## GENERAL

### Operational Hours

**ATS Hours / ADMIN Hours:** H24

**Night Restrictions**

No TKOF/LDG 0000-0600‡. Except:

- Delayed OPS until 0100‡ for flights planned before 0000‡.
- Earlier LDG between 0500-0600‡ due to MET reason, provided the SKED ARR time is planned after 0600‡.
- Air movement subject to unforeseen schedule alteration due to abnormal disturbance within ATC.
- ALTN, EMERG, PN.

### Airport Information

**RFF:** CAT 9
**PCN:** RWY 17/35: 52/F/B/W/T, RWY 03/21: 80/F/B/W/T

### Operation

**Preferential RWY**

RWY 03/21 will be used preferentially as RWY-in-use. If RWY 03/21 is not AVBL pilots may REQ to use RWY 17/35, incurring in delay, since RWY 17/35 may be used for taxiing OPS.
RWY 35 should only be used when required for safety reasons.
RWY 17 should be used for TKOF only. RWY can be used for ARR by ACFT with APCH guidance requirements less demanding than turbojet and other ACFT of similar APCH guidance requirements.
When RWY 03/21 is CLSD, RWY 35 will be RWY-in-use.

**Transponder Mode S**

Select assigned transponder Mode A and activate Mode S, set AUTO if technically AVBL;

- from the time of the request for push-back or taxi
- after landing, continuously until ACFT is fully parked on stand.

Select ACFT identification feature if AVBL, before activating transponder.
TCAS should be selected when approaching the holding point and should then be deselected after vacating the RWY.
ACFT taxiing without flight plan shall select Mode A code 2000.

**Low Visibility Procedures**

RWY 21: LVP in force when RVR TDZ RWY 21 is 550m or below or cloud base height RWY 21 is 200ft or below.

RWY 03: LVP in force when RVR TDZ RWY 03 is 800m or below or cloud base height RWY 03 is 200ft or below.

RWY crossing/vacating: When SMGCS U/S report sensitive area vacated, when ACFT is completely out of yellow/green TWY CLL.

Leave RWY via illuminated TWY HS, P, N2 or M5 and report when sensitive area is vacated.

CAT II/III OPS: Pilots shall stop and request further instructions at any stop bar lighted, as well as at any segment of TWY CLL unlighted.

Surface Movement Guidance and Control System (SMGCS) in use when LVP activated.

**GENERAL**

**Reduced Runway Separation Minima (RRSM)**
RWY 03/21: RRSM in force:
- day and night;
- if tail wind component is not greater than 5KT;
- if ground VIS at least 5km and CEIL is not less than 300m / 1000ft;
- if braking action is not impaired by RWY deposits such as ice, slush, snow, water etc. Report any impaired braking action detected during LDG or DEP;

Expect LDG CLR when RWY in use is temporarily occupied by DEP traffic.

**High Intensity Runway Operations (HIRO)**
0600-0000‡, do not request RWY 35 unless RWY 03 is not suitable for OPS.

**RWY Restriction**
Pilots are advised that turbulence can be expected on final and touchdown zone RWY 03 when wind direction is between 310°-360°:
- With wind speeds between 14KT-20KT, gusting up to 36KT moderate turbulence can be expected.
- With wind speeds above 21KT and gusts above 36KT, servere turbulence can be expected.

**TWY Restrictions**
TWY E width 18m / 59ft.

Taxilane A1, A2, M1, K, Y MAX wingspan 48m / 157ft.
Taxilane B, C, W MAX wingspan 51m / 167ft.
Taxilane E, F MAX wingspan 36m / 118ft.
Taxilane D MAX wingspan 31m / 102ft.

ACFT with wingspan 52m / 171ft and above shall adopt a trajectory compatible with the TWY curve dimensions of TWY S2-S4, N2 and U2 enabling to always maintain ACFT main undercarriage central point travelling over TWY CL markings in order to avoid main gear lateral excursions.

TWY D unlighted.

**Taxi/Parking**
Follow-me and marshaller compulsory for parking, except stands with APIS.
All stands on APNs 10, 11, 12, 14, 20, 22, 30, 40, 41, 42, 50, 80 APIS AVBL.

When pilots receives from APIS wrong ACFT type, wrong flight number, an ERR-message (i.e ER-62), an ESTOP (emergency stop message), if the display becomes unreadable, or if the distance indicator remains frozen once the ACFT cockpit is abeam the boarding bridge, ACFT MUST BE STOPPED immediately, then contact GND, ask for marshaller and hold PSN.

Taxi on APN and adjacent TWY with idle PWR.

If pilots wish to vacate RWY 03/21 via TWY S1 or RWY 17 make the REQ in first contact with TWR.

ACFT on TWY A1, A2 or R1 when instructed to hold before RWY 17/35 shall stop facing north or south. Stop is not allowed on TWY M1, G1 or facing west.

ACFT taxiing via taxilane J to north and instructed to hold before TWY Q1 shall stop and hold on stand taxilane J facing north. Stop not allowed facing east.

MD11 or similar, taxi with ENG 2 at idle PWR. B747, A340 taxi with ENG 1 and 4 maintaining idle PWR.

TWY M3, R2, S1-S4, T: B747 or similar, are requested to taxi with ENG 1 and 4 at idle PWR.

Heavy ACFT not authorized to turn from TWY G2 onto U2 due jet blast hazard.

ACFT taxiing northbound on TWY S3 prohibited to turn right and enter TWY U6.

**GENERAL**

All ACFT intending to taxi in with single ENG operation, must consider to shut down port ENG before GPU AVBL. If unable because of APU inop, starboard ENG shall be running until GPU AVBL. Port ENG shall be shut down immediately upon ACFT stopped on stand.

Due to parking shortage: All non based ACFT parking time more than 12HR; PPR.

JET blast affecting RWY OPS: Vacating/crossing RWYs do not stop until RWY ILS sensitive area is clear or until reaching parallel alignment with RWY CL whichever applicable, unless otherwise inst. by ATC.

ACFT without crossing CLR for RWY 17/35 shall stop and hold parallel to RWY 17/35 before TWY G1, Y, M1, or K.

ACFT leaving nose-in stands must be towed. Use of reverse thrust not permitted.

When RWY 03 in use, ACFT taxiing via G2, U1 and N1 expect position N for departure. ACFT taxiing via M4 expect position M for departure. If unable advise before staring taxi.

**Reduced Engine Taxi**

Whenever operationally and safety feasible, all ACFT are requested to shut down as many ENGs as possible while taxiing and holding on ground, except in the following circumstances:

- By any ACFT reaching the HLDG point that is required to cross an active RWY (no ACFT in front of the same TWY)
- By any ACFT reaching the HLDG point for line-up (no ACFT in front of the same TWY)

**Apron Restrictions**

**APN 10, 11, 12 and 14**

- Use MNM PWR necessary when maneuvering on taxilane A1 and A2, this is of utmost importance when turning to cross or enter onto RWY 17/35 via TWY K, Y, G1, M1, where jet blast can affect adjacent stands and vehicles passing behind on APN service roads.
- All multi propeller ENG ACFT must have port engines fully shut down before entering stand.
- Allowing the ACFT to move backwards on stand without the assistance of push-back, tug or PWR push device being connected to the ACFT, is strictly prohibited.

**APN 14**

Push-back from stands 146, pushed along all lengths of stand maintain alignment with the lead-in line of stand until reaching TWY R2 and taxilane W1 intersection. From there a pull ahead manoeuvre shall be executed placing ACFT over R1 TWY CL.

**APN 42**

In LVP push-back from stands 424-426 shall be assisted by follow-me on TWR REQ to guarantee TWY U1 and P CLR.

**APN 50**

- Taxilane J MAX wingspan 65m / 213ft. Wider ACFT are exceptionally parked on this APN, always enter/exit through TWY M2 always assisted by follow-me while taxiing on taxilane J.
- ACFT facing north at stand taxilane J must only initiate after CLR for entering taxilane I. Stoppage not permitted to avoid jet blast at stand.506.

**APN 60**

- Taxilane F MAX wingspan 35.99m / 118ft. Larger ACFT using TWY G2.
- APN not provided with APIS. Stands 600, 601-609 follow-me or marshaller mandatory.

**GENERAL**

**APN 70**

- On PSNs 701-703 (nose-out) ACFT will have direct entrance through TWY R2 and DEP manoeuvre will be autonomous through taxilane D and via TWY W1.
- On PSN 704 (nose-in) ACFT will enter by TWY W1 and taxilane D, DEP manoeuvre will be done with push-back and pull-ahead to breakaway area of taxilane D with nose facing south, ACFT will begin taxiing by its own means to TWY W1 under TWR instructions.
- Use MNM PWR necessary when maneuvering on APN. This is of utmost importance when breach away from stands 701-703, 705, 706 and maneuvering to exit APN, where jet blast can affect adjacent stands and vehicles on APN service roads.

**APU**

Use of APU shut down earliest opportunity on stand.
Use of APU on stands not allowed except when GPU U/S.

Narrow-body:

- Use of APU restricted to MAX 15min after ARR and MAX 30min before ETD.
- If ACFT on a short turnaround time below 55min, APU may be left ON after ARR.
- If OAT below 5° or above 25°, APU restriction is extended to 60min before ETD.

Wide-body:

- Use of APU restricted to MAX 20min after ARR.
- Use of APU restricted to MAX 75min before DEP or not more 90min when GPU has not enough PWR to support the FMS.
- If ACFT on a short turnaround time below 110min, APU may be left ON after ARR.
- If OAT below 5° or above 25°, APU restriction is extended to 90min before ETD.

**Engine Run-up**

- On Multipurpose Ramp
- Idle power allowed on stands, TWR PPR.

**Warnings**

LDG RWY 03:
Low sun angle reduces visibility of HLDG PSN markings and signs RWY 35/17 taxiing out of RWY 03 via rapid exit TWY north and southbound through TWY U3.

Transition surface RWY 17/35 is protruded:

- On west side edge, whenever vehicles are passing on AD perimeter roadway area, between INT with RWY 03/21 and THR RWY 17.
- On east side by ACFT tails whenever these are parked on APN A from stand 104-126.

RWY 03: First 900m / 2953ft after THR steep slope of +0.7%.

**CP NDB:** Bearing errors up to +/- 10° in sector R314-R316 and R115-R117; up to +/- 8° on final APCH RWY 03.

**CAS DVOR** unusable:
R030-R060 beyond 20NM below FL100.
R290-R350 beyond 10NM below FL100.

Excessive errors may be observed in sectors 117°-184° and 300°-030°.

Birds in vicinity of AD. Gas cannon devices along RWY 03/21 and permanently activated.

**ARRIVAL**

**Speed**

Within Lisboa AD unless other wise advised by ATC, Speed adjustment under radar control on ARR in accordance with following:
- MAX IAS 280KT between FL245 and FL100.
- MAX IAS 250KT at and below FL100.
- MAX IAS 220KT at and below FL70.
- MAx IAS 200KT at and below 4000ft.
- MAX IAS between 180KT and 160KT when established on ILS (D8) or on final APCH segment.
- Thereafter 160KT until 4NM from THR.

Additionally, ATC may REQ specific speeds for accurate spacing.
Comply with speed adjustments as promptly as feasible within own operational constraints.
Advise ATC if change of speed is required for performance reasons.

**Communication**

On first contact with APP report callsign, cleared LVL and STAR.

**COM Failure**
**RWY 03/35**
Fly at/to the last assigned LVL to CP HLDG and at ETA according current flight plan or EAT (when received and acknowledged) start descent to initial APCH ALT for standard APCH.

RNAV
In case of COM failure, perform the assigned RNAV STAR, if received and acknowledged, or FPL RNAV STAR until final LDG complying with FL and speed constraints. Squawk ident 3min before start descend.

**RWY 21**
Fly at/to the last assigned LVL to LAR HLDG and at ETA according current flight plan or EAT (when received and acknowledged) start descent to initial APCH ALT for standard APCH.

RNAV
In case of COM failure, perform the assigned RNAV STAR, if received and acknowledged, or FPL RNAV STAR until final LDG complying with FL and speed constraints. Squawk ident 3min before start descend.

**In case of MISAP**
**RWY 03**
ILS or LOC, NDB:
Climb FL70 straight ahead to intercept and proceed R095 LIS DVOR/DME. At D24 LIS DVOR/DME turn right to intercept and proceed R189 FTM DVOR/DME. When crossing R071 ESP DVOR/DME turn right to intercept and proceed R074 ESP DVOR/DME to ADSAD HLDG. After completing one HLDG pattern proceed on track 297° to intercept and proceed on R146 CAS DVOR/DME to PT541 descending to 3000ft to perform another ILS APCH.

RNAV
Climb FL70 straight ahead via PT544 to intercept and proceed via PT801, PT802, PT803 to HLDG ADSAD. After completing one HLDG pattern proceed via PT406 and PT404 descending to 3000ft to perform another RNAV (GNSS) APCH.

**ARRIVAL**

**RWY 21**
ILS or LOC Z / Y, ILS Z/Y CAT II/III, LOC Z/Y, LCTR, NDB:
Climb FL70 straight ahead to intercept and proceed R358 ESP DVOR/DME. At D7 ESP DVOR/DME turn left to intercept and proceed R066 ESP DVOR/DME. At D27 ESP DVOR/DME turn left to intercept and proceed R189 FTM DVOR. At D49 FTM DVOR turn left to intercept and proceed on QDR 105° LAR NDB HLDG. Complete one HLDG pattern descend to 4000ft to perform another ILS APCH.

RNAV
Climb FL70 straight ahead via PT554 to proceed via PT804, PT803, PT802 to HLDG LAR NDB. Complete one HLDG pattern to descend to 4000ft to perform another RNAV (GNSS) APCH.

**RWY 35**
DVOR
Climb FL70 straight ahead, at D5 LIS DVOR/DME turn right to intercept and proceed R095 LIS DVOR/DME. At D24 LIS DVOR/DME turn right to intercept and proceed R189 FTM DVOR/DME. When crossing R071 ESP DVOR/DME turn right to intercept and proceed R074 ESP DVOR/DME to ESP HLDG. Complete one HLDG pattern descend to FL60 to perform another DVOR/DME APCH.

**COM Failure during CDO**
In case of COM failure and if previously cleared by ATC for a CDO STAR, perform the assigned CDO STAR until final LDG. Squawk ident 3min before start descend to CDO.

**Arrival Procedure**

**Arrival Notes**
EAT to Lisboa AD is calculated to the HLDG fix associated with the RWY in use. For RWY 03 it is calculated at NETVO and for RWY 21 at UPKAT. An EAT to Lisboa AD will be determined for ARR ACFT subject to delay of 10min or more. A revised EAT will be transmitted to ACFT whenever it differs from a previously transmitted by 5min or more.

**Continuous Descent Operations**
INBD RWY 03: For all STARs with "K" designator.
CDA will be required to comply with following procedures:
- Authorized upon ATC approval.
- Authorized from the point marked in the respective STAR charts as CDA Start forward.
- A MAX 3.3° and MNM 2° slope must be respected.
- The 2° slope ends at point 2NM from FAP to allow for deceleration.
- When planning CDA STAR vertical profile, an explicit ATC descend CLR is always required.

**XAMAX 4C:** To be used pending MIL TFC CONDs.

**Critical DME for GNSS DME/DME or DME/DME/IRU navigation on RNAV STAR**
BUSEN
- RNAV Critical DME
  RWY 03/35 ESP: MTR and NSA at FL60 until 60NM

**Reverse:** Use of reverse from 0000-0600‡ strictly prohibited.

**Non-standard GP intercept position on RWY 03**
GP intercepts RWY 03 at *314m / 1030ft* after landing threshold.
Remaining DIST beyond GP is *3303m / 10837ft*.

## DEPARTURE

**Take-off Minima**

| RWY | | 03/21 | |
|---|---|---|---|
| All ACFT | ft - m/km | 0 - 75R | - |
| | | | |
| RWY | | 17/35 | |
| All ACFT | ft - m/km | 0 - 300V | - |

### Speed

MAX IAS 250KT below FL100, unless otherwise advised by ATC.
If unable to comply inform ATC ASAP and state MNM speed acceptable.

### Communication

Contact LISBOA APP when passing 1000ft, unless otherwise instructed by TWR.
On first contact with APP report only callsign and ALT.

**COM Failure**
**RWY 03/35**
Fly at last assigned and acknowledged LVL or to the LVL of SID if is higher, until passing D30 LIS VOR. Thereafter adjust LVL and speed according FPL.
If being radar vectored or proceeding offset, when passing D30 LIS VOR, rejoin current flight plan route and proceed according FPL.
If cleared DCT to ..., fly at/to assigned and acknowledged LVL or to FL060, whichever is higher, until passing D30 LIS VOR, maintain current flight plan route and proceed according FPL.

**RWY 21**
Fly at last assigned and acknowledged LVL or to the LVL of SID if is higher, until passing D30 LIS VOR. Thereafter adjust LVL and speed according FPL.
If being radar vectored or proceeding offset, when passing D30 LIS VOR, rejoin current flight plan route and proceed according FPL.
If cleared DCT to ..., fly at/to assigned and acknowledged LVL or to FL100, whichever is higher, until passing D30 LIS VOR, maintain current flight plan route and proceed according FPL.

### Departure Procedure

**Critical DME for GNSS or DME/DME or DME/DME/IRU SID**
BUSEN 5P
- RWY 03/35: **ESP:** MTR and NSA at FL60 until 60NM.

BUSEN 6P
- RWY 21: **ESP:** MTR and NSA at FL60 until 60NM NDB CP - Flyover.

**Start-up**
Contact GND (when GND CLSD contact TWR) for push-back and/or start-up CLR.

ENG start-up in nose-in stands is allowed whenever an APU is inoperative or not AVBL. GND or TWR must be advised and start-up PROC will be assisted by marshaller.

RWY 21: Preferred TKOF PSN for all ACFT PSN U, except heavy jets.
Advise ATC on start-up, when full length is required.

**DEPARTURE**

**Departure Notes**
**NON-RNAV** equipped ACFT not flying via FTM or ESP shall expect RAD vectoring.

**High Intensity Runway Operations (HIRO)**
- Expect immediate line-up and TKOF roll CLR after reaching RWY HLDG point. Advice ATC as early as possible before entering the RWY if not ready when reaching the HLDG point .
- Commence movement within 10s of receiving TKOF CLR. Inform ATC prior to entering the RWY if higher separation is desired.

When RWY 03 in use, ATC will use position M and N for DEP sequencing. Advise ATC at start-up if unable.

When RWY 21 in use, the preferred DEP position is position U, EXC heavy jet ACFT.

Advise ATC on start-up when full length for RWY 03 or RWY 21 is required.

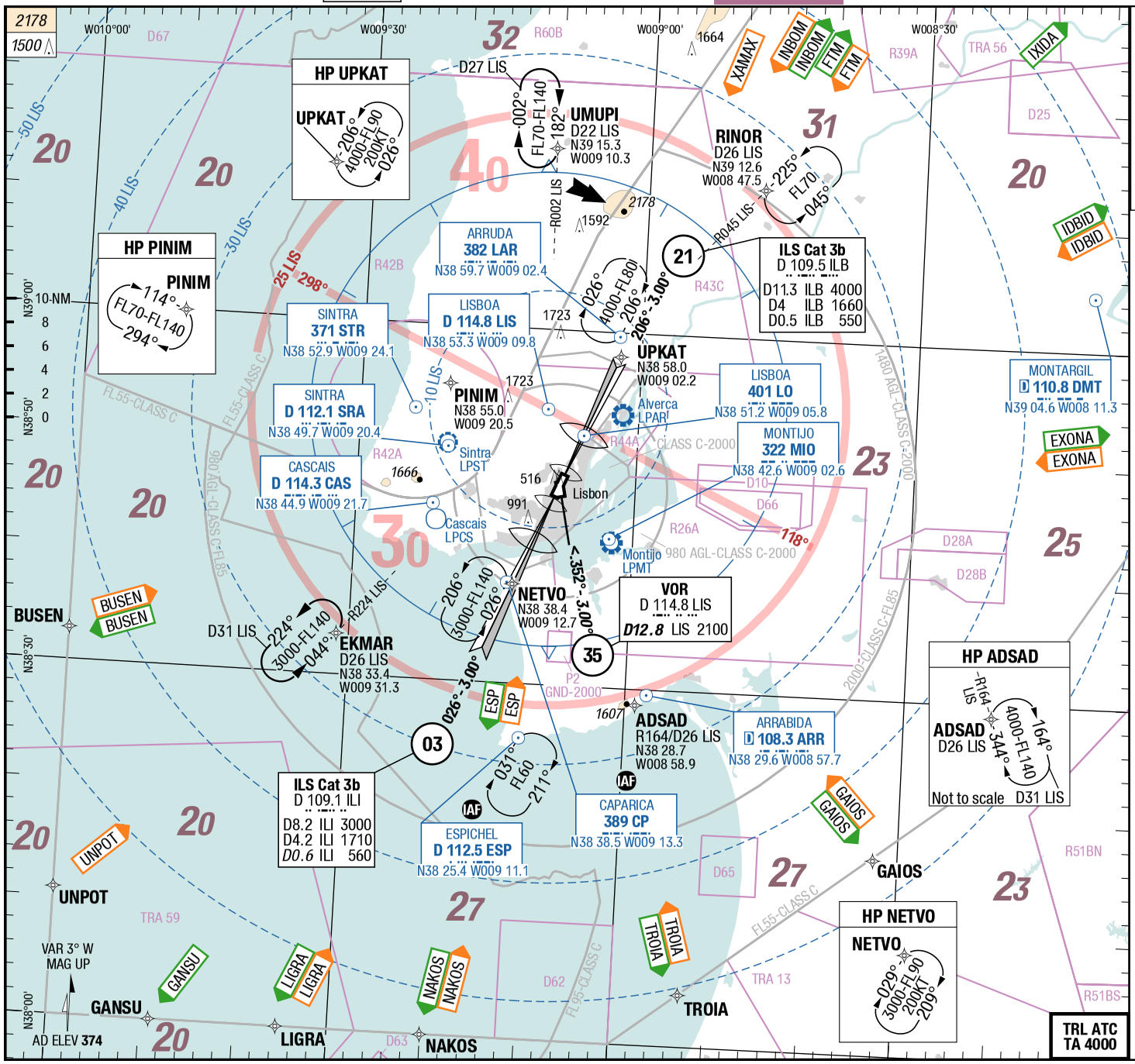
**ATC Slot Clearance**

**Airport Collaborative Decision Making (CDM)**
CDM concept in use at this airport. See General Part/RAR/RAR In-Flight and in addition:
Start-up/Push-back has to be initiated no later than 2min after the start-up approval has been issued.

Contact DLV, GND or TWR as announced by ATIS at least 10min prior to EOBT and report:
- Parking PSN
- ATIS acknowledgement
- ATC CLR including:
  - ACFT IDENT
  - CLR limit, normally DEST AD
  - designator of assigned SID, if applicable. Comply with the vertical profile of the assigned SID.
  - other INFO e.g. CTOT

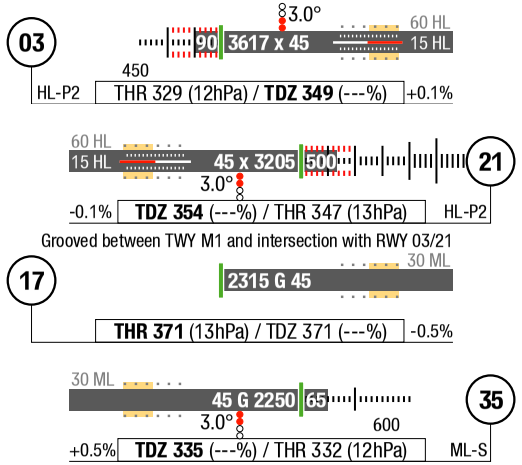
**De-Icing**

Not AVBL.




| | | |
|---|---|---|
| D-ATIS | 124.150 ARR<br>121.950 DEP | |
| ARR | 125.125<br>120.350 | 119.550 |
| APP | 119.100<br>120.350 | 119.550 |
| TWR | 118.100 | 118.500 HX |
| GND | 121.750 0700-2300 | 118.500 0700-2300 |
| DLV | 118.950 HO (by ATIS) | 118.500 |

**Landing RWY system:**




Changes: APL, FREQ, APCH boxes

| | | |
|---|---|---|
| D-ATIS | 124.150 ARR<br>121.950 DEP | |
| TWR | 118.100 | 118.500 HX |
| GND | 121.750 0700-2300 | 118.500 0700-2300 |
| DLV | 118.950 HO (by ATIS) | 118.500 |

| RWY | TORA | ASDA | TODA |
|---|---|---|---|
| 03 | 3705 | 3705 | 3805 |
| 21 (PSN S) | 3805 | 3805 | 3905 |
| 21 (PSN U) | 2410 | 2410 | 2510 |
| 35 | 2400 | 2400 | 2400 |

**Note**
RWY 17/35: Grooved between TWY M1 and intersection with RWY 03/21

Legend:
Area not visible from TWR

❶ RWY 21 starter extention provided with TWY CLL and TWY edge lights for LVP

For taxi restrictions concerning hot spots HS*1* to HS*3* see Taxi Charts.

See APC

W009° 09' W009° 08' N38° 47' N38° 46'

21 206° 347 — PSN S 3805

17 171° 371 — PSN U 2410

03 026° 329 — PSN M 3705, PSN N 3631

35 351° 332 — PSN K 2400, PSN M 2100

3705 x 45 — 2315 G 45 — PSN P 3007

ARP N 38 46.5 W 009 08.1

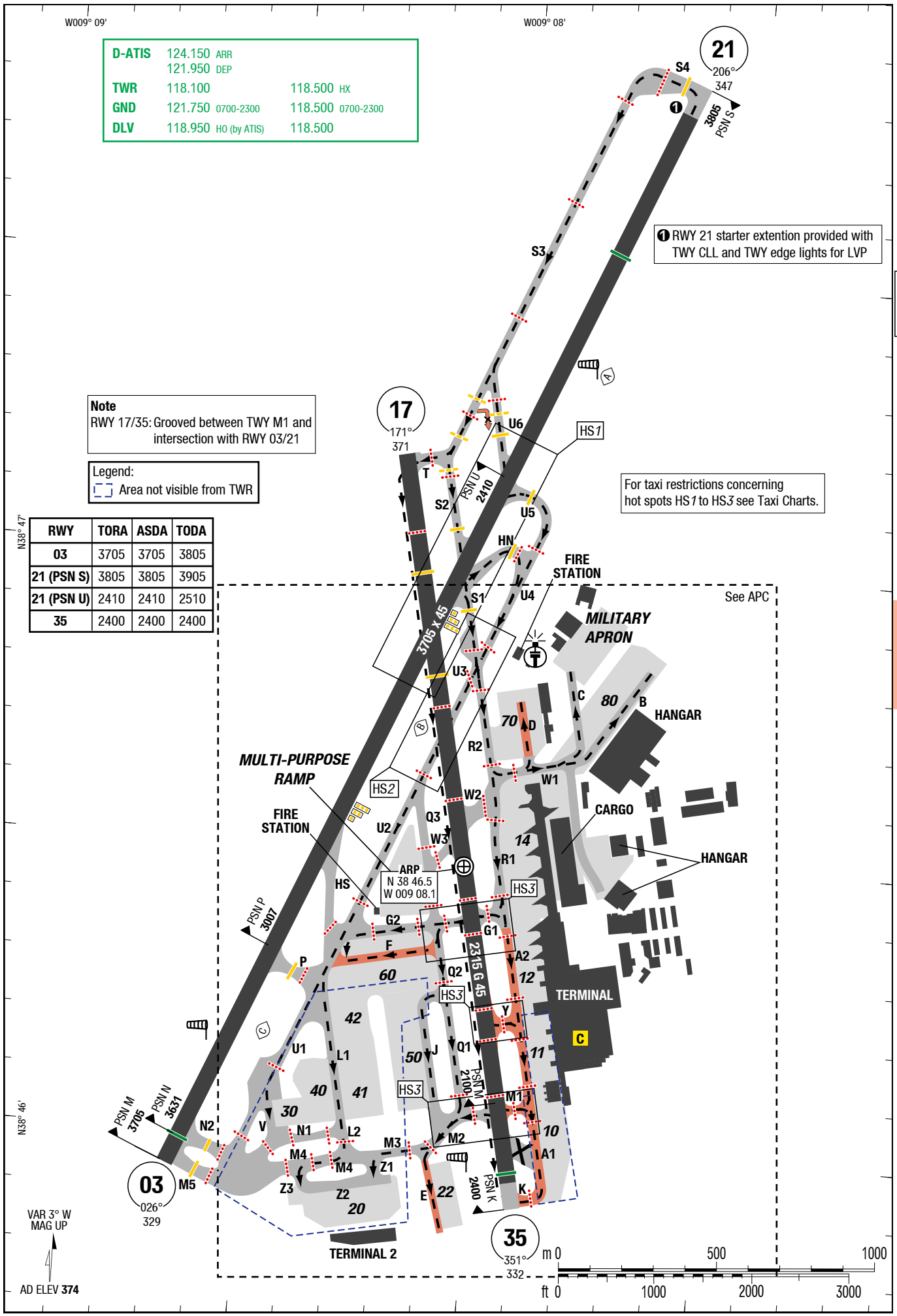
FIRE STATION — FIRE STATION — MILITARY APRON — MULTI-PURPOSE RAMP — HANGAR — HANGAR — CARGO — TERMINAL — TERMINAL 2

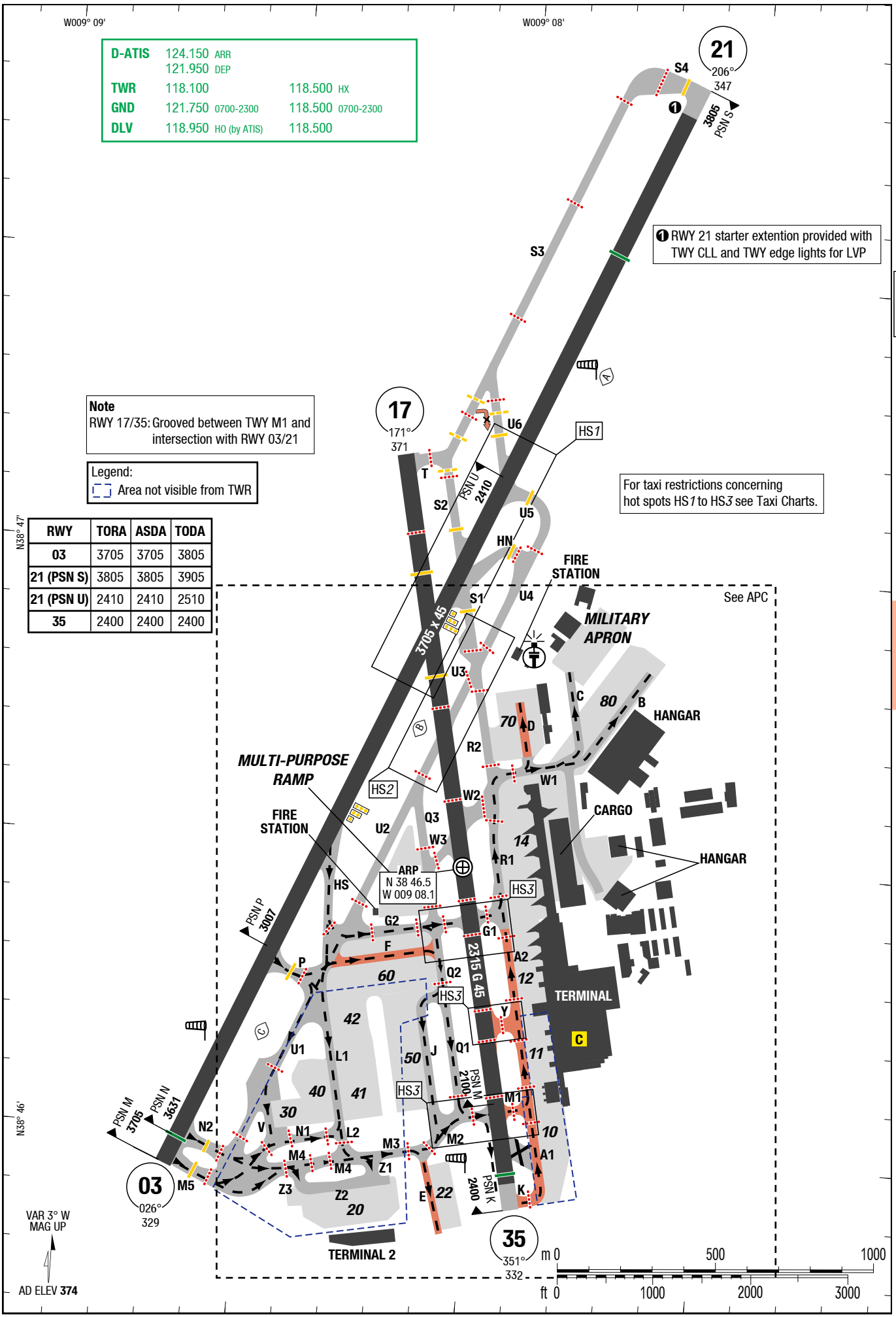
VAR 3° W MAG UP

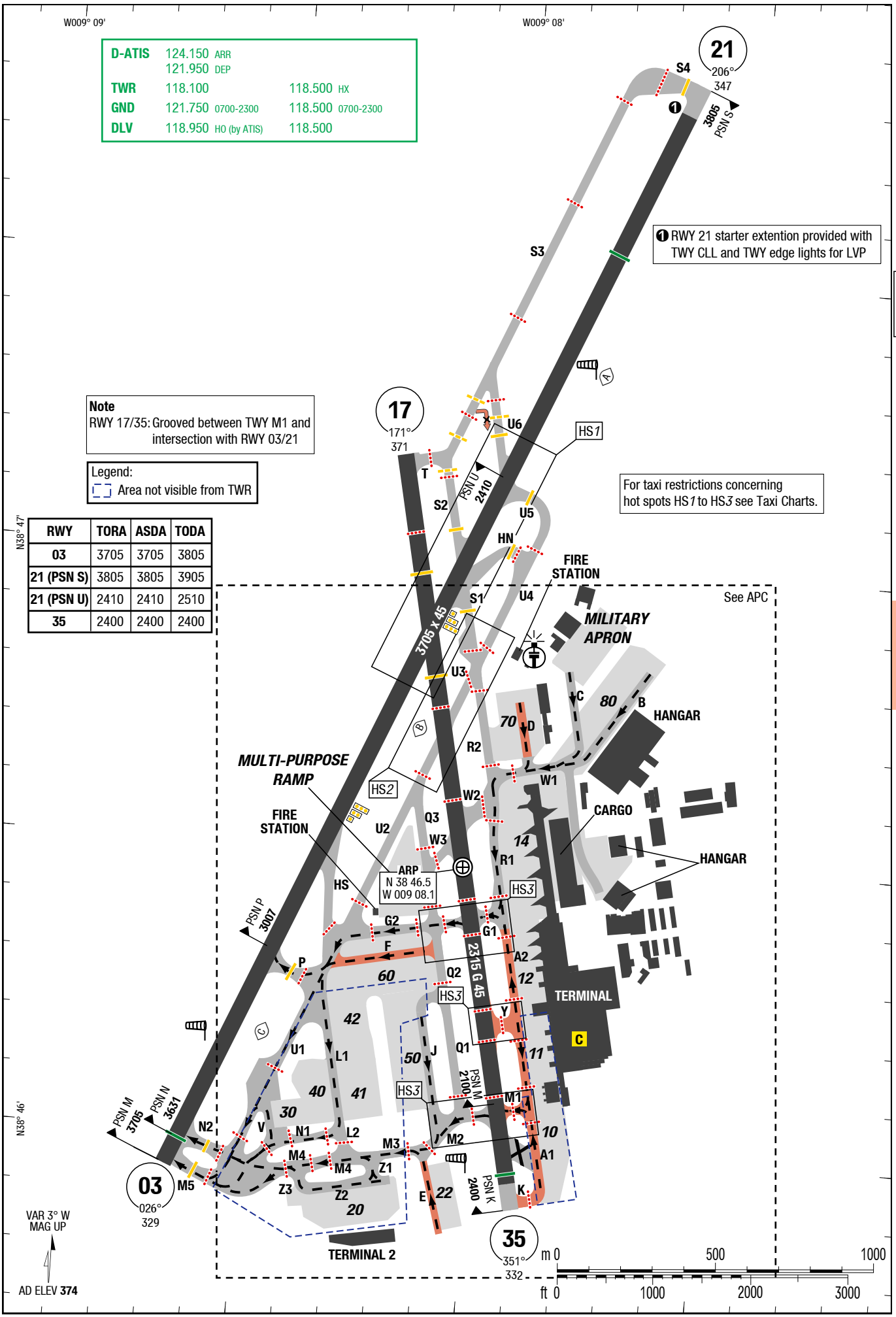
AD ELEV **374**

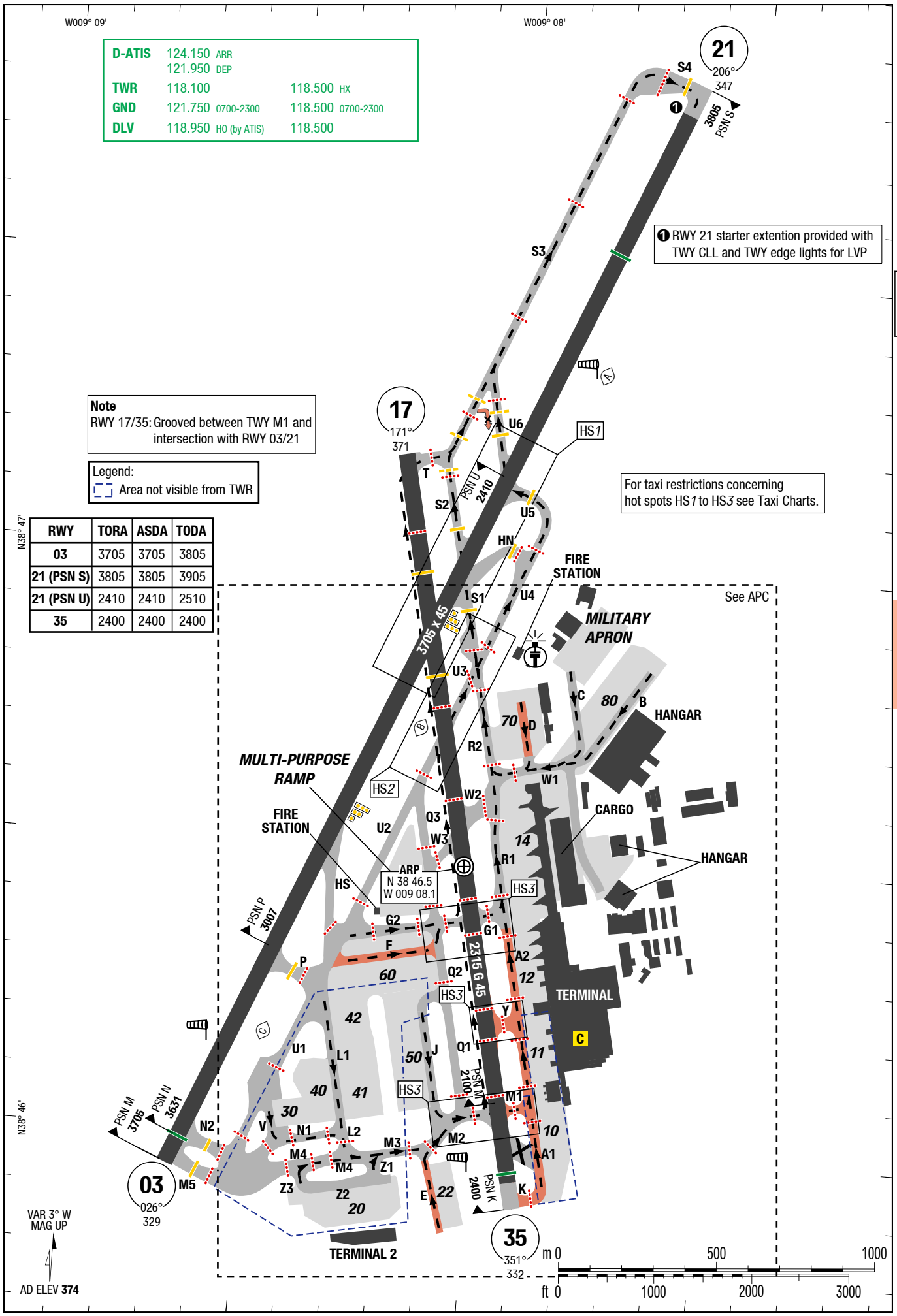
m 0 500 1000

ft 0 1000 2000 3000

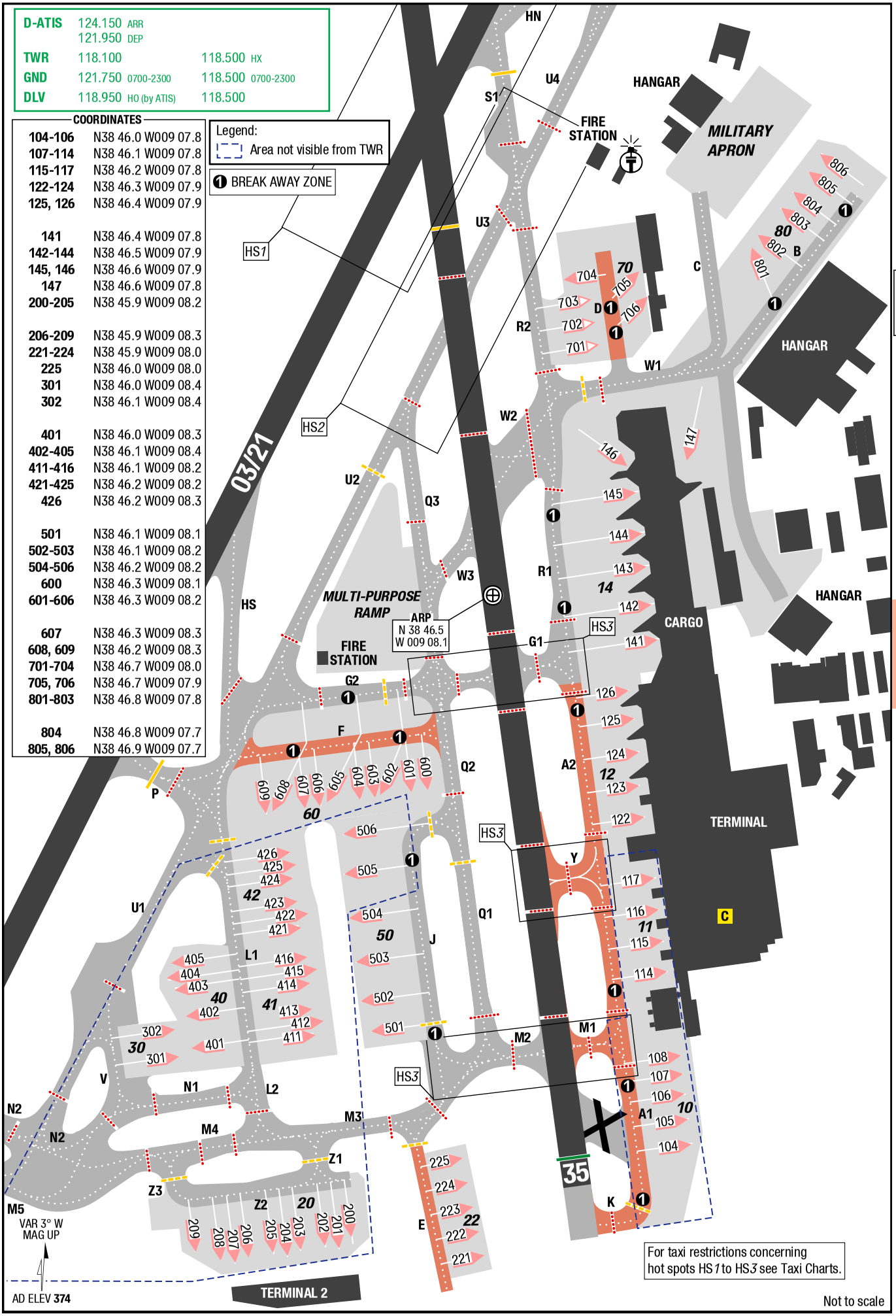

W009° 09'
W009° 08'
N38° 47'
N38° 46'
D-ATIS 124.150 ARR
121.950 DEP
TWR 118.100 118.500 HX
GND 121.750 0700-2300 118.500 0700-2300
DLV 118.950 HO (by ATIS) 118.500
Note
RWY 17/35: Grooved between TWY M1 and intersection with RWY 03/21
Legend:
Area not visible from TWR
RWY TORA ASDA TODA
03 3705 3705 3805
21 (PSN S) 3805 3805 3905
21 (PSN U) 2410 2410 2510
35 2400 2400 2400
❶ RWY 21 starter extention provided with TWY CLL and TWY edge lights for LVP
For taxi restrictions concerning hot spots HS1 to HS3 see Taxi Charts.
See APC
21
206°
347
17
171°
371
03
026°
329
35
351°
332
S4
S3
S2
S1
T
U6
U5
U4
U3
U2
U1
HN
HS1
HS2
HS3
HS
PSN U 2410
PSN S 3805
PSN P 3007
PSN M 3705
PSN N 3631
PSN W 2100
PSN K 2400
3705 X 45
2315 G 45
FIRE STATION
MILITARY APRON
MULTI-PURPOSE RAMP
FIRE STATION
ARP
N 38 46.5
W 009 08.1
HANGAR
CARGO
HANGAR
TERMINAL
C
TERMINAL 2
VAR 3° W
MAG UP
AD ELEV 374
m 0 500 1000
ft 0 1000 2000 3000

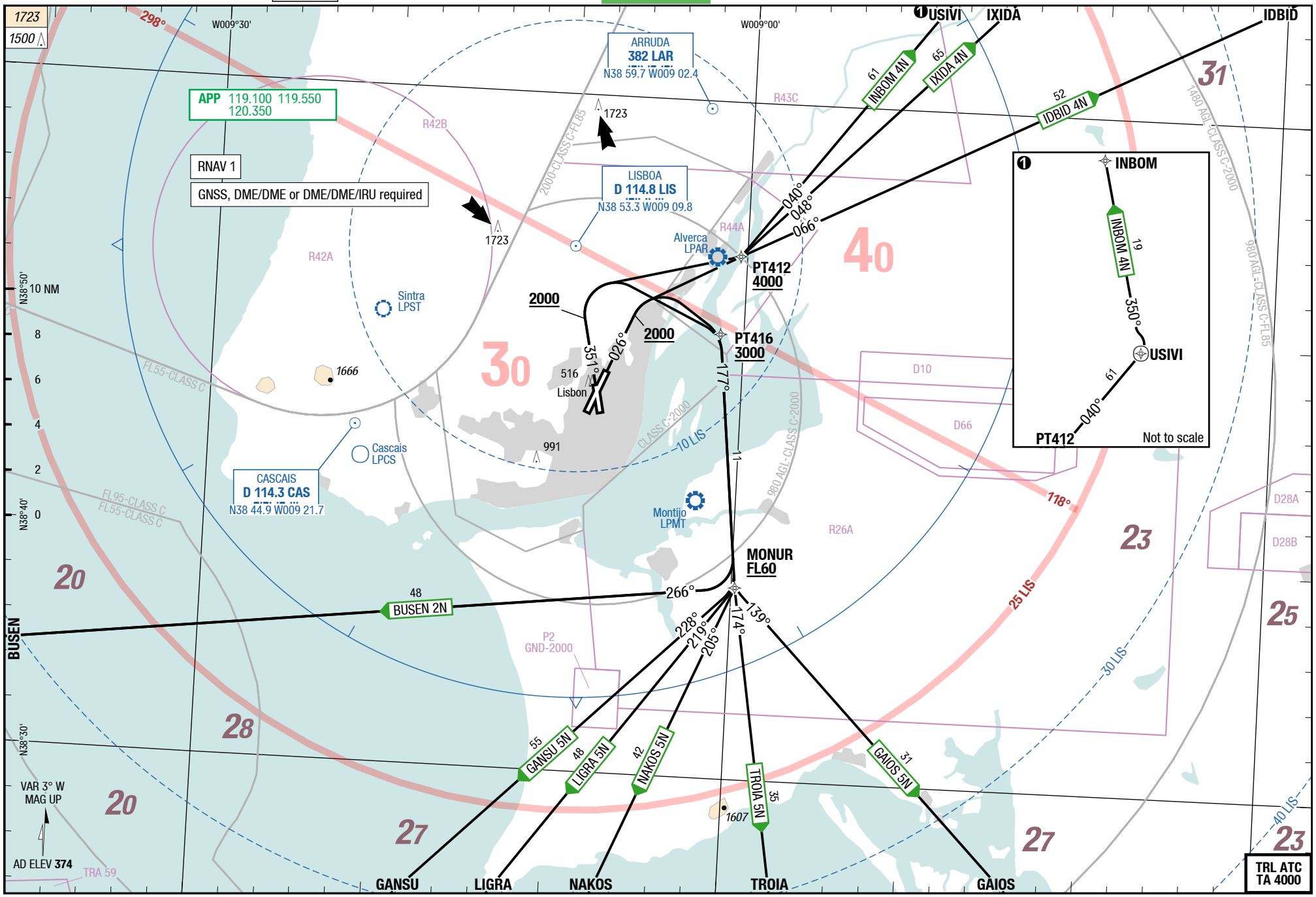

W009° 09'
W009° 08'
N38° 47'
N38° 46'
D-ATIS 124.150 ARR
121.950 DEP
TWR 118.100 118.500 HX
GND 121.750 0700-2300 118.500 0700-2300
DLV 118.950 HO (by ATIS) 118.500
Note
RWY 17/35: Grooved between TWY M1 and intersection with RWY 03/21
Legend:
Area not visible from TWR
RWY TORA ASDA TODA
03 3705 3705 3805
21 (PSN S) 3805 3805 3905
21 (PSN U) 2410 2410 2510
35 2400 2400 2400
❶ RWY 21 starter extention provided with TWY CLL and TWY edge lights for LVP
For taxi restrictions concerning hot spots HS1 to HS3 see Taxi Charts.
See APC
21
206°
347
17
171°
371
03
026°
329
35
351°
332
PSN S 3805
PSN U 2410
PSN P 3007
PSN M 3705
PSN N 3631
PSN M 2100
PSN K 2400
3705 x 45
2315 G 45
ARP
N 38 46.5
W 009 08.1
FIRE STATION
MILITARY APRON
MULTI-PURPOSE RAMP
HANGAR
CARGO
TERMINAL
C
TERMINAL 2
HS1
HS2
HS3
S1
S2
S3
S4
T
U1
U2
U3
U4
U5
U6
HN
R1
R2
W1
W2
W3
Q1
Q2
Q3
G1
G2
A1
A2
L1
L2
M1
M2
M3
M4
M5
N1
N2
Z1
Z2
Z3
E
F
J
K
P
V
Y
VAR 3° W
MAG UP
AD ELEV 374
m 0 500 1000
ft 0 1000 2000 3000


W009° 09'
W009° 08'
N38° 47'
N38° 46'
D-ATIS 124.150 ARR
121.950 DEP
TWR 118.100 118.500 HX
GND 121.750 0700-2300 118.500 0700-2300
DLV 118.950 HO (by ATIS) 118.500
Note
RWY 17/35: Grooved between TWY M1 and intersection with RWY 03/21
Legend:
Area not visible from TWR
RWY | TORA | ASDA | TODA
03 | 3705 | 3705 | 3805
21 (PSN S) | 3805 | 3805 | 3905
21 (PSN U) | 2410 | 2410 | 2510
35 | 2400 | 2400 | 2400
21
206°
347
S4
PSN S 3805
RWY 21 starter extention provided with TWY CLL and TWY edge lights for LVP
S3
17
171°
371
U6
HS1
T
PSN U 2410
S2
U5
HN
For taxi restrictions concerning hot spots HS1 to HS3 see Taxi Charts.
FIRE STATION
S1
U4
See APC
MILITARY APRON
3705 x 45
U3
C
80
B
HANGAR
70
D
R2
MULTI-PURPOSE RAMP
HS2
W1
W2
CARGO
FIRE STATION
U2
Q3
W3
14
R1
HANGAR
ARP
N 38 46.5
W 009 08.1
HS
HS3
PSN P 3007
G2
G1
F
2315 G 45
A2
P
60
Q2
12
HS3
TERMINAL
42
Y
C
U1
L1
50
J
Q1
11
40
41
HS3
PSN M 2100
M1
PSN M 3705
PSN N 3631
30
N2
V
N1
L2
M3
M2
10
M4
M4
Z1
A1
03
M5
Z3
Z2
20
E
22
PSN K 2400
K
026°
329
35
351°
332
TERMINAL 2
VAR 3° W
MAG UP
AD ELEV 374
m 0 500 1000
ft 0 1000 2000 3000


W009° 09'
W009° 08'
N38° 47'
N38° 46'
D-ATIS 124.150 ARR
121.950 DEP
TWR 118.100 118.500 HX
GND 121.750 0700-2300 118.500 0700-2300
DLV 118.950 HO (by ATIS) 118.500
Note
RWY 17/35: Grooved between TWY M1 and intersection with RWY 03/21
Legend:
Area not visible from TWR
RWY 21 starter extention provided with TWY CLL and TWY edge lights for LVP
For taxi restrictions concerning hot spots HS1 to HS3 see Taxi Charts.
See APC
RWY TORA ASDA TODA
03 3705 3705 3805
21 (PSN S) 3805 3805 3905
21 (PSN U) 2410 2410 2510
35 2400 2400 2400
21 206° 347
17 171° 371
03 026° 329
35 351° 332
PSN S 3805
PSN U 2410
PSN P 3007
PSN N 3631
PSN M 3705
PSN M 2100
PSN K 2400
3705 x 45
2315 G 45
ARP N 38 46.5 W 009 08.1
MILITARY APRON
FIRE STATION
FIRE STATION
MULTI-PURPOSE RAMP
HANGAR
HANGAR
CARGO
TERMINAL
TERMINAL 2
C
VAR 3° W MAG UP
AD ELEV 374
m 0 500 1000
ft 0 1000 2000 3000

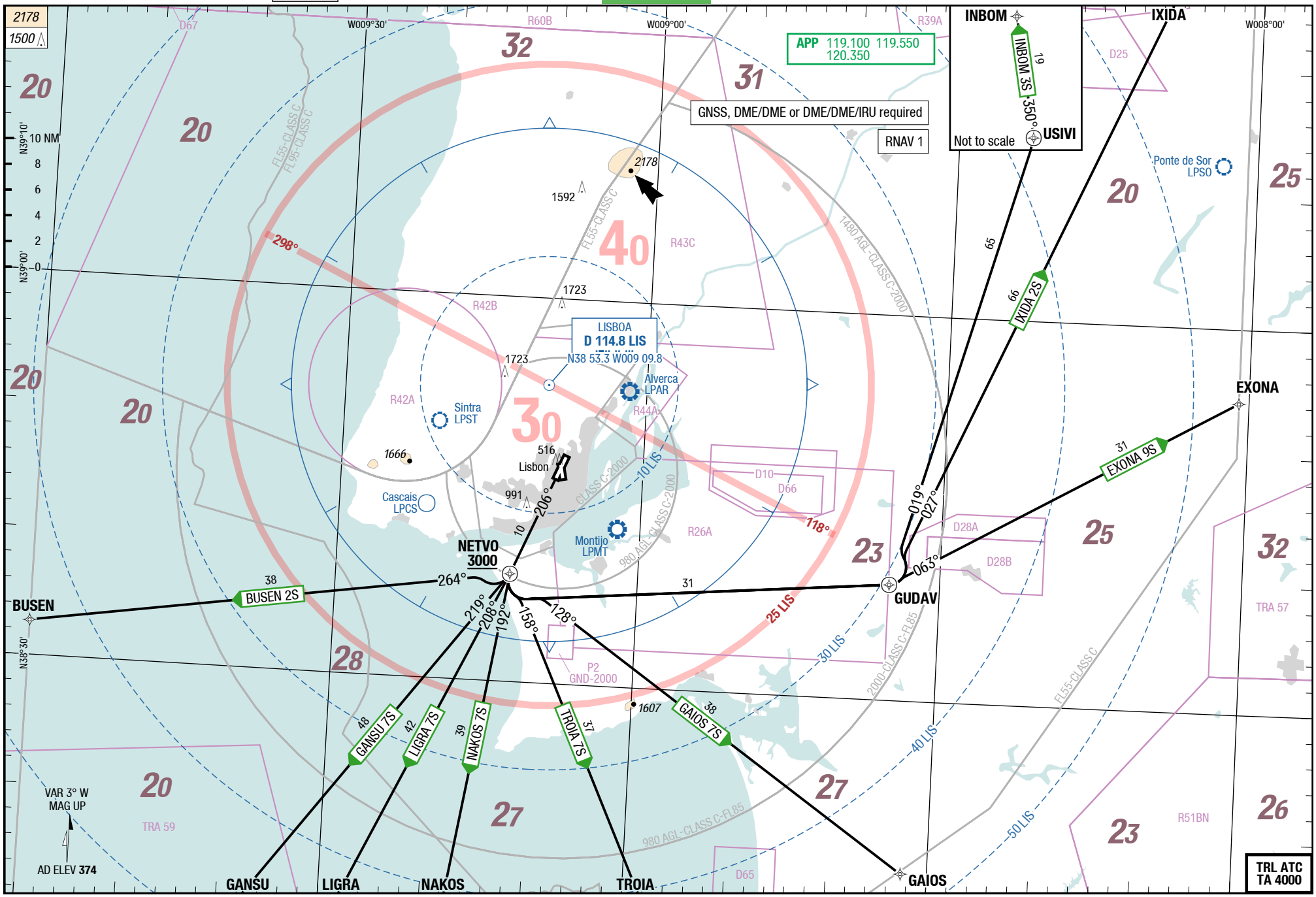
Changes: Stopbar, HLDG POS, TWY





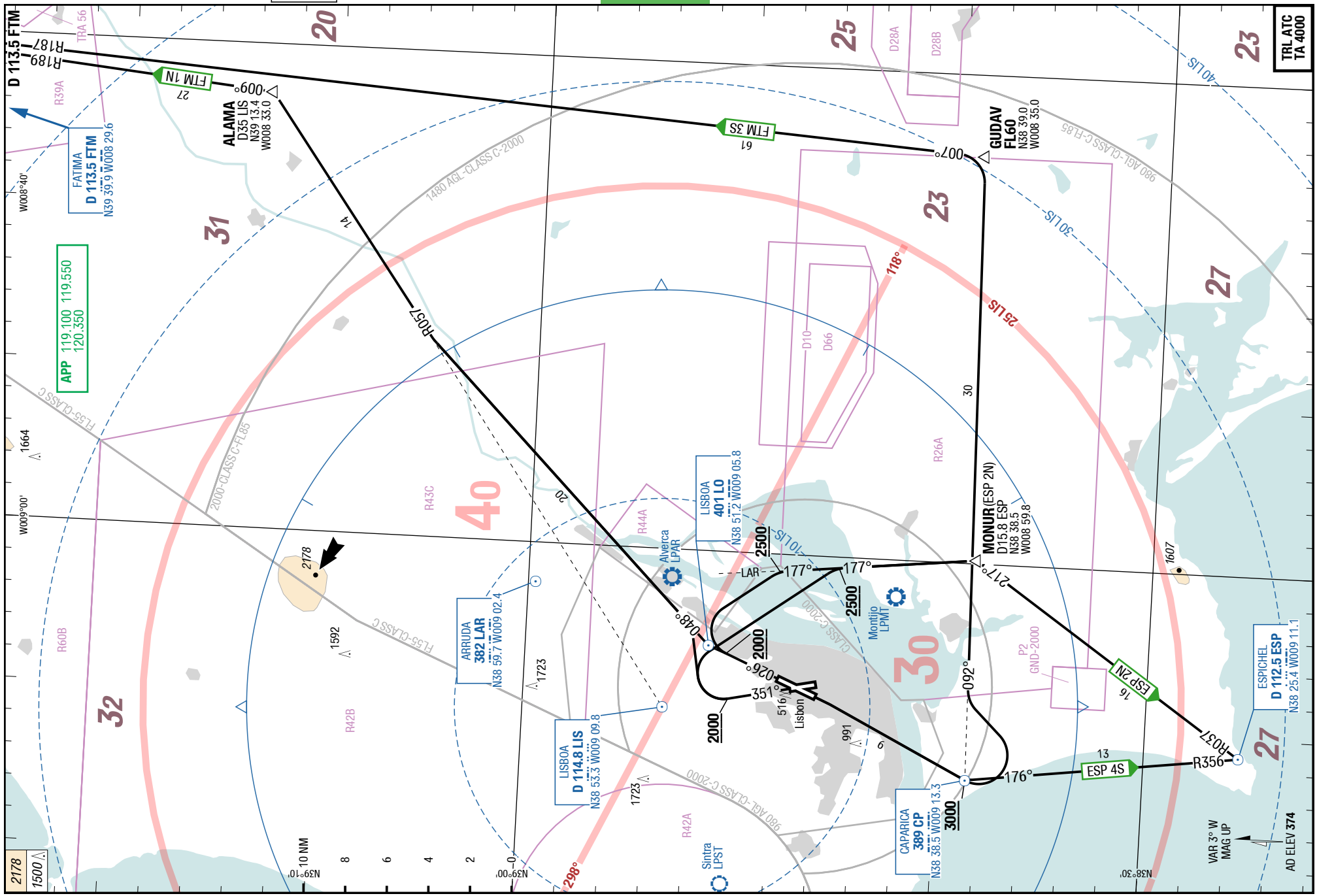



Changes: PROC, FREQ, PROC renumbered






Changes: PROC, FREQ, PROC renumbered






Changes: ALT, FREQ, PROC renumbered

**BUSEN 2N / GAIOS 5N / GANSU 5N / IDBID 4N / INBOM 4N / IXIDA 4N / LIGRA 5N / NAKOS 5N**

RWY 03 (026°)

**When passing 1000, contact Lisbon APP. Report only passing altitude.**

| | GS | 120 | 150 | 180 | 210 | 240 | 270 |
|---|---|---|---|---|---|---|---|
| 6.0% | ft/MIN | 800 | 1000 | 1100 | 1300 | 1500 | 1700 |

| DESIGNATOR | ROUTING | ALTITUDES |
|---|---|---|
| | **Runway 03** | |
| **BUSEN 2N**<br>6.0% to 2000<br>**119.100**<br>① | 026° [A2000+ ;R] - DCT PT416 - MONUR - BUSEN | PT416 MNM **3000**<br>MONUR MNM **FL60**<br><br>Initial climb **FL60** |
| **GAIOS 5N**<br>6.0% to 2000<br>**119.100**<br>① | 026° [A2000+ ;R] - DCT PT416 - MONUR - GAIOS | PT416 MNM **3000**<br>MONUR MNM **FL60**<br><br>Initial climb **FL60** |
| **GANSU 5N**<br>6.0% to 2000<br>**119.100**<br>① | 026° [A2000+ ;R] - DCT PT416 - MONUR - GANSU | PT416 MNM **3000**<br>MONUR MNM **FL60**<br><br>Initial climb **FL60** |
| **IDBID 4N**<br>6.0% to 2000<br>**119.100**<br>① | 026° [A2000+] - DCT PT412 - IDBID | PT412 MNM **4000**<br><br>Initial climb **FL60** |
| **INBOM 4N**<br>6.0% to 2000<br>**119.100**<br>① | 026° [A2000+] - DCT PT412 - USIVI - INBOM | PT412 MNM **4000**<br><br>Initial climb **FL60** |
| **IXIDA 4N**<br>6.0% to 2000<br>**119.100**<br>① | 026° [A2000+] - DCT PT412 - IXIDA | PT412 MNM **4000**<br><br>Initial climb **FL60** |
| **LIGRA 5N**<br>6.0% to 2000<br>**119.100**<br>① | 026° [A2000+ ;R] - DCT PT416 - MONUR - LIGRA | PT416 MNM **3000**<br>MONUR MNM **FL60**<br><br>Initial climb **FL60** |
| **NAKOS 5N**<br>6.0% to 2000<br>**119.100**<br>① | 026° [A2000+ ;R] - DCT PT416 - MONUR - NAKOS | PT416 MNM **3000**<br>MONUR MNM **FL60**<br><br>Initial climb **FL60** |

① Climb gradient due to ATC. This restriction, when needed, will be included in the ATIS DEP broadcast and/or CLR DLV. If unable to comply, advice ATC prior start up.

Changes: PROC, Climb gradient, PROC renumbered

**TROIA 5N / BUSEN 2N / GAIOS 5N / GANSU 5N / IDBID 4N / INBOM 4N / IXIDA 4N**

RWYs 03 (026°) / 35 (351°)

**When passing 1000, contact Lisbon APP. Report only passing altitude.**

| | GS | 120 | 150 | 180 | 210 | 240 | 270 |
|---|---|---|---|---|---|---|---|
| 4.9% | ft/MIN | 600 | 800 | 900 | 1100 | 1200 | 1400 |
| 6.0% | ft/MIN | 800 | 1000 | 1100 | 1300 | 1500 | 1700 |

| DESIGNATOR | ROUTING | ALTITUDES |
|---|---|---|
| | **Runway 03** | |
| **TROIA 5N**<br>6.0% to 2000<br>**119.100**<br>① | 026° [A2000+ ;R] - DCT PT416 - MONUR - TROIA | PT416 MNM **3000**<br>MONUR MNM **FL60**<br><br>Initial climb **FL60** |
| | **Runway 35** | |
| **BUSEN 2N**<br>4.9% to 600<br>**119.100**<br>② | 351° [A2000+ ;R] - DCT PT416 - MONUR - BUSEN | PT416 MNM **3000**<br>MONUR MNM **FL60**<br><br>Initial climb **FL60** |
| **GAIOS 5N**<br>4.9% to 600<br>**119.100**<br>② | 351° [A2000+ ;R] - DCT PT416 - MONUR - GAIOS | PT416 MNM **3000**<br>MONUR MNM **FL60**<br><br>Initial climb **FL60** |
| **GANSU 5N**<br>4.9% to 600<br>**119.100**<br>② | 351° [A2000+ ;R] - DCT PT416 - MONUR - GANSU | PT416 MNM **3000**<br>MONUR MNM **FL60**<br><br>Initial climb **FL60** |
| **IDBID 4N**<br>4.9% to 600<br>**119.100**<br>② | 351° [A2000+ ;R] - DCT PT412 - IDBID | PT412 MNM **4000**<br><br>Initial climb **FL60** |
| **INBOM 4N**<br>4.9% to 600<br>**119.100**<br>② | 351° [A2000+ ;R] - DCT PT412 - USIVI - INBOM | PT412 MNM **4000**<br><br>Initial climb **FL60** |
| **IXIDA 4N**<br>4.9% to 600<br>**119.100**<br>② | 351° [A2000+ ;R] - DCT PT412 - IXIDA | PT412 MNM **4000**<br><br>Initial climb **FL60** |

① Climb gradient due to ATC. This restriction, when needed, will be included in the ATIS DEP broadcast and/or CLR DLV. If unable to comply, advice ATC prior start up.

② Climb gradient due to obstacles.

Changes: PROC, Climb gradient, PROC renumbered

**LIGRA 5N / NAKOS 5N / TROIA 5N**

RWY 35 (351°)

**When passing 1000, contact Lisbon APP. Report only passing altitude.**

| | GS | 120 | 150 | 180 | 210 | 240 | 270 |
|---|---|---|---|---|---|---|---|
| 4.9% | ft/MIN | 600 | 800 | 900 | 1100 | 1200 | 1400 |

| DESIGNATOR | ROUTING | ALTITUDES |
|---|---|---|
| | **Runway 35** | |
| **LIGRA 5N**<br>4.9% to 600<br>**119.100**<br>① | 351° [A2000+ ;R] - DCT PT416 - MONUR - LIGRA | PT416 MNM **3000**<br>MONUR MNM **FL60**<br><br>Initial climb **FL60** |
| **NAKOS 5N**<br>4.9% to 600<br>**119.100**<br>① | 351° [A2000+ ;R] - DCT PT416 - MONUR - NAKOS | PT416 MNM **3000**<br>MONUR MNM **FL60**<br><br>Initial climb **FL60** |
| **TROIA 5N**<br>4.9% to 600<br>**119.100**<br>① | 351° [A2000+ ;R] - DCT PT416 - MONUR - TROIA | PT416 MNM **3000**<br>MONUR MNM **FL60**<br><br>Initial climb **FL60** |

① Climb gradient due to obstacles.

**BUSEN 2S / EXONA 9S / GAIOS 7S / GANSU 7S / INBOM 3S / IXIDA 2S / LIGRA 7S / NAKOS 7S / TROIA 7S**

RWY 21 (206°)

**When passing 1000ft, contact Lisbon APP. Report only passing altitude.**

| DESIGNATOR | ROUTING | ALTITUDES |
|---|---|---|
| | **Runway 21** | |
| **BUSEN 2S**<br>**119.100** | RW21 - NETVO - BUSEN | NETVO MNM **3000**<br>Initial climb **FL60** |
| **EXONA 9S**<br>**119.100** | RW21 - NETVO [L] - DCT GUDAV - EXONA | NETVO MNM **3000**<br>Initial climb **FL60** |
| **GAIOS 7S**<br>**119.100** | RW21 - NETVO - GAIOS | NETVO MNM **3000**<br>Initial climb **FL60** |
| **GANSU 7S**<br>**119.100** | RW21 - NETVO - GANSU | NETVO MNM **3000**<br>Initial climb **FL60** |
| **INBOM 3S**<br>**119.100** | RW21 - NETVO [L] - DCT GUDAV - USIVI - INBOM | NETVO MNM **3000**<br>Initial climb **FL60** |
| **IXIDA 2S**<br>**119.100** | RW21 - NETVO [L] - DCT GUDAV - IXIDA | NETVO MNM **3000**<br>Initial climb **FL60** |
| **LIGRA 7S**<br>**119.100** | RW21 - NETVO - LIGRA | NETVO MNM **3000**<br>Initial climb **FL60** |
| **NAKOS 7S**<br>**119.100** | RW21 - NETVO - NAKOS | NETVO MNM **3000**<br>Initial climb **FL60** |
| **TROIA 7S**<br>**119.100** | RW21 - NETVO - TROIA | NETVO MNM **3000**<br>Initial climb **FL60** |



Changes: PROC, PROC renumbered

## ESPICHEL 2N / FATIMA 1N / ESPICHEL 4S / FATIMA 3S

RWYs 03 (026°) / 21 (206°) / 35 (351°)

**When passing 1000ft, contact Lisbon APP. Report only passing altitude.**

| | GS | 120 | 150 | 180 | 210 | 240 | 270 |
|---|---|---|---|---|---|---|---|
| 4.9% | ft/MIN | 600 | 800 | 900 | 1100 | 1200 | 1400 |
| 6.0% | ft/MIN | 800 | 1000 | 1100 | 1300 | 1500 | 1700 |

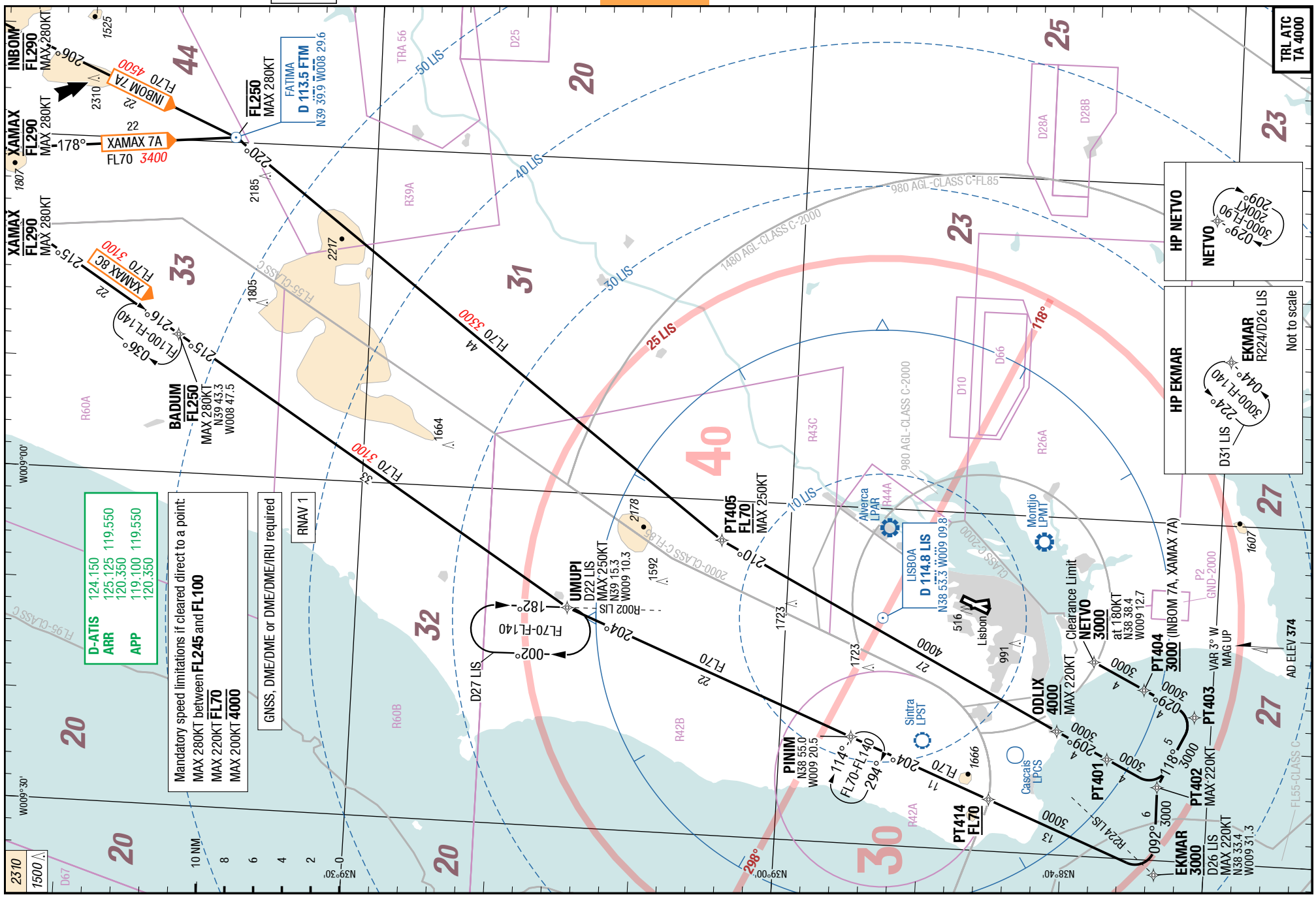
| DESIGNATOR | ROUTING | ALTITUDES |
|---|---|---|
| | **Runway 03** | |
| **ESPICHEL 2N**<br>**ESP 2N**<br>6.0% to 2000<br>**119.100**<br>①③ | at MNM **2000 RT** intercept QDR 177 **LAR** to MONUR - **RT** intercept R037 **ESP** to **ESP** | QDR 177 **LAR** MNM **2500**<br><br>initial climb **FL60** |
| **FATIMA 1N**<br>**FTM 1N**<br>6.0% to 2000<br>**119.100**<br>①③ | at MNM **2000 RT** intercept QDR 048 **LO** - intercept R057 **LIS** outbound - at ALAMA **LT** intercept R189 **FTM** to **FTM** | initial climb **FL60** |
| | **Runway 21** | |
| **ESPICHEL 4S**<br>**ESP 4S**<br>**119.100**<br>① | direct **CP** - **LT** intercept R356 **ESP** to **ESP** | **CP** MNM 3000<br><br>initial climb **FL60** |
| **FATIMA 3S**<br>**FTM 3S**<br>**119.100**<br>① | direct **CP** - QDR 092 **CP** - at GUDAV **LT** intercept R187 **FTM** to **FTM** | **CP** MNM 3000<br>GUDAV at **FL60**<br><br>initial climb **FL60** |
| | **Runway 35** | |
| **ESPICHEL 2N**<br>**ESP 2N**<br>4.9% to 600<br>**119.100**<br>①② | at MNM **2000 RT** intercept QDR 177 **LAR** to MONUR - **RT** intercept R037 **ESP** to **ESP** | QDR 177 **LAR** MNM **2500**<br><br>initial climb **FL60** |
| **FATIMA 1N**<br>**FTM 1N**<br>4.9% to 600<br>**119.100**<br>①② | at MNM **2000 RT** intercept QDR 048 **LO** - intercept R057 **LIS** outbound - at ALAMA **LT** intercept R189 **FTM** to **FTM** | initial climb **FL60** |

① Non RNAV equipped aircraft not flying via FTM or ESP expect radar vectoring and/or "direct to" instructions.

② Climb gradient due to obstacles.

③ Climb gradient due to ATC. This restriction, when needed, will be included in the ATIS DEP broadcast and/or CLR DLV. If unable to comply, advice ATC prior start up.

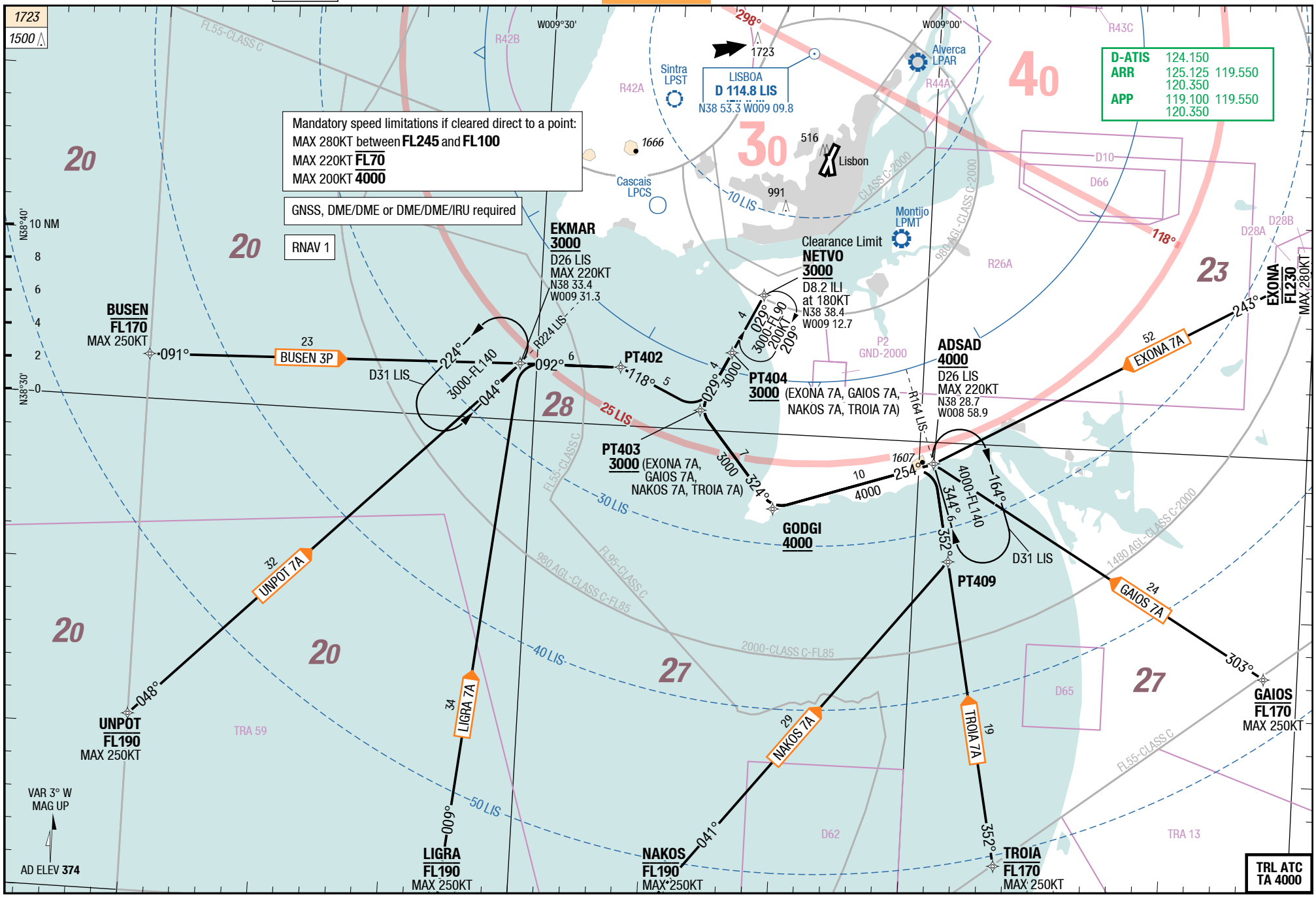
Changes: ALT, PROC renumbered



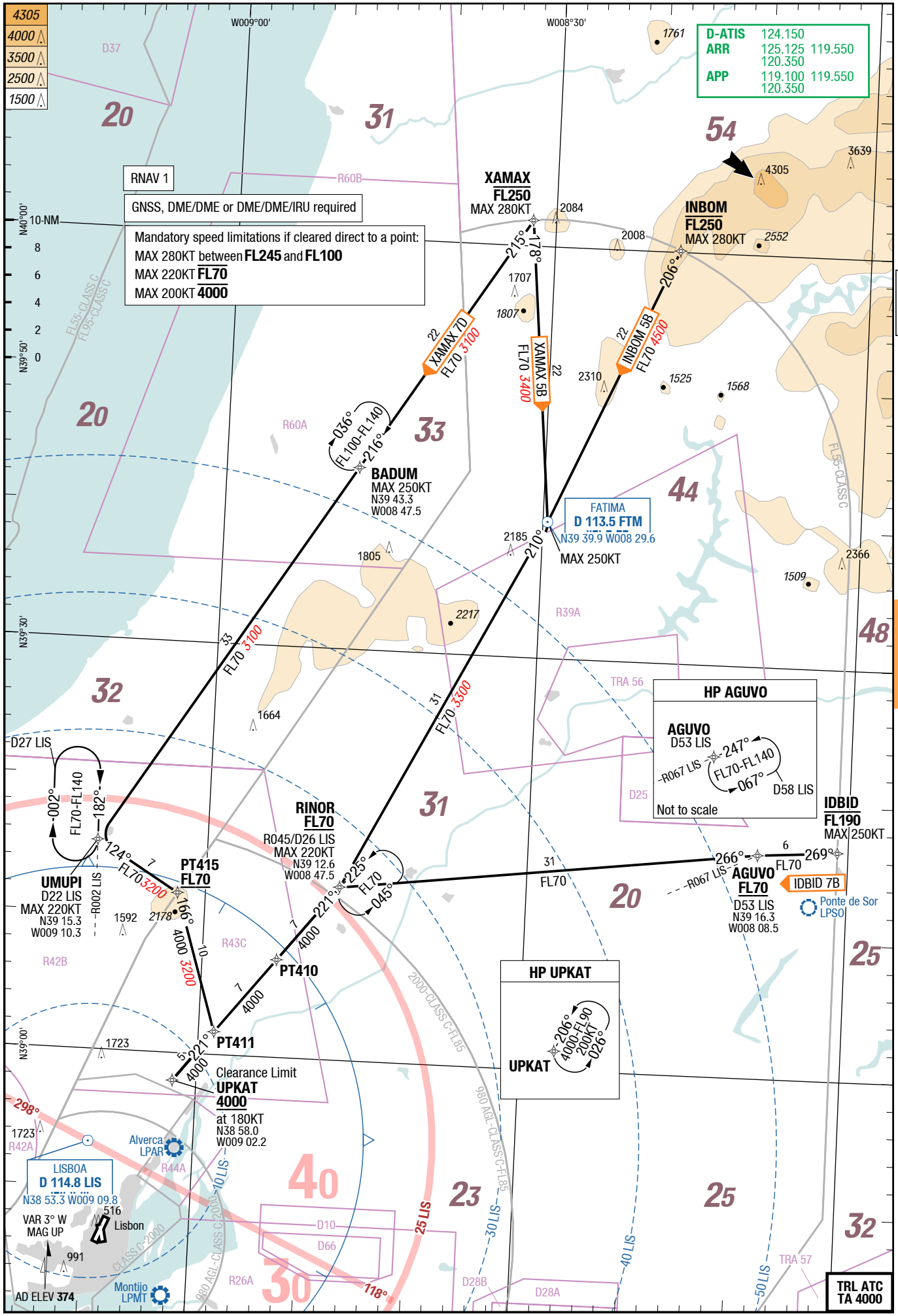


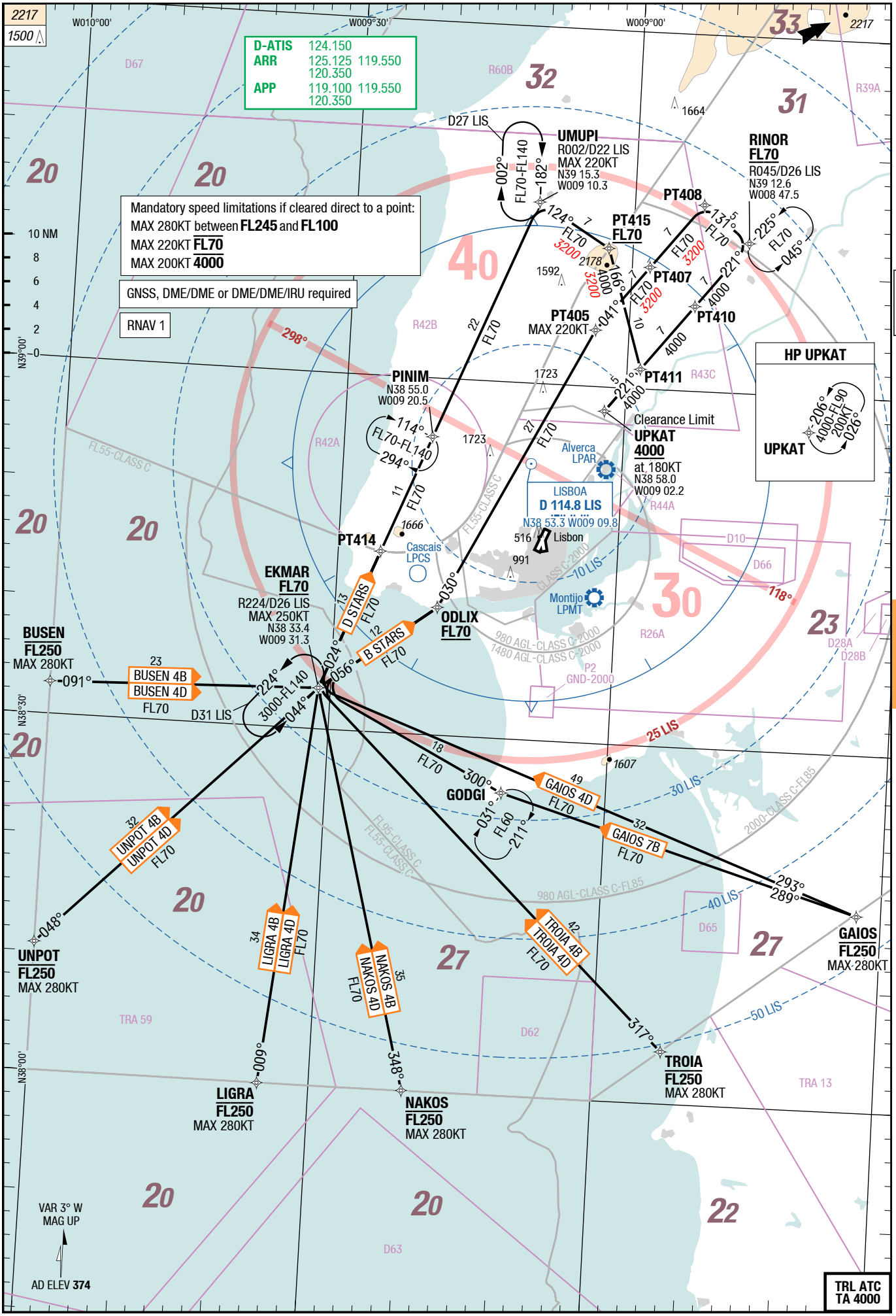

Changes: FREQ

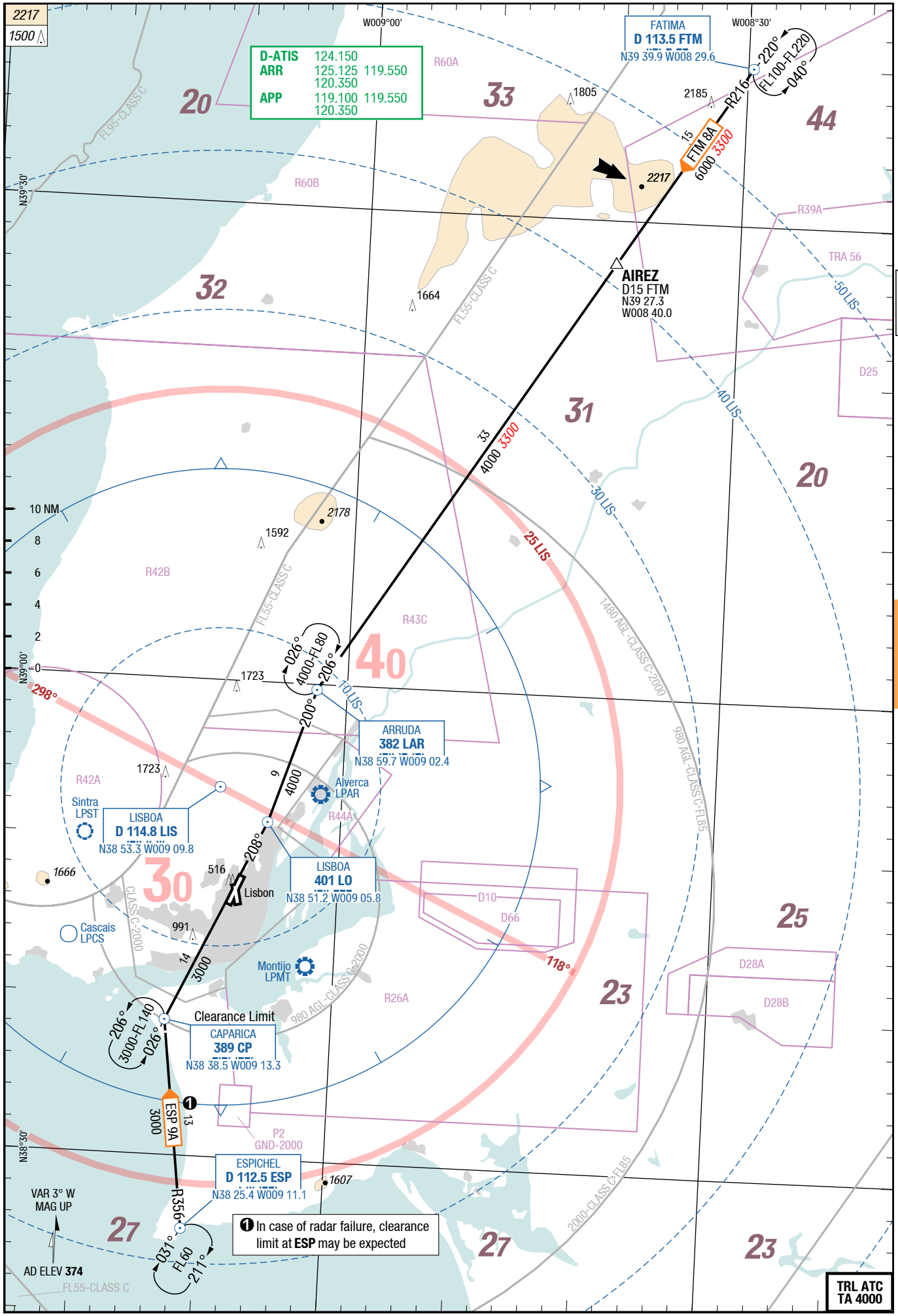
STAR **Lisbon** Portugal
**RNAV STARs RWYs 03/35 South**

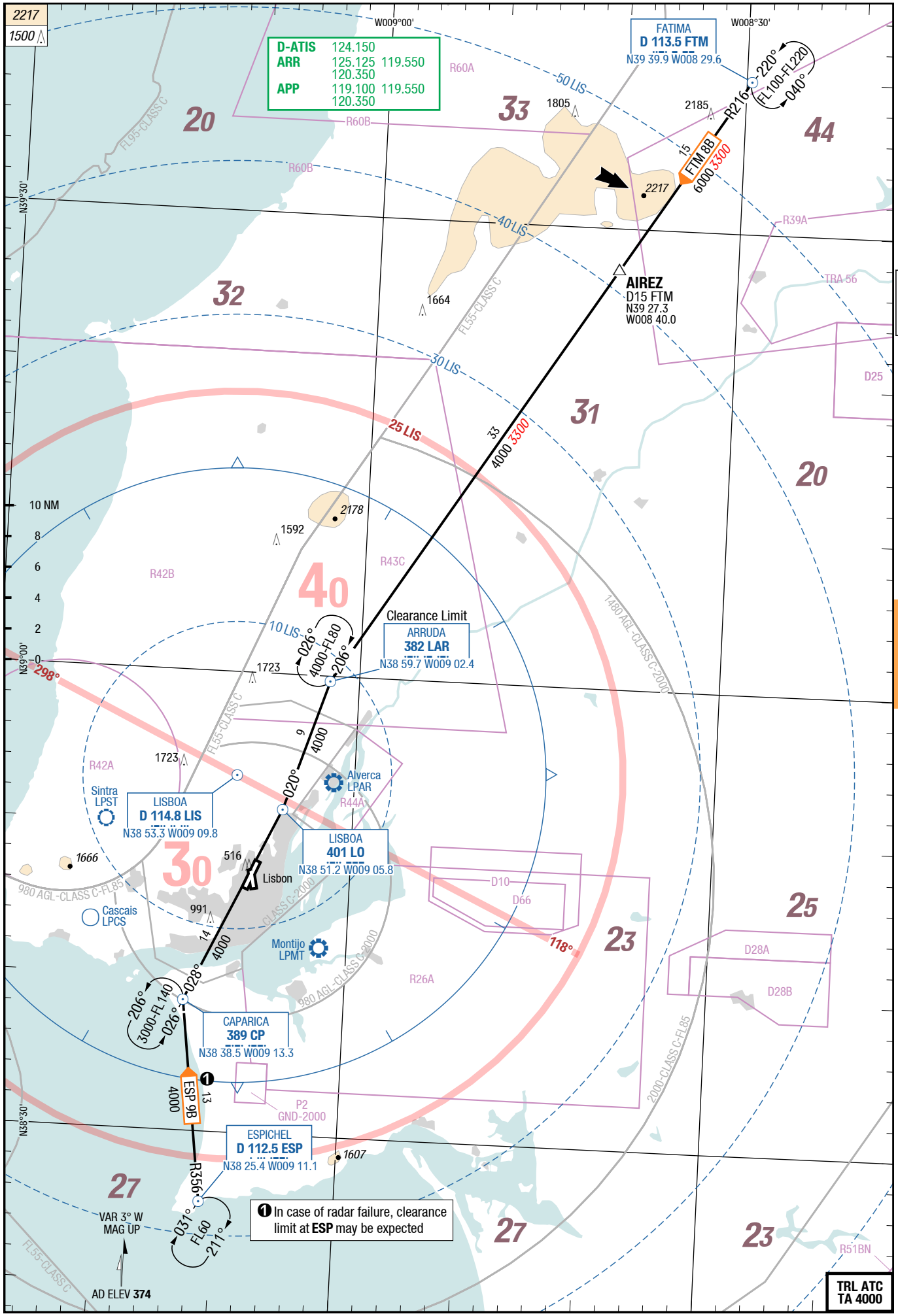


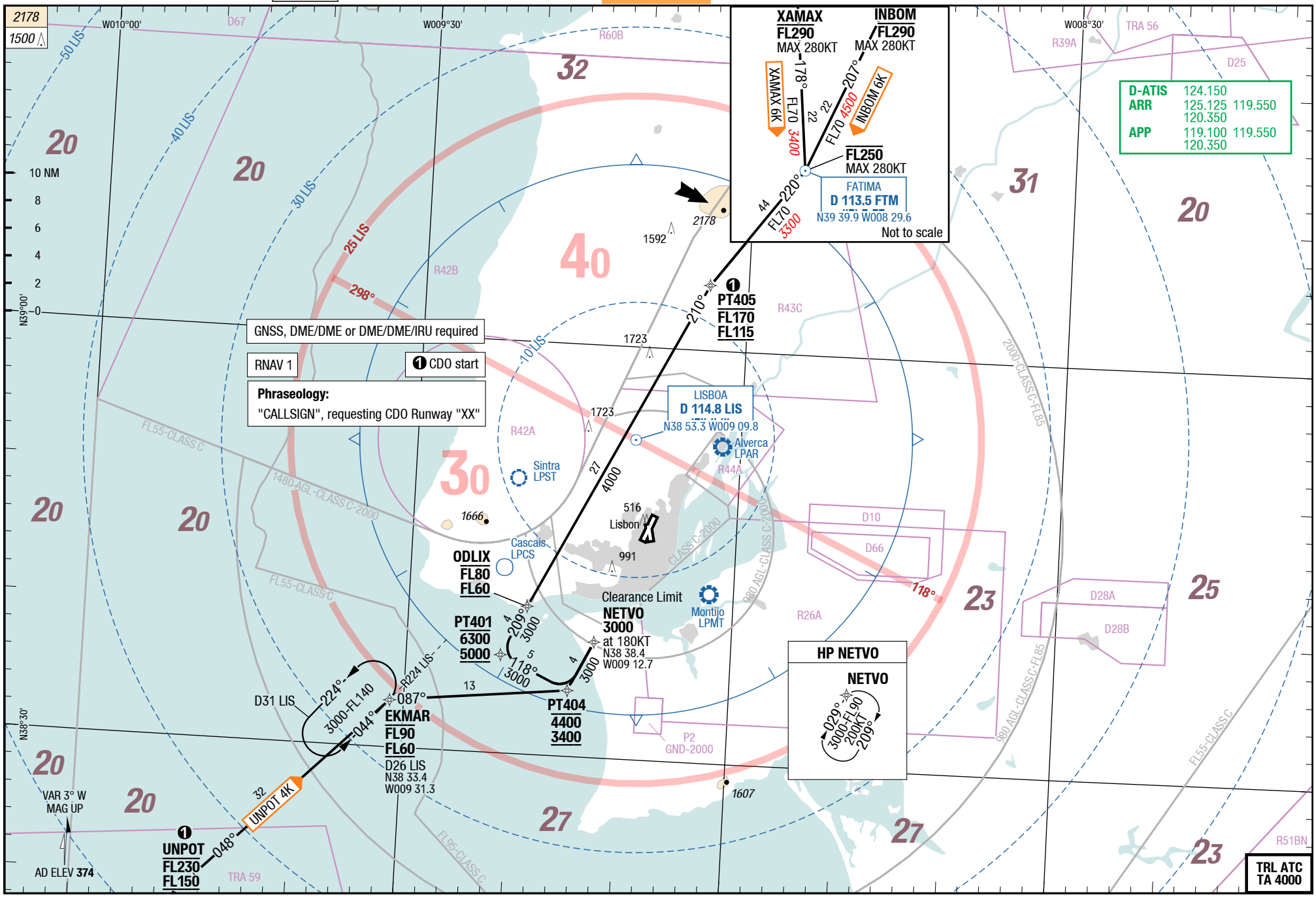

Changes: FREQ


4305
4000
3500
2500
1500
D-ATIS 124.150
ARR 125.125 119.550 120.350
APP 119.100 119.550 120.350
RNAV 1
GNSS, DME/DME or DME/DME/IRU required
Mandatory speed limitations if cleared direct to a point:
MAX 280KT between FL245 and FL100
MAX 220KT FL70
MAX 200KT 4000
XAMAX
FL250
MAX 280KT
INBOM
FL250
MAX 280KT
XAMAX 7D
FL70 3100
XAMAX 5B
FL70 3400
INBOM 5B
FL70 4500
036°
FL100-FL140
216°
BADUM
MAX 250KT
N39 43.3
W008 47.5
FATIMA
D 113.5 FTM
N39 39.9 W008 29.6
MAX 250KT
HP AGUVO
AGUVO
D53 LIS
247°
FL70-FL140
067°
D58 LIS
R067 LIS
Not to scale
IDBID
FL190
MAX 250KT
AGUVO
FL70
D53 LIS
N39 16.3
W008 08.5
IDBID 7B
Ponte de Sor
LPSO
RINOR
FL70
R045/D26 LIS
MAX 220KT
N39 12.6
W008 47.5
UMUPI
D22 LIS
MAX 220KT
N39 15.3
W009 10.3
R002 LIS
PT415
FL70
PT410
PT411
HP UPKAT
UPKAT
206°
4000-FL90
200KT
026°
Clearance Limit
UPKAT
4000
at 180KT
N38 58.0
W009 02.2
LISBOA
D 114.8 LIS
N38 53.3 W009 09.8
VAR 3° W
MAG UP
Lisbon
Alverca
LPAR
Montijo
LPMT
AD ELEV 374
TRL ATC
TA 4000
W009°00'
W008°30'
N40°00'
N39°50'
N39°30'
N39°00'
10-NM
D37
R60B
R60A
R39A
R43C
R42B
R44A
R42A
R26A
TRA 56
TRA 57
D27 LIS
D25
D10
D66
D28B
D28A
FL55-CLASS C
FL95-CLASS C
2000-CLASS C-FL85
980 AGL-CLASS C-FL85
CLASS C-2000
25 LIS
10 LIS
30 LIS
40 LIS
50 LIS
298°
118°


D-ATIS 124.150
ARR 125.125 119.550 120.350
APP 119.100 119.550 120.350
Mandatory speed limitations if cleared direct to a point:
MAX 280KT between FL245 and FL100
MAX 220KT FL70
MAX 200KT 4000
GNSS, DME/DME or DME/DME/IRU required
RNAV 1
UMUPI
R002/D22 LIS
MAX 220KT
N39 15.3
W009 10.3
RINOR
FL70
R045/D26 LIS
N39 12.6
W008 47.5
PT408
PT415
FL70
PT407
PT405
MAX 220KT
PT410
PT411
HP UPKAT
UPKAT
Clearance Limit
UPKAT
4000
at 180KT
N38 58.0
W009 02.2
PINIM
N38 55.0
W009 20.5
PT414
Cascais
LPCS
Alverca
LPAR
LISBOA
D 114.8 LIS
N38 53.3 W009 09.8
Lisbon
Montijo
LPMT
EKMAR
FL70
R224/D26 LIS
MAX 250KT
N38 33.4
W009 31.3
ODLIX
FL70
BUSEN
FL250
MAX 280KT
BUSEN 4B
BUSEN 4D
FL70
D31 LIS
UNPOT 4B
UNPOT 4D
FL70
UNPOT
FL250
MAX 280KT
LIGRA 4B
LIGRA 4D
FL70
LIGRA
FL250
MAX 280KT
NAKOS 4B
NAKOS 4D
FL70
NAKOS
FL250
MAX 280KT
D STARS
FL70
B STARS
FL70
GODGI
GAIOS 4D
FL70
GAIOS 7B
FL70
GAIOS
FL250
MAX 280KT
TROIA 4B
TROIA 4D
FL70
TROIA
FL250
MAX 280KT
D27 LIS
10 LIS
25 LIS
30 LIS
40 LIS
50 LIS
980 AGL-CLASS C-2000
1480 AGL-CLASS C-2000
980 AGL-CLASS C-FL85
2000-CLASS C-FL85
FL55-CLASS C
FL95-CLASS C
CLASS C-2000
P2
GND-2000
R60B
R42B
R42A
R43C
R44A
R26A
R39A
D67
D63
D62
D65
D66
D10
D28A
D28B
TRA 59
TRA 13
VAR 3° W
MAG UP
AD ELEV 374
TRL ATC
TA 4000
10 NM
8
6
4
2
0
W010°00'
W009°30'
W009°00'
N39°00'
N38°30'
N38°00'

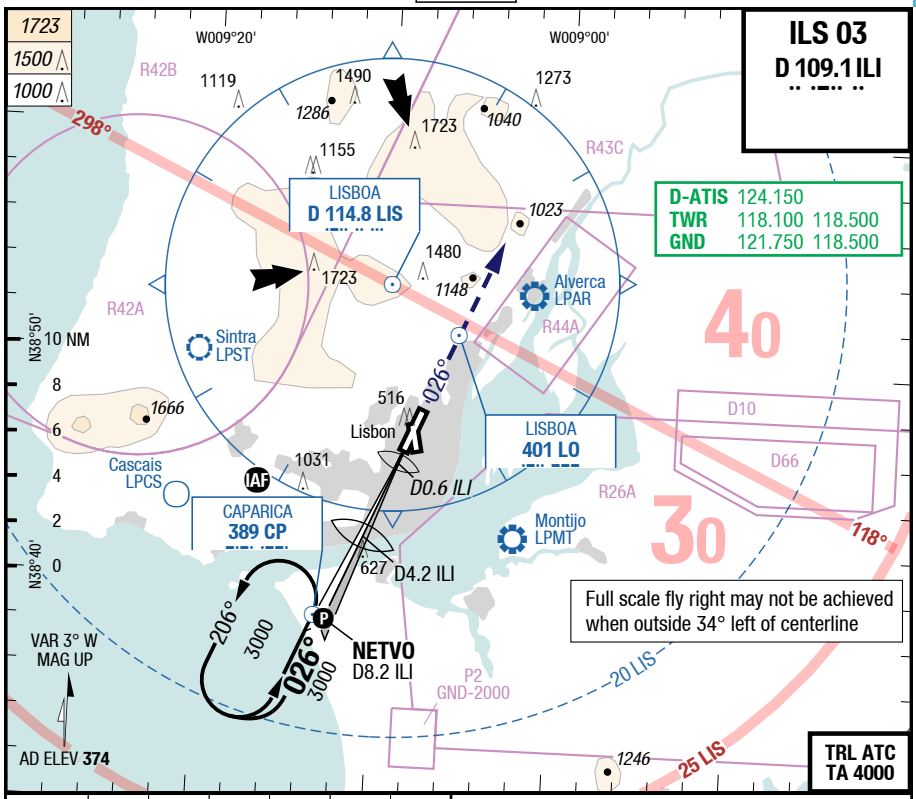

2217
1500
D-ATIS 124.150
ARR 125.125 119.550 120.350
APP 119.100 119.550 120.350
FATIMA
D 113.5 FTM
N39 39.9 W008 29.6
220°
FL100-FL220
040°
R216
FTM 8A
6000 3300
AIREZ
D15 FTM
N39 27.3
W008 40.0
4000 3300
ARRUDA
382 LAR
N38 59.7 W009 02.4
LISBOA
D 114.8 LIS
N38 53.3 W009 09.8
LISBOA
401 LO
N38 51.2 W009 05.8
Alverca LPAR
Sintra LPST
Cascais LPCS
Montijo LPMT
Lisbon
Clearance Limit
CAPARICA
389 CP
N38 38.5 W009 13.3
ESP 9A
3000
ESPICHEL
D 112.5 ESP
N38 25.4 W009 11.1
R356°
031°
FL60
211°
026°
3000-FL140
206°
026°
4000-FL80
206°
200°
208°
298°
118°
10 LIS
25 LIS
30 LIS
40 LIS
50 LIS
TRA 56
R60A
R60B
R39A
R42A
R42B
R43C
R44A
R26A
D10
D66
D25
D28A
D28B
P2
GND-2000
FL95-CLASS C
FL55-CLASS C
980 AGL-CLASS C-2000
1480 AGL-CLASS C-2000
980 AGL-CLASS C-FL85
2000-CLASS C-FL85
CLASS C-2000
10 NM
8
6
4
2
0
W009°00'
W008°30'
N39°30'
N39°00'
N38°30'
VAR 3° W
MAG UP
AD ELEV 374
1 In case of radar failure, clearance limit at ESP may be expected
TRL ATC
TA 4000


2217
1500
W009°00'
W008°30'
N39°30'
N39°00'
N38°30'
D-ATIS 124.150
ARR 125.125 119.550
120.350
APP 119.100 119.550
120.350
FATIMA
D 113.5 FTM
N39 39.9 W008 29.6
220°
FL100-FL220
040°
R216
15
FTM 8B
6000 3300
2217
AIREZ
D15 FTM
N39 27.3
W008 40.0
33
4000 3300
R60A
R60B
R39A
TRA 56
D25
50 LIS
40 LIS
30 LIS
25 LIS
10 LIS
FL95-CLASS C
FL55-CLASS C
1480 AGL-CLASS C-2000
980 AGL-CLASS C-FL85
CLASS C-2000
2000-CLASS C-FL85
20
33
44
32
31
40
30
23
25
27
1805
2185
1664
2178
1592
1723
1666
516
991
1607
10 NM
8
6
4
2
0
298°
Clearance Limit
ARRUDA
382 LAR
N38 59.7 W009 02.4
026°
4000-FL80
206°
9
4000
020°
14
4000
028°
206°
3000-FL140
026°
13
4000
ESP 9B
R356°
031°
FL60
211°
R42B
R43C
R42A
R44A
R26A
D10
D66
D28A
D28B
P2
GND-2000
R51BN
Sintra
LPST
LISBOA
D 114.8 LIS
N38 53.3 W009 09.8
Alverca
LPAR
LISBOA
401 LO
N38 51.2 W009 05.8
Lisbon
Cascais
LPCS
Montijo
LPMT
CAPARICA
389 CP
N38 38.5 W009 13.3
ESPICHEL
D 112.5 ESP
N38 25.4 W009 11.1
118°
❶ In case of radar failure, clearance limit at ESP may be expected
VAR 3° W
MAG UP
AD ELEV 374
TRL ATC
TA 4000

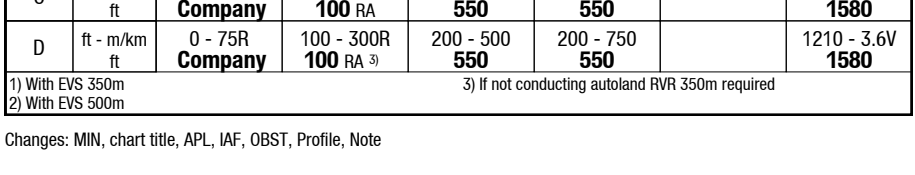





Changes: FREQ




| D ILI | 8.2 | 6 | 5 | 4 | 3 | 2 |
|---|---|---|---|---|---|---|
| | 3000 | 2310 | 1990 | 1670 | 1350 | 1040 |




| 03 | | Cat 3b | Cat 2 | Cat 1 LIS 1) | Cat 1 2) | | Circling |
|---|---|---|---|---|---|---|---|
| C | ft - m/km ft | 0 - 75R **Company** | 100 - 300R **100** RA | 200 - 500 **550** | 200 - 750 **550** | | 1210 - 2.4V **1580** |
| D | ft - m/km ft | 0 - 75R **Company** | 100 - 300R **100** RA 3) | 200 - 500 **550** | 200 - 750 **550** | | 1210 - 3.6V **1580** |

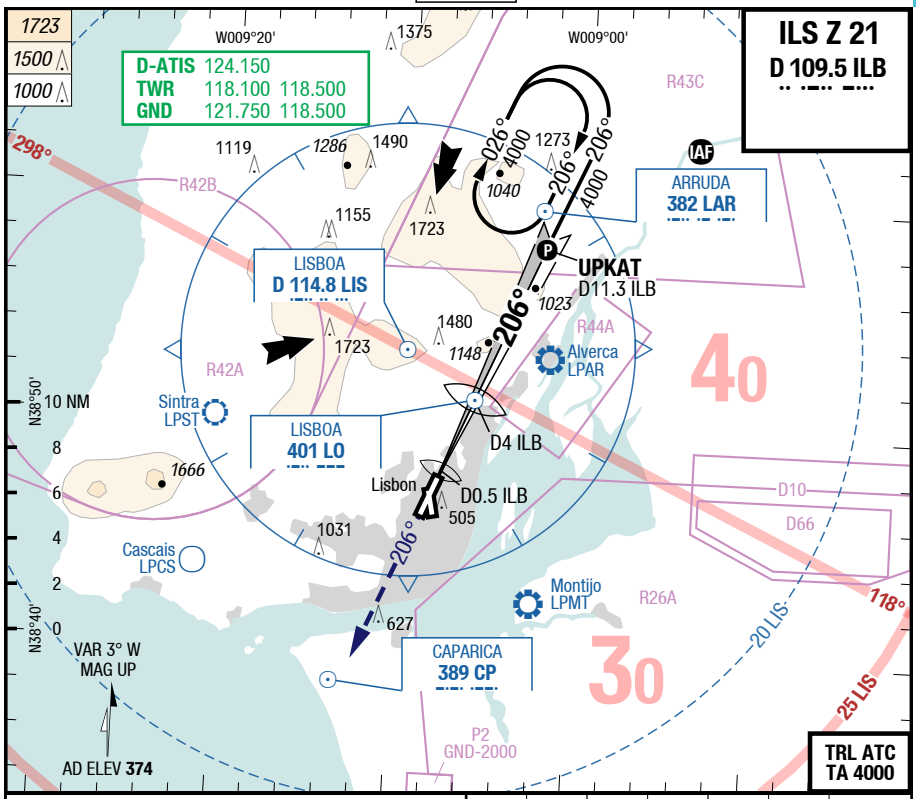
1) With EVS 350m
2) With EVS 500m
3) If not conducting autoland RVR 350m required

Changes: MIN, chart title, APL, IAF, OBST, Profile, Note

# LIS-LPPT

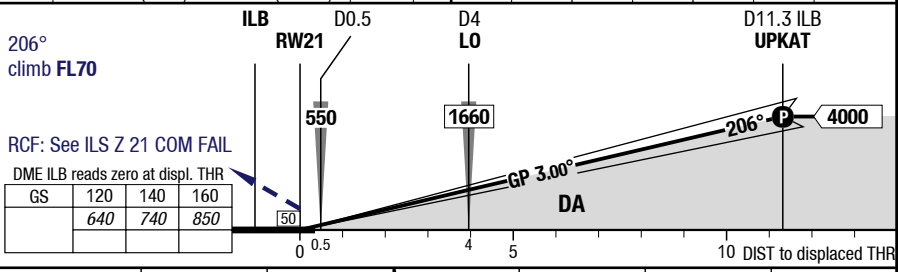
7-20

# ILS Z 21





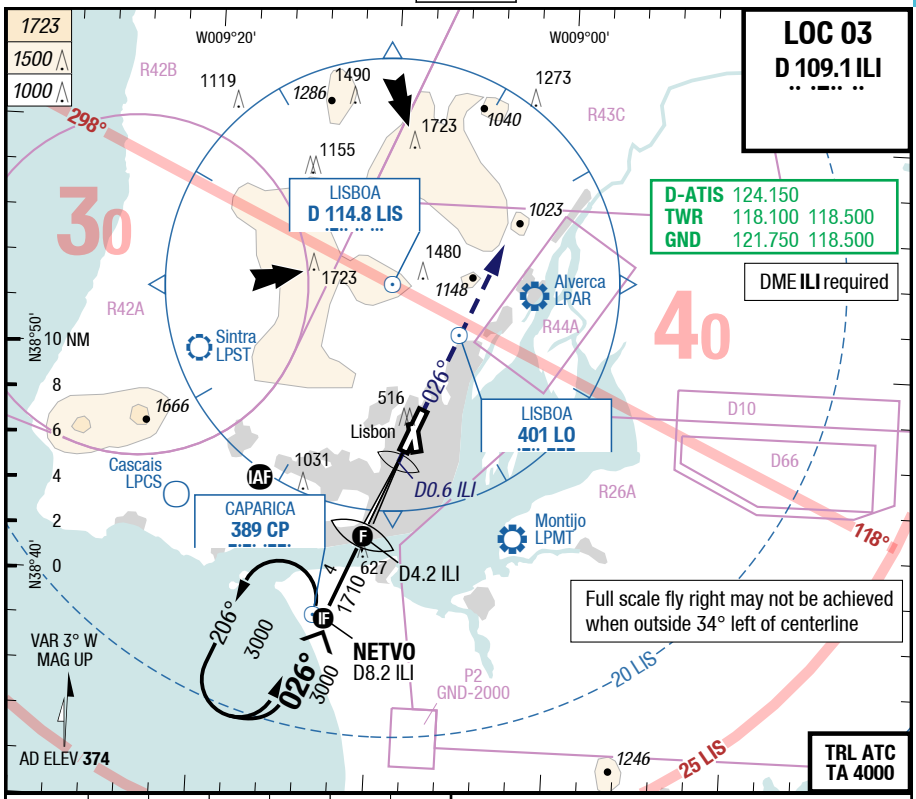
| 1 | 3 | 5 | 7 | 9 | 11.3 | D ILB |
|---|---|---|---|---|---|---|
| *730* | *1360* | *2000* | *2640* | *3270* | 4000 | |



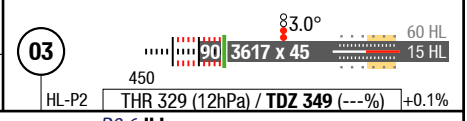

| 21 | | Cat 3b | Cat 2 | Cat 1 LTS 1) | Cat 1 1) | | Circling |
|---|---|---|---|---|---|---|---|
| C | ft - m/km ft | 0 - 75R **Company** | 100 - 300R **100** RA | 200 - 400 **560** | 200 - 550 **560** | | 1210 - 2.4V **1580** |
| D | ft - m/km ft | 0 - 75R **Company** | 100 - 300R **100** RA 2) | 200 - 400 **560** | 200 - 550 **560** | | 1210 - 3.6V **1580** |

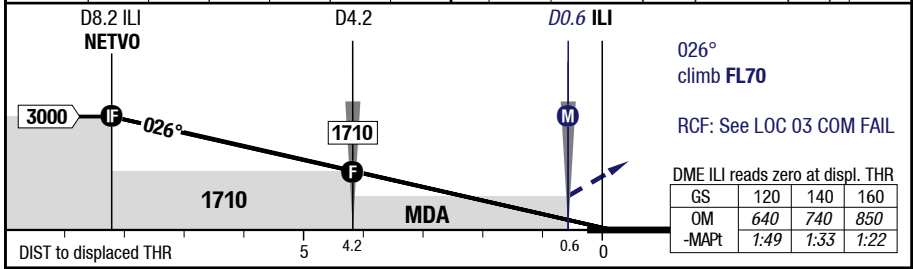
1) With EVS 350m
2) If not conducting autoland RVR 350m required

Changes: Nil




| 3.00° D ILI | 8.2 | 6 | 5 | 4 | 3 | 2 |
|---|---|---|---|---|---|---|
| | 3000 | 2310 | 1990 | 1670 | 1350 | 1030 |



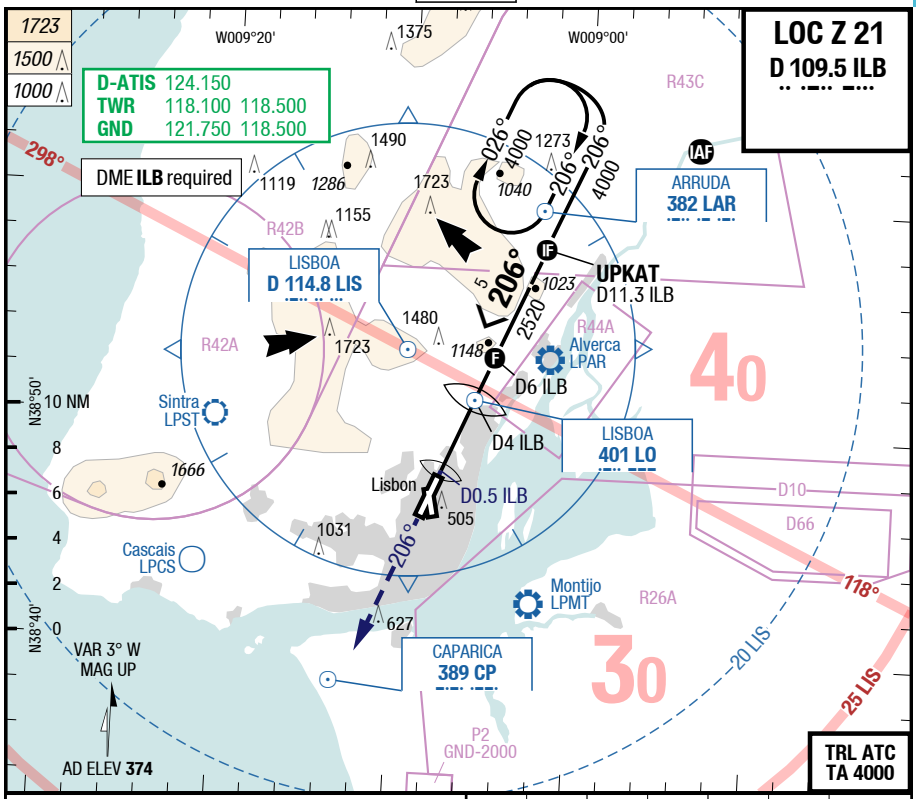

| 03 | | LOC DME | | | | | Circling |
|---|---|---|---|---|---|---|---|
| C | ft - m/km<br>ft | 480 - 1.8<br>**830** | | | | | 1210 - 2.4V<br>**1580** |
| D | ft - m/km<br>ft | 480 - 1.8<br>**830** | | | | | 1210 - 3.6V<br>**1580** |

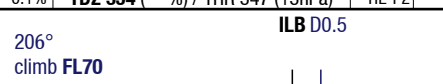
Changes: New

# LIS-LPPT

7-40

# LOC Z 21




| 2 | 3 | 5 | 7 | 9 | 10.1 | 3.36° |
|---|---|---|---|---|---|---|
| 1120 | 1480 | 2190 | 2910 | 3620 | 4000 | D ILB |




| GS | 120 | 140 | 160 |
|---|---|---|---|
| D6 ILB | 710 | 830 | 950 |
| -MAPt | 2:45 | 2:21 | 2:04 |

| 21 | | LOC DME | | | | | Circling |
|---|---|---|---|---|---|---|---|
| C | ft - m/km<br>ft | 390 - 1.1<br>**740** | | | | | 1210 - 2.4V<br>**1580** |
| D | ft - m/km<br>ft | 390 - 1.1<br>**740** | | | | | 1210 - 3.6V<br>**1580** |

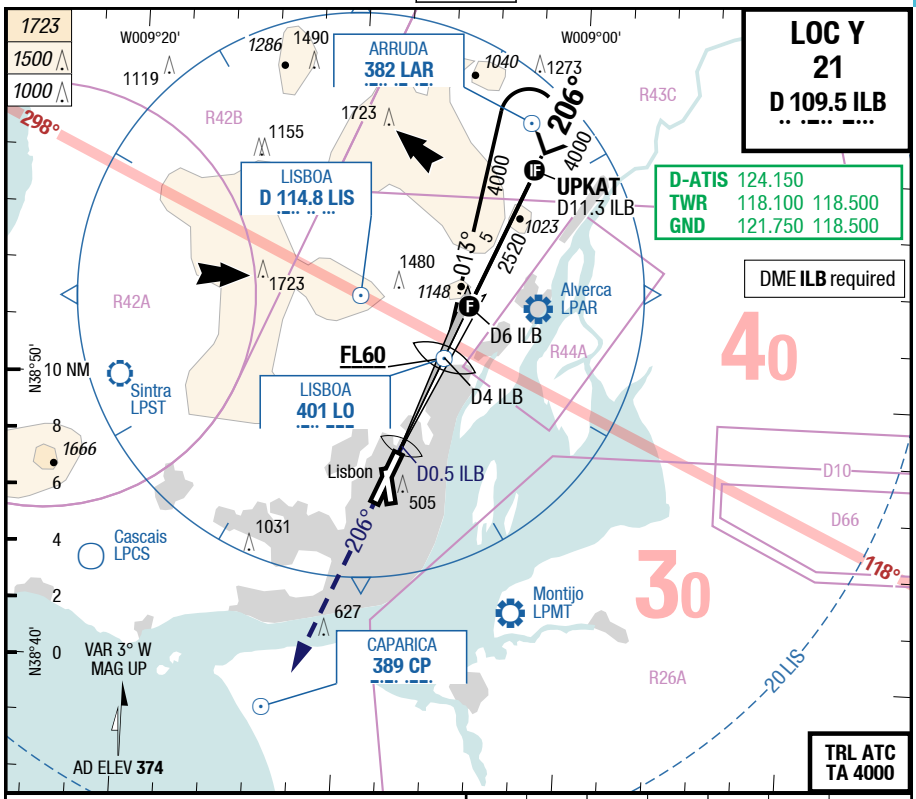


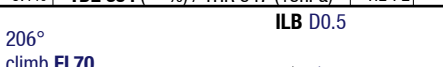
Changes: Page Number

# LIS-LPPT

7-50

# LOC Y 21




-0.1% **TDZ 354** (---%) / THR 347 (13hPa) HL-P2

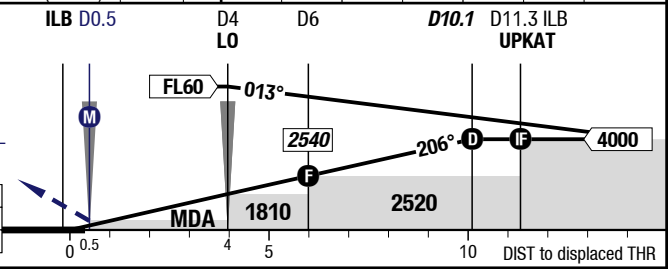
| 2 | 3 | 5 | 7 | 9 | 10.1 | *3.36°* **D ILB** |
|---|---|---|---|---|---|---|
| *1120* | *1480* | *2190* | *2910* | *3620* | 4000 | |

206°
climb **FL70**

RCF: see LOC Y 21 COM FAIL

DME ILB reads zero at displ. THR

| GS | 120 | 140 | 160 |
|---|---|---|---|
| D6 ILB | *710* | *830* | *950* |
| -MAPt | *2:45* | *2:21* | *2:04* |



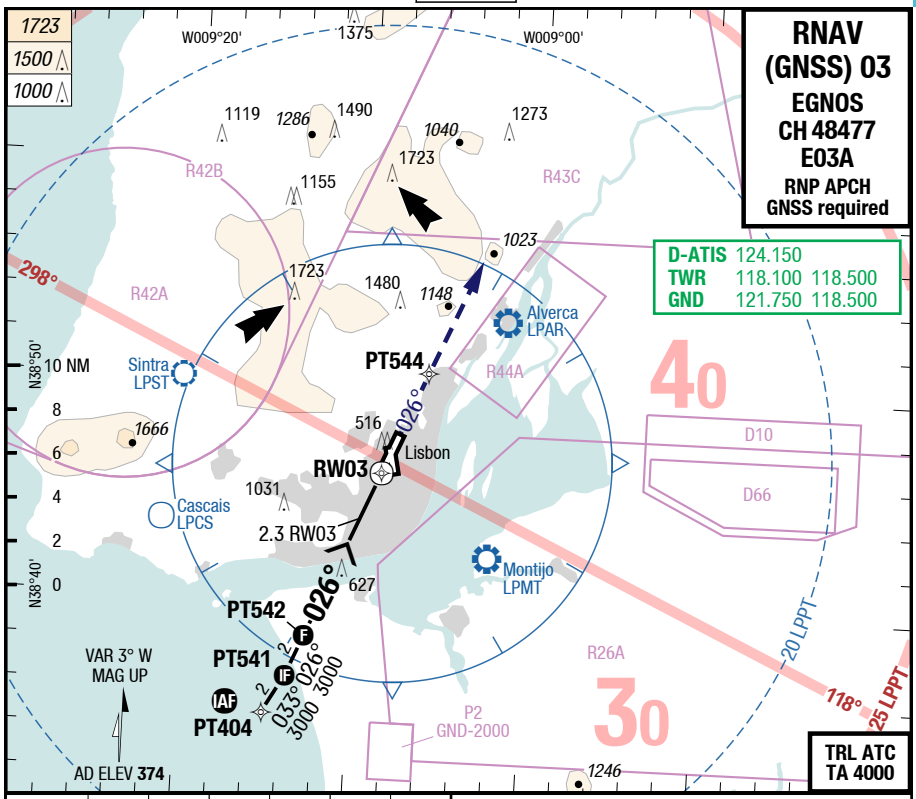

| 21 | | LOC DME | | | | | Circling |
|---|---|---|---|---|---|---|---|
| C | ft - m/km<br>ft | 390 - 1.1<br>**740** | | | | | 1210 - 2.4V<br>**1580** |
| D | ft - m/km<br>ft | 390 - 1.1<br>**740** | | | | | 1210 - 3.6V<br>**1580** |

Changes: Page Number

# LIS-LPPT

7-70

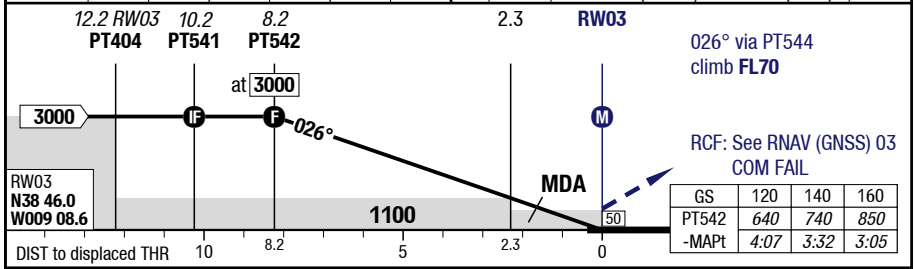
# RNAV (GNSS) 03




| 3.00° RW03 | 8.2 | 6 | 5 | 4 | 3 | 2 |
|---|---|---|---|---|---|---|
| | 3000 | 2290 | 1980 | 1660 | 1340 | 1020 |

03 — 3.0° — 60 HL — 90 — 3617 x 45 — 15 HL — 450

HL-P2 — THR 329 (12hPa) / **TDZ 349** (---%) — +0.1%




| GS | 120 | 140 | 160 |
|---|---|---|---|
| PT542 | *640* | *740* | *850* |
| -MAPt | *4:07* | *3:32* | *3:05* |

| 03 | | RNAV GNSS LPV 1) | RNAV GNSS VNAV 2) 3) | RNAV GNSS LNAV | | | Circling |
|---|---|---|---|---|---|---|---|
| C | ft - m/km | 270 - 900 | 420 - 1.5 | 490 - 1.8 | | | 1210 - 2.4V |
| | ft | **610** | **760** | **830** | | | **1580** |
| D | ft - m/km | 280 - 900 | 420 - 1.5 | 490 - 1.8 | | | 1210 - 3.6V |
| | ft | **620** | **760** | **830** | | | **1580** |

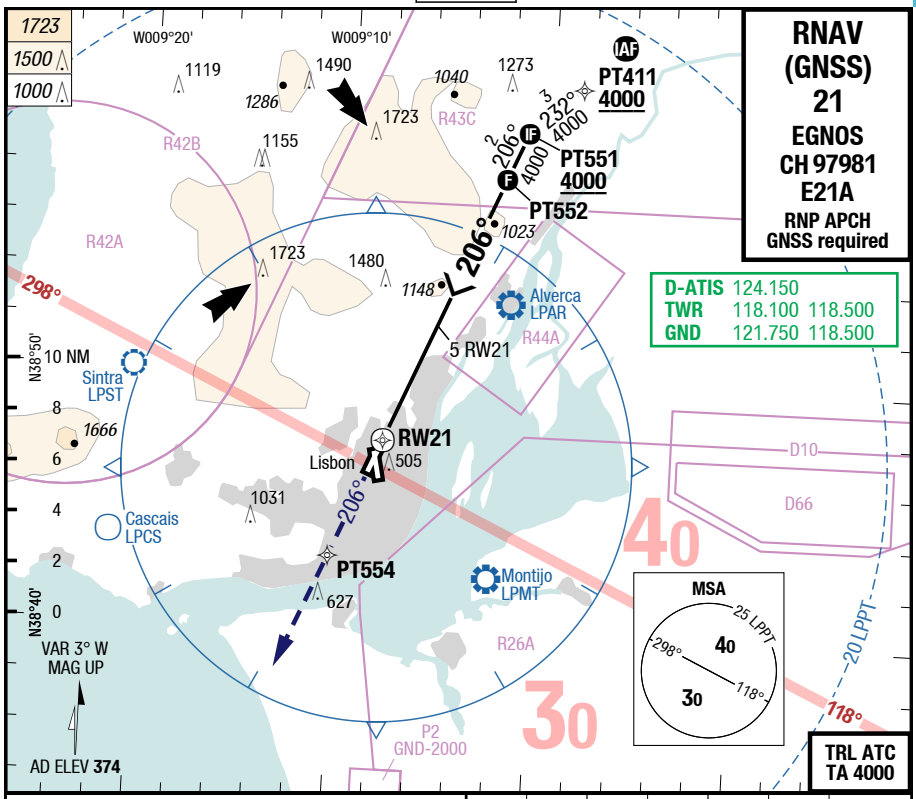
1) With EVS 600m
2) Uncompensated BARO VNAV NA below 0°C (32°F)
3) With EVS 1.0km

Changes: APL, OBST, Editorial

# LIS-LPPT

7-80

# RNAV (GNSS) 21





| 3 | 4 | 7 | 9 | 11 | 11.3 | 3.00° |
|---|---|---|---|---|---|---|
| *1360* | *1670* | *2630* | *3270* | *3900* | 4000 | **RW21** |




| GS | 120 | 140 | 160 |
|---|---|---|---|
| PT552 | *640* | *740* | *850* |
| -MAPt | *5:40* | *4:51* | *4:15* |

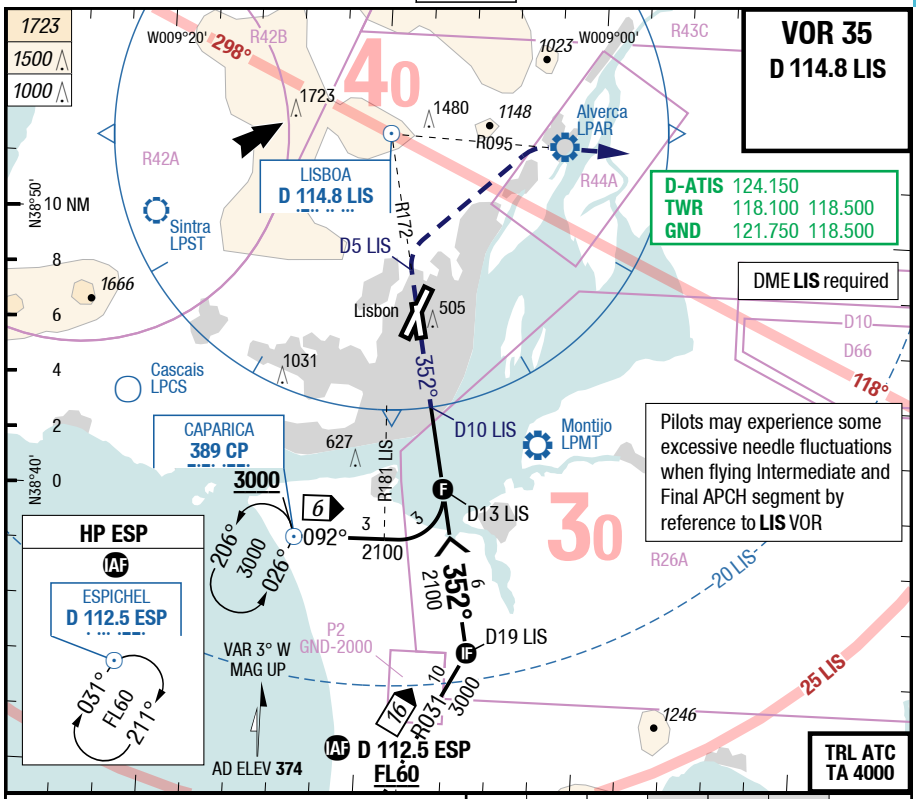
| **21** | | **RNAV GNSS** LPV 1) 2) | **RNAV GNSS** VNAV 3) 4) | **RNAV GNSS** LNAV | | | **Circling** |
|---|---|---|---|---|---|---|---|
| C | ft - m/km ft | 250 - 600 **610** | 450 - 1.4 **800** | 490 - 1.5 **840** | | | 1210 - 2.4V **1580** |
| D | ft - m/km ft | 260 - 600 **610** | 450 - 1.4 **800** | 490 - 1.5 **840** | | | 1210 - 3.6V **1580** |

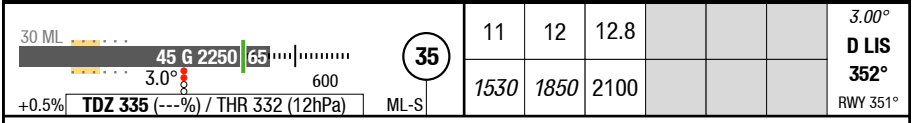
1) wo HGS RVR 750m required
2) With EVS 400m
3) With EVS 900m
4) Uncompensated BARO VNAV NA below 0°C (32°F)

# LIS-LPPT

7-90

# VOR 35

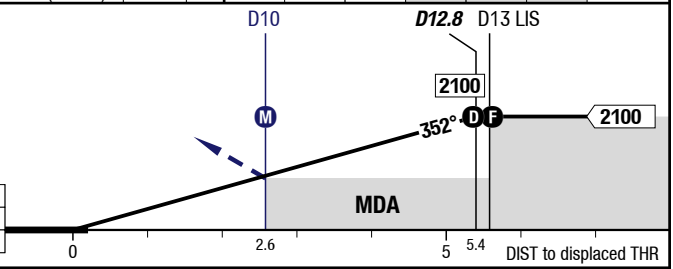



352°
at D5 **LIS RT**
intercept R095 **LIS**
climb **FL70**

RCF: See VOR 35
COM FAIL

| GS | 120 | 140 | 160 |
|---|---|---|---|
| D12.8 LIS | *640* | *740* | *850* |
| -MAPt | *1:24* | *1:12* | *1:03* |




| 35 | | VOR DME | | | | | Circling |
|---|---|---|---|---|---|---|---|
| C | ft - m/km<br>ft | 830 - 2.4<br>**1160** | | | | | 1210 - 2.4V<br>**1580** |
| D | ft - m/km<br>ft | 830 - 2.4<br>**1160** | | | | | 1210 - 3.6V<br>**1580** |

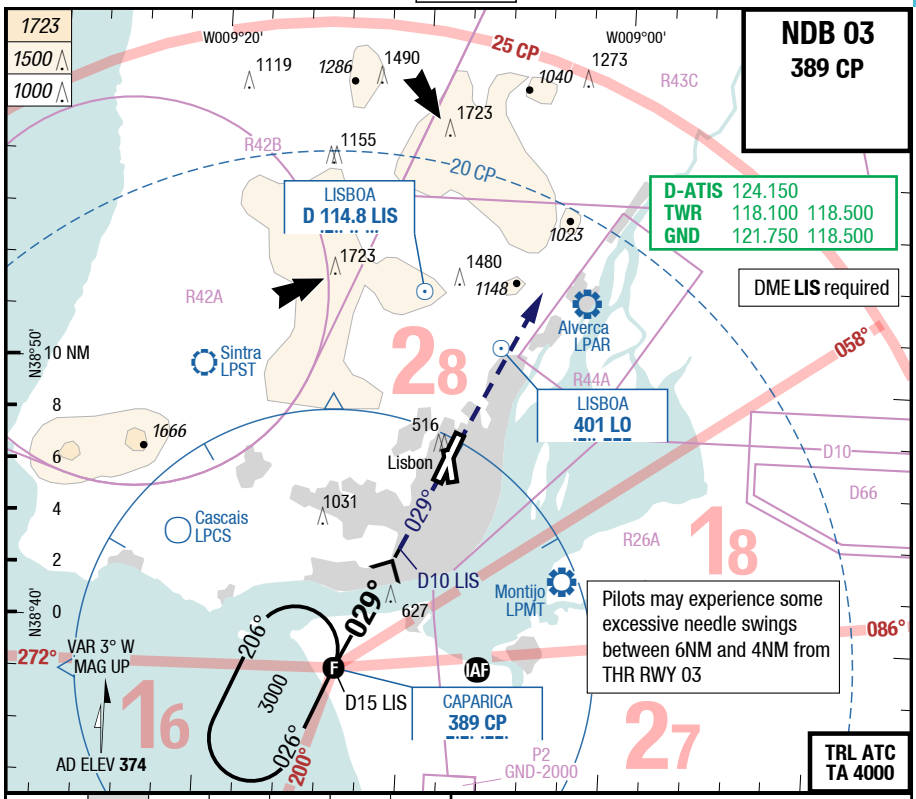


Changes: Page Number

# LIS-LPPT

7-100

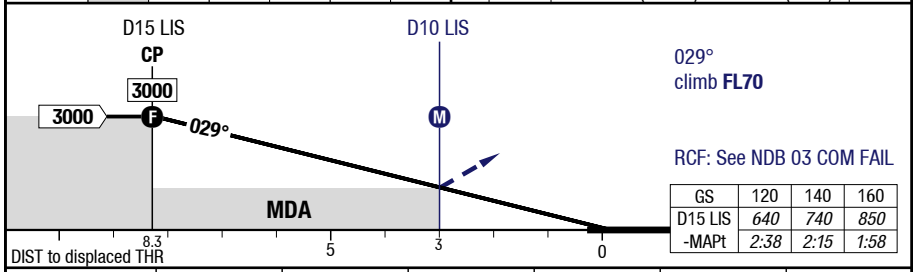
# NDB 03




| 3.00° D LIS 029° RWY 026° | | 15 | 14 | 13 | 12 | 11 |
|---|---|---|---|---|---|---|
| | | 3000 | 2700 | 2370 | 2030 | 1690 |

03 — HL-P2 — 3.0° — 60 HL — 90 — 3617 x 45 — 15 HL — 450

THR 329 (12hPa) / **TDZ 349** (---%) +0.1%

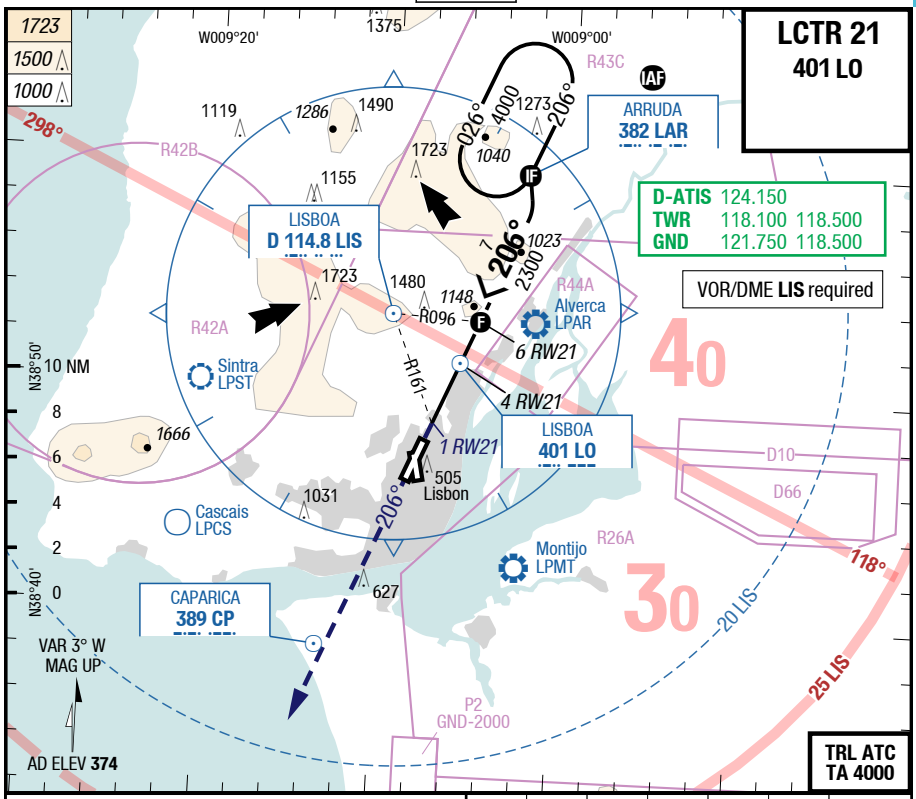


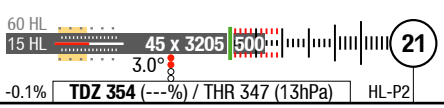

| GS | 120 | 140 | 160 |
|---|---|---|---|
| D15 LIS -MAPt | *640* *2:38* | *740* *2:15* | *850* *1:58* |

| **03** | | **NDB** 1) | | | | | **Circling** |
|---|---|---|---|---|---|---|---|
| C | ft - m/km ft | 980 - 2.4 **1320** | | | | | 1200 - 2.4V **1570** |
| D | ft - m/km ft | 980 - 2.4 **1320** | | | | | 1200 - 3.6V **1570** |

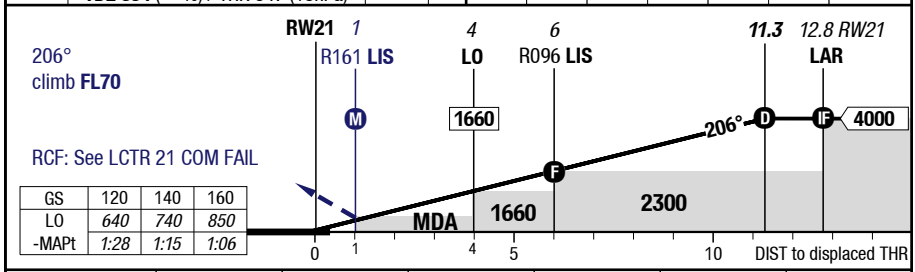
1) Timing to determine MAPt NA

Changes: APL, OBST




| 3 | 5 | 7 | 9 | 11 | 11.3 | 3.00° |
|---|---|---|---|---|---|---|
| 1360 | 1990 | 2630 | 3270 | 3900 | 4000 | RW21 |




| GS | 120 | 140 | 160 |
|---|---|---|---|
| LO | *640* | *740* | *850* |
| -MAPt | *1:28* | *1:15* | *1:06* |

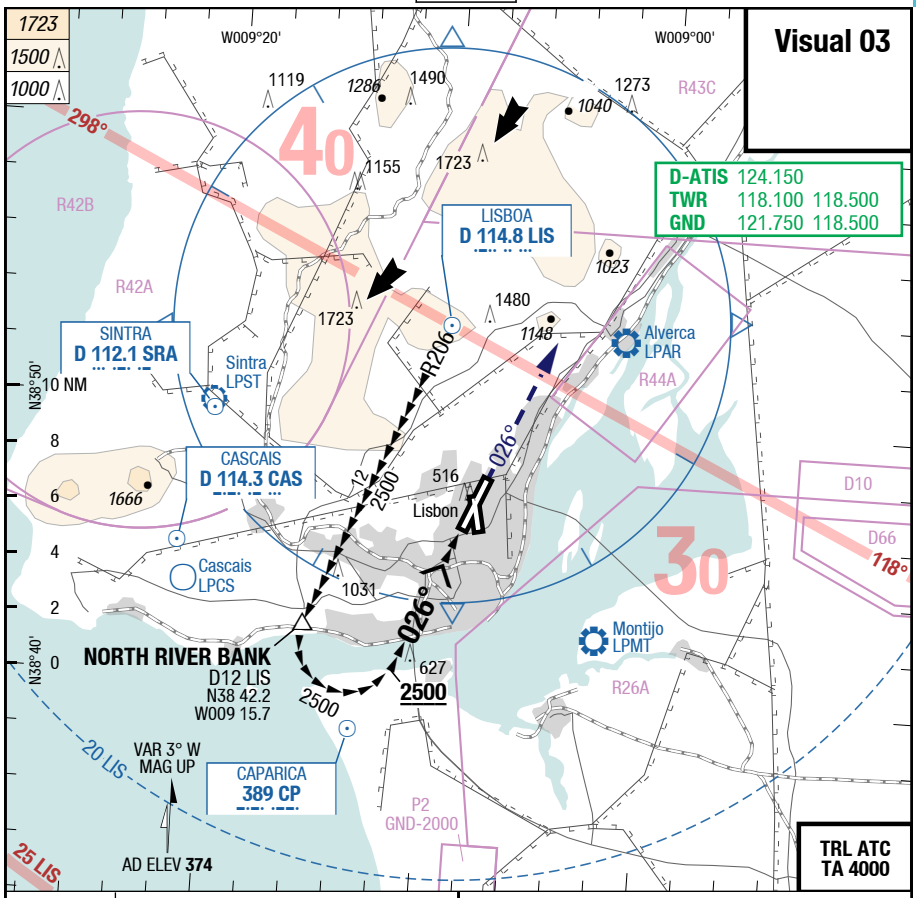
| 21 | | LCTR VOR LO + LIS | | | | | Circling |
|---|---|---|---|---|---|---|---|
| C | ft - m/km ft | 490 - 1.5 **840** | | | | | 1210 - 2.4V **1580** |
| D | ft - m/km ft | 490 - 1.5 **840** | | | | | 1210 - 3.6V **1580** |

Changes: Page Number

# LIS-LPPT

7-120

## Visual 03




**VISUAL**

03

3.0°
60 HL
15 HL
3617 x 45
450
HL-P2
THR 329 (12hPa) / **TDZ 349** (---%)
+0.1%

- All aircraft carrying out visual approach procedure to RWY 03 shall not, unless cleared by ATC, descend below **2500** on left downwind leg.
- Aircraft must join the final approach track to RWY 03 at **MNM 2500**.
- Procedure pending on traffic in R42A/R42B.

026°
climb **FL70**

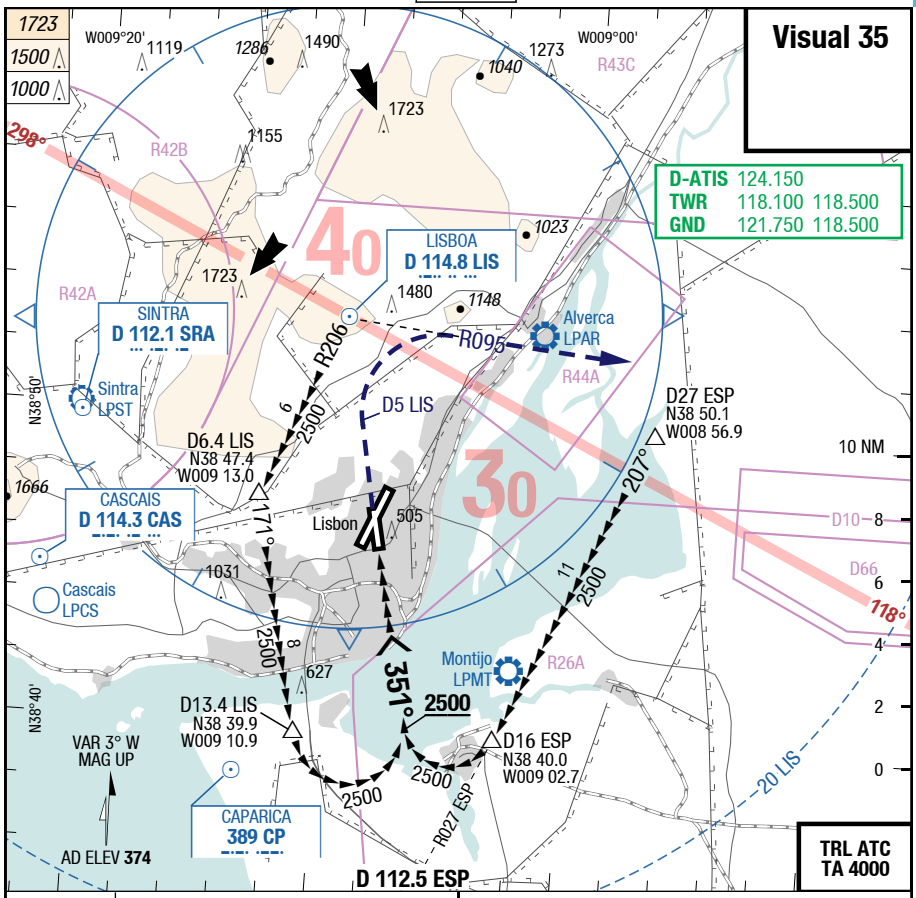


Changes: APL, OBST

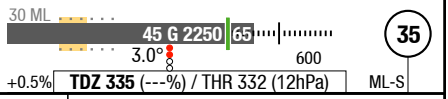
# LIS-LPPT

7-130

## Visual 35




**VISUAL**



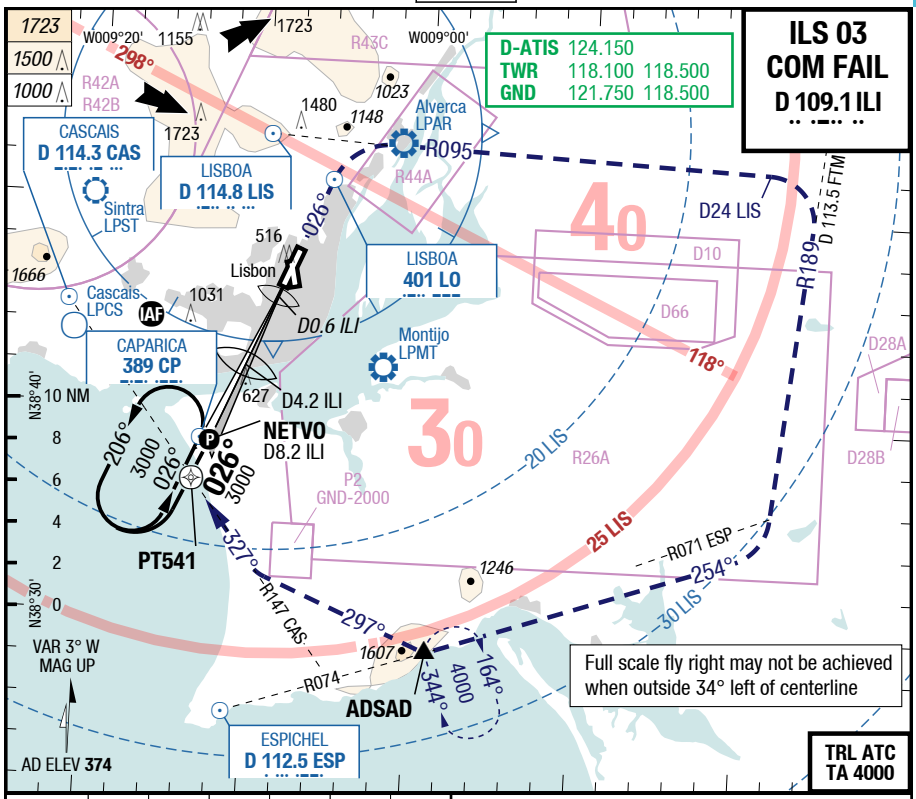

- All aircraft carrying out visual approach procedure to RWY 35 shall not, unless cleared by ATC, descend below **2500** on the left and right downwind leg.
- Aircraft must join the final approach track to RWY 35 at **MNM 2500**.
- Procedure pending on traffic in R26A and Montijo TWR approval.

351°
at D5 **LIS RT**
intercept R095 **LIS**
climb **FL70**

# LIS-LPPT

7-150

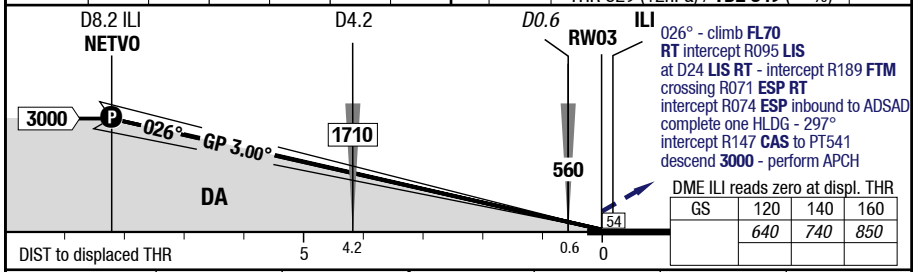
# ILS 03 COM FAIL




| D ILI | 8.2 | 6 | 5 | 4 | 3 | 2 |
|---|---|---|---|---|---|---|
| | 3000 | 2310 | 1990 | 1670 | 1350 | 1030 |

03 — 3.0° — 60 HL — 90 — 3617 x 45 — 15 HL — 450

HL-P2 — THR 329 (12hPa) / **TDZ 349** (---%) — +0.1%




| GS | 120 | 140 | 160 |
|---|---|---|---|
| | *640* | *740* | *850* |

| 03 | | Cat 3b | Cat 2 | Cat 1 LIS 1) | Cat 1 2) | | Circling |
|---|---|---|---|---|---|---|---|
| C | ft - m/km ft | 0 - 75R **Company** | 100 - 300R **100** RA | 200 - 500 **550** | 200 - 750 **550** | | 1210 - 2.4V **1580** |
| D | ft - m/km ft | 0 - 75R **Company** | 100 - 300R **100** RA 3) | 200 - 500 **550** | 200 - 750 **550** | | 1210 - 3.6V **1580** |

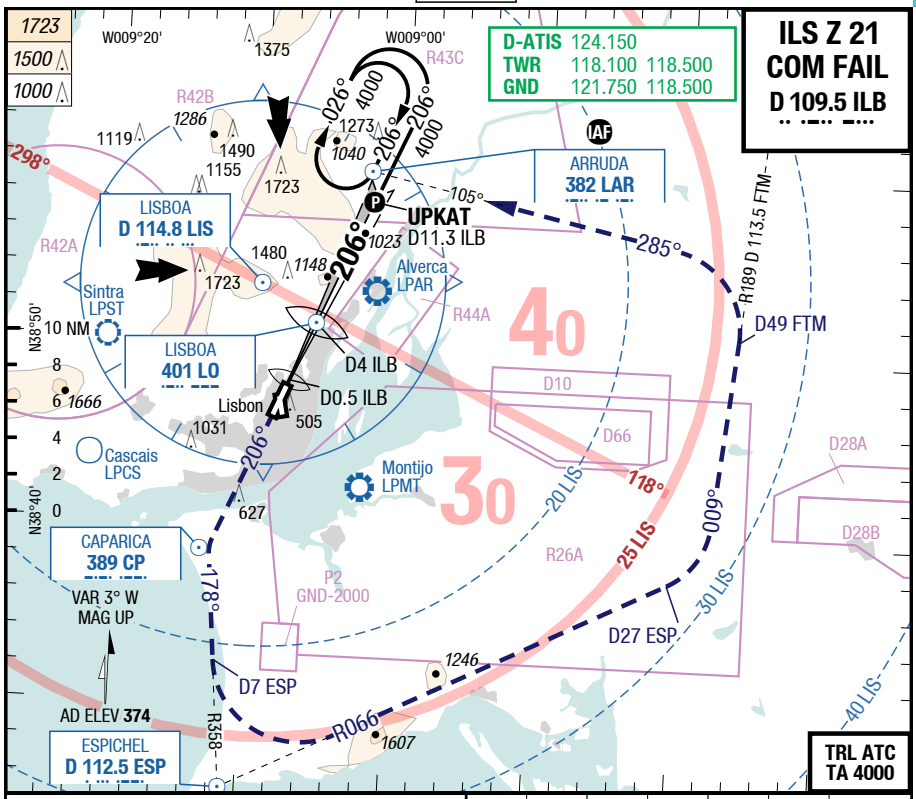
1) With EVS 350m
2) With EVS 500m
3) If not conducting autoland RVR 350m required

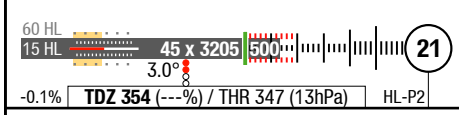
Changes: APL, IAF, MIN, OBST

# LIS-LPPT

7-160

# ILS Z 21 COM FAIL



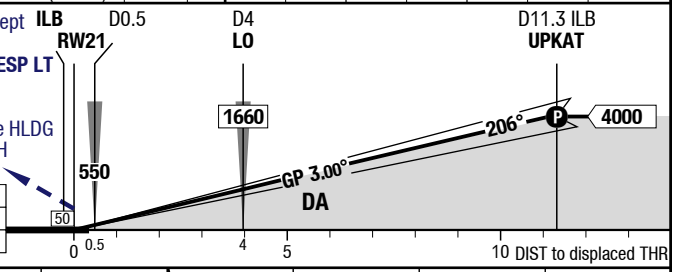




| 1 | 3 | 5 | 7 | 9 | 11.3 | D ILB |
|---|---|---|---|---|---|---|
| *730* | *1360* | *2000* | *2640* | *3270* | 4000 | |

206° - climb **FL70** - **LT** intercept
R358 **ESP** - at D7 **ESP LT**
intercept R066 **ESP** - at D27 **ESP LT**
intercept R189 **FTM** inbound
at D49 **FTM LT** intercept
QDM 285 **LAR** - complete one HLDG
descend **4000** - perform APCH

DME ILB reads zero at displ. THR

| GS | 120 | 140 | 160 |
|---|---|---|---|
| | *640* | *740* | *850* |




| 21 | | Cat 3b | Cat 2 | Cat 1 LTS 1) | Cat 1 1) | | Circling |
|---|---|---|---|---|---|---|---|
| C | ft - m/km ft | 0 - 75R **Company** | 100 - 300R **100** RA | 200 - 400 **560** | 200 - 550 **560** | | 1210 - 2.4V **1580** |
| D | ft - m/km ft | 0 - 75R **Company** | 100 - 300R **100** RA 2) | 200 - 400 **560** | 200 - 550 **560** | | 1210 - 3.6V **1580** |

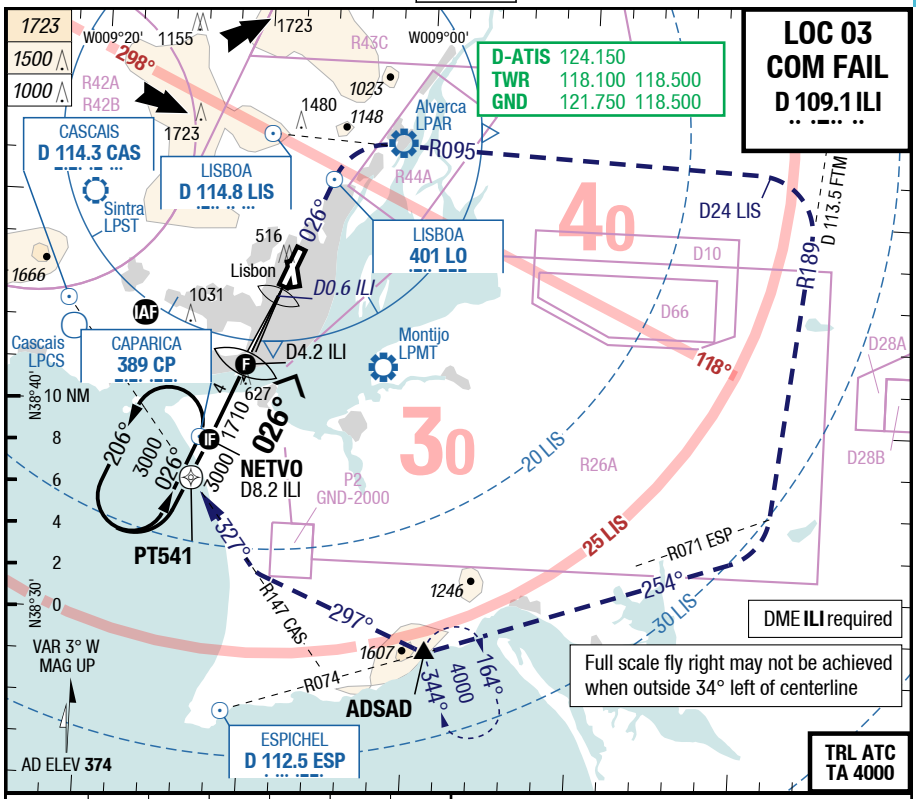
1) With EVS 350m
2) If not conducting autoland RVR 350m required

Changes: Page Number

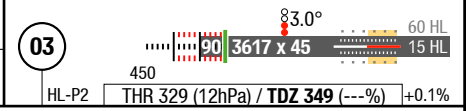
# LIS-LPPT

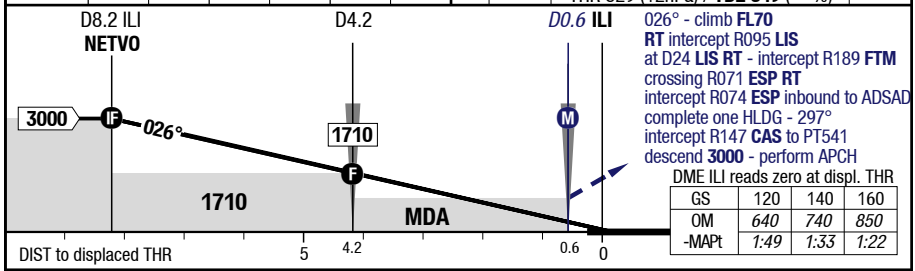
7-170

# LOC 03 COM FAIL




| 3.00° D ILI | 8.2 | 6 | 5 | 4 | 3 | 2 |
|---|---|---|---|---|---|---|
| | 3000 | 2310 | 1990 | 1670 | 1350 | 1030 |



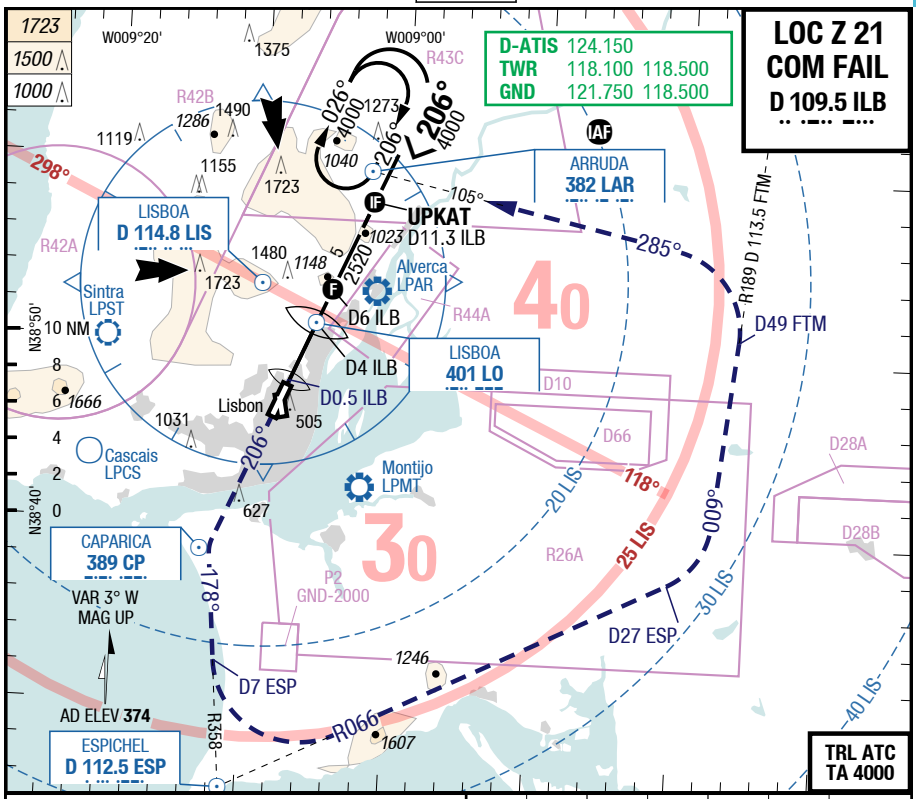

| 03 | | LOC DME | | | | | Circling |
|---|---|---|---|---|---|---|---|
| C | ft - m/km<br>ft | 480 - 1.8<br>**830** | | | | | 1210 - 2.4V<br>**1580** |
| D | ft - m/km<br>ft | 480 - 1.8<br>**830** | | | | | 1210 - 3.6V<br>**1580** |

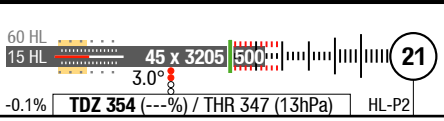
Changes: new

# LIS-LPPT

7-180

# LOC Z 21 COM FAIL



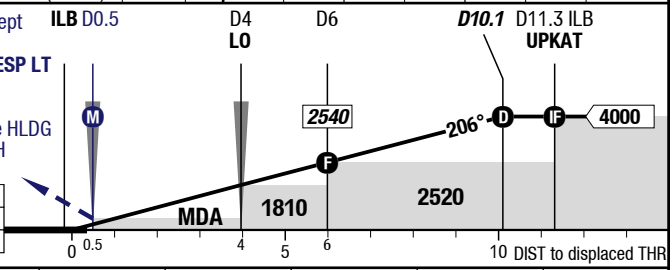




| 2 | 3 | 5 | 7 | 9 | 10.1 | 3.36° |
|---|---|---|---|---|---|---|
| 1120 | 1480 | 2190 | 2910 | 3620 | 4000 | D ILB |

206° - climb **FL70** - **LT** intercept
R358 **ESP** - at D7 **ESP LT**
intercept R066 **ESP** - at D27 **ESP LT**
intercept R189 **FTM** inbound
at D49 **FTM LT** intercept
QDM 285 **LAR** - complete one HLDG
descend **4000** - perform APCH

DME ILB reads zero at displ. THR

| GS | 120 | 140 | 160 |
|---|---|---|---|
| D6 ILB | *710* | *830* | *950* |
| -MAPt | *2:45* | *2:21* | *2:04* |



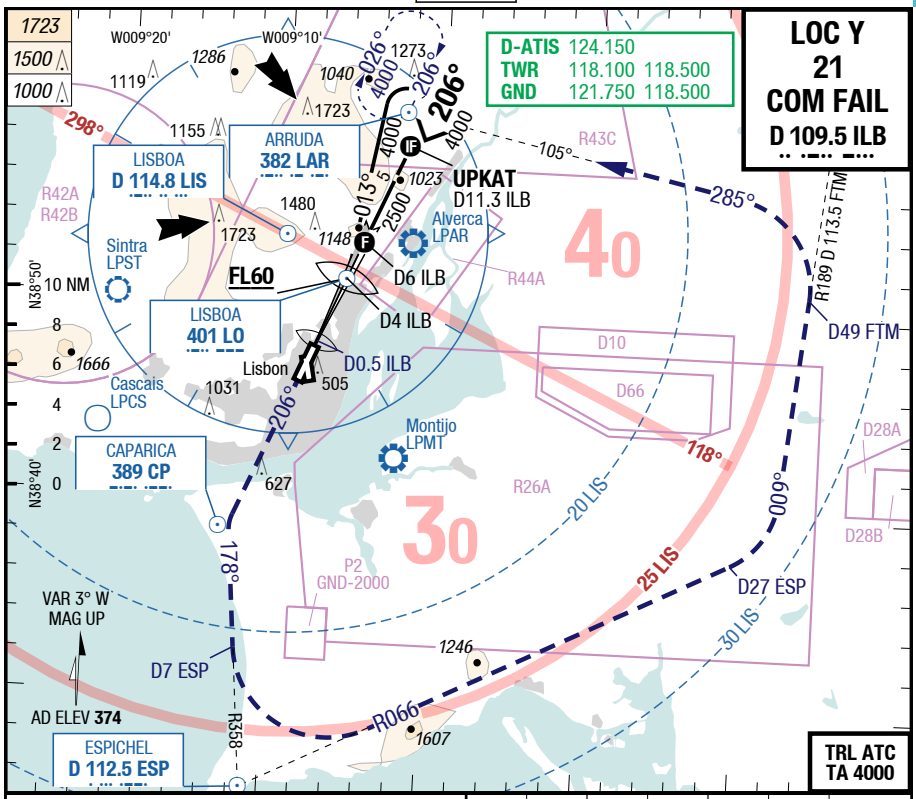

| 21 | | LOC DME | | | | | Circling |
|---|---|---|---|---|---|---|---|
| C | ft - m/km<br>ft | 390 - 1.1<br>**740** | | | | | 1210 - 2.4V<br>**1580** |
| D | ft - m/km<br>ft | 390 - 1.1<br>**740** | | | | | 1210 - 3.6V<br>**1580** |

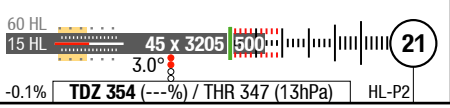
Changes: Page Number

# LIS-LPPT

7-190

# LOC Y 21 COM FAIL



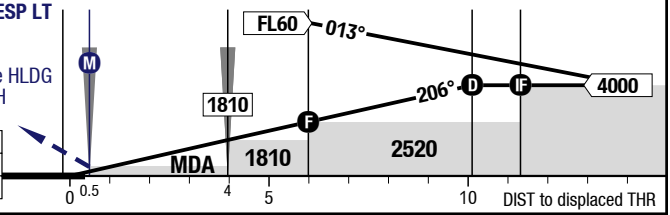

| 1 | 3 | 5 | 7 | 9 | 10.1 | 3.36° |
|---|---|---|---|---|---|---|
| 760 | 1480 | 2190 | 2910 | 3620 | 4000 | D ILB |

206° - climb **FL70** - **LT** intercept
R358 **ESP** - at D7 **ESP LT**
intercept R066 **ESP** - at D27 **ESP LT**
intercept R189 **FTM** inbound
at D49 **FTM LT** intercept -
QDM 285 **LAR** - complete one HLDG
descend **4000** - perform APCH

DME ILB reads zero at displ. THR

| GS | 120 | 140 | 160 |
|---|---|---|---|
| D3.9 ILB | *710* | *830* | *950* |
| -MAPt | *1:44* | *1:29* | *1:18* |

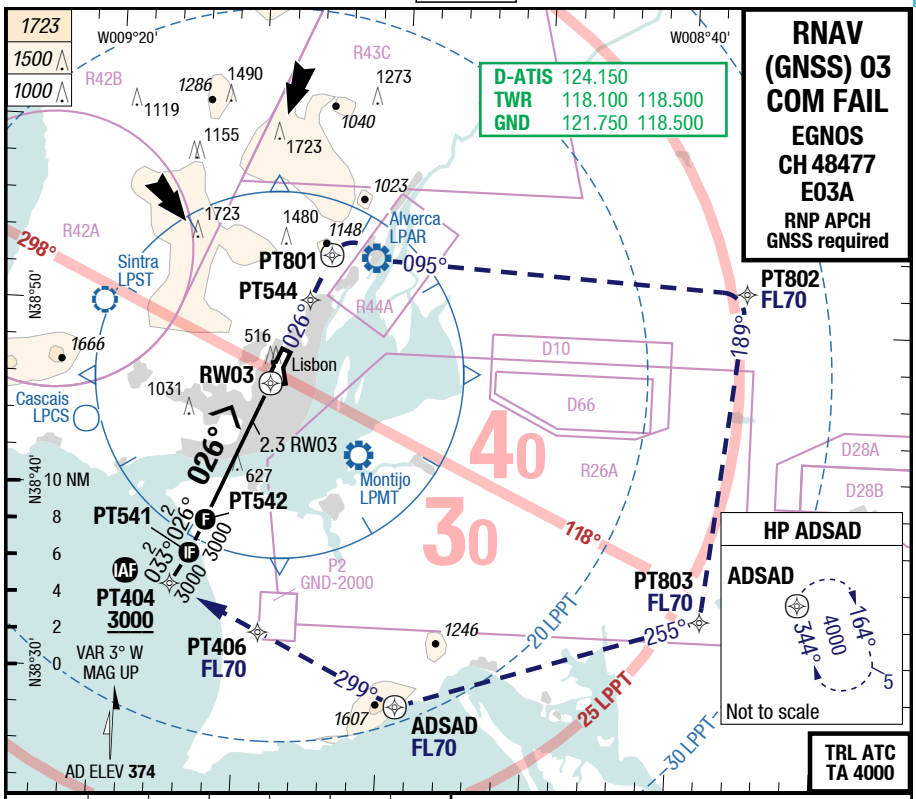
**ILB** D0.5 D4 **LO** D6 ***D10.1*** D11.3 ILB **UPKAT**




| 21 | | LOC DME | | | | | Circling |
|---|---|---|---|---|---|---|---|
| C | ft - m/km<br>ft | 390 - 1.1<br>**740** | | | | | 1210 - 2.4V<br>**1580** |
| D | ft - m/km<br>ft | 390 - 1.1<br>**740** | | | | | 1210 - 3.6V<br>**1580** |

# LIS-LPPT

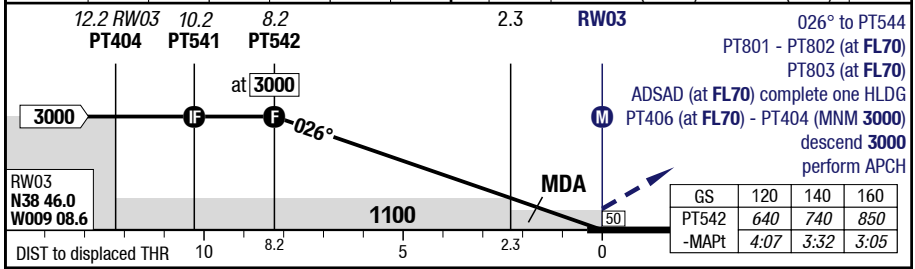
7-210 **RNAV (GNSS) 03 COM FAIL**




| 3.00° RW03 | 8.2 | 6 | 5 | 4 | 3 | 2 |
|---|---|---|---|---|---|---|
| | 3000 | 2290 | 1980 | 1660 | 1340 | 1020 |

03 — 3.0° — 60 HL — 90 — 3617 x 45 — 15 HL — 450

HL-P2 — THR 329 (12hPa) / **TDZ 349** (---%) — +0.1%




| GS | 120 | 140 | 160 |
|---|---|---|---|
| PT542 | *640* | *740* | *850* |
| -MAPt | *4:07* | *3:32* | *3:05* |

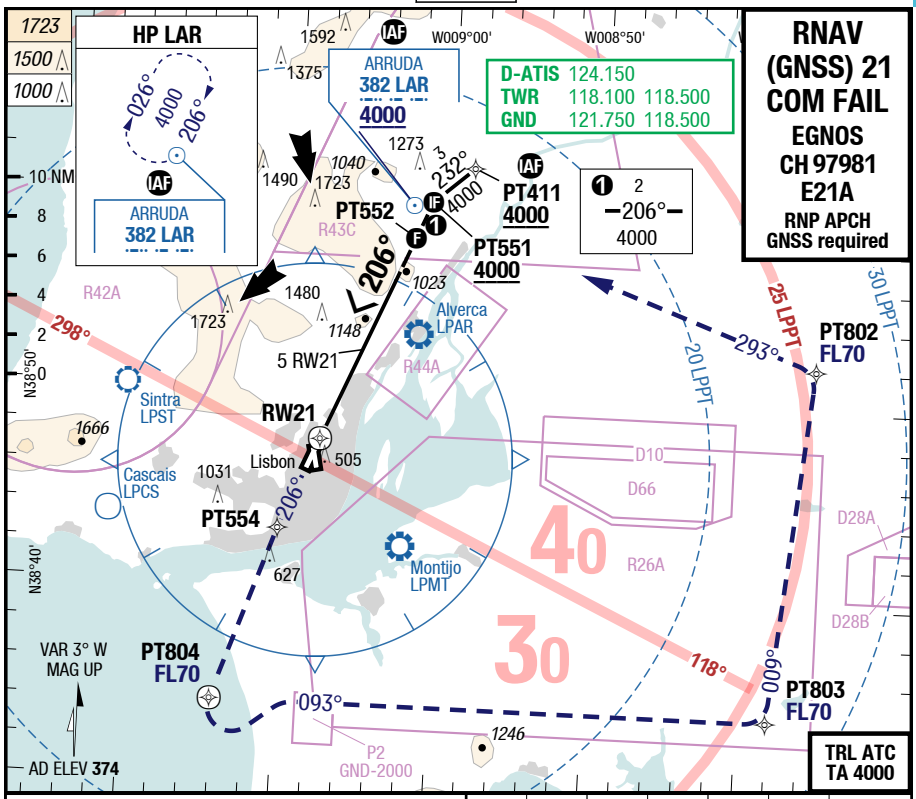
| 03 | | RNAV GNSS LPV 1) | RNAV GNSS VNAV 2) 3) | RNAV GNSS LNAV | | | Circling |
|---|---|---|---|---|---|---|---|
| C | ft - m/km ft | 270 - 900 **610** | 420 - 1.5 **760** | 490 - 1.8 **830** | | | 1210 - 2.4V **1580** |
| D | ft - m/km ft | 280 - 900 **620** | 420 - 1.5 **760** | 490 - 1.8 **830** | | | 1210 - 3.6V **1580** |

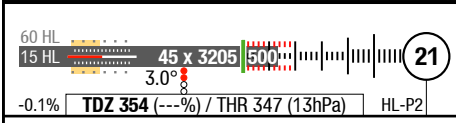
1) With EVS 600m
2) With EVS 1.0km
3) Uncompensated BARO VNAV NA below 0°C (32°F)

Changes: APL, OBST

# LIS-LPPT

7-220 **RNAV (GNSS) 21 COM FAIL**

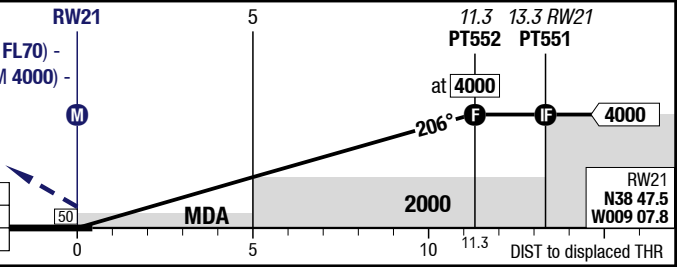



| 3 | 4 | 7 | 9 | 11 | 11.3 | 3.00° |
|---|---|---|---|---|---|---|
| *1360* | *1670* | *2630* | *3270* | *3900* | 4000 | **RW21** |

206° to PT554 -
PT804 (at **FL70**) - PT803 (at **FL70**) -
PT802 (at **FL70**) - **LAR** (MNM **4000**) -
complete one HLDG -
descend **4000**
perform APCH

| GS | 120 | 140 | 160 |
|---|---|---|---|
| PT552 | *640* | *740* | *850* |
| -MAPt | *5:40* | *4:51* | *4:15* |



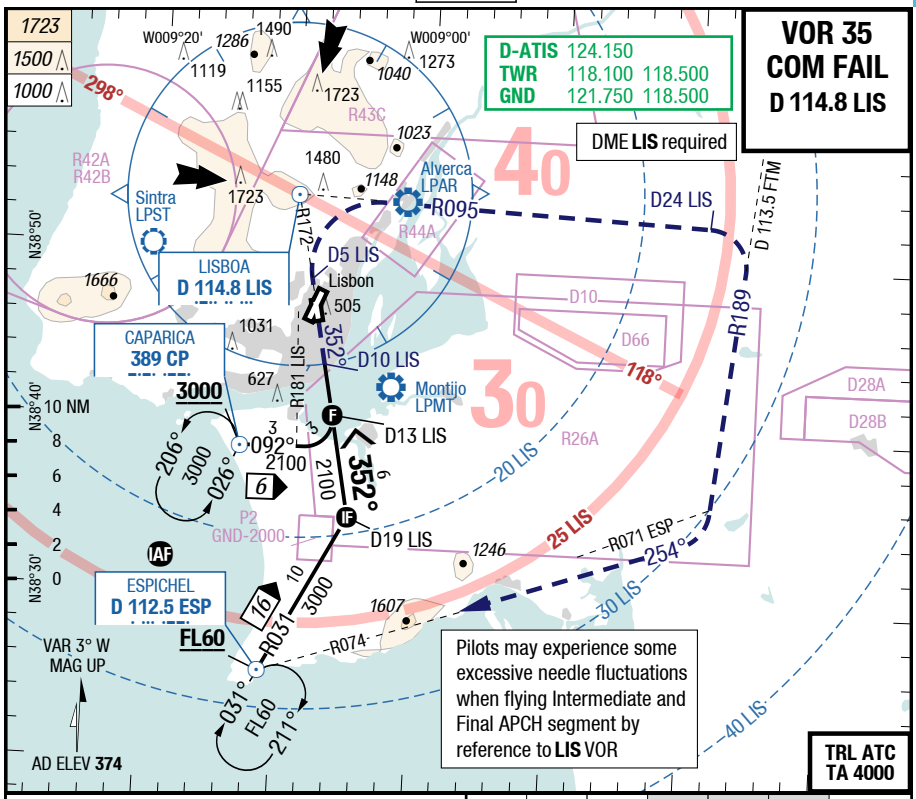

| 21 | | RNAV GNSS LPV 1) 2) | RNAV GNSS VNAV 3) 4) | RNAV GNSS LNAV | | | Circling |
|---|---|---|---|---|---|---|---|
| C | ft - m/km ft | 250 - 600 **610** | 450 - 1.4 **800** | 490 - 1.5 **840** | | | 1210 - 2.4V **1580** |
| D | ft - m/km ft | 260 - 600 **610** | 450 - 1.4 **800** | 490 - 1.5 **840** | | | 1210 - 3.6V **1580** |

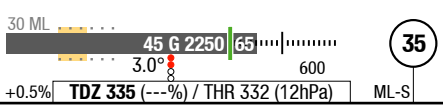
1) wo HGS RVR 750m required
2) With EVS 400m
3) With EVS 900m
4) Uncompensated BARO VNAV NA below 0°C (32°F)

# LIS-LPPT

7-230

# VOR 35 COM FAIL

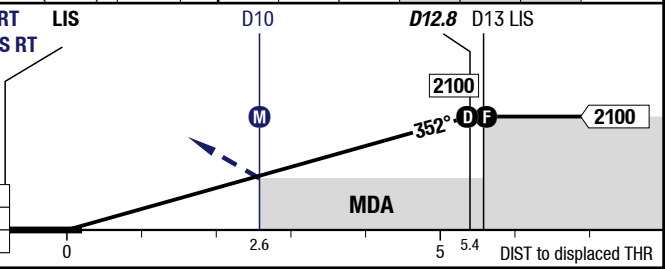



| 11 | 12 | 12.8 | | | | 3.00° |
|---|---|---|---|---|---|---|
| 1530 | 1850 | 2100 | | | | D LIS 352° RWY 351° |

352°- climb **FL70** - at D5 **LIS RT**
intercept R095 **LIS** - at D24 **LIS RT**
intercept R189 **FTM**
crossing R071 **ESP RT**
intercept R074 **ESP** inbound
complete one HLDG
descend **FL60** - perform APCH

| GS | 120 | 140 | 160 |
|---|---|---|---|
| D12.8 LIS | *640* | *740* | *850* |
| -MAPt | *1:24* | *1:12* | *1:03* |




| 35 | | VOR DME | | | | | Circling |
|---|---|---|---|---|---|---|---|
| C | ft - m/km<br>ft | 830 - 2.4<br>**1160** | | | | | 1210 - 2.4V<br>**1580** |
| D | ft - m/km<br>ft | 830 - 2.4<br>**1160** | | | | | 1210 - 3.6V<br>**1580** |

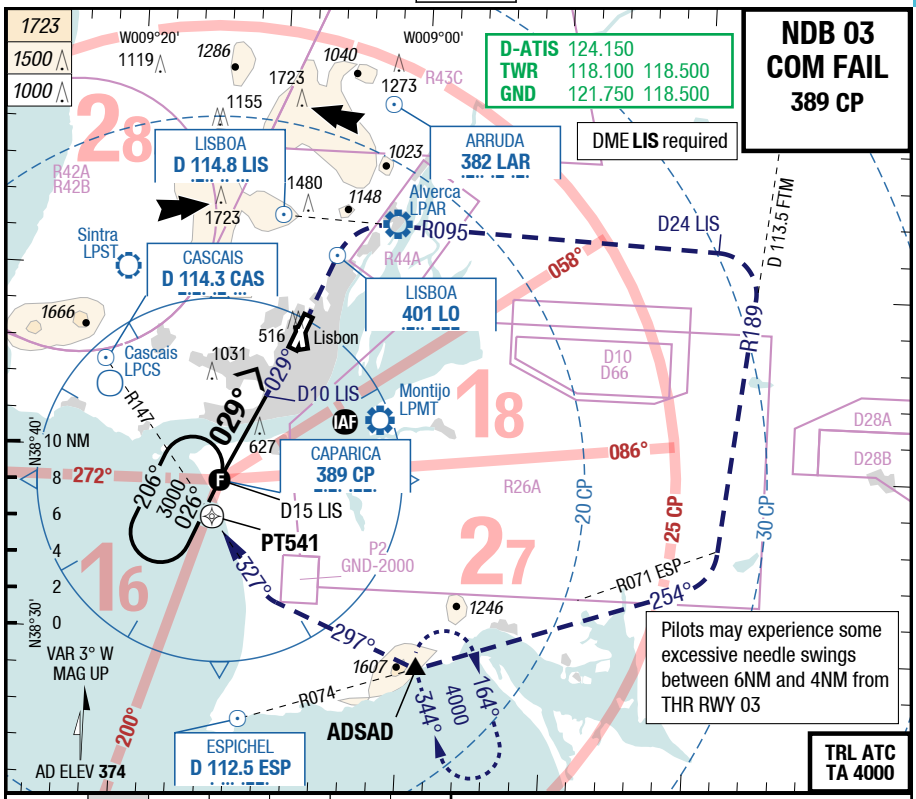


Changes: Page Number

# LIS-LPPT

7-240

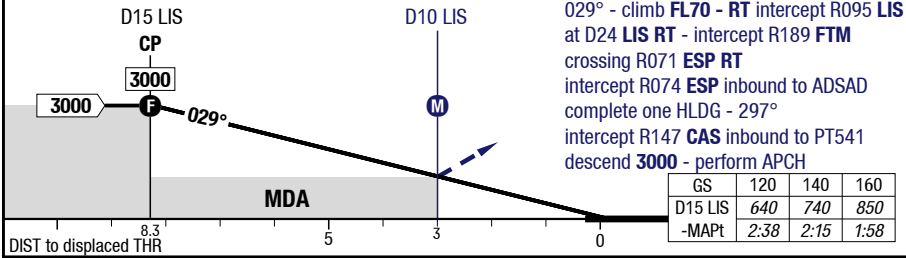
# NDB 03 COM FAIL




| 3.00° | | 15 | 14 | 13 | 12 | 11 |
|---|---|---|---|---|---|---|
| **D LIS** | | | | | | |
| **029°** | | 3000 | *2700* | *2370* | *2030* | *1690* |
| RWY 026° | | | | | | |

**03**

3.0°
60 HL
90 **3617 x 45** 15 HL
450
HL-P2
THR 329 (12hPa) / **TDZ 349** (---%) +0.1%




029° - climb **FL70 - RT** intercept R095 **LIS** at D24 **LIS RT** - intercept R189 **FTM** crossing R071 **ESP RT** intercept R074 **ESP** inbound to ADSAD complete one HLDG - 297° intercept R147 **CAS** inbound to PT541 descend **3000** - perform APCH

| GS | 120 | 140 | 160 |
|---|---|---|---|
| D15 LIS | *640* | *740* | *850* |
| -MAPt | *2:38* | *2:15* | *1:58* |

| **03** | | **NDB** 1) | | | | | **Circling** |
|---|---|---|---|---|---|---|---|
| C | ft - m/km<br>ft | 980 - 2.4<br>**1320** | | | | | 1200 - 2.4V<br>**1570** |
| D | ft - m/km<br>ft | 980 - 2.4<br>**1320** | | | | | 1200 - 3.6V<br>**1570** |

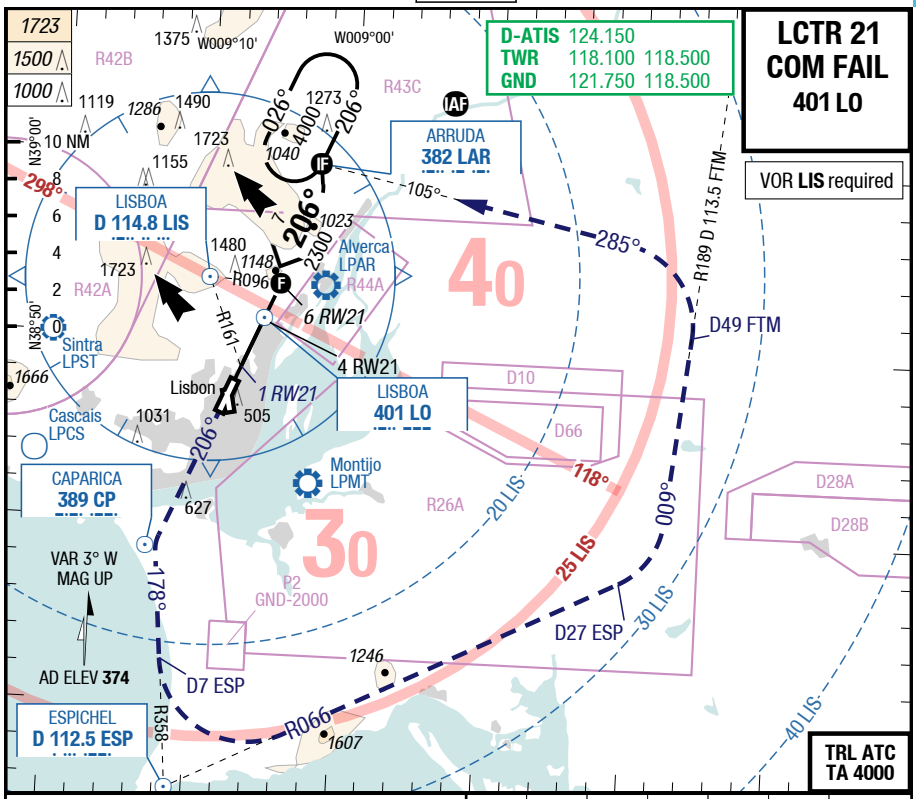
1) Timing to determine MAPt NA

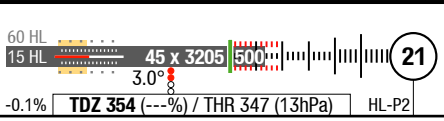
Changes: APL, OBST

# LIS-LPPT

7-250

# LCTR 21 COM FAIL

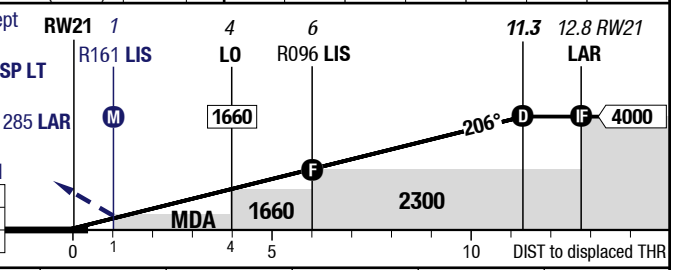



| 3 | 5 | 7 | 9 | 11 | 11.3 | 3.00° RW21 |
|---|---|---|---|---|---|---|
| *1360* | *1990* | *2630* | *3270* | *3900* | 4000 | |

206° - climb **FL70** - **LT** intercept R358 **ESP** - at D7 **ESP LT** intercept R066 **ESP** - at D27 **ESP LT** intercept R189 **FTM** inbound at D49 **FTM LT** intercept QDM 285 **LAR** complete one HLDG descend **4000** - Perform APCH

| GS | 120 | 140 | 160 |
|---|---|---|---|
| LO | *640* | *740* | *850* |
| -MAPt | *1:28* | *1:15* | *1:06* |




| 21 | | LCTR VOR LO + LIS | | | | | Circling |
|---|---|---|---|---|---|---|---|
| C | ft - m/km ft | 490 - 1.5 **840** | | | | | 1210 - 2.4V **1580** |
| D | ft - m/km ft | 490 - 1.5 **840** | | | | | 1210 - 3.6V **1580** |

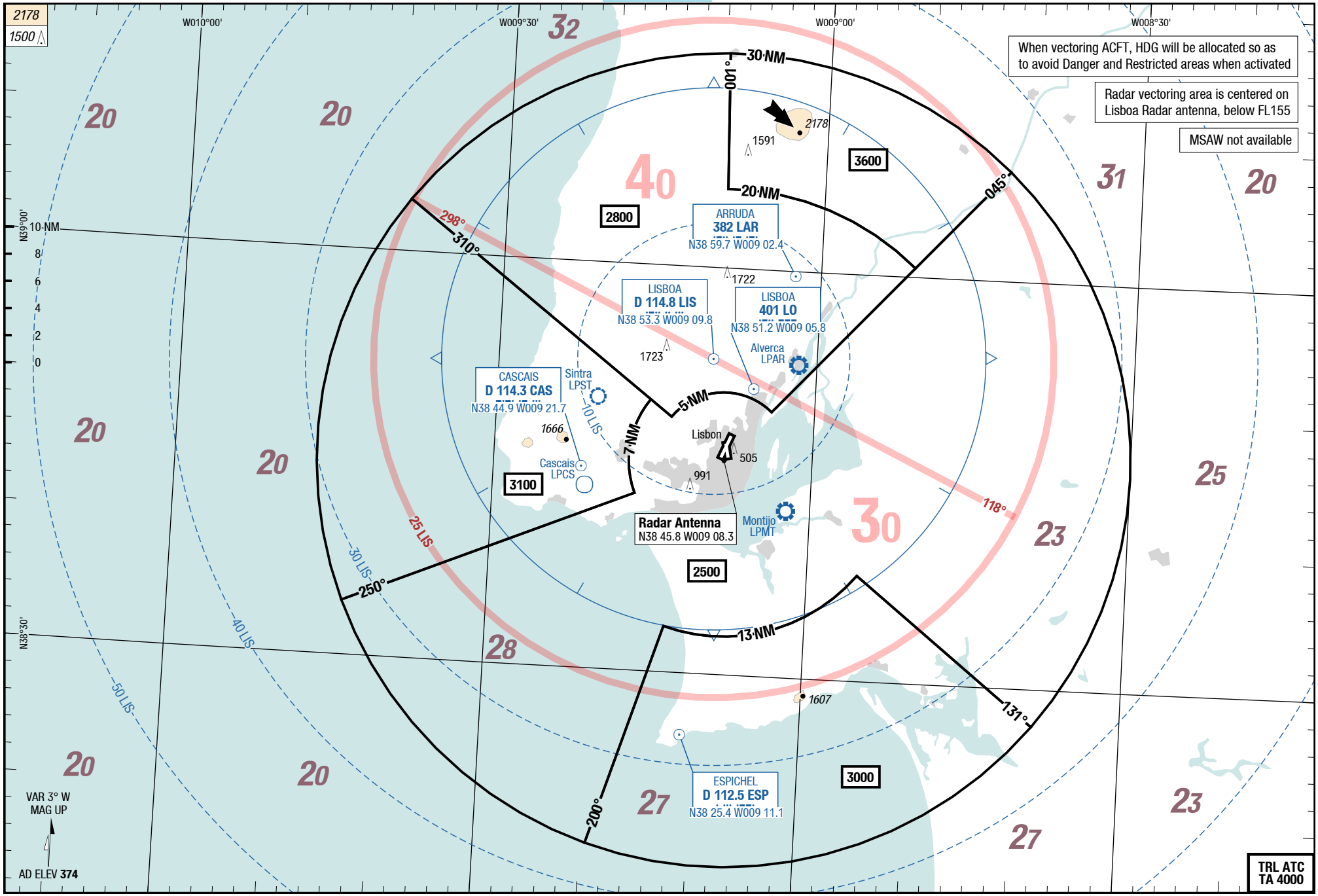


Changes: Page Number

Portugal **Lisbon**
NIL
**MRC**

MRC MRC

**Lisbon** Portugal
NIL
**MRC**




Changes: RADAR SECT, Note