 Right-Hand Circuit.

**09/27** 11483' ASPHALT. PCN 78/F/D/W/T.  
ASDA 27 12500'. HIRL.

Rwy 27 Right-Hand Circuit.

H24. Customs.

F-3, Jet A-1.

Fire 9.

**Annaba (Rabah Bitat)** Apt of Entry

16' DABB AAE +01:00 N36 49.3 E007 48.6

Apt Administration (038) 520107; Fax (038)  
520107. Apt Operator (038) 520159; Fax (038)  
520159.**05/23** 7513' CONC/BITU. PCN 46/F/D/W/T.  
ASDA 23 7644'. RL.**18/36** 9843' ASPHALT. PCN 65 F/D/W/T. LDA  
36 9515'. RL.

H24. Customs.

Jet A-1.

Fire 9.

**Batna (Mostepha Ben Boulaid)**2700' DABT BLJ +01:00 N35 45.5 E006  
19.3ATS (033) 266614 (TWR). Apt Operator (033)  
266615; Fax (033) 266615.**05/23** 9843' CONC/BITU. PCN 58/F/C/X/T.  
ASDA 05 10171'. ASDA 23 10171'. HIRL.

H24. Customs.

Jet A-1.

Fire 7.

**Bechar (Boudghene Ben Ali Lotfi)** Apt of  
Entry2657' DAOR CBH +01:00 N31 39.0 W002  
15.2Apt Administration (049) 221909; Fax (049)  
221909. ATS (049) 221910.**06/24** 11883' CONC/BITU. PCN 53/F/B/W/T.  
LDA 24 10899'. RL.

First 315m and last 300m PCN 58/R/C/W/T.

**18/36** 9843' CONC/BITU. PCN 55/F/B/W/T.  
ASDA 18 10171'. ASDA 36 10171'. RL. HIALS  
18.

H24. Customs: O/R.

Jet A-1.

ABN. Fire 7.

**Bejaia (Soummam-Abane Ramdane)**

20' DAAE BJA +01:00 N36 42.7 E005 04.2

Apt Administration (034) 183036. Apt Operator  
(034) 183029; Fax (034) 183031.**08/26** 7874' CONC/BITU. PCN 46/F/C/W/T.  
ASDA 26 8071'. RL.

## ALGERIA

H24. Customs.

Jet A-1.

ABN. Fire 7.

**Biskra (Mohamed Khider)**

289' DAUB BSK +01:00 N34 48.1 E005 44.5

Apt Administration 033543005; Fax 033543005.

ATS 033543006. Apt Operator 033543007.

**13/31** 10171' ASPH/CONC. PCN 60/F/C/W/T.

ASDA 13 10827'. ASDA 31 10499'. HIRL.

Rwy 13 first 150m PCN 52/R/C/W/T.

Sun-Thu 0700-1900, Fri Sat 0600-1800. Customs: O/R.

Jet A-1.

Fire 6.

**Bordj Mokhtar**

1302' DATM BMW +01:00 N21 22.5 E000 55.4

Apt Administration (049)989502, (049)989486; Fax (049)989502, (049)989486. ATS (049)989110.

**08/26** 9843' CONC/BITU. PCN 66/F/B/W/T. ASDA 08 10171'. ASDA 26 10171'. RL.

0600-1800, O/T PN before 1500. Customs: O/R.

Jet A-1.

Fire 5.

**Bou Saada**

1506' DAAD BUJ +01:00 N35 19.9 E004 12.3

ATS (035) 434779 (TWR). Apt Operator (035) 434778; Fax (035) 434778.

**04/22** 7218' BITUMEN. PCN 34/F/B/W/T. ASDA 22 7415'. RL.

0700-1600.

Fire 5.

**Boudghene Ben Ali Lotfi see Bechar**

**Cheikh Larbi Tebessi see Tebessa**

**Chlef**

502' DAOI CFK +01:00 N36 13.0 E001 20.4

Apt Operator (027) 728032; Fax (027) 728032.

**07/25** 5413' CONC/BITU. SIWL 60. RL.

**08/26** 9186' CONC/BITU. PCN 66/F/C/W/T. ASDA 08 9514'. ASDA 26 9514'. HIRL.

0800-1600, O/T PN before 1400. Customs: 0700-1530.

Jet A-1.

Fire 6.

**Constantine (Mohamed Boudiaf)** Apt of Entry

2316' DABC CZL +01:00 N36 17.1 E006 37.1

ARO (031) 810127. ATS (031) 810133. Apt Operator (031) 810125; Fax (031) 810125.

**13/31** 7874' ASPHALT. PCN 54/F/C/W/T. ASDA 13 8071'. ASDA 31 8202'. HIRL.

**16/34** 9843' CONC/BITU. PCN 93/F/D/W/T. ASDA 16 10171'. ASDA 34 10171'. HIRL.

H24. Customs.

Jet A-1.

ABN. Fire 8.

**Djanet (Tiska)** Apt of Entry

3169' DAAJ DJG +01:00 N24 17.6 E009 27.1

ATS (029)481504. Apt Operator (029)481502; Fax (029)481502.

**02/20** 7874' BITUMEN. PCN 51 F/B/W/T. HIRL.

**13/31** 9843' BITUMEN. PCN 54/F/B/W/T. ASDA 13 10171'. HIRL.

H24. Customs: O/R.

Jet A-1.

ABN. Fire 8.

**El Bayadh**

4482' DAOY EBH +01:00 N33 43.2 E001 05.5

**ALGERIA**

Apt Administration (049) 612724; Fax (049) 612734. ATS (049) 612731.

**04/22** 9843' CONC/BITU. PCN 40/F/B/W/T. HIRL.

First 300m PCN 46/R/B/W/T.

0800-1600, Fri & Sat clsd.

Fire 4.

**El Golea**

1306' DAUE ELG +01:00 N30 34.1 E002 51.9

ATS (029) 21 07 33. Apt Operator (029) 21 07 31/35; Fax (029) 21 07 35.

**10/28** 5906' ASPHALT. SIWL 60. ASDA 10 6890'. ASDA 28 6890'. MIRL.

**18/36** 11319' CONC/BITU. PCN 52/F/B/W/T. ASDA 18 11516'. ASDA 36 11647'. HIRL.

Rwy 18 first 250m and rwy 36 first 200m PCN 60/R/B/W/T.

Dly 0600-1800.

F-3, Jet A-1.

ABN. Fire 5.

**El Oued (Guemar)**

203' DAUO ELU +01:00 N33 30.8 E006 46.9

Apt Administration (032) 101015; Fax (032) 101015. ATS (032) 201396. Apt Operator (032) 101019.

**02/20** 6562' CONC/BITU. PCN 64/F/A/W/T. ASDA 20 6890'.

**13/31** 9843' CONC/BITU. PCN 57/F/A/W/T. ASDA 13 10171'. ASDA 31 10171'. HIRL.

Dly 0600-1800. Customs: Dly 0700-1500.

Jet A-1.

ABN. Fire 7.

**Ferhat Abbas see Jijel**

**Ghardaia (Noumerat-Moufdi Zakaria)** Apt of Entry

1512' DAUG GHA +01:00 N32 22.9 E003 48.0

Apt Administration (029) 295507; Fax (029) 295507. ATS (029) 295505.

**12/30** 10171' CONC/BITU. PCN 50/F/B/W/T. ASDA 12 10499'. HIRL.

**18/36** 7874' CONC/BITU. PCN 33/F/B/W/T. ASDA 36 8202'. HIRL.

H24. Customs.

F-3, Jet A-1.

ABN. Fire 7.

**Ghriss**

1686' DAOV MUW +01:00 N35 13.0 E000 08.9

Apt Administration (045) 715928; Fax (045) 715928. ATS (045) 715912; Fax (045) 715912. Apt Operator (045) 715911; Fax (045) 715911.

**08/26** 5577' CONC/BITU. PCN 21/F/B/W/T. MIRL.

0700-1500, Fri & Sat clsd. O/T PN before 1300.

Fire 3.

**Guemar see El Oued**

**Hassi Messaoud (Krim Belkacem)** Apt of Entry

459' DAUH HME +01:00 N31 40.4 E006 08.4

Apt Administration (029) 741885. Apt Operator Fax (029) 741892.

**18/36** 9843' CONC/BITU. PCN 66 F/A/X/T. ASDA 18 10171'. ASDA 36 10171'.

Rwy 36 Right-Hand Circuit.

H24. Customs.

Jet A-1.

Fire 7.

**Houari Boumediene see Algiers**
**Illizi (Takhamalt)**

1778' DAAP VVZ +01:00 N26 43.4 E008 37.1

ATS (029)413006. Apt Operator (029)413013; Fax (029)413004.

## ALGERIA

**09/27** 9843' CONC/BITU. PCN 45/F/A/X/T. ASDA 09 10171'. ASDA 27 10171'. HIRL.

Tue-Sun 0800-1600 and Mon 1000-1800. O/T PN before 1400 to DAAPYDYD.

Jet A-1.

Fire 7.

**In Amenas see Zarzaitine**

**In Guezzam**

1325' DATG INF +01:00 N19 33.6 E005 45.1

ATS (029) 351126. Apt Operator (029) 351123.

**08/26** 7218' CONC/BITU. PCN 27/F/B/W/T. ASDA 08 7546'. ASDA 26 7546'. RL.

0700-1500.

Fire 5.

**In Salah**

896' DAUI INZ +01:00 N27 15.2 E002 30.6

Apt Administration (029) 366103; Fax (029) 366101. ATS (029) 366102.

**05/23** 9843' CONC/BITU. PCN 51/F/B/X/T. ASDA 05 10171'. ASDA 23 10171'. HIRL.

APR - OCT H24, NOV - MAR 0600-2000. Customs: By operational requirements.

F-3, Jet A-1.

Fire 6.

**Jijel (Ferhat Abbas)**

36' DAAV GJL +01:00 N36 47.7 E005 52.4

ATS (030) 478484, (034) 446460. Apt Operator (034) 445055; Fax (034) 446259.

**17/35** 7874' CONC/BITU. PCN 59/F/D/W/T. ASDA 17 8202'. ASDA 35 8071'. HIRL. HIALS 17.

0600-1800, non-skd flights PNR before 1200.

Fire 6.

**Krim Belkacem see Hassi Messaoud**

**Mohamed Boudiaf see Constantine**

**Mohamed Khider see Biskra**

**Mostepha Ben Boulaid see Batna**

**Noumerat-Moufdi Zakaria see Ghardaia**

**Oran (Ahmed Benbella)** Apt of Entry

299' DAOO ORN +01:00 N35 37.6 W000 36.7

Apt Administration (041) 591067; Fax (041) 591073. ARO (041) 591109. ATS (041) 591020, (041) 591124.

**07L/25R** 11811' CONC/BITU. PCN 62/F/B/W/T. LDA 25R 11614'. ASDA 07L 12139'. ASDA 25R 12139'. HIRL.

**07R/25L** 9843' CONC/BITU. PCN 113/F/A/W/T. ASDA 07R 10171'. ASDA 25L 10171'. HIRL. HIALS 25L.

H24. Customs.

F-3, Jet A-1.

Fire 8.

**Ouargla (Ain Beida)**

499' DAUU OGX +01:00 N31 55.9 E005 24.8

ATS (029) 774905. Apt Operator (029) 774906; Fax (029) 774908.

**02/20** 9843' CONC/BITU. PCN 60/F/A/W/T. ASDA 02 10171'. ASDA 20 10171'. HIRL.

**18/36** 9843' CONC/BITU. PCN 52/F/A/W/T. ASDA 18 10171'. ASDA 36 10171'. RL. ALS 36.

H24. Customs: O/R.

Jet A-1.

ABN. Fire 7.

**Rabah Bitat see Annaba**

**Setif (8 Mai 45)**

3333' DAAS QSF +01:00 N36 10.7 E005 19.8

**ALGERIA**

Apt Administration (036) 543149. ATS (036) 543130. Apt Operator (036) 543135; Fax (036) 543175.

**09/27** 9514' CONC/BITU. PCN 53/F/C/W/T. HIRL.

H24. Customs.

Jet A-1.

Fire 6.

**Sidi Mahdi see Touggourt**

**Soummam-Abane Ramdane see Bejaia**

**Takhamalt see Illizi**

**Tamenghasset (Aguenar-Hadj Bey Akhamok)** Apt of Entry

4518' DAAT TMR +01:00 N22 48.7 E005 27.0

Apt Administration (029) 330031; Fax (029) 315683. ARO (029) 330065. ATS (029) 330057.

**02/20** 11811' ASPHALT. PCN 56/F/B/W/T. RL. Rwy 20 Right-Hand Circuit.

**08/26** 10335' ASPH/CONC. PCN 47/F/A/W/T. ASDA 08 10663'. ASDA 26 10663'. HIRL.

Rwy 08 Right-Hand Circuit.

Rwy 08 first 150m PCN 48/R/A/W/T and last 150 m PCN 46/R/A/W/T.

H24. Customs.

Jet A-1.

Fire 8.

**Tebessa (Cheikh Larbi Tebessi)** Apt of Entry 2657' DABS TEE +01:00 N35 26.0 E008 07.5

ATS (037)484394. Apt Operator (037)550748.

**11/29** 9843' CONC/BITU. PCN 59/F/D/W/T. ASDA 11 10171'. ASDA 29 10171'. HIRL.

**12/30** 7874' CONC/BITU. PCN 31/F/D/W/T. ASDA 12 8120'. ASDA 30 8120'. RL.

0600-1800. Customs.

Jet A-1.

Fire 5.

**Tiaret (Abdelhafid Boussouf Bou Chekif)**

3245' DAOB TID +01:00 N35 20.5 E001 28.0

Apt Administration (046) 240005; Fax (046) 240005. ATS (046) 240004. Apt Operator (046) 240003.

**08/26** 9843' CONC/BITU. PCN 69/F/C/W/T. ASDA 08 10237'. ASDA 26 10237'. HIRL.

0600-1800, O/T PNR before 1300. Customs: During operational hrs.

Jet A-1.

Fire 5.

**Timimoun**

1027' DAUT TMX +01:00 N29 14.5 E000 17.0

Apt Administration (049) 900217. ATS (049) 902464. Apt Operator Fax (049) 900217.

**06/24** 9843' CONC/BITU. PCN 54/F/B/W/T. ASDA 06 10171'. ASDA 24 10171'.

0600-1800. Customs: H24.

Jet A-1.

Fire 6.

**Tindouf**

1453' DAOF TIN 00:00 N27 42.0 W008 10.0 (049) 370017; Fax (049) 370017. ATS (049) 370012. Apt Operator (049) 370016.

**08L/26R** 9843' CONC/BITU. PCN 58/F/A/X/T. ASDA 08L 10040'. ASDA 26R 10040'. RL. HIALS 26R.

First 300m PCN 47/R/A/W/T.

**08R/26L** 9843' CONC/BITU. PCN 47/R/A/W/T. ASDA 08R 10050'. ASDA 26L 10050'. RL.

H24. Customs.

Jet A-1.

Fire 8.

**Tiska see Djanet**



## ALGERIA

**Tlemcen (Zenata-Messali El Hadj)** Apt of Entry

814' DAON TLM +01:00 N35 00.9 W001 27.0

Apt Administration (043) 403149; Fax (043) 403137.

**07/25** 8530' BITU/CONC. PCN 75/F/A/W/T. HIRL.

H24. Customs.

Jet A-1.

Fire 7.

**Touat Cheikh Sidi Mohamed Belkebir see Adrar**

**Touggourt (Sidi Mahdi)**

279' DAUK TGR +01:00 N33 03.6 E006 05.2

Apt Administration Fax (029)693145. ATS (029)693148.

**01/19** 9843' CONC/BITU. PCN 54/F/B/W/T. ASDA 01 10171'. ASDA 19 10171'.

0600-1800, O/T PNR before 1300 to DAUKY-DYD.

Fire 5.

**Zarzaitine (In Amenas)** Apt of Entry

1844' DAUZ IAM +01:00 N28 03.1 E009 38.6

(029) 451340; Fax (029) 451310. Apt Operator (029) 451311.

**05/23** 9843' CONC/BITU. PCN 58/F/B/W/T. TODA 23 10827'. ASDA 05 10171'. ASDA 23 10171'. HIRL.

First 300m PCN 57/R/B/W/T.

**14/32** 7218' CONC/BITU. PCN 56/F/B/W/T. ASDA 32 7546'. HIRL.

H24. Customs.

Jet A-1.

ABN. Fire 7.

**Zenata-Messali El Hadj see Tlemcen**

----- Effective 10 Oct: -----

**8 Mai 45 see Setif**

**Abdelhafid Boussouf Bou Chekif see Tiaret**

**Adrar (Touat Cheikh Sidi Mohamed Belk)**

Apt of Entry

919' DAUA AZR +01:00 N27 50.3 W000 11.1

Apt Administration (049)969156. Apt Operator Fax (049)969319.

**04/22** 9843' CONC/BITU. PCN 60/F/A/W/T. ASDA 04 10171'. ASDA 22 10171'. RL.

First 300m PCN 58/R/B/W/T.

H24. Customs.

Jet A-1.

ABN. Fire 7.

**Aguenar-Hadj Bey Akhamok see Tamenghasset**

**Ahmed Benbella see Oran**

**Ain Beida see Ouargla**

**Algiers (Houari Boumediene)** Apt of Entry

82' DAAG ALG +01:00 N36 41.7 E003 13.0

Apt Administration (021)509211; Fax (021)509211.

**05/23** 11483' CONC/BITU. PCN 75/F/D/W/T. HIRL. ALS 23.

Rwy 23 Right-Hand Circuit.

**09/27** 11483' ASPHALT. PCN 78/F/D/W/T. ASDA 27 12500'. HIRL.

Rwy 27 Right-Hand Circuit.

H24. Customs.

F-3, Jet A-1.

Fire 9.

**Annaba (Rabah Bitat)** Apt of Entry

16' DABB AAE +01:00 N36 49.3 E007 48.6

## ALGERIA

Apt Administration (038) 520107; Fax (038) 520107. Apt Operator (038) 520159; Fax (038) 520159.

**05/23** 7513' CONC/BITU. PCN 46/F/D/W/T. ASDA 23 7644'. RL.

**18/36** 9843' ASPHALT. PCN 65 F/D/W/T. LDA 36 9515'. RL.

H24. Customs.

Jet A-1.

Fire 9.

**Batna (Mostepha Ben Boulaid)**

2700' DABT BLJ +01:00 N35 45.5 E006 19.3

ATS (033) 870054 (TWR). Apt Operator (033) 870152; Fax (033) 870152.

**05/23** 9843' CONC/BITU. PCN 58/F/C/X/T. ASDA 05 10171'. ASDA 23 10171'. HIRL.

H24. Customs.

Jet A-1.

Fire 7.

**Bechar (Boudghene Ben Ali Lotfi)** Apt of Entry

2657' DAOR CBH +01:00 N31 39.0 W002 15.2

Apt Administration (049) 221909; Fax (049) 221909. ATS (049) 221910.

**06/24** 11883' CONC/BITU. PCN 53/F/B/W/T. LDA 24 10899'. RL.

First 315m and last 300m PCN 58/R/C/W/T.

**18/36** 9843' CONC/BITU. PCN 54/F/B/W/T. ASDA 18 10171'. ASDA 36 10171'. HIRL. HIALS 18.

First 300m PCN 42/R/B/W/T.

H24. Customs: O/R.

Jet A-1.

ABN. Fire 7.

**Bejaia (Soummam-Abane Ramdane)**

20' DAAE BJA +01:00 N36 42.7 E005 04.2

Apt Administration (034) 183036. Apt Operator (034) 183029; Fax (034) 183031.

**08/26** 7874' CONC/BITU. PCN 46/F/C/W/T. ASDA 26 8071'. RL.

H24. Customs.

Jet A-1.

ABN. Fire 7.

**Biskra (Mohamed Khider)**

289' DAUB BSK +01:00 N34 48.1 E005 44.5

Apt Administration 033543005; Fax 033543005. ATS 033543006. Apt Operator 033543007.

**13/31** 10171' ASPH/CONC. PCN 60/F/C/W/T. ASDA 13 10827'. ASDA 31 10499'. HIRL.

Rwy 13 first 150m PCN 52/R/C/W/T.

Sun-Thu 0700-1900, Fri Sat 0600-1800. Customs: O/R.

Jet A-1.

Fire 6.

**Bordj Mokhtar**

1302' DATM BMW +01:00 N21 22.5 E000 55.4

Apt Administration (049)989502, (049)989486; Fax (049)989502, (049)989486. ATS (049)989110.

**08/26** 9843' CONC/BITU. PCN 66/F/B/W/T. ASDA 08 10171'. ASDA 26 10171'. RL.

0600-1800, O/T PN before 1500. Customs: O/R.

Jet A-1.

Fire 5.

**Bou Saada**

1506' DAAD BUJ +01:00 N35 19.9 E004 12.3

ATS (035) 434779 (TWR). Apt Operator (035) 434778; Fax (035) 434778.

**04/22** 7218' BITUMEN. PCN 34/F/B/W/T. ASDA 22 7415'. RL.

0700-1600.

## ALGERIA

Fire 5.

**Boudghene Ben Ali Lotfi see Bechar**

**Cheikh Larbi Tebessi see Tebessa**

**Chlef**

502' DAOI CFK +01:00 N36 13.0 E001 20.4

Apt Operator (027) 728032; Fax (027) 728032.

**07/25** 5413' CONC/BITU. SIWL 60. RL.

**08/26** 9186' CONC/BITU. PCN 66/F/C/W/T.

ASDA 08 9514'. ASDA 26 9514'. HIRL.

0800-1600, O/T PN before 1400. Customs:  
0700-1530.

Jet A-1.

Fire 6.

**Constantine (Mohamed Boudiaf)** Apt of  
Entry

2316' DABC CZL +01:00 N36 17.1 E006  
37.1

ARO (031) 810127. ATS (031) 810133. Apt  
Operator (031) 810125; Fax (031) 810125.

**13/31** 7874' ASPHALT. PCN 54/F/C/W/T.  
ASDA 13 8071'. ASDA 31 8202'. HIRL.

**16/34** 9843' CONC/BITU. PCN 93/F/D/W/T.  
ASDA 16 10171'. ASDA 34 10171'. HIRL.

H24. Customs.

Jet A-1.

ABN. Fire 8.

**Djanet (Tiska)** Apt of Entry

3169' DAAJ DJG +01:00 N24 17.6 E009  
27.1

ATS (029)481504. Apt Operator (029)481502;  
Fax (029)481502.

**02/20** 7874' BITUMEN. PCN 51 F/B/W/T. HIRL.

**13/31** 9843' BITUMEN. PCN 54/F/B/W/T.  
ASDA 13 10171'. HIRL.

H24. Customs: O/R.

Jet A-1.

ABN. Fire 8.

**El Bayadh**

4482' DAOY EBH +01:00 N33 43.2 E001  
05.5

Apt Administration (049) 612724; Fax (049)  
612734. ATS (049) 612731.

**04/22** 9843' CONC/BITU. PCN 40/F/B/W/T.  
HIRL.

First 300m PCN 46/R/B/W/T.

0800-1600, Fri & Sat clsd.

Fire 4.

**El Golea**

1306' DAUE ELG +01:00 N30 34.1 E002  
51.9

ATS (029) 21 07 33. Apt Operator (029) 21 07  
31/35; Fax (029) 21 07 35.

**10/28** 5906' ASPHALT. SIWL 60. ASDA 10  
6890'. ASDA 28 6890'. MIRL.

**18/36** 11319' CONC/BITU. PCN 52/F/B/W/T.  
ASDA 18 11516'. ASDA 36 11647'. HIRL.

Rwy 18 first 250m and rwy 36 first 200m PCN  
60/R/B/W/T.

Dly 0600-1800.

F-3, Jet A-1.

ABN. Fire 5.

**El Oued (Guemar)**

203' DAUO ELU +01:00 N33 30.8 E006 46.9

Apt Administration (032) 101015; Fax (032)  
101015. ATS (032) 201396. Apt Operator (032)  
101019.

**02/20** 6562' CONC/BITU. PCN 64/F/A/W/T.  
ASDA 20 6890'.

**13/31** 9843' CONC/BITU. PCN 57/F/A/W/T.  
ASDA 13 10171'. ASDA 31 10171'. HIRL.

Dly 0600-1800. Customs: Dly 0700-1500.

Jet A-1.

ABN. Fire 7.

**Ferhat Abbas see Jijel**

**ALGERIA**

**Ghardaia (Noumerat-Moufdi Zakaria)** Apt of Entry

1512' DAUG GHA +01:00 N32 22.9 E003 48.0

Apt Administration (029) 295507; Fax (029) 295507. ATS (029) 295505.

**12/30** 10171' CONC/BITU. PCN 50/F/B/W/T. ASDA 12 10499'. HIRL.

**18/36** 7874' CONC/BITU. PCN 33/F/B/W/T. ASDA 36 8202'. HIRL.

H24. Customs.

F-3, Jet A-1.

ABN. Fire 7.

**Ghriss**

1686' DAOV MUW +01:00 N35 13.0 E000 08.9

Apt Administration (045) 715928; Fax (045) 715928. ATS (045) 715912; Fax (045) 715912. Apt Operator (045) 715911; Fax (045) 715911.

**08/26** 5577' CONC/BITU. PCN 21/F/B/W/T. MIRL.

0700-1500, Fri & Sat clsd. O/T PN before 1300.

Fire 3.

**Guemar see El Oued**

**Hassi Messaoud (Krim Belkacem)** Apt of Entry

459' DAUH HME +01:00 N31 40.4 E006 08.4

Apt Administration (029) 741885. Apt Operator Fax (029) 741892.

**18/36** 9843' CONC/BITU. PCN 66 F/A/X/T. ASDA 18 10171'. ASDA 36 10171'.

Rwy 36 Right-Hand Circuit.

H24. Customs.

Jet A-1.

Fire 7.

**Houari Boumediene see Algiers**

**Illizi (Takhamalt)**

1778' DAAP VVZ +01:00 N26 43.4 E008 37.1

ATS (029)413006. Apt Operator (029)413013; Fax (029)413004.

**09/27** 9843' CONC/BITU. PCN 45/F/A/X/T. ASDA 09 10171'. ASDA 27 10171'. HIRL.

Tue-Sun 0800-1600 and Mon 1000-1800. O/T PN before 1400 to DAAPYDYD.

Jet A-1.

Fire 7.

**In Amenas see Zarzaitine**

**In Guezzam**

1325' DATG INF +01:00 N19 33.6 E005 45.1

ATS (029) 351126. Apt Operator (029) 351123.

**08/26** 7218' CONC/BITU. PCN 27/F/B/W/T. ASDA 08 7546'. ASDA 26 7546'. RL.

0700-1500. Customs.

Fire 5.

**In Salah**

896' DAUI INZ +01:00 N27 15.2 E002 30.6

Apt Administration (029) 366103; Fax (029) 366101. ATS (029) 366102.

**05/23** 9843' CONC/BITU. PCN 51/F/B/X/T. ASDA 05 10171'. ASDA 23 10171'. HIRL.

APR - OCT H24, NOV - MAR 0600-2000. Customs: By operational requirements.

F-3, Jet A-1.

Fire 6.

**Jijel (Ferhat Abbas)**

36' DAAV GJL +01:00 N36 47.7 E005 52.4

ATS (030) 478484, (034) 446460. Apt Operator (034)445055; Fax (034)446259.

**17/35** 7874' CONC/BITU. PCN 59/F/D/W/T. ASDA 17 8202'. ASDA 35 8071'. HIRL. HIALS 17.

0600-1800, non-skd flights PNR before 1200.

## ALGERIA

Fire 6.

**Krim Belkacem** see Hassi Messaoud

**Mohamed Boudiaf** see Constantine

**Mohamed Khider** see Biskra

**Mostepha Ben Boulaid** see Batna

**Noumerat-Moufdi Zakaria** see Ghardaia

**Oran (Ahmed Benbella)** Apt of Entry

299' DAOO ORN +01:00 N35 37.6 W000 36.7

Apt Administration (041)591067; Fax (041)591073. ARO (041)591109. ATS (041)591020, (041)591124.

**07L/25R** 11811' CONC/BITU. PCN 62/F/B/W/T. LDA 25R 11614'. ASDA 07L 12139'. ASDA 25R 12139'. HIRL.

**07R/25L** 9843' CONC/BITU. PCN 113/F/A/W/T. ASDA 07R 10171'. ASDA 25L 10171'. HIRL. HIALS 25L.

H24. Customs.

F-3, Jet A-1.

Fire 8.

**Ouargla (Ain Beida)**

499' DAUU OGX +01:00 N31 55.9 E005 24.8

ATS (029) 774905. Apt Operator (029) 774906; Fax (029) 774908.

**02/20** 9843' CONC/BITU. PCN 60/F/A/W/T. ASDA 02 10171'. ASDA 20 10171'. HIRL.

**18/36** 9843' CONC/BITU. PCN 52/F/A/W/T. ASDA 18 10171'. ASDA 36 10171'. RL. ALS 36.

H24. Customs: O/R.

Jet A-1.

ABN. Fire 7.

**Rabah Bitat** see Annaba

**Setif (8 Mai 45)**

3333' DAAS QSF +01:00 N36 10.7 E005 19.8

Apt Administration (036) 543149. ATS (036) 543130. Apt Operator (036) 543135; Fax (036) 543175.

**09/27** 9514' CONC/BITU. PCN 53/F/C/W/T. HIRL.

H24. Customs.

Jet A-1.

Fire 6.

**Sidi Mahdi** see Touggourt

**Soummam-Abane Ramdane** see Bejaia

**Takhamalt** see Illizi

**Tamenghasset (Aguenar-Hadj Bey**

**Akhamok)** Apt of Entry

4518' DAAT TMR +01:00 N22 48.7 E005 27.0

Apt Administration (029) 330031; Fax (029) 315683. ARO (029) 330065. ATS (029) 330057.

**02/20** 11811' ASPHALT. PCN 56/F/B/W/T. RL.

Rwy 20 Right-Hand Circuit.

**08/26** 10335' ASPH/CONC. PCN 47/F/A/W/T. ASDA 08 10663'. ASDA 26 10663'. HIRL.

Rwy 08 Right-Hand Circuit.

Rwy 08 first 150m PCN 48/R/A/W/T and last 150 m PCN 46/R/A/W/T.

H24. Customs.

Jet A-1.

Fire 8.

**Tebessa (Cheikh Larbi Tebessi)** Apt of Entry

2657' DABS TEE +01:00 N35 26.0 E008 07.5

ATS (037)484394. Apt Operator (037)550748.

**11/29** 9843' CONC/BITU. PCN 59/F/D/W/T. ASDA 11 10171'. ASDA 29 10171'. HIRL.

## ALGERIA

**12/30** 7874' CONC/BITU. PCN 31/F/D/W/T. ASDA 12 8120'. ASDA 30 8120'. RL.

0600-1800. Customs.

Jet A-1.

Fire 5.

**Tiaret (Abdelhafid Boussouf Bou Chekif)**

3245' DAOB TID +01:00 N35 20.5 E001 28.0

Apt Administration (046) 240005; Fax (046) 240005. ATS (046) 240004. Apt Operator (046) 240003.

**08/26** 9843' CONC/BITU. PCN 69/F/C/W/T. ASDA 08 10237'. ASDA 26 10237'. HIRL.

0600-1800, O/T PNR before 1300. Customs: During operational hrs.

Jet A-1.

Fire 5.

**Timimoun**

1027' DAUT TMX +01:00 N29 14.5 E000 17.0

Apt Administration (049) 900217. ATS (049) 902464. Apt Operator Fax (049) 900217.

**06/24** 9843' CONC/BITU. PCN 54/F/B/W/T. ASDA 06 10171'. ASDA 24 10171'.

0600-1800. Customs: H24.

Jet A-1.

Fire 6.

**Tindouf**

1453' DAOF TIN 00:00 N27 42.0 W008 10.0 (049) 370017; Fax (049) 370017. ATS (049) 370012. Apt Operator (049) 370016.

**08L/26R** 9843' CONC/BITU. PCN 58/F/A/X/T. ASDA 08L 10040'. ASDA 26R 10040'. RL. HIALS 26R.

First 300m PCN 47/R/A/W/T.

**08R/26L** 9843' CONC/BITU. PCN 47/R/A/W/T. ASDA 08R 10050'. ASDA 26L 10050'. RL.

H24. Customs.

Jet A-1.

Fire 8.

**Tiska see Djanet**

**Tlemcen (Zenata-Messali El Hadj)** Apt of Entry

814' DAON TLM +01:00 N35 00.9 W001 27.0

Apt Administration (043) 403149; Fax (043) 403137.

**07/25** 8530' BITU/CONC. PCN 75/F/A/W/T. HIRL.

H24. Customs.

Jet A-1.

Fire 7.

**Touat Cheikh Sidi Mohamed Belkebir see Adrar**

**Touggourt (Sidi Mahdi)**

279' DAUK TGR +01:00 N33 03.6 E006 05.2

Apt Administration Fax (029)693145. ATS (029)693148.

**01/19** 9843' CONC/BITU. PCN 54/F/B/W/T. ASDA 01 10171'. ASDA 19 10171'.

0600-1800, O/T PNR before 1300 to DAUKY-DYD.

Fire 5.

**Zarzaitine (In Amenas)** Apt of Entry

1844' DAUZ IAM +01:00 N28 03.1 E009 38.6

(029) 451340; Fax (029) 451310. Apt Operator (029) 451311.

**05/23** 9843' CONC/BITU. PCN 58/F/B/W/T. TODA 23 10827'. ASDA 05 10171'. ASDA 23 10171'. HIRL.

First 300m PCN 57/R/B/W/T.

**14/32** 7218' CONC/BITU. PCN 56/F/B/W/T. ASDA 32 7546'. HIRL.

H24. Customs.

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ALGERIA

Jet A-1.

ABN. Fire 7.

**Zenata-Messali El Hadj see Tlemcen**

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## ANGOLA

**4th Of February** see Luanda

**11th of November** see Ondjiva

**17th of September** see Benguela

**Albano Machado** see Huambo

**Benguela (17th of September)**

118' FNBG BUG +01:00 S12 36.6 E013 24.2

Apt Operator 272 234 895/923 643071; abenguela@enana-ao.com.

**14/32** 5249' ASPHALT. PCN 9/F/A/Z/U. TODA 14 5905'. TODA 32 5905'.

Days. Customs: 0800-2300 or until last flight of the day.

Jet A-1.

ABN.

**Cabinda**

66' FNCA CAB +01:00 S05 35.2 E012 11.3

Apt Operator 923 597 661; acabinda@enana-ao.com.

**18/36** 8202' ASPHALT. PCN 39/F/B/X/U. TODA 18 8694'. TODA 36 8694'. ASDA 18 8399'. ASDA 36 8399'.

0500-2300. Customs: 0800-2300 or until the last flight of the day..

Jet A-1.

ABN. Fire 6.

**Catumbela** Apt of Entry

13' FNCT CBT +01:00 S12 28.8 E013 29.2

Apt Operator 923 768 026/993 768 026; acatumbela@enana-ao.com.

**02/20** 12093' PAVED. TODA 02 13405'. TODA 20 13307'. ASDA 02 12290'. ASDA 20 12290'. HIALS 20.

0500-2000. Customs: 0800-2300 or until the last flight of the day.

Jet A-1.

ABN. Fire 7.

**Dundo (Kamakenzo)**

2500' FNDU +01:00 S07 24.2 E020 49.0

**04/22** 8202' PAVED. PCN 40/F/B/X/T. TORA 22 7546'. LDA 04 7546'. TODA 04 8694'. TODA 22 8694'. ASDA 04 8399'. ASDA 22 8399'.

Days.

Fire 7.

**Huambo (Albano Machado)**

5592' FNHU NOV +01:00 S12 48.0 E015 45.0

Apt Operator 923 468 589/991 468 589; ahuambo@enana-ao.com.

**11/29** 8727' ASPHALT. TODA 11 8924'.

Days. Customs: 0800-2300 or until the last flight of the day.

Jet A-1.

ABN. Fire 6.

**Kamakenzo** see Dundo

**Luanda (4th Of February)** Apt of Entry

238' FNLU LAD +01:00 S08 51.3 E013 14.0

Apt Administration (2) 226516-20, -36, -08; vendail@enana-ao.com.

**05/23** 12139' ASPHALT. PCN 85/F/B/W/U. LDA 23 11647'. TODA 05 13123'. TODA 23 12926'. ASDA 23 12336'. ALS 23.

**07/25** 8166' ASPHALT. PCN 76/F/B/Y/U. TODA 07 10020'. TODA 25 8658'. ASDA 07 8363'.

H24. Customs.

Jet A-1.

ABN. Fire 9.

**Lubango (Mukanka)** Apt of Entry

5772' FNUB SDD +01:00 S14 55.5 E013 34.3

Apt Operator 923 505 305; alubango@enana-ao.com.



**ANGOLA**

**10/28** 10308' ASPHALT. PCN 52/F/A/X/U. TODA 10 11292'. TODA 28 11292'. ASDA 10 10505'. ASDA 28 10505'. HIALS 28.

0500-2100. Customs: 0800-2300 or until the last flight of the day.

Jet A-1.

Fire 7.

**Luena**

4446' FNUE LUO +01:00 S11 46.1 E019 53.8

Apt Operator 923831170; 912214025; aluena@enana-ao.com.

**11/29** 10991' ASPHALT. TODA 11 11778'. TODA 29 11778'. ASDA 11 11188'. ASDA 29 11188'.

Days.

Jet A-1.

ABN. Fire 5.

**Menongue**

4691' FNME +01:00 S14 39.4 E017 43.2

Apt Operator 924 180 957; amenongue@enana-ao.com.

**13/31** 11483' PAVED. TODA 13 13452'. TODA 31 13452'. ASDA 13 11778'. ASDA 31 11778'.

Days. Customs: 0800-2300.

Jet A-1.

ABN. Fire 5.

**Mukanka see Lubango**
**Namibe (Welwitschia Mirabilis)**

230' FNMO MSZ +01:00 S15 15.6 E012 08.9

Apt Operator 941 175 290; anamibe@enana-ao.com.

**08/26** 8202' ASPHALT. TODA 08 9186'. TODA 26 9186'. ASDA 08 8399'. ASDA 26 8399'. HIALS 26.

0500-2000. Customs: 0800-2300 or until the last flight of the day.

Jet A-1.

ABN. Fire 7.

**Ondjiva (11th of November)**

3657' FNGI VPE +01:00 S17 02.6 E015 41.0

Apt Operator 023 836 691; aondjiva@enana-ao.com.

**13/31** 10623' ASPHALT. PCN 39/F/B/X/U. TODA 31 11410'. ASDA 13 10820'. ASDA 31 10820'.

Days. Customs: 0830-2300 or until the last flight of the day.

Jet A-1.

ABN. Fire 5.

**Saurimo**

3585' FNFA VHC +01:00 S09 41.3 E020 25.8

Apt Operator 923 742 261; asaurimo@enana-ao.com.

**13/31** 11155' ASPHALT.

Days.

Jet A-1.

ABN. Fire 5.

**Welwitschia Mirabilis see Namibe**

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ASCENSION I.**Ascension I. (Ascension Aux AB)** Apt of

Entry

278' FHAW ASI Mil. 00:00 S07 58.2 W014  
23.6

Apt Manager 321-494-1110. Apt Operator  
011-247-2200/2222.

**13/31** 10019' ASPHALT. PCN 31/F/A/W/T.  
HIRL. HIALS 13.

Mon-Fri 0730-1700LT, Sat 0730-1200LT unless  
prior coordination.

Refer to DOD/NGA supplementary publications  
for additional information.

JP-8. JASU. Oxygen.

ABN.

## BOTSWANA

**Francistown (Francistown Intl)** Apt of Entry  
3312' FBFT FRW +02:00 S21 09.4 E027  
28.2

Apt Administration 2413420, 2450661,  
2413811; Fax 2415855.

**11/29** 7218' BITUMEN. PCN 25/F/B/Y/U. TODA  
11 8399'. TODA 29 8399'. ASDA 11 7316'.  
ASDA 29 7316'.

**13/31** 9843' ASPH/CONC. PCN 44/F/C/W/T.  
ASDA 13 10040'. ASDA 31 10040'. MIRL.

0400-2000. Customs.

F-3, Jet A-1.

Fire 4.

**Gaborone (Sir Seretse Khama Intl)** Apt of  
Entry

3299' FBSK GBE +02:00 S24 33.3 E025  
55.1

Apt Operator 3914401, 3951191, ext. 3201;  
Fax 3904557.

**08/26** 13123' CONCRETE. PCN 75/R/B/W/T.  
TODA 08 14107'. TODA 26 18044'. ASDA 08  
13320'. ASDA 26 13320'. HIRL.

Rwy 26 Right-Hand Circuit.

H24. Customs.

F-4, Jet A-1.

Fire 7.

**Ghanzi**

3729' FBGZ GNZ +02:00 S21 42.0 E021  
40.0

Apt Operator 6596249, 6596508; Fax 6596160.

**06/24** 4921' BITUMEN. AUW-13. ASDA 06  
5019'. ASDA 24 5019'. RL.

Mon-Fri: 0530-1430. Customs: SEP-APR  
0400-1630, MAY-AUG 0430-1600.

Fuel: U.

**Gumare**

3150' FBGM +02:00 S19 20.0 E022 09.0

**07/25** 3609' SAND. AUW-13. ASDA 07 3707'.  
ASDA 25 3625'.

Rwy 25 Right-Hand Circuit.

Inspect landing area before landing.

Mon-Fri except Hol, 0530-1430.

**Kang**

3520' FBKG +02:00 S23 41.0 E022 49.0

**08/26** 3609' BITUMEN. AUW-13. ASDA 08  
3707'. ASDA 26 3707'.

Mon-Fri except Hol, 0530-1430.

**Kanye**

4200' FBKY +02:00 S25 03.0 E025 19.0

**03/21** 3609' GRAS/GRVL. AUW-13. ASDA 03  
4068'. ASDA 21 3839'.

Mon-Fri except Hol, 0530-1430.

**Kasane (Kasane Intl)** Apt of Entry

3290' FBKE BBK +02:00 S17 49.9 E025  
09.8

Apt Operator 6250133, 6250136, 6255000; Fax  
6250174.

**08/26** 9843' ASPHALT. PCN 38/F/A/X/U.  
TODA 08 10827'. TODA 26 10827'.  
HIRL. HIALS.

Dly 0400-2000 and by Notam. Customs: Dly  
0400-1630.

F-3, Jet A-1.

Fire 5.

**Limpopo Valley**

1774' FBLV TLD +02:00 S22 11.4 E029  
07.6

Apt Operator 2645321; Fax 2645263.

**12/30** 4921' BITU/SLD. AUW-46,  
PCN 9/F/B/W/T.

Dly 0400-1600. Customs: By prior arrange-  
ment.

**Makalamabedi**

3100' FBMM +02:00 S20 20.0 E023 53.0

**08/26** 2920' SAND. AUW-13. ASDA 08 3077'.  
ASDA 26 3169'.

**BOTSWANA**

Mon-Fri except Hol, 0530-1430.

**Maun (Maun Intl)** Apt of Entry

3094' FBMN MUB +02:00 S19 58.3 E023 25.7

Apt Operator 6860238; Fax 6860186.

**08/26** 12139' ASPHALT. PCN 44/F/A/X/T. TODA 08 13123'. TODA 26 13123'. HIRL.

0400-2000. Customs.

Jet A-1, Fuel: U.

Fire 6.

**Nata**

3200' FBNT +02:00 S20 14.0 E026 10.0

**09/27** 3609' GRAVEL. AUW-13. ASDA 09 3904'. ASDA 27 3691'.

Inspect landing area before landing.

Mon-Fri except Hol, 0530-1430.

**Nokaneng**

3200' FBNN +02:00 S19 20.0 E022 10.0

**06/24** 2739' SAND. AUW-13. ASDA 06 2837'. ASDA 24 2837'.

Inspect landing area before landing.

Mon-Fri except Hol, 0530-1430.

**Palapye**

3000' FBPY +02:00 S22 33.0 E027 08.0

**07/25** 3609' GRAVEL. AUW-13.

Mon-Fri except Hol, 0530-1430.

**Selebi-Phikwe** Apt of Entry

2925' FBSP PKW +02:00 S22 03.4 E027 49.2

Apt Operator 2600730, 2600133, 2600728; Fax 2600729.

**12/30** 5840' BITUMEN. PCN 8/F/A/Y/U, AUW-46. TODA 12 6824'. TODA 30 6168'. ASDA 12 5955'. ASDA 30 5971'.

Mon-Fri 0530-1045 and 1145-1430. Customs: SEP-MAR 0430-1630, APR-AUG 0500-1600.

Fire N.

**Shakawe**

3380' FBSW SWX +02:00 S18 22.0 E021 49.0

**11/29** 4593' BITUMEN. AUW-13. ASDA 11 4691'. ASDA 29 4691'.

Mon-Fri except Hol, 0530-1430. Customs.

**Sir Seretse Khama Intl see Gaborone**

**Tshabong**

3184' FBTS TBY +02:00 S26 02.0 E022 24.0

**05/23** 3281' GRAVEL. AUW-13.

Mon-Fri except Hol, 0530-1430.

## BURUNDI

**Bujumbura (Melchior Ndadaye Intl)** Apt of

Entry

2582' HBBA BJM +02:00 S03 18.5 E029  
19.0Apt Operator 22203101, 22203102; Fax  
22223428; aacb@aacb.bi.**17/35** 11811' BITUMEN. PCN 80/F/A/X/U.  
TODA 17 12008'. TODA 35 12008'. ASDA 17  
12008'. ASDA 35 12008'. HIRL. HIALS 35.

Rwy 17 Right-Hand Circuit.

H24. Customs.

F-4, JP-1.

ABN. Fire 7.

**Gitega**5741' HBBE GID +02:00 S03 24.9 E029  
55.0Apt Operator 22203101, 22203102; Fax  
22223428; aacb@aacb.bi.**12/30** 3117' LATERITE. AUW-66.

Days. Restricted use.

**Kirundo**4619' HBBO KRE +02:00 S02 32.7 E030  
05.6**12/30** 3281' LATERITE. AUW-13.

Days.

**Melchior Ndadaye Intl see Bujumbura**

**CANARY IS.**
**El Berriel**

25' GCLB 00:00\* N27 46.9 W015 30.4

Apt Operator 928157147.

**07/25** 2625' ASPHALT.

Rwy 07 Right-Hand Circuit.

Days.

F-3.

9186'(2800m)-10171'(3100m)

PCN

124/R/B/W/T.

First 984'(300m) from THR rwy 03R PCN 68/F/A/W/T, last 984'(300m) PCN 50/R/B/W/T.

H24, PPR for foreign mil acft. Customs: H24.

F-3, Jet A-1.

Fire 9.

**Fuerteventura** Apt of Entry

83' GCFV FUE 00:00\* N28 27.2 W013 51.8

Apt Administration (928) 860 600/500; Fax (928) 860 530; ejecufue@aena.es.

**01/19** 11175' ASPHALT. PCN 130/F/A/W/T. TORA 19 7894'. LDA 01 7894'. LDA 19 9646'. TODA 01 11372'. TODA 19 8091'. HIRL. Pilot Controlled Lighting.

Rwy 01 Right-Hand Circuit.

Mon-Thu & Sat 0630-2200 (0730-2300) plus 1hr PPR before apt closure; Fri & Sun 0600-2130 (0700-2230) plus 90min PPR before apt closure. PPR restricted to pax commercial flights previously coordinated. Customs.

Jet A-1.

Fire 9.

**Hierro**

103' GCHI VDE 00:00\* N27 48.9 W017 53.2

Apt Administration (922) 553707; Fax (922) 553731; vde.coord@aena.es.

**16/34** 4101' ASPHALT. PCN 29/F/A/W/T. MIRL.

Rwy 34 Right-Hand Circuit.

First 85m PCN 30/R/C/W/T.

First 150m PCN 21/F/C/W/T.

Summer:0710-1700 EXC JUL-SEP 0710-1800 plus 90 MIN. Winter:0810-1800 plus 90 MIN.

Fire 5.

**La Gomera**

716' GCGM GMZ 00:00\* N28 01.8 W017 12.9

Apt Operator (922) 873000; Fax (922) 873002; cecoagqz@aena.es.

**09/27** 4921' ASPHALT. PCN 55/F/B/W/T. TODA 09 5118'. TODA 27 5118'. HIRL.

Rwy 09 Right-Hand Circuit.

Summer: 0700-1700, Winter: 0800-1800.

Fire 5.

**Gran Canaria** Apt of Entry

78' GCLP LPA 00:00\* N27 55.9 W015 23.2

Apt Operator (928)328300 (MIL), (928)579000; Fax (928)328296 (MIL), (928)579117; lpainfo@aena.es.

**03L/21R** 10171' CONC/ASPH. PCN 102/F/A/W/T. TODA 21R 10368'. HIRL. HIALS 03L. ALS 21R.

Rwy 03L Right-Hand Circuit.

**03R/21L** 10171' CONC/ASPH. PCN 89/F/A/W/T. TODA 21L 10368'. HIRL. HIALS 03R. ALS 21L.

Rwy 03R Right-Hand Circuit.

RWY 03R: 0-984'(300m) PCN 100/R/A/W/T; 984'(300m)-9186'(2800m) PCN 89/F/A/W/T;

**La Palma**

108' GCLA SPC 00:00\* N28 37.6 W017 45.3

Apt Administration (922)426100/101/103; Fax (922)426142/141/143. Apt Operator spcaero-puerto@aena.es.

**18/36** 7388' ASPHALT. PCN 60/F/A/W/T. TORA 18 6923'. TORA 36 7218'. LDA 18 6752'. LDA 36 6752'. TODA 18 7415'. TODA 36 7585'.

## CANARY IS.

ASDA 18 6923'. ASDA 36 7218'. Pilot Control-  
led Lighting.

Rwy 36 Right-Hand Circuit.

984' (300m) from Thr: PCN 90/F/A/W/T.

0700-2030 (0800-2130). 2hr PPR. Customs.

Jet A-1.

ABN. Fire 7 Cat 8 PPR 3hr.

**Lanzarote** Apt of Entry

47' GCRR ACE 00:00\* N28 56.7 W013 36.3

Apt Administration CIV (928) 846000/006, MIL

(928) 846800; Fax CIV (928) 846004, MIL (928)

846827. Apt Operator Aceceops@aena.es.

**03/21** 7874' ASPHALT. PCN 103/F/A/W/T.

TORA 21 7579'. LDA 03 7579'. LDA 21 7579'.

TODA 03 8071'. TODA 21 8071'. ASDA 21

7579'. HIRL.

Rwy 03 Right-Hand Circuit.

Summer: 0600-0000, Winter: 0700-0100. For  
foreign state ACFT: PPR 24HR. Customs.

F-3, Jet A-1.

Fire 9 MIL Fire Cat 7.

**Reina Sofia see Tenerife-South****Tenerife-North**

2077' GCXO TFN 00:00\* N28 29.0 W016  
20.5

Apt Operator (922) 635860, (922) 635870; Fax  
(922) 631328, (922) 635859;

tfn.ops.ceops@aena.es.

**12/30** 10404' ASPHALT. PCN 53/F/C/W/T.

TODA 12 11037'. HIRL. ALS 30.

Summer: 0545-2220, Winter: 0645-2320 plus  
1hr PPR 30min before AD clsd. GA IFR/VFR  
traffic 24hr PPR to Ops office (922) 635 860/70.  
Customs.

F-3, Jet A-1.

Fire 9.

**Tenerife-South (Reina Sofia)** Apt of Entry

209' GCTS TFS 00:00\* N28 02.7 W016 34.3

Apt Administration tfsopya@aena.es. Apt Oper-  
ator (922) 759000; Fax (922) 759247.

**07/25** 10499' ASPHALT. PCN 92/F/C/W/T.

TODA 07 10696'. TODA 25 10696'. HIRL.

Rwy 07 Right-Hand Circuit.

H24. Customs.

Jet A-1.

Fire 9.

## CAPE VERDE

**Amilcar Cabral see Sal**

**Aristides Pereira Intl see Rabil**

**Cesaria Evora Intl see Sao Pedro**

**Maio**

60' GVMA MMO -01:00 N15 09.3 W023 12.8

Apt Operator 255 1108; Fax 255 1108.

**01/19** 3937' ASPHALT. SIWL 44.

By operational requirements.

Fire 5.

**Mandela Intl see Praia**

**Mosteiros**

1' GVMT -01:00 N15 02.7 W024 20.4

Apt Operator 283 1006, 283 1201; Fax 283 1201.

**11/29** 2402' GRAVEL. SIWL 11.

By operational requirements.

Fire 2.

**Praia (Mandela Intl)** Apt of Entry

324' GVNP RAI -01:00 N14 56.5 W023 29.1

Apt Operator 260 8700/15; Fax 263 3876.

**03/21** 6890' ASPHALT. PCN 49/F/B/X/U. TORA 21 6578'. LDA 03 6234'. LDA 21 6578'. TODA 21 6578'. ASDA 21 6578'. RL. ALS.

Rwy 21 Right-Hand Circuit.

H24. Customs.

Jet A-1.

ABN. Fire 7.

**Preguica**

601' GVSN SNE -01:00 N16 35.3 W024 17.0

Apt Operator 235 1313/1954; Fax 235 1500.

**01/19** 4593' ASPHALT. SIWL 44. LDA 01 3937'.

By operational requirements.

Fire 5.

**Rabil (Aristides Pereira Intl)** Apt of Entry

91' GVBA BVC -01:00 N16 08.2 W022 53.3

Apt Administration 251 90 00, 251 90 01, 251 19 24; Fax 251 11 93.

**03/21** 6890' ASPHALT. PCN 71/F/B/W/T.

Rwy 21 Right-Hand Circuit.

0900-1900 and by Notam. Customs.

Jet A-1.

Fire 7.

**Sal (Amilcar Cabral)** Apt of Entry

184' GVAC SID -01:00 N16 44.3 W022 57.0

Apt Operator 241 1135, 241 1372; Fax 241 1570.

**01/19** 9843' ASPHALT. PCN 58/F/A/W/U. TODA 01 10827'. TODA 19 10827'. HIRL.

H24. Customs.

Jet A-1.

ABN. Fire 9.

**Sao Filipe**

568' GVSF -01:00 N14 53.1 W024 28.8

Apt Operator 281 2107; Fax 281 2108.

**14/32** 4429' ASPHALT. SIWL 44. LDA 14 3773'. LDA 32 3773'.

By operational requirements.

Fire 5.

**Sao Pedro (Cesaria Evora Intl)** Apt of Entry

105' GVSF VXE -01:00 N16 50.0 W025 03.3

Apt Operator 2323715, 2300602; Fax 2327553.

**07/25** 6562' ASPHALT. PCN 42/F/B/X/T. LDA 07 6070'. TODA 07 6890'. TODA 25 7054'. RL.

0700-2300. Non-sked flts O/R 3hr. Customs: 0700-2300.

Jet A-1.

ABN. Fire 7.



**Diego Garcia (Diego Garcia Navy)**

14' FJDG Mil. +06:00 S07 18.8 E072 24.7

Apt Manager 315 370 3322 (DSN); Fax 315 370 3206 (DSN). Apt Operator nsfair-ops@fe.navy.mil.

**13/31** 12004' CONCRETE. PCN 97/R/A/W/T. ASDA 13 12929'. ASDA 31 12977'. HIRL. HIALS.

Mon-Fri 0100-1759. 72hr PNR, official business only.

JP-5. JASU. Oxygen.

ABN.

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COMOROS**Moroni (Prince Said Ibrahim)**

93' FMCH HAH +03:00 S11 32.2 E043 16.3

Apt Administration 7731593; Fax 7732613,  
7732135; asnacom@comorestelecom.km.

**02/20** 9514' ASPHALT. PCN 65/F/B/W/T.  
TODA 20 10301'. ASDA 02 9711'. ASDA 20  
9711'. HIRL. HIALS 02.

First 720m PCN: 83/F/B/W/T.

0300-1800. O/T O/R 72hr. Customs: During skd  
ops 0400-1230.

Jet A-1. Oxygen.

Fire 7.

**Prince Said Ibrahim see Moroni**

**CONGO, D.R. OF**

----- Effective thru 09 Oct: -----

**Bangoka Intl see Kisangani**
**Bukavu (Kavuma)**

5657' FZMA BKY +02:00 S02 18.5 E028 48.5

Apt Operator Kavumu-aero@rva.cd, bukavu-aero@yahoo.fr.

**17/35** 6562' ASPHALT. S/L 22, TT/L 88, T/L 44.

Rwy 35 Right-Hand Circuit.

Customs.

Fire 4.

**Bunia**

4083' FZKA BUX +02:00 N01 33.9 E030 13.2

**10/28** 5837' ASPHALT. T/L 44, S/L 22, TT/L 88. TODA 10 6244'. TODA 28 6142'. ASDA 10 5965'. ASDA 28 5945'.

**Buta-Zega**

1380' FZKJ BZU +02:00 N02 49.0 E024 47.0

Apt Operator aerozega@yahoo.fr.

**07/25** 6890' PAVED. T/L 66, S/L 33, TT/L 132. ASDA 07 7054'. ASDA 25 7054'.

Days. Customs.

Fire 4.

**Gbadolite**

1378' FZFD BDT +01:00 N04 15.0 E020 58.0

**07/25** 10499' ASPHALT. S/L 33, T/L 66, TT/L 132.

Days. Customs: During skd ops.

**Gemena**

1378' FZFK GMA +01:00 N03 14.2 E019 46.3

Apt Operator 814040264, 99863361; jakaleng@yahoo.fr.

**10/28** 6562' ASPHALT. S/L 22, TT/L 88, T/L 44.

Days. Customs.

Fire 6.

**Goma (Goma Intl) Apt of Entry**

5045' FZNA GOM +02:00 S01 40.3 E029 14.3

Apt Operator goma-aero@rva.cd, goma-aero@virunga.cd.

**17/35** 8530' ASPHALT. S/L 33, TT/L 132, T/L 66. ASDA 35 8743'.

Rwy 17 Right-Hand Circuit.

H24. Customs.

Jet A-1.

ABN. Fire 7.

**Kalemie**

2553' FZRF FMI +02:00 S05 52.5 E029 15.0

Apt Operator 825 114 378, 812 357 859; kalemie-aero@rva.cd, kalemieaero@gmail.com.

**06/24** 5741' ASPHALT. T/L 44, S/L 22, TT/L 88.

Days.

Jet A-1.

Fire 5.

**Kamina (Kamina Base)**

3543' FZSA KMN Mil. +02:00 S08 37.6 E025 14.9

**13L/31R** 8858' PAVED. T/L 88, S/L 44, TT/L 220. Rwy 13L Runway closed. Rwy 31R Runway closed.

**13R/31L** 8858' PAVED. T/L 88, S/L 44, TT/L 220.

Days.

F-4.

**Kananga**

2143' FZUA KGA +02:00 S05 54.0 E022 28.2

Apt Operator 818138031, 9991003885, 851124332; Kananga-aero@rva.cd, kananga.aero@yahoo.fr, theoitebe@yahoo.fr.

**CONGO, D.R. OF**

**11/29** 7218' CONC/BITU. S/L 33, T/L 66, TT/L 132. ASDA 11 7546'.

Days. Customs.

Jet A-1.

ABN. Fire 7.

**Kavuma see Bukavu**

**Kindu**

1628' FZOA KND +02:00 S02 55.2 E025 54.9

Apt Operator kinduaero@yahoo.fr.

**18/36** 7218' ASPHALT. S/L 33, TT/L 132, T/L 66.

Days, nights O/R 24hr before. Customs.

F-4, J.

ABN. Fire 7.

**Kinshasa (N'Djili Intl)** Apt of Entry

998' FZAA FIH +01:00 S04 23.2 E015 26.5

Apt Operator 23510, 23760; Ndjili-aero@rva.cd, rvandjili@yahoo.fr.

**06/24** 13123' CONCRETE. T/L 88, TT/L 220, S/L 44. TODA 06 18701'. TODA 24 16578'. ALS 06.

Rwy 24 Right-Hand Circuit.

H24. Customs.

Jet A-1.

ABN. Fire 8.

**Kinshasa (N'Dolo)**

915' FZAB NLO +01:00 S04 19.0 E015 19.0

Apt Operator Ndolo-aero@rva.cd.

**08/26** 5249' ASPHALT. TT/L 132, S/L 33, T/L 66.

Rwy 08 Right-Hand Circuit.

Customs.

Jet A-1.

Fire 4.

**Kisangani (Bangoka Intl)** Apt of Entry

1417' FZIC FKI +02:00 N00 28.9 E025 20.3

Apt Administration kisanganiinterair-port@yahoo.fr. Apt Operator 211063, 8105910697, 993367869; Bangoka-aer@rva.cd.

**13/31** 11483' ASPHALT. S/L 44, T/L 88, TT/L 220. ASDA 13 11811'. ASDA 31 11811'.

Rwy 13 Right-Hand Circuit.

Days. Customs.

F-3, Jet A-1.

ABN. Fire 7.

**Kolwezi**

5007' FZQM KWZ +02:00 S10 46.0 E025 30.0

Apt Operator 972001338, 997032949; Kolwezi-aero@rva.cd, jditend@yahoo.fr.

**11/29** 8202' ASPHALT. S/L 22, T/L 44, TT/L 88.

Days. Customs.

Fire 6.

**Lubumbashi (Lubumbashi Intl)** Apt of Entry

4290' FZQA FBM +02:00 S11 35.5 E027 31.9

Apt Administration ccrluano@yahoo.fr, rva-luano@yahoo.fr. Apt Operator 813331298, 999946558, 815776216, 998788069; Fax 222804 (local).

**07/25** 10499' ASPHALT. S/L 40, TT/L 176, T/L 84. ALS 25.

H24. Customs.

F-2, 100 octane, Jet A-1.

ABN. Fire 9.

**Matadi-Tshimpi**

1116' FZAM MAT +01:00 S05 48.0 E013 26.0

Apt Operator matadi-aero@rva.cd.

**02/20** 5184' LATERITE. T/L 44, S/L 22, TT/L 88.

F-4.

**CONGO, D.R. OF**
**Mbandaka**

1040' FZEA MDK +01:00 N00 01.4 E018 17.3

Apt Operator 2203, 2191, 2124.

**18/36** 7228' ASPHALT. T/L 66, S/L 33, TT/L 132. ASDA 18 7556'. ASDA 36 7556'.

Days. Customs: During ops hrs.

Jet A-1.

ABN. Fire 4.

**Mbuji-Mayi**

2221' FZWA MJM +02:00 S06 07.3 E023 34.1

Apt Operator 11 Ext 27-22; bipemba-aero@rva.cd, rvamjm@muanelu.cd.

**16/34** 6559' ASPHALT. T/L 44, TT/L 88, S/L 22. Mon Tue Fri Sunrise-2200. Wed Thu Sat Sun on request 24hr before Sunrise. Customs.

F-3, Jet A-1.

Fire 5.

**Muanda**

89' FZAG +01:00 S05 56.0 E012 21.0

ATS 851401172, 828917323. Apt Operator muanda-aero@rva.cd, muanda-aero@yahoo.fr.

**04/22** 4856' ASPHALT.

Days.

Fire 4.

**N'Djili Intl see Kinshasa**

**N'Dolo see Kinshasa**

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----- **Effective 10 Oct:** -----

**Bangoka Intl see Kisangani**

**Bukavu (Kavuma)**

5657' FZMA BKY +02:00 S02 18.5 E028 48.5

Apt Operator Kavumu-aero@rva.cd, bukavu-aero@yahoo.fr.

**17/35** 6562' ASPHALT. S/L 22, TT/L 88, T/L 44.

Rwy 35 Right-Hand Circuit.

Customs.

Fire 4.

**Bunia**

4083' FZKA BUX +02:00 N01 33.9 E030 13.2

**10/28** 5837' ASPHALT. T/L 44, S/L 22, TT/L 88. TODA 10 6244'. TODA 28 6142'. ASDA 10 5965'. ASDA 28 5945'.

**Buta-Zega**

1380' FZKJ BZU +02:00 N02 49.0 E024 47.0

Apt Operator aerezega@yahoo.fr.

**07/25** 6890' PAVED. T/L 66, S/L 33, TT/L 132. ASDA 07 7054'. ASDA 25 7054'.

Days. Customs.

Fire 4.

**Gbadolite**

1378' FZFD BDT +01:00 N04 15.0 E020 58.0

**07/25** 10499' ASPHALT. TT/L 132, S/L 33, T/L 66.

Days. Customs: During skd ops.

**Gemena**

1378' FZFK GMA +01:00 N03 14.2 E019 46.3

Apt Operator 814040264, 99863361; jakaleng@yahoo.fr.

**10/28** 6562' ASPHALT. T/L 44, S/L 22, TT/L 88. Days. Customs.

Fire 6.

**Goma (Goma Intl)** Apt of Entry

5045' FZNA GOM +02:00 S01 40.3 E029 14.3

Apt Operator goma-aero@rva.cd, goma-aero@virunga.cd.

**CONGO, D.R. OF**

**17/35** 8530' ASPHALT. T/L 66, S/L 33, TT/L 132. ASDA 35 8743'.

Rwy 17 Right-Hand Circuit.

H24. Customs.

Jet A-1.

ABN. Fire 7.

**Kalemie**

2553' FZRF FMI +02:00 S05 52.5 E029 15.0  
Apt Operator 825 114 378, 812 357 859; kale-  
mie-aero@rva.cd, kalemieaero@gmail.com.

**06/24** 5741' ASPHALT. T/L 44, S/L 22, TT/L 88.

Days.

Jet A-1.

Fire 5.

**Kamina (Kamina Base)**

3543' FZSA KMN Mil. +02:00 S08  
37.6 E025 14.9

**13L/31R** 8858' PAVED. TT/L 220, T/L 88, S/  
L 44. Rwy 13L Runway closed. Rwy 31R  
Runway closed.

**13R/31L** 8858' PAVED. S/L 44, TT/L 220, T/  
L 88.

Days.

F-4.

**Kananga**

2143' FZUA KGA +02:00 S05 54.0 E022  
28.2

Apt Operator 818138031, 9991003885,  
851124332; Kananga-aero@rva.cd,  
kananga.aero@yahoo.fr, theoitebe@yahoo.fr.

**11/29** 7218' CONC/BITU. S/L 33, TT/L 132, T/  
L 66. ASDA 11 7546'.

Days. Customs.

Jet A-1.

ABN. Fire 7.

**Kavuma see Bukavu**

**Kindu**

1628' FZOA KND +02:00 S02 55.2 E025  
54.9

Apt Operator kinduaero@yahoo.fr.

**18/36** 7218' ASPHALT. S/L 33, TT/L 132, T/  
L 66.

Days, nights O/R 24hr before. Customs.

F-4, J.

ABN. Fire 7.

**Kinshasa (N'Djili Intl)** Apt of Entry

998' FZAA FIH +01:00 S04 23.2 E015 26.5

Apt Operator 23510, 23760; Ndjili-aero@rva.cd,  
rvandjili@yahoo.fr.

**06/24** 13123' CONCRETE. TT/L 220, S/L 44, T/  
L 88. TODA 06 18701'. TODA 24 16578'. ALS  
06.

Rwy 24 Right-Hand Circuit.

H24. Customs.

Jet A-1.

ABN. Fire 8.

**Kinshasa (N'Dolo)**

951' FZAB NLO +01:00 S04 19.0 E015 19.0

Apt Operator 22986/24812; Ndolo-  
aero@rva.cd.

**07/25** 5249' ASPHALT. T/L 66, TT/L 132, S/  
L 33.

Rwy 07 Right-Hand Circuit.

Days. Customs.

Jet A-1.

Fire 4.

**Kisangani (Bangoka Intl)** Apt of Entry

1417' FZIC FKI +02:00 N00 28.9 E025 20.3

Apt Administration kisanganiinterair-  
port@yahoo.fr. Apt Operator 211063,  
8105910697, 993367869; Bangoka-  
aer@rva.cd.

**13/31** 11483' ASPHALT. TT/L 220, S/L 44, T/  
L 88. ASDA 13 11811'. ASDA 31 11811'.

## CONGO, D.R. OF

Rwy 13 Right-Hand Circuit.

Days. Customs.

F-3, Jet A-1.

ABN. Fire 7.

### Kolwezi

5007' FZQM KWZ +02:00 S10 46.0 E025 30.0

Apt Operator 972001338, 997032949; Kolwezi-  
aero@rva.cd, jditend@yahoo.fr.

**11/29** 8202' ASPHALT. TT/L 88, S/L 22, T/L 44.

Days. Customs.

Fire 6.

**Lubumbashi (Lubumbashi Intl)** Apt of Entry

4290' FZQA FBM +02:00 S11 35.5 E027 31.9

Apt Administration ccrluano@yahoo.fr, rva-  
luano@yahoo.fr. Apt Operator 813331298,  
999946558, 815776216, 998788069; Fax  
222804 (local).

**07/25** 10499' ASPHALT. S/L 40, T/L 84, TT/  
L 176. ALS 25.

H24. Customs.

F-2, 100 octane, Jet A-1.

ABN. Fire 9.

### Matadi-Tshimpi

1116' FZAM MAT +01:00 S05 48.0 E013 26.0

Apt Operator matadi-aero@rva.cd.

**02/20** 5184' LATERITE. S/L 22, TT/L 88, T/  
L 44.

F-4.

### Mbandaka

1040' FZEA MDK +01:00 N00 01.4 E018 17.3

Apt Operator 2203, 2191, 2124.

**18/36** 7228' ASPHALT. TT/L 132, T/L 66, S/  
L 33. ASDA 18 7556'. ASDA 36 7556'.

Days. Customs: During ops hrs.

Jet A-1.

ABN. Fire 4.

### Mbuji-Mayi

2221' FZWA MJM +02:00 S06 07.3 E023 34.1

Apt Operator 11 Ext 27-22; bipemba-  
aero@rva.cd, rvamjm@muanetu.cd.

**16/34** 6559' ASPHALT. S/L 22, T/L 44, TT/L 88.

Mon Tue Fri Sunrise-2200. Wed Thu Sat Sun  
on request 24hr before Sunrise. Customs.

F-3, Jet A-1.

Fire 5.

### Muanda

89' FZAG +01:00 S05 56.0 E012 21.0

ATS 851401172, 828917323. Apt Operator  
muanda-aero@rva.cd, muanda-aero@yahoo.fr.

**04/22** 4856' ASPHALT.

Days.

Fire 4.

**N'Djili Intl see Kinshasa**

**N'Dolo see Kinshasa**

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## DAKHLA/LAAYOUNE

**Dakhla (Dakhla Intl)** Apt of Entry

36' GMMH VIL 00:00\* N23 43.1 W015 55.9

Apt Operator (0) 528930630; Fax (0)  
528897256.

**03/21** 9843' BITUMEN. PCN 50/F/A/W/T. RL.

SR/SS, O/T O/R. Customs: Days (SR - SS),  
Night O/R before 1630.

F-3, Jet A-1.

Fire 6.

**Hassan I see Laayoune****Laayoune (Hassan I)** Apt of Entry

223' GMLL EUN 00:00\* N27 09.1 W013  
13.1

Apt Operator (0) 528893791/528893863; Fax  
(0) 528893765.

**02/20** 8858' BITUMEN. PCN 40/F/B/W/T.  
ASDA 02 9186'. ASDA 20 9055'. HIRL.

**04/22** 8202' BITUMEN. PCN 27/F/B/W/T.  
ASDA 04 8858'. ASDA 22 8399'. HIRL.

H24. Customs.

F-3, O/R. Jet A-1. O/R.

Fire 7.



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DJIBOUTI**Ambouli see Djibouti****Djibouti (Ambouli)** Apt of Entry

49' HDAM JIB +03:00 N11 32.8 E043 09.6

Apt Administration aeroport@intnet.dj. Apt  
Operator 21340101; Fax 21340723.

**09/27** 10325' CONC/BITU. PCN 70/F/C/W/U.  
LDA 27 9600'. ASDA 09 10909'. ASDA 27  
10922'. HIRL.

Rwy 09 Right-Hand Circuit.

H24. Customs.

ABN. Fire 8.

## EGYPT

**6th of October (October)**

807' HEOC +02:00 N29 48.7 E030 49.4

Apt Operator (02) 22657812; Fax (02) 22657812.

**01/19** 6562' ASPHALT. PCN 9/F/A/X/T. HIRL. HIALS.

0600-SS.

F-3.

ABN. Fire 5.

**Abu Simbel**

616' HEBL ABS +02:00 N22 22.5 E031 36.7  
Apt Operator (097) 3400159, 3400201, 3400242; Mobile (02) 22657845; Fax (097) 3400201.

**15/33** 9843' ASPHALT. PCN 70/F/B/W/U. HIRL. HIALS 15. HIALS 33.

H24. Customs: O/R.

Jet A-1.

ABN. Fire 7.

**Al Alamain (Al Alamain Intl)** Apt of Entry

143' HEAL DBB +02:00 N30 55.5 E028 27.7

Apt Operator From (03) 4885000 to 4885019; Fax (03) 4885021, 4885010.

**13/31** 11483' ASPHALT. PCN 72/F/A/W/T. HIRL. HIALS 31.

SR-SS or O/R.

Jet A-1.

ABN. Fire 7.

**Alexandria (Alexandria Intl)** Apt of Entry

-8' HEAX ALY +02:00 N31 10.9 E029 56.8

Apt Operator (03) 3813996, 3820527, (03) 4279765, 4278764, 4271036, 4273535, 4272021; Fax (02) 4272020.

**04/22** 7221' ASPHALT. PCN 46/F/C/X/T. HIRL. ALS.

Rwy 04 Right-Hand Circuit.

H24. Customs.

Jet A-1.

ABN. Fire 7.

**Alexandria (Borg El Arab Intl)** Apt of Entry

177' HEBA HBE +02:00 N30 55.1 E029 41.7

Apt Operator (03) 24631001/03/10/11; Fax (03) 24631002/1008.

**14R/32L** 11155' ASPHALT. PCN 62/F/B/W/T. HIRL.

H24. Customs.

Jet A-1.

ABN. Fire 9.

**Almaza (Almaza AB)** Apt of Entry

300' HEAZ Mil. +02:00 N30 05.5 E031 21.6

Apt Operator (02) 24157359; Fax (02) 22916368.

**05/23** 3757' ASPHALT. PCN 41/F/A/W/T.

**18/36** 6726' ASPHALT. PCN 41/F/A/W/T. LDA 36 6152'. TODA 18 6824'. TODA 36 7005'. ASDA 18 6824'. ASDA 36 7005'.

H24, PPR before landing. Customs: O/R.

Jet A-1.

ABN. IBN. Fire 4.

**Aswan (Aswan Intl)** Apt of Entry

662' HESN ASW +02:00 N23 57.9 E032 49.2

Apt Operator (097) 2244114/15, 224-4333/4440/4061/4491; Mobile (02) 22739215; Fax (097) 224-4272/4062.

**17/35** 11161' ASPHALT. PCN 60/F/B/W/U. HIRL. HIALS.

Rwy 17 Right-Hand Circuit.

H24. Customs.

Jet A-1.

ABN. Fire 9.

**Asyut (Asyut Intl)** Apt of Entry

772' HEAT ATZ +02:00 N27 02.8 E031 00.7

Apt Operator (088) 2325648, 2301250, 2324486; Fax (088) 2325648.

**13/31** 9905' ASPHALT. PCN 59/F/A/X/T. HIRL.

## EGYPT

H24. Customs.

F-3, Jet A-1.

ABN. Fire 8.

**Borg El Arab Intl see Alexandria****Cairo (Cairo Intl)** Apt of Entry

467' HECA CAI +02:00 N30 06.7 E031 24.8

Apt Operator (202) 22914255 till 22914299;

Fax (202) 22673578/77.

**05C/23C** 13120' ASPHALT. PCN 100/F/A/W/T.  
HIRL. ALS 23C.

**05L/23R** 10830' ASPHALT. PCN 100/F/B/W/U.  
HIRL. HIALS 05L. ALS 23R.

**05R/23L** 13123' ASPHALT. PCN 100/F/A/W/T.  
HIRL.

H24. Customs.

Jet A-1. Oxygen.

ABN. IBN. Fire 9.

**Cairo (Capital Intl)** Apt of Entry

833' HECF +02:00 N30 04.3 E031 50.0

Apt Operator 28580416, 28580418; Fax  
28580417.

**01L/19R** 11975' ASPHALT. PCN 87/F/A/W/T.  
HIRL.

**01R/19L** 10531' ASPHALT. PCN 52/F/A/W/T.

**02/20** 10922' ASPHALT. PCN 52/F/A/W/T.

Days. Customs.

Jet A-1.

ABN. Fire 7.

**Capital Intl see Cairo****Dakhla**

613' HEDK DAK +02:00 N25 24.7 E029 00.2

Apt Operator (092) 2825871, 2825452; Fax  
(092) 2820773.

**15/33** 8166' ASPHALT. PCN 30/F/B/X/U. HIRL.

Days.

ABN. Fire 5.

**El Arish (El Arish Intl)** Apt of Entry

121' HEAR AAC +02:00 N31 04.4 E033 50.1

Apt Operator (068) 3320843, 3321350; Fax  
(068) 3321350.

**16/34** 9905' ASPHALT. PCN 55/F/B/W/U.  
HIRL. HIALS.

H24. Customs.

F-3, Jet A-1.

ABN. Fire 7.

**El Gora**

324' HEGR +02:00 N31 04.4 E034 09.0

Apt Operator (068) 340854, 340855.

**08/26** 7874' ASPHALT. PCN 48/F/B/W/U.

**17/35** 7874' ASPHALT. PCN 18/F/B/W/U.

SR-SS.

**El Gouna**

49' HE01 +02:00 N27 22.0 E033 40.1

**16/34** 5249' ASPHALT. PCN 11.

Fire U.

**El Kharga**

192' HEKG UVL +02:00 N25 28.4 E030 35.4

Apt Operator (092) 2933180, 2920354; Fax  
(092) 2920457.

**18/36** 11483' ASPHALT. PCN 40/F/C/X/U.  
HIRL. HIALS.

SR-SS and O/R.

ABN. Fire 7.

**El Tor**

115' HETR ELT +02:00 N28 12.5 E033 38.7

Apt Operator (069) 3773037, 3771263,  
3776946; Fax (069) 3773037.

**10/28** 9843' ASPHALT. PCN 65/F/A/W/U.  
HIRL. HIALS 10. HIALS 28.

SR-SS.

ABN. Fire 5.

## EGYPT

**Giza (Sphinx Intl)**

553' HESX +02:00 N30 06.5 E030 53.7  
ATS 35393158 (TWR), 35393145 (AIS). Apt  
Operator 35391580, 35391579; Fax 35391577.  
**10/28** 9843' ASPHALT. PCN 48/F/A/W/T.  
**16L/34R** 9843' ASPHALT. PCN 48/F/A/W/T.  
**16R/34L** 11975' ASPHALT. PCN 87/F/A/W/T.  
HIRL.  
H24.  
Jet A-1.  
Fire 7.

**Hurghada (Hurghada Intl)** Apt of Entry

109' HEGN HRG +02:00 N27 10.7 E033 48.0  
Apt Operator (065) 3414213, (065) 3414214;  
Fax (065) 3414222.  
**16L/34R** 13123' ASPHALT. PCN 70/F/C/W/U.  
TORA 16L 12139'. LDA 16L 12139'. TODA 16L  
12139'. ASDA 16L 12139'. HIRL. HIALS.  
Rwy 34R Right-Hand Circuit.  
**16R/34L** 13123' ASPHALT. PCN 64/F/A/X/T.  
HIRL. HIALS.  
H24. Customs.  
Jet A-1.  
ABN. Fire 9.

**Luxor (Luxor Intl)** Apt of Entry

294' HELX LXR +02:00 N25 40.2 E032 42.4  
Apt Operator (095) 2324446/55, 2323767,  
2321471; Fax (095) 2323767, 2324450/56.  
**02/20** 9843' ASPHALT. PCN 70/F/C/W/U.  
HIRL. HIALS.  
**02L/20R** 9843' ASPHALT. PCN 58/F/C/W/U.  
HIRL.  
H24. Customs.  
Jet A-1.  
ABN. Fire 9.

**Marsa Alam (Marsa Alam Intl)** Apt of Entry

251' HEMA RMF +02:00 N25 33.5 E034 35.0  
Apt Operator (065) 37000 -12 and -20 till -29;  
Fax (065) 3700003/5/7/10.  
**15/33** 10640' ASPHALT. PCN 54/F/A/W/T.  
TODA 15 11624'. TODA 33 11624'. HIRL.  
HIALS 15. HIALS 33.  
H24. Customs.  
Jet A-1.  
ABN. Fire 7.

**Mersa Matruh (Mersa Matruh Intl)** Apt of Entry

95' HEMM MUH +02:00 N31 19.5 E027 13.3  
Apt Operator (046) 4952193, 4952194,  
4952195; Fax (046) 4952195.  
**06/24** 9843' ASPHALT. PCN 38/F/A/X/U.  
Rwy used for Egyptian Airforce only.  
**15/33** 9843' ASPHALT. PCN 40/F/B/W/U.  
HIRL. HIALS.  
SR-SS and O/R, avbl for night ops 24hr PPR.  
Customs: 0600-1600 and O/R.  
Jet A-1.  
ABN. Fire 6.

**October see 6th of October****Port Said**

8' HEPS PSD +02:00 N31 16.8 E032 14.4  
Apt Administration (066) 3337981, 3337982,  
3245948, 3320691; Fax (066) 3221680.  
**10/28** 7707' ASPHALT. PCN 35/F/C/X/U.  
HIRL. HIALS.  
SR-SS, O/T O/R. Customs.  
Jet A-1.  
ABN. Fire 6.

**Shark El Oweinat**

859' HEOW GSQ +02:00 N22 35.0 E028 43.0

## EGYPT

Apt Operator (02) 22654745, (02) 22924745, (097) 324960, (097) 324961.

**01/19** 11483' ASPHALT. PCN 60/F/A/W/U.

HIRL. HIALS 01. HIALS 19.

SR-SS. Night ops avbl O/R. Customs.

Fire 5.

**Sharm El Sheikh (Sharm El Sheikh Intl)** Apt of Entry

143' HESH SSH +02:00 N27 58.7 E034 23.6

Apt Operator (069) 3623382, 2623304, 3623305; Fax (069) 3601140.

**04L/22R** 10108' ASPHALT. PCN 65/F/B/W/U. HIRL. HIALS.

**04R/22L** 10108' ASPHALT. PCN 65/F/B/W/U. HIRL. HIALS.

H24. Customs.

Jet A-1. Oxygen.

ABN. Fire 9.

**Sphinx Intl see Giza**

**St Catherine**

4368' HESC SKV +02:00 N28 41.1 E034 03.7

Apt Operator (069) 3470037, 3470340, 3470094, 3470048; Fax (069) 3470094.

**17/35** 6939' ASPHALT. PCN 40/F/B/W/U.

SR-SS. Customs: O/R.

Fire 5.

**Suhag (Suhag Intl)** Apt of Entry

304' HESG HMB +02:00 N26 20.6 E031 44.6

Apt Administration (093) 2372006/8; Fax (093) 2372005/6. Apt Manager Fax (093) 2372010.

**15/33** 9843' ASPHALT. PCN 49/F/A/W/U. HIRL. HIALS.

H24. Customs.

Jet A-1.

ABN. Fire 8.

**Taba (Taba Intl)** Apt of Entry

2457' HETB TCP +02:00 N29 35.3 E034 46.7

Apt Operator (069) 3501222, 01064445279; Fax (069) 3501224, (02) 26969689.

**04/22** 13123' ASPHALT. PCN 70/F/B/W/U. HIRL. HIALS 04. HIALS 22.

H24. Customs.

Jet A-1.

ABN. Fire 7.

## ERITREA

**Asmara (Asmara Intl)** Apt of Entry

7661' HHAS ASM +03:00 N15 17.0 E038  
54.0

Apt Operator 1-152122, 1-154530; Fax  
1-152657.

**07/25** 9843' ASPHALT. PCN 40/F/B/X/T. ASDA  
07 10194'. ASDA 25 10040'. HIRL. HIALS 07.

H24. Customs.

Jet A-1.

ABN. Fire 8.

**Assab (Assab Intl)** Apt of Entry

46' HHSB ASA +03:00 N13 04.0 E042 38.0

Apt Administration 08470002/08487010.

**12/30** 11483' CONC/ASPH. PCN 60/R/C/W/U.

Mon-Fri 0400-0900 and 1200-1500. O/T 12hr  
PNR. Customs: 12hr PNR.

Jet A-1.

Fire U.

**Massawa (Massawa Intl)** Apt of Entry

194' HHMS MSW +03:00 N15 40.2 E039  
22.2

Apt Operator 1-541312/13; Fax 1-541315.

**07/25** 11450' CONCRETE. PCN 50/R/A/W/T.  
ASDA 07 11647'. ASDA 25 11647'. RL. HIALS.

H24. Customs.

Jet A-1.

ABN. Fire 8.

## ESWATINI

**Manzini (Matsapha)** Apt of Entry

2078' FDMS MTS +02:00 S26 31.7 E031  
18.4

Apt Operator 2518 4344/5, 4455, 4656; Fax  
2518 8466.

**07/25** 8530' ASPHALT. PCN 71/F/C/W/T.  
ASDA 07 8727'. ASDA 25 8727'. HIRL.

Rwy 25 Right-Hand Circuit.

Mon-Fri 0600-1500. O/T PPR before 1300 on  
airport administration working day. Customs:  
Mon-Fri: 0600-1445, O/T O/R.

F-3, Jet A-1.

ABN. Fire 6 , fire 7 O/R.

**Matsapha see Manzini****Sikhuphe (Sikhuphe Intl)** Apt of Entry

1092' FDSK +02:00 S26 21.5 E031 43.0

Apt Operator 2333 5000/5160; Fax 2333 5229;  
aim.km3@swacaa.co.sz.

**02/20** 11745' ASPHALT. PCN 59/F/A/W/T.  
TODA 02 15387'. TODA 20 13090'. HIRL. ALS  
02. HIALS 20.

Rwy 02 Right-Hand Circuit.

Dly 0400-1600. Customs: 0600-1445, O/T OR.

Jet A-1.

Fire 7 up to Cat 9 O/R.

## ETHIOPIA

**Aba Jifar see Jimma****Addis Abeba (Bole Intl)** Apt of Entry

7625' HAAB ADD +03:00 N08 58.5 E038 48.0

Apt Manager (11) 6650 670. Apt Operator (11) 6650 400, 6650 566; Bole.a.p@ethionet.et.

**07L/25R** 12139' ASPH/CONC.  
PCN 65/F/D/X/T. LDA 07L 11073'. LDA 25R 10909'. TODA 07L 12336'. TODA 25R 12336'. ASDA 07L 12336'. ASDA 25R 12336'. HIRL.

**07R/25L** 12467' ASPH/CONC.  
PCN 100/F/D/X/T. LDA 07R 11286'. LDA 25L 11286'. TODA 07R 12762'. TODA 25L 12762'. HIRL.

H24. Customs.

Jet A-1. Oxygen.

Fire 9.

**Alula Aba Nega see Mekele****Arba Minch**

3895' HAAM AMH +03:00 N06 01.7 E037 35.0

Apt Operator 046 8811 595; Jimma.ap@ethionet.et.

**03/21** 9186' ASPH/CONC. PCN 50/F/C/X/T. TODA 03 9383'. TODA 21 9383'. ASDA 03 9383'. ASDA 21 9383'. RL. HIALS.

During sked operations, other flts PPR.

Fire 6.

**Asosa (Hidase)**

5118' HASO +03:00 N10 01.3 E034 34.9

Apt Operator 57 775 0344, 57 669 0961.

**11/29** 8202' ASPH/CONC. PCN 60. LDA 11 7710'. LDA 29 7710'.

Fire 6.

**Axum**

6960' HAAX AXU +03:00 N14 08.2 E038 46.6

ATS 348759007. Apt Manager 348759014. Apt Operator axumatsey10@gmail.com.

**16/34** 7874' ASPH/CONC. PCN 50/F/C/X/T. TODA 16 8071'. TODA 34 8071'. ASDA 16 8071'. ASDA 34 8071'.

Dly 0300-1730.

Fire 5.

**Bahir Dar (Bahir Dar Intl)** Apt of Entry

6023' HABD BJR +03:00 N11 36.4 E037 19.2

Apt Manager 058 22600 33. Apt Operator 058 22600 34 (TWR); Fax 058 22601 56; bahir-dar.ap@ethionet.et.

**04/22** 12139' ASPH/CONC. PCN 49/R/B/W/U. TODA 04 12992'. TODA 22 12631'. ASDA 04 12336'. ASDA 22 12336'.

Dly 0300-2000. O/T O/R. Customs.

Fire 7.

**Bole Intl see Addis Abeba****Combolcha**

6134' HADC DSE +03:00 N11 06.1 E039 43.6

**17/35** 6562' ASPH/CONC. TODA 17 6759'. TODA 35 6759'. ASDA 17 6759'. ASDA 35 6759'.

Fire 6.

**Dire Dawa (Dire Dawa Intl)** Apt of Entry

3792' HADR DIR +03:00 N09 38.3 E041 50.9

Apt Manager 025 111 3260. Apt Operator 025 111 1120(TWR), 025 111 3611, 025 111 3613(SAR); eaeddia@ethionet.et.

**15/33** 8858' ASPH/CONC. PCN 41/R/B/W/T. ASDA 15 9055'. ASDA 33 9055'. HIRL. HIALS 15.

0300-1700. Customs.

Jet A-1.

Fire 7.



## ETHIOPIA

**Gambella**

1804' HAGM GMB +03:00 N08 07.0 E034 33.8

Apt Manager 047 551 1052. Apt Operator Jimma.ap@ethionet.et.

**18/36** 8268' CONCRETE. PCN 32/R/B/W/T. TODA 18 8465'. TODA 36 8465'. ASDA 18 8465'. ASDA 36 8465'.

Dly 0500-1400. Tue, Wed, Fri and Sat sked flights. Non-sked flights PNR.

Fire 6.

**Goba (Robe)**

8093' HAGB GOB +03:00 N07 07.2 E040 02.7

Apt Manager 0912061348.

**15/33** 8202' ASPH/CONC. TODA 15 8530'. TODA 33 8530'. ASDA 15 8399'.

Days.

Fire 6.

**Gode**

834' HAGO +03:00 N05 56.1 E043 34.7

Apt Manager 025 776 0006. Apt Operator eaeddia@ethionet.et.

**04/22** 7874' ASPH/CONC. PCN 50/F/C/X/T. TODA 04 8071'. TODA 22 8071'. ASDA 04 8071'. ASDA 22 8071'.

Dly 0500-1400, except Mon. By Notam/AIP SUPP for sked flights. For Non-sked prior arrangement required.

Fire 6.

**Gonder**

6545' HAGN GDQ +03:00 N12 31.9 E037 25.9

ATS 0581140368. Apt Manager 058 114 0365. Apt Operator bahirdar.ap@ethionet.et.

**17/35** 9121' ASPH/CONC. PCN 50/F/D/X/T. ASDA 17 9318'. RL. HIALS 35. Rwy 17 Landing not allowed. Rwy 35 Takeoff not allowed.

Dly 0500-1500.

Fire 5.

**Hawassa**

5702' HALA +03:00 N07 06.0 E038 23.8

**01/19** 9843' ASPH/CONC. PCN 89/F/C/X/U. ASDA 01 10040'. ASDA 19 10040'.

**Humera**

2579' HAHU +03:00 N13 49.8 E036 52.9

Apt Manager 0914705516.

**13/31** 9843' ASPH/CONC. LDA 13 9350'. LDA 31 9350'.

Mon and Fri 0500-1400, OT O/R.

Fire 5.

**Jigjiga (Garad Wilwal)**

5935' HAJJ +03:00 N09 19.8 E042 54.7

Apt Manager 0257752056; eaeddia@ethionet.et.

**03/21** 8202' ASPHALT. PCN 60. LDA 03 7218'. LDA 21 7218'.

0400-1500.

Fire 6.

**Jimma (Aba Jifar)**

5621' HAJM JIM +03:00 N07 39.7 E036 49.2

ATS 471110188. Apt Manager 471110187. Apt Operator Fax 471122548; jimma.ap@ethionet.et.

**13/31** 10827' ASPH/CONC. PCN 80. LDA 13 10532'. LDA 31 10532'. TODA 13 11680'. TODA 31 11680'. ASDA 13 11024'. ASDA 31 11024'.

Rwy 13 Right-Hand Circuit.

Dly 0400-1500.

Fire 5.

**Kebri Dehar**

1726' HAKD +03:00 N06 44.0 E044 14.5

Apt Operator 11 6650400; Bole.a.p@ethionet.et.

## ETHIOPIA

**08/26** 8530' CONCRETE.

Fire 6.

**Lalibella**

6431' HALL LLI +03:00 N11 58.4 E038 59.5  
ATS 981190046. Apt Manager Mobile  
0338360010. Apt Operator 981190045; Laliair-  
port@gmail.com.

**10/28** 7874' ASPH/CONC. TODA 10 8071'.  
TODA 28 8071'. ASDA 10 8071'. ASDA 28  
8071'. RL.

Dly 0400-1500.

Fire 6.

**Mekele (Alula Aba Nega)**

7401' HAMK MQX +03:00 N13 28.4 E039  
31.1

Apt Manager 034 442 0327. Apt Operator 034  
442 0321/22/23, 034 442 0328(TWR); Fax 034  
442 1232; mekele.ap@ethionet.et.

**11/29** 11811' ASPH/CONC. PCN 60. LDA 11  
10827'. LDA 29 10827'. TODA 11 12008'.  
TODA 29 12008'. ASDA 11 12008'. ASDA 29  
12008'. HIRL.

Rwy 11 Right-Hand Circuit.

0300-1700. Customs.

Fire 7.

**Robe see Goba**

**Semera**

1365' HASM +03:00 N11 47.2 E040 59.5

Apt Manager Mobile 09 11483181. Apt Opera-  
tor 336689090; Bole.a.p@ethionet.et.

**13/31** 8202' ASPH/CONC. PCN 65/F/B/X/U.  
ASDA 13 8399'. ASDA 31 8399'.

Dly 0400-1500.

Fire 6.

**Shire (Major General Haelom)**

6209' HASR +03:00 N14 04.6 E038 16.4

Apt Administration Bole.a.p@ethionet.et. Apt  
Manager 0911559207.

**15/33** 8104' ASPH/CONC. ASDA 15 8301'.  
ASDA 33 8301'.

Dly 0400-1500.

Fire 6.

**GHANA**
**Accra (Kotoka Intl)** Apt of Entry

205' DGAA ACC 00:00 N05 36.3 W000 10.1

Apt Operator 302 776171 ext 2248; Fax 302 773293, 760981; info@gacil.com.gh, info@gcaa.com.gh.

**03/21** 11175' ASPHALT. PCN 70/F/B/W/T. TORA 03 9840'. LDA 03 9840'. LDA 21 9840'. TODA 03 11362'. ASDA 03 10870'. ASDA 21 11516'. ALS 21.

Rwy 03 Right-Hand Circuit.

H24. Customs.

F-3, Jet A-1. Oxygen.

ABN. Fire 9.

**Kotoka Intl see Accra**
**Kumasi**

942' DGSi KMS 00:00 N06 42.9 W001 35.4

Apt Operator 3220 22957, 22969; Fax 3220 22855; info@ghanairports.com.gh.

**02/20** 6542' ASPHALT. PCN 35/F/B/W/T. ASDA 02 7300'. ASDA 20 7287'.

Dly 0600-1800, PPR for non-skid and private acft.

Jet A-1.

IBN. Fire 6.

**Navrongo**

678' DGLN 00:00 N10 56.6 W001 05.2

Apt Operator (0) 302776171; Fax (0) 302773293; info@gcaa.com.gh.

**14/32** 4921' GRAVEL.

Avbl all seasons, unserviceable after heavy rain.

**Sunyani**

1014' DGSN NYI 00:00 N07 21.7 W002 19.7

Apt Operator 3520 27300, 23436; Fax 3520 23316; info@ghanairports.com.gh.

**07/25** 4199' TARMAC. PCN 15/F/A/Y/U. TODA 07 4386'. TODA 25 4393'.

Dly 0600-1400, PPR for non-skid and private Acft.

Jet A-1.

Fire 5.

**Takoradi**

22' DGTK TKD Mil. 00:00 N04 53.8 W001 46.5

Apt Operator 3120 24543 ext 248, 344; Fax 3120 22903/22778.

**03/21** 5745' ASPHALT. PCN 10/F/B/Z/U. LDA 21 5089'.

0600-1800, PPO for non-skid & private acft. Customs: O/R.

Jet A-1.

Fire 7.

**Tamale**

552' DGLE TML 00:00 N09 33.2 W000 52.0

Apt Operator 3720 22042, 23325, 91233; Fax 3720 23334; info@ghanairports.com.gh.

**05/23** 11155' ASPHALT. PCN 60/F/A/W/T. ALS 23.

0600-1800. PPR for non-skid and priv acft.

Jet A-1.

Fire 6.

**Wa**

1009' DGLW 00:00 N10 05.0 W002 30.5

Apt Operator 302 776171; Fax 302 773293; info@gcaa.com.gh.

**02/20** 6562' ASPHALT. PCN 20/F/A/Y/T.

Unserviceable after heavy rain.

Fire 5.

## GUINEA REP

**Badala see Faranah****Banankoro (Gbenko)**

2133' GUGO 00:00 N09 14.8 W009 17.7  
**12/30** 5184' LATERITE. AN-12. ASDA 12  
5512'. ASDA 30 5381'.  
Days.

**Baralande see Boke****Boke (Baralande)** Apt of Entry

164' GUOK BKJ 00:00 N10 57.4 W014 18.4  
**02/20** 5102' LATERITE. AN-24.

Days. Customs.

**Conakry (Gbessia)** Apt of Entry

71' GUCY CKY 00:00 N09 34.6 W013 36.7  
Apt Operator (224) 656888106, 664449889,  
657544323.

**06/24** 10827' ASPH/BITU. PCN 73/F/B/W/T.  
ASDA 06 11024'. ASDA 24 11024'. RL. HIALS  
06.

H24. Customs.

Jet A-1.

Fire 9.

**Diankana see Kankan****Faranah (Badala)** Apt of Entry

1476' GUFH FAA 00:00 N10 02.3 W010  
45.6

Apt Operator 81-01-65.

**09/27** 7595' BITU/ASPH. B-727. TODA 09  
8327'. TODA 27 8327'. ASDA 09 7989'. ASDA  
27 9350'.

0730-1800.

**Fria (Katourou)**

499' GUFA FIG 00:00 N10 21.2 W013 24.4

**06/24** 5249' BITU/ASPH. AN-24. ASDA 06  
5446'. ASDA 24 5446'.

0800-1800LT.

**Gbenko see Banankoro****Gbessia see Conakry****Kankan (Diankana)**

1234' GUXD KNN 00:00 N10 26.8 W009  
14.4

Apt Operator 461861; Fax 229068.

**10/28** 8858' LATERITE. B737. ASDA 10 9186'.  
ASDA 28 9186'.

0800-1800.

Fire 7.

**Katourou see Fria****Kissidougou**

1808' GUKU KSI 00:00 N09 09.6 W010 07.4

**02/20** 6562' LATERITE. AN-12. ASDA 02  
6890'. ASDA 20 6890'.

Days.

**Konia see Nzerekore****Koundara (Sambailo)**

295' GUSB SBI 00:00 N12 34.4 W013 21.5

**12/30** 4921' LATERITE. AN-12.

Days.

**Labe (Tata)** Apt of Entry

3396' GULB LEK 00:00 N11 19.9 W012  
17.8

Airport Operator 510259.

**06/24** 6562' BITU/ASPH. AN-12. ASDA 06  
6759'. ASDA 24 6759'.

3281' paved runway in front of threshold 06  
unusable.

0730-1800. Customs.

**Macenta**

1690' GUMA MCA 00:00 N08 29.4 W009  
31.5

**07/25** 4593' LATERITE. AN-24. ASDA 07  
4921'. ASDA 25 4921'.

Days.

## GUINEA REP

**Nzerekore (Konia)** Apt of Entry

1657' GUNZ NZE 00:00 N07 48.9 W008  
42.2

**18/36** 4921' LATERITE. AN-24. ASDA 18  
5249'. ASDA 36 5249'.  
0800-1800. Customs.

**Sambailo see Koundara****Siguiri**

1296' GUSI GII 00:00 N11 24.1 W009 11.2  
**12/30** 4593' LATERITE. AN-24. ASDA 12  
5085'. ASDA 30 5249'.  
Days.

**Tata see Labe**

## KENYA

**Amboseli**

3755' HKAM ASV +03:00 S02 38.1 E037  
15.0

**08/26** 3281' BITUMEN. AUW-13.

Days.

**Bura East**

345' HKBR +03:00 S01 06.2 E039 57.1

Apt Operator 2623, 2131 (Garissa).

**18/36** 3291' SAND. AUW-13.

Days.

**Eastleigh see Nairobi****Eldoret**

7050' HKED +03:00 N00 31.8 E035 16.0

Apt Operator 269.

**08/26** 4396' BITUMEN. PCN 8/F/C/Y/U.

Days.

F-3.

**Eldoret (Eldoret Intl)** Apt of Entry

6945' HKEL EDL +03:00 N00 24.2 E035  
14.2

Apt Operator 53 63377 or 61299; Fax 53  
61295; kaa.ela@africaonline.co.ke.

**08/26** 11483' ASPHALT. PCN 60/F/A/W/T.  
TODA 08 12467'. TODA 26 12467'. HIRL.

Rwy 08 Right-Hand Circuit.

Dly 0330-1800 and by Notams. Customs: Dly  
0330-1800.

Jet A-1.

ABN. Fire 8.

**Embu**

4173' HKEM Mil. +03:00 S00 34.3 E037  
29.7

Apt Operator 20-6822400; Fax 20-6822078.

**14/32** 3110' TARMAC.

Rwy 14 Right-Hand Circuit.

Dly 0330-1500.

Fire U.

**Ferguson's Gulf see Kalokol****Garba Tula**

2000' HKGT +03:00 N00 31.8 E038 31.1

Apt Operator 2003 (Isiolo).

**01/19** 3281' SOIL. AUW-13.

**Garissa**

475' HKGA GAS +03:00 S00 28.2 E039  
38.1

**17/35** 3937' BITUMEN. PCN 8/F/C/Y/U.

Days.

**Jomo Kenyatta Intl see Nairobi****Kalokol (Ferguson's Gulf)**

1245' HKFG FER +03:00 N03 28.8 E035  
50.0

Apt Operator 21620 (Lodwar).

**12/30** 3281' BITUMEN. AUW-13.

Days.

F-4.

**Keekorok see Masai Mara****Kericho**

6503' HKKR KEY +03:00 S00 25.2 E035  
15.0

Apt Operator 20822078, 20822400.

**04/22** 4134' GRASS. AUW-13.

Days.

**Kilaguni**

2605' HKKL ILU +03:00 S02 55.1 E038 04.1

**01/19** 5249' SAND. AUW-13.

**12/30** 5249' SAND. AUW-13.

Days.

Fire 1.

**Kisima see Maralal****Kisumu** Apt of Entry

3795' HKKI KIS +03:00 S00 05.2 E034 43.7

## KENYA

Apt Operator 57-41976; Fax 57-21857.

**06/24** 10804' BITUMEN. PCN 46/F/A/W/T. LDA 06 9843'. LDA 24 10312'.

Rwy 06 Right-Hand Circuit.

Dly 0330-1800. Customs.

F-4, Jet A-1.

ABN. Fire 7.

**Kitale**

6070' HKKT KTL +03:00 N00 58.0 E034 57.3

Apt Operator 20 822400; Fax 20 822078.

**04/22** 4757' BITUMEN. PCN 6/F/B/Y/U.

Days.

**Lanet see Nakuru****Lodwar**

1715' HKLO LOK +03:00 N03 07.5 E035 36.5

Apt Operator 21620.

**09/27** 3281' BITUMEN. PCN 8/F/C/Y/U.

Days.

**Lokichogio** Apt of Entry

2115' HKLK LKG +03:00 N04 12.2 E034 20.9

Apt Operator 054-32266, -32441.

**09/27** 5905' TARMAC.

Rwy 09 Right-Hand Circuit.

Dly 0330-1530. Customs.

Fire 6.

**Lokitaung**

1805' HKLG +03:00 N04 19.8 E035 42.0

Apt Operator 21620 (Lodwar).

**12/30** 3599' SOIL. AUW-13.

Days.

**Loyangalani**

1195' HKLY LOY +03:00 N02 44.8 E036 43.1

Apt Operator 2620 (Marsabit).

**16/34** 3609' BITUMEN. PCN 8/F/C/Y/U.

Days.

**Mackinnon Road**

1180' HKMR +03:00 S03 44.1 E039 02.1

Apt Operator 2106.

**12/30** 3707' GRASS. AUW-13.

Days.

**Magadi**

2100' HKMG +03:00 S01 57.0 E036 17.0

**02/20** 5741' SOIL. AUW-13.

PPR.

**Makindu**

3278' HKMU +03:00 S02 17.2 E037 50.1

Apt Operator 30725, 30151 (Machakos).

**14/32** 3000' GRASS. AUW-10.

Days.

**Malindi** Apt of Entry

88' HKML MYD +03:00 S03 13.4 E040 06.0

Apt Administration 042 2131201.

**08/26** 3346' BITUMEN. PCN 8/F/C/Y/U.

Rwy 26 Right-Hand Circuit.

**17/35** 4600' BITUMEN. PCN 35/F/A/W/U.

Rwy 17 Right-Hand Circuit.

Dly 0130-2030. Customs.

F-3, Jet A-1.

ABN. Fire 5.

**Manda Bay**

32' HK01 Mil. +03:00 S02 10.0 E040 53.8

**16/34** 4085' PAVED.

**Mandera**

805' HKMA NDE +03:00 N03 55.8 E041 51.1

Apt Operator 2002, 2249.

**05/23** 3609' BITUMEN. PCN 8/F/C/Y/U.

## KENYA

Days.

Acft to use mil airstrip 250 (T) Deg 1NM from civil airstrip shall contact Mandera Police on 118.1 MHz prior landing and do not violate Ethiopia and Somalia airspace.

Jet A-1.

**Maralal (Kisima)**

5940' HKMI +03:00 N00 56.8 E036 48.1

Apt Operator 2620.

**10/28** 3000' GRASS. AUW-13.

Days.

**Marsabit**

4395' HKMB RBT +03:00 N02 20.8 E037 59.1

Apt Operator 2620, 2001.

**14/32** 3281' BITUMEN. PCN 8/F/C/Y/U.

Days.

**Masai Mara (Keekorok)**

5591' HKKE KEU +03:00 S01 35.2 E035 15.0

**09/27** 5020' GRAVEL. PCN 8/F/C/Y/U.

Days.

**Meru (Mulika Lodge)**

2230' HKMK +03:00 N00 13.8 E038 11.1

Apt Operator 20700.

**15/33** 3281' BITUMEN. AUW-13.

Days.

**Moi Intl see Mombasa****Mombasa (Moi Intl)** Apt of Entry

200' HKMO MBA +03:00 S04 01.6 E039 35.9

Apt Operator 041-352200; Fax 041 434434.

**03/21** 10988' ASPHALT. PCN 80/F/A/W/U. TODA 21 13380'. ASDA 03 11250'. ASDA 21 11185'. HIALS 21.

**15/33** 4291' ASPHALT. PCN 8/F/C/Y/U. TODA 15 7014'. TODA 33 7014'. ASDA 15 4553'. ASDA 33 4553'.

Rwy 15/33 Right-Hand Circuit.

H24. Customs.

F-3, Jet A-1.

ABN. Fire 9.

**Mtito Andei**

2475' HKMT +03:00 S02 43.1 E038 12.1

Apt Operator 30725, 30151 (Machkos).

**14/32** 4600' GRASS. AUW-13.

Days.

**Mulika Lodge see Meru****Nairobi (Eastleigh)**

5335' HKRE Mil. +03:00 S01 16.7 E036 51.6

Apt Operator 20 6764401; Fax 20 6764393.

**06/24** 7999' ASPHALT. PCN 35/F/B/X/U. MIALS 06.

First 2000' Rwy 06 and last 2000' rwy 24 PCN 85/F/B/X/U.

Dly 0500-1400. Avbl for civ Acft in emergency only.

F-4, J.

ABN. Fire 9.

**Nairobi (Jomo Kenyatta Intl)** Apt of Entry

5330' HKJK NBO +03:00 S01 19.2 E036 55.7

Apt Operator 020 6822111; Fax 020 6822078.

**06/24** 13507' BITUMEN. PCN 65/F/A/W/T. TODA 06 14622'. TODA 24 14622'. ASDA 06 13707'. ASDA 24 13707'. RL.

Rwy 06 Right-Hand Circuit.

H24. Customs.

F-3, Jet A-1.

ABN. Fire 9.



## KENYA

**Nairobi (Wilson)**

5546' HKNW WIL +03:00 S01 19.3 E036 48.9

Apt Operator 020-501941/2; Fax 020-501944.

**07/25** 4790' BITUMEN. PCN 18/F/B/X/U.

Rwy 07 Right-Hand Circuit.

**14/32** 5098' BITUMEN. PCN 13/F/A/W/T. LDA 14 4462'. ASDA 14 5426'.

Rwy 14 Right-Hand Circuit.

Dly 0330-1730. Customs.

100 octane, Jet A-1.

ABN. Fire 5.

**Naivasha**

6592' HKNV +03:00 S00 48.2 E036 26.0

Apt Operator 20199.

**18/36** 3609' BITUMEN. PCN 8/F/C/Y/U.

Days.

**Nakuru (Lanet)**

6200' HKNK NUU +03:00 S00 18.2 E036 09.0

Apt Operator 41816.

**13/31** 5607' GRASS. AUW-13.

Days.

F-2, F-4.

**Nanyuki**

6253' HKNL NYK +03:00 S00 03.7 E037 02.5

Apt Operator 20 6822400; Fax 20 6822078.

**03/21** 3937' BITUMEN. PCN 8/F/C/Y/U.

Days. Unmanned airstrip.

**Narok**

6322' HKNO +03:00 S01 09.2 E035 46.0

Apt Operator 2203, 2202.

**11/29** 6001' GRASS. AUW-13.

Days.

**Nyeri**

5830' HKNI NYE +03:00 S00 22.0 E036 58.0

Police 2222.

**16/34** 3937' BITUMEN. PCN 8/F/C/Y/U.

Days.

**Olkiombo**

4997' HKOK Mil. +03:00 S01 24.5 E035 06.6

Apt Operator 20 6822400; Fax 20 6822078.

**09/27** 3937' GRAVEL. AUW-11. TORA 09 3540'. LDA 09 3540'. TODA 09 3540'. ASDA 09 3540'.

Days. Unmanned airstrip.

**Voi**

2000' HKVO +03:00 S03 22.1 E038 32.1

Apt Operator 2126.

**18/36** 4200' GRASS. AUW-13.

Days.

**Wajir** Apt of Entry

757' HKWJ WJR +03:00 N01 44.0 E040 05.5

Apt Operator 020 4401517; Fax 020 4401517.

**15/33** 9186' ASPH/CONC. PCN 49/R/B/W/T.

Rwy 33 Right-Hand Circuit.

Asphalt PCN 50/F/B/W/T.

0330-1530. Customs.

Fire 5.

**Wilson see Nairobi**

**LESOTHO**
**Katse**

7000' FXKA +02:00 S29 21.7 E028 31.6  
PPR.

**18/36** 3281' GRAVEL.

**Leribe**

5350' FXLR LRB +02:00 S28 51.3 E028 03.2

**02/20** 5118' GRASS.

Days.

**Letseng**

10400' FXLT +02:00 S29 00.5 E028 51.3

**10/28** 3782' GRAVEL.

Days.

**Maseru (Mejametalana AB)**

5105' FXMU Mil. +02:00 S29 18.2 E027 30.2

**04/22** 4531' ASPHALT. LCN 15. RL.

**11/29** 1542' GRASS.

By operational requirements.

VFR only.

F-4, Jet A-1.

ABN.

**Maseru (Moshoeshoe I Intl) Apt of Entry**

5348' FXMM MSU +02:00 S29 27.3 E027 33.3

Apt Administration 22 312499; Fax 22 350380.  
Apt Operator 22 350395, 22 350777, 22 350101(TWR).

**04/22** 10499' ASPHALT. PCN 52/F/B/W/T. LDA 04 9843'. HIRL. HIALS.

Rwy 04 Right-Hand Circuit.

**11/29** 3314' ASPHALT. PCN 12/F/B/Y/T. RL.

Rwy 29 Right-Hand Circuit.

Dly 0500-1600. Customs.

F-4, Jet A-1. Oxygen.

ABN. Fire 6.

**Mejametalana see Maseru**
**Mokhotlong Apt of Entry**

7200' FXMK MKH +02:00 S29 16.8 E029 04.3

**04/22** 2297' GRAVEL.

**13/31** 2625' ASPHALT.

**16/34** 2316' GRAVEL.

Mon-Fri 0600-1430, Sat 0600-1100. Customs.  
For departing traffic.

Fire 1.

**Moshoeshoe I Intl see Maseru**
**Qacha's Nek Apt of Entry**

6100' FXQN UNE +02:00 S30 06.7 E028 40.3

**14/32** 2461' BITUMEN.

Mon-Fri 0600-1430, Sat 0600-1100. Customs.  
For departing traffic.

Fire 1.

**Sehonghong**

6500' FXSH SHK +02:00 S29 43.8 E028 46.2

**04/22** 3415' GRAVEL.

**14/32** 1936' GRAVEL.

Days.

**Semonkong**

7200' FXSM SOK +02:00 S29 50.3 E028 03.5

**08/26** 2625' ASPHALT.

**12/30** 2297' GRAVEL.

Days.

**LIBERIA**
**Buckanan**

12' GLBU UCN 00:00 N05 10.1 W009 17.0  
**17/35** 3400' UNPAVED. DC-3.

**Cape Palmas see Harper**
**Greenville (Sinoe)**

10' GLGE SNI 00:00 N05 02.1 W009 04.0  
**02/20** 4400' LATERITE. HS 748.

**Harper (Cape Palmas)**

20' GLCP CPA 00:00 N04 22.1 W007 42.0  
**05/23** 3200' LATERITE. DC-3.

**Lamco see Nimba**
**Monrovia (Roberts Intl) Apt of Entry**

31' GLRB ROB 00:00 N06 14.4 W010 21.6  
 Apt Manager Fax 770135. Apt Operator  
 886488379; jdennis@robertsinternationalair-  
 port.com.

**04/22** 11000' ASPHALT. PCN 50/F/B/W/T. LDA  
 22 9800'. TODA 04 11984'. TODA 22 11984'.  
 RL.

H24. Customs.

Jet A-1.

ABN. Fire 8.

**Monrovia (Spriggs Payne)**

26' GLMR MLW 00:00 N06 17.1 W010 46.0  
**05/23** 6000' ASPHALT. AUW-114. LDA 05  
 5800'. LDA 23 5800'. HIRL.

0645-SS, O/T svc avbl O/R. Customs: Dly  
 0600-1800.

F-4, Jet A-1.

ABN. Fire 6.

**Nimba (Lamco)**

500' GLNA NIA 00:00 N07 30.1 W008 36.0  
**16/34** 6063' UNPAVED. F-28.

**Roberts Intl see Monrovia**
**Sinoe see Greenville**
**Spriggs Payne see Monrovia**
**Tchien**

787' GLTN THC 00:00 N06 04.1 W008 08.0  
**18/36** 6000' LATERITE. B-737.  
 Days, unattended.

## LIBYA

**Benghazi (Benina Intl)** Apt of Entry

436' HLLB BEN +02:00 N32 05.8 E020 16.2  
Apt Operator 61 2223063, 26922, 61  
3350092/3; Fax 61 2223063.

**15L/33R** 11811' ASPH/CONC. TODA 15L  
12795'. TODA 33R 12795'. ASDA 15L 12795'.  
ASDA 33R 12795'. HIRL.

**15R/33L** 11811' ASPH/CONC. PCN 90. TODA  
15R 12795'. TODA 33L 12795'. ASDA 15R  
12795'. ASDA 33L 12795'. RL. ALS.

H24. Customs.

F-4, Jet A-1. Oxygen.

ABN. Fire 8.

**Benina Intl see Benghazi****Burdi (Kambut)**

20' HLBK +02:00 N31 50.1 E024 36.3

Apt Operator 21 5630219; Fax 21 53222;  
aftn.amhs@gmail.com.

**15/33** 5906' ASPHALT. PCN 60. ASDA 15  
6103'. ASDA 33 6103'.

Customs: O/R

Fire U.

**El Beida (Labraq)**

2157' HLLQ LAQ +02:00 N32 47.3 E021  
57.9

Apt Operator 69 4637163.

**03/21** 6427' ASPHALT. LCN 15.

**10/28** 11811' ASPHALT. LCN 100. RL. ALS.

H24. Customs.

Jet A-1.

Fire 5.

**Ghadames**

1122' HLTD LTD +02:00 N30 09.1 E009  
42.9

Apt Operator 484 3330652, 484 62084.

**01/19** 5249' PAVED. PCN 30.

**06/24** 11811' PAVED. PCN 90. TODA 06  
12795'. TODA 24 12795'. ASDA 06 12795'.  
ASDA 24 12795'.

Days. Night ops O/R.

ABN. Fire N.

**Ghardabiya Intl see Sirte****Ghat**

2296' HLGT GHT +02:00 N25 08.0 E010  
08.0

**06/24** 6562' ASPHALT. PCN 85. LDA 06 4922'.  
ASDA 06 6759'. ASDA 24 6759'.

**17/35** 11811' ASPHALT. PCN 85. ASDA 17  
12795'. ASDA 35 12205'. HIALS.

SR-SS. PPR via AFTN AFS (HLLTYAYX) or  
FAX +218213618075.

Jet A-1.

Fire 5.

**Kambut see Burdi****Kufra**

1367' HLKF AKF +02:00 N24 10.7 E023  
18.9

Apt Operator 64 7502201, 7502314; Fax 64  
7502564.

**02/20** 12008' ASPH/CONC. TODA 02 13648'.  
TODA 20 13648'. ASDA 02 12828'. ASDA 20  
12828'. RL.

Rwy 02/20 clsd.

**02L/20R** 12057' ASPHALT. PCN 80.

O/R.

Jet A-1, Fuel: U.

Fire 6.

**Labraq see El Beida****Misrata (Misrata Intl)** Apt of Entry

38' HLMS MRA +02:00 N32 19.4 E015 03.7

Apt Operator 21 5630219; Fax 21 53222;  
aftn.amhs@gmail.com.

## LIBYA

**15/33** 11155' ASPHALT. PCN 100. TODA 15 12139'. TODA 33 12139'. ASDA 15 11253'. ASDA 33 11253'.

Customs: H24.

Jet A-1.

Fire 8.

**Mitiga Intl see Tripoli**

**Sebha** Apt of Entry

1427' HLLS SEB +02:00 N26 59.2 E014 28.4

Apt Operator 71 2635458, 2624850, 2631012; Fax 71 2630129.

**06/24** 4462' ASPHALT. TODA 06 4659'. TODA 24 4659'. ASDA 06 4659'. ASDA 24 4659'.

**13/31** 11811' ASPHALT. TODA 13 13566'. TODA 31 13517'. ASDA 13 12795'. ASDA 31 12008'. HIRL. HIALS.

H24. Customs.

F-3, Jet A-1.

ABN. Fire 6.

**Sirte (Ghardabiya Intl)**

270' HLGD SRX +02:00 N31 03.6 E016 35.5

Apt Administration 05465455, 0213617748.

**18/36** 11811' CONCRETE. LCN 100. TODA 18 12795'. TODA 36 12795'. ASDA 18 12795'. ASDA 36 12795'. HIRL. HIALS.

H24. Customs.

Jet A-1, Fuel: U.

Fire 5.

**Tobruk**

522' HLTQ TOB +02:00 N31 51.6 E023 54.4

Apt Operator 62 8230110; Fax 62 8230111.

**02/20** 9843' ASPH/CONC. PCN 100.

H24. Customs.

Rwys 09/27 and 15/33 clsd.

Jet A-1.

Fire 6.

**Tripoli (Mitiga Intl)** Apt of Entry

36' HLLM MJJ +02:00 N32 53.7 E013 16.7

Apt Operator 21 3501052/3; Fax 21 3502314.

**11/29** 11001' ASPHALT. ASDA 11 11821'. ASDA 29 11821'. MIRL. ALS.

H24. Customs.

F-3, Jet A-1.

Fire 6.

**Tripoli (Tripoli Intl)** Apt of Entry

263' HLLT TIP +02:00 N32 39.8 E013 09.5

Apt Administration 0213609696, 3609777; Fax 0213609696.

**09/27** 11811' ASPH/CONC. PCN 100. TODA 09 12008'. TODA 27 12008'. ASDA 09 12008'. ASDA 27 12008'. HIRL. HIALS 09.

**18/36** 8280' ASPHALT. PCN 75. TODA 18 8362'. TODA 36 8375'. ASDA 18 8362'. ASDA 36 8375'. HIRL. HIALS 18. HIALS 36.

Apt clsd. Customs.

F-4, Jet A-1.

ABN. Fire 8.

**Ubari**

1528' HLUB QUB +02:00 N26 34.1 E012 49.4

Apt Operator 71 7622729/721/919.

**09/27** 8028' ASPHALT. PCN 65. ASDA 09 8684'. ASDA 27 8684'.

SR-SS. PPR via AFTN AFS (HLLTYAYX) or FAX +218213618075.

Fire 4.

**Wafa**

2188' HLWF +02:00 N28 54.2 E010 04.9

**16/34** 8104' ASPHALT. RL.

Jet A-1.

Fire U.

**Zwara**

9' HLZW +01:00\* N32 57.1 E012 00.9

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**LIBYA**

**06/24** 5906' ASPHALT. LCN 30. ASDA 06  
6103'. ASDA 24 6234'. RL. MIALS.  
SR-SS. Customs.  
Fire 5.

## MADAGASCAR

**Ambalavao**

3189' FMSA +03:00 S21 48.9 E046 54.9

**11/29** 3609' LATE/GRAS. AUW-13.

Dly 0400-1400.

**Ampanihy**

771' FMSY AMP +03:00 S24 41.9 E044 43.9

**13/31** 3609' LATERITE. AUW-13.

Dly 0400-1400.

**Analalava**

344' FMNL HVA +03:00 S14 37.8 E047 45.7

**11/29** 3937' GRVL/BITU. AUW-13.

**17/35** 3379' LATERITE. AUW-13.

Dly 0400-1400.

**Andapa**

1552' FMND ZWA +03:00 S14 39.1 E049 37.2

Apt Administration 202258113, 202258114.

**02/20** 4101' BITUMEN. AUW-13.

Dly 0400-1400.

**Ankavandra**

427' FMMK JVA +03:00 S18 48.3 E045 16.4

**16/34** 3281' LATE/GRAS. AUW-13.

Dly 0400-1400.

**Antalaha (Antsirabato)**

23' FMNH ANM +03:00 S14 59.9 E050 19.2

**17/35** 3914' BITUMEN. PCN 12/F/B/Z/T. ASDA 17 3980'.

Dly 0400-1400.

F-4, O/R. J. O/R.

**Antananarivo (Ivato)** Apt of Entry

4198' FMMI TNR +03:00 S18 47.8 E047 28.6

Apt Operator 202258113/14, 332337001;  
bdpfmmi@asecna.org, biafmmi@asecna.org.

**11/29** 10171' BITU/CONC. PCN 87/F/B/X/T. TODA 11 10663'. TODA 29 10663'. ASDA 11 10368'. ASDA 29 10368'. HIRL.

H24. Customs.

F-3, Jet A-1.

Fire 8.

**Antsalova**

551' FMMG WAQ +03:00 S18 42.1 E044 36.9

**04/22** 3018' GRASS. AUW-13.

Dly 0400-1400.

**Antsirabato see Antalaha****Antsiranana (Arrachart)** Apt of Entry

374' FMNA DIE +03:00 S12 21.1 E049 17.6

Apt Operator 34 05 565 02; adema-die@adema.mg.

**13/31** 4921' BITUMEN. PCN 28,2/F/B/X/T. TODA 13 5003'. TODA 31 5003'.

0300-1500. Customs: O/R.

F-3, Jet A-1.

Fire 5.

**Antsoa see Beroroha****Arrachart see Antsiranana****Atsinanana see Ilaka****Bekily**

1270' FMSL OVA +03:00 S24 14.2 E045 18.3

**03/21** 4199' LATE/GRAS. AUW-13.

**14/32** 2559' LATE/GRAS. AUW-13.

Dly 0400-1400.

**Beroroha (Antsoa)**

820' FMSB WBO +03:00 S21 36.3 E045 08.1

**02/20** 3117' LATERITE. AUW-13.

Dly 0400-1400.

## MADAGASCAR

**Fascene see Nosy-Be****Fianarantsoa**

3658' FMSF WFI +03:00 S21 26.5 E047 06.6

Apt Operator 20 75 903 55, 34 05 565 62; ademawfi@moov.mg.

**08/26** 4101' ASPH/CONC. PCN 12/F/A/X/T. TODA 08 4429'. TODA 26 4429'.

Customs: O/R.

F-3, Jet A-1.

Fire 4.

**Ihosy**

2500' FMSI IHO +03:00 S22 24.4 E046 10.0

**18/36** 5249' SAND/GRAS. AUW-13.

Dly 0400-1400.

**Ilaka (Atsinanana)**

33' FMMQ ILK +03:00 S19 35.0 E048 48.0

**01/19** 3281' SAND/GRAS. DHC-6.

**Ivato see Antananarivo**

**Mahajanga (Philibert Tsiranana)** Apt of Entry 87' FMNM MJN +03:00 S15 40.0 E046 21.1

Apt Operator 34.05.238.24; Mobile 33.23.370.02; ademamjn@moov.mg, aimfmnm@asecna.org.

**14/32** 7218' CONC/BITU. PCN 48/F/A/X/T. TODA 14 7874'. TODA 32 7874'. ASDA 14 7316'. ASDA 32 7316'. HIRL.

During skd operations 0300-1900, O/T O/R before 1300. Customs: Customs: O/R. Immigration: During skd operations and O/R.

F-3, Jet A-1.

Fire 6.

**Mahanoro**

16' FMMH VVB +03:00 S19 50.2 E048 48.0

**03/21** 4429' SAND/GRAS. AUW-13.

Dly 0400-1400.

**Maintirano**

98' FMMO MXT +03:00 S18 03.0 E044 01.9

**03/21** 4216' SAND/GRAS. AUW-13.

**10/28** 4265' SAND/GRAS. AUW-13.

Dly 0400-1400.

**Manakara**

33' FMSK WVK +03:00 S22 07.2 E048 01.3

**05/23** 3937' BITUMEN. PCN 12.2/F/B/Z/T.

Railway tracks crossing rwy at 290m from threshold 05.

Mon-Sat 0400-1400. Sun, Hol O/R to FMMMZIX the previous day before 0900.

F-4. O/R.

**Mananjary**

20' FMSM MNJ +03:00 S21 12.4 E048 21.4

Apt Operator 20 72 900 01, 34 07 565 01; ademamnj@moov.mg.

**04/22** 4921' ASPH/CONC. PCN 32/F/B/X/T. TODA 04 5577'. TODA 22 5249'.

Dly 0300-1500.

Jet A-1. O/R.

Fire 4.

**Mandabe**

951' FMSC WMD +03:00 S21 02.8 E044 56.4

**10/28** 3510' GRASS. AUW-13.

Dly 0400-1400.

**Mandritsara**

1007' FMNX WMA +03:00 S15 50.8 E048 50.1

**10/28** 3740' LATE/GRAS. AUW-13. LDA 10 3107'.

Dly 0400-1400.

J. O/R.

**Manja**

787' FMSJ MJA +03:00 S21 25.6 E044 18.9

**11/29** 5249' CLAY/GRAS. AUW-13.



## MADAGASCAR

Dly 0400-1400.

**Morondava**

30' FMMV MOQ +03:00 S20 17.1 E044 19.1  
Apt Operator 20 95 934 80, 34 05 564 82; ademamoq@moov.mg.

**10/28** 4921' ASPH/CONC. PCN 73/F/A/X/T.  
TODA 10 5249'. TODA 28 5249'.

Days and O/R. 3HR prior notice is required for the non-sked flights. Customs: O/R.

F-3, Jet A-1.

Fire 5.

**Nosy-Be (Fascene)** Apt of Entry

35' FMNN NOS +03:00 S13 19.1 E048 18.5  
Apt Operator 34 49 333 87; m.rakotobe@ravinala-airports.mg.

**05/23** 7316' ASPH/CONC. PCN 53/F/B/X/T.  
TORA 23 4987'. LDA 05 4987'. TODA 05 8300'.  
HIRL.

Day/Night and O/R prior 1200. Customs: O/R  
24hr.

F-3, Jet A-1.

Fire 8.

**Philibert Tsiranana see Mahajanga****Sainte-Marie** Apt of Entry

9' FMMS SMS +03:00 S17 05.4 E049 48.9  
Apt Operator 341714674; ademasm@moov.mg.

**01/19** 4639' ASPH/CONC. PCN 29.4/F/B/X/T.  
TODA 01 5623'. TODA 19 5623'. ASDA 01  
4737'. ASDA 19 4737'.

Rwy 19 Right-Hand Circuit.

Customs: O/R.

Fire 4.

**Sambava (Sambava South)**

20' FMNS SVB +03:00 S14 16.7 E050 10.5  
Apt Operator 340831113; ademmasvb@moov.mg.

**16/34** 5906' ASPH/CONC. PCN 69/F/A/X/T.  
TODA 16 6562'. TODA 34 6562'. ASDA 16  
6021'. ASDA 34 6004'.

0300-1500. Customs: O/R.

F-3, Jet A-1.

Fire 5.

**Toamasina** Apt of Entry

22' FMMT TMM +03:00 S18 06.9 E049 23.6  
Apt Administration 205332880, 332337003. Apt  
Operator 205333516; Fax 205333516; ademmatmm@moov.mg, aimfmmmt@asecna.org.

**01/19** 7218' ASPHALT. MTOW-88,  
PCN 21.1/F/B/X/T. TODA 01 7579'. TODA 19  
7874'. ASDA 01 7415'. ASDA 19 7316'. HIRL.  
HIALLS 19.

Rwy 01 Right-Hand Circuit.

Dly 0300-1900, O/T O/R prior 1300. Customs:  
O/R.

F-3, Jet A-1.

Fire 5.

**Tolagnaro**

26' FMSD FTU +03:00 S25 02.3 E046 57.4  
Apt Administration 209290196, 209290202. Apt  
Operator Mobile 341145666; ademafu@adema.mg.

**08/26** 5906' ASPH/CONC. PCN 59/F/A/X/T.  
TODA 08 6890'. TODA 26 6398'.

Rwy 08 Right-Hand Circuit.

0300-1500. Customs: O/R.

F-3, Jet A-1.

Fire 5.

**Toliary**

30' FMST TLE +03:00 S23 23.4 E043 43.5  
Apt Operator 209490550; adematile@moov.mg.

**04/22** 6562' BITUMEN. PCN 66/F/A/X/T. TODA  
04 6890'. TODA 22 6890'. MIRL.

0300-1500. OT O/R before 1200. Customs:  
O/R.

F-3, Jet A-1.  
Fire 5.

## MALAWI

**Blantyre (Chileka Intl)** Apt of Entry

2555' FWCL BLZ +02:00 S15 40.8 E034 58.0

ATS aischileka@gmail.com. Apt Operator 01-692 244/231/287/319; Fax 01-692347; pesi@malawi.net.

**10/28** 7628' ASPHALT. PCN 50/F/A/W/T. TODA 10 8678'. TODA 28 8629'. ASDA 10 8028'. HIRL. HIALS 10.

Rwy 28 Right-Hand Circuit.

**15/33** 4501' ASPHALT. PCN 15/F/A/Y/T. TODA 33 5511'.

Rwy 33 Right-Hand Circuit.

0400-1700, O/T O/R. Customs.

F-3, Jet A-1.

Fire 7.

**Chelinda**

7760' FWCD CEH +02:00 S10 33.0 E033 48.0

**08/26** 4249' SOIL. AUW-13.

Days, PPR.

**Chileka Intl see Blantyre**

**Club Makokola**

1589' FWCM CMK +02:00 S14 18.0 E035 08.0

Apt Operator 01-584244.

**11/29** 3576' GRAVEL. AUW-13.

Days.

**Kamuzu Intl see Lilongwe**

**Karonga**

1743' FWKA KGJ +02:00 S09 57.2 E033 53.6

Apt Operator 01-362288; Fax 01-362597; dca-karonga@gmail.com.

**14/32** 5512' ASPHALT. PCN 10/F/C/Y/T. TODA 14 5906'. TODA 32 5906'.

Mon-Fri 0530-1500. Customs: PNR.

Fire 2.

**Likoma**

1632' FWLK LIX +02:00 S12 04.8 E034 44.2  
Apt Operator (01) 770577; Fax (01) 774986, 770006.

**01/19** 3707' PAVED. PCN 20/R/D/Y/T.

Mon-Fri 0530-1500. Customs: O/R.

Fire N.

**Lilongwe (Kamuzu Intl)** Apt of Entry

4029' FWKI LLW +02:00 S13 47.0 E033 46.6

Apt Operator 01-700766/701013; Fax 01-700849/294; liacommandant@malawi.net.

**14/32** 11614' ASPHALT. PCN 80/F/B/W/T. TODA 14 13254'. TODA 32 12598'. HIRL. HIALS 14. ALS 32.

Dly 0400-1700. Outside O/R. Customs.

F-4, Jet A-1.

Fire 9.

**Mzuzu**

4117' FWUU ZZU +02:00 S11 26.6 E034 00.7

Apt Operator 01-312 666,-311 832; Fax 01-311 448.

**17/35** 4265' PAVED. PCN 20/R/D/Y/T. TODA 17 4921'. TODA 35 4921'.

Mon-Fri 0530-1500. Customs: O/R.

Fire 4.

**MAURITIUS**
**Mauritius (Sir Seewoosagur Ramgoolam**
**Intl)** Apt of Entry

183' FIMP MRU +04:00 S20 25.8 E057 41.0

Apt Operator 6036000; Fax 6036100; airportinfo@aml.mru.aero.

**14/32** 11056' ASPHALT. PCN 98/F/B/W/T. TORA 32 9974'. LDA 14 9974'. LDA 32 9974'. TODA 14 12040'. TODA 32 10466'. ASDA 32 9974'. HIRL. HIALS 14. ALS 32.

Rwy 14 Right-Hand Circuit.

H24. Customs: By operational requirements.

Jet A-1.

Fire 10.

**Plaine Corail see Rodrigues**
**Rodrigues (Plaine Corail)**

93' FIMR RRG +04:00 S19 45.5 E063 21.7

Apt Operator 8327888; Fax 8327078; airport\_info@arl.mu.

**12/30** 4222' ASPHALT. PCN 15/F/A/X/T. TORA 12 3993'. TORA 30 3927'. LDA 12 3566'. LDA 30 3697'. TODA 12 4977'. TODA 30 4911'. ASDA 12 3993'. ASDA 30 3927'. RL. ALS.

During skd operations and O/R. Customs.

Jet A-1.

Fire 5.

**Sir Seewoosagur Ramgoolam Intl see Mauritius**

## MAYOTTE

----- Effective thru 09 Oct: -----

**Dzaoudzi (Pamandzi)** Apt of Entry

23' FMCZ DZA +03:00 S12 48.4 E045 16.8

Apt Administration ops@aeropot-mayotte.com.

Apt Operator 269645400.

**16/34** 6332' PAVED. PCN 53/F/C/W/T. TORA  
34 5955'. LDA 16 5512'. LDA 34 6283'. TODA  
16 7644'. TODA 34 5955'. ASDA 34 6283'. RL.

Rwy 16 Right-Hand Circuit.

Sked defined by Notam. Customs: 0430-SS  
+15min.

F-3, Jet A-1.

Fire 7 . fire 8 for sked flights, non-sked flights  
72hr PPR.

**Pamandzi see Dzaoudzi**

----- Effective 10 Oct: -----

**Dzaoudzi (Pamandzi)** Apt of Entry

23' FMCZ DZA +03:00 S12 48.4 E045 16.8

Apt Operator 269 64 54 00, 639 69 89 94;  
mayotte.pce@edeis.com.

**16/34** 6345' PAVED. PCN 53/F/C/W/T. TORA  
34 5955'. LDA 16 5518'. LDA 34 6283'. TODA  
16 7657'. TODA 34 5955'. ASDA 34 6283'. RL.

Rwy 16 Right-Hand Circuit.

Sked defined by Notam. Customs: 0430-SS  
+15min.

F-3, Jet A-1.

Fire 7 . fire 8 from apt 72hr PPR.

**Pamandzi see Dzaoudzi**

**MELILLA (SPAIN)**
**Melilla**

156' GEML MLN +01:00\* N35 16.8 W002  
57.4

Apt Administration 952 698 622/621/614; Fax  
952 698 677/608; melillaCECOA@aena.es.

**15/33** 4701' ASPHALT. PCN 35/F/A/W/T.  
TORA 33 4498'. LDA 15 3930'. LDA 33 4498'.  
TODA 33 4695'. ASDA 33 4498'. HIALS 15.

Summer: 0550-1830 (until 1930 PPR), Winter:  
0700-1730 (until 1830 PPR). Customs.

Jet A-1.

Fire 5 other O/R.

## MOROCCO

**Agadir (Al Massira Intl)** Apt of Entry

253' GMAD AGA +01:00 N30 19.3 W009 24.7

Apt Operator (0) 528839102; Fax (0) 528839149.

**09/27** 10499' BITUMEN. PCN 62/F/A/W/T. HIALS 27.

H24. Customs.

F-3, Jet A-1.

IBN. Fire 8.

**Agadir (Inezgane)**

88' GMAA Mil. +01:00 N30 23.0 W009 33.5

**10/28** 9547' PAVED.

**Al Hoceima (Cherif El Idrissi Intl)** Apt of Entry

95' GMTA AHU +01:00 N35 10.8 W003 50.4

Apt Operator (0) 539982560; Fax (0) 539985204.

**17/35** 8202' BITUMEN. PCN 45/F/C/W/T. TODA 17 8530'. ASDA 17 8399'. ASDA 35 8317'. HIRL.

20 SEP-19 JUN dly 0700-1900 and 20 JUN-19 SEP H24. Customs.

F-3, Jet A-1.

Fire 6.

**Al Massira Intl see Agadir****Angads Intl see Oujda****Beni Mellal (Beni Mellal Intl)** Apt of Entry

1700' GMMD +01:00 N32 24.1 W006 19.0

Apt Operator (0) 523516290; Fax (0) 523516597.

**05/23** 8169' BITUMEN. PCN 54/F/C/W/T. ASDA 23 8366'. RL.

The last 1290m rwy 05 and first of rwy 23 PCN 64/F/A/W/T.

Days (SR/SS) and O/T O/R to AD commander 24hr prior. Customs: H24.

Fire 5.

**Benslimane**

627' GMMB GMD +01:00 N33 39.3 W007 13.5

Apt Administration (0) 523290748/50; Fax (0) 523290790.

**14/32** 9993' BITUMEN. PCN 52/F/B/W/T. LDA 32 9186'. TODA 14 10242'. TODA 32 10977'. ASDA 14 10242'. ASDA 32 10242'.

0700-2200 and O/R 24hr(LT) PPR.

F-3, Jet A-1.

Fire 4.

**Bouarfa**

3680' GMFB UAR +01:00 N32 30.9 W001 58.7

Apt Operator (0) 536797554; Fax (0) 536797553.

**09/27** 10499' BITUMEN. PCN 67/F/B/W/T. TODA 09 11155'. TODA 27 11155'. ASDA 09 10696'. ASDA 27 10696'.

Mon-Fri 0830-1630, O/T O/R 24hr.

Fire 5.

**Casablanca (Mohammed V Intl)** Apt of Entry

656' GMMN CMN +01:00 N33 21.8 W007 34.9

Apt Operator (0) 522539040/522539140; Fax (0) 522539051. Apt Switchboard (0) 522435858.

**17L/35R** 12205' ASPH/CONC. PCN 65/F/C/W/T. TODA 17L 15158'. TODA 35R 13517'. ASDA 17L 12402'. ASDA 35R 12402'.

Rwy 17L PCN: 9482' to 12008' -- 73/R/C/W/T and last 197' -- 67/R/C/W/T. Rwy 35RPCN: first 197' -- 67/R/C/W/T, 197' to 2723' -- 73/R/C/W/T.

**17R/35L** 12205' ASPH/CONC. PCN 66/F/B/W/T. TODA 17R 15125'. TODA

**MOROCCO**

35L 13189'. ASDA 17R 12402'. ASDA 35L 12402'.

RWY 17R last 3937'/RWY 35L first 3937' PCN -- 62/R/B/W/T.

H24. Customs.

Jet A-1. Oxygen.

Fire 9.

**Casablanca (Tit Mellil)**

331' GMMT +01:00 N33 35.6 W007 27.9

Apt Operator (0) 522332411; Fax (0) 522332411.

**18/36** 3698' BITUMEN. MTOW-13.

Dly 0700 - SS.

F-3.

Fire 2.

**Cherif El Idrissi Intl see Al Hoceima**

**El Aroui Intl see Nador**

**Errachidia (Moulay Ali Cherif Intl)** Apt of Entry

3432' GMFK ERH +01:00 N31 56.9 W004 24.0

Apt Operator (0) 535572350/535574263; Fax (0) 535572350.

**13/31** 10499' BITUMEN. PCN 45/F/A/W/T. RL.

Days, O/T O/R before 1600. Customs: 0830-1630LT, O/T O/R.

Jet A-1.

Fire 6.

**Essaouira (Mogador Intl)** Apt of Entry

420' GMMI ESU +01:00 N31 23.9 W009 41.0

Apt Operator (0) 524476704; Fax (0) 524476705.

**16/34** 8553' BITUMEN. PCN 53/F/B/W/T. ASDA 16 8750'.

Days. Outside hr O/R, 12 hr PPR. Customs: H24.

F-3, Jet A-1.

Fire 7.

**Fes (Saiss Intl)** Apt of Entry

1896' GMFF FEZ +01:00 N33 55.6 W004 58.7

Apt Operator (0) 535624800; Fax (0) 535652664.

**09/27** 10499' BITUMEN. PCN 55/F/B/W/T. LDA 27 9774'. TODA 09 10926'. TODA 27 11352'.

ASDA 27 10696'. HIALS 27.

H24. Customs.

F-3, Jet A-1.

Fire 8.

**Guelmim**

1119' GMAG GLN +01:00 N29 01.0 W010 03.7

Apt Operator (0) 528771100; Fax (0) 528771094.

**05/23** 9974' BITUMEN. PCN 55/F/B/W/T. TODA 05 10958'. TODA 23 10958'. ASDA 05 10171'. ASDA 23 10158'. ALS 05.

0700-2200. Customs: Sked flts, other t/c O/R before 1630.

Fire 5.

**Ibn Batouta Intl see Tanger**

**Ifrane**

5466' GMFI +01:00 N33 30.3 W005 09.1

Apt Administration (0) 535566152; Fax (0) 535566152.

**03/21** 6890' BITUMEN. PCN 13/F/B/W/T. TODA 03 7874'. ASDA 03 7874'.

Rwy 21 Right-Hand Circuit.

Mon-Fri 0830-1630LT, O/T O/R 24hr.

Fire U.

**Inezgane see Agadir**



## MOROCCO

**Marrakech (Menara Intl)** Apt of Entry

1545' GMMX RAK +01:00 N31 36.5 W008 02.4

Apt Operator (0)  
524447910/524447865/524448506; Fax (0)  
524449219.

**10/28** 10171' BITUMEN. PCN 80/F/B/W/T.  
TODA 10 10794'. TODA 28 10614'. ASDA 10  
10368'. HIALS 10.

Rwy 10 Right-Hand Circuit.

H24. Customs.

F-3, Jet A-1.

Fire 7.

**Menara Intl see Marrakech**

**Mogador Intl see Essaouira**

**Mohammed V Intl see Casablanca**

**Moulay Ali Cherif Intl see Errachidia**

**Nador (El Aroui Intl)** Apt of Entry

594' GMMW NDR +01:00 N34 59.4 W003 01.7

Apt Operator (0) 536361074/77/78; Fax (0)  
536361072.

**08/26** 9843' BITUMEN. PCN 85/F/A/W/T.  
ASDA 08 10073'. ASDA 26 10073'. HIRL.  
HIALS 08.

H24. Customs.

Jet A-1.

Fire 7.

**Ouarzazate (Ouarzazate Intl)** Apt of Entry

3782' GMMZ OZZ +01:00 N30 56.2 W006 54.4

Apt Operator (0) 524882297; Fax (0)  
524882112.

**12/30** 9843' BITUMEN. PCN 54/F/C/W/T.  
TODA 12 10893'. TODA 30 10414'.

H24. Customs.

F-3, Jet A-1.

Fire 7.

**Oujda (Angads Intl)** Apt of Entry

1535' GMFO OUD +01:00 N34 47.2 W001 55.5

Apt Operator (0) 536683636; Fax (0)  
536684461.

**06/24** 9843' BITUMEN. PCN 53/F/B/W/T.  
TODA 06 10663'. TODA 24 10663'. ASDA 06  
10040'. HIRL.

**13/31** 9843' BITUMEN. PCN 82/F/B/W/T.  
TODA 13 10499'. TODA 31 11155'. ASDA 13  
10073'. ASDA 31 10073'.

H24. Customs.

F-3, Jet A-1.

Fire 7.

**Plage Blanche Intl see Tan Tan**

**Rabat (Sale Intl)** Apt of Entry

272' GMME RBA +01:00 N34 03.1 W006 45.1

Apt Operator (0) 537803563/537808562 (Mil),  
(0) 537808089/537808090; Fax (0) 537808094.

**03/21** 11483' BITUMEN. PCN 54/F/B/W/T.  
TODA 03 12467'. TODA 21 11811'. ASDA 03  
11680'. ASDA 21 11680'. HIALS 21.

H24. Customs.

F-3, Jet A-1.

Fire 8.

**Saiss Intl see Fes**

**Sale Intl see Rabat**

**Saniat R'mel see Tetouan**

**Tan Tan (Plage Blanche Intl)** Apt of Entry

653' GMAT TTA +01:00 N28 26.9 W011 09.7

Apt Operator (0) 528877043; Fax (0)  
528877355.

**03/21** 6562' BITUMEN. PCN 22/F/A/W/T.  
ASDA 21 6775'.

## MOROCCO

Days. Night O/R 16h PN. Customs: O/R.

F-3, Jet A-1.

Fire 3.

**Tanger (Ibn Batouta Intl)** Apt of Entry

69' GMTT TNG +01:00 N35 43.9 W005 55.3

Apt Operator (0)539393720, 539393649,  
539393650; Mobile (0)660101014; Fax (0)  
539393676.

**10/28** 11483' BITUMEN. PCN 60/F/B/W/T. LDA  
28 9843'. TODA 10 12041'. TODA 28 12238'.  
ASDA 10 11680'. ASDA 28 11680'. HIRL.  
HIALS 28.

H24. Customs.

F-3, Jet A-1.

Fire 7.

**Tetouan (Saniat R'mel)** Apt of Entry

13' GMTN TTU +01:00 N35 35.7 W005 19.2

Apt Operator (0) 539971876/539971643; Fax  
(0) 539971098.

**06/24** 7546' BITUMEN. PCN 60/R/B/W/T. LDA  
06 6726'. TODA 06 8202'. ASDA 06 7743'.  
ASDA 24 7743'. RL.

OCT-APR: 0700-2000, O/T O/R 24hr, MAY-  
SEP: H24. Customs: H24.

F-3, Jet A-1.

Fire 5.

**Tit Mellil see Casablanca**

**Zagora**

2415' GMAZ OZG +01:00 N30 15.8 W005  
51.2

Apt Operator (0) 524891505; Fax (0)  
524891505.

**11/29** 9843' BITUMEN. PCN 41/F/A/W/T.  
ASDA 11 10040'. ASDA 29 10040'. HIRL. ALS  
29.

Mon-Fri: 0830-1630, O/T O/R 24hr.

Fire 4.

## MOZAMBIQUE

**Angoche**

118' FQAG ANO +02:00 S16 11.0 E039 56.0

**05/23** 2690' GRAVEL. AUW-42.

**13/31** 1969' GRAVEL. AUW-42.

**18/36** 3609' GRAVEL. AUW-42.  
SR-SS.

**Beira** Apt of Entry

36' FQBR BEW +02:00 S19 47.7 E034 54.3

Apt Operator 23 301071/2; Fax 23 302331.

**06/24** 3018' ASPH/CONC. SIWL 13.

**12/30** 7874' ASPH/CONC. PCN 44/F/A/X/U.  
TODA 12 8858'. TODA 30 10827'. HIRL. HIALS 12.

H24. Customs.

F-3, Jet A-1.

ABN. Fire 6.

**Bilene**

131' FQBI +02:00 S25 16.0 E033 14.0

**01/19** 2264' ASPHALT.

SR-SS.

**Chimoio**

2272' FQCH VPY +02:00\* S19 09.0 E033 25.7

Apt Operator 25 122163; Mobile 82 65 55 192.

**01/19** 7874' ASPHALT. PCN 26/F/B/X/U.

0530-1330(0730-1530).

Fire 6.

**Chingozi see Tete****Inhaca**

8' FQIA IHC +02:00\* S25 59.8 E032 55.7

**10/28** 2461' SAND.

**18/36** 2953' ASPHALT.

Mon/Tue/Thu-Sun: 0300-1400 (0500-1600),  
O/T PPR.

**Inhambane**

30' FQIN INH +02:00 S23 52.0 E035 25.0

Apt Operator 293 27020; Fax 293 220312.

**06/24** 2625' SAND. AUW-13.

**16/34** 4921' ASPHALT. LCN 18 f 8. RL. ALS.

Dly 0600-1400 (0800-1600). O/T O/R 5hr in advance.

Jet A-1.

ABN. Fire 3.

**Lichinga**

4491' FQLC VXC +02:00 S13 16.5 E035 15.9

Apt Operator 271 20127, 21594; Mobile 82 6401776; Fax 271 20127, 21594.

**08/26** 8300' ASPHALT. PCN 26/F/B/X/U.  
RL. ALS.

Mon, Wed, Sat, Sun+Hol: 0600-1400  
(0800-1600). O/T O/R 3hr in advance.

ABN. Fire 6.

**Lumbo**

33' FQLU +02:00 S15 02.0 E040 40.0

**01/19** 4265' ASPHALT. LCN 18 f 8. RL.

**06/24** 2625' GRAVEL. AUW-26.

SR-SS, O/T O/R.

Fire 1.

**Maputo (Maputo Intl)** Apt of Entry

147' FQMA MPM +02:00 S25 55.2 E032 34.4

Apt Operator 21 465827/8; Fax 21 465064.

**05/23** 12008' ASPHALT. PCN 66/F/A/W/T.  
TODA 05 14961'. ASDA 05 12992'. HIRL.  
HIALS 23.

**10/28** 5577' ASPHALT. PCN 40/F/A/Y/U. HIRL.

H24. Customs.

F-4, Jet A-1.

ABN. Fire 9.

**MOZAMBIQUE**
**Nacala**

398' FQNC MNC +02:00 S14 29.4 E040 42.7

Apt Operator 877249752/26912466;  
sica.nacala@aeroportos.co.mz.

**01/19** 10171' ASPHALT. PCN 62/F/A/X/T.  
TODA 01 11352'. TODA 19 11155'. ASDA 01 10368'. ASDA 19 10368'. HIRL.

Dly 0600-1600. O/T O/R not later than 3hr before apt closure. Customs.

Jet A-1.

ABN. Fire 7.

**Nampula Apt of Entry**

1444' FQNP APL +02:00\* S15 06.2 E039 17.1

Apt Operator 26 213133, 213100; Fax 26225015.

**05/23** 6562' ASPHALT. PCN 25/F/A/X/U. HIRL.  
Mon-Sun+Hol: 0400-1600 (0600-1800). O/T OR 3hr in advance. Customs.

F-3, Jet A-1.

ABN. IBN. Fire 6.

**Pemba**

331' FQPB POL +02:00 S12 59.5 E040 31.5

Apt Operator 0258 242312, 082 5525641.

**17/35** 5906' ASPHALT. PCN 24/F/A/X/U. HIRL. HIALS 17.

Dly 0600-1800. O/T O/R 3hr in advance. Customs.

Jet A-1.

ABN. IBN. Fire 6.

**Ponta De Ouro**

95' FQPO PDD +02:00 S26 50.0 E032 50.0

**03/21** 2461' ASPHALT. AUW-13.

**12/30** 2461' ASPHALT. AUW-13.

SR-SS.

**Quelimane**

36' FQQL UEL +02:00 S17 51.1 E036 52.1

Apt Operator 4 213054/5; Fax 4 212245.

**18/36** 5906' ASPHALT. PCN 26/F/B/X/U. HIRL. HIALS.

Dly 0600-1800. O/T O/R not later than 5hr before apt closure. Customs: Mon-Fri 0600-1800,.

Jet A-1.

ABN. Fire 6.

**Tete (Chingozzi)**

525' FQTT TET +02:00 S16 06.5 E033 38.4

Apt Operator (052) 20010; Fax (052) 20024.

**01/19** 8202' ASPHALT. PCN 25/F/A/X/U. HIRL. ALS.

Mon-Fri and Hol 0530-1330. O/T O/R 3hr in advance. Customs.

Jet A-1.

ABN. Fire 6.

**Vilankulo**

46' FQVL VNX +02:00 S22 01.1 E035 18.8

Apt Operator (023) 82207.

**10/28** 2461' ASPHALT. LCN 25.

**17/35** 4823' ASPHALT. LCN 25. HIRL.

Dly 0600-1500. O/T O/R 3hr in advance. Customs.

F-3, Jet A-1.

ABN. Fire 6.

## NAMIBIA

**Eros see Windhoek****Gobabis**

4729' FYGB +02:00\* S22 30.3 E018 58.5

Apt Operator 061 239850; Fax 061 238884/5.

**07/25** 7415' GRAVEL. LCN 30.**11/29** 5249' GRAVEL.

Days.

J.

**Grootfontein**

4636' FYGF GFY Mil. +02:00\* S19 36.0 E018 08.0

ATC 067 2491342; Fax 067 242542. Apt Operator 067 2491218.

**08/26** 11680' ASPHALT. LCN 74. ASDA 08 12664'. ASDA 26 12664'.**17/35** 3412' ASPHALT. LCN 35. ASDA 17 3674'. ASDA 35 3674'.

H24. Customs: O/R. Tel (067) 243328.

Fire 5.

**Hosea Kutako Intl see Windhoek****Katima Mulilo**

3144' FYKM MPA +02:00\* S17 38.0 E024 10.6

ATC 066 250202/3. Apt Operator 066 250211, 064 271100; Fax 066 250212, 064 200164; dirk@airports.com.na.

**09/27** 7520' ASPHALT. LCN 29.

Rwy 09 Right-Hand Circuit.

Mon-Fri: 0600-1030 and 1100-1400. Sun: 0700-1300. Customs: 24hr PNR Tel.: 66-250200.

F-3, Jet A-1.

Fire 5.

**Keetmanshoop** Apt of Entry

3506' FYKT KMP +02:00\* S26 32.3 E018 06.7

Apt Operator 063 225603; Fax 063 225608; sinvula@airports.com.na.

**04/22** 7598' ASPHALT. LCN 62. HIRL.**18/36** 4705' GRAVEL. LCN 16.

Summer: 0600-1500, Winter: 0700-1600. Customs: O/R.

ABN.

**Luderitz**

457' FYLZ LUD +02:00\* S26 41.1 E015 14.7

Apt Operator 81 268 7367, 63 202035, 64 271100; Fax 63 202027, 64 200164; tjihukununaD@airports.com.na.

**04/22** 6004' ASPHALT. LCN 35.

Rwy 04 Right-Hand Circuit.

**12/30** 3914' GRAVEL. LCN 20.

Winter: Mon-Fri 0700-1600, Sat/Sun 0800-1400. Summer: Mon-Fri 0600-1500, Sat/Sun 0700-1300. Customs: O/R, Tel: (063) 202259.

F-3, Jet A-1.

Fire 4.

**Mariental**

3650' FYML +02:00\* S24 36.2 E017 55.5

Apt Operator (061) 23-9850; Fax (061) 23-8884/5.

**01/19** 6562' ASPHALT. LCN 35.**12/30** 4921' GRAVEL. LCN 15.

Unlicensed Apt.

**Mokuti Lodge**

3650' FYMO +02:00\* S18 48.9 E017 03.1

Apt Operator 067 229084; Fax 067 234512.

**08/26** 7218' GRAVEL. LCN 8.

Rwy 26 Right-Hand Circuit.

Days.

F-3.

## NAMIBIA

**Ondangwa**

3599' FYOA OND +02:00\* S17 52.6 E015 57.0

ATC 065 703190/1; Fax 065 703199. Apt Operator 065 240476/240515; Mobile 081 1441633; Fax 065240534; ensboombe@gmail.com.

**08/26** 9265' ASPHALT. LCN 65. HIRL.

By Notam, Tel: 65 703190/1. Customs: 0600-1500, Tel: 65 240193.

F-4, Jet A-1.

ABN. Fire 4.

**Oranjemund**

13' FYOG OMD +02:00\* S28 35.1 E016 26.8

Apt Operator (063) 237051; Fax (063) 237710; travel@namdeb.com.na.

**02/20** 5249' ASPHALT. PCN 14/F/C/Y/T. TODA 02 5577'. TODA 20 5577'. ASDA 02 5446'. ASDA 20 5446'. RL.

Mon-Fri: 0530-1100 and 1200-1430. Customs: PNR Tel.: (063) 232756, 233552 and Fax.: (063) 234266.

Jet A-1. O/R.

Fire 4.

**Rundu**

3627' FYRU NDU +02:00\* S17 57.4 E019 43.2

Apt Operator 064 271100; Fax 064 200164; dirk@airports.com.na.

**08/26** 11004' ASPHALT. LCN 63. LDA 26 10020'.

Winter: Mon-Fri 0700-1600. Summer: Mon-Fri 0600-1500. Customs: O/R, Tel: (067) 255014.

F-3, Jet A-1.

Fire 5.

**Skorpion Mine**

1870' FYSA +02:00\* S27 52.6 E016 38.9

Apt Operator (063) 2712100; Fax (063) 2712526.

**17/35** 5741' ASPHALT. PCN 9/F//Y/T.

Days. 24hr PNR. Customs: Days.

Jet A-1.

Fire 1.

**Walvis Bay** Apt of Entry

317' FYWB WVB +02:00\* S22 58.8 E014 38.7

Apt Administration Fax 064 200164. Apt Manager 064 271101. Apt Operator 064 271100; Mobile 081 1635038; georgec@airports.com.na.

**09/27** 11286' ASPHALT. HIRL. HIALS 27.

Rwy 09 Right-Hand Circuit.

Mon-Fri 0500-1700 and Sat, Sun 0700-1500. Customs: O/R, Tel: (064) 2086000, 203232.

F-4, Jet A-1.

ABN. IBN. Fire 6.

**Windhoek (Eros)** Apt of Entry

5575' FYWE ERS +02:00\* S22 36.4 E017 04.7

ATC 061 702090. ATIS 0813323508. Apt Manager 061 2955501. Apt Operator Fax 061 2955522; eros@airports.com.na. Apt Switchboard 061 2955500.

**01/19** 6506' ASPHALT. PCN 6/F/D/Y/T. HIRL.

**09/27** 3297' ASPHALT. PCN 6/F/D/Y/T.

Mon-Fri 0400-1900, Sat 0400-1800, Sun 0500-1800. O/T PPR. Customs: Summer: Mon-Fri 0400-1900, Sat 0400-1800, Sun 0500-1800 and Winter: Mon-Fri 0500-1900, Sat 0500-1800, Sun 0600-1800.

F-4, Jet A-1, J.

ABN. Fire 4.

**Windhoek (Hosea Kutako Intl)** Apt of Entry

5641' FYWH WDH +02:00\* S22 28.8 E017 28.3

ATC 062 702490/1/2/3; Fax 062 702499. ATIS 0813323509. Apt Manager 061 2955600;

## NAMIBIA

Mobile 0811441631; shipuata@airports.com.

Apt Operator Fax 061 2955622, 702066.

**08/26** 14991' ASPHALT. PCN 73/F/A/W/T.

TODA 08 15387'. TODA 26 15387'. HIRL.

Rwy 26 Right-Hand Circuit.

**16/34** 4999' ASPHALT. TODA 16 5529'. TODA

34 5529'. ASDA 16 5037'. ASDA 34 5037'.

HIRL.

By NOTAM. Customs.

F-4, Jet A-1, J.

ABN. Fire 9.

**NIGERIA**

**Abuja (Nnamdi Azikiwe Intl)** Apt of Entry  
1122' DNAA ABV +01:00 N09 00.4 E007  
15.8

Apt Operator 8122440316; abujaair-  
port@faan.gov.ng.

**04/22** 11844' ASPHALT. PCN 98/F/B/X/T. ALS.  
H24. Customs.

Jet A-1.

ABN. Fire 9.

**Akanu Ibiam see Enugu**

**Akure**

1108' DNAK AKR +01:00 N07 14.8 E005  
18.1

Apt Operator 803 3475 288.

**03/21** 9186' ASPHALT. LCN 100.

Dly 0600-1800.

ABN. Fire 6.

**Asaba**

298' DNAS +01:00 N06 12.2 E006 40.0

**11/29** 11155' PAVED.

0600-1800.

**Bauchi (Sir Abubakar Tafawa Balewa)**

1965' DNBC +01:00 N10 29.0 E009 44.6

**17/35** 11155' ASPHALT. PCN 100. TODA 17  
11549'. TODA 35 11549'. ASDA 17 11549'.  
ASDA 35 11549'. ALS 35.

0600-1800. Customs: During Hajj.

ABN. Fire 9.

**Benin**

259' DNBE BNI +01:00 N06 19.0 E005 35.9

Apt Administration 8059037090, 7038311108.

**05/23** 7874' ASPH/CONC. LCG III, LCN 55.

0600-1800.

Fire 6.

**Birnin Kebbi (Sir Ahmadu Bello)**

775' DNBK +01:00 N12 28.7 E004 22.2

Apt Administration 8035981380, 8080604500.

**06/24** 10171' ASPH/CONC. PCN 60. ALS 06.

0600-1800, O/T O/R. Customs.

ABN. Fire 9.

**Bonny (Finima)**

15' DNFB +01:00 N04 24.3 E007 10.9

Apt Operator 8035354504.

**04/22** 5577' ASPHALT. PCN 38. TORA 04  
5249'. TORA 22 4593'. LDA 04 4593'. LDA 22  
5249'. TODA 04 5249'. TODA 22 4593'.

Dly 0600-1800.

ABN. Fire 6.

**Calabar (Margaret Ekpo)** Apt of Entry

209' DNCA CBQ +01:00 N04 58.6 E008  
20.8

Apt Operator 803 6527 004.

**03/21** 8038' ASPHALT. LCG III-IV, LCN 50.

Dly 0600-1800. Customs.

ABN. Fire 7.

**Dutse**

1365' DNDS +01:00 N11 47.7 E009 18.1

Apt Operator 8074590626, 8052057791,  
8186834415.

**06/24** 9843' ASPHALT. PCN 75.8.

0600-1800. Customs: O/R.

ABN. Fire 9.

**Enugu (Akanu Ibiam)** Apt of Entry

514' DNEN ENU +01:00 N06 28.4 E007  
33.5

Apt Operator 803 3100 788.

**08/26** 9843' ASPHALT.

Dly 0600-1800. Customs.

F-4, Jet A-1.

ABN. Fire 8.

**Finima see Bonny**



**NIGERIA**
**Forcados (Forcados Terminal)**

11' DNFD +01:00 N05 21.3 E005 20.9

Apt Administration 807 034 2071.

**02/20** 3165' ASPHALT. PCN 38. TORA 02 2930'. TORA 20 2858'. LDA 02 2858'. LDA 20 2930'. TODA 02 2930'. TODA 20 2858'.

0700-1800.

ABN. Fire 3.

**Gombe** Apt of Entry

1589' DNGO GMO +01:00\* N10 17.9 E010 53.9

Apt Operator 8158194446, 8039664453.

**05/23** 10827' ASPHALT. PCN 100.

Dly 0600-1800. Customs: During Hajj only.

ABN. Fire 9.

**Ibadan**

728' DNIB IBA +01:00 N07 21.7 E003 58.7

Apt Operator 702 8160 150.

**04/22** 7874' ASPHALT. LCG III-IV, LCN 50.

Dly 0600-1800.

ABN. Fire 6.

**Ilorin** Apt of Entry

1126' DNIL ILR +01:00 N08 26.4 E004 29.6

Apt Administration 806 7350 098.

**05/23** 10171' ASPHALT. LCN 90, LCG II. ALS.

0600-2000. Customs: Avbl during Hajj.

Jet A-1.

ABN. Fire 7.

**Jos (Yakubu Gowon)**

4229' DNJO JOS +01:00 N09 38.4 E008 52.1

Apt Operator 803 3396 362.

**10/28** 9843' ASPHALT. LCG III-IV, LCN 50.

Dly 0600-1800.

Fire 6.

**Kaduna (New Kaduna)** Apt of Entry

2072' DNKA KAD +01:00 N10 41.7 E007 19.2

Apt Operator 803 5049 918.

**05/23** 9843' ASPH/CONC. LCG I-II, LCN 100. ALS.

Dly 0600-2000. Customs: During Hajj operations.

Jet A-1.

Fire 9.

**Kano (Mallam Aminu Kano)** Apt of Entry

1562' DNKN KAN +01:00 N12 02.9 E008 31.4

Apt Operator 8157992847, 064-430741.

**05/23** 8038' ASPH/CONC. LCN 65.

RWY05/23 not avbl for night operations.

**06/24** 10827' ASPH/CONC. LCN 90. ALS.

H24. Customs.

J.

ABN. Fire 9.

**Katsina**

1685' DNKT DKA +01:00 N13 00.4 E007 39.6

Apt Operator 803 7882 753.

**05/23** 11483' ASPHALT. LCN 90.

Dly 0600-1800. Customs: During Hajj.

ABN. Fire 7.

**Lagos (Murtala Muhammed)** Apt of Entry

138' DNMM LOS +01:00 N06 34.7 E003 19.3

Apt Operator 8062176247; Mobile 012806948; lagosairport@faannigeria.org.

**18L/36R** 9006' ASPHALT. PCN 91/F/B/W/T.

**18R/36L** 12795' ASPHALT. PCN 89/F/B/W/T. ALS 18R.

H24. Customs.

Jet A-1.

ABN. Fire 9.

## NIGERIA

**Maiduguri** Apt of Entry

1097' DNMA MIU +01:00 N11 51.3 E013 04.9

Apt Operator 8100265445.

**05/23** 9843' ASPH/CONC. LCG II, LCN 90.

0600-1800, H24 during Hajj operations. Customs: Dly H24 during Hajj operation and O/R.

Jet A-1.

Fire 5.

**Mallam Aminu Kano see Kano****Margaret Ekpo see Calabar****Minna**

898' DNMN MXJ +01:00 N09 39.1 E006 27.7

Apt Operator 803 5954 070.

**05/23** 11155' ASPHALT. LCN 90. ALS 05.

Dly 0600-1800. Customs: During Hajj.

ABN. Fire 8.

**Murtala Muhammed see Lagos****Nnamdi Azikiwe Intl see Abuja****Owerri (Sam Mbakwe)**

374' DNIM QOW +01:00 N05 25.6 E007 12.4

Apt Operator 806 2896 449.

**17/35** 8858' ASPHALT. LCN 55.

Dly 0600-1800.

ABN. Fire 6.

**Port Harcourt** Apt of Entry

91' DNPO PHC +01:00 N05 00.9 E006 57.0

Apt Operator 803-7919-704/-4237-033.

**03/21** 9843' ASPHALT. LCN 100, LCG I-II.

H24. Customs.

F-4, Jet A-1.

ABN. Fire 9.

**Sam Mbakwe see Owerri****Sir Abubakar Tafawa Balewa see Bauchi****Sir Ahmadu Bello see Birnin Kebbi****Sokoto (Saddiq Abubakar III Intl)** Apt of Entry

1010' DNSO SKO +01:00 N12 54.9 E005 12.4

Apt Operator 803 3722 732.

**08/26** 9843' ASPHALT. LCG II, LCN 85. ALS.

Dly 0600-1800. Customs: H24 during HAJJ and on request.

Jet A-1.

ABN. Fire 6.

**Yakubu Gowon see Jos****Yola** Apt of Entry

613' DNYO YOL +01:00 N09 15.5 E012 25.8

Apt Operator 803 6001 858.

**17/35** 9843' ASPHALT. LCG III-IV, LCN 50.

0600-1800, after 1800 with PPR from NAMA headquarters. Customs: During Hajj operations.

ABN. Fire 6.

**Zaria**

2177' DNZA ZAR +01:00 N11 07.8 E007 41.1

Apt Operator 803 7009 875.

**05/23** 5400' ASPHALT.

0600-1800.

F-2, F-4.

Fire 5.

**Saddiq Abubakar III Intl see Sokoto**

## REUNION

----- Effective thru 09 Oct: -----

**La Reunion (Roland Garros)** Apt of Entry

66' FMEE RUN +04:00\* S20 53.4 E055 31.0  
 Apt Administration (0262) 488000; Fax (0262) 488046. ATIS H24 (0262) 728989.

**12/30** 10499' BITU/CONC. PCN 80/F/B/W/T.  
 TORA 30 10105'. LDA 12 10105'. LDA 30 10105'. TODA 12 12139'. ASDA 30 10105'. HIRL.

Rwy 30 Right-Hand Circuit.

**14/32** 8760' BITU/CONC. PCN 73/F/B/W/T.  
 TORA 32 8366'. LDA 14 8366'. LDA 32 7201'. TODA 14 8940'. ASDA 32 8366'. HIRL.

Rwy 32 Right-Hand Circuit.

H24. Customs.

F-3, Jet A-1.

Fire 9.

**Pierrefonds see St Pierre**

**Roland Garros see La Reunion**

**St Pierre (Pierrefonds)** Apt of Entry

60' FMEE ZSE +04:00\* S21 19.3 E055 25.5  
 Apt Administration 262 968000. ATS 262 968008. Apt Operator Fax 262 968013.

**15/33** 7185' ASPHALT. PCN 49/F/A/W/T.  
 TORA 15 6890'. TORA 33 6890'. LDA 15 6594'. LDA 33 6594'. TODA 15 7087'. TODA 33 7382'. ASDA 15 6890'. ASDA 33 6890'. RL.

Rwy 15 Right-Hand Circuit.

Dly 0300-0815 and 0915-1415, O/T O/R. Customs: Dly 0300-0815 and 0915-1500, O/T O/R.

F-3, Jet A-1.

Fire 5 Cat 7 O/R.

----- Effective 10 Oct: -----

**La Reunion (Roland Garros)** Apt of Entry

66' FMEE RUN +04:00\* S20 53.4 E055 31.0  
 Apt Administration (0262) 488000; Fax (0262) 488046. ATIS H24 (0262) 728989.

**12/30** 10499' BITU/CONC. PCN 80/F/B/W/T.  
 TORA 30 10105'. LDA 12 10105'. LDA 30 10105'. TODA 12 12139'. ASDA 30 10105'. HIRL.

Rwy 30 Right-Hand Circuit.

**14/32** 8760' BITU/CONC. PCN 73/F/B/W/T.  
 TORA 32 8366'. LDA 14 8366'. LDA 32 7201'. TODA 14 8940'. ASDA 32 8366'. HIRL.

Rwy 32 Right-Hand Circuit.

H24. Customs.

F-3, Jet A-1.

Fire 9.

**Pierrefonds see St Pierre**

**Roland Garros see La Reunion**

**St Pierre (Pierrefonds)** Apt of Entry

60' FMEE ZSE +04:00\* S21 19.3 E055 25.5  
 Apt Administration 262 968000. ATS 262 968008. Apt Operator Fax 262 968013.

**15/33** 7185' ASPHALT. PCN 49/F/A/W/T.  
 TORA 15 6890'. TORA 33 6890'. LDA 15 6594'. LDA 33 6594'. TODA 15 7087'. TODA 33 7382'. ASDA 15 6890'. ASDA 33 6890'. RL.

Rwy 15 Right-Hand Circuit.

Dly 0300-0815 and 0915-1415, O/T O/R. Customs.

F-3, Jet A-1.

Fire 5 Cat 7 O/R.

**RWANDA**
**Gisenyi**

5082' HRYG GYI +02:00 S01 40.6 E029 15.5

ATS 0252540866. Apt Manager 0252540877.

**01/19** 3330' ASPHALT. AUW-24. TODA 01 3527'. TODA 19 3419'.

Days. Customs: O/R.

Fire 5.

**Kamembe**

5192' HRZA KME +02:00 S02 27.6 E028 54.5

ATS 0252537777. Apt Manager 0252537766.

**02/20** 4767' ASPHALT. AUW-24. TODA 02 4997'. TODA 20 4898'.

Days. Customs.

Fire 5.

**Kigali (Kigali Intl)** Apt of Entry

4883' HRYR KGL +02:00 S01 58.1 E030 08.3

Apt Operator 252 585555, 724 123 139; operations@rac.co.rw.

**10/28** 11483' ASPHALT. PCN 64/F/B/W/U. TORA 10 11161'. TORA 28 11096'. LDA 10 10774'. LDA 28 10381'. TODA 10 12641'. TODA 28 12408'. ASDA 10 11161'. ASDA 28 11096'. HIRL.

Rwy 28 Right-Hand Circuit.

H24. Customs.

Jet A-1.

ABN. Fire 9.

**Nemba**

4905' HRYN +02:00 S02 20.0 E030 12.0

Apt Administration 252 585845; Fax 252 582609.

**13/31** 3609' LATERITE. TODA 13 3806'. TODA 31 3806'. Rwy 13 Land prior permission only. Rwy 31 Takeoff prior permission only.

Days.

**Ruhengeri**

6102' HRYU RHG +02:00 S01 30.0 E029 38.0

Apt Administration 252 585845; Fax 252 582609.

**14/32** 4856' GRASS. TORA 14 4757'. LDA 32 4511'. TODA 14 4954'. TODA 32 5053'. ASDA 14 4757'. Rwy 14 Land prior permission only. Rwy 32 Takeoff prior permission only.

Days.

**SEYCHELLES**
**Praslin**

10' FSPP PRI +04:00 S04 19.2 E055 41.5

Apt Administration 384000, 384009.

**15/33** 4610' CONCRETE. TORA 15 4318'.  
TORA 33 3588'. LDA 15 3642'. LDA 33 4062'.  
TODA 15 4318'. TODA 33 3588'. ASDA 15  
4318'. ASDA 33 4318'. HIRL. ALS.

H24.

Fire 5.

**Seychelles (Seychelles Intl) Apt of Entry**

12' FSIA SEZ +04:00 S04 40.5 E055 31.3

Apt Administration 4384000; Fax 4384030,  
4384009; secretariat@scaa.sc.

**13/31** 9800' CONCRETE. PCN 72/R/B/W/U.  
LDA 13 8799'. LDA 31 8799'. TODA 13 14698'.  
TODA 31 11801'. HIRL. HIALS 13. ALS 31.

Rwy 31 Right-Hand Circuit.

H24. Customs.

F-3, Jet A-1.

Fire 9.

## SIERRA LEONE

**Bo**

328' GFBO KBS 00:00 N07 56.9 W011 45.7  
**04/22** 4002' LATERITE. HS 748.

Weekdays during skd operations, Sun closed.

**Bonthe**

14' GFBN BTE 00:00 N07 32.0 W012 30.2  
**16/34** 3599' BITUMEN. HS 748.

Weekdays during skd operations, Sun closed.

**Freetown (Lungi) Apt of Entry**

93' GFLF FNA 00:00 N08 37.0 W013 11.7  
Apt Operator (22) 223881/224660; Fax (22)  
228133/224653.

**12/30** 10499' ASPH/CONC. PCN 80/R/B/W/T.  
TODA 12 11152'. TODA 30 11365'. ASDA 12  
10709'. ASDA 30 10899'. HIRL. HIALS.

H24. Customs.

Jet A-1.

ABN. Fire 8.

**Gbangbatoke**

75' GFGK GBK 00:00 N07 46.0 W012 23.0

**07/25** 3740' LATERITE.

Weekdays O/R 48 hr, Sun closed.

**Hastings**

60' GFHA HGS 00:00 N08 23.8 W013 07.7

**09/27** 2986' TARMAC. HS 748.

Dly 0800-1830.

**Kabala**

1012' GFKB KBA 00:00 N09 38.1 W011  
31.0

**01/19** 4003' TARMAC.

Landings on Rwy 19, Take-offs on Rwy 01.

During skd operations, non-skd 72 hr PNR.

VFR flights only.

**Kenema**

485' GFKE KEN 00:00 N07 53.5 W011 10.6

**05/23** 4593' TARMAC. HS 748.

Weekdays during skd operations, Sun closed.

**Lungi see Freetown****Yengema**

1300' GFYE WYE 00:00 N08 36.6 W011  
02.7

**15/33** 3084' BITUMEN. HS 748.

Weekdays during skd operations, Sun closed,  
PPR from Ministry of Defence.

## SOMALIA

**Aden Adde Intl see Mogadishu**

ABN. Fire U.

**Baledogle**

302' HC01 Mil. +03:00 N02 40.2 E044 47.6

04/22 10504' SOIL.

**Berbera**

30' HCM1 BBO +03:00 N10 23.4 E044 55.5

05/23 13583' ASPHALT.

Dly 0330-1430. Customs.

**Burao**

3410' HCMV BUO +03:00 N09 30.0 E045

34.0

05/23 5249' GRAVEL. AN-24/26.

Dly 0330-1430. Customs.

**Egal**

4471' HCMH HGA +03:00 N09 31.1 E044

05.4

Apt Operator 634428402;  
slncaapa@gmail.com.

06/24 12139' ASPHALT.

Dly 0315-1500. Customs.

Jet A-1.

ABN. Fire U.

**Kisimayu**

49' HCMK KMU +03:00 S00 20.7 E042 28.0

05/23 12139' CONCRETE. LCN 70 f 20.

0330-1400. Customs.

**Mogadishu (Aden Adde Intl) Apt of Entry**28' HCMM MGQ +03:00 N02 00.8 E045  
18.2Apt Administration 1853675/1853676;  
scaa@scaa.gov.so. Apt Operator Mobile 617  
165 456.

05/23 10446' ASPHALT. RL.

0300-1900. Acft operations after 1500 by coordi-  
nation with SCAMA. Customs: 0300-1500.

Jet A-1.

**SOUTH AFRICAN REP**
**Alexander Bay**

98' FAAB ALJ +02:00 S28 34.4 E016 32.1

Apt Operator 027 8311330; Fax 027 8311910; schalkl@alexkor.co.za.

**01/19** 6063' ASPHALT. LCN 22. TODA 01 6263'. TODA 19 6263'. HIRL.

**07/25** 5499' GRAVEL.

**11/29** 4823' GRAVEL.

By operational requirements.

**Aliwal North**

4410' FAAN +02:00 S30 41.0 E026 44.0

Apt Operator (051) 6332441; Fax (051) 6341307.

**06/24** 4902' GRASS.

**Bethlehem**

5561' FABM +02:00 S28 14.9 E028 20.2

Apt Manager Mobile 073 166 7073; tra-seobi@dihlabeng.co.za. Apt Operator (058) 303 5732; Fax (058) 303 4810.

**11/29** 3917' ASPHALT.

**13/31** 4196' GRASS. LCN 16.

H24.

F-3.

**Bhisho**

1950' FABE BIY +02:00\* S32 53.7 E027 17.1

ATC (040) 6591151; Fax (040) 6591151. Apt Manager Fax (040) 6591312. Apt Switchboard (040) 6591000.

**08/26** 8209' ASPHALT. PCN 100/F/B/W/T.

Rwy 08 Right-Hand Circuit.

Days, night O/R PNR.

**Bloemfontein (Bram Fischer Intl)** Apt of Entry

4457' FABL BFN +02:00 S29 05.6 E026 18.2

ATS (051) 503 7201. Apt Manager (051) 407 2215; Mobile 0824537965. Apt Operator (051)

407 2200; Fax (051) 4331485; FABL@airports.co.za.

**02/20** 8409' ASPHALT. PCN 76/F/B/W/T. RL. Pilot Controlled Lighting.

**12/30** 7198' ASPHALT. PCN 57/F/B/W/T. RL. Pilot Controlled Lighting.

Mon-Fri 0400-1800, Sat 0630-1400, Sun 0630-1800. O/T PPR. Customs: During skd operations H24 on call-out.

F-3, Jet A-1.

Fire 7.

**Brakpan-Benoni**

5300' FABB +02:00 S26 14.3 E028 18.3

Apt Operator Mobile (071) 5422993; Fax (086) 7508646.

**18/36** 4724' ASPHALT.

Fire 1.

**Bram Fischer Intl see Bloemfontein**
**Burgersdorp**

4715' FABD +02:00 S30 59.0 E026 18.0

Apt Operator (051) 6531777/1834; Fax (051) 6530056.

**03/21** 3435' GRAVEL. LCN 8.

**16/34** 2339' GRAVEL.

**Calvinia**

3250' FACV +02:00 S31 30.0 E019 43.5

**09/27** 4101' ASPHALT.

**Cape Town (Cape Town Intl)** Apt of Entry

151' FACT CPT +02:00 S33 58.3 E018 36.3 Switchboard (021) 9371200. Chief 623313. ATC 9371116/7, 9340263, Fax 9340964. ATIS H24 (021) 9371179.

**01/19** 10502' ASPHALT. PCN 66/F/A/X/T. TODA 01 13688'. TODA 19 11627'. HIRL. ALS.

**16/34** 5581' ASPHALT. PCN 32/F/A/X/U. HIRL. H24. Customs: Avbl during sked operations.

F-3, Jet A-1. Oxygen.



**SOUTH AFRICAN REP**

Fire 9.

**Carnarvon**

4150' FACN +02:00 S30 59.5 E022 08.0

**05/23** 4199' GRAVEL.

**12/30** 3599' GRAVEL.

**16/34** 4216' GRAVEL. LCN 12.

**De Aar**

4154' FADA +02:00 S30 41.5 E024 01.5

**03/21** 5171' GRAVEL. LCN 10.

**11/29** 4039' GRAVEL. LCN 10.

**15/33** 3802' GRAVEL. LCN 10.

**18/36** 4482' GRAVEL. LCN 10.

**Durban (King Shaka Intl)** Apt of Entry

304' FALE DUR +02:00 S29 36.7 E031 07.2

ATS 0324365020. Apt Operator 0324366000.

**06/24** 12139' ASPHALT. PCN 85/F/A/X/T.  
TODA 06 13123'. TODA 24 13123'. ALS.

H24. Customs.

F-3, Jet A-1.

Fire 9.

**Durban (Virginia)**

20' FAVG VIR +02:00 S29 46.2 E031 03.6

ATS (031) 5634213 (TWR); Fax (031) 5634213 (TWR). Apt Manager Mobile 084 6688569. Apt Operator (031) 5637101; Fax (031) 5637138.

**05/23** 3035' ASPHALT. LCN 32. ASDA 05 3534'. ASDA 23 3534'. RL.

Rwy 05 Right-Hand Circuit.

Mon-Fri 0400-2000.

F-3, J.

Fire 2.

**East London**

435' FAEL ELS +02:00 S33 02.1 E027 49.3

Apt Manager (043) 706 0304. Apt Operator Fax (043) 706 0313; Michael.Kernkamp@airports.co.za.

**06/24** 5197' ASPHALT. PCN 46/F/A/W/T.  
TODA 06 6181'. TODA 24 5722'.

**11/29** 6362' ASPHALT. PCN 52/F/A/W/T.  
TODA 11 7346'. TODA 29 6887'. Pilot Controlled Lighting.

Mon-Fri 0430-1830, Sat 0600-1600, Sun 0600-1830 and O/T O/R.

F-3, Jet A-1.

Fire 7.

**Ficksburg Sentraoes**

5315' FAFB +02:00 S28 49.5 E027 54.5

**08/26** 4593' ASPHALT. LCN 15.

**Fisantekraal**

399' FAFK +02:00 S33 46.3 E018 44.4

**05/23** 2953' CONCRETE.

**Fort Beaufort**

1762' FAFO +02:00 S32 47.4 E026 34.6

Apt Operator (046) 6451109; Fax (046) 6451538; fgreeff@woodoc.com.

**11/29** 4144' GRASS. TODA 11 4318'. TODA 29 4479'.

Rwy 29 Right-Hand Circuit.

**Gariep Dam**

4176' FAHV +02:00 S30 33.7 E025 31.8

Apt Operator (011) 3260568; Mobile (082) 4425584; Fax (082) 4193129.

**10/28** 4298' ASPHALT. LCN 10.5.

**15/33** 3701' ASPHALT.

Fire 1.

**George**

648' FAGG GRJ +02:00 S34 00.4 E022 22.5

Apt Manager Brenda.vorster@airports.co.za. Apt Operator (044) 8769310; Fax (044) 8769027.

**11/29** 6562' ASPHALT. PCN 49/F/B/Y/U.  
TORA 29 6955'. TODA 11 7546'. TODA 29

## SOUTH AFRICAN REP

8202'. ASDA 11 6759'. ASDA 29 6955'. HIRL.  
ALS 29. Pilot Controlled Lighting.  
Rwy 11 Right-Hand Circuit.  
TORA/ASDA with starter extension 120m.  
Mon-Thu 0430-1700, Fri 0430-1800, Sat  
0630-1300, Sun 0630-1730.  
F-3, Jet A-1.  
Fire 7.

**George Dick Montshioa see Mafikeng****Graaff-Reinet**

2588' FAGR +02:00 S32 11.7 E024 32.5  
Apt Manager Mobile 072 335 2231. Apt Opera-  
tor (049) 8922121/2; Fax (049) 8924319.  
**04/22** 4921' ASPHALT. PCN 15/F/B/X/T.

**Grahamstown**

2135' FAGT +02:00 S33 17.0 E026 30.0  
**16/34** 3937' ASPHALT. LCN 15.

**Grand Central**

5325' FAGC GCJ +02:00 S25 59.2 E028  
08.4  
Apt Manager (011) 805 3166, -3167, -3168;  
Fax (011) 3150194.  
**17/35** 5997' ASPHALT. PCN 45. LDA 17 5826'.  
LDA 35 5826'. RL. Pilot Controlled Lighting.  
Rwy 17 Right-Hand Circuit.  
H24.  
F-3, Jet A-1.  
Fire 3.

**Hendrik Swellengrebel see Swellendam****Hoedspruit (Hoedspruit AB)**

1756' FAHS HDS Mil. +02:00 S24  
21.3 E031 03.0  
Apt Administration (015) 799 2451. Apt Opera-  
tor (015) 799 2911; Fax (015) 799 2695; hoed-  
spruitatc@gmail.com.  
**09/27** 6995' ASPHALT. LCN 74.  
Rwy 09 Right-Hand Circuit.

**18/36** 12159' ASPHALT. LCN 74.

Rwy 36 Right-Hand Circuit.

Mon-Fri 0500-1330.

Unlicensed military AD. To be used in Emer-  
gency only.

Jet A-1.

Fire 5 Cat 7 avbl 24hr PNR.

**Johan Pienaar see Kuruman**

**Johannesburg (O.R. Tambo Intl)** Apt of  
Entry

5558' FAOR JNB +02:00 S26 08.0 E028  
14.5

ATIS H24 (011) 9286461. Apt Operator (011)  
9216262 (Info ACSA), (011) 9216911, (011)  
9286454/5 (ATC), (011) 9286459, -9286460  
(TWR); Fax (011) 3940806.

**03L/21R** 14505' ASPHALT. PCN 71/F/A/W/U.  
LDA 21R 13028'. TODA 03L 15391'. TODA  
21R 14833'. ASDA 03L 14705'. ASDA 21R  
14790'. HIRL. ALS.

Rwy 21R Right-Hand Circuit.

**03R/21L** 11171' ASPHALT. PCN 71/F/A/W/U.  
TODA 03R 11368'. TODA 21L 11368'. ASDA  
03R 11358'. ASDA 21L 11358'. HIRL. ALS.

Rwy 03R Right-Hand Circuit.

H24. Customs.

Jet A-1.

Fire 9.

**Johannesburg (Rand)**

5483' FAGM QRA +02:00 S26 14.5 E028  
09.1

Apt Operator (011) 8278884/5/6, TWR  
8274517; Fax (011) 8244475, TWR 8274239.

**11/29** 5623' ASPHALT. LCN 51. TORA 11  
5180'. LDA 29 5180'. TODA 11 5180'.

Rwy 11 Right-Hand Circuit.

**17/35** 4895' ASPHALT. LCN 43. TORA 17  
4514'. TORA 35 4308'. LDA 17 4308'. LDA 35  
4514'. TODA 17 4514'. TODA 35 4308'. RL.

**SOUTH AFRICAN REP**

Rwy 17 Right-Hand Circuit.

Dly 0600-1400.

F-3, Jet A-1.

Fire 6.

**Karoo Gateway**

2929' FABW +02:00 S32 18.0 E022 40.0

Apt Operator (012) 362 4628; Mobile 083 654 3773; Fax (012) 362 4629; info@heibergerstates.com.

**08/26** 4872' ASPHALT. PCN 18/F/B/X/T.

Day, night and PNR.

100 octane, Jet A-1.

**Kimberley**

3950' FAKM KIM +02:00 S28 48.3 E024 45.8

ATS 851 1012; Fax 851 1555; kmatc@atns.co.za. Apt Operator 830 7108; Fax 851 1032; Florah.Ramusi@airports.co.za, gerda.eden@airports.co.zs.

**02/20** 9849' ASPHALT. PCN 42/F/A/W/T. TODA 02 10833'. TODA 20 10833'. Pilot Controlled Lighting.

Rwy 20 Right-Hand Circuit.

**10/28** 7995' ASPHALT. PCN 42/F/A/W/T. TODA 10 8979'. TODA 28 8979'.

Mon-Fri 0400-1800, Sat 0700-1400, Sun 1100-1800 and Hol O/R from sked ops only.

F-3, J.

Fire 6.

**King Shaka Intl see Durban**
**Klerksdorp (P.C. Pelser)**

4444' FAKD +02:00 S26 52.0 E026 43.0

**15/33** 3281' GRASS.

**18/36** 4921' ASPHALT. LCN 40.

**Kruger Mpumalanga (Kruger Mpumalanga Intl) Apt of Entry**

2829' FAKN MQP +02:00 S25 23.5 E031 06.0

ATC (013) 753 7520, 751 2917; Fax (013) 751 2910. Apt Manager Mobile 083 626 4903; mar-ius@kmiairport.co.za. Apt Operator (013) 753 7502; Fax (013) 753 7555.

**05/23** 10705' ASPHALT. PCN 56/F/B/X/T. TORA 05 10180'. TORA 23 10171'. LDA 05 8540'. LDA 23 8540'. ASDA 05 10180'. ASDA 23 10171'.

Rwy 05 Right-Hand Circuit.

Mon-Sun 0500-1700. Customs: Mon-Sun 0500-1700, O/T 48hr in advance (Fax 013-7537555).

F-3, Jet A-1.

Fire 7.

**Krugersdorp**

5499' FAKR +02:00 S26 04.9 E027 43.5

**08/26** 2762' GRAS/ASPH. LCN 4. TORA 08 2907'. TORA 26 3005'. TODA 08 3150'. TODA 26 3150'. ASDA 08 3150'. ASDA 26 3150'.

Rwy 26 Right-Hand Circuit.

**Kuruman (Johan Pienaar)**

4370' FAKU +02:00 S27 27.6 E023 24.8

**02/20** 5577' ASPHALT. LCN 22.

**Ladysmith**

3548' FALY LAY +02:00 S28 34.8 E029 45.2

Apt Operator (036) 637-6800/4; Fax (036) 637-3150; LADYSMUN@INTEKOM.CO.ZA.

**11/29** 3937' ASPHALT. LCN 11.

Days.

**Langebaanweg**

108' FALW SDB Mil. +02:00 S32 58.1 E018 09.9

## SOUTH AFRICAN REP

Apt Administration Fax 706 2375. 706 2211/2500; Fax 706 2391. ATS 706 2137, 2259. Apt Operator 706 2911; langebaa-natc@telkomsa.net.

**02L/20R** 7680' ASPHALT. LCN 60. ALS.

Rwy 20R Right-Hand Circuit.

**02R/20L** 7690' ASPHALT. LCN 60. HIALS 02R. ALS 20L.

Rwy 02R Right-Hand Circuit.

**07/25** 4934' ASPHALT. LCN 50. RL.

Rwy 25 Right-Hand Circuit.

**16/34** 5830' ASPHALT. LCN 50. RL.

Rwy 34 Right-Hand Circuit.

Mon-Fri 0545-1415. Customs: Mon-Fri 0230-1800, Sat, Sun 0530-0600 and 1730-1800.

Unlicenced mil Apt, used in emergency only..

Jet A-1.

Fire 6.

**Lanseria (Lanseria Intl)** Apt of Entry

4521' FALA HLA +02:00 S25 56.4 E027 55.5

ATC (011) 701 3262/3278; Fax (011) 701 3505.

Apt Operator (011) 367 0300; info@lanse-ria.co.za.

**07/25** 9829' ASPHALT. PCN 65/F/B/W/T. LDA 25 9596'. TODA 07 14750'. TODA 25 14750'. HIRL.

Rwy 25 Right-Hand Circuit.

H24. Customs.

F-3, Jet A-1.

ABN. Fire 7, fire 8 by 12hr PN.

**Louis Trichardt**

3025' FALO +02:00 S23 03.7 E029 51.9

**10/28** 3937' ASPHALT. LCN 18.

**Mafikeng (George Dick Montshioa)**

4181' FAMM MBD +02:00 S25 48.4 E025 32.7

Apt Operator (018) 3851131 (ATC), 385 1130/1120/1121/1006/1059/1052/1065/1027/10 29/1132/1036; Fax (018) 3851131 (ATC), 385 1037.

**04/22** 14760' ASPHALT. LCN 100. RL. Pilot Controlled Lighting.

Rwy 22 Right-Hand Circuit.

Mon-Fri 0600-1600 and Sun 1200-1600. Public Hol by NOTAM.

Fire 5.

**Majuba Power Station**

5600' FAMJ +02:00 S27 05.0 E029 47.1

Apt Operator (017) 7993111; Fax (017) 7992145.

**14/32** 4921' ASPHALT. LCN 40.

H24.

**Makhado (Makhado AB)**

3069' FALM Mil. +02:00 S23 09.6 E029 42.1

Apt Administration (015) 577 2237; Fax (015) 577 2239. Apt Operator (015) 577 2911; falm-tower@gmail.com.

**10/28** 13126' ASPHALT. LCN 65.

Rwy 10 Right-Hand Circuit.

Mon-Fri 0500-1330, O/T PPR.

Unlicensed military AD. To be used in Emergency only.

F-4, Jet A-1.

Fire 5.

**Malelane**

1153' FAMN LLE +02:00 S25 28.4 E031 33.9

Apt Operator (013) 7911000, (013) 7911484; Fax 0866197958.

**09/27** 4094' ASPHALT. LCN 17. LDA 27 3766'. ASDA 27 4750'.

SR-SS. PPR 24hr/1 workday before ARR Tel (013) 7911484/Fax (086) 6197958.

**SOUTH AFRICAN REP**
**Marble Hall**

2980' FAMI +02:00 S24 59.5 E029 17.0

**04/22** 3281' ASPHALT.

**Margate**

498' FAMG MGH +02:00 S30 51.4 E030 20.6

Apt Operator (039) 3120560; Fax 0864571838; Margateairport@nm.gov.za.

**05/23** 4409' ASPHALT.

Rwy 05 Right-Hand Circuit.

Mon-Fri 0600-1430.

F-3, Jet A-1.

Fire 4.

**Middelburg**

4000' FAMC +02:00 S31 32.8 E025 01.8

Apt Operator (049) 8421104; Fax (049) 8423996.

**11/29** 3461' GRASS. LCN 8.

**Mossel Bay**

526' FAMO +02:00 S34 09.4 E022 03.7

Apt Operator (044) 695 4025; Fax (044) 695 4025; office@mosselbayaero.com.

**10/28** 3750' UNPAVED.

Fire 1.

**Mthatha**

2429' FAUT UTT +02:00 S31 32.8 E028 40.5

ATC (047) 5360029. Apt Manager Mobile 082 8282531. Apt Operator (047) 5360114.

**14/32** 8530' ASPHALT. PCN 83. TODA 14 8858'. TODA 32 8858'. ASDA 14 8727'. ASDA 32 8727'.

Rwy 32 Right-Hand Circuit.

H24.

Fire 4.

**Nelspruit**

2901' FANS +02:00 S25 30.1 E030 54.7

Apt Manager Mobile 082 825 1033. Apt Operator (013) 741 8050; gmnam@mwebbiz.co.za.

**04/22** 3419' GRAVEL. LCN 8. TODA 04 4338'. ASDA 04 3534'. Pilot Controlled Lighting.

Fire 1.

**New Tempe**

4526' FATP +02:00 S29 02.0 E026 09.5

**01/19** 4265' ASPHALT. LCN 25. RL.

Rwy 19 Right-Hand Circuit.

**10/28** 3937' ASPHALT. RL.

**Newcastle**

4075' FANC NCS +02:00 S27 46.4 E029 58.6

Apt Administration (034) 3287761; Fax (034) 3129243. Apt Manager 0829269297.

**11/29** 4921' ASPHALT. LCN 18. TORA 11 4593'. LDA 11 4593'. LDA 29 4593'. TODA 11 4593'. RL.

H24.

**O.R. Tambo Intl see Johannesburg**
**Orient**

5100' FAOI +02:00 S26 02.4 E027 35.6

Apt Operator 082 4947231.

**18/36** 4800' GRAVEL. LCN 8.

**Oudtshoorn**

1063' FAOH OUH +02:00 S33 36.4 E022 11.4

Apt Operator (044) 2033000; Fax (044) 2033104; post@oudtmun.co.za.

**04/22** 5581' ASPHALT. LCN 45. TORA 04 5299'. LDA 22 5299'. TODA 04 5299'. RL.

Rwy 04 Right-Hand Circuit.

RL switched on automatically at SS and daylight switch.

MON-SAT 0500-1700. Altn for FAGG and FAGG.

F-3, Jet A-1.

## SOUTH AFRICAN REP

**Overberg (Overberg AB)**

52' FAOB OVG Mil. +02:00 S34 33.5 E020 14.9

Apt Administration (028) 425 4081. Apt Operator (028) 4254111; Mobile 079 5025413 / 082 7399764; Fax (028) 4254082, Fax: (028) 4254198; overbergatc@gmail.com.

**10/28** 6926' ASPHALT. LCN 70. ALS.

Rwy 28 Right-Hand Circuit.

**17/35** 10220' ASPHALT. LCN 70. ALS.

Rwy 35 Right-Hand Circuit.

Mon-Fri 0545-1415.

Jet A-1.

Fire 4.

**P.C. Pelser see Klerksdorp****Piet Retief**

4420' FAPF +02:00 S27 00.1 E030 50.6  
Apt Operator (017) 8262211. Fax 8260330.

**15/33** 4498' GRAVEL. LCN 10.5.

Days.

**Pietermaritzburg**

2423' FAPM PZB +02:00 S29 38.8 E030 23.9

ATS (033) 3923110; Fax (033) 3869618. Apt Manager (033) 3923107; Fax 086 7702177. Apt Operator (033) 3923103; Nontobeko.Mofokeng@msunduzi.gov.za.

**16/34** 5043' ASPHALT. PCN 34. TODA 16 5240'. TODA 34 5240'. ASDA 16 5469'. RL. Pilot Controlled Lighting.

Dly 0630-2000.

F-3, Jet A-1.

Fire 6.

**Pietersburg**

4354' FAPI +02:00 S23 55.6 E029 29.1

**08/26** 7379' ASPHALT. LCN 16.

Rwy 08 Right-Hand Circuit.

**Pilanesberg (Pilanesberg Intl) Apt of Entry**

3412' FAPN NTY +02:00 S25 20.1 E027 10.3

Apt Manager (018) 388 1439/1079; Mobile 083 277 9500; Fax (018) 388 1825. Apt Operator Mthobakgale@nwpg.gov.za.

**05/23** 9022' ASPHALT. PCN 58/F/C/X/T. TODA 05 9219'. TODA 23 9219'. MIRL. Pilot Controlled Lighting.

Rwy 05 Right-Hand Circuit.

Mon-Sun 0530-1400. Night ops restricted to pilots acquainted with AD. Customs: Dly 0500-1700 with 12hr PNR.

F-3, Jet A-1.

Fire 6.

**Plettenberg Bay**

465' FAPG PBZ +02:00 S34 05.3 E023 19.7  
Apt Operator (044) 5339036; Fax (044) 5339038.

**12/30** 4068' ASPHALT. LCN 20.

Rwy 30 Right-Hand Circuit.

Days.

F-3, Jet A-1.

**Polokwane (Polokwane Intl) Apt of Entry**

4076' FAPP PTG +02:00 S23 51.0 E029 27.4

(015) 2880030, (015) 2880233 / (015) 2880083; Mobile 082 8227202 / 083 7735218, 073 9937642. ATC (015) 2880343; Fax (015) 2880344. Apt Operator (015) 2880122; Fax (015) 2880125.

**01/19** 8399' ASPHALT. LCN 73. TODA 01 12014'. TODA 19 8547'. ASDA 01 8727'. ASDA 19 8727'.

Rwy 19 Right-Hand Circuit.

**05/23** 7612' ASPHALT. LCN 73. TODA 05 10614'. TODA 23 7809'. ASDA 05 10417'.

Rwy 23 Right-Hand Circuit.

## SOUTH AFRICAN REP

Mon-Fri 0430-1630, Sat 0800-1400, Sun 0800-1630. O/T O/R 24hr. Customs.

F-3, Jet A-1.

Fire 7.

**Pongola**

942' FAPL +02:00 S27 21.7 E031 36.3

Apt Operator (034) 413 1223; Fax (034) 413 1706; PONGOLATLC@PGA.DOREA.CO.ZA.

**16/34** 2290' ASPHALT. LCN 20.

Days.

**Port Alfred**

275' FAPA AFD +02:00 S33 33.6 E026 52.7

Apt Manager Mobile 0826535371. Apt Operator (046) 6242433; Fax (046) 6242432; fly@43air-school.com.

**07/25** 3609' GRASS.

**10L/28R** 5997' GRASS.

Days. Night PPR.

F-3.

**Port Elizabeth (Port Elizabeth Intl)** Apt of Entry

229' FAPE PLZ +02:00 S33 59.4 E025 36.6

Apt Manager (041) 507 7378; Mobile 082 859 2522. Apt Operator Fax (041) 5077340; fape@airports.co.za. Apt Switchboard (041) 5077348.

**08/26** 6496' ASPHALT. PCN 50/F/B/X/T. TORA 26 7087'. TODA 08 6693'. TODA 26 7284'. ASDA 08 6693'. ASDA 26 7087'. HIRL. ALS.

Rwy 08 Right-Hand Circuit.

**17/35** 5502' ASPHALT. PCN 50/F/B/X/T. TODA 17 5699'. MIRL.

H24. Customs: Mon-Fri 0530-1415.

F-3, Jet A-1.

Fire 7.

**Potchefstroom**

4520' FAPS +02:00 S26 40.1 E027 05.0

Apt Operator (018) 2995111; Fax (018) 2931113.

**03/21** 5791' ASPHALT. PCN 41/F/B/Y/T. TODA 03 5988'. ASDA 03 5873'. ASDA 21 6414'. RL.

Rwy 21 Right-Hand Circuit.

F-3, Jet A-1.

Fire 3.

**Pretoria (Wonderboom)**

4095' FAWB PRY +02:00 S25 39.3 E028 13.3

Apt Manager (012) 543 8105; Fax (012) 543 8111. Apt Operator (012) 358 4040; Fax (012) 358 4141; ndivhol@tshwane.gov.za, peet@wonderboomairport.co.za.

**06/24** 4157' ASPHALT. PCN 30. TODA 06 4403'. TODA 24 4403'.

Rwy 24 Right-Hand Circuit.

**11/29** 5997' ASPHALT. PCN 40. TODA 11 6489'. TODA 29 6489'.

Rwy 29 Right-Hand Circuit.

Mon-Sun 0400-1800. Public Holidays by NOTAM.

F-3, J.

ABN. Fire 5.

**Prieska**

3104' FAPK +02:00 S29 41.0 E022 46.2

Apt Operator (053) 3533002/6; Fax (053) 3531386.

**16/34** 5249' GRAVEL. LCN 16.

**Prince Mangosuthu Buthelezi see Ulundi****Queenstown**

3637' FAQT +02:00 S31 55.0 E026 53.0

**12/30** 3937' ASPHALT.

**Rand see Johannesburg****Richards Bay**

109' FARB RCB +02:00 S28 44.4 E032 05.6

## SOUTH AFRICAN REP

Apt Manager (035) 7899630; Mobile 082 657 5225, 078 655 9171; Fax (035) 7860296. Apt Operator farbatsu@indiza.biz.

**05/23** 4265' ASPHALT. PCN 27, LCN 40. RL.

Rwy 05 Right-Hand Circuit.

Mon-Fri 0430-1700, Sat 0700-0900, Sun 1100-1330 and 1500-1700, Hol by NOTAM.

F-3, Jet A.

Fire 6 Mon-Fri 0430-1600. O/T Fire 2 O/R 24hr in advance.

**Robertson**

640' FARS +02:00 S33 48.6 E019 54.6

**10/28** 4921' ASPHALT.

**Rustenburg**

3700' FARG +02:00 S25 38.7 E027 16.3

Apt Operator (014) 5903111.

**16/34** 4019' ASPHALT. LCN 18.

Rwy 34 Right-Hand Circuit.

**Saldanaha-Vredenburg**

50' FASD +02:00 S32 57.8 E017 58.2

**02/20** 4665' ASPHALT.

**Secunda**

5250' FASC ZEC +02:00 S26 31.2 E029 10.3

Apt Administration Mobile 083 6304833. Apt Operator (017) 6206265; Fax (017) 6206214.

**11/29** 3609' ASPHALT. LCN 15. RL.

Rwy 29 Right-Hand Circuit.

Days. Nights PPR.

F-4.

**Springbok**

2690' FASB +02:00 S29 41.4 E017 56.3

Apt Operator (027) 7188100; Fax (027) 7121635/7182661.

**10/28** 5213' ASPHALT. LCN 15.

**Springs**

5340' FASI +02:00 S26 15.0 E028 24.0

Apt Operator Mobile 082 9201194, 084 2786870; admin@erfc.biz.

**03/21** 5249' ASPHALT. TORA 03 4757'. TORA 21 4429'. LDA 03 3937'. LDA 21 3937'. RL.

Rwy 21 Right-Hand Circuit.

**St Francis Field**

134' FACF +02:00 S34 11.3 E024 49.9

**10/28** 3609' GRASS.

**Swellendam (Hendrik Swellengrebel)**

407' FASX +02:00 S34 03.0 E020 29.0

**15/33** 3291' ASPHALT. ASDA 15 3590'.

**Tommy's Field**

4360' FATF +02:00 S28 16.0 E023 00.0

Apt Manager (053) 3116547. Apt Operator Fax 086 731 7921; Ronel.vanRensburg@ass-mang.co.za.

**03/21** 4790' ASPHALT. LCN 14. TODA 03 5062'. TODA 21 5141'. ASDA 03 4925'. ASDA 21 4875'.

Rwy 21 Right-Hand Circuit.

Mon-Fri 0445-0545, 0930-1030 and 1500-1545.

Jet A-1.

Fire 3.

**Uitenhage**

285' FAUH +02:00 S33 47.0 E025 23.0

Apt Operator (041) 9941111/123-4, 9941202; Fax (041) 9941210.

**08/26** 2625' GRASS. LCN 10.5.

Rwy 08 Right-Hand Circuit.

**Ulundi (Prince Mangosuthu Buthelezi)**

1720' FAUL ULD +02:00 S28 19.2 E031 25.0

Apt Administration Fax (035) 8709414. Apt Manager (035) 8709408; Mobile 082-9026029.



## SOUTH AFRICAN REP

**02/20** 2710' ASPHALT. LCN 15. Rwy 02 Take-off not allowed. Rwy 20 Landing not allowed.

Rwy 02 Right-Hand Circuit.

**05/23** 5381' ASPHALT. LCN 20. RL. Pilot Controlled Lighting.

Rwy 05 Right-Hand Circuit.

Days. Apt avbl as unmanned afd for IFR only outside opr hr.

Fire 2.

**Upington (Upington Intl)** Apt of Entry

2791' FAUP UTN +02:00 S28 24.1 E021 15.6

Apt Manager (054) 3377900; Fax (054) 3326502; Nongo.Dibete@airports.co.za.

**01/19** 7999' ASPHALT. PCN 56/F/A/X/T. TODA 01 8196'. TODA 19 8196'. RL.

**08/26** 2736' ASPHALT. PCN 56/F/A/X/T. TODA 08 3228'. TODA 26 3720'. ASDA 08 3048'. ASDA 26 3720'.

Rwy 26 Right-Hand Circuit.

**17/35** 16076' ASPHALT. PCN 56/F/A/X/T. TODA 17 17257'. TODA 35 17257'. ASDA 17 17257'. ASDA 35 17257'. HIRL.

Mon-Fri 0500-1700, Sat 0800-1200 and Sun 0900-1700. Pub HOL same as corresponding weekdays. Customs: Mon-Fri 0530-1400. H24 O/R.

F-4, Jet A-1.

Fire 5, fire 8 O/R 7 days.

### Vereeniging

4846' FAVV +02:00 S26 34.5 E027 57.7

Apt Operator (016) 429 9900/01/02/04; Mobile (071) 680 8783; Fax (086) 743 7123; col-inm@sedlbeng.gov.za.

**03/21** 5266' ASPHALT. LCN 22. MIRL. Pilot Controlled Lighting.

Rwy 03 Right-Hand Circuit.

**15/33** 3724' ASPHALT. LCN 22.

Rwy 33 Right-Hand Circuit.

H24.

F-4, J.

### Victoria West

4122' FAVW +02:00 S31 24.0 E023 09.0

Apt Operator (053) 6210026; Fax (053) 6210368.

**14/32** 5778' GRASS. LCN 19.

**Virginia** see Durban

### Vredendal

330' FAVR +02:00 S31 38.6 E018 32.4

Apt Operator (027) 2131045; Fax (027) 2133238; headoff@matzikamamun.co.za.

**08/26** 4265' GRVL/ASPH.

### Warmbaths

3640' FAWA +02:00 S24 54.5 E028 18.3

**03/21** 3937' TARMAC. LCN 10.

H24.

### Waterkloof

4940' FAWK WKF Mil. +02:00 S25 49.7 E028 13.3

ATS (012) 672-3251/3060; Fax (012) 672-3323. Apt Operator (012) 672-3297/3313; Fax (012) 672-3038.

**01/19** 11001' ASPHALT. PCN 90/F/A/W/T. HIRL. HIALS 01. ALS 19.

Rwy 01 Right-Hand Circuit.

H24.

Jet A-1.

IBN. Fire 7.

### Welkom

4402' FAWM +02:00 S27 59.9 E026 40.2

**07/25** 6578' ASPHALT. LCN 30.

Days, night ops PNR.

Fire U.

### Williston

3485' FAWL +02:00 S31 23.0 E020 56.0

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**SOUTH AFRICAN REP**

**05/23** 4199' GRAVEL. LCN 10.5.

**Wonderboom see Pretoria**

**Ysterplaat (Ysterplaat AB)**

49' FAYP Mil. +02:00 S33 54.1 E018 29.8

ATS (021) 5086151; Fax (021) 5086224. Apt  
Operator (021) 5086222 (OPS); Fax (021)  
5086405 (OPS).

**02/20** 5200' ASPHALT. LCN 30. RL.

Rwy 20 Right-Hand Circuit.

Mon-Fri 0500-1330. Sat, Sun 1 hr PNR. CIV  
only in emergency cases.

F-3, Jet A-1.

Fire 6.

**Zeerust**

4258' FAZR +02:00 S25 35.9 E026 02.5

Apt Operator (018) 6421081; Mobile (082)  
8901080; Fax (018) 6422618.

**04/22** 6480' ASPHALT. LCN 12.

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**ST. HELENA**
**St Helena** Apt of Entry

1017' FSH HLE 00:00 S15 57.5 W005  
38.8

Apt Operator 25175; gwyneth.howell@sthele-  
naairport.aero.

**02/20** 6070' CONCRETE. PCN 52/R/B/W/T.  
TORA 02 5364'. LDA 02 5036'. LDA 20 5085'.  
TODA 02 7956'. TODA 20 9105'. ASDA 02  
5364'. HIRL. HIALS.

Rwy 02 Right-Hand Circuit.

By NOTAM. 48HR PN BFR nominating St  
Helena AP as ALTN. Acft Cat C PPR. Customs:  
O/R for sked ops.

Jet A-1.

Fire A Fire 7.

## SUDAN

**Atbara**

1197' HSAT ATB +02:00 N17 42.6 E034  
03.4

**01/19** 5906' UNPAVED.

Days.

Fire 4.

**Damazin**

1584' HSDZ RSS +02:00 N11 47.2 E034  
20.2

Apt Administration 0551822425; Fax  
0551822427.

**17/35** 9022' ASPHALT.

Days.

Fire 4.

**Dongola**

773' HSDN DOG +02:00 N19 09.1 E030  
25.8

Apt Operator 0241 22592, 22593, 22591; Fax  
0241 823697.

**17/35** 9843' ASPHALT. TODA 17 10236'.  
TODA 35 10564'. ASDA 17 10040'. ASDA 35  
10040'.

Days. Customs.

Jet A-1.

Fire 5.

**El Fashir**

2402' HSFS ELF +02:00 N13 36.9 E025  
19.5

Apt Administration 00249731844519; Fax  
00249731842880.

**05/23** 9705' ASPHALT. PCN 61/F/B/X/T. ALS  
05.

Days. Customs.

Jet A-1.

Fire 8.

**El Obeid** Apt of Entry

1928' HSOB EBD +02:00 N13 09.2 E030  
14.0

Apt Operator 123449419.

**01/19** 9820' ASPHALT. PCN 72/F/C/Y/T. TORA  
01 9688'. TORA 19 9688'. LDA 01 9688'. LDA  
19 9688'. TODA 01 9688'. TODA 19 9688'.  
ASDA 01 9688'. ASDA 19 9688'.

H24. Customs.

Jet A-1.

Fire 7.

**Juba** Apt of Entry

1496' HSSJ JUB +02:00 N04 52.3 E031  
36.1

**13/31** 10171' ASPHALT. PCN 66/F/B/X/T.  
HIRL.

0400-1800. Customs.

Jet A-1.

Fire 8.

**Kadugli**

1848' HSLI KDX +02:00 N11 08.2 E029 41.9  
Apt Operator 923515926; Fax 631822815.

**06/24** 8399' ASPHALT. TORA 06 8232'. TORA  
24 8232'. LDA 06 8232'. LDA 24 8232'. TODA  
06 8232'. TODA 24 8232'. ASDA 06 8232'.  
ASDA 24 8232'.

Days. Customs: By operational requirements.

**Kassala**

1671' HSKA KSL +02:00 N15 23.2 E036  
19.7

Apt Administration 0411823777.

**02/20** 8202' ASPHALT. ASDA 02 8399'. ASDA  
20 8399'.

Days. Customs.

Jet A-1.

Fire 4.

**Khartoum** Apt of Entry

1271' HSSS KRT +02:00 N15 35.4 E032  
33.2

Apt Operator (183) 779147, 777128; Fax (183)  
782382.

## SUDAN

**18/36** 9774' ASPHALT. PCN 92/F/C/W/T. TODA 18 10561'. TODA 36 10561'. ASDA 18 10168'. ASDA 36 10168'.

H24. Customs.

Jet A-1.

ABN. Fire 9.

**Malakal**

1290' HSSM MAK +02:00 N09 33.5 E031 39.1

**04/22** 6557' PAVED. TORA 04 6522'. TORA 22 6522'. LDA 04 6522'. LDA 22 6522'.

Days.

Fire 4.

**Merowe**

899' HSMN MWE +02:00 N18 26.6 E031 50.6

Apt Operator 0231821044; Fax 0231821647.

**02/20** 13186' ASPHALT. PCN 80/F/C/W/T. TODA 02 14826'. TODA 20 14826'. ASDA 02 13514'. ASDA 20 13514'. ALS.

Days.

Jet A-1.

ABN. Fire 9.

**Nyala** Apt of Entry

2095' HSNM UYL +02:00 N12 03.2 E024 57.4

Apt Operator 0711 33904.

**04/22** 9845' ASPHALT. PCN 78/F/C/X/T. TORA 04 9701'. TORA 22 9701'. LDA 04 9701'. LDA 22 9701'. TODA 04 9701'. TODA 22 9701'. ASDA 04 9701'. ASDA 22 9701'.

Days. Customs.

Jet A-1.

Fire 8.

**Port Sudan** Apt of Entry

135' HSPN PZU +02:00 N19 26.0 E037 14.0

Apt Operator 31123507 , 31129899; Fax 31123507 , 31129899.

**16/34** 8202' ASPHALT. PCN 60/F/A/W/T. TODA 16 12303'. TODA 34 12303'.

H24. Customs.

F-3, Jet A-1.

ABN. Fire 7.

**Sebara Geneina**

2637' HSSG +02:00 N13 28.6 E022 32.2

**04/22** 9829' ASPHALT. PCN 42.

Days. Customs.

Jet A-1.

Fire 7.

**Wadi Halfa**

933' HSSW WHF +02:00 N21 48.2 E031 31.3

Apt Manager 251822270; Fax 251822396.

**06/24** 6562' UNPAVED.

Days. Customs: By operational requirements.

Fire N.

**Wau**

1527' HSWW WUU +02:00 N07 43.5 E027 58.5

**09/27** 7138' PAVED.

Days.

Fire N.

## TANZANIA

**Abeid Amani Karume Intl see Zanzibar****Arusha**

4567' HTAR ARK +03:00 S03 22.1 E036 37.5

Apt Operator 738 777 778; elipid.tesha@air-ports.go.tz.

**09/27** 5381' TARMAC. PCN 15/F/B/Y/T.

0330-1600.

F-3, Jet A-1.

Fire 5.

**Bukoba**

3784' HTBU +03:00 S01 19.9 E031 49.2

Apt Manager 28 2220311.

**13/31** 4593' TARMAC. PCN 46/F/C/X/T. ASDA 31 4888'.

Customs: Mon-Fri 0430-1230, Hol clsd.

Fire 5.

**Chake Chake see Pemba**

**Dar-Es-Salaam (Julius Nyerere Intl)** Apt of Entry

182' HTDA DAR +03:00 S06 52.7 E039 12.2

Apt Operator (22) 2844324/8, 2844211/2, 2844014; Fax (22) 2844373; jnia@air-ports.go.tz.

**05/23** 9842' TARMAC. PCN 63/F/A/W/T. TODA 05 10826'. TODA 23 10826'. ASDA 05 10039'. ASDA 23 10039'. HIALS 05.

Rwy 05 Right-Hand Circuit.

**14/32** 3281' TARM/CONC. PCN 15/F/B/Y/U. TODA 14 4265'. TODA 32 4265'. ASDA 14 3580'.

Rwy 14 Right-Hand Circuit.

H24. Customs.

F-3, Jet A-1. Oxygen.

Fire 9.

**Dodoma**

3637' HTDO DOD +03:00 S06 10.2 E035 45.0

Apt Manager (026) 2354833 or 2352179.

**09/27** 8038' TARMAC. PCN 15/F/B/Y/U. TORA 09 7382'. LDA 09 7382'. LDA 27 7382'. TODA 09 7382'. ASDA 09 7382'. RL.

0400-1530. Customs: 2hr PNR.

F-3, Jet A-1.

Fire 3.

**Ibadakuli see Shinyanga****Iringa**

4678' HTIR IRI +03:00 S07 40.1 E035 45.1

Apt Manager Mobile 0732951163.

**02/20** 5509' SOIL. PCN 15/F/B/Y/U. ASDA 02 5709'. ASDA 20 5709'.

Mon-Fri 0430-1230. Sat, Sun and Hol 2hr PN.

Fire 5.

**Julius Nyerere Intl see Dar-Es-Salaam****Kasulu**

4133' HTKU +03:00 S04 33.0 E030 06.1

Apt Manager 28 2802857/8.

**08/26** 4593' SOIL.

**Kigoma**

2681' HTKA TKQ +03:00 S04 53.1 E029 40.2

Apt Administration (28) 2802857/8.

**15/33** 5906' TARMAC. PCN 38/F/B/X/T.

Mon-Fri 0500-1530, Sat/Sun/Hol during sked operations or 2 hr PNR. Customs: Mon-Fri 0430-1230 and PNR.

Jet A-1.

Fire 5.

**Kilimanjaro (Kilimanjaro Intl)** Apt of Entry

2932' HTKJ JRO +03:00 S03 25.8 E037 04.5

## TANZANIA

Apt Operator (27) 2554122; Fax (27) 2554312; info@kadco.co.tz. Apt Switchboard (27) 2554252.

**09/27** 11811' TARMAC. PCN 47/F/A/W/T. TODA 09 12795'. TODA 27 12795'. ASDA 09 12008'. ASDA 27 12008'. HIALS 09.

Rwy 27 Right-Hand Circuit.

H24. Customs.

Jet A-1.

ABN. Fire 9.

**Mafia**

102' HTMA +03:00 S07 55.0 E039 40.1

Apt Manager 23 2011309, 23 2939319.

**15/33** 4921' TARMAC. PCN 56/F/B/Y/T. TODA 15 5512'. TODA 33 5512'. ASDA 15 5118'. ASDA 33 5118'.

Fire 1.

**Manyara**

4150' HTLM +03:00 S03 22.5 E035 49.1

Apt Manager 732 979004.

**12/30** 4003' SOIL. AUW-12.

Fire 2.

**Masasi**

1700' HTMI XMI +03:00 S10 44.0 E038 46.0

Apt Manager (732) 934037; Fax (732) 934107.

**14/32** 4176' GRASS. AUW-13.

Days.

Fire 1.

**Morogoro**

1691' HTMG +03:00 S06 47.8 E037 39.2

**03/21** 3504' SOIL. AUW-30.

**Mpanda**

3565' HTMP +03:00 S06 21.3 E031 05.0

Apt Manager 754 319179/655 319179; mpanda@airports.go.tz.

**09/27** 6562' TARMAC. PCN 32/F/B/Y/T.

Customs: O/R.

Fire 1.

**Mtwara**

371' HTMT MYW +03:00 S10 20.2 E040 10.9

Apt Operator 23 293 4130.

**01/19** 7408' TARMAC. PCN 32/F/B/Y/U.

**08/26** 3799' GRASS. AUW-30.

Dly 0300-1530. Customs: 12 hr PNR.

Jet A-1.

Fire 6.

**Musoma**

3783' HTMU MUZ +03:00 S01 30.2 E033 48.1

Apt Manager (28) 2622769.

**18/36** 5249' GRASS. PCN 15/F/B/Y/U. ASDA 18 5446'. ASDA 36 5446'.

Mon-Fri 0430-1230. Customs: 12hr PNR Tel.: (028) 622551

Fire 4.

**Mwanza**

3763' HTMW MWZ +03:00 S02 26.6 E032 55.9

Apt Manager mwz@airports.go.tz. Apt Operator (28) 2560067; Fax (28) 2560962.

**12/30** 10827' CONC/TARM. PCN 60/F/C/X/U. LDA 12 9899'.

H24. Customs.

F-3, Jet A-1.

Fire 7.

**Ngara**

5053' HTNR +03:00 S02 32.5 E030 42.2

Apt Manager Mobile 0784 462125; Fax (28) 2223601.

**06/24** 4724' SOIL. ASDA 06 4986'. ASDA 24 5085'.

Mon-Fri 0430-1230. Customs: PNR.

Fire N.

**TANZANIA**
**Pemba (Chake Chake)**

80' HTP E PMA +03:00 S05 15.4 E039 48.7  
Apt Manager (024) 2452176.

**03/21** 5003' TARMAC. PCN 17/F/B/Y/U. RL.

Dly 0430-1530. Customs.

Fire 4.

**Seronera**

5058' HTSN +03:00 S02 27.8 E034 49.6

Apt Operator 732 985810/985760; Mobile 688 905 353; Fax 732 985760; mich-joe23@yahoo.com, serengeti@tanzania-parks.go.tz.

**14/32** 7546' GRAVEL.

Jet A-1.

Fire 2.

**Shinyanga (Ibadakuli)**

3800' HTSY SHY +03:00 S03 36.5 E033 30.2

Apt Manager (732) 987008.

**11/29** 6562' GRASS. AUW-13.

Mon-Fri 0430-1230.

Fire 5.

**Songea**

3480' HTSO SGX +03:00 S10 40.9 E035 34.9

Apt Manager (25) 2600805.

**14/32** 5331' TARMAC. PCN 15/F/B/Y/U.

Mon-Fri 0430-1230. Customs: PNR.

Fire 3.

**Songwe**

4412' HTGW +03:00 S08 55.2 E033 16.4

ATS (25) 2954257. Apt Manager (25) 2954259.

Apt Operator Fax (25) 2954258.

**09/27** 10925' TARMAC. PCN 57.

Dly 0430-1530. Customs: 24hr PNR.

Jet A-1.

Fire 6.

**Sumbawanga**

5920' HTSU +03:00 S07 56.9 E031 36.6

Apt Manager 25 2802783; Fax 25 2802783.

**07/25** 4974' GRASS. PCN 15/F/B/Y/U. ASDA 07 5171'. ASDA 25 5171'.

Fire 2.

**Tabora**

3890' HTTP TBO +03:00 S05 04.6 E032 49.8

Apt Manager (26) 2965664; Fax (26) 2965664.

**08/26** 2920' TARMAC. PCN 28/F/C/Y/T. ASDA 26 3937'.

**13/31** 6198' TARMAC. PCN 28/F/C/Y/T. ASDA 13 6493'. ASDA 31 6395'.

Dly 0430-1530. Customs: Mon-Fri 0430-1230.

F-3, Jet A-1.

Fire 5.

**Tanga**

129' HTTP TGT +03:00 S05 05.5 E039 04.3

Apt Manager (027) 2644175.

**06/24** 4160' TARMAC. PCN 15/F/B/Y/U.

**14/32** 4544' GRASS. AUW-13.

Dly 0430-1530. Customs: 12hr PNR.

Fire 2.

**Zanzibar (Abeid Amani Karume Intl)** Apt of Entry

54' HTZA ZNZ +03:00 S06 13.5 E039 13.5

Apt Administration dazia11@yahoo.com. Apt Operator (24) 2231653/4; Fax (24) 2231653; zaa@zaa.go.tz.

**18/36** 9915' TARMAC. PCN 61/F/A/W/T. TODA 18 11391'. TODA 36 11391'. ASDA 18 10112'. ASDA 36 10112'. RL.

H24. Customs.

F-3, Jet A-1.

ABN. Fire 9.



## TUNISIA

**Ain Draham see Tabarka****Borj El Amri**

109' DTTI +01:00 N36 43.3 E009 56.6

Apt Administration 71542138/030/750/674/319;  
Fax 71542766.

**12/30** 3609' ASPHALT. AUW-13. ASDA 12  
3806'. ASDA 30 3806'.

Rwy 30 Right-Hand Circuit.

Mon-Fri 0600-1700 and Sat 0600-1200, except  
Hol. JUL, AUG and Ramadan dly 0600-1200  
except Sun/Hol.

Fire 3.

**Carthage see Tunis****Djerba (Zarzis) Apt of Entry**

19' DTTJ DJE +01:00 N33 52.5 E010 46.6

Apt Administration 75650233; Fax 75650585.

**09/27** 10210' ASPHALT. PCN 60/F/B/W/T.  
ASDA 09 10397'. ASDA 27 10390'. HIRL.

H24. Customs.

Jet A-1.

Fire 9.

**El Borma**

847' DTTR EBM +01:00 N31 42.2 E009 15.4

Apt Operator 71906563; Fax 71906571.

**11/29** 8858' BITUMEN. ASDA 11 9055'. ASDA  
29 9055'.

18T/RSI-25T/J-42T/B.

**Enfidha (Hammamet) Apt of Entry**

21' DTNH NBE +01:00 N36 04.5 E010 26.3

Apt Operator 73 103000; Fax 73 856028.

**09/27** 10827' ASPHALT. PCN 104/F/A/W/T.  
ASDA 09 11024'. ASDA 27 11024'. HIRL.  
HIALS 09. HIALS 27.

H24. Customs.

Jet A-1.

ABN. Fire 9.

**Gabes (Matmata) Apt of Entry**

410' DTTG GAE +01:00 N33 43.9 E009 55.0

Apt Operator 75275910, 75276010; Fax  
75275909.

**06/24** 9869' ASPHALT. PCN 63/F/A/W/T.  
ASDA 06 10066'. ASDA 24 10066'. HIRL.

By Notam. Customs: By NOTAM.

Fire 6.

**Gafsa (Ksar) Apt of Entry**

1060' DTTF GAF +01:00 N34 24.9 E008  
48.8

Apt Operator 76217700; Fax 76217800.

**05/23** 9514' ASPHALT. PCN 55/F/B/W/T.  
ASDA 23 9711'. RL.

Rwy 05 Right-Hand Circuit.

H24. Customs.

Jet A-1. O/R.

Fire 7.

**Habib Bourguiba see Monastir****Hammamet see Enfidha****Ksar see Gafsa****Matmata see Gabes****Monastir (Habib Bourguiba) Apt of Entry**

9' DTMB MIR +01:00 N35 45.5 E010 45.3

Apt Administration 73520000, 73521300,  
73521590; Fax 73520318, 73520980.

**07/25** 9744' ASPHALT. PCN 53/F/A/W/T.  
ASDA 07 9908'. ASDA 25 9908'. HIRL. HIALS  
07.

Rwy 07 Right-Hand Circuit.

H24. Customs.

Jet A-1.

Fire 9.

**Nefta see Tozeur**

**TUNISIA**
**Sfax (Thyna)** Apt of Entry

85' DTTX SFA +01:00 N34 43.2 E010 41.3

Apt Administration 74278000; Fax 74278359.

**15/33** 8858' ASPHALT. PCN 54/F/B/W/T.

ASDA 15 9055'. ASDA 33 9842'. HIRL.

H24. Customs.

Jet A-1.

Fire 8.

**11/29** 9350' BITUMEN. PCN 64/F/B/W/T. LDA 29 8694'. ASDA 29 9547'. HIRL.

H24. Customs.

Jet A-1.

Fire 9.

**Zarzis see Djerba**

**Tabarka (Ain Draham)** Apt of Entry

230' DTKA TBJ +01:00 N36 58.8 E008 52.6

Apt Administration

78680005/113/127/130/186/364; Fax

78680133.

**09/27** 9416' ASPHALT. PCN 49/F/A/W/T. HIRL.

Rwy 27 Right-Hand Circuit.

By NOTAM. Customs: H24.

Jet A-1.

ABN. Fire 8.

**Thyna see Sfax**

**Tozeur (Nefta)** Apt of Entry

287' DTTZ TOE +01:00 N33 56.4 E008 06.6

Apt Administration 76453388/339/345/352/525;

Fax 76452909.

**09/27** 10581' ASPHALT. PCN 48/F/A/W/T.

ASDA 09 10778'. ASDA 27 10778'. MIRL.

HIALS 09.

Rwy 27 Right-Hand Circuit.

By Notam. Customs.

Jet A-1.

ABN. Fire 7.

**Tunis (Carthage)** Apt of Entry

21' DTTA TUN +01:00 N36 51.1 E010 13.6

Apt Administration 70102100, 71115800,

71848000; Fax 71753327.

**01/19** 10499' BITUMEN. PCN 63/F/A/W/T.

ASDA 01 10696'. ASDA 19 10696'. HIRL.

**UGANDA**
**Entebbe (Entebbe Intl)** Apt of Entry

3782' HUEN EBB +03:00 N00 02.4 E032  
26.4

Apt Operator 414-352000; Fax 414-322401;  
aviation@caa.co.ug.

**12/30** 7874' ASPHALT. LCN 37. Rwy 12  
Runway closed. Rwy 30 Runway closed.

**17/35** 12001' ASPHALT. PCN 70/F/A/X/U.  
HIRL. HIALS 17. MIALS 35.

Rwy 17 Right-Hand Circuit.

H24. Customs.

F-3, Jet A-1.

ABN. Fire 9.

Apt Operator 454-461198; sorotiair-  
port@caa.co.ug.

**05/23** 6102' ASPHALT. AUW-30.

**09/27** 2526' LATERITE.

Days.

Fire 5.

**Kasese**

3146' HUKS KSE +03:00 N00 11.3 E030  
06.1

Apt Operator 483-444017/444591; kas-  
ese@caa.co.ug.

**01/19** 5151' GRASS. AUW-30.

Days.

Fire 3.

**Kotido**

4200' HUKO +03:00 N02 57.0 E034 07.0

**05/23** 5249' LATERITE.

Days.

Fire 4.

**Moroto**

4200' HUMO +03:00 N02 31.0 E034 35.0

Apt Administration 414 353100; Fax 414  
321401. Apt Operator aviation@caa.co.ug.

**13/31** 4921' LATERITE.

Days.

Fire 3.

**Soroti**

3697' HUSO SRT +03:00 N01 43.3 E033  
37.1

## WEST AFRICA

**Benin****Cadjehoun Intl see Cotonou****Cotonou (Cadjehoun Intl)** Apt of Entry

20' DBBB COO +01:00 N06 21.4 E002 23.0

Apt Operator 21302585, 21305916; Fax 21302585; secretariat@ugab.bj.

**06/24** 7874' ASPH/CONC. PCN 53/F/B/X/T. LDA 06 7749'. TODA 06 8383'. ASDA 06 8054'. ASDA 24 8054'. HIRL. HIALS 24.

Rwy 24 Right-Hand Circuit.

H24. Customs: 0600-1400, O/T O/R.

Jet A-1.

Fire 8.

**Parakou**

1266' DBBP PKO +01:00 N09 21.4 E002 36.5

Apt Operator 21302585.

**04/22** 5249' LATERITE. F-28. TODA 04 5577'. ASDA 22 5430'.

During sked operations 0600-1730 and O/R. Customs: O/R.

Jet A-1. O/R.

Fire U.

**Burkina Faso****Bobo-Dioulasso** Apt of Entry

1511' DFOO BOY 00:00 N11 10.0 W004 19.3

Apt Administration 20970070, 20970140; Fax 20972926; asecnadfoo@gmail.com.

**06/24** 10827' BITU/CONC. PCN 57/F/B/X/T. ASDA 06 11089'. ASDA 24 11089'. HIRL. ALS 06.

During skd operations and O/R. Customs.

F-3, Jet A-1.

Fire 6.

**Dedougou**

984' DFOD DGU 00:00 N12 27.5 W003 29.6

**06/24** 4921' LATERITE. DC-3.

**Fada N'Gourma**

1024' DFEF FNG 00:00 N12 02.6 E000 21.9

**04/22** 4921' LATERITE.

Paved portion of 400m x 20m.

**Ouagadougou** Apt of Entry

1037' DFFD OUA 00:00 N12 21.2 W001 30.7

Apt Administration asecnadfca@gmail.com. Apt Operator 25306515/16; Fax 25306557, 25307840.

**04/22** 9843' BITUMEN. PCN 54/F/B/W/T. TODA 04 10663'. TODA 22 13124'. HIRL. HIALS 04.

Rwy 04 Right-Hand Circuit.

H24. Customs: During sked operations (0700-1530). O/T O/R.

F-3, Jet A-1.

Fire 8.

**Cameroon****Bafoussam**

4347' FKKU BFX +01:00 N05 32.1 E010 21.3

**15/33** 8202' BITUMEN. B-727. ASDA 15 8399'. ASDA 33 8399'. RL. ALS.

Mon-Sat 0700-1500, Sun O/R preceding day before 1200. Customs.

Fire 5.

**Bali**

4439' FKKG BLC +01:00 N05 54.0 E010 02.0

**05/23** 4003' LATERITE. DC-3.

**Bamenda**

4065' FKKV BPC +01:00 N06 02.2 E010 07.4

## WEST AFRICA

**18/36** 8202' BITUMEN. B-737. RL.

Dly 0700-1500, Sun O/R.

Fire 5.

**Banyo**

3730' FKAB +01:00 N06 46.0 E011 48.0

**11/29** 2953' LATE/CLAY. AUW-11. ASDA 11 3117'. ASDA 29 3117'.

**Batouri**

2152' FKKI OUR +01:00 N04 28.0 E014 22.0

**02/20** 6234' LATERITE. DC 4.

0700-1500. Use of apt may be restricted during rainy season (Mar-Oct).

Fire U.

**Douala** Apt of Entry

33' FKKD DLA +01:00 N04 00.7 E009 42.5

Apt Operator 233430100,  
233423551/5702/8762; Fax 233427117;  
asecna-aim-douala@asecna.org.

**12/30** 9350' BITUMEN. PCN 59/F/C/X/U.  
TODA 12 9678'. ASDA 12 9514'. ASDA 30 9514'. HIRL.

H24. Customs.

F-3, Jet A-1.

Fire 8.

**Dschang**

4593' FKKS DSC +01:00 N05 27.0 E010 04.0

**11/29** 3609' LATE/CLAY. DC-3.

Dly 0700-1500.

**Eseka**

738' FKKE +01:00 N03 39.0 E010 47.0

**17/35** 2625' LATERITE. AUW-4.

**Foumban (Nkounja)**

3966' FKKM FOM +01:00 N05 38.7 E010 45.4

**04/22** 6890' BITUMEN. B-737. TODA 04 7382'. TODA 22 7382'. ASDA 04 7087'. ASDA 22 7087'. RL.

180 deg turns on rwy for acft exceeding AUW-88 on turning pads only. Approach rwy 22 recommended in bad weather.

0700-1500.

F-3.

**Garoua** Apt of Entry

794' FKKR GOU +01:00 N09 20.2 E013 22.9

Apt Operator 222271302/1367; Fax 222271367; caig@ccaa.aero.

**09/27** 11155' ASPH/CONC. PCN 71/F/C/X/T. LDA 27 10778'. ASDA 09 11647'. ASDA 27 11647'. HIRL. HIALS 09.

0700-2000 and O/R. Customs.

Jet A-1.

Fire 7.

**Kribi**

148' FKKB +01:00 N02 52.4 E009 58.7

**03/21** 8202' LATERITE. DC4.

0700-1500.

**Mamfe**

410' FKKF MMF +01:00 N05 42.2 E009 18.2

**08/26** 4495' LATERITE. HS-748.

Dly 0700-1500.

Fire N.

**Maroua-Salak**

1391' FKKL MVR +01:00 N10 27.3 E014 15.2

Apt Administration 242 72 66 75; drenams@ccaa.aero.

**13/31** 6890' BITUMEN. PCN 33/F/D/Y/U. ASDA 13 7087'. ASDA 31 7087'. HIRL. ALS 31.

0700-1700. O/T O/R 4hr before closing time. Customs: 0700-1700.

Fire 6.

## WEST AFRICA

**N'Gaoundere**

3655' FKKN NGE +01:00 N07 21.5 E013 33.6

Apt Operator 22251237.

**02/20** 8858' CONC/BITU. B-737. LDA 02 8727'. LDA 20 8366'. ASDA 02 9055'. ASDA 20 9055'. RL.

180 deg turns on rwy for acft exceeding AUW-88 on turning pads only.

0700-1700, O/R before 1200. Customs.

J.

Fire 6.

**Nkounja see Foumban****Nsimalen see Yaounde****Tibati**

2864' FKKT +01:00 N06 28.0 E012 37.0

**18/36** 3281' LATE/GRAS. DC-3.

**Tiko**

151' FKKC TKC +01:00 N04 05.2 E009 21.4

**05/23** 4495' BITUMEN. DC-4. TODA 05 4659'. TODA 23 4659'. RL.

0700-1500. Customs.

**Yaounde (Nsimalen) Apt of Entry**

2278' FKYS NSI +01:00 N03 43.0 E011 33.1

Apt Operator 222220402; Fax 222220401.

**01/19** 11155' ASPH/CONC. PCN 71/F/C/W/U. TODA 01 11680'. TODA 19 11680'. ASDA 01 11352'. ASDA 19 11352'. HIRL. ALS 01. HIALS 19.

Take-off rwy 01 prohibited after 2100. 180° turns on rwy prohibited for acft exceeding 13t.

H24. Customs.

Jet A-1.

Fire 8.

**Yaounde/Ville**

2464' FKKY YAO +01:00 N03 49.9 E011 31.3

**03/21** 6562' BITUMEN. PCN 26/F/B/Y/U. ASDA 03 6693'. ASDA 21 6693'. RL.

0500-2200.

Fire U.

**Central African Rep****Bangassou**

1706' FEFG +01:00 N04 47.0 E022 47.0

Apt Operator 21613380.

**09/27** 5906' LATERITE. C-160. ASDA 09 6234'. ASDA 27 6234'.

**Bangui (M'Poko) Apt of Entry**

1208' FEFF BGF +01:00 N04 23.9 E018 31.2

Apt Administration 21613380, 21615250, 21615265; Fax 21 614918; aseca@intnet.cfr.

**16/34** 8530' CONC/BITU. PCN 47/F/B/W/T. TODA 16 8727'. TODA 34 8727'. ASDA 16 8661'. ASDA 34 8661'. HIRL. HIALS 34.

Rwy 16 Right-Hand Circuit.

**16/34** 6562' GRASS.

H24. Customs: By sked operations (0730-1530). O/T O/R.

F-3, Jet A-1.

Fire 8.

**Berberati**

1929' FEFT BBT +01:00 N04 13.6 E015 47.1

Apt Operator 641300 at Berberati.

**17/35** 5448' BITUMEN. C-160.

Landing rwy 35 & take-off rwy 17 when wind calm.

Days and O/R to Bangui Apt before 1200. Customs.

**Birao**

1696' FEFI IRO +01:00 N10 14.0 E022 43.0

**06/24** 5906' LATERITE. DC-4.

## WEST AFRICA

**Bossangoa**

1637' FEFS BSN +01:00 N06 30.0 E017 26.0

**12/30** 5906' LATE/CLAY. DC-4.

**Bouar**

3373' FEFO BOP +01:00 N05 57.0 E015 38.4

Apt Operator asecafe@intnet.cf.

**17/35** 6234' BITU/GRVL. C-160. ASDA 17 6562'. ASDA 35 6562'.

Rwy paved on first 984' from beginning of each direction.

Days.

**Bozoum**

2215' FEGZ BOZ +01:00 N06 21.0 E016 19.0

**01/19** 3675' LATERITE. DC-3.

**M'Boki see Obo****M'Poko see Bangui****N'Dele**

1637' FEFN NDL +01:00 N08 25.8 E020 38.1

**17/35** 4921' LATERITE. DC-4.

**Obo (M'Boki)**

1969' FEGE MKI +01:00 N05 21.0 E025 55.0

**08/26** 5577' LATERITE. DC-4.

Dly 0700-1500.

**Ouadda**

2461' FEFW ODA +01:00 N08 01.0 E022 24.0

**12/30** 4921' LATERITE. DC-4.

**Ouanda-Djalle**

1985' FEGO ODJ +01:00 N08 54.0 E022 47.0

**14/32** 4921' LATE/CLAY. DC-3.

**Yalinga**

1975' FEFY AIG +01:00 N06 31.0 E023 16.0  
**08/26** 3609' LATERITE. DC-3.

**Zemio**

1995' FEFZ IMO +01:00 N05 03.0 E025 09.0

**04/22** 4380' LATE/GRAS. DC-3.

**Chad****Abeche**

1789' FTTC AEH +01:00 N13 50.8 E020 50.9

Apt Operator 22698126, 22698125; Fax 22698125.

**09/27** 9186' ASPHALT. B-737. ASDA 09 9678'. ASDA 27 9678'. HIRL.

0600-1700. Customs: O/R.

Jet A-1.

Fire 4.

**Am-Timan**

1421' FTTN AMC +01:00 N11 02.4 E020 16.6

**03/21** 6070' BRICK. TRANSALL. ASDA 03 6267'. ASDA 21 6267'.

0600-1600.

**Bardai (Zougra)**

3524' FTTZ Mil. +01:00 N21 27.0 E017 03.0

**07/25** 5906' SAND/GRVL. N-2501.

PPR from Government of Chad.

**Bokoro**

984' FTTC BKR +01:00 N12 23.0 E017 04.0

**05/23** 3756' LATERITE. DC-3.

**Bouso**

1099' FTTS OUT +01:00 N10 29.0 E016 43.0

**03/21** 3937' UNPAVED. DC-3.

## WEST AFRICA

**Fada**

1847' FTTF +01:00 N17 11.5 E021 30.2  
**11/29** 5906' LATERITE. AUW-176. TODA 11 6234'. TODA 29 6168'.  
Dly 0600-1600.

**Faya-Largeau**

771' FTTY FYT +01:00 N17 55.0 E019 06.5  
**06/24** 9186' ASPHALT. B 747. ASDA 06 9678'.  
ASDA 24 9842'.  
Days.

**Goz-Beida**

1765' FTTG +01:00 N12 12.0 E021 28.0  
**17/35** 4593' SOIL. DC-3. LDA 35 3340'.

**Hassan Djamous see N'Djamena****Mongo**

1414' FTTM MVO +01:00 N12 10.3 E018 40.7  
**06/24** 4921' SAND/CLAY. TRANSALL.  
Rwy 06 Right-Hand Circuit.

**Moundou**

1409' FTTD MQQ +01:00 N08 37.2 E016 04.1  
**04/22** 9843' BRICK. B 747-400.  
0600-1700. O/T O/R via FTTTZQZX.

**N'Djamena (Hassan Djamous)** Apt of Entry  
968' FTTJ NDJ +01:00 N12 07.5 E015 01.5  
Apt Operator 22 525 526, 22 525 753, 22 523 881; Fax 22 526 231.  
**05/23** 9186' CONC/BITU. PCN 63/F/C/X/U. TODA 05 9908'. TODA 23 9973'. ASDA 05 9383'. ASDA 23 9337'. HIRL. HIALS 05.  
Rwy 23 Right-Hand Circuit.  
H24. Customs.  
F-3, Jet A-1.  
Fire 8.

**Pala**

1532' FTTF PLF +01:00 N09 23.0 E014 56.0  
**05/23** 5249' LATERITE. DC-4. ASDA 05 5577'.  
ASDA 23 5577'.  
SR-15min to SS+15min. Customs.  
Fire U.

**Sarh** Apt of Entry

1197' FTTA SRH +01:00 N09 09.1 E018 22.8  
Apt Administration 22681499, 22681334.  
**04/22** 5906' LATE/BITU. PCN 27/F/B/Y/U. ASDA 04 6070'. ASDA 22 6070'. PORT-RL.  
Rwy 22 Right-Hand Circuit.

First 656'(200m) bitumen covered. No pitch reversing except when necessary. Swys available during dry season only.  
0600-1430 and on request before 1400. Customs.  
Fire 4.

**Zouar**

2654' FTTR +01:00 N20 27.0 E016 35.0  
**13/31** 4757' GRAVEL. N 2501.  
PPR from Government of Chad.

**Zougna see Bardai****Congo, Rep Of****Antonio Agostinho Neto see Pointe Noire****Brazzaville (Maya-Maya)** Apt of Entry

1052' FCBB BZV +01:00 S04 15.0 E015 15.1  
Apt Operator 053779544.  
**05/23** 10827' ASPH/CONC. PCN 60/F/B/W/U. TODA 05 11024'. TODA 23 11024'. ASDA 05 11024'. ASDA 23 11024'. HIRL.  
H24. Customs.  
Jet A-1.



## WEST AFRICA

Fire 8.

### Dolisie

1070' FCPD DIS +01:00 S04 12.7 E012 39.9

**14/32** 6726' CONC/BITU. B737-200. ASDA 14 6923'. ASDA 32 6923'.

Dly 0600-1600.

F-2, F-4.

### Makoua

1286' FCOM MKJ +01:00 S00 01.1 E015 34.9

Apt Operator 9771 and 56.

Dly 0600-1600.

Fire U.

### Maya-Maya see Brazzaville

### Ollombo (Sassou N'Guesso) Apt of Entry

1073' FCOD OLL +01:00 S01 13.3 E015 54.8

Apt Operator 069748287, 056232612, 066104888, 066162424.

**04/22** 10827' CONCRETE. B747-400. ASDA 04 11155'. ASDA 22 11155'. HIRL. HIALS 04.

During sked operations 0600-1800, O/T O/R. Customs.

Fire 6.

### Ouessou

1168' FCOU OUE +01:00 N01 36.6 E016 02.2

**01/19** 9843' PAVED. B737-200. HIRL.

0600-1600.

F-3, Jet A-1.

### Pointe Noire (Antonio Agostinho Neto) Apt of Entry

55' FCPP PNR +01:00 S04 48.9 E011 53.2

Apt Operator 053779557, 056232609, 066700843.

**17/35** 8596' ASPH/CONC. PCN 59/F/B/W/T. ASDA 17 8924'. ASDA 35 8924'. HIRL. HIALS 17.

H24. Customs.

Jet A-1.

Fire 8.

### Sassou N'Guesso see Ollombo

### Sibiti

1759' FCBS SIB +01:00 S03 41.2 E013 22.3

**12/30** 6726' CONCRETE. B732.

0600-1600.

### Zanaga

1870' FCBZ ANJ +01:00 S02 51.0 E014 10.0

**09/27** 4265' LATERITE. AUW-33.

0600-1600.

## Cote d'Ivoire

### Abidjan (Felix Houphouet Boigny Intl) Apt of Entry

20' DIAP ABJ 00:00 N05 15.3 W003 55.7

Apt Administration 21755858; Fax 21277171.

**03/21** 9843' ASPH/CONC. PCN 56/F/B/W/T. TODA 03 10663'. ASDA 03 10171'. ASDA 21 10040'. HIRL.

H24. Customs.

Jet A-1.

Fire 9.

### Bouake

1231' DIBK BYK 00:00 N07 45.1 W005 04.1

Apt Operator 21203445; Fax 21203441.

**03/21** 10827' BITUMEN. PCN 64/F/B/W/U. TODA 03 12106'. TODA 21 12106'. ASDA 03 11778'. ASDA 21 11778'.

0700-2000, O/T O/R to the AD not later than 1600. Customs: O/R.

Fire 5.

**WEST AFRICA**
**Felix Houphouet Boigny Intl see Abidjan**
**Korhogo**

1213' DIKO HGO 00:00 N09 23.3 W005 33.2

Apt Operator 021582001; Fax 021277344; infos@sodexam.ci.

**08/26** 6890' ASPHALT. PCN 27/F/B/W/U. TODA 08 7415'. TODA 26 7415'. ASDA 08 7087'. ASDA 26 7087'.

Dly 0700-2000. O/T O/R before 1600. Customs: O/R.

Fire 5.

**Man**

1090' DIMN MJC 00:00 N07 16.3 W007 35.3

Apt Operator (225) 21 58 2001; Fax (225) 21 27 7344; infos@sodexam.ci.

**03/21** 6726' BITUMEN. PCN 27/F/B/W/U. TODA 03 7054'. TODA 21 7054'. RL.

Dly 0700-2000. O/T O/R before 1600. Customs: O/R.

Fire 5.

**Odienne**

1367' DIOD KEO 00:00 N09 32.3 W007 33.8

Apt Operator 021582001; Fax 021277344; infos@sodexam.ci.

**06/24** 6890' ASPHALT. PCN 27/F/B/W/U. TODA 06 7546'. TODA 24 7546'. ASDA 06 7382'. ASDA 24 7382'. RL.

0700-2000. O/T O/R before 1600. Customs: O/R.

Fire 5.

**San Pedro**

29' DISP SPY 00:00 N04 44.8 W006 39.6

Apt Operator 34711435, 34711441 (TWR), 34711435/1115.

**03/21** 6562' CONC/BITU. PCN 27/F/B/W/U.

Dly 0700-2000.

Fire 6.

**Sassandra**

207' DISS ZSS 00:00 N04 55.9 W006 07.9

Apt Operator 34720139; commandantsassandra@sodexam.ci.

**04/22** 5741' LATERITE. TODA 04 5905'. TODA 22 5905'. ASDA 04 5905'.

Fire N.

**Yamoussoukro** Apt of Entry

697' DIYO ASK 00:00 N06 54.3 W005 21.8

Apt Operator 021582001; Fax 021277344; infos@sodexam.ci.

**05/23** 9843' ASPHALT. PCN 60/F/B/W/U. TODA 05 10368'. TODA 23 10499'. ASDA 05 10040'. ASDA 23 10171'. ALS 05.

H24. Customs: O/R.

F-3, Jet A-1.

Fire 5.

**Equatorial Guinea**
**Bata** Apt of Entry

16' FGBT BSG +01:00 N01 54.1 E009 48.2

Apt Operator 333082210; Fax 333083528.

**03/21** 10860' BITUMEN. A-380. TODA 21 11798'. ASDA 03 11090'. ASDA 21 11090'. HIRL.

H24. Customs.

Jet A-1.

Fire 4.

**Malabo** Apt of Entry

76' FGSL SSG +01:00 N03 45.3 E008 42.5

Apt Administration Fax 333 09 3501. Apt Operator 333 09 2925/2332/2202.

**04/22** 9646' ASPH/CONC. PCN 64/F/C/W/T. TODA 04 10696'. ASDA 04 9810'. ASDA 22 9810'. HIRL. ALS 22.

Rwy 22 Right-Hand Circuit.

**WEST AFRICA**

H24. Customs.

Jet A-1.

Fire 8.

**Mongomeyen** Apt of Entry

2159' FGMV +01:00 N01 40.7 E011 01.5

Apt Administration 222 26 7076, 666 777409,  
666 176832, 666 176620. Apt Operator mengo-  
meyen5@gmail.com.

**18/36** 9843' BITUMEN. B747-400. TODA 18  
11483'. ASDA 18 10138'. ASDA 36 10138'.  
HIRL. HIALS 18.

0600-1600 and O/R. Customs: During sked  
operations and O/R.

Jet A-1.

Fire 4.

## Gabon

**Bangombe see Moanda**

**Franceville (M'Vengue)** Apt of Entry

1450' FOON MVB +01:00 S01 39.1 E013  
26.1

Apt Administration 05182325. ATS  
05182306/2328. Apt Operator 01677076.

**15/33** 10105' ASPH/CONC. PCN 59/F/B/X/T.  
TODA 15 10499'. ASDA 15 10302'. ASDA 33  
10302'. HIRL. HIALS 15.

During skd operations and O/R. Customs.

Fire 6.

**Lambarene**

82' FOGV +01:00 S00 42.3 E010 14.7

**05/23** 5906' LATERITE. AUW-116.

Dly 0700-1500 and O/R PNR 13hr in advance.

**Leon M'ba see Libreville**

**Libreville (Leon M'ba)** Apt of Entry

38' FOOL LBV +01:00 N00 27.5 E009 24.7

Apt Operator 01732104, 05997852; boa@adl-  
gabon.com.

**16/34** 9843' CONC/BITU. PCN 80/F/B/W/T.  
HIRL. HIALS 16.

H24. Customs.

Jet A-1.

Fire 8.

**M'Vengue see Franceville**

**Moanda (Bangombe)**

1893' FOOD MFF +01:00 S01 31.6 E013  
15.1

Apt Operator 661061.

**12/30** 5741' ASPH/CONC.

0600-1700.

**Mouila (Mouila Ville)**

282' FOGM MJL +01:00 S01 50.8 E011 03.4

**17/35** 5906' CONC/BITU. MTOW-116.

Dly 0700-1500 and O/R PNR 13hr in advance.

**Okondja**

1325' FOGQ OKN +01:00 S00 39.8 E013  
40.4

**08/26** 4921' MACADAM. F-28. TODA 08 5413'.  
TODA 26 5413'. ASDA 08 5019'. ASDA 26  
5019'.

**Omboue (Omboue Hospital)**

33' FOOH OMB +01:00 S01 35.0 E009 16.0

**14/32** 5578' MACADAM. MTOW-65.

Dly 0700-1500 and O/R PNR 13hr in advance.

**Oyem**

2165' FOGO OYE +01:00 N01 32.2 E011  
34.7

**03/21** 5906' ASPH/CONC. ATR 72-500,  
MTOW-49.

Alternate destination for acft max strength  
70988lb.

Dly 0700-1500 and O/R PNR 13hr in advance.

**Port Gentil** Apt of Entry

13' FOOG POG +01:00 S00 43.1 E008 45.1

**WEST AFRICA**

ATS 05826030. Apt Operator 05997851.

**03/21** 8530' ASPH/CONC. PCN 40/F/B/W/T. ASDA 03 8727'. ASDA 21 8727'. RL. HIALS 21.

0500-2300 & O/R before 1600. Customs.

Jet A-1.

Fire 6.

**Tchibanga**

269' FOOT TCH +01:00 S02 53.3 E010 57.3

**15/33** 6562' CONC/BITU. AUW-116. ASDA 15 6890'. ASDA 33 6890'.

Dly 0700-1500 and O/R PNR 13hr in advance.

**Gambia**

**Banjul (Banjul Intl)** Apt of Entry

93' GBYD BJL 00:00 N13 20.6 W016 39.5

Apt Administration 4472831, 4472730, 4472737; Fax 4472190.

**14/32** 11811' ASPHALT. LCN 80. TODA 14 12467'. TODA 32 12303'. ASDA 14 12205'. ASDA 32 12008'. HIRL. HIALS 14. HIALS 32.

H24. Customs.

Non-skd flts and GA PPR 72hr to GBYDYAYX (technical flts exempted).

Jet A-1.

ABN. Fire 8.

**Guinea-Bissau**

**Bissau (Osvaldo Viera)** Apt of Entry

129' GGOV OXB 00:00 N11 53.3 W015 39.3

Apt Operator 320 59 77; Fax 320 59 77.

**03/21** 10499' ASPHALT. PCN 35/F/B/X/U. TODA 03 11811'. TODA 21 11155'. ASDA 03 10827'. ASDA 21 10827'. RL. HIALS 21.

0700-1900. Customs.

Jet A-1.

ABN. Fire 7.

**Osvaldo Viera see Bissau**

**Mali**

**Ambodedjo see Mopti**

**Ansongo**

853' GAAO 00:00 N15 42.0 E000 30.0

**01/19** 3609' LATE/CLAY. AUW-13. ASDA 01 4265'.

**10/28** 3281' LATE/CLAY. AUW-13. ASDA 10 3609'. ASDA 28 3937'.

**Bafoulabe**

381' GABF 00:00 N13 48.3 W010 51.1

**06/24** 2953' LATE/CLAY. AUW-13. ASDA 06 3150'. ASDA 24 3281'.

**Bamako (Modibo Keita/Senou)** Apt of Entry

1247' GABS BKO 00:00 N12 32.3 W007 56.6

Apt Administration 20203161, 20206701; Fax 20204151.

**06/24** 10499' ASPH/CONC. PCN 63/F/A/W/T. TODA 06 11483'. TODA 24 11483'. ASDA 06 10827'. ASDA 24 10827'. HIRL. HIALS 06.

Rwy 06 Right-Hand Circuit.

H24. Customs.

F-3, Jet A-1.

Fire 8.

**Bandiagara**

1312' GABD 00:00 N14 20.0 W003 36.0

**09/27** 2953' LATE/CLAY. AUW-13. ASDA 09 3281'.

**Bourem**

942' GABR 00:00 N17 02.0 W000 24.0

**07/25** 5085' LATERITE. AUW-13.

**Dag Dag see Kayes**

**Dignangan see Sikasso**

## WEST AFRICA

**Gao (Korogoussou)** Apt of Entry

870' GAGO GAQ 00:00 N16 14.9 W000 00.4

Apt Administration 21820201.

**07L/25R** 8202' BITUMEN. PCN 42/F/A/W/T. TODA 07L 9843'. TODA 25R 10827'. ASDA 07L 8858'. ASDA 25R 8858'. RL.

Rwy 07L Right-Hand Circuit.

**07R/25L** 5906' LATERITE. ASDA 07R 6234'. ASDA 25L 6234'.

During skd operations, O/T O/R. Customs: O/R. Jet A-1.

Fire 5.

**Goundam**

866' GAGM GUD 00:00 N16 21.0 W003 36.0

**05/23** 4921' LATERITE. DC-4. ASDA 05 5249'. ASDA 23 5249'.

Fire U.

**Kayes (Dag Dag)** Apt of Entry

164' GAKD KYS 00:00 N14 28.9 W011 24.1

Apt Administration 78740075, 90502673. Apt Operator 21594522.

**09/27** 8858' ASPHALT. PCN 74/F/B/W/T. ASDA 09 9055'. ASDA 27 9055'. ALS 09.

During sked operations 0700-1800. Nights O/R 6hr before 1600 to GABSVDYX or O/R 1hr before 1600 to 78740075, 21594522. Customs: O/R via 21522066.

Jet A-1.

Fire 6.

**Keibane see Nara****Kenieba**

466' GAKA KNZ 00:00 N12 50.6 W011 15.0

Apt Operator 20283823/20289194; Fax 20283824.

**05/23** 3747' LATERITE. AUW-13. ASDA 05 3845'. ASDA 23 3911'.

Rwy 23 Right-Hand Circuit.

PPR.

**Kidal**

1496' GAKL 00:00 N18 26.0 E001 25.0

**09/27** 6234' SAND/CLAY. DC-3.

**Kita**

1122' GAKT 00:00 N13 04.0 W009 29.0

**11/29** 2625' LATERITE. AUW-13.

**Korogoussou see Gao****Koutiala**

1240' GAKO KTX 00:00 N12 21.1 W005 25.8

**08/26** 3937' LATE/CLAY. AUW-13.

**Markala**

951' GAMA 00:00 N13 42.0 W006 04.0

**06/24** 2953' LATE/CLAY. AUW-13.

**Menaka**

899' GAMK 00:00 N15 51.0 E002 26.0

**06/24** 3937' LATE/CLAY. AUW-13.

**Modibo Keita/Senou see Bamako****Mopti (Ambodedjo)** Apt of Entry

910' GAMB MZI 00:00 N14 30.5 W004 05.0

Apt Operator 66740141.

**05/23** 8202' CONCRETE. PCN 46/F/A/W/T. TODA 23 8858'. ASDA 05 8399'. ASDA 23 8399'. RL. ALS 05.

During skd operations and O/R. Customs: O/R.

Jet A-1.

Fire 6.

**Nara (Keibane)**

889' GANK NRM 00:00 N15 14.0 W007 16.1

**13/31** 5577' LATE/SAND. DC-3.

**Niafunke**

869' GANF 00:00 N15 56.0 W004 01.0

## WEST AFRICA

**08/26** 3937' SOIL. AUW-13.

**Nioro**

773' GANR NIX 00:00 N15 14.3 W009 34.6

**08/26** 4921' MACADAM. DC-4. ASDA 08 5118'.  
ASDA 26 5151'. RL.

During skd operations and O/R 6hr to Bamako  
(Senou) before 1600.

Fire 4.

**Sikasso (Dignangan)** Apt of Entry

1302' GASO KSS 00:00 N11 35.9 W005  
47.9

Apt Operator 78740072/40066, 73399845,  
90502674.

**07/25** 5249' ASPHALT. FK28. ASDA 07 5446'.  
ASDA 25 5446'. RL. ALS 07.

Mon-Fri 0700-1800, O/T O/R. Nights svc on  
request to GABSVDYX 6hr/Tel 1hr before 1600  
on 78740072, 78740066, 73399845. Customs:  
O/R.

Fire 4.

**Tessalit**

1612' GATS 00:00 N20 14.8 E000 58.8

**05/23** 8251' BITUMEN. DC-4.

Rwy 23 Right-Hand Circuit.

H24.

Fire U.

**Tombouctou**

864' GATB TOM 00:00 N16 44.0 W002 59.9

Apt Administration (223) 21921119, 78740076.

**07/25** 7119' BITUMEN. PCN 34/F/B/W/T.  
TODA 07 7775'. TODA 25 7775'. ASDA 07  
7316'. ASDA 25 7316'. RL.

During skd operations and O/R. Customs: O/R.

Jet A-1.

Fire 4.

**Yelimane**

331' GAYE EYL 00:00 N15 07.4 W010 34.3

Apt Operator 20283823/9194; Fax 20283824.

**11/29** 5249' LATERITE. AUW-53. ASDA 11  
5446'. ASDA 29 5446'.

0600-1800 or O/R.

**Mauritania****Atar**

761' GQPA ATR 00:00 N20 29.9 W013 02.9

Apt Operator 45229817; aeroport-  
atar@sam.mr.

**04/22** 9843' MACADAM. DC-9. RL.

Mon-Fri and Sun Days, Sat 0800-1600.

Jet A-1.

Fire 4.

**Bir Mogrein**

1194' GQPT 00:00 N25 14.0 W011 35.0

**01/19** 5906' MACADAM. DC-3.

Mon-Fri and Sun Days, Sat 0800-1600.

**Boghe**

66' GQNE BGH 00:00 N16 38.0 W014 12.0

**03/21** 3117' LATERITE. DC-3.

**Dahara see Timbedra****Kiffa**

430' GQNF KFA 00:00 N16 35.6 W011 24.0

Apt Administration 36382138, 45258321,  
45259483; Fax 45258859; Kiffa@sam.mr.

**07/25** 5249' ASPHALT. F-28.

0800-1600. O/T OR.

**Letfotar see Moudjeria****Moudjeria (Letfotar)**

256' GQNL MOM 00:00 N17 45.0 W012  
30.0

**18/36** 5249' MACADAM. F-28.

**Nouadhibou** Apt of Entry

9' GQPP NDB 00:00 N20 55.7 W017 01.9

## WEST AFRICA

Apt Operator 4574 5009, 4574 5349; Fax 4574 5160, 4574 9967.

**02/20** 7956' BITUMEN. PCN 48/F/B/X/T. ASDA 02 8284'. ASDA 20 8284'. HIRL. HIALS 02.

180 deg turns on rwy for acft exceeding AUW-88 on turning pads only.

H24. Customs.

F-3, Jet A-1.

Fire 7.

**Nouakchott (Oumtounsy)** Apt of Entry

9' GQNO NKC 00:00 N18 18.6 W015 58.2

Apt Administration 45252001, 45252009, 45253850; Fax 45251625, 45293210.

**06/24** 7874' CONCRETE. PCN 98/R/B/W/T. TODA 06 9022'. ASDA 06 8268'. ASDA 24 8268'. HIRL. HIALS 06.

**16/34** 11155' CONCRETE. PCN 99/R/B/W/T. TODA 34 12303'. ASDA 16 11549'. ASDA 34 11549'. HIALS 34.

H24. Customs.

F-3, Jet A-1.

Fire 8.

**Oumtounsy see Nouakchott**

**Tamchakett**

620' GQNT THT 00:00 N17 14.0 W010 49.0

**10/28** 3609' LATE/SAND. DC-3.

**Tichitt**

561' GQNC THI 00:00 N18 27.0 W009 31.0

**08/26** 4265' SOIL. DC-3.

**11/29** 8711' SOIL. L-100.

Thr rwy 11 displaced 3707' when VIS is below 5 NM, LDA rwy 11 - 5003'.

**Timbedra (Dahara)**

722' GQNM 00:00 N16 18.0 W008 03.0

**08/26** 3609' LATE/CLAY. DC-3.

**Timbedra**

692' GQNH TMD 00:00 N16 14.0 W008 10.0

**09/27** 4101' CLAY. DC-3.

**Niger**

**Agadez (Mano Dayak)** Apt of Entry

1660' DRZA AJY +01:00 N16 57.7 E007 59.4

Apt Administration 20440040. Apt Operator Mobile 94244262.

**07/25** 9843' ASPH/CONC. PCN 54/F/C/W/T. TODA 07 10171'. TODA 25 10171'. RL. MIALS 07.

0530-1730. O/R 48hrs before departure. Customs: O/R.

Jet A-1.

Fire 4.

**Diffa**

993' DRZF +01:00 N13 22.4 E012 37.4

**09/27** 5906' BITUMEN. B-737. TODA 09 6234'. TODA 27 6890'. ASDA 09 6234'. ASDA 27 6234'.

Days, O/R 48hr.

**Diori Hamani see Niamey**

**Dirkou**

1273' DRZD +01:00 N18 58.1 E012 52.1

**04/22** 5249' BITUMEN. N-2501. ASDA 04 5577'. ASDA 22 5905'.

Paved rwy width 82' only.

Fire U.

**Dogondoutchi**

961' DRRC +01:00 N13 40.0 E004 06.0

**11/29** 3281' LATE/CLAY. DC-3. ASDA 29 3609'.

**Gaya**

663' DRRG +01:00 N11 53.0 E003 26.0

**WEST AFRICA**

**06/24** 4528' LATERITE. DC-3. ASDA 24 5184'.

**Goure**

1378' DRZG +01:00 N13 53.0 E010 11.0

**05/23** 4954' SAND/CLAY. DC-3.

First 984' rwy 23 unusable in rainy season, remaining part subject to restrictions.

**Iferouane**

2162' DRZI +01:00 N19 04.0 E008 22.0

**01/19** 4593' SAND. DC-3.

**La Tapoa**

722' DRRP +01:00 N12 29.0 E002 24.0

**09/27** 3937' LATERITE. DC-3.

**Mano Dayak see Agadez**

**Maradi**

1243' DRRM MFQ +01:00 N13 30.1 E007 07.2

Apt Operator 20410346; Mobile 94248007.

**08/26** 6070' ASPHALT. AUW-157, B737. TODA 08 6398'. TODA 26 6398'. ASDA 08 6398'. ASDA 26 6398'.

0530-1730, O/R 48hrs before departure. Customs: O/R.

Fire 3.

**Niamey (Diori Hamani)** Apt of Entry

732' DRRN NIM +01:00 N13 28.9 E002 10.2

Apt Operator 20732381, 20732383, 20732517, 20732518, 20732519; Fax 20735512.

**09L/27R** 5315' LATERITE. C130.

Unusable 24hr after rain.

**09R/27L** 9843' ASPHALT. PCN 59/F/B/X/T. TODA 09R 10499'. TODA 27L 10827'. ASDA 09R 10040'. ASDA 27L 10040'. HIRL.

H24. Customs.

F-3, Jet A-1.

Fire 8.

**Tahoua**

1270' DRRT THZ +01:00 N14 52.7 E005 16.2

Apt Operator 20610022; Mobile 94662623.

**06/24** 7054' ASPH/CONC. B-737, PCN 38/F/A/X/T. TODA 06 7546'. TODA 24 7710'.

Dly 0530-1730 and O/R 48hr before departure. Customs: O/R.

Fire 3.

**Tessaoua**

1358' DRRR +01:00 N13 46.0 E008 01.0

**10/28** 3937' SAND. DC-3.

**Zinder** Apt of Entry

1506' DRZR ZND +01:00 N13 47.0 E008 59.4

Apt Administration 20510169. Apt Operator Mobile 94118397.

**05/23** 5988' BITU/CONC. PCN 80/F/A/W/T. TODA 05 6316'. TODA 23 6316'.

0530-1730 and O/R 48hrs before departure. Customs: On request.

Jet A-1.

Fire 4.

**Sao Tome and Principe**

**Principe**

584' FPPR PCP 00:00 N01 39.8 E007 24.7

Apt Manager 2399921017; jannie.fourie@afri-cas-connections.com. Apt Operator 2221878, 2222063, 2222561; Fax 2221154; enasa@cstome.net.

**18/36** 5741' ASPHALT. LCN 25, PCN 37.

Dly 0600-1730. Customs.

Fire U.

**Sao Tome (Sao Tome Intl)** Apt of Entry

33' FPST TMS 00:00 N00 22.7 E006 42.8



## WEST AFRICA

Apt Operator 2222560, 2221878, 2224802, 2222561; Fax 2221154; enasa@cstome.net.

**11/29** 7087' ASPHALT. PCN 45/F/D/W/T. TODA 29 7284'. MIRL. ALS 11.

O/R H24. Customs.

Jet A-1.

ABN O/R. Fire 8.

**Senegal****Bakel**

82' GOTB BXE 00:00 N14 52.0 W012 29.0

**07/25** 5741' LATERITE. FK 27.

Fire N.

**Blaise Diagne Intl see Dakar-Diass**

**Cap Skirring** Apt of Entry

56' GOGS CSK 00:00 N12 23.3 W016 44.5

Apt Administration 339935177, 339935181; Fax 339935181.

**15/33** 6562' BITUMEN. PCN 45/F/A/W/T. TODA 33 7743'. ASDA 33 6759'.

Mon-Sat 0700-1900, Sun and Hol O/R prior 12hr. Customs: For commercial and international flights.

Fire 6.

**Dakar (Leopold Sedar Senghor)**

85' GOOY DKR Mil. 00:00 N14 44.6 W017 28.8

Apt Administration 338692200, 338692201. Apt Operator Fax 338200600, -0656.

**03/21** 4898' CONC/BITU. PCN 18/F/C/W/T. TODA 21 5554'. ASDA 03 4996'. ASDA 21 4996'.

**18/36** 11450' CONC/BITU. PCN 82/F/C/X/U. LDA 18 10925'. TODA 18 12434'. TODA 36 11647'. ASDA 18 11647'. ASDA 36 11647'. HIRL. ALS 36.

H24. Customs.

F-3, Jet A-1. Oxygen.

Fire 9.

**Dakar-Diass (Blaise Diagne Intl)** Apt of Entry 290' GOBD DSS 00:00 N14 40.2 W017 04.4

Apt Operator 339395900, 339396900; Mobile 762354343; Fax 339570930; dutymanager@dakaraeroport.com.

**01/19** 11483' ASPH/CONC. PCN 80/F/A/W/T. TODA 01 12139'. TODA 19 11811'. ASDA 01 11877'. ASDA 19 11877'. ALS 01.

H24. Customs.

F-3, Jet A-1.

ABN. Fire 9.

**Kaolack**

20' GOOK KLC 00:00 N14 08.7 W016 03.3

Apt Operator 33941 2748.

**06/24** 5249' BITUMEN. FK 27. ASDA 06 5397'. ASDA 24 5397'.

Fire N.

**Kolda (Sare Bidji)**

121' GOGK KDA 00:00 N12 54.0 W014 58.0

**04/22** 4921' BITUMEN. FK 27.

Mon-Fri days. Sat, Sun and Hol O/R 3hr.

**Leopold Sedar Senghor see Dakar**

**Matam (Ouro Sogui)**

85' GOSM MAX 00:00 N15 35.6 W013 19.3

Apt Operator 78637 1517.

**13/31** 5577' LATERITE. FK 27.

J. O/R.

Fire N.

**Ouro Sogui see Matam**

**Podor**

20' GOSP POD 00:00 N16 41.0 W014 58.0

**15/33** 5085' LATERITE. F-27. ASDA 15 5249'. ASDA 33 5249'.

Mon-Fri days. Sat, Sun and Hol O/R 3hr.

Fire N.

**WEST AFRICA**
**Richard Toll**

20' GOSR RDT 00:00 N16 26.0 W015 39.0

**08/26** 5085' LATERITE. FK 27.

F-4, O/R. J. O/R.

Fire N.

**Sare Bidji see Kolda**
**Simenti**

157' GOTS SMY 00:00 N13 03.0 W013 18.0

Apt Operator 2219811406, 2219811155.

**04/22** 5906' LATE/CLAY. FK 27. TODA 04 6234'. TODA 22 6234'. ASDA 04 6234'. ASDA 22 6234'.

Mon-Fri days. Sat, Sun and Hol O/R 3hr.

Fire N.

**St Louis** Apt of Entry

10' GOSS XLS 00:00 N16 03.0 W016 27.7

Apt Administration 339382260/70. Apt Operator Fax 339613935.

**18/36** 6234' ASPHALT. PCN 39/F/C/W/T. TODA 18 6562'. TODA 36 6562'. ASDA 18 6562'. ASDA 36 6562'. RL.

Mon-Sat 0645-1900, Sun, Hol and night O/R 12hr. Customs: O/R.

F-3, Jet A-1.

Fire 5.

**Tambacounda**

161' GOTT TUD 00:00 N13 44.0 W013 39.5

Apt Operator 339810125; Mobile 786371516; Fax 339810125.

**06/24** 6562' MACADAM. PCN 46/F/A/W/T. RL.

Mon-Sat 0645-1900, Sun, Hol, Night O/R PN 3hr.

Fire 4.

**Ziguinchor** Apt of Entry

79' GOGG ZIG 00:00 N12 33.4 W016 16.6

Apt Operator 339911621, 339911338; Fax 339911621.

**10/28** 6561' CONC/BITU. PCN 33/F/A/W/T. TODA 10 7217'. TODA 28 7217'. ASDA 10 6758'. ASDA 28 6758'. RL.

0700-1900, O/R 12hr.

Fire 5.

**Togo**
**Gnassingbe Eyadema see Lome**
**Lome (Gnassingbe Eyadema)** Apt of Entry

71' DXXX LFW 00:00 N06 09.9 E001 15.2

Apt Administration 2226 2101, 2202; Fax 2226 5236; togorep@asecna.org.

**04/22** 9843' BITUMEN. PCN 55/F/B/W/T. TODA 04 10827'. TODA 22 10827'. ASDA 04 10040'. ASDA 22 10040'. HIRL. HIALS 22.

Rwy 04 Right-Hand Circuit.

H24. Customs: During skd operations and O/R.

Jet A-1.

Fire 8.

**Niamtougou (Niamtougou Intl)** Apt of Entry

1515' DXNG LRL 00:00 N09 46.7 E001 05.7

Apt Administration 26650004, 26650044; Fax 26650118; togorep@asecna.org.

**03/21** 8202' CONC/BITU. DC-10/30. TODA 03 8530'. TODA 21 8530'. ASDA 03 8530'. ASDA 21 8530'. HIRL. ALS 03.

During skd operations and O/R. Customs: O/R 2hr.

Jet A-1.

Fire 6.

## ZAMBIA

----- Effective thru 09 Oct: -----

**Chipata** Apt of Entry

3359' FLCP CIP +02:00 S13 33.7 E032 35.1

Apt Operator 62-222828.

**08/26** 2654' GRASS.**18/36** 4823' ASPHALT. SIWL 21. TODA 18 5020'. TODA 36 5676'. ASDA 18 5020'. ASDA 36 5020'.

Mon-Fri 0500-1500, Sat/Sun/Hol O/R. Customs: Mon-Fri 0500-1500, Sat/Sun/Hol O/R. Non-sked 24hr PNR.

F-2, F-4, J.

Fire 4.

**Harry Mwaanga Nkumbula Intl see Livingstone****Kasama** Apt of Entry

4542' FLKS KAA +02:00 S10 13.0 E031 08.0

Apt Operator -4-221105.

**01/19** 2671' GRAVEL.**10/28** 2756' GRAVEL.**13/31** 6148' GRAVEL. SIWL 21. TODA 31 6935'.

Days. Customs.

J.

Fire 4.

**Kenneth Kaunda Intl see Lusaka****Kitwe (Southdowns)**

4145' FLSSO KIW +02:00 S12 54.0 E028 09.0

Apt Operator 212-239020.

**11/29** 6562' ASPHALT. SIWL 21, MTOW-45.

Days.

Fire 4.

**Livingstone (Harry Mwaanga Nkumbula Intl)**

Apt of Entry

3255' FLHN LVI +02:00 S17 49.3 E025 49.0

Apt Operator 213-321682, -321153, -323222;

Fax 213-324235.

**10/28** 9843' ASPHALT. PCN 52. RL. ALS.**15/33** 4501' GRAVEL. SIWL 21. LDA 15 4255'. TODA 15 5288'. TODA 33 4895'. ASDA 15 4800'.

Dly 0500-1600 and O/R to the Apt not later than 1400 UTC. Customs.

F-3, Jet A-1.

ABN. Fire 7.

**Lukulu**

3480' FLLK LXU +02:00 S14 22.0 E023 15.5

**09/27** 3609' GRAVEL. MTOW-45, SIWL 21.**Lusaka (Kenneth Kaunda Intl)** Apt of Entry

3782' FLKK LUN +02:00 S15 19.8 E028 27.2

Apt Operator 211-271044, -271248; Fax 211-224777, -271781.

**10/28** 12999' PAVED. PCN 59. TODA 10 16001'. TODA 28 18698'. ASDA 10 13999'. ASDA 28 13498'. HIRL. HIALS 10. ALS 28.

0400-2200 and O/R. Customs.

F-3, Jet A-1.

ABN. IBN. Fire 8.

**Mansa**

4100' FLMA MNS +02:00 S11 08.0 E028 52.0

Apt Operator 212-821269.

**10/28** 5610' PAVED. MTOW-45, SIWL 21.

Days. Customs: Public HOL O/R.

Fire 3.

**Mfuwe** Apt of Entry

1841' FLMF MFU +02:00 S13 16.0 E031 56.0

## ZAMBIA

Apt Operator 216-245006, -245083, -245142; Fire 4.  
Fax 216-245029.

**09/27** 7218' PAVED. PCN 45. ASDA 27 7710'.

Dly 0500-1600 and O/R.

F-3, Jet A.

Fire 5.

**Mongu**

3465' FLMG MNR +02:00 S15 13.5 E023 09.2

Apt Operator 217-221260.

**10/28** 4800' ASPHALT. LCN 20 f 10. TODA 10 5400'. TODA 28 5200'. ASDA 10 5000'. ASDA 28 5000'.

Days. Public HOL O/R.

Fire 3.

**Ndola (Simon Mwansa Kapwepwe Intl)** Apt of Entry

4167' FLSK NLA +02:00 S12 59.7 E028 39.9

Apt Operator 212-611195, -615422, -615542; Fax 212-614054.

**10L/28R** 8251' CONCRETE. PCN 50. TODA 10L 10849'. TODA 28R 10052'. ASDA 10L 8750'. ASDA 28R 8451'. HIRL. ALS.

**10R/28L** 3999' BITUMEN. PCN 50. TODA 10R 4599'. TODA 28L 4599'. ASDA 10R 4199'. ASDA 28L 4199'.

Dly 0400-1800 and O/R. Customs.

F-3, Jet A-1.

ABN. Fire 7.

**Simon Mwansa Kapwepwe Intl see Ndola**

**Solwezi**

4547' FLSW SLI +02:00 S12 10.0 E026 22.0  
Apt Operator 218-821213.

**08/26** 4400' SLD. PCN 23. TODA 08 5391'. TODA 26 5063'. ASDA 08 5391'. ASDA 26 5063'.

Days. Weekend and public Holidays O/R.

**Southdowns see Kitwe**

----- **Effective 10 Oct:** -----

**Chipata** Apt of Entry

3359' FLCP CIP +02:00 S13 33.7 E032 35.1

Apt Operator 62-222828.

**08/26** 2654' GRASS.

**18/36** 4823' ASPHALT. SIWL 21. TODA 18 5020'. TODA 36 5676'. ASDA 18 5020'. ASDA 36 5020'.

Mon-Fri 0500-1500, Sat/Sun/Hol O/R. Customs: Mon-Fri 0500-1500, Sat/Sun/Hol O/R. Non-sked 24hr PNR.

F-2, F-4, J.

Fire 4.

**Harry Mwaanga Nkumbula Intl see Livingstone**

**Kasama** Apt of Entry

4542' FLKS KAA +02:00 S10 13.0 E031 08.0

Apt Operator -4-221105.

**01/19** 2671' GRAVEL.

**10/28** 2756' GRAVEL.

**13/31** 6148' GRAVEL. SIWL 21. TODA 31 6935'.

Days. Customs.

J.

Fire 4.

**Kenneth Kaunda Intl see Lusaka**

**Kitwe (Southdowns)**

4145' FLSSO KIW +02:00 S12 54.0 E028 09.0

Apt Operator 212-239020.

**11/29** 6562' ASPHALT. MTOW-45, SIWL 21. Days.

## ZAMBIA

Fire 4.

**Livingstone (Harry Mwaanga Nkumbula Intl)**

Apt of Entry

3255' FLHN LVI +02:00 S17 49.3 E025 49.0

Apt Operator 213-321682, -321153, -323222;  
Fax 213-324235.

**10/28** 9843' ASPHALT. PCN 52. RL. ALS.

**15/33** 4501' GRAVEL. SIWL 21. LDA 15 4255'.  
TODA 15 5288'. TODA 33 4895'. ASDA 15  
4800'.

Dly 0500-1600 and O/R to the Apt not later than  
1400 UTC. Customs.

F-3, Jet A-1.

ABN. Fire 7.

**Lukulu**

3480' FLLK LXU +02:00 S14 22.0 E023 15.5

**09/27** 3609' GRAVEL. MTOW-45, SIWL 21.

**Lusaka (Kenneth Kaunda Intl)** Apt of Entry

3782' FLKK LUN +02:00 S15 19.8 E028  
27.2

Apt Operator 211-271044, -271248; Fax  
211-224777, -271781.

**10/28** 12999' PAVED. PCN 59. TODA 10  
16001'. TODA 28 18698'. ASDA 10 13999'.  
ASDA 28 13498'. HIRL. HIALS 10. ALS 28.

0400-2200 and O/R. Customs.

F-3, Jet A-1.

ABN. IBN. Fire 8.

**Mansa**

4100' FLMA MNS +02:00 S11 08.0 E028  
52.0

Apt Operator 212-821269.

**10/28** 5610' PAVED. MTOW-45, SIWL 21.

Days. Customs: Public HOL O/R.

Fire 3.

**Mfuwe** Apt of Entry

1841' FLMF MFU +02:00 S13 16.0 E031  
56.0

Apt Operator 216-245006, -245083, -245142;  
Fax 216-245029.

**09/27** 7218' PAVED. PCN 45. ASDA 27 7710'.

Dly 0500-1600 and O/R.

F-3, Jet A.

Fire 5.

**Mongu**

3465' FLMG MNR +02:00 S15 13.5 E023  
09.2

Apt Operator 217-221260.

**10/28** 4800' ASPHALT. LCN 20 f 10. TODA 10  
5400'. TODA 28 5200'. ASDA 10 5000'. ASDA  
28 5000'.

Days. Public HOL O/R.

Fire 3.

**Ndola** Apt of Entry

4167' FLND NLA +02:00 S12 59.7 E028  
39.9

Apt Operator 212-611195, -615422, -615542;  
Fax 212-614054.

**10L/28R** 8251' CONCRETE. PCN 50. TODA  
10L 10849'. TODA 28R 10052'. ASDA 10L  
8750'. ASDA 28R 8451'. HIRL. ALS.

**10R/28L** 3999' BITUMEN. PCN 50. TODA 10R  
4599'. TODA 28L 4599'. ASDA 10R 4199'.  
ASDA 28L 4199'.

Dly 0400-1800 and O/R. Customs.

F-3, Jet A-1.

ABN. Fire 7.

**Solwezi**

4547' FLSW SLI +02:00 S12 10.0 E026 22.0

Apt Operator 218-821213.

**08/26** 4400' SLD. PCN 23. TODA 08 5391'.  
TODA 26 5063'. ASDA 08 5391'. ASDA 26  
5063'.

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**ZAMBIA**

Days. Weekend and public Holidays O/R.

Fire 4.

**Southdowns see Kitwe**

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## ZIMBABWE

**Buffalo Range see Chiredzi****Bulawayo (J.M. Nkomo)** Apt of Entry

4366' FVJN BUQ +02:00 S20 01.1 E028 37.5

Apt Operator 0292 296423/4/5/7, 297415, 0772 132743; Fax 0292 296146.

**02/20** 4419' BITUMEN. PCN 21/F/C/Y/U.

**13/31** 8491' BITUMEN. PCN 40/F/A/X/U. TODA 13 9377'. TODA 31 11089'. ASDA 13 8711'. ALS 13.

Dly 0430-1900. Customs: 0400-1600, O/T prior Dep/Arr O/R.

F-3, Jet A-1.

ABN. Fire 7.

**Charles Prince see Harare****Chinhoyi**

4000' FVCI +02:00 S17 25.0 E030 08.5

Apt Operator (10): 794661 Ext 330.

**06/24** 3609' GRASS.

PPR. Days.

**Chiredzi (Buffalo Range)** Apt of Entry

1421' FVCZ BFO +02:00 S21 00.6 E031 34.8

Apt Operator 31 2312444; Mobile 772 132 745-8.

**14/32** 5177' BITUMEN. PCN 27/F/B/X/T. TODA 14 6817'. TODA 32 6561'. ASDA 14 5374'. ASDA 32 6561'.

Mon-Fri 0500-1500. Customs: Days with PNR.

F-4, Jet A-1.

Fire 5.

**Gokwe**

4200' FVGO +02:00 S18 12.0 E028 55.0

**14/32** 3609' GRAVEL.

PPR.

**Harare (Charles Prince)**

4850' FVCP +02:00 S17 45.1 E030 55.3

Apt Operator 242 302199/302832, 335543; Mobile 772132733/4.

**06/24** 3937' BITUMEN. AUW-13. TODA 06 4593'. RL.

Rwy 24 Right-Hand Circuit.

**14/32** 3035' BITUMEN. AUW-13. TODA 14 3691'. RL.

Dly 0400-1600. Wed: 0400 to 1800 PNR before 1400. Customs: Dly 0600-1600.

F-3.

Fire 5.

**Harare (Robert Gabriel Mugabe Intl)** Apt of Entry

4901' FVRG HRE +02:00 S17 56.0 E031 05.6

Apt Operator 0242 585073-83, 585009-17, 585019-20, 0772 132 715-30; Fax 0242 575163.

**05/23** 15502' ASPHALT. PCN 50/F/A/W/T. TODA 05 15699'. TODA 23 16486'. RL. MIALS 05.

H24. Customs.

F-4, Jet A-1.

Fire 9.

**Hwange (Hwange National Park)**

3543' FVWN HWN +02:00 S18 38.0 E027 00.5

Apt Operator 081 28313/4, 0772 132 753/4; Fax 081 28338.

**08/26** 15091' BITUMEN. PCN 25/F/B/X/U. TODA 08 15583'. TODA 26 15780'. ASDA 26 15288'.

Mon-Fri 0600-1500.

Fire N.

**J.M. Nkomo see Bulawayo****Kariba (Kariba Intl)** Apt of Entry

1706' FVKB KAB +02:00 S16 31.2 E028 53.1

**ZIMBABWE**

Apt Operator 061 2146405, 2146183, 2146157, Dly 0400-1600. Customs.  
0772 132 744/9. F-3, Jet A-1.

**09/27** 5413' BITUMEN. PCN 21/F/D/Y/U. Fire 8.

Rwy 09 Right-Hand Circuit.

Dly 0500-1600. Customs: Days with PNR on  
Tel 061 2146643, 2146625/2146084.

F-3, Jet A-1.

Fire 5.

**Masvingo (Masvingo Intl)** Apt of Entry

3596' FVMV MVZ +02:00 S20 03.7 E030  
51.7

Apt Operator 039 262106 , 266 212, 266 213,  
0772 132 741/2; Fax 039 262505.

**17/35** 5663' BITUMEN. PCN 16/F/B/Y/T. TODA  
17 6194'. TODA 35 6647'.

Mon-Fri 0600-1400 excluding public holidays.  
Customs: 24hr PNR Tel: 039 263087 or 262676  
(Customs), 263772 (Immigration),  
262106/262505 (ATC). Flights on weekends  
and public holidays must be notified in advance  
on 262106 or 262505.

**Mhangura**

4078' FVGM +02:00 S16 54.5 E030 14.5

Apt (160) 601 Ext 201, Apt Operator (10)  
28656.

**05/23** 4757' BITUMEN.

PPR.

**Robert Gabriel Mugabe Intl see Harare**

**Victoria Falls** Apt of Entry

3500' FVFA VFA +02:00 S18 05.6 E025  
50.4

Apt Manager 83 2844255; Fax 83 2844394. Apt  
Operator 83 2844428; Mobile 772132735/37.

**12/30** 13123' ASPHALT. PCN 60/F/A/W/T.  
TODA 12 14107'. TODA 30 14107'. ASDA 12  
13320'. ASDA 30 13320'. HIRL. HIALS 12.  
MIALS 30.

First 400m/150m rwy 12/30 PCN 60/R/A/W/T.