WAMM AD 2.1 AERODROME LOCATION INDICATOR AND NAME

WAMM – MANADO / Sam Ratulangi

WAMM AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

ARP Coordinates and Site at AD	013244N 1245530E
Direction and Distance From (City)	7.03 NM NE
Elevation / Reference Temperature	270 ft / 30º C
MAG VAR / Annual Change	0º 22' East (2015)
AD Administration	Airport PT. Angkasa Pura I (Persero) ATS Perum LPPNPI / Airnav Indonesia District Manado
Address	Airport Sam Ratulangi Airport Jl. MR. A. A. Maramis, Lapangan Manado 95258 ATS Sam Ratulangi International Airport Jl. MR. A. A. Maramis Lapangan Manado 95258
Telephone	Airport (0431) 814320, 814322, 814323, 817982 (AD AIS unit)) ATS (0431) 814376
Telefax	Airport (0431) 811595, 817982 (AD AIS unit) ATS (0431) 818057, 817982 (AD AIS unit)
Telex	Airport 74328 SRPAP IA AIS NIL
E-mail	Airport mdc@angkasapura1.co.id AIS manado@airnavindonesia.co.id ais.samratulangi@airnavindonesia.co.id
AFTN	WAMMYOYE, WAMMZTZE, WAMMYSYE
Type of Traffic Permitted	IFR and VFR
Remarks	NIL

WAMM AD 2.3 OPERATIONAL HOURS

AD Administration	MON – THU : 0000 – 0830 FRI : 2330 – 0730
ATS Administration	MON – THU : 2330 – 0830 FRI : 2330 – 0900
Customs and Immigration	2200 – 1500
Health and Sanitation	2200 – 1500
AIS Briefing Office	2200 – 1500
ATS Reporting Office	2200 – 1500
MET Briefing Office	2200 – 1500

ATS	2200 – 1500
Fuelling	2200 – 1500
Handling	2200 – 1500
Security	H - 24
De-Icing	NIL
Remarks	Extended/Advanced Hour On Request

WAMM AD 2.4 HANDLING SERVICE AND FACILITIES

Cargo Handling Facilities	Provided by PT GAPURA, PT. JAS, PT. PTN, PT KOKAPURA
Fuel / Oil / Type	AVTUR 50 / Jet A1
Fuelling Facilities / Capacity	Fuel Truck 25000 LT : 2 Fuel Truck 12000 LT : 2 Fuel Truck 7000 LT : 1
De-Icing Facilities	NIL
Hangar Space for Visiting Aircraft	Available 1 for F27
Repair Facilities for Visiting Aircraft	NIL
Remarks	All request for ACFT marshalling should be directed to the airlines or ground handling agent except for non handling agent flight service by AMC (Apron Movement Control)

WAMM AD 2.5 PASSENGER FACILITIES

Hotels	Available in Town
Restaurant	Available
Transportation	Taxi & Rent Car and Bus
Medical Facilities	First Aid at AD, Hospital in Town
Bank and Post Office	Available
Tourist Office	Available
Remarks	NIL

WAMM AD 2.6 RESCUE AND FIRE FIGHTING

AD Category for Fire Fighting	CAT 7
Rescue Equipment	Trained Personnel : 26 Ziegler 10000/1000 1 unit, Chub Fire 9000/900 1 unit, Morita 2 4000/400 1 unit, Rescue Tender 1 unit, and Ambulance 2 units.
Capability for Removal of Disabled Aircraft	Heavy Truck & Commando Car 1 unit
Remarks	NIL

WAMM AD 2.7 SEASONAL AVAILABILITY CLEARING

Type Of Clearing Equipment	RWY Sweeper : 2 Units
Clearance	RWY, TWY & APRON
Remarks	NIL

WAMM AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATION DATA

APRON SURFACE AND STRENGTH

APRON I	
Surface	= Concrete
Strength	= PCN 72 R/C/X/T
Dimension	= 107 x 149.3 m
APRON II	
Surface	= Concrete
Strength	= PCN 72 R/C/X/T

Dimension = 106 x 233.7 m

APRON III
Surface = Asphalt Concrete
Strength = PCN 60 R/C/X/T
Dimension = 70 x 286.7 m

APRON IV
Surface = Concrete
Strength = PCN 65 R/C/X/T
Dimension = 174.50 x 107.41m

TAXIWAY WIDTH, SURFACE, AND STRENGTH

TAXIWAY A, B, & D
Surface = Asphalt
Strength = PCN 72 F/C/X/T
Dimension = 150 x 29 m

TAXIWAY C
Surface = Asphalt
Strength = PCN 72 F/C/X/T
Dimension = 180.32 x 23 m

PARALLEL TAXIWAY
Surface = Asphalt
Strength = PCN 72 F/C/X/T
Dimension = 2680 x 23 m

APRON TAXIWAY
Surface = Asphalt
Strength = PCN 72 F/C/X/T
Dimension = 583 x 23 m

WAMM AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKING

Use of Aircraft ID sign, TWY guide lines and visual docking / parking guidance system of Aircraf stands……	- Guidance sign board available - Nose wheel guide lines at apron. - Parking guidance line at apron available
RWY, TWY Marking & Light …….	RWY Marking : - RWY designation, THR, TDZ Centerline, Fixed distance marking Side Stripe and Aiming point. - RWY LGT: THR, RWY end, RWY edge, - TWY Marking : Centerline, Holding Position; Edge Taxi shoulder. - TWY LGT : - Edge Light.

Stop Bars……	All stop bars lit
Remarks……..	Follow Nose Wheel Guide Lines When Taxiing on Apron and TWY and Entry / Exit RWY

Parking Stands Coordinates :

Stand Numbers :	Coordinates :
1	013242.33N 1245524.14E
2	013241.15N 1245524.20E
3	013239.73N 1245523.99E
4	013238.43N 1245523.89E
5	013236.66N 1245523.86E
6	013235.62N 1245524.32E
7	013233.89N 1245524.18E
8	013231.08N 1245523.84E
9	013229.45N 1245523.79E
10	013228.03N 1245523.74E
11	013226.61N 1245523.69E
12	013225.19N 1245523.64E
13	013223.91N 1245523.60E
14	013222.77N 1245523.56E
15	013221.61N 1245524.08E
16	013220.45N 1245524.52E
17	013218.95N 1245524.62E
18	013218.92N 1245525.38E
19	013218.90N 1245526.14E
20	013217.99N 1245524.59E
21	013217.96N 1245525.35E
22	013217.94N 1245526.11E

Remark :

a. Aircraft parking stands Nr. 4 till Nr.7 Avio–Bridge available
b. Parking stand Nr.17 till Nr.22 for light Aircraft only

WAMM AD 2.10 AERODROME OBSTACLE

Reserved

WAMM AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

Associated Met Office……....	AD Meteorological and climatology and Geophysical Station Sam Ratulangi (BMKG)
Hours of Service / Met Office Outside Hours..	2200 – 1500, On Request
Office Responsible for TAF Preparation Period of Validity……..	H - 24
Trend Forecasts & Interval Issuance……..	MET Report / 30 Minutes
Briefing / Consultation Provided……	Briefing MET
Flight Documentation - Language Used….....	Wind Temp, SIGWX, TAFOR, SIGMET METAR - English
Charts and Other Information Available for Briefing or Consultation……..	Photo Satellite Chart
Supplementary Equipment Available for Providing Information……..	Weather Satellite, Radar,AMOS
ATS Units Provided With Information…….	TWR, APP, FSS and Aerodrome AIS unit

Additional Information (Limitation of Service etc.)…….. NIL ←

WAMM AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

1	2	3	4	5	6
Designations RWY NR	True BRG	Dimension of RWY	Strength (PCN) and Surface of RWY and SWY	THR Coordinates	THR Elevation and Highest Elevation of TDZ of Precision APP RWY
18	181.90º	2650 x 45 m	80 F/C/W/T Asphalt	013340.73N 1245536.13 E	270 ft
36	001.90º			013214.50 N 1245533.27 E	264 ft

7	8	9	10	11	12
Slope of RWY - NR	SWY Dimension	CWY Dimension	Strip Dimension	OFZ	Remarks
0.097 %	60 x 45 m ←	150 x 150 m	2770 x 300 m	NIL	RESA RWY : 90 x 90 m (both of RWY)
0.093 %	NIL	150 x150 m		NIL	

WAMM AD 2.13 DECLARED DISTANCES

1	2	3	4	5
RWY Designator	TORA	TODA	ASDA	LDA
18	2650 m	2800 m	2710 m ←	2650 m
36	2650 m	2800 m	2650 m	2650 m

WAMM AD 2.14 APPROACH AND RUNWAY LIGHTING

1	2	3	4	5
RWY Designator	APCH LIGHT Type LEN	THR LGT Colour WBAR	VASIS (MEHT) PAPI	TDZ LGT LEN
18	PALS CAT I	Green	PAPI	NIL
36	PALS CAT I	Green	PAPI	NIL

6	7	8	9	10
RWY Centerline LGT Length Spacing Colour	RWY Edge LGT LEN Spacing Colour	RWY End LGT Colour WBAR	SWY LGT LEN (m) Colour	Remarks
NIL	White	Red	NIL	NIL
NIL	White	Red	NIL	NIL

WAMM AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1.	ABN / IBN Location, Characteristic and Hours Operation	NIL
2.	LDI Location and LGT Anemometer location and LGT	LDI : NIL
3.	TWY Edge and Center Line LGT	TWY edge LGT Available, Centerline LGT : NIL
4.	Secondary Power Supply / Switch Over Time	Standby Generator Set Switch Time 10 Second
5.	Remarks	Lead in light system (LILS) RWY 36

WAMM AD 2.16 HELICOPTER LANDING AREA

1.	Coordinates TLOF THR FATO	NIL
2.	TLOF and / or FATO Elevation (m / ft)	NIL
3.	TLOF and FATO Area Dimensions, Surface, Strength, Marking	NIL
4.	True Bearing and Magnetic Bearing Of FATO	NIL
5.	Declared Distance Available	NIL
6.	APP and FATO Lighting	NIL
7.	Remarks	NIL

WAMM AD 2.17 ATS AIRSPACE

1.	Designation and Lateral Limits	MANADO Control Zone (CTR) : A Circle with Radius of 30 NM Centered at “MNO” VOR/DME MANADO Aerodrome Traffic Zone (ATZ) : A Circle with Radius of 10 NM Centered at “MNO” VOR/DME
2	Vertical Limits	CTR : SFC up to 8000 ft ATZ : SFC up to 2500 ft

3.	Airspace Classification	CTR : C ATZ : C
4.	ATS Unit Call Sign Language(s)	CTR : MANADO APPROACH ATZ : RATULANGI TOWER ENGLISH
5.	Transition	11,000 ft / FL130
6.	Remarks	NIL

WAMM AD 2.18 ATS COMMUNICATION FACILITIES

1	2	3	4	5
Service Designator	Call sign	Frequency	Hours of Operation	Remarks
TWR	Ratulangi Tower	118.1 MHz	2200 – 1500	TWR coordinate : 013241.47N 1245521.97E
APP	Manado Approach	119.0 MHz	2200 – 1500	
FSS	Manado Information	8918, 11309 5550, 6554 kHz	2200 – 1500	RDARA, vertical limit service from SFC to FL245, Outside FSS operating hours CTC Ujung Pandang Information freq. 11309, 8918KHz
ATIS		126.4 MHz	2200 – 1500	←

WAMM AD 2.19 RADIO NAVIGATION AND LANDING AID

1	2	3	4	5	6	7
Type of Aid and Category	ID	Frequency	Hours of Operation	Site of Transmitting Antenna Coordinates	Elevation of DME Transmitting Antenna	Remarks
VOR/DME	MNO	114.2 MHz/ CH89X	H-24	013318.66N 1245540.25E		VOR “MNO” unusable areas beyond 40 NM : 010º–110º BLW 1500 ft. 110º –190º BLW 6500 ft. 190º -220º BLW 8000 ft. 220º –270º BLW 4000 ft. 270º – 300º BLW 6500 ft. 300º – 360º BLW 5000 ft.
VOR/DME	MWB	114.8 MHz/ CH-95X	H-24	011923.70N 1245717.61E		
NDB	MD	255 KHz	H-24	012850.98N 1245018.74E		
NDB	PN	290 KHz	H-24	012937.03N 1245434.14E		
ILS/LLZ	IMNO (RWY 18)	111.1 MHz	H-24	013209.81N 1245533.25E		
GP		331.7 MHz	H-24	013330.86N 1245539.84E		
DME		CH48X	H-24			
ILS/LLZ	ITDO (RWY 36)	110.5 MHz	H-24	013345.42N 1245536.44E		
GP		329.6 MHz	H-24	013223.66N 1245537.59E		
DME		CH42X	H-24			
Radar head				011920N 1245723E		Coverage range: 200 NM

WAMM AD 2.20 LOCAL TRAFFIC REGULATIONS

2.20.1 Airport regulation
Reserved

2.20.2 Taxiing to and from stands
Reserved

2.20.3 Parking area for small aircraft
Reserved

2.20.4 Parking area for helicopter
Reserved

2.20.5 Apron - taxiing during winter conditions
Reserved

2.20.6 Taxiing – limitations
Reserved

2.20.7 School and training flights – technical test flights – use of runways
Reserved

2.20.8 Helicopter traffic – limitation
Reserved

2.20.9 Removal of disable aircraft from runways
Reserved

WAMM AD 2.21 NOISE ABATEMENT PROCEDURES
Reserved

WAMM AD 2.22 FLIGHT PROCEDURES

2.22.1 Responsibility

Approach Control Unit (APP) is responsible for the provision of Air Traffic Control Service to all controlled flight within TMA / CTR

2.22.2 Altimeter Setting Procedures

2.22.2.1 This ICAO altimeter-setting procedure shall be used by all aircraft operating within TMA and CTR, QNH provided in mille-bars, in inches available on request.

2.22.2.2 Transition Altitudes 11,000 ft and Transition Level FL 130.

2.22.3 Communication Procedures

All aircraft within TMA and CTR shall be equipped with radio capable of conducting and maintaining two ways communication.

2.22.4 VFR Flight

2.22.4.1 Flight information and alerting service will only be provided to VFR Flight operation within TMA and CTR on request. VFR flight requesting the above service shall report intended action and comply with the position or as required by ATC.

2.22.4.2 No aircraft shall be operated under VFR within TMA and or CTR and prior authorization has been obtained from Approach.

2.22.5 Departure Procedures

Departing aircraft shall follow the Standard Instrument Departure (SID) or as instructed by ATC.

a. All departing aircraft are required to follow the appropriate TRANSITION and DEPARTURE routes as describes below :

ATS ROUTES	TRANSITION	TRANSITION ROUTES	SID RNP-AR
RWY18			
W15	PANDI	MM502 - MM965 - MM608 - MM613 - MM614 -MM961 -MM615 -MM616- PANDI	ALPON ONE ALPHA DEPARTURE
W51	ALPON	MM602 - MM965 - MM608 - MM613 - MM614 -MM961 -MM615 -MM616- ALPON	ALPON ONE ALPHA DEPARTURE
W32	LOKON	MM602 - MM965 - MM608 - MM613 - MM614 - MM961 - MM615 - MM616 - LOKON	LOKON ONE ALPHA DEPARTURE
W55	SOPUT	MM602 - MM962 - MM603 - MM604 - MM963 - MM606 - MM617 - MM607 - SOPUT	SOPUT ONE ALPHA DEPARTURE
W67	SIGAR	MM602 - MM962 - MM603 - MM604 - MM605 – SIGAR	SIGAR ONE ALPHA DEPARTURE
W61	JULAS	MM602 - MM962 - MM603 - MM604 - MM605 – JULAS	JULAS ONE ALPHA DEPARTURE
A461,R342	CATUR	MM602 - MM965 - MM608 - MM965 - MM609 - MM610 - MM966 - MM611- MM612 - BONDA - CATUR	CATUR ONE ALPHA DEPARTURE
RWY36			
W15	PANDI	MM502 - MM503 - MM998 MM504 - MM505 - MM706 - MM707 - PANDI	PANDI ONE BRAVO DEPARTURE
W51	ALPON	MM502 - MM503 - MM998- MM504 – MM505 - MM706 - MM707 - ALPON	ALPON ONE BRAVO DEPARTURE
W32	LOKON	MM502 – MM503 - MM998 – MM504 - MM505 - MM706 - MM707 -LOKON	LOKON ONE BRAVO DEPARTURE
W55	SOPUT	MM502 – MM503 - MM998 – MM504 - MM997 – MM506 - MM603 - MM604- MM963 - MM606 - MM617 - MM607- SOPUT	SOPUT ONE BRAVO DEPARTURE
W67	SIGAR	MM502 – MM503 - MM998 – MM504 - MM997 – MM506 - MM603 - MM604 - MM60S - SIGAR	SIGAR ONE BRAVO DEPARTURE
W61	JULAS	MM502 – MM503 - MM998 – MM504 – MM506 - MM603 - MM604 - MM605 - JULAS	JULAS ONE RAVO DEPARTURE
A461,R342	CATUR	MM502 - MM996 - MM507 - MM713 - MM714 - CATUR	CATUR ONE BRAVO DEPARTURE

b. Waypoint coordinates which are used on the SIDs RNAV depicted on the following table :

WAYPOINT	LATITUDE	LONGITUDE
RWY 18		
ALPON	010406.71N	1240944.25E
BONDA	020241.52N	1245249.57E
CATUR	020931.92N	1245427.94E
JULAS	011008.83N	1254620.30E
LOKON	004152.38N	1242405.82E
MM600	013214.50N	1245533.27E
MM601	013111.65N	1245525.70E
MM602	012952.95N	1245455.40E
MM603	012533.19N	1245605.00E
MM604	012149.19N	1250416.07E
MM605	011136.99N	1252611.60E
MM606	011937.96N	1250633.11E
MM607	005813.22N	1251837.56E
MM608	012842.15N	1245304.07E
MM609	012846.12N	1245146.42E
MM610	013027.01N	1244553.06E
MM611	013437.46N	1244340.70E
MM612	013952.59N	1244523.36E
MM613	012658.36N	1244320.55E
MM614	012543.57N	1243619.70E
MM615	012459.75N	1243430.77E
MM616	012012.11N	1242719.86E
MM960 (CNF)	013132.25N	1245236.77E
MM961 (CNF)	012058.48N	1243709.75E
MM962 (CNF)	012811.91N	1245716.47E
MM963 (CNF)	011725.50N	1250217.34E
MM965 (CNF)	013134.34N	1245233.84E
MM966 (CNF)	013336.20N	1244646.40E
PANDI	010752.11N	1240842.16E
RWY18	013340.73N	1245536.13E
SIGAR	010300.51N	1254427 .62E
SOPUT	003759.21N	1252532.27E
RWY 36		
ALPON	010406.71N	1240944.25E
CATUR	020931.92N	1245427.94E
JULAS	011008.83N	1254620.30E
LOKON	004152.38N	1242405.82E
MM501	013400.57N	1245536.78E

MM502	013552.82N	1245357.14E
MM503	013605.51N	1245118.26E
MM504	013535.86N	1244917.67E
MM505	013400.00N	1244645.23E
MM506	012823.9N	1244947.05E
MM507	014030.28N	1245119.49E
MM603	012533.19N	1245605.00E
MM604	012149.19N	1250416.07E
MM605	011136.99N	1252611.6E
MM606	011937.96N	1250633.11E
MM607	005813.22N	1251837.56E
MM617	011135.53N	1251105.17E
MM706	012836.38N	1243810.62E
MM707	011923.70N	1242718.34E
MM713	014421.78N	1245311.4E
MM714	014932.53N	1245729.85E
MM963 (CNF)	011725.5N	1250217.34E
MM996 (CNF)	013905.66N	1245412.36E
MM997 (CNF)	013207.77N	1245126.88E
MM998 (CNF)	013246.89N	1245102.59E
MM999(CNF)	013404.20N	1245348.57E
PANDI	010752.11N	1240842.16E
RWY 36 (DER)	013214.5N	1245533.27E
SIGAR	010300.51N	1254427.62E
SOPUT	003759.21N	1252532.27E

c. Database coding reference for RNAV SID RWY 18

FIX/ NAVAID	LAT/LONG	C	FO/ FB	LEG TYPE	TRUE	MAG-NETIC	DIST (NM)	ALT	SPEED	REMARKS
RWY 18	013340.73N 1245536.13E									
MM600	013214.50N 1245533.27E	Y	FB	TF	181.91	181.01	1.43			
MM601	013111.6SN 1245525.70E	Y	FB	TF	186.91	186.01	1.05	+400		
MM960 (CNF)	013132.25N 1245236.77E	N								R 2.84 NM ARC RADIUS
MM602	012952.95N 1245455.40E	Y	FB	RF			1.41	+1200	-210	

PANDI TRANSITION										
MM602	012952.95N 1245455.40E			IF				+1200	-210	
MM965 (CNF)	013134.34N 1245233.84E	N								R 2.90 NM ARC RADIUS

MM608	012842.15N 1245304.07E	Y	FB	RF			2.25	+1600	-230	
MM613	012658.36N 1244320.55E	Y	FB	TF	259.98	259.08	9.89	4000		
MM614	012543.57N 1243619.70E	Y	FB	TF	259.99	259.09	7.13	+5000		
MM961 (CNF)	012058.48N 1243709.75E	N								L 4.8 NM ARC RADIUS
MM615	012459.75N 1243430.77E	Y	FB	RF			1.97		-250	
MM616	012012.11N 1242719.86E	Y	FB	TF	236.45	235.55	8.63	9000		
PANDI	010752.11N 1240842.16E	Y	FB	TF	236.7	235.8	22.3			

ALPON TRANSITION										
MM602	012952.95N 1245455.40E			IF				+1200		
MM965 (CNF)	013134.34N 1245233.84E	N								R 2.90 NM ARC RADIUS
MM608	012842.15N 1245304.07E	Y	FB	RF			2.25	+1600	-230	
MM613	012658.36N 1244320.55E	Y	FB	TF	259.98	259.08	9.89	4000		
MM614	012543.57N 1243619.70E	Y	FB	TF	259.99	259.09	7.13	+5000		
MM961 (CNF)	012058.48N 1243709.75E	N								L 4.8 NM ARC RADIUS
MM615	012459.75N 1243430.77E	Y	FB	RF			1.97		-250	
MM616	012012.11N 1242719.86E	Y	FB	TF	236.45	235.55	8.63	9000		
ALPON	010406.71N 1240944.25E	Y	FB	TF	227.7	226.8	23.8			

LOKON TRANSITION										
MM602	012952.95N 1245455.40E			IF				+1200		
MM965 (CNF)	013134.34N 1245233.84E	N								R 2.90 NM ARC RADIUS
MM608	012842.15N 1245304.07E	Y	FB	RF			2.25	+1600	-230	
MM613	012658.36N 1244320.55E	Y	FB	TF	259.98	259.08	9.89	4000		
MM614	012543.57N 1243619.70E	Y	FB	TF	259.99	259.09	7.13	+5000		
MM961 (CNF)	012058.48N 1243709.75E	N								L 4.8 NM ARC RADIUS

MM615	012459.75N 1243430.77E	Y	FB	RF			1.97		-250	
MM616	012012.11N 1242719.86E	Y	FB	TF	236.45	235.55	8.63	9000		
LOKON	004152.38N 1242405.82E	Y	FB	TF	184.9	184	38.3			

SOPUT TRANSITION										
MM602	01252.95N 1245455.40E			IF				+1200	-210	
MM962 (CNF)	012811.91N 1245716.47E	N								
MM603	012533.19N 1245605.00E	Y	FB	RF			5.01	+2200	-2 10	
MM604	012149.19N 1250416.07E	Y	FB	TF	114.38	113.48	9	+4000		
MM963 (CNF)	011725.50N 1250217.34E	N								
MM606	011937.96N 1250633.11E	Y	FB	RF			3.22	+5000	-250	R 4.80 NM ARC RADIUS
MM617	011135.53N 1251105.17E	Y	FB	TF	150.42	149.52	9.2	7000		
MM607	005813.22N 1251837.S6E	Y	FB	TF	150.42	149.52	15.3	8000		
SOPUT	003759.21N 1252532.27E	Y	FB	TF	161	160.1	21.3			

SIGAR TRANSITION										
MM602	012952.95N 1245455.40E			IF				+1200	-210	
MM962 (CNF)	012811.91N 1245716.47E	N								R 2.89NM ARC RADIUS
MM603	012533.19N 1245605.00E	Y	FB	RF			5.01	+2200	-210	
MM604	011149.19N 1250416.07E	Y	FB	TF	114.38	113.48	9	+4000		
MM605	011136.99N 1252611.60E	Y	FB	TF	114.81	113.91	24.2	8000		
SIGAR	010300.51N 1254427.62E	Y	FB	TF	115.1	114.2	20.2			

JULAS TRANSITION										
MM602	012952.95N 1245455.40E			IF				+1200	-210	
MM962 (CNF)	012811.91N 1245716.47E	N								R 2.89NM ARC RADIUS

MM603	012533.19N 1245605.00E	Y	FB	RF			5.01	+2200	-210	
MM604	011149.19N 1250416.07E	Y	FB	TF	114.38	113.48	9	+4000		
MM605	011136.99N 1252611.60E	Y	FB	TF	114.81	113.91	24.2	8000		
JULAS	011008.83N 1254620.30E	Y	FB	TF	94.1	93.2	20.2			

CATUR TRANSITION										
MM602	012952.95N 1245455.40E			IF				+1200		
MM965 (CNF)	013134.34N 1245233.84E	N								R 2.90 NM ARC RADIUS
MM608	012842.15N 1245304.07E	Y	FB	RF			2.25	+1600	-230	
MM965 (CNF)	013134.34N 1245233.84E	N								R 2.90 NM ARC RADIUS
MM609	012846.12N 1245146.42E	Y	FB	RF			1.31			
MM610	013027.01N 1244553.06E	Y	FB	TF	285.84	284.94	6.13	3000		
MM966 (CNF)	013336.20N 1244646.40E	N								R 2.90 NM ARC RADIUS
MM611	013437.46N 1244340.70E	Y	FB	RF			5.26	+4000	-230	
MM612	013952.59N 1244523.36E	Y	FB	TF	18.15	17.25	5.5	+5000		
BONDA	020241.62N 1245249.57E		FB	TF	18.16	17.26	23.9	9000		
CATUR	020931.92N 1245427.94E	Y	FB	TF	13.56	12.66	7			

d. Database coding reference for RNAV SID RWY 36

FIX/ NAVAID	LAT/LONG	C	FO /FB	LEG TYPE	TRUE	MAG	DIST (NM)	ALT	SPEED	REMARKS
RWY36 (DER)	013340.73N 1245536.13E	N								
MM501	013400.57N 1245536.78E	Y	FB	TF	1.89	0.99	0.33			
MM999 (CNF)	013404.20N 1245348.57E	N								
MM501	013552.82 N 1245357.14 E	Y	FB	RF			2.79	+1000	-190	

PANDI TRANSITION										
MM502	013552.82N 1245357.14E			IF				+1000		
MM503	013605.51N 1245118.26E	Y	FB	TF	274.54	273.64	2.66			
MM998 (CNF)	013246.89N 1245102.59E	N								L3.30 NM ARC RADIUS
MM504	013535.86N 1244917.67E	Y	FB	RF			2.1	3000	-230	
MM505	013400.00N 1244645.23E	Y	FB	TF	238	237.1	3	4000		
MM706	012836.38N 1243810.62E	Y	FB	TF	238	237.1	10.13	+5000		
MM707	011923.70N 1242718.34E	Y	FB	TF	229.91	229.01	14.23	+8000		
PANDI	010752.11N 1240842.16E	Y	FB	TF	238.4	237.5	21.9			
ALPON TRANSITION										
MM502	013552.82N 1245357.14E			IF				+1000		
MM503	013605.51N 1245118.26E	Y	FB	TF	274.54	273.64	2.66			
MM998 (CNF)	013246.89N 1245102.59E	N								L3.30 NM ARC RADIUS
MM504	013535.86N 1244917.67E	Y	FB	RF			2.1	3000	-230	
MM505	013400.00N 1244645.23E	Y	FB	TF	238	237.1	3	4000		
MM706	012836.38N 1243810.62E	Y	FB	TF	238	237.1	10.13	+5000		
MM707	011923.70N 1242718.34E	Y	FB	TF	229.91	229.01	14.23	+8000		
ALPON	010406.71N 1240944.25E	Y	FB	TF	229.2	228.3	23.3			
LOKON TRANSITION										
MM502	013552.82N 1245357.14E			IF				+1000		
MM503	013605.51N 1245118.26E	Y	FB	TF	274.54	273.64	2.66			
MM998 (CNF)	013246.89N 1245102.59E	N								L3.30 NM ARC RADIUS
MM504	013535.86N 1244917.67E	Y	FB	RF			2.1	3000	-230	
MM505	013400.00N 1244645.23E	Y	FB	TF	238	237.1	3	4000		
MM706	012836.38N	Y	FB	TF	238	237.1	10.13	+5000		

	1243810.62E									
MM707	011923.70N 1242718.34E	Y	FB	TF	229.91	229.01	14.23	+8000		
LOKON	004152.38N 1240405.82E	Y	FB	TF	184.9	184	37.5			
SOPUT TRANSITION										
MM502	013552.82N 1245357.14E			IF				+10000		
MM503	013605.51N 1245118.26E	Y	FB	TF	274.54	273.64	2.66			
MM998 (CNF)	013246.89N 1245102.59E	N								L3.30 NM ARC RADIUS
MM504	013535.86N 1244917.67E	Y	FB	RF			2.1	3000	-230	
MM997 (CNF)	013207.77N 1245126.88E	N								L4.07 NM ARC RADIUS
MM506	012823.9N 1244947.05E	Y	FB	RF			8.79	+7000	-230	
MM603	012533.19N 1245605.00E	Y	FB	TF	114.18	113.28	6.91	+8000		
MM604	012149.19N 1250416.07E	Y	FB	TF	114.38	113.48	9	10000		
MM963 (CNF)	011725.50N 1250217.34E	N								R 4.80 NM ARC RADIUS
MM606	011937.96N 1250633.11E	Y	FB	RF			3.22	10000	-230	
MM617	011135.53N 1251105.17E	Y	FB	TF	150.42	149.52	9.2	10000		
MM607	005813.22N 1251837.S6E	Y	FB	TF	150.42	149.52	15.3	10000		
SOPUT	003759.21N 1252532.27E	Y	FB	TF	161	160.1	21.3			
SIGAR TRANSITION										
MM502	013552.82N 1245357.14E			IF				+10000		
MM503	013605.51N 1245118.26E	Y	FB	TF	274.54	273.64	2.66			
MM998 (CNF)	013246.89N 1245102.59E	N								L3.30 NM ARC RADIUS
MM504	013535.86N 1244917.67E	Y	FB	RF			2.1	3000	-230	
MM997 (CNF)	013207.77N 1245126.88E	N								L4.07 NM ARC RADIUS
MM506	012823.9N	Y	FB	RF			8.79	+7000	-230	

	1244947.05E									
MM603	012533.19N 1245605.00E	Y	FB	TF	114.18	113.28	6.91	+8000		
MM604	011149.19N 1250416.07E	Y	FB	TF	114.38	113.48	9	10000		
MM605	011136.99N 1252611.60E	Y	FB	TF	114.81	113.91	24.19	10000		
SIGAR	010300.51N 1254427.62E	Y	FB	TF	115.1	114.2	20.2	10000		
JULAS TRANSITION										
MM502	013552.82N 1245357.14E			IF				+10000		
MM503	013605.51N 1245118.26E	Y	FB	TF	274.54	273.64	2.66			
MM998 (CNF)	013246.89N 1245102.59E	N								L3.30 NM ARC RADIUS
MM504	013535.86N 1244917.67E	Y	FB	RF			2.1	3000	-230	
MM997 (CNF)	013207.77N 1245126.88E	N								L4.07 NM ARC RADIUS
MM506	012823.9N 1244947.05E	Y	FB	RF			8.79	+7000	-230	
MM603	012533.19N 1245605.00E	Y	FB	TF	114.18	113.28	6.91	+8000		
MM604	011149.19N 1250416.07E	Y	FB	TF	114.38	113.48	9	10000		
MM605	011136.99N 1252611.60E	Y	FB	TF	114.81	113.91	24.19	10000		
JULAS	011008.83N 1254620.30E	Y	FB	TF	94.1	93.2	20.2	10000		
CATUR TRANSITION										
MM502	013552.82N 1245357.14E			IF				+10000		
MM996 (CNF)	013905.66N 1245412.36E	N								R 3.21 NM ARC RADIUS
MM507	014030.28N 1245119.49E	Y	FB	RF			6.24	3000	-230	
MM713	014421.78N 1245311.4E	Y	FB	TF	25.94	25.04	4.27	4000		
MM714	014932.53N 1245729.85E	Y	FB	TF	39.92	39.02	6.72	+6000		
CATUR	020931.92N 1245427.94E	Y	FB	TF	351.32	350.42	20.12	+8000		

2.22.6 Arrival Procedures

Arriving aircraft shall follow the Standard Instrument Arrival or as instructed by ATC

a. All arriving aircraft are required to follow the appropriate TRANSTION and ARRIVAL routes as describes below :

ATS ROUTES	TRANSITION	TRANSITION ROUTES	STAR RNP-AR
RWY18			
A461, R342	BONDA	BONDA - UMALA - MM529 - MM528 - MM527	BONDA ONE ALPHA ARRIVAL
W15	PANDI	PANDI - MM807 - MM532 - TAKIM - MM530 - MM527	PANDI ONE CHARLIE ARRIVAL
W51	ALPON	ALPON - MM807 - MM532 - TAKIM - MM530 - MM527	ALPON ONE CHARLIE ARRIVAL
W32	LOKON	LOKON - MM807 - MM532 - TAKIM - MM530 - MM527	LOKON ONE CHARLIE ARRIVAL
W55	SOPUT	SOPUT - MM803 - PETIR - MM535 - MM534 - MM533 – MM527	SOPUT ONE CHARLIE ARRIVAL
W67	SIGAR	SIGAR - MM803 - PETIR – MM535 – MM534 - MM533 – MM527	SIGAR ONE CHARLIE ARRIVAL
W61	JULAS	JULAS - MM803 - PETIR – MM535 – MM534 - MM33 – MM527	JULAS ONE CHARLIE ARRIVAL

RWY36			
A461, R342	BONDA	BONDA - UMALA - NAKEN - MM664 - MM660 - MM659	BONDA ONE BRAVO ARRIVAL
W15	PANDI	PANDI- MM807 - DANES - MM662 - MM661- MM660 - MM659	PANDI ONE DELTA ARRIVAL
W51	ALPON	ALPON- MM807 - DANES - MM662 - MM661- MM660 - MM659	ALPON ONE DELTA ARRIVAL
W32	LOKON	LOKON - MM807 - DANES - MM662 - MM661- MM660 - MM659	LOKON ONE DELTA ARRIVAL
W55	SOPUT	SOPUT - MM803 - SAMAH - MM670 - MM669 - MM668 - MM667 - MM659	SOPUT ONE DELTA ARRIVAL
W67	SIGAR	SIGAR - MM803 - SAMAH - MM670 - JULAS - MM803 - SAMAH - MM670-	SIGAR ONE DELTA ARRIVAL
W61	JULAS	JULAS - MM803 - SAMAH - MM670 - MM669 - MM668 - MM667 - MM659	JULAS ONE DELTA ARRIVAL

b. Waypoint coordinates which are used on the STARs RNAV depicted on the following table :

WAYPOINT	LATITUDE	LONGITUDE
	RWY 18	
ALPON	010406.71N	1240944.25E
BONDA	020241.62N	1245249.57E
JULAS	011008.83N	1254620.30E
LOKON	004152.38N	1242405.82E
MM521	012704.51N	1244359.37E
MM522	013311.84N	1244325.43E
MM523	012904.29N	1244910.98E
MM524	013214.50N	1245533.27E
MM525	013641.52N	1245542.12E
MM526	013732.78N	1245531.83E
MM527 (FAF)	013857.58N	1245452.96E
MM528 (IF)	014141.84N	1245337.67E
MM529	014352.34N	1245319.75E
MM530 (IF)	013842.22N	1244925.75E
TAKIM	012919.89N	1244609.12E
MM532	012035.88N	1244112.75E
MM533 (IF)	014252.69N	1245617.51E
MM534	014124.99N	1250014.70E
MM535	013650.00N	1250217.51E
PETIR	012859.77N	1250547.49E
UMALA	014922.89N	1245411.89E
MM803	011034.68N	1252556.23E
MM807	010904.87N	1242908.86E
MM901	013743.08N	1245212.45E
MM902	014012.07N	1245733.47E
MM903	014316.80N	1245702.27E
MM904	013645.30N	1245349.53E
MM905	013222.62N	1245131.35E
MM906	012953.47N	1244105.11E
PANDI	010752.11N	1240842.16E
RWY18	013340.73N	1245536.13E
SIGAR	010300.51N	1254427.62E
SOPUT	003759.21N	1252532.27E
	RWY 36	
ALPON	010406.71N	1240944.25E
BONDA	020241.62N	1245249.57E
DANES	012222.39N	1243943.33E
JULAS	011008.83N	1254620.30E
LOKON	004152.38N	1242405.82E
MM651	014055.00N	1244942.80E
MM652	014042.64N	1244236.63E
MM653	013710.31N	1244537.28E
MM654	013635.64N	1244917.35E
MM655	013557.39N	1245326.34E
MM656	013320.89N	1245535.47E

MM657	013013.98N	1245529.28E
MM65S	012904.39N	1245502.22E
MM659	012534.30N	1245436.39E
MM660	012735.89N	1245225.73E
MM661	012741.99N	1244752.23E
MM662	012705.99N	1244605.54E
MM664	013030.05N	1244941.76E
MM667	012616.93N	1245359.97E
MM668	012406.72N	1245615.69E
MM669	012323.66N	1250112.17E
MM670	012231.91N	1250306.51E
MM803	011034.68N	1252556.23E
MM807	010904.57N	1242908.86E
MM911 (CNF)	011937.12N	1250039.69E
MM912 (CNF)	012453.19N	1244748.52E
MM913 (CNF)	013024.68N	1245229.44E
MM914 (CNF)	013017.71N	1245337.90E
MM915 (CNF)	013325.99N	1245303.37E
MM916 (CNF)	012647.85N	1245638.79E
MM917 (CNF)	014042.45N	1244609.85E
NAKEN	013725.89N	1244954.90E
PANDI	010752.11N	1240842.16E
RWY36	013214.5N	1245533.27E
SAMAH	011405.82N	1251301.24E
SIGAR	010300.51N	1254427.62E
SOPUT	003759.21N	1252532.27E
UMALA	014922 .89N	1245411.89E

c. Database coding reference for RNAV STAR RWY 18

FROM	TO	TRUE	MAG	LEG TYPE	AIR SPEED	RF RAD	ARC DIR	DIST	ALT	RNP LEVEL
BONDA TRANSITION										
	BONDA			IF					+8000	
BONDA	UMALA (IAF)	174.08	173.18	TF				13.32	+5000	1.00
UMALA	MM529	189.02	188.12	TF	-210			5.55	+3000	0.30
MM529	MM528 (IF)			RF	-210	3.76	L	2.22	+2500	0.30
MM528 (IF)	MM527	155.24	154.34	TF				3	+2100	0.30

PANDI TRANSITION										
	PANDI			IF						
PANDI	MM807	86.62	85.72	TF				20.5	+11000	1.00
MM807	MM532	46.51	45.61	TF				16.65	+8000	1.00
MM532	TAKIM (IAF)	29.65	28.75	TF				10	+6500	1.00
TAKIM	MM530	19.39	18.49	TF	-210			9.89	+3000	0.30
MM530 (IF)	MM527			RF	-210	2.95	R	6.99	+2100	0.30
ALPON TRANSITION										
	ALPON			IF						
ALPON	MM807	75.7	74.8	TF				20.1	+11000	1.00
MM807	MM532	46.51	45.61	TF				16.65	+8000	1.00
MM532	TAKIM (IAF)	29.65	28.75	TF				10	+6500	1.00
TAKIM	MM530	19.39	18.49	TF	-210			9.89	+3000	0.30
MM530 (IF)	MM527			RF	-210	2.95	R	6.99	+2100	0.30
LOKON TRANSITION										
	LOKON			IF						
LOKON	MM807	10.6	9.7	TF				27.5	+11000	1.00
MM807	MM532	46.51	45.61	TF				16.65	+8000	1.00
MM532	TAKIM (IAF)	29.65	28.75	TF				10	+6500	1.00
TAKIM	MM530	19.39	18.49	TF	-210			9.89	+3000	0.30
MM530 (IF)	MM527			RF	-210	2.95	R	6.99	+2100	0.30
SOPUT TRANSITION										
	SOPUT			IF						
SOPUT	MM803	0.7	359.8	TF				32.5	+11000	1.00
MM803	PETIR (IAF)	312.26	311.36	TF				27.26	+8000	1.00
PETIR	MM535	335.8	334.9	TF				8.55	+5000	0.30
MM535	MM534	335.8	334.9	TF	210			5	+4000	0.30
MM534	MM533			RF	210	2.95	L	4.7	+2600	0.30
MM533 (IF)	MM527			RF	210	2.95	L	4.6	+2100	0.30

SIGAR TRANSITION										
	SIGAR			IF						
SIGAR	MM803	292. 1	291.2	TF				20	+11000	1.00
MM803	PETIR (IAF)	312.26	311.36	TF				27.26	+8000	1.00
PETIR	MM535	335.8	334.9	TF				8.55	+5000	0.30
MM535	MM534	335.8	334.9	TF	210			5	+4000	0.30
MM534	MM533			RF	210	2.95	L	4.7	+2600	0.30
MM533 (IF)	MM527			RF	210	2.95	L	4.6	+2100	0.30
JULAS TRANSITION										
	JULAS			IF						
JULAS	MM803	271.2	270.3	TF				20.5	+11000	1.00
MM803	PETIR (IAF)	312.26	311.36	TF				27.26	+8000	1.00
PETIR	MM535	335.8	334.9	TF				8.55	+5000	0.30
MM535	MM534	335.8	334.9	TF	210			5	+4000	0.30
MM534	MM533			RF	210	2.95	L	4.7	+2600	0.30
MM533 (IF)	MM527			RF	210	2.95	L	4.6	+2 100	0.30
MM527 (FAF)	MM526	155.24	154.34	TF				1.55		
MM526	MM525			RF	165	1.88	R	0.88		0.30
MM525	RWY18	181.91	181.01	TF				3		0.30
RWY18	MM524	181.91	181.01	TF				1.43		0.30
MM524	MM523			RF	230	4.04	R	8.05		0.30
MM523	MM522	305.45	304.55	TF				7. 1		1.00
MM522	MM521			RF	230	4.04	R	18.44		1.00
MM521	TAKIM	43.96	43.06	TF				3.1	6500	1.00

d. Database coding reference for RNAV STAR RWY 36

FROM	TO	TRUE	MAG	LEG TYPE	AIR SPEED	RF RAD	ARC DIST	DIST	ALT	RNP LEVEL
BONDA TRANSITION										
	BONDA			IF					11000	

BONDA	UMALA	174.08	173.18	TF				13.32	+9000	1.00
UMALA	NAKEN (IAF)	199.83	198.93	TF				12.64	+5000	0.3
NAKEN	MM664	181.82	180.92	TF	-210			6.9	+3000	0.3
MM664	MM660			RF	-210	2.8	L	4.43	+1900	0.3
MM660	MM659 (FAF)			RF	-210	2.8	L	2.47	+1600	0.3
PANDI TRANSITION										
	PANDI			IF						
PANDI	MM807	86.62	85.72	TF				20.5	+11000	1.00
MM807	DANES (IAF)	38.68	37. 78	TF				16.94	+6000	1.00
DANES	MM662	53.55	52.65	TF				8	+3500	0.3
MM662	MM661			RF	-210	2.8	R	1.84	+3000	0.3
MM661	MM660	91.27	90.37	TF				4.57	+1900	0.3
MM660	MM659 (FAF)			RF	-210	2.8	L	2.47	+1600	0.3
ALPON TRANSITION										
	ALPON			IF						
ALPON	MM807	75.7	74.8	TF				20.1	+11000	1.00
MM807	DANES (IAF)	38.68	37. 78	TF				16.94	+6000	1.00
DANES	MM662	53.55	52.65	TF				8	+3500	0.3
MM662	MM661			RF	-210	2.8	R	1.84	+3000	0.3
MM661	MM660	91.27	90.37	TF				4.57	+1900	0.3
MM660	MM659 (FAF)			RF	-210	2.8	L	2.47	+1600	0.3
LOKON TRANSITION										
	LOKON			IF						
LOKON	MM807	10.6	9.7	TF				27.5	+11000	1.00
MM807	DANES (IAF)	38.68	37. 78	TF				16.94	+6000	1.00
DANES (IAF)	MM662	53.55	52.65	TF				8	+3500	0.3
MM662	MM661			RF	-210	2.8	R	1.84	+3000	0.3
MM661	MM660	91.27	90.37	TF				4.57	+1900	0.3
MM660	MM659 (FAF)			RF	-210	2.8	L	2.47	+1600	0.3

SOPUT TRANSITION										
	SOPUT			IF						
SOPUT	MM803	0.7	359.8	TF				32.5	+11000	
MM803	SAMAH (IAF)	285.15	284.25	TF				13.4	+7000	1.00
SAMAH	MM670	310.22	309.32	TF				13	+4500	0.3
MM670	MM669			RF	-210	3.8	L	2.12	+4000	0.3
MM669	MM668	278.12	277.22	TF				5	+2500	0.3
MM668	MM667			RF	-210	2.7	R	3.34	+1900	0. 3
MM667	MM659 (FAF)			RF	-210	2.7	R	2.44	+1600	0.3
SIGAR TRANSITION										
	SIGAR			IF						
SIGAR	MM803	292.1	291.2	TF				20	+11000	1.00
MM803	SAMAH (IAF)	285.15	284.25	TF				13.4	+7000	1.00
SAMAH	MM670	310.22	309.32	TF				13	+4500	0.3
MM670	MM669			RF	-210	3.8	L	2.12	+4000	0.3
MM669	MM668	278.12	277.22	TF				5	+2500	0.3
MM668	MM667			RF	-210	2.7	R	3.34	+1900	0.3
MM667	MM659 (FAF)			RF	-210	2.7	R	2.44	+1600	0.3
JULAS TRANSITION										
	JULAS			IF						
JULAS	MM803	271.2	270.3	TF				20.S	+11000	1.00
MM803	SAMAH (IAF)	285.15	284.25	TF				13.4	+7000	1.00
SAMAH	MM670	310.22	309.32	TF				13	+4500	0.3
MM670	MM669			RF	-210	3.8	L	2.12	+4000	0.3
MM669	MM668	278.12	277.22	TF				5	+2500	0.3
MM668	MM667			RF	-210	2.7	R	3.34	+1900	0.3
MM667	MM659 (FAF)			RF	-210	2.7	R	2.44	+1600	0.3
MM659	MM658	40.82	39.92	TF				0.66		0.3

MM658	MM657			RF	-165	1.86	L	1.26		0.3
MM657	RWY36	1.91	1.01	TF				2		0.3
RWY36	MM656	1.91	1.01	TF				1.1		0.3
MM656	MM655			RF	-210	2.54	L	3.73		0.3
MM655	MM654	278.69	277.79	TF				4.2	No Constrain Alt.	0. 5
MM654	MM653	278.89	277.99	TF				3.72	No Constrain Alt.	0.5
MM653	MM652			RF	-210	3.6	R	5.04	No Constrain Alt.	1.00
MM652	MM651			RF	-210	3.6	R	10.97	No Constrain Alt.	1.00
MM651	NAKEN	176.66	175.76	TF				3.47	5000	1.00

2.22.7 Position Reporting Procedures

Aircraft operating within or about to enter TMA and or CTR shall report position:

a. Over TMA Boundary
b. Over any other point or time as instructed by ATC.

2.22.8 Communication Failure Procedures

Aircraft radio communication failure procedures shall be in accordance with ICAO Standard and recommended practices, or:

2.22.8.1 In Visual Meteorological Condition (VMC)

a. Continue Fly in VMC
b. Fly full circuit over the Aerodrome, pilot shall endeavor to transmit blindly his position, intention, etc. so as to be monitored by Approach or any other traffic over TMA or and CTR.

2.22.8.2 In instrument Meteorological (IMC)

a. Proceed according to current Flight Plan to the appropriate designated navigation and serving Approach and when required to ensure compliance with (b) below, hold over this aid until commencement of descent.
b. Commence descent from the navigation aid specified in (a) or as close a possible to ETA as indicated in the filled flight plan and revised in accordance with current flight plan.
c. Land if possible within thirty minutes after the estimated time of arrival (ETA)

WAMM AD 2.23 ADDITIONAL INFORMATION

Reserved

WAMM AD 2.24 CHART RELATED TO THE AERODROME

WAMM AD 2.24-1 AERODROME CHART-ICAO, Dated 03 MAR 16;
WAMM AD 2.24-4 AERODROME OBSTACLE CHART-ICAO, Dated 03 MAR 16;
WAMM AD 2.24-7A STANDARD DEPARTURE CHART-INSTRUMENT (SID) ICAO RWY 36, Dated 03 MAR 16;
WAMM AD 2.24-7B STANDARD INSTRUMENT DEPARTURE CHART-INSTRUMENT (SID) ICAO RWY 18, Dated 02 MAR 17;
WAMM AD 2.24-7C STANDARD INSTRUMENT DEPARTURE CHART-INSTRUMENT (SID) RNAV (RNP) ICAO RWY 36, Dated 02 MAR 17;
WAMM AD 2.24-7D STANDARD INSTRUMENT DEPARTURE CHART-INSTRUMENT (SID) ICAO RWY 18 RNAV (RNP), Dated 02 MAR 17;
WAMM AD 2.24-9A STANDARD ARRIVAL CHART-INSTRUMENT (STAR)-ICAO, Dated 03 MAR 16;
WAMM AD 2.24-9B STANDARD ARRIVAL CHART-INSTRUMENT (STAR) RNAV (RNP) ICAO RWY 18 -ICAO,Dated 03 MAR 16;
WAMM AD 2.24-9C STANDARD ARRIVAL CHART-INSTRUMENT (STAR) RNAV (RNP) ICAO RWY 36 -ICAO,Dated 03 MAR 16;
WAMM AD 2.24-10A INSTRUMENT APPROACH CHART-ICAO ILS VOR/DME RWY 18, Dated 03 MAR 16;
WAMM AD 2.24-10B INSTRUMENT APPROACH CHART-ICAO ILS VOR/DME RWY RWY 36, Dated 03 MAR 16;
WAMM AD 2.24-10C INSTRUMENT APPROACH CHART-ICAO NDB RWY 36 CIRCLING CAT. A/B, Dated 26 NOV 07;
WAMM AD 2.24-10D INSTRUMENT APPROACH CHART-ICAO RWY 36 CIRCLING CAT C/D, Dated 03 MAR 16;