

## List of pages in this Trip Kit

Trip Kit Index

Departure and Destination EDDV - EHRD

Entire Route EDDV - EHRD

Strip Charts EDDV - EHRD

Airport Information For EDDV

Terminal Charts For EDDV

Airport Information For EHRD

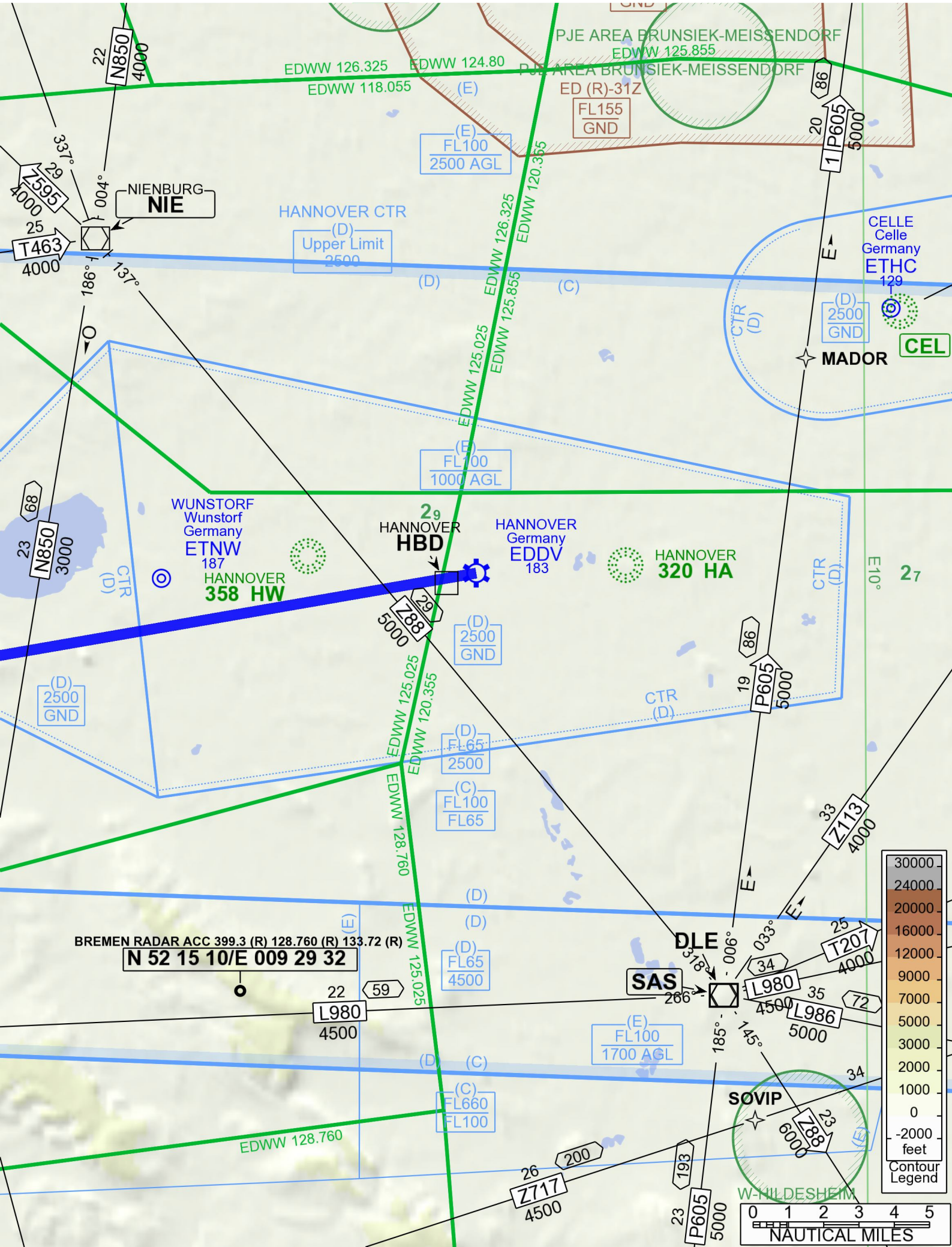
Terminal Charts For EHRD

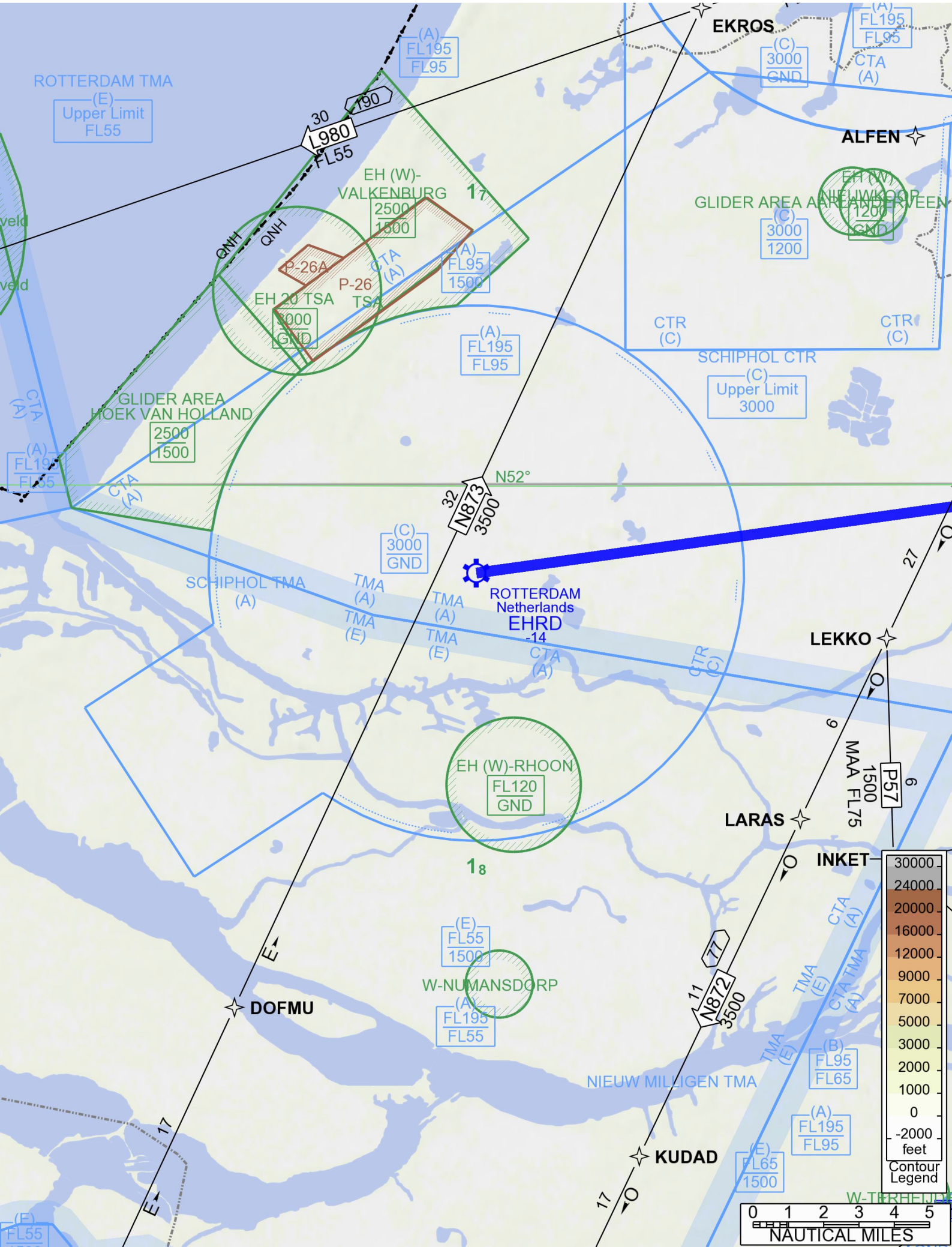
Revision Letter For Cycle 06-2024

Change Notices

Notebook

FIR/UIR Communications

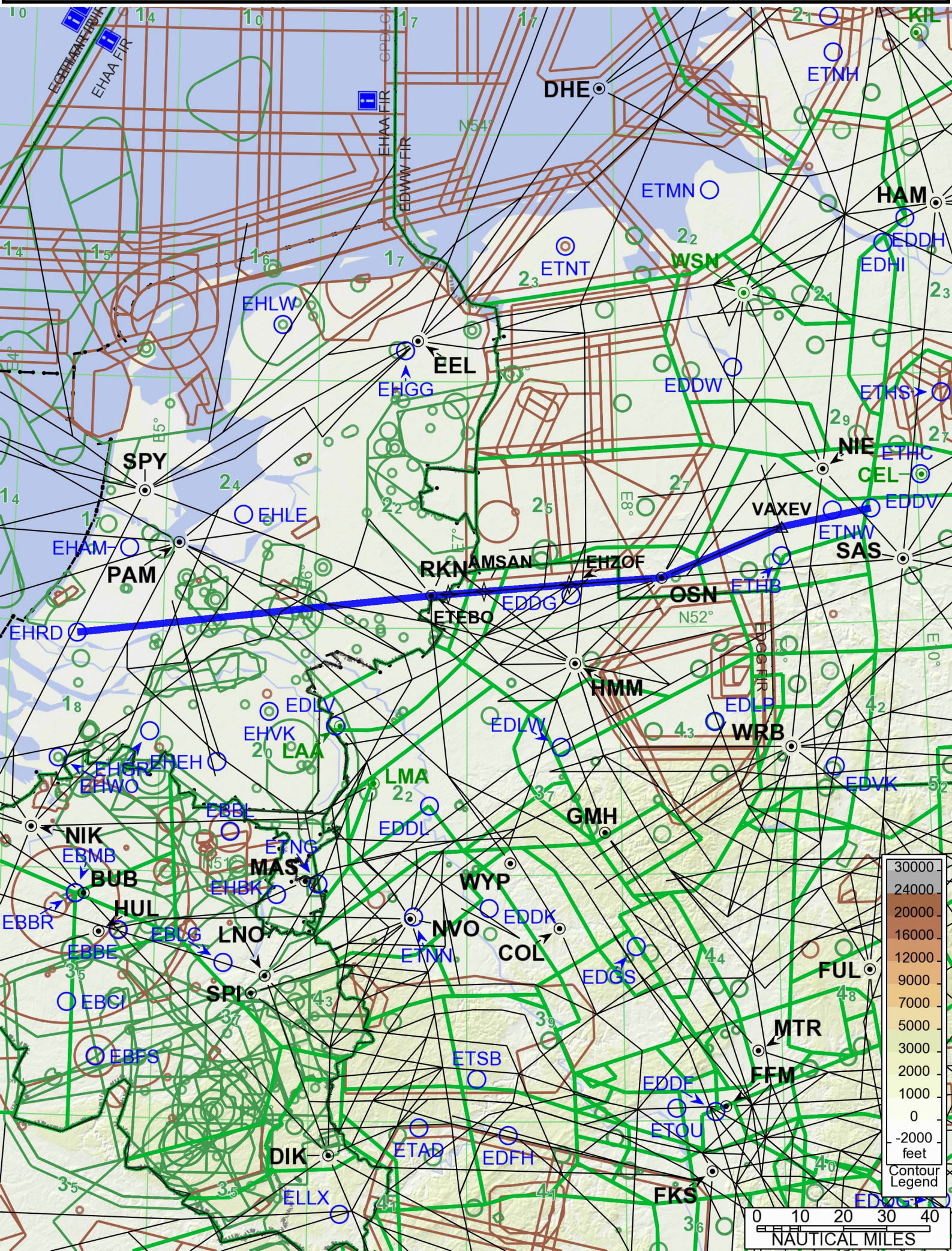




Altitude (feet)
30000
24000
20000
16000
12000
9000
7000
5000
3000
2000
1000
0
-2000
feet

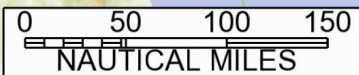
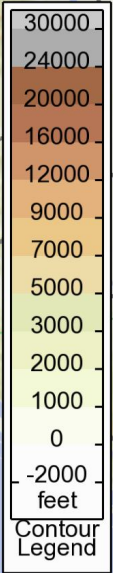
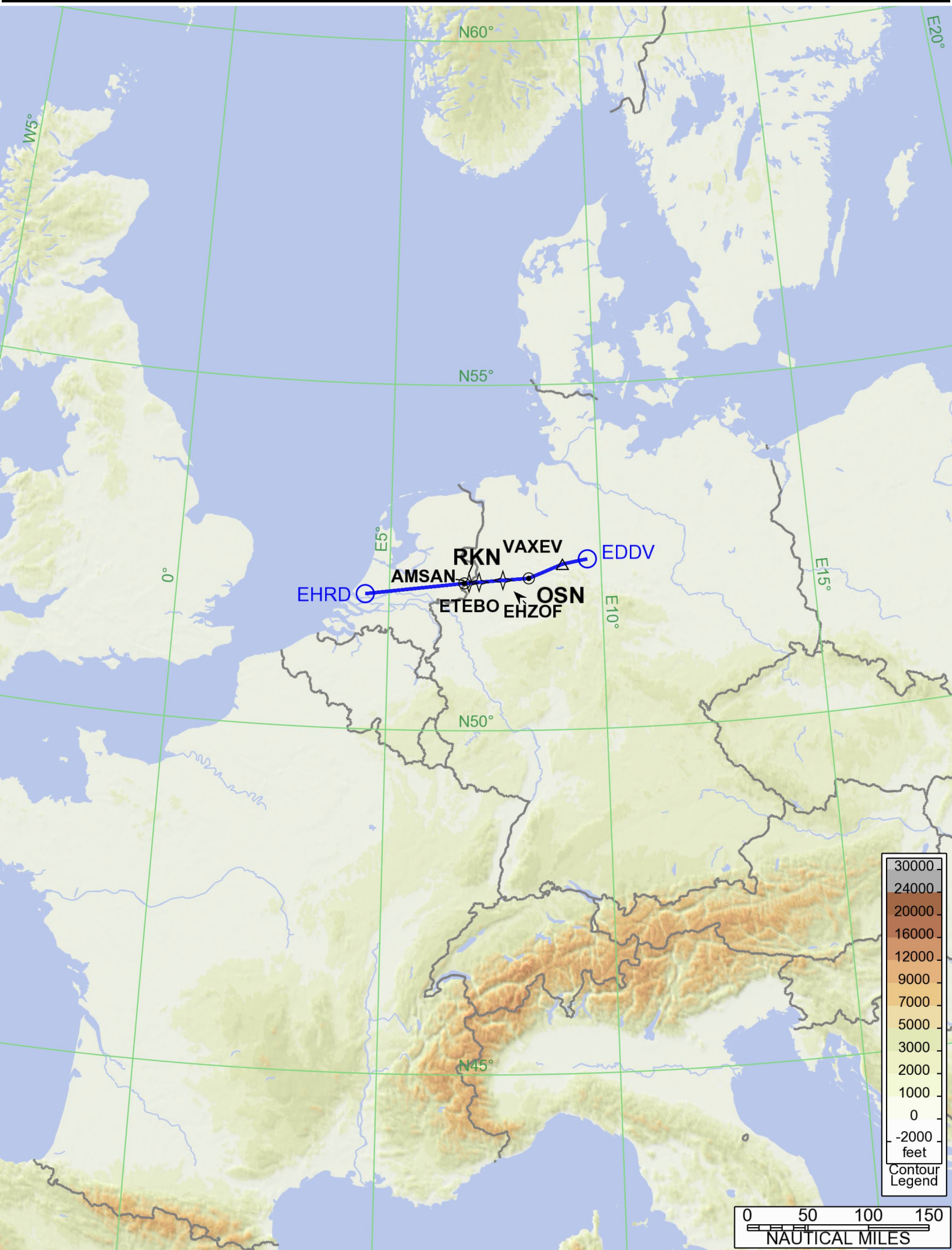
Contour Legend





30000
24000
20000
16000
12000
9000
7000
5000
3000
2000
1000
0
-2000
feet





## General Information

Location: HANNOVER DEU  
ICAO/IATA: EDDV / HAJ  
Lat/Long: N52° 27.6', E009° 41.0'  
Elevation: 183 ft

Airport Use: Public  
Daylight Savings: Observed  
UTC Conversion: -1:00 = UTC  
Magnetic Variation: 2.0° E

Fuel Types: 100 Octane (LL), Jet A-1  
Repair Types: Major Airframe, Major Engine  
Customs: Yes  
Airport Type: IFR  
Landing Fee: Yes  
Control Tower: Yes  
Jet Start Unit: No  
LLWS Alert: No  
Beacon: Yes

Sunrise: 0431 Z  
Sunset: 1813 Z

## Runway Information

Runway: 09C  
Length x Width: 1804 ft x 75 ft  
Surface Type: asphalt  
TDZ-Elev: 178 ft  
Stopway: 558 ft

Runway: 09L  
Length x Width: 10499 ft x 148 ft  
Surface Type: concrete  
TDZ-Elev: 167 ft  
Lighting: Edge, ALS, Centerline, TDZ

Runway: 09R  
Length x Width: 7677 ft x 148 ft  
Surface Type: concrete  
TDZ-Elev: 172 ft  
Lighting: Edge, ALS, Centerline

Runway: 27C  
Length x Width: 1804 ft x 75 ft  
Surface Type: asphalt  
TDZ-Elev: 174 ft  
Stopway: 197 ft

Runway: 27L

Length x Width: 7677 ft x 148 ft

Surface Type: concrete

TDZ-Elev: 179 ft

Lighting: Edge, ALS, Centerline

Runway: 27R

Length x Width: 10499 ft x 148 ft

Surface Type: concrete

TDZ-Elev: 169 ft

Lighting: Edge, ALS, Centerline, TDZ

## Communication Information

ATIS: 136.575

Hannover Tower: 120.405

Hannover Tower: 120.180

Hannover Ground: 121.955

Bremen Radar Approach: 119.490 RCO

Hannover Direct (Approach Control Radar): 119.605

Hannover De-Icing Operations: 121.605

Hannover De-Icing Operations: 121.780

# 1. GENERAL

## 1.1. ATIS

D-ATIS 136.575

## 1.2. NOISE ABATEMENT PROCEDURES

### 1.2.1. NIGHT FLYING RESTRICTIONS

Between 2200-0559LT, ACFT exceeding the noise limits pursuant to ICAO Annex 16, Volume 1, Chapter 3 are not permitted to operate.

If any ACFT are to take off or land between 2300-0559LT, a copy of the noise certificates shall be submitted in advance.

Between 2300-0559LT, only the following ACFT movements and ACFT are permitted:

1. Take-offs and landings of turbo-jet ACFT with noise certificate in accordance with ICAO Annex 16, Volume 1, Chapter 3, 4 or 14 which minimum comply with or are below the limits laid down in ICAO Annex 16, Volume 1, Chapter 4 and
  - a) which are usually scheduled for the APT of Hannover; or
  - b) which are used for night airmail service of a universal service provider as defined in the Postal Universal Service Ordinance (PUDLV) if the night flight is required to meet the quality standard in accordance with Article 2, item 3 of the PUDLV; or
  - c) which are operated by air carriers whose main base and maintenance facilities are in Hannover.
2. Take-offs and landings of turbo-jet cargo ACFT which have a noise certificate in accordance with ICAO Annex 16, Volume 1, Chapter 3, 4 or 14 and which comply with or are below the limits laid down in ICAO Annex 16, Volume 1, Chapter 4.
3. Take-offs and landings of ACFT with different means of propulsion in commercial and corporate air traffic complying with the provisions of ICAO Annex 16, Volume 1, Chapters 3, 4, 5, 6, (-4 dBA), 8, 10 (-3 to -8 dBA) or 11 and/or Chapters III, IV 2.4, VII or X 2.4 of Noise Requirements for ACFT as well as landings of ACFT with different means of propulsion and noise certificate stationed at Hannover APT in business air traffic.
4. Landings of ACFT provably using the APT as alternate aerodrome for meteorological, technical or other safety reasons.
5. Calibration flights conducted by DFS Deutsche Flugsicherung GmbH as far as necessary for maintaining flight safety.
6. Take-offs and landings in emergency cases.
7. Take-offs and landings in exceptional cases with special permission from the aviation supervision office of the "Niedersaechsisches Ministerium fuer Wirtschaft, Arbeit, Verkehr und Digitalisierung".

Subject to other restrictions of this provision, between 2200-0559LT take-offs and landings by ACFT as listed below are only permitted on the northern RWYs 09L/27R.

Exceptions for urgent technical, meteorological or operational reasons are possible.

A300	propeller-driven ACFT with more than 5.7t MTOM
A310	LOCKHEED L1011
A330	DC 8-70-series
A340	DC 10
B727-100 re-engined with 3 tay engines	MD 11
B737-200	MD 80-series
B747-400	MD 90
B757-300	TUPOLEV 154
B767	TUPOLEV 204
B777	



EDDV/HAJ  
HANNOVER

+ JEPPESEN

19 FEB 21

10-1P1

HANNOVER, GERMANY  
.AIRPORT.BRIEFING.

---

## 1. GENERAL

---

### 1.2.2. LOCAL FLYING RESTRICTIONS

1. Arrivals and departures immediately following one another as well as circling flights for ACFT over 5.7t MTOM and for ACFT up to 5.7t MTOM not complying with the conditions of ICAO Annex 16, Volume I, Chapter 3, 4, 5, 6 (-4 dB[A]), 8, 10 (-3 to -8 dB [A]) or 11 pursuant to ICAO and/or LSL Chapters III, V, VI 2.4, VIII or X 2.4:  
Only permitted MON-FRI between 0600-2059LT and SAT between 0800-1259LT.
2. Arrivals and departures immediately following one another as well as circling flights for ACFT up to 5.7t MTOM complying with the conditions of ICAO Annex 16, Volume I, Chapter 3, 4, 5, 6 (-4 dB [A]), 8, 10 (-3 to -8 dB [A]) or 11 pursuant to ICAO and/or LSL Chapters III, V, VI 2.4, VIII or X 2.4:  
Only permitted MON-SAT between 0600-2059LT and SUN, HOL between 0800-2059LT.
3. Arrivals and departures immediately following one another, not represented at the APT by an ACFT operator, are subject to permission by the "Luftaufsicht" at Hannover APT.

### 1.2.3. RUN-UP TESTS

Run-up tests of jet engines shall be conducted exclusively in a noise suppression facility which is ready for operation.

If the noise suppression facility is not ready for operation, run-up tests of jet engines may be conducted only from 0600-2200LT. Between 2200-2400LT as well as between 0400-0600LT run-up tests of jet engines may, however, also be conducted outside the noise suppression facility which is not ready for operation if required for urgent maintenance due to safety reasons shortly before a take-off after landing. This provision does not apply to idle test runs.

### 1.3. LOW VISIBILITY PROCEDURES

ACFT will be guided onto RWY by Follow-me car.

Enquiries via HANNOVER Ground.

### 1.4. AUXILIARY POWER UNIT (APU)

To avoid additional noise and reduce further immissions, utilization of the APU shall be reduced to a minimum. This is the responsibility of the pilot.

The APU shall be operated only:

- To start the engines; 15 min prior to EOBT; at the earliest;
- For necessary maintenance work on the ACFT;
- If the stationary or mobile ground equipment of the APT is not available or suitable for certain ACFT types.

In special cases, extended hours of operation for the APU may be granted by the APT duty officer (Tel : +49 511 977 1455).

EDDV/HAJ  
HANNOVER

+ JEPPESEN

5 MAR 21

10-1P2

HANNOVER, GERMANY  
.AIRPORT.BRIEFING.**1. GENERAL****1.5. TAXI PROCEDURES****1.5.1. GENERAL**

During the entire taxiing phase, ACFT shall maintain continuous radio contact with the control tower. Any instructions to change frequency shall be complied with without delay.

To increase safety of RWYs RWY guard lights have been installed on both sides of CAT I holding positions of RWYs 09L/27R and 09R/27L, as well as of holding positions of RWY 09C/27C.

On the apron, ACFT are permitted to taxi only at the minimum RPM required. TWYs A1, D1, F1 and L1 on the apron are ACFT stand taxilanes with reduced minimum separation distances between taxilane centerlines and stationary objects. The separation distances between taxilane centerline and the red obstacle limitation lines are:

- 156' /47.5m in the area of the parallel TWY F1 between positions 42 and 61 and L1 between positions 4 and 27. The separation between the parallel guidelines is 256' /78m.
- 139' /42.5m in the area of TWY D1.
- 136' /41.5m in the area of taxilane A1 between positions 23 and 42.
- 125' /38m in the area of positions 1 and 2.
- 85' /26m in the area of positions 12, 13 and 20.

When entering positions 1 to 20, the oversteering procedure shall be used.

TWY P MAX wingspan 56' /17m.

TWY O MAX wingspan 66' /20m.

TWY Q MAX wingspan below 118' /36m.

While taxiing to and from RWY 09L/27R pilots will need crossing-clearance for RWY 09C/27C, which is an active VFR daytime RWY. To avoid RWY incursions pilots are referred to the published hot spots on 10-9 page.

**1.5.2. TAXIING TO/FROM THE SOUTHERN RWY 09R/27L**

ACFT code E and ACFT types B767, MD10, MD11, DC10 and L1011 shall only use TWYs A and E for taxiing to and from the southern RWY 09R/27L.

ACFT will be guided by a Follow-me vehicle to/from the RWY.

**1.5.3. TAXIING TO/FROM THE NORTHERN RWY 09L/27R**

ACFT types A340, A350 and B777 shall be guided by a Follow-me vehicle at the level of RWY 09C/27C when taxiing from TWY F to TWY L or from TWY L to TWY F.

ACFT types code E and ACFT types MD11 and DC10 of ACFT code D shall be guided by a Follow-me vehicle when taxiing from TWY G to TWY L or from TWY L to TWY G.

TWY J may not be used by ACFT type A346.

TWY K is limited to ACFT code C between RWY 09L/27R and TWY Kto.

TWY Kto may not be used by ACFT types A346, A35K, B773 and B77L.

TWY N may not be used by ACFT code E and D, except for ACFT types A400M, B752 or B753.

**1.5.4. OPERATION OF B747-8/8F**

- B747-8/8F may only take off from and land on RWY 09L/27R.
- Taxiing on TWYs and the apron is only permitted under the guidance of a Follow-me car.

The following TWYs shall be used:

- To enter RWY 27R: TWY L and TWY M;
- To enter RWY 09L: TWY L and TWY G;
- To exit RWY 27R: TWY H, TWY G and TWY L or TWY G and TWY L;
- To exit RWY 09L: TWY M and TWY L.

B747-8/8F shall be parked on stand DP1 or 61.

EDDV/HAJ  
HANNOVER

+ JEPPESEN

5 MAR 21

10-1P3

HANNOVER, GERMANY  
.AIRPORT.BRIEFING.

---

## 1. GENERAL

---

### 1.6. PARKING INFORMATION

#### 1.6.1. GENERAL

On stands 1 thru 28 and 40 thru 61, except R-stands push-back required.  
Stands 1 thru 20, except A-stands equipped with visual docking guidance system.  
For stand graphic refer to 10-9 charts.

#### 1.6.2. GENERAL AVIATION 1

All ACFT will be guided by Follow-me.  
MAX wingspan 66'/20m between hangar 11, 12 and posn 72-75.  
MAX wingspan 56'/17m in front of hangar 13.  
MAX wingspan 52'/16m on other parts of apron.

#### 1.6.3. GENERAL AVIATION 2

MAX wingspan 49'/15m.

#### 1.6.4. GENERAL AVIATION 3

MAX wingspan below 118'/36m; ACFT with wingspan over 95'/29m will be towed.

---

## 2. ARRIVAL

---

### 2.1. NOISE ABATEMENT PROCEDURES

#### 2.1.1. REVERSE THRUST

Between 2100-0600LT reverse thrust, other than idle thrust, shall only be used to an extent necessary for safety reasons.

### 2.2. CAT II/III OPERATIONS

RWY 09L/27R approved for CAT II/III operations, special aircrew and ACFT certification required.

### 2.3. TAXIING PROCEDURES

#### RWY 09L RESTRICTIONS

After landing on RWY 09L, all ACFT with code E may only taxi independently via TWY L to the apron. When leaving the RWY via TWY M, ACFT types B777, B787, A340 and A350 shall be guided to the apron via TWY F by a Follow-me vehicle.

#### RWY 27R RESTRICTIONS

After landing on RWY 27R, ACFT with code E may only taxi independently via TWY L to the apron. When leaving the RWY via TWY G, ACFT types B777, B787, A340 and A350 shall be guided to the apron via TWY F by a Follow-me vehicle.

When leaving the RWY via TWY H, ACFT types B777, B787, A340 and A350 shall be guided to the apron by a Follow-me vehicle starting at TWY G via TWY F.

### 2.4. OTHER

During approaches to the parallel RWY system 09/27, a reduced diagonal separation of at least 1.5NM may be used between parallel approaching ACFT on final. ACFT types B744, B773 and A346 shall disregard the PAPI when approaching RWY27L.

EDDV/HAJ  
HANNOVER

+ JEPPESEN

5 MAR 21

10-1P4

HANNOVER, GERMANY  
.AIRPORT.BRIEFING.

---

### 3. DEPARTURE

---

#### 3.1. DATALINK DEPARTURE CLEARANCE (DCL)

Temporal parameters:

- ti 25 minutes prior to EOBT for unregulated flights.  
30 minutes prior to CTOT for ATFM regulated flights.
- tt 11 minutes prior to EOBT for unregulated flights.  
16 minutes prior to CTOT for ATFM regulated flights.
- t1 5 minutes.

#### 3.2. DE-ICING

##### 3.2.1. GENERAL

The de-icing of ACFT will take place on defined de-icing areas (DPs), exclusively. These areas are located at the Western part of the apron.

De-icing on other parking positions - with the exception of the regulation described below - is not permitted.

##### 3.2.2. DE-ICING AREAS

The special areas assigned for the de-icing of ACFT are designated DP1 and DP2 (see 10-9A). In exceptional cases, de-icing may take place on the positions located in between. The actual de-icing position will be assigned by the de-icing operator. The de-icing of jet-propelled ACFT will be carried out with running engines and switched off Auxiliary Power Units (APU). The same regulation applies for ACFT types ATR 42/72 with applied propeller brakes.

##### 3.2.3. DE-ICING

A de-icing operation shall be reported to the de-icing operator in good time (30 minutes in advance prior to EOBT/CTOT) under the phone number (0511)-9771415 however, when obtaining start-up clearance for the engines from HANNOVER Ground, at the latest.

The order of notifications has no influence on the actual de-icing sequence. This will be determined by ground control, exclusively.

After start-up clearance/push-back, ACFT will be guided by ground control to the immediate vicinity of the de-icing areas. The ACFT will then be guided by a Follow-me car to a vacant de-icing position.

After parking the ACFT on the de-icing area, the pilot will report on HANNOVER De-icing **121.780** together with his flight number. After the de-icing process has been completed, the Pilot-In-Command shall report "ready to taxi" to HANNOVER Ground.

If the engines have to be started up again, this shall be reported to ground control.

During the de-icing process, the pilot shall maintain constant listening watch on the respective de-icing frequency. When the de-icing procedure has been completed, the de-icing code will be transmitted and the ACFT handed over by the de-icing operator to the ground controller.

Taxiing maneuvers from the de-icing areas may only be carried out after express clearance by the ground controller and with the absolute minimum number of engine revolutions required, only.

After de-icing has taken place, the de-icing areas shall be vacated as quickly as possible after receiving taxi clearance.

All special services, such as the de-icing of the undercarriage or de-icing beneath the wings, will be conducted on the pads with engines switched off, only.

EDDV/HAJ  
HANNOVER

+ JEPPESEN

5 MAR 21

10-1P5

HANNOVER, GERMANY  
.AIRPORT.BRIEFING.

### 3. DEPARTURE

The hands-on check will generally only be carried out by representatives of the air transport company concerned or by a crew member of the de-iced ACFT on the respective de-icing pad. A hands-on check shall be requested by the crew through a handling agent, only. On instructions from the de-icing operator, an ACFT may be towed to another position for the hands-on check or planned for another de-icing position in the pre-planning stage already. If a hands-on check becomes necessary, the control tower shall be informed in time, but at the latest when requesting startup clearance. The employees of FHG and AGS (de-icing personnel) will not carry out these checks.

Differences of the above or in published Aeroplane Deicing Plan mentioned procedures have to be granted by the APT operator.

#### 3.3. START-UP, PUSH-BACK AND TAXI PROCEDURES

##### 3.3.1. START-UP

Pilots shall obtain start-up approval on the appropriate frequency of Ground.

##### 3.3.2. PUSH-BACK PROCEDURE ON MAIN APRON (STANDS 1 THRU 61)

ACFT may leave nose-in positions only by the aid of ACFT tractors.

Reverse thrust or variable pitch propellers shall not be used.

To receive push-back instructions from nose-in position, pilots are requested to contact the "Walkout Assistent" after they received approval to start their engines.

This request shall only be made if the pilot is able to carry out the maneuver without delay. The "Walkout Assistent" will carry out the push-back procedure immediately after receiving the necessary clearance from apron control. To avoid delays, the engines shall be started during push-back.

##### 3.3.3. TAXI PROCEDURE

To obtain taxi-out instructions after push-back or from a roll-out stand, pilots are instructed to request taxi clearance on the appropriate frequency of Ground.

###### RWY 09L Restrictions

From the apron to THR 09L, ACFT types B777, B787, A340 and A350 shall be guided to THR 09L via TWY F and G by a Follow-me vehicle. Independent taxiing is only possible starting at TWY H.

###### RWY 27R Restrictions

From the apron to THR 27R, ACFT types B777, B787, A340 and A350 shall be guided to THR 27R via TWY F and TWY M by a Follow-me vehicle.

#### 3.4. NOISE ABATEMENT PROCEDURES

The starting points for the take-off runs of 3200m in length are located at the level of the Eastern edge of TWY N for landing direction 27 and at the level of the Western edge of TWY H for landing direction 09. The starting points located 300m in front of THR 09L for take-offs in an Eastern direction and 300m in front of THR 27R for take-offs in a Western direction may only be used by ACFT requiring a take-off run exceeding 3200m for the forthcoming take-off.

#### 3.5. RWY OPERATIONS

##### RWY 09L/27R

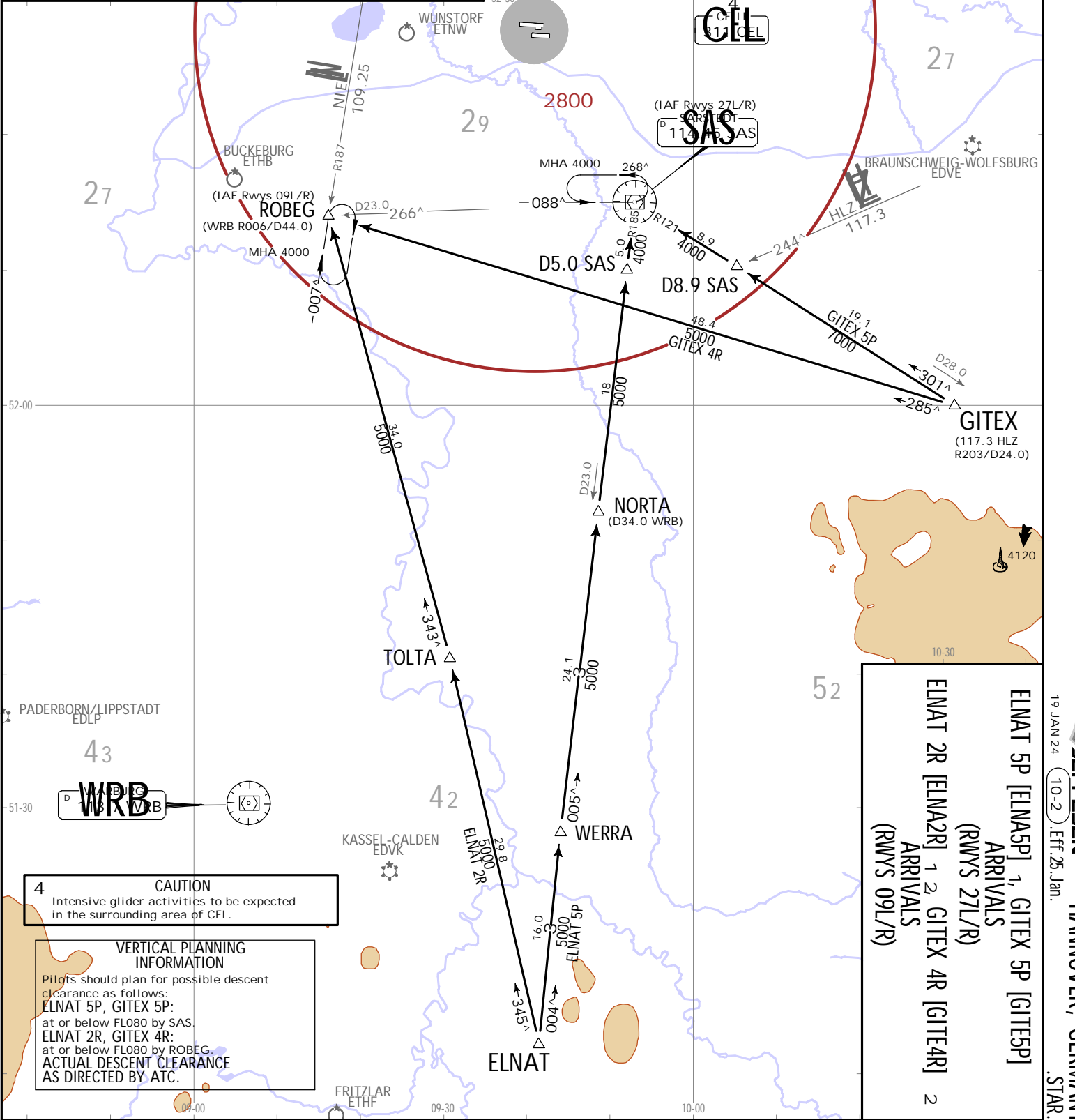
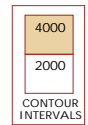
ACFT which are using extended take-off runs and which require a TORA of 10499' / 3200m or less shall only set take-off thrust when passing the THR.

D-ATIS 136.575  
Apt Elev 183  
Alt Set: hPa (IN on request)  
Trans level: By ATC

ELNAT 5P [ELNA5P]<sup>1</sup>, GITEX 5P [GITE5P]  
ARRIVALS  
(RWYS 27L/R)  
ELNAT 2R [ELNA2R]<sup>1 2</sup>, GITEX 4R [GITE4R]<sup>2</sup>  
ARRIVALS  
(RWYS 09L/R)

**SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC  
NOT APPLICABLE WITHIN AIRSPACE C**

- 1 By ATC.
- 2 BRNAV equipment necessary.
- 3 Between ELNAT & NORTA  
BRNAV equipment necessary.



**4 CAUTION**  
Intensive glider activities to be expected in the surrounding area of CEL.

**VERTICAL PLANNING INFORMATION**  
Pilots should plan for possible descent clearance as follows:  
ELNAT 5P, GITEX 5P:  
at or below FLO80 by SAS.  
ELNAT 2R, GITEX 4R:  
at or below FLO80 by ROBEG.  
**ACTUAL DESCENT CLEARANCE AS DIRECTED BY ATC.**

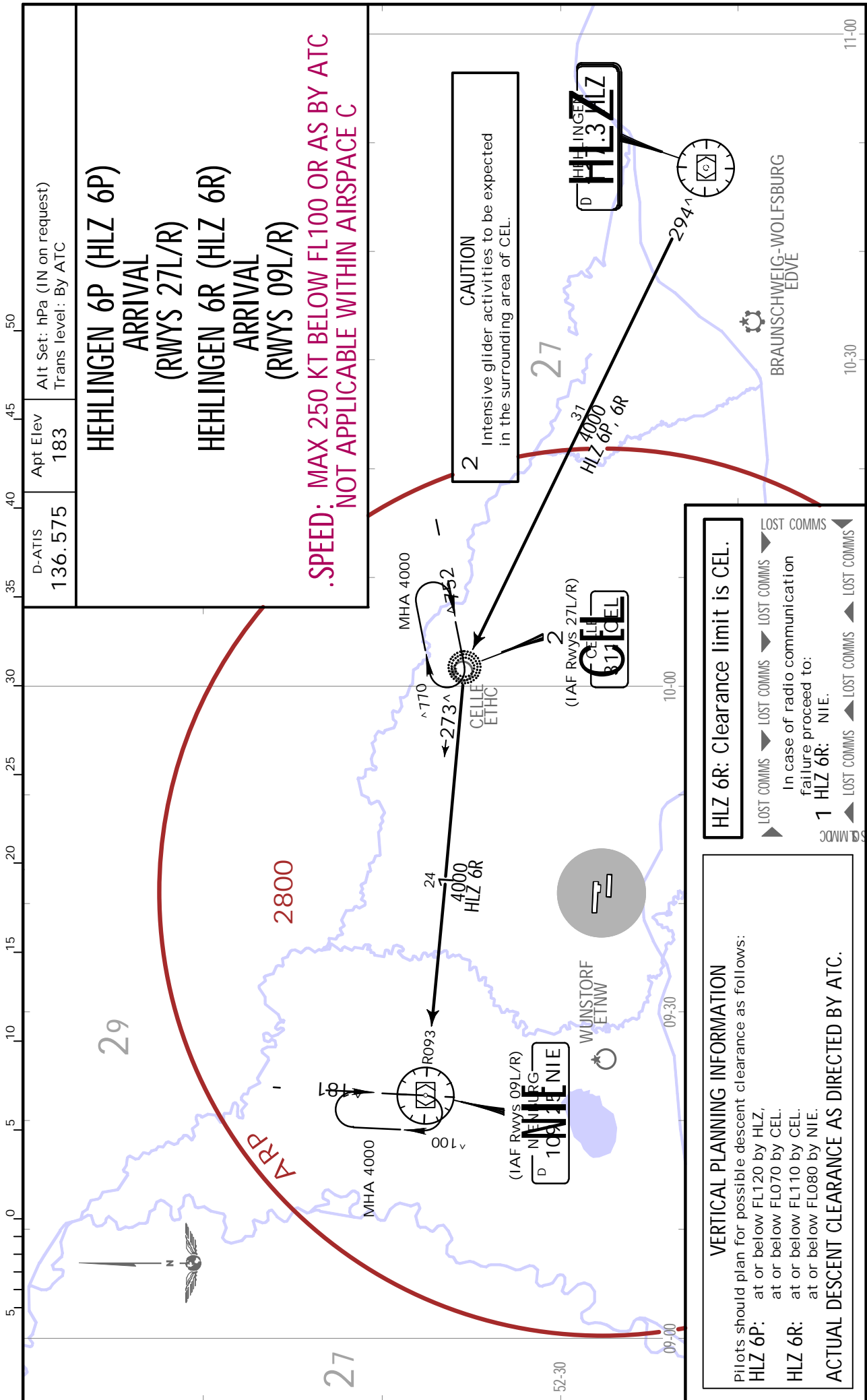
19 JAN 24  
JEPPESSEN  
10-2 EFF: 25. Jan.  
HANNOVER, GERMANY  
STAR.  
EINAT 5P [ELNA5P]<sup>1</sup>, GITEX 5P [GITE5P]  
ARRIVALS  
(RWYS 27L/R)  
EINAT 2R [ELNA2R]<sup>1 2</sup>, GITEX 4R [GITE4R]<sup>2</sup>  
ARRIVALS  
(RWYS 09L/R)

CHANGES: NIE VOR replaced by NIE VORDIENE. JEPPESSEN, 2018, 2024. ALL RIGHTS RESERVED.

**EDDV/HAJ**  
HANNOVER

**JEPPESEN**  
19 JAN 24 **10-2A** .Eff.25.Jan.

**HANNOVER, GERMANY**  
.STAR.



D-ATIS  
**136.575**

Apt Elev  
**183**

Alt Set: hPa (IN on request)  
Trans level: By ATC

**HEHLINGEN 6P (HLZ 6P)**  
**ARRIVAL**  
**(RWYS 27L/R)**

**HEHLINGEN 6R (HLZ 6R)**  
**ARRIVAL**  
**(RWYS 09L/R)**

**.SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC**  
**NOT APPLICABLE WITHIN AIRSPACE C**

**2**

**CAUTION**  
Intensive glider activities to be expected  
in the surrounding area of CEL.

**HLZ 6R: Clearance limit is CEL.**

LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼

In case of radio communication failure proceed to:

**1 HLZ 6R: NIE.**

▲ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲

**VERTICAL PLANNING INFORMATION**

Pilots should plan for possible descent clearance as follows:

**HLZ 6P:**  
at or below FL120 by HLZ,  
at or below FL070 by CEL.

**HLZ 6R:**  
at or below FL110 by CEL,  
at or below FL080 by NIE.

**ACTUAL DESCENT CLEARANCE AS DIRECTED BY ATC.**

EDDV/HAJ  
HANNOVER

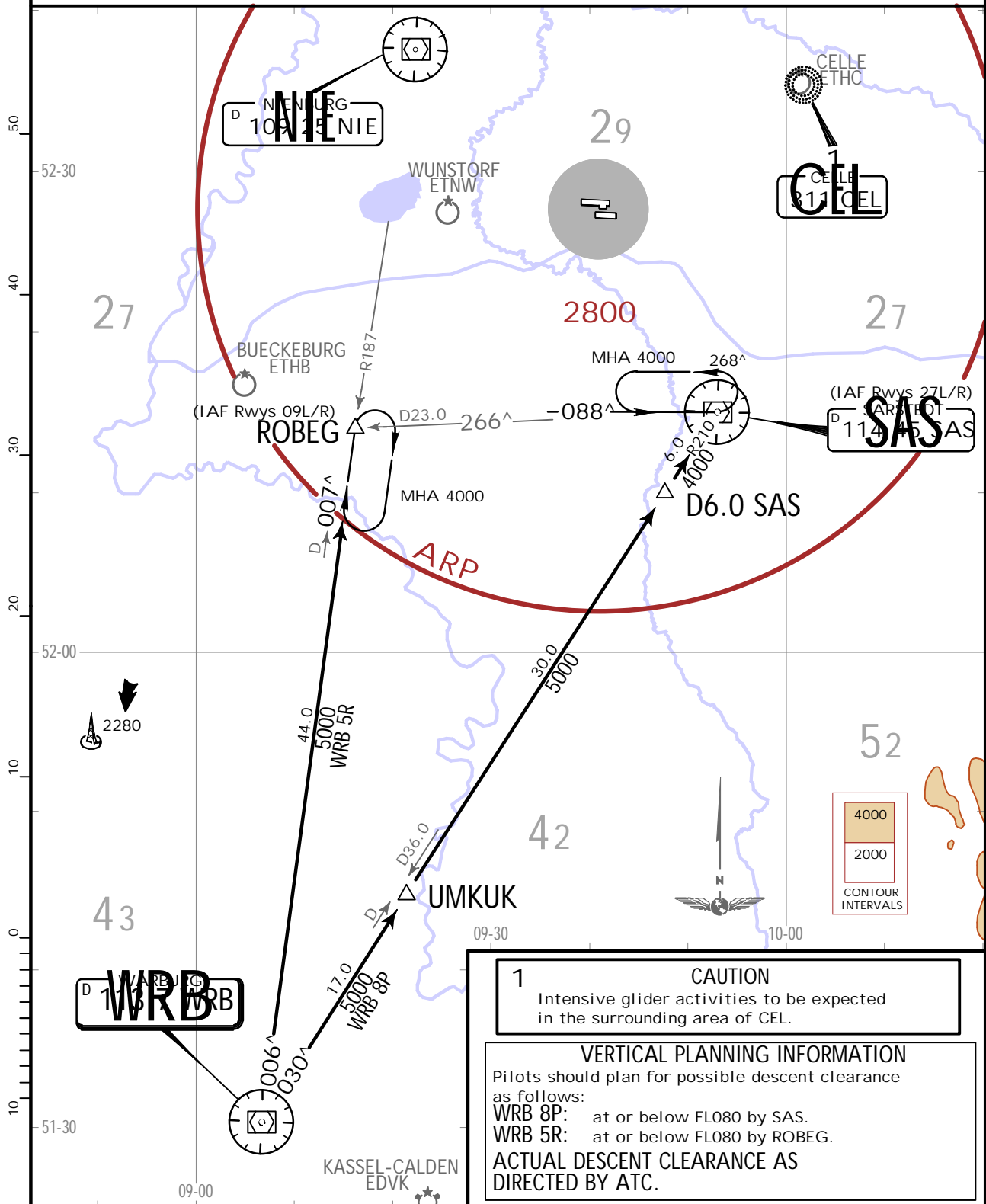
JEPPESEN  
19 JAN 24 10-2B .Eff.25.Jan.

HANNOVER, GERMANY  
.STAR.

D-ATIS 136.575	Apt Elev 183	Alt Set: hPa (IN on request) Trans level: By ATC
-------------------	-----------------	---

WARBURG 8P (WRB 8P)  
ARRIVAL  
(RWYS 27L/R)  
WARBURG 5R (WRB 5R)  
ARRIVAL  
(RWYS 09L/R)

**.SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC  
NOT APPLICABLE WITHIN AIRSPACE C**



**1 CAUTION**  
Intensive glider activities to be expected in the surrounding area of CEL.

**VERTICAL PLANNING INFORMATION**  
Pilots should plan for possible descent clearance as follows:  
WRB 8P: at or below FL080 by SAS.  
WRB 5R: at or below FL080 by ROBEG.  
**ACTUAL DESCENT CLEARANCE AS DIRECTED BY ATC.**



EDDV/HAJ  
HANNOVER

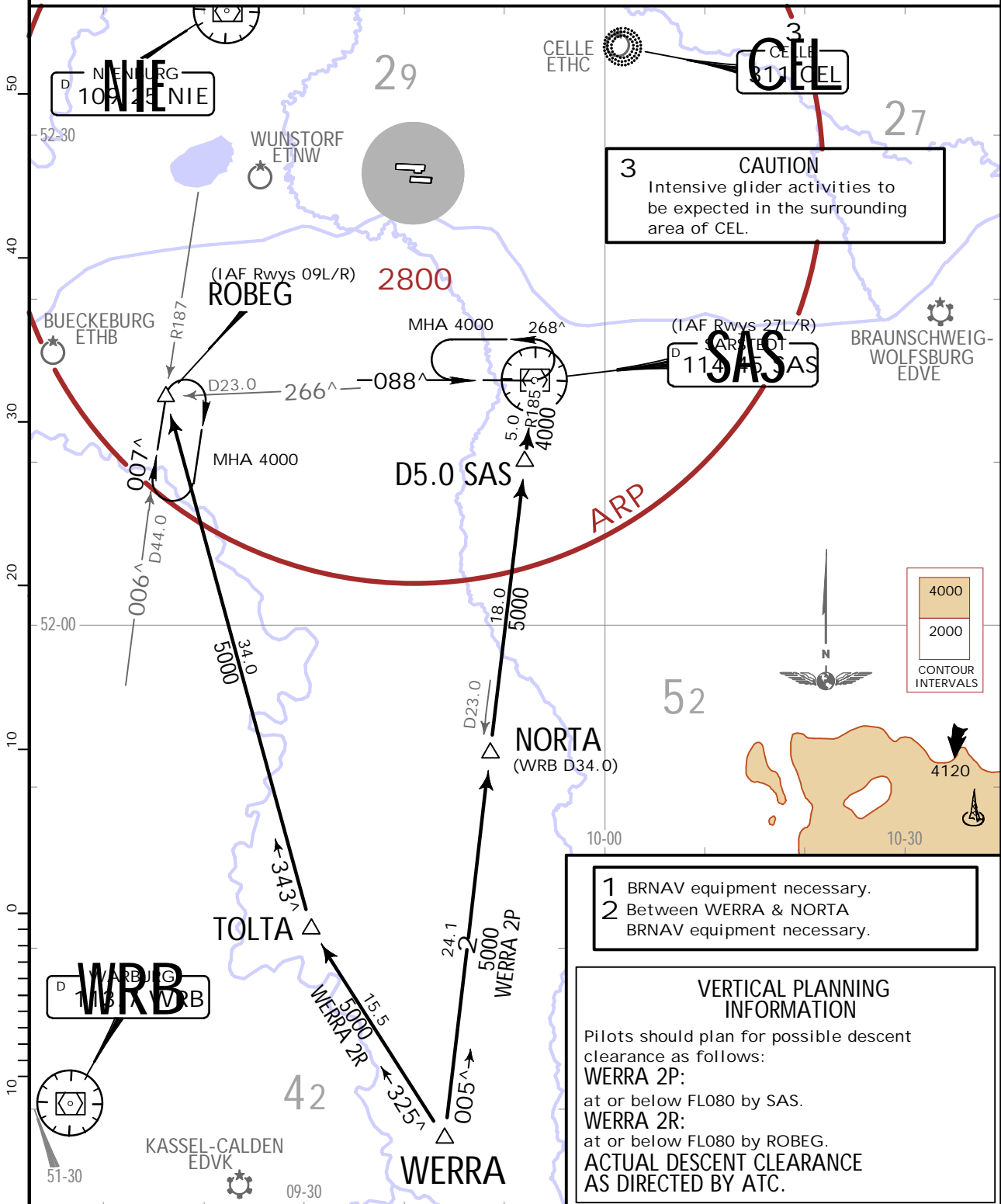
JEPPESEN  
19 JAN 24 (10-2C) .Eff.25.Jan.

HANNOVER, GERMANY  
.STAR.

D-ATIS 136.575	Apt Elev 183	Alt Set: hPa (IN on request) Trans level: By ATC
-------------------	-----------------	---

WERRA 2P [WERA2P]  
ARRIVAL  
(RWYS 27L/R)  
WERRA 2R [WERA2R] 1  
ARRIVAL  
(RWYS 09L/R)

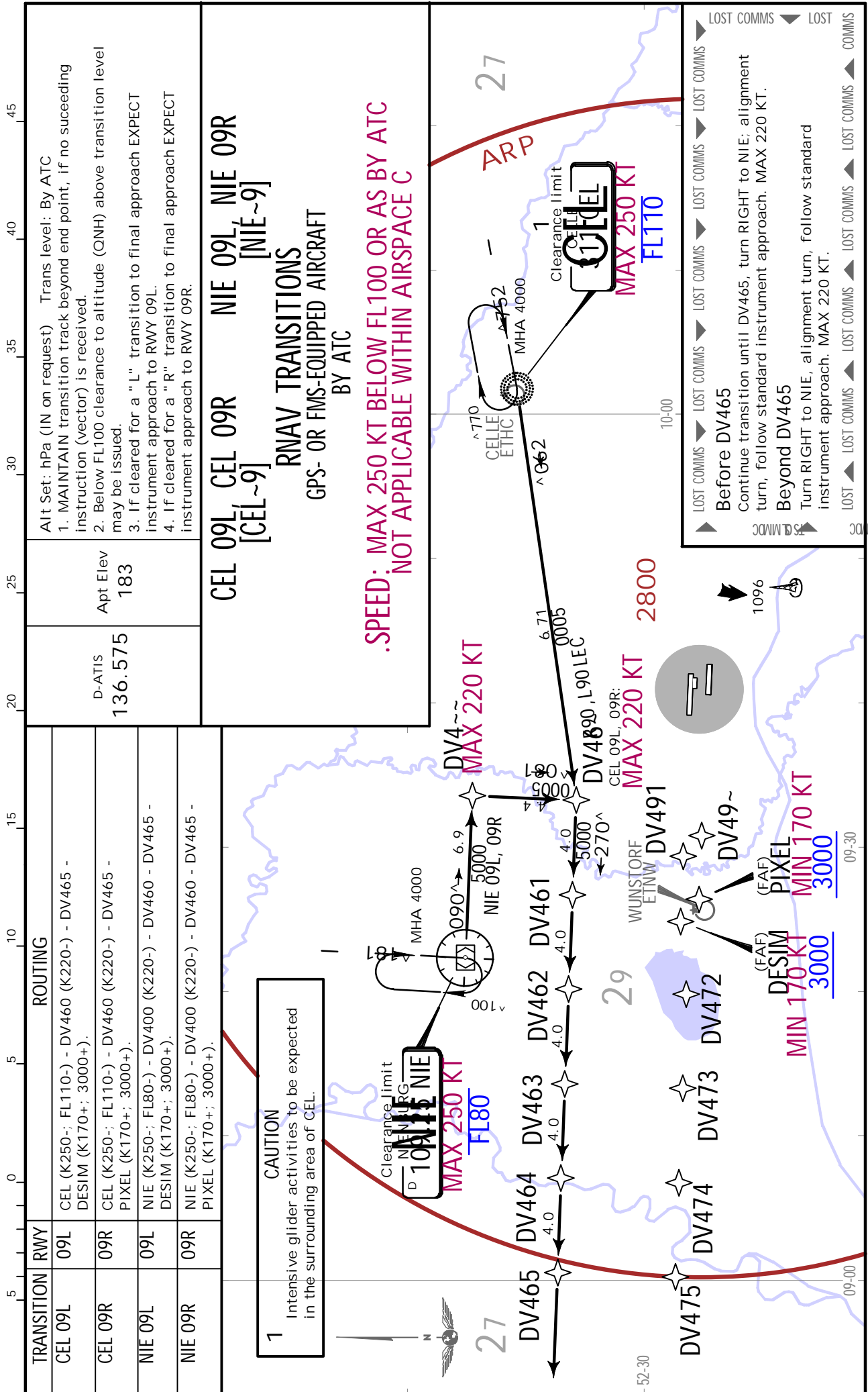
**.SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC  
NOT APPLICABLE WITHIN AIRSPACE C**



**EDDV/HAJ**  
HANNOVER

**JEPPESEN**  
19 JAN 24 10-2D .Eff.25.Jan.

**HANNOVER, GERMANY**  
.RNAV.TRANSITION.

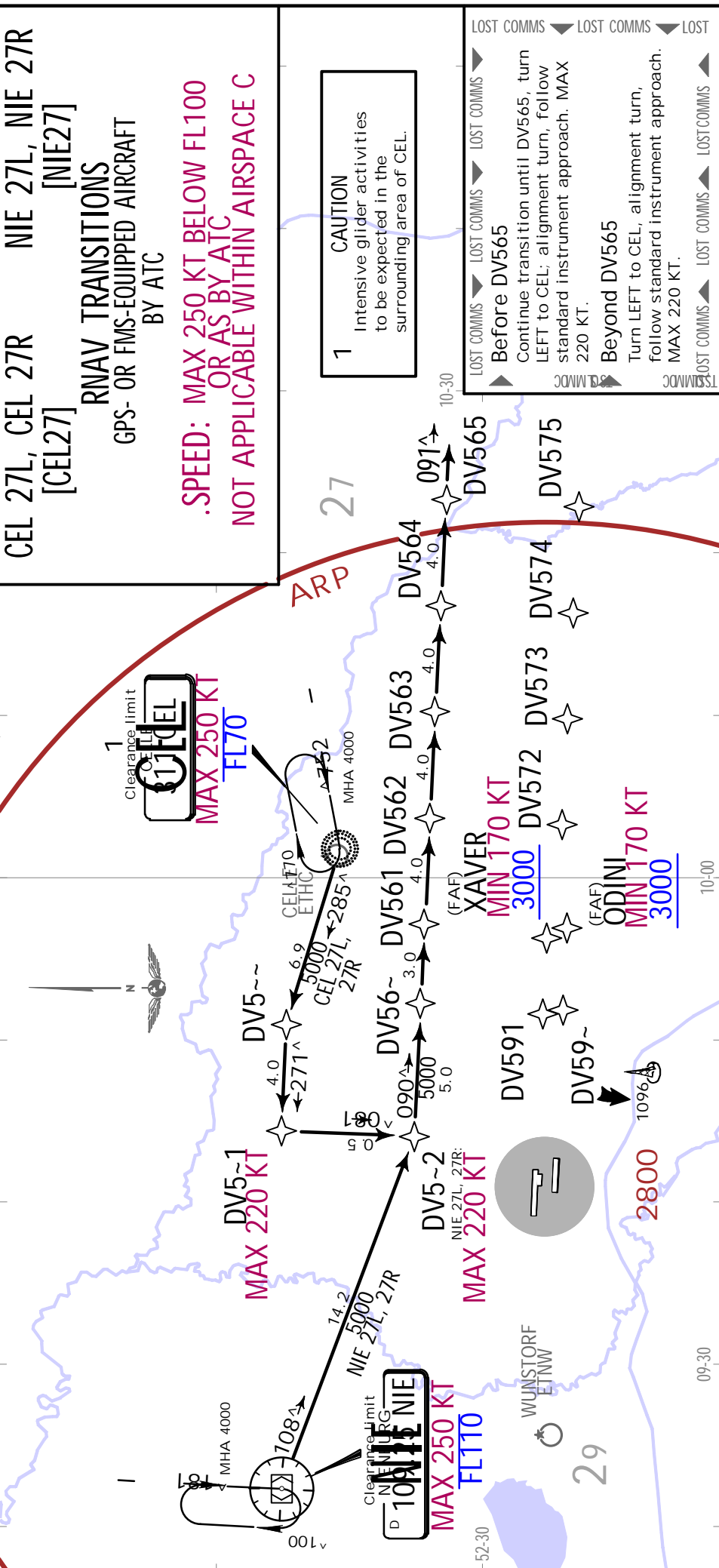


EDDV/HAJ  
HANNOVER

JEPPesen  
19 JAN 24 (10-2E) Eff. 25. Jan.

HANNOVER, GERMANY  
.RNAV. TRANSITION.

TRANSITION	RWY	ROUTING	Apt Elev
CEL 27L	27L	CEL (K250-; FL70-) - DV500 - DV501 (K220-) - DV502 - DV565 - ODINI (K170+; 3000+)	183
CEL 27R	27R	CEL (K250-; FL70-) - DV500 - DV501 (K220-) - DV502 - DV565 - XAVER (K170+; 3000+)	
NIE 27L	27L	NIE (K250-; FL110-) - DV502 (K220-) - DV565 - ODINI (K170+; 3000+)	183
NIE 27R	27R	NIE (K250-; FL110-) - DV502 (K220-) - DV565 - XAVER (K170+; 3000+)	



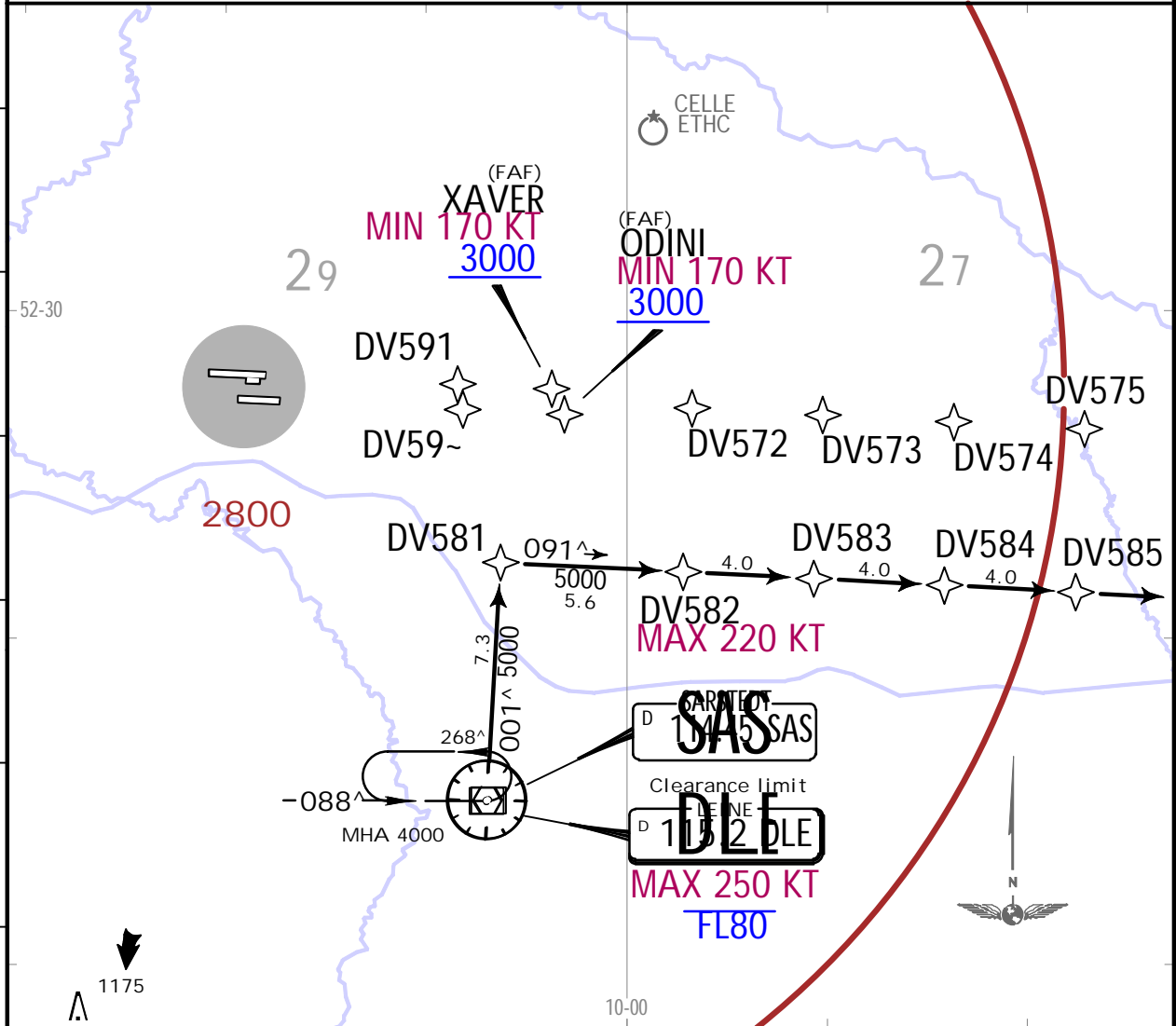
EDDV/HAJ  
HANNOVER

JEPPESEN  
30 AUG 19 10-2F

HANNOVER, GERMANY  
.RNAV.TRANSITION.

*D-ATIS <b>136.575</b>	Apt Elev <b>183</b>	Alt Set: hPa (IN on request) Trans level: By ATC 1. MAINTAIN transition track beyond end point, if no succeeding instruction (vector) is received. 2. Below FL100 clearance to altitude (QNH) above transition level may be issued. 3. If cleared for a "L" transition to final approach EXPECT instrument approach to RWY 27L. 4. If cleared for a "R" transition to final approach EXPECT instrument approach to RWY 27R.
---------------------------	------------------------	---

**DLE 27L, DLE 27R**  
**[DLE27]**  
**RNAV TRANSITIONS**  
 GPS- OR FMS-EQUIPPED AIRCRAFT  
 BY ATC  
.SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC  
NOT APPLICABLE WITHIN AIRSPACE C



LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼  
 ▶ Before DV585  
 Continue transition until DV585, turn RIGHT to SAS; alignment turn, follow standard instrument approach. MAX 220 KT.  
 Beyond DV585  
 Turn RIGHT to SAS, alignment turn, follow standard instrument approach. MAX 220 KT.  
 LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲

TRANSITION	RWY	ROUTING
DLE 27L	27L	DLE (K250-; FL80-) - DV581 - DV582 (K220-) - DV585 - ODINI (K170+; 3000+).
DLE 27R	27R	DLE (K250-; FL80-) - DV581 - DV582 (K220-) - DV585 - XAVER (K170+; 3000+).

**EDDV/HAJ**  
HANNOVER

**JEPPESEN**  
30 AUG 19 **(10-2G)**

**HANNOVER, GERMANY**  
.RNAV.TRANSITION.

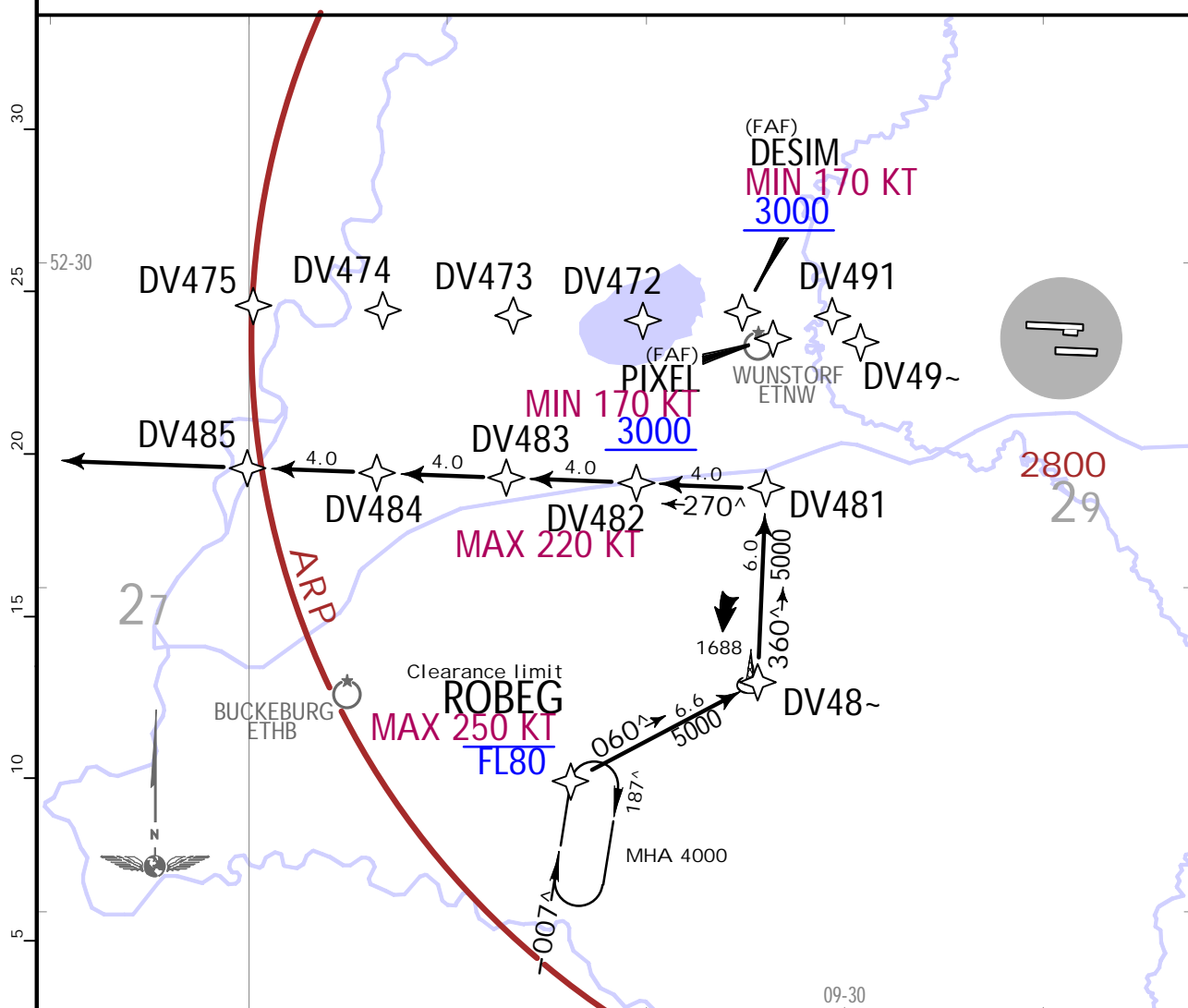
\*D-ATIS  
**136.575**

Apt Elev  
**183**

- Alt Set: hPa (IN on request) Trans level: By ATC
1. MAINTAIN transition track beyond end point, if no succeeding instruction (vector) is received.
  2. Below FL100 clearance to altitude (QNH) above transition level may be issued.
  3. If cleared for a "L" transition to final approach EXPECT instrument approach to RWY 09L.
  4. If cleared for a "R" transition to final approach EXPECT instrument approach to RWY 09R.

**ROBEG 09L, ROBEG 09R**  
[ROBE~9]  
**RNAV TRANSITIONS**  
GPS- OR FMS-EQUIPPED AIRCRAFT  
BY ATC

**.SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC**  
**NOT APPLICABLE WITHIN AIRSPACE C**



LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼

Before DV485  
Continue transition until DV485, turn LEFT to ROBEG; alignment turn, follow standard instrument approach. MAX 220 KT.

► Beyond DV485  
Turn LEFT to ROBEG, alignment turn, follow standard instrument approach. MAX 220 KT.

COMMS LOST ▲ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ COMMS

TRANSITION	RWY	ROUTING
ROBEG 09L	09L	ROBEG (K250-; FL80-) - DV480 - DV481 - DV482 (K220-) - DV485 - DESIM (K170+; 3000+).
ROBEG 09R	09R	ROBEG (K250-; FL80-) - DV480 - DV481 - DV482 (K220-) - DV485 - PIXEL (K170+; 3000+).

EDDV/HAJ  
HANNOVER

JEPPESSEN  
9 MAR 18 (10-2H)

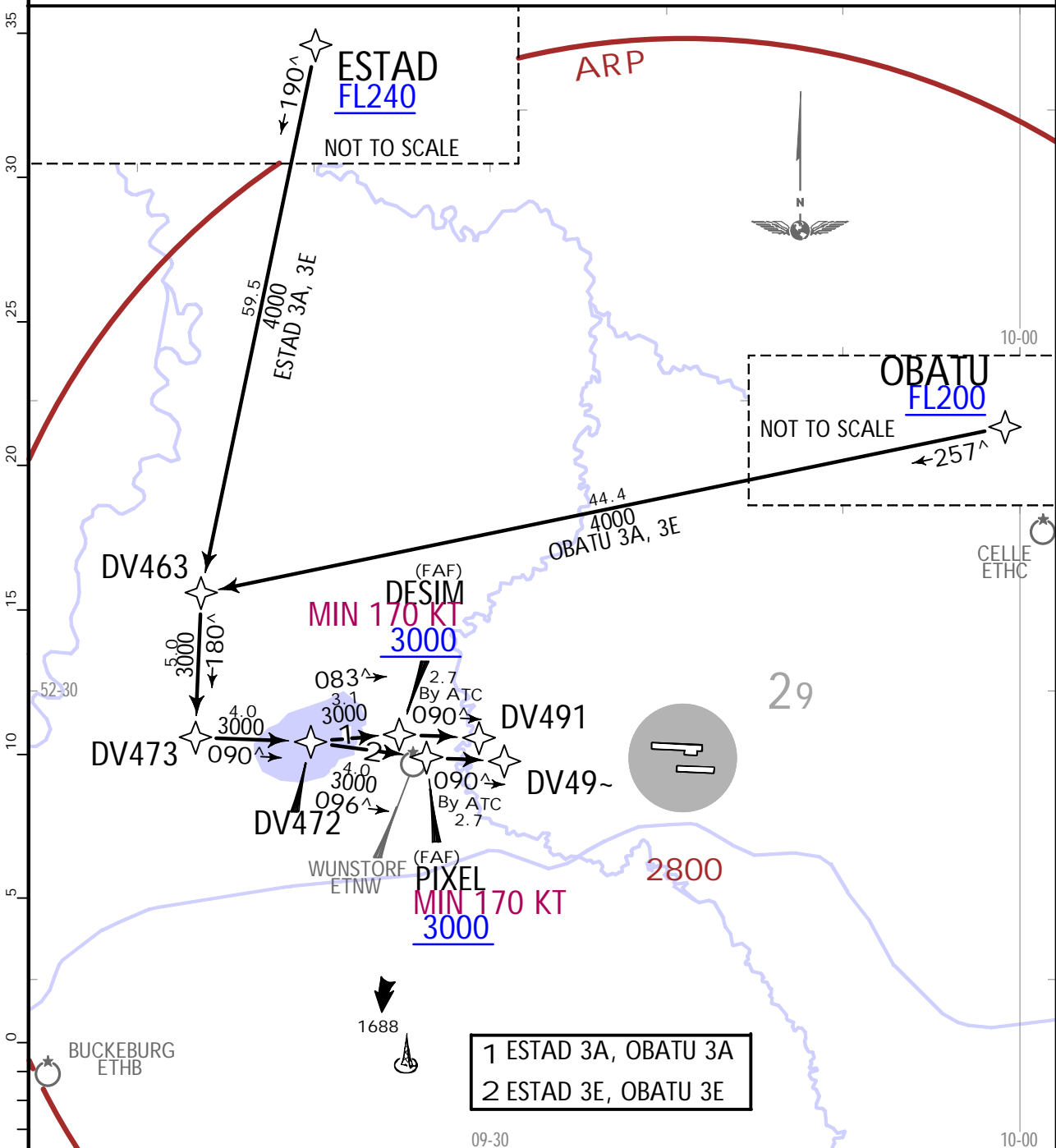
HANNOVER, GERMANY  
.RNAV.TRANSITION.

*D-ATIS 136.575	Apt Elev 183	Alt Set: hPa (IN on request) Trans level: By ATC When cleared for "Transition and Profile" aim for a low noise continuous descent operation (CDO) within the constraints as laid down in the procedure description.
--------------------	-----------------	--

ESTAD 3A [ESTA3A], ESTAD 3E [ESTA3E]  
OBATU 3A [OBAT3A], OBATU 3E [OBAT3E]  
RNAV TRANSITIONS

FLY THE TRANSITION AS CONTINUOUS DESCENT OPERATION (CDO)  
GPS- OR FMS-EQUIPPED AIRCRAFT  
BY ATC

**.SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC  
NOT APPLICABLE WITHIN AIRSPACE C**

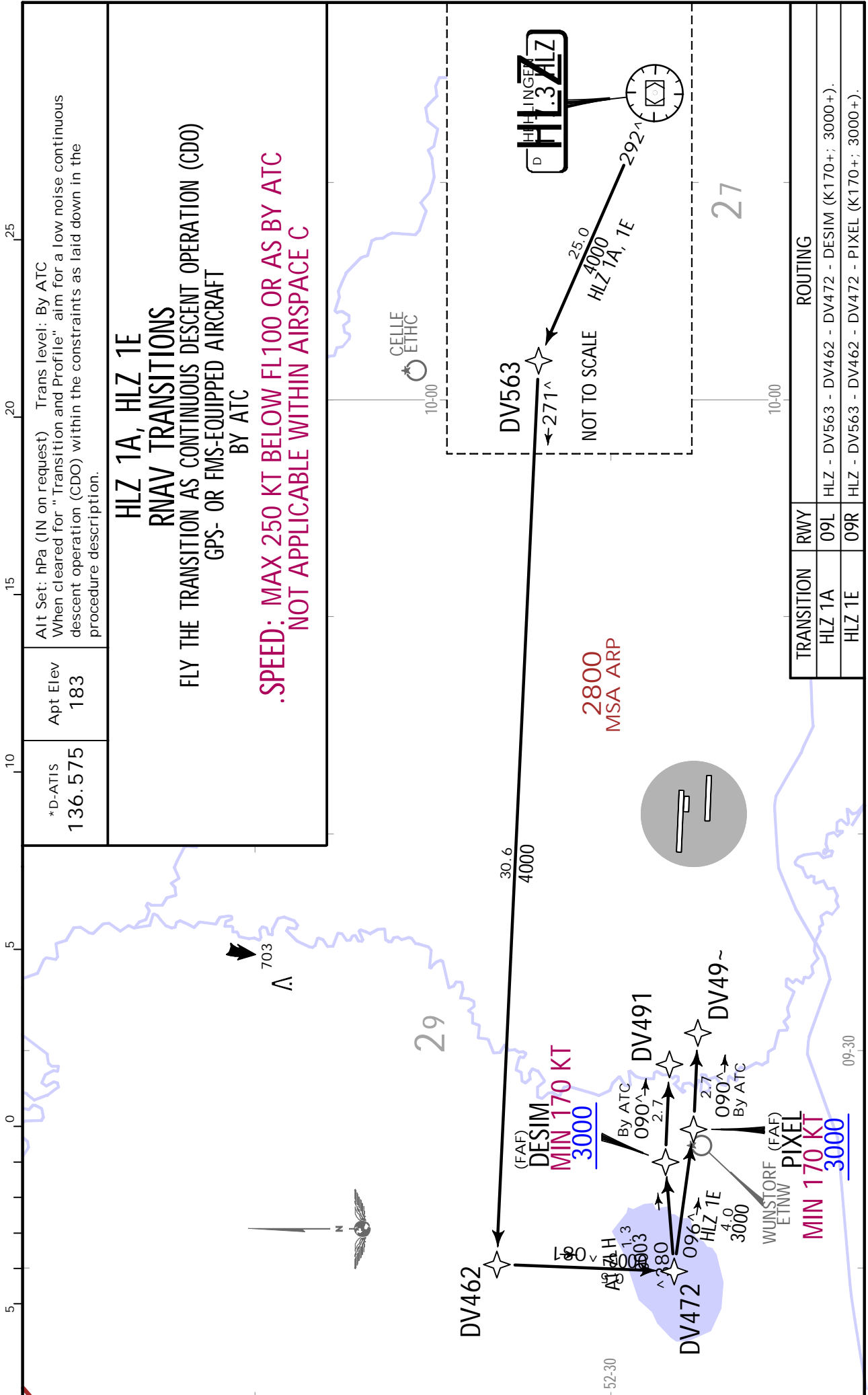


TRANSITION	RWY	ROUTING
ESTAD 3A	09L	ESTAD (FL240+) - DV463 - DV473 - DV472 - DESIM (K170+; 3000+).
ESTAD 3E	09R	ESTAD (FL240+) - DV463 - DV473 - DV472 - PIXEL (K170+; 3000+).
OBATU 3A	09L	OBATU (FL200+) - DV463 - DV473 - DV472 - DESIM (K170+; 3000+).
OBATU 3E	09R	OBATU (FL200+) - DV463 - DV473 - DV472 - PIXEL (K170+; 3000+).

**EDDV/HAJ**  
HANNOVER

**JEPPESSEN**  
9 MAR 18 (10-2J)

**HANNOVER, GERMANY**  
.RNAV.TRANSITION.



\*D-ATIS  
**136.575**

Apt Elev  
**183**

Alt Set: hPa (IN on request) Trans level: By ATC  
When cleared for "Transition and Profile" aim for a low noise continuous descent operation (CDO) within the constraints as laid down in the procedure description.

**HLZ 1A, HLZ 1E**  
**RNAV TRANSITIONS**  
**FLY THE TRANSITION AS CONTINUOUS DESCENT OPERATION (CDO)**  
**GPS- OR FMS-EQUIPPED AIRCRAFT**  
**BY ATC**

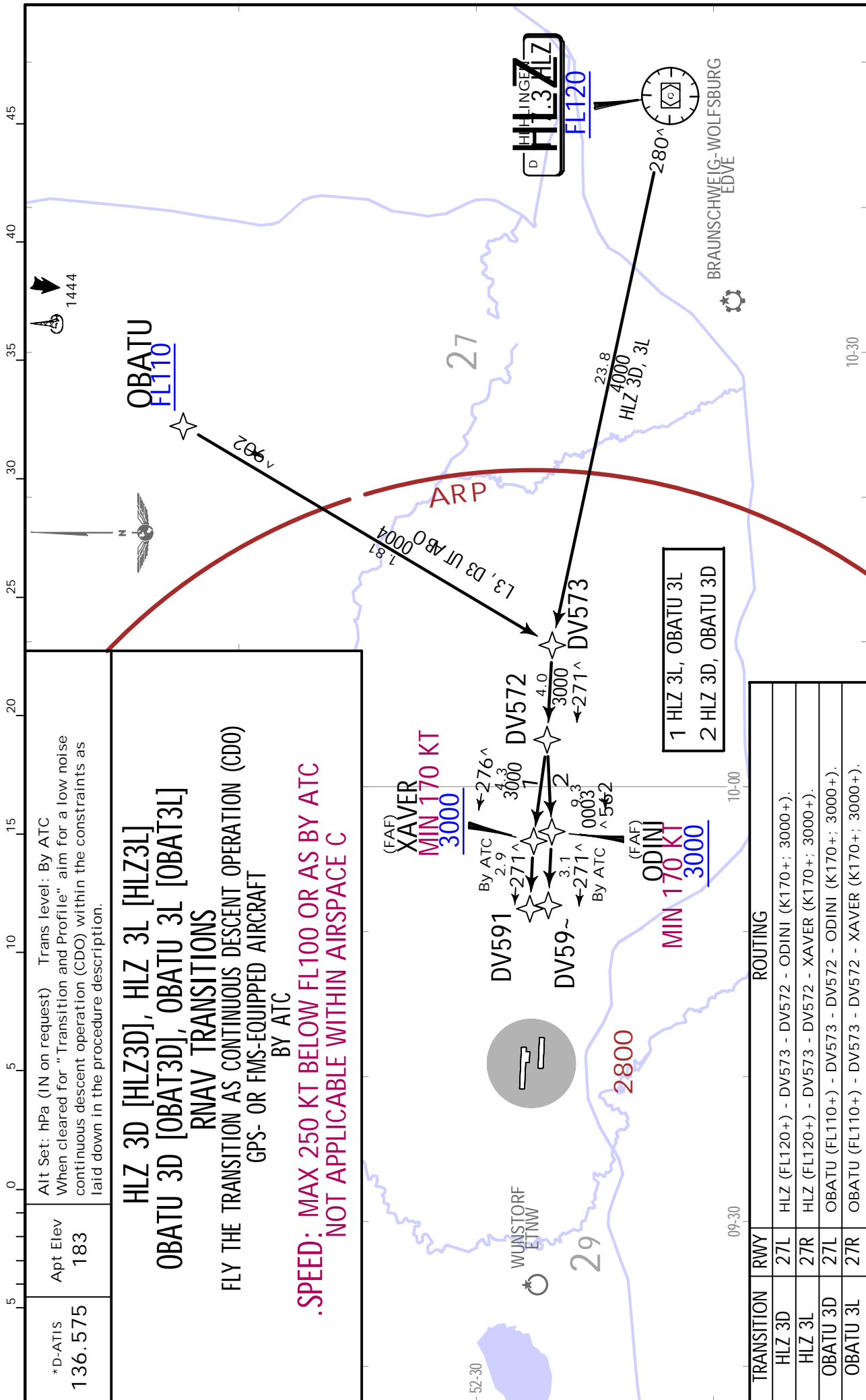
**.SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC**  
**NOT APPLICABLE WITHIN AIRSPACE C**

TRANSITION	RWY	ROUTING
HLZ 1A	09L	HLZ - DV563 - DV462 - DV472 - DESIM (K170+; 3000+).
HLZ 1E	09R	HLZ - DV563 - DV462 - DV472 - PIXEL (K170+; 3000+).

EDDV/HAJ  
HANNOVER

JEPPESSEN  
9 MAR 18 10-2K

HANNOVER, GERMANY  
.RNAV.TRANSITION.





EDDV/HAJ  
HANNOVER

JEPPESEN

HANNOVER, GERMANY  
.RNAV.TRANSITION.

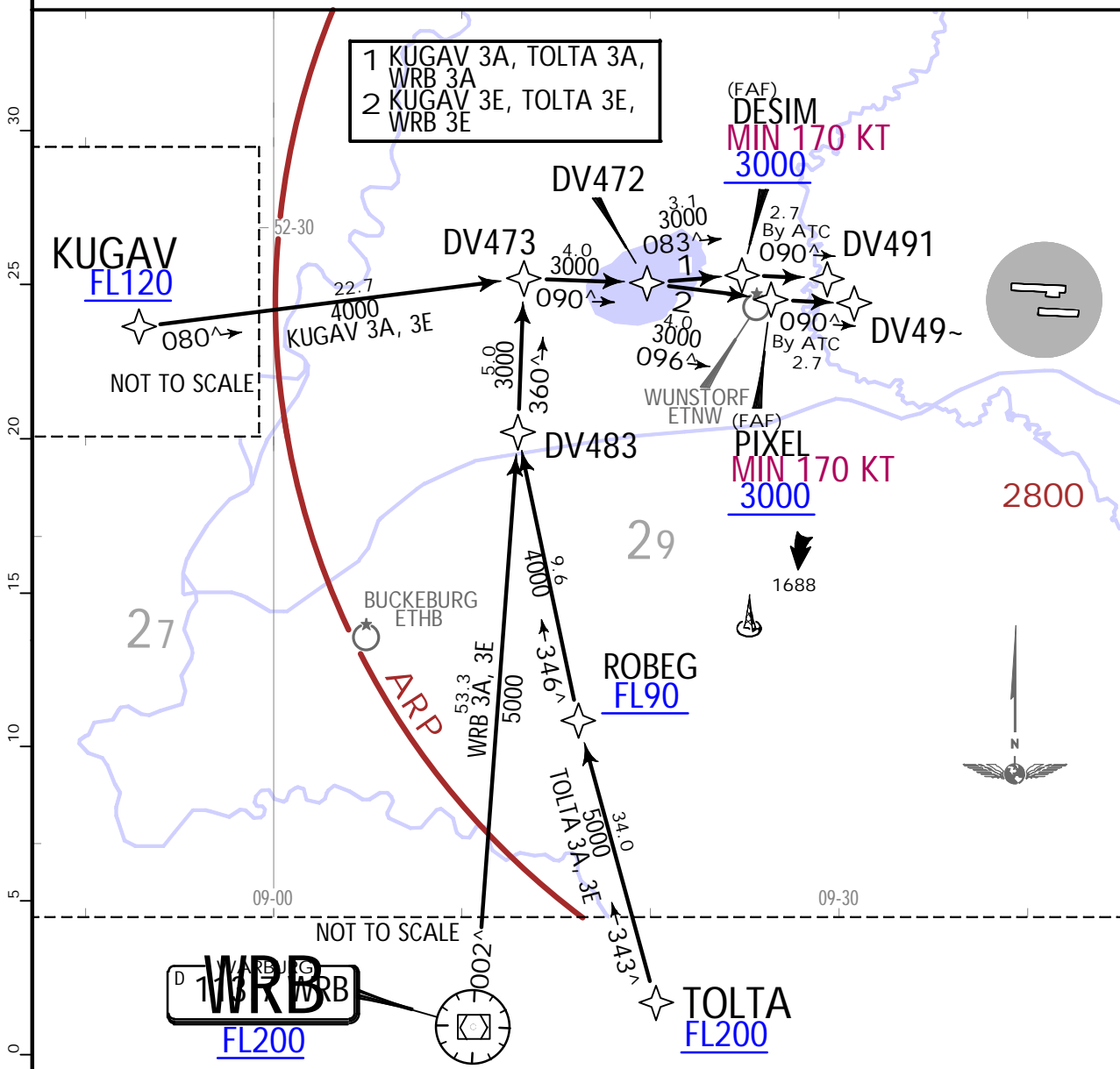
9 MAR 18 10-2L

\*D-ATIS  
136.575  
Apt Elev  
183

Alt Set: hPa (IN on request) Trans level: By ATC  
When cleared for "Transition and Profile" aim for a low noise continuous descent operation (CDO) within the constraints as laid down in the procedure description.

KUGAV 3A [KUGA3A], KUGAV 3E [KUGA3E]  
TOLTA 3A [TOLT3A], TOLTA 3E [TOLT3E]  
WRB 3A [WRB3A], WRB 3E [WRB3E]  
RNAV TRANSITIONS  
FLY THE TRANSITION AS CONTINUOUS DESCENT OPERATION (CDO)  
GPS- OR FMS-EQUIPPED AIRCRAFT  
BY ATC

**.SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC  
NOT APPLICABLE WITHIN AIRSPACE C**

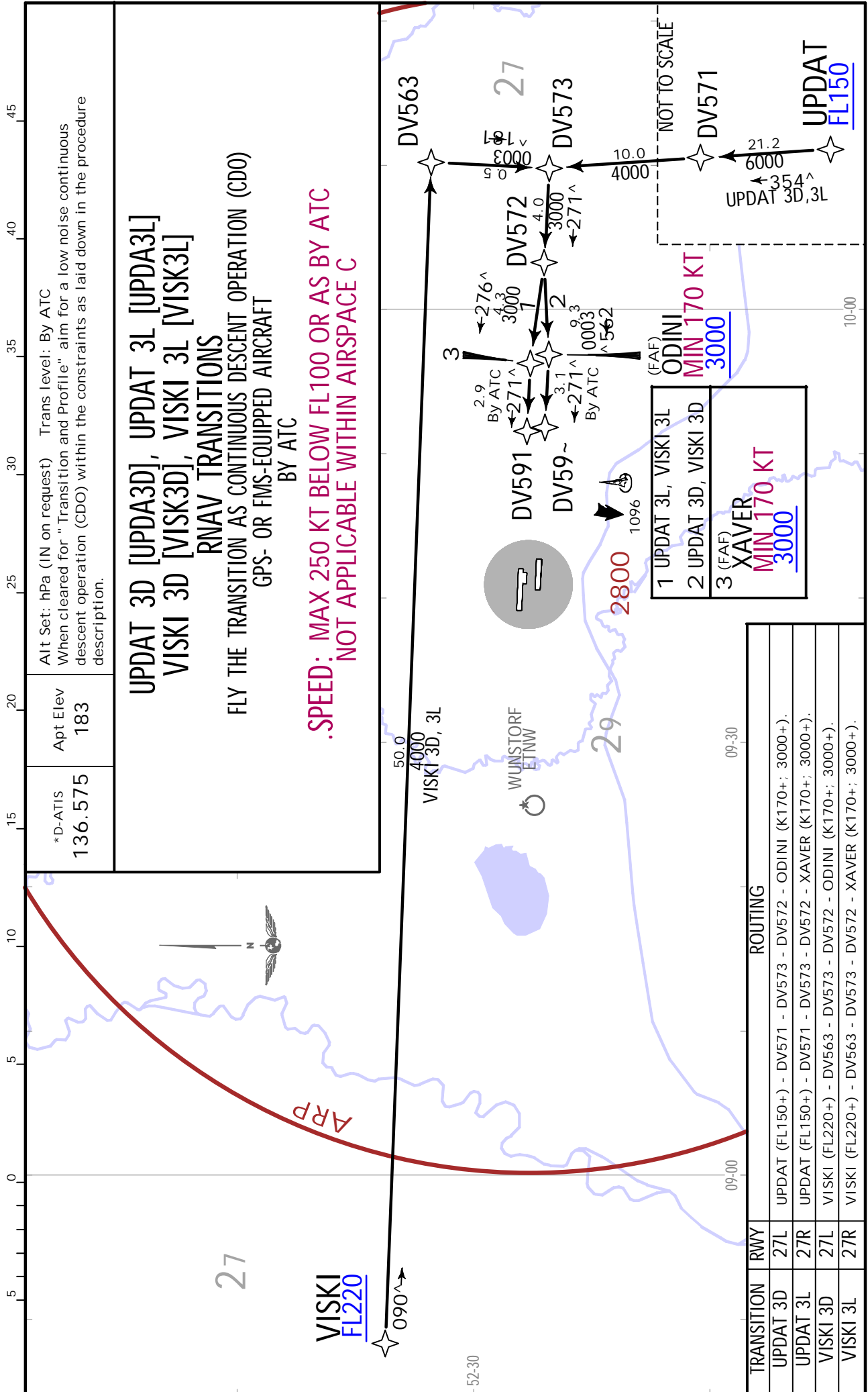


TRANSITION	RWY	ROUTING
KUGAV 3A	09L	KUGAV (FL120+) - DV473 - DV472 - DESIM (K170+; 3000+).
KUGAV 3E	09R	KUGAV (FL120+) - DV473 - DV472 - PIXEL (K170+; 3000+).
TOLTA 3A	09L	TOLTA (FL200+) - ROBEG (FL90+) - DV483 - DV473 - DV472 - DESIM (K170+; 3000+).
TOLTA 3E	09R	TOLTA (FL200+) - ROBEG (FL90+) - DV483 - DV473 - DV472 - PIXEL (K170+; 3000+).
WRB 3A	09L	WRB (FL200+) - DV483 - DV473 - DV472 - DESIM (K170+; 3000+).
WRB 3E	09R	WRB (FL200+) - DV483 - DV473 - DV472 - PIXEL (K170+; 3000+).

EDDV/HAJ  
HANNOVER

JEPPESSEN  
9 MAR 18 10-2M

HANNOVER, GERMANY  
.RNAV.TRANSITION.



Trans alt: 5000  
 1. Contact BREMEN Radar IMMEDIATELY after take-off.  
 2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY.

BREMEN Radar (APP)  
 119.490

Apt Elev  
 183

**CELLE 8F (CEL 8F)**  
**CELLE 9G (CEL 9G)**  
**CELLE 6S (CEL 6S)**  
**CELLE 6Y (CEL 6Y)**

**DEPARTURES**  
**(RWYS 09L/R, 27L/R)**  
**.SPEED: MAX 250 KT BELOW FL100**  
**OR AS BY ATC**  
**NOT APPLICABLE WITHIN AIRSPACE C**

These SIDs require minimum climb gradients of  
 CEL 8F: 9.0% (550 FT/NM) until passing 3500 due to airspace structure.  
 CEL 6S: 12.0% (730 FT/NM) until passing 4000 due to airspace structure.

Gnd speed-KT	75	100	150	200	250	300
9.0% V/V (fpm)	684	911	1367	1823	2279	2734
12.0% V/V (fpm)	911	1215	1823	2430	3038	3646

If unable to comply advise Tower as soon as possible.

Initial climb clearance **4000**

**ROUTING**

CEL 8F  
 1

CEL 9G  
 09R

CEL 6S  
 1

CEL 6Y  
 09L

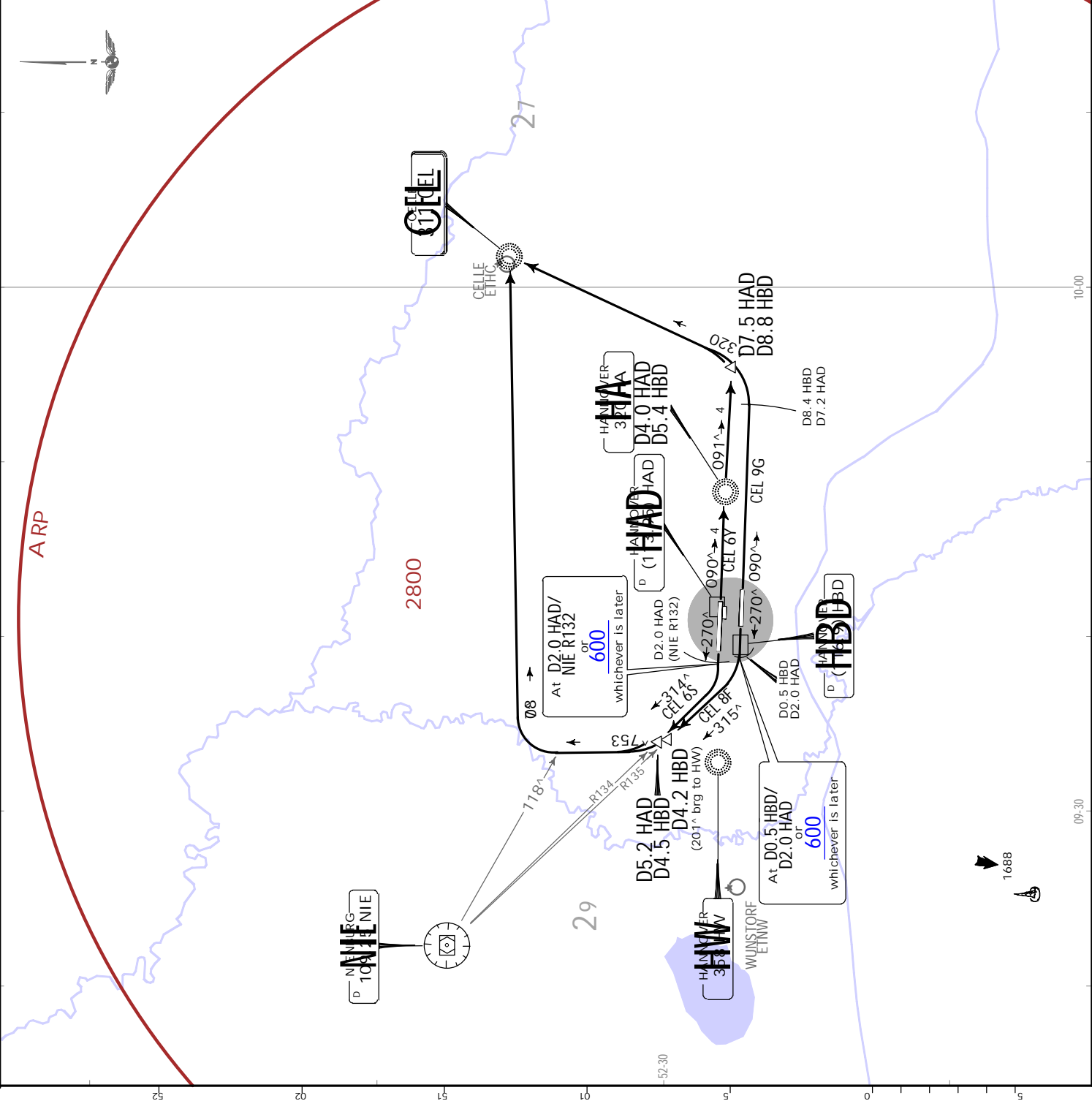
Climb straight ahead to D0.5 HBD WEST of HBD/D2.0 HAD or 600, whichever is later, turn RIGHT, intercept NIE R135 inbound to D4.2 HBD/201° bearing to HW, turn RIGHT, 357° bearing to HW, passing NIE R118 turn RIGHT, intercept 087° bearing to CEL.

Climb straight ahead to D8.4 HBD/D7.2 HAD, turn LEFT, intercept 023° bearing to CEL.

Climb straight ahead to D2.0 HAD/NIE R132 or 600, whichever is later, turn RIGHT, intercept NIE R134 inbound to D5.2 HAD/D4.5 HBD, turn RIGHT, 357° track, when passing NIE R118 turn RIGHT, intercept 087° bearing to CEL.

Climb straight ahead to D7.5 HAD/D8.8 HBD, turn LEFT, intercept 023° bearing to CEL.

1 After passing NIE R118 B-RNAV equipment necessary.



Trans alt: 5000  
 1. Contact BREMEN Radar IMMEDIATELY after take-off.  
 2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY.

**MULDO 8F**  
**MULDO 6G**  
**DEPARTURES**  
**(RWYS 09R, 27L)**  
**.SPEED: MAX 250 KT BELOW FL100**  
**OR AS BY ATC**  
**NOT APPLICABLE WITHIN AIRSPACE C**

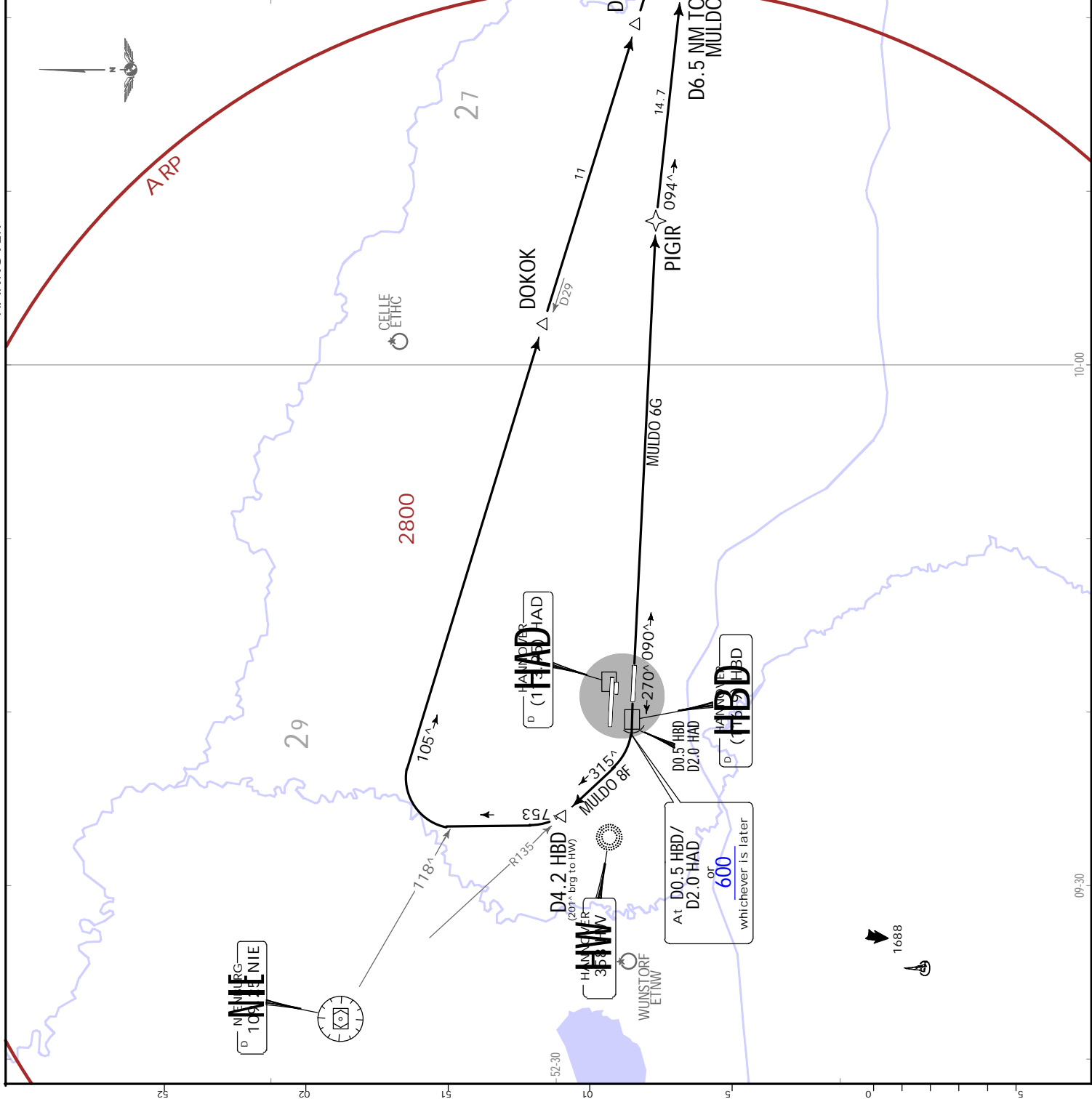
These SIDs require minimum climb gradients of  
 MULDO 8F: 9.0% (550 FT/NM) until passing 3500 due to airspace structure.  
 MULDO 6G: 3.8% (230 FT/NM) until passing 2500 due to airspace structure.

Gnd speed-KT	75	100	150	200	250	300
3.8% V/V (fpm)	289	385	577	770	962	1154
9.0% V/V (fpm)	684	911	1367	1823	2279	2734

If unable to comply advise Tower as soon as possible.

Initial climb clearance		4000
SID	RWY	ROUTING
MULDO 8F	27L	Climb straight ahead to D0.5 HBD WEST of HBD/D2.0 HAD or 600, whichever is later, turn RIGHT, intercept NIE R135 inbound to D4.2 HBD/201 <sup>^</sup> bearing to HW, turn RIGHT, 357 <sup>^</sup> track, when passing NIE R118 turn RIGHT, intercept HLZ R285 inbound via DOKKOK to MULDO.
MULDO 6G 1	09R	Climb straight ahead to PIGIR, turn RIGHT, 094 <sup>^</sup> track MULDO.

1 After passing 2500 B-RNAV equipment necessary.



**JEPPesen HANNOVER, GERMANY**  
 .SID.  
 19 JAN 24 (10-3B) .Eff. 25.Jan.

Trans alt: 5000  
 1. Contact BREMEN Radar (APP) 119.490  
 IMMEDIATELY after take-off.  
 2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY.

**MULDO 6S**  
**MULDO 5Y**  
**DEPARTURES**  
**(RWYS 09L, 27R)**  
**.SPEED: MAX 250 KT BELOW FL100**  
**OR AS BY ATC**  
**NOT APPLICABLE WITHIN AIRSPACE C**

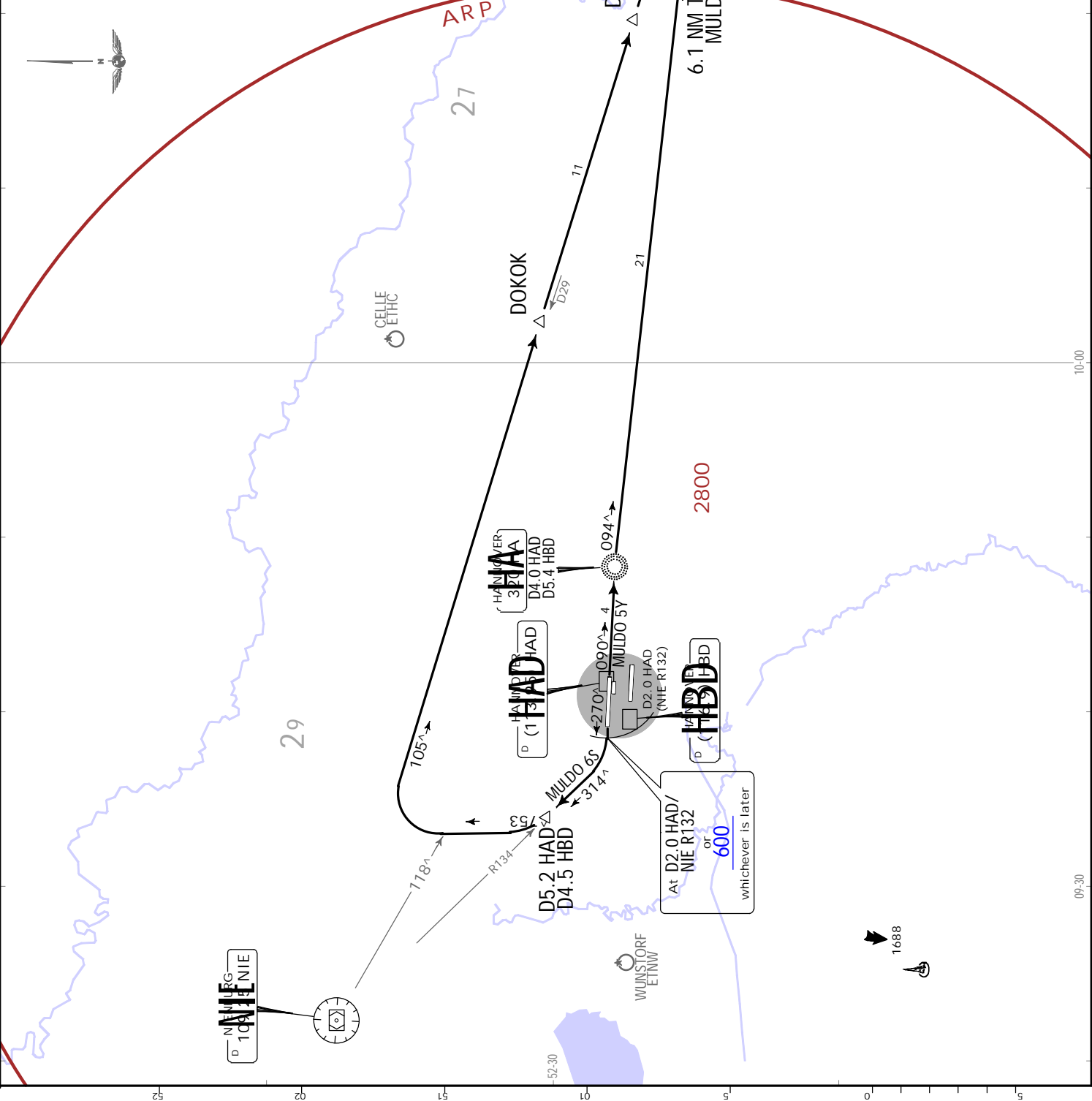
MULDO 6S  
 This SID requires a minimum climb gradient of 12.0% (730 FT/NM) until passing 4000 due to airspace structure. If unable to comply advise Tower as soon as possible.

Gnd speed-KT	75	100	150	200	250	300
12.0% V/V (fpm)	911	1215	1823	2430	3038	3646

SID	RWY	ROUTING
MULDO 6S	27R	Climb straight ahead to D2.0 HAD/NIE R132 or 600, whichever is later, turn RIGHT, intercept NIE R134 inbound to D5.2 HAD/D4.5 HBD, turn RIGHT, 357° track, when passing NIE R118 turn RIGHT, intercept HLZ R285 inbound via DOKOK to MULDO.
MULDO 5Y 1	09L	To HA, turn RIGHT, 094° bearing to MULDO.

Initial climb clearance 4000

1 After passing 2500 B-RNAV equipment necessary.



**EDDV/HAJ**  
 HANNOVER

Trans alt: 5000  
 1. Contact BREMEN Radar IMMEDIATELY after take-off.  
 2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY.

BREMEN Radar (APP)  
 119.490

Apt Elev  
 183

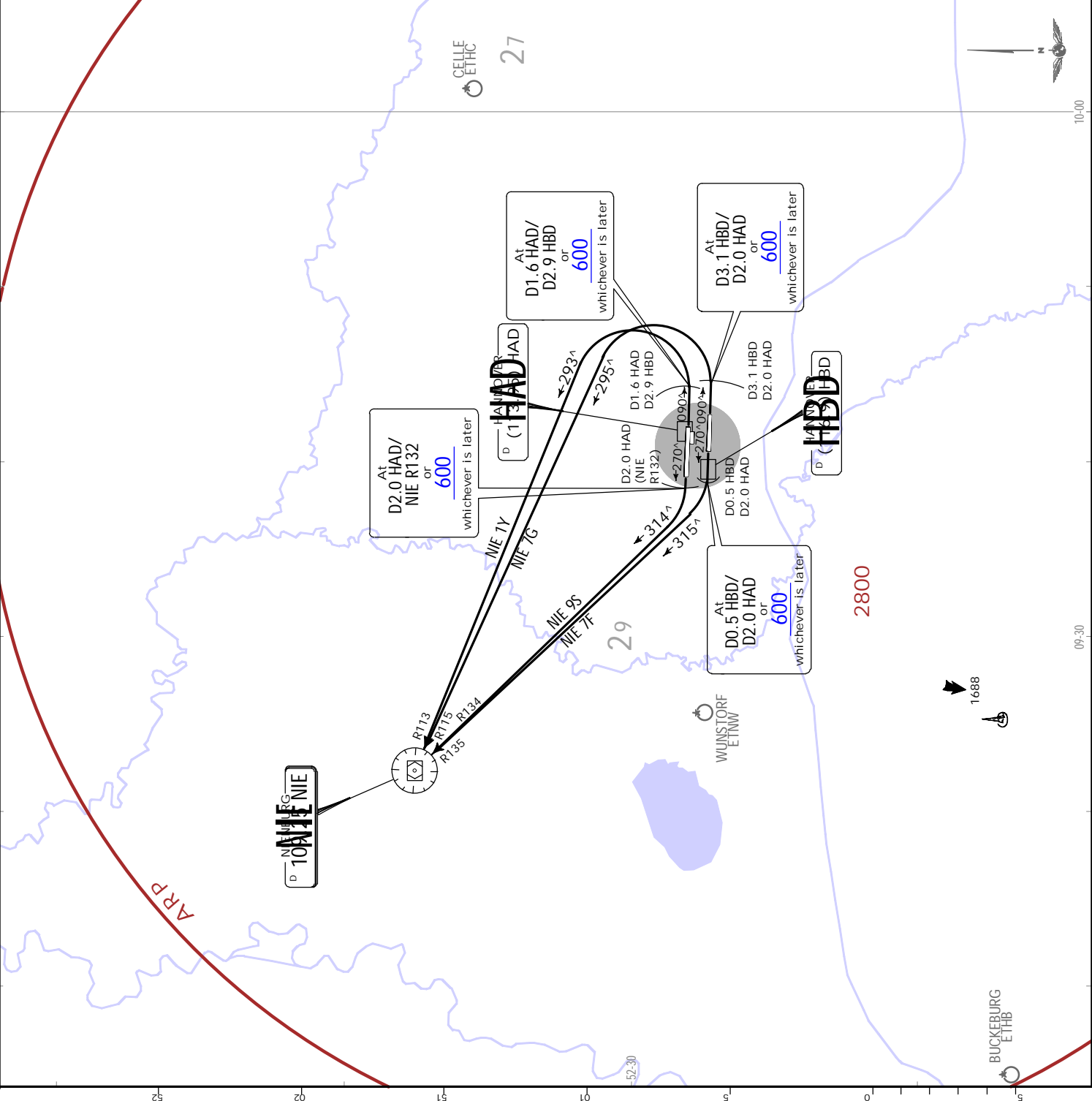
NIENBURG 7F (NIE 7F)  
 NIENBURG 7G (NIE 7G)  
 NIENBURG 9S (NIE 9S)  
 NIENBURG 1Y (NIE 1Y)  
 DEPARTURES  
 (RWYS 09L/R, 27L/R)  
**.SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC**  
**NOT APPLICABLE WITHIN AIRSPACE C**

These SIDs require minimum climb gradients of  
 NIE 7F: 9.0% (550 FT/NM) until passing 3500 due to airspace structure.  
 NIE 9S: 12.0% (730 FT/NM) until passing 3000 due to airspace structure.

Grnd speed-KT	75	100	150	200	250	300
9.0% V/V (fpm)	684	911	1367	1823	2279	2734
12.0% V/V (fpm)	911	1215	1823	2430	3038	3646

If unable to comply advise Tower as soon as possible.

Initial climb clearance		4000
SID	RWY	ROUTING
NIE 7F	27L	Climb straight ahead to D0.5 HBD WEST of HBD/D2.0 HAD or 600, whichever is later, turn RIGHT, intercept NIE R135 inbound to NIE.
NIE 7G	09R	Climb straight ahead to D3.1 HBD/D2.0 HAD or 600, whichever is later, turn LEFT, intercept NIE R115 inbound to NIE.
NIE 9S	27R	Climb straight ahead to D2.0 HAD/NIE R132 or 600, whichever is later, turn RIGHT, intercept NIE R134 inbound to NIE.
NIE 1Y	09L	Climb straight ahead to D1.6 HAD/D2.9 HBD or 600, whichever is later, turn LEFT, intercept NIE R113 inbound to NIE.



Trans alt: 5000  
 1. Contact BREMEN Radar  
 IMMEDIATELY after take-off.  
 2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY.

**POVEL 3F**  
**POVEL 2H**  
**POVEL 3S**  
**POVEL 2Y**  
**DEPARTURES**  
**(RWY 09L/R, 27L/R)**  
**.SPEED: MAX 250 KT BELOW FL100**  
**OR AS BY ATC**  
**NOT APPLICABLE WITHIN AIRSPACE C**

These SIDs require minimum climb gradients of  
**POVEL 3F:** 9.0% (550 FT/NM) until passing 3500 due to airspace structure.  
**POVEL 3S:** 11.0% (670 FT/NM) until passing 3000 due to airspace structure.

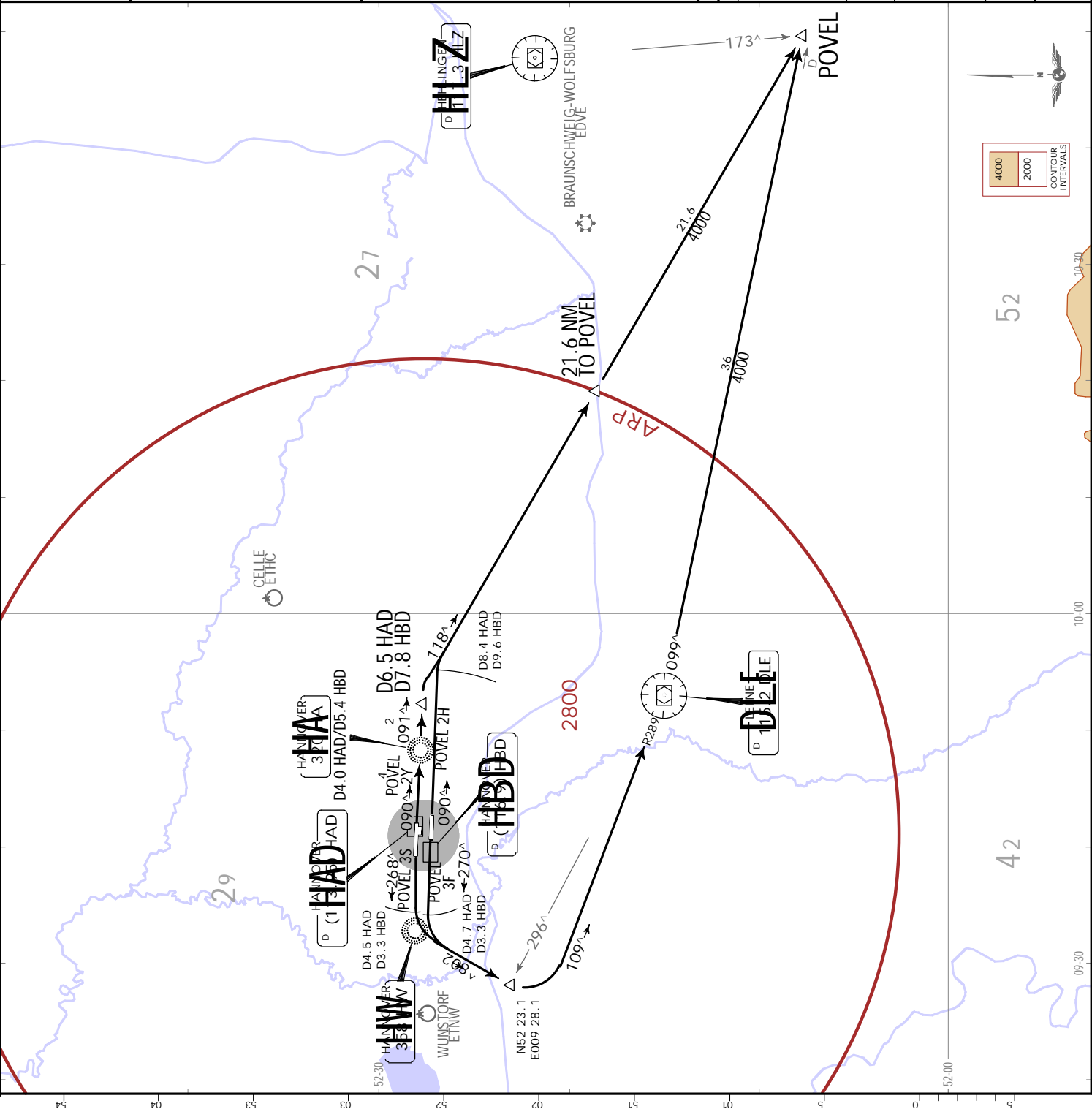
Grnd speed-KT	75	100	150	200	250	300
9.0% V/V (fpm)	684	911	1367	1823	2279	2734
11.0% V/V (fpm)	835	1114	1671	2228	2785	3342

If unable to comply advise Tower as soon as possible.

Initial climb clearance **4000**

SID	RWY	ROUTING
POVEL 3F	27L	Climb straight ahead to D4.7 HAD/D3.3 HBD, turn LEFT, intercept 208° bearing from HW, when passing DLE R296 turn LEFT, intercept DLE R289 inbound to DLE, turn LEFT, DLE R099 to POVEL.
POVEL 2H 1	09R	Climb straight ahead to D8.4 HAD/D9.6 HBD, turn RIGHT, 118° track to POVEL.
POVEL 3S	27R	Towards HW, at D4.5 HAD/D3.3 HBD turn LEFT, intercept 208° bearing from HW, when passing DLE R296 turn LEFT, intercept DLE R289 inbound to DLE, turn LEFT, DLE R099 to POVEL.
POVEL 2Y 2	09L	Climb straight ahead to D6.5 HAD/D7.8 HBD, turn RIGHT, 118° track to POVEL.

BRNAV equipment necessary after  
 1 D8.4 HAD/D9.6 HBD  
 2 D6.5 HAD/D7.8 HBD.



Trans alt: 5000  
 1. Contact BREMEN Radar IMMEDIATELY after take-off.  
 2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY.

BREMEN Radar (APP)  
 119.490

Apt Elev  
 183

VAXEV 1F  
 VAXEV 1G  
 VAXEV 1S  
 VAXEV 1Y  
 DEPARTURES  
 (RWYS 09L/R, 27L/R)  
 .SPEED: MAX 250 KT BELOW FL100  
 OR AS BY ATC  
 NOT APPLICABLE WITHIN AIRSPACE C

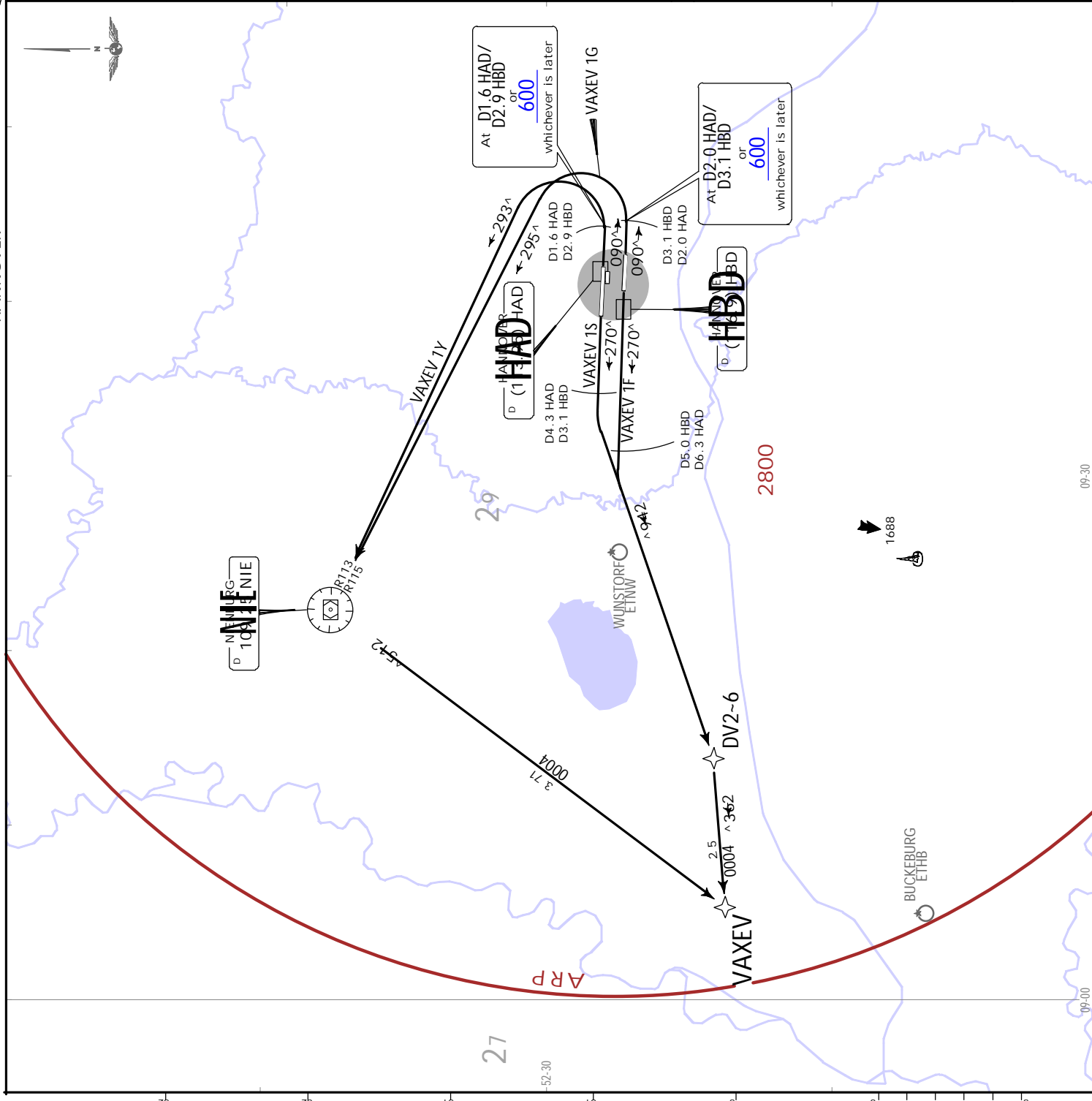
These SIDs require minimum climb gradients of  
 VAXEV 1F: 8.6% (520 FT/NM) until passing 3000 due to airspace structure.  
 VAXEV 1S: 11.4% (700 FT/NM) until passing 3000 due to airspace structure.

Gnd speed-KT	75	100	150	200	250	300
8.6% V/V (fpm)	653	871	1306	1742	2177	2613
11.4% V/V (fpm)	866	1154	1732	2309	2886	3463

If unable to comply advise Tower as soon as possible.

SID	RWY	ROUTING
VAXEV 1F 1	27L	Climb straight ahead to D5.0 HBD/D6.3 HAD, turn LEFT, 249° track to DV2-6, turn RIGHT, 263° track to VAXEV.
VAXEV 1G 2	09R	Climb straight ahead to D3.1 HBD/D2.0 HAD or 600, whichever is later, turn LEFT, intercept NIE R115 inbound to NIE, turn LEFT, NIE R215 to VAXEV.
VAXEV 1S 3	27R	Climb straight ahead to D4.3 HAD/D3.1 HBD, turn LEFT, 249° track to DV2-6, turn RIGHT, 263° track to VAXEV.
VAXEV 1Y 2	09L	Climb straight ahead to D1.6 HBD/D2.9 HBD or 600, whichever is later, turn LEFT, intercept NIE R113 inbound to NIE, turn LEFT, NIE R215 to VAXEV.

1 After passing D5.0 HBD/D6.3 HAD BRNAV equipment necessary.  
 2 After NIE BRNAV equipment necessary.  
 3 After passing D4.3 HAD/D3.1 HBD BRNAV equipment necessary.





CHANGES: Communication

EDDV/HAJ  
HANNOVER

BREMEN Radar (APP) 119.490  
Apt Elev 183  
Trans alt: 5000  
1. Contact BREMEN Radar IMMEDIATELY after take-off.  
2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY.

**WARBURG 8F (WRB 8F), WARBURG 1G (WRB 1G)  
WARBURG 3S (WRB 3S), WARBURG 3Y (WRB 3Y)  
DEPARTURES (RWYS 09L/R, 27L/R)  
FLIGHTS TO EDDF END AT TOLTA**

**.SPEED: MAX 250 KT BELOW FL100  
OR AS BY ATC  
NOT APPLICABLE WITHIN AIRSPACE C**

These SIDs require minimum climb gradients of

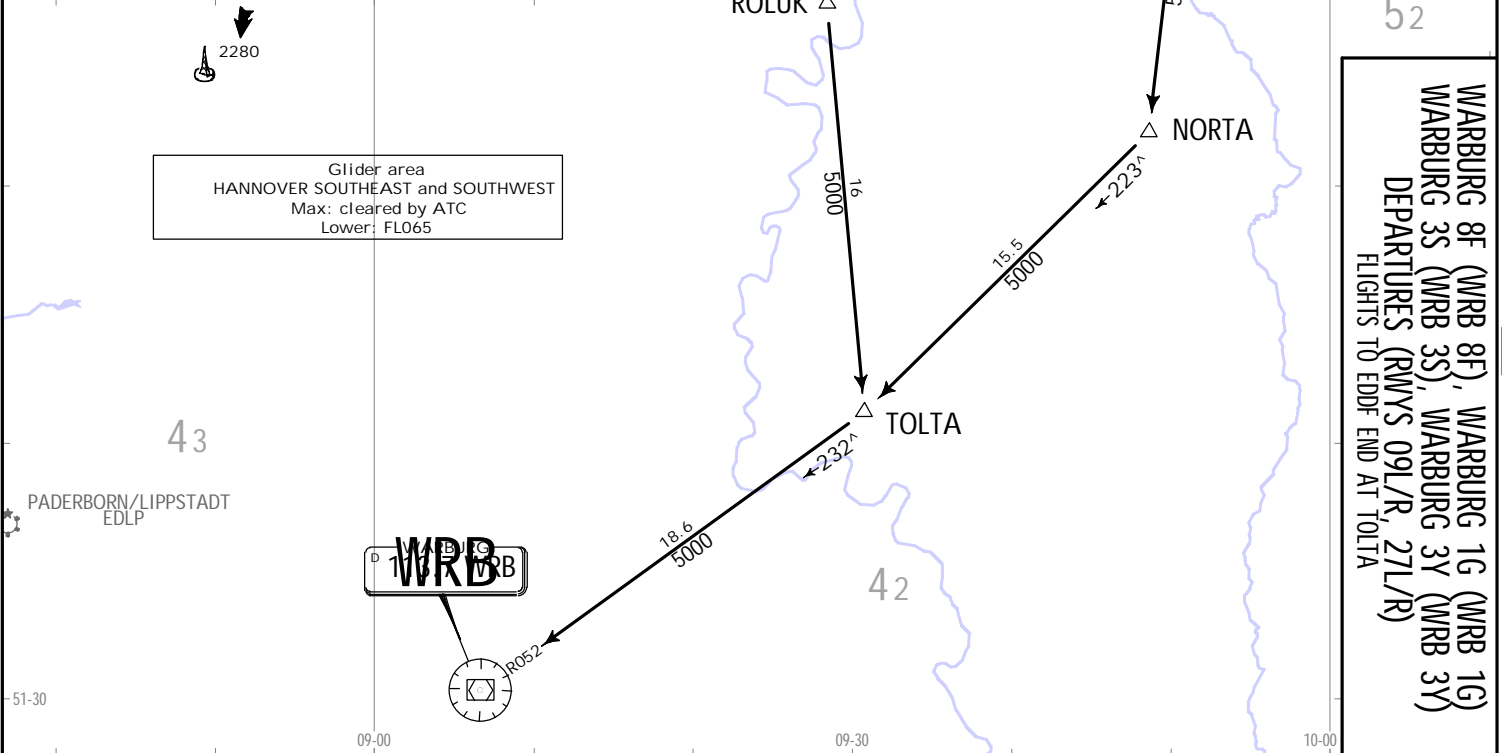
WRB 8F: 9.0% (550 FT/NM) until passing 3500 due to airspace structure.  
WRB 3S: 11.0% (670 FT/NM) until passing 3000 due to airspace structure.

Gnd speed-KT	75	100	150	200	250	300
9.0% V/V (fpm)	684	911	1367	1823	2279	2734
11.0% V/V (fpm)	835	1114	1671	2228	2785	3342

If unable to comply advise Tower as soon as possible.

SID	RWY	ROUTING
WRB 8F 13	27L	Climb straight ahead to D4.7 HAD/D3.3 HBD, turn LEFT, intercept 208° bearing from HW to D12.0 HAD/D10.4 HBD, turn LEFT, 173° track via ADSIN and ROLUK to TOLTA, turn RIGHT, 232° track to WRB.
WRB 1G 24	09R	Climb straight ahead to D6.5 HAD/D7.7 HBD, turn RIGHT, intercept DLE R007 inbound to DLE, DLE R185 to NORTA, 223° track to TOLTA, 232° track to WRB.
WRB 3S 13	27R	Towards HW, at D4.5 HAD/D3.3 HBD turn LEFT, intercept 208° bearing from HW to D12.0 HAD/D10.4 HBD, turn LEFT, 173° track via ADSIN and ROLUK to TOLTA, turn RIGHT, 232° track to WRB.
WRB 3Y 24	09L	Climb straight ahead to D6.5 HAD/D7.8 HBD, turn RIGHT, intercept DLE R007 inbound to DLE, DLE R185 to NORTA, 223° track to TOLTA, 232° track to WRB.

- 1 If glider area HANNOVER SOUTHWEST is announced active on ATIS: Flights have to be able to cross ADSIN at or above FL100. If unable to comply advise ATC upon start-up.
- 2 If glider area HANNOVER SOUTHEAST is announced active on ATIS: Flights have to be able to cross DLE at or above FL100. If unable to comply advise ATC upon start-up.
- 3 After D12.0 HAD/D10.4 HBD BRNAV equipment necessary.
- 4 After DLE BRNAV equipment necessary.

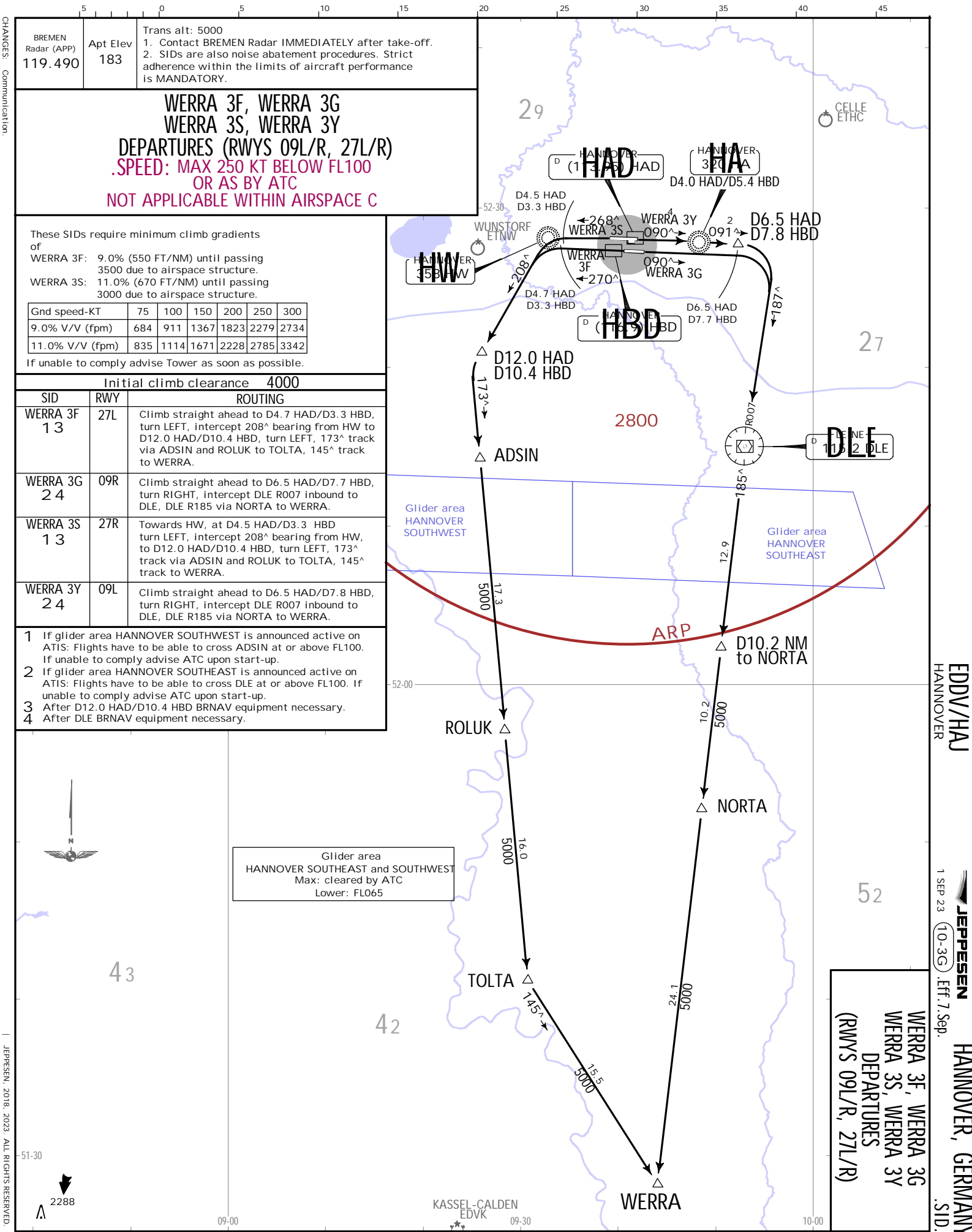


Glider area HANNOVER SOUTHWEST and SOUTHWEST  
Max: cleared by ATC  
Lower: FL065

**WARBURG 8F (WRB 8F), WARBURG 1G (WRB 1G)  
WARBURG 3S (WRB 3S), WARBURG 3Y (WRB 3Y)  
DEPARTURES (RWYS 09L/R, 27L/R)  
FLIGHTS TO EDDF END AT TOLTA**

JEPPesen HANNOVER, GERMANY  
SID  
1 SEP 23 (10-3F) .Eff. 7.Sep.

JEPPesen, 2018 - 2023. ALL RIGHTS RESERVED.



BREMEN Radar (APP) 119.490  
 Apt Elev 183  
 Trans alt: 5000  
 1. Contact BREMEN Radar IMMEDIATELY after take-off.  
 2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY.

**WERRA 3F, WERRA 3G  
 WERRA 3S, WERRA 3Y  
 DEPARTURES (RWYS 09L/R, 27L/R)  
 .SPEED: MAX 250 KT BELOW FL100  
 OR AS BY ATC  
 NOT APPLICABLE WITHIN AIRSPACE C**

These SIDs require minimum climb gradients of  
 WERRA 3F: 9.0% (550 FT/NM) until passing 3500 due to airspace structure.  
 WERRA 3S: 11.0% (670 FT/NM) until passing 3000 due to airspace structure.

Gnd speed-KT	75	100	150	200	250	300
9.0% V/V (fpm)	684	911	1367	1823	2279	2734
11.0% V/V (fpm)	835	1114	1671	2228	2785	3342

If unable to comply advise Tower as soon as possible.

Initial climb clearance 4000

SID	RWY	ROUTING
WERRA 3F 13	27L	Climb straight ahead to D4.7 HAD/D3.3 HBD, turn LEFT, intercept 208° bearing from HW to D12.0 HAD/D10.4 HBD, turn LEFT, 173° track via ADSIN and ROLUK to TOLTA, 145° track to WERRA.
WERRA 3G 24	09R	Climb straight ahead to D6.5 HAD/D7.7 HBD, turn RIGHT, intercept DLE R007 inbound to DLE, DLE R185 via NORTA to WERRA.
WERRA 3S 13	27R	Towards HW, at D4.5 HAD/D3.3 HBD turn LEFT, intercept 208° bearing from HW, to D12.0 HAD/D10.4 HBD, turn LEFT, 173° track via ADSIN and ROLUK to TOLTA, 145° track to WERRA.
WERRA 3Y 24	09L	Climb straight ahead to D6.5 HAD/D7.8 HBD, turn RIGHT, intercept DLE R007 inbound to DLE, DLE R185 via NORTA to WERRA.

- 1 If glider area HANNOVER SOUTHWEST is announced active on ATIS: Flights have to be able to cross ADSIN at or above FL100. If unable to comply advise ATC upon start-up.
- 2 If glider area HANNOVER SOUTHEAST is announced active on ATIS: Flights have to be able to cross DLE at or above FL100. If unable to comply advise ATC upon start-up.
- 3 After D12.0 HAD/D10.4 HBD BRNAV equipment necessary.
- 4 After DLE BRNAV equipment necessary.

Glider area HANNOVER SOUTHEAST and SOUTHWEST  
 Max: cleared by ATC  
 Lower: FL065

**WERRA 3F, WERRA 3G  
 WERRA 3S, WERRA 3Y  
 DEPARTURES  
 (RWYS 09L/R, 27L/R)**

EDDV/HAJ  
 HANNOVER  
 SEP 23  
 JEPPesen  
 10-3G  
 Eff: 7. Sep.  
 HANNOVER, GERMANY  
 SID.

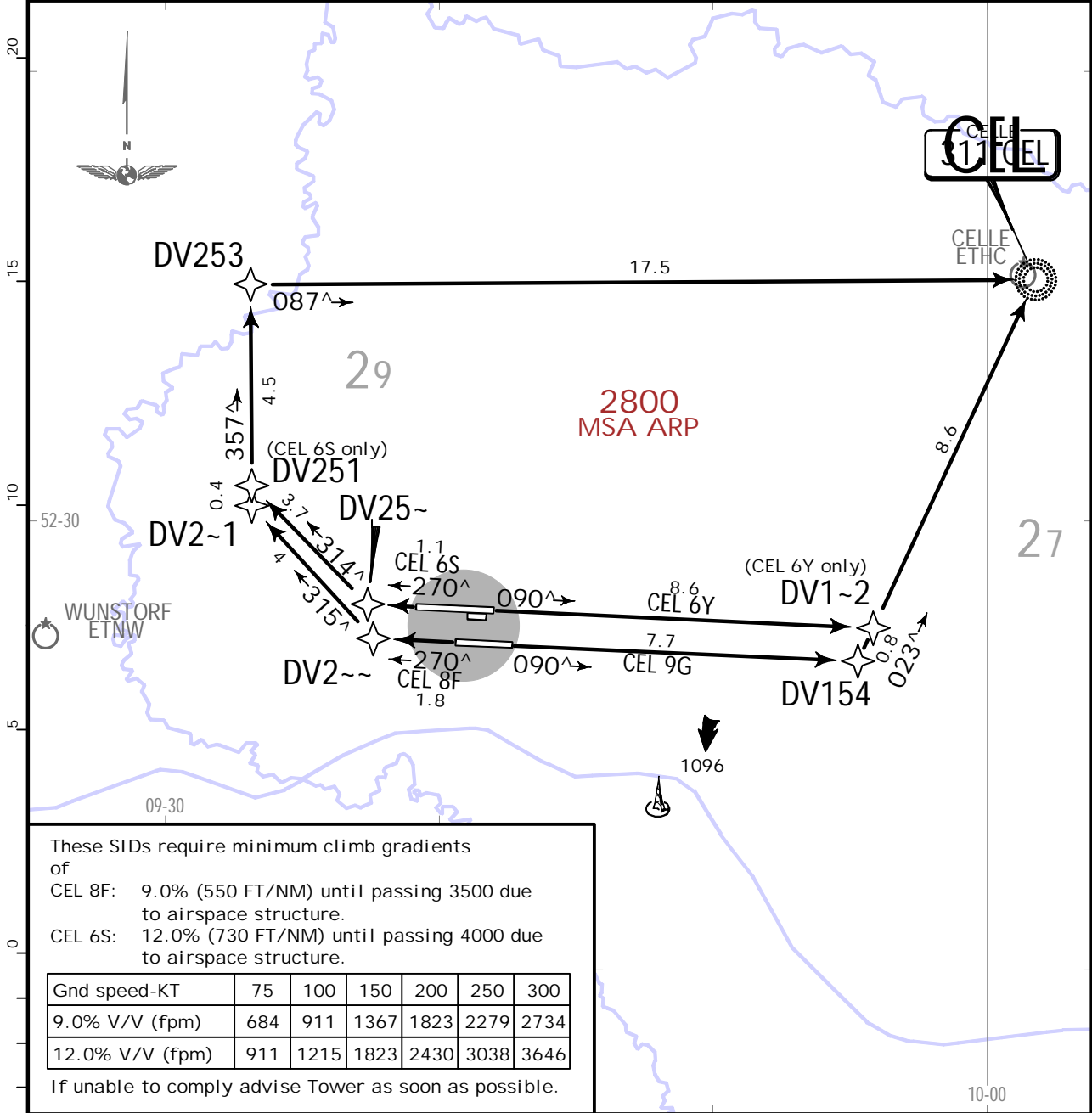
**EDDV/HAJ**  
HANNOVER

**JEPPESEN**  
1 SEP 23 **(10-3H)** .Eff.7.Sep.

**HANNOVER, GERMANY**  
.RNAV.SID.(OVERLAY).

BREMEN Radar (APP) <b>119.490</b>	Apt Elev <b>183</b>	Trans alt: 5000 1. Contact BREMEN Radar IMMEDIATELY after take-off. 2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY.
---	------------------------	---

**CELLE 8F (CEL 8F)**  
**CELLE 9G (CEL 9G)**  
**CELLE 6S (CEL 6S)**  
**CELLE 6Y (CEL 6Y)**  
**RNAV DEPARTURES (OVERLAY 10-3)**  
**(RWYS 09L/R, 27L/R)**  
.SPEED: MAX 250 KT BELOW FL100 OR AS BY ATC  
NOT APPLICABLE WITHIN AIRSPACE C

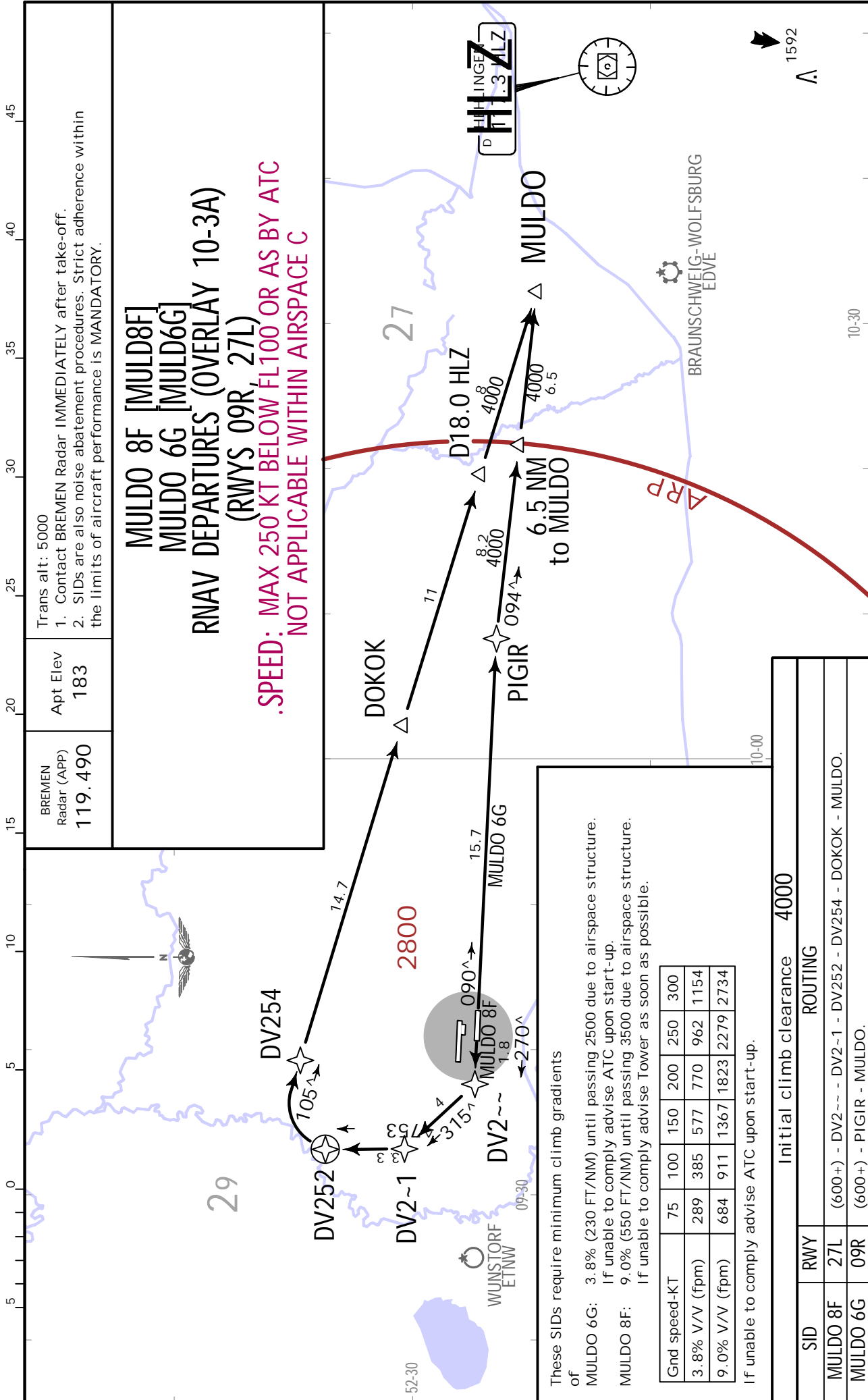


		Initial climb clearance	4000
SID	RWY	ROUTING	
CEL 8F	27L	(600+) - DV2-- - DV2-1 - DV253 - CEL.	
CEL 9G	09R	(600+) - DV154 - CEL.	
CEL 6S	27R	(600+) - DV25~ - DV251 - DV253 - CEL.	
CEL 6Y	09L	(600+) - DV1-2 - CEL.	

**EDDV/HAJ**  
HANNOVER

**JEPPESSEN**  
1 SEP 23 (10-3J) .Eff.7.Sep.

**HANNOVER, GERMANY**  
.RNAV.SID.(OVERLAY).



**JEYPESEN HANNOVER, GERMANY**  
 19 JAN 24 (10-3K) . Eff. 25-Jan. . RNAV.SID. (OVERLAY.)

BREMEN  
 Radar (APP)  
 119.490

Apt Elev  
 183

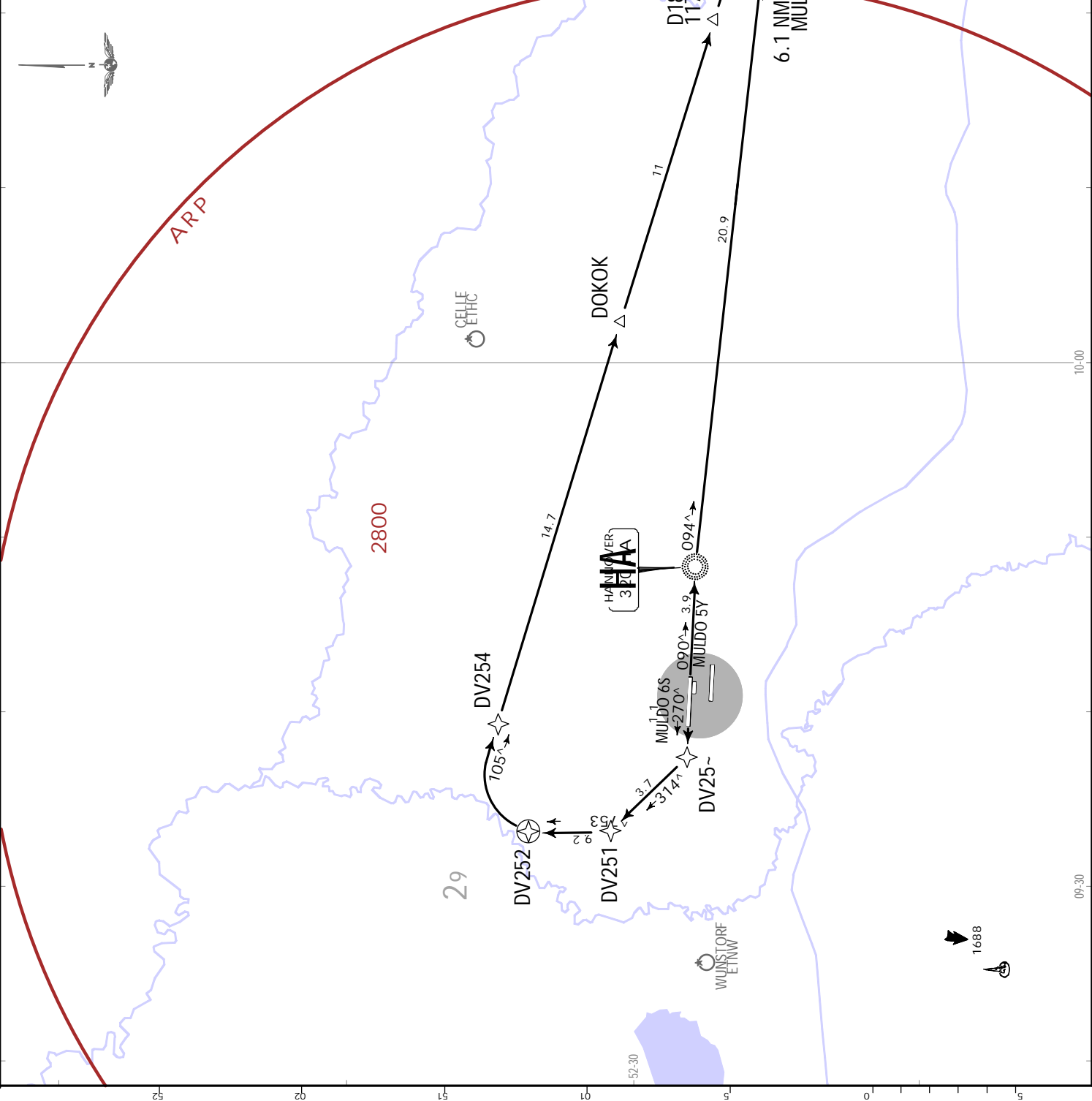
Trans alt: 5000  
 1. Contact BREMEN Radar IMMEDIATELY after take-off.  
 2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY.

**MULDO 6S [MULD6S]**  
**MULDO 5Y [MULD5Y]**  
**RNAV DEPARTURES (OVERLAY 10-3B)**  
**(RWYS 09L, 27R)**  
**.SPEED: MAX 250 KT BELOW FL100**  
**OR AS BY ATC**  
**NOT APPLICABLE WITHIN AIRSPACE C**

MULDO 6S  
 This SID requires a minimum climb gradient of 12.0% (730 FT/NM) until passing 4000 due to airspace structure. If unable to comply advise Tower as soon as possible.

Gnd speed-KT	75	100	150	200	250	300
12.0% V/V (fpm)	911	1215	1823	2430	3038	3646

Initial climb clearance 4000	
SID	ROUTING
MULDO 6S	(600+) - DV25- - DV251 - DV252 - DV254 - DOKOK - MULDO.
MULDO 5Y	(600+) - HA - MULDO.



**EDDV/HAJ**  
 HANNOVER

Trans alt: 5000  
1. Contact BREMEN Radar IMMEDIATELY after take-off.  
2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY.

BREMEN Radar (APP)  
119.490

Apt Elev  
183

NIENBURG 7F (NIE 7F)  
NIENBURG 7G (NIE 7G)  
NIENBURG 9S (NIE 9S)  
NIENBURG 1Y (NIE 1Y)  
RMVAV DEPARTURES  
(OVERLAY 10-3C)  
(RWYS 09L/R, 27L/R)  
.SPEED: MAX 250 KT BELOW FL100  
OR AS BY ATC  
NOT APPLICABLE WITHIN AIRSPACE C

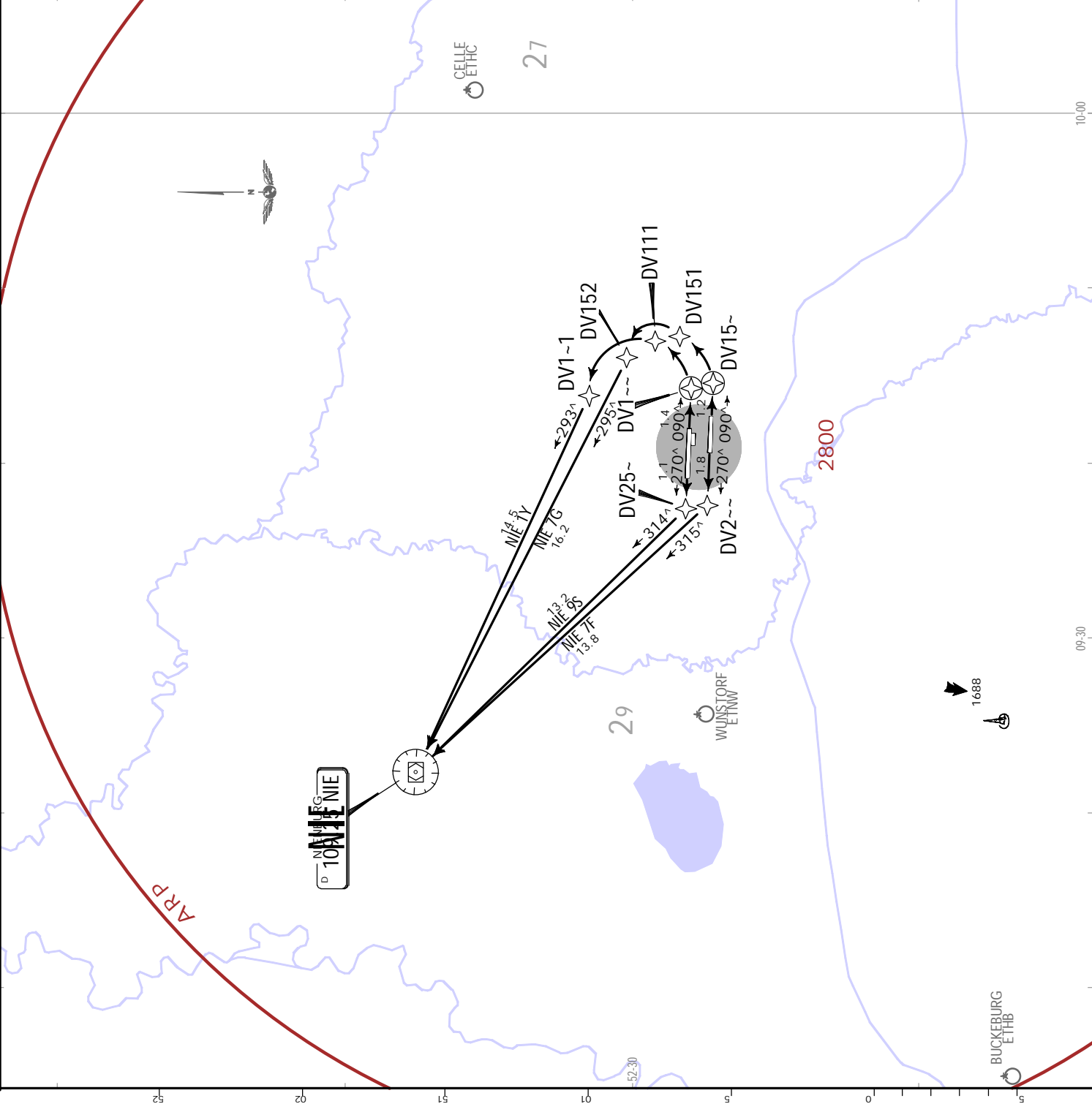
These SIDs require minimum climb gradients of  
NIE 7F: 9.0% (550 FT/NM) until passing 3500 due to airspace structure.  
NIE 9S: 12.0% (730 FT/NM) until passing 3000 due to airspace structure.

Gnd speed-KT	75	100	150	200	250	300
9.0% V/V (fpm)	684	911	1367	1823	2279	2734
12.0% V/V (fpm)	911	1215	1823	2430	3038	3646

If unable to comply advise Tower as soon as possible.

Initial climb clearance 4000

SID	RWY	ROUTING
NIE 7F	27L	(600+) - DV2 - - - NIE.
NIE 7G	09R	(600+) - DV15 - - - DV151 - DV152 - NIE.
NIE 9S	27R	(600+) - DV25 - - NIE.
NIE 1Y	09L	(600+) - DV1 - - - DV111 - DV1 - 1 - NIE.



BREMEN Radar (APP) 119.490	Apt Elev 183	Trans alt: 5000 1. Contact BREMEN Radar IMMEDIATELY after take-off. 2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY.
----------------------------------	-----------------	--

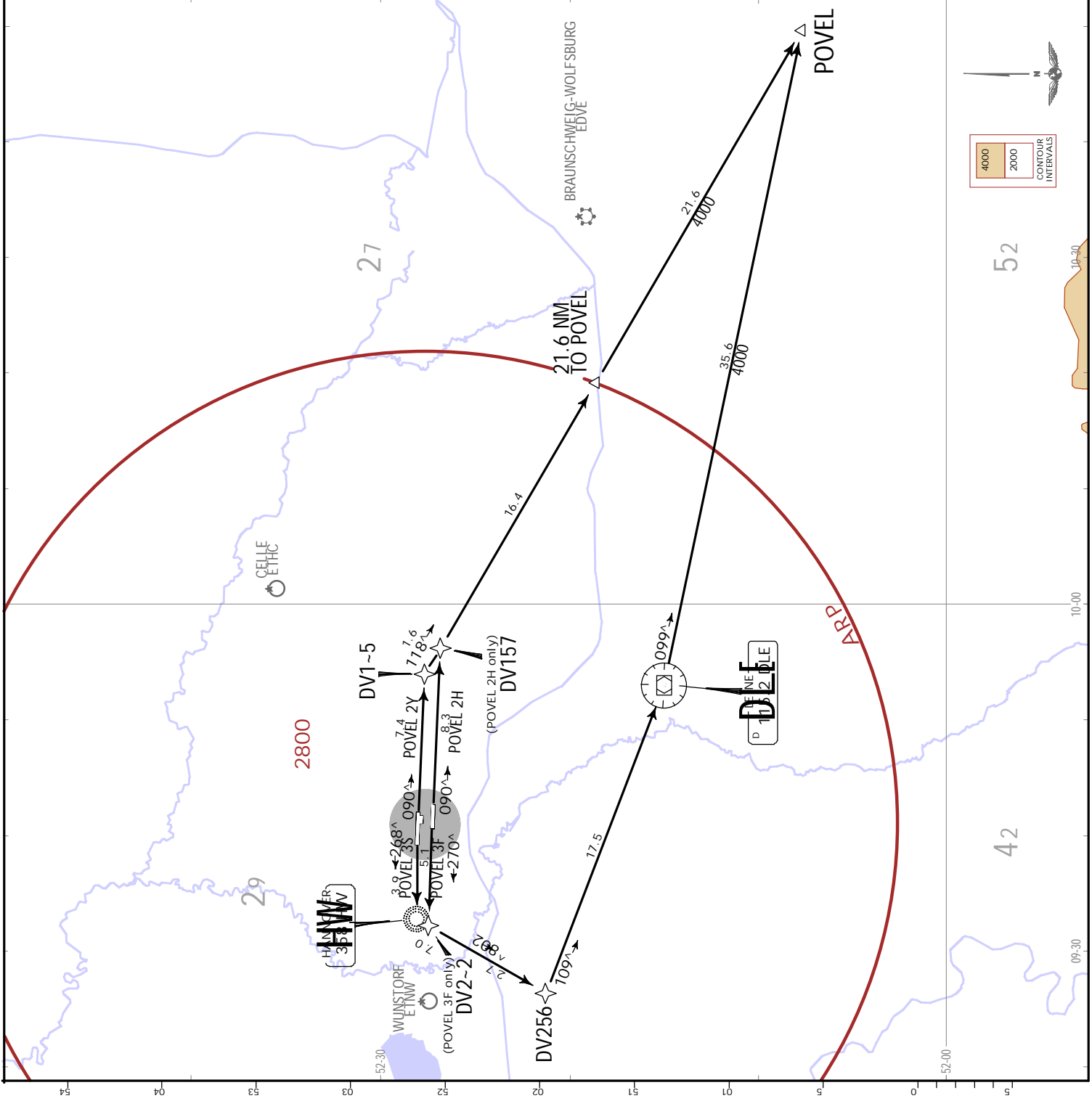
POVEL 3F [POVE3F]  
POVEL 2H [POVE2H]  
POVEL 3S [POVE3S]  
POVEL 2Y [POVE2Y]  
RWY DEPARTURES  
(OVERLAY 10-3D)  
(RWYS 09L/R, 27 L/R)  
**.SPEED: MAX 250 KT BELOW FL100  
OR AS BY ATC  
NOT APPLICABLE WITHIN AIRSPACE C**

These SIDs require minimum climb gradients of  
POVEL 3F: 9.0% (550 FT/NM) until passing 3500 due to airspace structure.  
POVEL 3S: 11.0% (670 FT/NM) until passing 3000 due to airspace structure.

Gnd speed-KT	75	100	150	200	250	300
9.0% V/V (fpm)	684	911	1367	1823	2279	2734
11.0% V/V (fpm)	835	1114	1671	2228	2785	3342

If unable to comply advise Tower as soon as possible.

Initial climb clearance		4000
SID	RWY	ROUTING
POVEL 3F	27L	(600+) - DV2-2 - DV256 - DLE - POVEL.
POVEL 2H	09R	(600+) - DV157 - POVEL.
POVEL 3S	27R	(600+) - HW - DV256 - DLE - POVEL.
POVEL 2Y	09L	(600+) - DV1-5 - POVEL.



4000  
2000  
CONTOUR INTERVALS

52

42

10-00

09-30

52-00

54

04

03

02

01

0

5

10

15

20

25

30

35

40

45

50

55

60

65

70

75

80

85

90

95

100

105

110

115

120

125

130

135

140

145

150

155

160

165

170

175

180

185

190

195

200

205

210

215

220

225

230

235

240

245

250

255

260

265

270

275

280

285

290

295

300

305

310

315

320

325

330

335

340

345

350

355

360

365

370

375

380

385

390

395

400

405

410

415

420

425

430

435

440

445

450

455

460

465

470

475

480

485

490

495

500

505

510

515

520

525

530

535

540

545

550

555

560

565

570

575

580

585

590

595

600

605

610

615

620

625

630

635

640

645

650

655

660

665

670

675

680

685

690

695

700

705

710

715

720

725

730

735

740

745

750

755

760

765

770

775

780

785

790

795

800

805

810

815

820

825

830

835

840

845

850

855

860

865

870

875

880

885

890

895

900

905

910

915

920

925

930

935

940

945

950

955

960

965

970

975

980

985

990

995

1000

CHANGES: None.

Trans alt: 5000  
1. Contact BREMEN Radar IMMEDIATELY after take-off.  
2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY.

BREMEN Radar (APP)  
119.490

Apt Elev  
183

VAXEV 1F [VAXE1F]  
VAXEV 1G [VAXE1G]  
VAXEV 1S [VAXE1S]  
VAXEV 1Y [VAXE1Y]  
RNAV DEPARTURES  
(OVERLAY 10-3E)

(RWYS 09L/R, 27L/R)  
.SPEED: MAX 250 KT BELOW FL100  
OR AS BY ATC  
NOT APPLICABLE WITHIN AIRSPACE C

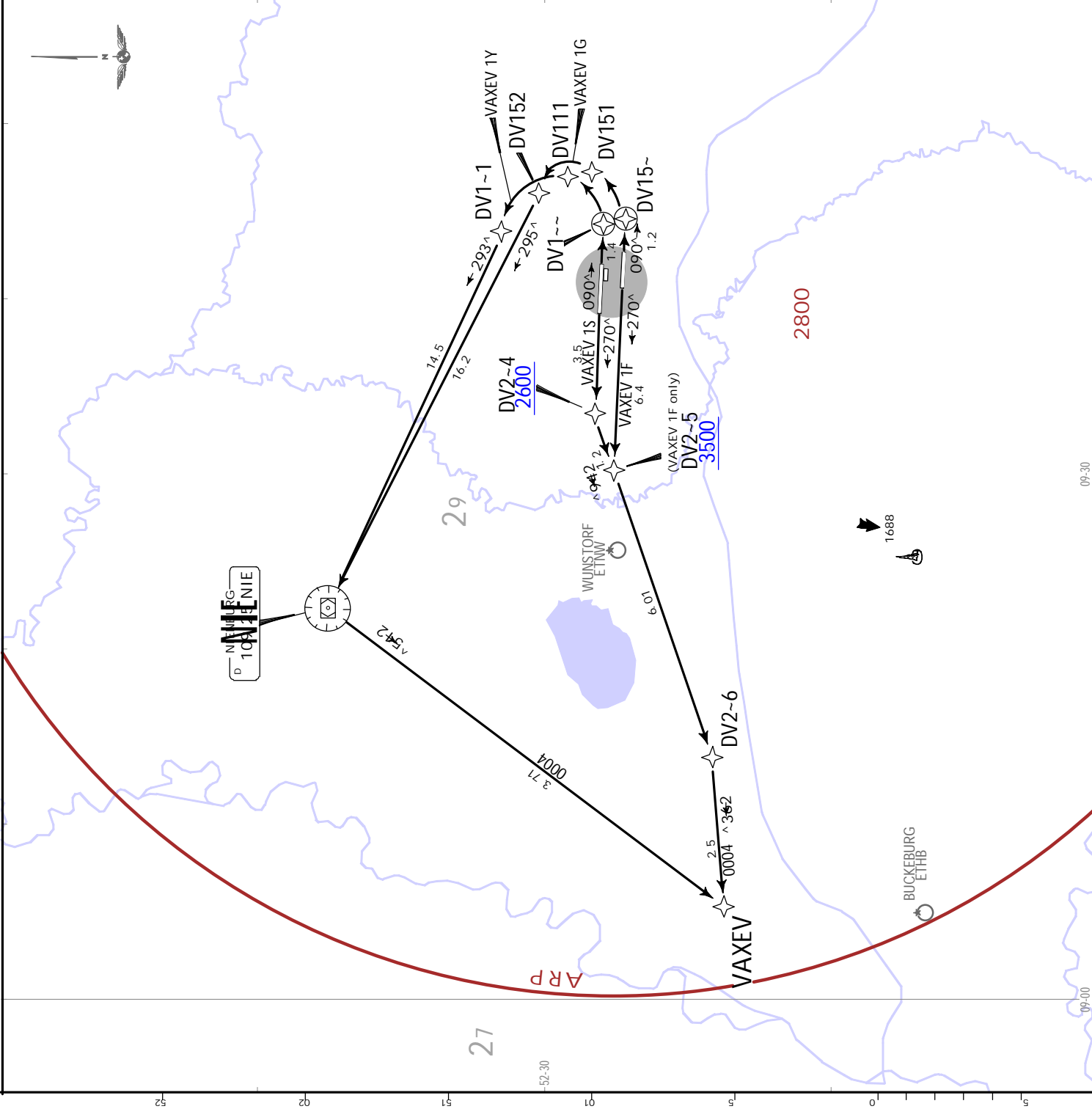
These SIDs require minimum climb gradients of  
VAXEV 1F: 8.6% (520 FT/NM) until passing 3000 due to airspace structure.  
VAXEV 1S: 11.4% (700 FT/NM) until passing 3000 due to airspace structure.

Gnd speed-KT	75	100	150	200	250	300
8.6% V/V (fpm)	653	871	1306	1742	2177	2613
11.4% V/V (fpm)	866	1154	1732	2309	2886	3463

If unable to comply advise Tower as soon as possible.

Initial climb clearance 4000

SID	RWY	ROUTING
VAXEV 1F	27L	(600+) - DV2-5 (3500+) - DV2-6 - VAXEV.
VAXEV 1G	09R	(600+) - DV15- - DV151 - DV152 - NIE - VAXEV.
VAXEV 1S	27R	(600+) - DV2-4 (2600+) - DV2-6 - VAXEV.
VAXEV 1Y	09L	(600+) - DV1- - DV111 - DV1-1 - NIE - VAXEV.





CHANGES: Communication.

EDDV/HANNOVER

BREMEN Radar (APP) 119.490  
 Apt Elev 183  
 Trans alt: 5000  
 1. Contact BREMEN Radar IMMEDIATELY after take-off.  
 2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY.

**WARBURG 8F (WRB 8F), WARBURG 1G (WRB 1G)  
 WARBURG 3S (WRB 3S), WARBURG 3Y (WRB 3Y)  
 RNAV DEPARTURES (OVERLAY 10-3F)  
 (RWYS 09L/R, 27L/R)  
 FLIGHTS TO EDDF END AT TOLTA  
 .SPEED: MAX 250 KT BELOW FL100  
 OR AS BY ATC  
 NOT APPLICABLE WITHIN AIRSPACE C**

These SIDs require minimum climb gradients of

WRB 8F: 9.0% (550 FT/NM) until passing 3500 due to airspace structure.  
 WRB 3S: 11.0% (670 FT/NM) until passing 3000 due to airspace structure.

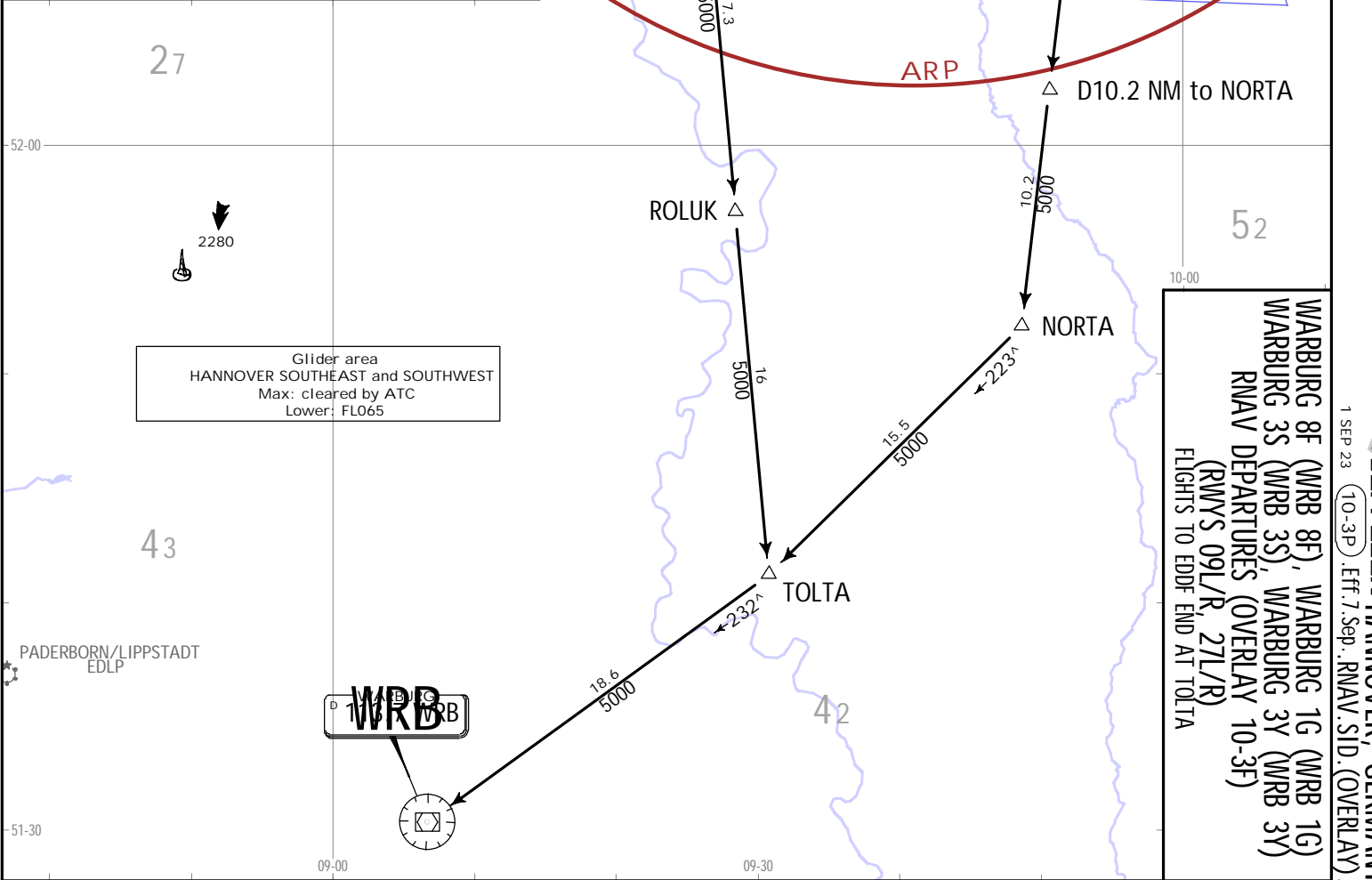
Gnd speed-KT	75	100	150	200	250	300
9.0% V/V (fpm)	684	911	1367	1823	2279	2734
11.0% V/V (fpm)	835	1114	1671	2228	2785	3342

If unable to comply advise Tower as soon as possible.

Initial climb clearance **4000**

SID	RWY	ROUTING
WRB 8F 1	27L	(600+) - DV2-2 - DV257 - ADSIN - ROLUK - TOLTA - WRB.
WRB 1G 2	09R	(600+) - DV153 - DV156 - DLE - NORTA - TOLTA - WRB.
WRB 3S 1	27R	(600+) - HW - DV257 - ADSIN - ROLUK - TOLTA - WRB.
WRB 3Y 2	09L	(600+) - DV1-3 - DV1-4 - DLE - NORTA - TOLTA - WRB.

- 1 If glider area HANNOVER SOUTHWEST is announced active on ATIS: Flights have to be able to cross ADSIN at or above FL100. If unable to comply advise ATC upon start-up.
- 2 If glider area HANNOVER SOUTHEAST is announced active on ATIS: Flights have to be able to cross DLE at or above FL100. If unable to comply advise ATC upon start-up.



**WARBURG 8F (WRB 8F), WARBURG 1G (WRB 1G)  
 WARBURG 3S (WRB 3S), WARBURG 3Y (WRB 3Y)  
 RNAV DEPARTURES (OVERLAY 10-3F)  
 (RWYS 09L/R, 27L/R)  
 FLIGHTS TO EDDF END AT TOLTA**

JEPPESSEN HANNOVER, GERMANY  
 1 SEP 23 (10-3P) Eff. 7 Sep. RNAV SID (OVERLAY)

JEPPESSEN, 2018, 2023. ALL RIGHTS RESERVED.

CHANGES: Communication.

BREMEN Radar (APP) 119.490  
 Apt Elev 183

Trans alt: 5000  
 1. Contact BREMEN Radar IMMEDIATELY after take-off.  
 2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is MANDATORY.

**WERRA 3F [WERA3F], WERRA 3G [WERA3G]  
 WERRA 3S [WERA3S], WERRA 3Y [WERA3Y]  
 RNAV DEPARTURES (OVERLAY 10-3G)  
 (RWYS 09L/R, 27L/R)  
 .SPEED: MAX 250 KT BELOW FL100  
 OR AS BY ATC  
 NOT APPLICABLE WITHIN AIRSPACE C**

These SIDs require minimum climb gradients of

WERRA 3F: 9.0% (550 FT/NM) until passing 3500 due to airspace structure.  
 WERRA 3S: 11.0% (670 FT/NM) until passing 3000 due to airspace structure.

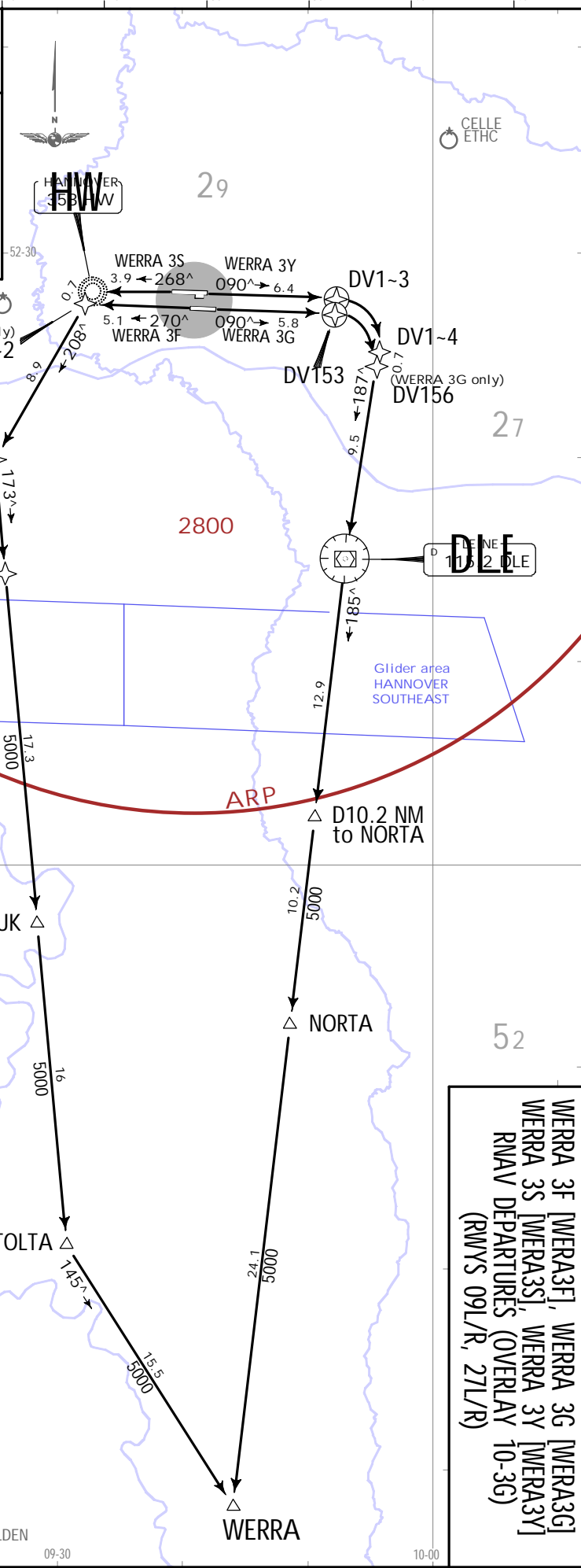
Gnd speed-KT	75	100	150	200	250	300
9.0% V/V (fpm)	684	911	1367	1823	2279	2734
11.0% V/V (fpm)	835	1114	1671	2228	2785	3342

If unable to comply advise Tower as soon as possible.

Initial climb clearance 4000

SID	RWY	ROUTING
WERRA 3F 1	27L	(600+) - DV2-2 - DV257 - ADSIN - ROLUK - TOLTA - WERRA.
WERRA 3G 2	09R	(600+) - DV153 - DV156 - DLE - NORTA - WERRA.
WERRA 3S 1	27R	(600+) - HW - DV257 - ADSIN - ROLUK - TOLTA - WERRA.
WERRA 3Y 2	09L	(600+) - DV1-3 - DV1-4 - DLE - NORTA - WERRA.

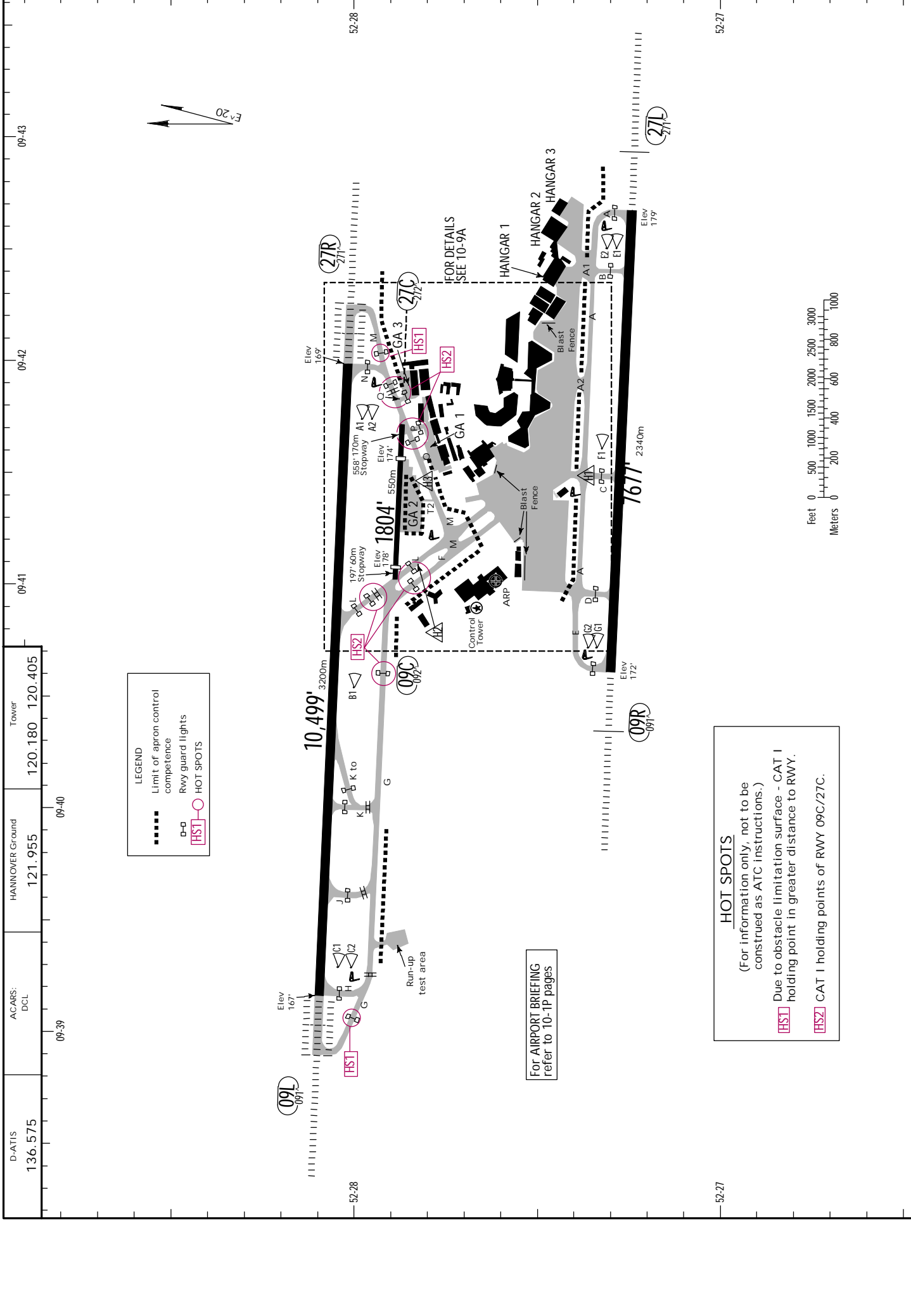
- If glider area HANNOVER SOUTHWEST is announced active on ATIS: Flights have to be able to cross ADSIN at or above FL100. If unable to comply advise ATC upon start-up.
- If glider area HANNOVER SOUTHEAST is announced active on ATIS: Flights have to be able to cross DLE at or above FL100. If unable to comply advise ATC upon start-up.



WERRA 3F [WERA3F], WERRA 3G [WERA3G]  
 WERRA 3S [WERA3S], WERRA 3Y [WERA3Y]  
 RNAV DEPARTURES (OVERLAY 10-3G)  
 (RWYS 09L/R, 27L/R)

EDDV/HAJ  
 HANNOVER  
 JEPPESEN  
 HANNOVER, GERMANY  
 1 SEP 23 (10-30) . Eff. 7. Sep.  
 RNAV.SID. (OVERLAY)

52-28 09-43 09-42 09-41 09-40 09-39 52-27



**LEGEND**

- Limit of apron control competence
- Rwy guard lights
- HOT SPOTS

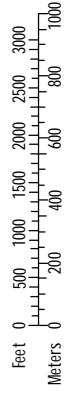
For AIRPORT BRIEFING refer to 10-1P pages

**HOT SPOTS**

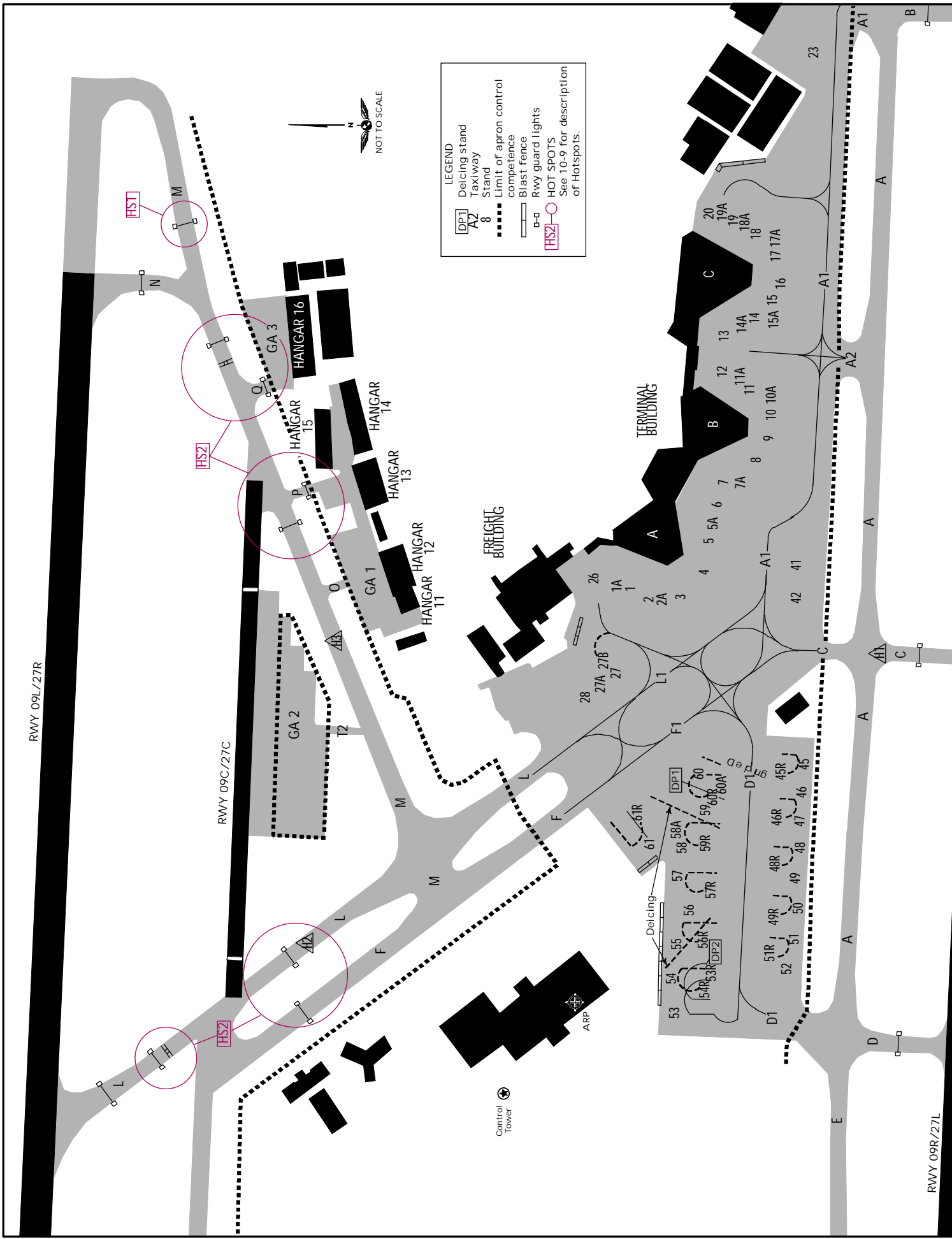
(For information only, not to be construed as ATC instructions.)

Due to obstacle limitation surface - CAT I holding point in greater distance to RWY.

CAT I holding points of RWY 09C/27C.



52-28 09-43 09-42 09-41 09-40 09-39 52-27



EDDV/HAJ



HANNOVER, GERMANY

1 MAR 24

10-9A1

HANNOVER

ADDITIONAL RUNWAY INFORMATION							
RWY		USABLE LENGTHS		TAKE-OFF	WIDTH	LANDING BEYOND	
		Threshold	Glide Slope				
09L	HIRL CL (15m) ALSF-II TDZ REIL PAPI-L(3.0^)	RVR	9466'	2885m	2	148'	45m
27R	HIRL CL (15m) ALSF-II TDZ REIL PAPI-L(3.0^)	1 RVR	9527'	2904m			
<p>1 HST-Kto</p> <p>2 Additional 984' /300m starter extension available with PPO.</p> <p>TAKE-OFF RUN AVAILABLE</p> <p><u>RWY 09L:</u></p> <p>From rwy head 10,499' (3200m)</p> <p>twy J int 8858' (2700m)</p> <p>twy K int 7382' (2250m)</p> <p>twy L int 4331' (1320m)</p> <p><u>RWY 27R:</u></p> <p>From rwy head 10,499' (3200m)</p> <p>twy L int 6234' (1900m)</p>							
09C				3 2001' 610m	74'	23m	
27C				4 2362' 720m			
<p>3 Includes paved swy West of thr 09C.</p> <p>4 Includes paved swy East of thr 27C.</p>							
09R	HIRL CL (30m) (White) HIALS SFL REIL PAPI-L	5 RVR	6584'	2007m	6	148'	45m
27L			6706'	2044m			
<p>5 angle 3.0^</p> <p>6 TAKE-OFF RUN AVAILABLE</p> <p><u>RWY 09R:</u></p> <p>From rwy head 7677' (2340m)</p> <p>twy D int 6463' (1970m)</p> <p>twy C int 4462' (1360m)</p> <p><u>RWY 27L:</u></p> <p>From rwy head 7677' (2340m)</p> <p>twy B int 6693' (2040m)</p> <p>twy C int 3281' (1000m)</p>							

.Std/State. TAKE-OFF							
Low Visibility Procedure required				RCLM or RL or CL	RL or CL	Adequate Vis Ref	
Approval for Low Visibility Take-off required.						DAY	NIGHT
RCLM & RL & CL & RVR	RCLM & RL & RVR	RCLM & RVR & RL or CL		DAY	NIGHT	DAY	NIGHT
	DAY	NIGHT					
R350m				R/V400m	R/V500m	NA	

EDDV/HAJ



HANNOVER, GERMANY

HANNOVER

INS COORDINATES

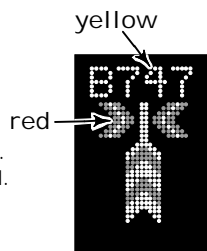
STAND No.	COORDINATES	STAND No.	COORDINATES
1, 1A	N52 27.6 E009 41.6	53R	N52 27.5 E009 41.1
2 thru 5	N52 27.5 E009 41.6	54	N52 27.6 E009 41.1
5A thru 7A	N52 27.5 E009 41.7	54R	N52 27.5 E009 41.0
8 thru 11	N52 27.5 E009 41.8	55, 56	N52 27.6 E009 41.2
11A thru 13	N52 27.5 E009 41.9	56R	N52 27.5 E009 41.1
14 thru 15A	N52 27.5 E009 42.0	57	N52 27.6 E009 41.3
16	N52 27.4 E009 42.0	57R	N52 27.5 E009 41.2
17	N52 27.4 E009 42.1	58 thru 59	N52 27.6 E009 41.3
17A thru 20	N52 27.5 E009 42.1	59R	N52 27.5 E009 41.2
23	N52 27.5 E009 42.4	60, 60A	N52 27.6 E009 41.4
26	N52 27.6 E009 41.6	60R	N52 27.5 E009 41.3
27 thru 28	N52 27.6 E009 41.5	61, 61R, DP1	N52 27.6 E009 41.3
41, 42	N52 27.4 E009 41.6	DP2	N52 27.5 E009 41.1
45	N52 27.5 E009 41.4		
45R	N52 27.4 E009 41.3		
46	N52 27.5 E009 41.4		
46R	N52 27.4 E009 41.3		
47, 48	N52 27.5 E009 41.3		
48R	N52 27.4 E009 41.2		
49	N52 27.5 E009 41.3		
49R	N52 27.4 E009 41.1		
50, 51	N52 27.5 E009 41.2		
51R	N52 27.4 E009 41.1		
52	N52 27.5 E009 41.1		
53	N52 27.6 E009 41.0		

## ADVANCED VISUAL DOCKING GUIDANCE SYSTEM (A-VDGS)

**WARNING:** Do not start docking procedure unless one of the routine docking process displays are shown or if a pilot is unsure about the indicated information.

### 1. START OF DOCKING

The floating arrows indicate that the system is activated and in capture mode, searching for an approaching aircraft. It shall be checked, that the correct aircraft type is displayed. The lead-in line shall be followed. **THE PILOT MUST NOT PROCEED BEYOND THE BRIDGE, UNLESS THE ARROWS HAVE BEEN SUSPENDED BY THE CLOSING RATE BAR.**



### 5. STOP POSITION REACHED

When the correct stop position is reached, the display will show STOP with red lights.



### 2. TRACKING

When the aircraft has been caught by the laser, the floating arrow is replaced by the yellow center line indicator. A flashing red arrow indicates the direction to turn. The vertical yellow arrow shows position in relation to center line. This indicator gives correct position and azimuth guidance.



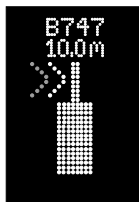
### 6. DOCKING COMPLETED

When the aircraft has parked, OK will be displayed.



### 3. CLOSING RATE

The closing rate is the final countdown from 30m distance to the stop position. A yellow vertical closing rate bar / center line indicator appears with the digital countdown.



### 7. ON BLOCK TIME

On block time will be displayed in UTC-time.



### 4. SLOW (DECREASE SPEED)

If the aircraft is approaching faster than the accepted speed, the system will show SLOW as a warning to the pilots.



### 8. CHOCK ON

CHOCK ON will be displayed, when the ground staff has put the chocks in front of and behind the main gear wheels and pressed the "Chocks on" button on the operator panel. It disappears after 180 seconds.



## DISPLAYED FORMS AT ABNORMAL CONDITIONS

#### Form:

Acft type  
 Display black with red lights  
 Display complete black  
 ERROR  
 ERR10  
 WAIT  
 WAIT followed by GATE BLOCK

#### STOP

STOP followed by ID FAIL  
 STOP followed by TOO FAST

STOP followed by SBU  
 STOP followed by OK  
 STOP / ABORT  
 TOO FAR

#### Indication for:

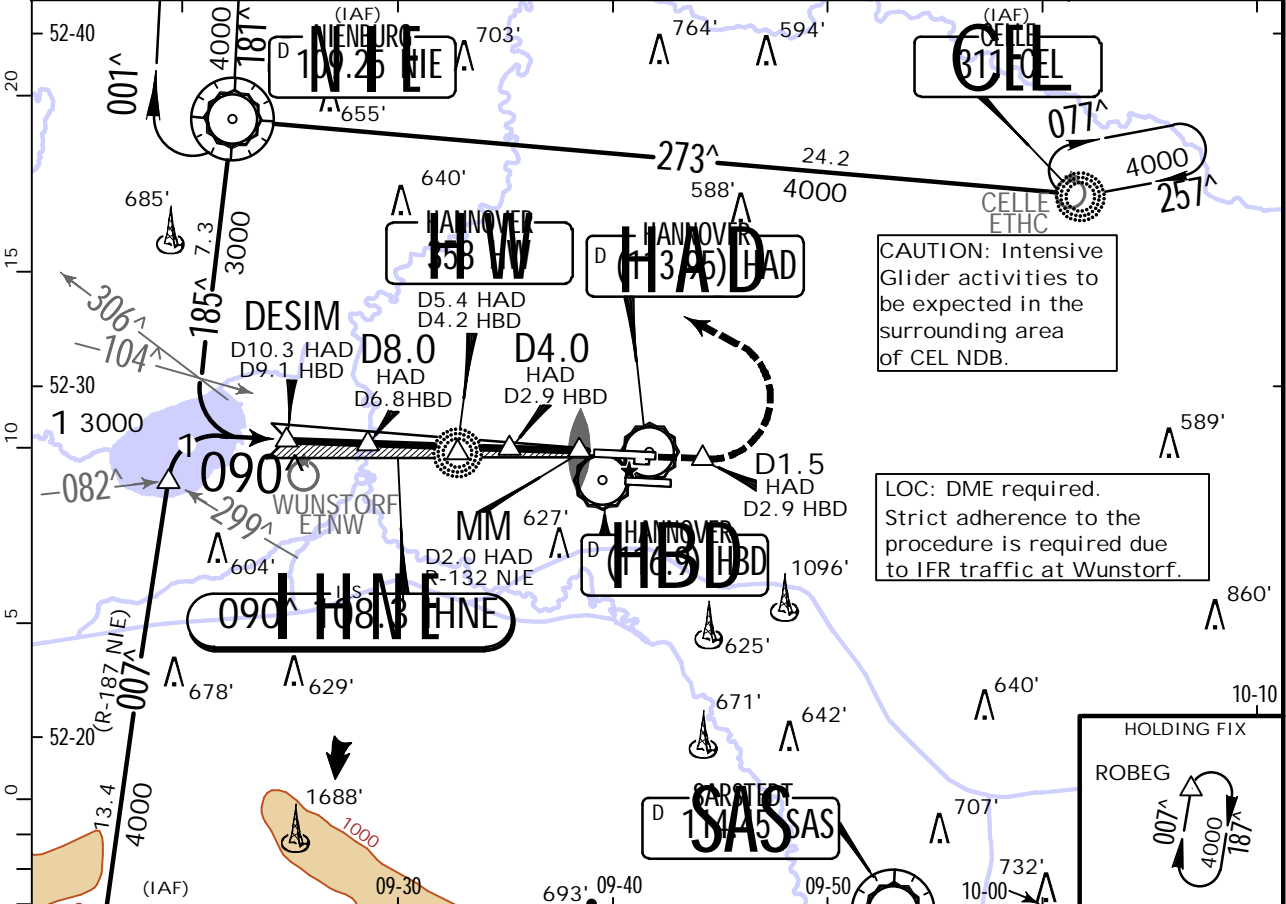
(preselected)  
 System breakdown - stop  
 Power failure - stop  
 System error  
 System error (communication error with system)  
 Not allowed object within scanning range - stop  
 Not allowed object within scanning range when system starts - stand not usable  
 Emergency stop  
 Identification failed - stop  
 Docking system must be restarted or the docking procedure completed by manual guidance  
 Too far of center line within last 10' / 3m to stop position  
 Not correct stop position is reached but within limits  
 Docking is interrupted by gate operator  
 Acft has overshoot the stop position (more than 1m)

# EDDV/HAJ HANNOVER

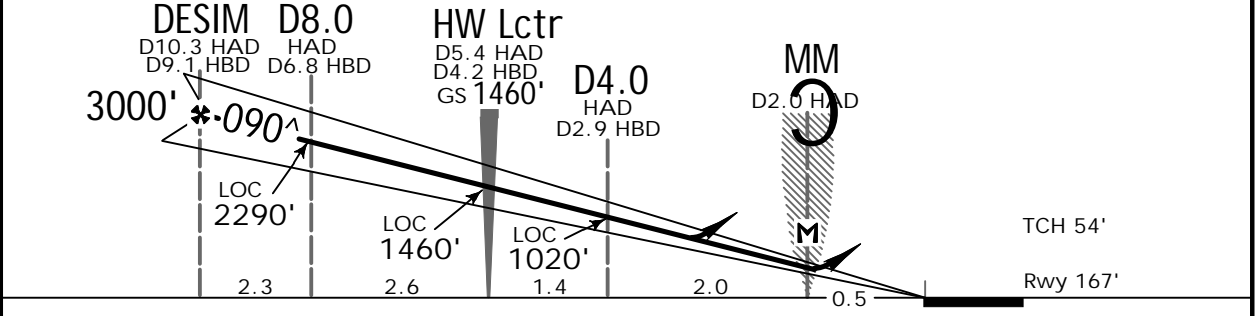
**JEPPESSEN**  
19 JAN 24 (11-1) .Eff.25.Jan.

# HANNOVER, GERMANY ILS or LOC Rwy 09L

D-ATIS 136.575		BREMEN Radar (APP) 119.490		HANNOVER Director (APP) 119.605		HANNOVER Tower 120.180 120.405		Ground 121.955
LOC IHNE 108.3	Final Apch Crs 090 <sup>^</sup>	GS HW Lctr 1460' (1293')	ILS DA(H) 367' (200')	Apt Elev 183' Rwy 167'		2800		
MISSED APCH: Climb STRAIGHT AHEAD to D1.5 EAST of HAD/ D2.9 EAST of HBD. Then turn LEFT inbound NIE VOR climbing to 4000'.								
Alt Set: hPa (IN on req)		Rwy Elev: 6 hPa	Trans level: By ATC		Trans alt: 5000'		MSA ARP	



LOC (GS out)	HAD DME	10.0	9.0	8.0	7.0	6.0	5.0	4.0	3.0
	ALTITUDE	2930'	2610'	2300'	1980'	1660'	1340'	1020'	700'



Gnd speed-Kts	70	90	100	120	140	160	ALSF-II REIL PAPI	D1.5 EAST of HAD D2.9 EAST of HBD
ILS GS or LOC Descent Angle 3.00 <sup>^</sup>	372	478	531	637	743	849		
MAP at MM/D2.0 HAD								

Standard. ILS STRAIGHT-IN LANDING RWY 09L			LOC (GS out)	
DA(H) 367' (200') 1			CDFA DA/MDA(H) 550' (383')	
FULL	TDZ or CL out	ALS out	ALS out	
A				
B	RVR 550m	RVR 550m 2	RVR 1100m	RVR 1500m
C				RVR 1800m
D				

1 LACFT: DA(H) 395' (228'). 2 RVR 750m when a Flight Director or Autopilot or HUD to DA is not used.  
CHANGES: NIE VOR/DME frequency. | JEPPESSEN, 1999, 2024. ALL RIGHTS RESERVED.

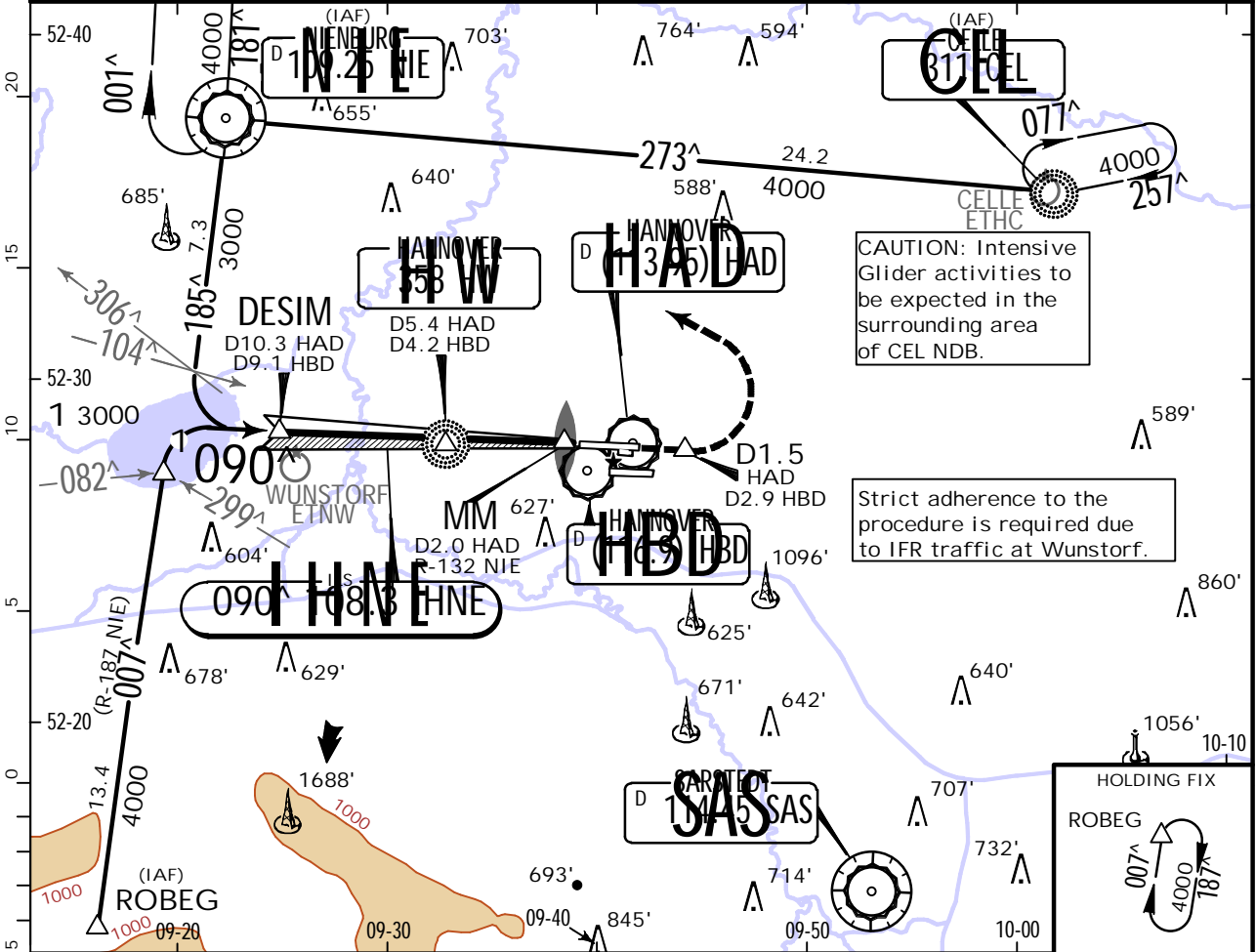


# EDDV/HAJ HANNOVER

**JEPPESEN**  
19 JAN 24  
Eff. 25. Jan. **(11-1A)**

# HANNOVER, GERMANY CAT II/III ILS Rwy 09L

D-ATIS 136.575	BREMEN Radar (APP) 119.490	HANNOVER Director (APP) 119.605	HANNOVER Tower 120.180 120.405	Ground 121.955
LOC IHNE 108.3	Final Apch Crs 090 <sup>^</sup>	GS HW Lctr 1460' (1293')	CAT IIIB, IIIA & II ILS Refer to Minimums	Apt Elev 183' Rwy 167'
MISSED APCH: Climb STRAIGHT AHEAD to D1.5 EAST of HAD/D2.9 EAST of HBD. Then turn LEFT inbound NIE VOR climbing to 4000'.				2800  MSA ARP
Alt Set: hPa (IN on req) Rwy Elev: 6 hPa Trans level: By ATC Trans alt: 5000'				



Standard.			STRAIGHT-IN LANDING RWY 09L		
CAT IIIB ILS	CAT IIIA ILS	CAT II ILS			
	DH 50'	RA 101'			DA(H) 267' (100')
RVR 75m	RVR 200m	RVR 300m			

CHANGES: NIE VOR/DME frequency.

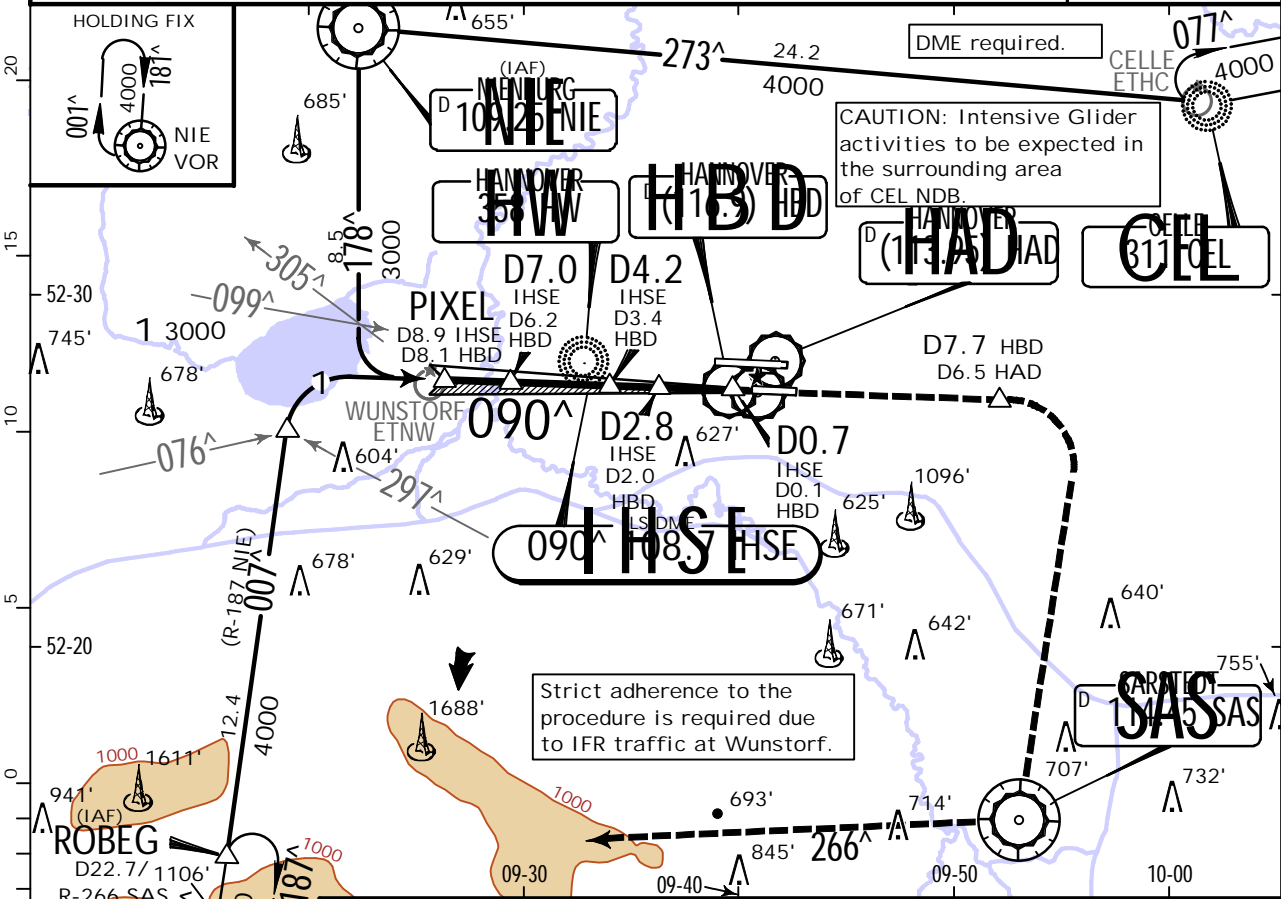
# EDDV/HAJ HANNOVER



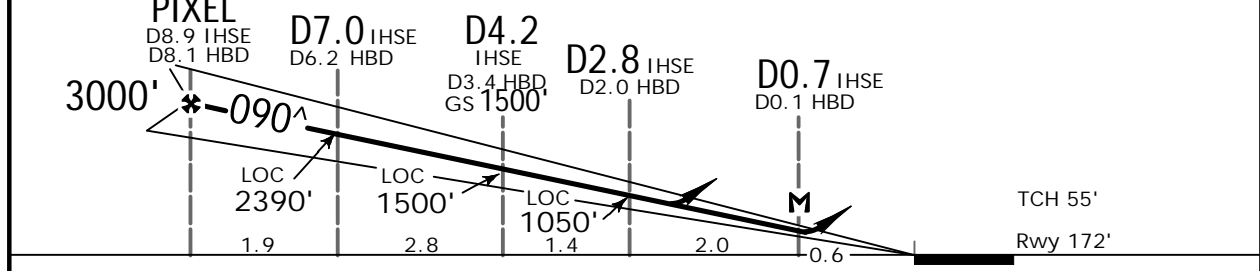
19 JAN 24 (11-2) .Eff.25.Jan.

# HANNOVER, GERMANY ILS or LOC Rwy 09R

D-ATIS 136.575	BREMEN Radar (APP) 119.490	HANNOVER Director (APP) 119.605	HANNOVER Tower 120.180 120.405	Ground 121.955
LOC IHSE 108.7	Final Apch Crs 090 <sup>^</sup>	GS D4.2 IHSE 1500' (1328')	ILS DA(H) 372' (200')	Apt Elev 183' Rwy 172'
MISSED APCH: Climb STRAIGHT AHEAD to D7.7 HBD/D6.5 HAD, then turn RIGHT direct to SAS VOR. Turn RIGHT on R-266 SAS to ROBEG climbing to 4000'.				2800
Alt Set: hPa (IN on req) Rwy Elev: 6 hPa Trans level: By ATC Trans alt: 5000'				MSA ARP



LOC (GS out)	IHSE DME	8.0	7.0	6.0	5.0	4.0	3.0	2.0
	ALTITUDE	2710'	2390'	2070'	1760'	1440'	1120'	800'



Gnd speed-Kts	70	90	100	120	140	160	HIALS REIL PAPI D7.7 HBD D6.5 HAD	
ILS GS or LOC Descent Angle	3.00 <sup>^</sup>	372	478	531	637	743		849
MAP at D0.7 IHSE/D0.1 HBD								

PANS OPS	Standard. ILS STRAIGHT-IN LANDING RWY 09R		LOC (GS out)	
	DA(H) 372' (200')		CDFA DA/MDA(H) 570' (398')	
	FULL	ALS out	ALS out	ALS out
	A			RVR 1500m
B				
C	RVR 550m 1	RVR 1200m	RVR 1100m	RVR 1800m
D				

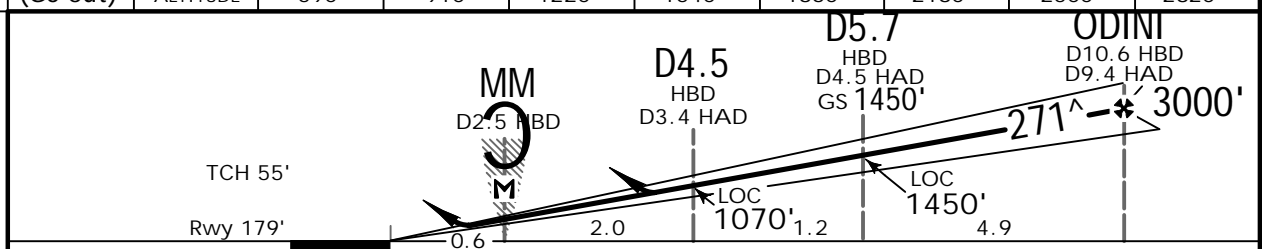
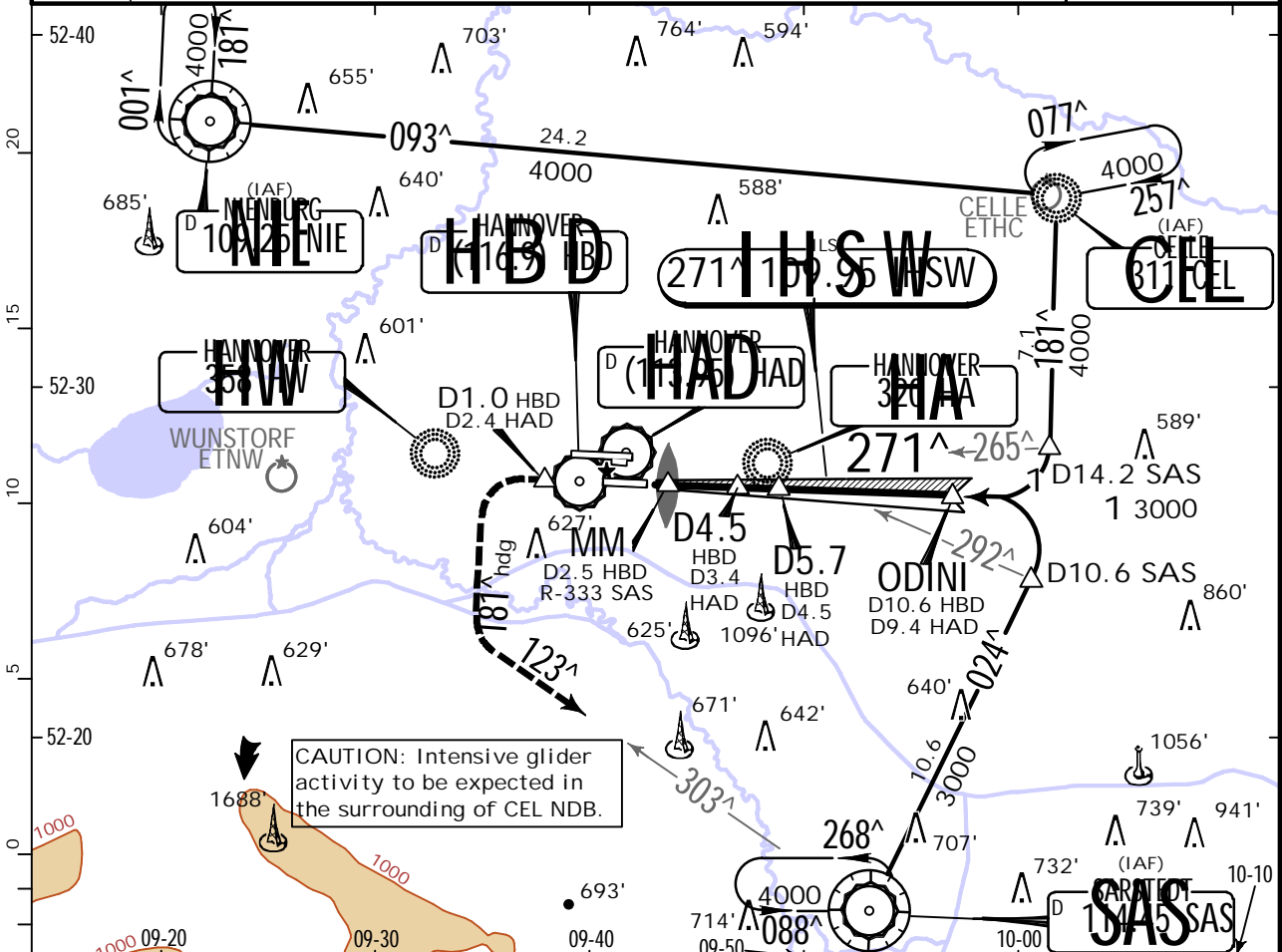
1 RVR 750m when a Flight Director or Autopilot or HUD to DA is not used.

# EDDV/HAJ HANNOVER

**JEPPESSEN**  
19 JAN 24  
.Eff.25.Jan. (11-3)

# HANNOVER, GERMANY ILS Z or LOC Z Rwy 27L

D-ATIS 136.575	BREMEN Radar (APP) 119.490	HANNOVER Director (APP) 119.605	HANNOVER Tower 120.180 120.405	Ground 121.955
LOC IHSW 109.95	Final Apch Crs 271 <sup>^</sup>	GS D5.7 HBD 1450' (1271')	ILS DA(H) 379' (200')	Apt Elev 183' Rwy 179'
MISSED APCH: Climb STRAIGHT AHEAD to D1.0 WEST of HBD/D2.4 WEST of HAD, then turn LEFT (MAX 185 KT) on heading 181 <sup>^</sup> to intercept and follow R-303 inbound to SAS VOR climbing to 4000'.				2800  MSA ARP
Alt Set: hPa (IN on req)    Rwy Elev: 6 hPa    Trans level: By ATC    Trans alt: 5000'				
DME required.				



ILS DA(H) 379' (200')		LOC (GS out) DA/MDA(H) 560' (381')	
FULL	ALS out	FULL	ALS out
A			RVR 1500m
B	RVR 550m 1	RVR 1200m	RVR 1100m
C			RVR 1800m
D			

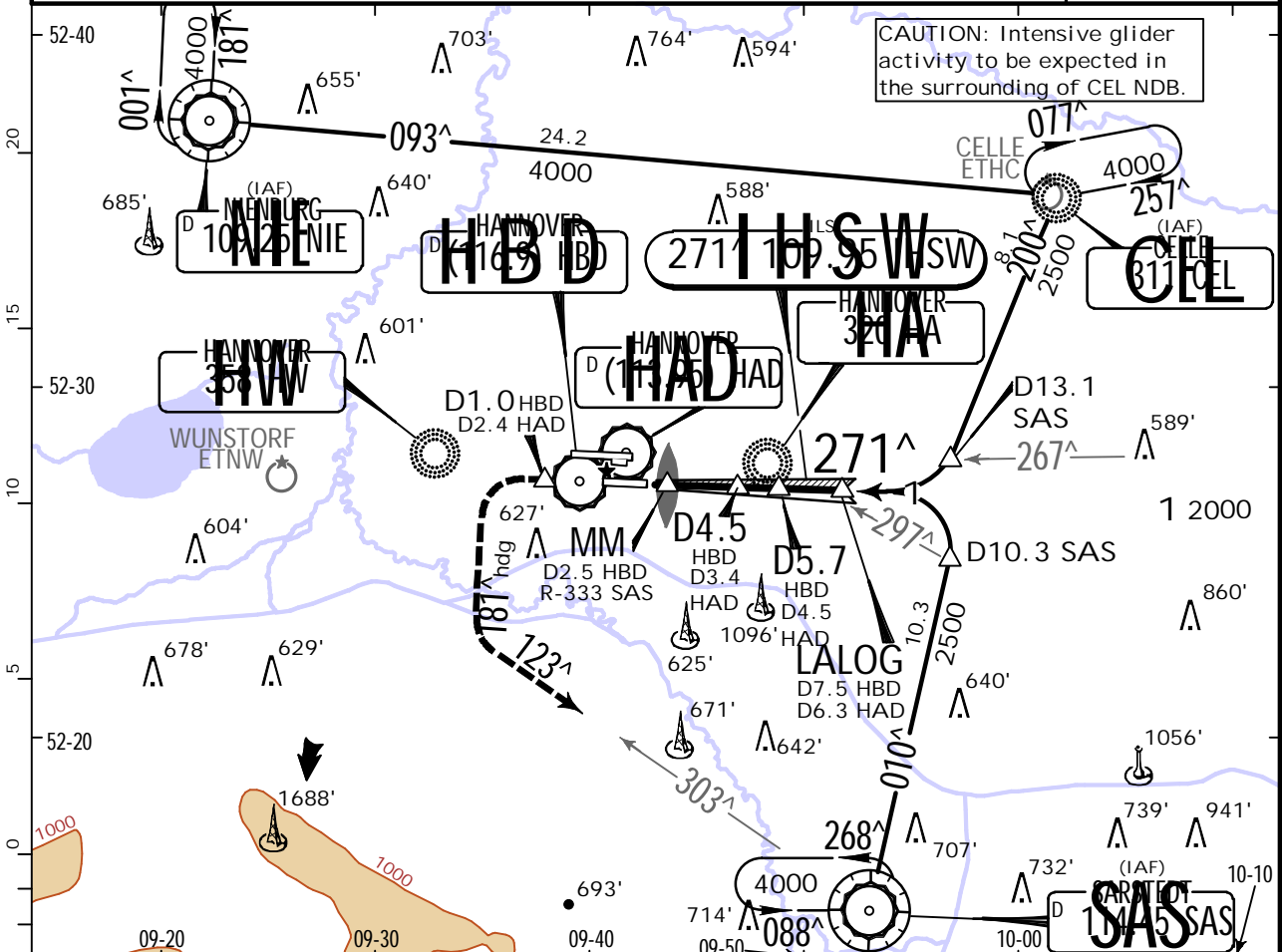
1 RVR 750m when a Flight Director or Autopilot or HUD to DA is not used.

# EDDV/HAJ HANNOVER

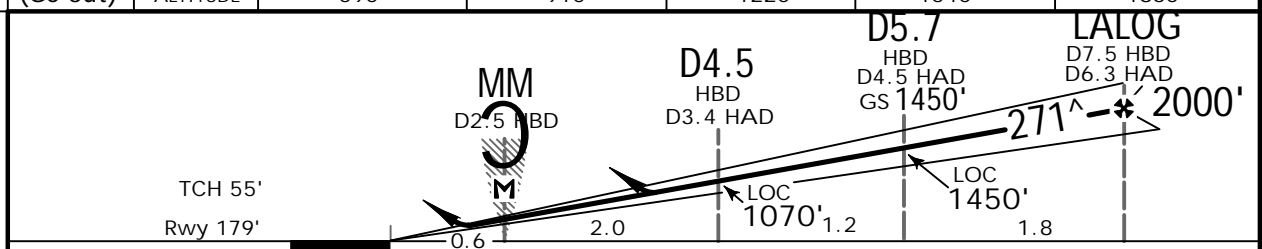
**JEPPESSEN**  
19 JAN 24  
.Eff. 25 Jan. (11-4)

# HANNOVER, GERMANY ILS Y or LOC Y Rwy 27L

D-ATIS 136.575	BREMEN Radar (APP) 119.490	HANNOVER Director (APP) 119.605	HANNOVER Tower 120.180 120.405	Ground 121.955
LOC IHSW 109.95	Final Apch Crs 271 <sup>^</sup>	GS D5.7 HBD 1450' (1271')	ILS DA(H) 379' (200')	Apt Elev 183' Rwy 179'
MISSED APCH: Climb STRAIGHT AHEAD to D1.0 WEST of HBD/D2.4 WEST of HAD, then turn LEFT (MAX 185 KT) on heading 181 <sup>^</sup> to intercept and follow R-303 inbound to SAS VOR climbing to 4000'.				2800 MSA ARP
Alt Set: hPa (IN on req) Rwy Elev: 6 hPa Trans level: By ATC Trans alt: 5000' DME required.				



LOC (GS out)	HBD DME	3.0	4.0	5.0	6.0	7.0
	ALTITUDE	590'	910'	1220'	1540'	1860'



Gnd speed-Kts	70	90	100	120	140	160	HIALS REIL PAPI D1.0 WEST of HBD D2.4 WEST of HAD 181 <sup>^</sup> hdg LT	
ILS GS or LOC Descent Angle	3.00 <sup>^</sup>	372	478	531	637	743		849
MAP at MM/D2.5 HBD								

Standard.		STRAIGHT-IN LANDING RWY 27L		LOC (GS out)	
FULL		ALS out		CDA (381')	
DA(H) 379' (200')		DA(MDA(H) 560' (381'))			
A					
B	RVR 550m 1	RVR 1200m	RVR 1100m	RVR 1500m	
C					
D				RVR 1800m	

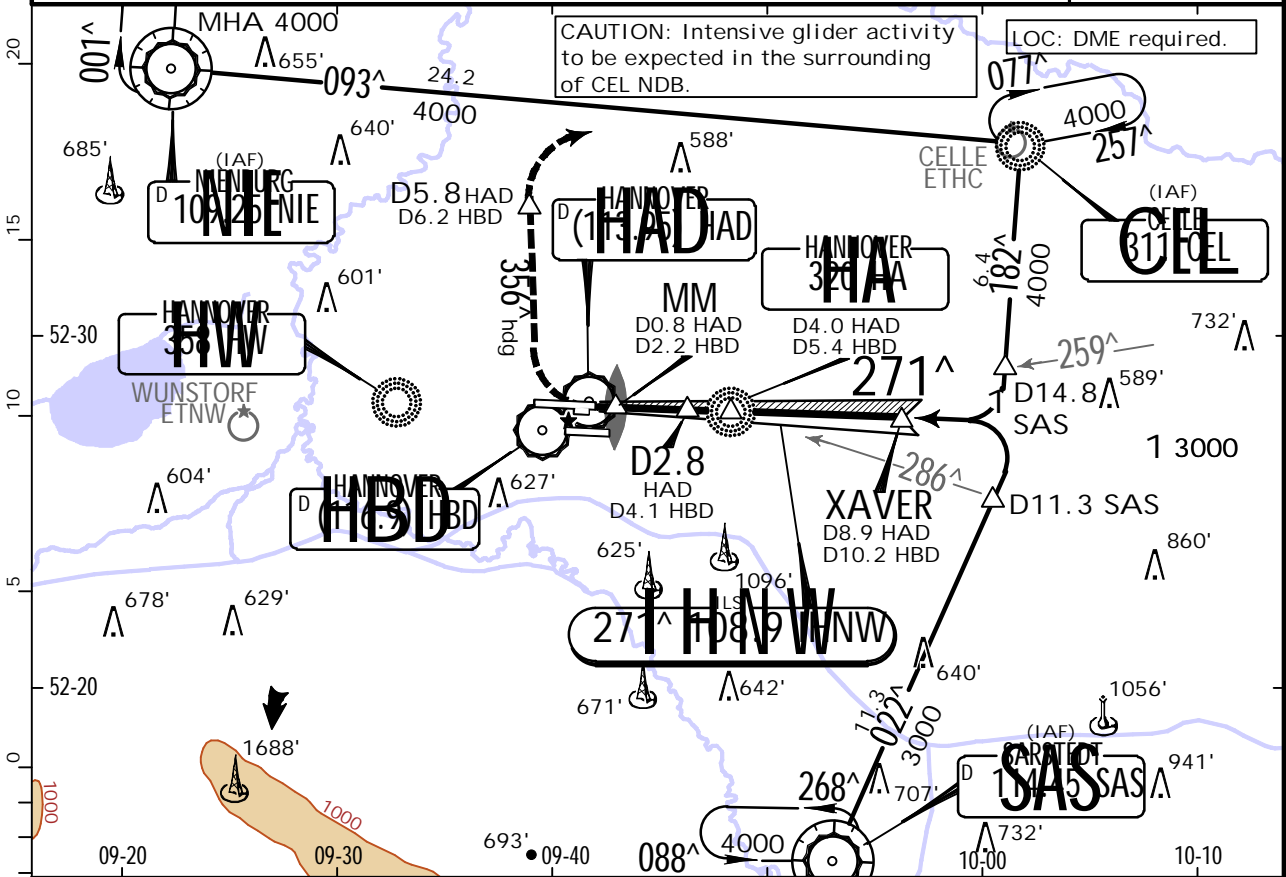
1 RVR 750m when a Flight Director or Autopilot or HUD to DA is not used.

# EDDV/HAJ HANNOVER

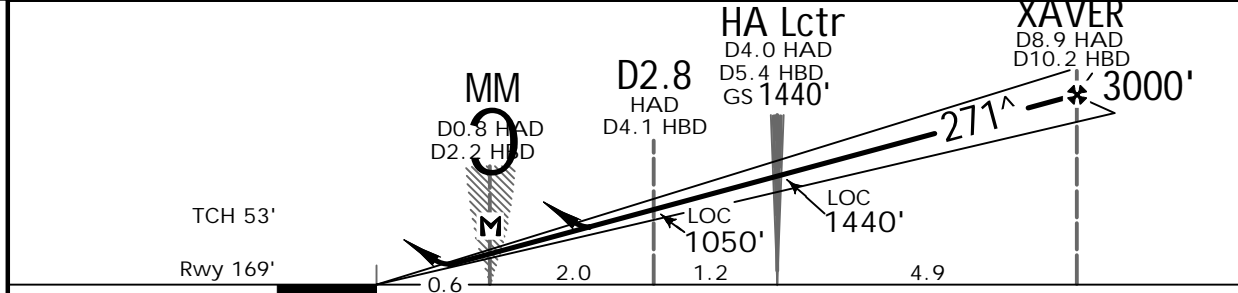
**JEPPesen**  
19 JAN 24  
Eff. 25 Jan. (11-5)

# HANNOVER, GERMANY ILS Z or LOC Z Rwy 27R

D-ATIS 136.575	BREMEN Radar (APP) 119.490	HANNOVER Director (APP) 119.605	HANNOVER Tower 120.180 120.405	Ground 121.955
LOC IHNW 108.9	Final Apch Crs 271 <sup>^</sup>	GS HA Lctr 1440' (1271')	ILS DA(H) 369' (200')	Apt Elev 183' Rwy 169'
<b>MISSED APCH:</b> Climb STRAIGHT AHEAD. After passing 600' or D0.8 HAD/D2.2 HBD whichever is later, turn RIGHT (MAX 185 KT) on heading 356 <sup>^</sup> climbing to MAX 3000'. At D5.8 HAD/D6.2 HBD turn RIGHT on 093 <sup>^</sup> to CEL NDB climbing to 4000'.				2800  MSA ARP
Alt Set: hPa (IN on req)    Rwy Elev: 6 hPa    Trans level: By ATC    Trans alt: 5000'				



LOC (GS out)	HAD DME	2.0	3.0	4.0	5.0	6.0	7.0	8.0
	ALTITUDE	800'	1120'	1440'	1760'	2070'	2390'	2710'



Gnd speed-Kts	70	90	100	120	140	160	ALSF-II REIL PAPI Refer to Missed Apch above
ILS GS or LOC Descent Angle 3.00 <sup>^</sup>	372	478	531	637	743	849	
MAP at MM/D0.8 HAD/D2.2 HBD							

Standard. STRAIGHT-IN LANDING RWY 27R				LOC (GS out) CDFA	
ILS		DA(H) 369' (200')		DA/MDA(H) ABC: 560' (391') D: 590' (421')	
FULL	TDZ or CL out	ALS out		ALS out	
A					
B					
C	RVR 550m	RVR 550m 1	RVR 1200m	RVR 1100m	RVR 1500m
D				RVR 1300m	RVR 1800m
					RVR 2000m

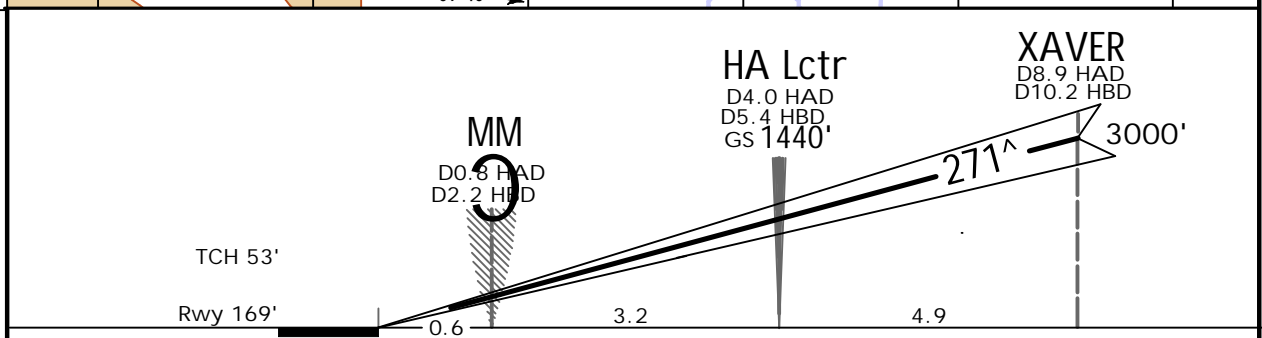
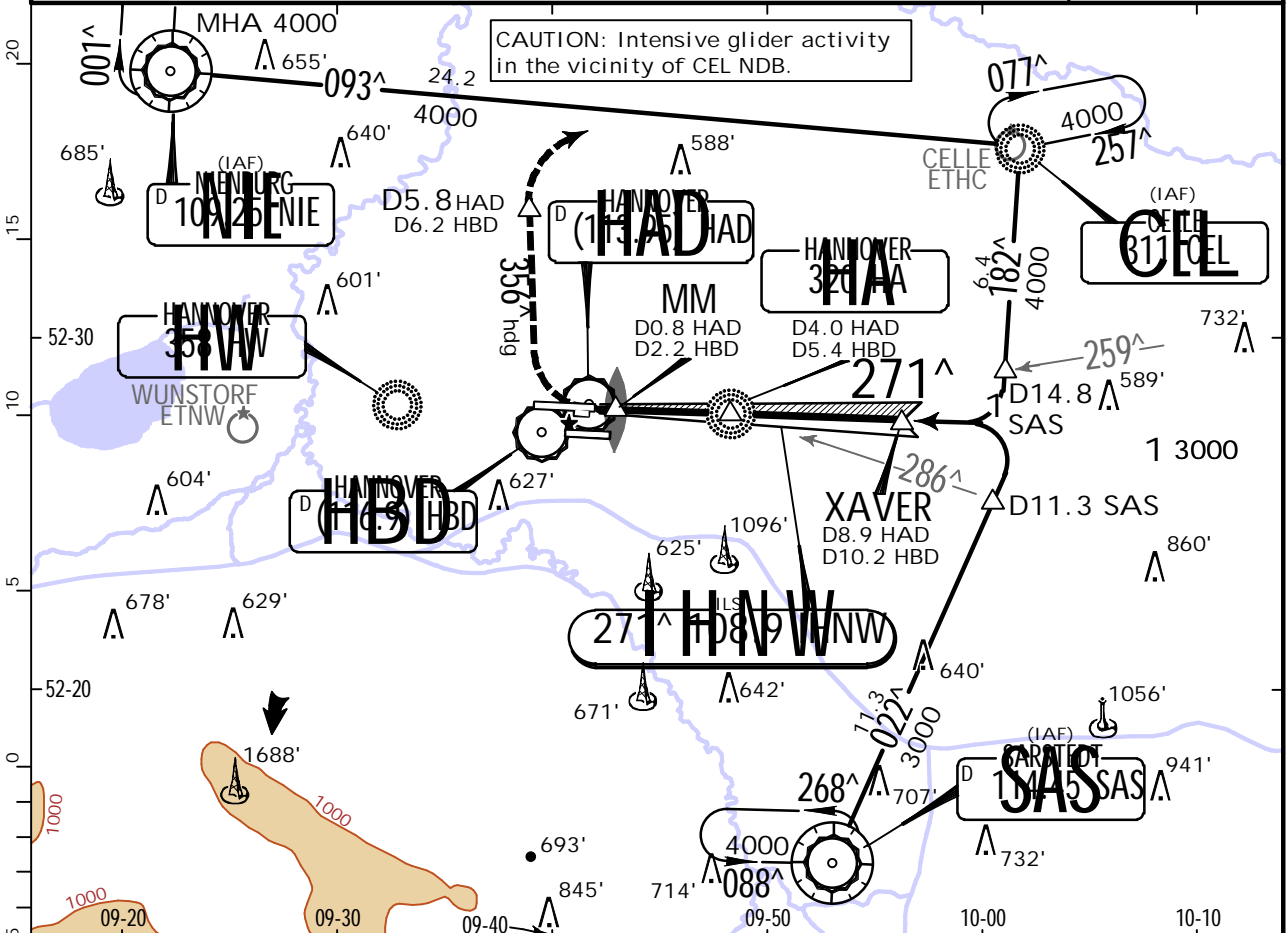
1 RVR 750m when a Flight Director or Autopilot or HUD to DA is not used.

# EDDV/HAJ HANNOVER

**JEPPESEN**  
19 JAN 24  
Eff. 25 Jan. (11-5A)

# HANNOVER, GERMANY CAT II/III ILS Z Rwy 27R

D-ATIS 136.575		BREMEN Radar (APP) 119.490		HANNOVER Director (APP) 119.605		HANNOVER Tower 120.180 120.405		Ground 121.955
LOC IHNW 108.9	Final Apch Crs 271 <sup>^</sup>	GS HA Lctr 1440' (1271')	CAT IIIB, IIIA & II ILS Refer to Minimums		Apt Elev 183' Rwy 169'		2800 MSA ARP	
MISSED APCH: Climb STRAIGHT AHEAD. After passing 600' or D0.8 HAD/ D2.2 HBD whichever is later, turn RIGHT (MAX 185 KT) on heading 356 <sup>^</sup> climbing to MAX 3000'. At D5.8 HAD/D6.2 HBD turn RIGHT on 093 <sup>^</sup> to CEL NDB climbing to 4000'.								
Alt Set: hPa (IN on req)		Rwy Elev: 6 hPa		Trans level: By ATC		Trans alt: 5000'		



Gnd speed-Kts	70	90	100	120	140	160	ALSF-II REIL PAPI	Refer to Missed Apch above
GS	3.00 <sup>^</sup>	372	478	531	637	849		

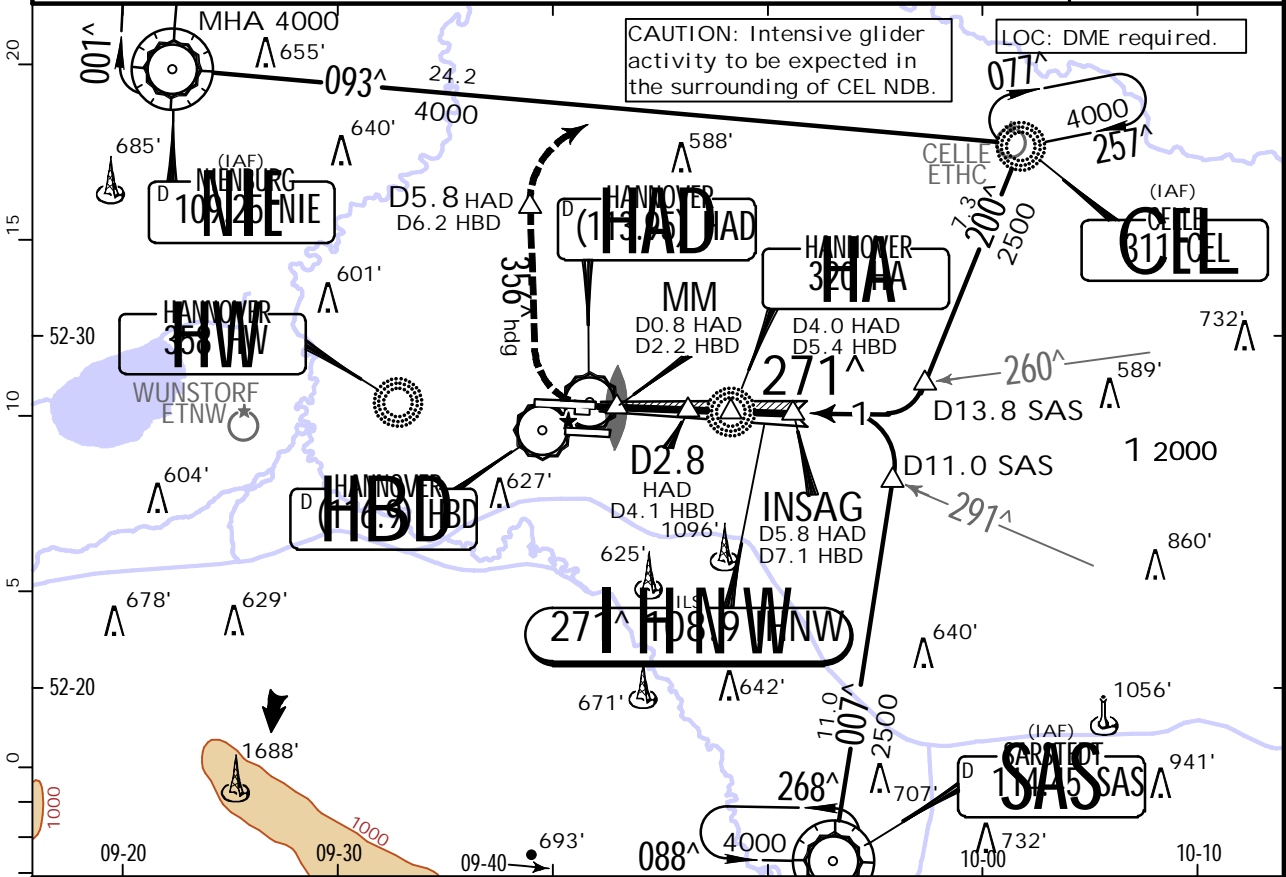
PANS OPS	Standard CAT IIIB ILS	STRAIGHT-IN LANDING RWY 27R CAT IIIA ILS	CAT II ILS
		DH 50'	ABC RA 97' DA(H) 269' (100')
	RVR 75m	RVR 200m	RA <sup>D</sup> 98' DA(H) 270' (101')
			RVR 300m

# EDDV/HAJ HANNOVER

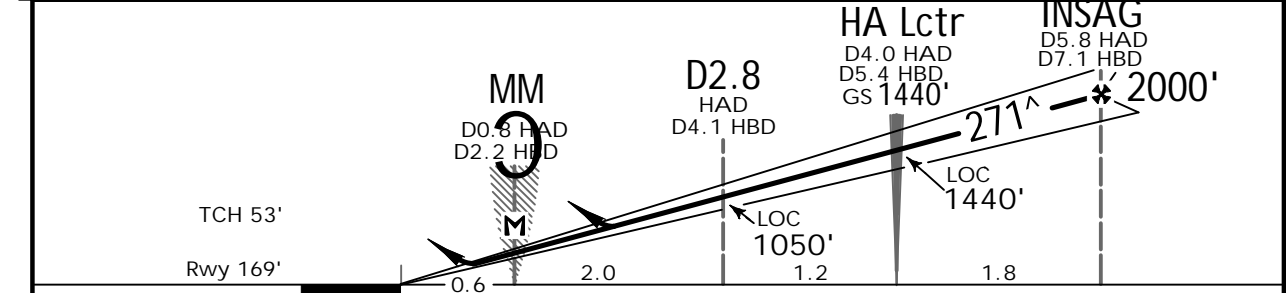
**JEPPESEN**  
19 JAN 24  
.Eff. 25 Jan. **(11-6)**

# HANNOVER, GERMANY ILS Y or LOC Y Rwy 27R

D-ATIS 136.575	BREMEN Radar (APP) 119.490	HANNOVER Director (APP) 119.605	HANNOVER Tower 120.180 120.405	Ground 121.955
LOC IHNW 108.9	Final Apch Crs 271 <sup>^</sup>	GS HA Lctr 1440' (1271')	ILS DA(H) 369' (200')	Apt Elev 183' Rwy 169'
MISSED APCH: Climb STRAIGHT AHEAD. After passing 600' or D0.8 HAD/D2.2 HBD whichever is later, turn RIGHT (MAX 185 KT) on heading 356 <sup>^</sup> climbing to MAX 3000'. At D5.8 HAD/D6.2 HBD turn RIGHT on 093 <sup>^</sup> to CEL NDB climbing to 4000'.				2800  MSA ARP
Alt Set: hPa (IN on req) Rwy Elev: 6 hPa Trans level: By ATC Trans alt: 5000'				



LOC (GS out)	HAD DME	2.0	3.0	4.0	5.0
	ALTITUDE	800'	1120'	1440'	1760'



Gnd speed-Kts	70	90	100	120	140	160	ALSF-II REIL PAPI Refer to Missed Apch above
ILS GS or LOC Descent Angle 3.00 <sup>^</sup>	372	478	531	637	743	849	
MAP at MM/D0.8 HAD/D2.2 HBD							

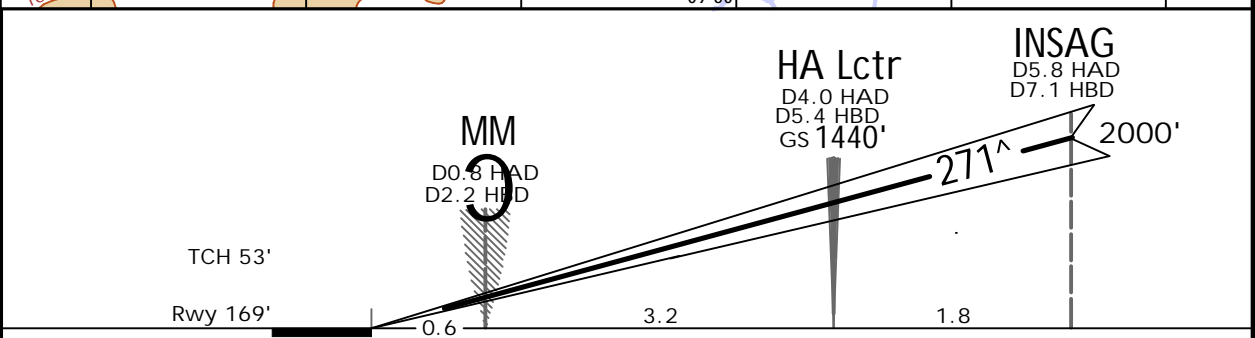
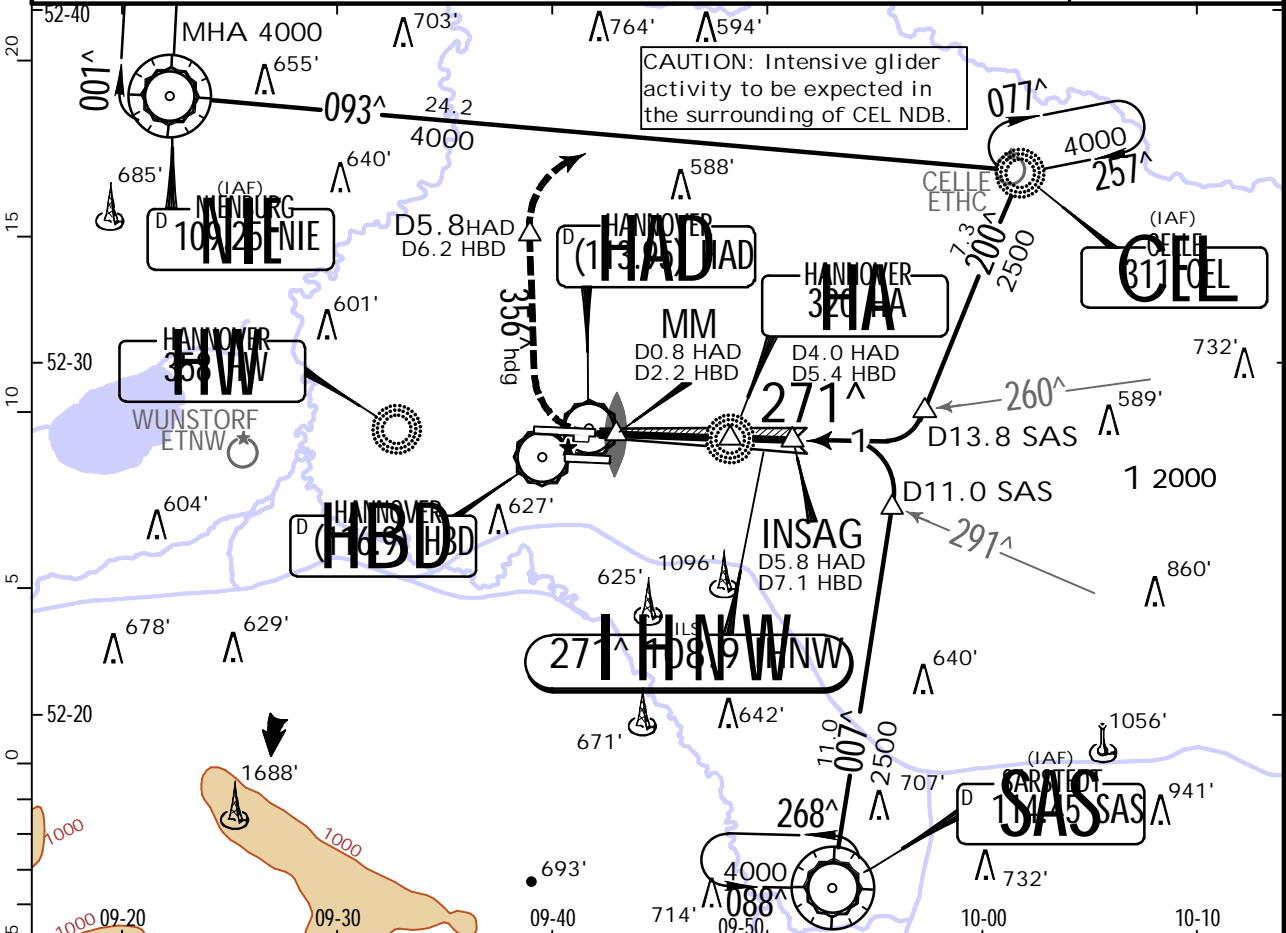
<b>Standard.</b>				STRAIGHT-IN LANDING RWY 27R		LOC (GS out) CDFA	
ILS			DA(H) 369' (200')			DA/MDA(H) ABC: 560' (391') D: 590' (421')	
FULL		IDZ or CL out	ALS out		ALS out		
A					RVR 1100m		RVR 1500m
B							RVR 1800m
C	RVR 550m	RVR 550m 1	RVR 1200m		RVR 1300m		RVR 2000m
D							
1 RVR 750m when a Flight Director or Autopilot or HUD to DA is not used.							

# EDDV/HAJ HANNOVER

**JEPPESEN**  
19 JAN 24  
Eff. 25 Jan. (11-6A)

# HANNOVER, GERMANY CAT II/III ILS Y Rwy 27R

D-ATIS 136.575	BREMEN Radar (APP) 119.490	HANNOVER Director (APP) 119.605	HANNOVER Tower 120.180 120.405	Ground 121.955
LOC IHNW 108.9	Final Apch Crs 271 <sup>^</sup>	GS HA Lctr 1440' (1271')	CAT IIIB, IIIA & II ILS Refer to Minimums	Apt Elev 183' Rwy 169'
<b>MISSED APCH:</b> Climb STRAIGHT AHEAD. After passing 600' or D0.8 HAD/D2.2 HBD whichever is later, turn RIGHT (MAX 185 KT) on heading 356 <sup>^</sup> climbing to MAX 3000'. At D5.8 HAD/D6.2 HBD turn RIGHT on 093 <sup>^</sup> to CEL NDB climbing to 4000'.				2800  MSA ARP
Alt Set: hPa (IN on req)    Rwy Elev: 6 hPa    Trans level: By ATC    Trans alt: 5000'				



Gnd speed-Kts	70	90	100	120	140	160	ALSF-II REIL PAPI Refer to Missed Apch above
GS	3.00 <sup>^</sup>	372	478	531	637	849	

Standard CAT IIIB ILS	STRAIGHT-IN LANDING RWY 27R		CAT II ILS	
	CAT IIIA ILS	ABC RA 97' DA(H) 269' (100')	RA <sup>D</sup> 98' DA(H) 270' (101')	
	DH 50'			
RVR 75m	RVR 200m	RVR 300m		

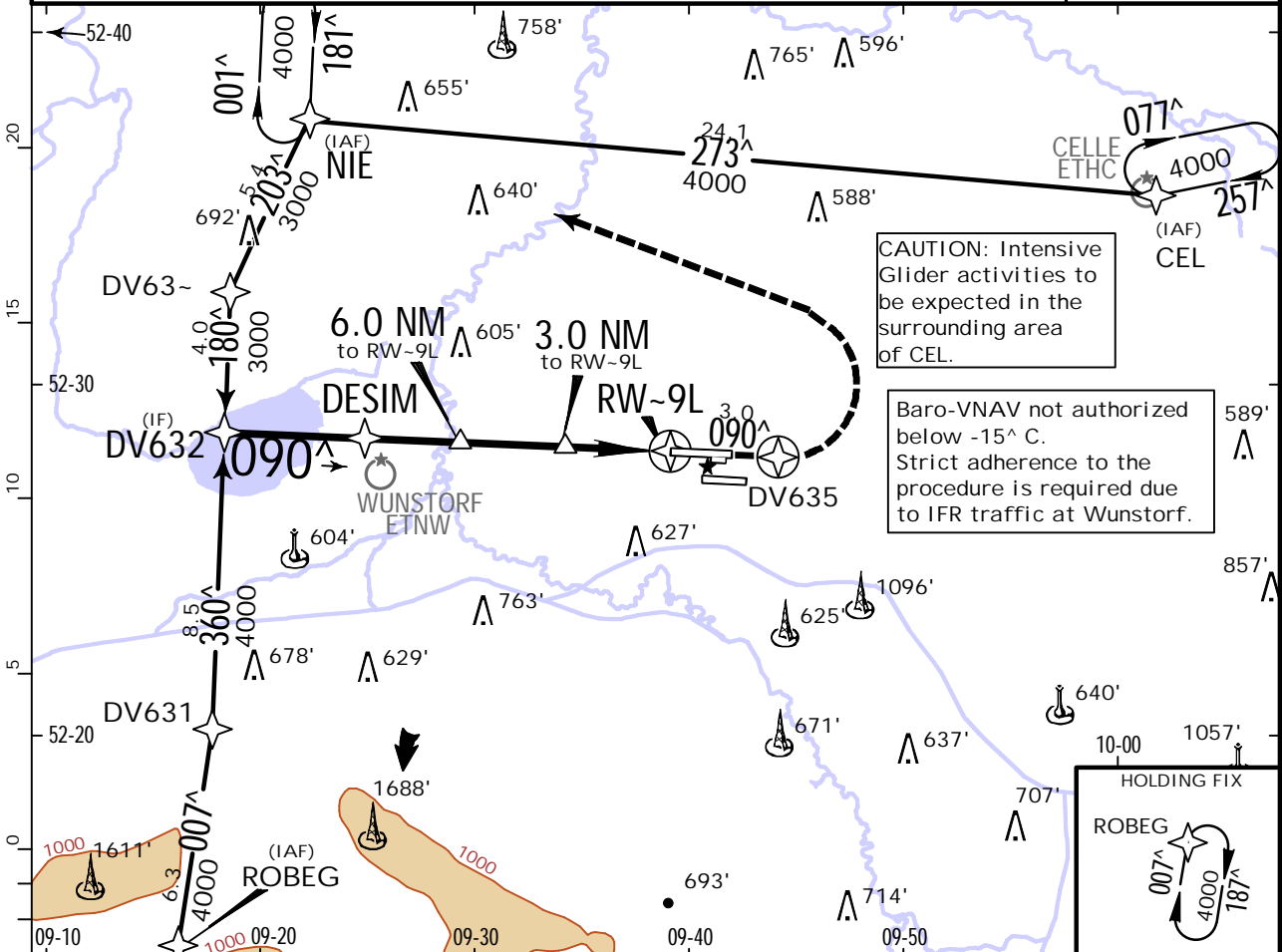


**EDDV/HAJ**  
HANNOVER

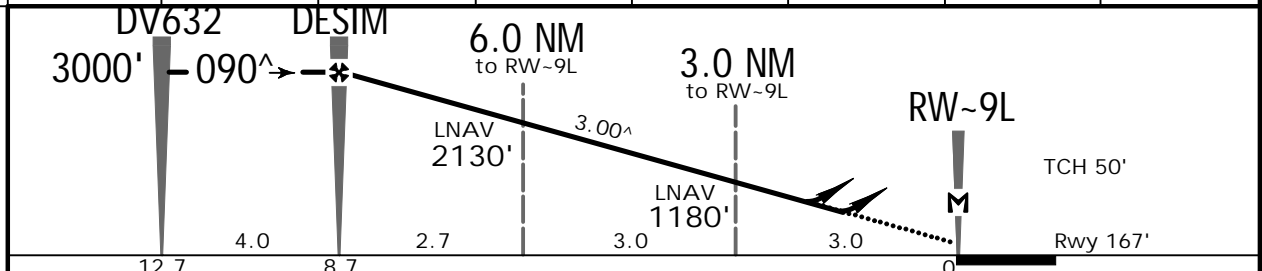
**JEPPESEN**  
9 FEB 24 (12-1)

**HANNOVER, GERMANY**  
RNP Rwy 09L

BRIEFING STRIP™	D-ATIS	BREMEN Radar (APP)	HANNOVER Director (APP)	HANNOVER Tower	Ground
	136.575	119.490	119.605	120.180 120.405	121.955
	RNAV	Final Apch Crs <b>090<sup>^</sup></b>	DESIM <b>3000'</b> (2833')	LNAV/VNAV DA(H) Refer to Minimums	Apt Elev 183' Rwy 167'
MISSED APCH: Climb on 090 <sup>^</sup> to DV635, then turn LEFT direct to NIE climbing to 4000'.					
Alt Set: hPa (IN on req) Rwy Elev: 6 hPa Trans level: By ATC Trans alt: 5000'					MSA ARP



NM to RW-9L	8.0	7.0	6.0	5.0	4.0	3.0	2.0
ALTITUDE	2770'	2450'	2130'	1810'	1500'	1180'	860'



Gnd speed-Kts	70	90	100	120	140	160	ALSF-II REIL PAPI	090 <sup>^</sup> ↑ DV635	
Descent Angle	3.00 <sup>^</sup>	372	478	531	637	743			849
MAP at RW-9L									

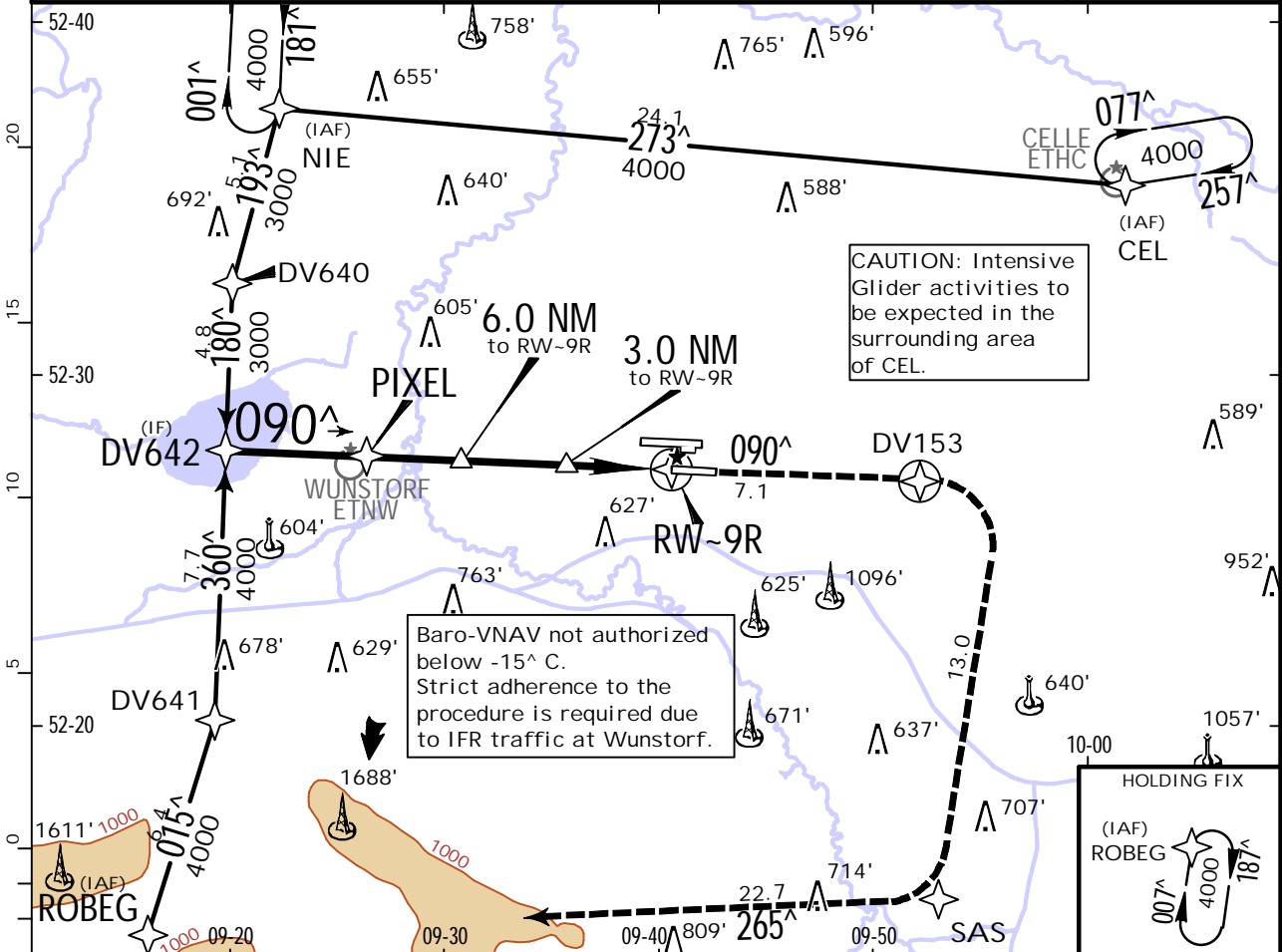
Standard.		STRAIGHT-IN LANDING RWY 09L				LNAV CDFA	
A: 577' (410')		C: 592' (425')		LNAV		680' (513')	
DA(H)		B: 585' (418')		D: 600' (433')		DA/MDA(H)	
		ALS out				ALS out	
A	RVR 1200m	RVR 1500m		RVR 1500m			
B							
C	RVR 1300m	RVR 2000m		RVR 1600m		RVR 2400m	
D							

# EDDV/HAJ HANNOVER

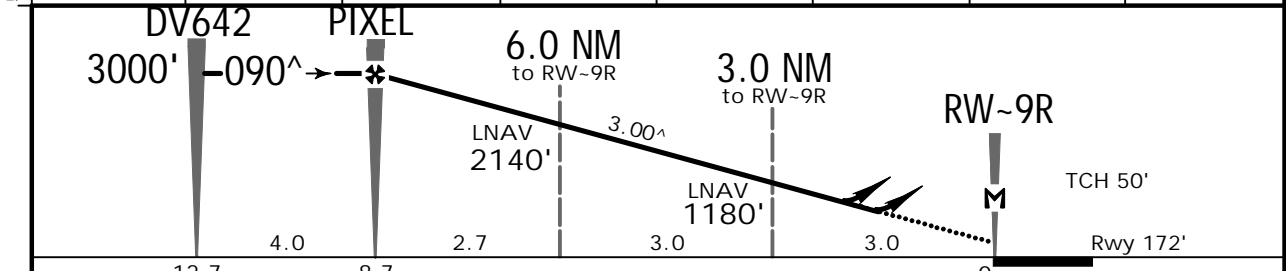


# HANNOVER, GERMANY RNP Rwy 09R

D-ATIS 136.575		BREMEN Radar (APP) 119.490		HANNOVER Director (APP) 119.605		HANNOVER Tower 120.180 120.405		Ground 121.955
RNAV	Final ApcH Crs <b>090<sup>^</sup></b>	PIXEL <b>3000'</b> (2828')		LNAV/VNAV DA(H) Refer to Minimums		Apt Elev 183'	Rwy 172'	2800
MISSED APCH: Climb on 090 <sup>^</sup> to DV153, then turn RIGHT direct to SAS. Then turn RIGHT to ROBEG climbing to 4000'.								
Alt Set: hPa (IN on req)			Rwy Elev: 6 hPa		Trans level: By ATC		Trans alt: 5000'	



NM to RW-9R	8.0	7.0	6.0	5.0	4.0	3.0	2.0
ALTITUDE	2770'	2460'	2140'	1820'	1500'	1180'	860'



Gnd speed-Kts	70	90	100	120	140	160	HIALS REIL PAPI	090 <sup>^</sup> ↑ DV153
Descent Angle	3.00 <sup>^</sup>	372	478	531	637	743		
MAP at RW-9R								

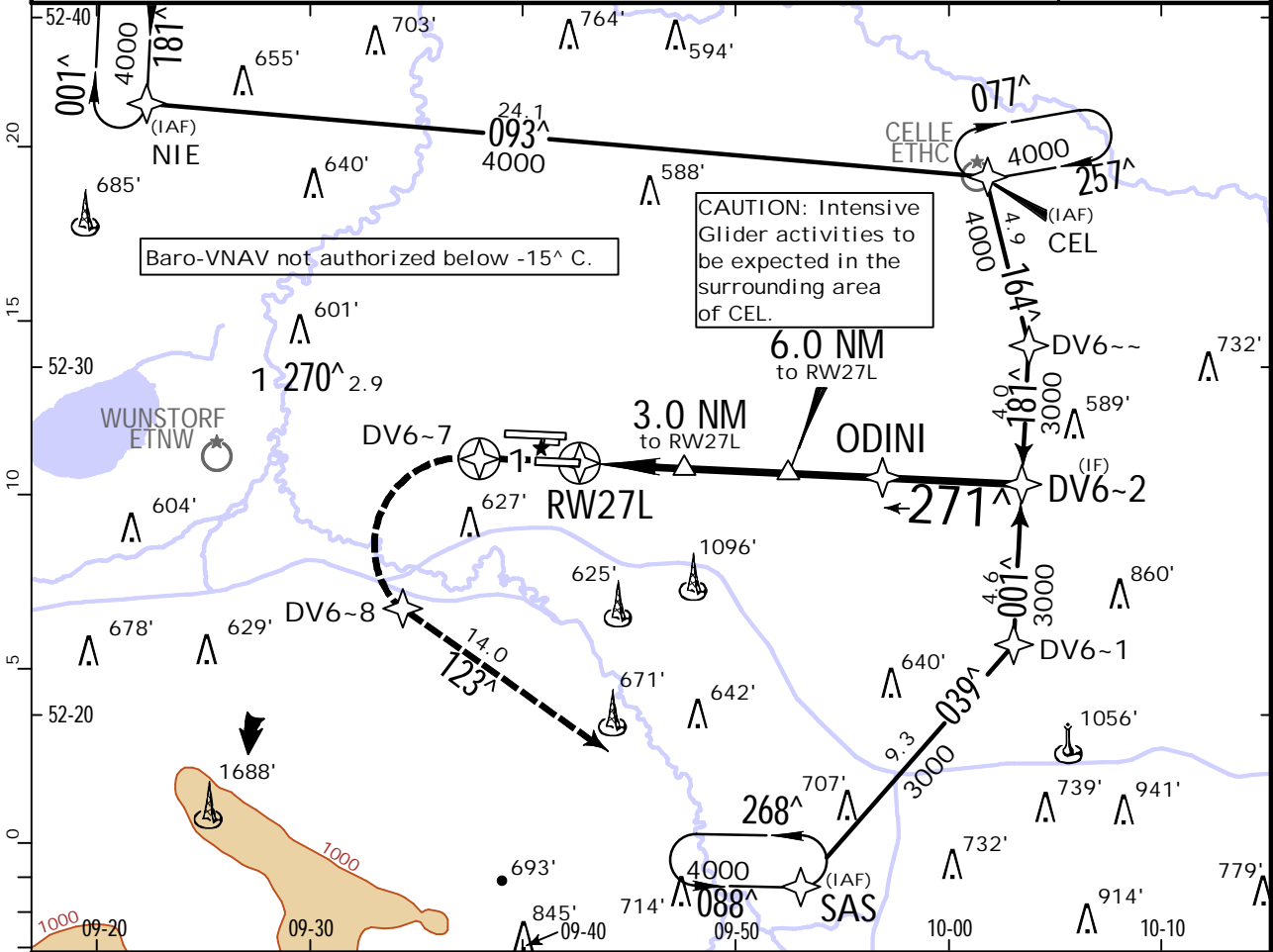
Standard.		LNAV/VNAV STRAIGHT-IN LANDING RWY 09R				LNAV CDFA	
DA(H) A: 549' (377') B: 559' (387')		C: 569' (397') D: 579' (407')		DA/MDA(H) 670' (498')		ALS out	
A	RVR 1000m	RVR 1500m		RVR 1500m			
B	RVR 1100m	RVR 1500m		RVR 1500m			
C		RVR 1800m		RVR 1500m		RVR 2300m	
D	RVR 1200m	RVR 1900m		RVR 1500m			

**EDDV/HAJ**  
HANNOVER

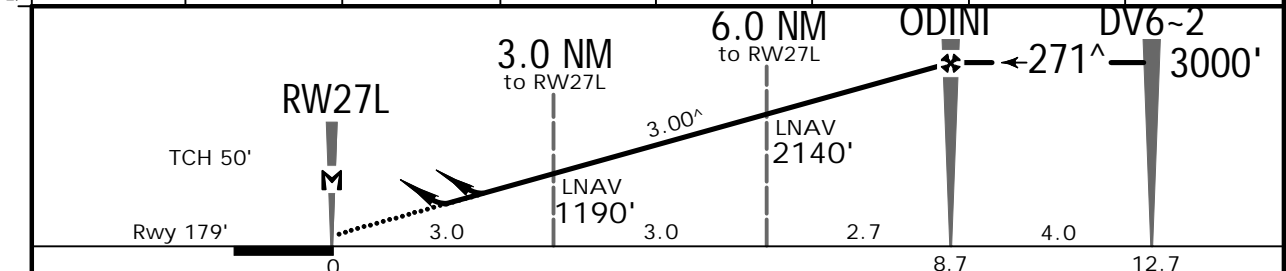
**JEPPesen**  
8 SEP 23 **(12-3)**

**HANNOVER, GERMANY**  
RNP Rwy 27L

D-ATIS 136.575		BREMEN Radar (APP) 119.490		HANNOVER Director (APP) 119.605		HANNOVER Tower 120.180 120.405		Ground 121.955	
RNAV	Final Apch Crs <b>271<sup>^</sup></b>	ODINI <b>3000'</b> (2821')		LNAV/VNAV DA(H) Refer to Minimums		Apt Elev 183' Rwy 179'		2800	
MISSED APCH: Climb on 270 <sup>^</sup> to DV6~7, then turn LEFT (MAX 185 KT) direct to DV6~8. Then to SAS climbing to 4000'.									
Alt Set: hPa (IN on req)			Rwy Elev: 6 hPa		Trans level: By ATC		Trans alt: 5000'		MSA ARP



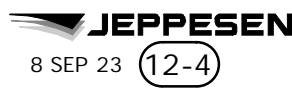
NM to RW27L	2.0	3.0	4.0	5.0	6.0	7.0	8.0
ALTITUDE	870'	1190'	1510'	1830'	2140'	2460'	2780'



Gnd speed-Kts	70	90	100	120	140	160	HIALS REIL PAPI	270 <sup>^</sup> LT	DV6~7
Descent Angle	3.00 <sup>^</sup>	372	478	531	637	743			
MAP at RW27L									

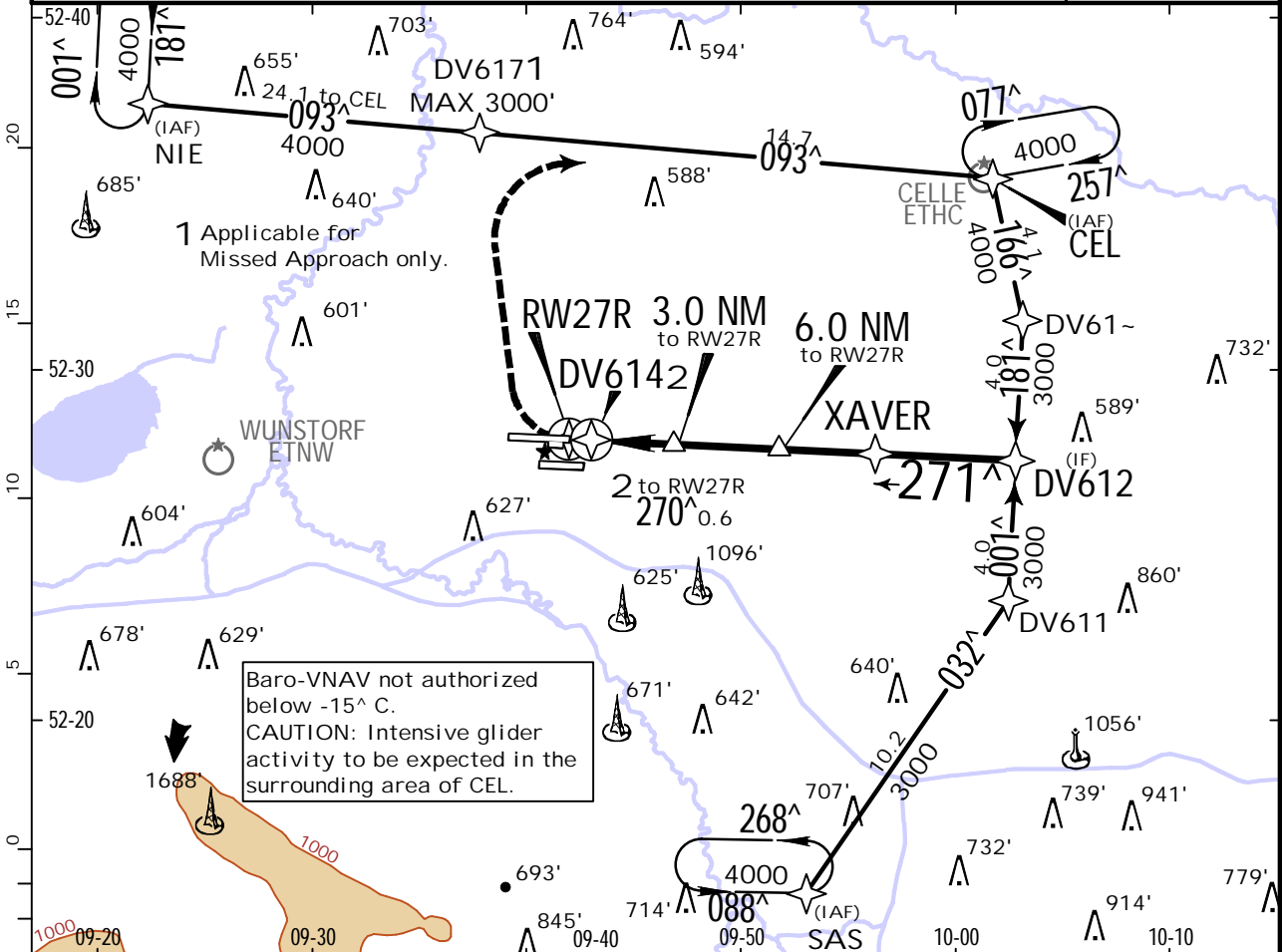
Standard.		STRAIGHT-IN LANDING RWY 27L				LNAV CDFA			
A: 537' (358')		C: 553' (374')		A: 650' (471')		CD: 670' (491')			
B: 545' (366')		D: 562' (383')		ALS out		ALS out			
A	RVR 900m			RVR 1500m		RVR 1500m			
B	RVR 1000m			RVR 1500m		RVR 1500m			
C	RVR 1100m			RVR 1700m		RVR 1500m		RVR 2300m	
D	RVR 1100m			RVR 1800m					

# EDDV/HAJ HANNOVER



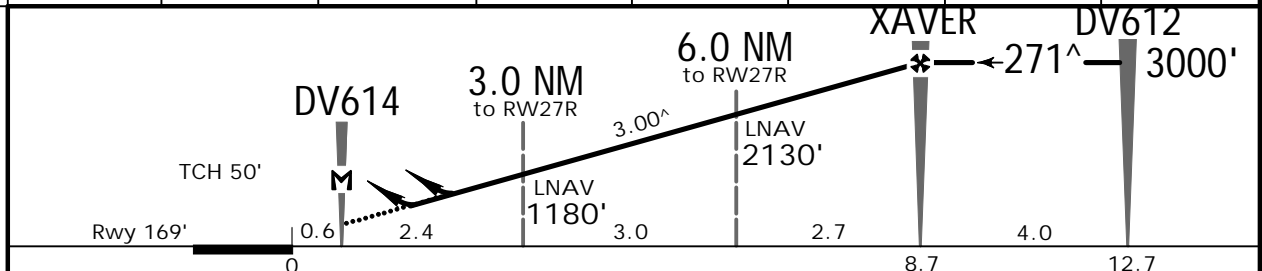
# HANNOVER, GERMANY RNP Rwy 27R

D-ATIS 136.575		BREMEN Radar (APP) 119.490		HANNOVER Director (APP) 119.605		HANNOVER Tower 120.180 120.405		Ground 121.955
RNAV	Final Apch Crs 271 <sup>^</sup>	XAVR 3000' (2831')		LNAV/VNAV DA(H) Refer to Minimums		Apt Elev 183' Rwy 169'		2800
MISSED APCH: Climb on 270 <sup>^</sup> to RW27R or 600', whichever is later. Then turn RIGHT (MAX 185 KT) direct to DV617 climbing to MAX 3000'. Then to CEL climbing to 4000'.								
Alt Set: hPa (IN on req)		Rwy Elev: 6 hPa		Trans level: By ATC		Trans alt: 5000'		MSA ARP



Baro-VNAV not authorized below -15<sup>^</sup> C.  
CAUTION: Intensive glider activity to be expected in the surrounding area of CEL.

NM to RW27R	2.0	3.0	4.0	5.0	6.0	7.0	8.0
ALTITUDE	860'	1180'	1500'	1820'	2130'	2450'	2770'



Gnd speed-Kts	70	90	100	120	140	160	ALSF-II REIL PAPI	Refer to Missed Apch above	
Descent Angle	3.00 <sup>^</sup>	372	478	531	637	743			849
MAP at DV614									

Standard.				STRAIGHT-IN LANDING RWY 27R				LNAV CDFA 670' (501')	
A: 466' (297')		C: 486' (317')		A: 466' (297')		C: 486' (317')		DA/MDA(H) 670' (501')	
B: 476' (307')		D: 579' (410')		B: 476' (307')		D: 579' (410')		ALS out	
A	RVR 750m 1			RVR 1400m			RVR 1500m		
B	RVR 1200m			RVR 1900m			RVR 1600m		
C							RVR 2400m		
D									

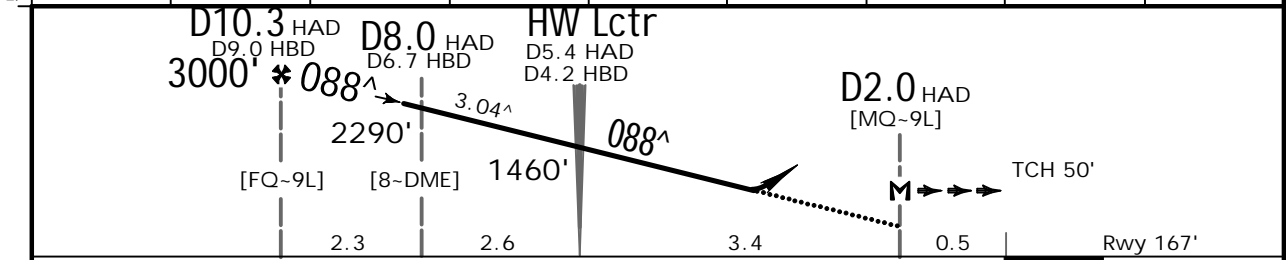
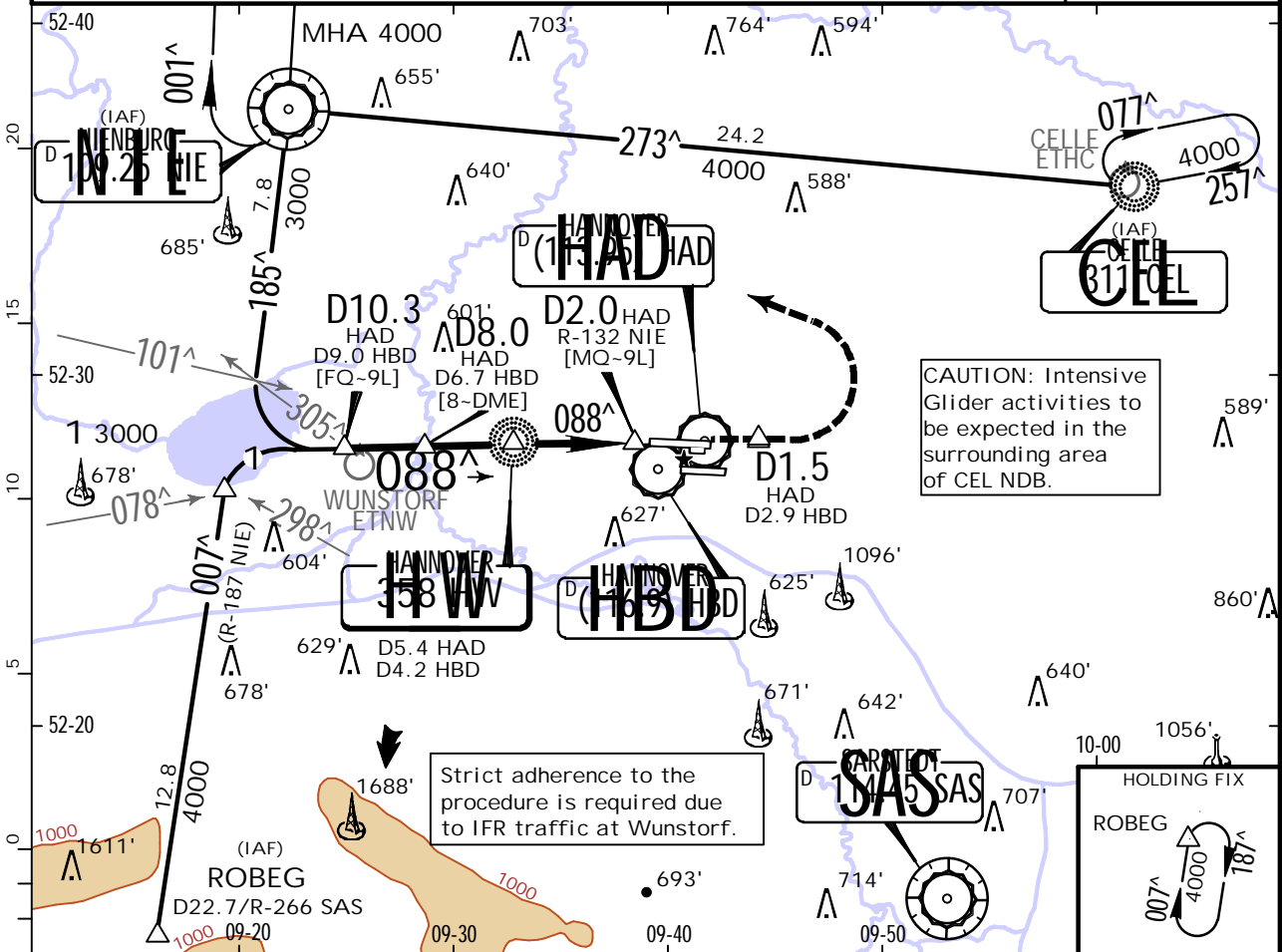
1 With TDZ & CL & HUD: CAT A: RVR 650m, CAT BC: 700m.

# EDDV/HAJ HANNOVER

**JEPPESSEN**  
19 JAN 24 (16-1) .Eff.25.Jan.

# HANNOVER, GERMANY NDB Rwy 09L

D-ATIS 136.575	BREMEN Radar (APP) 119.490	HANNOVER Director (APP) 119.605	HANNOVER Tower 120.180 120.405	Ground 121.955
Lctr HW 358	Final Apch Crs 088 <sup>^</sup>	D10.3 3000' (2833')	DA/MDA(H) 750' (583')	Apt Elev 183' Rwy 167'
MISSED APCH: Climb STRAIGHT AHEAD to D1.5 EAST of HAD/D2.9 EAST of HBD, then turn LEFT to NIE VOR climbing to 4000'.				2800
Alt Set: hPa (1N on req) Rwy Elev: 6 hPa Trans level: By ATC Trans alt: 5000'				
1. DME required. 2. Final approach track offset 2.5 <sup>^</sup> from rwy centerline.				



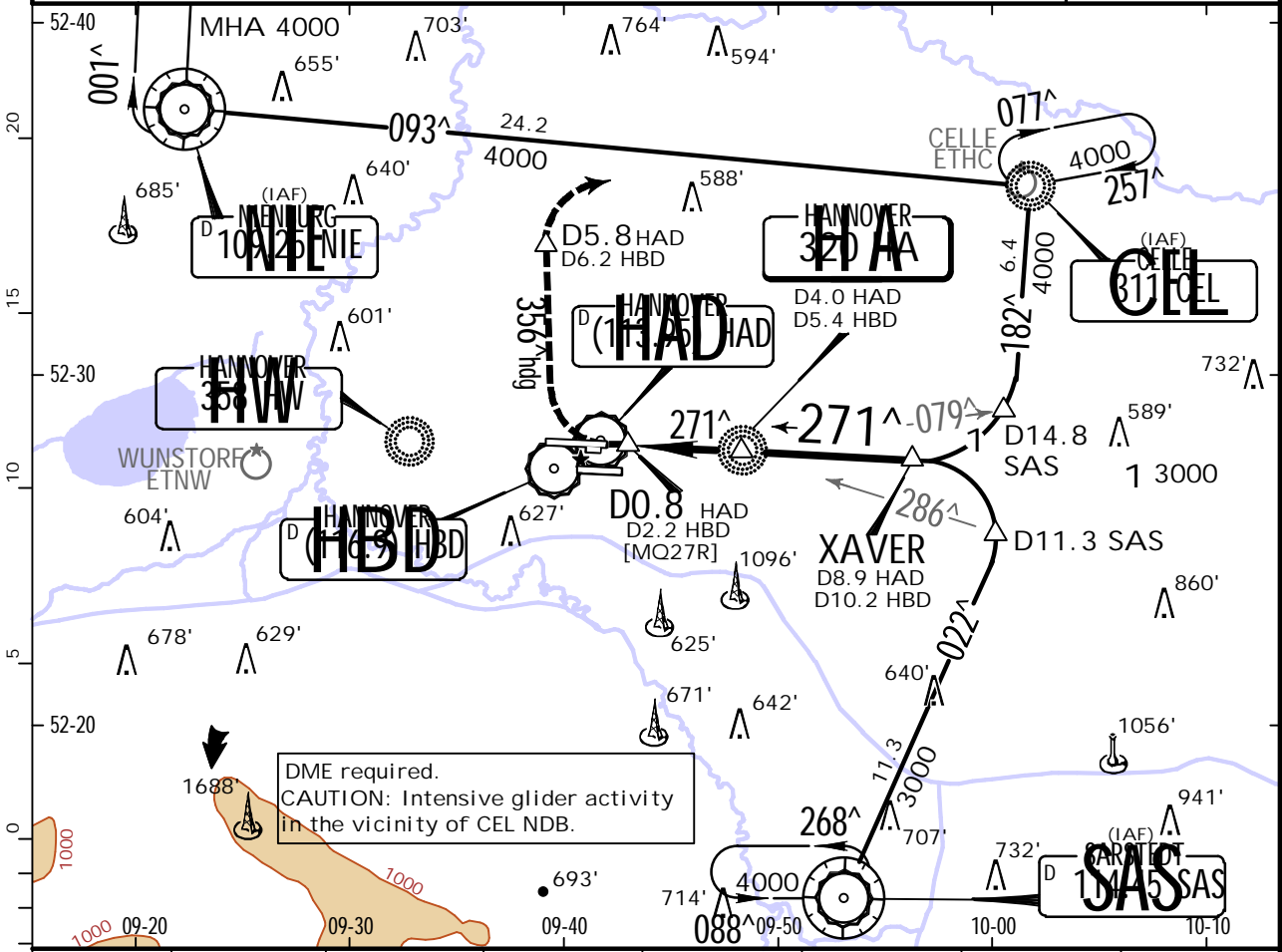
Standard.		STRAIGHT-IN LANDING RWY 09L	
CDFA		DA/MDA(H) 750' (583')	
ALS out			
A	RVR 1500m		
B	RVR 1500m		
C	RVR 2000m	RVR 2400m	
D	RVR 2000m	RVR 2400m	

# EDDV/HAJ HANNOVER

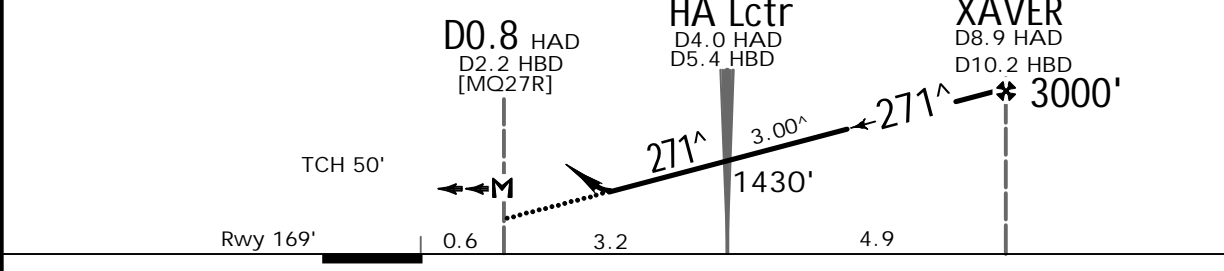
**JEPPESSEN**  
19 JAN 24 (16-2) .Eff.25.Jan.

# HANNOVER, GERMANY NDB Rwy 27R

D-ATIS 136.575	BREMEN Radar (APP) 119.490	HANNOVER Director (APP) 119.605	HANNOVER Tower 120.180 120.405	Ground 121.955
Lctr HA 320	Final Apch Crs 271 <sup>^</sup>	XAVR 3000' (2831')	DA/MDA(H) 750' (581')	Apt Elev 183' Rwy 169'
<b>MISSED APCH:</b> Climb STRAIGHT AHEAD. After passing 600' or D0.8 HAD/D2.2 HBD whichever is later, turn RIGHT (MAX 185 KT) on heading 356 <sup>^</sup> climbing to MAX 3000'. At D5.8 HAD/D6.2 HBD turn RIGHT on 093 <sup>^</sup> to CEL NDB climbing to 4000'.				2800  MSA ARP
Alt Set: hPa (IN on req)    Rwy Elev: 6 hPa    Trans level: By ATC    Trans alt: 5000'				



HAD DME	2.0	3.0	4.0	5.0	6.0	7.0	8.0
ALTITUDE	800'	1120'	1430'	1750'	2070'	2390'	2710'



Gnd speed-Kts	70	90	100	120	140	160	ALSF-II REIL PAPI	Refer to Missed Apch above	
Descent angle	3.00 <sup>^</sup>	372	478	531	637	743			849
MAP at D0.8 HAD/D2.2 HBD									

**.Standard.** STRAIGHT-IN LANDING RWY 27R  
CDFA  
DA/MDA(H) 750' (581')  
ALS out

A	RVR 1500m	
B	RVR 1500m	
C	RVR 2000m	RVR 2400m
D	RVR 2000m	RVR 2400m

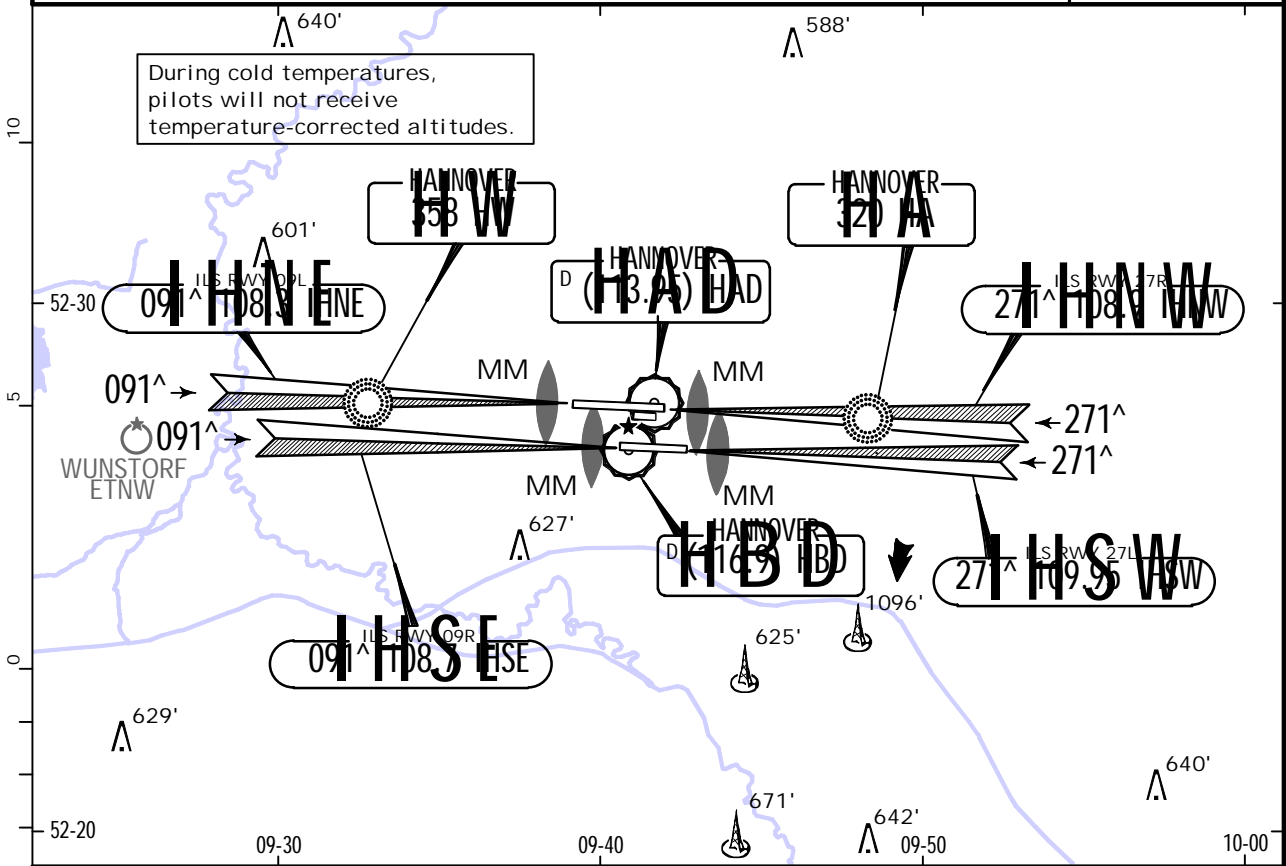
# EDDV/HAJ HANNOVER



# HANNOVER, GERMANY SRA Rwy 09L/R, 27L/R

8 SEP 23 (18-1)

BRIEFING STRIP™	D-ATIS	BREMEN Radar (APP)	HANNOVER Director (APP)	HANNOVER Tower	Ground
	136.575	119.490	119.605	120.180 120.405	121.955
	RADAR	Final Apch Crs By ATC	Minimum Alt See table below	DA/MDA(H) Refer to Minimums	Apt Elev 183' Rwy -See below
MISSED APCH: Climb STRAIGHT AHEAD to 3000'.					
Alt Set: hPa (IN on req)		Apt Elev: 7 hPa	Trans level: By ATC	Trans alt: 5000'	MSA ARP

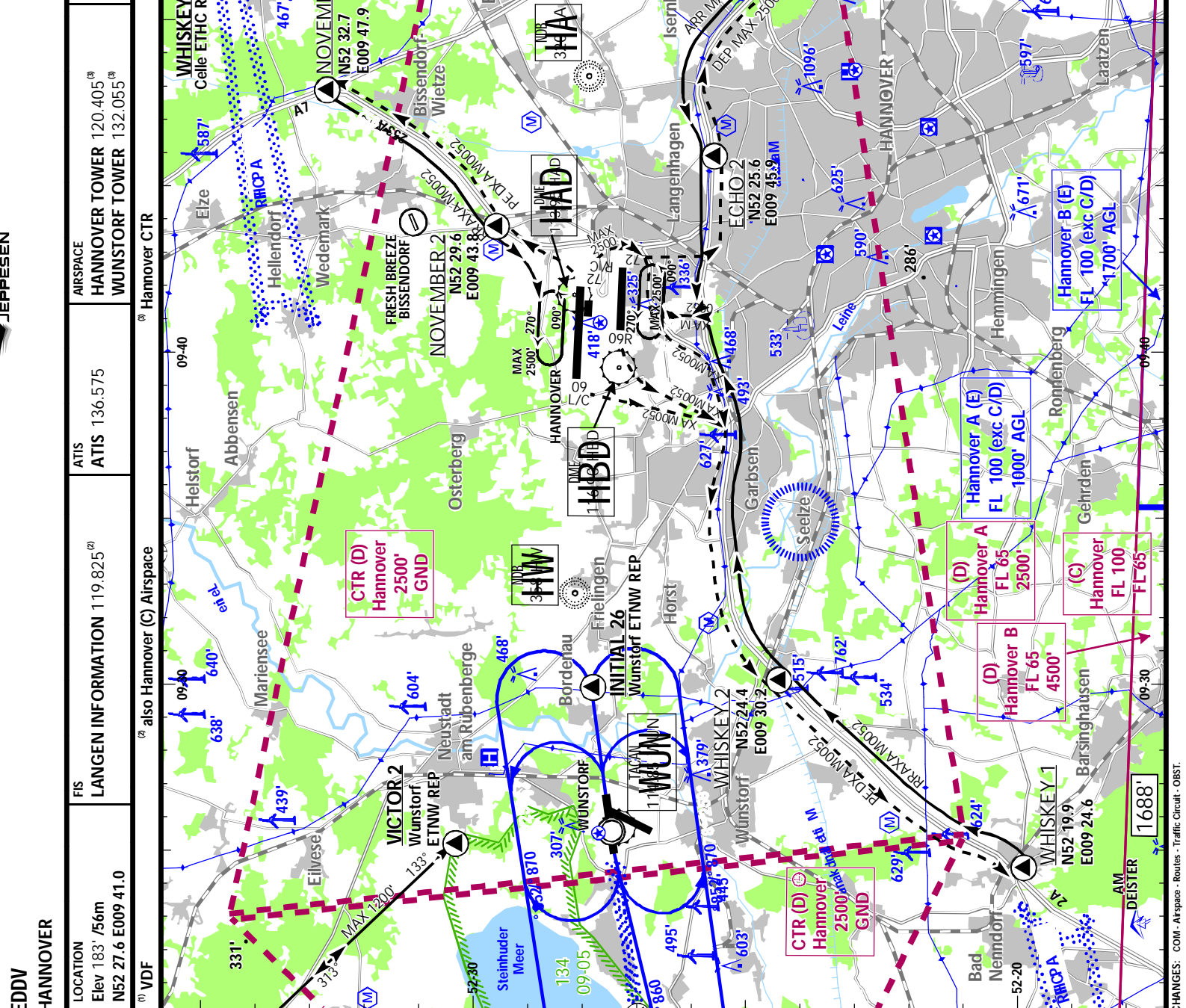


RADAR FIX	10.0	9.0	8.0	7.0	6.0	5.0	4.0	3.0	2.0
ALTITUDE	3300'	3000'	2700'	2400'	2100'	1800'	1500'	1200'	900'
Minimum Alt/NM	10.0 FAF								
SRA 09L, SRA 09R	3300'								
SRA 27L, SRA 27R	3300'								
RWY	09L	09R	27L	27R					
ELEV	167'	172'	179'	169'					

Gnd speed-Kts	70	90	100	120	140	160	Lighting-Refer to Airport Chart	3000'
Descent Angle	2.83°	350	451	501	601	701		
MAP at THR								

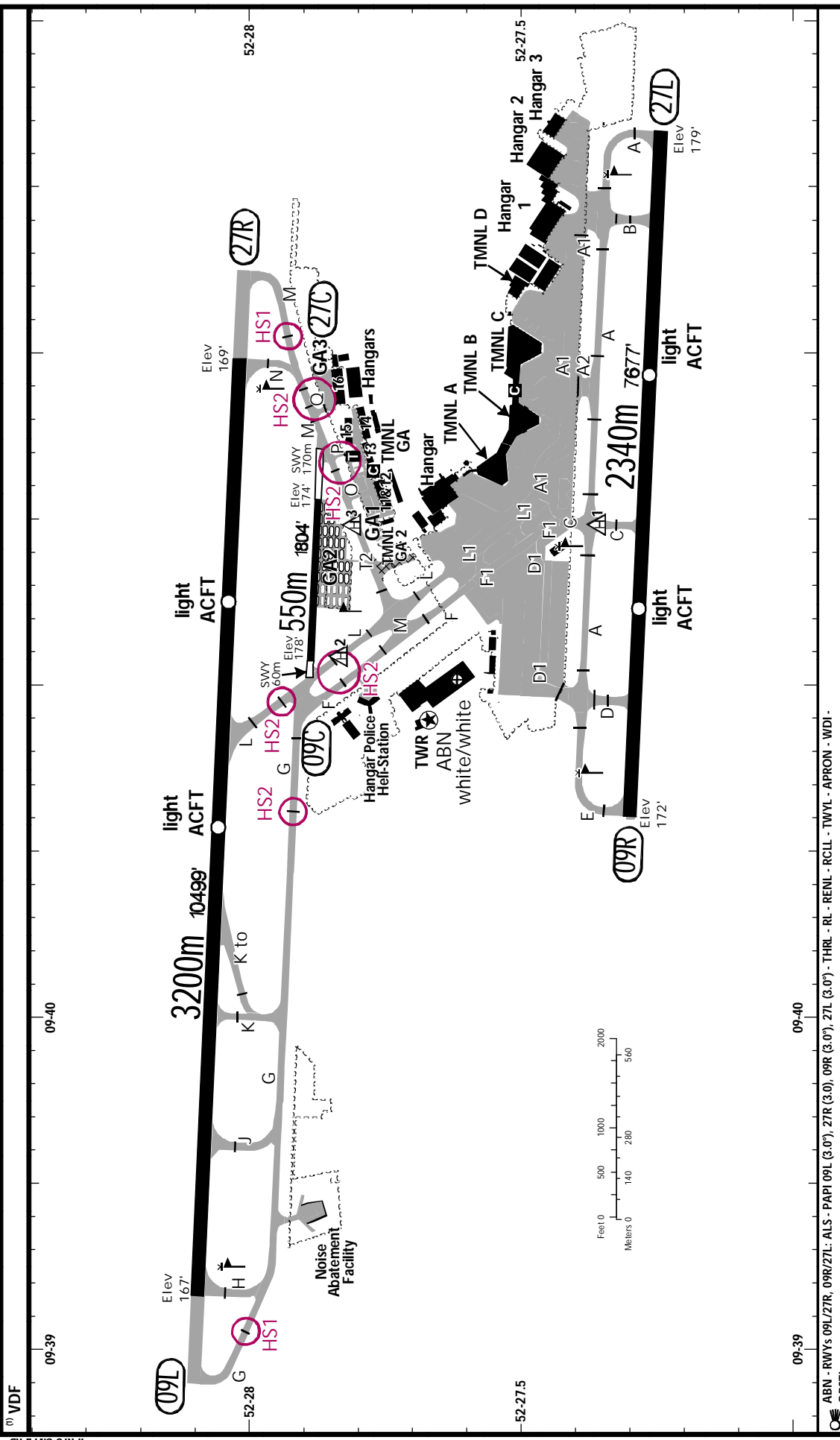
PANS OPS	Standard.							
	SRA 09L CDFA DA/MDA(H) 760' (593')		SRA 09R CDFA DA/MDA(H) 760' (588')		SRA 27L CDFA DA/MDA(H) 830' (651')		SRA 27R CDFA DA/MDA(H) 760' (591')	
	ALS out		ALS out		ALS out		ALS out	
	A	RVR 1500m	RVR 1500m	RVR 1500m	RVR 1500m	RVR 1500m	RVR 1500m	RVR 1500m
	B	RVR 1500m	RVR 1500m	RVR 1500m	RVR 1500m	RVR 1500m	RVR 1500m	RVR 1500m
C	RVR 2000m	RVR 2400m	RVR 2000m	RVR 2400m	RVR 2300m	RVR 2400m	RVR 2000m	RVR 2400m
D	RVR 2000m	RVR 2400m	RVR 2000m	RVR 2400m	RVR 2300m	RVR 2400m	RVR 2000m	RVR 2400m

<b>EDDV</b> <b>HANNOVER</b>	<b>LOCATION</b> Elev 183' / 56m N52 27.6 E009 41.0	<b>FIS</b> LANGEN INFORMATION 119.825 <sup>(2)</sup>	<b>ATIS</b> ATIS 136.575	<b>AIRSPACE</b> HANNOVER TOWER 120.405 <sup>(8)</sup> WUNSTORF TOWER 132.055 <sup>(8)</sup>	<b>TOWER</b> HANNOVER TOWER 120.180 <sup>(1)</sup> (ge, en) HANNOVER GROUND 121.955 <sup>(1)</sup> (ge, en)					
						<b>(1) VDF</b>				
						<b>(2) also Hannover (C) Airspace</b>				





LOCATION	ATIS	TOWER
Elev 183' / 56m N52 27.6 E009 41.0	ATIS 136.575	HANNOVER GROUND 121.955 <sup>(0)</sup> (ge, en) HANNOVER TOWER 120.180 <sup>(0)</sup> (ge, en)



OBSTL.	RWY No	Dimension (m) - Surface	TORA (m)	LDA (m)	Strength	Lights
	09L (090°) 27R (270°)	3200 x 45 Concrete	3200	3200	PCN 90/R/B/W/T	☉
	09R (090°) 27L (270°)	2340 x 45 Concrete	2340	2340	PCN 90/R/B/W/T	☉
	09C (090°) <sup>1</sup> 27C (270°)	550 x 23 Asphalt	610 720	550	5.7I AWW	...

1 Utilisation according to VFR only, during the day. TORA including the paved SWY.  
 CHANGES: SWY - TWYs - Buildings - AD Facilities - Text.  
 © JEPPESEN, 2019, 2024. ALL RIGHTS RESERVED

**EDDV**  
**HANNOVER**

02 FEB 24

19-3
**HANNOVER**  
**GERMANY**
**RWY INCURSION HOT SPOTS**

HS 1 - Due to obstacle limitation surface - CAT I holding point in greater distance to RWY.

HS 2 - CAT I holding points of RWY 09C/27C.

**Intersection TKOF**

RWY	TWY	TORA (m)
09L	J	2700
	K	2250
	L	1320
27R	L	1900
09R	D	1970
	C	1360
27L	B	2040
	C	1000

CAUTION: Possible wake turbulences.

Overflying of the sector boundary within Hannover CTR without clearance is not allowed.

**VFR APP/DEP according to the depicted routes at MAX ALT 2500'.**

**In cross-winds, vortexes shall be expected east of THR 27C due to existing buildings.**

**Model-flying areas are close to APP/DEP routes.**

**Attention must be paid to the floodlight masts (47' AGL) at the eastern edge of GA 3, which are located on the direct extension of RWY 09C/27C.**

**Power plant test bench S of RWY 27L: operation indicated by red flashing light, turbulence possible.**

**Restrictions for use of Aprons and TWYs**
**Aprons**

**APRON GA1: The MAX wingspan of up to 17m is in front of hangar 13. All other areas: MAX wingspan of up to 16m (except BTN hangar 11&12). All ACFT shall be guided by a follow-me vehicle.**

**APRON GA2: MAX wingspan of up to 15m.**

**For parking over 24 hr, use the main apron.**

**TWYs**

**TWY P: only for ACFT with a wingspan of up to 17m.**

## General Information

Location: ROTTERDAM NLD  
ICAO/IATA: EHRD / RTM  
Lat/Long: N51° 57.4', E004° 26.2'  
Elevation: -14 ft

Airport Use: Public  
Daylight Savings: Observed  
UTC Conversion: -1:00 = UTC  
Magnetic Variation: 1.0° E

Fuel Types: 100 Octane (LL), Jet A-1  
Repair Types: Minor Airframe, Minor Engine  
Customs: Yes  
Airport Type: IFR  
Landing Fee: Yes  
Control Tower: Yes  
Jet Start Unit: No  
LLWS Alert: No  
Beacon: No  
Traffic Pattern Altitude: 1000 ft (1014 ft AGL)

Sunrise: 0453 Z  
Sunset: 1833 Z

## Runway Information

Runway: 06  
Length x Width: 7215 ft x 148 ft  
Surface Type: asphalt  
TDZ-Elev: -14 ft  
Lighting: Edge, ALS, Centerline  
Displaced Threshold: 640 ft

Runway: 24  
Length x Width: 7215 ft x 148 ft  
Surface Type: asphalt  
TDZ-Elev: -15 ft  
Lighting: Edge, ALS, Centerline  
Displaced Threshold: 646 ft

## Communication Information

ATIS: 128.565  
Rotterdam Tower: 119.705 VHF-DF  
Rotterdam Tower: 118.205 VHF-DF  
Rotterdam Clearance Delivery: 122.180  
Schiphol Approach: 121.205

Rotterdam Approach: 122.990 VHF-DF

Schiphol Approach: 119.055

Rotterdam Approach: 131.155

Schiphol Arrival: 126.680

Schiphol Arrival: 118.405

Schiphol Departure: 119.055

Schiphol Departure: 121.205

Amsterdam Information: 124.300 Flight Info Service RCO

EHRD/RTM  
ROTTERDAM

+ JEPPESEN

ROTTERDAM, NETHERLANDS  
.Eff.2.Nov. .AIRPORT.BRIEFING.

27 OCT 23

10-1P

---

## 1. GENERAL

---

### 1.1. ATIS

ATIS 128.565

### 1.2. LOW VISIBILITY PROCEDURES

When the visibility falls below 1500m and the ceiling becomes equal to or below 300' cautionary measures are taken. Four low visibility phases are recognized:

- PHASE A - Lowest RVR below or equal 1500m and/or ceiling below or equal 300': No conditional clearances. Limited use of intersection take-offs.
- PHASE B - Lowest RVR below 550m and/or ceiling below 200'. RWY 06/24 will only be used in one direction. Taxiing only allowed under the guidance of a marshaller or with a Follow-me car. If no marshaller/car is available ATC may give permission to taxi if no other ACFT is moving or expected to be moving in the maneuvering area.
- PHASE C - Lowest RVR below 350m. RWY 06/24 will only be used in one direction. Taxiing only allowed under the guidance of a marshaller or with a Follow-me car. If no marshaller/car is available ATC may give permission to taxi if no other ACFT is moving or expected to be moving in the maneuvering area.
- PHASE D - Any RVR below 100m: The APT is below operational limits for arrivals and departures.

### 1.3. TAXI PROCEDURES

#### 1.3.1. GENERAL

Pilots are to use the minimum power necessary when maneuvering on the aprons and TWY system. Specific caution is advised during taxiing on aprons and TWY N and TWY Y (MAX speed 15 KT). It is of particular importance to:

- use minimum breakaway thrust/power setting when taxiing out from ACFT stands A, B, C and D to avoid jet blast hazard at adjacent ACFT stands;
- use idle power and do not use breakaway thrust when turning from TWY N and TWY Y towards ACFT stands D, to avoid jet blast hazard at adjacent aprons and service roads. Notify ATC if breakaway thrust is required at this location;
- avoid excessive jet blast towards other ACFT when maneuvering at J-apron.

A 180° turn is allowed for ACFT up to and including aerodrome reference code C only.

Ground movement operations of ACFT with wingspan exceeding 118' /36m are subject to the following mitigating restrictions:

TWYs V2, V3, V4 and V5 do not meet the required minimum outer main gear wheel clearance.

Use of ACFT stand lead-in lines is not available.

#### 1.3.2. USE OF APU

The use of Auxiliary Power Units (APU) and Ground Power Units (GPU) is strictly controlled by APT authority at all ACFT stands. Flight crew are urgently requested to limit use of the APU as much as possible to reduce environmental and noise burden.

The APU should be shut down as soon as practicable following Actual In-Block Time (AIBT), but not later than 5 minutes after parking brakes set, and not restarted until 5 minutes prior to Estimated Off-Block Time (EOBT) in order to start the engines.

EHRD/RTM  
ROTTERDAM

+ JEPPESEN

ROTTERDAM, NETHERLANDS  
.Eff.2.Nov. .AIRPORT.BRIEFING.

27 OCT 23

10-1P1

## 1. GENERAL

### Exceptions

- When it is necessary to use the APU to ensure safety on board, at flight crew decision. Report to APT authority (OPS) on channel 121.950 as soon as practicable.
- When the outside temperature is below 0°C or above +20°C (according to METAR) the APU should not be restarted until Actual Start Boarding Time (ASBT).
- When it is necessary to use an APU to diagnose and/or rectify ACFT faults (for technical/maintenance reasons). Prior permission required from the Airside Operations office, Tel: +31 (0)10 446 3450.
- At all ACFT stands other the Main Apron the following applies:
  - When no GPU is available at the ACFT stand the APU may be started from 30 minutes prior to EOBT and should be shut down not later than 20 minutes after parking brakes set.
  - When a GPU is available, limit use of the APU as much as possible (within the time bracket 30 minutes prior to EOBT and 20 minutes after parking brakes set).

### 1.3.3. GROUND HANDLING

Ground handling is mandatory for all commercial ACFT regardless of any slot confirmation. For security reasons ground handling is mandatory for all non-homebased General Aviation (GA). Visiting APT is only permitted with confirmed handling from GA ground handling companies.

### 1.4. OTHER INFORMATION

Caution during APCH to RWY 06 with southeastern (light, moderate or strong) wind, pilots should be aware and must be prepared for the possibility of building-induced turbulence, wind shear and wind gradient effects over the THR and TDZ of RWY 06. During these circumstances, while landing at RWY 06, pilots should be aware of suddenly increased turbulence.

Birds in vicinity of APT.

RWY 24 right-hand circuit.

High visibility clothing is mandatory on airside for ACFT crew and personnel.

ACFT of APT reference CAT D and E require special permission from APT authority regardless of any slot confirmation. Permission has to be requested 24 hours prior to operations via operations@rtha.com. Not applicable for unplanned traffic; the APT may be filed as alternate for CAT D and E ACFT.

EHRD/RTM  
ROTTERDAM

+ JEPPESEN

ROTTERDAM, NETHERLANDS  
.Eff.2.Nov. .AIRPORT.BRIEFING.

27 OCT 23

10-1P2

---

## 2. ARRIVAL

---

### 2.1. LOST COMMUNICATIONS

#### 2.1.1. GENERAL

- Select transponder code 7600.
- If possible call Amsterdam ACC Supervisor on telephone number: +31 (0)20 406 3999.  
**Note:** Use telephone connection to mitigate COM failure only. All telephone calls will be automatically recorded.
- If telephone connection is disconnected prematurely (before read-back), revert to general communication failure procedure (see Emergency pages / State Rules and Procedures - Europe / Netherlands).

In addition, for arriving flights, communication failure procedures shown below apply.

#### 2.1.2. ARRIVAL CLEARANCE NOT RECEIVED

Proceed according to the current flight plan route and STAR, to the appropriate holding fix: MASOS or DOFMU, if capable of RNAV 1.

Non-RNAV 1 traffic proceed to RTM.

Maintain the last cleared and acknowledged flight level or altitude.

Flights via INKET or PAM with last cleared and acknowledged flight level or altitude below FL050 shall avoid the segment KAKKO - DOFMU and proceed direct to DOFMU.

After arrival over the holding fix, intercept the holding pattern.

For MASOS commence descent to FL050 at or as near as possible to ETO over holding fix.

For DOFMU, KAKKO or RTM commence descent to 3000' AMSL at or as near as possible to the ETO over the holding fix.

After reaching FL050 or 3000' AMSL leave the holding fix and carry out an instrument approach procedure to the RWY in use. Flights via RTM can only use the VOR approach.

#### 2.1.3. ARRIVAL CLEARANCE RECEIVED ON OR OUTSIDE STANDARD ARRIVAL ROUTE AND PRIOR TO THE IAF

Proceed direct to the appropriate holding fix:

- MASOS or DOFMU, if capable RNAV 1;
- RTM, only if not capable RNAV 1 or if previously instructed by ATC;
- KAKKO, only if previously instructed by ATC.

Maintain the last cleared and acknowledged flight level or altitude.

After arrival over the holding fix intercept the holding pattern.

For MASOS commence descent to FL050 at or as near as possible to the ETO over the holding fix.

For DOFMU, KAKKO or RTM commence descent to 3000' AMSL at or as near as possible to the ETO over the holding fix.

After reaching FL050 or 3000' AMSL leave the holding fix and carry out an instrument approach procedure to the received and acknowledged RWY. Flights via RTM can only use the VOR approach.

#### 2.1.4. INSTRUMENT APPROACH PROCEDURE

- After leaving the IAF carry out an instrument approach procedure to the received and acknowledged RWY or the RWY-in-use as is included in the ATIS broadcast.
- Do not use the ILS Y approach RWY 24 unless instructed by ATC.
- Do not use the VOR approach unless instructed by ATC or when unable RNAV 1.
- In case the COM failure occurs after a direct was received to a WPT beyond the IAF, pick up the expected approach procedure from there.
- For approach RWY 24 pass KAKKO at 3000' AMSL.

EHRD/RTM  
ROTTERDAM

+ JEPPESEN

ROTTERDAM, NETHERLANDS  
.Eff.2.Nov. .AIRPORT.BRIEFING.

27 OCT 23

10-1P3

---

## 2. ARRIVAL

---

### 2.1.5. MISSED APPROACH PROCEDURE IN CASE OF COMMUNICATION FAILURE

#### 2.1.5.1. MISSED APPROACH PROCEDURE DURING INSTRUMENT APPROACH

The missed approach in case of communication failure is equal to the standard missed approach procedure as described on the relevant instrument approach chart.

#### 2.1.5.2. MISSED APPROACH DURING VISUAL APPROACH

Turn to the intended landing RWY, intercept RWY track (MAG) of that RWY while:  
When visual:

- Remain visual and execute another circuit for that RWY; or

When unable to remain visual:

- Climb to 2000' AMSL.
- Execute the missed approach procedure as depicted on relevant approach chart.

#### 2.1.5.3. MISSED APPROACH WHILE CIRCLING TO LAND (CONTRARY TO ICAO DOC. 8168, PANS-OPS)

- Start climbing and complete the turn to the intended landing RWY.
- Execute the missed approach procedure as depicted on the relevant approach chart of the intended landing RWY.

---

## 3. DEPARTURE

---

### 3.1. START-UP PROCEDURE

Pilots shall request permission from ATC before starting engines and when applicable report a cross-bleed start. The request for start-up shall be made to ROTTERDAM Delivery after all preparations for departure have been made (doors closed etc.) and shall include:

- ACFT identification;
- position;
- ATIS information;
- flight rules;
- destination;
- request start-up.

If unable RNAV, inform ATC prior to start-up.

Permission for start-up will be issued either immediately or at a specified time. Since ATC planning of outbound traffic (involving en route clearance and coordination with adjacent ACCs) is based on the start-up time, the pilot shall be able to comply with start-up and taxi permission. Any delay in start-up or taxiing shall be reported to ATC immediately. In case of indefinite delay the probable duration of delay will be given.

Apart from the ATIS broadcast no MET information will be provided to departing ACFT except RVR.

**Note:** Performing a crossbleed start at ACFT stand or apron is not permitted. Towing or taxi-out on one engine to an assigned location for crossbleed start is necessary.

### 3.2. CLEARANCE DELIVERY

Enroute clearance will be issued after start-up clearance has been given by ROTTERDAM Delivery.



EHRD/RTM  
ROTTERDAM

+ JEPPESEN

ROTTERDAM, NETHERLANDS  
.Eff.2.Nov. .AIRPORT.BRIEFING.

27 OCT 23

10-1P4

---

## 3. DEPARTURE

---

### 3.3. LOST COMMUNICATIONS

- Select transponder code 7600.
- If possible call Amsterdam ACC Supervisor on telephone number:  
+31 (0)20 406 3999.

**Note:** Use telephone connection to mitigate COM failure only. All telephone calls will be automatically recorded.

- If telephone connection is disconnected prematurely (before read-back), revert to general communication failure procedure (see Emergency pages / State Rules and Procedures - Europe / Netherlands).

# EHRD/RTM ROTTERDAM

15 DEC 23 (10-1R) .Eff.28.Dec.

# ROTTERDAM, NETHERLANDS .RADAR.MINIMUM.ALTITUDES.

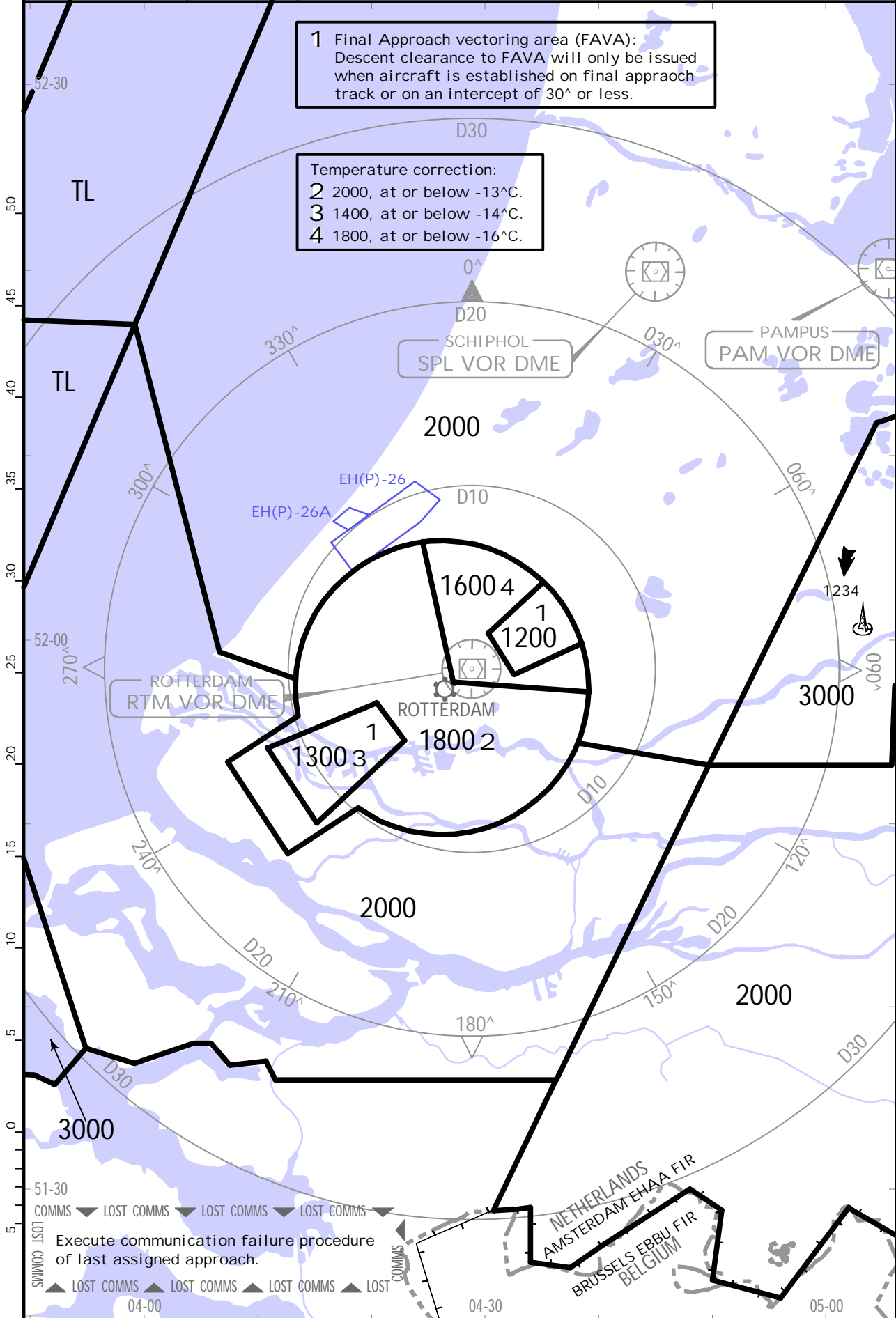
\*ROTTERDAM  
Approach (R)  
122.990

Apt Elev  
-14  
(BELOW  
SEA LEVEL)

Alt Set: hPa Trans level: By ATC Trans alt: 3000  
1. Chart only to be used for cross-checking of altitudes while under  
RADAR control.  
2. Aeronautical data and minimum vectoring altitudes only within  
relevant CTR and TMA.

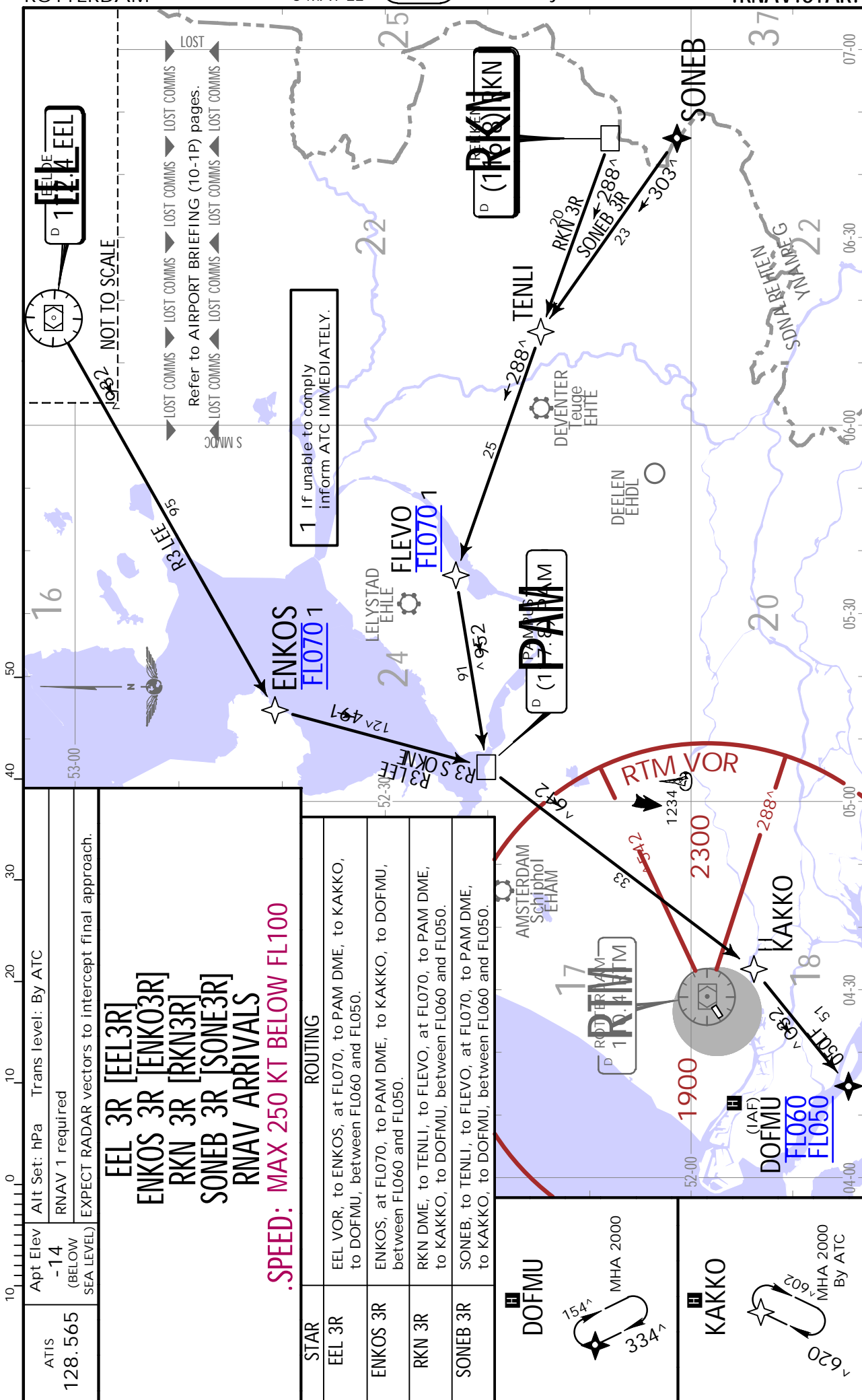
1 Final Approach vectoring area (FAVA):  
Descent clearance to FAVA will only be issued  
when aircraft is established on final approach  
track or on an intercept of 30° or less.

Temperature correction:  
2 2000, at or below -13°C.  
3 1400, at or below -14°C.  
4 1800, at or below -16°C.



# EHRD/RTM

## ROTTERDAM



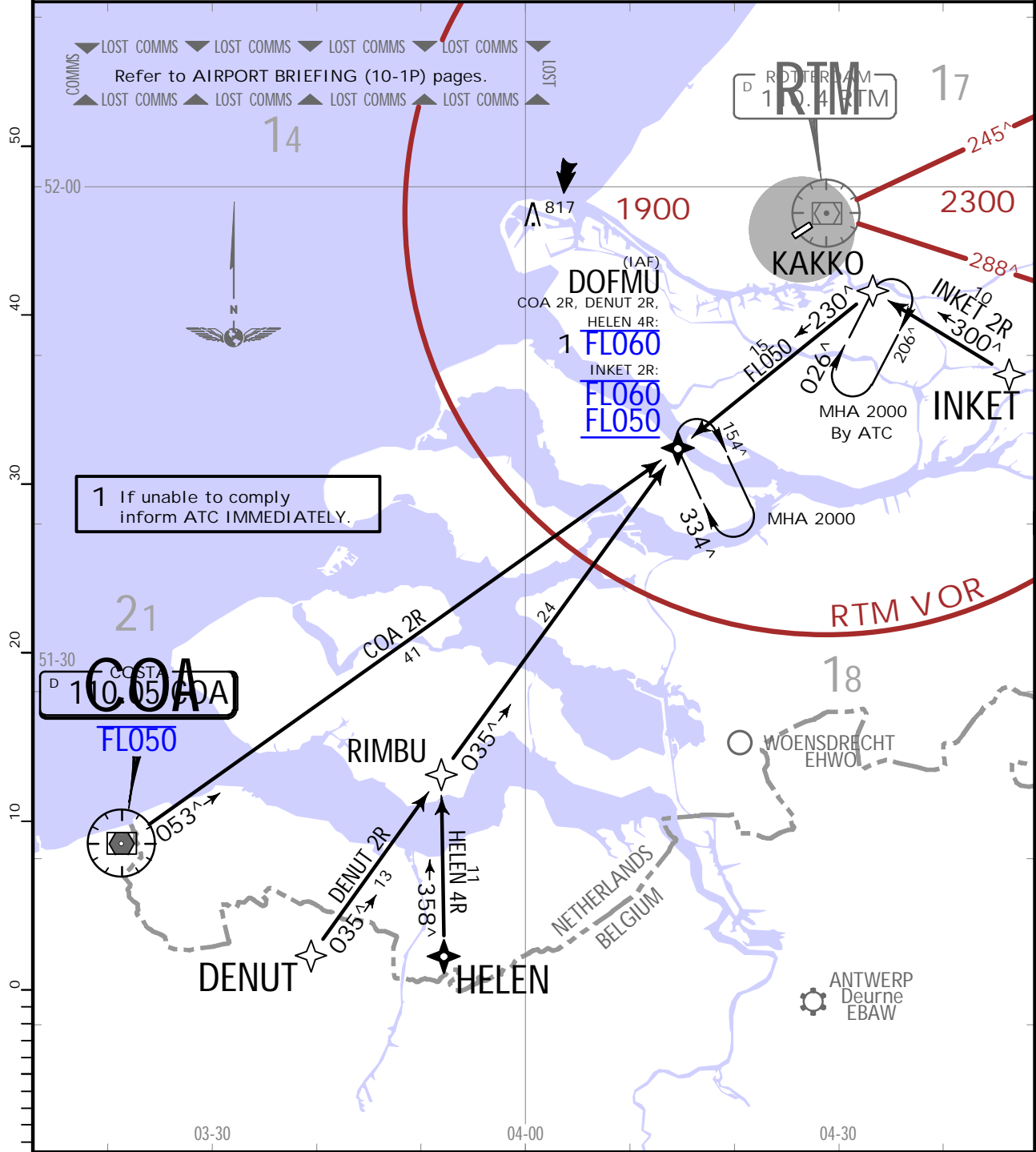
# EHRD/RTM ROTTERDAM

**JEPPESSEN** ROTTERDAM, NETHERLANDS  
6 MAY 22 (10-2A). Eff. 19. May. .RNAV.STAR.

ATIS 128.565	Apt Elev -14 (BELOW SEA LEVEL)	Alt Set: hPa Trans level: By ATC
		RNAV 1 required
EXPECT RADAR vectors to intercept final approach.		

COA 2R [COA2R]  
DENUT 2R [DENU2R]  
HELEN 4R [HELE4R]  
INKET 2R [INKE2R]  
RNAV ARRIVALS

**.SPEED: MAX 250 KT BELOW FL100**



STAR	ROUTING
COA 2R	COA VOR, at or below FL050, to DOFMU, at or below FL060.
DENUT 2R	DENUT, to RIMBU, to DOFMU, at or below FL060.
HELEN 4R	HELEN, to RIMBU, to DOFMU, at or below FL060.
INKET 2R	INKET, to KAKKO, to DOFMU, between FL060 and FL050.

**EHRD/RTM**  
ROTTERDAM

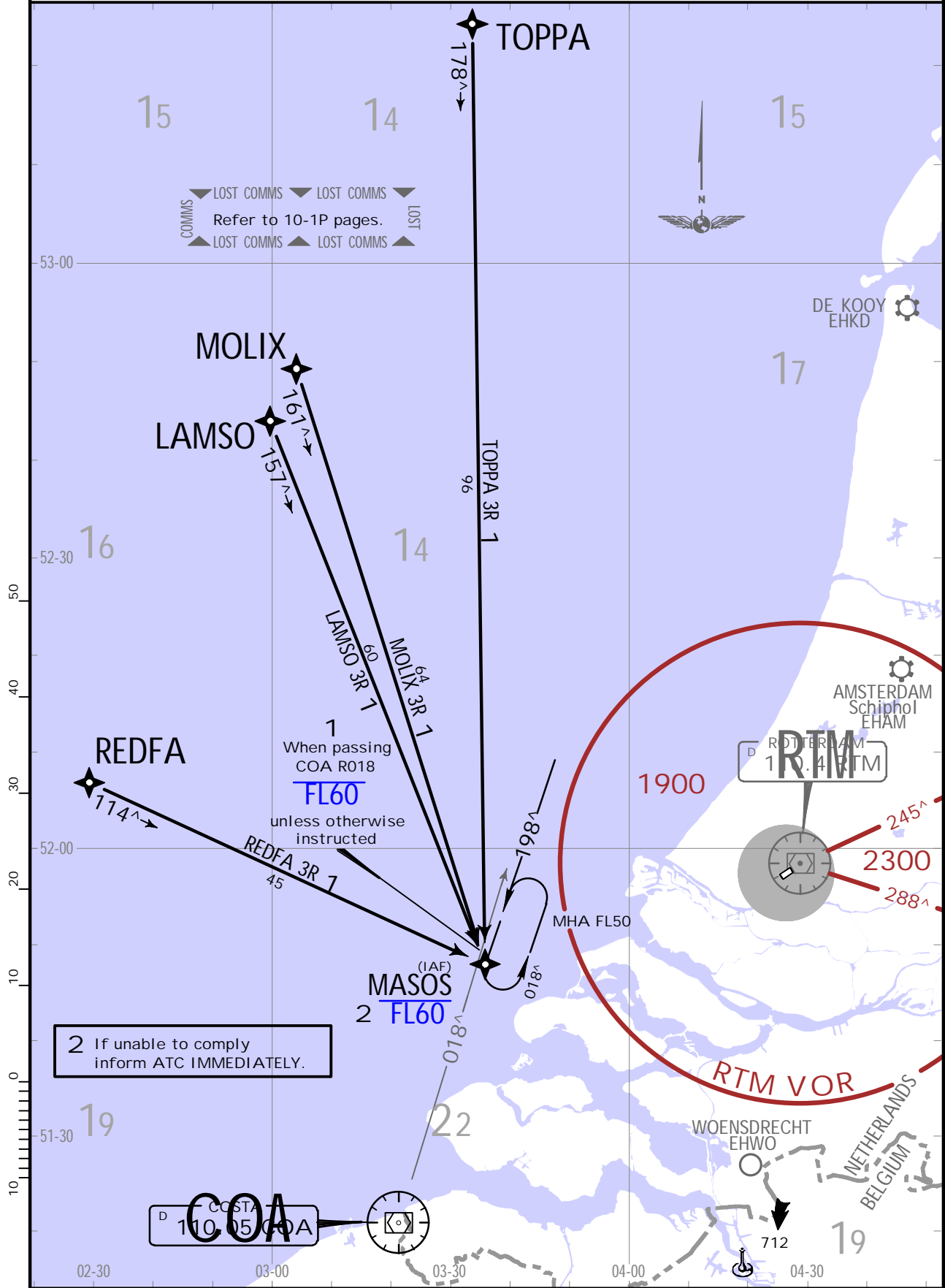
**JEPESEN** ROTTERDAM, NETHERLANDS  
30 JUL 21 (10-2B) .Eff.12.Aug.

**.RNAV.STAR.**

ATIS 128.565	Apt Elev -14	Alt Set: hPa Trans level: By ATC 1. RNAV 1 required. 2. EXPECT RADAR vectors to intercept final approach.
-----------------	-----------------	---

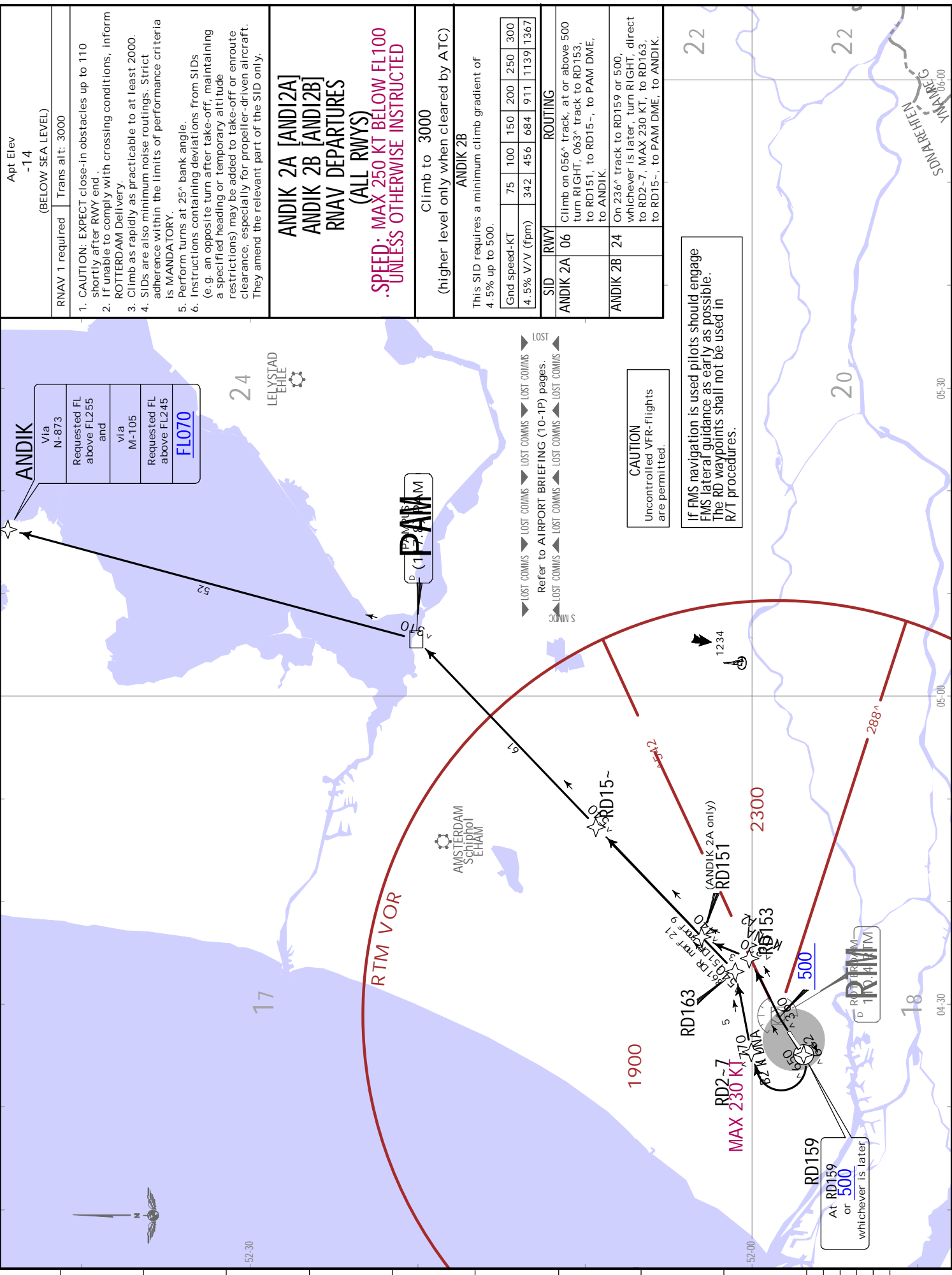
**LAMSO 3R [LAMS3R], MOLIX 3R [MOLI3R]  
 REDFA 3R [REDF3R], TOPPA 3R [TOPP3R]  
 RNAV ARRIVALS**

**.SPEED: MAX 250 KT BELOW FL100**



**ROTTERDAM, NETHERLANDS**  
**.RNAV.SID.**

**EHRD/RTM**  
**ROTTERDAM**  
 6 MAY 22 (10-3) .Eff. 19 May.



<b>ANDIK</b>
Via N-873
Requested FL above FL255 and
via M-105
Requested FL above FL245
<b>FL070</b>

Apt Elev -14 (BELOW SEA LEVEL)

RNAV 1 required | Trans alt: 3000

1. CAUTION: EXPECT close-in obstacles up to 110 shortly after RWY end.
2. If unable to comply with crossing conditions, inform ROTTERDAM Delivery.
3. Climb as rapidly as practicable to at least 2000.
4. SIDs are also minimum noise routings. Strict adherence within the limits of performance criteria is MANDATORY.
5. Perform turns at 25° bank angle.
6. Instructions containing deviations from SIDs (e.g. an opposite turn after take-off, maintaining a specified heading or temporary altitude restrictions) may be added to take-off or enroute clearance, especially for propeller-driven aircraft. They amend the relevant part of the SID only.

**ANDIK 2A [ANDI2A]**  
**ANDIK 2B [ANDI2B]**  
**RNAV DEPARTURES**  
**(ALL RWYS)**  
**.SPEED: MAX 250 KT BELOW FL100**  
**.UNLESS OTHERWISE INSTRUCTED**

Climb to 3000 (higher level only when cleared by ATC)

**ANDIK 2B**

This SID requires a minimum climb gradient of 4.5% up to 500.

Gnd speed-KT	75	100	150	200	250	300
4.5% V/V (fpm)	342	456	684	911	1139	1367

SID	IRWY	ROUTING
<b>ANDIK 2A</b>	<b>06</b>	Climb on 056° track, at or above 500 turn RIGHT, 063° track to RD153, to RD151, to RD15~, to PAM DME, to ANDIK.
<b>ANDIK 2B</b>	<b>24</b>	On 236° track to RD159 or 500, whichever is later, turn RIGHT, direct to RD2-7, MAX 230 KT, to RD163, to RD15~, to PAM DME, to ANDIK.

**CAUTION**  
 Uncontrolled VFR-Flights are permitted.

**CAUTION**  
 IF FMS navigation is used pilots should engage FMS lateral guidance as early as possible. The RD waypoints shall not be used in R/T procedures.

LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST  
 Refer to AIRPORT BRIEFING (10-1P) pages.  
 LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST

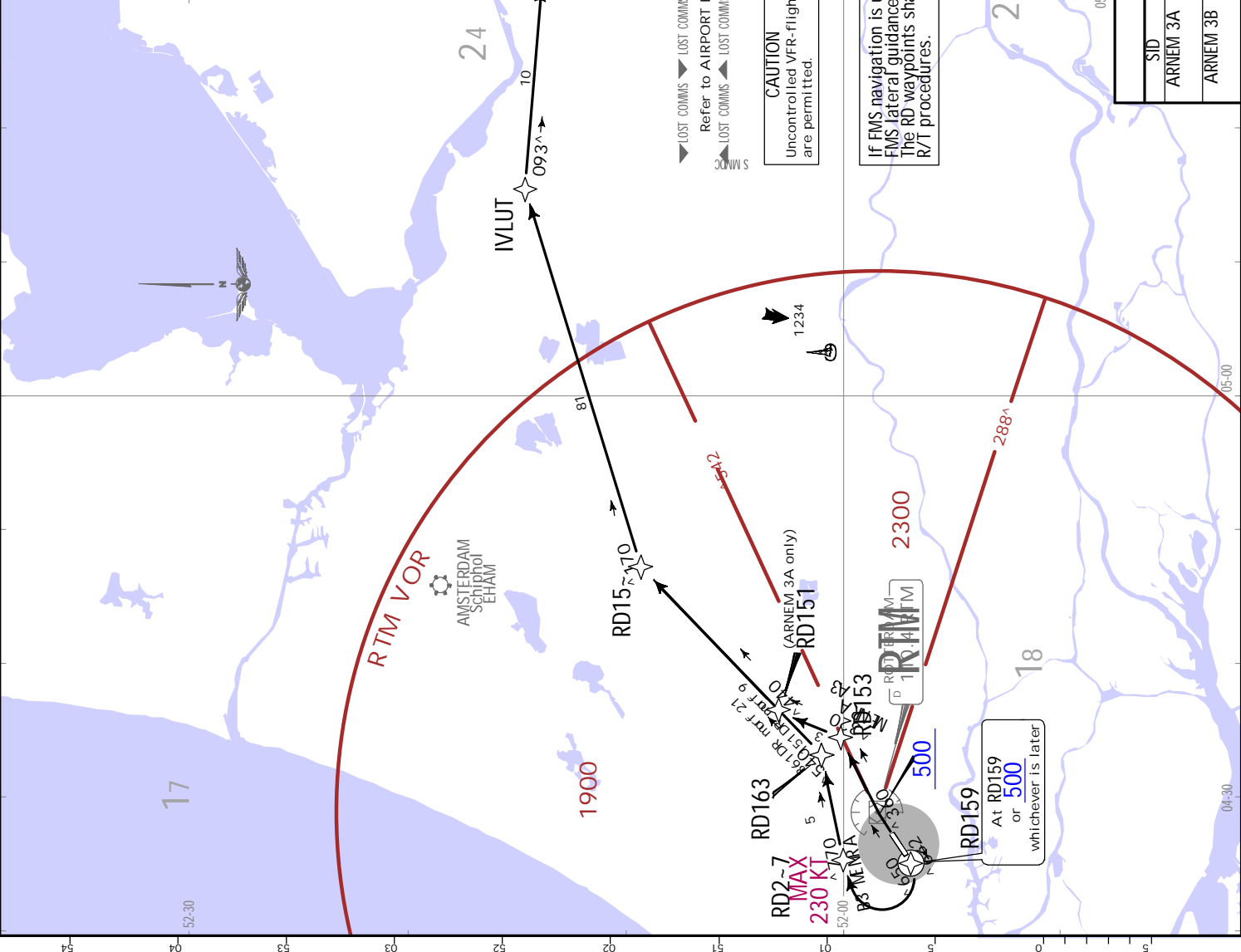
RNAV 1 required Trans alt: 3000

Apt Elev -14 (BELOW SEA LEVEL)

1. CAUTION: EXPECT close-in obstacles up to 110 shortly after RWY end.  
2. If unable to comply with crossing conditions, inform ROTTERDAM Delivery.  
3. Climb as rapidly as practicable to at least 2000. 4. SIDs are also minimum noise routings. Strict adherence within the limits of performance criteria is MANDATORY. 5. Perform turns at 25° bank angle. 6. Instructions containing deviations from SIDs (e.g. an opposite turn after take-off, maintaining a specified heading or temporary altitude restrictions) may be added to take-off or enroute clearance, especially for propeller-driven aircraft. They amend the relevant part of the SID only.

**ARNEM 3A [ARNE3A], ARNEM 3B [ARNE3B]**  
**RNAV DEPARTURES**  
**(ALL RWYS)**

**SPEED: MAX 250 KT BELOW FL100**  
**UNLESS OTHERWISE INSTRUCTED**



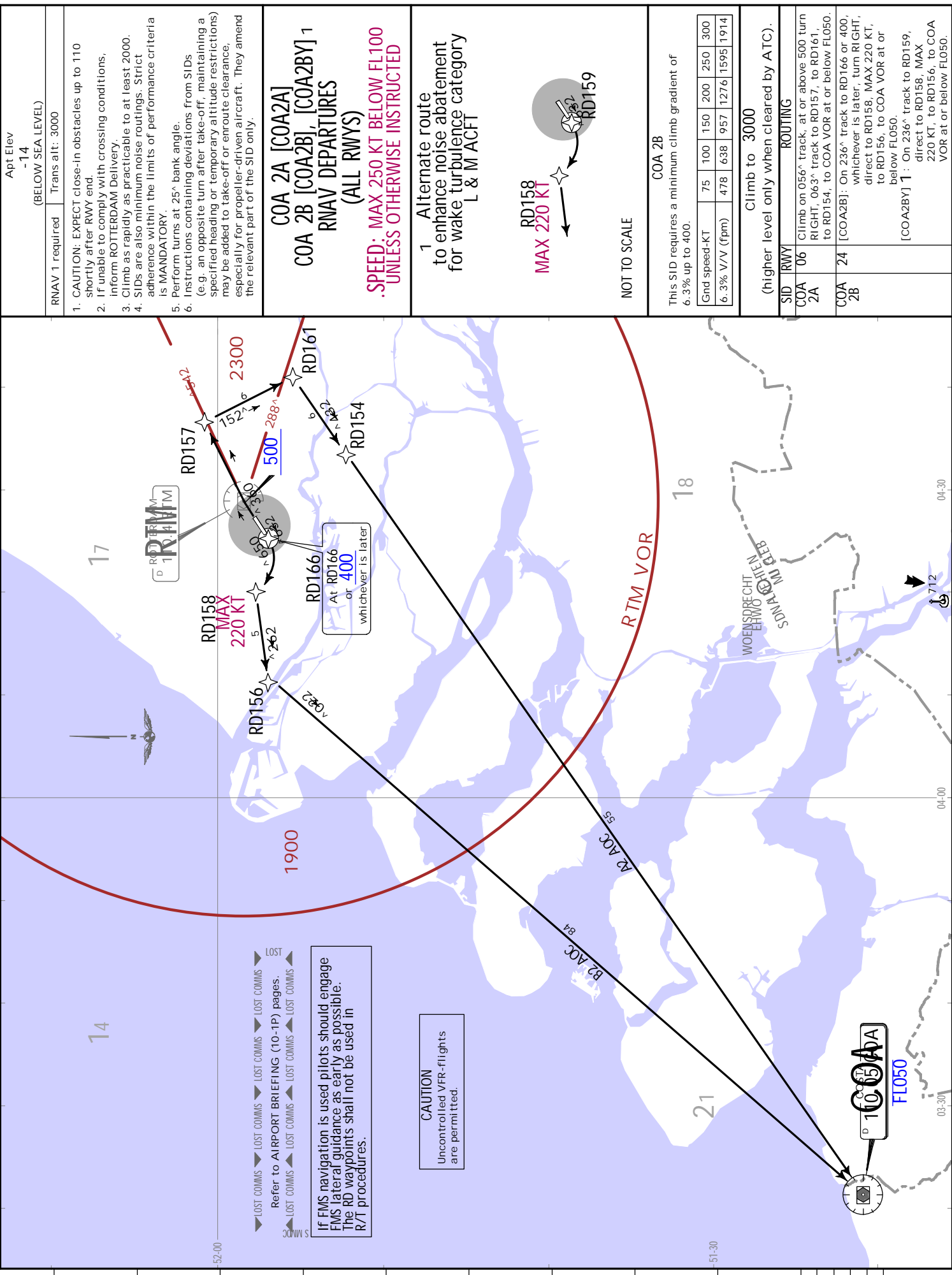
Climb to 3000 (higher level only when cleared by ATC)	
SID	RWY
ARNEM 3A	06
ARNEM 3B	24

**ROUTING**

Climb on 056° track, at or above 500 turn RIGHT, 063° track to RD151, to RD15-, to IMLUT, to NYKER, to ARNEM.  
On 236° track to RD159 or 500, whichever is later, turn RIGHT, direct to RD2-7, MAX 230 KT, to RD163, to RD15-, to IMLUT, to NYKER, to ARNEM.

# ROTTERDAM, NETHERLANDS .RNAV.SID.

**EHRD/RTM**  
ROTTERDAM  
6 MAY 22 (10-3B) .Eff. 19 May.



1. CAUTION: EXPECT close-in obstacles up to 110 shortly after RWY end
2. If unable to comply with crossing conditions, inform ROTTERDAM Delivery.
3. Climb as rapidly as practicable to at least 2000.
4. SIDs are also minimum noise routings. Strict adherence within the limits of performance criteria is MANDATORY.
5. Perform turns at 25° bank angle.
6. Instructions containing deviations from SIDs (e.g. an opposite turn after take-off, maintaining a specified heading or temporary altitude restrictions) may be added to take-off or enroute clearance, especially for propeller-driven aircraft. They amend the relevant part of the SID only.

**COA 2A [COA2A]**  
**COA 2B [COA2B], [COA2BY] 1**  
**RNAV DEPARTURES**  
**(ALL RWYS)**  
**.SPEED: MAX 250 KT BELOW FL100**  
**.UNLESS OTHERWISE INSTRUCTED**

<sup>1</sup> Alternate route to enhance noise abatement for wake turbulence category L & M ACFT

RD158  
MAX 220 KT

RD159

NOT TO SCALE

COA 2B

This SID requires a minimum climb gradient of 6.3% up to 400.

Gnd speed-KT	75	100	150	200	250	300
6.3% V/V (fpm)	478	638	957	1276	1595	1914

Climb to 3000

(higher level only when cleared by ATC).

SID	RWY	ROUTING
COA 2A	06	Climb on 056° track, at or above 500 turn RIGHT, 063° track to RD157, to RD161, to RD154, to COA VOR at or below FLO50.
COA 2B	24	[COA2B]: On 236° track to RD166 or 400, whichever is later, turn RIGHT, direct to RD158, MAX 220 KT, to RD156, to COA VOR at or below FLO50. [COA2BY] 1: On 236° track to RD159, direct to RD158, MAX 220 KT, to RD156, to COA VOR at or below FLO50.



# EHRD/RTM ROTTERDAM

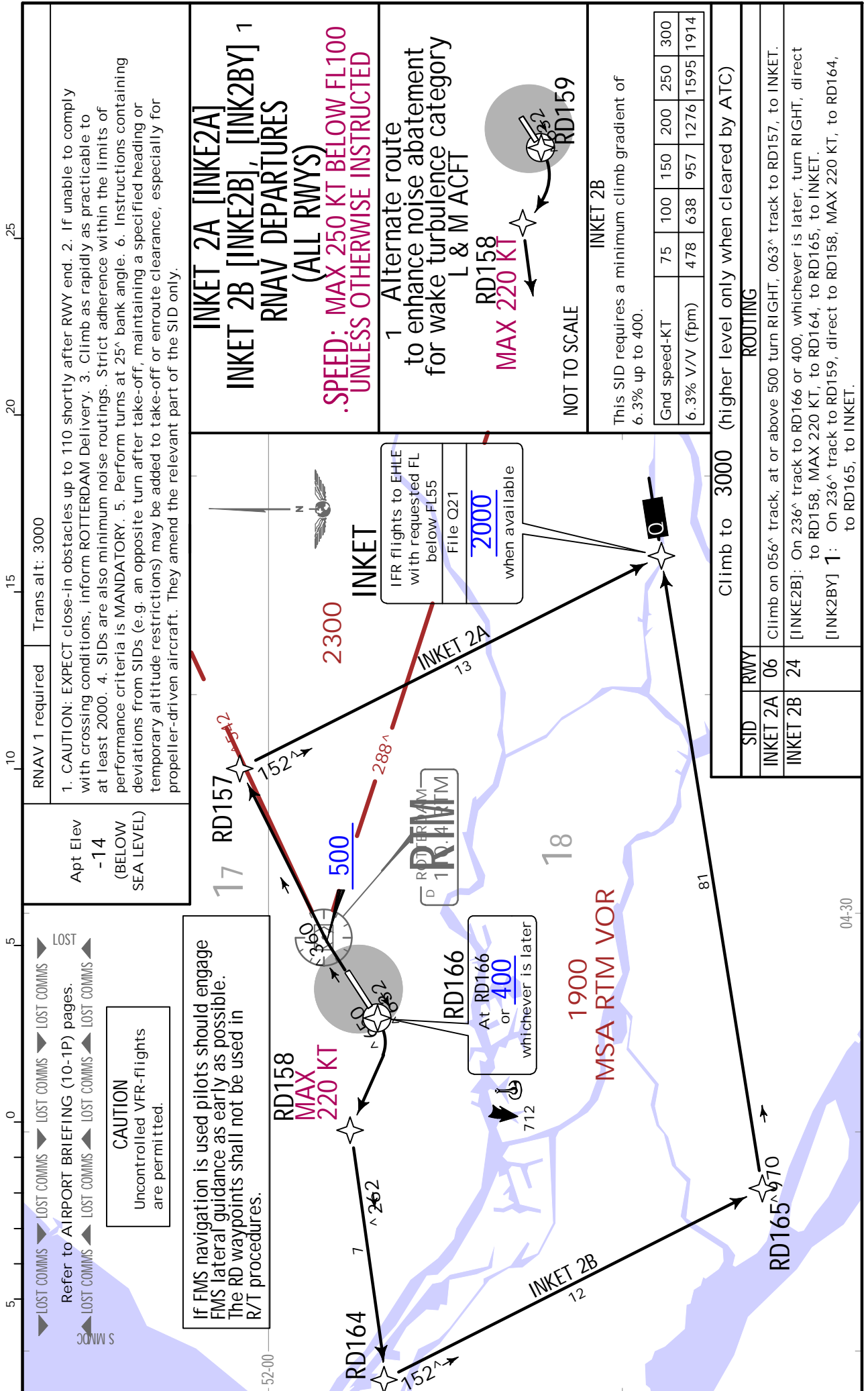
# JEPPesen ROTTERDAM, NETHERLANDS Eff. 19. May. .RNAV.SID.

6 MAY 22

10-3C

Eff. 19. May.

.RNAV.SID.



# ROTTERDAM, NETHERLANDS .RNAV.SID.

Apt Elev -14

Trans alt: 3000

- RNAV 1 required.
- CAUTION: EXPECT close-in obstacles up to 110 shortly after RWY end.
- If unable to comply with crossing conditions, inform ROTTERDAM Delivery.
- Climb as rapidly as practicable to at least 2000.
- SIDs are also minimum noise routings. Strict adherence within the limits of performance criteria is MANDATORY.
- Perform turns at 25° bank angle.
- Instructions containing deviations from SIDs (e.g. an opposite turn after take-off, maintaining a specified heading or temporary altitude restrictions) may be added to take-off or enroute clearance, especially for propeller-driven aircraft. They amend the relevant part of the SID only.

**LUNIX 2A [LUNIX2A]  
LUNIX 2B [LUNIX2B]  
RNAV DEPARTURES  
(ALL RWYS)  
SPEED: MAX 250 KT BELOW FL100  
UNLESS OTHERWISE INSTRUCTED**

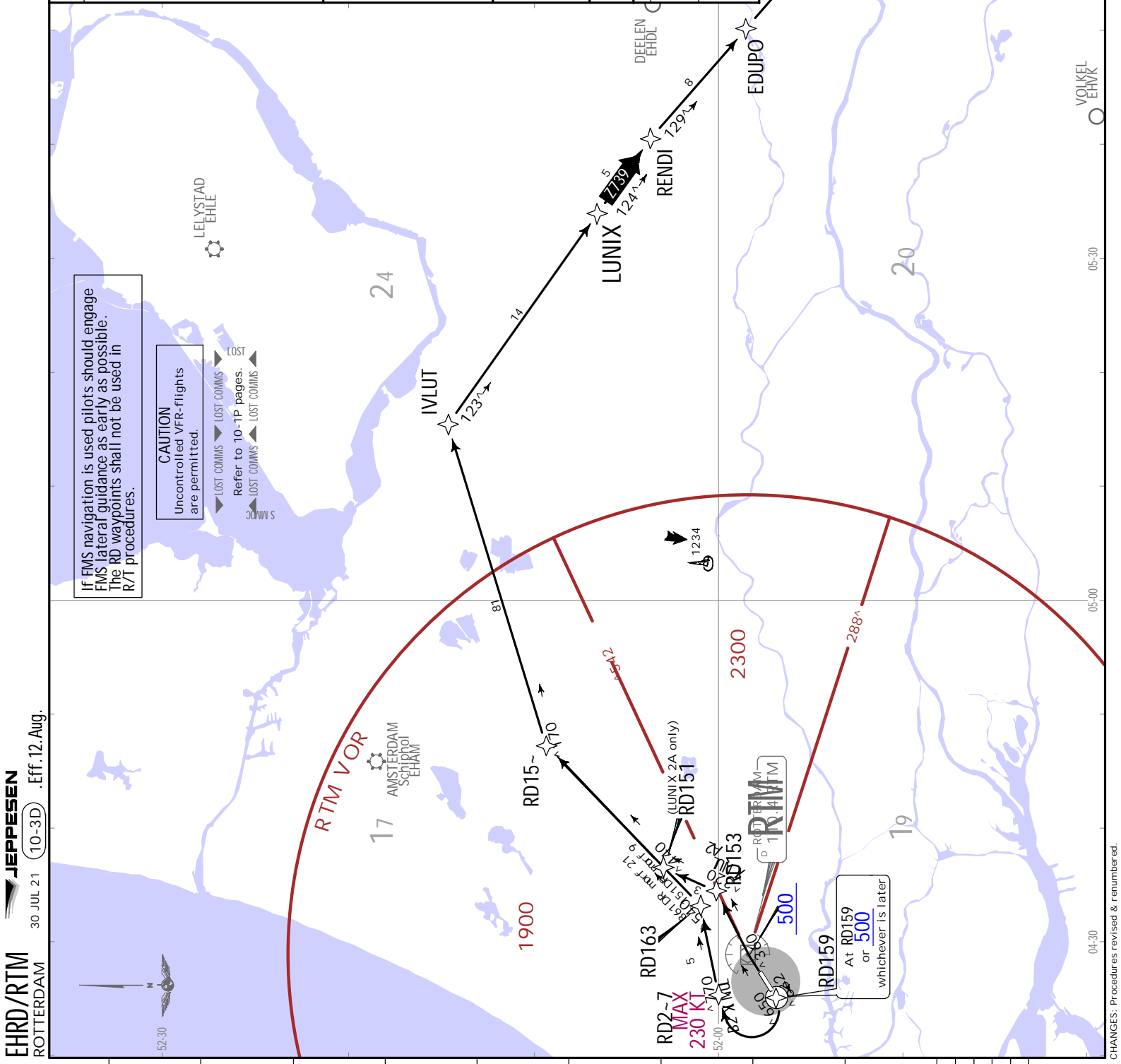
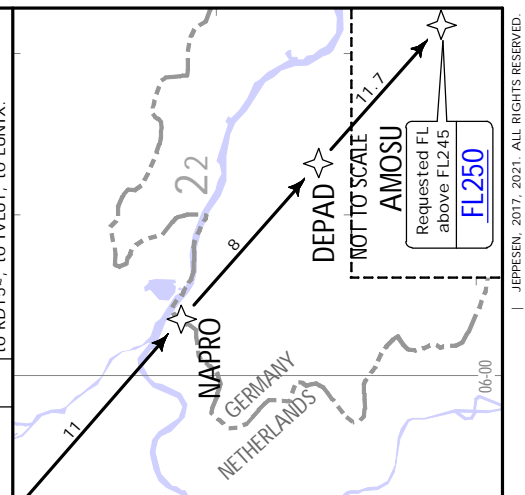
LUNIX 2B

This SID requires a minimum climb gradient of 4.5% up to 500.

Grnd speed-KT	75	100	150	200	250	300
4.5% V/V (fpm)	342	456	684	911	1139	1367

Climb to 3000  
(higher level only when cleared by ATC)

SID	RWY	ROUTING
LUNIX 2A	06	Climb on 056° track, at or above 500 turn RIGHT, 063° track to RD153, to RD151, to RD15-, to IVLUT, to LUNIX.
LUNIX 2B	24	On 236° track to RD159 or 500, whichever is later, turn RIGHT, direct to RD2-7, MAX 230 KT, to RD163, to RD15-, to IVLUT, to LUNIX.



EHRD/RTM ROTTERDAM

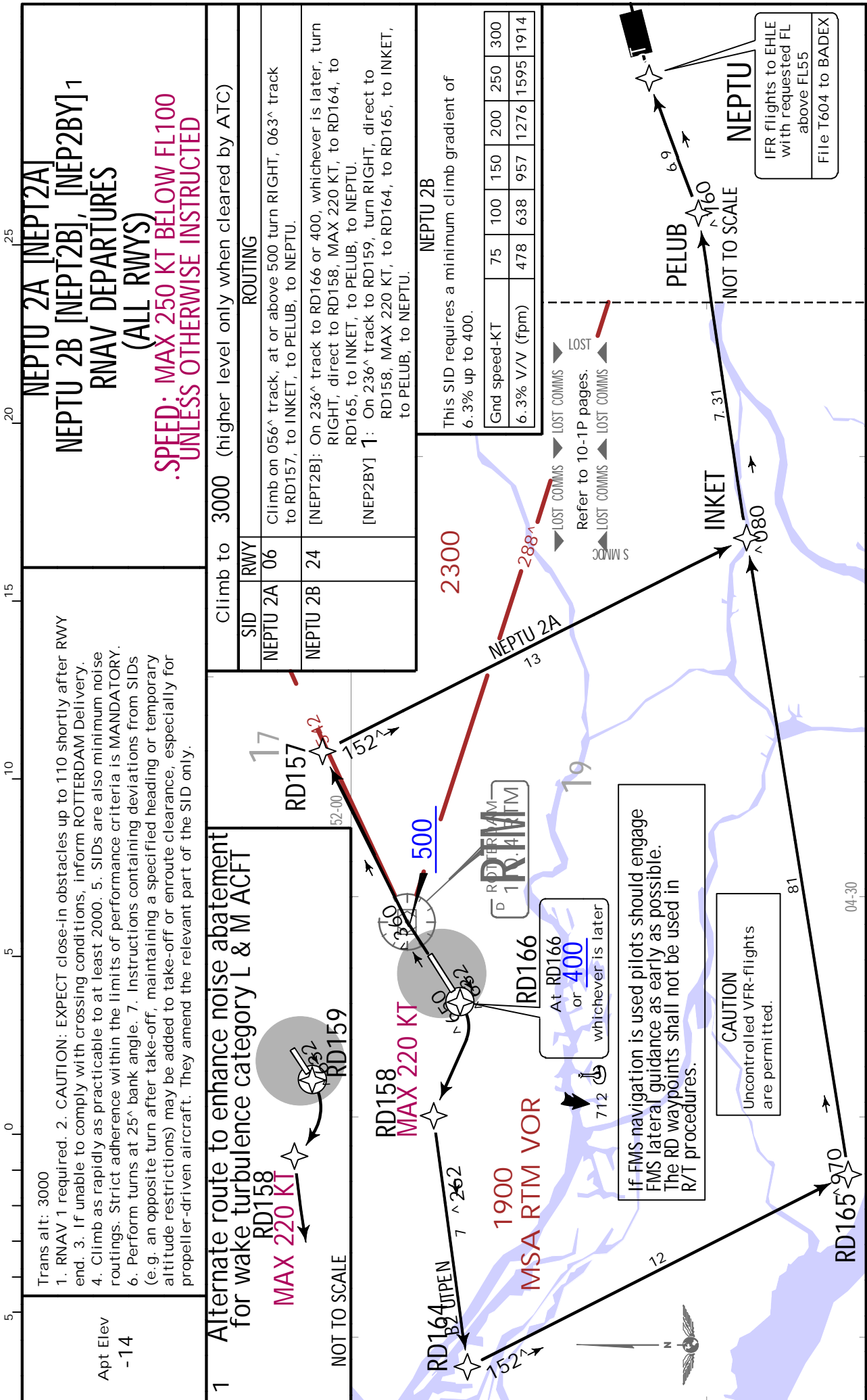
JEPESEN

30 JUL 21 (10-3D) .Eff. 12. Aug.

**EHRD/RTM**  
ROTTERDAM

**JEPPESSEN ROTTERDAM, NETHERLANDS**  
30 JUL 21 (10-3E) .Eff.12.Aug.

**.RNAV.SID.**



# EHRD/RTM ROTTERDAM

**JEPPESSEN ROTTERDAM, NETHERLANDS**  
30 JUL 21 (10-3E1) .Eff.12.Aug. .RNAV.SID.

Trans alt: 3000  
 1. RNAV 1 required. 2. CAUTION: EXPECT close-in obstacles up to 110 shortly after RWY end.  
 3. If unable to comply with crossing conditions, inform ROTTERDAM Delivery. 4. Climb as rapidly as practicable to at least 2000. 5. SIDs are also minimum noise routings. Strict adherence within the limits of performance criteria is MANDATORY. 6. Perform turns at 25° bank angle. 7. Instructions containing deviations from SIDs (e.g. an opposite turn after take-off, maintaining a specified heading or temporary altitude restrictions) may be added to take-off or enroute clearance, especially for propeller-driven aircraft. They amend the relevant part of the SID only.

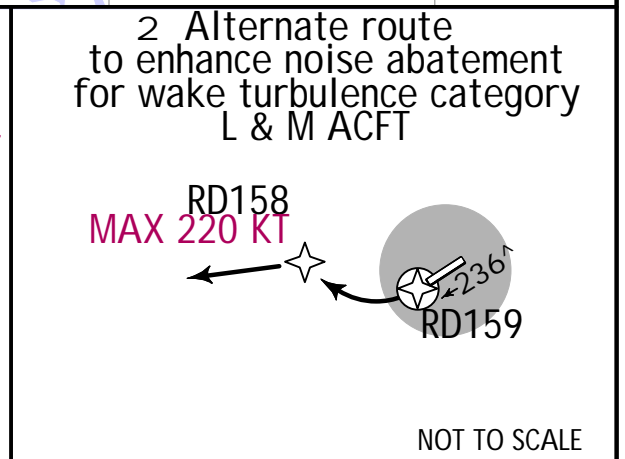
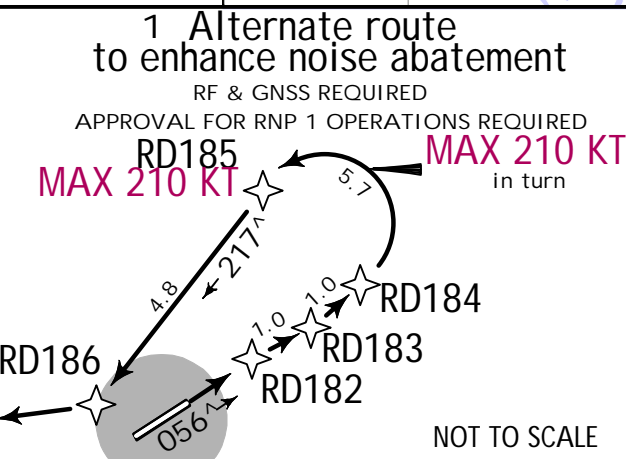
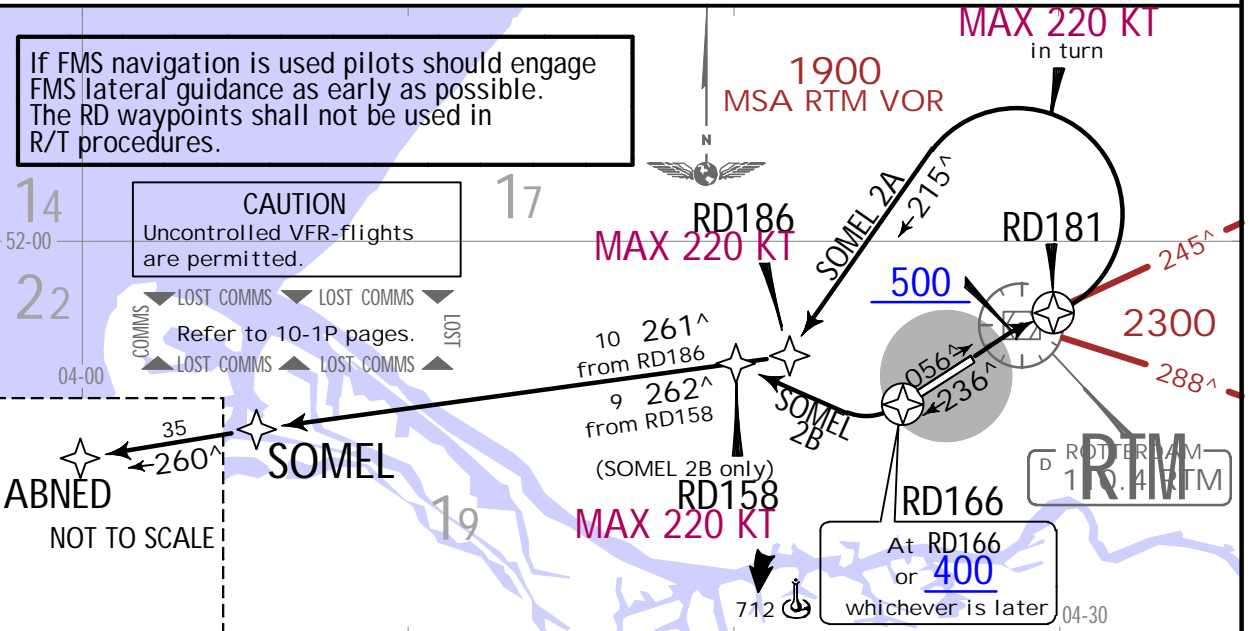
Apt Elev  
-14

## SOMEL 2A [SOME2A], [SOM2AY] 1 SOMEL 2B [SOME2B], [SOM2BY] 2 RNAV DEPARTURES (ALL RWYS)

**.SPEED: MAX 250 KT BELOW FL100 UNLESS OTHERWISE INSTRUCTED**

If FMS navigation is used pilots should engage FMS lateral guidance as early as possible. The RD waypoints shall not be used in R/T procedures.

**CAUTION**  
Uncontrolled VFR-flights are permitted.  
Refer to 10-1P pages.



These SIDs require minimum climb gradients of  
 SOMEL 2A [SOME2A]: 8.0% up to 500.  
 [SOM2AY]: 7.5% up to 400.  
 SOMEL 2B: 6.3% up to 400.

Gnd speed-KT	75	100	150	200	250	300
6.3% V/V (fpm)	478	638	957	1276	1595	1914
7.5% V/V (fpm)	570	760	1139	1519	1899	2279
8.0% V/V (fpm)	608	810	1215	1620	2025	2430

Climb to **3000** (higher level only when cleared by ATC)

SID	RWY	ROUTING
SOMEL 2A	06	[SOME2A]: Climb on 056° track, at or above 500 turn RIGHT direct to RD181, 215° track to RD186, MAX 220 KT, to SOMEL, to ABNED. [SOM2AY] 1: On 056° track to RD182, turn RIGHT to RD183, turn LEFT to RD184, turn LEFT to RD185, MAX 210 KT, to RD186, to SOMEL, to ABNED.
SOMEL 2B	24	[SOME2B]: On 236° track to RD166 or 400, whichever is later, turn RIGHT, direct to RD158, MAX 220 KT, to SOMEL, to ABNED. [SOM2BY] 2: On 236° track to RD159, turn RIGHT, direct to RD158, MAX 220 KT, to SOMEL, to ABNED.

Apt Elev -14

Trans alt: 3000

- RNAV 1 required.
- CAUTION: EXPECT close-in obstacles up to 110 shortly after RWY end.
- If unable to comply with crossing conditions, inform ROTTERDAM Delivery.
- Climb as rapidly as practicable to at least 2000.
- SIDs are also minimum noise routings. Strict adherence within the limits of performance criteria is MANDATORY.
- Perform turns at 25° bank angle.
- Instructions containing deviations from SIDs (e.g. an opposite turn after take-off, maintaining a specified heading or temporary altitude restrictions) may be added to take-off or enroute clearance, especially for propeller-driven aircraft. They amend the relevant part of the SID only.

**TULIP 4A [TUL4A], [TUL4AY] 1**  
**TULIP 3B [TUL3B], [TUL3BY] 2**  
**RNAV DEPARTURES**  
**(ALL RWYS)**  
**SPEED: MAX 250 KT BELOW FL100**  
**UNLESS OTHERWISE INSTRUCTED**

These SIDs require minimum climb gradients of

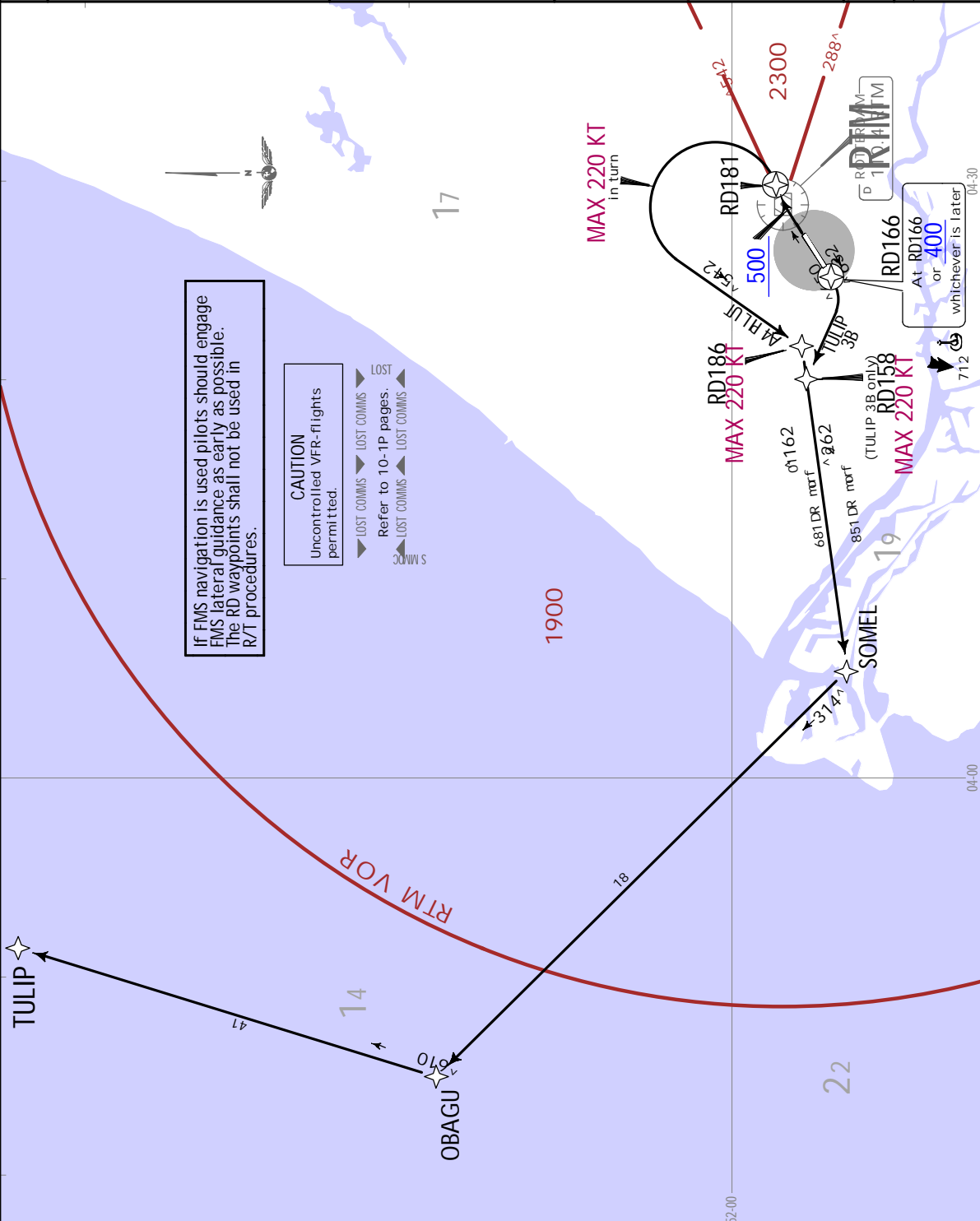
**TULIP 4A [TUL4A]:** 8.0% up to 500.  
[TUL4AY]: 7.5% up to 400.

**TULIP 3B:** 6.3% up to 400.

Grnd speed-KT	75	100	150	200	250	300
6.3% V/V (fpm)	478	638	957	1276	1595	1914
7.5% V/V (fpm)	570	760	1139	1519	1899	2279
8.0% V/V (fpm)	608	810	1215	1620	2025	2430

Climb to 3000  
(higher level only when cleared by ATC)

SID	RWY	ROUTING
TULIP 4A	06	[TUL4A]: Climb on 056° track, at or above 500 turn RIGHT direct to RD181, 215° track to RD186, MAX 220 KT, to SOMEL, to OBAGU, to TULIP. [TUL4AY] 1 : On 056° track to RD182, turn RIGHT to RD183, turn LEFT to RD184, turn LEFT to RD185, MAX 210 KT, to RD186, to SOMEL, to OBAGU, to TULIP.
TULIP 3B	24	[TUL3B]: On 236° track to RD166 or 400, whichever is later, turn RIGHT, direct to RD158, MAX 220 KT, to SOMEL, to OBAGU, to TULIP. [TUL3BY] 2 : On 236° track to RD159, direct to RD158, MAX 220 KT, to SOMEL, to OBAGU, to TULIP.



**2 Alternate route to enhance noise abatement for wake turbulence category L & M ACFT**

RD158  
MAX 220 KT

RD159

NOT TO SCALE

**1 Alternate route to enhance noise abatement**  
RF & GNSS REQUIRED  
APPROVAL FOR RNP 1 OPERATIONS REQUIRED

RD185  
MAX 210 KT  
in turn

RD184  
RD183  
RD182


RD186

NOT TO SCALE

Trans alt: 3000  
 1. RNAV 1 required.  
 2. CAUTION: EXPECT close-in obstacles up to 110 shortly after RWY end.  
 3. If unable to comply with crossing conditions, inform ROTTERDAM Delivery.  
 4. Climb as rapidly as practicable to at least 2000. SIDs are also minimum noise routings. Strict adherence within the limits of performance criteria is MANDATORY.  
 6. Perform turns at 25° bank angle.  
 7. Instructions containing deviations from SIDs (e.g. an opposite turn after take-off, maintaining a specified heading or temporary altitude restrictions) may be added to take-off or enroute clearance, especially for propeller-driven aircraft. They amend the relevant part of the SID only.

**WOODY 2A [WOOD2A]**  
**WOODY 2B [WOOD2B], [WOOD2BY]** 1  
**RNAV DEPARTURES**  
**(ALL RWYS)**  
**SPEED: MAX 250 KT BELOW FL100**  
**UNLESS OTHERWISE INSTRUCTED**

<sup>1</sup> Alternate route to enhance noise abatement for wake turbulence category L & M ACFT



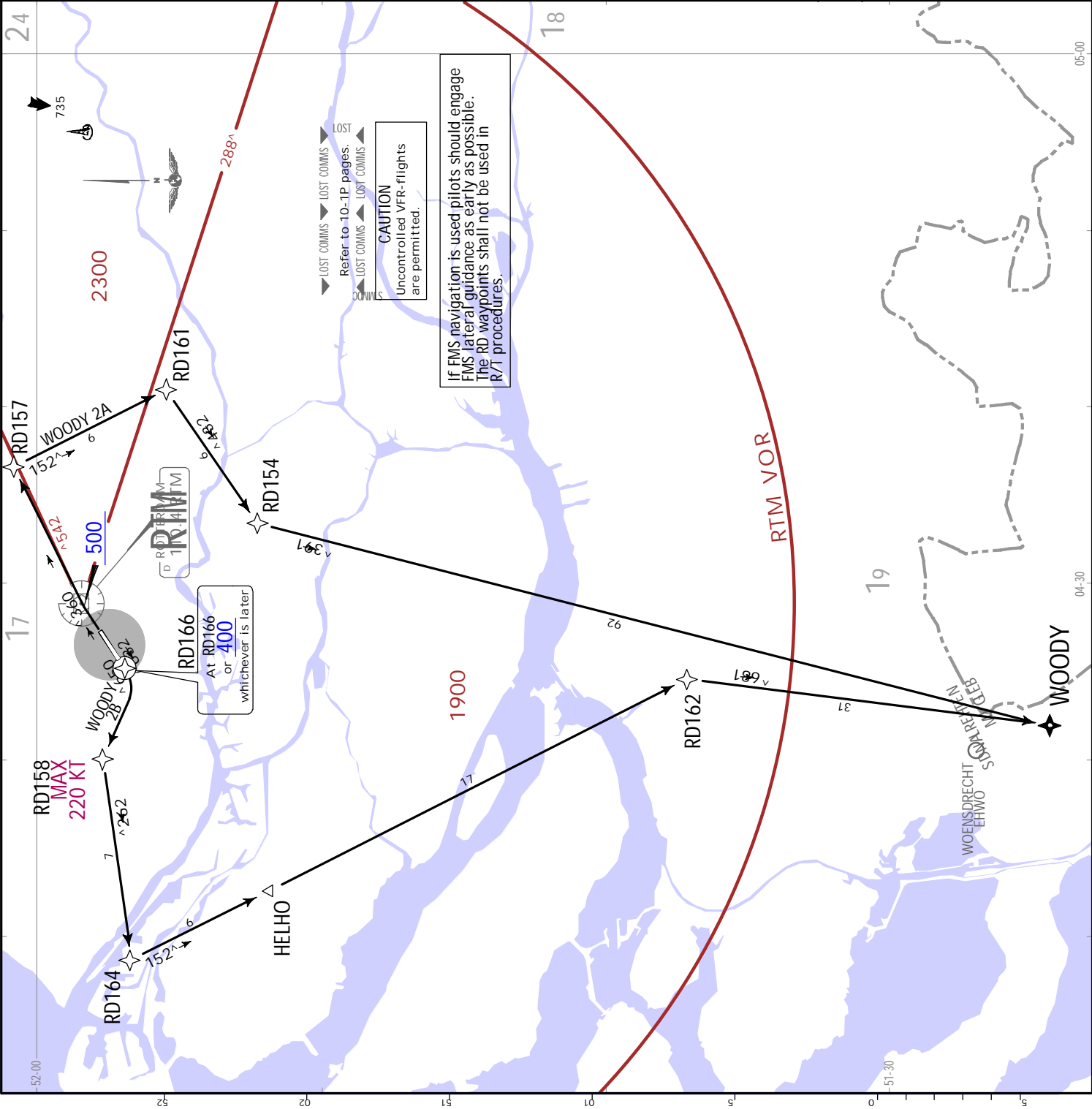
**WOODY 2B**

This SID requires a minimum climb gradient of 6.3% up to 400.

Gnd speed-KT	75	100	150	200	250	300
6.3% V/V (fpm)	478	638	957	1276	1595	1914

Climb to 3000 (higher level only when cleared by ATC)

SID	RWY	ROUTING
WOODY 2A	06	Climb on 056° track, at or above 500 turn RIGHT, 063° track to RD157, to RD161, to WOODY.
WOODY 2B	24	[WOOD2B]: On 236° track to RD166 or 400, whichever is later, turn RIGHT, direct to RD158, MAX 220 KT, to RD164, to HELHO, to RD162, to WOODY. [WOOD2BY] 1 : On 236° track to RD159, direct to RD158, MAX 220 KT, to RD164, to HELHO, to RD162, to WOODY.



# EHRD/RTM

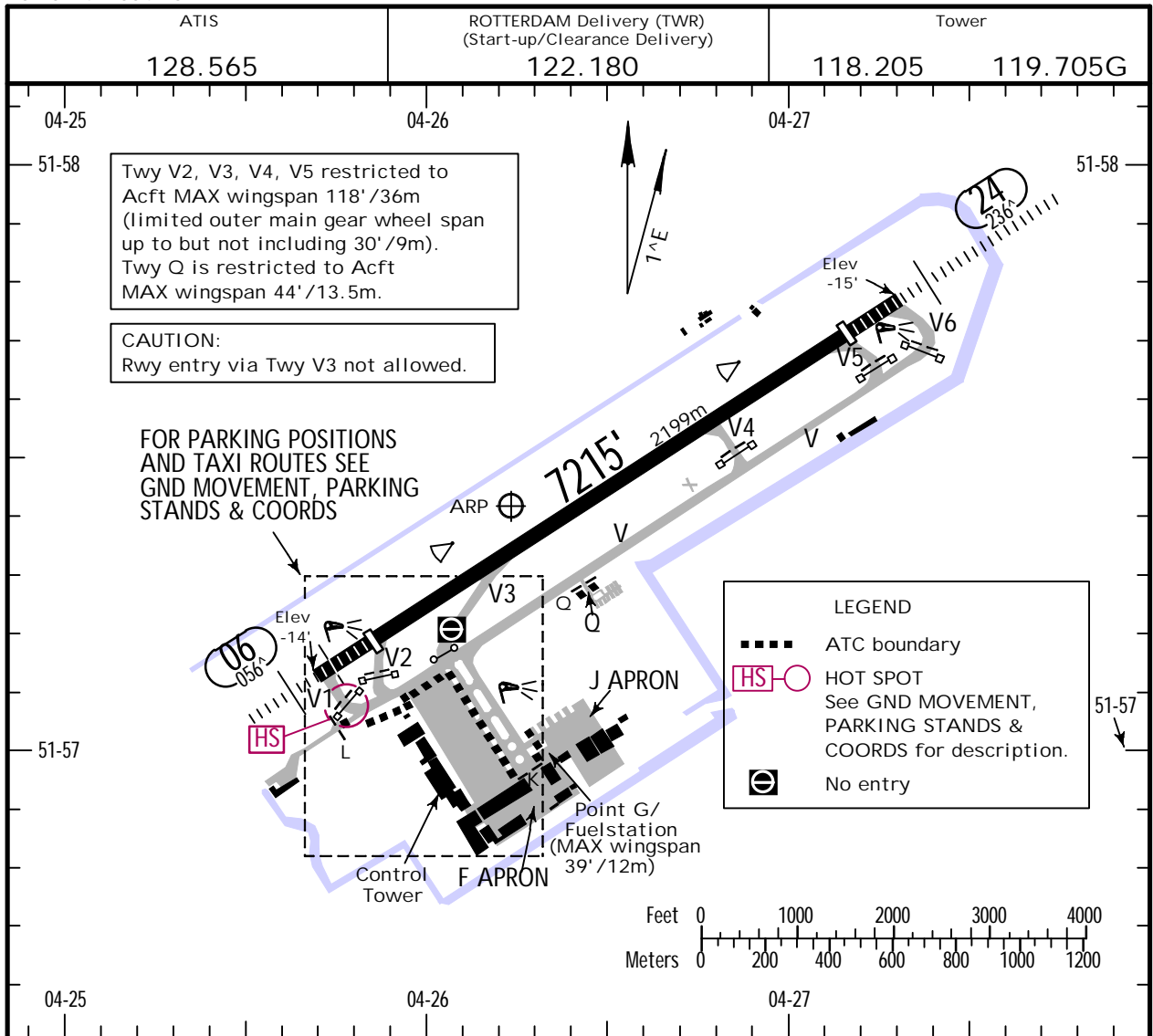


# ROTTERDAM, NETHERLANDS

Apt Elev -14 (BELOW SEA LEVEL)  
N51 57.4 E004 26.2

27 OCT 23 (10-9). Eff. 2. Nov.

ROTTERDAM



### ADDITIONAL RUNWAY INFORMATION

RWY		USABLE LENGTHS		TAKE-OFF	WIDTH
		Threshold	Glide Slope		
06 1 24	2 HIRL (30m) 2 CL (15m) 23 HIALS PAPI-L (angle 3.0°)	RVR 6575' 2004m	5453' 1662m	5	148' 45m
	2 HIRL (30m) 2 CL (15m) 24 HIALS PAPI-L (angle 3.0°)	RVR 6568' 2002m	5545' 1690m		

- 1 Anti-skid layer
- 2 LED lights
- 3 length 450m
- 4 length 780m
- 5 TAKE-OFF RUN AVAILABLE

**RWY 06:**  
From Rwy head 7215' (2199m)  
Twy V2 int 6575' (2004m)

**RWY 24:**  
From Rwy head 7215' (2199m)  
Twy V5 int 6568' (2002m)  
Twy V4 int 4921' (1500m)

### Std/State.

### TAKE-OFF

HIRL & CL (spacing 15m or less) & relevant RVR		RL & CL & relevant RVR		RL & CL		Low Visibility Take-off		Adequate Vis Ref	
						RL or RCLM	RL or CL	DAY	NIGHT
TDZ R125m	TDZ R150m								
Mid R125m	Mid R150m	R200m							NA
Rollout R125m	Rollout R150m								

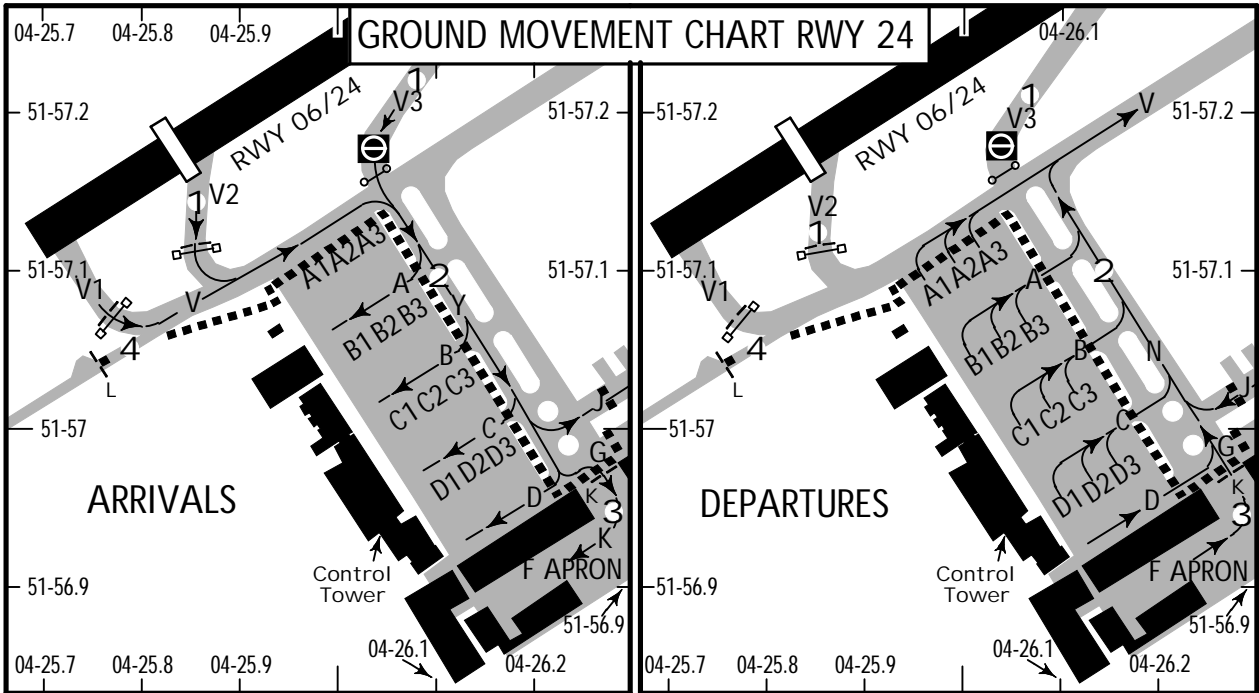
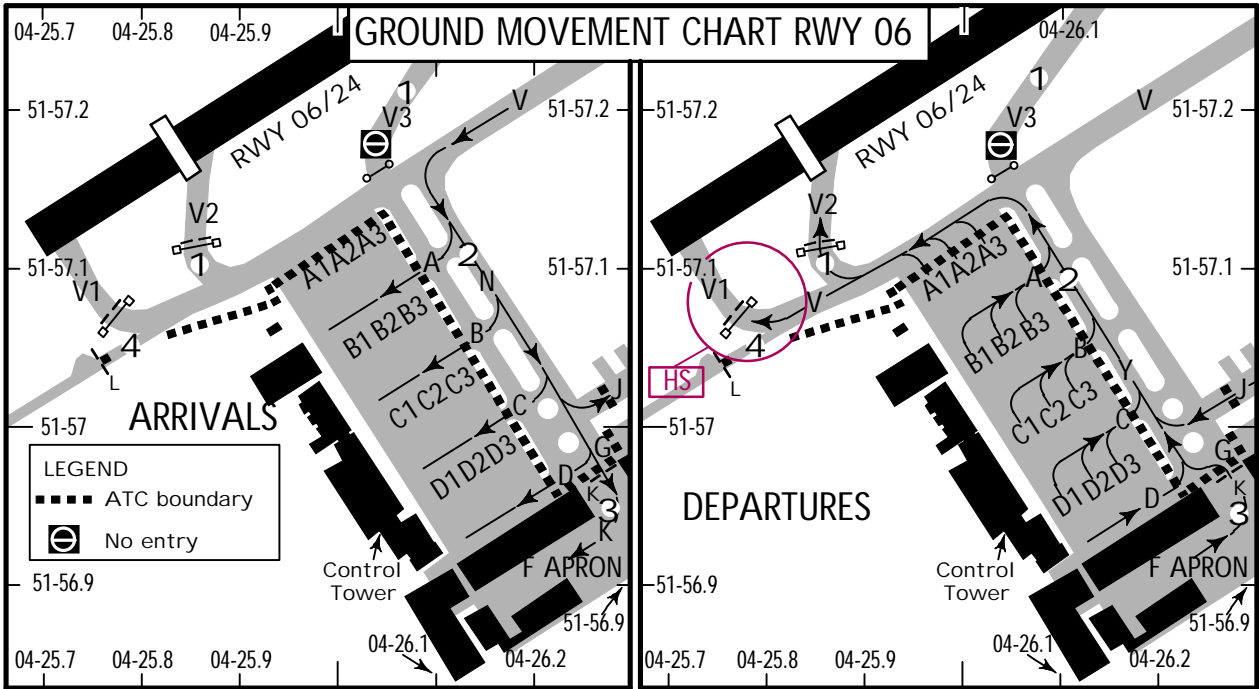
EHRD/RTM



ROTTERDAM, NETHERLANDS

27 OCT 23 (10-9A) .Eff.2.Nov.

ROTTERDAM



**INS COORDINATES**

STAND No.	COORDINATES
A1 thru A3	N51 57.1 E004 26.0
B1	N51 57.0 E004 26.0
B2, B3	N51 57.1 E004 26.1
C1 thru D2	N51 57.0 E004 26.1
D3	N51 57.0 E004 26.2

**HOT SPOT**  
(For information only, not to be construed as ATC instructions.)

**HS** RWY 06 departures only.  
CAUTION: Do not cross the holding position marking without a clearance.

**GROUND MOVEMENT RESTRICTIONS**

CAUTION for Acft with wingspan exceeding 118' /36m and outer main gear wheel span exceeding 30' /9m:

- Follow-me service is mandatory;
- Simultaneous use of Twy N and Twy Y is not allowed;
- Between Twy V1 and Twy V3 Acft must strictly adhere to Follow-me instructions to stay clear of obstacles.

MAX wingspan:

- 1 118' /36m (limited outer main gear wheel span up to but not including 30' /9m)
- 2 118' /36m
- 3 79' /24m
- 4 44' /13.5m



EHRD/RTM



ROTTERDAM, NETHERLANDS  
EASA AIR OPS  
ROTTERDAM

COPTER

STRAIGHT-IN RWY	DA(H) / MDA(H)	RVR (ALS/ALS out)
06	ILS	R600m / R1000m
	LOC	R1000m / R1000m
	VOR	R1000m / R1000m
	RNP(LPV CAT I)	R600m / R1000m
	RNP(LNAV/VNAV)	R800m / R1000m
	RNP(LNAV)	R1000m / R1000m
24	ILS Z or Y	R550m / R1000m
	LOC Z or Y	R1000m / R1000m
	VOR	R800m / R1000m
	RNP(LPV CAT I)	R550m / R1000m
	RNP(LNAV/VNAV)	R750m / R1000m
	RNP(LNAV)	R1000m / R1000m

CIRCLE-TO-LAND 1	MDA(H)	VIS
	490' (504')	V1000m

1 Prohibited Southeast of rwy 06/24.

TAKE-OFF RWY 06, 24

2 LVP must be in Force			
RL or FATO lights & RCLM & RVR info	RL or FATO lights & RCLM	Nil Facilities DAY	Nil Facilities NIGHT
R150m	R200m	3 R250m	R/V800m

2 Without LVP R/V400m are stipulated.

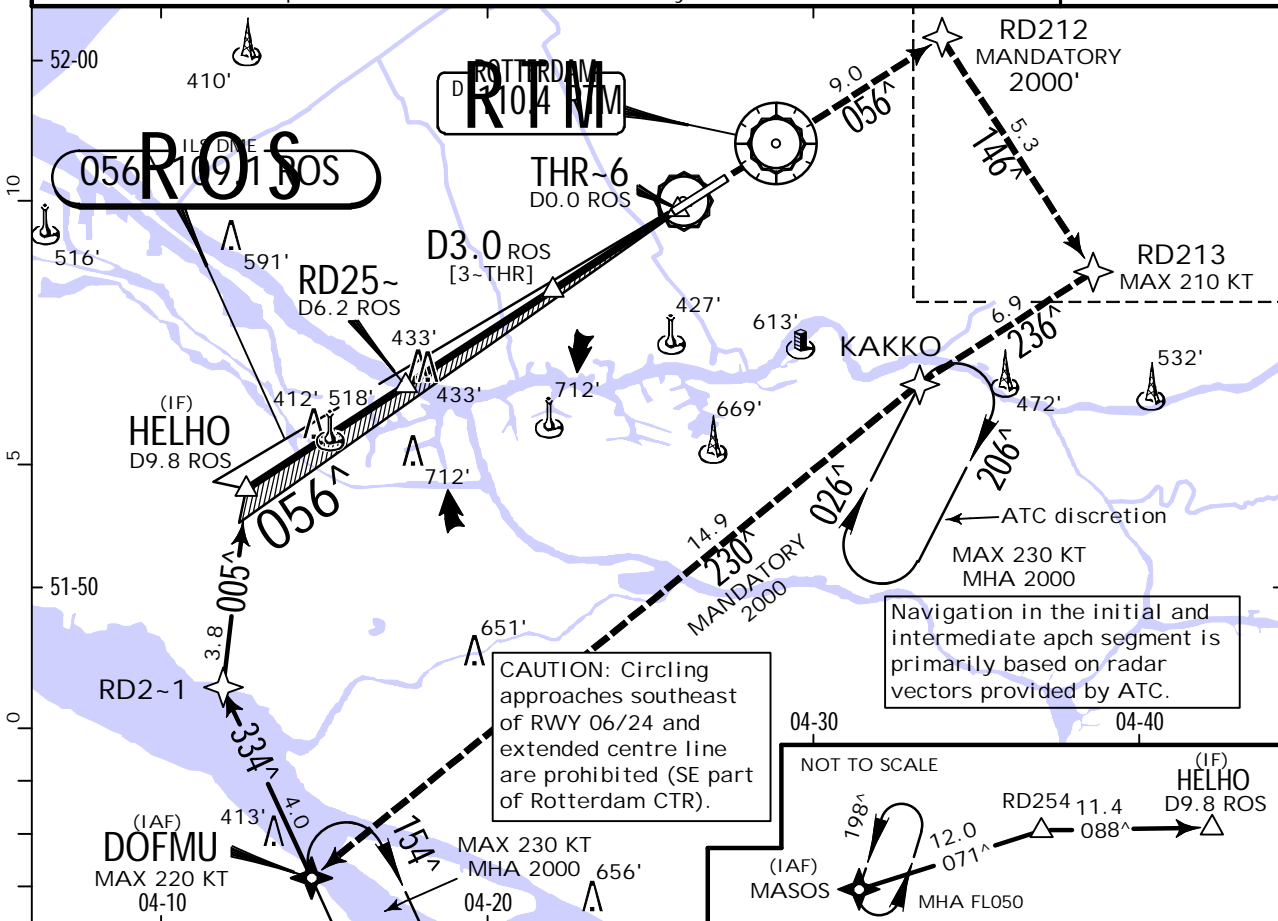
3 Or rejected take-off distance whichever is the greater.

# EHRD/RTM ROTTERDAM

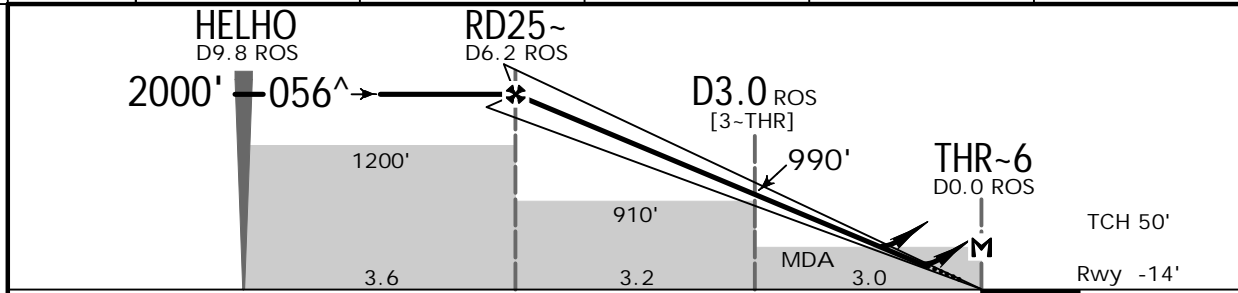
**JEPPesen** 22 OCT 21 **11-1** .Eff.4.Nov.

# ROTTERDAM, NETHERLANDS ILS or LOC Rwy 06

ATIS 128.565		*ROTTERDAM Approach (R) 122.990 131.155X		ROTTERDAM Tower 118.205 119.705G	
LOC ROS 109.1	Final Apch Crs 056 <sup>^</sup>	RD25~ 2000' (2014')	ILS DA(H) Refer to Minimums	Apt Elev -14' Rwy -14' (BELOW SEA LEVEL)	
MISSED APCH: Climb on track 056 <sup>^</sup> to RD212 to 2000'. Inform ATC. At RD212 turn RIGHT (MAX 210 KT) to RD213, then proceed via KAKKO to DOFMU.					
Alt Set: hPa		Rwy Elev: -1 hPa		Trans level: By ATC	
1.DME and RNAV 1 required.		2.ILS DME reads zero at rwy 06 thresh.		Trans alt: 3000'	
					MSA RTM VOR



LOC (GS out)	ROS DME	5.0	4.0	3.0	2.0
	ALTITUDE	1630'	1310'	990'	670'



Gnd speed-Kts	70	90	100	120	140	160	HIALS PAPI 2000' on 056 <sup>^</sup> RD212
GS	3.00 <sup>^</sup>	372	478	531	637	743	
MAP at THR-6/DO.0 ROS							

PANS OPS	.Std/State.		STRAIGHT-IN LANDING		LOC (GS out)		CIRCLE-TO-LAND	
	ILS		C: 195' (209')		CDFA		Prohibited Southeast of runway	
	AB: 186' (200')		D: 202' (216')		1 DA/MDA(H) 470' (484')		Max Kts	
	FULL		ALS out		ALS out		MDA(H)	
A	R750m	R1200m		R1500m		100	490' (504')	V1500m
B	R800m	R1200m		R1500m		135	960' (974')	V1600m
C	R800m	R1200m		R1800m	R2300m	180	1050' (1064')	V2400m
D	R800m	R1200m		R1800m	R2300m	205	1050' (1064')	V3600m

1 VNAV DA(H) in lieu of MDA(H) depends on operator policy.  
 CHANGES: Speed restrictions on holding MASOS withdrawn. | JEPPesen, 2008, 2021. ALL RIGHTS RESERVED.

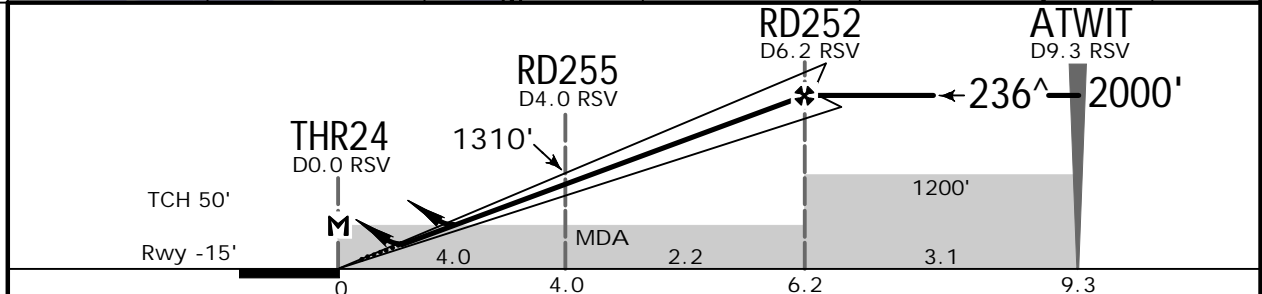
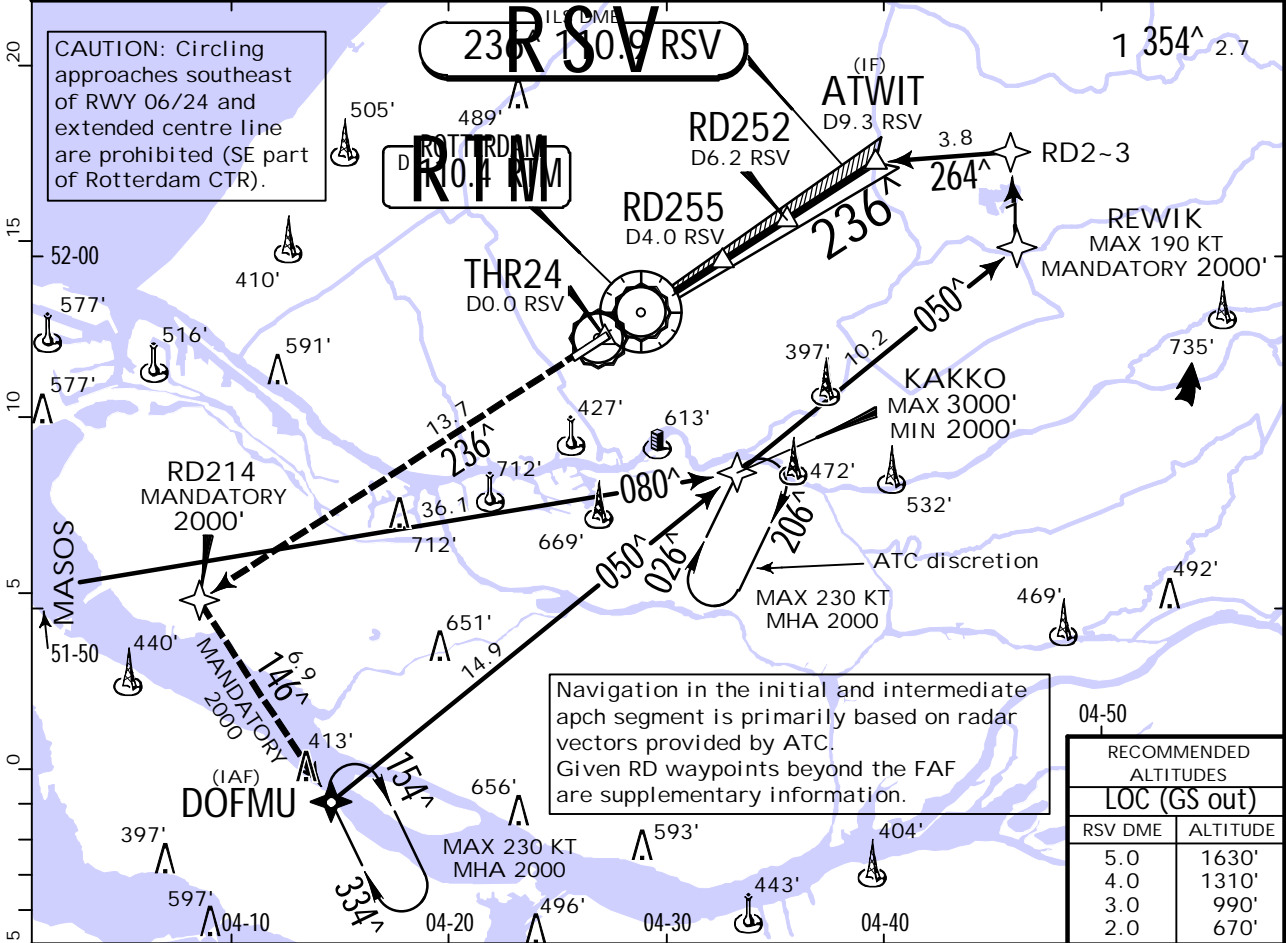
# EHRD/RTM ROTTERDAM



# ROTTERDAM, NETHERLANDS ILS Z or LOC Z Rwy 24

22 OCT 21 (11-2) .Eff.4.Nov.

ATIS 128.565		*ROTTERDAM Approach (R) 122.990 131.155X		ROTTERDAM Tower 118.205 119.705G	
LOC RSV 110.9	Final Apch Crs 236 <sup>^</sup>	RD252 2000' (2015')	ILS DA(H) Refer to Minimums	Apt Elev -14' Rwy -15' (BELOW SEA LEVEL)	
MISSED APCH: Climb on track 236 <sup>^</sup> to RD214 to 2000'. Inform ATC. At RD214 turn LEFT to DOFMU.					
Alt Set: hPa		Rwy Elev: -1 hPa		Trans level: By ATC	
1. DME rand RNAV 1 required.		2. ILS DME reads zero at rwy 24 thresh.		Trans alt: 3000'	
					MSA RTM VOR



Gnd speed-Kts	70	90	100	120	140	160	HIALS PAPI	2000' on 236 <sup>^</sup> RD214
GS	3.00 <sup>^</sup>	372	478	531	637	743		
MAP at THR24/DO.0 RSV								

PANS OPS	.Std/State. ILS			STRAIGHT-IN LANDING LOC (GS out)			CIRCLE-TO-LAND		
	A: 187' (202') C: 204' (219')			CDEA 440' (455')			Prohibited Southeast of runway		
	B: 197' (212') D: 214' (229')			2 DA/MDA(H)			Max Kts		
	FULL		ALS out		ALS out		MDA(H)		
A	1 R550m		R1200m		R1400m		100	490' (504') V1500m	
B							135	960' (974') V1600m	
C							180	1050' (1064') V2400m	
D							205	1050' (1064') V3600m	

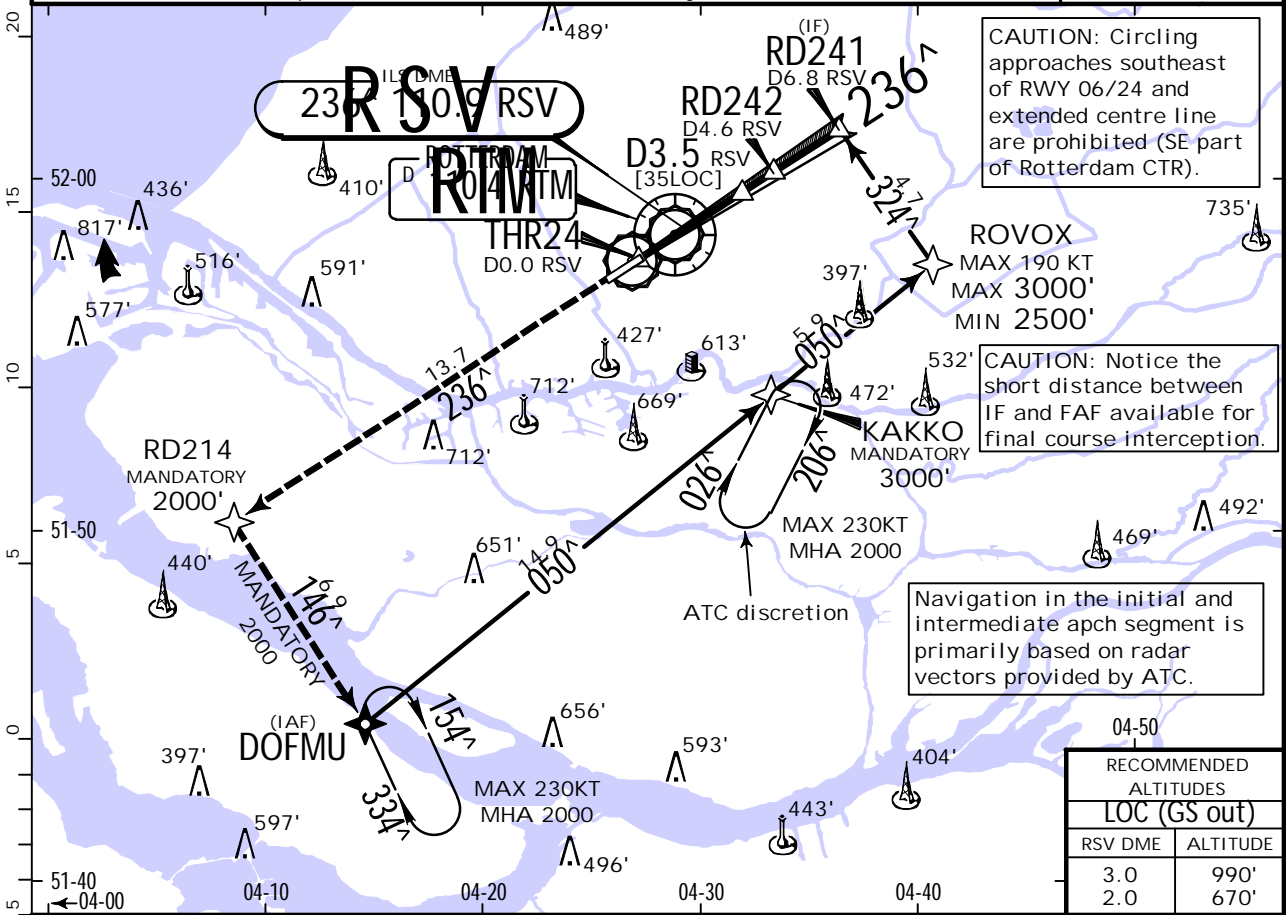
1 R750m when a Flight Director or Autopilot or HUD to DA is not used.  
 2 VNAV DA(H) in lieu of MDA(H) depends on operator policy.  
 CHANGES: None. | JEPPesen, 2001, 2021. ALL RIGHTS RESERVED.

# EHRD/RTM ROTTERDAM

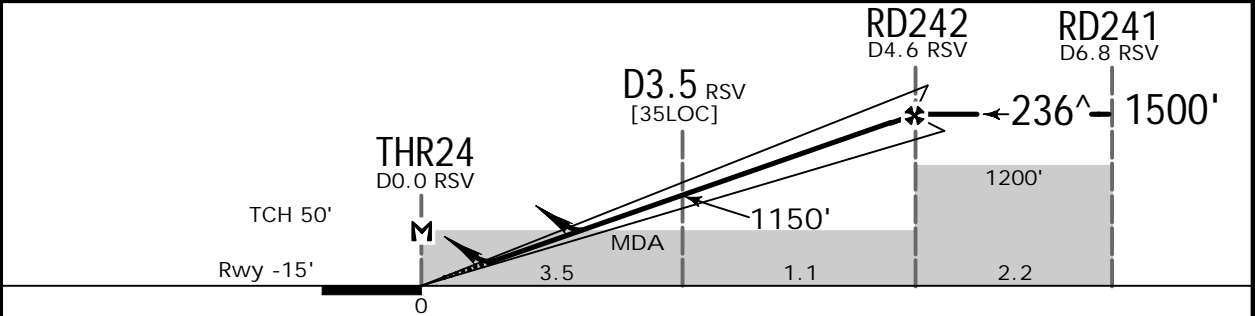
**JEPESEN**  
30 JUL 21  
Eff. 12 Aug. (11-3)

# ROTTERDAM, NETHERLANDS ILS Y or LOC Y Rwy 24

ATIS 128.565		*ROTTERDAM Approach (R) 122.990 131.155X		ROTTERDAM Tower 118.205 119.705G	
LOC RSV <b>110.9</b>	Final Apch Crs <b>236<sup>^</sup></b>	RD242 <b>1500'</b> (1485')	ILS DA(H) Refer to Minimums	Apt Elev -14' Rwy -15' (BELOW SEA LEVEL)	
MISSED APCH: Climb on track 236 <sup>^</sup> to RD214 to 2000'. Inform ATC. At RD214 turn LEFT to DOFMU.					
Alt Set: hPa Rwy Elev: -1 hPa Trans level: By ATC Trans alt: 3000'				MSA RTM VOR	
1. DME and RNAV 1 required. 2. ILS DME reads zero at rwy 24 thresh.					



RECOMMENDED ALTITUDES	
LOC (GS out)	
RSV DME	ALTITUDE
3.0	990'
2.0	670'



Gnd speed-Kts	70	90	100	120	140	160		2000' ↑ on 236 <sup>^</sup> RD214	
ILS GS or LOC Descent Angle	3.00 <sup>^</sup>	372	478	531	637	743			849
MAP at THR24/DO.0 RSV									

.Std/State.	STRAIGHT-IN LANDING			CIRCLE-TO-LAND	
	ILS	LOC (GS out)		Prohibited Southeast of runway	
DA(H)	A: 187' (202') B: 197' (212')	C: 204' (219') D: 214' (229')	CDFA 2 DA/MDA(H) 440' (455')		
	FULL	ALS out	ALS out	Max Kts	MDA(H)
A			R1500m	100	490' (504') V1500m
B	1 R550m	R1200m	R1400m	135	960' (974') V1600m
C				180	1050' (1064') V2400m
D				205	1050' (1064') V3600m

1 RVR 750m when a Flight Director or Autopilot or HUD or DA is not used.  
2 VNAV DA(H) in lieu of MDA(H) depends on operator policy.

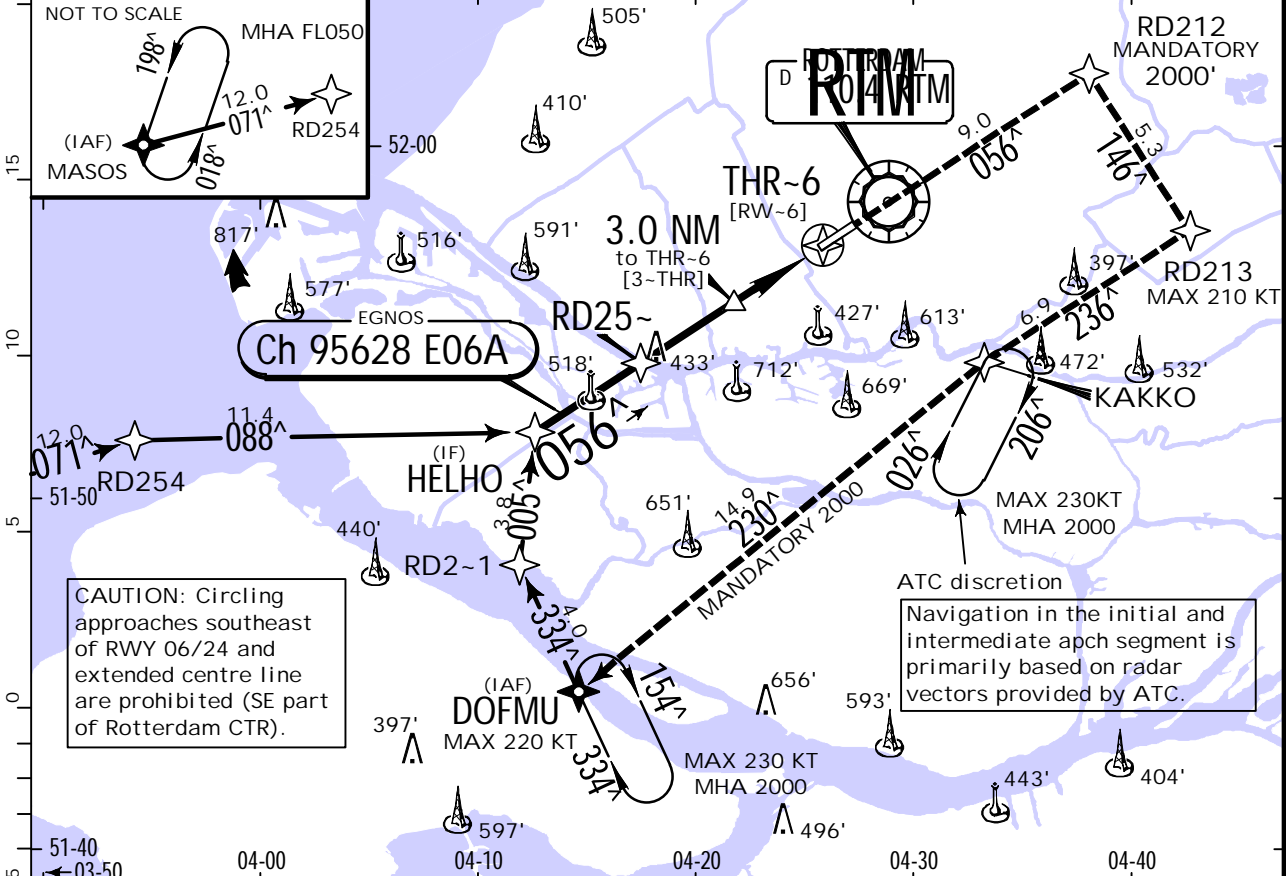
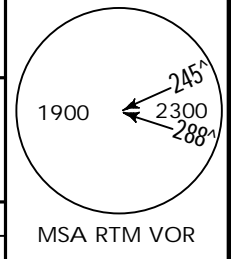
# EHRD/RTM ROTTERDAM



# ROTTERDAM, NETHERLANDS RNP Rwy 06

22 OCT 21 (12-1) .Eff.4.Nov.

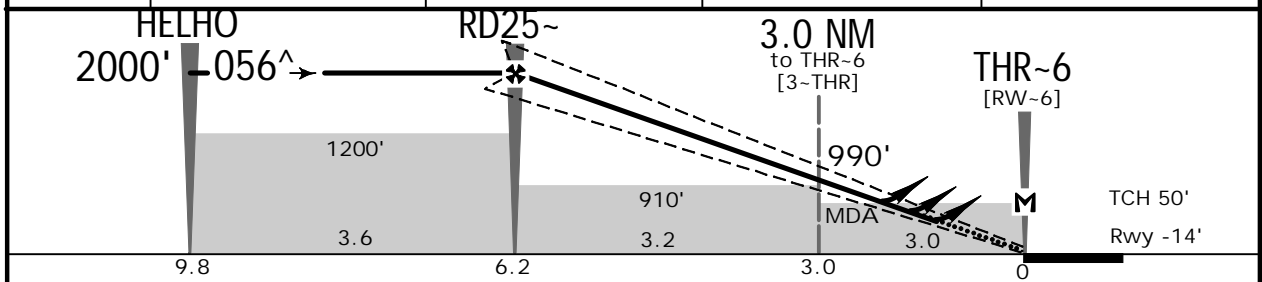
ATIS 128.565		*ROTTERDAM Approach (R) 122.990 131.155X		ROTTERDAM Tower 118.205 119.705G	
EGNOS Ch 95628 E06A	Final Apch Crs 056 <sup>^</sup>	RD25~ 2000' (2014')	LPV CAT I DA(H) Refer to Minimums	Apt Elev -14' Rwy -14' (BELOW SEA LEVEL)	
MISSED APCH: Climb on track 056 <sup>^</sup> to RD212 to 2000'. Inform ATC. At RD212 turn RIGHT (MAX 210 KT) to RD213, then proceed via KAKKO to DOFMU.					
RNP Apch	Alt Set: hPa	Rwy Elev: -1 hPa	Trans level: By ATC	Trans alt: 3000'	
LNAV/VNAV: Minimum temperature -20°C.					



CAUTION: Circling approaches southeast of RWY 06/24 and extended centre line are prohibited (SE part of Rotterdam CTR).

ATC discretion  
Navigation in the initial and intermediate apch segment is primarily based on radar vectors provided by ATC.

DIST to THR-6	5.0	4.0	3.0	2.0
ALTITUDE	1630'	1310'	990'	670'



Gnd speed-Kts	70	90	100	120	140	160	HIALS PAPI	2000'	on 056 <sup>^</sup>	RD212
Glide Path Angle	3.00 <sup>^</sup>	372	478	531	637	743				

PANS OPS	Std/State		STRAIGHT-IN LANDING				CIRCLE-TO-LAND	
	LPV CAT I		LNAV/VNAV				Prohibited Southeast of runway	
	DA(H)		DA(H)		LNAV CDFA		Max Kts	
	A: 241' (255') C: 260' (274') B: 251' (265') D: 270' (284')		A: 323' (337') C: 344' (358') B: 334' (348') D: 354' (368')		2 <sup>DA</sup> /MDA(H) 470' (484')		MDA(H)	
ALS out		ALS out		ALS out		100		
A	R800m	R1100m	R1500m	R1500m		490'(504') V1500m		
B	R900m	R1300m	R1200m	R1500m		135 960'(974') V1600m		
C		R1400m	R1300m	R1700m	R1800m	R2300m	180 1050'(1064') V2400m	
D							205 1050'(1064') V3600m	

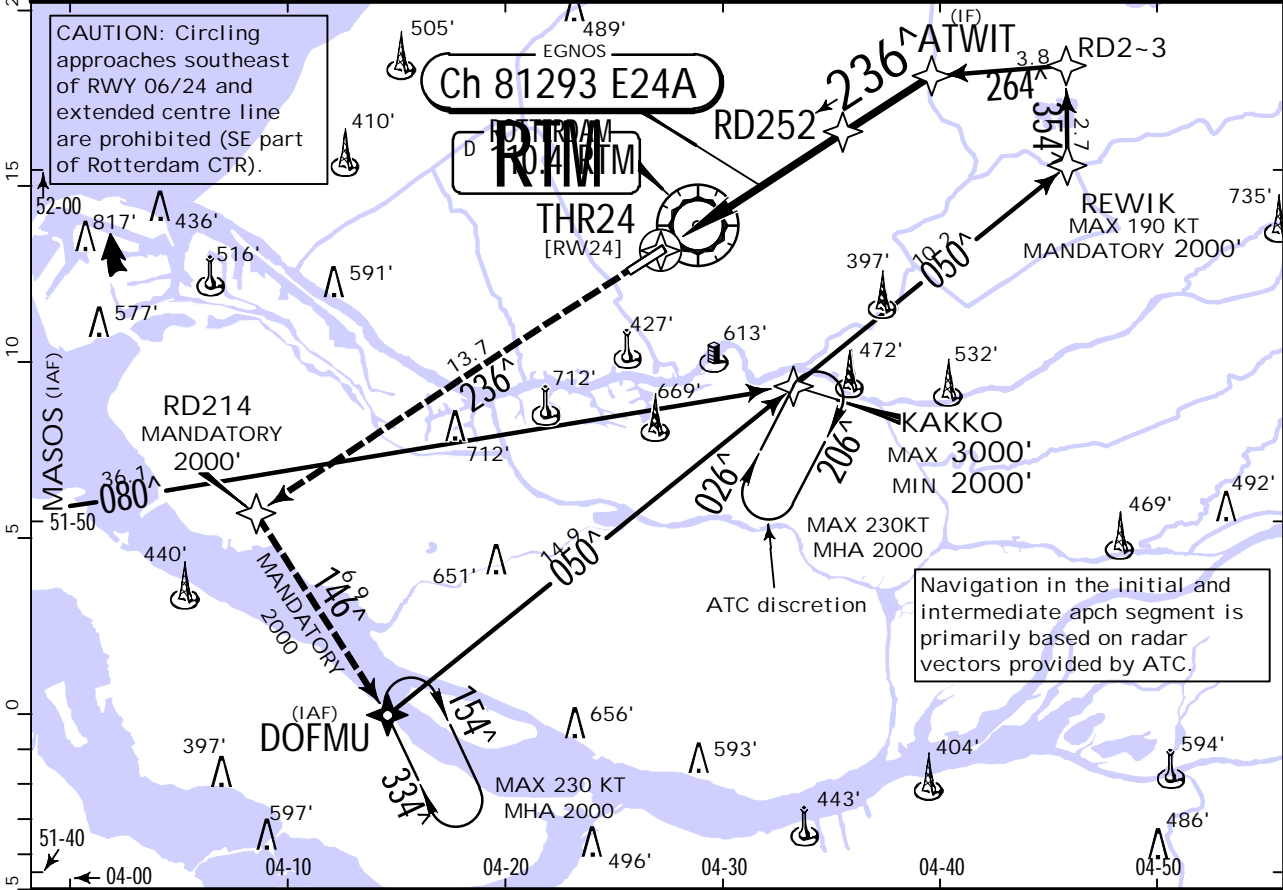
1 VNAV DA(H) in lieu of MDA(H) depends on operator policy.

# EHRD/RTM ROTTERDAM

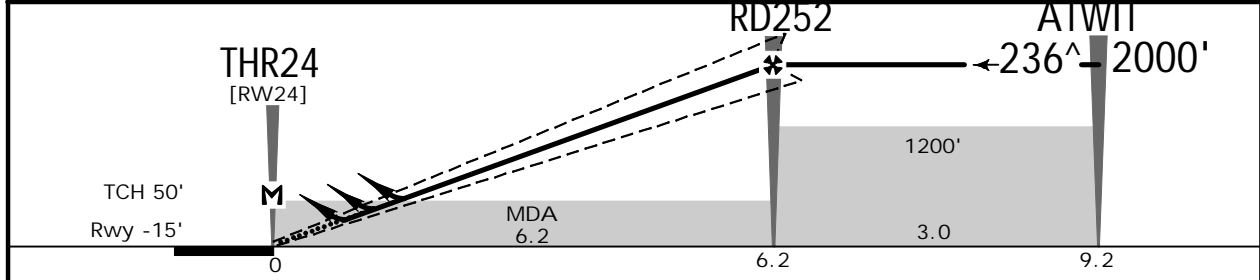
**JEPPesen** 22 OCT 21 **12-2** .Eff.4.Nov.

# ROTTERDAM, NETHERLANDS RNP Rwy 24

ATIS 128.565		*ROTTERDAM Approach (R) 122.990 131.155X		ROTTERDAM Tower 118.205 119.705G	
EGNOS <b>Ch 81293</b> E24A	Final Apch Crs <b>236^</b>	RD252 <b>2000'</b> (2015')	LPV CAT I DA(H) Refer to Minimums	Apt Elev -14' Rwy -15' (BELOW SEA LEVEL)	
MISSED APCH: Climb on track 236^ to RD214 to 2000'. Inform ATC. At RD214 turn LEFT to DOFMU.					
RNP Apch	Alt Set: hPa	Rwy Elev: -1 hPa	Trans level: By ATC	Trans alt: 3000'	
LNAV/VNAV: Minimum temperature -20°C.					MSA RTM VOR



DIST to THR24	2.0	3.0	4.0	5.0
ALTITUDE	670'	990'	1310'	1630'



Gnd speed-Kts	70	90	100	120	140	160		2000' on 236^ RD214
Glide Path Angle	3.00^	372	478	531	637	743		

.Std/State		STRAIGHT-IN LANDING		LNAV	CIRCLE-TO-LAND		
LPV CAT I		LNAV/VNAV		CDFA	Prohibited Southeast of runway		
A: 205' (220') C: 225' (240')		A: 310' (325') C: 330' (345')		2 DA/ MDA(H) 450' (465')			
B: 215' (230') D: 235' (250')		B: 320' (335') D: 340' (355')					
	ALS out		ALS out	ALS out			
A	1 R550m	R1200m	R800m	R1500m	R1500m	100	490'(504') V1500m
B			R900m	R1600m	R1500m	135	960'(974') V1600m
C		R1300m				180	1050'(1064') V2400m
D					R2200m	205	1050'(1064') V3600m

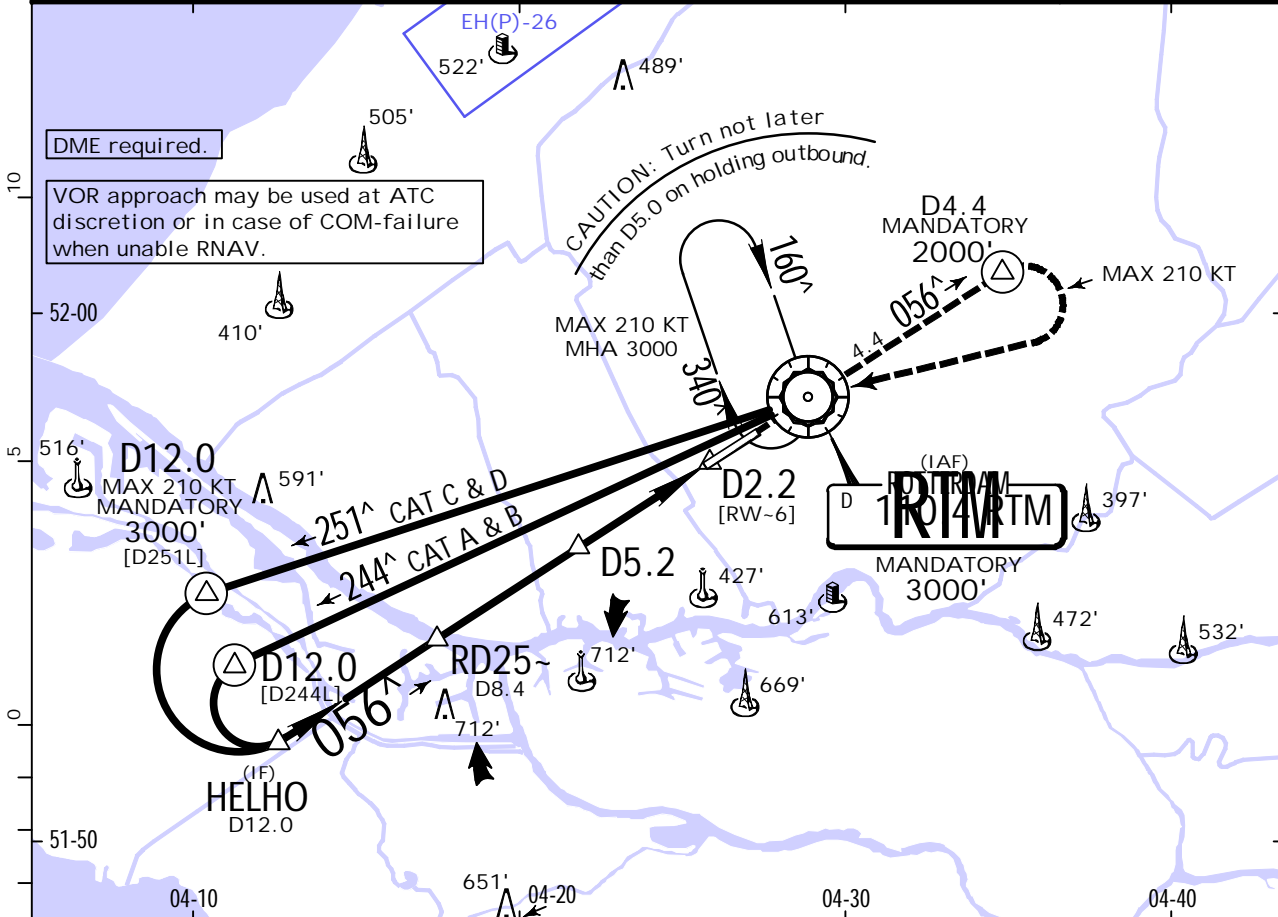
1 R750m when a Flight Director or Autopilot or HUD to DA is not used.  
 2 VNAV DA(H) in lieu of MDA(H) depends on operator policy.  
 CHANGES: None. | JEPPesen, 2019, 2021. ALL RIGHTS RESERVED.

# EHRD/RTM ROTTERDAM

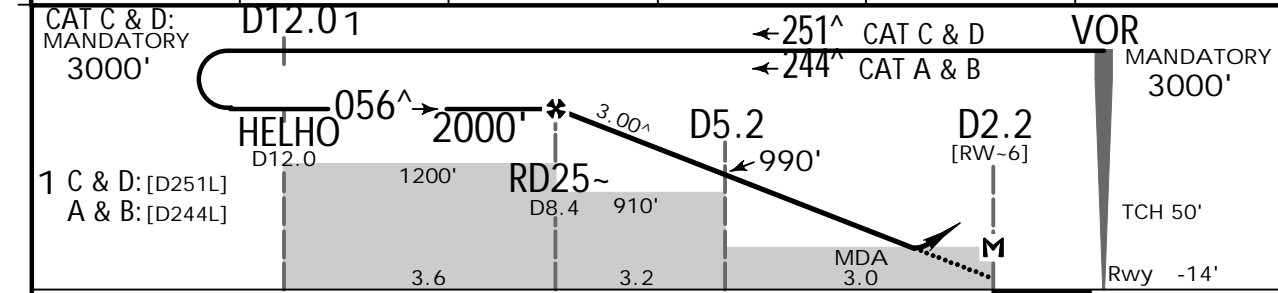
**JEPPesen** 24 DEC 21 **13-1** .Eff.30.Dec.

# ROTTERDAM, NETHERLANDS VOR Rwy 06

ATIS 128.565		*ROTTERDAM Approach (R) 122.990 131.155X		ROTTERDAM Tower 118.205 119.705G	
VOR RTM 110.4	Final Apch Crs 056 <sup>^</sup>	RD25~ 2000' (2014')	DA/MDA(H) 470' (484')	Apt Elev -14' Rwy -14' (BELOW SEA LEVEL)	
MISSED APCH: Climb on track 056 <sup>^</sup> to 2000'. At D4.4 turn RIGHT (MAX 210 KT) and maintain 2000'. When established inbound RTM climb to 3000'. Inform ATC.					
Alt Set: hPa		Rwy Elev: -1 hPa		Trans level: By ATC	
				Trans alt: 3000'	



RTM DME	8.0	7.0	6.0	5.0	4.0
ALTITUDE	1870'	1550'	1230'	920'	600'



Gnd speed-Kts	70	90	100	120	140	160	HIALS PAPI 2000' on 056 <sup>^</sup>
Descent Angle	3.00 <sup>^</sup>	372	478	531	637	743	
MAP at D2.2							

PANS OPS	Std/State.		STRAIGHT-IN LANDING		CIRCLE-TO-LAND	
			CDFA		Prohibited Southeast of runway	
			1 DA/MDA(H) 470' (484')			
			ALS out		Max Kts	MDA(H)
	A	R1500m			100	490' (504') V1500m
B				135	960' (974') V1600m	
C	R1800m		R2300m	180	1050' (1064') V2400m	
D				205	1050' (1064') V3600m	

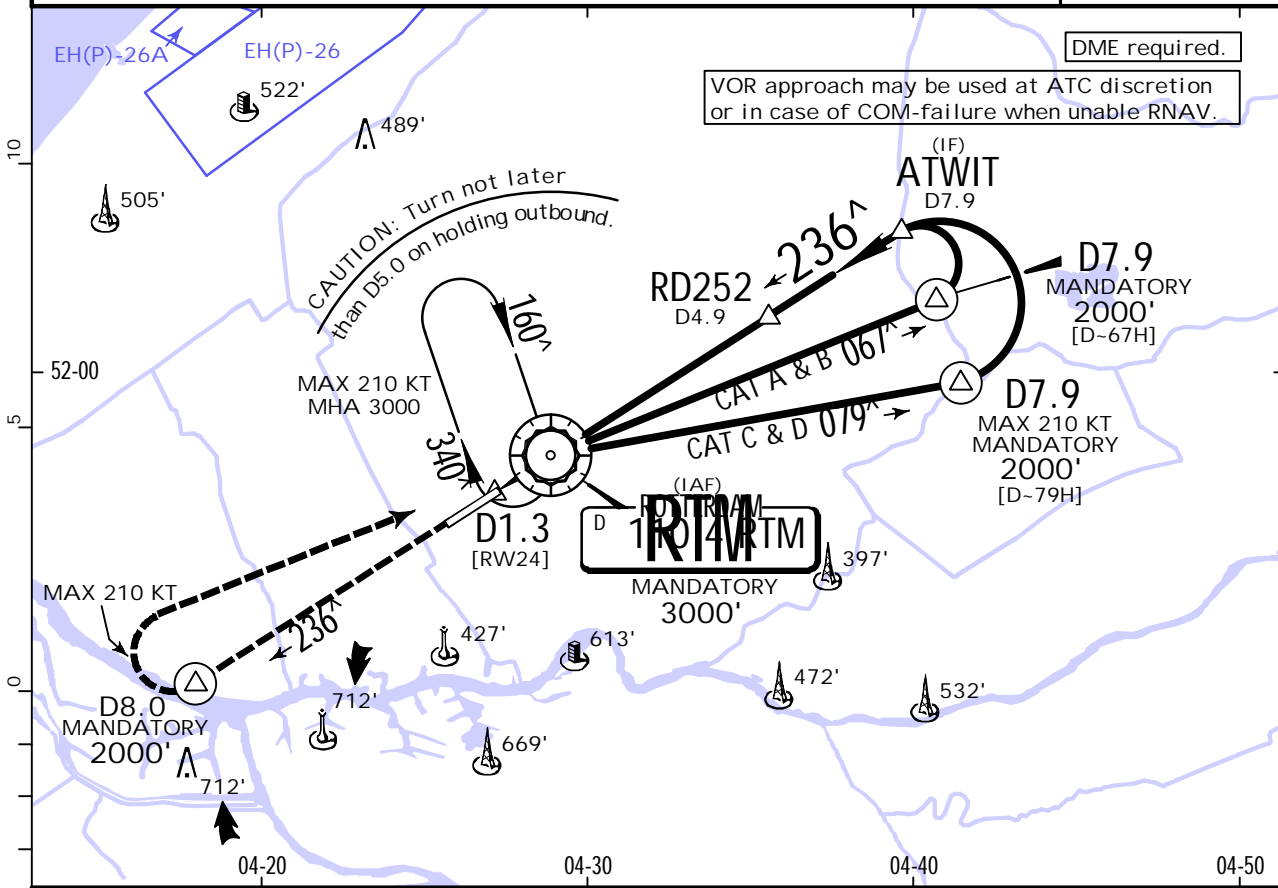
1 VNAV DA(H) in lieu of MDA(H) depends on operator policy.

# EHRD/RTM ROTTERDAM

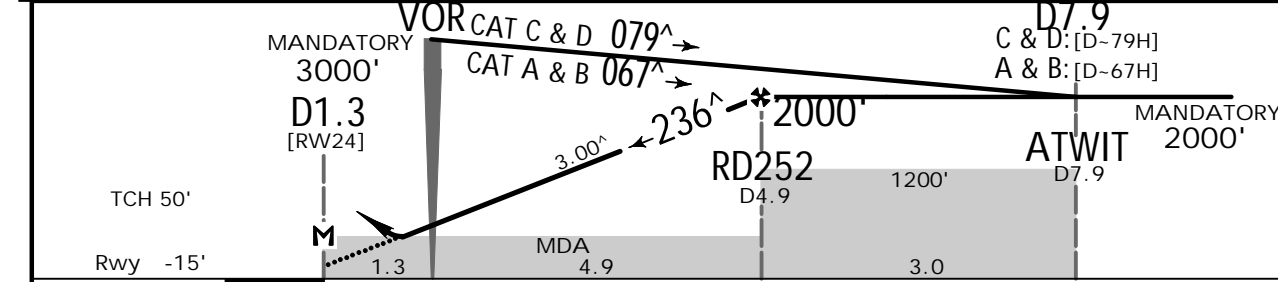
**JEPPesen** 24 DEC 21 (13-2) .Eff.30.Dec.

# ROTTERDAM, NETHERLANDS VOR Rwy 24

ATIS 128.565		*ROTTERDAM Approach (R) 122.990 131.155X		ROTTERDAM Tower 118.205 119.705G	
VOR RTM <b>110.4</b>	Final Apch Crs <b>236<sup>^</sup></b>	RD252 <b>2000'</b> (2015')	DA/MDA(H) <b>430'</b> (445')	Apt Elev -14' Rwy -15' (BELOW SEA LEVEL)	
<b>MISSED APCH:</b> Climb on track 236 <sup>^</sup> to 2000'. At D8.0 turn RIGHT (MAX 210 KT) and maintain 2000'. When established inbound RTM climb to 3000'. Inform ATC.					
Alt Set: hPa	Rwy Elev: -1 hPa	Trans level: By ATC	Trans alt: 3000'	MSA RTM VOR	



RTM DME	1.0	2.0	3.0	4.0
ALTITUDE	755'	1075'	1395'	1715'



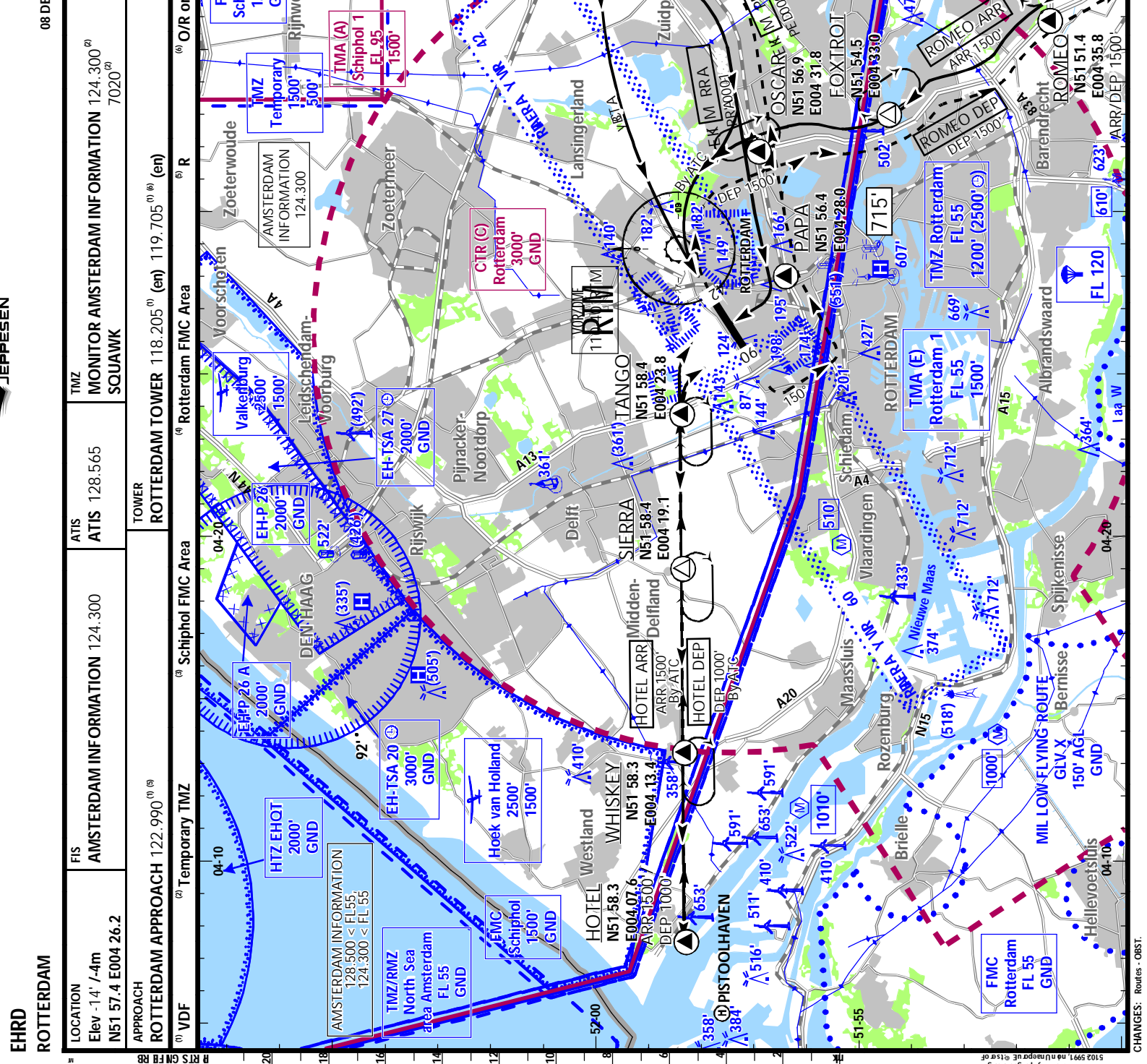
Gnd speed-Kts	70	90	100	120	140	160	
Descent Angle	3.00 <sup>^</sup>	372	478	531	637	849	
MAP at D1.3							

PANS OPS	Std/State.		STRAIGHT-IN LANDING		CIRCLE-TO-LAND	
			CDFA		Prohibited Southeast of runway	
			1 DA/MDA(H) <b>430'</b> (445')			
			ALS out		Max Kts	MDA(H)
	A	R1400m	R1500m		100	490' (504') V1500m
B	R2100m		135	960' (974') V1600m		
C			180	1050' (1064') V2400m		
D			205	1050' (1064') V3600m		

1 VNAV DA(H) in lieu of MDA(H) depends on operator policy.



LOCATION		FIS	AMSTERDAM INFORMATION	ATIS	TMZ	MONITOR AMSTERDAM INFORMATION	FMC
Elev -14' /-4m		N51 57.4	E004 26.2	128.565	124.300	7020 (en)	122.990 (en)
APPROACH		ROTTERDAM APPROACH		ROTTERDAM TOWER		ROTTERDAM TOWER	
N51 57.4 E004 26.2		122.990 (en)		118.205 (en)		119.705 (en)	
ROTTERDAM APPROACH 04-10		Schiphol FMC Area		Rotterdam FMC Area		Rotterdam FMC Area	
VDF		Temporary TMZ		Rotterdam FMC Area		Rotterdam FMC Area	

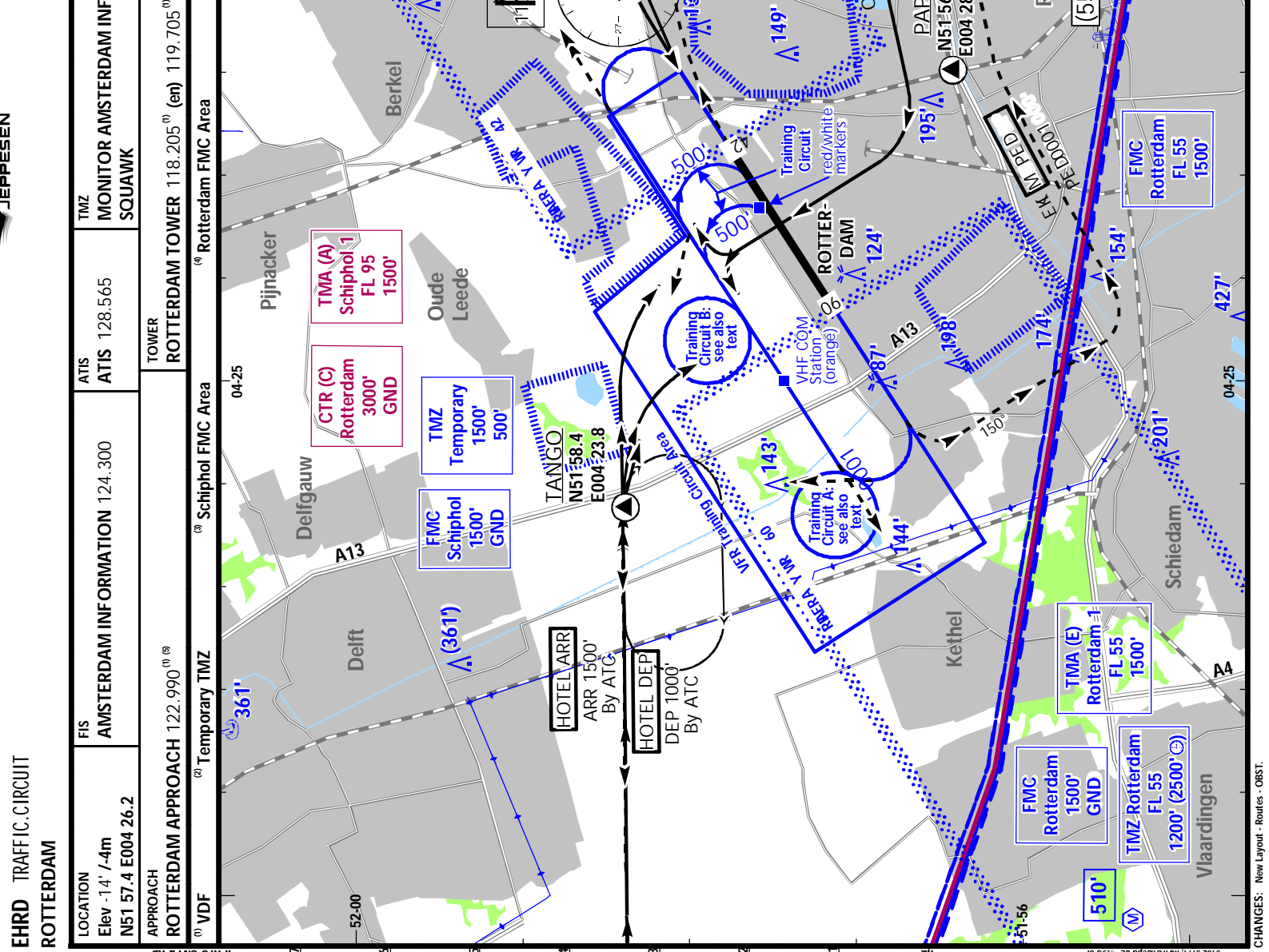


<b>LOCATION</b> Elev -14' / -4m N51 57.4 E004 26.2	<b>FIS</b> AMSTERDAM INFORMATION 124.300	<b>ATIS</b> ATIS 128.565	<b>TMZ</b> MONITOR AMSTERDAM INFORMATION 124.300 7020 <sup>(2)</sup>	<b>FMC</b> MONITOR 124.300 <sup>(6)</sup> 122.990 <sup>(6)</sup> SQUAWK 7020 <sup>(6)</sup> 7010 <sup>(6)</sup>
--	---	-----------------------------	--	---

08 DEC 23 (19-1A)

<b>APPROACH</b> ROTTERDAM APPROACH 122.990 <sup>(1)</sup> (en)	<b>TOWER</b> ROTTERDAM TOWER 118.205 <sup>(1)</sup> (en) 119.705 <sup>(1)</sup> (en)
---	---

<sup>(1)</sup> VDF <sup>(2)</sup> Temporary TMZ <sup>(3)</sup> Schiphol FMC Area <sup>(4)</sup> Rotterdam FMC Area <sup>(5)</sup> R <sup>(6)</sup> O/R or by ATC



**EHRD**  
**ROTTERDAM**

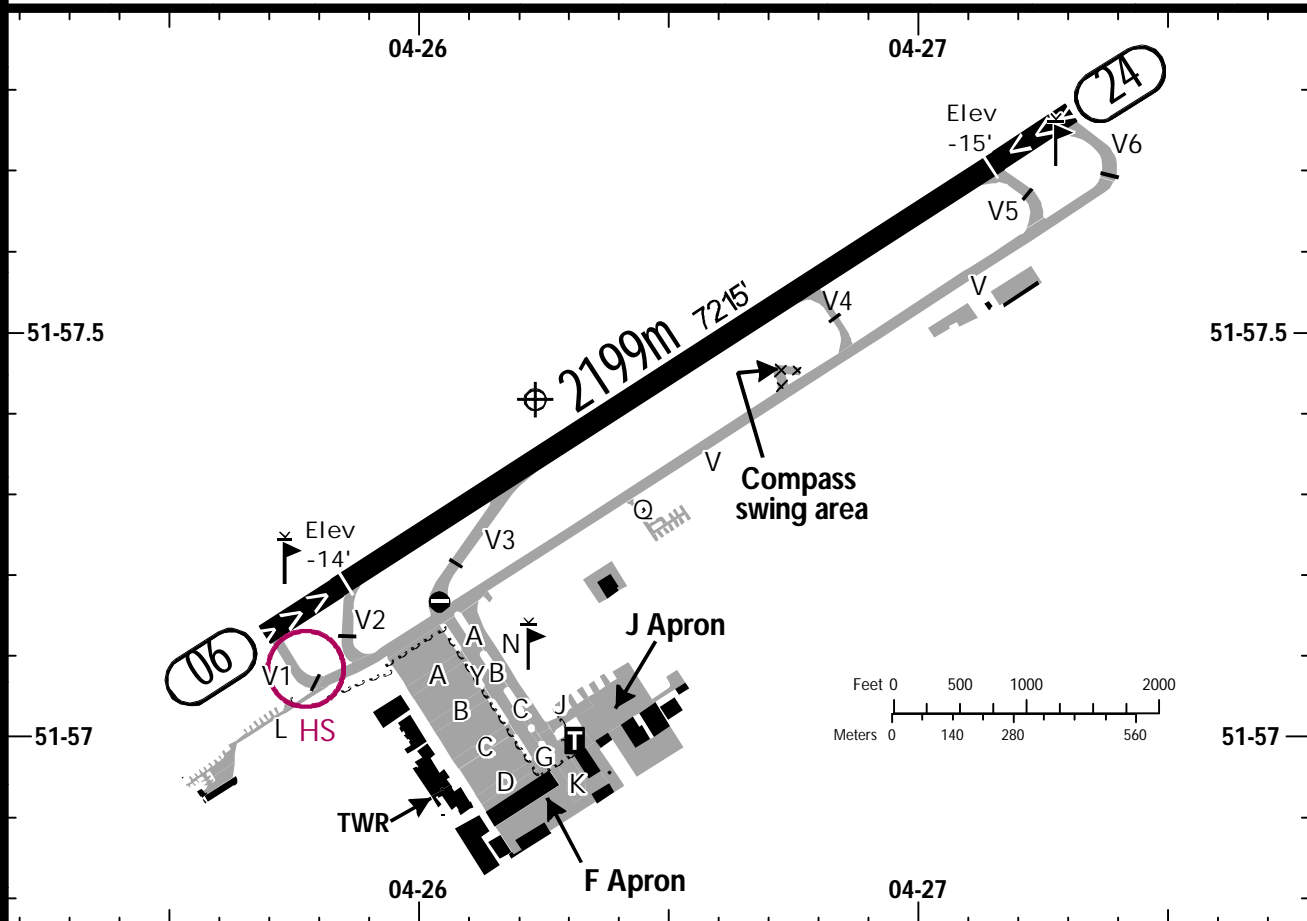
**ROTTERDAM**  
**NETHERLANDS**

15 SEP 23 **(19-2)**

BRIEFING STRIP™	LOCATION	ATIS	TOWER
	Elev -14' /-4m	ATIS 128.565	ROTTERDAM DELIVERY 122.180 <sup>(2)</sup>
	N51 57.4 E004 26.2		ROTTERDAM TOWER 118.205 <sup>(1)</sup> (en) 119.705 <sup>(1)</sup> (3) (en)

ADMITTED AIRCRAFT

<sup>(1)</sup> VDF      <sup>(2)</sup> Start-up Control, Clearance Delivery      <sup>(3)</sup> O/R or by ATC



ALS - PAPI 06 (3.0°), 24 (3.0°) - THRL - RL - RENL - RCLL - TWYL (EXC V4) - WDI - APRON.

RWY No	Dimension (m) - Surface	TORA (m)	LDA (m)	Strength	Lights
06 (056°) 24 (236°)	2199 x 45 Asphalt	2199	2004 2002	PCN 70/F/D/W/T	☯

Intersection TKOF

RWY	TWY	TORA (m)
06	V2	2004
24	V5	2002
	V4	1500

**NOTE: Avoid overflying Gas Venting Sites below 1000' AGL and in close vicinity.**

CAUTION: Pilots are urgently advised to maintain two-way radio communication within Rotterdam TMA. When operating in or below Rotterdam TMA 1 and 2 or in the vicinity of Schiphol TMA 1, the use of a frequency monitoring code is strongly recommended.

VFR flights shall not be operated within Schiphol TMA, unless authorised by the appropriate ATS authority.

During APCH to RWY 06 with SE wind: pilots should be prepared for building induced turbulence, wind-shear and wind-gradient effects over THR and TDZ RWY 06.

Bird-scare activities H24 with the use of various

equipment including flare shellcrackers, bird dispersal guns and amplified cries of distress.

RWY entry via TWY V3 not allowed.

RWY Incursion Hot Spots

HS - CAUTION: Do not cross the holding position marking without a clearance.

General

FPL mandatory for all VFR flights within CTR Rotterdam.

The use of RWY 06/24 is restricted to ACFT maintaining two-way radio contact with TWR.

Built-up areas shall be avoided as much as possible.

VFR flights within the CTR may be instructed by ATC to stay clear of the specified IFR areas.

Ground Movement

Follow-me service is mandatory during taxiing.

Pilots are to use the MNM power necessary when manoeuvring on the aprons and TWY system. Specific

**EHRD**  
**ROTTERDAM**

15 SEP 23 **19-3**

**ROTTERDAM**  
**NETHERLANDS**

caution is advised during taxiing on aprons and TWYs N & Y, MAX speed 15 KT.

TWY Q MAX wingspan 13.5m.

High-visibility clothing is mandatory on airside for ACFT crew and personnel.

### Traffic Circuits

RWY 06: LH circuit at 1000'.

RWY 24: RH circuit at 1000'; maintain 1000' until turning base leg.

NOTE: For traffic reasons pilots may be instructed to extend the downwind leg.

### Training Circuits

At 500' within the designated circuit area.

For these flights THR 24 has been displaced 800m beyond the normal THR 24 indicated by white marking and red/white markers on the right side of RWY.

ACFT are to stay inside the designated circuit area.

Follow the training circuit as depicted.

The downwind leg is marked by the orange coloured VHF COM station.

Touchdown at THR 06 and touchdown at displaced THR 24 (red/white markers).

NOTE: For traffic reasons pilots may be instructed to hold in area "ALPHA" or "BRAVO".

### Arrival

- Contact ROTTERDAM TOWER 2 MIN before reaching the CTR boundary for permission to enter the CTR.
- MIKE ARR: Enter CTR via MIKE at 1000', follow VFR route via OSCAR (or ABM OSCAR) to PAPA and keep 500m RH side of railway.
- ROMEO ARR: Enter CTR via ROMEO at 1500', follow VFR route via OSCAR (or ABM OSCAR) to PAPA and keep 500m RH side of motorway.
- HOTEL ARR (at ATC discretion only): Enter CTR via WHISKEY at 1500', follow VFR route via SIERRA to TANGO.

NOTE: HOTEL ARR coincides with R271° of "RTM" VOR/DME.

- Pilots may be instructed to hold over ROMEO, FOXTROT, ABM MIKE, ABM OSCAR, WHISKEY, SIERRA or TANGO.
- When instructed to approach via ABM PAPA the following applies:
  - Join TFC circuit as instructed by ATC.
  - Maintain 1000' (MIKE ARR) or 1500' (ROMEO ARR).
  - After passing ABM PAPA cross the RWY in the midfield and join the downwind leg as instructed by ATC.
- In case of an overshoot enter the relevant TFC circuit and inform ATC.

### Departure

- Contact ROTTERDAM DELIVERY and obtain start-up clearance before starting engines.

- MIKE DEP: After TKOF follow the VFR route via OSCAR (or ABM OSCAR) to MIKE while climbing to 1000' and keep 500m RH side of railway.

- ROMEO DEP: After TKOF follow the VFR route via OSCAR (or ABM OSCAR) and FOXTROT to ROMEO while climbing to 1500' and keep 500m RH side of motorway.

- HOTEL DEP (at ATC discretion only): After TKOF follow the VFR route via TANGO and SIERRA to WHISKEY in direction HOTEL while climbing to 1000'.

NOTE: The HOTEL ARR/DEP route coincides with R271° of "RTM" VOR/DME.

- For other directions: DEP instructions will be given.

### Communication Failure Procedures

Select transponder code 7600.

If possible call Amsterdam ACC Supervisor on TEL Nr (020) 406 3999.

NOTE: Use TEL connection to mitigate COM failure only. All TEL calls will be automatically recorded.

If TEL connection is disconnected prematurely (before read-back), revert to COM failure procedures below.

### VFR Inbound

- Via ROMEO and MIKE ARR:

- In case of COM failure before joining the circuit leave CTR according to the ROMEO or MIKE DEP and proceed to an appropriate AD.
- In case of COM failure over or after a position from where to join the circuit (this is past REP PAPA) execute a circuit for the last received and acknowledged RWY as short as practicable. Make a full stop LDG and vacate as soon as possible. In case of go-around execute a similar circuit. Pay attention to the other AD TFC.

- Via HOTEL ARR:

- In case of COM failure before joining the circuit leave CTR according to the HOTEL DEP and proceed to an appropriate AD.
- In case of COM failure over or after a position from where to join the circuit (this is past REP TANGO), act as stated under ROMEO/MIKE ARR.

- Via a Different Route:

- In case of COM failure before joining the circuit act in accordance with VFR Crossing CTR.
- In case of COM failure over or after a position from where to join the circuit act as stated under ROMEO/MIKE ARR.

### VFR Outbound

Adhere to DEP instructions. If they contain a clearance limit in CTR, act in accordance to the procedures 'VFR Crossing CTR'.

### VFR Crossing CTR

Leave CTR via the shortest route, maintain ALT until outside CTR, do not cross RCL or IFR areas and proceed to an appropriate AD.

## Chart changes since cycle 05-2024

ADD = added chart, REV = revised chart, DEL = deleted chart.

ACT	PROCEDURE IDENT	INDEX	REV DATE	EFF DATE
-----	-----------------	-------	----------	----------

**HANNOVER, (HANNOVER - EDDV)**

**ROTTERDAM, (ROTTERDAM - EHRD)**

## TERMINAL CHART CHANGE NOTICES

### No Chart Change Notices for Airport EDDV

### Chart Change Notices for Airport EHRD

**Type:** Terminal

**Effectivity:** Temporary

**Begin Date:** Immediately

**End Date:** 20230331

(13-1) VOR Rwy 06 - minima changed as follows: DA/MDA(H) 500' (514'), with ALS CAT C,D R1900m, without ALS CAT C,D R2400m. Based on NOTAM A0441/23.

### Chart Change Notices for Country DEU

**Type:** Gen Tmnl

**Effectivity:** Permanent

**Begin Date:** Immediately

**End Date:** No end date

Location/airport name changed from Buchel to Buechel, Buckeburg to Bueckeburg, Norvenich to Noervenich.

**Type:** Gen Tmnl

**Effectivity:** Permanent

**Begin Date:** Immediately

**End Date:** No end date

Location/airport name changed from Monchengladbach to Moenchengladbach.

**Type:** Gen Tmnl

**Effectivity:** Temporary

**Begin Date:** Immediately

**End Date:** Until Further Notice

Jeppesen charted take-off minimums are determined according to the available RWY lights. In Germany, Low Visibility Procedures (LVP) are only available for the following airports: EDDB, EDDC, EDDE, EDDF, EDDG, EDDH, EDDK, EDDL, EDDM, EDDN, EDDP, EDDR, EDDS, EDDV, EDDW, EDFH, EDHI, EDHL, EDJA, EDLN, EDLP, EDLV, EDLW, EDMA, EDNY, EDQM, EDSB, EDTL, EDTY, EDVE, EDVK. All other German airports are not approved for Low Visibility Take-off Operations (LVTO) with an RVR below 400m because of missing LVP.

**Type:** Gen Tmnl

**Effectivity:** Permanent

**Begin Date:** 20210326

**End Date:** No end date

Use of SID RNAV OVERLAY: Pilots of GPS/FMS-RNAV-equipped aircraft should, if possible, use the defined supplementary GPS/FMS/RNAV procedures which are published as "OVERLAY" to a conventional procedure. Please refer also to ATC Germany pages for additional information.

**Type:** Gen Tmnl (VFR)

**Effectivity:** Permanent

**Begin Date:** Immediately

**End Date:** No end date

In general, the callsign of A/G communication station at uncontrolled aerodromes is RADIO, service AFIS is withdrawn. On approaches, radio telephony communication shall be established not later than 5 MIN prior to reaching the AD.

**Type:** Gen Tmnl (VFR)

**Effectivity:** Permanent

**Begin Date:** Immediately

**End Date:** No end date

EFF 25 MAR 21 BDRY between FIS sectors with COM LANGEN INFORMATION 126.950 and LANGEN INFORMATION 128.950 moved APRX 26 NM W. BDRY between FIS sectors with COM LANGEN INFORMATION 119.825 and LANGEN INFORMATION 125.800 and LANGEN INFORMATION 132.650 moved APRX 26 NM W.

### Chart Change Notices for Country NLD

**Type:** Gen Tmnl (VFR)

**Effectivity:** Permanent

**Begin Date:** Immediately

**End Date:** No end date

EFF 20 MAY 21 FIS EELDE TOWER 118.705 chgd to EELDE APPROACH 120.305.

**Type:** Gen Tmnl (VFR)

**Effectivity:** Permanent

**Begin Date:** Immediately

**End Date:** No end date

EFF 20 MAY 21 FIS BEEK TOWER 119.480 chgd to BEEK APPROACH 123.980.

### Communication Information For EBBU ACC No communication information available

### Communication Information For EBBU ACC Low (ACC Sector Low)

Callsign:	Frequency	Radar	ServiceIndicators
Type: ACC:			
BRUSSELS CONTROL:	128.805 MHz		
BRUSSELS CONTROL:	387.05 MHz		

### Communication Information For EBBU FIR INMARSAT Service: INMARSAT SECURITY NUMBER FOR BRUSSELS ACC IS 420501

Callsign:	Frequency	Radar	ServiceIndicators
Type: Approach:			
LUXEMBOURG:	119.95 MHz	(R)	Secondary
LUXEMBOURG:	120.165 MHz	(R)	Secondary
LUXEMBOURG:	120.885 MHz	(R)	VDF
Type: Information:			
BELGA:	374.4 MHz		FIS
Type: Radar:			
BELGA:	129.32 MHz	(R)	
BELGA:	130.580 MHz	(R)	
BELGA:	258.6 MHz	(R)	
BELGA:	282.07 MHz	(R)	
BELGA:	284.85 MHz	(R)	
BELGA:	306.6 MHz	(R)	
BELGA:	342.82 MHz	(R)	
BELGA:	343.17 MHz	(R)	
BELGA:	344.8 MHz	(R)	
BELGA:	362.62 MHz	(R)	
BELGA:	374.4 MHz	(R)	
BELGA:	378.42 MHz	(R)	
Type: VOLMET:			
BRUSSELS MET BROADCAST:	127.805 MHz		

### Communication Information For EBUR ACC High (ACC Sector High)

Callsign:	Frequency	Radar	ServiceIndicators
Type: ACC:			
BRUSSELS CONTROL:	128.805 MHz		
BRUSSELS CONTROL:	387.05 MHz		

### Communication Information For EBUR UAC High (UAC Sector High)

Callsign:	Frequency	Radar	ServiceIndicators
Type: Upper Area Control Center:			
MAASTRICHT RADAR:	132.205 MHz		



MAASTRICHT RADAR: 336.35 MHz

**Communication Information For EBUR UIR** CPDLC Service: CPDLC SERVICES ARE AVAILABLE ABOVE FL245 WITH LOGON ADDRESS OF EDYY IN BRUSSELS UIR. LOGON IS MANDATORY FOR ALL FLIGHT CREWS OF CPDLC-EQUIPPED AND EUROCONTROL NM LOG ON LISTED ATN AIRCRAFT. AIRCRAFT WHICH DO NOT QUALIFY FOR NM DPMF LOG ON LISTING, SHOULD REFRAIN FROM LOG ON ATTEMPTS TO AVOID DETERIORATION OF THE VDL MODE 2 PERFORMANCE.  
 INMARSAT Service: INMARSAT SECURITY NUMBER FOR BRUSSELS ACC IS 420501

Callsign:	Frequency	Radar	ServiceIndicators
Type: ACC:			
BRUSSELS CONTROL:	125.0 MHz	(R)	
BRUSSELS CONTROL:	125.780 MHz	(R)	
BRUSSELS CONTROL:	126.980 MHz	(R)	
BRUSSELS CONTROL:	127.230 MHz	(R)	
BRUSSELS CONTROL:	128.2 MHz	(R)	
BRUSSELS CONTROL:	128.45 MHz	(R)	
BRUSSELS CONTROL:	128.805 MHz	(R)	
BRUSSELS CONTROL:	129.57 MHz	(R)	
BRUSSELS CONTROL:	131.1 MHz	(R)	
BRUSSELS CONTROL:	387.05 MHz	(R)	
Type: Information:			
BRUSSELS:	126.9 MHz		FIS
BELGA:	129.32 MHz		FIS
BRUSSELS:	259.27 MHz		FIS
Type: Upper Area Control Center:			
MAASTRICHT RADAR:	132.205 MHz	(R)	
MAASTRICHT RADAR:	132.315 MHz	(R)	
MAASTRICHT RADAR:	132.755 MHz	(R)	
MAASTRICHT RADAR:	133.355 MHz	(R)	
MAASTRICHT RADAR:	135.960 MHz	(R)	
MAASTRICHT RADAR:	135.980 MHz	(R)	
MAASTRICHT RADAR:	292.77 MHz	(R)	
MAASTRICHT RADAR:	336.35 MHz	(R)	
MAASTRICHT RADAR:	338.87 MHz	(R)	
MAASTRICHT RADAR:	359.45 MHz	(R)	
Type: VOLMET:			
BRUSSELS MET BROADCAST:	127.805 MHz		

**Communication Information For EDGG ACC** No communication information available

**Communication Information For EDGG ACC Low (ACC Sector Low)**

Callsign:	Frequency	Radar	ServiceIndicators
Type: ACC:			
LANGEN RADAR:	129.3 MHz		
LANGEN RADAR:	387.82 MHz		
Type: Radar:			
LANGEN RADAR:	129.3 MHz		

**Communication Information For EDGG FIR**

Callsign:	Frequency	Radar	ServiceIndicators
-----------	-----------	-------	-------------------

Type: ACC:

LANGEN RADAR:	118.75 MHz	(R)	
LANGEN RADAR:	119.030 MHz	(R)	Secondary
LANGEN RADAR:	119.110 MHz	(R)	
LANGEN RADAR:	119.2 MHz	(R)	
LANGEN RADAR:	120.155 MHz	(R)	
LANGEN RADAR:	120.805 MHz	(R)	
LANGEN RADAR:	121.05 MHz	(R)	
LANGEN RADAR:	121.355 MHz	(R)	
LANGEN RADAR:	123.280 MHz	(R)	
LANGEN RADAR:	124.430 MHz	(R)	
LANGEN RADAR:	124.730 MHz	(R)	
LANGEN RADAR:	124.9 MHz	(R)	
LANGEN RADAR:	125.05 MHz	(R)	
LANGEN RADAR:	125.2 MHz	(R)	
LANGEN RADAR:	125.22 MHz	(R)	
LANGEN RADAR:	125.355 MHz	(R)	
LANGEN RADAR:	125.405 MHz	(R)	
LANGEN RADAR:	125.6 MHz	(R)	
LANGEN RADAR:	125.680 MHz	(R)	
LANGEN RADAR:	126.555 MHz	(R)	Secondary
LANGEN RADAR:	127.05 MHz	(R)	
LANGEN RADAR:	127.365 MHz	(R)	
LANGEN RADAR:	127.5 MHz	(R)	
LANGEN RADAR:	127.62 MHz	(R)	
LANGEN RADAR:	127.72 MHz	(R)	
LANGEN RADAR:	128.555 MHz	(R)	
LANGEN RADAR:	129.17 MHz	(R)	
LANGEN RADAR:	129.3 MHz	(R)	
LANGEN RADAR:	129.355 MHz	(R)	
LANGEN RADAR:	129.67 MHz	(R)	
LANGEN RADAR:	131.3 MHz	(R)	
LANGEN RADAR:	132.155 MHz	(R)	
LANGEN RADAR:	133.435 MHz	(R)	
LANGEN RADAR:	133.460 MHz	(R)	
LANGEN RADAR:	134.8 MHz	(R)	
LANGEN RADAR:	135.35 MHz	(R)	
LANGEN RADAR:	135.65 MHz	(R)	
LANGEN RADAR:	135.72 MHz	(R)	
LANGEN RADAR:	136.130 MHz	(R)	

Type: Information:

LANGEN:	119.15 MHz		FIS
---------	------------	--	-----

Type: VOLMET:

BREMEN:	127.410 MHz
FRANKFURT 1:	127.605 MHz
FRANKFURT 2:	135.780 MHz

### Communication Information For EDGG UAC High (UAC Sector High)

Callsign:	Frequency	Radar	ServiceIndicators
-----------	-----------	-------	-------------------

Type: ACC:

LANGEN RADAR:	127.72 MHz
LANGEN RADAR:	296.95 MHz

Type: Radar:

LANGEN RADAR:	127.72 MHz
LANGEN RADAR:	296.95 MHz

### Communication Information For EDMM ACC Both (ACC Sector)

Callsign:	Frequency	Radar	ServiceIndicators
-----------	-----------	-------	-------------------

Type: ACC:  
MUNICH RADAR: 118.235 MHz  
MUNICH RADAR: 374.87 MHz

### Communication Information For EDMM ACC High (ACC Sector High)

Callsign:	Frequency	Radar	ServiceIndicators
Type: ACC:			
MUNICH RADAR:	118.235 MHz		
MUNICH RADAR:	374.87 MHz		

### Communication Information For EDMM ACC Low (ACC Sector Low)

Callsign:	Frequency	Radar	ServiceIndicators
Type: ACC:			
MUNICH RADAR:	126.065 MHz		
MUNICH RADAR:	264.65 MHz		
Type: Approach:			
MUNICH RADAR:	126.065 MHz		

### Communication Information For EDMM FIR INMARSAT Service: INMARSAT SECURITY NUMBER FOR MUNICH ATC IS 421105

Callsign:	Frequency	Radar	ServiceIndicators
Type: ACC:			
MUNICH RADAR:	118.235 MHz	(R)	
MUNICH RADAR:	124.960 MHz	(R)	
MUNICH RADAR:	125.140 MHz	(R)	
MUNICH RADAR:	125.87 MHz	(R)	
MUNICH RADAR:	126.17 MHz	(R)	
MUNICH RADAR:	128.630 MHz	(R)	
MUNICH RADAR:	129.1 MHz	(R)	
MUNICH RADAR:	129.45 MHz	(R)	
MUNICH RADAR:	129.52 MHz	(R)	
MUNICH RADAR:	129.555 MHz	(R)	
MUNICH RADAR:	131.055 MHz	(R)	
MUNICH RADAR:	132.455 MHz	(R)	
MUNICH RADAR:	132.555 MHz	(R)	
MUNICH RADAR:	133.230 MHz	(R)	
MUNICH RADAR:	133.55 MHz	(R)	
MUNICH RADAR:	133.615 MHz	(R)	
MUNICH RADAR:	133.680 MHz	(R)	
MUNICH RADAR:	134.15 MHz	(R)	
MUNICH RADAR:	136.230 MHz	(R)	
MUNICH RADAR:	136.52 MHz	(R)	
MUNICH RADAR:	253.5 MHz	(R)	
MUNICH RADAR:	255.95 MHz	(R)	
MUNICH RADAR:	264.65 MHz	(R)	
MUNICH RADAR:	265.72 MHz	(R)	
MUNICH RADAR:	291.65 MHz	(R)	
MUNICH RADAR:	296.77 MHz	(R)	
MUNICH RADAR:	306.6 MHz	(R)	
MUNICH RADAR:	307.3 MHz	(R)	
MUNICH RADAR:	374.87 MHz	(R)	

Type: Information:

LANGEN: 125.8 MHz FIS

Type: VOLMET:
BERLIN: 128.405 MHz
FRANKFURT 2: 135.780 MHz

Communication Information For EDUU UAC High (UAC Sector High)

Callsign: Frequency Radar ServiceIndicators

Type: Upper Area Control Center:
RHEIN RADAR: 133.035 MHz
RHEIN RADAR: 258.92 MHz

Communication Information For EDUU UIR CPDLC Service: CPDLC SERVICES FOR ATN VDL MODE

2 EQUIPPED AIRCRAFT ARE AVAILABLE WITH LOGON ADDRESS OF EDUU IN RHEIN UIR. WITHIN THE AREA OF RESPONSIBILITY OF RHEIN UIR IT IS MANDATORY FOR FLIGHT CREWS OF CPDLC-EQUIPPED AIRCRAFT TO LOG ON TO EDUU. INMARSAT Service: INMARSAT SECURITY NUMBER FOR KARLSRUHE UAC IS 421106

Callsign: Frequency Radar ServiceIndicators

Type: Upper Area Control Center:
RHEIN RADAR: 118.215 MHz (R)
RHEIN RADAR: 120.930 MHz (R)
RHEIN RADAR: 121.440 MHz (R)
RHEIN RADAR: 122.635 MHz (R)
RHEIN RADAR: 123.390 MHz (R)
RHEIN RADAR: 124.035 MHz (R)
RHEIN RADAR: 124.960 MHz (R)
RHEIN RADAR: 126.265 MHz (R)
RHEIN RADAR: 126.785 MHz (R)
RHEIN RADAR: 127.290 MHz (R)
RHEIN RADAR: 127.310 MHz (R)
RHEIN RADAR: 128.235 MHz (R)
RHEIN RADAR: 128.830 MHz (R)
RHEIN RADAR: 130.115 MHz (R)
RHEIN RADAR: 131.365 MHz (R)
RHEIN RADAR: 131.385 MHz (R)
RHEIN RADAR: 132.080 MHz (R)
RHEIN RADAR: 132.140 MHz (R)
RHEIN RADAR: 132.330 MHz (R)
RHEIN RADAR: 132.405 MHz (R)
RHEIN RADAR: 132.730 MHz (R)
RHEIN RADAR: 133.035 MHz (R)
RHEIN RADAR: 133.280 MHz (R)
RHEIN RADAR: 133.285 MHz (R)
RHEIN RADAR: 133.340 MHz (R)
RHEIN RADAR: 133.360 MHz (R)
RHEIN RADAR: 133.640 MHz (R)
RHEIN RADAR: 133.655 MHz (R)
RHEIN RADAR: 133.755 MHz (R)
RHEIN RADAR: 133.760 MHz (R)
RHEIN RADAR: 133.815 MHz (R)
RHEIN RADAR: 133.835 MHz (R)
RHEIN RADAR: 133.840 MHz (R)
RHEIN RADAR: 133.860 MHz (R)
RHEIN RADAR: 134.065 MHz (R)
RHEIN RADAR: 134.085 MHz (R)
RHEIN RADAR: 134.690 MHz (R)
RHEIN RADAR: 135.030 MHz (R)
RHEIN RADAR: 135.310 MHz (R)
RHEIN RADAR: 135.955 MHz (R)
RHEIN RADAR: 136.315 MHz (R)
RHEIN RADAR: 136.335 MHz (R)
RHEIN RADAR: 136.405 MHz (R)
RHEIN RADAR: 136.480 MHz (R)
RHEIN RADAR: 252.97 MHz (R)

RHEIN RADAR:	254.97 MHz	(R)
RHEIN RADAR:	258.92 MHz	(R)
RHEIN RADAR:	280.35 MHz	(R)
RHEIN RADAR:	280.77 MHz	(R)
RHEIN RADAR:	281.37 MHz	(R)
RHEIN RADAR:	282.7 MHz	(R)
RHEIN RADAR:	285.07 MHz	(R)
RHEIN RADAR:	292.12 MHz	(R)
RHEIN RADAR:	300.05 MHz	(R)
RHEIN RADAR:	307.25 MHz	(R)
RHEIN RADAR:	308.87 MHz	(R)
RHEIN RADAR:	338.45 MHz	(R)
RHEIN RADAR:	338.47 MHz	(R)
RHEIN RADAR:	342.12 MHz	(R)
RHEIN RADAR:	344.27 MHz	(R)
RHEIN RADAR:	355.62 MHz	(R)
RHEIN RADAR:	357.02 MHz	(R)
RHEIN RADAR:	359.7 MHz	(R)
RHEIN RADAR:	360.37 MHz	(R)
RHEIN RADAR:	375.25 MHz	(R)
RHEIN RADAR:	376.35 MHz	(R)
RHEIN RADAR:	379.1 MHz	(R)
RHEIN RADAR:	387.32 MHz	(R)
RHEIN RADAR:	397.45 MHz	(R)
RHEIN RADAR:	398.7 MHz	(R)

Type: VOLMET:	
BREMEN:	127.410 MHz
FRANKFURT 1:	127.605 MHz
BERLIN:	128.405 MHz
FRANKFURT 2:	135.780 MHz

### Communication Information For EDVV UAC High (UAC Sector High)

Callsign:	Frequency	Radar	ServiceIndicators
Type: Upper Area Control Center:			
MAASTRICHT RADAR:	120.860 MHz		
MAASTRICHT RADAR:	312.35 MHz		

### Communication Information For EDVV UIR CPDLC Service: CPDLC SERVICES FOR ATN VDL MODE

2 EQUIPPED AIRCRAFT ARE AVAILABLE WITH LOGON ADDRESS OF EDYY IN HANNOVER UIR. LOGON IS MANDATORY FOR CPDLC EQUIPPED AIRCRAFT FOR SAFETY REASONS.

Callsign:	Frequency	Radar	ServiceIndicators
Type: Upper Area Control Center:			
MAASTRICHT RADAR:	120.860 MHz	(R)	
MAASTRICHT RADAR:	122.765 MHz	(R)	
MAASTRICHT RADAR:	125.980 MHz	(R)	
MAASTRICHT RADAR:	128.810 MHz	(R)	
MAASTRICHT RADAR:	129.610 MHz	(R)	
MAASTRICHT RADAR:	129.735 MHz	(R)	
MAASTRICHT RADAR:	129.840 MHz	(R)	
MAASTRICHT RADAR:	130.110 MHz	(R)	
MAASTRICHT RADAR:	130.510 MHz	(R)	
MAASTRICHT RADAR:	131.080 MHz	(R)	
MAASTRICHT RADAR:	131.380 MHz	(R)	
MAASTRICHT RADAR:	132.085 MHz	(R)	
MAASTRICHT RADAR:	132.780 MHz	(R)	
MAASTRICHT RADAR:	132.855 MHz	(R)	
MAASTRICHT RADAR:	133.215 MHz	(R)	
MAASTRICHT RADAR:	133.955 MHz	(R)	
MAASTRICHT RADAR:	134.710 MHz	(R)	
MAASTRICHT RADAR:	135.510 MHz	(R)	
MAASTRICHT RADAR:	135.830 MHz	(R)	
MAASTRICHT RADAR:	136.465 MHz	(R)	

MAASTRICHT RADAR:	138.57 MHz	(R)	
MAASTRICHT RADAR:	244.75 MHz	(R)	Secondary, MIL
MAASTRICHT RADAR:	255.6 MHz	(R)	
MAASTRICHT RADAR:	292.77 MHz	(R)	
MAASTRICHT RADAR:	312.35 MHz	(R)	
MAASTRICHT RADAR:	314.6 MHz	(R)	MIL
MAASTRICHT RADAR:	315.05 MHz	(R)	
MAASTRICHT RADAR:	338.87 MHz	(R)	
MAASTRICHT RADAR:	339.92 MHz	(R)	
MAASTRICHT RADAR:	342.65 MHz	(R)	
MAASTRICHT RADAR:	399.75 MHz	(R)	
MAASTRICHT RADAR:	399.8 MHz	(R)	Secondary
Type: VOLMET:			
BREMEN:	127.410 MHz		
FRANKFURT 2:	135.780 MHz		

### Communication Information For EDWW ACC Both (ACC Sector)

Callsign:	Frequency	Radar	ServiceIndicators
Type: ACC:			
BREMEN RADAR:	124.17 MHz		
BREMEN RADAR:	125.3 MHz		
BREMEN RADAR:	259.82 MHz		
Type: Radar:			
BREMEN RADAR:	124.17 MHz		
BREMEN RADAR:	259.82 MHz		

### Communication Information For EDWW ACC Low (ACC Sector Low)

Callsign:	Frequency	Radar	ServiceIndicators
Type: ACC:			
BREMEN RADAR:	124.07 MHz		
BREMEN RADAR:	398.0 MHz		
Type: Radar:			
BREMEN RADAR:	124.07 MHz		
BREMEN RADAR:	398.0 MHz		

### Communication Information For EDWW FIR INMARSAT Service: INMARSAT SECURITY NUMBER FOR BREMEN ATC/FIS/ALRS IS 421102

Callsign:	Frequency	Radar	ServiceIndicators
Type: ACC:			
BREMEN RADAR:	118.055 MHz	(R)	
BREMEN RADAR:	119.490 MHz	(R)	
BREMEN RADAR:	119.505 MHz	(R)	
BREMEN RADAR:	119.510 MHz	(R)	
BREMEN RADAR:	119.630 MHz	(R)	
BREMEN RADAR:	120.22 MHz	(R)	
BREMEN RADAR:	120.340 MHz	(R)	
BREMEN RADAR:	120.355 MHz	(R)	
BREMEN RADAR:	120.630 MHz	(R)	
BREMEN RADAR:	123.22 MHz	(R)	
BREMEN RADAR:	124.07 MHz	(R)	
BREMEN RADAR:	124.17 MHz	(R)	
BREMEN RADAR:	124.8 MHz	(R)	

BREMEN RADAR:	125.02 MHz	(R)	
BREMEN RADAR:	125.3 MHz	(R)	
BREMEN RADAR:	125.855 MHz	(R)	
BREMEN RADAR:	126.080 MHz	(R)	
BREMEN RADAR:	126.32 MHz	(R)	
BREMEN RADAR:	126.42 MHz	(R)	
BREMEN RADAR:	126.655 MHz	(R)	
BREMEN RADAR:	127.67 MHz	(R)	
BREMEN RADAR:	128.760 MHz	(R)	
BREMEN RADAR:	133.72 MHz	(R)	Secondary
BREMEN RADAR:	134.255 MHz	(R)	
BREMEN RADAR:	136.05 MHz	(R)	
BREMEN RADAR:	136.45 MHz	(R)	
BREMEN RADAR:	136.67 MHz	(R)	
BREMEN RADAR:	313.5 MHz	(R)	

Type: Information:			
LANGEN:	119.82 MHz		FIS
LANGEN:	125.1 MHz		FIS
LANGEN:	132.65 MHz		FIS

Type: VOLMET:			
BREMEN:	127.410 MHz		
BERLIN:	128.405 MHz		
FRANKFURT 2:	135.780 MHz		

### Communication Information For EGPX ACC Both (ACC Sector)

Callsign:	Frequency	Radar	ServiceIndicators
Type: ACC:			
SCOTTISH CONTROL:	118.780 MHz		
SCOTTISH CONTROL:	119.530 MHz		
SCOTTISH CONTROL:	119.87 MHz		
SCOTTISH CONTROL:	121.32 MHz		
SCOTTISH CONTROL:	121.37 MHz		
SCOTTISH CONTROL:	123.77 MHz		
SCOTTISH CONTROL:	124.5 MHz		
SCOTTISH CONTROL:	124.82 MHz		
SCOTTISH CONTROL:	125.680 MHz		
SCOTTISH CONTROL:	125.95 MHz		
SCOTTISH CONTROL:	126.3 MHz		
SCOTTISH CONTROL:	126.930 MHz		
SCOTTISH CONTROL:	127.27 MHz		
SCOTTISH CONTROL:	128.055 MHz		
SCOTTISH CONTROL:	128.67 MHz		
SCOTTISH CONTROL:	129.1 MHz		
SCOTTISH CONTROL:	129.22 MHz		
SCOTTISH CONTROL:	130.97 MHz		
SCOTTISH CONTROL:	132.490 MHz		
SCOTTISH CONTROL:	132.730 MHz		
SCOTTISH CONTROL:	133.05 MHz		
SCOTTISH CONTROL:	133.2 MHz		
SCOTTISH CONTROL:	133.680 MHz		
SCOTTISH CONTROL:	133.8 MHz		
SCOTTISH CONTROL:	133.87 MHz		

### Communication Information For EGTT ACC No communication information available

### Communication Information For EGTT ACC Both (ACC Sector)

Callsign:	Frequency	Radar	ServiceIndicators
-----------	-----------	-------	-------------------

Type: ACC:  
 LONDON CONTROL: 118.480 MHz  
 LONDON CONTROL: 118.82 MHz  
 LONDON CONTROL: 119.780 MHz  
 LONDON CONTROL: 120.180 MHz  
 LONDON CONTROL: 120.47 MHz  
 LONDON CONTROL: 120.530 MHz  
 LONDON CONTROL: 121.030 MHz  
 LONDON CONTROL: 121.230 MHz  
 LONDON CONTROL: 121.280 MHz  
 LONDON CONTROL: 123.905 MHz  
 LONDON CONTROL: 124.930 MHz  
 LONDON CONTROL: 126.080 MHz  
 LONDON CONTROL: 126.780 MHz  
 LONDON CONTROL: 126.87 MHz  
 LONDON CONTROL: 127.105 MHz  
 LONDON CONTROL: 127.430 MHz  
 LONDON CONTROL: 127.7 MHz  
 LONDON CONTROL: 127.830 MHz  
 LONDON CONTROL: 127.880 MHz  
 LONDON CONTROL: 127.955 MHz  
 LONDON CONTROL: 128.130 MHz  
 LONDON CONTROL: 128.160 MHz  
 LONDON CONTROL: 128.430 MHz  
 LONDON CONTROL: 128.480 MHz  
 LONDON CONTROL: 128.815 MHz  
 LONDON CONTROL: 129.02 MHz  
 LONDON CONTROL: 129.05 MHz  
 LONDON CONTROL: 129.080 MHz  
 LONDON CONTROL: 129.205 MHz

### Communication Information For EGTT ACC High (ACC Sector High)

Callsign:	Frequency	Radar	ServiceIndicators
Type: ACC:			
LONDON CONTROL:	118.480 MHz		
LONDON CONTROL:	118.82 MHz		
LONDON CONTROL:	119.780 MHz		
LONDON CONTROL:	120.180 MHz		
LONDON CONTROL:	120.47 MHz		
LONDON CONTROL:	120.530 MHz		
LONDON CONTROL:	121.030 MHz		
LONDON CONTROL:	121.230 MHz		
LONDON CONTROL:	121.280 MHz		
LONDON CONTROL:	123.905 MHz		
LONDON CONTROL:	124.930 MHz		
LONDON CONTROL:	126.080 MHz		
LONDON CONTROL:	126.780 MHz		
LONDON CONTROL:	126.87 MHz		
LONDON CONTROL:	127.105 MHz		
LONDON CONTROL:	127.430 MHz		
LONDON CONTROL:	127.7 MHz		
LONDON CONTROL:	127.830 MHz		
LONDON CONTROL:	127.880 MHz		
LONDON CONTROL:	127.955 MHz		
LONDON CONTROL:	128.130 MHz		
LONDON CONTROL:	128.160 MHz		
LONDON CONTROL:	128.430 MHz		
LONDON CONTROL:	128.480 MHz		
LONDON CONTROL:	128.815 MHz		
LONDON CONTROL:	129.02 MHz		
LONDON CONTROL:	129.05 MHz		
LONDON CONTROL:	129.080 MHz		
LONDON CONTROL:	129.205 MHz		

### Communication Information For EGTT ACC Low (ACC Sector Low)



Callsign:	Frequency	Radar	ServiceIndicators
Type: ACC:			
LONDON CONTROL:	118.480 MHz		
LONDON CONTROL:	118.82 MHz		
LONDON CONTROL:	119.780 MHz		
LONDON CONTROL:	120.180 MHz		
LONDON CONTROL:	120.47 MHz		
LONDON CONTROL:	120.530 MHz		
LONDON CONTROL:	121.030 MHz		
LONDON CONTROL:	121.230 MHz		
LONDON CONTROL:	121.280 MHz		
LONDON CONTROL:	123.905 MHz		
LONDON CONTROL:	124.930 MHz		
LONDON CONTROL:	126.080 MHz		
LONDON CONTROL:	126.780 MHz		
LONDON CONTROL:	126.87 MHz		
LONDON CONTROL:	127.105 MHz		
LONDON CONTROL:	127.430 MHz		
LONDON CONTROL:	127.7 MHz		
LONDON CONTROL:	127.830 MHz		
LONDON CONTROL:	127.880 MHz		
LONDON CONTROL:	127.955 MHz		
LONDON CONTROL:	128.130 MHz		
LONDON CONTROL:	128.160 MHz		
LONDON CONTROL:	128.430 MHz		
LONDON CONTROL:	128.480 MHz		
LONDON CONTROL:	128.815 MHz		
LONDON CONTROL:	129.02 MHz		
LONDON CONTROL:	129.05 MHz		
LONDON CONTROL:	129.080 MHz		
LONDON CONTROL:	129.205 MHz		

**Communication Information For EGTT AOR** No communication information available

**Communication Information For EGTT FIR/UIR** CPDLC Service: CPDLC SERVICES ARE AVAILABLE WITH LOGON ADDRESS OF EGTT ABOVE FL285 IN LONDON UIR AND WILL BE PROVIDED AT FL195 AND ABOVE WHERE POSSIBLE. LOGON SHOULD BE ESTABLISHED LESS THAN 15 MINUTES PRIOR TO ENTERING THE DATA LINK AIRSPACE  
 INMARSAT Service: INMARSAT SECURITY NUMBER FOR RAF(U) SWANWICK D&D IS 423202

Callsign:	Frequency	Radar	ServiceIndicators
Type: ACC:			
LONDON CONTROL:	118.480 MHz	(R)	
SCOTTISH CONTROL:	118.780 MHz	(R)	
LONDON CONTROL:	118.82 MHz	(R)	
SCOTTISH CONTROL:	119.530 MHz	(R)	
LONDON CONTROL:	119.780 MHz	(R)	
LONDON CONTROL:	120.180 MHz	(R)	
LONDON CONTROL:	120.47 MHz	(R)	
LONDON CONTROL:	120.530 MHz	(R)	
LONDON CONTROL:	121.030 MHz	(R)	
LONDON CONTROL:	121.230 MHz	(R)	
LONDON CONTROL:	121.280 MHz	(R)	
LONDON CONTROL:	123.905 MHz	(R)	
LONDON CONTROL:	124.930 MHz	(R)	
LONDON CONTROL:	126.080 MHz	(R)	
LONDON CONTROL:	126.780 MHz	(R)	
LONDON CONTROL:	126.87 MHz	(R)	
LONDON CONTROL:	127.105 MHz	(R)	
LONDON CONTROL:	127.430 MHz	(R)	
LONDON CONTROL:	127.7 MHz	(R)	
LONDON CONTROL:	127.830 MHz	(R)	
LONDON CONTROL:	127.880 MHz	(R)	
LONDON CONTROL:	127.955 MHz	(R)	
SCOTTISH CONTROL:	128.055 MHz	(R)	
LONDON CONTROL:	128.130 MHz	(R)	
LONDON CONTROL:	128.160 MHz	(R)	

LONDON CONTROL: 128.430 MHz (R)  
 LONDON CONTROL: 128.480 MHz (R)  
 LONDON CONTROL: 128.815 MHz (R)  
 LONDON CONTROL: 129.02 MHz (R)  
 LONDON CONTROL: 129.05 MHz (R)  
 LONDON CONTROL: 129.080 MHz (R)  
 LONDON CONTROL: 129.205 MHz (R)  
 LONDON CONTROL: 129.280 MHz (R)  
 LONDON CONTROL: 129.380 MHz (R)  
 LONDON CONTROL: 129.430 MHz (R)  
 LONDON CONTROL: 129.605 MHz (R)  
 LONDON CONTROL: 130.92 MHz (R)  
 LONDON CONTROL: 132.165 MHz (R)  
 LONDON CONTROL: 132.605 MHz (R)  
 LONDON CONTROL: 132.840 MHz (R)  
 LONDON CONTROL: 132.860 MHz (R)  
 LONDON CONTROL: 132.95 MHz (R)  
 SCOTTISH CONTROL: 133.05 MHz (R)  
 LONDON CONTROL: 133.080 MHz (R)  
 LONDON CONTROL: 133.180 MHz (R)  
 LONDON CONTROL: 133.52 MHz (R)  
 LONDON CONTROL: 133.6 MHz (R)  
 LONDON CONTROL: 133.705 MHz (R)  
 SCOTTISH CONTROL: 133.8 MHz (R)  
 LONDON CONTROL: 133.940 MHz (R)  
 LONDON CONTROL: 133.97 MHz (R)  
 LONDON CONTROL: 134.12 MHz (R)  
 LONDON CONTROL: 134.25 MHz (R)  
 LONDON CONTROL: 134.390 MHz (R)  
 SCOTTISH CONTROL: 134.430 MHz (R)  
 LONDON CONTROL: 134.440 MHz (R)  
 LONDON CONTROL: 134.460 MHz (R)  
 LONDON CONTROL: 134.755 MHz (R)  
 LONDON CONTROL: 134.905 MHz (R)  
 LONDON CONTROL: 135.055 MHz (R)  
 LONDON CONTROL: 135.25 MHz (R)  
 LONDON CONTROL: 135.255 MHz (R)  
 LONDON CONTROL: 135.32 MHz (R)  
 LONDON CONTROL: 135.42 MHz (R)  
 LONDON CONTROL: 135.580 MHz (R)  
 SCOTTISH CONTROL: 135.715 MHz (R)  
 LONDON CONTROL: 135.805 MHz (R)  
 LONDON CONTROL: 136.2 MHz (R)  
 LONDON CONTROL: 136.27 MHz (R)  
 LONDON CONTROL: 136.55 MHz (R)  
 LONDON CONTROL: 136.6 MHz (R)

Type: Information:  
 LONDON: 124.6 MHz FIS  
 LONDON: 124.75 MHz FIS  
 LONDON: 125.47 MHz FIS

Type: Radar:  
 ANGLIA: 125.27 MHz (R)  
 SWANWICK MIL: 127.45 MHz (R) MIL  
 SWANWICK MIL: 128.7 MHz (R) MIL  
 ANGLIA: 128.92 MHz (R)  
 WESTERN RADAR: 131.05 MHz (R) Secondary  
 WESTERN RADAR: 132.3 MHz (R)  
 SWANWICK MIL: 133.32 MHz (R) MIL  
 SWANWICK MIL: 133.9 MHz (R) MIL  
 SWANWICK MIL: 134.3 MHz (R) MIL  
 SWANWICK MIL: 135.07 MHz (R) MIL  
 SWANWICK MIL: 135.15 MHz (R) MIL  
 SWANWICK MIL: 136.37 MHz (R) MIL

Type: VOLMET:  
 LONDON: 126.6 MHz  
 LONDON: 128.6 MHz  
 LONDON: 135.37 MHz

## Communication Information For EHAA ACC High (ACC Sector High)

Callsign:	Frequency	Radar	ServiceIndicators
Type: ACC:			
AMSTERDAM RADAR:	134.37 MHz		
AMSTERDAM RADAR:	276.72 MHz		

## Communication Information For EHAA FIR CPDLC Service: CPDLC SERVICES ARE AVAILABLE ABOVE FL245 WITH LOGON ADDRESS OF EDYY IN AMSTERDAM FIR. LOGON IS MANDATORY FOR CREWS OF CPDLC-EQUIPPED, EUROCONTROL NM LOGON-LISTED ATN AIRCRAFT

Callsign:	Frequency	Radar	ServiceIndicators
Type: ACC:			
AMSTERDAM RADAR:	118.805 MHz	(R)	
AMSTERDAM RADAR:	120.555 MHz	(R)	
DUTCH MIL:	120.830 MHz	(R)	
AMSTERDAM RADAR:	123.705 MHz	(R)	
AMSTERDAM RADAR:	123.85 MHz	(R)	
AMSTERDAM RADAR:	124.880 MHz	(R)	
AMSTERDAM RADAR:	125.75 MHz	(R)	
DUTCH MIL:	125.930 MHz	(R)	
AMSTERDAM RADAR:	127.780 MHz	(R)	
DUTCH MIL:	128.355 MHz	(R)	
AMSTERDAM RADAR:	128.580 MHz	(R)	
AMSTERDAM RADAR:	130.955 MHz	(R)	
AMSTERDAM RADAR:	134.37 MHz	(R)	
DUTCH MIL:	259.25 MHz	(R)	
AMSTERDAM RADAR:	276.72 MHz	(R)	
DUTCH MIL:	336.32 MHz	(R)	
AMSTERDAM RADAR:	387.6 MHz	(R)	
Type: Information:			
AMSTERDAM:	119.17 MHz		FIS
AMSTERDAM:	119.480 MHz		FIS
AMSTERDAM:	124.3 MHz		FIS
DUTCH MIL:	132.35 MHz		FIS
AMSTERDAM:	136.65 MHz		FIS
AMSTERDAM:	259.47 MHz		FIS
AMSTERDAM:	341.6 MHz		FIS
AMSTERDAM:	369.62 MHz		FIS
Type: Upper Area Control Center:			
MAASTRICHT RADAR:	122.185 MHz	(R)	
MAASTRICHT RADAR:	122.815 MHz	(R)	
MAASTRICHT RADAR:	122.835 MHz	(R)	
MAASTRICHT RADAR:	124.435 MHz	(R)	
MAASTRICHT RADAR:	132.085 MHz	(R)	
MAASTRICHT RADAR:	133.215 MHz	(R)	
MAASTRICHT RADAR:	134.705 MHz	(R)	
MAASTRICHT RADAR:	135.960 MHz	(R)	
MAASTRICHT RADAR:	136.465 MHz	(R)	
Type: VOLMET:			
AMSTERDAM:	126.2 MHz		

## Communication Information For EHAA UAC High (UAC Sector High)

Callsign:	Frequency	Radar	ServiceIndicators
-----------	-----------	-------	-------------------

Type: Upper Area Control Center:  
 MAASTRICHT RADAR: 134.705 MHz  
 MAASTRICHT RADAR: 292.77 MHz

## Communication Information For LFFF ACC Low (ACC Sector Low)

Callsign:	Frequency	Radar	ServiceIndicators
Type: Approach: LILLE:	126.480 MHz		

## Communication Information For LFFF FIR INMARSAT Service: INMARSAT SECURITY NUMBER FOR PARIS ACC IS 422704

Callsign:	Frequency	Radar	ServiceIndicators
Type: ACC:			
PARIS CONTROL:	118.72 MHz	(R)	
PARIS CONTROL:	120.955 MHz	(R)	
PARIS CONTROL:	122.57 MHz	(R)	
PARIS CONTROL:	124.85 MHz	(R)	
PARIS CONTROL:	125.080 MHz	(R)	
PARIS CONTROL:	125.45 MHz	(R)	
PARIS CONTROL:	127.080 MHz	(R)	
PARIS CONTROL:	128.105 MHz	(R)	
PARIS CONTROL:	128.27 MHz	(R)	
PARIS CONTROL:	128.87 MHz	(R)	
PARIS CONTROL:	129.15 MHz	(R)	Secondary
PARIS CONTROL:	131.180 MHz	(R)	
PARIS CONTROL:	132.1 MHz	(R)	
PARIS CONTROL:	135.405 MHz	(R)	
PARIS CONTROL:	135.55 MHz	(R)	
PARIS CONTROL:	136.75 MHz	(R)	
PARIS CONTROL:	279.02 MHz	(R)	
PARIS CONTROL:	375.87 MHz	(R)	
Type: Information:			
PARIS:	125.7 MHz		FIS
PARIS:	126.1 MHz		FIS
PARIS:	129.62 MHz		FIS

## Communication Information For LFFF UAC High (UAC Sector High)

Callsign:	Frequency	Radar	ServiceIndicators
Type: Upper Area Control Center:			
MAASTRICHT RADAR:	120.860 MHz		
MAASTRICHT RADAR:	122.185 MHz		
MAASTRICHT RADAR:	122.765 MHz		
MAASTRICHT RADAR:	122.815 MHz		
MAASTRICHT RADAR:	122.835 MHz		
MAASTRICHT RADAR:	124.435 MHz		
MAASTRICHT RADAR:	125.980 MHz		
MAASTRICHT RADAR:	126.765 MHz		
MAASTRICHT RADAR:	128.810 MHz		
MAASTRICHT RADAR:	129.610 MHz		
MAASTRICHT RADAR:	129.735 MHz		
MAASTRICHT RADAR:	129.840 MHz		
MAASTRICHT RADAR:	130.110 MHz		
MAASTRICHT RADAR:	130.510 MHz		
MAASTRICHT RADAR:	131.080 MHz		
MAASTRICHT RADAR:	132.205 MHz		

MAASTRICHT RADAR:	132.315 MHz
MAASTRICHT RADAR:	132.755 MHz
MAASTRICHT RADAR:	132.780 MHz
MAASTRICHT RADAR:	132.855 MHz
MAASTRICHT RADAR:	244.75 MHz
MAASTRICHT RADAR:	255.6 MHz
MAASTRICHT RADAR:	292.77 MHz
MAASTRICHT RADAR:	312.35 MHz
MAASTRICHT RADAR:	314.6 MHz
MAASTRICHT RADAR:	315.05 MHz
MAASTRICHT RADAR:	336.35 MHz
MAASTRICHT RADAR:	338.87 MHz
MAASTRICHT RADAR:	342.65 MHz
MAASTRICHT RADAR:	359.45 MHz
MAASTRICHT RADAR:	398.02 MHz
MAASTRICHT RADAR:	399.75 MHz
MAASTRICHT RADAR:	399.8 MHz

**Communication Information For LFFF UIR** CPDLC Service: CPDLC SERVICES TO ATN PROTECTED MODE (VDL MODE 2) EQUIPPED AIRCRAFT ARE AVAILABLE WITH LOGON ADDRESS OF LFFF FOR PARIS ACC, LFEE FOR REIMS ACC, LFRR FOR BREST ACC, LFMM FOR MARSEILLE ACC AND LFBB FOR BORDEAUX ACC WITHIN FRANCE UIR. THE LOGON MUST BE INITIATED BY THE PILOT, WITH SUFFICIENT ADVANCE NOTICE (APPROXIMATELY 15 MINUTES). THE USE OF CPDLC IS PREFERRED WHEN OPERATIONAL CONDITIONS ALLOW. CPDLC CAN ONLY BE USED FOR NON-URGENT REQUESTS.

Callsign:	Frequency	Radar	ServiceIndicators
Type: Upper Area Control Center:			
BREST CONTROL:	118.030 MHz	(R)	
PARIS CONTROL:	118.230 MHz	(R)	
MARSEILLE CONTROL:	118.415 MHz	(R)	
BORDEAUX CONTROL:	118.430 MHz	(R)	
PARIS CONTROL:	118.72 MHz	(R)	
BREST CONTROL:	118.865 MHz	(R)	
MARSEILLE CONTROL:	118.880 MHz	(R)	
BREST CONTROL:	118.885 MHz	(R)	
BREST CONTROL:	119.82 MHz	(R)	
MARSEILLE CONTROL:	119.865 MHz	(R)	
BORDEAUX CONTROL:	120.785 MHz	(R)	
BORDEAUX CONTROL:	120.935 MHz	(R)	
PARIS CONTROL:	120.955 MHz	(R)	
REIMS CONTROL:	121.07 MHz	(R)	
BORDEAUX CONTROL:	121.340 MHz	(R)	
BORDEAUX CONTROL:	122.415 MHz	(R)	
PARIS CONTROL:	122.57 MHz	(R)	
PARIS CONTROL:	122.615 MHz	(R)	
BORDEAUX CONTROL:	122.630 MHz	(R)	
MARSEILLE CONTROL:	122.715 MHz	(R)	
MARSEILLE CONTROL:	123.530 MHz	(R)	
BORDEAUX CONTROL:	123.630 MHz	(R)	
MARSEILLE CONTROL:	123.97 MHz	(R)	
MARSEILLE CONTROL:	124.015 MHz	(R)	
BREST CONTROL:	124.065 MHz	(R)	
BORDEAUX CONTROL:	124.080 MHz	(R)	
MARSEILLE CONTROL:	124.305 MHz	(R)	
MARSEILLE CONTROL:	124.55 MHz	(R)	Secondary
MARSEILLE CONTROL:	124.615 MHz	(R)	
PARIS CONTROL:	124.630 MHz	(R)	
BORDEAUX CONTROL:	124.635 MHz	(R)	
MARSEILLE CONTROL:	124.65 MHz	(R)	Secondary
BREST CONTROL:	124.67 MHz	(R)	
BREST CONTROL:	124.77 MHz	(R)	Secondary
BORDEAUX CONTROL:	124.830 MHz	(R)	
PARIS CONTROL:	124.85 MHz	(R)	
BREST CONTROL:	124.940 MHz	(R)	
REIMS CONTROL:	124.955 MHz	(R)	
PARIS CONTROL:	125.080 MHz	(R)	
MARSEILLE CONTROL:	125.465 MHz	(R)	
REIMS CONTROL:	125.935 MHz	(R)	
BREST CONTROL:	125.965 MHz	(R)	
BORDEAUX CONTROL:	126.130 MHz	(R)	
MARSEILLE CONTROL:	126.255 MHz	(R)	
BREST CONTROL:	126.265 MHz	(R)	

REIMS CONTROL:	126.285 MHz	(R)	
MARSEILLE CONTROL:	126.465 MHz	(R)	
MARSEILLE CONTROL:	126.780 MHz	(R)	
MARSEILLE CONTROL:	127.180 MHz	(R)	
PARIS CONTROL:	127.305 MHz	(R)	
BREST CONTROL:	127.385 MHz	(R)	
BORDEAUX CONTROL:	127.435 MHz	(R)	
MARSEILLE CONTROL:	127.540 MHz	(R)	
REIMS CONTROL:	127.555 MHz	(R)	
BREST CONTROL:	127.560 MHz	(R)	
REIMS CONTROL:	127.785 MHz	(R)	
MARSEILLE CONTROL:	127.840 MHz	(R)	
REIMS CONTROL:	127.855 MHz	(R)	
BREST CONTROL:	127.860 MHz	(R)	
PARIS CONTROL:	128.105 MHz	(R)	
PARIS CONTROL:	128.140 MHz	(R)	
PARIS CONTROL:	128.27 MHz	(R)	
REIMS CONTROL:	128.305 MHz	(R)	
MARSEILLE CONTROL:	128.560 MHz	(R)	Secondary
BORDEAUX CONTROL:	128.765 MHz	(R)	
MARSEILLE CONTROL:	128.780 MHz	(R)	
REIMS CONTROL:	128.835 MHz	(R)	
PARIS CONTROL:	128.87 MHz	(R)	
PARIS CONTROL:	129.005 MHz	(R)	
BREST CONTROL:	129.505 MHz	(R)	
MARSEILLE CONTROL:	130.165 MHz	(R)	
BORDEAUX CONTROL:	130.230 MHz	(R)	
BREST CONTROL:	130.235 MHz	(R)	
MARSEILLE CONTROL:	130.735 MHz	(R)	
PARIS CONTROL:	131.065 MHz	(R)	
REIMS CONTROL:	131.085 MHz	(R)	
PARIS CONTROL:	131.180 MHz	(R)	
PARIS CONTROL:	131.255 MHz	(R)	
BREST CONTROL:	131.280 MHz	(R)	
BREST CONTROL:	132.02 MHz	(R)	
PARIS CONTROL:	132.1 MHz	(R)	
BORDEAUX CONTROL:	132.180 MHz	(R)	
BREST CONTROL:	132.185 MHz	(R)	
BREST CONTROL:	132.190 MHz	(R)	
BREST CONTROL:	132.210 MHz	(R)	
BREST CONTROL:	132.240 MHz	(R)	
MARSEILLE CONTROL:	132.255 MHz	(R)	
PARIS CONTROL:	132.265 MHz	(R)	
REIMS CONTROL:	132.280 MHz	(R)	
MARSEILLE CONTROL:	132.365 MHz	(R)	
PARIS CONTROL:	132.380 MHz	(R)	
MARSEILLE CONTROL:	132.385 MHz	(R)	
REIMS CONTROL:	132.390 MHz	(R)	
REIMS CONTROL:	132.410 MHz	(R)	Secondary
BORDEAUX CONTROL:	132.430 MHz	(R)	
MARSEILLE CONTROL:	132.435 MHz	(R)	
MARSEILLE CONTROL:	132.490 MHz	(R)	
REIMS CONTROL:	132.505 MHz	(R)	
BREST CONTROL:	132.510 MHz	(R)	Secondary
REIMS CONTROL:	132.630 MHz	(R)	Secondary
PARIS CONTROL:	132.67 MHz	(R)	Secondary
BREST CONTROL:	132.735 MHz	(R)	
PARIS CONTROL:	132.740 MHz	(R)	
MARSEILLE CONTROL:	132.760 MHz	(R)	
REIMS CONTROL:	132.785 MHz	(R)	
BREST CONTROL:	132.830 MHz	(R)	
MARSEILLE CONTROL:	132.865 MHz	(R)	
PARIS CONTROL:	132.885 MHz	(R)	
BORDEAUX CONTROL:	132.910 MHz	(R)	
BORDEAUX CONTROL:	132.990 MHz	(R)	
REIMS CONTROL:	133.005 MHz	(R)	
BORDEAUX CONTROL:	133.010 MHz	(R)	
BREST CONTROL:	133.085 MHz	(R)	
MARSEILLE CONTROL:	133.235 MHz	(R)	
BREST CONTROL:	133.240 MHz	(R)	
REIMS CONTROL:	133.255 MHz	(R)	
MARSEILLE CONTROL:	133.330 MHz	(R)	
REIMS CONTROL:	133.415 MHz	(R)	
MARSEILLE CONTROL:	133.430 MHz	(R)	
BORDEAUX CONTROL:	133.465 MHz	(R)	
BREST CONTROL:	133.480 MHz	(R)	
PARIS CONTROL:	133.505 MHz	(R)	

BREST CONTROL:	133.55 MHz	(R)	Secondary
MARSEILLE CONTROL:	133.585 MHz	(R)	
BREST CONTROL:	133.615 MHz	(R)	
BREST CONTROL:	133.635 MHz	(R)	
BORDEAUX CONTROL:	133.680 MHz	(R)	
MARSEILLE CONTROL:	133.760 MHz	(R)	
REIMS CONTROL:	133.830 MHz	(R)	
PARIS CONTROL:	133.92 MHz	(R)	Secondary
BORDEAUX CONTROL:	133.960 MHz	(R)	
BORDEAUX CONTROL:	134.255 MHz	(R)	
MARSEILLE CONTROL:	134.260 MHz	(R)	
BREST CONTROL:	134.335 MHz	(R)	
REIMS CONTROL:	134.405 MHz	(R)	
BREST CONTROL:	134.410 MHz	(R)	
BORDEAUX CONTROL:	134.610 MHz	(R)	
MARSEILLE CONTROL:	134.705 MHz	(R)	
BORDEAUX CONTROL:	134.730 MHz	(R)	
BORDEAUX CONTROL:	134.765 MHz	(R)	
REIMS CONTROL:	134.960 MHz	(R)	
REIMS CONTROL:	135.035 MHz	(R)	
REIMS CONTROL:	135.105 MHz	(R)	Secondary
MARSEILLE CONTROL:	135.110 MHz	(R)	
BORDEAUX CONTROL:	135.115 MHz	(R)	
BORDEAUX CONTROL:	135.240 MHz	(R)	
BREST CONTROL:	135.260 MHz	(R)	
MARSEILLE CONTROL:	135.290 MHz	(R)	
REIMS CONTROL:	135.305 MHz	(R)	
PARIS CONTROL:	135.405 MHz	(R)	
MARSEILLE CONTROL:	135.440 MHz	(R)	
BORDEAUX CONTROL:	135.460 MHz	(R)	
REIMS CONTROL:	135.505 MHz	(R)	
PARIS CONTROL:	135.55 MHz	(R)	
BORDEAUX CONTROL:	135.665 MHz	(R)	
MARSEILLE CONTROL:	135.930 MHz	(R)	
BREST CONTROL:	135.965 MHz	(R)	
BREST CONTROL:	136.0 MHz	(R)	Secondary
BORDEAUX CONTROL:	136.040 MHz	(R)	
BREST CONTROL:	136.160 MHz	(R)	
BORDEAUX CONTROL:	136.180 MHz	(R)	
REIMS CONTROL:	136.330 MHz	(R)	Secondary
BREST CONTROL:	232.05 MHz	(R)	
PARIS CONTROL:	232.25 MHz	(R)	
MARSEILLE CONTROL:	232.32 MHz	(R)	
PARIS CONTROL:	232.42 MHz	(R)	
REIMS CONTROL:	241.6 MHz	(R)	
MARSEILLE CONTROL:	244.92 MHz	(R)	
BORDEAUX CONTROL:	245.55 MHz	(R)	
REIMS CONTROL:	251.0 MHz	(R)	
BORDEAUX CONTROL:	255.92 MHz	(R)	
REIMS CONTROL:	269.02 MHz	(R)	
PARIS CONTROL:	279.02 MHz	(R)	
BORDEAUX CONTROL:	341.42 MHz	(R)	
REIMS CONTROL:	343.3 MHz	(R)	
MARSEILLE CONTROL:	344.37 MHz	(R)	
MARSEILLE CONTROL:	357.45 MHz	(R)	
PARIS CONTROL:	359.8 MHz	(R)	
BREST CONTROL:	369.25 MHz	(R)	
BORDEAUX CONTROL:	369.52 MHz	(R)	
BORDEAUX CONTROL:	371.97 MHz	(R)	
BREST CONTROL:	372.72 MHz	(R)	
BREST CONTROL:	372.9 MHz	(R)	
PARIS CONTROL:	374.4 MHz	(R)	
REIMS CONTROL:	375.72 MHz	(R)	
BREST CONTROL:	375.8 MHz	(R)	
PARIS CONTROL:	375.87 MHz	(R)	
BORDEAUX CONTROL:	377.4 MHz	(R)	
BREST CONTROL:	389.87 MHz	(R)	
PARIS CONTROL:	398.62 MHz	(R)	