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Changed chart(s) since Disc 22-2010

ADD = Added chart, REV = Revised chart, DEL = Deleted chart.

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

**Brussels, (Brussels National - EBBR)**

|     |                            |       |            |            |
|-----|----------------------------|-------|------------|------------|
| REV | ARVOL & TULNI 3A & 3B ARRS | 10-2B | 05 ïŸ 2010 |            |
| REV | KOK 4A ARR                 | 10-2C | 05 ïŸ 2010 |            |
| ADD | NIK 2N & 4Z DEPS           | 10-3H | 05 ïŸ 2010 | 18 ïŸ 2010 |
| ADD | LNO 2C, 2D & 2Q DEPS       | 10-3J | 05 ïŸ 2010 | 18 ïŸ 2010 |
| ADD | LNO 3F, 2H, 2J & 4L DEPS   | 10-3K | 05 ïŸ 2010 | 18 ïŸ 2010 |
| ADD | LNO 3Z DEP                 | 10-3L | 05 ïŸ 2010 | 18 ïŸ 2010 |

# **TERMINAL CHART NOTAMs**

## **Chart NOTAMs for Airport EBBR**

**Type:** Terminal

**Effectivity:** Temporary

**Begin Date:** Immediately

**End Date:** Until Further Notice

(10-3 thru 10-3L and 10-3S thru 10-3X4) Note 2 in chart heading: delete reference "(refer to 10-4E)."

**EBBR (Brussels National)****General Info**

Brussels, BEL

N 50° 54.1' E 04° 29.1' Mag Var: 1.5°W

Elevation: 184'

Public, IFR, Control Tower, Customs, Landing Fee

Fuel: Jet A-1

Repairs: Major Airframe, Major Engine

Time Zone Info: GMT+1:00 uses DST

**Runway Info**

Runway 02-20 9800' x 164' asphalt

Runway 07L-25R 11936' x 148' asphalt

Runway 07R-25L 10535' x 148' asphalt

Runway 02 (15.0°M) TDZE 184'

Lights: Edge, ALS, Centerline, TDZ

Displaced Threshold Distance 151'

Runway 07L (66.0°M) TDZE 129'

Lights: Edge, Centerline

Displaced Threshold Distance 847'

Runway 07R (71.0°M) TDZE 175'

Lights: Edge, Centerline

Displaced Threshold Distance 400'

Runway 20 (195.0°M) TDZE 131'

Lights: Edge, ALS, Centerline

Displaced Threshold Distance 722'

Runway 25L (251.0°M) TDZE 165'

Lights: Edge, ALS, Centerline, TDZ

Runway 25R (246.0°M) TDZE 112'

Lights: Edge, ALS, Centerline, TDZ

Displaced Threshold Distance 984'

***EBBR (Brussels National)*****Communications Info**ATIS **132.475** Arrival ServiceATIS **121.75** Departure ServiceATIS **117.55**ATIS **114.9** Arrival ServiceATIS **114.6**ATIS **112.05**ATIS **110.6**Brussels Tower **127.15**Brussels Tower **120.775**Brussels Tower **118.6**Brussels Tower **388.52** MilitaryBrussels Tower **257.80** MilitaryBrussels Ground Control **121.875**Brussels Ground Control **121.7**Brussels Ground Control **118.05**Brussels Pre-Taxi Clearance **121.95**Brussels Final Approach Control **129.725**Brussels Final Approach Control **127.575**Brussels Arrival Control **129.725**Brussels Arrival Control **127.575**Brussels Arrival Control **126.625**Brussels Arrival Control **120.1**Brussels Arrival Control **118.25**Brussels Arrival Control **389.37** MilitaryBrussels Arrival Control **362.30** MilitaryBrussels Departure Control **126.625**Brussels Radar **120.1****Notebook Info**

**EBBR/BRU****JEPPESEN****BRUSSELS, BELGIUM****BRUSSELS NATIONAL**

25 JUN 10

10-1P

Eff 1 Jul

**AIRPORT BRIEFING****1. GENERAL****1.1. ATIS**

D-ATIS Arrival 110.6 112.05 114.6 114.9 117.55 132.47

D-ATIS Departure 121.75

**1.2. NOISE ABATEMENT PROCEDURES****1.2.1. PREFERENTIAL RWY SYSTEM**

The direction in which ACFT take-off and land is determined by the surface wind (speed and direction) and the preferential RWY system.

The term "RWY-in-use" shall be used to indicate the RWY that at a particular time is considered by ATC to be the most suitable for use by the types of ACFT expected to land or take-off.

Normally an ACFT will land and take-off into wind, unless safety, RWY configuration or traffic conditions determine that a different direction is preferable. However, in selecting the RWY-in-use, ATC shall take into consideration other relevant factors such as the aerodrome traffic circuits, the length of the RWY, the approach and landing aids available, meteorological conditions, ACFT performance and the noise abatement.

Accepting a RWY is a pilots decision. If the PIC considers the RWY-in-use not usable for reasons of safety or performance, he shall request permission to use another RWY. ATC will accept to such request, provided traffic and air safety conditions permit.

|                               |      | 0600 to 2259LT |                | 2300 to 0559LT |
|-------------------------------|------|----------------|----------------|----------------|
| MON 0600LT<br>till TUE 0559LT | TKOF | 25R            |                | 25R/20*        |
|                               | LDG  | 25L/25R        |                | 25R/25L**      |
| TUE 0600LT<br>till WED 0559LT | TKOF | 25R            |                | 25R/20*        |
|                               | LDG  | 25L/25R        |                | 25R/25L**      |
| WED 0600LT<br>till THU 0559LT | TKOF | 25R            |                | 25R/20*        |
|                               | LDG  | 25L/25R        |                | 25R/25L**      |
| THU 0600LT<br>till FRI 0559LT | TKOF | 25R            |                | 25R/20*        |
|                               | LDG  | 25L/25R        |                | 25R/25L**      |
| FRI 0600LT<br>till SAT 0559LT | TKOF | 25R            |                | 25R***         |
|                               | LDG  | 25L/25R        |                | 25R            |
| SAT 0600LT<br>till SUN 0559LT |      | 0600 to 1559LT | 1600 to 2259LT |                |
|                               | TKOF | 25R            | 25R/20*        | 25L****        |
|                               | LDG  | 25L/25R        | 25R/25L**      | 25L            |
| SUN 0600LT<br>till MON 0559LT | TKOF | 25R/20*        | 25R            | 20****         |
|                               | LDG  | 25R/25L**      | 25L/25R        | 20             |

\* RWY 25R only via CIV, DENUT, ELSIK, HELEN, KOK and NIK;  
RWY 20 only via LNO, PITES, ROUSY, SOPOK and SPI;  
ACFT with MTOM of more than 200t shall use RWY 25R regardless the destination.

\*\* Arrival on RWY 25L at ATC discretion only.

\*\*\* No departures between 0100 and 0600LT.

\*\*\*\* No departures between 2400 and 0500LT.

Times of RWY changeover are subject to flexibility in order to ensure transition in safe conditions. ATC will operate the changeover as close as possible from the indicated time, taking into account the traffic conditions.

**EXEPTIONS:**

The Preferential RWY System is not the determining factor under the following circumstances:

- when RWYs are dry or wet and the crosswind component exceeds 15 KT (gusts included);
- when RWYs are dry or wet and the tailwind component exceeds 7 KT (gusts included), including a buffer of 2 KT;

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25 JUN 10

10-1P1

Eff 1 Jul

**AIRPORT BRIEFING****1. GENERAL**

- when pilots report excessive wind at higher attitudes;
- when RWYs are contaminated or when braking action is less than good;
- when alternative RWYs are successively requested by pilots for safety reasons;
- when wind shear has been reported or forecasted, or when thunderstorms are expected to affect arriving or departing traffic.

When the components exceed the values stated above, a RWY more nearly into wind will be assigned. However, RWYs 07L/07R will not be used for landing, except when no other suitable RWY is available.

In headwind configurations the crosswind component is not a limiting factor when take-off is conducted on pilot's responsibility and at ATC discretion.

**1.2.2. NIGHTTIME RESTRICTIONS**

Between 2300-0559LT only four ACFT will be authorized to taxi at the same time to the holding position of the RWY in use. Additionally only three ACFT will be allowed to await take-off clearance at the same time.

**1.2.2.1. NOISE QUOTA SYSTEM**

For movements of JET ACFT with MTOW 34t and more or with a capacity of more than 19 seats (crew-only seats excluded) are restricted:

- Take-off or landing with QC greater than 8 is forbidden between 2300-0559LT.
- Take-off or landing with QC greater than 12 is forbidden between 0600-0659LT.
- Take-off with QC greater than 48 is forbidden between 0700-2059LT.
- Landing with QC greater than 24 is forbidden between 0700-2059LT.
- Take-off with QC greater than 24 is forbidden between 2100-2259LT.
- Landing with QC greater than 12 is forbidden between 2100-2259LT.

Restrictions between 0700-2259LT do not apply to ACFT that operated at EBBR between 25 Oct 2008 and 24 Oct 2009.

Exemptions may be granted for:

- Take-off with QC smaller than or equal to 26 between 2100-2259LT.
- Take-off with QC smaller than or equal to 12 between 2300-0559LT if ACFT operated at EBBR between 25 Oct 2008 and 24 Oct 2009.
- Landing with QC smaller than or equal to 12 between 2300-0559LT.

Exemptions to be requested at least two weeks in advance at Fax Nr +320 7240201.

Excluded are:

- Flights carrying members of the Belgian Royal Family, of the Federal government, of Regional and Community governments, of foreign royal families, heads of State or leaders of foreign governments, presidents and commissioners of the European Union on official mission;
- Missions in case of disasters or medical urgency;
- Military missions;
- Take-offs and landings performed in exceptional conditions such as flights on which there is an immediate danger to the health of persons as well as animals, diverted flights, etc.

In case of circumstances beyond the operator's control a non-compliant flight may be exceptionally allowed, provided that proper justification is sent to the Director General of the CAA within two working days after the flight.

For marginally compliant ACFT, an authorization of temporary use may be delivered by the Minister of Transport or his representative, if the aircraft is operated exceptionally or in non-commercial flights for modifications, repairs or maintenance.

**1.2.3. REVERSE THRUST**

Reverse thrust other than idle thrust is prohibited except for safety reasons.

**EBBR/BRU****JEPPESEN****BRUSSELS, BELGIUM****BRUSSELS NATIONAL**

15 JAN 10

(10-1P2)

**AIRPORT BRIEFING****1. GENERAL****1.2.4. RUN-UP TESTS**

Engine test runs are only allowed between 0700-2200LT.

Engine test runs and idle checks in the open air and without silencers must be restricted to the very minimum and require prior permission from the APT Authority. Engine test runs can only take place on the crossing of TWY F3, Y, W1 and W2. If this crossing is not available due to infrastructural reasons, holding platform P7 may be used instead. Between 2300-0559LT engine test runs are not allowed at the holding position, except for engine test runs performed immediately before take-off as part of the take-off procedure.

**1.2.5. USE OF APU/GPU/400Hz**

Stands 140 thru 172, 201 thru 240 and 680 thru 699 are equipped with 400Hz and pre-conditioned air (PCA).

As soon as possible after arrival at one of these positions (MAX 5 min after docking), the 400 Hz shall be connected and the APU shall be switched-off.

Upon departure (15 min before ETD) the APU may be started and 400 Hz shall be disconnected. When 400 Hz or PCA is not available, the APU may be used.

When no PCA is available and an authorization from the APT Inspection has been obtained, the use of APU is allowed during periods of extreme high or low temperatures for ACFT docked for more than one hour at the ACFT parking position.

**1.3. LOW VISIBILITY PROCEDURES (LVP)**

The operations phase will start when RVR falls to 800m or ceiling is 200' or below. Pilots will be informed via ATIS or RTF when LVP are in progress.

The ATIS message will contain the phrase "Low Visibility Procedures in progress". The RWY exits are equipped with alternating green/yellow centerline lights within the ILS sensitive areas. Landing ACFT should leave this area as soon as possible.

Departing ACFT are required to use RWY 25R CAT II/III holding points B1 (backtrack not allowed), P3 or A1.

Intersection take-offs are not allowed except when entering RWY 25R via B1 or A1.

After receiving taxi clearance, ACFT shall proceed only when a green centerline path is illuminated, except on TWYs N6-A1.

ACFT taxiing for departure from RWY 25R North of Pier A shall use TWYs INN-2, INN-3 and INN-4 to avoid infringing the ILS sensitive area.

**1.4. SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM****1.4.1. USE OF MODE S TRANSPONDERS**

ACFT operators should ensure that Mode S transponders are able to operate when ACFT is on ground.

Pilots shall select XPDR or the equivalent according to specific installation, AUTO if available, not OFF or STBY, and assigned Mode A code:

- From the request for push-back or taxi, whichever is earlier,
- After landing, continuously until ACFT is fully parked on stand. When parked, Mode A code 2000 shall be set before selecting OFF or STBY.

Whenever possible, the ACFT identification (i.e. callsign used in flight), shall be entered from the request for push-back or taxi, whichever is earlier (through the FMS or the transponder control panel). Pilots shall use the ICAO format for ACFT identification, as specified in item 7 of the flight plan (e.g. DAT123).

To ensure that the performance of systems based on SSR frequencies (including airborne ACAS units and SSR radars) is not compromised, ACAS shall not be selected before receiving clearance to line up. It should be deselected after vacating the RWY.

ACFT taxiing without flight plan shall select, Mode A code 2000.

**EBBR/BRU**  
**BRUSSELS NATIONAL**

15 JAN 10

**JEPPESEN**  
**10-1P3****BRUSSELS, BELGIUM**  
**AIRPORT BRIEFING****1. GENERAL****1.5. RWY OPERATIONS****1.5.1. MINIMUM RWY OCCUPANCY TIME**

To avoid go-arounds, vacate the RWY quickly and entirely without prejudice to safety. Consider that it could be more efficient to use an exit situated farther away, than to try to vacate too quickly, miss the exit, and then taxi slowly to the next. The aim should be to achieve a normal touchdown, with progressive smooth deceleration to vacate, at safe speed, at the nominated exit point.

The table below indicates the distances to exit.

| RWY | EXIT LEFT                  | EXIT RIGHT                       | Distance to Exit                                                                                                     |
|-----|----------------------------|----------------------------------|----------------------------------------------------------------------------------------------------------------------|
| 02  | E3<br>E4/E5<br>E6<br>B1    |                                  | 2631'/802m<br>4961'/1512m<br>6949'/2118m<br>8625'/2629m                                                              |
| 07L | A5<br>A3                   | B7<br>B6<br>B5<br>B3<br>B1       | 3770'/1149m<br>5679'/1731m<br>4072'/1241m<br>5584'/1702m<br>5705'/1739m<br>8241'/2512m<br>9872'/3009m                |
| 07R | C3/C4<br>C2<br>C1/C5       |                                  | 3658'/1115m<br>5144'/1568m<br>6850'/2088m                                                                            |
| 20  |                            | E4<br>E3<br>E1<br>C5             | 3389'/1033m<br>5932'/1808m<br>6086'/1855m<br>6906'/2105m                                                             |
| 25L |                            | C1/P5<br>C2<br>C3/C4<br>C5<br>C6 | 2789'/850m<br>4042'/1232m<br>5879'/1792m<br>7047'/2148m<br>7890'/2405m                                               |
| 25R | B6<br>B5<br>B7<br>B9<br>B8 | A3<br>A5<br>A6                   | 4167'/1270m<br>6063'/1848m<br>7700'/2347m<br>3573'/1089m<br>3957'/1206m<br>5102'/1555m<br>7277'/2218m<br>7552'/2302m |



**EBBR/BRU****JEPPESEN****BRUSSELS, BELGIUM****BRUSSELS NATIONAL**

15 OCT 10

(10-1P4)

**AIRPORT BRIEFING****1. GENERAL****1.6. TAXI PROCEDURES****1.6.1. GENERAL**

TWYs N5 MAX wingspan 171' / 52m.

TWY R1 MAX wingspan 147' / 45m.

TWYs K, N3, N6 and U, Strips 0, 1, 2 and 3 MAX wingspan 118' / 36m.

Distance between the axis of TWYs R4 and S is 249' / 76m.

Stopbars at entry points of active RWY are operating permanently. The stopbar at RWY entry point P9 will remain off when the RWYs 02/07R are in use. ACFT shall never cross a lit stopbar. When stopbars for all RWY entry points of one or more RWYs can not be lit, this will be announced via RTF and ATIS, as well as via NOTAM if the outage is estimated to occur for a period of at least two hours. Pilots are reminded that when stopbars are not lit, this does not constitute an authorisation of any kind to enter a RWY, irrespective if this RWY is active or not.

**1.6.2. STANDARD TAXIROUTES****1.6.2.1. GENERAL**

Arriving ACFT shall remain on Tower frequency until instructed to contact Ground.

An explicit clearance to cross or enter any RWY shall be issued by ATC. If no such clearance is received, pilot shall obtain such clearance from ATC before crossing the relevant holding position marking.

**1.6.2.2. RWY CONFIGURATION 25L/R**

ACFT requiring full length for departure from RWY 25R shall advise Ground at the latest when requesting taxi clearance.

Departures originating from sector Ground North will expect to depart from INT B1.

Departures originating from sector Ground South will expect to depart from W41 or W42.

Clearance to cross RWY 02/20 on routes E4 - F4, E5 - F4 or E6 - F5 may be given by Ground.

Arriving ACFT on RWY 25L proceeding via E1 or E3 will receive clearance to cross RWY 02/20 from Tower.

**1.6.2.3. RWY CONFIGURATION 02/07L/R**

Departing traffic that requires to cross RWY 07R will be transferred to Tower for crossing clearance.

Departing traffic from RWY 07R will receive line-up clearance on Ground South.

Departing traffic will receive take-off clearance from Tower.

ACFT vacating RWY 02 via TWY E1, E3 or E4 may expect instructions to contact Ground South.

ACFT vacating RWY 02 via TWY E5, E6, B1 or A1 may expect instructions to contact Ground North.

**1.7. PARKING INFORMATION**

Docking guidance system available at stands 140 thru 172, 201 thru 240, 350 thru 354 and 680 thru 699.

**EBBR/BRU****JEPPESEN****BRUSSELS, BELGIUM****BRUSSELS NATIONAL**

15 OCT 10

(10-1P5)

**AIRPORT BRIEFING**

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**2. ARRIVAL**

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**2.1. SPEED RESTRICTIONS**

MAX 250 KT at SLP.

ACFT being radar vectored shall reduce speed to MAX 250 KT at BUB 30 DME or when below FL100.

**2.2. NOISE ABATEMENT PROCEDURES****2.2.1. GENERAL**

ACFT using the ILS shall intercept the glide path at or above 2000' for RWYs 25L/R, respectively 3000' and 2000' when simultaneous approaches are in progress, 2000' for RWY 02 and 3000' for RWY 20, nor thereafter fly below the corresponding GS. ACFT performing a radar approach without ILS assistance shall not descend below 2000' before reaching 6 NM from touchdown, nor thereafter fly below a descent path corresponding to a GS of 3°. ACFT performing a visual approach without radar or ILS assistance shall not descend below 1800' before intercepting the approach slope of the PAPI, nor thereafter fly below it.

Noise abatement procedures utilizing continuous descent and reduced power/drag techniques should be used when operating conditions are as follows:

- ILS available;
- RWY clear and dry;
- VIS exceeding 1900 m;
- Ceiling higher than 500' AAL;
- Tail-wind component, including gusts, lower than 5 KT;
- Crosswind component, including gusts, lower than 15 KT;
- No adverse weather conditions that may affect the approach (wind shears, thunderstorms, etc.).

Turbo-jet powered ACFT shall use, as a final flap setting, the minimum certificated landing flap setting set in the approved ACFT Flight Manual for the applicable conditions.

However, each PIC may use a different flap setting approved for that ACFT if he determines that it is necessary in the interest of safety.

**2.2.2. NIGHTTIME RESTRICTIONS****SPECIAL NOISE ABATEMENT PROCEDURES FOR ARRIVALS AT NIGHT  
(2300-0559LT)**

Traffic leaving IAF KERKY for approach on RWYs 25L/R will not be cleared to descend below FL70 until crossing BUB R-360. On all ILS equipped RWYs the ILS LOC/glide path shall not be intercepted at less than 11 NM from THR and not below 3000'.

When simultaneous approaches are in progress the ILS LOC/GS shall not be intercepted below 3000' (RWY 25R) and 4000' (RWY 25L).

**2.3. CAT II/III OPERATIONS**

RWYs 25L and 25R approved for CAT II/III operations, special aircrew and ACFT certification required.

**EBBR/BRU****JEPPESEN****BRUSSELS, BELGIUM****BRUSSELS NATIONAL**

3 SEP 10

(10-1P6)

**AIRPORT BRIEFING**

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**2. ARRIVAL**

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**2.4. OTHER INFORMATION****2.4.1. SIMULTANEOUS DEPENDENT IFR APPROACHES ON RWYS 25L AND 25R**

Simultaneous dependent IFR approaches may be performed, provided that following conditions are met:

- VIS is 2000m and CEILING is 600',
- radio, RADAR and ILS equipment (both, airborne and on ground) are fully serviceable.

The ATIS broadcast will include the following message:

"Simultaneous dependent IFR approaches in progress on runways 25R and 25L."

When receiving this information, pilots shall advise ATC of the unavailability of any equipment needed to perform the apch.

In any case, pilots shall execute a precise interception, without overshooting the LOC axis.

Any undue track variation in relation to the LOC axis or any equipment malfunctioning shall be reported to ATC immediately, together with any decision to perform a missed apch.

ATC will monitor the missed apch and transmit instructions to start a new apch.

**2.4.2. SIMULTANEOUS INDEPENDENT IFR APPROACHES ON RWYS 25L AND 25R**

Simultaneous independent IFR approaches may be performed, provided that following conditions are met:

- VIS is 2000m and CEILING is 600',
- radio, RADAR and ILS equipment (LOC, GS, DME and markers), both airborne and on ground, are fully serviceable.

The ATIS broadcast will include the following message:

"Simultaneous independent IFR approaches in progress - ILS 25R frequency 108.9;

ILS 25L frequency 110.35."

Advise ATC of any unavailability of required equipment.

Pilots experiencing radio communication failure before RWY assignment shall execute an ILS apch on RWY 25L.

If, for any reason, an ACFT being radar vectored does not receive LOC interception instructions, the pilot shall intercept the ILS/LOC course serving the assigned RWY by himself.

Pilots shall execute precise LOC interception without overshooting the LOC axis.

Any undue track variation in relation to the LOC axis or any equipment malfunctioning shall be reported to ATC immediately, together with any decision to perform a missed apch.

ATC will monitor the missed apch and transmit instructions to start a new apch.

**EBBR/BRU****JEPPESEN****BRUSSELS, BELGIUM****BRUSSELS NATIONAL**

3 SEP 10

10-1P7

**AIRPORT BRIEFING****3. DEPARTURE****3.1. START-UP & PUSH-BACK PROCEDURES****3.1.1. TOBT-TSAT PROCEDURE**

|                                  |      |                                                                                                        |
|----------------------------------|------|--------------------------------------------------------------------------------------------------------|
| Info from<br>Airline/<br>Handler | TOBT | Target off block time: confirmation of estimated ready time                                            |
| Info from<br>ATC                 | TSAT | Target start-up approval time, based on TOBT or EOBT (if TOBT not available): sequenced off block time |

Docking guidance system will display TOBT from EOBT - 20 min and TSAT at TOBT - 5 min.

If no display available, pilots can obtain TOBT via Redcap/Loadmaster and TSAT via Delivery from approx TOBT - 10 min onwards.

Start-up shall be requested from BRUSSELS Delivery or via Digital Data Link in accordance with the related TSAT +/- 5 min. The start-up request shall only be made when the ACFT is "ready" and when push-back (if required) becomes available. Pilots must check the push-back availability before requesting start-up. If the flight is not ready at TSAT + 5 min, ATC will issue a new TSAT only after receipt of an updated EOBT. The IATA delay code becomes "code 61". ACFT requiring full RWY length shall include this in their start-up request. Pilots are reminded that noise abatement procedures affecting some RWY distances remain to be adhered to.

The request for push-back and/or taxi shall be done within 5 min after reception of start-up clearance. TWR shall be advised if the latter is not possible and delay is expected. Otherwise, the TOBT will be deleted and must be entered again. If pilot does not call at TSAT + 5 min, ATC will issue a new TSAT only after receipt of an updated EOBT.

**3.1.1.1. DE-ICING**

For on-stand de-icing, the TOBT value shall include the time at which the de-icing is expected to be finished. The resulting TSAT is the target time to start-up in order to proceed to the RWY holding position.

In case of remote de-icing the TOBT is based on the remote de-icing sequence but it does NOT include any assessment of de-icing operations. However in building the pre-departure sequence, ATC will include the waiting time for de-icing in the TSAT. The estimated de-icing time is part of the taxi-out calculation by ATC. De-icing must be requested by the pilot as early as possible.

**3.1.2. DATA LINK CLEARANCE DELIVERY SERVICE (DCL)**

DCL via Data Link can only be used by ACFT using SID whose specifications include level requirements.

The service does not provide clearance revision. Any clearance modification will be made via BRUSSELS Delivery.

After reception of the departure clearance, the pilot shall send to the ground system acknowledge message including entire content of clearance before contacting Ground.

In case departure clearance is not received, the pilot shall contact Delivery.

TSAT will be communicated from TOBT - 10 min onwards.

TSAT on docking guidance system has precedence over TSAT via Data Link.

The aircrew, before take-off, shall check the consistency of the SID delivered in the DCL message with departure RWY and flight plan information. Voice procedures shall be used in case of inconsistency.

Departure clearance delivered by voice shall always supersede any DCL clearance.

**Pilots are reminded to keep a continuous listening watch on BRUSSELS Delivery.**

**EBBR/BRU****JEPPESEN****BRUSSELS, BELGIUM****BRUSSELS NATIONAL**

26 FEB 10

(10-1P8)

**AIRPORT BRIEFING**

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**3. DEPARTURE**

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**3.1.3. PUSH-BACK**

Push-back compulsory on nose-in stands unless prior permission has been obtained from APT inspection.

Push-back shall be executed immediately after approval has been received from BRUSSELS Ground, taking into account the traffic information and/or restrictions contained in the approval message.

**3.2. NOISE ABATEMENT PROCEDURES****3.2.1. TURBO-JET POWERED ACFT**

|                   |                                                                                                      |
|-------------------|------------------------------------------------------------------------------------------------------|
| Take-off to 1700' | Take-off power;<br>Take-off flaps;<br>Climb at $V_2 + 10$ KT to 20 KT (or as limited by body angle). |
| At 1700'          | Reduce thrust to not less than climb thrust.                                                         |
| 1700'-3200'       | Climb at $V_2 + 10$ KT to 20 KT.                                                                     |
| At 3200'          | Accelerate smoothly to enroute climb speed with flap retraction.                                     |

**3.2.2. PROPELLER ACFT**

|                   |                                                                                                                                                                                  |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Take-off to 1700' | Take-off power;<br>Climb at the maximum gradient compatible with safety;<br>Speed not less than single engine climb speed, nor higher than best rate of climb speed.             |
| At 1700'          | Reduce power to the maximum normal operating power (if this power has been used for showing compliance with the noise certification requirements) or to the maximum climb power. |
| 1700'-3200'       | Climb at the maximum gradient with reduced power, maintaining constant speed.                                                                                                    |
| At 3200'          | Accelerate smoothly to enroute climb speed.                                                                                                                                      |

**3.2.3. SPECIAL NOISE ABATEMENT PROCEDURES FOR DEPARTURES AT NIGHT (2300-0559LT)**

Take-off from another RWY than the assigned one can only be allowed for safety reasons.

All departures from RWY 25R shall start their take-off at the beginning of the RWY and preferably an uninterrupted take-off from P3 will be made.

When RWY 25R or 25L is take-off RWY in use, special types of ACFT only will be allocated CIV 7D or CIV 2Q if routing via CIV.

**3.3. OTHER INFORMATION**

ACFT requiring full RWY length shall advise Ground at the latest when requesting taxi clearance.

**EBBR/BRU**  
**BRUSSELS NATIONAL**

**JEPPESEN**  
4 AUG 06 **(10-1R)**

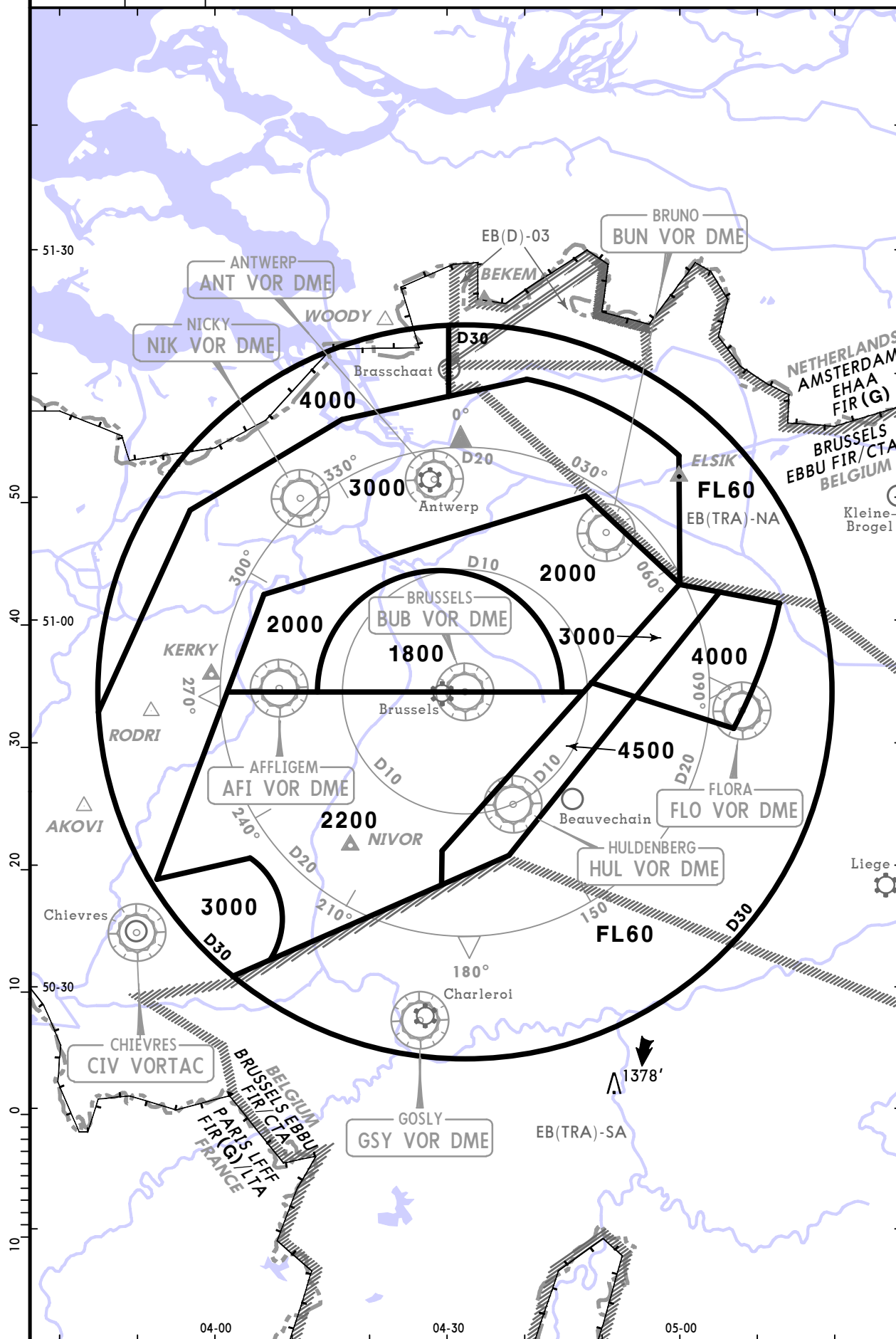
**BRUSSELS, BELGIUM**  
**RADAR MINIMUM ALTITUDES**

BRUSSELS  
Arrival (R)  
**118.25**

*Apt Elev*  
**184'**

Alt Set: hPa Trans level: By ATC Trans alt: 4500'

The indicated altitudes or levels are the lowest altitudes or levels to be allocated by the radar controller inside the Radar Vectoring Area. Subsequent descent may be given when the aircraft is established on the 30° leg. Remark: These lowest altitudes do not apply at night between 2300-0559LT.



**EBBR/BRU**  
**BRUSSELS NATIONAL**

**JEPPESSEN**

1 JUN 07

10-2

Eff 7 Jun

**BRUSSELS, BELGIUM**

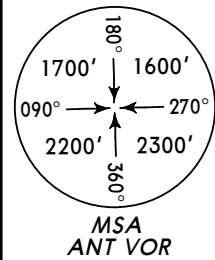
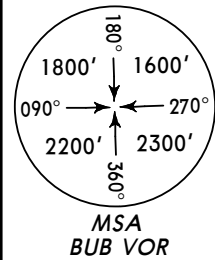
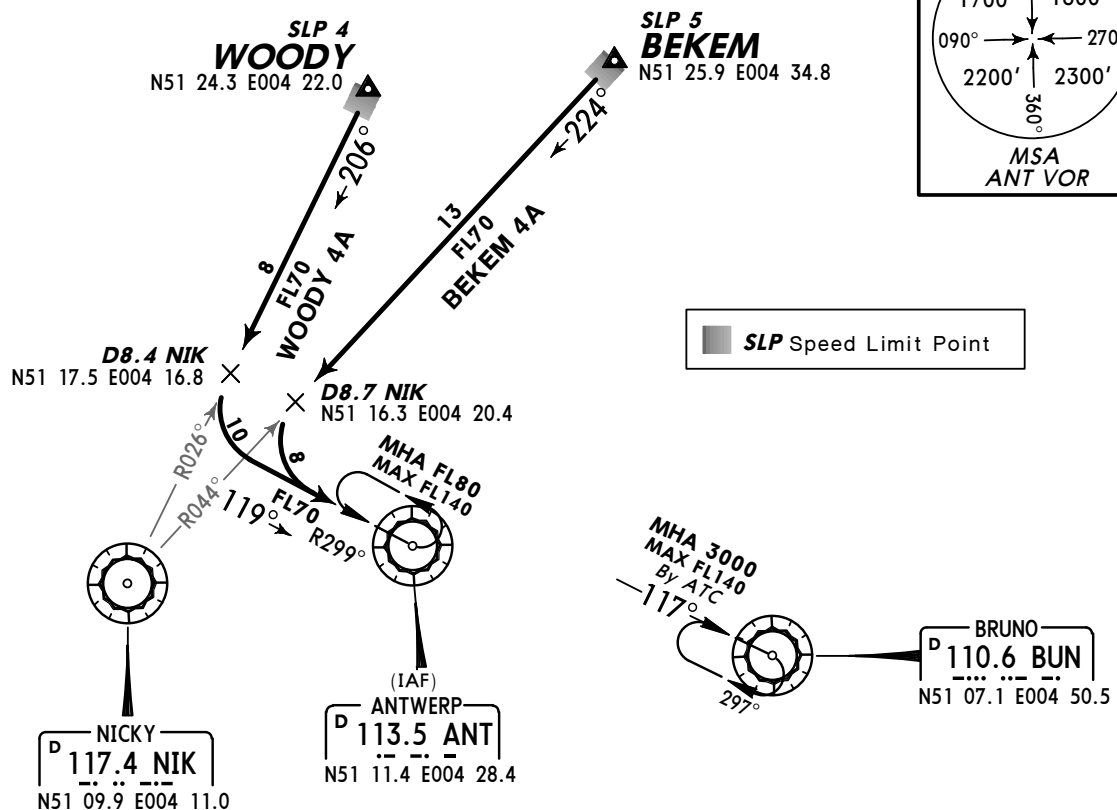
**STAR**

ATIS  
110.6 112.05 114.6  
114.9 117.55 132.47

Apt Elev  
184'

Alt Set: hPa  
Trans level: By ATC Trans alt: 4500'

**BEKEM FOUR ALFA (BEKEM 4A) [BEKE4A]**  
**WOODY FOUR ALFA (WOODY 4A) [WODY4A]**  
**ARRIVALS**  
**FROM NORTH**

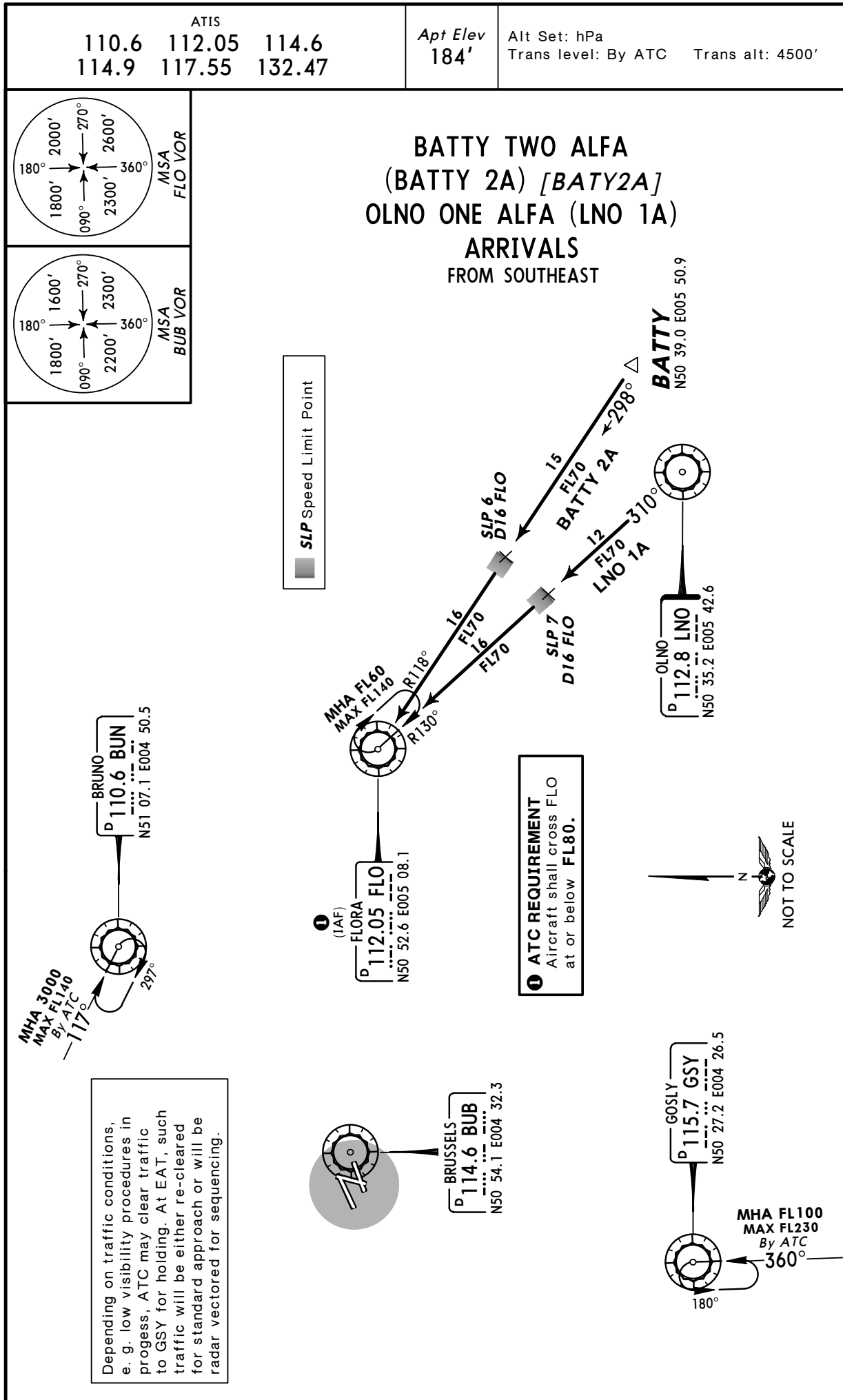


Depending on traffic conditions, e. g. low visibility procedures in progress, ATC may clear traffic to GSY for holding. At EAT, such traffic will be either re-cleared for standard approach or will be radar vectored for sequencing.

**EBBR/BRU**  
**BRUSSELS NATIONAL**

**JEPPESSEN**  
1 JUN 07 **(10-2A)** **Eff 7 Jun**

## BRUSSELS, BELGIUM

**STAR**

**CHANGES:** None.

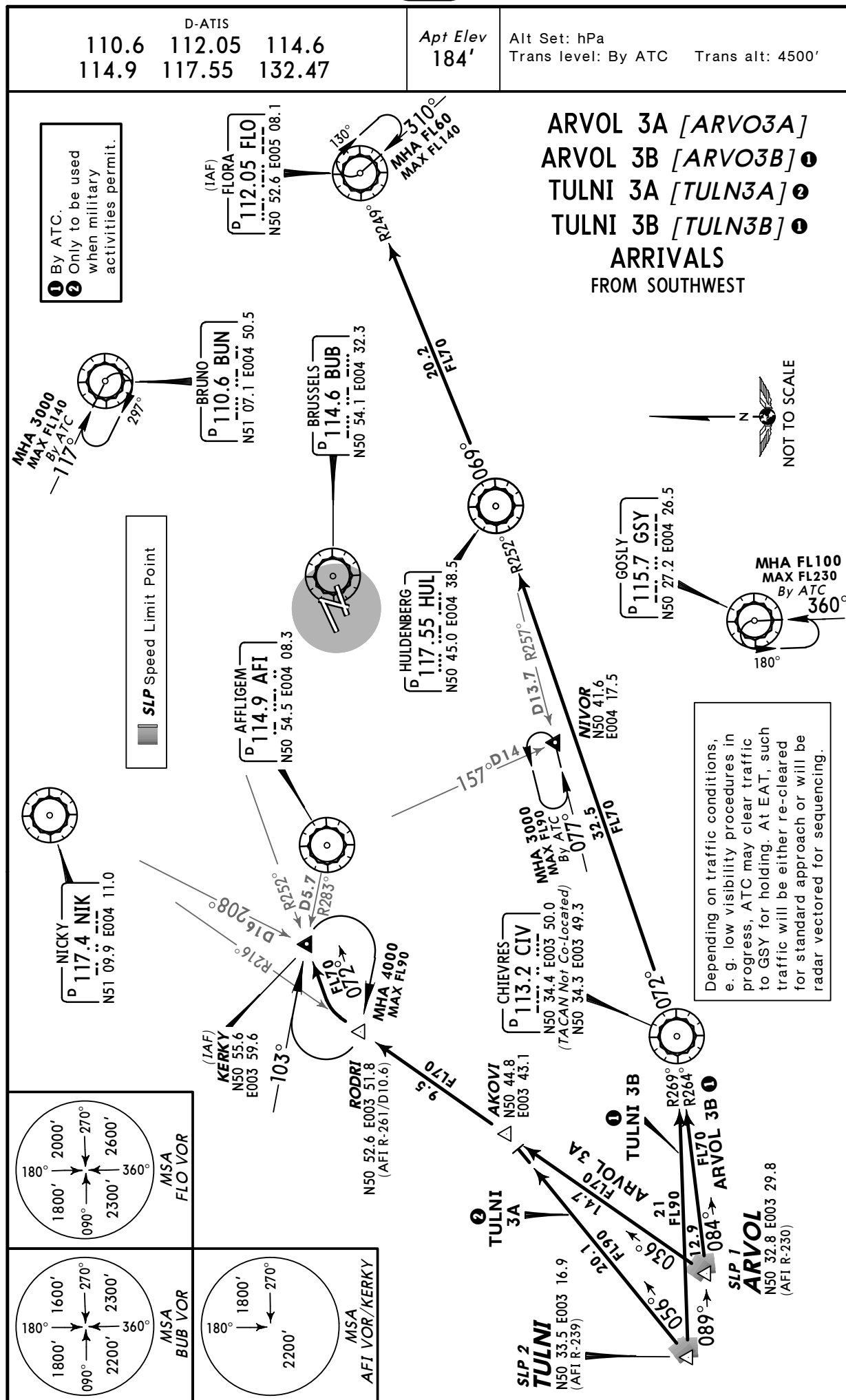
© JEPPESEN SANDERSON, INC., 2004, 2006. ALL RIGHTS RESERVED.



**EBBR/BRU**  
**BRUSSELS NATIONAL**

**JEPPESSEN**  
5 NOV 10 **(10-2B)**

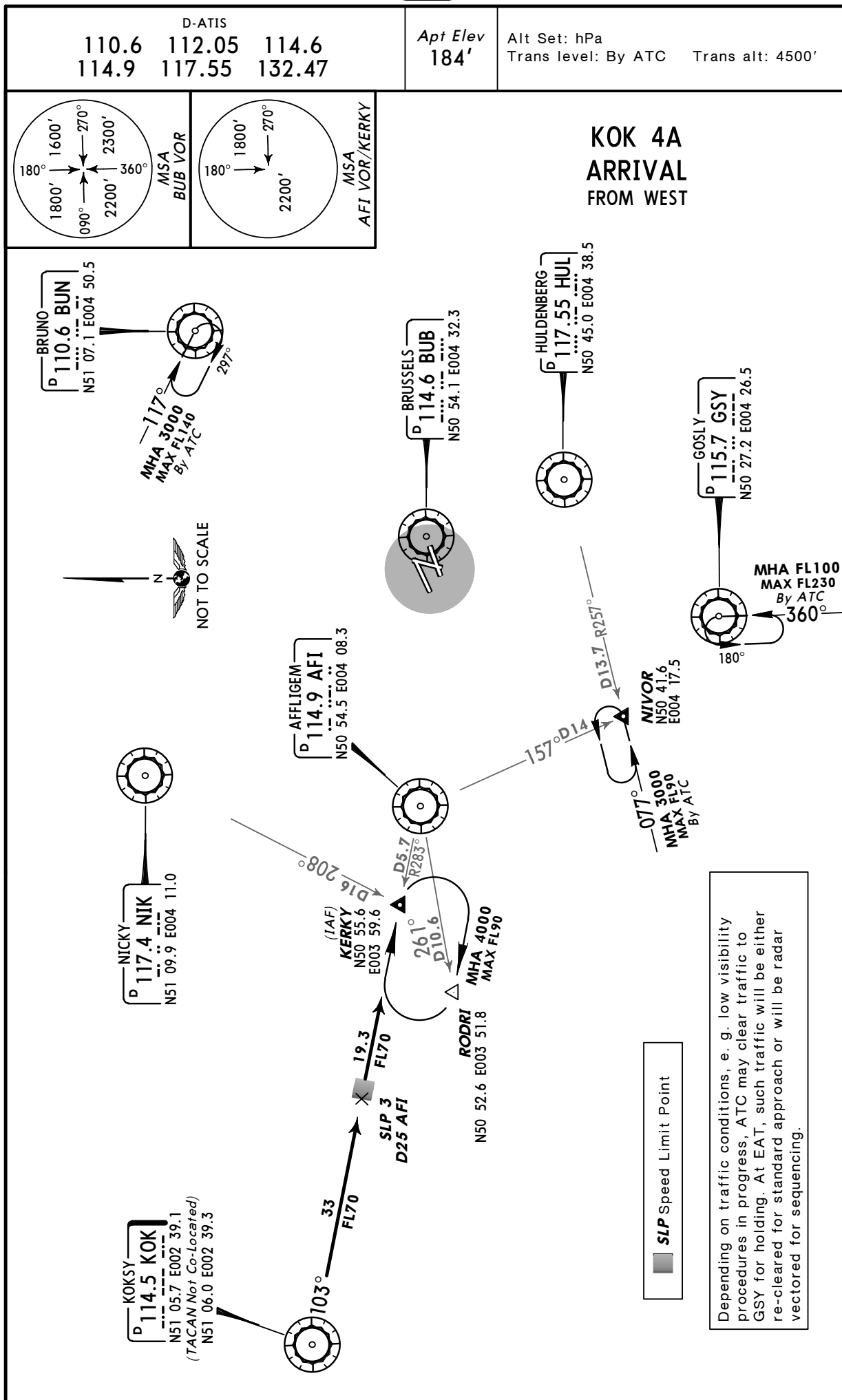
**BRUSSELS, BELGIUM**  
**STAR**



**EBBR/BRU**  
**BRUSSELS NATIONAL**

**JEPPESSEN**  
 5 NOV 10 **10-2C**

**BRUSSELS, BELGIUM**  
**STAR**



**EBBR/BRU**  
**BRUSSELS NATIONAL**

**JEPPESSEN**  
26 FEB 10 **10-3** **Eff 11 Mar**

**BRUSSELS, BELGIUM**  
**SID**

BRUSSELS Tower  
**118.6**  
**120.77**

BRUSSELS  
Departure(R)  
**126.62**

Apt Elev  
**184'**

Trans level: By ATC Trans alt: 4500'  
1. After take-off remain on Tower frequency.  
2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is mandatory, except when being radar vectored.

**CIV 1C, CIV 1E**  
**RWYS 25L/R DEPARTURES**

**SOUTHBOUND VIA AIRWAY M 617**

**SOUTHBOUND VIA AIRWAYS N 872, UN 872 (ONLY FOR TRAFFIC FLIGHTPLANNED ABOVE FL195)**

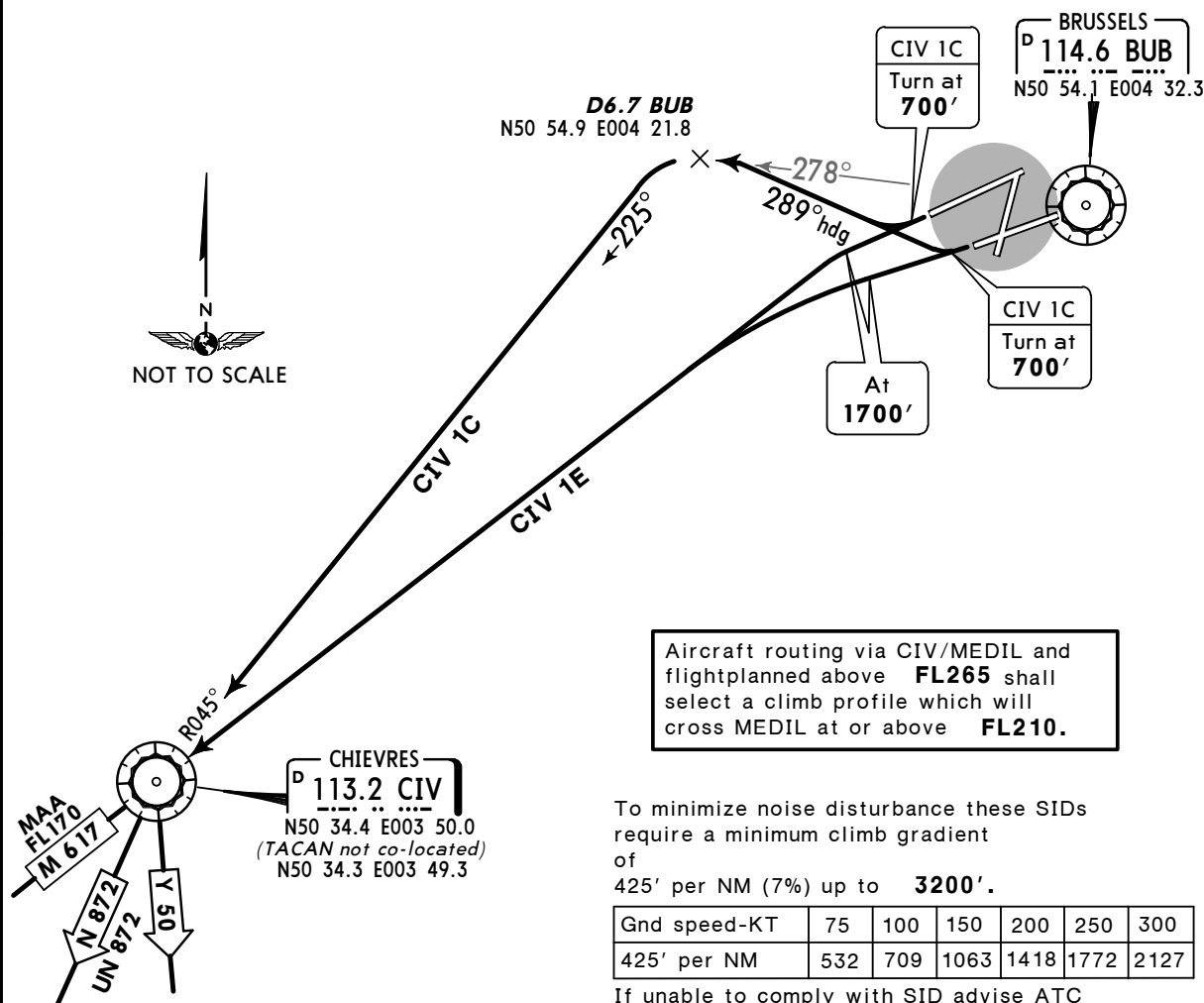
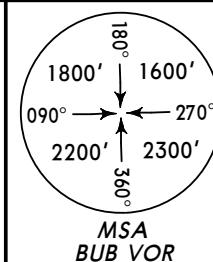
**COMPULSORY FOR DESTINATIONS WITHIN**

**PARIS TMA VIA AIRWAY Y 50 SOUTHBOUND**

**FOR SIDS RWYS 02, 07L/R, 20 REFER TO CHART 10-3A**

**FOR NIGHTTIME SIDS RWYS 25R/L REFER TO CHART 10-3B**

**~~SPEED~~ MAX 250 KT OR CLEAN SPEED ( $V_{ZF}$ ),  
WHICHEVER IS HIGHER, BELOW FL100 OR AS BY ATC**



To minimize noise disturbance these SIDs require a minimum climb gradient of  
425' per NM (7%) up to **3200'**.

| Gnd speed-KT | 75  | 100 | 150  | 200  | 250  | 300  |
|--------------|-----|-----|------|------|------|------|
| 425' per NM  | 532 | 709 | 1063 | 1418 | 1772 | 2127 |

If unable to comply with SID advise ATC when requesting start-up clearance.

Initial climb clearance **FL60**, higher level by BRUSSELS Departure or BRUSSELS Control as soon as traffic permits

| SID             | INITIAL CLIMB/ROUTING                                                                                                            |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------|
| <b>CIV 1C ①</b> | Climb to <b>700'</b> , turn RIGHT, 289° heading, intercept BUB R-278, at D6.7 BUB turn LEFT, intercept CIV R-045 inbound to CIV. |
| <b>CIV 1E ②</b> | Climb straight ahead, at <b>1700'</b> turn LEFT to CIV.                                                                          |

- ① Not available during weekends between 0600-2259LT.  
② Only available during weekends between 0600-2259LT.

**EBBR/BRU**  
**BRUSSELS NATIONAL**

**JEPPESSEN**  
26 FEB 10 **(10-3A)** **Eff 11 Mar**

**BRUSSELS, BELGIUM**  
**SID**

BRUSSELS Tower  
**118.6**  
**120.77**

BRUSSELS  
Departure(R)  
**126.62**

Apt Elev  
**184'**

Trans level: By ATC Trans alt: 4500'  
1. After take-off remain on Tower frequency.  
2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is mandatory, except when being radar vectored.

**CIV 6F, CIV 4H, CIV 4J, CIV 7L**  
**RWYS 02, 07L/R, 20 DEPARTURES**

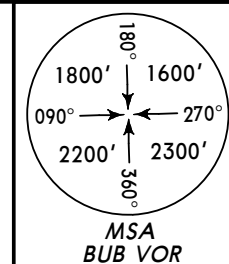
**SOUTHBOUND VIA AIRWAY M 617**

**SOUTHBOUND VIA AIRWAYS N 872, UN 872 (ONLY FOR TRAFFIC  
FLIGHTPLANNED ABOVE FL195)**

**COMPULSORY FOR DESTINATIONS WITHIN  
PARIS TMA VIA AIRWAY Y 50 SOUTHBOUND**

**FOR NIGHTTIME SIDS RWYS 25R/L REFER TO CHART 10-3B**

**~~SPEED~~ MAX 250 KT OR CLEAN SPEED ( $V_{ZF}$ ),  
WHICHEVER IS HIGHER, BELOW FL100 OR AS BY ATC**



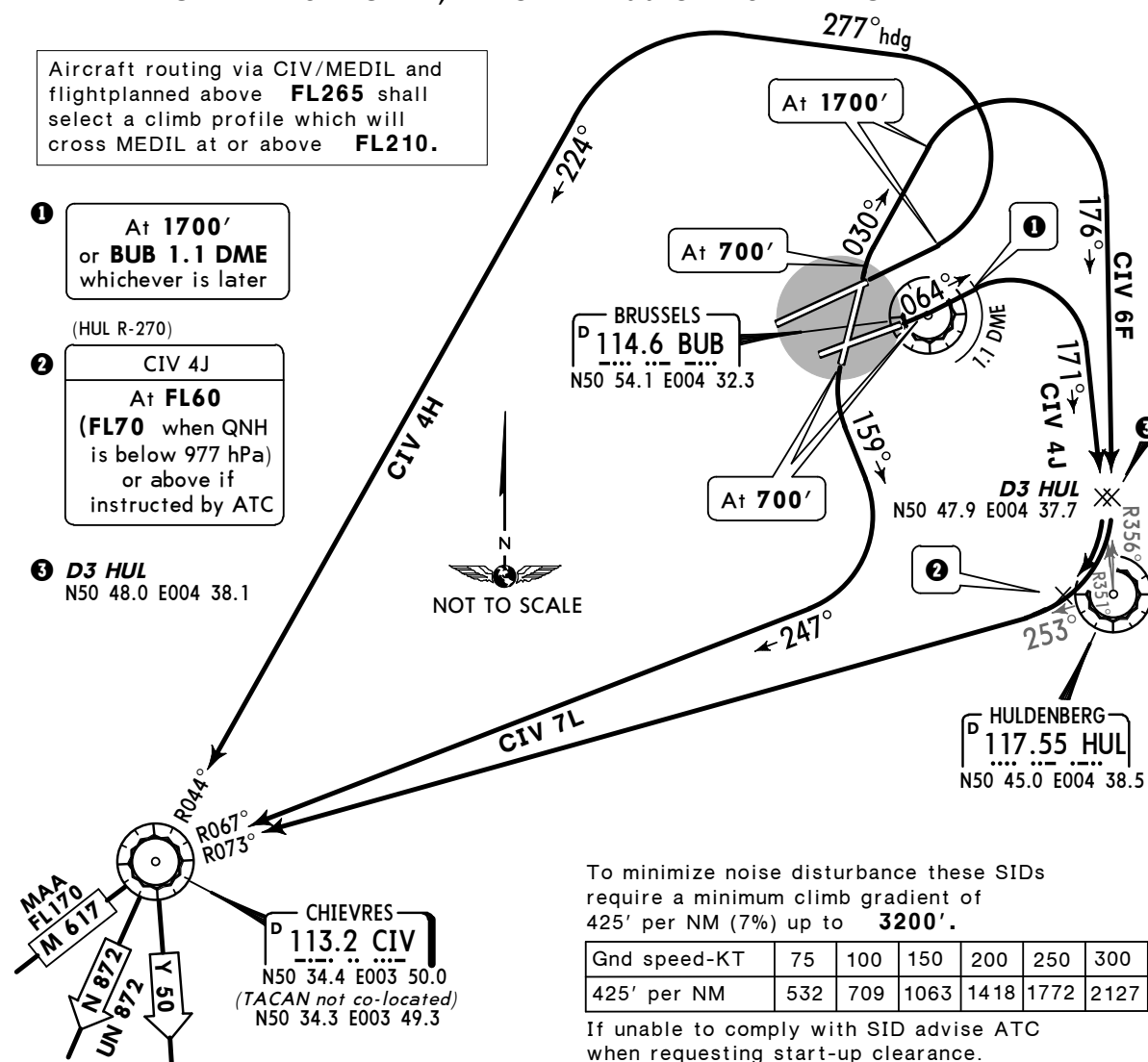
Aircraft routing via CIV/MEDIL and flightplanned above **FL265** shall select a climb profile which will cross MEDIL at or above **FL210**.

① At **1700'**  
or **BUB 1.1 DME**  
whichever is later

(HUL R-270)

② **CIV 4J**  
At **FL60**  
(**FL70** when QNH is below 977 hPa)  
or above if instructed by ATC

③ **D3 HUL**  
N50 48.0 E004 38.1



To minimize noise disturbance these SIDs require a minimum climb gradient of 425' per NM (7%) up to **3200'**.

| Gnd speed-KT | 75  | 100 | 150  | 200  | 250  | 300  |
|--------------|-----|-----|------|------|------|------|
| 425' per NM  | 532 | 709 | 1063 | 1418 | 1772 | 2127 |

If unable to comply with SID advise ATC when requesting start-up clearance.

Initial climb clearance **FL60**, higher level by BRUSSELS Departure or BRUSSELS Control as soon as traffic permits

| SID                                               | RWY        | INITIAL CLIMB/ROUTING                                                                                                                                                                     |
|---------------------------------------------------|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>CIV 6F</b><br>④                                | <b>02</b>  | Climb to <b>700'</b> , 030° track, at <b>1700'</b> turn RIGHT, intercept HUL R-356 inbound to D3 HUL, turn RIGHT, intercept CIV R-073 inbound to CIV.                                     |
| <b>CIV 4H</b>                                     | <b>07L</b> | Climb straight ahead, at <b>1700'</b> turn LEFT, 277° heading, intercept CIV R-044 inbound to CIV.                                                                                        |
| <b>CIV 4J</b>                                     | <b>07R</b> | Climb to <b>700'</b> , 064° track, at <b>1700'</b> or BUB 1.1 DME, whichever is later, turn RIGHT, intercept HUL R-351 inbound, at D3 HUL turn RIGHT, intercept CIV R-073 inbound to CIV. |
| <b>CIV 7L</b>                                     | <b>20</b>  | Climb to <b>700'</b> , 159° track, turn RIGHT, intercept CIV R-067 inbound to CIV.                                                                                                        |
| ④ Available when RWY 02 in single RWY operations. |            |                                                                                                                                                                                           |

**EBBR/BRU**  
**BRUSSELS NATIONAL**

**JEPPESSEN**  
 26 FEB 10 **(10-3B)** **Eff 11 Mar**

**BRUSSELS, BELGIUM**  
**SID**

BRUSSELS Tower  
**118.6**  
**120.77**

BRUSSELS  
 Departure(R)  
**126.62**

*Apt Elev*  
**184'**

Trans level: By ATC Trans alt: 4500'  
 1. After take-off remain on Tower frequency.  
 2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is mandatory, except when being radar vectored.

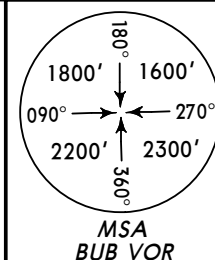
**CIV 7D, CIV 2Q**  
**RWYS 25R/L DEPARTURES**

AVAILABLE BETWEEN 2300-0559LT  
 SOUTHBOUND VIA AIRWAY M 617

SOUTHBOUND VIA AIRWAYS N 872, UN 872 (ONLY FOR TRAFFIC  
 FLIGHTPLANNED ABOVE FL195)

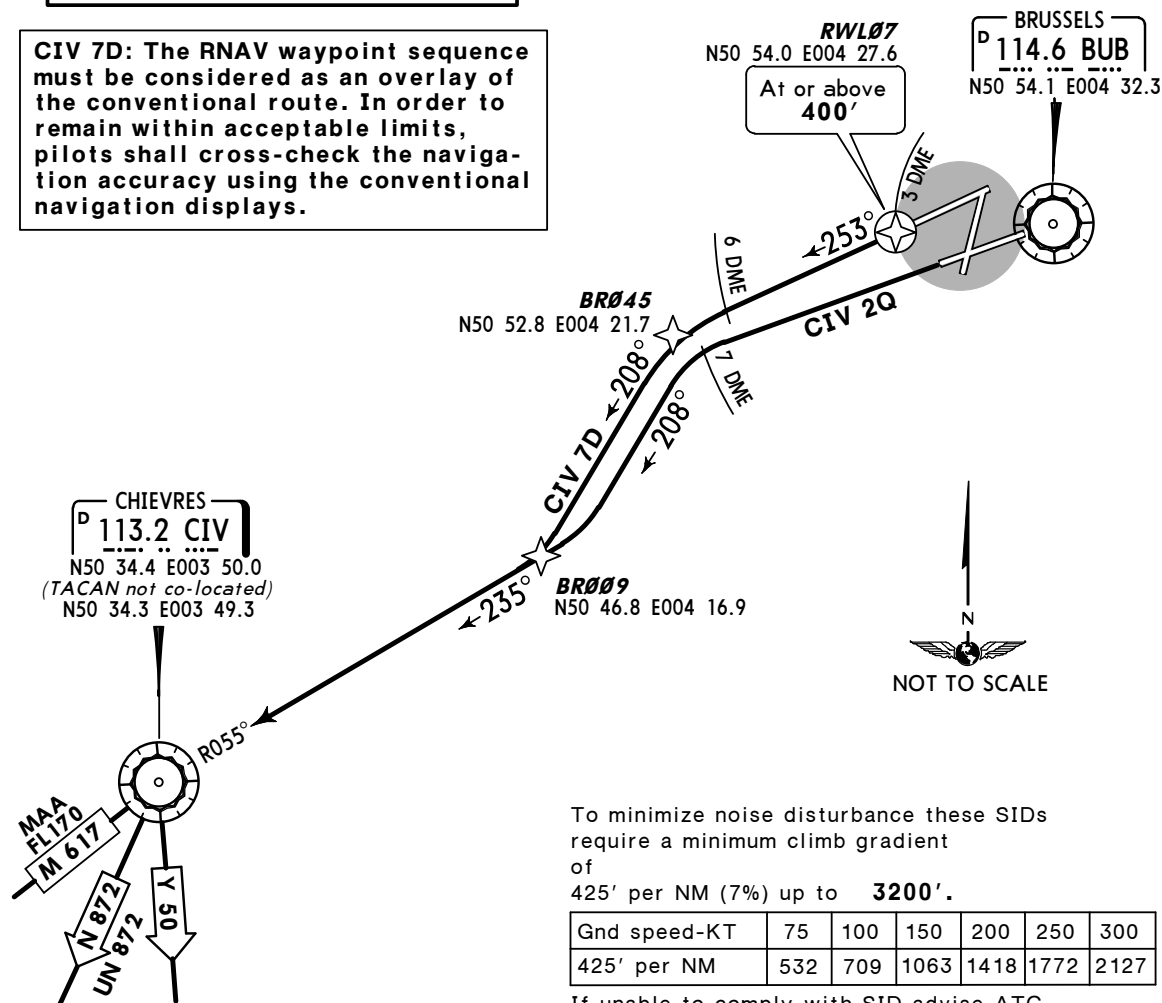
COMPULSORY FOR DESTINATIONS WITHIN  
 PARIS TMA VIA AIRWAY Y 50 SOUTHBOUND

**~~SPEED~~ MAX 250 KT OR CLEAN SPEED (V<sub>ZF</sub>),  
 WHICHEVER IS HIGHER, BELOW FL100 OR AS BY ATC**



Aircraft routing via CIV/MEDIL and flightplanned above **FL265** shall select a climb profile which will cross MEDIL at or above **FL210**.

**CIV 7D: The RNAV waypoint sequence must be considered as an overlay of the conventional route. In order to remain within acceptable limits, pilots shall cross-check the navigation accuracy using the conventional navigation displays.**



To minimize noise disturbance these SIDs require a minimum climb gradient of 425' per NM (7%) up to **3200'**.

| Gnd speed-KT | 75  | 100 | 150  | 200  | 250  | 300  |
|--------------|-----|-----|------|------|------|------|
| 425' per NM  | 532 | 709 | 1063 | 1418 | 1772 | 2127 |

If unable to comply with SID advise ATC when requesting start-up clearance.

Initial climb clearance **FL60**, higher level by BRUSSELS Departure or BRUSSELS Control as soon as traffic permits

| SID           | RWY        | INITIAL CLIMB/ROUTING                                                                                                                                              |
|---------------|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>CIV 7D</b> | <b>25R</b> | At BUB 3 DME (THR 07L) on 253° track, at BUB 6 DME turn LEFT, 208° track, intercept CIV R-055 inbound to CIV.<br><b>RNAV: RWL07 (400'+) - BR045 - BR009 - CIV.</b> |
| <b>CIV 2Q</b> | <b>25L</b> | Climb straight ahead, at BUB 7 DME turn LEFT, 208° track, intercept CIV R-055 inbound to CIV.                                                                      |

EBBR/BRU  
BRUSSELS NATIONAL

JEPPESEN  
26 FEB 10 (10-3C) Eff 11 Mar

BRUSSELS, BELGIUM  
SID

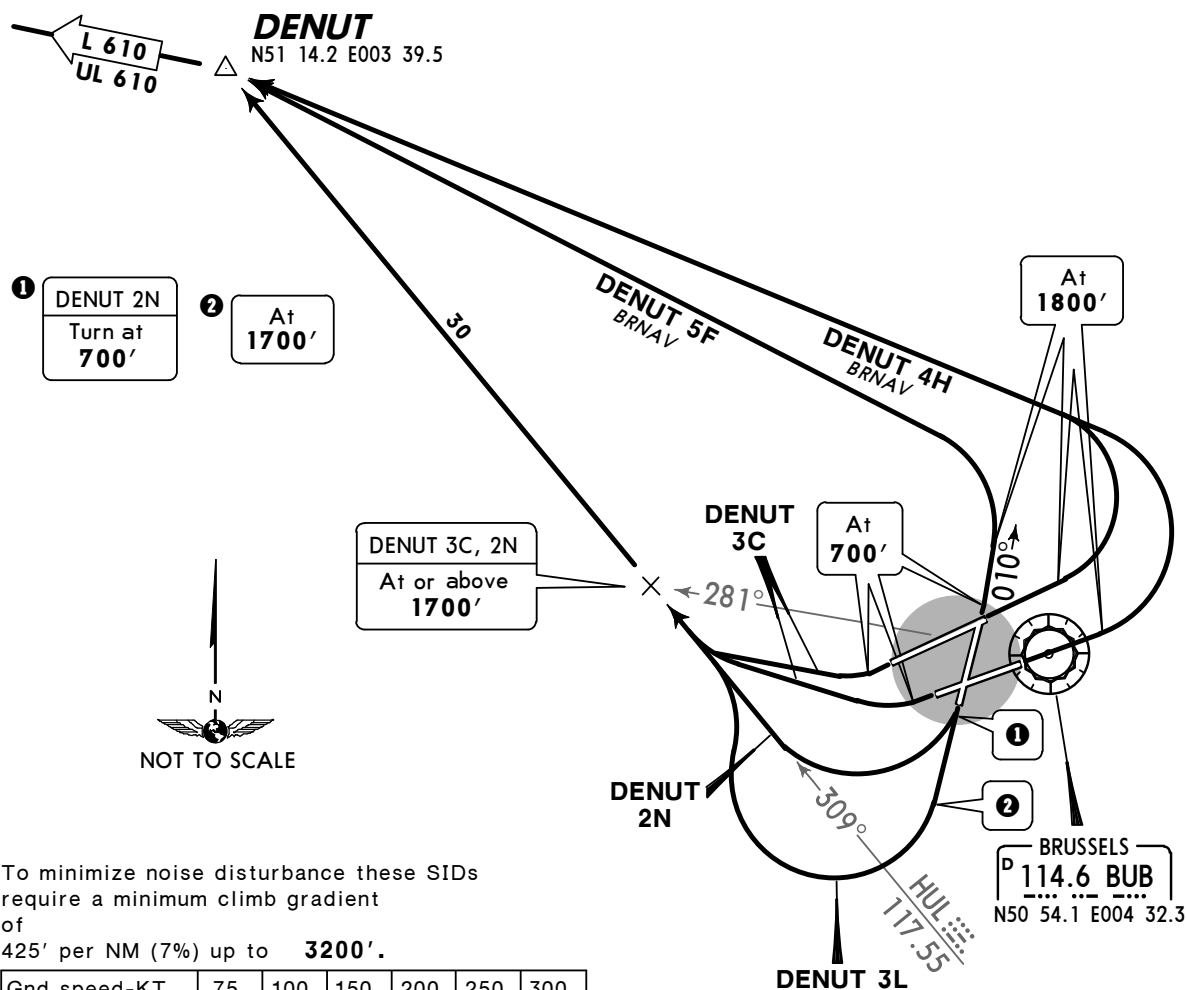
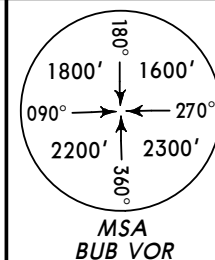
BRUSSELS Tower  
118.6  
120.77

BRUSSELS  
Departure(R)  
126.62

Apt Elev  
184'

Trans level: By ATC Trans alt: 4500'  
1. After take-off remain on Tower frequency.  
2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is mandatory, except when being radar vectored.

**DENUT**  
RWYS 25L/R, 02, 07L/R, 20 DEPARTURES  
**~~SPEED~~ MAX 250 KT OR CLEAN SPEED (V<sub>ZF</sub>),  
WHICHEVER IS HIGHER, BELOW FL100 OR AS BY ATC**



To minimize noise disturbance these SIDs require a minimum climb gradient of 425' per NM (7%) up to 3200'.

| Gnd speed-KT | 75  | 100 | 150  | 200  | 250  | 300  |
|--------------|-----|-----|------|------|------|------|
| 425' per NM  | 532 | 709 | 1063 | 1418 | 1772 | 2127 |

If unable to comply with SID advise ATC when requesting start-up clearance.

Initial climb clearance **FL60**, higher level by BRUSSELS Departure or BRUSSELS Control as soon as traffic permits

| SID                                      | RWY          | INITIAL CLIMB/ROUTING                                                           |
|------------------------------------------|--------------|---------------------------------------------------------------------------------|
| <b>DENUT 3C</b> [DENU3C] ③               | <b>25L/R</b> | Climb to <b>700'</b> , turn RIGHT, intercept HUL R-309 to DENUT.                |
| <b>DENUT 5F</b> [DENU5F] BRNAV above MSA | <b>02</b>    | Climb to <b>700'</b> , 010° track, at <b>1800'</b> direct to DENUT.             |
| <b>DENUT 4H</b> [DENU4H] BRNAV above MSA | <b>07L/R</b> | Climb straight ahead, at <b>1800'</b> direct to DENUT.                          |
| <b>DENUT 3L</b> [DENU3L] ③④              | <b>20</b>    | Climb straight ahead, at <b>1700'</b> turn RIGHT, intercept HUL R-309 to DENUT. |
| <b>DENUT 2N</b> [DENU2N] ③⑤              |              | Climb to <b>700'</b> , turn RIGHT, intercept HUL R-309 to DENUT.                |

- ③ Via Airways (U)L 610 westbound. For traffic destinations EGKK, EGHH & EGHI. For traffic overflying London TMA with requested FL above FL245.  
④ Available between 0600-2259LT.  
⑤ Available between 2300-0559LT or when runway 25R is not available for landing.

**EBBR/BRU**  
**BRUSSELS NATIONAL**

**JEPPESSEN**  
 26 MAY 06 **(10-3D)** **Eff 8 Jun**

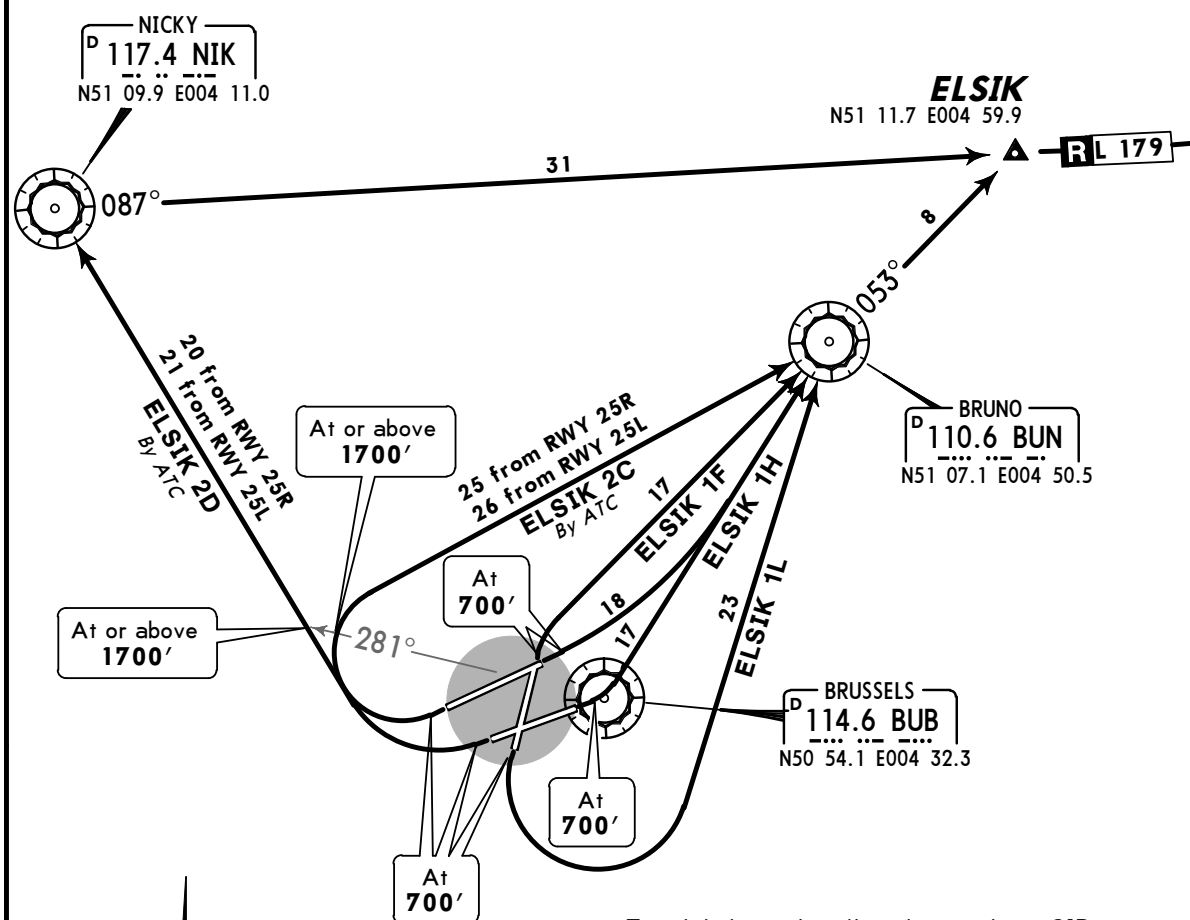
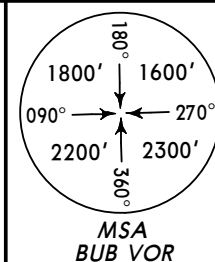
**BRUSSELS, BELGIUM**  
**SID**

|                                                 |                                           |                         |                                                                                                                                                                                                                                                                     |
|-------------------------------------------------|-------------------------------------------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| BRUSSELS Tower<br><b>118.6</b><br><b>120.77</b> | BRUSSELS<br>Departure(R)<br><b>126.62</b> | Apt Elev<br><b>184'</b> | Trans level: By ATC Trans alt: 4500'<br>1. After take-off remain on Tower frequency.<br>2. SIDs are also noise abatement procedures (refer to 10-4E).<br>Strict adherence within the limits of aircraft performance is mandatory, except when being radar vectored. |
|-------------------------------------------------|-------------------------------------------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**ELSIK**  
**RWYS 25L/R, 02, 07L/R, 20 DEPARTURES**  
**VIA AIRWAY L 179 EASTBOUND**

**TO BE USED WHEN ADEQUATE MILITARY AIRSPACES**  
**ARE AVAILABLE FOR GAT**

**~~SPEED~~ MAX 250 KT OR CLEAN SPEED (V<sub>ZF</sub>),**  
**WHICHEVER IS HIGHER, BELOW FL100 OR AS BY ATC**



NOT TO SCALE

To minimize noise disturbance these SIDs require a minimum climb gradient of 425' per NM (7%) up to **3200'**.

| Gnd speed-KT | 75  | 100 | 150  | 200  | 250  | 300  |
|--------------|-----|-----|------|------|------|------|
| 425' per NM  | 532 | 709 | 1063 | 1418 | 1772 | 2127 |

If unable to comply with SID advise ATC when requesting start-up clearance.

Initial climb clearance **FL60**, higher level by BRUSSELS Departure or BRUSSELS Control as soon as traffic permits

| SID                                  | RWY          | INITIAL CLIMB/ROUTING                                    |
|--------------------------------------|--------------|----------------------------------------------------------|
| <b>ELSIK 2C</b> [ELSI2C]<br>BY ATC ① | <b>25L/R</b> | Climb to <b>700'</b> , turn RIGHT to BUN, then to ELSIK. |
| <b>ELSIK 2D</b> [ELSI2D]<br>BY ATC   |              | Climb to <b>700'</b> , turn RIGHT to NIK, then to ELSIK. |
| <b>ELSIK 1F</b> [ELSI1F]             | <b>02</b>    | Climb to <b>700'</b> , turn RIGHT to BUN, then to ELSIK. |
| <b>ELSIK 1H</b> [ELSI1H]             | <b>07L/R</b> | Climb to <b>700'</b> , turn LEFT to BUN, then to ELSIK.  |
| <b>ELSIK 1L</b> [ELSI1L]             | <b>20</b>    |                                                          |

① If unable to comply advise ATC and expect SID ELSIK 2D.

**EBBR/BRU**  
**BRUSSELS NATIONAL**

**JEPPESEN**  
26 MAY 06 **(10-3E)** **Eff 8 Jun**

**BRUSSELS, BELGIUM**  
**SID**

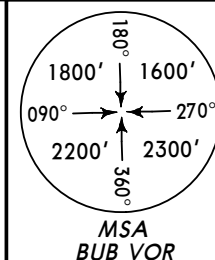
BRUSSELS Tower  
**118.6**  
**120.77**

BRUSSELS  
Departure(R)  
**126.62**

Apt Elev  
**184'**

Trans level: By ATC Trans alt: 4500'  
1. After take-off remain on Tower frequency.  
2. SIDs are also noise abatement procedures (refer to 10-4E).  
Strict adherence within the limits of aircraft performance is mandatory, except when being radar vectored.

**HELEN**  
**RWYS 25L/R, 02, 07L/R, 20 DEPARTURES**  
**~~SPEED~~ MAX 250 KT OR CLEAN SPEED ( $V_{ZF}$ ),**  
**WHICHEVER IS HIGHER, BELOW FL100 OR AS BY ATC**



**HELEN**  
N51 14.1  
E003 52.2



① **HELEN 2N**  
Turn at  
**700'**

② **At**  
**1700'**

**HELEN 3C, 2N**  
At or above  
**1700'**

To minimize noise disturbance these SIDs require a minimum climb gradient of 425' per NM (7%) up to **3200'**.

| Gnd speed-KT | 75  | 100 | 150  | 200  | 250  | 300  |
|--------------|-----|-----|------|------|------|------|
| 425' per NM  | 532 | 709 | 1063 | 1418 | 1772 | 2127 |

If unable to comply with SID advise ATC when requesting start-up clearance.

Initial climb clearance **FL60**, higher level by BRUSSELS Departure or BRUSSELS Control as soon as traffic permits

| SID                                         | RWY          | INITIAL CLIMB/ROUTING                                                           |
|---------------------------------------------|--------------|---------------------------------------------------------------------------------|
| <b>HELEN 3C</b> [HELE3C] ③                  | <b>25L/R</b> | Climb to <b>700'</b> , turn RIGHT, intercept HUL R-316 to HELEN.                |
| <b>HELEN 5F</b> [HELE5F]<br>BRNAV above MSA | <b>02</b>    | Climb to <b>700'</b> , 010° track, at <b>1800'</b> direct to HELEN.             |
| <b>HELEN 4H</b> [HELE4H]<br>BRNAV above MSA | <b>07L/R</b> | Climb straight ahead, at <b>1800'</b> direct to HELEN.                          |
| <b>HELEN 3L</b> [HELE3L] ③④                 | <b>20</b>    | Climb straight ahead, at <b>1700'</b> turn RIGHT, intercept HUL R-316 to HELEN. |
| <b>HELEN 2N</b> [HELE2N] ③⑤                 |              | Climb to <b>700'</b> , turn RIGHT, intercept HUL R-316 to HELEN.                |

③ For traffic with destination EHAM: route HELEN - HSD. For traffic inbound London TMA except destinations EGKK, EGHH & EGHI & for traffic overflying London TMA with requested FL below FL245: route HELEN - COA. For traffic via Airway L745 intending to leave Amsterdam FIR via RAVLO, MIMVA or GODOS: route HELEN - COA - TULIP.

④ Available between 0600-2259LT.

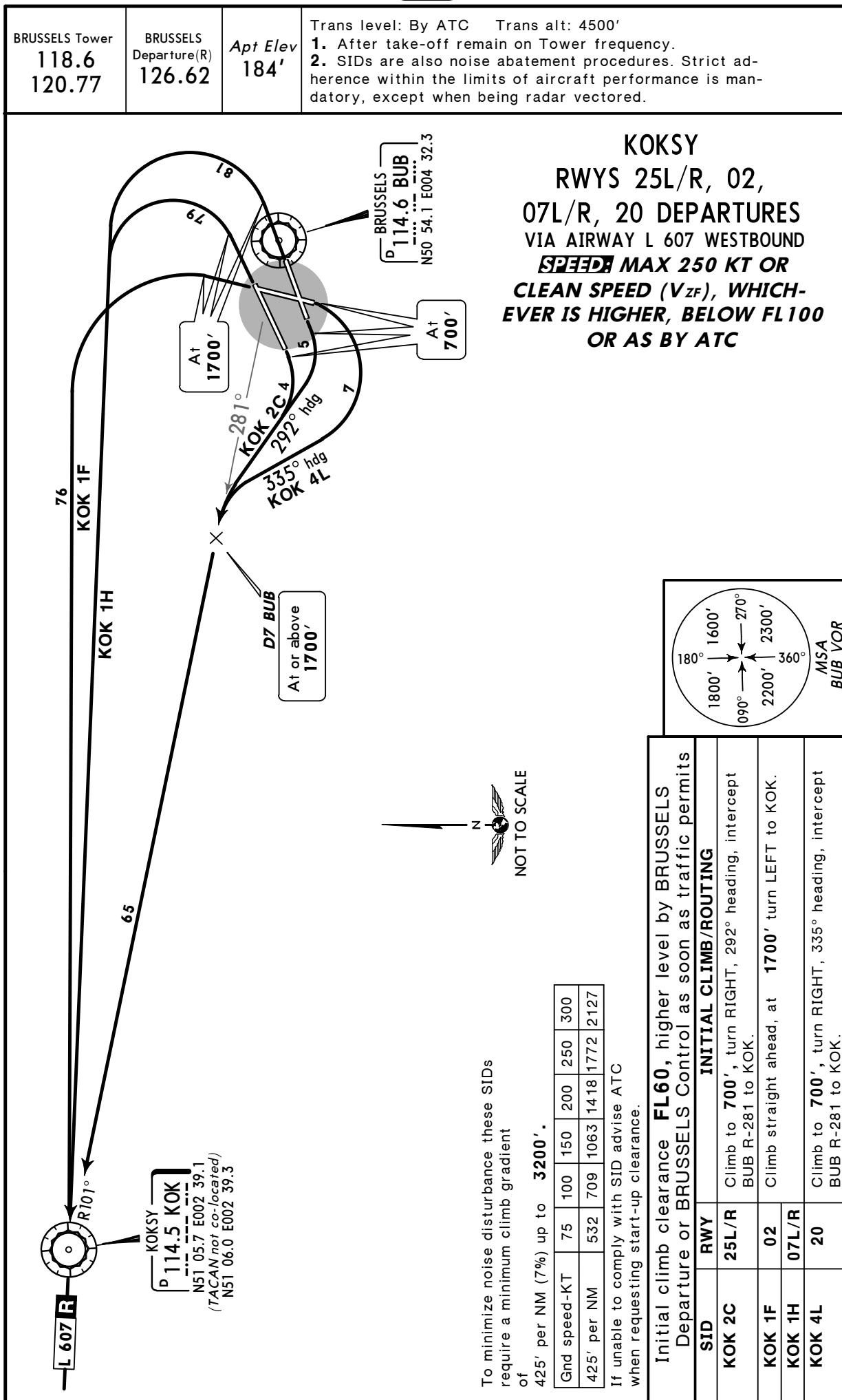
⑤ Available between 2300-0559LT or when runway 25R is not available for landing.



**EBBR/BRU**  
**BRUSSELS NATIONAL**

**JEPPesen**  
 13 APR 07 **10-3F**

**BRUSSELS, BELGIUM**  
**SID**



**EBBR/BRU**  
**BRUSSELS NATIONAL**

**JEPPesen**  
13 APR 07 **(10-3G)**

**BRUSSELS, BELGIUM**  
**SID**

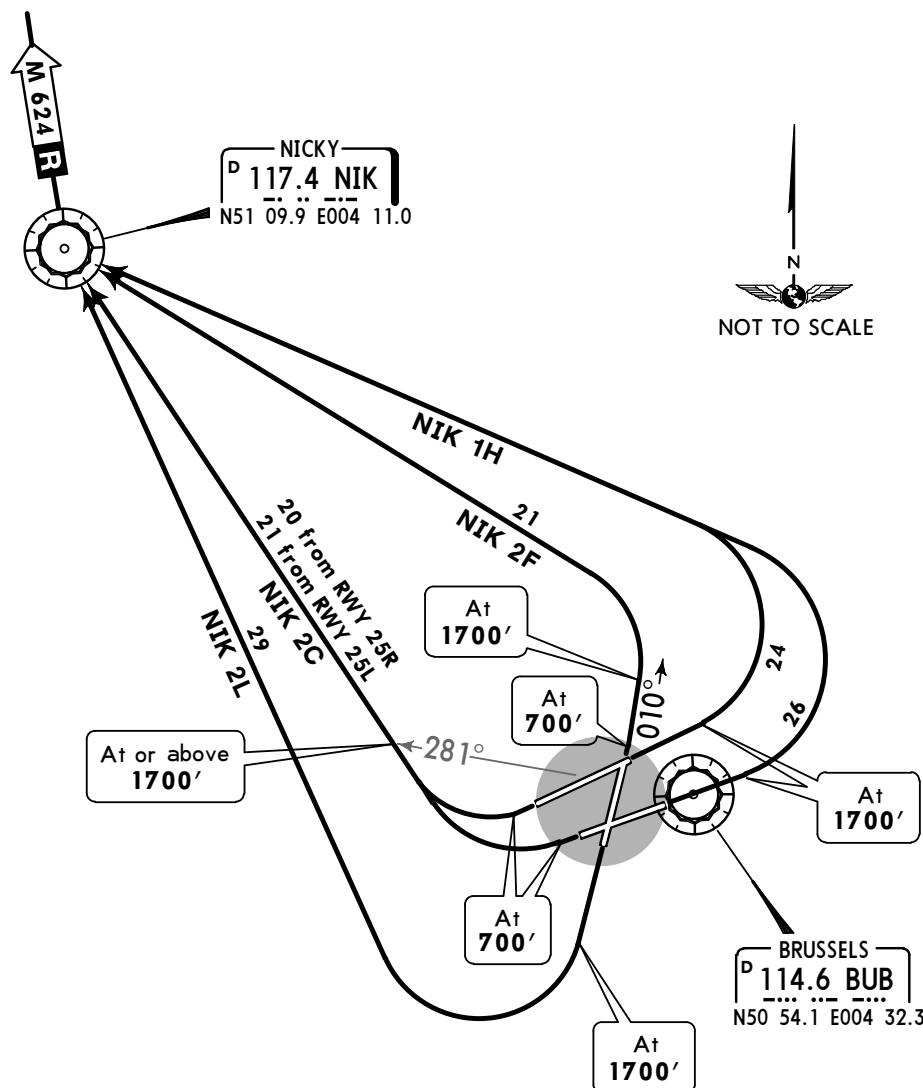
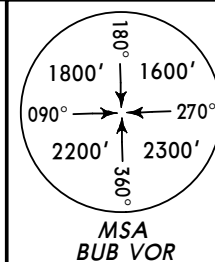
BRUSSELS Tower  
**118.6**  
**120.77**

BRUSSELS  
Departure(R)  
**126.62**

*Apt Elev*  
**184'**

Trans level: By ATC    Trans alt: 4500'  
**1.** After take-off remain on Tower frequency.  
**2.** SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is mandatory, except when being radar vectored.

**NICKY**  
**RWYS 25L/R, 02, 07L/R, 20 DEPARTURES**  
**VIA AIRWAY M 624 NORTHBOUND**  
**NOT TO BE USED BY TRAFFIC DESTINATION EHAM**  
**FOR NIGHTTIME SIDS RWYS 20, 25R REFER TO CHART 10-3H**  
**~~SPEED~~ MAX 250 KT OR CLEAN SPEED ( $V_{ZF}$ ),**  
**WHICHEVER IS HIGHER, BELOW FL100 OR AS BY ATC**



To minimize noise disturbance these SIDs require a minimum climb gradient of 425' per NM (7%) up to **3200'**.

| Gnd speed-KT | 75  | 100 | 150  | 200  | 250  | 300  |
|--------------|-----|-----|------|------|------|------|
| 425' per NM  | 532 | 709 | 1063 | 1418 | 1772 | 2127 |

If unable to comply with SID advise ATC when requesting start-up clearance.

Initial climb clearance **FL60**, higher level by BRUSSELS Departure or BRUSSELS Control as soon as traffic permits

| SID             | RWY          | INITIAL CLIMB/ROUTING                                                |
|-----------------|--------------|----------------------------------------------------------------------|
| <b>NIK 2C ①</b> | <b>25L/R</b> | Climb to <b>700'</b> , turn RIGHT to NIK.                            |
| <b>NIK 2F</b>   | <b>02</b>    | Climb to <b>700'</b> , 010° track, at <b>1700'</b> turn LEFT to NIK. |
| <b>NIK 1H</b>   | <b>07L/R</b> | Climb straight ahead, at <b>1700'</b> turn LEFT to NIK.              |
| <b>NIK 2L ②</b> | <b>20</b>    | Climb straight ahead, at <b>1700'</b> turn RIGHT to NIK.             |

① SIDs runway 25R only available between 0600-2259LT.

② Available between 0600-2259LT.

**EBBR/BRU**  
**BRUSSELS NATIONAL**

**JEPPesen**  
 5 NOV 10 **(10-3H)** **Eff 18 Nov**

**BRUSSELS, BELGIUM**  
**SID**

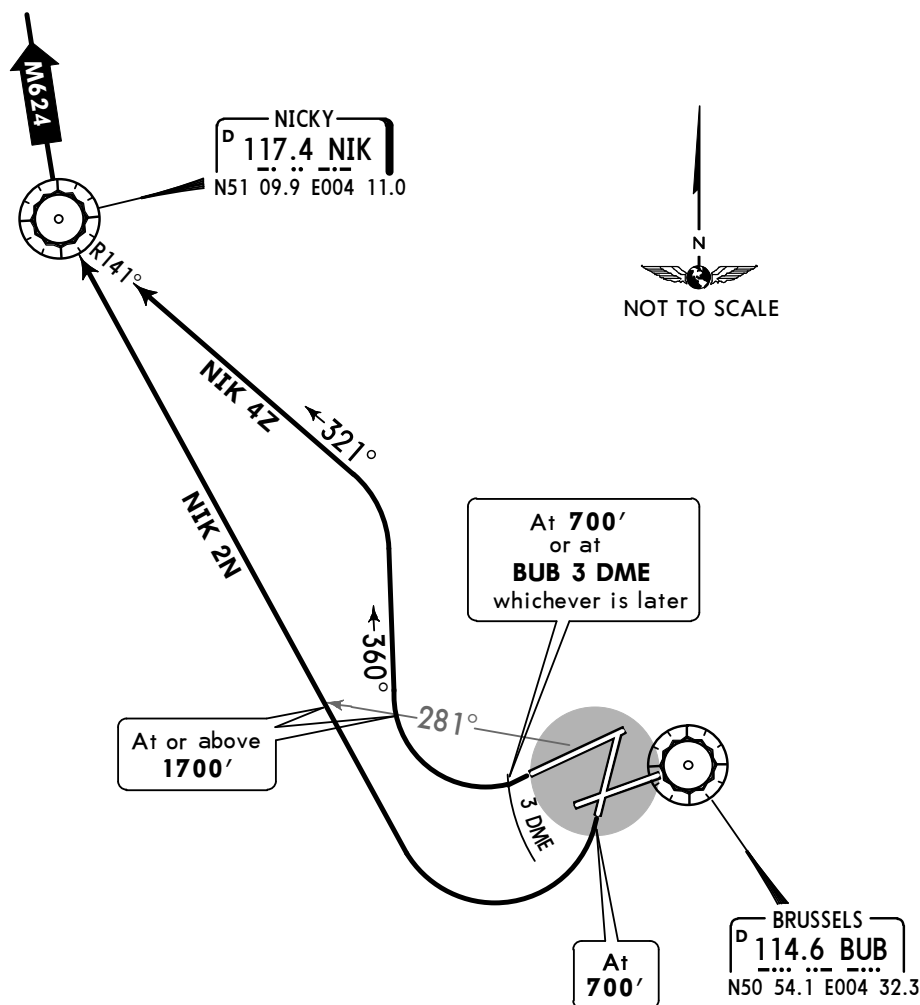
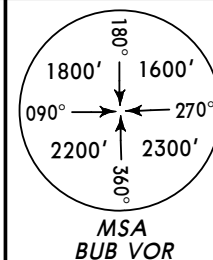
BRUSSELS Tower  
**118.6**  
**120.77**

BRUSSELS  
 Departure(R)  
**126.62**

*Apt Elev*  
**184'**

Trans level: By ATC Trans alt: 4500'  
 1. After take-off remain on Tower frequency.  
 2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is mandatory, except when being radar vectored.

**NIK 2N, NIK 4Z**  
**RWYS 20, 25R DEPARTURES**  
 VIA AIRWAY M 624 NORTHBOUND  
 NOT TO BE USED BY TRAFFIC DESTINATION EHAM  
**~~SPEED~~ MAX 250 KT OR CLEAN SPEED (V<sub>ZF</sub>),**  
**WHICHEVER IS HIGHER, BELOW FL100 OR AS BY ATC**



To minimize noise disturbance these SIDs require a minimum climb gradient of 425' per NM (7%) up to **3200'**.

| Gnd speed-KT | 75  | 100 | 150  | 200  | 250  | 300  |
|--------------|-----|-----|------|------|------|------|
| 425' per NM  | 532 | 709 | 1063 | 1418 | 1772 | 2127 |

If unable to comply with SID advise ATC when requesting start-up clearance.

Initial climb clearance **FL60**, higher level by BRUSSELS Departure or BRUSSELS Control as soon as traffic permits

| SID             | RWY        | INITIAL CLIMB/ROUTING                                                                                                         |
|-----------------|------------|-------------------------------------------------------------------------------------------------------------------------------|
| <b>NIK 2N ①</b> | <b>20</b>  | Climb to <b>700'</b> , turn RIGHT to NIK.                                                                                     |
| <b>NIK 4Z ②</b> | <b>25R</b> | Climb to <b>700'</b> or BUB 3 DME, whichever is later, turn RIGHT, 360° track, turn LEFT, intercept NIK R-141 inbound to NIK. |

- ① Available between 2300-0559LT or when runway 25R is not available for landing.  
 ② Available between 2300-0559LT.

**EBBR/BRU**  
**BRUSSELS NATIONAL**

**JEPPESSEN**  
 5 NOV 10 **10-3J** **Eff 18 Nov**

**BRUSSELS, BELGIUM**  
**SID**

BRUSSELS Tower  
**118.6**  
**120.77**

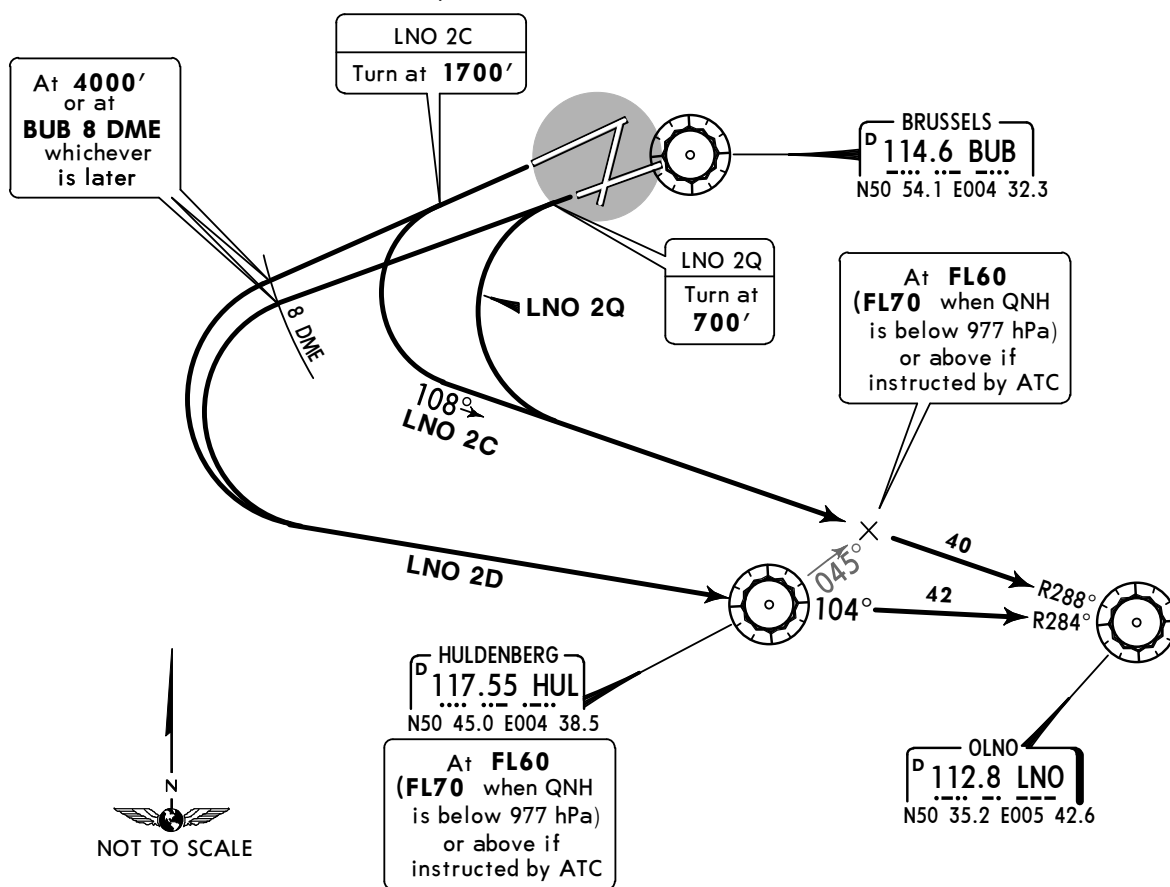
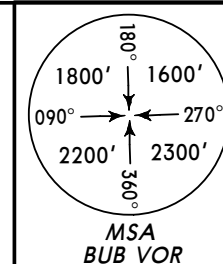
BRUSSELS  
 Departure(R)  
**126.62**

*Apt Elev*  
**184'**

Trans level: By ATC Trans alt: 4500'  
 1. After take-off remain on Tower frequency.  
 2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is mandatory, except when being radar vectored.

**LNO 2C, LNO 2D, LNO 2Q**  
**RWYS 25R/L DEPARTURES**

FOR TRAFFIC REQUESTING A CRUISING OR INITIAL FL BELOW FL195  
 FOR SIDS RWYS 02, 07L/R, 20 REFER TO CHART 10-3K  
 FOR NIGHTTIME SID RWY 25R REFER TO CHART 10-3L  
**~~SPEED~~ MAX 250 KT OR CLEAN SPEED (V<sub>ZF</sub>),**  
**WHICHEVER IS HIGHER, BELOW FL100 OR AS BY ATC**



To minimize noise disturbance these SIDs require a minimum climb gradient of 425' per NM (7%) up to **3200'**.

| Gnd speed-KT | 75  | 100 | 150  | 200  | 250  | 300  |
|--------------|-----|-----|------|------|------|------|
| 425' per NM  | 532 | 709 | 1063 | 1418 | 1772 | 2127 |

If unable to comply with SID advise ATC when requesting start-up clearance.

Initial climb clearance **FL60**, higher level by BRUSSELS Departure or BRUSSELS Control as soon as traffic permits

| SID                         | RWY          | INITIAL CLIMB/ROUTING                                                                                                            |
|-----------------------------|--------------|----------------------------------------------------------------------------------------------------------------------------------|
| <b>LNO 2C</b><br><b>① ②</b> | <b>25R</b>   | Climb straight ahead, at <b>1700'</b> turn LEFT, intercept LNO R-288 inbound to LNO.                                             |
| <b>LNO 2D</b><br><b>③ ④</b> | <b>25L/R</b> | Climb straight ahead, at <b>4000'</b> or at BUB 8 DME, whichever is later, turn LEFT to HUL, intercept LNO R-284 inbound to LNO. |
| <b>LNO 2Q ①</b>             | <b>25L</b>   | Climb to <b>700'</b> , turn LEFT, intercept LNO R-288 inbound to LNO.                                                            |

- ①** To be used by 1-, 2-, 3-engined aircraft.  
 May be used by 4-engined aircraft noise certificated according to ICAO Annex 16, Chapter 3/ FAR Part 36 Stage 3 and whose performances permit to adhere to the SID.
- ②** Available between 0600-2259LT.
- ③** To be used by 4-engined aircraft.
- ④** SIDs runway 25R only available between 0600-2259LT.

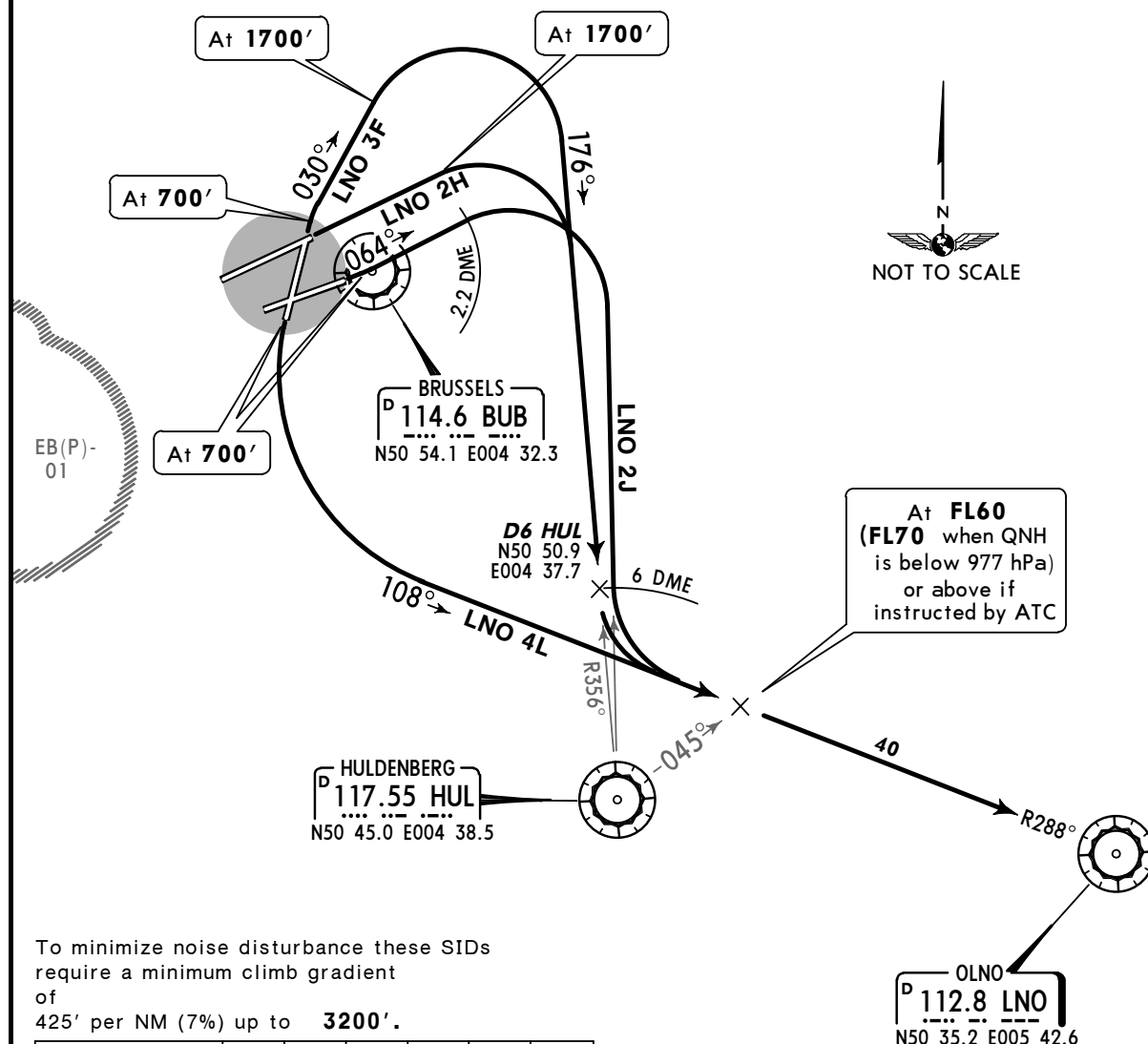
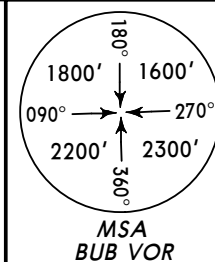
**EBBR/BRU**  
**BRUSSELS NATIONAL**

**JEPPESSEN**  
 5 NOV 10 **10-3K** **Eff 18 Nov**

**BRUSSELS, BELGIUM**  
**SID**

|                                                 |                                           |                         |                                                                                                                                                                                                                                                 |
|-------------------------------------------------|-------------------------------------------|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| BRUSSELS Tower<br><b>118.6</b><br><b>120.77</b> | BRUSSELS<br>Departure(R)<br><b>126.62</b> | Apt Elev<br><b>184'</b> | Trans level: By ATC Trans alt: 4500'<br>1. After take-off remain on Tower frequency.<br>2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is mandatory, except when being radar vectored. |
|-------------------------------------------------|-------------------------------------------|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**LNO 3F, LNO 2H, LNO 2J, LNO 4L**  
**RWYS 02, 07L/R, 20 DEPARTURES**  
 FOR TRAFFIC REQUESTING A CRUISING OR INITIAL FL BELOW FL195  
 FOR NIGHTTIME SID RWY 25R REFER TO CHART 10-3L  
**~~SPEED~~ MAX 250 KT OR CLEAN SPEED (V<sub>ZF</sub>),**  
**WHICHEVER IS HIGHER, BELOW FL100 OR AS BY ATC**



To minimize noise disturbance these SIDs require a minimum climb gradient of 425' per NM (7%) up to **3200'**.

|              |     |     |      |      |      |      |
|--------------|-----|-----|------|------|------|------|
| Gnd speed-KT | 75  | 100 | 150  | 200  | 250  | 300  |
| 425' per NM  | 532 | 709 | 1063 | 1418 | 1772 | 2127 |

If unable to comply with SID advise ATC when requesting start-up clearance.

Initial climb clearance **FL60**, higher level by BRUSSELS Departure or BRUSSELS Control as soon as traffic permits

| SID           | RWY        | INITIAL CLIMB/ROUTING                                                                                                                                |
|---------------|------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>LNO 3F</b> | <b>02</b>  | Climb to <b>700'</b> , 030° track, at <b>1700'</b> turn RIGHT, intercept HUL R-356 inbound to D6 HUL, turn LEFT, intercept LNO R-288 inbound to LNO. |
| <b>LNO 2H</b> | <b>07L</b> | Climb straight ahead, at <b>1700'</b> turn RIGHT, intercept HUL R-356 inbound to D6 HUL, turn LEFT, intercept LNO R-288 inbound to LNO.              |
| <b>LNO 2J</b> | <b>07R</b> | Climb to <b>700'</b> , 064° track to BUB 2.2 DME, turn RIGHT towards HUL, at HUL 6 DME turn LEFT, intercept LNO R-288 inbound to LNO.                |
| <b>LNO 4L</b> | <b>20</b>  | Climb to <b>700'</b> , turn LEFT, intercept LNO R-288 inbound to LNO.                                                                                |

**EBBR/BRU**  
**BRUSSELS NATIONAL**

**JEPPesen**  
5 NOV 10 **10-3L** **Eff 18 Nov**

**BRUSSELS, BELGIUM**  
**SID**

BRUSSELS Tower  
**118.6**  
**120.77**

BRUSSELS  
Departure(R)  
**126.62**

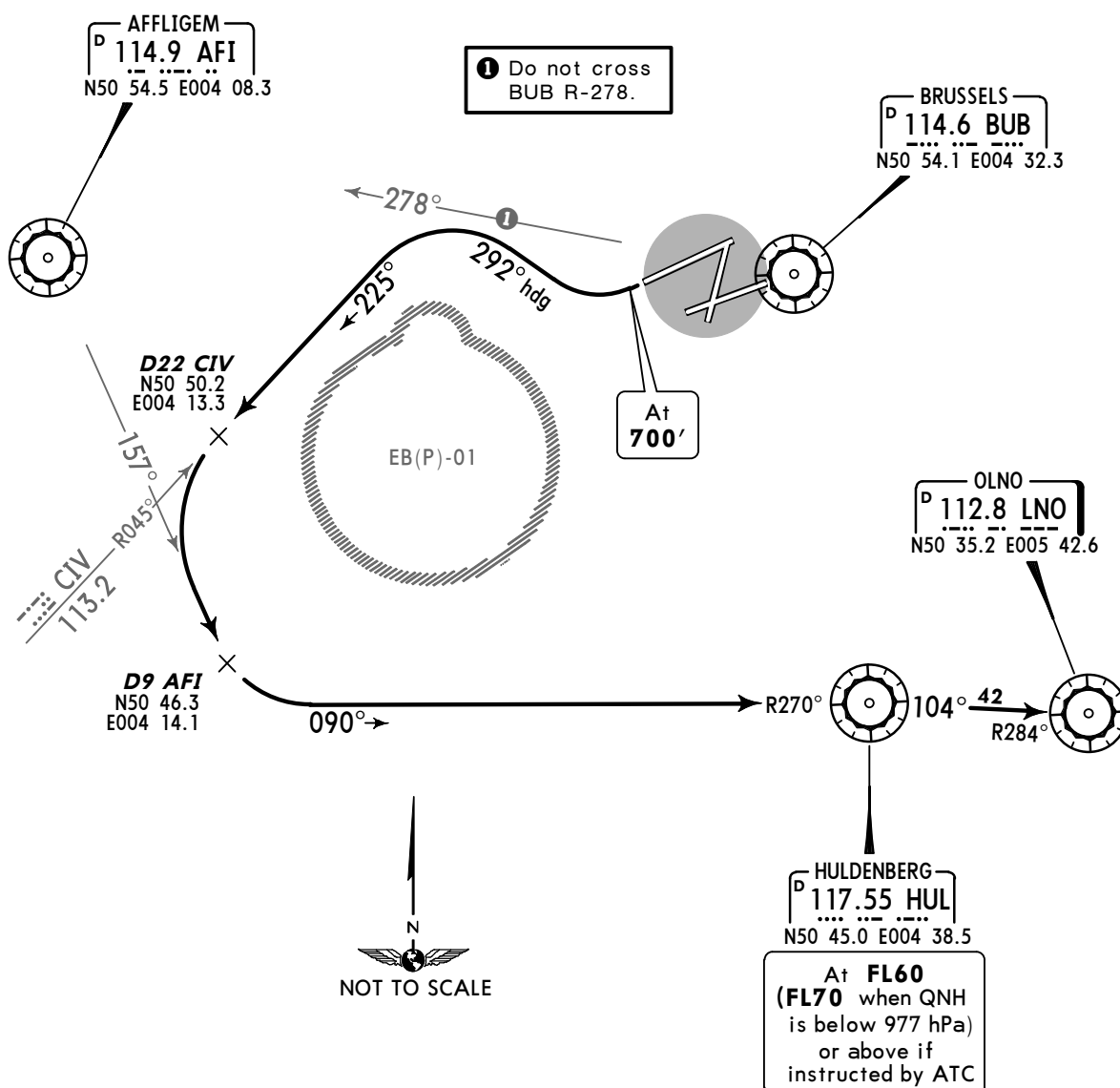
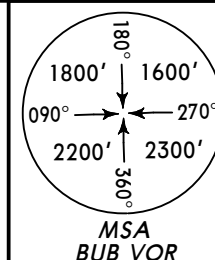
*Apt Elev*  
**184'**

Trans level: By ATC Trans alt: 4500'  
**1.** After take-off remain on Tower frequency.  
**2.** SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is mandatory, except when being radar vectored.

**LNO 3Z**  
**RWY 25R DEPARTURE**

FOR TRAFFIC REQUESTING A CRUISING OR INITIAL FL BELOW FL195  
AVAILABLE BETWEEN 2300-0559LT

***SPEED* MAX 250 KT OR CLEAN SPEED ( $V_{ZF}$ ),  
WHICHEVER IS HIGHER, BELOW FL100 OR AS BY ATC**



To minimize noise disturbance this SID requires a minimum climb gradient of 425' per NM (7%) up to **3200'**.

| Gnd speed-KT | 75  | 100 | 150  | 200  | 250  | 300  |
|--------------|-----|-----|------|------|------|------|
| 425' per NM  | 532 | 709 | 1063 | 1418 | 1772 | 2127 |

If unable to comply with SID advise ATC when requesting start-up clearance.

Initial climb clearance **FL60**, higher level by BRUSSELS Departure or BRUSSELS Control as soon as traffic permits

**INITIAL CLIMB/ROUTING**

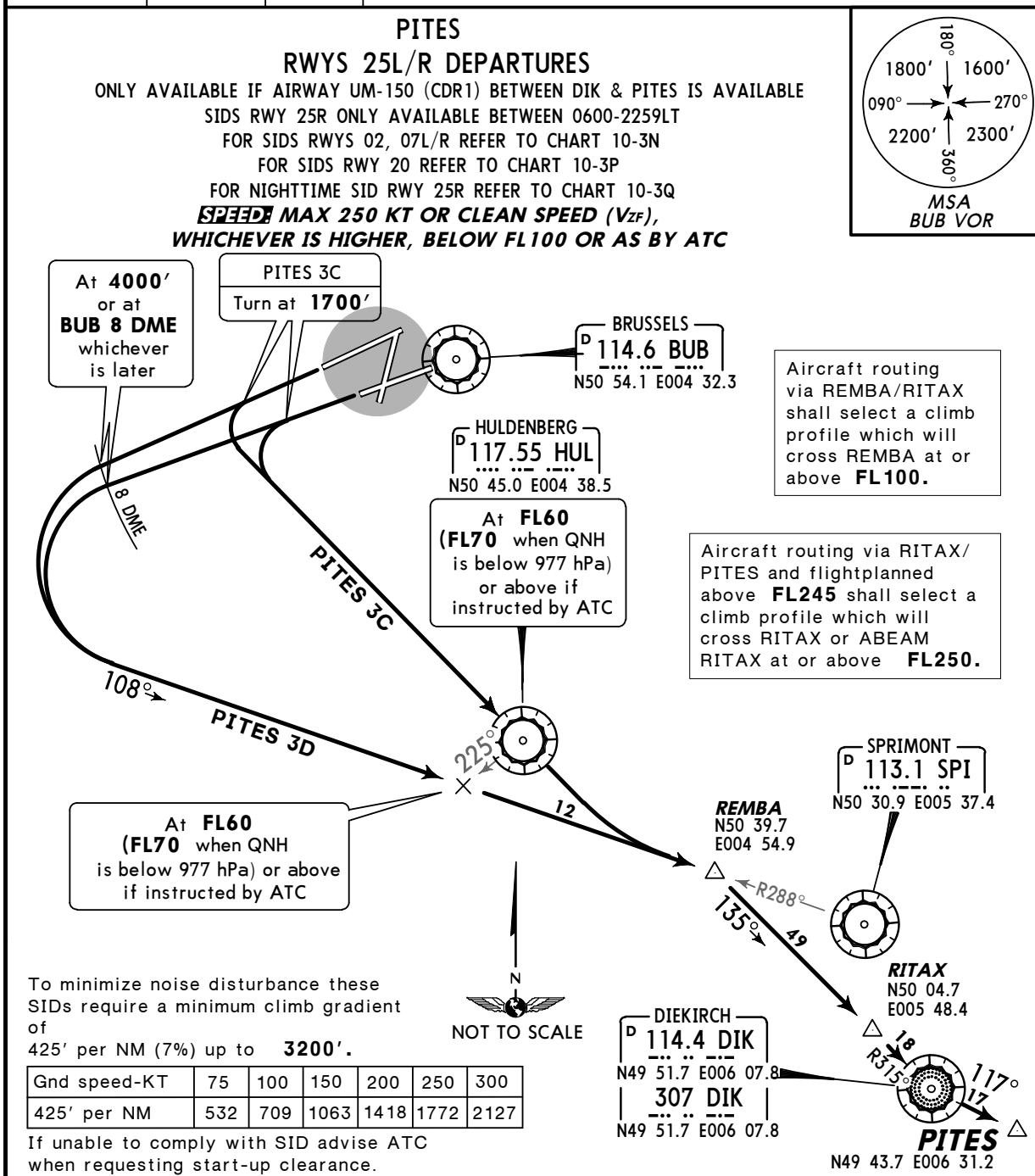
Climb to **700'**, turn RIGHT, 292° heading, intercept CIV R-045 inbound, at D22 CIV turn LEFT, intercept AFI R-157, at D9 AFI turn LEFT, intercept HUL R-270 inbound to HUL, intercept LNO R-284 inbound to LNO.

**EBBR/BRU**  
**BRUSSELS NATIONAL**

**JEPPESSEN**  
15 OCT 10 **(10-3M)**

**BRUSSELS, BELGIUM**  
**SID**

|                                                 |                                           |                         |                                                                                                                                                                                                                                                    |
|-------------------------------------------------|-------------------------------------------|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| BRUSSELS Tower<br><b>118.6</b><br><b>120.77</b> | BRUSSELS<br>Departure(R)<br><b>126.62</b> | Apt Elev<br><b>184'</b> | Trans level: By ATC    Trans alt: 4500'<br>1. After take-off remain on Tower frequency.<br>2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is mandatory, except when being radar vectored. |
|-------------------------------------------------|-------------------------------------------|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



Initial climb clearance **FL60**, higher level by BRUSSELS Departure or BRUSSELS Control as soon as traffic permits

| SID                                         | INITIAL CLIMB/ROUTING                                                                                                                                                        |
|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>PITES 3C</b><br>[PITE3C]<br><b>1 2 3</b> | Climb straight ahead, at <b>1700'</b> turn LEFT to HUL, intercept SPI R-288 inbound to REMBA, turn RIGHT to RITAX, then to DIK, then to PITES.                               |
| <b>PITES 3D</b><br>[PITE3D]<br><b>4 5 6</b> | Climb straight ahead, at <b>4000'</b> or at BUB 8 DME, whichever is later, turn LEFT, intercept SPI R-288 inbound to REMBA, turn RIGHT to RITAX, then to DIK, then to PITES. |

- To be used by 1-, 2-, 3-engined aircraft.  
May be used by 4-engined aircraft noise certificated according to ICAO Annex 16, Chapter 3/ FAR Part 36 Stage 3 and whose performances permit to adhere to the SID.
- Alternative route when airway **UM-150** not available: SOPOK 3C - SOPOK - ETENO.
- Alternative route on ATC instruction: SOPOK 3C - SOPOK - RITAX - DIK - PITES.
- To be used by 4-engined aircraft.
- Alternative route when airway **UM-150** not available: SOPOK 3D - SOPOK - ETENO.
- Alternative route on ATC instruction: SOPOK 3D - SOPOK - RITAX - DIK - PITES.

**EBBR/BRU**  
**BRUSSELS NATIONAL**

**JEPPESSEN**  
15 OCT 10 **(10-3N)**

**BRUSSELS, BELGIUM**  
**SID**

BRUSSELS Tower  
**118.6**  
**120.77**

BRUSSELS  
Departure(R)  
**126.62**

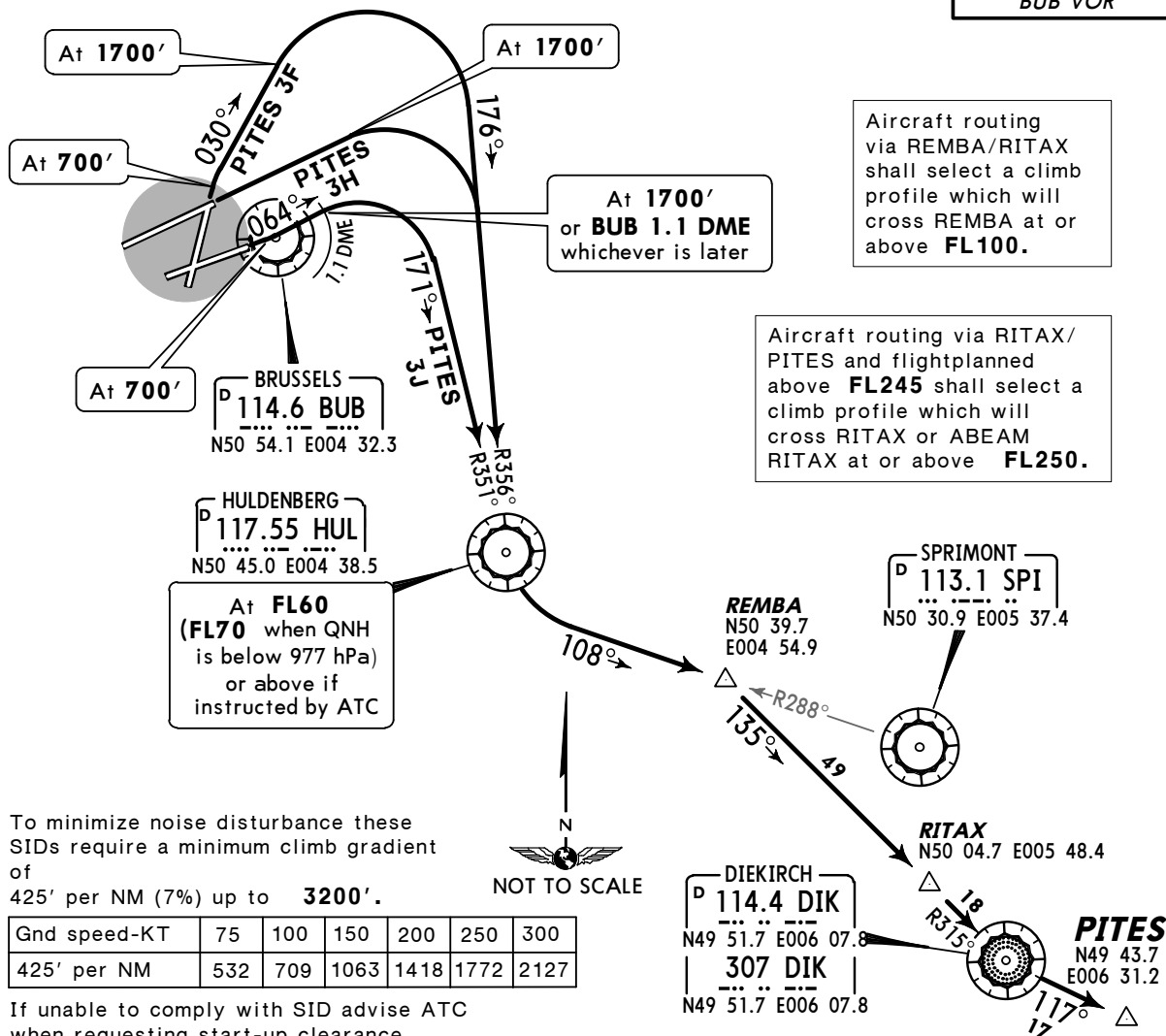
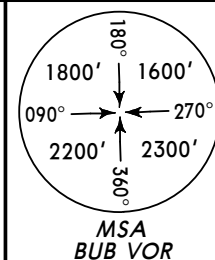
Apt Elev  
**184'**

Trans level: By ATC Trans alt: 4500'  
1. After take-off remain on Tower frequency.  
2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is mandatory, except when being radar vectored.

**PITES**

**RWYS 02, 07L/R DEPARTURES**

ONLY AVAILABLE IF AIRWAY UM-150 (CDR1) BETWEEN DIK & PITES IS AVAILABLE  
FOR SIDS RWY 20 REFER TO CHART 10-3P  
FOR NIGHTTIME SID RWY 25R REFER TO CHART 10-3Q  
**SPEED MAX 250 KT OR CLEAN SPEED (V<sub>ZF</sub>),  
WHICHEVER IS HIGHER, BELOW FL100 OR AS BY ATC**



Initial climb clearance **FL60**, higher level by BRUSSELS Departure or BRUSSELS Control as soon as traffic permits

| SID                             | RWY        | INITIAL CLIMB                                                                                                                          |
|---------------------------------|------------|----------------------------------------------------------------------------------------------------------------------------------------|
| <b>PITES 3F</b><br>[PITE3F] ① ② | <b>02</b>  | Climb to <b>700'</b> , 030° track, at <b>1700'</b> turn RIGHT, intercept HUL R-356 inbound to HUL.                                     |
| <b>PITES 3H</b><br>[PITE3H] ③ ④ | <b>07L</b> | Climb straight ahead, at <b>1700'</b> turn RIGHT, intercept HUL R-356 inbound to HUL.                                                  |
| <b>PITES 3J</b><br>[PITE3J] ⑤ ⑥ | <b>07R</b> | Climb to <b>700'</b> , 064° track, at <b>1700'</b> or BUB 1.1 DME, whichever is later, turn RIGHT, intercept HUL R-351 inbound to HUL. |

**ROUTING**

At HUL turn LEFT, intercept SPI R-288 inbound to REMBA, turn RIGHT to RITAX, then to DIK, then to PITES.

- ① Alternative route when airway **UM-150** not available: SOPOK 3F - SOPOK - ETENO.
- ② Alternative route on ATC instruction: SOPOK 3F - SOPOK - RITAX - DIK - PITES.
- ③ Alternative route when airway **UM-150** not available: SOPOK 2H - SOPOK - ETENO.
- ④ Alternative route on ATC instruction: SOPOK 2H - SOPOK - RITAX - DIK - PITES.
- ⑤ Alternative route when airway **UM-150** not available: SOPOK 2J - SOPOK - ETENO.
- ⑥ Alternative route on ATC instruction: SOPOK 2J - SOPOK - RITAX - DIK - PITES.

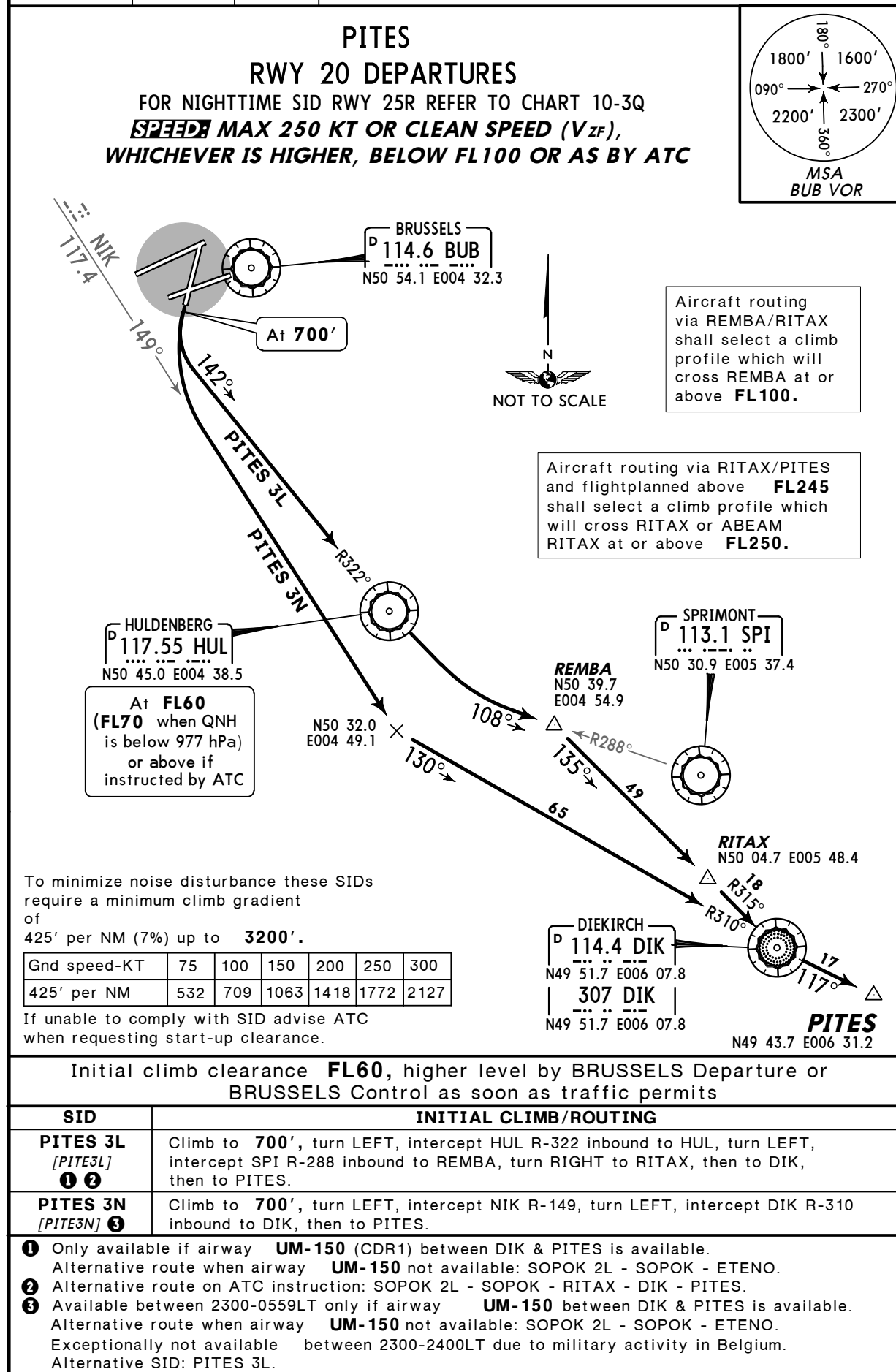


**EBBR/BRU**  
**BRUSSELS NATIONAL**

**JEPPESSEN**  
15 OCT 10 **(10-3P)**

**BRUSSELS, BELGIUM**  
**SID**

|                                                 |                                           |                         |                                                                                                                                                                                                                                                    |
|-------------------------------------------------|-------------------------------------------|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| BRUSSELS Tower<br><b>118.6</b><br><b>120.77</b> | BRUSSELS<br>Departure(R)<br><b>126.62</b> | Apt Elev<br><b>184'</b> | Trans level: By ATC    Trans alt: 4500'<br>1. After take-off remain on Tower frequency.<br>2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is mandatory, except when being radar vectored. |
|-------------------------------------------------|-------------------------------------------|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



**EBBR/BRU**  
**BRUSSELS NATIONAL**

**JEPPESSEN**  
 15 OCT 10 **(10-3Q)**

**BRUSSELS, BELGIUM**  
**SID**

BRUSSELS Tower  
**118.6**  
**120.77**

BRUSSELS  
 Departure(R)  
**126.62**

*Apt Elev*  
**184'**

Trans level: By ATC Trans alt: 4500'  
 1. After take-off remain on Tower frequency.  
 2. SIDs are also noise abatement procedures. Strict adherence within the limits of aircraft performance is mandatory, except when being radar vectored.

**PITES 3Z [PITE3Z]**

**RWY 25R DEPARTURE**

AVAILABLE BETWEEN 2300-0559LT

ONLY AVAILABLE IF AIRWAY UM-150 (CDR1) BETWEEN DIK & PITES IS AVAILABLE

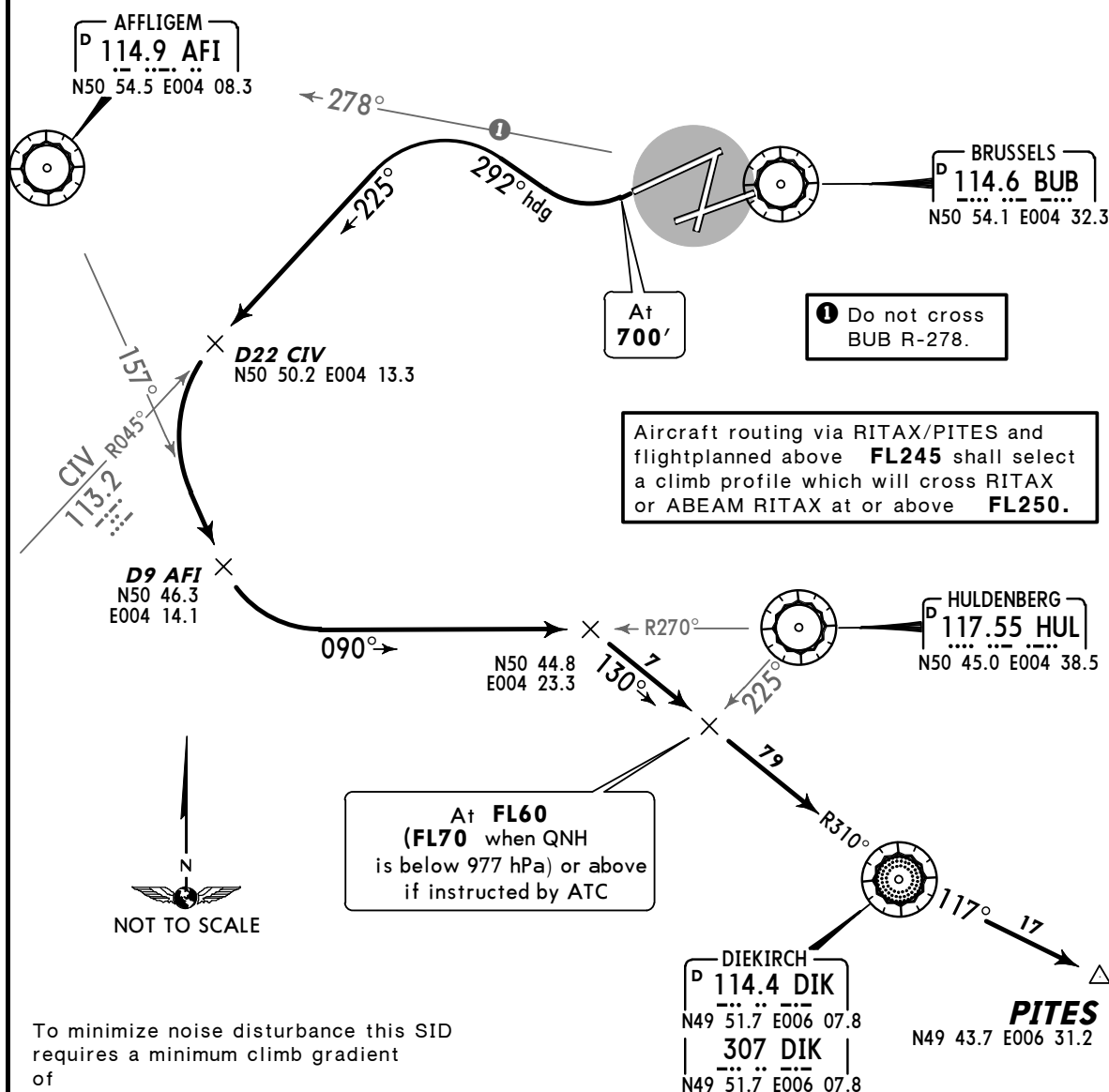
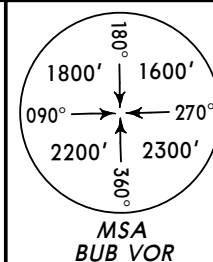
ALTERNATIVE ROUTE WHEN AIRWAY UM-150 NOT AVAILABLE:

SOPOK 2L - SOPOK - ETENO

ALTERNATIVE ROUTE ON ATC INSTRUCTION:

SOPOK 4Z - SOPOK - RITAX - DIK - PITES

***SPEED MAX 250 KT OR CLEAN SPEED (V<sub>ZF</sub>), WHICHEVER IS HIGHER, BELOW FL100 OR AS BY ATC***



To minimize noise disturbance this SID requires a minimum climb gradient of 425' per NM (7%) up to **3200'**.

| Gnd speed-KT | 75  | 100 | 150  | 200  | 250  | 300  |
|--------------|-----|-----|------|------|------|------|
| 425' per NM  | 532 | 709 | 1063 | 1418 | 1772 | 2127 |

If unable to comply with SID advise ATC when requesting start-up clearance.

Initial climb clearance **FL60**, higher level by BRUSSELS Departure or BRUSSELS Control as soon as traffic permits

**INITIAL CLIMB/ROUTING**

Climb to **700'**, turn RIGHT, 292° heading, intercept CIV R-045 inbound, at D22 CIV turn LEFT, intercept AFI R-157, at D9 AFI turn LEFT, intercept HUL R-270 inbound, intercept DIK R-310 inbound to DIK, then to PITES.

**EBBR/BRU**  
**BRUSSELS NATIONAL**

**JEPPESSEN**

7 APR 06

**10-3S**

**Eff 13 Apr**

**BRUSSELS, BELGIUM**

**SID**

BRUSSELS Tower  
**118.6**  
**120.77**

BRUSSELS  
Departure(R)  
**126.62**

Apt Elev  
**184'**

Trans level: By ATC Trans alt: 4500'

1. After take-off remain on Tower frequency.
2. SIDs are also noise abatement procedures (refer to 10-4E). Strict adherence within the limits of aircraft performance is mandatory, except when being radar vectored.

## ROUSY

### RWYS 25L/R DEPARTURES

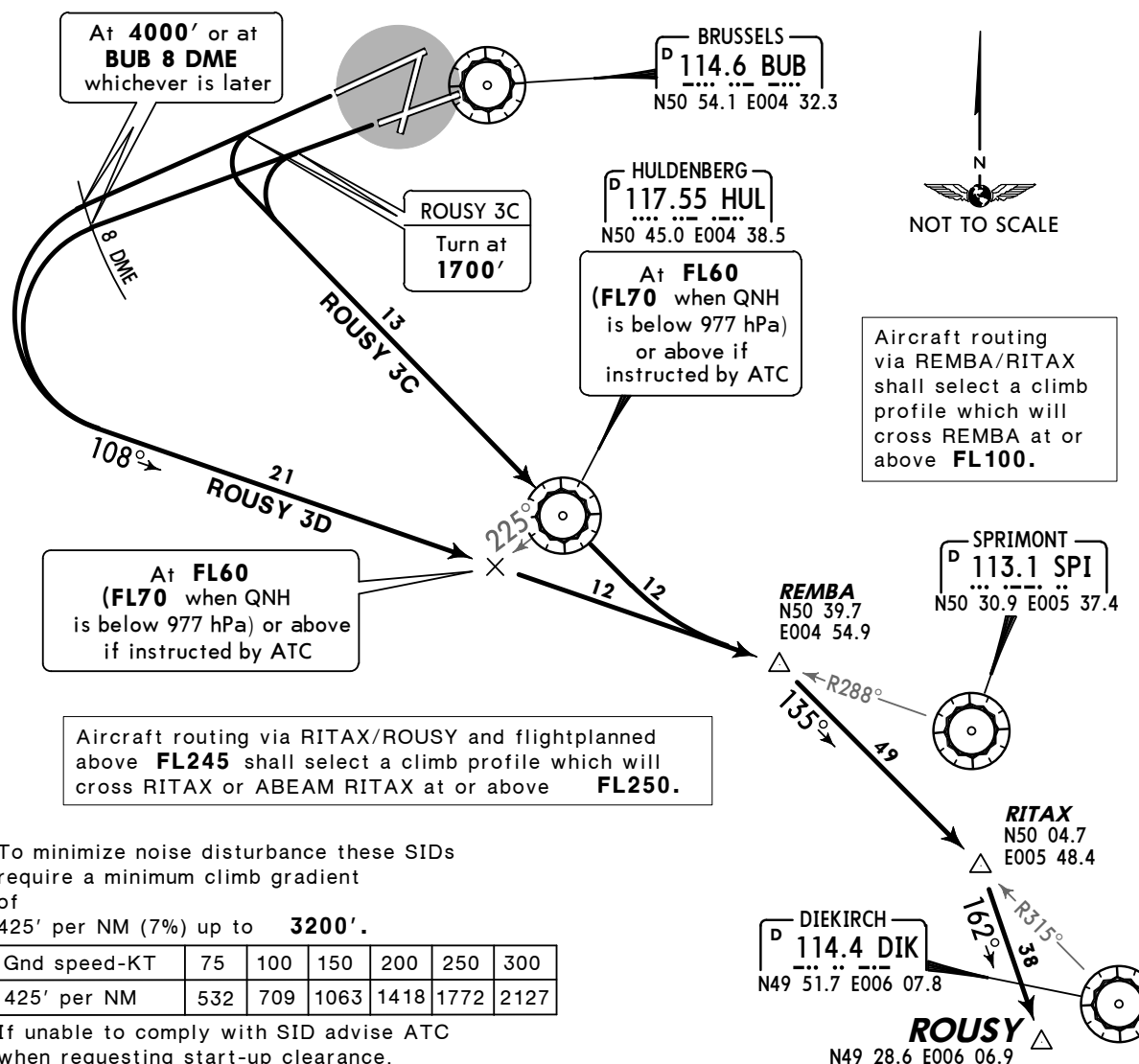
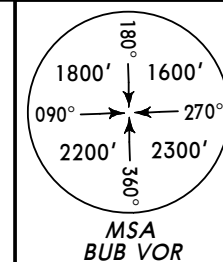
SIDS RWY 25R ONLY AVAILABLE BETWEEN 0600-2259LT

FOR SIDS RWYS 02, 07L/R REFER TO CHART 10-3T

FOR SIDS RWY 20 REFER TO CHART 10-3U

FOR NIGHTTIME SID RWY 25R REFER TO CHART 10-3V

**~~SPEED~~ MAX 250 KT OR CLEAN SPEED ( $V_{ZF}$ ),  
WHICHEVER IS HIGHER, BELOW FL100 OR AS BY ATC**



To minimize noise disturbance these SIDs require a minimum climb gradient of

425' per NM (7%) up to **3200'**.

| Gnd speed-KT | 75  | 100 | 150  | 200  | 250  | 300  |
|--------------|-----|-----|------|------|------|------|
| 425' per NM  | 532 | 709 | 1063 | 1418 | 1772 | 2127 |

If unable to comply with SID advise ATC when requesting start-up clearance.

Initial climb clearance **FL60**, higher level by BRUSSELS Departure or BRUSSELS Control as soon as traffic permits

| SID                                       | INITIAL CLIMB/ROUTING                                                                                                                                           |
|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>ROUSY 3C</b><br>[ROUS3C]<br><b>1 2</b> | Climb straight ahead, at <b>1700'</b> turn LEFT to HUL, intercept SPI R-288 inbound to REMBA, turn RIGHT to RITAX, then to ROUSY.                               |
| <b>ROUSY 3D</b><br>[ROUS3D]<br><b>3 4</b> | Climb straight ahead, at <b>4000'</b> or at BUB 8 DME, whichever is later, turn LEFT, intercept SPI R-288 inbound to REMBA, turn RIGHT to RITAX, then to ROUSY. |

**1** To be used by 1-, 2-, 3-engined aircraft.

May be used by 4-engined aircraft noise certificated according to ICAO Annex 16, Chapter 3/ FAR Part 36 Stage 3 and whose performances permit to adhere to the SID.

**2** Alternative route on ATC instruction: SOPOK 3C - SOPOK - RITAX - ROUSY.

**3** To be used by 4-engined aircraft.

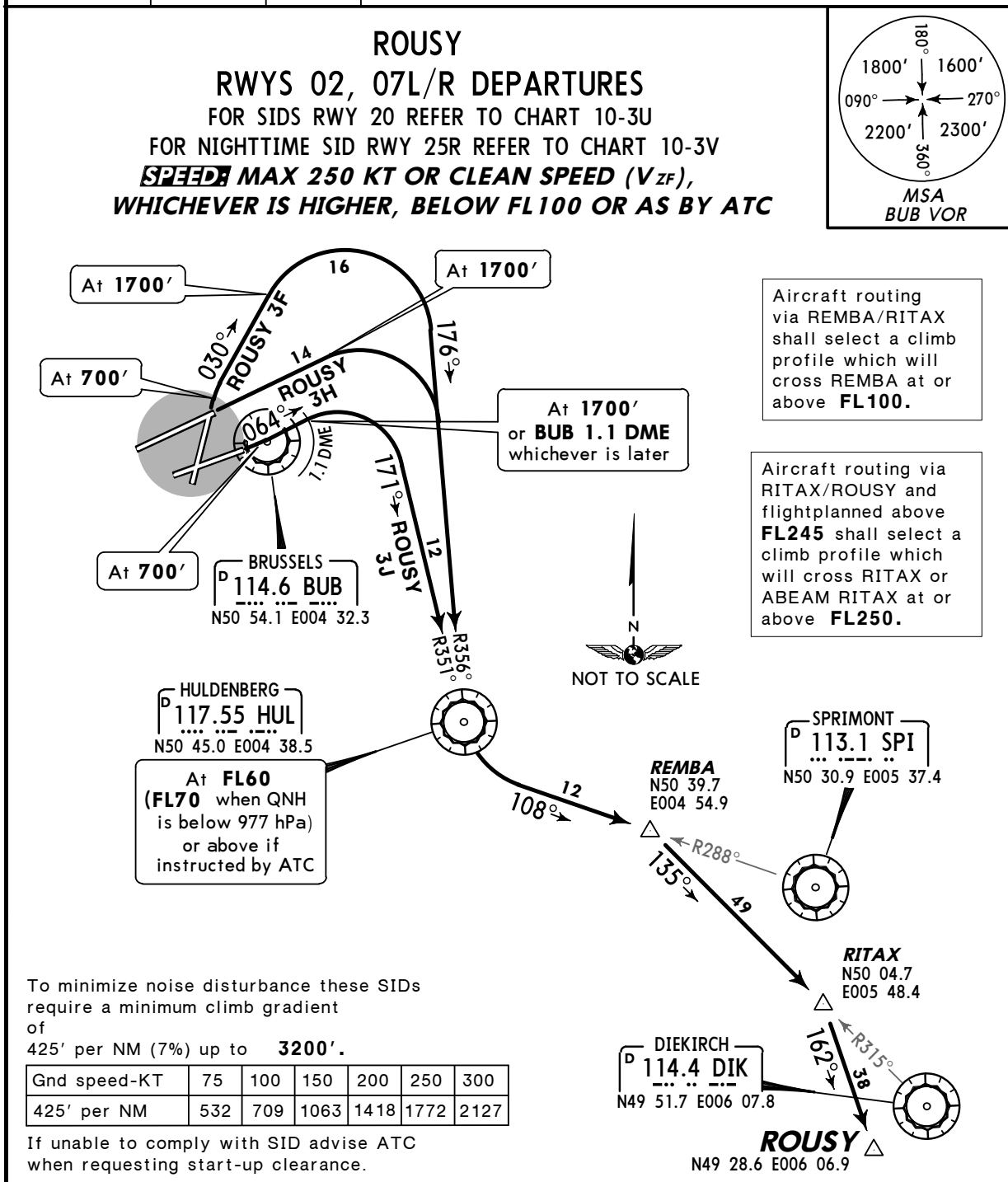
**4** Alternative route on ATC instruction: SOPOK 3D - SOPOK - RITAX - ROUSY.

**EBBR/BRU**  
**BRUSSELS NATIONAL**

**JEPPESSEN**  
7 APR 06 **10-3T** **Eff 13 Apr**

**BRUSSELS, BELGIUM**  
**SID**

|                                                 |                                           |                         |                                                                                                                                                                                                                                                                                         |
|-------------------------------------------------|-------------------------------------------|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| BRUSSELS Tower<br><b>118.6</b><br><b>120.77</b> | BRUSSELS<br>Departure(R)<br><b>126.62</b> | Apt Elev<br><b>184'</b> | Trans level: By ATC    Trans alt: 4500'<br><b>1.</b> After take-off remain on Tower frequency.<br><b>2.</b> SIDs are also noise abatement procedures (refer to 10-4E).<br>Strict adherence within the limits of aircraft performance is<br>mandatory, except when being radar vectored. |
|-------------------------------------------------|-------------------------------------------|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



| Initial climb clearance <b>FL60</b> , higher level by BRUSSELS Departure or BRUSSELS Control as soon as traffic permits                                                                                                             |            |                                                                                                                                                                                                                             |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SID                                                                                                                                                                                                                                 | RWY        | INITIAL CLIMB/ROUTING                                                                                                                                                                                                       |
| <b>ROUSY 3F</b><br>[ROUS3F]<br>❶                                                                                                                                                                                                    | <b>02</b>  | Climb to <b>700'</b> , 030° track, at <b>1700'</b> turn RIGHT, intercept HUL R-356 inbound to HUL, turn LEFT, intercept SPI R-288 inbound to REMBA, turn RIGHT to RITAX, then to ROUSY.                                     |
| <b>ROUSY 3H</b><br>[ROUS3H]<br>❷                                                                                                                                                                                                    | <b>07L</b> | Climb straight ahead, at <b>1700'</b> turn RIGHT, intercept HUL R-356 inbound to HUL, turn LEFT, intercept SPI R-288 inbound to REMBA, turn RIGHT to RITAX, then to ROUSY.                                                  |
| <b>ROUSY 3J</b><br>[ROUS3J]<br>❸                                                                                                                                                                                                    | <b>07R</b> | Climb to <b>700'</b> , 064° track, at <b>1700'</b> or BUB 1.1 DME, whichever is later, turn RIGHT, intercept HUL R-351 inbound to HUL, turn LEFT, intercept SPI R-288 inbound to REMBA, turn RIGHT to RITAX, then to ROUSY. |
| ❶ Alternative route on ATC instruction: SOPOK 3F - SOPOK - RITAX - ROUSY.<br>❷ Alternative route on ATC instruction: SOPOK 2H - SOPOK - RITAX - ROUSY.<br>❸ Alternative route on ATC instruction: SOPOK 2J - SOPOK - RITAX - ROUSY. |            |                                                                                                                                                                                                                             |

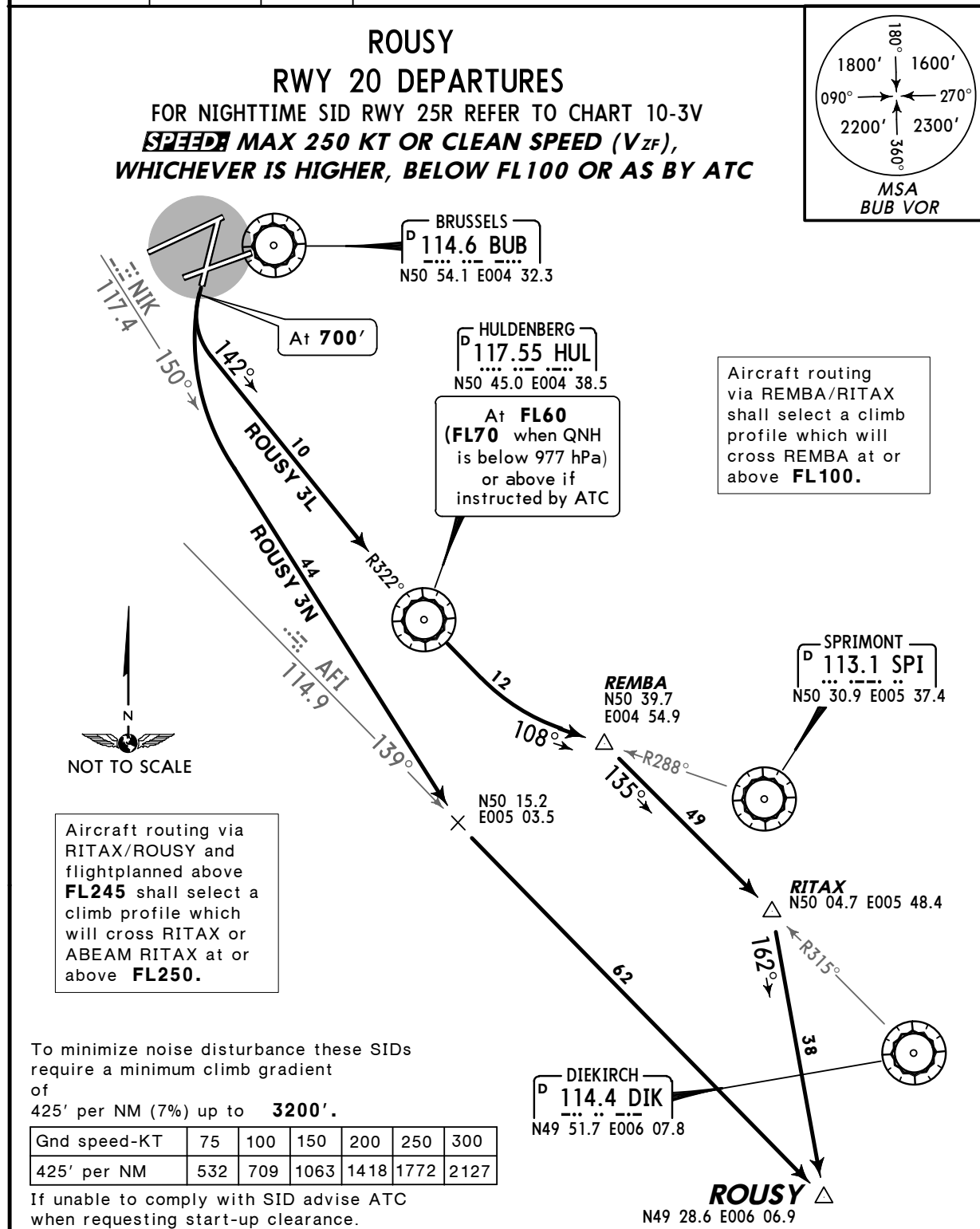
CHANGES: SIDs renumbered & revised.

**EBBR/BRU**  
**BRUSSELS NATIONAL**

**JEPPESSEN**  
 7 APR 06 **10-3U** **Eff 13 Apr**

**BRUSSELS, BELGIUM**  
**SID**

|                                                 |                                           |                         |                                                                                                                                                                                                                                                                     |
|-------------------------------------------------|-------------------------------------------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| BRUSSELS Tower<br><b>118.6</b><br><b>120.77</b> | BRUSSELS<br>Departure(R)<br><b>126.62</b> | Apt Elev<br><b>184'</b> | Trans level: By ATC Trans alt: 4500'<br>1. After take-off remain on Tower frequency.<br>2. SIDs are also noise abatement procedures (refer to 10-4E).<br>Strict adherence within the limits of aircraft performance is mandatory, except when being radar vectored. |
|-------------------------------------------------|-------------------------------------------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



Initial climb clearance **FL60**, higher level by BRUSSELS Departure or BRUSSELS Control as soon as traffic permits

| SID                              | INITIAL CLIMB/ROUTING                                                                                                                                      |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>ROUSY 3L</b><br>[ROUS3L]<br>① | Climb to <b>700'</b> , turn LEFT, intercept HUL R-322 inbound to HUL, turn LEFT, intercept SPI R-288 inbound to REMBA, turn RIGHT to RITAX, then to ROUSY. |
| <b>ROUSY 3N</b><br>[ROUS3N]<br>② | Climb to <b>700'</b> , turn LEFT, intercept NIK R-150, turn LEFT, intercept AFI R-139 to ROUSY.                                                            |

- ① Alternative route on ATC instruction: SOPOK 2L - SOPOK - RITAX - ROUSY.  
 ② Available between 2300-0559LT. Exceptionally not available between 2300-2400LT due to military activity in Belgium. Alternative SID: ROUSY 3L.

**EBBR/BRU**  
**BRUSSELS NATIONAL**

**JEPPesen**  
7 APR 06 **(10-3V)** **Eff 13 Apr**

**BRUSSELS, BELGIUM**  
**SID**

BRUSSELS Tower  
**118.6**  
**120.77**

BRUSSELS  
Departure(R)  
**126.62**

Apt Elev  
**184'**

Trans level: By ATC Trans alt: 4500'

1. After take-off remain on Tower frequency.
2. SIDs are also noise abatement procedures (refer to 10-4E). Strict adherence within the limits of aircraft performance is mandatory, except when being radar vectored.

# **ROUSY THREE ZULU (ROUSY 3Z) [ROUS3Z]**

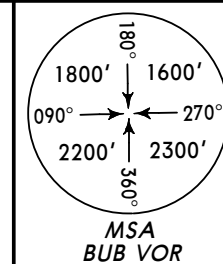
## **RWY 25R DEPARTURE**

AVAILABLE BETWEEN 2300-0559LT

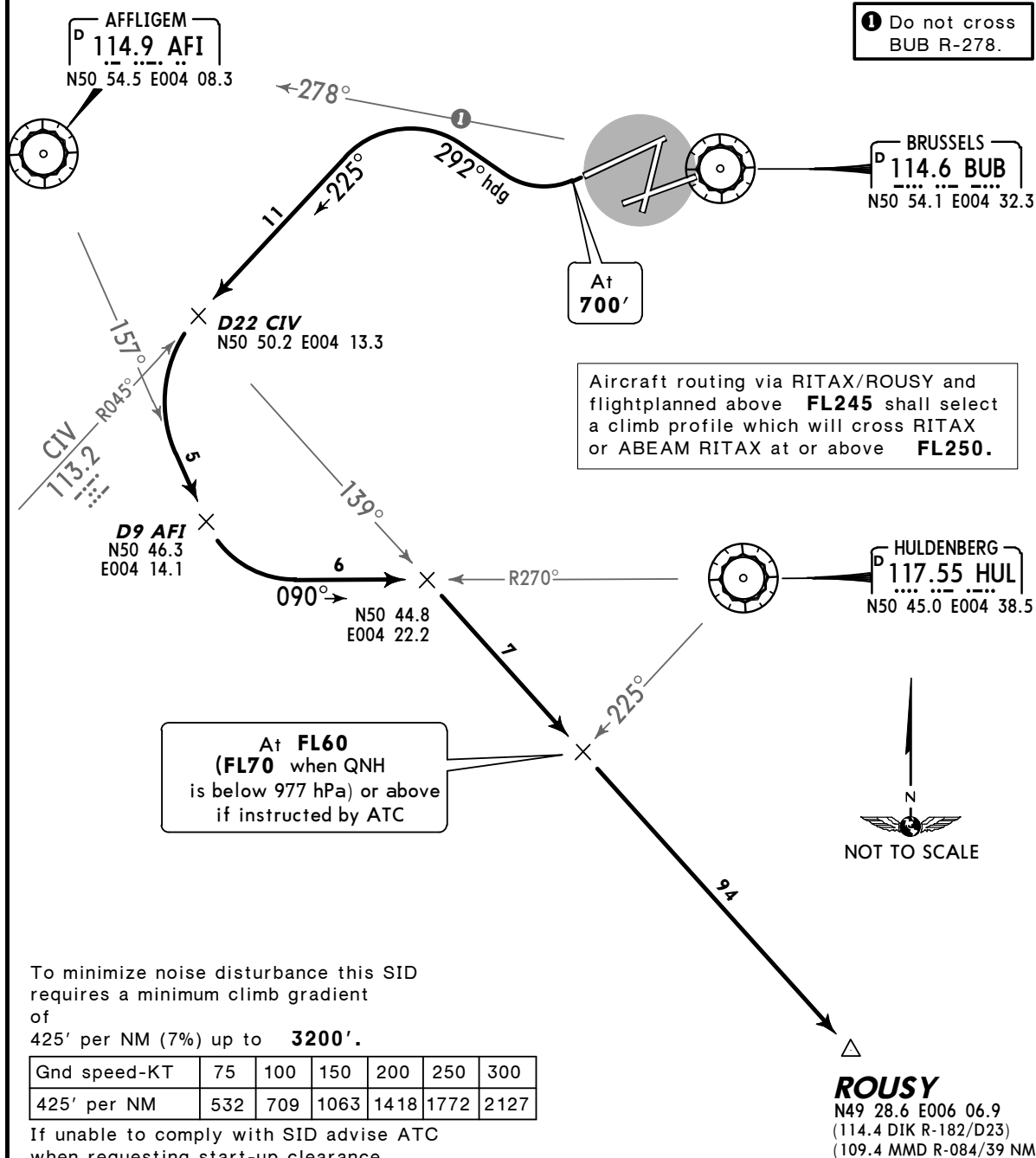
ALTERNATIVE ROUTE ON ATC INSTRUCTION:

SOPOK 4Z - SOPOK - RITAX - ROUSY

**~~SPEED~~ MAX 250 KT OR CLEAN SPEED (V<sub>ZF</sub>),  
WHICHEVER IS HIGHER, BELOW FL100 OR AS BY ATC**



**1** Do not cross  
BUB R-278.



To minimize noise disturbance this SID requires a minimum climb gradient of 425' per NM (7%) up to 3200'.

| Gnd speed-KT | 75  | 100 | 150  | 200  | 250  | 300  |
|--------------|-----|-----|------|------|------|------|
| 425' per NM  | 532 | 709 | 1063 | 1418 | 1772 | 2127 |

If unable to comply with SID advise ATC when requesting start-up clearance.

Initial climb clearance **FL60**, higher level by BRUSSELS Departure or BRUSSELS Control as soon as traffic permits

### **INITIAL CLIMB/ROUTING**

Climb to **700'**, turn RIGHT, 292° heading, intercept CIV R-045 inbound, at D22 CIV turn LEFT, intercept AFI R-157, at D9 AFI turn LEFT, intercept HUL R-270 inbound, turn RIGHT, intercept AFI R-139 to ROUSY.

**EBBR/BRU**  
**BRUSSELS NATIONAL**

**JEPPESSEN**

3 FEB 06

**(10-3W)**

**Eff 16 Feb**

**BRUSSELS, BELGIUM**

**SID**

BRUSSELS Tower  
**118.6**  
**120.77**

BRUSSELS  
Departure(R)  
**126.62**

Apt Elev  
**184'**

Trans level: By ATC Trans alt: 4500'

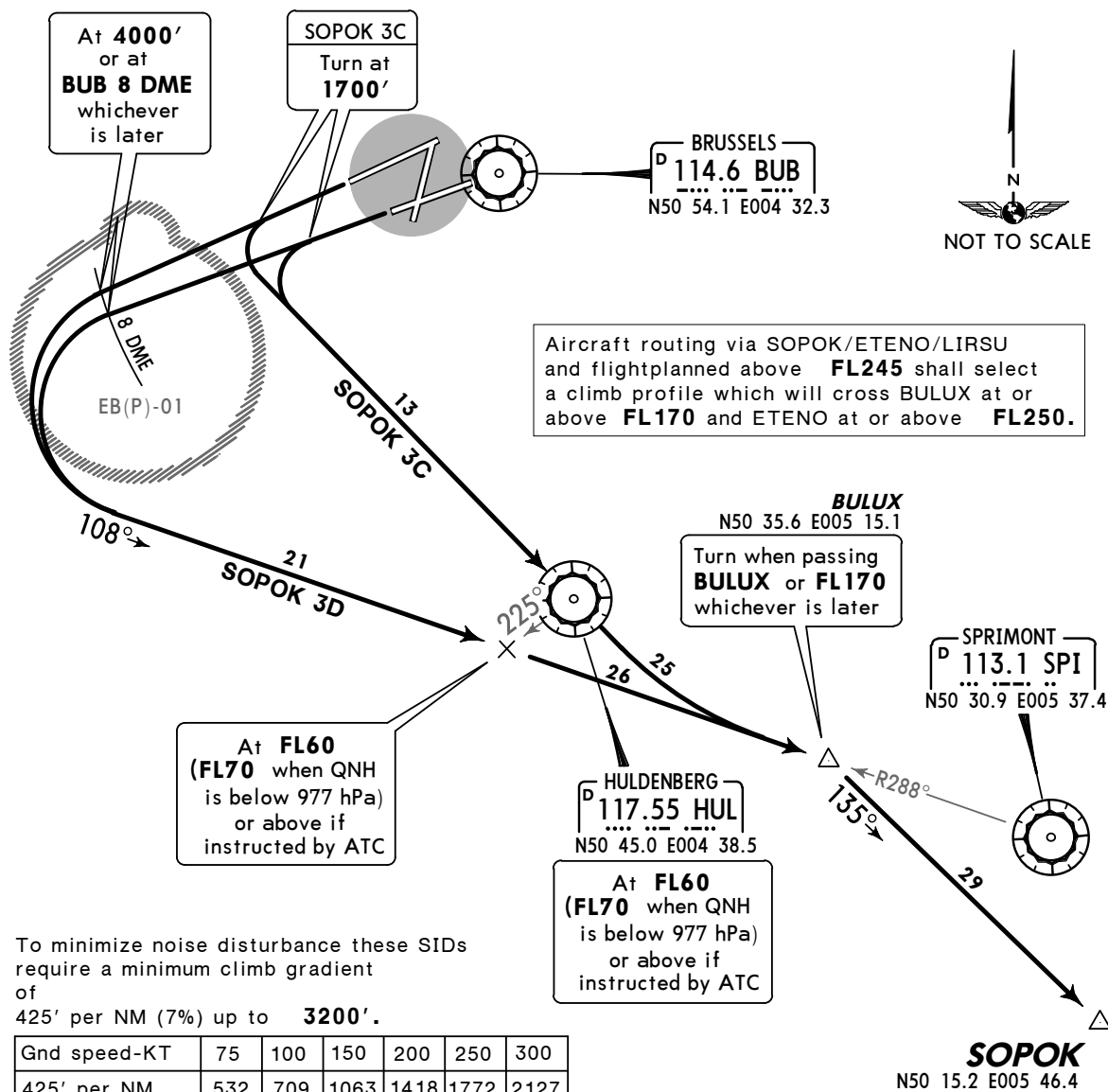
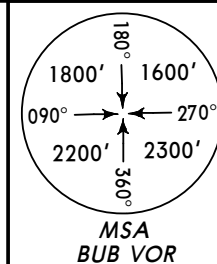
1. After take-off remain on Tower frequency.
2. SIDs are also noise abatement procedures (refer to 10-4E). Strict adherence within the limits of aircraft performance is mandatory, except when being radar vectored.

## SOPOK

### RWYS 25L/R DEPARTURES

SIDS RWY 25R ONLY AVAILABLE BETWEEN 0600-2259LT  
FOR SIDS RWYS 02, 07L/R, 20 REFER TO CHART 10-3X  
FOR NIGHTTIME SID RWY 25R REFER TO CHART 10-3X1

**~~SPEED~~ MAX 250 KT OR CLEAN SPEED (V<sub>ZF</sub>),  
WHICHEVER IS HIGHER, BELOW FL100 OR AS BY ATC**



If unable to comply with SID advise ATC when requesting start-up clearance.

Initial climb clearance **FL60**, higher level by BRUSSELS Departure or BRUSSELS Control as soon as traffic permits

| SID                           | INITIAL CLIMB/ROUTING                                                                                                                                                                            |
|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>SOPOK 3C</b><br>[SOPO3C] ① | Climb straight ahead, at <b>1700'</b> turn LEFT to HUL, intercept SPI R-288 inbound, when passing BULUX or <b>FL170</b> , whichever is later, turn RIGHT to SOPOK.                               |
| <b>SOPOK 3D</b><br>[SOPO3D] ② | Climb straight ahead, at <b>4000'</b> or at BUB 8 DME, whichever is later, turn LEFT, intercept SPI R-288 inbound, when passing BULUX or <b>FL170</b> , whichever is later, turn RIGHT to SOPOK. |

① To be used by 1-, 2-, 3-engined aircraft.

May be used by 4-engined aircraft noise certificated according to ICAO Annex 16, Chapter 3/ FAR Part 36 Stage 3 and whose performances permit to adhere to the SID.

② To be used by 4-engined aircraft.

**EBBR/BRU**  
**BRUSSELS NATIONAL**

**JEPPESSEN**

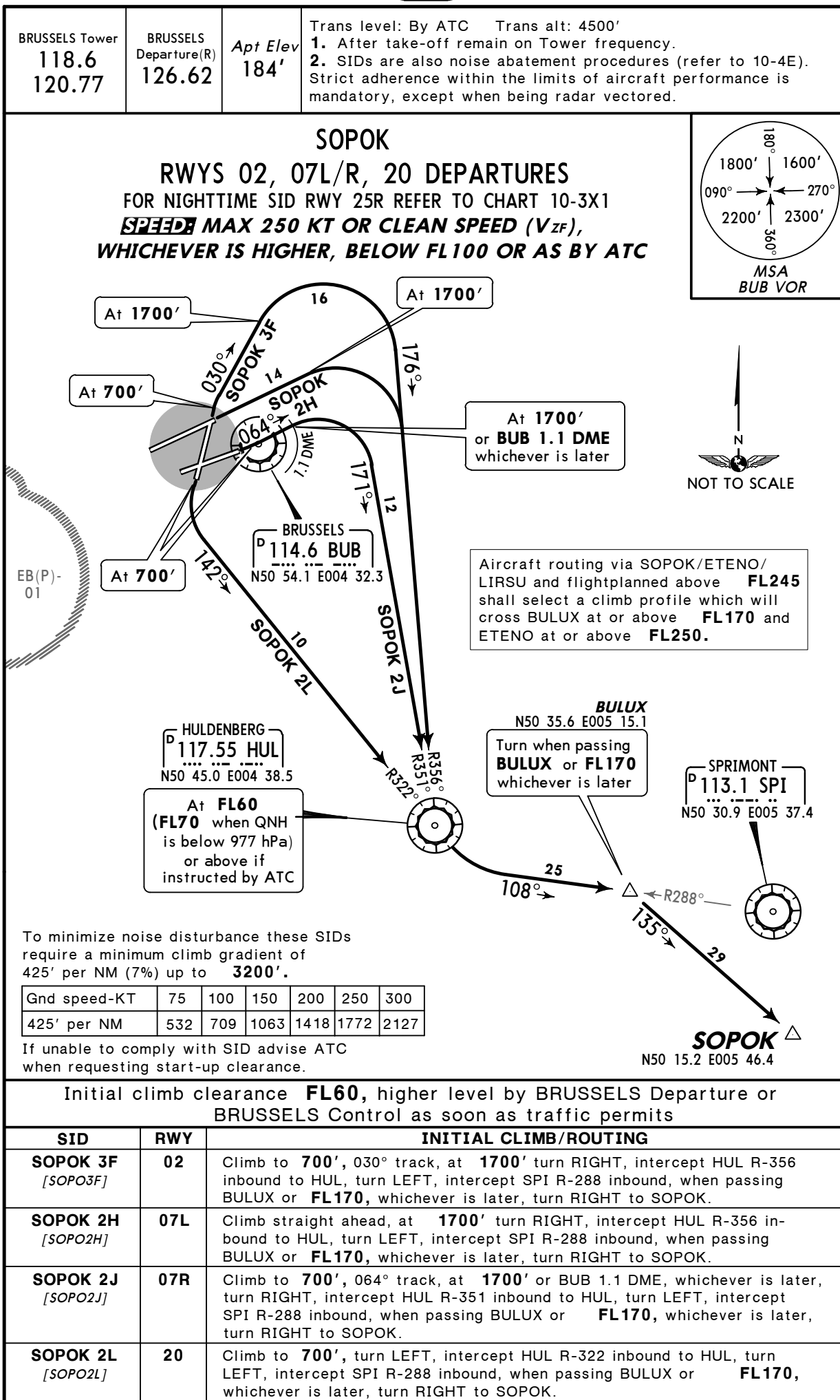
3 FEB 06

(10-3X)

Eff 16 Feb

**BRUSSELS, BELGIUM**

**SID**





**EBBR/BRU**  
**BRUSSELS NATIONAL**

**JEPPESEN**

3 FEB 06

**10-3X1**

**Eff 16 Feb**

**BRUSSELS, BELGIUM**

**SID**

BRUSSELS Tower  
**118.6**  
**120.77**

BRUSSELS  
Departure(R)  
**126.62**

*Apt Elev*  
**184'**

Trans level: By ATC Trans alt: 4500'

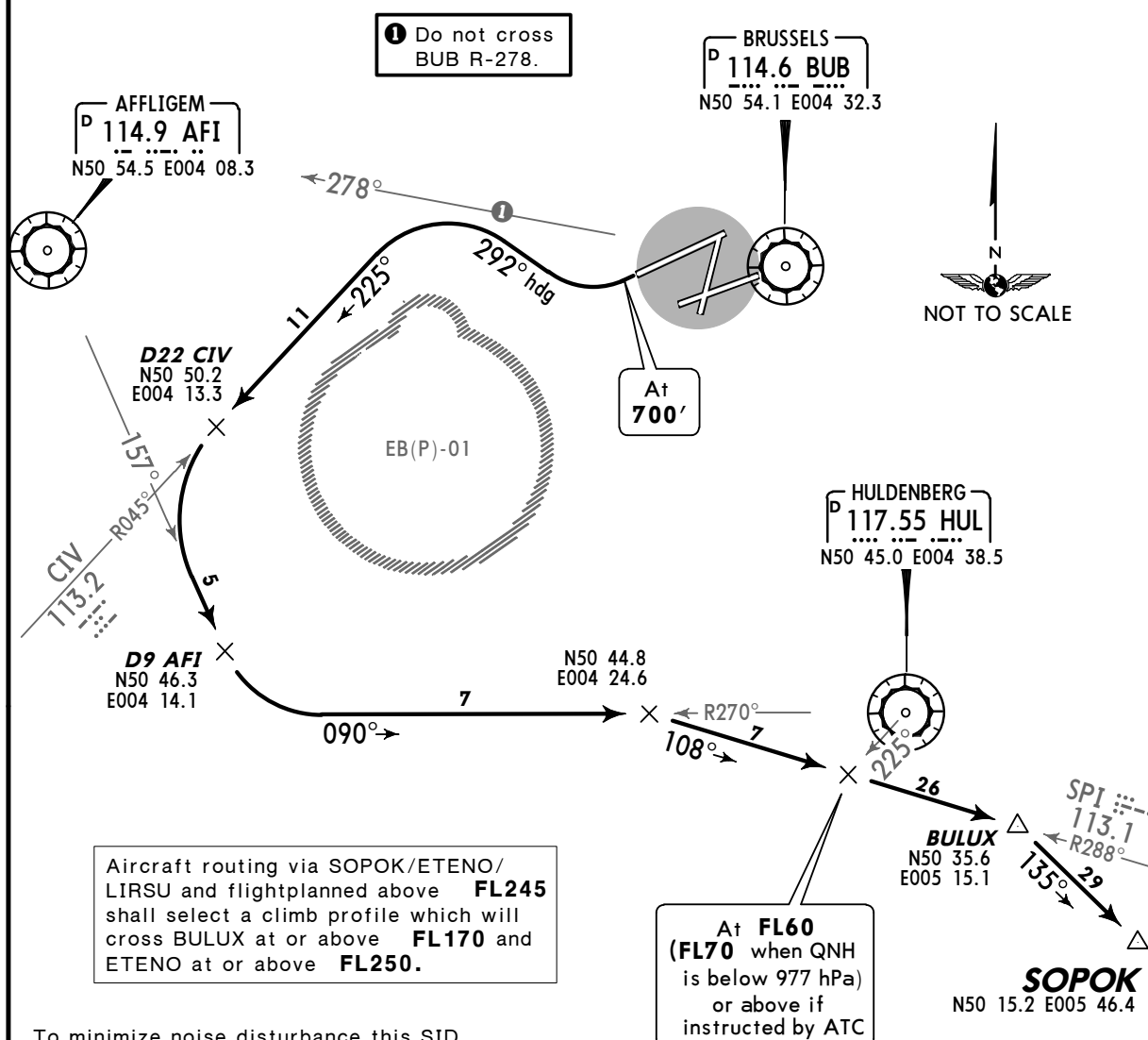
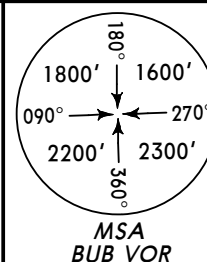
1. After take-off remain on Tower frequency.
2. SIDs are also noise abatement procedures (refer to 10-4E). Strict adherence within the limits of aircraft performance is mandatory, except when being radar vectored.

# **SOPOK FOUR ZULU (SOPOK 4Z) [SOPO4Z]**

## **RWY 25R DEPARTURE**

AVAILABLE BETWEEN 2300-0559LT

**~~SPEED~~ MAX 250 KT OR CLEAN SPEED ( $V_{ZF}$ ),  
WHICHEVER IS HIGHER, BELOW FL100 OR AS BY ATC**



**EBBR/BRU**  
**BRUSSELS NATIONAL**

**JEPPesen**

3 FEB 06 **10-3X2** Eff 16 Feb

**BRUSSELS, BELGIUM**

**SID**

|                                                 |                                           |                         |                                                                                                                                                                                                                                                                     |
|-------------------------------------------------|-------------------------------------------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| BRUSSELS Tower<br><b>118.6</b><br><b>120.77</b> | BRUSSELS<br>Departure(R)<br><b>126.62</b> | Apt Elev<br><b>184'</b> | Trans level: By ATC Trans alt: 4500'<br>1. After take-off remain on Tower frequency.<br>2. SIDs are also noise abatement procedures (refer to 10-4E).<br>Strict adherence within the limits of aircraft performance is mandatory, except when being radar vectored. |
|-------------------------------------------------|-------------------------------------------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

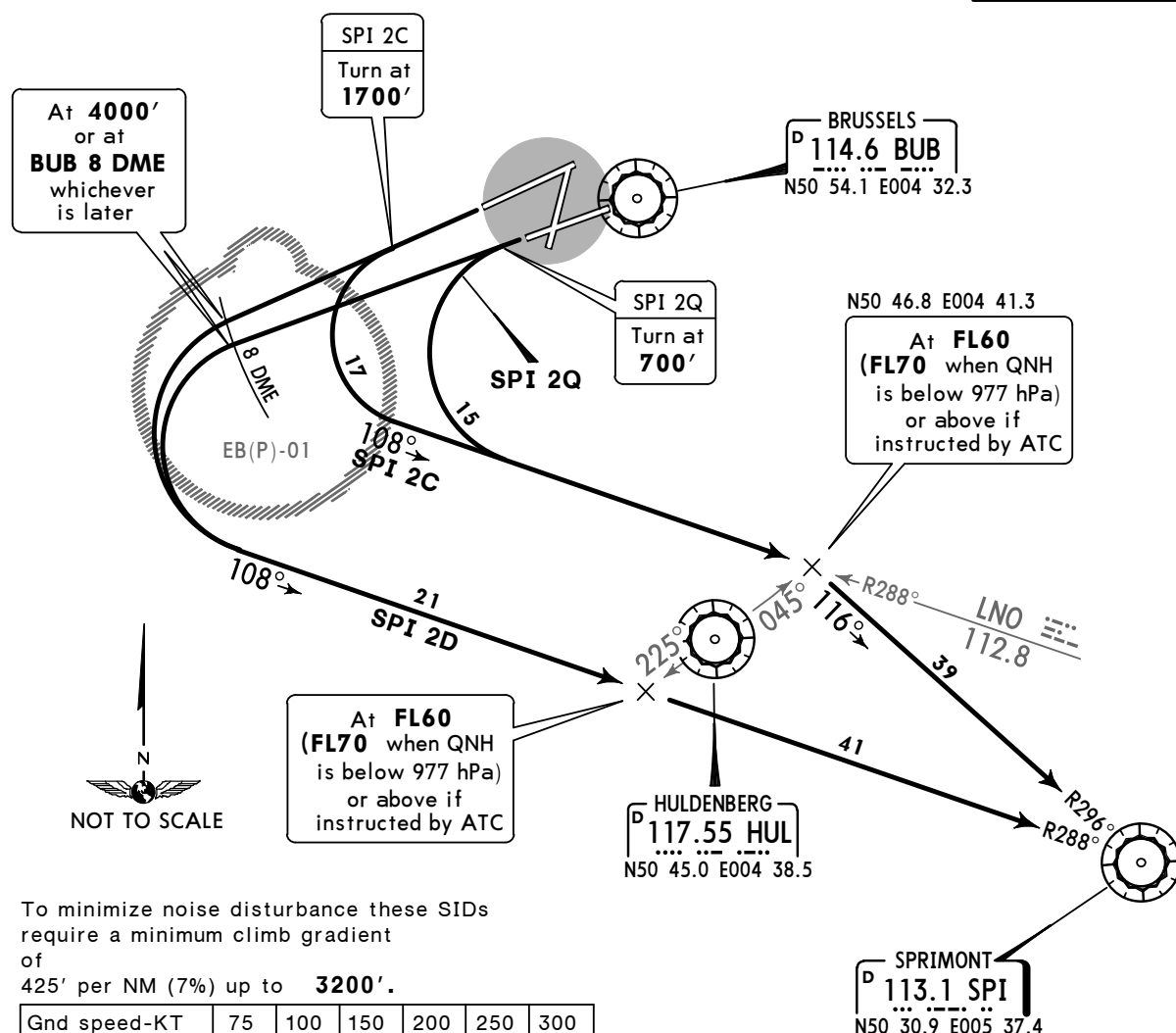
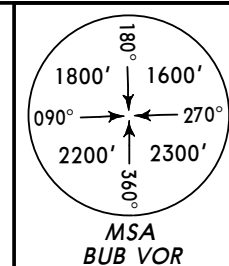
## SPRIMONT

### RWYS 25R/L DEPARTURES

FOR SIDS RWYS 02, 07L/R, 20 REFER TO CHART 10-3X3

FOR NIGHTTIME SID RWY 25R REFER TO CHART 10-3X4

**~~SPEED~~ MAX 250 KT OR CLEAN SPEED (V<sub>ZF</sub>),  
WHICHEVER IS HIGHER, BELOW FL100 OR AS BY ATC**



To minimize noise disturbance these SIDs require a minimum climb gradient of 425' per NM (7%) up to 3200'.

|              |     |     |      |      |      |      |
|--------------|-----|-----|------|------|------|------|
| Gnd speed-KT | 75  | 100 | 150  | 200  | 250  | 300  |
| 425' per NM  | 532 | 709 | 1063 | 1418 | 1772 | 2127 |

If unable to comply with SID advise ATC when requesting start-up clearance.

Initial climb clearance **FL60**, higher level by BRUSSELS Departure or BRUSSELS Control as soon as traffic permits

| SID                  | RWY          | INITIAL CLIMB/ROUTING                                                                                                         |
|----------------------|--------------|-------------------------------------------------------------------------------------------------------------------------------|
| <b>SPI 2C</b><br>① ② | <b>25R</b>   | Climb straight ahead, at <b>1700'</b> turn LEFT, intercept LNO R-288 inbound, turn RIGHT, intercept SPI R-296 inbound to SPI. |
| <b>SPI 2D</b><br>③ ④ | <b>25L/R</b> | Climb straight ahead, at <b>4000'</b> or at BUB 8 DME, whichever is later, turn LEFT, intercept SPI R-288 inbound to SPI.     |
| <b>SPI 2Q</b><br>①   | <b>25L</b>   | Climb to <b>700'</b> , turn LEFT, intercept LNO R-288 inbound, turn RIGHT, intercept SPI R-296 inbound to SPI.                |

① To be used by 1-, 2-, 3-engined aircraft.

May be used by 4-engined aircraft noise certificated according to ICAO Annex 16, Chapter 3/ FAR Part 36 Stage 3 and whose performances permit to adhere to the SID.

② Available between 0600-2259LT.

③ To be used by 4-engined aircraft.

④ SIDs runway 25R only available between 0600-2259LT.

**EBBR/BRU**  
**BRUSSELS NATIONAL**

**JEPPESSEN**

3 FEB 06 **10-3X3** Eff 16 Feb

**BRUSSELS, BELGIUM**

**SID**

BRUSSELS Tower  
**118.6**  
**120.77**

BRUSSELS  
Departure(R)  
**126.62**

Apt Elev  
**184'**

Trans level: By ATC Trans alt: 4500'

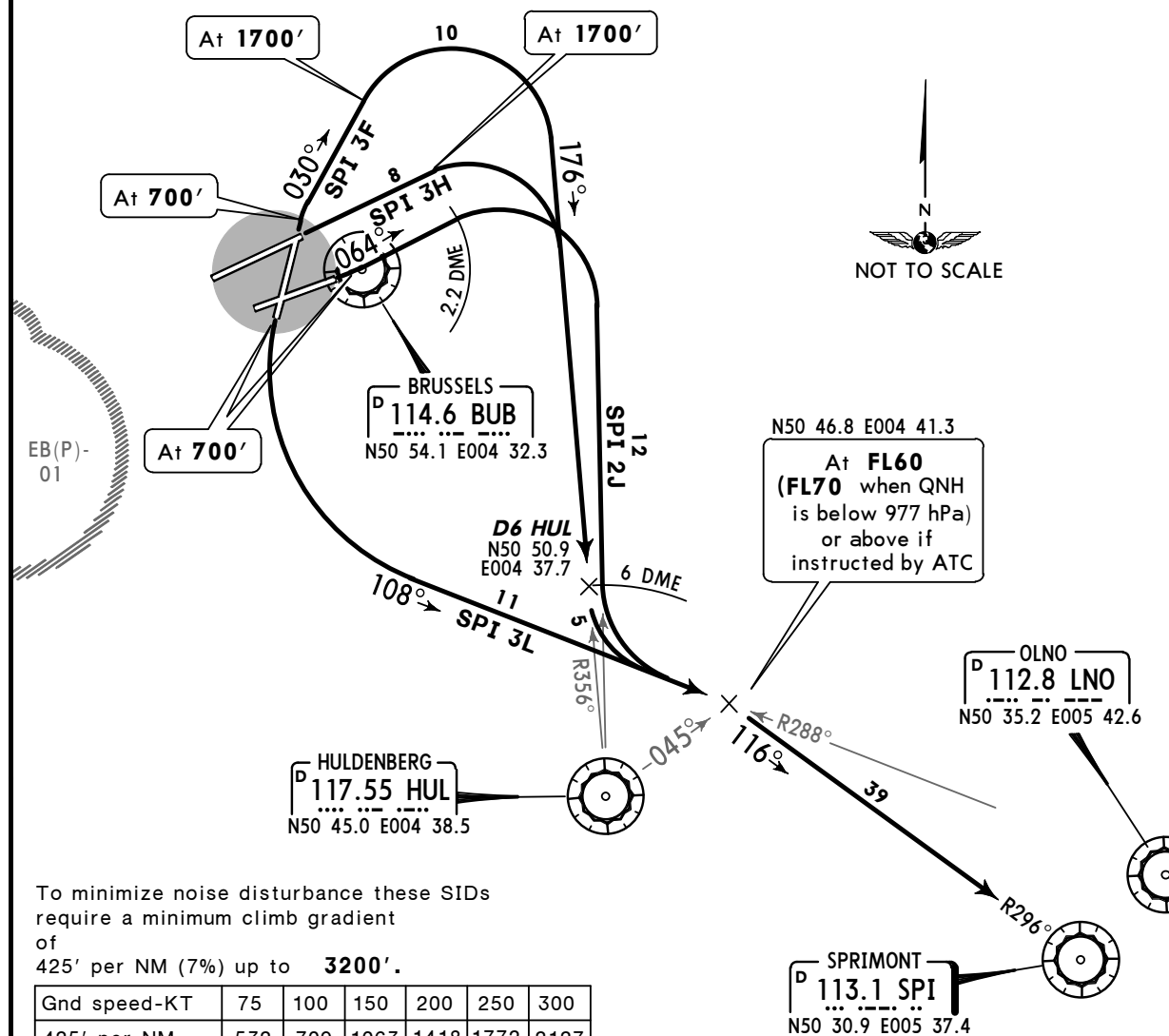
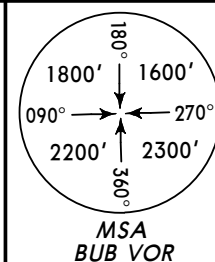
1. After take-off remain on Tower frequency.
2. SIDs are also noise abatement procedures (refer to 10-4E). Strict adherence within the limits of aircraft performance is mandatory, except when being radar vectored.

## SPRIMONT

### RWYS 02, 07L/R, 20 DEPARTURES

FOR NIGHTTIME SID RWY 25R REFER TO CHART 10-3X4

**~~SPEED~~ MAX 250 KT OR CLEAN SPEED ( $V_{ZF}$ ),  
WHICHEVER IS HIGHER, BELOW FL100 OR AS BY ATC**



To minimize noise disturbance these SIDs require a minimum climb gradient of 425' per NM (7%) up to **3200'**.

| Gnd speed-KT | 75  | 100 | 150  | 200  | 250  | 300  |
|--------------|-----|-----|------|------|------|------|
| 425' per NM  | 532 | 709 | 1063 | 1418 | 1772 | 2127 |

If unable to comply with SID advise ATC when requesting start-up clearance.

Initial climb clearance **FL60**, higher level by BRUSSELS Departure or BRUSSELS Control as soon as traffic permits

| SID           | RWY        | INITIAL CLIMB/ROUTING                                                                                                                                                                         |
|---------------|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>SPI 3F</b> | <b>02</b>  | Climb to <b>700'</b> , 030° track, at <b>1700'</b> turn RIGHT, intercept HUL R-356 inbound to D6 HUL, turn LEFT, intercept LNO R-288 inbound, turn RIGHT, intercept SPI R-296 inbound to SPI. |
| <b>SPI 3H</b> | <b>07L</b> | Climb straight ahead, at <b>1700'</b> turn RIGHT, intercept HUL R-356 inbound to D6 HUL, turn LEFT, intercept LNO R-288 inbound, turn RIGHT, intercept SPI R-296 inbound to SPI.              |
| <b>SPI 2J</b> | <b>07R</b> | Climb to <b>700'</b> , 064° track to BUB 2.2 DME, turn RIGHT towards HUL, at HUL 6 DME turn LEFT, intercept LNO R-288 inbound, turn RIGHT, intercept SPI R-296 inbound to SPI.                |
| <b>SPI 3L</b> | <b>20</b>  | Climb to <b>700'</b> , turn LEFT, intercept LNO R-288 inbound, turn RIGHT, intercept SPI R-296 inbound to SPI.                                                                                |

**EBBR/BRU**  
**BRUSSELS NATIONAL**

**JEPPESSEN**

3 FEB 06 **10-3X4** Eff 16 Feb

**BRUSSELS, BELGIUM**

**SID**

BRUSSELS Tower  
**118.6**  
**120.77**

BRUSSELS  
Departure(R)  
**126.62**

Apt Elev  
**184'**

Trans level: By ATC Trans alt: 4500'

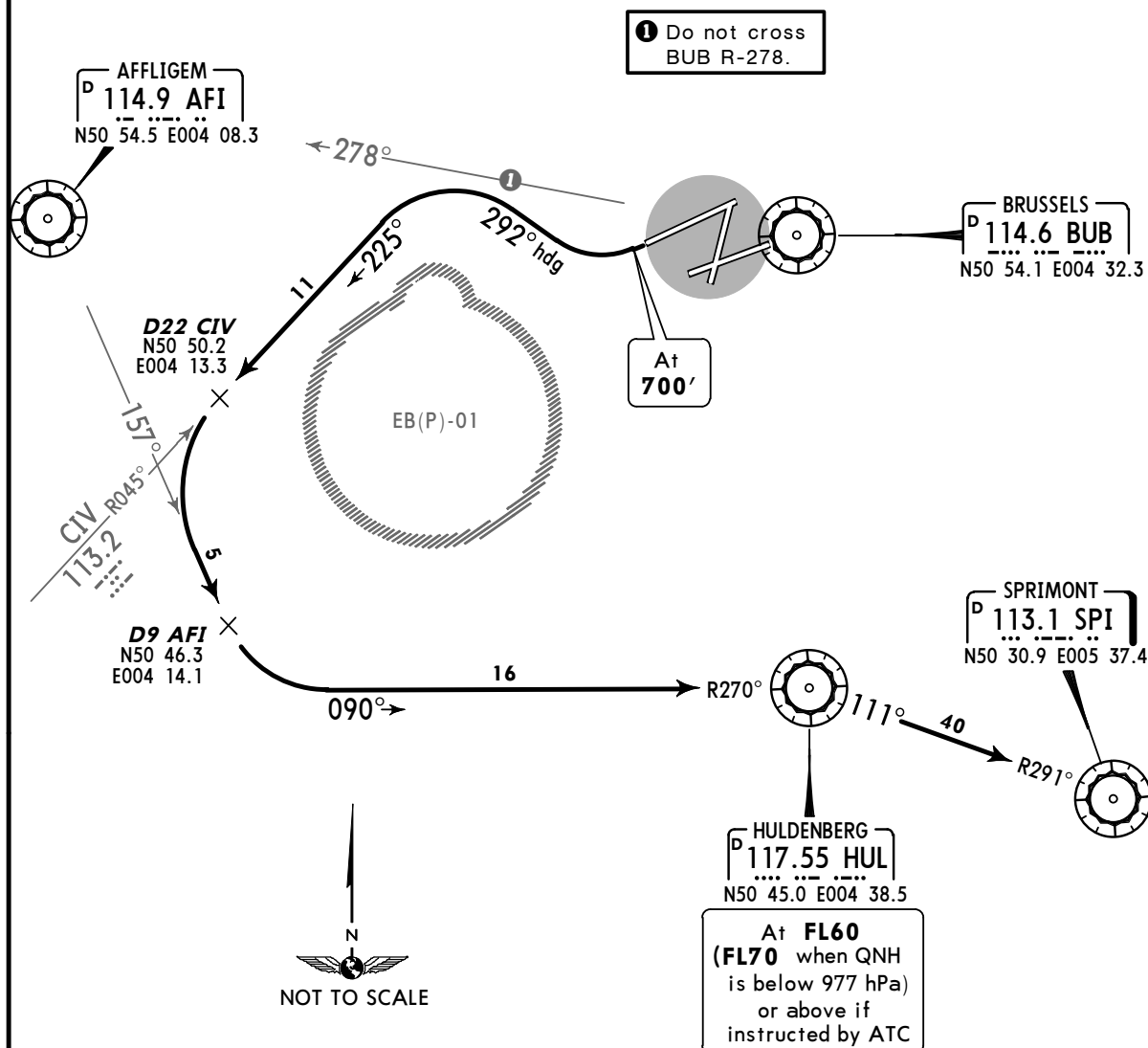
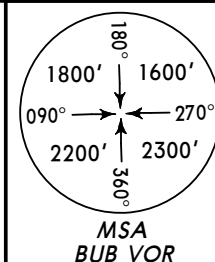
1. After take-off remain on Tower frequency.
2. SIDs are also noise abatement procedures (refer to 10-4E). Strict adherence within the limits of aircraft performance is mandatory, except when being radar vectored.

## SPRIMONT FOUR ZULU (SPI 4Z)

### RWY 25R DEPARTURE

AVAILABLE BETWEEN 2300-0559LT

***SPEED MAX 250 KT OR CLEAN SPEED (V<sub>ZF</sub>),  
WHICHEVER IS HIGHER, BELOW FL100 OR AS BY ATC***



To minimize noise disturbance this SID requires a minimum climb gradient of 425' per NM (7%) up to **3200'**.

| Gnd speed-KT | 75  | 100 | 150  | 200  | 250  | 300  |
|--------------|-----|-----|------|------|------|------|
| 425' per NM  | 532 | 709 | 1063 | 1418 | 1772 | 2127 |

If unable to comply with SID advise ATC when requesting start-up clearance.

Initial climb clearance **FL60**, higher level by BRUSSELS Departure or BRUSSELS Control as soon as traffic permits

#### INITIAL CLIMB/ROUTING

Climb to **700'**, turn RIGHT, 292° heading, intercept CIV R-045 inbound, at D22 CIV turn LEFT, intercept AFI R-157, at D9 AFI turn LEFT, intercept HUL R-270 inbound to HUL, intercept SPI R-291 inbound to SPI.

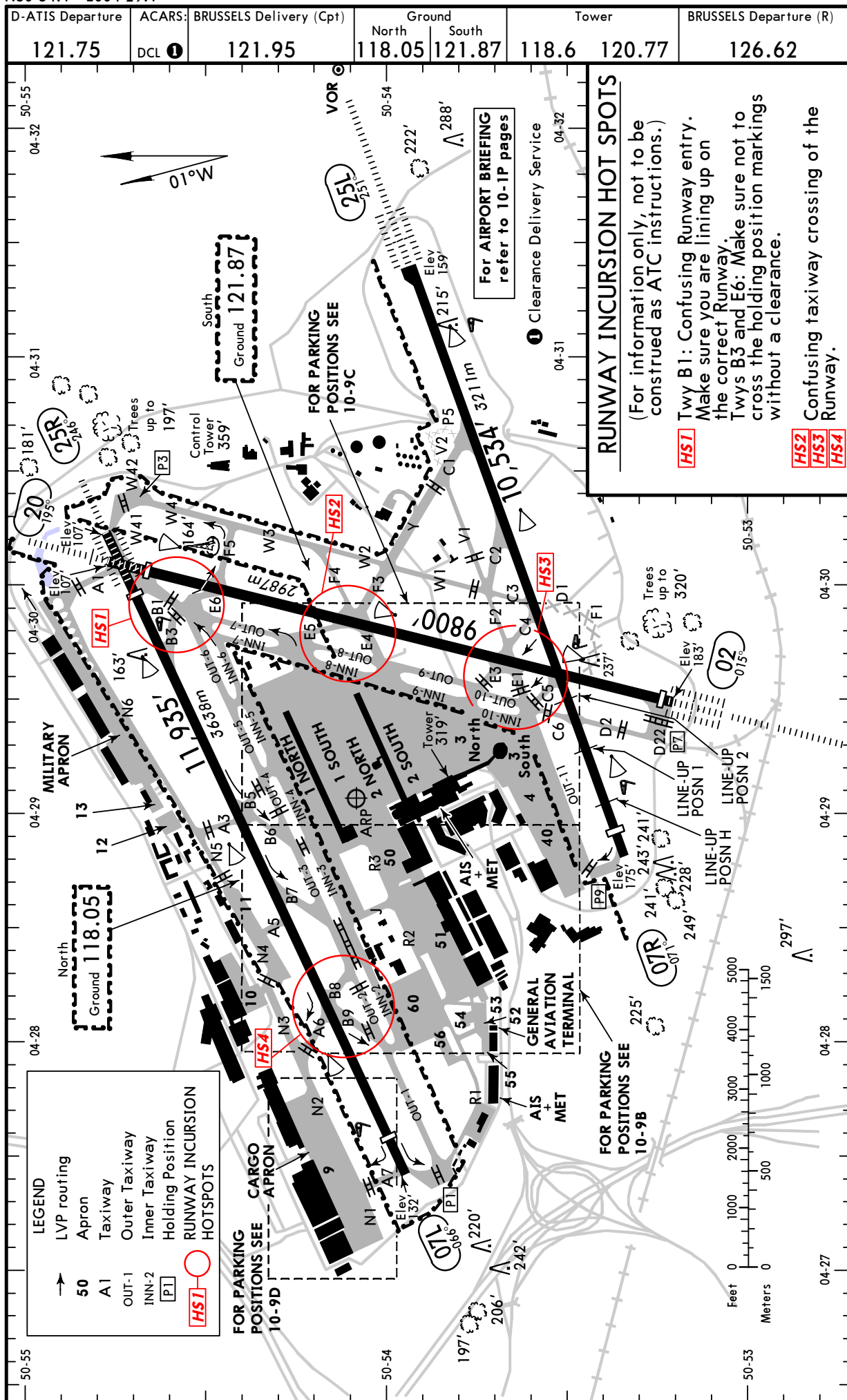
**EBBR/BRU**

Apt Elev **184'**  
N50 54.1 E004 29.1

**JEPPesen**  
19 MAR 10 **10-9**

**BRUSSELS, BELGIUM**

**BRUSSELS NATIONAL**



**EBBR/BRU** **JEPPesen**  
19 MAR 10 **(10-9A)****BRUSSELS, BELGIUM**  
**BRUSSELS NATIONAL**

| ADDITIONAL RUNWAY INFORMATION                                                                                                                          |                                          |         |                       |                       |                 |       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|---------|-----------------------|-----------------------|-----------------|-------|
| RWY                                                                                                                                                    |                                          |         | USABLE LENGTHS        |                       | TAKE-OFF        | WIDTH |
|                                                                                                                                                        |                                          |         | LANDING BEYOND        |                       |                 |       |
|                                                                                                                                                        |                                          |         | Threshold             | Glide Slope           |                 |       |
| 02                                                                                                                                                     | HIRL CL (15m) HIALS-II TDZ PAPI-L (3.0°) | ① RVR   | 9649' 2941m           | 8541' 2603m           | ②               | 164'  |
| 20                                                                                                                                                     | HIRL CL (15m) HIALS PAPI-L (3.0°)        | RVR     | 9078' 2767m           | 8141' 2481m           |                 | 50m   |
| ① HST-E5                                                                                                                                               |                                          |         |                       |                       |                 |       |
| ② TAKE-OFF RUN AVAILABLE                                                                                                                               |                                          |         |                       |                       |                 |       |
| RWY 02:                                                                                                                                                |                                          |         | RWY 20:               |                       |                 |       |
| From rwy head                                                                                                                                          |                                          |         | 9800' (2987m)         |                       | 9800' (2987m)   |       |
| twy C5 int                                                                                                                                             |                                          |         | 7628' (2325m)         |                       | 9268' (2825m)   |       |
| twy E1 int                                                                                                                                             |                                          |         | 6808' (2075m)         |                       | 8776' (2675m)   |       |
| twy E3 int                                                                                                                                             |                                          |         | 6654' (2028m)         |                       | 7100' (2164m)   |       |
| twy E4 int                                                                                                                                             |                                          |         | 4111' (1253m)         |                       | 5112' (1558m)   |       |
| Intersection take-off run available on pilot's acceptance if <b>VIS is 2km or more</b> ,<br>pilots unable to accept should advise ATC duly in advance. |                                          |         |                       |                       |                 |       |
| 07L                                                                                                                                                    | HIRL CL (15m) PAPI-L (3.0°)              | RVR     | 11,089' 3380m         |                       | ④               | 148'  |
| 25R                                                                                                                                                    | HIRL CL (15m) HIALS-II TDZ PAPI-R (3.0°) | ③ RVR   | 10,951' 3338m         | 10,033' 3058m         |                 | 45m   |
| ③ HST-B6, B7, B9                                                                                                                                       |                                          |         |                       |                       |                 |       |
| ④ TAKE-OFF RUN AVAILABLE                                                                                                                               |                                          |         |                       |                       |                 |       |
| RWY 07L:                                                                                                                                               |                                          |         | RWY 25R:              |                       |                 |       |
| From rwy head                                                                                                                                          |                                          |         | 11,935' (3638m)       |                       | 11,935' (3638m) |       |
| twy A6 int                                                                                                                                             |                                          |         | 8684' (2647m)         |                       | 11,247' (3428m) |       |
| twy B8 int                                                                                                                                             |                                          |         | 8537' (2602m)         |                       | 10,719' (3267m) |       |
| twy B9 int                                                                                                                                             |                                          |         | 8261' (2518m)         |                       | 9088' (2770m)   |       |
| twy A5 int                                                                                                                                             |                                          |         | 7047' (2148m)         |                       | 6552' (1997m)   |       |
| twy B7 int                                                                                                                                             |                                          |         | 6086' (1855m)         |                       | 6453' (1967m)   |       |
| twy A3 int                                                                                                                                             |                                          |         | 5151' (1570m)         |                       | 6446' (1965m)   |       |
| twy B5 int                                                                                                                                             |                                          |         | 4941' (1506m)         |                       | 4970' (1515m)   |       |
| twy B6 int                                                                                                                                             |                                          |         | 4557' (1389m)         |                       | 4616' (1407m)   |       |
| Intersection take-off run available on pilot's acceptance if <b>VIS is 2km or more</b> ,<br>pilots unable to accept should advise ATC duly in advance. |                                          |         |                       |                       |                 |       |
| 07R                                                                                                                                                    | HIRL CL (15m) PAPI-L (angle 3.0°)        | RVR     | 10,135' 3089m         |                       | ⑥               | 148'  |
| 25L                                                                                                                                                    | HIRL CL (15m) HIALS-II TDZ PAPI-L (3.0°) | ⑤ RVR   |                       | 9393' 2863m           |                 | 45m   |
| ⑤ HST-C2                                                                                                                                               |                                          |         |                       |                       |                 |       |
| ⑥ TAKE-OFF RUN AVAILABLE                                                                                                                               |                                          |         |                       |                       |                 |       |
| RWY 07R:                                                                                                                                               |                                          |         | RWY 25L:              |                       |                 |       |
| From Line-up PSN H                                                                                                                                     |                                          |         | 9485' (2891m)         |                       | 10,534' (3211m) |       |
| Line-up PSN 1                                                                                                                                          |                                          |         | 8609' (2624m)         |                       | 7251' (2210m)   |       |
| twy C6 int                                                                                                                                             |                                          |         | 7890' (2405m)         |                       | 5545' (1690m)   |       |
| Line-up PSN 2                                                                                                                                          |                                          |         | 7680' (2341m)         |                       | 4058' (1237m)   |       |
| twy C5 int                                                                                                                                             |                                          |         | 7047' (2148m)         |                       |                 |       |
| twy C4 int                                                                                                                                             |                                          |         | 5879' (1792m)         |                       |                 |       |
| twy C3 int                                                                                                                                             |                                          |         | 5820' (1774m)         |                       |                 |       |
| Intersection take-off run available on pilot's acceptance if <b>VIS is 2km or more</b> ,<br>pilots unable to accept should advise ATC duly in advance. |                                          |         |                       |                       |                 |       |
| Standard                                                                                                                                               |                                          |         |                       |                       |                 |       |
| TAKE-OFF ①                                                                                                                                             |                                          |         |                       |                       |                 |       |
| All Rwsy                                                                                                                                               |                                          |         |                       |                       |                 |       |
| LVP must be in Force                                                                                                                                   |                                          |         |                       |                       |                 |       |
| Approved Operators                                                                                                                                     | RL, CL                                   |         |                       |                       |                 |       |
| HIRL, CL & mult. RVR req                                                                                                                               | & mult. RVR req                          | RL & CL | RCLM (DAY only) or RL | RCLM (DAY only) or RL | NIL (DAY only)  |       |
| A                                                                                                                                                      | 150m                                     | 150m    | 200m                  | 250m                  | 400m            | 500m  |
| B                                                                                                                                                      |                                          |         |                       |                       |                 |       |
| C                                                                                                                                                      |                                          |         |                       |                       |                 |       |
| D                                                                                                                                                      | 200m                                     | 250m    | 300m                  |                       |                 |       |
| ① Operators applying U.S. Ops Specs: CL required below 300m.                                                                                           |                                          |         |                       |                       |                 |       |

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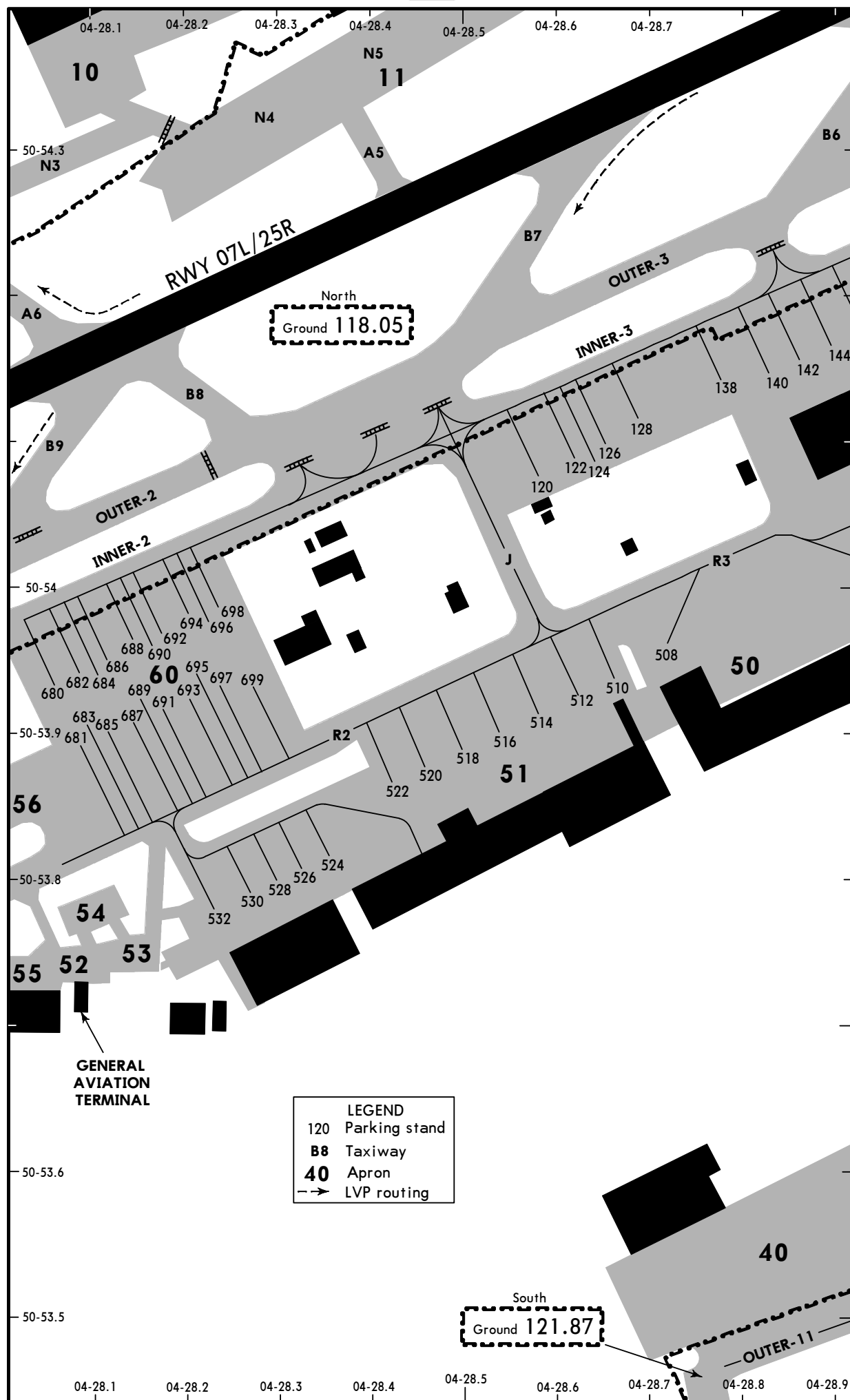
**BRUSSELS, BELGIUM**

**BRUSSELS NATIONAL**

26 JUN 09

**10-9B**

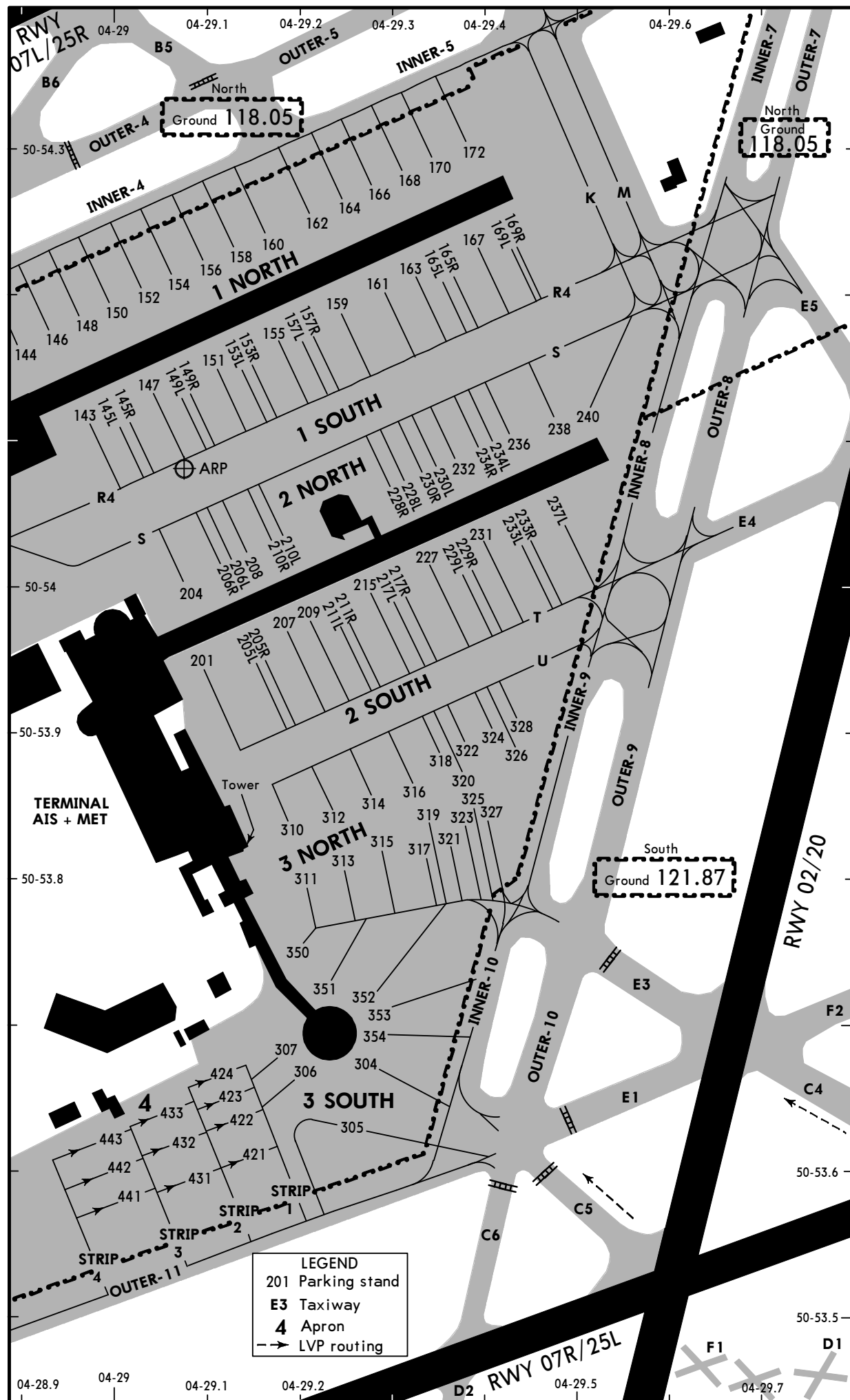
**Eff 2 Jul**



**EBBR/BRU**

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26 JUN 09 **10-9C** Eff 2 Jul

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CHANGES: Stands.

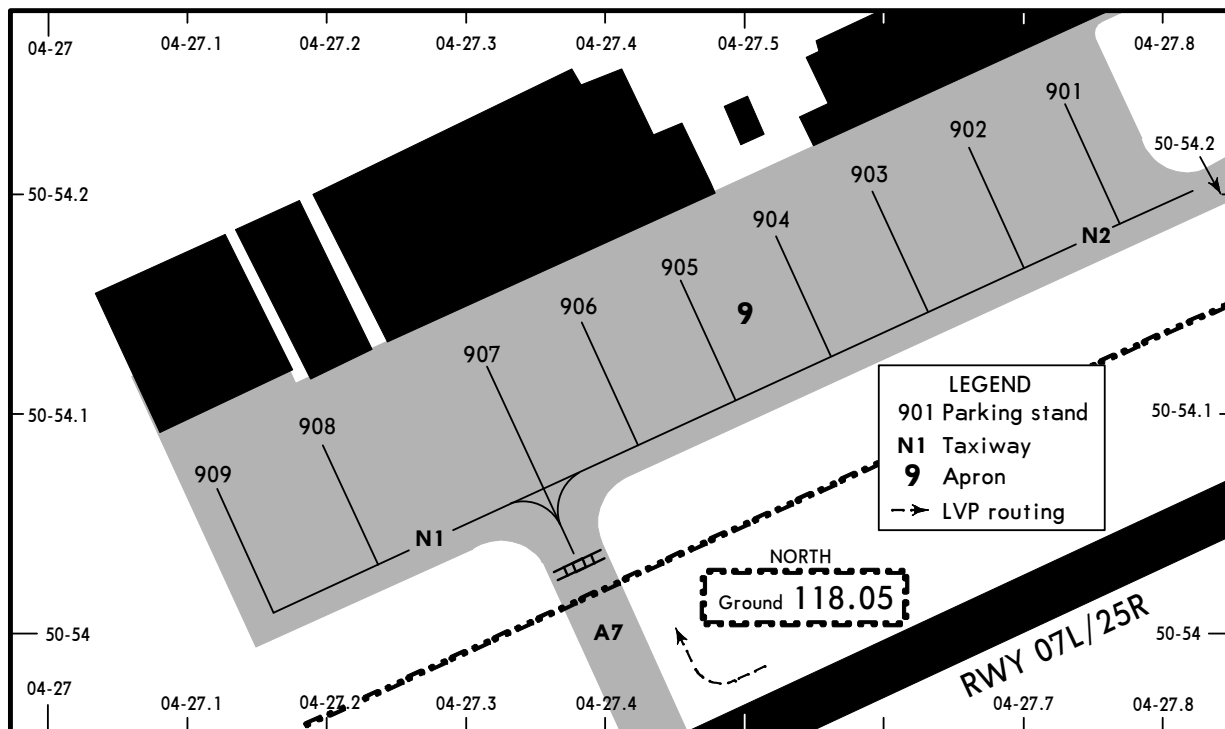
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**EBBR/BRU**

**JEPPESEN**  
26 JUN 09 **10-9D** **Eff 2 Jul**

**BRUSSELS, BELGIUM**  
**BRUSSELS NATIONAL**



**EBBR/BRU** **JEPPESEN**

26 JUN 09

10-9E

Eff 2 Jul

**BRUSSELS, BELGIUM****BRUSSELS NATIONAL****INS COORDINATES**

| <b>STAND No.</b>   | <b>COORDINATES</b> | <b>STAND No.</b> | <b>COORDINATES</b> |
|--------------------|--------------------|------------------|--------------------|
| 120 thru 126       | N50 54.1 E004 28.6 | 316, 317         | N50 53.8 E004 29.4 |
| 128                | N50 54.1 E004 28.7 | 318              | N50 53.9 E004 29.4 |
| 138, 140           | N50 54.1 E004 28.8 | 319              | N50 53.8 E004 29.4 |
| 142                | N50 54.2 E004 28.9 | 320              | N50 53.9 E004 29.4 |
| 143                | N50 54.1 E004 29.0 | 321              | N50 53.8 E004 29.4 |
| 144                | N50 54.2 E004 28.9 | 322              | N50 53.9 E004 29.4 |
| 145L/R             | N50 54.1 E004 29.0 | 323              | N50 53.8 E004 29.4 |
| 146                | N50 54.2 E004 28.9 | 324              | N50 53.9 E004 29.4 |
| 147                | N50 54.1 E004 29.0 | 325              | N50 53.8 E004 29.4 |
| 148                | N50 54.2 E004 29.0 | 326              | N50 53.9 E004 29.5 |
| 149L/R             | N50 54.2 E004 29.1 | 327              | N50 53.8 E004 29.4 |
| 150                | N50 54.2 E004 29.0 | 328              | N50 53.9 E004 29.5 |
| 151                | N50 54.2 E004 29.1 | 350              | N50 53.7 E004 29.2 |
| 152                | N50 54.2 E004 29.0 | 351 thru 354     | N50 53.7 E004 29.3 |
| 153L/R, 154        | N50 54.2 E004 29.1 | 421 thru 423     | N50 53.6 E004 29.2 |
| 155                | N50 54.2 E004 29.2 | 424 thru 432     | N50 53.6 E004 29.1 |
| 156                | N50 54.2 E004 29.1 | 433              | N50 53.6 E004 29.0 |
| 157L/R             | N50 54.2 E004 29.2 | 441              | N50 53.5 E004 29.0 |
| 158                | N50 54.2 E004 29.1 | 442, 443         | N50 53.6 E004 29.0 |
| 159, 160           | N50 54.2 E004 29.2 | 508              | N50 54.0 E004 28.7 |
| 161                | N50 54.2 E004 29.3 | 510              | N50 53.9 E004 28.7 |
| 162                | N50 54.3 E004 29.2 | 512, 514         | N50 53.9 E004 28.6 |
| 163                | N50 54.2 E004 29.3 | 516, 518         | N50 53.9 E004 28.5 |
| 164                | N50 54.3 E004 29.2 | 520, 522         | N50 53.9 E004 28.4 |
| 165L               | N50 54.2 E004 29.3 | 524 thru 528     | N50 53.8 E004 28.3 |
| 165R               | N50 54.2 E004 29.4 | 530, 532         | N50 53.8 E004 28.2 |
| 166                | N50 54.3 E004 29.3 | 680, 681         | N50 53.9 E004 28.0 |
| 167                | N50 54.2 E004 29.4 | 682 thru 691     | N50 53.9 E004 28.1 |
| 168                | N50 54.3 E004 29.3 | 692, 693         | N50 53.9 E004 28.2 |
| 169L/R             | N50 54.3 E004 29.4 | 694              | N50 54.0 E004 28.2 |
| 170                | N50 54.3 E004 29.3 | 695              | N50 53.9 E004 28.2 |
| 172                | N50 54.3 E004 29.4 | 696              | N50 54.0 E004 28.2 |
| 201                | N50 53.9 E004 29.1 | 697              | N50 53.9 E004 28.2 |
| 204                | N50 54.0 E004 29.1 | 698              | N50 54.0 E004 28.2 |
| 205L/R             | N50 54.0 E004 29.2 | 699              | N50 53.9 E004 28.2 |
| 206L/R             | N50 54.0 E004 29.1 | 901              | N50 54.2 E004 27.7 |
| 207 thru 210L/R    | N50 54.0 E004 29.2 | 902              | N50 54.2 E004 27.6 |
| 211L/R thru 217L/R | N50 54.0 E004 29.3 | 903, 904         | N50 54.2 E004 27.5 |
| 227                | N50 54.0 E004 29.4 | 905              | N50 54.2 E004 27.4 |
| 228L/R             | N50 54.1 E004 29.3 | 906, 907         | N50 54.1 E004 27.3 |
| 229L/R             | N50 54.0 E004 29.4 | 908, 909         | N50 54.1 E004 27.1 |
| 230L               | N50 54.1 E004 29.4 |                  |                    |
| 230R               | N50 54.1 E004 29.3 |                  |                    |
| 231                | N50 54.0 E004 29.4 |                  |                    |
| 232                | N50 54.1 E004 29.4 |                  |                    |
| 233L               | N50 54.0 E004 29.4 |                  |                    |
| 233R               | N50 54.0 E004 29.5 |                  |                    |
| 234L/R, 236        | N50 54.1 E004 29.4 |                  |                    |
| 237L, 238, 240     | N50 54.1 E004 29.5 |                  |                    |
| 304                | N50 53.7 E004 29.3 |                  |                    |
| 305                | N50 53.6 E004 29.3 |                  |                    |
| 306                | N50 53.6 E004 29.2 |                  |                    |
| 307                | N50 53.7 E004 29.2 |                  |                    |
| 310, 311           | N50 53.8 E004 29.2 |                  |                    |
| 312 thru 315       | N50 53.8 E004 29.3 |                  |                    |

EBBR/BRU


**JEPPESEN**  
 15 OCT 10 (10-9F)
**BRUSSELS, BELGIUM**  
BRUSSELS NATIONAL**DOCKING GUIDANCE SYSTEM****Note**

When a pilot receives either a wrong type of aircraft, a wrong flight number, an ERR-message, an ESTOP emergency stop or the display becomes unreadable, he must stop immediately his aircraft and call for assistance of a marshaller via the Ground Frequencies.

**OPERATIONAL AND INFORMATION MESSAGES****Aircraft parking positions 140 thru 172, 350 thru 354 and 680 thru 699**

|                                              |                                                                                                                                                |
|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Flight number/Aircraft type flashing:</b> | The gate is ready for docking. Aircraft not detected as long as flashing occurs.                                                               |
| <b>Aircraft type steadily:</b>               | Aircraft has been detected, AC symbol on the display and system guides the pilot.                                                              |
| <b>Distance:</b>                             | Distance to stop position (in meters), approach slowly to the stop position                                                                    |
| <b>Arrow:</b> < >                            | Correction left required<br>Correction right required                                                                                          |
| <b>STOP:</b>                                 | Stop now, the docking position is reached                                                                                                      |
| <b>OK:</b>                                   | Docking successful                                                                                                                             |
| <b>STOP TOO FAR:</b>                         | The pilot went past the stop position                                                                                                          |
| <b>ESTOP:</b>                                | The emergency stop has been activated. <b>Stop aircraft immediately</b> , wait for marshaller instructions to resume docking procedure.        |
| <b>BRIN/STOP:</b>                            | The bridge is not in a good position (not applicable for positions 680 thru 699). <b>Stop the aircraft</b> , wait for marshaller instructions. |

**Aircraft parking positions 201 thru 240**

|                             |                                                                              |
|-----------------------------|------------------------------------------------------------------------------|
| <b>TEST/STOP:</b>           | The system starts and runs a test                                            |
| <b>WAIT/STOP:</b>           | The system waits for the order to start                                      |
| <b>BRIN/STOP:</b>           | The bridge is not in a good position                                         |
| <b>STBY/STOP:</b>           | The emergency stop has been activated                                        |
| <b>TOO followed by FAR:</b> | The pilot went 5'/1.5m past the stop position                                |
| <b>SLOW:</b>                | The aircraft was driving at more than 3m/s at 72'/22m from the stop position |
| <b>Flight number:</b>       | Displayed until the aircraft is at +/- 98'/30m from the stop position        |
| <b>Aircraft type:</b>       | Remains fixed as from 69'/21m from the stop position onwards                 |
| <b>STOP followed by OK:</b> | Aircraft stopped on the right position                                       |

**Note**

Two simultaneous messages at the same time are always shown in an alternate way.

**EBBR/BRU** **JEPPESEN**  
9 JUL 10 **(10-9X)****JAA MINIMUMS**  
**BRUSSELS, BELGIUM**  
BRUSSELS NATIONAL

| STRAIGHT-IN RWY |                | A                           | B                           | C                           | D                           |
|-----------------|----------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| 02              | ILS            | <b>383' (200')</b>          | <b>383' (200')</b>          | <b>383' (200')</b>          | <b>383' (200')</b>          |
|                 |                | <b>R550m</b>                | <b>R550m</b>                | <b>R550m</b>                | <b>R550m</b>                |
|                 | <i>ALS out</i> | R1000m                      | R1000m                      | R1000m                      | R1000m                      |
|                 | LOC ❶          | <b>640' (457')</b>          | <b>640' (457')</b>          | <b>640' (457')</b>          | <b>640' (457')</b>          |
|                 |                | <b>R1000m</b>               | <b>R1200m</b>               | <b>R1200m</b>               | <b>R1600m</b>               |
|                 | <i>ALS out</i> | R1500m                      | R1500m                      | R2000m                      | R2000m                      |
| 07L             | SRA            | <b>880' (697')</b>          | <b>880' (697')</b>          | <b>880' (697')</b>          | <b>880' (697')</b>          |
|                 |                | <b>V3600m</b>               | <b>V3600m</b>               | <b>V3600m</b>               | <b>V3600m</b>               |
|                 | VOR            | <b>640' (511')</b>          | <b>640' (511')</b>          | <b>640' (511')</b>          | <b>640' (511')</b>          |
|                 | with D6.0 BUB  | <b>V2800m</b>               | <b>V2800m</b>               | <b>V3300m</b>               | <b>V3300m</b>               |
|                 | VOR            | <b>880' (751')</b>          | <b>880' (751')</b>          | <b>880' (751')</b>          | <b>880' (751')</b>          |
|                 | w/o D6.0 BUB   | <b>V2800m</b>               | <b>V2800m</b>               | <b>V3300m</b>               | <b>V3300m</b>               |
| 07R             | SRA            | <b>1030' (901')</b>         | <b>1030' (901')</b>         | <b>1030' (901')</b>         | <b>1030' (901')</b>         |
|                 |                | <b>V5500m</b>               | <b>V5500m</b>               | <b>V5500m</b>               | <b>V5500m</b>               |
|                 | VOR            | <b>560' (385')</b>          | <b>560' (385')</b>          | <b>560' (385')</b>          | <b>560' (385')</b>          |
|                 | with D4.5 BUB  | <b>V1500m</b>               | <b>V1500m</b>               | <b>V1800m</b>               | <b>V2000m</b>               |
|                 | VOR            | <b>1100' (925')</b>         | <b>1100' (925')</b>         | <b>1100' (925')</b>         | <b>1100' (925')</b>         |
|                 | w/o D4.5 BUB   | <b>V1500m</b>               | <b>V1500m</b>               | <b>V2000m</b>               | <b>V2000m</b>               |
| 20              | SRA            | <b>1030' (855')</b>         | <b>1030' (855')</b>         | <b>1030' (855')</b>         | <b>1030' (855')</b>         |
|                 |                | <b>V5500m</b>               | <b>V5500m</b>               | <b>V5500m</b>               | <b>V5500m</b>               |
|                 | ILS            | <b>313' (200')</b>          | <b>316' (203')</b>          | <b>324' (211')</b>          | <b>335' (222')</b>          |
|                 |                | <b>R800m</b>                | <b>R800m</b>                | <b>R800m</b>                | <b>R800m</b>                |
|                 | <i>ALS out</i> | R1000m                      | R1000m                      | R1000m                      | R1000m                      |
|                 | LOC            | <b>530' (417')</b>          | <b>530' (417')</b>          | <b>530' (417')</b>          | <b>530' (417')</b>          |
| 25L             |                | <b>R1200m</b>               | <b>R1300m</b>               | <b>R1400m</b>               | <b>R1600m</b>               |
|                 | <i>ALS out</i> | R1500m                      | R1500m                      | R1800m                      | R2000m                      |
|                 | SRA            | <b>800' (687')</b>          | <b>800' (687')</b>          | <b>800' (687')</b>          | <b>800' (687')</b>          |
|                 |                | <b>V3600m</b>               | <b>V3600m</b>               | <b>V3600m</b>               | <b>V3600m</b>               |
|                 | CAT 3B ILS     | <b>R150m</b>                | <b>R150m</b>                | <b>R150m</b>                | <b>R150m</b>                |
|                 | CAT 3A ILS     | <b>RA50'R200m</b>           | <b>RA50'R200m</b>           | <b>RA50'R200m</b>           | <b>RA50'R200m</b>           |
| 25L             | CAT 2 ILS      | <b>259' (100')</b>          | <b>259' (100')</b>          | <b>259' (100')</b>          | <b>272' (113')</b>          |
|                 |                | <b>RA113'R300m</b>          | <b>RA113'R300m</b>          | <b>RA113'R300m</b>          | <b>RA123'R300m</b>          |
|                 | ILS            | <b>359' (200')</b>          | <b>359' (200')</b>          | <b>359' (200')</b>          | <b>359' (200')</b>          |
|                 |                | <b>R550m</b>                | <b>R550m</b>                | <b>R550m</b>                | <b>R550m</b>                |
|                 | <i>ALS out</i> | R1000m                      | R1000m                      | R1000m                      | R1000m                      |
|                 | ILS ❷          | <b>359' (200')</b>          | <b>359' (200')</b>          | <b>359' (200')</b>          | <b>359' (200')</b>          |
| 25L             |                | ceiling 600' - <b>2000m</b> | ceiling 600' - <b>2000m</b> | ceiling 600' - <b>2000m</b> | ceiling 600' - <b>2000m</b> |
|                 | LOC            | <b>560' (401')</b>          | <b>560' (401')</b>          | <b>560' (401')</b>          | <b>560' (401')</b>          |
|                 |                | <b>R900m</b>                | <b>R1000m</b>               | <b>R1000m</b>               | <b>R1400m</b>               |
|                 | <i>ALS out</i> | R1500m                      | R1500m                      | R1800m                      | R2000m                      |
|                 | VOR            | <b>560' (401')</b>          | <b>560' (401')</b>          | <b>560' (401')</b>          | <b>560' (401')</b>          |
|                 |                | <b>V900m</b>                | <b>V1000m</b>               | <b>V1000m</b>               | <b>V1400m</b>               |
| 25L             | <i>ALS out</i> | 1500m                       | 1500m                       | 1800m                       | 2000m                       |
|                 | SRA            | <b>800' (641')</b>          | <b>800' (641')</b>          | <b>800' (641')</b>          | <b>800' (641')</b>          |
| 25L             |                | <b>V3600m</b>               | <b>V3600m</b>               | <b>V3600m</b>               | <b>V3600m</b>               |

❶ MM out: NOT AUTHORIZED.

❷ Simultaneous dependent apch

**EBBR/BRU**

**JEPPESEN**  
9 JUL 10 **(10-9X1)**
**JAA MINIMUMS**  
**BRUSSELS, BELGIUM**  
 BRUSSELS NATIONAL

| STRAIGHT-IN RWY |            | A               | B               | C               | D               |
|-----------------|------------|-----------------|-----------------|-----------------|-----------------|
| 25R             | CAT 3B ILS | R150m           | R150m           | R150m           | R150m           |
|                 | CAT 3A ILS | RA50'R200m      | RA50'R200m      | RA50'R200m      | RA50'R200m      |
|                 | CAT 2 ILS  | 211'(100')      | 211'(100')      | 211'(100')      | 211'(100')      |
|                 |            | RA104'R300m     | RA104'R300m     | RA104'R300m     | RA104'R300m     |
|                 | ILS        | 311'(200')      | 311'(200')      | 311'(200')      | 311'(200')      |
|                 |            | R800m           | R800m           | R800m           | R800m           |
|                 | ALS out    | R1000m          | R1000m          | R1000m          | R1000m          |
|                 | ILS ❶      | 311'(200')      | 311'(200')      | 311'(200')      | 311'(200')      |
|                 |            | ceil600'- 2000m | ceil600'- 2000m | ceil600'- 2000m | ceil600'- 2000m |
|                 | LOC ❷      | 540'(429')      | 540'(429')      | 540'(429')      | 540'(429')      |
|                 |            | R1200m          | R1300m          | R1400m          | R1600m          |
| ALS out         | R1500m     | R1500m          | R1800m          | R2000m          |                 |
| SRA             | 800'(690') | 800'(690')      | 800'(690')      | 800'(690')      |                 |
|                 | V3600m     | V3600m          | V3600m          | V3600m          |                 |

❶ Simultaneous dependent apch

❷ MM out: NOT AUTHORIZED.

| CIRCLE-TO-LAND | A          | B | C | D |
|----------------|------------|---|---|---|
|                | PROHIBITED |   |   |   |

**TAKE-OFF RWY 02, 07L/R, 20, 25L/R**

| LVP must be in Force                              |                           |         |                          |                          |                   |
|---------------------------------------------------|---------------------------|---------|--------------------------|--------------------------|-------------------|
| Approved Operators<br>HIRL, CL<br>& mult. RVR req | RL, CL<br>& mult. RVR req | RL & CL | RCLM (DAY only)<br>or RL | RCLM (DAY only)<br>or RL | NIL<br>(DAY only) |
| A<br>B<br>C<br>D                                  | 150m                      | 150m    | 200m                     | 400m                     | 500m              |
|                                                   |                           | 200m    | 250m                     |                          |                   |

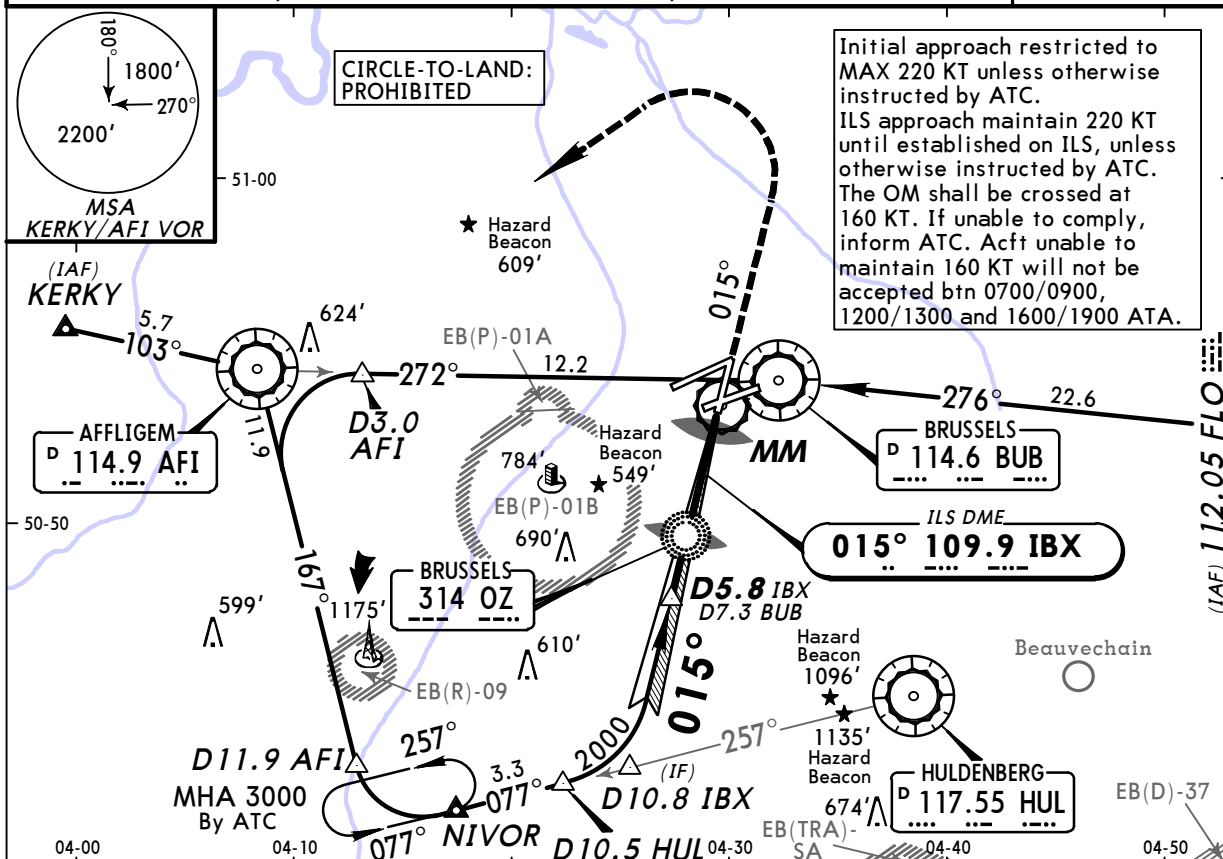
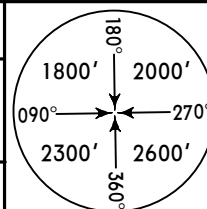
**EBBR/BRU**  
**BRUSSELS NATIONAL**

**JEPPesen**  
19 MAR 10 **(11-1)**

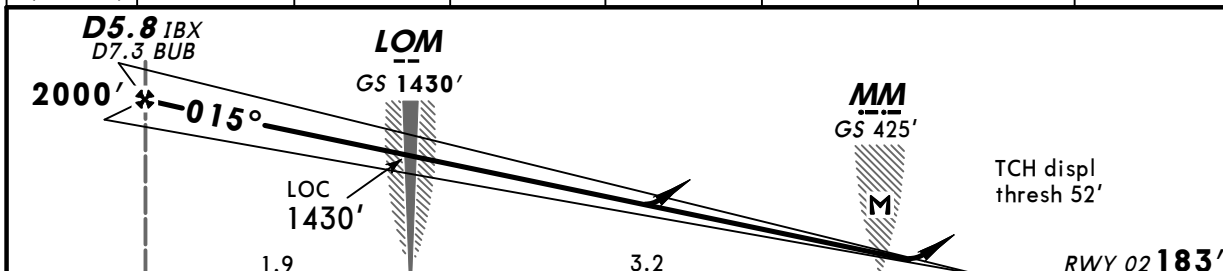
**BRUSSELS, BELGIUM**  
**ILS or LOC Rwy 02**

BRIEFING STRIP

|                                                                                                             |                    |                 |              |                                          |                      |                  |                |                |
|-------------------------------------------------------------------------------------------------------------|--------------------|-----------------|--------------|------------------------------------------|----------------------|------------------|----------------|----------------|
| D-ATIS Arrival                                                                                              |                    |                 |              |                                          | BRUSSELS Arrival (R) |                  | BRUSSELS Tower |                |
| 110.6                                                                                                       | 112.05             | 114.6           | 114.9        | 117.55                                   | 132.47               | 118.25           | 118.6          | 120.77         |
| Ground                                                                                                      |                    |                 |              |                                          |                      |                  |                |                |
| 118.05 for apron 2 North and North of it                                                                    |                    |                 |              | 121.87 for apron 2 South and South of it |                      |                  |                |                |
| LOC<br>IBX                                                                                                  | Final<br>Aptch Crs | GS<br>LOM       | ILS<br>DA(H) | Apt Elev                                 |                      | 184'             |                |                |
| 109.9                                                                                                       | 015°               | 1430' (1247')   | 383' (200')  | RWY                                      |                      | 183'             |                |                |
| MISSED APCH: Climb on track 015° to 1500', then climbing turn LEFT to 4000' inbound AFI VOR. Report to ATC. |                    |                 |              |                                          |                      |                  |                |                |
| Alt Set: hPa                                                                                                |                    | Rwy Elev: 7 hPa |              | Trans level: By ATC                      |                      | Trans alt: 4500' |                | MSA<br>FLO VOR |



| LOC (GS out) | IBX DME  | 5.8   | 5.0   | 4.0   | 3.0   | 2.0  | 1.0  |
|--------------|----------|-------|-------|-------|-------|------|------|
|              | ALTITUDE | 2000' | 1740' | 1420' | 1100' | 780' | 470' |



|                                   |     |     |     |     |     |     |             |  |
|-----------------------------------|-----|-----|-----|-----|-----|-----|-------------|--|
| TO DISPLACED THRESHOLD            |     |     |     |     |     |     | RWY 02 183' |  |
| Gnd speed-Kts                     | 70  | 90  | 100 | 120 | 140 | 160 |             |  |
| ILS GS or LOC Descent Angle 3.00° | 377 | 484 | 538 | 646 | 753 | 861 |             |  |
| MAP at MM                         |     |     |     |     |     |     |             |  |

| STRAIGHT-IN LANDING RWY 02 |          |          |           | LOC (GS out)      |           |
|----------------------------|----------|----------|-----------|-------------------|-----------|
| ILS                        |          |          |           | DA(H) 640' (457') |           |
| DA(H) 383' (200')          |          |          |           |                   |           |
| FULL                       | Limited  | ALS out  |           | ALS out           |           |
| A                          |          |          |           |                   | RVR 1500m |
| B                          |          |          |           |                   |           |
| C                          | RVR 550m | RVR 750m | RVR 1200m | RVR 1400m         | CMV 2100m |
| D                          |          |          |           |                   |           |

PANS OPS 3

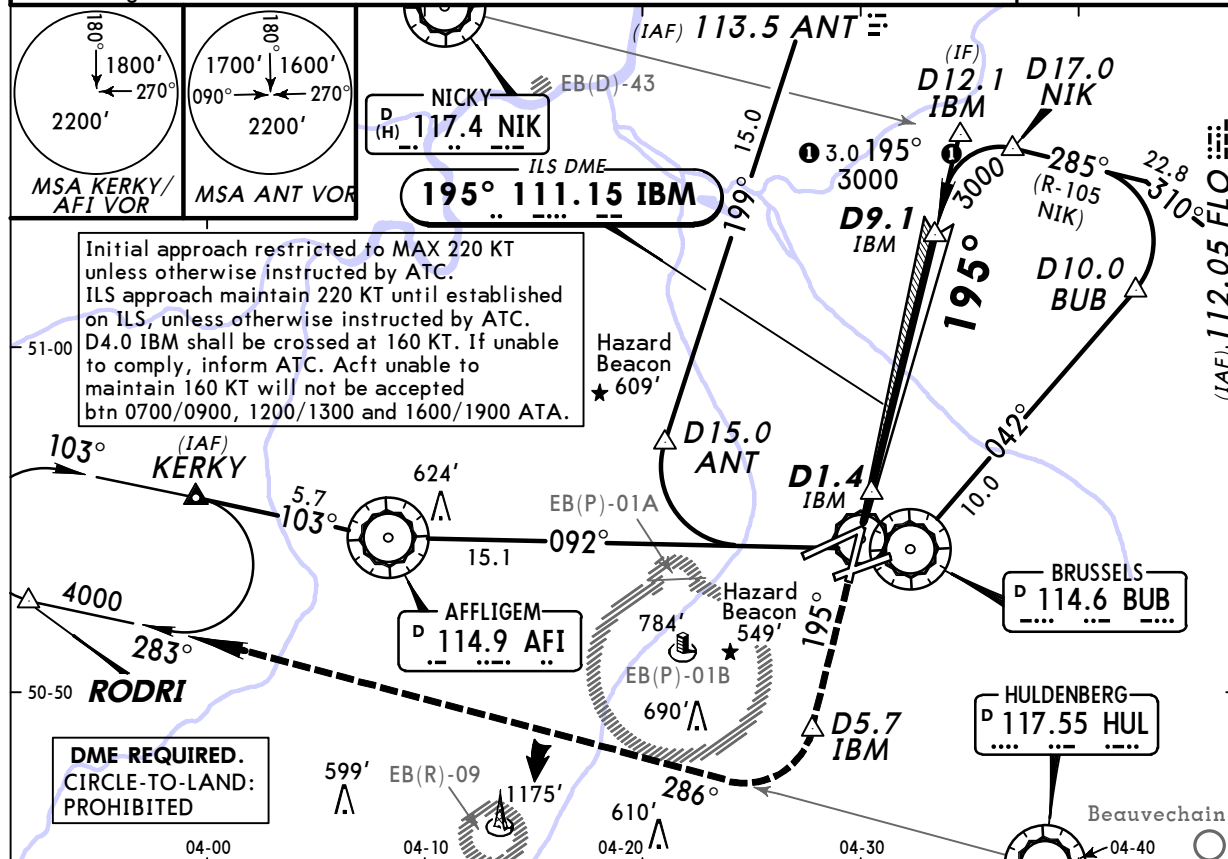
**EBBR/BRU**  
**BRUSSELS NATIONAL**

**JEPPesen**  
19 MAR 10 **(11-2)**

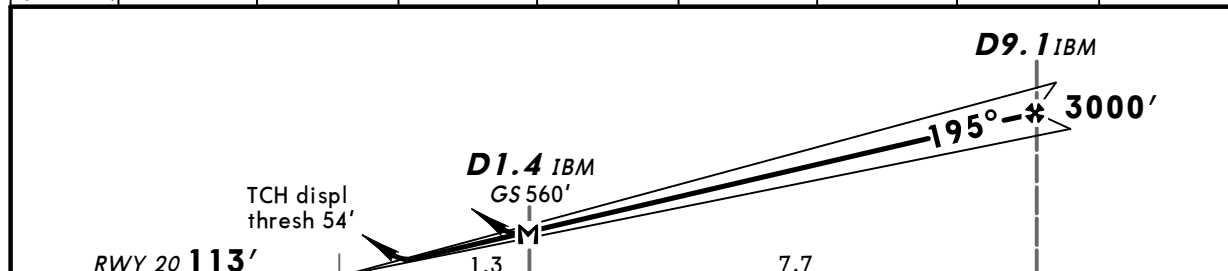
**BRUSSELS, BELGIUM**  
**ILS or LOC Rwy 20**

BRIEFING STRIP™

|                                                                                                                 |                    |                                   |                      |                     |        |                      |                                   |                |                |
|-----------------------------------------------------------------------------------------------------------------|--------------------|-----------------------------------|----------------------|---------------------|--------|----------------------|-----------------------------------|----------------|----------------|
| D-ATIS Arrival                                                                                                  |                    |                                   |                      |                     |        | BRUSSELS Arrival (R) |                                   | BRUSSELS Tower |                |
| 110.6                                                                                                           | 112.05             | 114.6                             | 114.9                | 117.55              | 132.47 | 118.25               |                                   | 118.6          | 120.77         |
| Ground                                                                                                          |                    |                                   |                      |                     |        |                      |                                   |                |                |
| 118.05                                                                                                          |                    | for apron 2 North and North of it |                      |                     | 121.87 |                      | for apron 2 South and South of it |                |                |
| LOC<br>IBM                                                                                                      | Final<br>Aptch Crs | GS<br>D9.1 IBM                    | ILS<br>DA(H)         | Apt Elev            |        | 184'                 |                                   |                |                |
| 111.15                                                                                                          | 195°               | 3000' (2887')                     | Refer to<br>Minimums | RWY                 |        | 113'                 |                                   |                |                |
| MISSED APCH: Climb STRAIGHT AHEAD. Turn RIGHT to intercept R-286 HUL to RODRI climbing to 4000'. Report to ATC. |                    |                                   |                      |                     |        |                      |                                   |                |                |
| Alt Set: hPa                                                                                                    |                    | Rwy Elev: 4 hPa                   |                      | Trans level: By ATC |        | Trans alt: 4500'     |                                   |                |                |
| GS coverage area restricted to 6° on the left-hand side of the antenna.                                         |                    |                                   |                      |                     |        |                      |                                   |                | MSA<br>FLO VOR |



| LOC      | IBM DME  | 2.0  | 3.0   | 4.0   | 5.0   | 6.0   | 7.0   | 8.0   |
|----------|----------|------|-------|-------|-------|-------|-------|-------|
| (GS out) | ALTITUDE | 750' | 1060' | 1380' | 1700' | 2020' | 2340' | 2670' |



|                         |     |     |     |     |     |     |             |  |
|-------------------------|-----|-----|-----|-----|-----|-----|-------------|--|
| Gnd speed-Kts           | 70  | 90  | 100 | 120 | 140 | 160 | HIALS       |  |
| ILS GS or               | 377 | 484 | 538 | 646 | 753 | 861 | PAPI        |  |
| LOC Descent Angle 3.00° |     |     |     |     |     |     | Refer to    |  |
| MAP at D1.4 IBM         |     |     |     |     |     |     | Missed Apch |  |

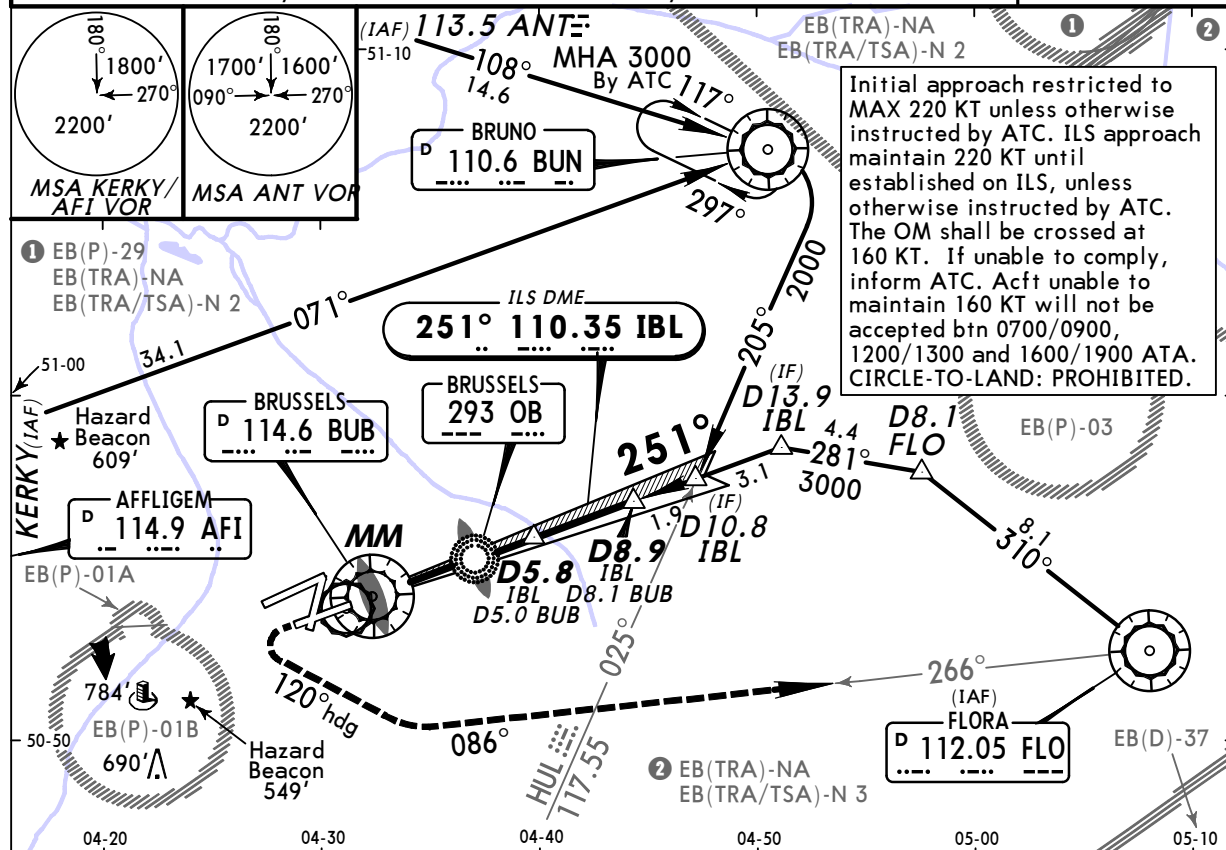
| Standard       |  |  |  | STRAIGHT-IN LANDING RWY 20 |  |  |  | LOC (GS out) |  |
|----------------|--|--|--|----------------------------|--|--|--|--------------|--|
| ILS            |  |  |  | DA(H)                      |  |  |  | 530' (417')  |  |
| A: 313' (200') |  |  |  | C: 324' (211')             |  |  |  |              |  |
| B: 316' (203') |  |  |  | D: 335' (222')             |  |  |  |              |  |
| FULL/Limited   |  |  |  | ALS out                    |  |  |  | ALS out      |  |
| A              |  |  |  |                            |  |  |  | RVR 1500m    |  |
| B              |  |  |  |                            |  |  |  |              |  |
| C              |  |  |  |                            |  |  |  | RVR 1500m    |  |
| D              |  |  |  |                            |  |  |  | RVR 1900m    |  |

**EBBR/BRU**  
**BRUSSELS NATIONAL**

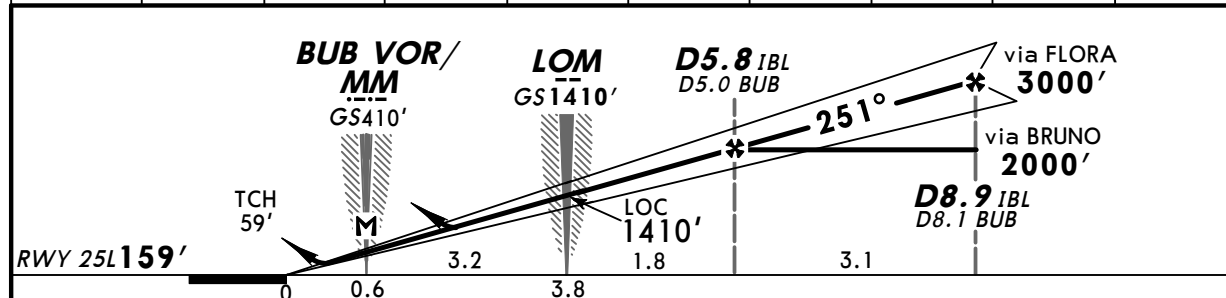
**JEPPESEN**  
9 JUL 10 (11-3)

BRUSSELS, BELGIUM  
ILS or LOC Rwy 25L

|                                                                                                                                                                                                                     |                   |                 |              |                     |        |                      |  |                |                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-----------------|--------------|---------------------|--------|----------------------|--|----------------|------------------------|
| D-ATIS Arrival                                                                                                                                                                                                      |                   |                 |              |                     |        | BRUSSELS Arrival (R) |  | BRUSSELS Tower |                        |
| 110.6                                                                                                                                                                                                               | 112.05            | 114.6           | 114.9        | 117.55              | 132.47 | 118.25               |  | 118.6 120.77   |                        |
| 118.05 for apron 2 North and North of it      Ground      121.87 for apron 2 South and South of it                                                                                                                  |                   |                 |              |                     |        |                      |  |                | <p>MSA<br/>FLO VOR</p> |
| LOC<br>IBL                                                                                                                                                                                                          | Final<br>Apch Crs | GS<br>LOM       | ILS<br>DA(H) | Apt Elev 184'       |        |                      |  |                |                        |
| 110.35                                                                                                                                                                                                              | 251°              | 1410' (1251')   | 359' (200')  | RWY 159'            |        |                      |  |                |                        |
| <b>MISSED APCH:</b> Climb to 2500'. When passing 700' turn LEFT onto hdg 120°. Intercept and follow R-266 inbound FLO VOR and climb to 4500'. Report to ATC as soon as practicable. No LEFT turn before BUB VOR/MM. |                   |                 |              |                     |        |                      |  |                |                        |
| Alt Set: hPa                                                                                                                                                                                                        |                   | Rwy Elev: 6 hPa |              | Trans level: By ATC |        | Trans alt: 4500'     |  |                |                        |



| LOC<br>(GS out) | IBL DME  | 2.0  | 3.0   | 4.0   | 5.0   | 6.0   | 7.0   | 8.0   | 8.9   |
|-----------------|----------|------|-------|-------|-------|-------|-------|-------|-------|
|                 | ALTITUDE | 800' | 1120' | 1440' | 1750' | 2070' | 2390' | 2700' | 3000' |



|                                |     |     |     |     |     |     |  |
|--------------------------------|-----|-----|-----|-----|-----|-----|--|
| <i>Gnd speed-Kts</i>           | 70  | 90  | 100 | 120 | 140 | 160 |  |
| <i>ILS GS or</i>               | 377 | 484 | 538 | 646 | 753 | 861 |  |
| <i>LOC Descent Angle 3.00°</i> |     |     |     |     |     |     |  |
| <i>MAP at MM/BUB VOR</i>       |     |     |     |     |     |     |  |

## Standard

STRAIGHT-IN LANDING RWY 25L

| ILS                      |          |          |           | LOC (GS out)             |           |
|--------------------------|----------|----------|-----------|--------------------------|-----------|
| DA(H) <b>359'</b> (200') |          |          |           | DA(H) <b>560'</b> (401') |           |
| FULL                     |          | Limited  | ALS out   | ALS out                  |           |
| A                        | RVR 550m | RVR 750m | RVR 1200m | RVR 1200m                | RVR 1500m |
| B                        |          |          |           |                          | RVR 1900m |
| C                        |          |          |           |                          |           |
| D                        |          |          |           |                          |           |

**CHANGES:** None.

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**EBBR/BRU**  
**BRUSSELS NATIONAL**

**JEPPESEN**  
9 JUL 10 (11-3A)

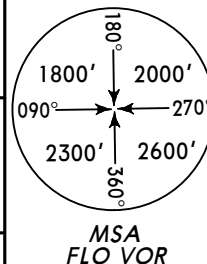
BRUSSELS, BELGIUM  
CAT II ILS Rwy 25L

|                |        |       |       |        |        |                      |                |
|----------------|--------|-------|-------|--------|--------|----------------------|----------------|
| D-ATIS Arrival |        |       |       |        |        | BRUSSELS Arrival (R) | BRUSSELS Tower |
| 110.6          | 112.05 | 114.6 | 114.9 | 117.55 | 132.47 | 118.25               | 118.6 120.77   |

**BRIEFING STRIP™**

|        |                                   |        |        |                                   |
|--------|-----------------------------------|--------|--------|-----------------------------------|
| 118.05 | for apron 2 North and North of it | Ground | 121.87 | for apron 2 South and South of it |
|--------|-----------------------------------|--------|--------|-----------------------------------|

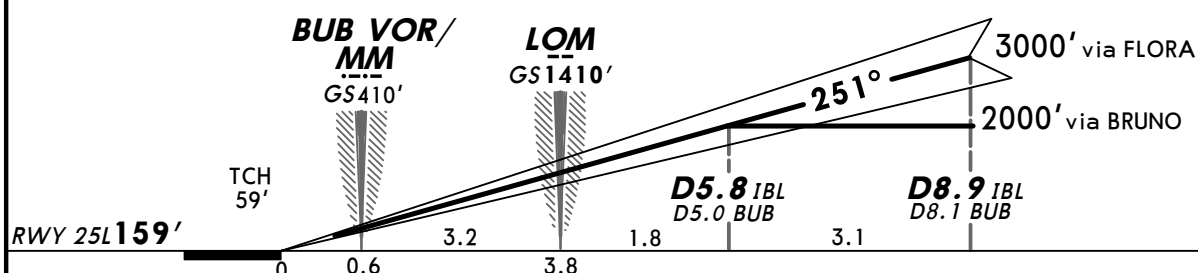
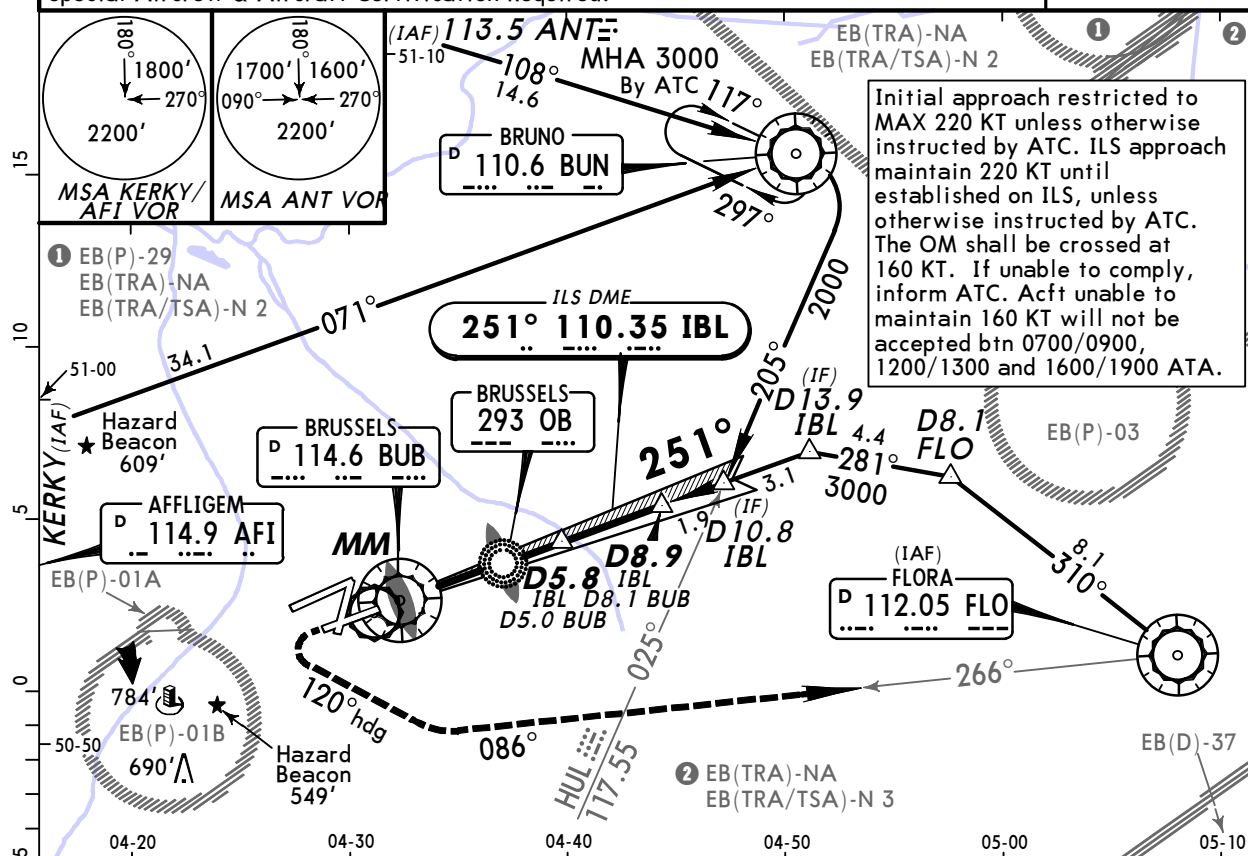
|                             |                                  |                                   |                                                |                                             |
|-----------------------------|----------------------------------|-----------------------------------|------------------------------------------------|---------------------------------------------|
| LOC<br>IBL<br><b>110.35</b> | Final<br>Apch Crs<br><b>251°</b> | GS<br>LOM<br><b>1410'</b> (1251') | CAT II ILS<br>RA/DA(H)<br>Refer to<br>Minimums | Apt Elev <b>184'</b><br><br>RWY <b>159'</b> |
|-----------------------------|----------------------------------|-----------------------------------|------------------------------------------------|---------------------------------------------|



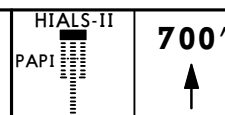
**MISSED APCH:** Climb to 2500'. When passing 700' turn LEFT onto hdg 120°. Intercept and follow R-266 inbound FLO VOR and climb to 4500'. Report to ATC as soon as practicable. No LEFT turn before BUB VOR/MM.

Alt Set: hPa      Rwy Elev: 6 hPa      Trans level: By ATC      Trans alt: 4500'

Special Aircrew & Aircraft Certification Required.



|                      |     |     |     |     |     |     |
|----------------------|-----|-----|-----|-----|-----|-----|
| <i>Gnd speed-Kts</i> | 70  | 90  | 100 | 120 | 140 | 160 |
| GS 3.00°             | 377 | 484 | 538 | 646 | 753 | 861 |
|                      |     |     |     |     |     |     |
|                      |     |     |     |     |     |     |



### Standard

STRAIGHT-IN LANDING RWY 25L  
CAT II ILS

ABC  
RA 113'  
DA(H) 259' (100')

D  
RA 123'  
DA(H) 272' (113')

RVR **300m**

## PANS OPS 3

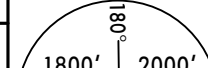
**EBBR/BRU**  
**BRUSSELS NATIONAL**

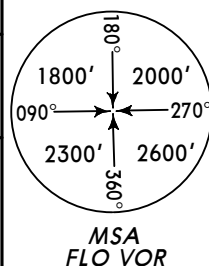
**JEPPesen**  
19 MAR 10 **(11-4)**

**SIMULTANEOUS  
DEPENDENT APCH**

**BRUSSELS, BELGIUM**  
**ILS Rwy 25L**

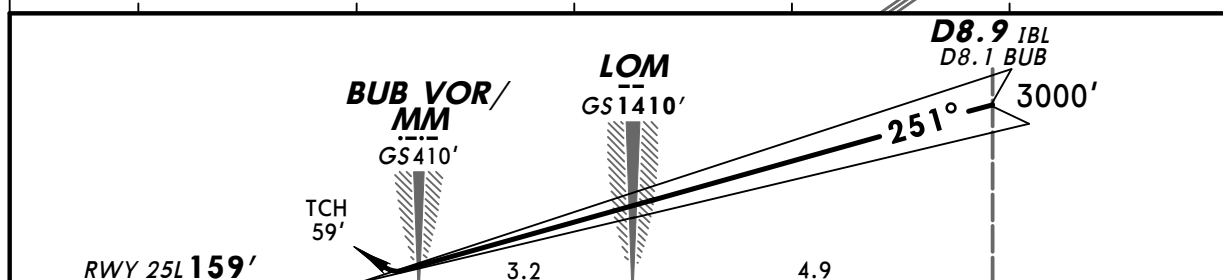
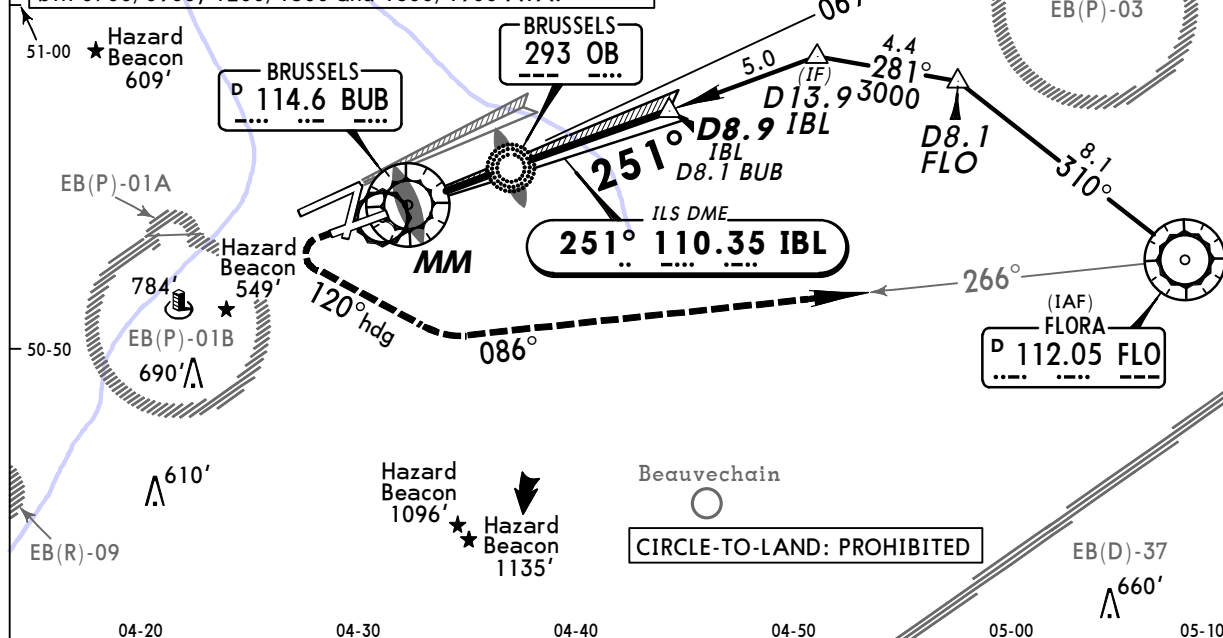
BRIEFING STRIP

| D-ATIS Arrival                                                                                                                                                                                                      |                   |                 |              |                                          | BRUSSELS Arrival (R) |                  | BRUSSELS Tower |                                                                                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-----------------|--------------|------------------------------------------|----------------------|------------------|----------------|-------------------------------------------------------------------------------------|
| 110.6                                                                                                                                                                                                               | 112.05            | 114.6           | 114.9        | 117.55                                   | 132.47               | 118.25           | 118.6          | 120.77                                                                              |
| Ground                                                                                                                                                                                                              |                   |                 |              |                                          |                      |                  |                |  |
| 118.05 for apron 2 North and North of it                                                                                                                                                                            |                   |                 |              | 121.87 for apron 2 South and South of it |                      |                  |                |                                                                                     |
| LOC<br>IBL                                                                                                                                                                                                          | Final<br>Apch Crs | GS<br>LOM       | ILS<br>DA(H) | Apt Elev 184'                            |                      |                  |                |                                                                                     |
| 110.35                                                                                                                                                                                                              | 251°              | 1410' (1251')   | 359' (200')  | RWY 159'                                 |                      |                  |                |                                                                                     |
| <b>MISSED APCH:</b> Climb to 2500'. When passing 700' turn LEFT onto hdg 120°. Intercept and follow R-266 inbound FLO VOR and climb to 4500'. Report to ATC as soon as practicable. No LEFT turn before BUB VOR/MM. |                   |                 |              |                                          |                      |                  |                |                                                                                     |
| Alt Set: hPa                                                                                                                                                                                                        |                   | Rwy Elev: 6 hPa |              | Trans level: By ATC                      |                      | Trans alt: 4500' |                |                                                                                     |



Simultaneous ILS approach authorized with rwy 25R. Initial approach restricted to MAX 220 KT unless otherwise instructed by ATC. ILS approach maintain 220 KT until established on ILS, unless otherwise instructed by ATC. The OM shall be crossed at 160 KT. If unable to comply, inform ATC. Acft unable to maintain 160 KT will not be accepted btn 0700/0900, 1200/1300 and 1600/1900 ATA.

EB(TRA)-NA  
EB(TRA/TSA)-N 2  
EB(TRA/TSA)-N 3  
**DURING SIMULTANEOUS APPROACH PILOTS  
MUST EXECUTE PRECISE LOC INTERCEPTION  
(DO NOT OVERSHOOT R-069 BUB VOR).**



|               |       |     |     |     |     |     |                                            |
|---------------|-------|-----|-----|-----|-----|-----|--------------------------------------------|
| Gnd speed-Kts | 70    | 90  | 100 | 120 | 140 | 160 | <b>CEILING REQUIRED</b><br><b>700'</b><br> |
| GS            | 3.00° | 377 | 484 | 538 | 646 | 753 |                                            |
|               |       |     |     |     |     |     |                                            |

|                 |                                    |         |                         |
|-----------------|------------------------------------|---------|-------------------------|
| <b>Standard</b> | <b>STRAIGHT-IN LANDING RWY 25L</b> |         | <b>CEILING REQUIRED</b> |
|                 | <b>ILS</b>                         |         |                         |
|                 | DA(H) <b>359' (200')</b>           |         |                         |
|                 | FULL/Limited                       | ALS out |                         |

PANS OPS 3

|   |              |
|---|--------------|
| A | 600' - 2000m |
| B |              |
| C |              |
| D |              |

# EBBR/BRU BRUSSELS NATIONAL

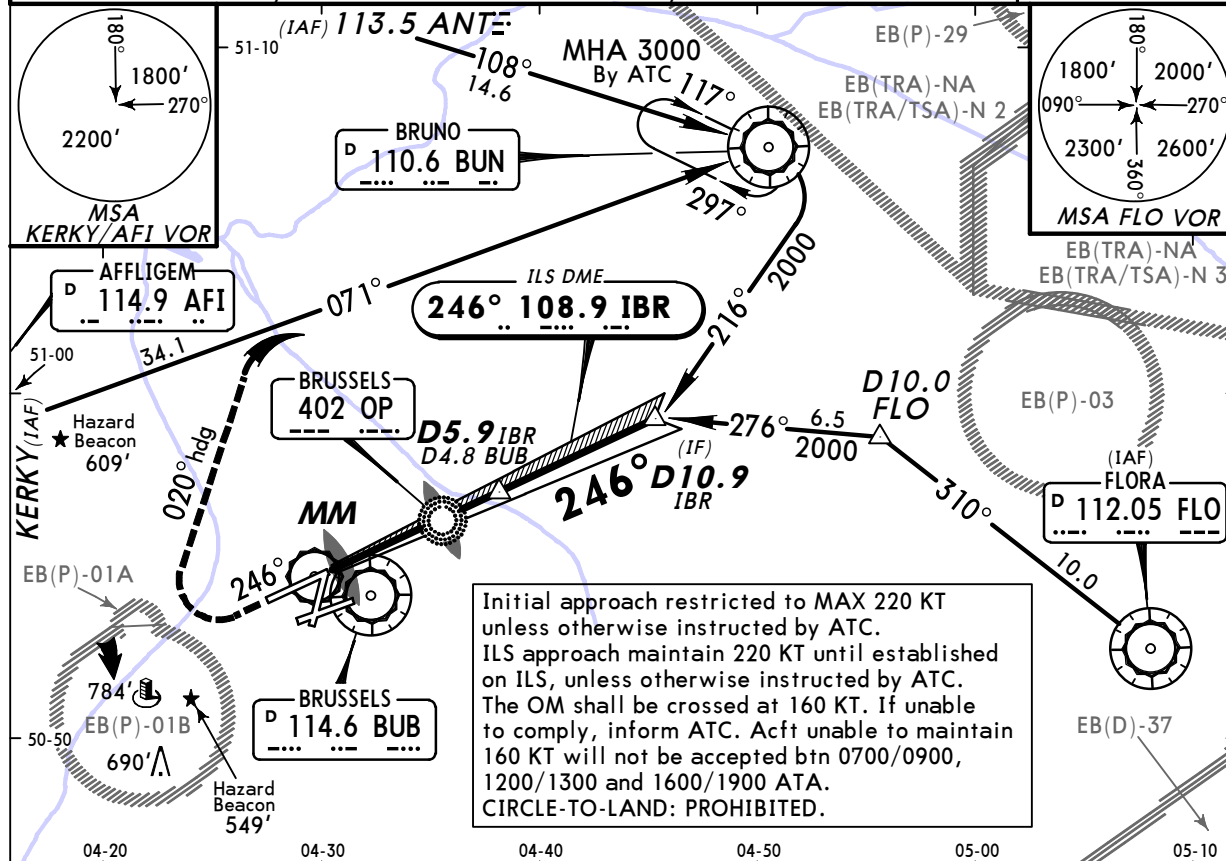
**JEPPesen**  
9 JUL 10 (11-5)

# BRUSSELS, BELGIUM ILS or LOC Rwy 25R

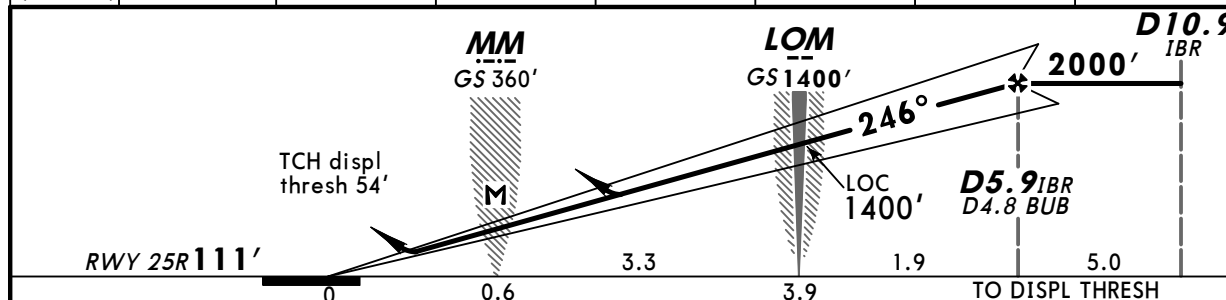
BRIEFING STRIP

|                                                                                                                                                                                                                |          |                                   |             |                     |                      |                                   |                |        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------------------------------|-------------|---------------------|----------------------|-----------------------------------|----------------|--------|
| D-ATIS Arrival                                                                                                                                                                                                 |          |                                   |             |                     | BRUSSELS Arrival (R) |                                   | BRUSSELS Tower |        |
| 110.6                                                                                                                                                                                                          | 112.05   | 114.6                             | 114.9       | 117.55              | 132.47               | 118.25                            | 118.6          | 120.77 |
| Ground                                                                                                                                                                                                         |          |                                   |             |                     |                      |                                   |                |        |
| 118.05                                                                                                                                                                                                         |          | for apron 2 North and North of it |             | 121.87              |                      | for apron 2 South and South of it |                |        |
| LOC                                                                                                                                                                                                            | Final    | GS                                | ILS         | Apt Elev            |                      | 184'                              |                |        |
| IBR                                                                                                                                                                                                            | Apch Crs | LOM                               | DA(H)       | RWY                 |                      | 111'                              |                |        |
| 108.9                                                                                                                                                                                                          | 246°     | 1400' (1289')                     | 311' (200') |                     |                      |                                   |                |        |
| MISSED APCH: Climb to 2000'. When passing 700' turn RIGHT onto hdg 020°. Intercept and follow R-251 inbound BUN VOR and climb to 3000'. Report to ATC as soon as practicable. No RIGHT turn before OP Lctr/OM. |          |                                   |             |                     |                      |                                   |                |        |
| Alt Set: hPa                                                                                                                                                                                                   |          | Rwy Elev: 4 hPa                   |             | Trans level: By ATC |                      | Trans alt: 4500'                  |                |        |

MSA  
ANT VOR



| LOC      | IBR DME  | 1.0  | 2.0  | 3.0   | 4.0   | 5.0   | 5.9   |
|----------|----------|------|------|-------|-------|-------|-------|
| (GS out) | ALTITUDE | 430' | 750' | 1070' | 1380' | 1700' | 2000' |



|                                   |     |     |     |     |     |     |  |
|-----------------------------------|-----|-----|-----|-----|-----|-----|--|
| Gnd speed-Kts                     | 70  | 90  | 100 | 120 | 140 | 160 |  |
| ILS GS or LOC Descent Angle 3.00° | 377 | 484 | 538 | 646 | 753 | 861 |  |
| MAP at MM                         |     |     |     |     |     |     |  |

| STRAIGHT-IN LANDING RWY 25R |          |                   |           | HIALS-II PAPI 700' |  |
|-----------------------------|----------|-------------------|-----------|--------------------|--|
| Standard                    |          | ILS               |           | LOC (GS out)       |  |
|                             |          | DA(H) 311' (200') |           | DA(H) 540' (429')  |  |
|                             |          | FULL/Limited      |           | ALS out            |  |
| A                           |          |                   |           | RVR 1500m          |  |
| B                           |          |                   |           |                    |  |
| C                           | RVR 800m |                   | RVR 1200m |                    |  |
| D                           |          |                   |           | RVR 1600m          |  |
|                             |          |                   |           | RVR 2000m          |  |

PANS OPS 3

**EBBR/BRU**  
**BRUSSELS NATIONAL**

**JEPPesen**  
9 JUL 10 **(11-5A)**

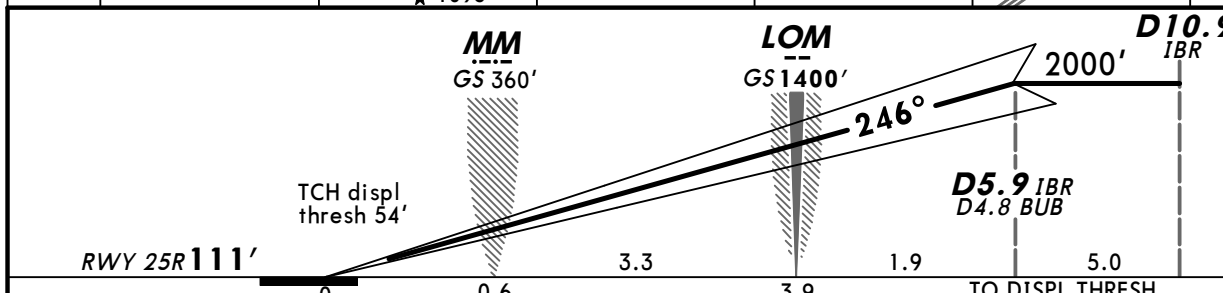
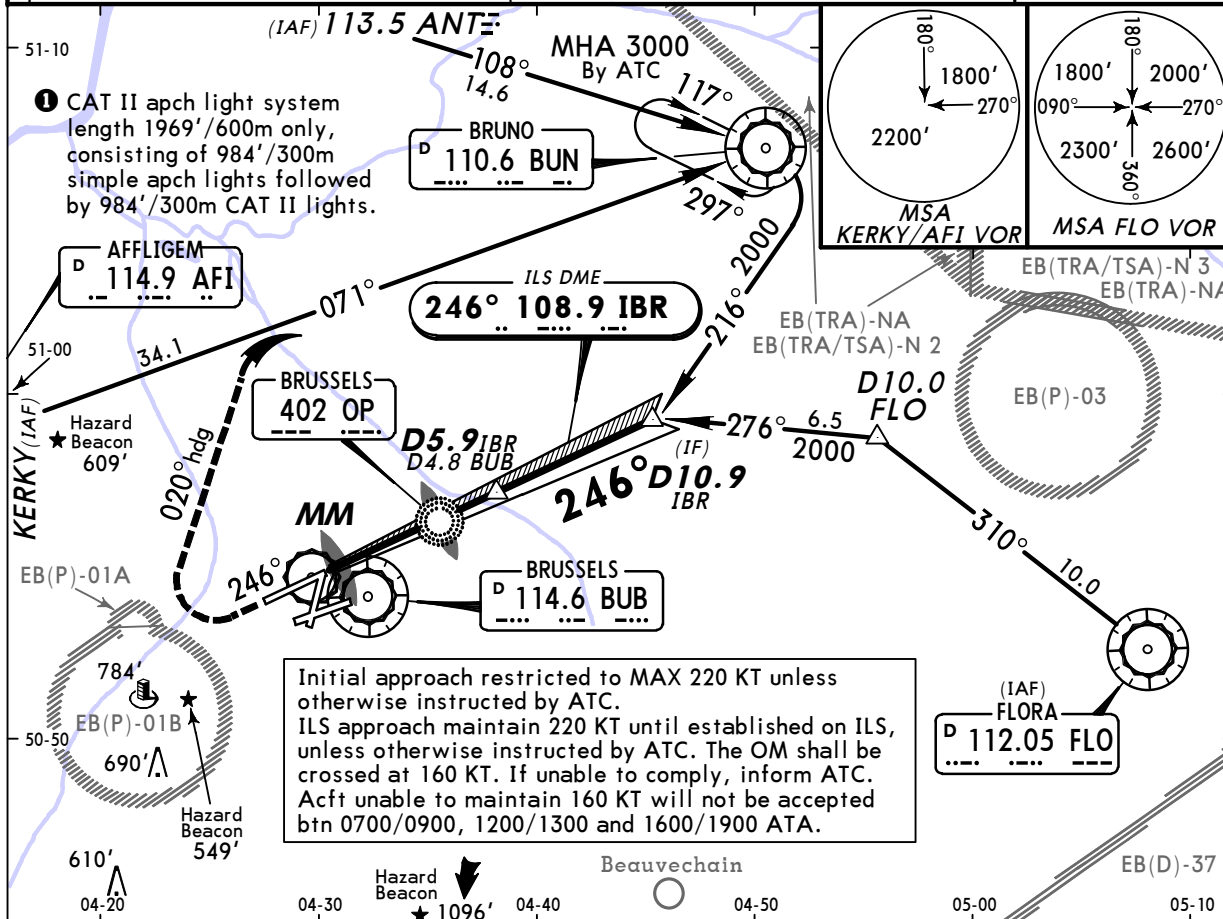
**BRUSSELS, BELGIUM**  
**CAT II ILS Rwy 25R**

BRIEFING STRIP

|                                                                                                                                                                                                                       |                   |                 |                                |                     |                                   |                  |                |        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-----------------|--------------------------------|---------------------|-----------------------------------|------------------|----------------|--------|
| D-ATIS Arrival                                                                                                                                                                                                        |                   |                 |                                |                     | BRUSSELS Arrival (R)              |                  | BRUSSELS Tower |        |
| 110.6                                                                                                                                                                                                                 | 112.05            | 114.6           | 114.9                          | 117.55              | 132.47                            | 118.25           | 118.6          | 120.77 |
| 118.05                                                                                                                                                                                                                |                   |                 |                                |                     | for apron 2 North and North of it |                  |                |        |
| Ground                                                                                                                                                                                                                |                   |                 |                                |                     | 121.87                            |                  |                |        |
| for apron 2 South and South of it                                                                                                                                                                                     |                   |                 |                                |                     |                                   |                  |                |        |
| LOC<br>IBR                                                                                                                                                                                                            | Final<br>Apch Crs | GS<br>LOM       | CAT II ILS<br>RA 103'<br>DA(H) |                     | Apt Elev 184'                     |                  |                |        |
| 108.9                                                                                                                                                                                                                 | 246°              | 1400' (1289')   | 211' (100')                    |                     | RWY 111'                          |                  |                |        |
| <b>MISSED APCH:</b> Climb to 2000'. When passing 700' turn RIGHT onto hdg 020°. Intercept and follow R-251 inbound BUN VOR and climb to 3000'. Report to ATC as soon as practicable. No RIGHT turn before OP Lctr/OM. |                   |                 |                                |                     |                                   |                  |                |        |
| Alt Set: hPa                                                                                                                                                                                                          |                   | Rwy Elev: 4 hPa |                                | Trans level: By ATC |                                   | Trans alt: 4500' |                |        |
| Special Aircrew & Aircraft Certification Required.                                                                                                                                                                    |                   |                 |                                |                     |                                   |                  |                |        |

180°  
1700'  
1600'  
090° 270°  
2200'

MSA  
ANT VOR



| Gnd speed-Kts | 70    | 90  | 100 | 120 | 140 | 160 | HIALS-II |      |
|---------------|-------|-----|-----|-----|-----|-----|----------|------|
| GS            | 3.00° | 377 | 484 | 538 | 646 | 753 | PAPI     | 700' |
|               |       |     |     |     |     |     |          |      |

|                 |  |                                    |  |
|-----------------|--|------------------------------------|--|
| <b>Standard</b> |  | <b>STRAIGHT-IN LANDING RWY 25R</b> |  |
|                 |  | <b>CAT II ILS</b>                  |  |
|                 |  | <b>ABCD</b>                        |  |
|                 |  | <b>RA 104'</b>                     |  |
|                 |  | <b>DA(H) 211' (100')</b>           |  |
|                 |  | <b>RVR 300m</b>                    |  |

PANS OPS 3



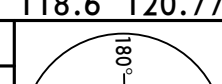
**EBBR/BRU**  
**BRUSSELS NATIONAL**

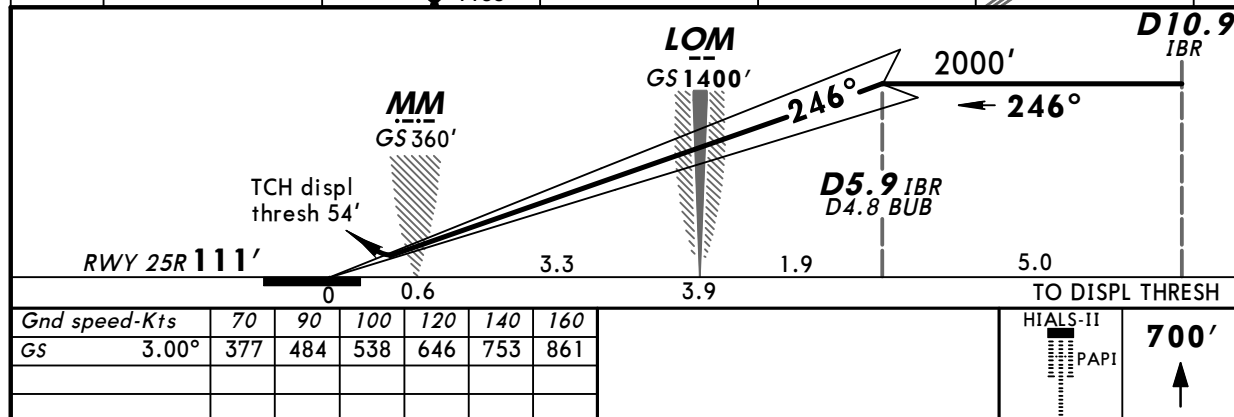
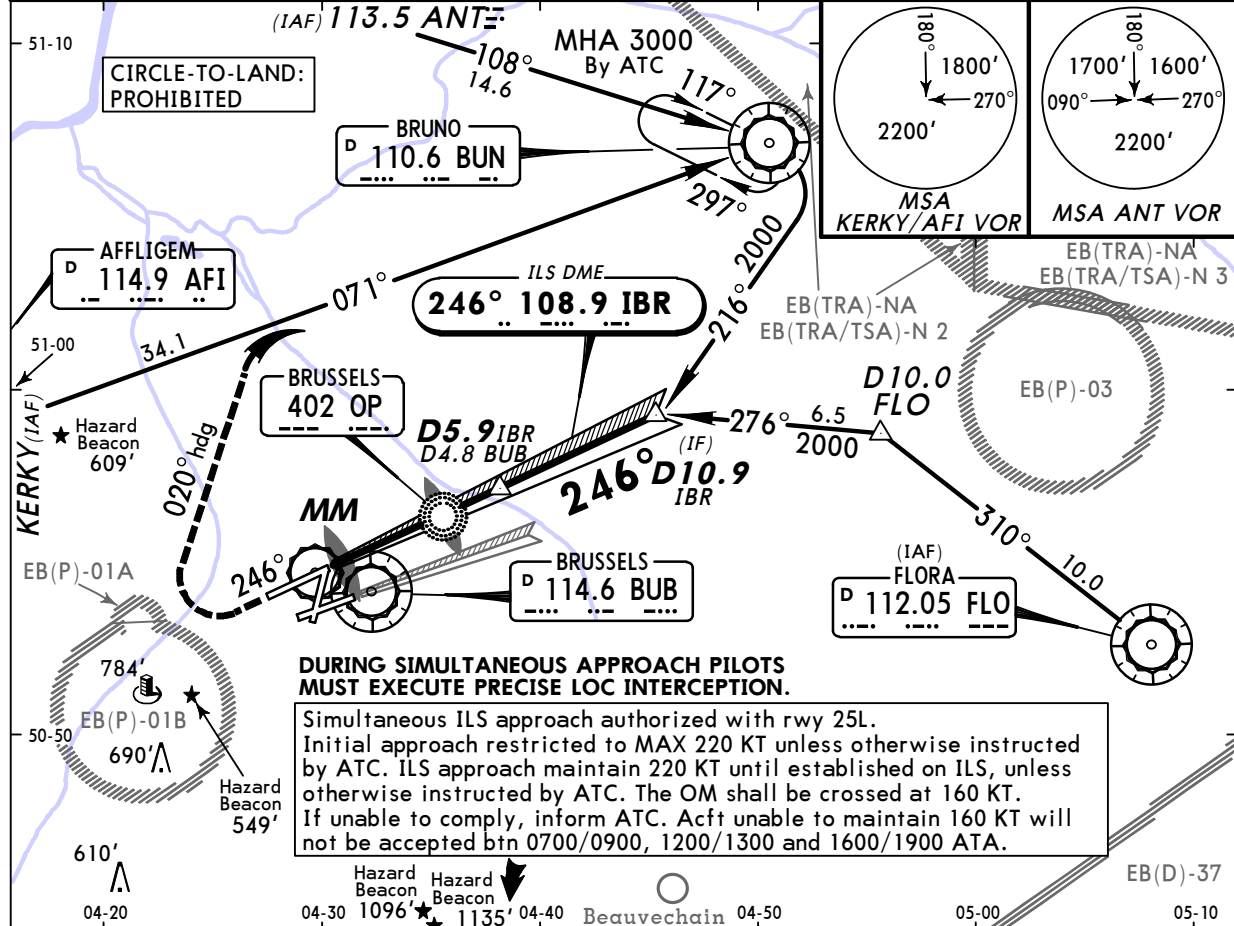
**JEPPESSEN**  
19 MAR 10 **(11-6)**

**SIMULTANEOUS  
DEPENDENT APCH**

**BRUSSELS, BELGIUM**  
**ILS Rwy 25R**

BRIEFING STRIP

|                                                                                                                                                                                                                 |  |                   |  |                     |                                   |                  |                                                 |               |                                                                                     |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------|--|---------------------|-----------------------------------|------------------|-------------------------------------------------|---------------|-------------------------------------------------------------------------------------|--|
| D-ATIS Arrival                                                                                                                                                                                                  |  |                   |  |                     | BRUSSELS Arrival (R)              |                  | BRUSSELS Tower                                  |               |                                                                                     |  |
| 110.6 112.05 114.6 114.9 117.55 132.47                                                                                                                                                                          |  |                   |  |                     | 118.25                            |                  | 118.6 120.77                                    |               |                                                                                     |  |
| 118.05                                                                                                                                                                                                          |  |                   |  |                     | for apron 2 North and North of it |                  | Ground 121.87 for apron 2 South and South of it |               |                                                                                     |  |
| LOC<br>IBR                                                                                                                                                                                                      |  | Final<br>Apch Crs |  | GS<br>LOM           |                                   | ILS<br>DA(H)     |                                                 | Apt Elev 184' |                                                                                     |  |
| 108.9                                                                                                                                                                                                           |  | 246°              |  | 1400' (1289')       |                                   | 311' (200')      |                                                 | RWY 111'      |                                                                                     |  |
| MISSED APCH: Climb to 2000'. When passing 700' turn RIGHT onto hdg 020°. Intercept and follow R-251 inbound BUN VOR and climb to 3000' . Report to ATC as soon as practicable. No RIGHT turn before OP Lctr/OM. |  |                   |  |                     |                                   |                  |                                                 |               |  |  |
| Alt Set: hPa                                                                                                                                                                                                    |  | Rwy Elev: 4 hPa   |  | Trans level: By ATC |                                   | Trans alt: 4500' |                                                 |               |                                                                                     |  |



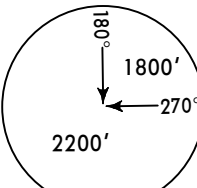
|          |              |                             |  |                  |  |
|----------|--------------|-----------------------------|--|------------------|--|
| Standard |              | STRAIGHT-IN LANDING RWY 25R |  | CEILING REQUIRED |  |
|          |              | ILS                         |  |                  |  |
|          |              | DA(H) 311' (200')           |  |                  |  |
|          |              | FULL/Limited                |  | ALS out          |  |
| A        | 600' - 2000m |                             |  |                  |  |
| B        |              |                             |  |                  |  |
| C        |              |                             |  |                  |  |
| D        |              |                             |  |                  |  |

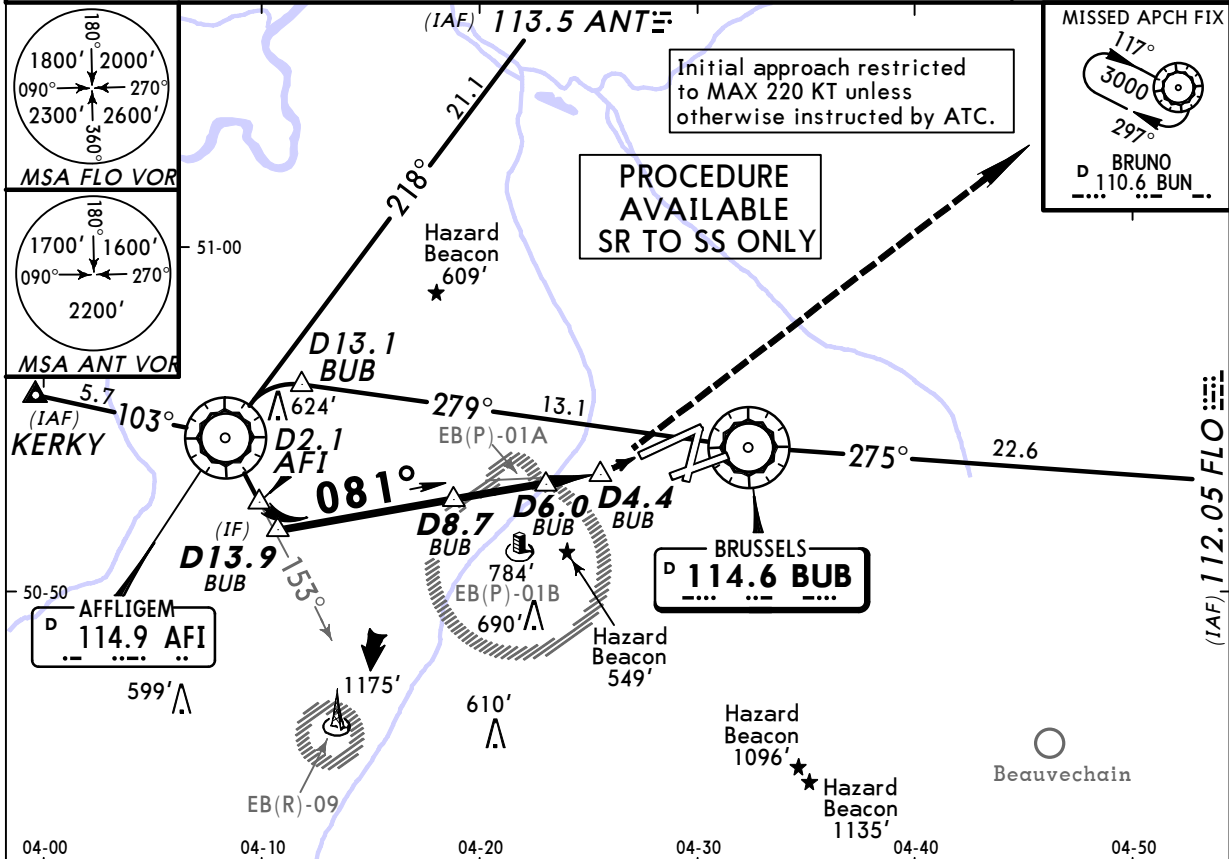
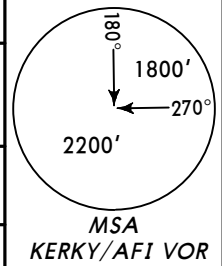
**EBBR/BRU**  
**BRUSSELS NATIONAL**

**JEPPesen**  
19 MAR 10 **(13-1)**

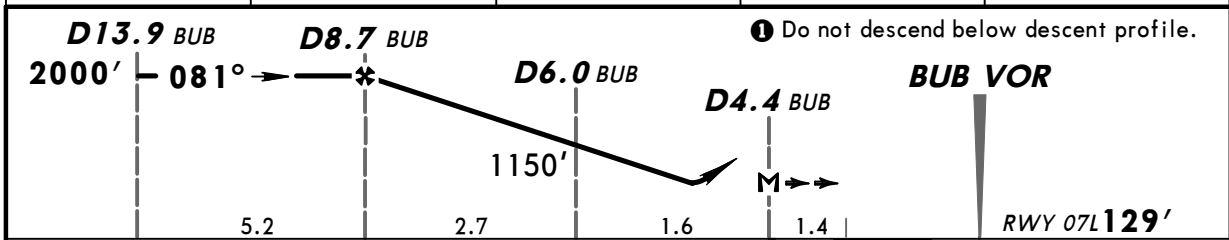
**BRUSSELS, BELGIUM**  
**VOR Rwy 07L**

BRIEFING STRIP

|                                                                      |                           |                                          |                                       |                                          |          |                      |  |                                                                                     |  |
|----------------------------------------------------------------------|---------------------------|------------------------------------------|---------------------------------------|------------------------------------------|----------|----------------------|--|-------------------------------------------------------------------------------------|--|
| D-ATIS Arrival                                                       |                           |                                          |                                       |                                          |          | BRUSSELS Arrival (R) |  | BRUSSELS Tower                                                                      |  |
| 110.6                                                                | 112.05                    | 114.6                                    | 114.9                                 | 117.55                                   | 132.47   | 118.25               |  | 118.6 120.77                                                                        |  |
| Ground                                                               |                           |                                          |                                       |                                          |          |                      |  |  |  |
| 118.05 for apron 2 North and North of it                             |                           |                                          |                                       | 121.87 for apron 2 South and South of it |          |                      |  |                                                                                     |  |
| VOR<br>BUB<br>114.6                                                  | Final<br>Apch Crs<br>081° | Minimum Alt<br>D8.7 BUB<br>2000' (1871') | DA(H)<br>(CONDITIONAL)<br>640' (511') | Apt Elev 184'                            | RWY 129' |                      |  |                                                                                     |  |
| MISSED APCH: Turn LEFT to BUN VOR. Climb to 3000'.<br>Report to ATC. |                           |                                          |                                       |                                          |          |                      |  |                                                                                     |  |
| Alt Set: hPa                                                         |                           | Rwy Elev: 5 hPa                          |                                       | Trans level: By ATC                      |          | Trans alt: 4500'     |  |                                                                                     |  |
| 1. DME REQUIRED. 2. CIRCLE-TO-LAND: PROHIBITED.                      |                           |                                          |                                       |                                          |          | MSA<br>KERKY/AFI VOR |  |                                                                                     |  |



|          |       |       |      |      |
|----------|-------|-------|------|------|
| BUB DME  | 8.0   | 7.0   | 5.0  | 4.4  |
| ALTITUDE | 1780' | 1470' | 830' | 640' |



|                 |       |     |     |     |     |     |  |  |
|-----------------|-------|-----|-----|-----|-----|-----|--|--|
| Gnd speed-Kts   | 70    | 90  | 100 | 120 | 140 | 160 |  |  |
| Descent Angle   | 3.00° | 372 | 478 | 531 | 637 | 849 |  |  |
| MAP at D4.4 BUB |       |     |     |     |     |     |  |  |

|                                           |  |                                          |  |
|-------------------------------------------|--|------------------------------------------|--|
| <b>Standard</b>                           |  | <b>STRAIGHT-IN LANDING RWY 07L</b>       |  |
| with D6.0 BUB<br>DA(H) <b>640'</b> (511') |  | w/o D6.0 BUB<br>DA(H) <b>880'</b> (751') |  |

|   |       |       |
|---|-------|-------|
| A |       |       |
| B | 2800m |       |
| C | 3300m | 3500m |
| D |       |       |

PANS OPS 3

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**JEPPESEN**  
19 MAR 10 (13-2)

BRUSSELS, BELGIUM  
VOR Rwy 07R

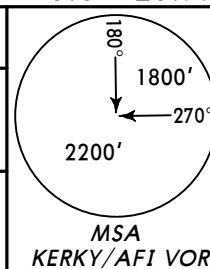
|                |        |       |       |        |        |                      |                |
|----------------|--------|-------|-------|--------|--------|----------------------|----------------|
| D-ATIS Arrival |        |       |       |        |        | BRUSSELS Arrival (R) | BRUSSELS Tower |
| 110.6          | 112.05 | 114.6 | 114.9 | 117.55 | 132.47 | 118.25               | 118.6 120.77   |

**BRIEFING STRIP™**

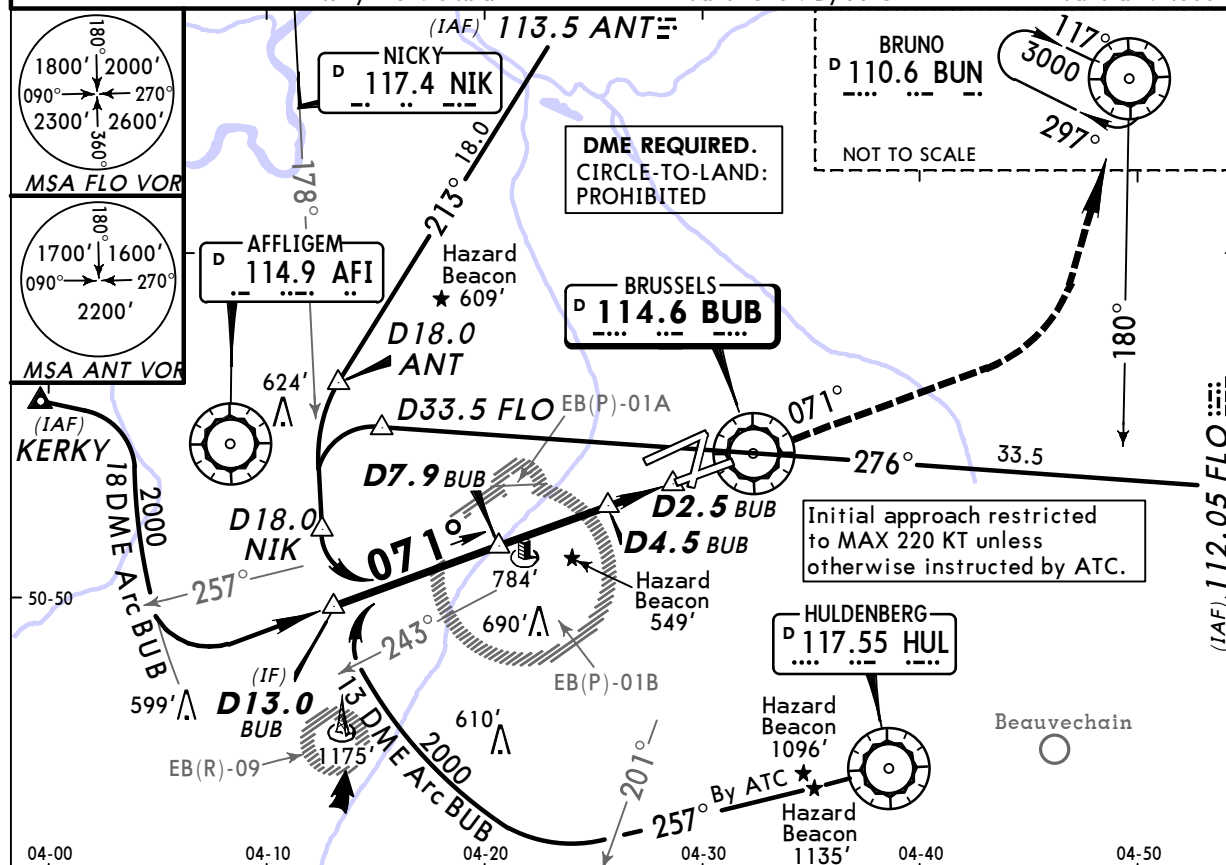
|        |                                   |        |        |                                   |
|--------|-----------------------------------|--------|--------|-----------------------------------|
| 118.05 | for apron 2 North and North of it | Ground | 121.87 | for apron 2 South and South of it |
|--------|-----------------------------------|--------|--------|-----------------------------------|

|                            |                                  |                                                        |                                               |                                             |
|----------------------------|----------------------------------|--------------------------------------------------------|-----------------------------------------------|---------------------------------------------|
| VOR<br>BUB<br><b>114.6</b> | Final<br>Apch Crs<br><b>071°</b> | Minimum Alt<br><b>D7.9 BUB</b><br><b>2000'</b> (1825') | MDA(H)<br>(CONDITIONAL)<br><b>560'</b> (385') | Apt Elev <b>184'</b><br><br>RWY <b>175'</b> |
|----------------------------|----------------------------------|--------------------------------------------------------|-----------------------------------------------|---------------------------------------------|

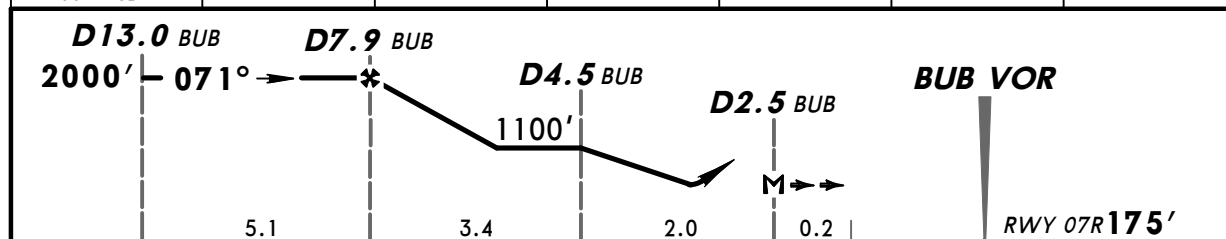
**MISSED APCH: Climb on 071° to 2000', then climbing turn LEFT to 3000' inbound BUN VOR. (MAX 185 KT. Do not cross R-180 BUN VOR.) Report to ATC.**



|              |                 |                     |                  |
|--------------|-----------------|---------------------|------------------|
| Alt Set: hPa | Rwy Elev: 6 hPa | Trans level: By ATC | Trans alt: 4500' |
|--------------|-----------------|---------------------|------------------|



|          |       |       |       |      |      |      |
|----------|-------|-------|-------|------|------|------|
| BUB DME  | 7.0   | 6.0   | 5.0   | 4.0  | 3.0  | 2.5  |
| ALTITUDE | 1680' | 1360' | 1100' | 940' | 620' | 560' |



|                            |     |     |     |     |     |     |        |                                                               |
|----------------------------|-----|-----|-----|-----|-----|-----|--------|---------------------------------------------------------------|
| <i>Gnd speed-Kts</i>       | 70  | 90  | 100 | 120 | 140 | 160 | PAPI-L | <div> <div>2000'</div> <div>↑</div> <div>on 071°</div> </div> |
| <i>Descent Angle 3.00°</i> | 372 | 478 | 531 | 637 | 743 | 849 |        |                                                               |
| <i>MAP at D2.5 BUB</i>     |     |     |     |     |     |     |        |                                                               |
|                            |     |     |     |     |     |     |        |                                                               |

|          |                             |
|----------|-----------------------------|
| Standard | STRAIGHT-IN LANDING RWY 07R |
|----------|-----------------------------|

| with D4.5 BUB<br><i>MDA(H)</i> <b>560'</b> (385') |       | w/o D4.5 BUB<br><i>MDA(H)</i> <b>1100'</b> (925') |
|---------------------------------------------------|-------|---------------------------------------------------|
| A                                                 | 2000m | 4500m                                             |
| B                                                 |       |                                                   |
| C                                                 | 2200m | 4700m                                             |
| D                                                 |       |                                                   |

### PANS OPS 3

**EBBR/BRU**  
**BRUSSELS NATIONAL**

**JEPPESEN**  
19 MAR 10 (13-3)

BRUSSELS, BELGIUM  
VOR Rwy 25L

|                |        |       |       |        |        |                      |                |
|----------------|--------|-------|-------|--------|--------|----------------------|----------------|
| D-ATIS Arrival |        |       |       |        |        | BRUSSELS Arrival (R) | BRUSSELS Tower |
| 110.6          | 112.05 | 114.6 | 114.9 | 117.55 | 132.47 | 118.25               | 118.6 120.77   |

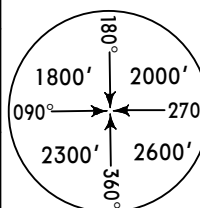
**BRIEFING STRIP™**

|                                          |                           |                                                       |                      |                           |
|------------------------------------------|---------------------------|-------------------------------------------------------|----------------------|---------------------------|
| Ground                                   |                           |                                                       |                      |                           |
| 118.05 for apron 2 North and North of it |                           | 121.87 for apron 2 South and South of it              |                      |                           |
| VOR<br>BUB<br>114.6                      | Final<br>Apch Crs<br>251° | Procedure Alt<br>(CONDITIONAL)<br>Refer to<br>Profile | DA(H)<br>560' (401') | Apt Elev 184'<br>RWY 159' |

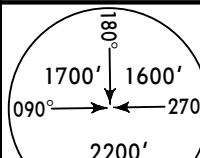
**MISSED APCH:** Climb to 2500'. When passing 700' turn LEFT onto hdg 120°. Intercept and follow R-266 inbound FLO VOR and climb to 4500'. Report to ATC as soon as practicable.

No LEFT turn before BUB VOR.

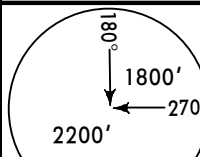
|              |                 |                     |                  |
|--------------|-----------------|---------------------|------------------|
| Alt Set: hPa | Rwy Elev: 6 hPa | Trans level: By ATC | Trans alt: 4500' |
|--------------|-----------------|---------------------|------------------|



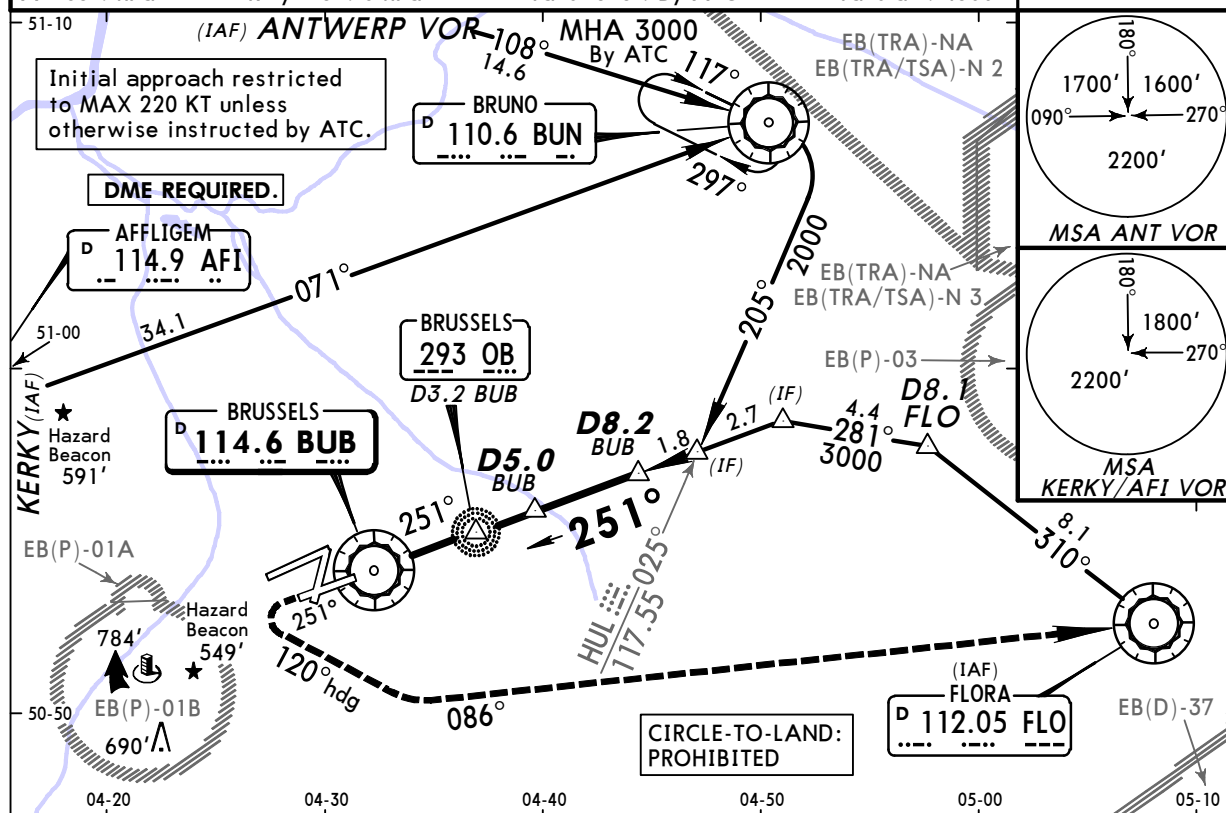
MSA  
FLO VOR



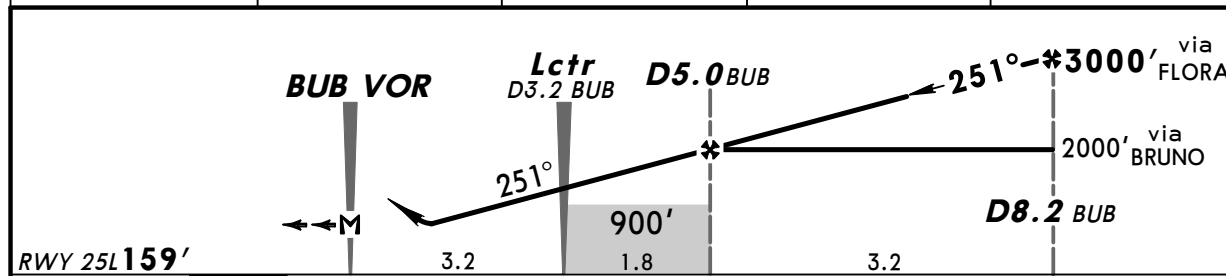
MSA ANT VOR



MSA  
KERKY/AFI VOM



|          |      |       |       |       |
|----------|------|-------|-------|-------|
| BUB DME  | 1.0  | 2.0   | 3.0   | 4.0   |
| ALTITUDE | 720' | 1040' | 1350' | 1670' |



|                     |     |     |     |     |     |     |          |  |                                                                                               |                                                                                               |
|---------------------|-----|-----|-----|-----|-----|-----|----------|--|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| 0 0.6               |     |     |     |     |     |     | HIALS-II |  | <br>PAPI | <br>700' |
| Gnd speed-Kts       | 70  | 90  | 100 | 120 | 140 | 160 |          |  |                                                                                               |                                                                                               |
| Descent Angle 3.00° | 372 | 478 | 531 | 637 | 743 | 849 |          |  |                                                                                               |                                                                                               |
| MAP at BUB VOR      |     |     |     |     |     |     |          |  |                                                                                               |                                                                                               |

**Standard**

STRAIGHT-IN LANDING RWY 25L

 $DA(H) \quad 560' (401')$ 

---

ALS out

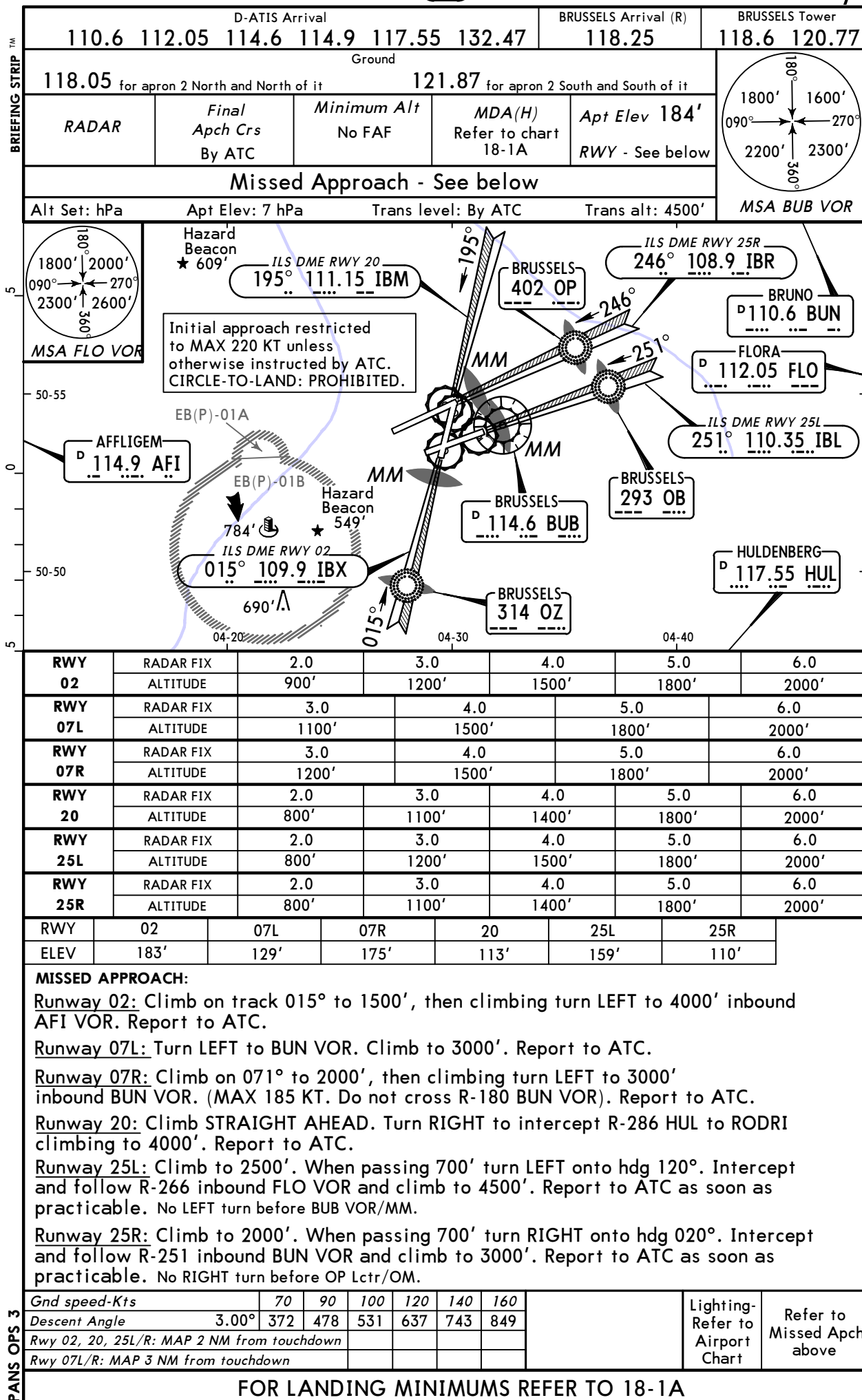
|   |       |       |
|---|-------|-------|
| A | 1200m | 1500m |
| B |       | 1900m |
| C |       |       |
| D | 1400m |       |

## PANS OPS 3

**CHANGES:** ATIS, Minimums.

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19 MAR 10 (18-1)BRUSSELS, BELGIUM  
SRA All Rws

EBBR/BRU

 **JEPPESEN**  
19 MAR 10 **(18-1A)**

**BRUSSELS, BELGIUM**  
**BRUSSELS NATIONAL**

**LANDING MINIMUMS**

**Standard**

**STRAIGHT-IN LANDING**

| SRA 02                    |       | SRA 07L                    |  |
|---------------------------|-------|----------------------------|--|
| MDA(H) <b>880'</b> (697') |       | MDA(H) <b>1030'</b> (901') |  |
| ALS out                   |       |                            |  |
| A                         | 3600m | 5500m                      |  |
| B                         |       |                            |  |
| C                         |       |                            |  |
| D                         |       |                            |  |

**Standard**

**STRAIGHT-IN LANDING**

| SRA 07R                    |       | SRA 20                    |  |
|----------------------------|-------|---------------------------|--|
| MDA(H) <b>1030'</b> (855') |       | MDA(H) <b>800'</b> (687') |  |
|                            |       | ALS out                   |  |
| A                          | 5500m | 3600m                     |  |
| B                          |       |                           |  |
| C                          |       |                           |  |
| D                          |       |                           |  |

**Standard**

**STRAIGHT-IN LANDING**

| SRA 25L                   |       | SRA 25R                   |  |
|---------------------------|-------|---------------------------|--|
| MDA(H) <b>800'</b> (641') |       | MDA(H) <b>800'</b> (690') |  |
| ALS out                   |       | ALS out                   |  |
| A                         | 3600m | 3600m                     |  |
| B                         |       |                           |  |
| C                         |       |                           |  |
| D                         |       |                           |  |

PANS OPS 3

CHANGES: Minimums.

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