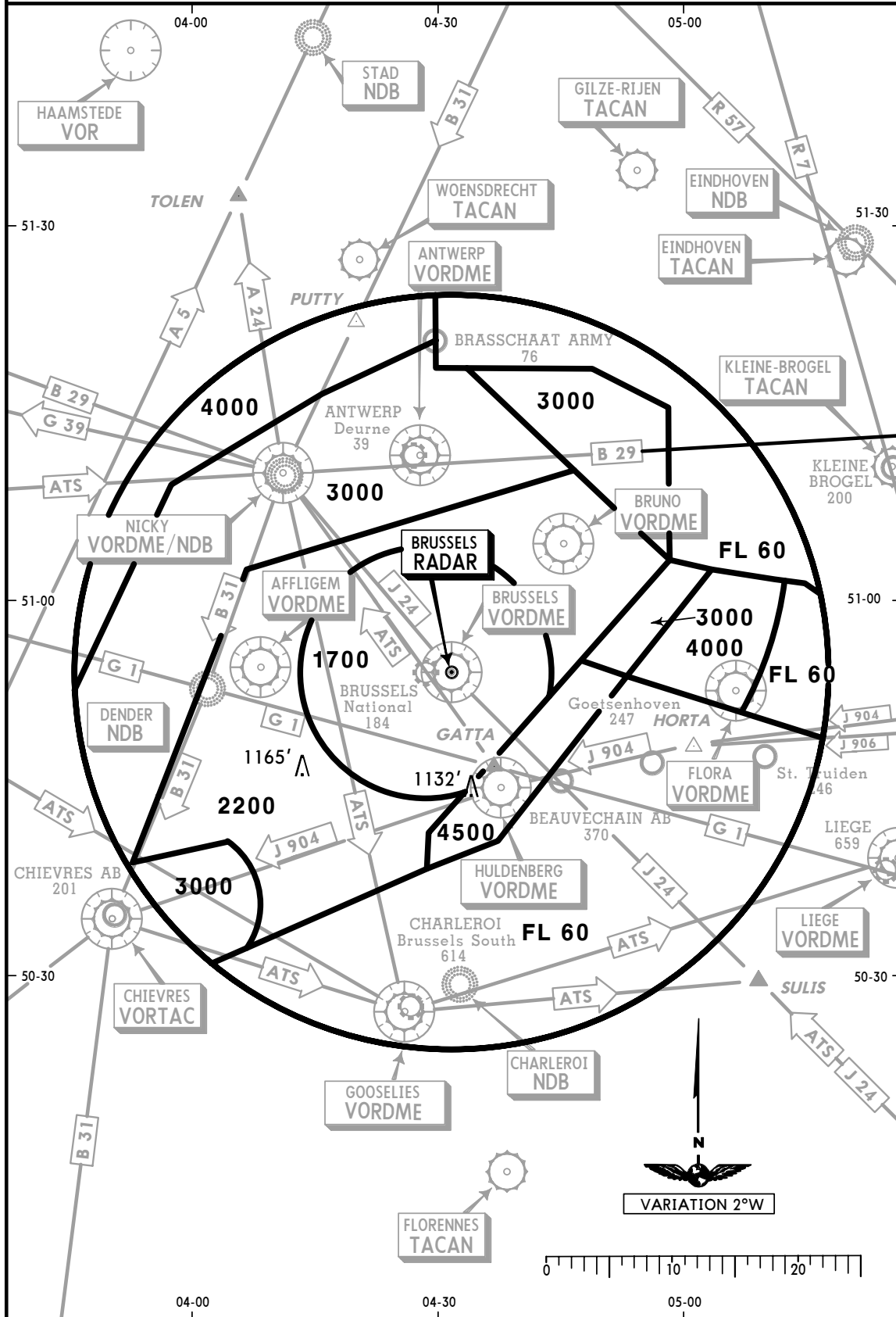


### RADAR VECTORING AREA

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 2200-0500.



**EBBR/BRU**  
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**BRUSSELS, BELGIUM**

24 DEC 04 **10-2**

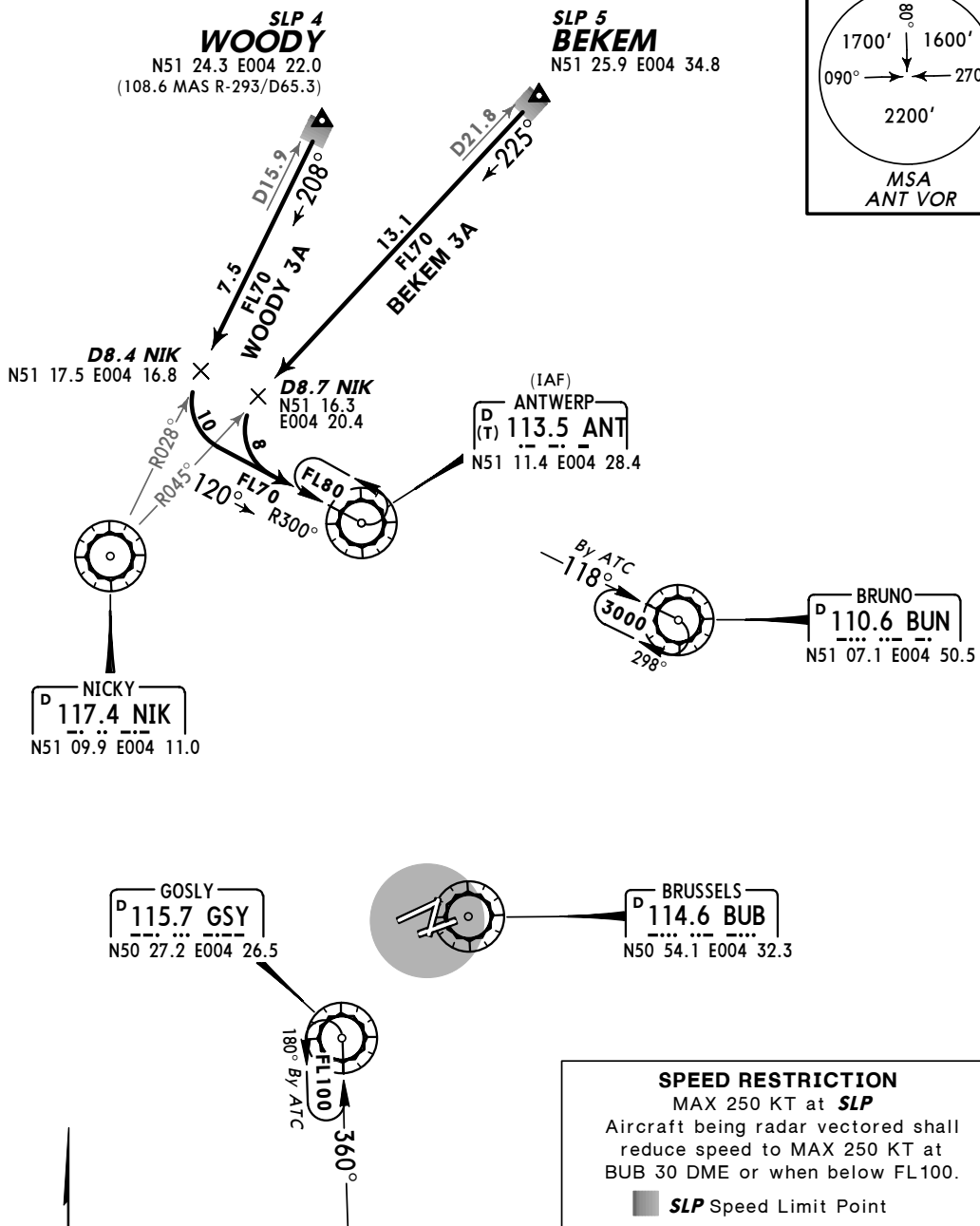
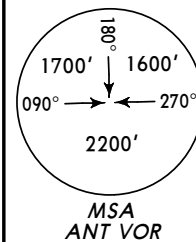
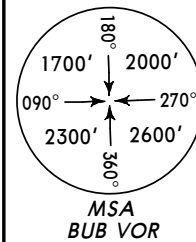
**STAR**

ATIS  
110.6 112.05 114.6  
114.9 117.55 121.75 132.47

Apt Elev  
184'

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

**BEKEM THREE ALFA (BEKEM 3A) [BEKE3A]  
WOODY THREE ALFA (WOODY 3A) [WODY3A]  
ARRIVALS  
FROM NORTH**



**SPEED RESTRICTION**  
MAX 250 KT at **SLP**  
Aircraft being radar vectored shall reduce speed to MAX 250 KT at BUB 30 DME or when below FL100.  
■ **SLP** Speed Limit Point

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.



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**BRUSSELS NATIONAL**

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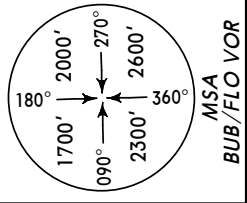
**BRUSSELS, BELGIUM**

24 DEC 04

**10-2A**

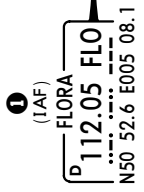
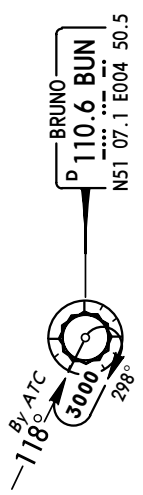
**STAR**

ATIS				Apt Elev	Alt Set: hPa
110.6	112.05	114.6		184'	Trans level: By ATC
114.9	117.55	121.75	132.47		Trans alt: 4500'

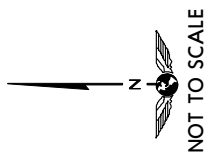
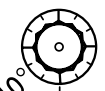
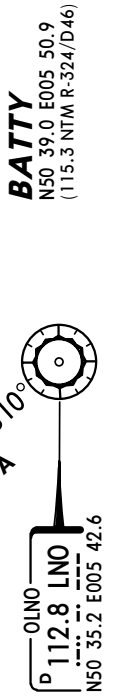
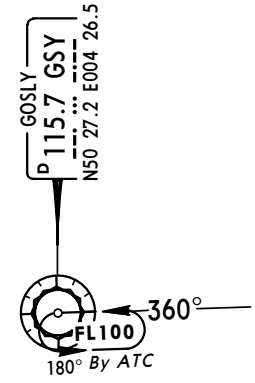
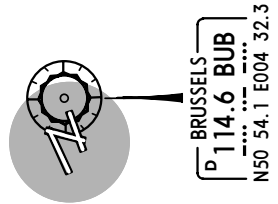


**BATTY ONE ALFA**  
**(BATTY 1A) [BATY1A]**  
**OLNO ONE ALFA (LNO 1A)**  
**ARRIVALS**  
**FROM SOUTHEAST**

**SPEED RESTRICTION**  
MAX 250 KT at **SLP**  
Aircraft being radar vectored shall reduce speed to MAX 250 KT at BUB 30 DME or when below FL100.  
■ **SLP** Speed Limit Point



**ATC REQUIREMENT**  
Aircraft shall cross FLO at or below **FL80**.



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.

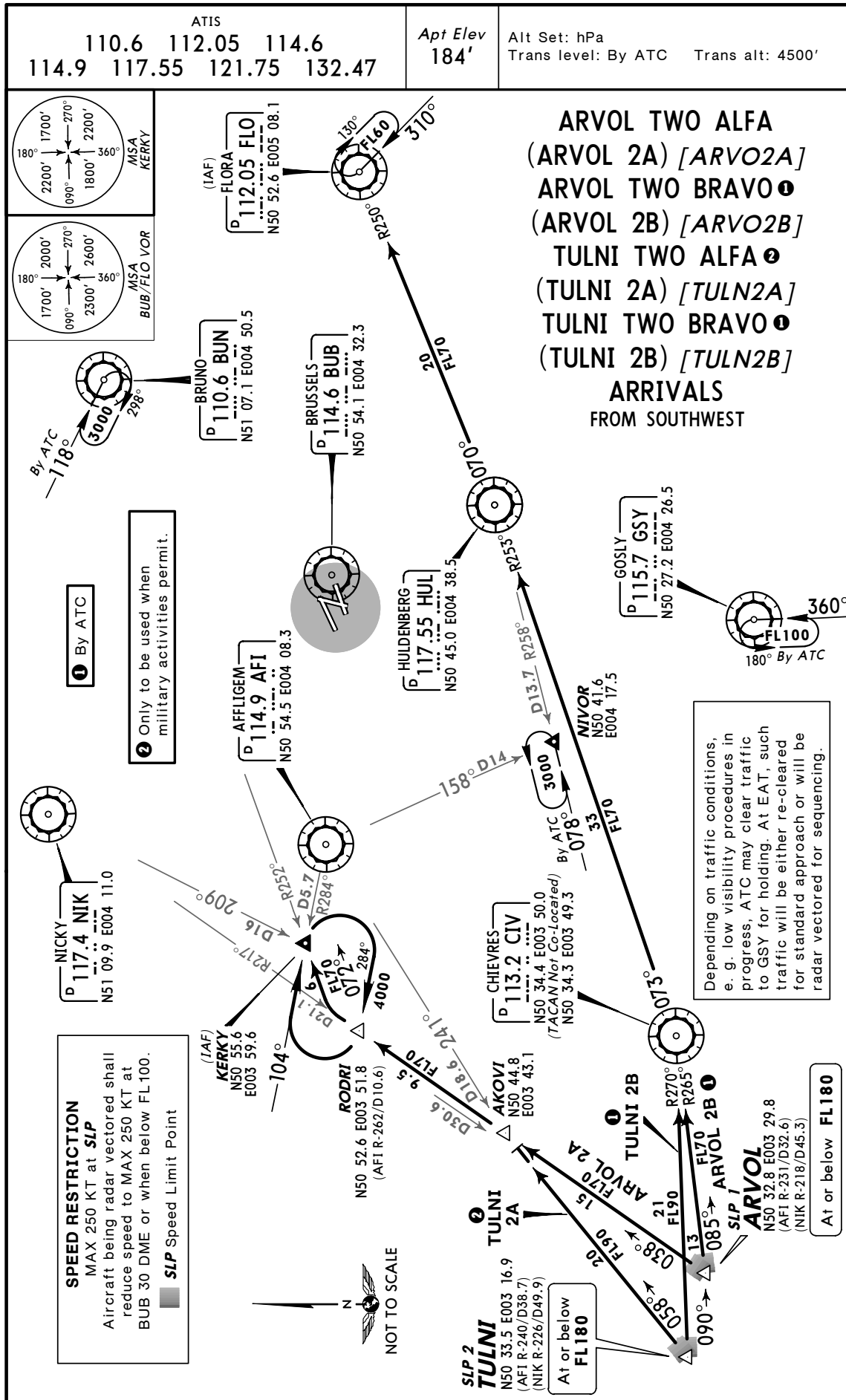
**EBBR/BRU**  
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**BRUSSELS, BELGIUM**

24 DEC 04 **10-2B**

**STAR**



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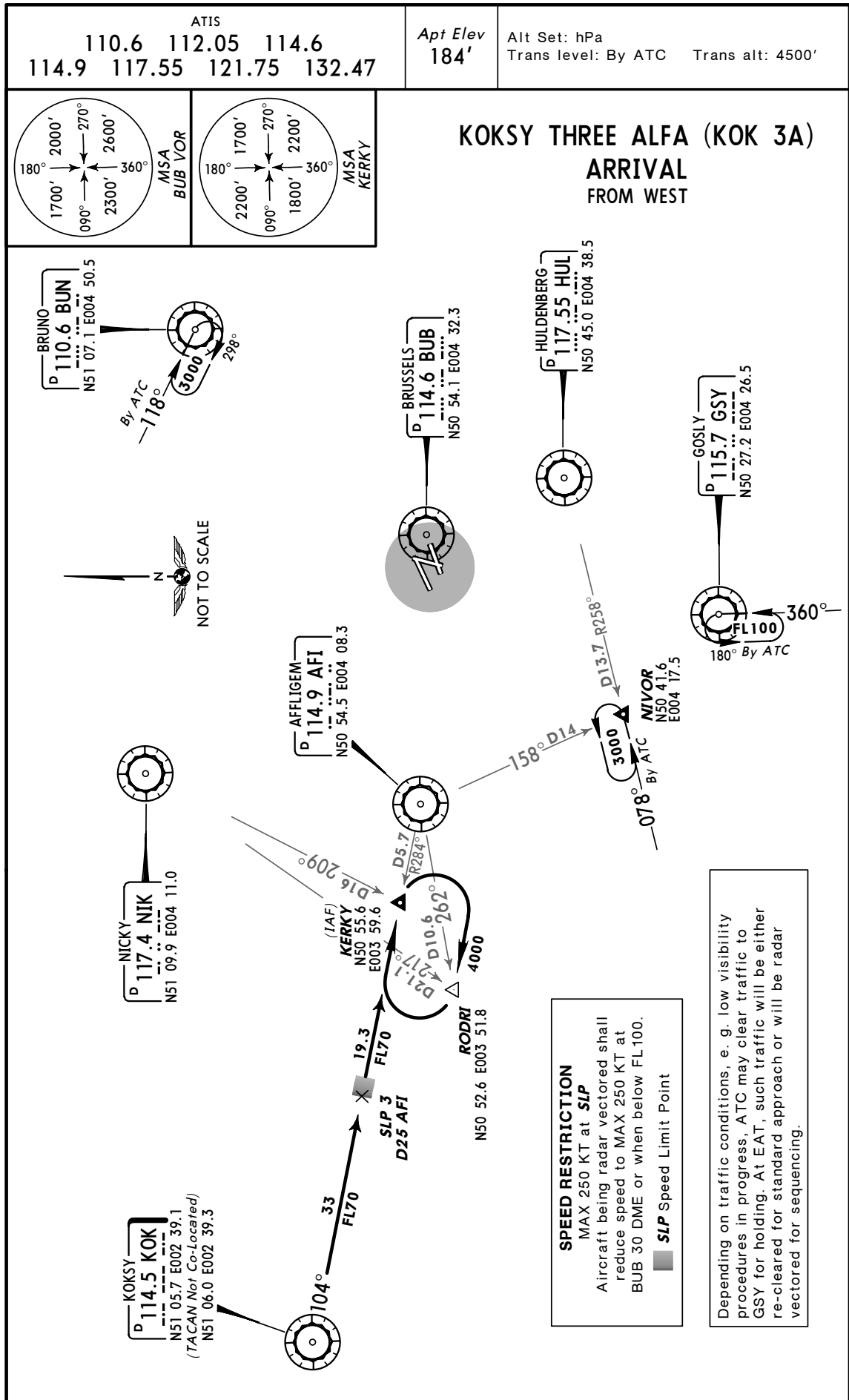
**JEPPESEN**

**BRUSSELS, BELGIUM**

24 DEC 04

10-2C

**STAR**



CHANGES: MSA revised; ATIS frequency commissioned.

**EBBR/BRU**  
BRUSSELS NATIONAL

**JEPPESEN**

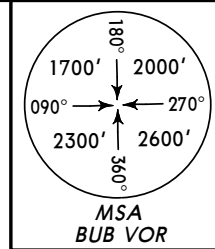
**BRUSSELS, BELGIUM**

24 DEC 04 **10-3**

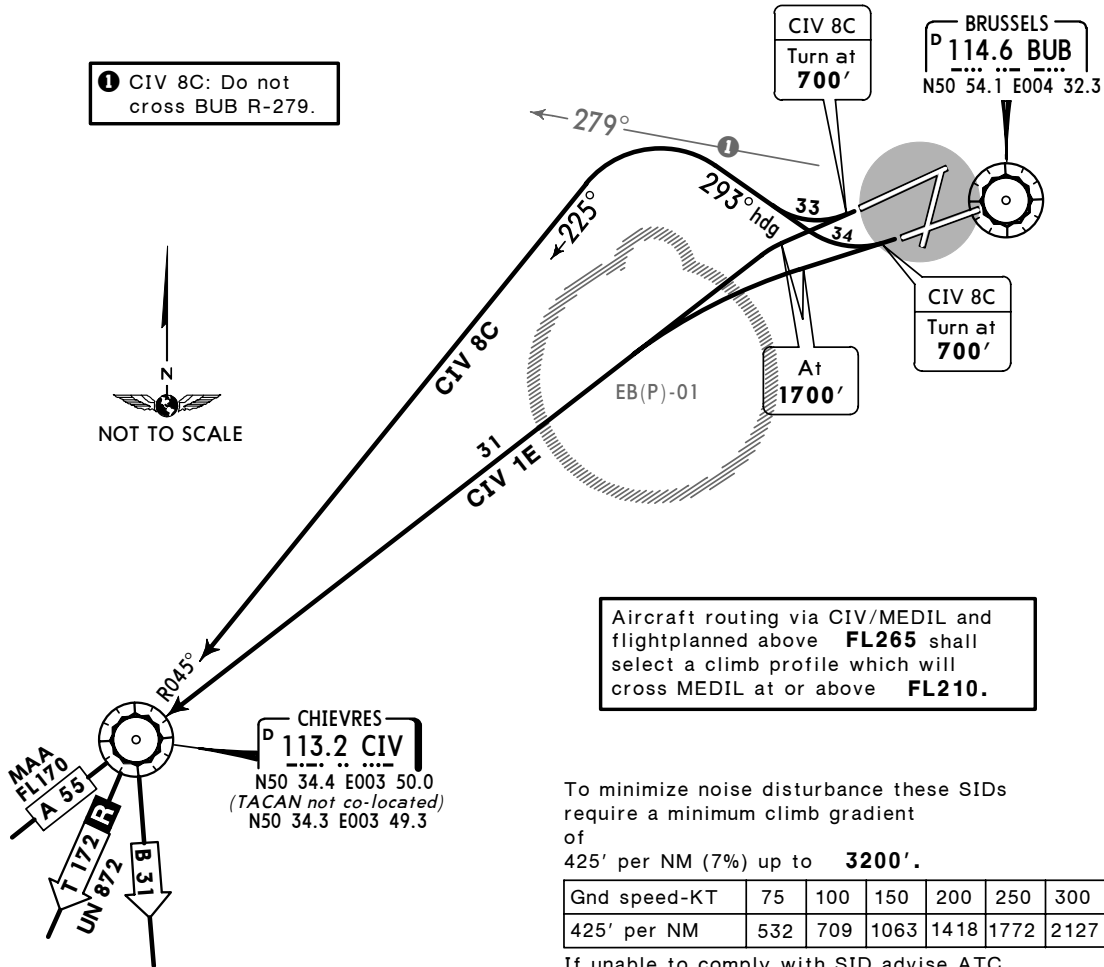
**SID**

BRUSSELS Tower <b>118.6</b> <b>120.77</b>	Apt Elev <b>184'</b>	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.
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**CHIEVRES**  
**RWYS 25L/R DEPARTURES**  
SOUTHBOUND VIA AIRWAY A 55  
SOUTHBOUND VIA AIRWAYS T 172, UN 872 (ONLY FOR TRAFFIC  
FLIGHTPLANNED ABOVE FL195)  
COMPULSORY FOR DESTINATIONS WITHIN  
PARIS TMA VIA AIRWAY B 31 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<sub>ZF</sub>),  
WHICHEVER IS HIGHER, BELOW FL100 OR AS BY ATC**



① CIV 8C: Do not cross BUB R-279.



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 8C</b> ②	Climb to <b>700'</b> , turn RIGHT, 293° heading, intercept CIV R-045 inbound to CIV.
<b>CIV 1E</b> ③	Climb straight ahead, at <b>1700'</b> turn LEFT to CIV.

- ② Not available during weekends between 0600-2259LT.
- ③ Only available during weekends between 0600-2259LT.

**EBBR/BRU**  
BRUSSELS NATIONAL

**JEPPesen**

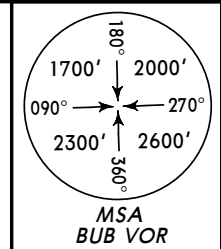
**BRUSSELS, BELGIUM**

24 DEC 04 **(10-3A)**

**SID**

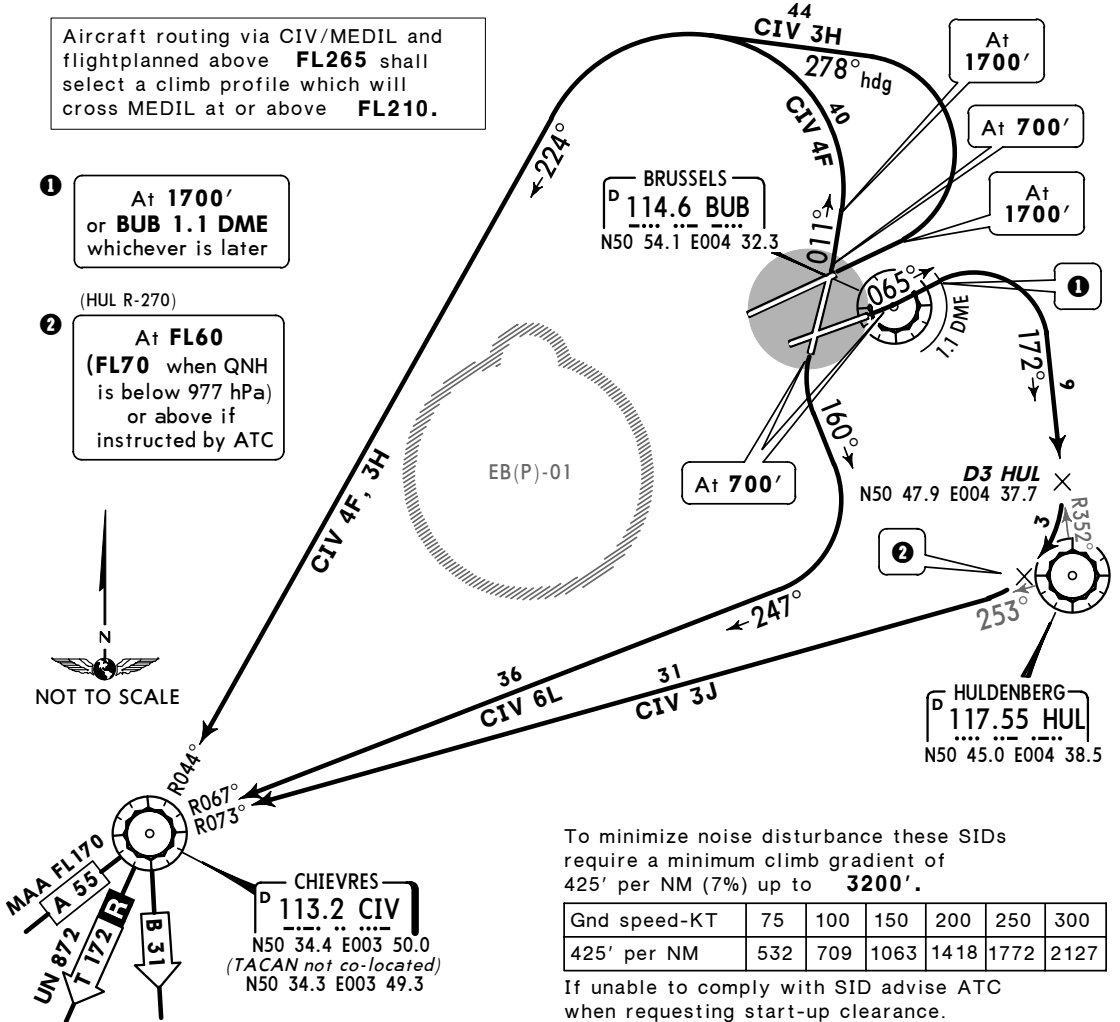
BRUSSELS Tower <b>118.6</b> <b>120.77</b>	Apt Elev <b>184'</b>	Trans level: By ATC Trans alt: 4500' 1. After take-off remain on Tower frequency. 2. SIDs are also noise abatement procedures (refer to 10-4E). Strict adherence within the limits of aircraft performance is mandatory, except when being radar vectored.
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**CHIEVRES**  
**RWYS 02, 07L/R, 20 DEPARTURES**  
SOUTHBOUND VIA AIRWAY A 55  
SOUTHBOUND VIA AIRWAYS T 172, UN 872 (ONLY FOR TRAFFIC FLIGHTPLANNED ABOVE FL195)  
COMPULSORY FOR DESTINATIONS WITHIN PARIS TMA VIA AIRWAY B 31 SOUTHBOUND  
FOR NIGHTTIME SIDS RWYS 25R/L REFER TO CHART 10-3B  
**~~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**.

- 1 At **1700'** or **BUB 1.1 DME** whichever is later
- (HUL R-270)
- 2 At **FL60** (**FL70** when QNH is below 977 hPa) or above if instructed 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>CIV 4F</b>	<b>02</b>	Climb to <b>700'</b> , <b>011°</b> track, at <b>1700'</b> turn LEFT, intercept CIV R-044 inbound to CIV.
<b>CIV 3H</b>	<b>07L</b>	Climb straight ahead, at <b>1700'</b> turn LEFT, <b>278°</b> heading, intercept CIV R-044 inbound to CIV.
<b>CIV 3J</b>	<b>07R</b>	Climb to <b>700'</b> , <b>065°</b> track, at <b>1700'</b> or <b>BUB 1.1 DME</b> , whichever is later, turn RIGHT, intercept HUL R-352 inbound, at D3 HUL turn RIGHT, intercept CIV R-073 inbound to CIV.
<b>CIV 6L</b>	<b>20</b>	Climb to <b>700'</b> , <b>160°</b> track, turn RIGHT, intercept CIV R-067 inbound to CIV.

CHANGES: MSA revised.

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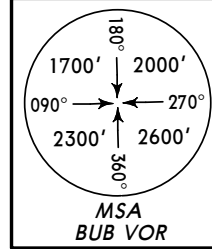
**BRUSSELS, BELGIUM**

24 DEC 04 (10-3B)

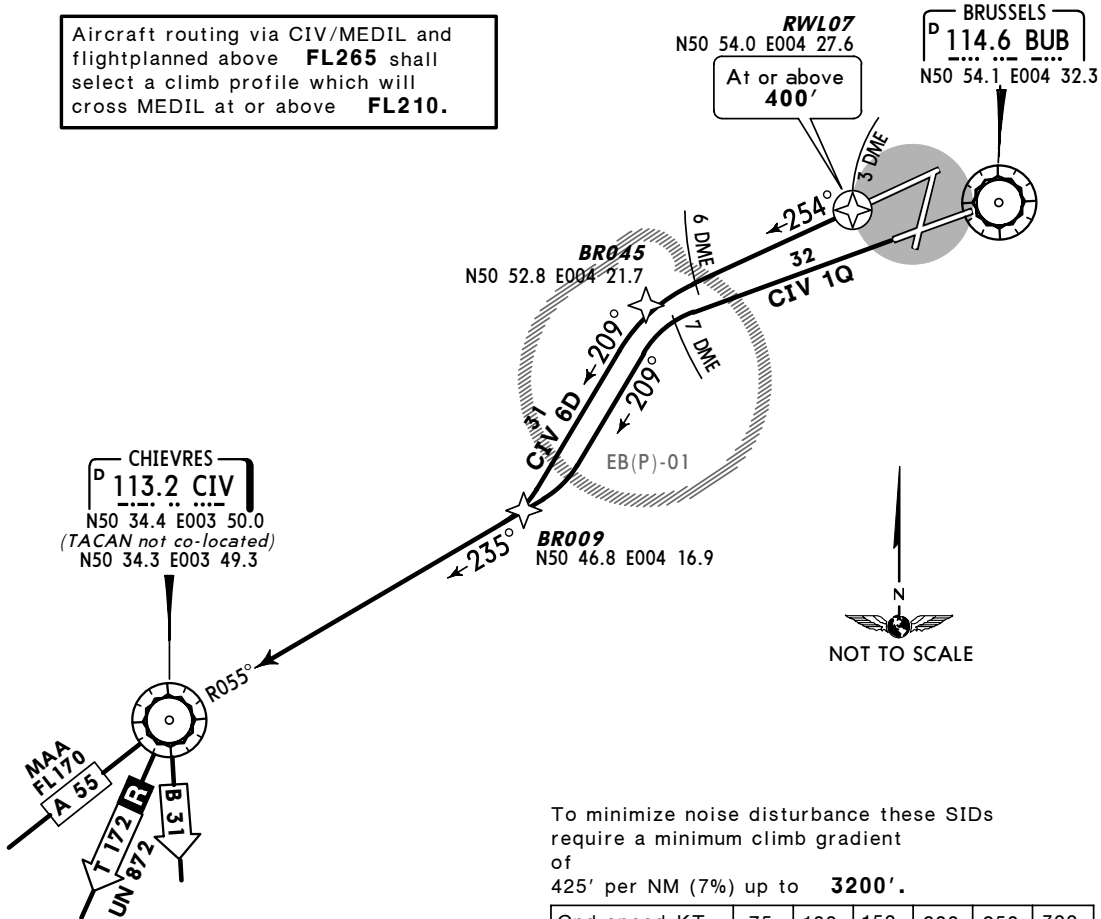
**SID**

BRUSSELS Tower <b>118.6</b> <b>120.77</b>	Apt Elev <b>184'</b>	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.
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**CHIEVRES**  
**RWYS 25R/L DEPARTURES**  
AVAILABLE BETWEEN 2300-0559LT  
SOUTHBOUND VIA AIRWAY A 55  
SOUTHBOUND VIA AIRWAYS T 172, UN 872 (ONLY FOR TRAFFIC  
FLIGHTPLANNED ABOVE FL195)  
COMPULSORY FOR DESTINATIONS WITHIN  
PARIS TMA VIA AIRWAY B 31 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**.



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 6D</b>	<b>25R</b>	At BUB 3 DME (THR 07L) on 254° track, at BUB 6 DME turn LEFT, 209° track, intercept CIV R-055 inbound to CIV. <b>RNAV: RWL07 (400'+) - BR045 - BR009 - CIV.</b>
<b>CIV 1Q</b>	<b>25L</b>	Straight ahead, at BUB 7 DME turn LEFT, 209° track, intercept CIV R-055 inbound to CIV.



**EBBR/BRU**  
BRUSSELS NATIONAL

**JEPPESEN**

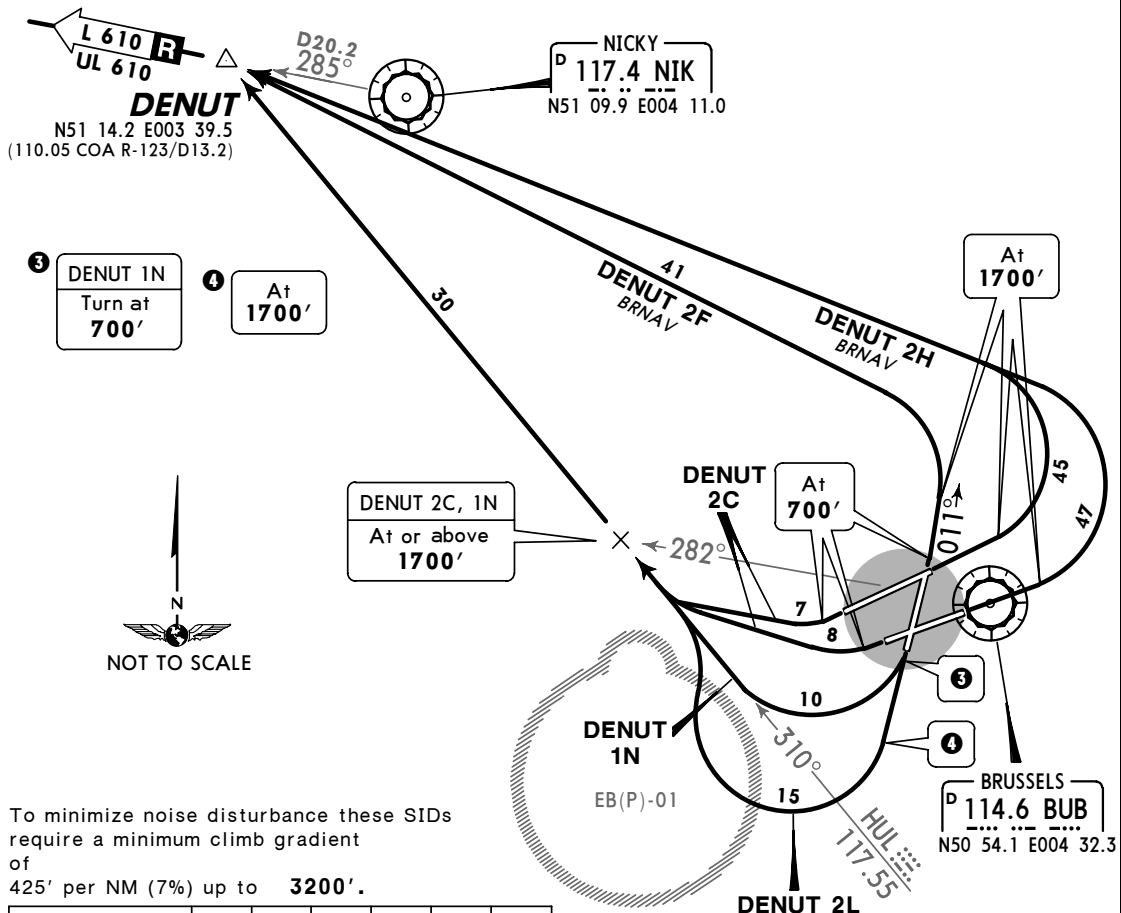
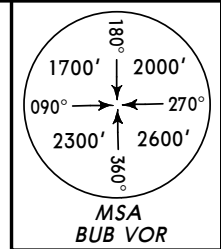
**BRUSSELS, BELGIUM**

24 DEC 04 **(10-3C)**

**SID**

BRUSSELS Tower <b>118.6</b> <b>120.77</b>	Apt Elev <b>184'</b>	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.
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**DENUT**  
**RWYS 25L/R, 02, 07L/R, 20 DEPARTURES**  
 VIA AIRWAYS (U)L 610 WESTBOUND  
 FOR TRAFFIC DESTINATIONS EGKK, EGGH & EGGI  
 FOR TRAFFIC OVERFLYING LONDON TMA  
 WITH REQUESTED FL ABOVE FL245  
**~~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 2C</b> [DENU2C]	<b>25L/R</b>	Climb to <b>700'</b> , turn <b>RIGHT</b> , intercept HUL R-310 to DENUT.
<b>DENUT 2F</b> [DENU2F] BRNAV above MSA	<b>02</b>	Climb to <b>700'</b> , <b>011°</b> track, at <b>1700'</b> turn <b>LEFT</b> to DENUT.
<b>DENUT 2H</b> [DENU2H] BRNAV above MSA	<b>07L/R</b>	Climb straight ahead, at <b>1700'</b> turn <b>LEFT</b> to DENUT.
<b>DENUT 2L</b> [DENU2L] ①	<b>20</b>	Climb straight ahead, at <b>1700'</b> turn <b>RIGHT</b> , intercept HUL R-310 to DENUT.
<b>DENUT 1N</b> [DENU1N] ②		Climb to <b>700'</b> , turn <b>RIGHT</b> , intercept HUL R-310 to DENUT.

- ① Available between 0600-2259LT.
- ② Available between 2300-0559LT or when runway 25R is not available for landing.

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**BRUSSELS, BELGIUM**

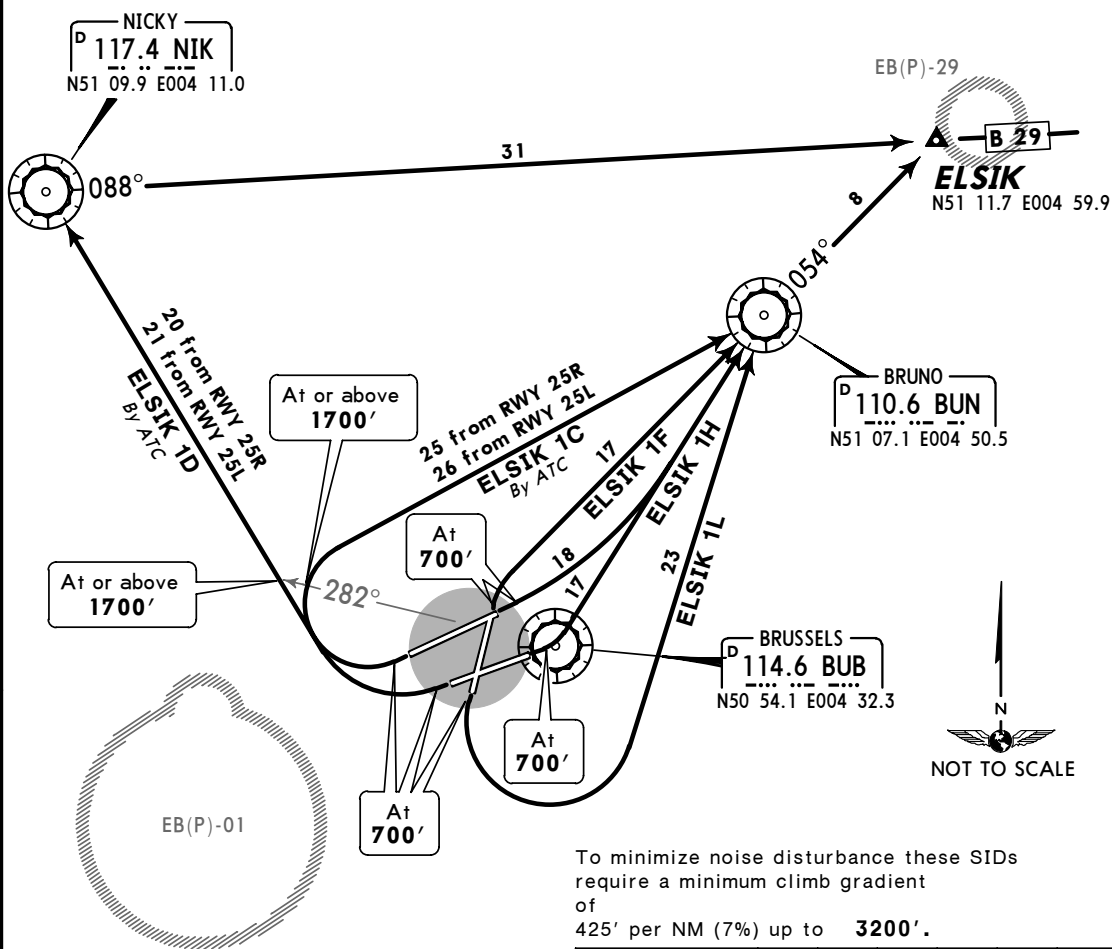
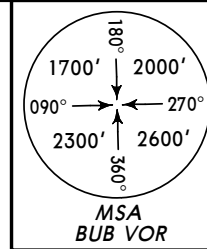
24 DEC 04 (10-3D)

**SID**

BRUSSELS Tower <b>118.6</b> <b>120.77</b>	Apt Elev <b>184'</b>	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.
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**ELSIK**  
RWYS 25L/R, 02, 07L/R, 20 DEPARTURES  
B 29 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**



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 1C</b> [ELSI1C] BY ATC ①	<b>25L/R</b>	Climb to <b>700'</b> , turn RIGHT to BUN, then to ELSIK.
<b>ELSIK 1D</b> [ELSI1D] 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 1D.

**EBBR/BRU**  
BRUSSELS NATIONAL

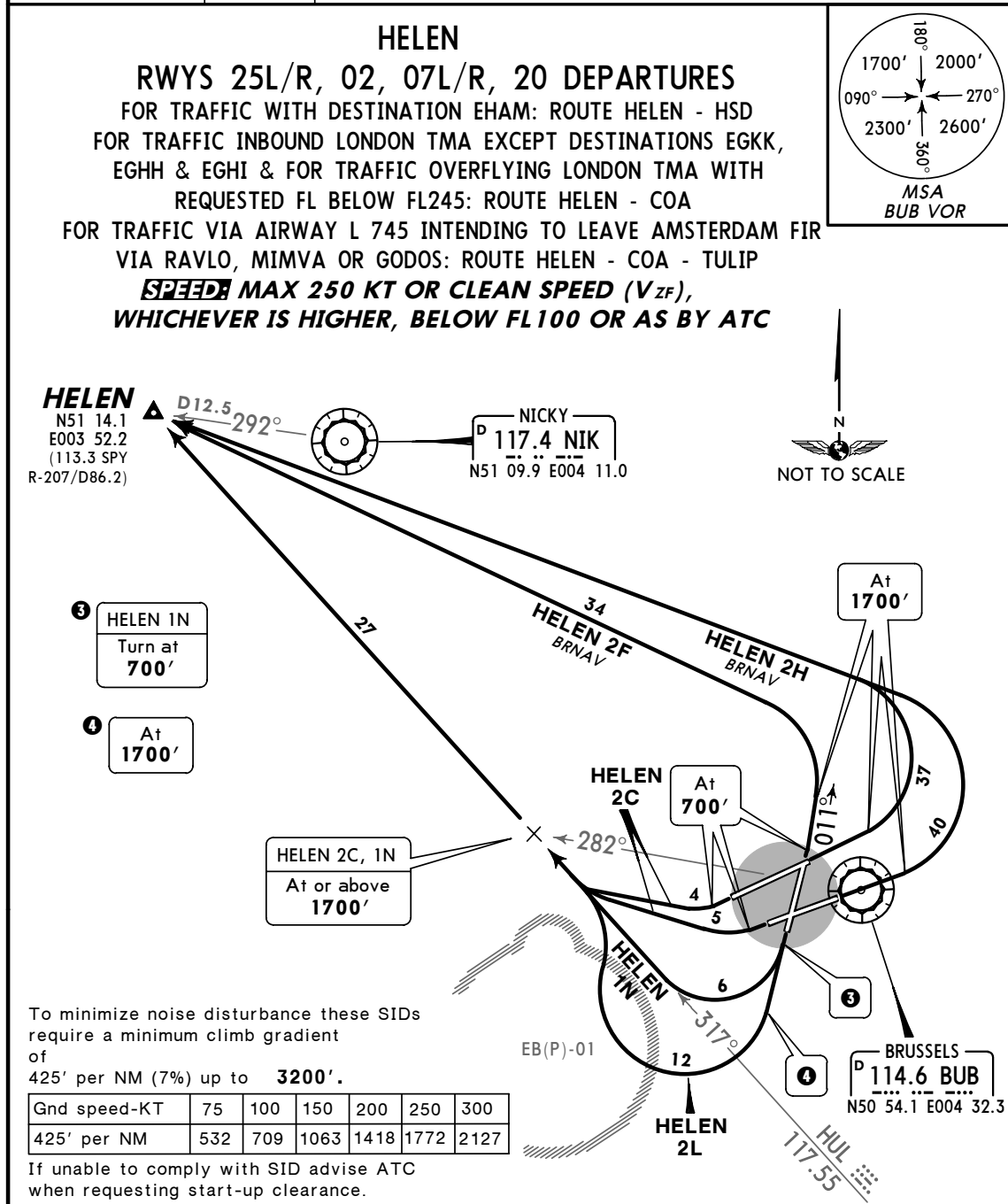
**JEPPESEN**

**BRUSSELS, BELGIUM**

24 DEC 04 **(10-3E)**

**SID**

BRUSSELS Tower <b>118.6</b> <b>120.77</b>	Apt Elev <b>184'</b>	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.
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Initial climb clearance **FL60**, higher level by BRUSSELS Departure or BRUSSELS Control as soon as traffic permits

SID	RWY	INITIAL CLIMB/ROUTING
<b>HELEN 2C</b> [HELE2C]	<b>25L/R</b>	Climb to <b>700'</b> , turn RIGHT, intercept HUL R-317 to HELEN.
<b>HELEN 2F</b> [HELE2F] BRNAV above MSA	<b>02</b>	Climb to <b>700'</b> , 011° track, at <b>1700'</b> turn LEFT to HELEN.
<b>HELEN 2H</b> [HELE2H] BRNAV above MSA	<b>07L/R</b>	Climb straight ahead, at <b>1700'</b> turn LEFT to HELEN.
<b>HELEN 2L</b> [HELE2L] ①	<b>20</b>	Climb straight ahead, at <b>1700'</b> turn RIGHT, intercept HUL R-317 to HELEN.
<b>HELEN 1N</b> [HELE1N] ②		Climb to <b>700'</b> , turn RIGHT, intercept HUL R-317 to HELEN.

- ① Available between 0600-2259LT.
- ② Available between 2300-0559LT or when runway 25R is not available for landing.

**EBBR/BRU**  
BRUSSELS NATIONAL

**JEPPesen**

**BRUSSELS, BELGIUM**

24 DEC 04 **(10-3F)**

**SID**

BRUSSELS Tower <b>118.6</b> <b>120.77</b>	Apt Elev <b>184'</b>	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.
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**KOKSY**  
RWYS 25L/R, 02,  
07L/R, 20 DEPARTURES  
VIA AIRWAY L 607 WESTBOUND  
**SPEEDS MAX 250 KT OR  
CLEAN SPEED (V<sub>ZF</sub>), WHICH-  
EVER IS HIGHER, BELOW FL100  
OR AS BY ATC**

SID	RWY	INITIAL CLIMB/ROUTING
KOK 1C	25L/R	Climb to 700', turn RIGHT, 293° heading, intercept BUB R-282 to KOK.
KOK 1F	02	Climb straight ahead, at 1700' turn LEFT to KOK.
KOK 1H	07L/R	Climb to 700', turn RIGHT, 336° heading, intercept BUB R-282 to KOK.
KOK 3L	20	

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

To minimize noise disturbance these SIDs require a minimum climb gradient of 425' per NM (7%) up to 3200'.  
If unable to comply with SID advise ATC when requesting start-up clearance.

**EBBR/BRU**  
BRUSSELS NATIONAL

**JEPPESEN**

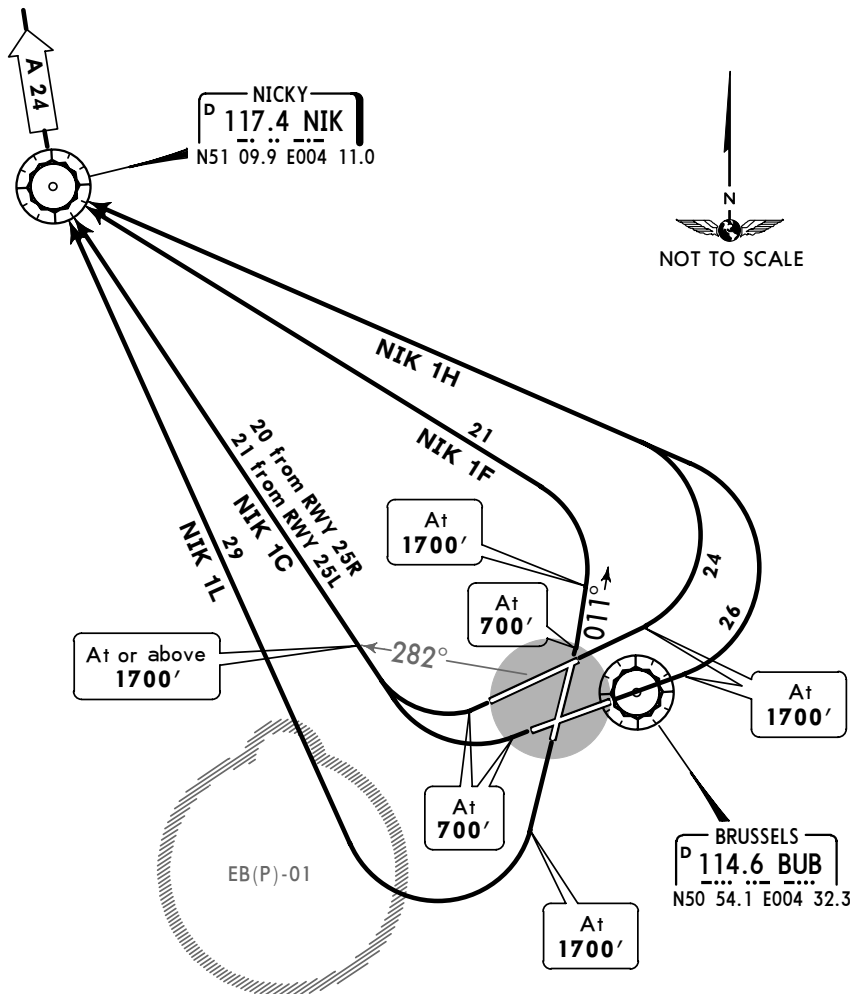
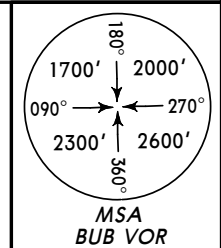
**BRUSSELS, BELGIUM**

24 DEC 04 **(10-3G)**

**SID**

BRUSSELS Tower <b>118.6</b> <b>120.77</b>	Apt Elev <b>184'</b>	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.
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**NICKY**  
**RWYS 25L/R, 02, 07L/R, 20 DEPARTURES**  
VIA AIRWAY A 24 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<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 1C</b> ①	<b>25L/R</b>	Climb to <b>700'</b> , turn RIGHT to NIK.
<b>NIK 1F</b>	<b>02</b>	Climb to <b>700'</b> , 011° 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 1L</b> ②	<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**

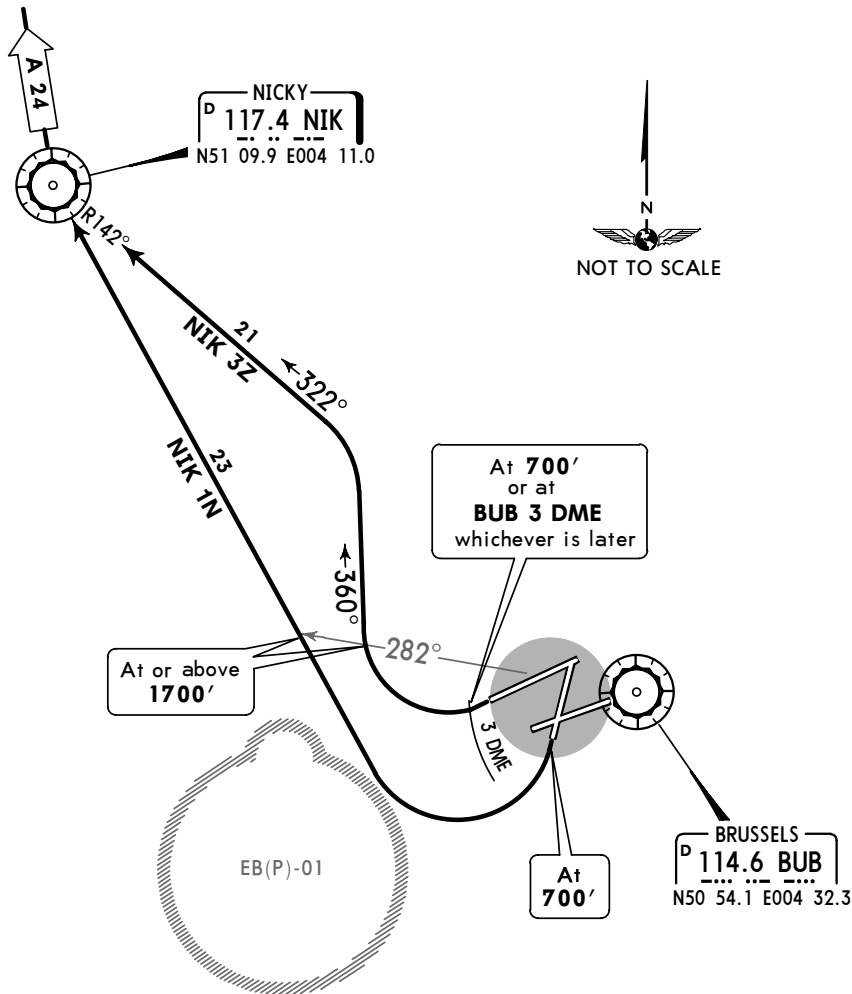
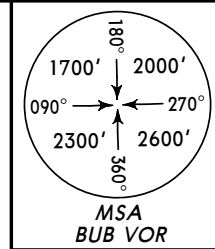
**BRUSSELS, BELGIUM**

24 DEC 04 (10-3H)

**SID**

BRUSSELS Tower <b>118.6</b> <b>120.77</b>	Apt Elev <b>184'</b>	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.
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**NICKY**  
**RWYS 20, 25R DEPARTURES**  
VIA AIRWAY A 24 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 1N ①</b>	<b>20</b>	Climb to <b>700'</b> , turn RIGHT to NIK.
<b>NIK 3Z 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-142 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

**JEPPesen**

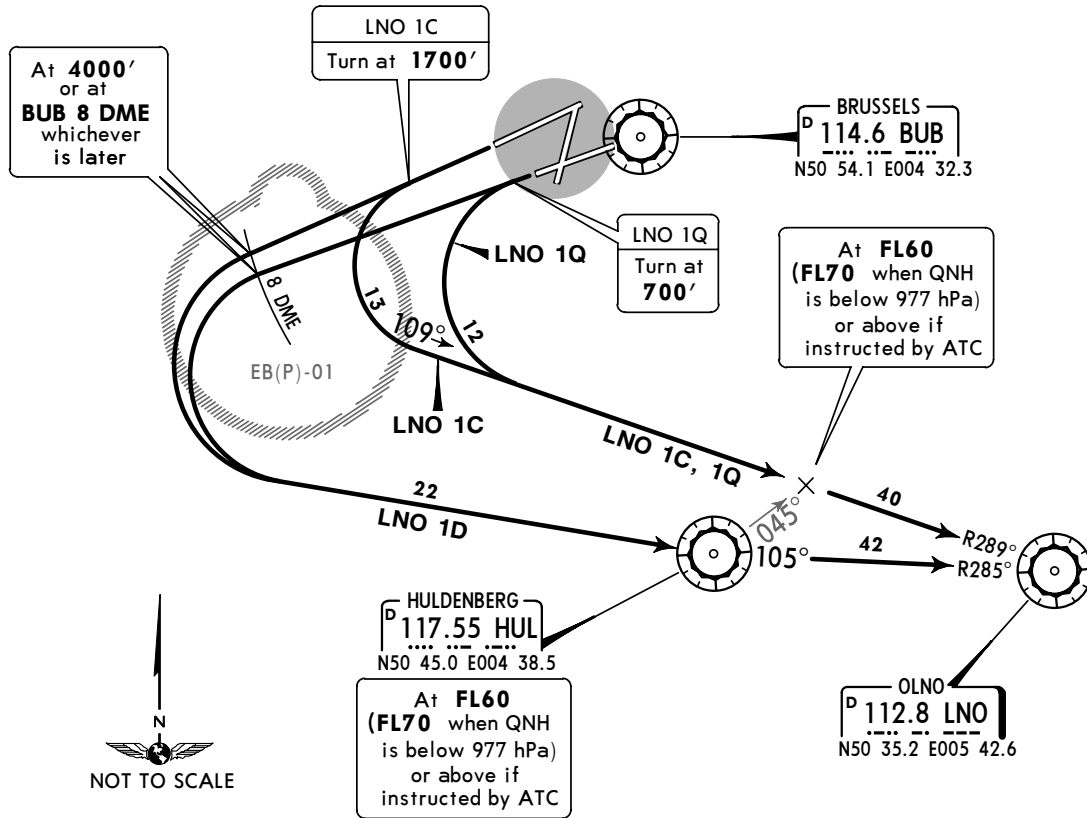
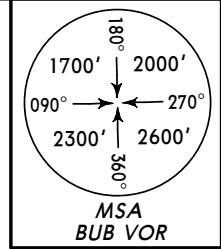
**BRUSSELS, BELGIUM**

24 DEC 04 (10-3J)

**SID**

BRUSSELS Tower <b>118.6</b> <b>120.77</b>	Apt Elev <b>184'</b>	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.
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**OLNO**  
**RWYS 25R/L DEPARTURES**  
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 1C</b> ① ② ③	<b>25R</b>	Climb straight ahead, at <b>1700'</b> turn LEFT, intercept LNO R-289 inbound to LNO.
<b>LNO 1D</b> ④ ⑤	<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-285 inbound to LNO.
<b>LNO 1Q</b> ① ②	<b>25L</b>	Climb to <b>700'</b> , turn LEFT, intercept LNO R-289 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 For traffic requesting a cruising or initial FL below FL195.
- ③ Available between 0600-2259LT.
- ④ To be used by 4-engined aircraft.
- ⑤ SIDs runway 25R only available between 0600-2259LT.

**EBBR/BRU**  
BRUSSELS NATIONAL

**JEPPESEN**

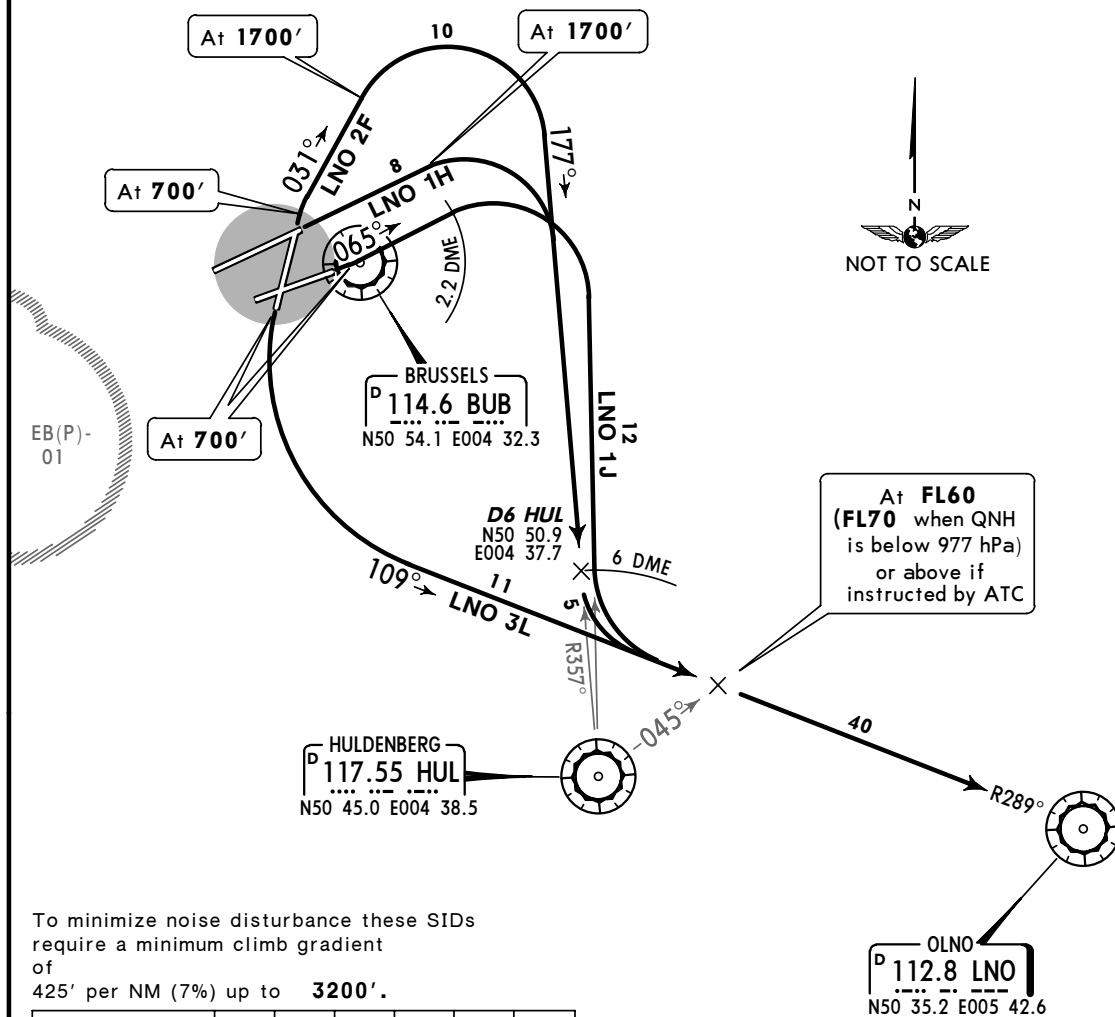
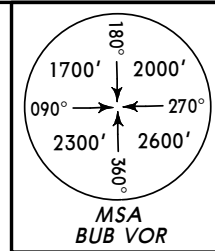
**BRUSSELS, BELGIUM**

24 DEC 04 **10-3K**

**SID**

BRUSSELS Tower <b>118.6</b> <b>120.77</b>	<i>Apt Elev</i> <b>184'</b>	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.
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**OLNO**  
**RWYS 02, 07L/R, 20 DEPARTURES**  
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
LNO 2F	02	Climb to 700', 031° track, at 1700' turn RIGHT, intercept HUL R-357 inbound to D6 HUL, turn LEFT, intercept LNO R-289 inbound to LNO.
LNO 1H	07L	Climb straight ahead, at 1700', turn RIGHT, intercept HUL R-357 inbound to D6 HUL, turn LEFT, intercept LNO R-289 inbound to LNO.
LNO 1J	07R	Climb to 700', 065° track to BUB 2.2 DME, turn RIGHT towards HUL, at HUL 6 DME turn LEFT, intercept LNO R-289 inbound to LNO.
LNO 3L	20	Climb to 700', turn LEFT, intercept LNO R-289 inbound to LNO.



**EBBR/BRU**  
BRUSSELS NATIONAL

**JEPPESEN**

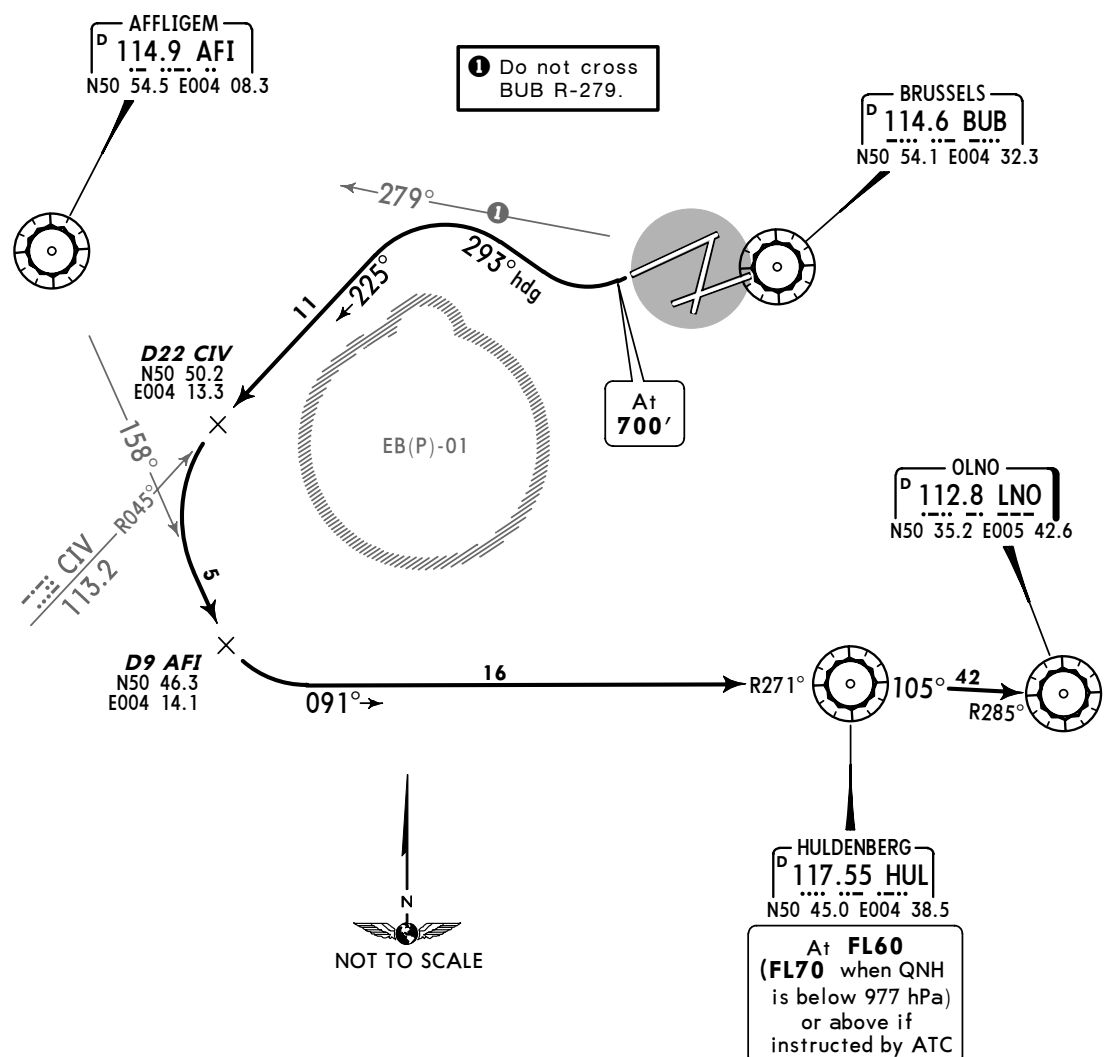
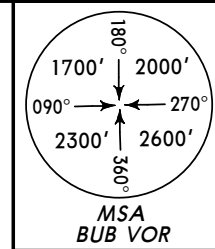
**BRUSSELS, BELGIUM**

24 DEC 04 **10-3L**

**SID**

BRUSSELS Tower <b>118.6</b> <b>120.77</b>	Apt Elev <b>184'</b>	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.
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**OLNO TWO ZULU (LNO 2Z)**  
**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 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

**INITIAL CLIMB/ROUTING**

Climb to **700'**, turn RIGHT, 293° heading, intercept CIV R-045 inbound, at D22 CIV turn LEFT, intercept AFI R-158, at D9 AFI turn LEFT, intercept HUL R-271 inbound to HUL, intercept LNO R-285 inbound to LNO.

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

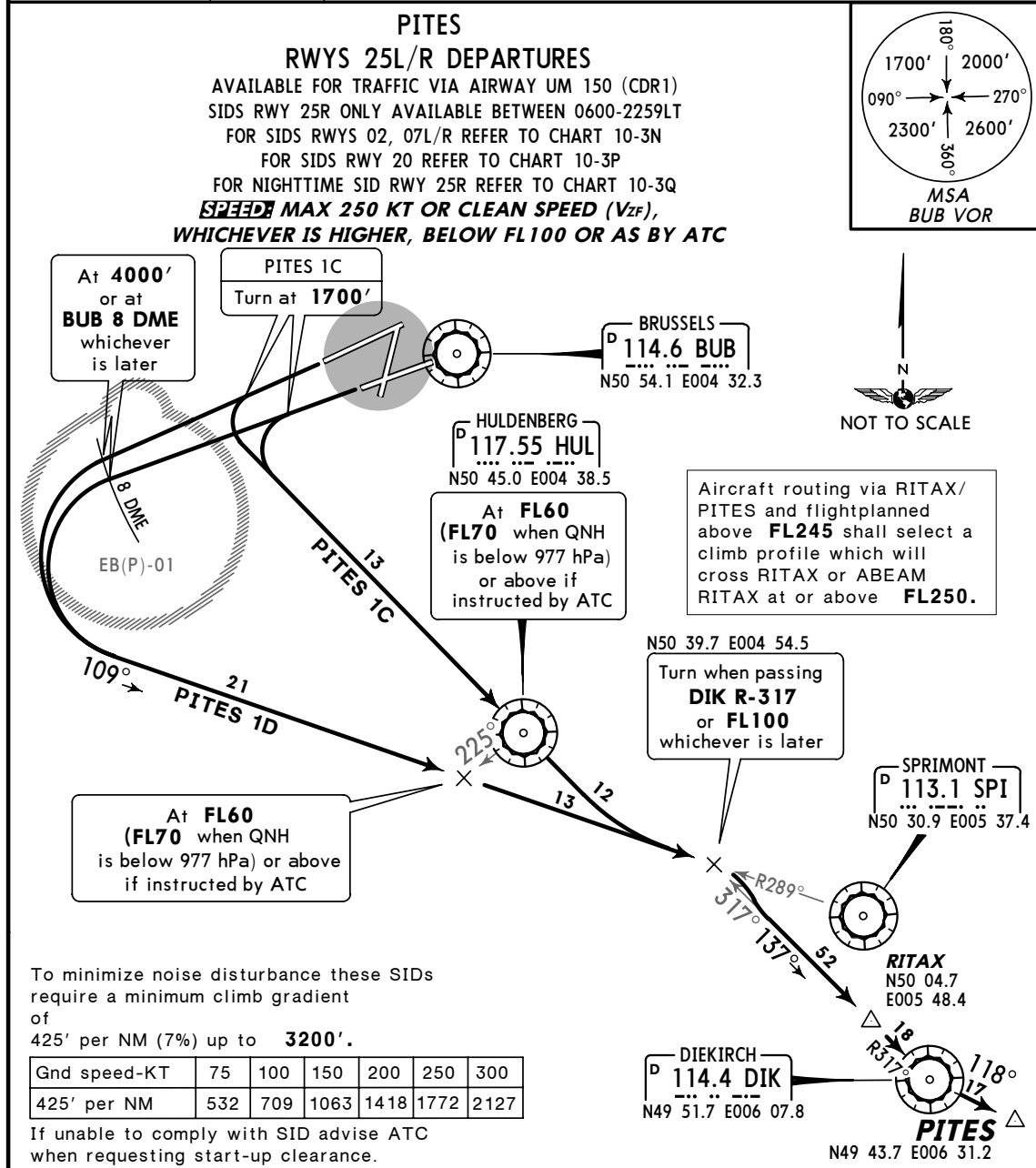
**JEPPesen**

**BRUSSELS, BELGIUM**

24 DEC 04 **(10-3M)**

**SID**

BRUSSELS Tower <b>118.6</b> <b>120.77</b>	Apt Elev <b>184'</b>	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.
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Initial climb clearance **FL60**, higher level by BRUSSELS Departure or  
BRUSSELS Control as soon as traffic permits

SID	INITIAL CLIMB/ROUTING
<b>PITES 1C</b> [PITE1C] ① ② ③	Climb straight ahead, at <b>1700'</b> turn LEFT to HUL, intercept SPI R-289 inbound, when passing DIK R-317 or <b>FL100</b> , whichever is later, turn RIGHT to RITAX, then to DIK, then to PITES.
<b>PITES 1D</b> [PITE1D] ④ ⑤ ⑥	Climb straight ahead, at <b>4000'</b> or at BUB 8 DME, whichever is later, turn LEFT, intercept SPI R-289 inbound, when passing DIK R-317 or <b>FL100</b> , whichever is later, turn RIGHT to RITAX, then to DIK, then to PITES.

- 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 when airway **UM 150** not available: SOPOK 2C - SOPOK - ETENO.
- ③ Alternative route on ATC instruction: SOPOK 2C - SOPOK - RITAX - DIK - PITES.
- ④ To be used by 4-engined aircraft.
- ⑤ Alternative route when airway **UM 150** not available: SOPOK 2D - SOPOK - ETENO.
- ⑥ Alternative route on ATC instruction: SOPOK 2D - SOPOK - RITAX - DIK - PITES.

**EBBR/BRU**  
BRUSSELS NATIONAL

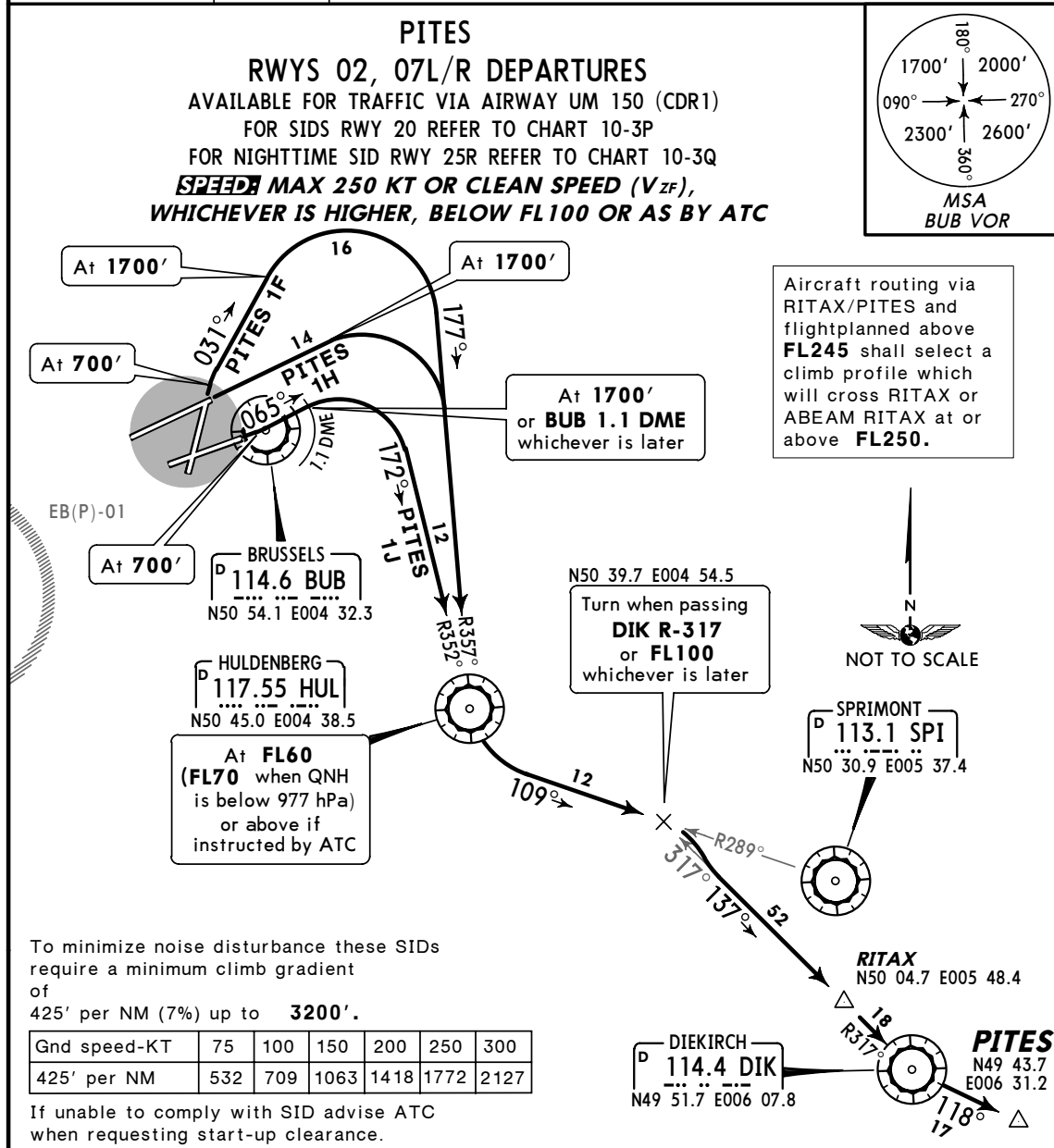
**JEPPESEN**

**BRUSSELS, BELGIUM**

24 DEC 04 **(10-3N)**

**SID**

BRUSSELS Tower <b>118.6</b> <b>120.77</b>	Apt Elev <b>184'</b>	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.
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Initial climb clearance **FL60**, higher level by BRUSSELS Departure or BRUSSELS Control as soon as traffic permits

SID	RWY	INITIAL CLIMB
<b>PITES 1F</b> [PITE1F] ① ②	<b>02</b>	Climb to <b>700'</b> , <b>031°</b> track, at <b>1700'</b> turn RIGHT, intercept HUL R-357 inbound to HUL.
<b>PITES 1H</b> [PITE1H] ③ ④	<b>07L</b>	Climb straight ahead, at <b>1700'</b> turn RIGHT, intercept HUL R-357 inbound to HUL.
<b>PITES 1J</b> [PITE1J] ⑤ ⑥	<b>07R</b>	Climb to <b>700'</b> , <b>065°</b> track, at <b>1700'</b> or BUB 1.1 DME, whichever is later, turn RIGHT, intercept HUL R-352 inbound to HUL.

**ROUTING**

At HUL turn LEFT, intercept SPI R-289 inbound, when passing DIK R-317 or **FL100**, whichever is later, turn RIGHT to RITAX, then to DIK, then to PITES.

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

**EBBR/BRU**  
BRUSSELS NATIONAL

**JEPPesen**

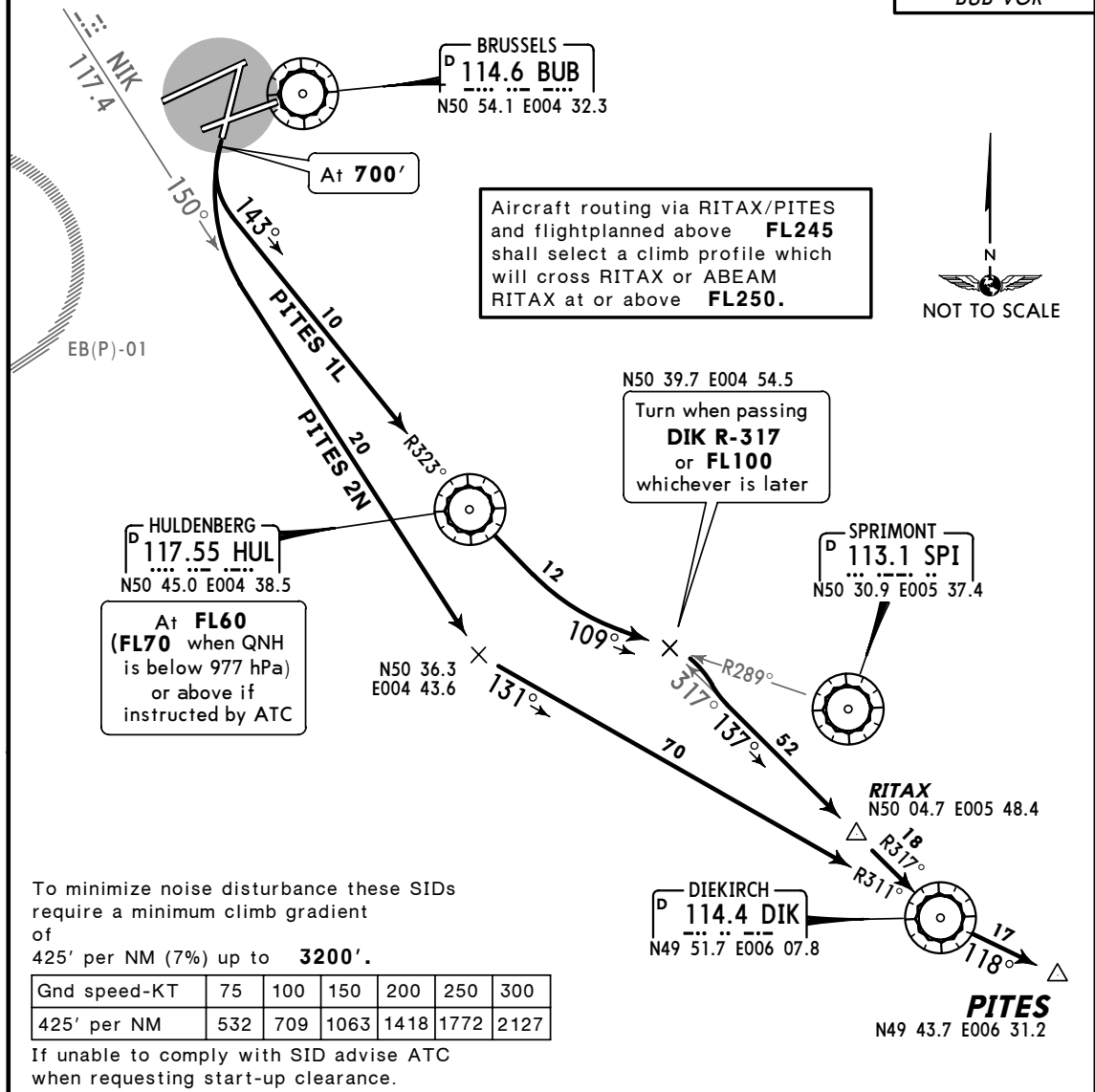
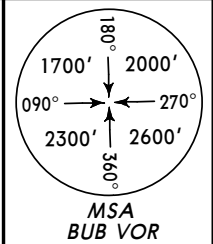
**BRUSSELS, BELGIUM**

24 DEC 04 (10-3P)

**SID**

BRUSSELS Tower <b>118.6</b> <b>120.77</b>	Apt Elev <b>184'</b>	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.
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**PITES**  
**RWY 20 DEPARTURES**  
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	INITIAL CLIMB/ROUTING
<b>PITES 1L</b> [PITE1L] ① ②	Climb to <b>700'</b> , turn LEFT, intercept HUL R-323 inbound to HUL, turn LEFT, intercept R-289 inbound, when passing DIK R-317 or <b>FL100</b> , whichever is later, turn RIGHT to RITAX, then to DIK, then to PITES.
<b>PITES 2N</b> [PITE2N] ③	Climb to <b>700'</b> , turn LEFT, intercept NIK R-150, turn LEFT, intercept DIK R-311 inbound to DIK, then to PITES.

- ① Available for traffic via airway **UM 150** (CDR1).  
Alternative route when airway **UM 150** not available: SOPOK 1L - SOPOK - ETENO.
- ② Alternative route on ATC instruction: SOPOK 1L - SOPOK - RITAX - DIK - PITES.
- ③ Available between 2300-0559LT if airway **UM 150** is available. Exceptionally not available between 2300-2400LT due to military activity in Belgium. Alternative SID: PITES 1L.

**EBBR/BRU**  
BRUSSELS NATIONAL

**JEPPESEN**

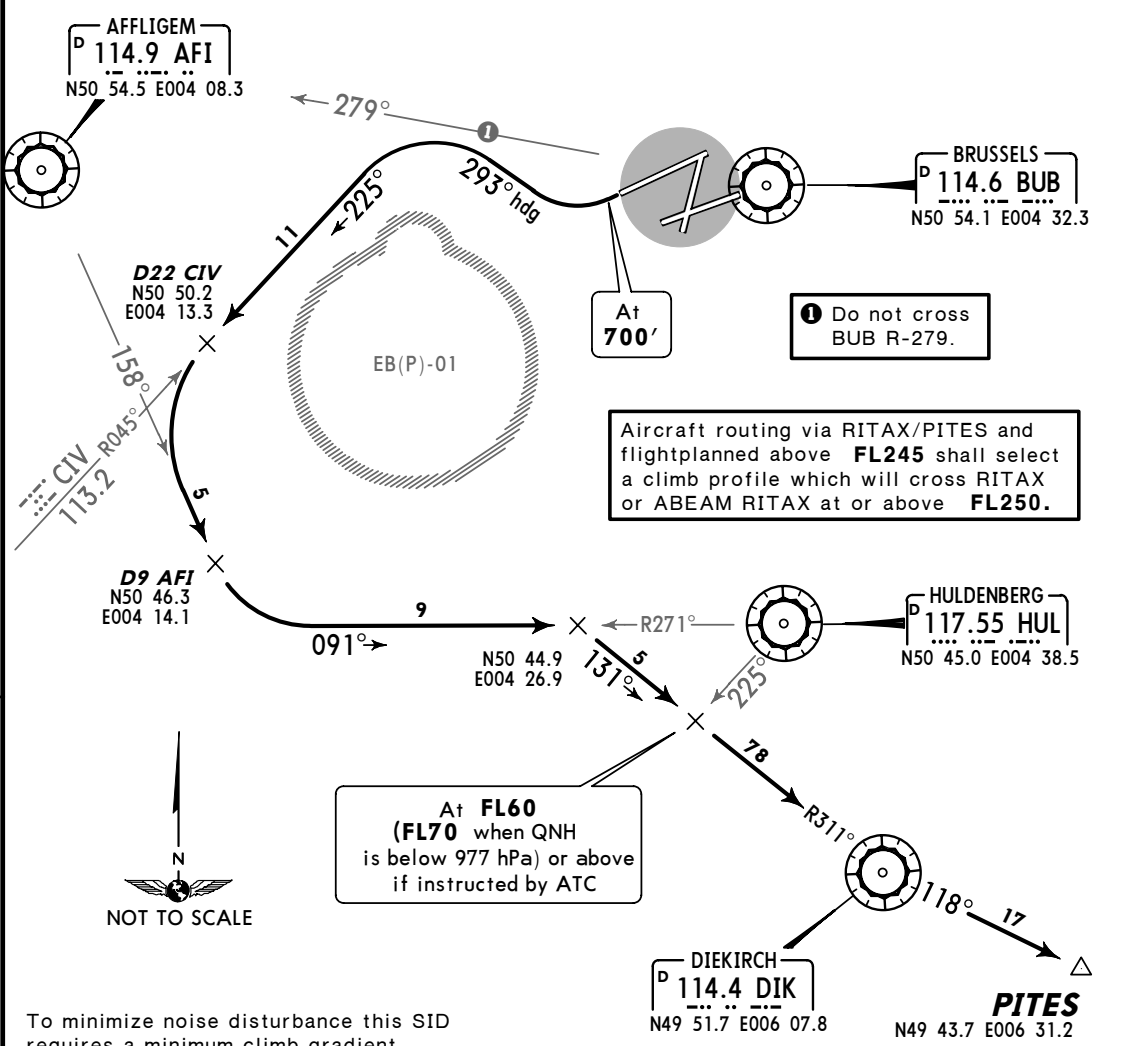
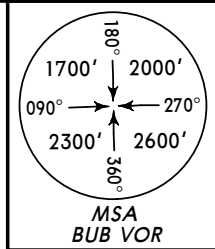
**BRUSSELS, BELGIUM**

24 DEC 04 **(10-3Q)**

**SID**

BRUSSELS Tower <b>118.6</b> <b>120.77</b>	Apt Elev <b>184'</b>	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.
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**PITES TWO ZULU (PITES 2Z) [PITE2Z]**  
**RWY 25R DEPARTURE**  
 AVAILABLE BETWEEN 2300-0559LT  
 ALTERNATIVE ROUTE ON ATC INSTRUCTION:  
 SOPOK 3Z - 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, 293° heading, intercept CIV R-045 inbound, at D22 CIV turn LEFT, intercept AFI R-158, at D9 AFI turn LEFT, intercept HUL R-271 inbound, intercept DIK R-311 inbound to DIK, then to PITES.

**EBBR/BRU**  
BRUSSELS NATIONAL

**JEPPesen**

**BRUSSELS, BELGIUM**

24 DEC 04 **(10-3S)**

**SID**

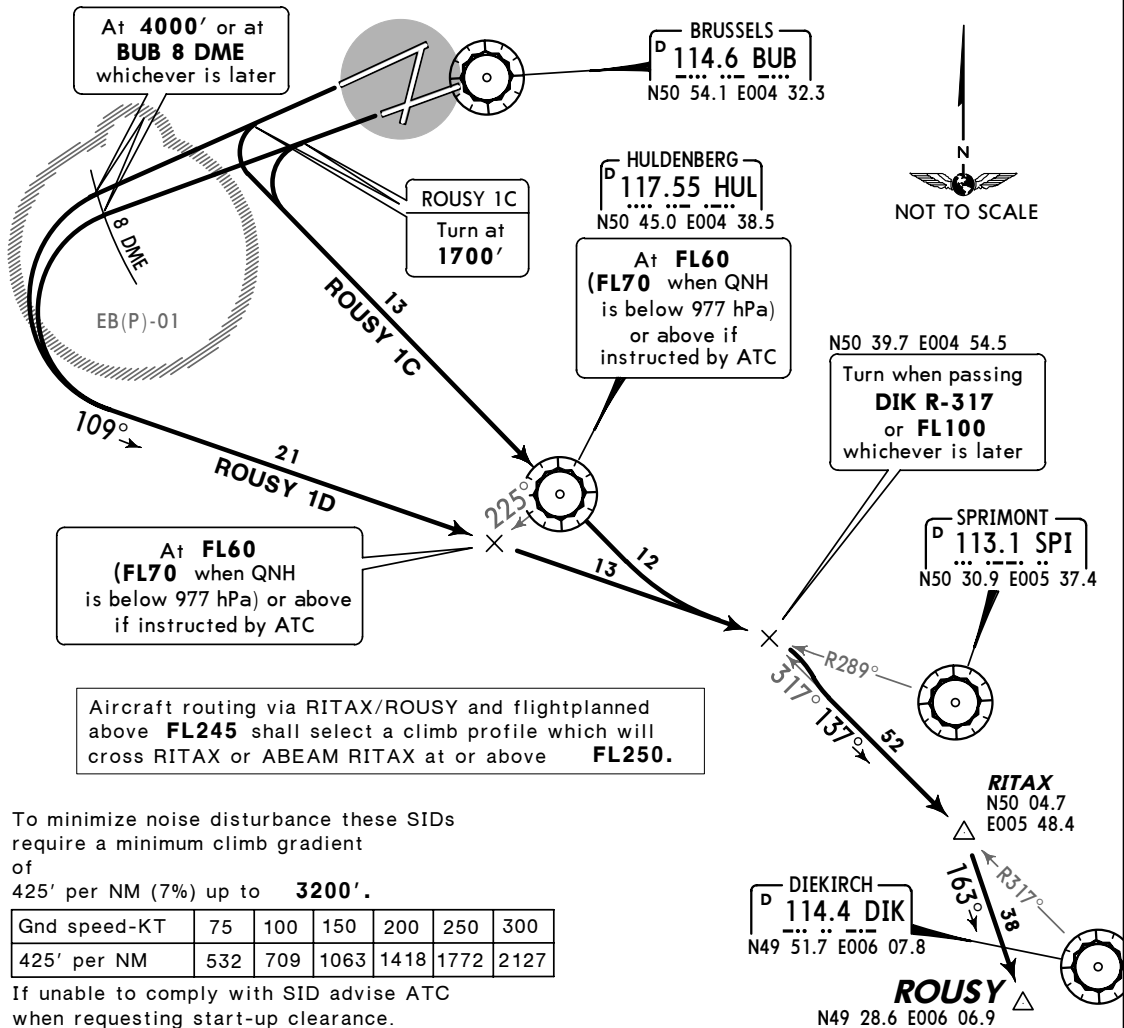
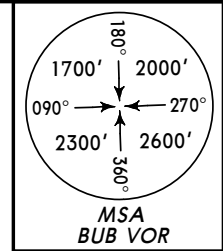
BRUSSELS Tower <b>118.6</b> <b>120.77</b>	Apt Elev <b>184'</b>	Trans level: By ATC Trans alt: 4500' 1. After take-off remain on Tower frequency. 2. SIDs are also noise abatement procedures (refer to 10-4E). Strict adherence within the limits of aircraft performance is mandatory, except when being radar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

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



Aircraft routing via RITAX/ROUSY and flightplanned above **FL245** shall select a climb profile which will cross RITAX or ABEAM RITAX at or above **FL250**.

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 1C</b> [ROUS1C] ① ②	Climb straight ahead, at <b>1700'</b> turn LEFT to HUL, intercept SPI R-289 inbound, when passing DIK R-317 or <b>FL100</b> , whichever is later, turn RIGHT to RITAX, then to ROUSY.
<b>ROUSY 1D</b> [ROUS1D] ③ ④	Climb straight ahead, at <b>4000'</b> or at BUB 8 DME, whichever is later, turn LEFT, intercept SPI R-289 inbound, when passing DIK R-317 or <b>FL100</b> , whichever is later, 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 2C - SOPOK - RITAX - ROUSY.
- ③ To be used by 4-engined aircraft.
- ④ Alternative route on ATC instruction: SOPOK 2D - SOPOK - RITAX - ROUSY.

**EBBR/BRU**  
BRUSSELS NATIONAL

**JEPPESEN**

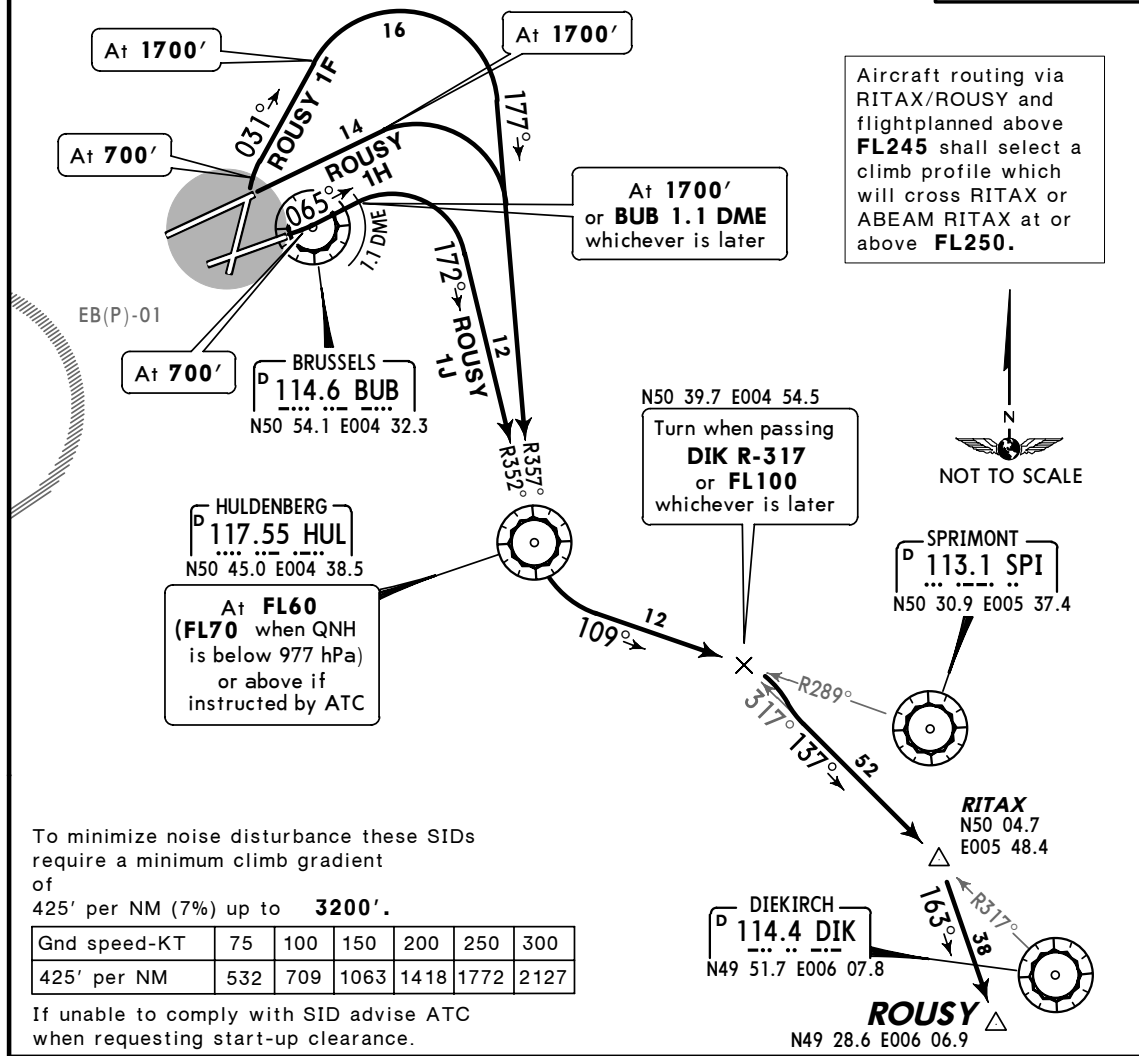
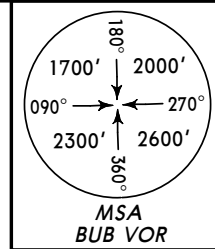
**BRUSSELS, BELGIUM**

24 DEC 04 **(10-3T)**

**SID**

BRUSSELS Tower <b>118.6</b> <b>120.77</b>	Apt Elev <b>184'</b>	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.
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**ROUSY**  
**RWYS 02, 07L/R DEPARTURES**  
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<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>ROUSY 1F</b> [ROUS1F] ①	<b>02</b>	Climb to <b>700'</b> , <b>031°</b> track, at <b>1700'</b> turn RIGHT, intercept HUL R-357 inbound to HUL, turn LEFT, intercept SPI R-289 inbound, when passing DIK R-317 or <b>FL100</b> , whichever is later, turn RIGHT to RITAX, then to ROUSY.
<b>ROUSY 1H</b> [ROUS1H] ②	<b>07L</b>	Climb straight ahead, at <b>1700'</b> turn RIGHT, intercept HUL R-357 inbound to HUL, turn LEFT, intercept SPI R-289 inbound, when passing DIK R-317 or <b>FL100</b> , whichever is later, turn RIGHT to RITAX, then to ROUSY.
<b>ROUSY 1J</b> [ROUS1J] ③	<b>07R</b>	Climb to <b>700'</b> , <b>065°</b> track, at <b>1700'</b> or BUB 1.1 DME, whichever is later, turn RIGHT, intercept HUL R-352 inbound to HUL, turn LEFT, intercept SPI R-289 inbound, when passing DIK R-317 or <b>FL100</b> , whichever is later, turn RIGHT to RITAX, then to ROUSY.

- ① Alternative route on ATC instruction: SOPOK 2F - SOPOK - RITAX - ROUSY.
- ② Alternative route on ATC instruction: SOPOK 1H - SOPOK - RITAX - ROUSY.
- ③ Alternative route on ATC instruction: SOPOK 1J - SOPOK - RITAX - ROUSY.

**EBBR/BRU**  
BRUSSELS NATIONAL

**JEPPESEN**

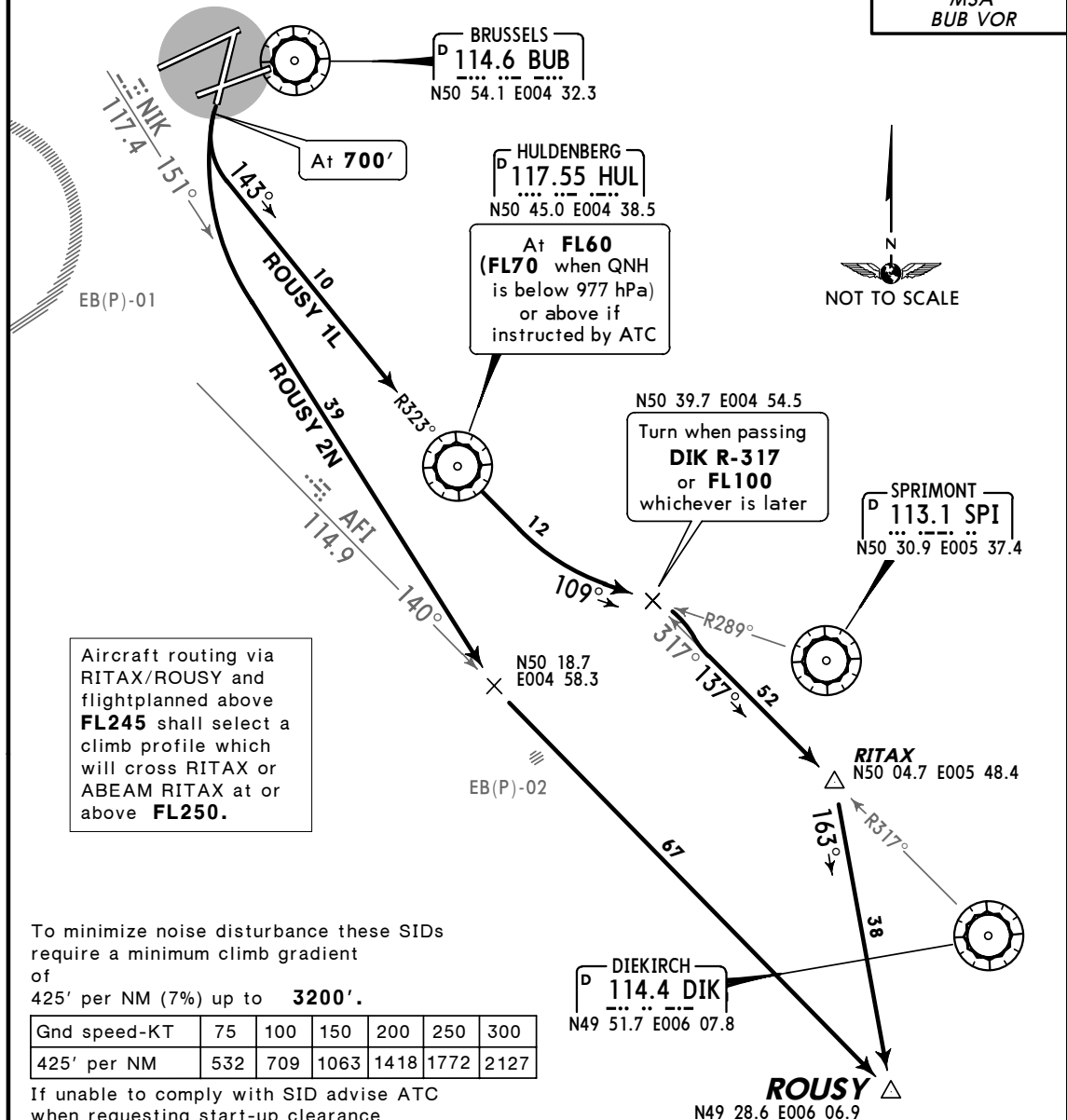
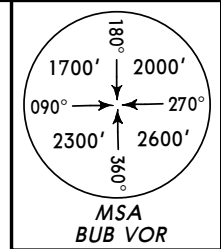
**BRUSSELS, BELGIUM**

24 DEC 04 (10-3U)

**SID**

BRUSSELS Tower <b>118.6</b> <b>120.77</b>	Apt Elev <b>184'</b>	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.
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**ROUSY**  
**RWY 20 DEPARTURES**  
FOR NIGHTTIME SID RWY 25R REFER TO CHART 10-3V  
**~~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	INITIAL CLIMB/ROUTING
<b>ROUSY 1L</b> [ROUS1L] ①	Climb to <b>700'</b> , turn LEFT, intercept HUL R-323 inbound to HUL, turn LEFT, intercept SPI R-289 inbound, when passing DIK R-317 or <b>FL100</b> , whichever is later, turn RIGHT to RITAX, then to ROUSY.
<b>ROUSY 2N</b> [ROUS2N] ②	Climb to <b>700'</b> , turn LEFT, intercept NIK R-151, turn LEFT, intercept AFI R-140 to ROUSY.

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



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**BRUSSELS, BELGIUM**

24 DEC 04 (10-3V)

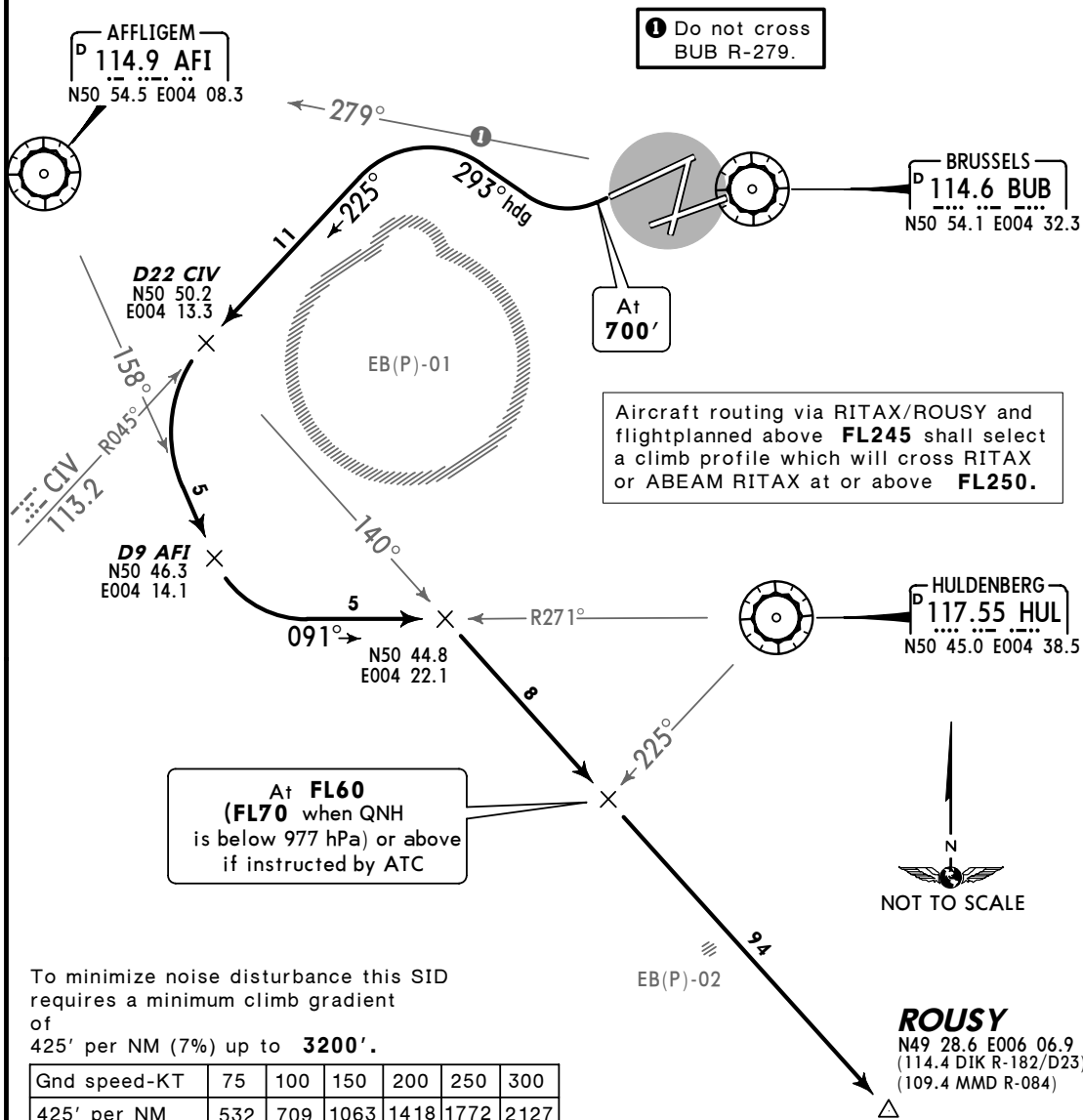
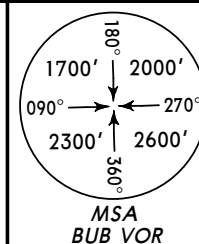
**SID**

BRUSSELS Tower  
118.6  
120.77

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 TWO ZULU (ROUSY 2Z) [ROUS2Z]**  
**RWY 25R DEPARTURE**  
AVAILABLE BETWEEN 2300-0559LT  
ALTERNATIVE ROUTE ON ATC INSTRUCTION:  
SOPOK 3Z - SOPOK - RITAX - ROUSY  
**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

**INITIAL CLIMB/ROUTING**

Climb to **700'**, turn RIGHT, 293° heading, intercept CIV R-045 inbound, at D22 CIV turn LEFT, intercept AFI R-158, at D9 AFI turn LEFT, intercept HUL R-271 inbound, turn RIGHT, intercept AFI R-140 to ROUSY.

**EBBR/BRU**  
BRUSSELS NATIONAL

**JEPPESEN**

**BRUSSELS, BELGIUM**

24 DEC 04 **(10-3W)**

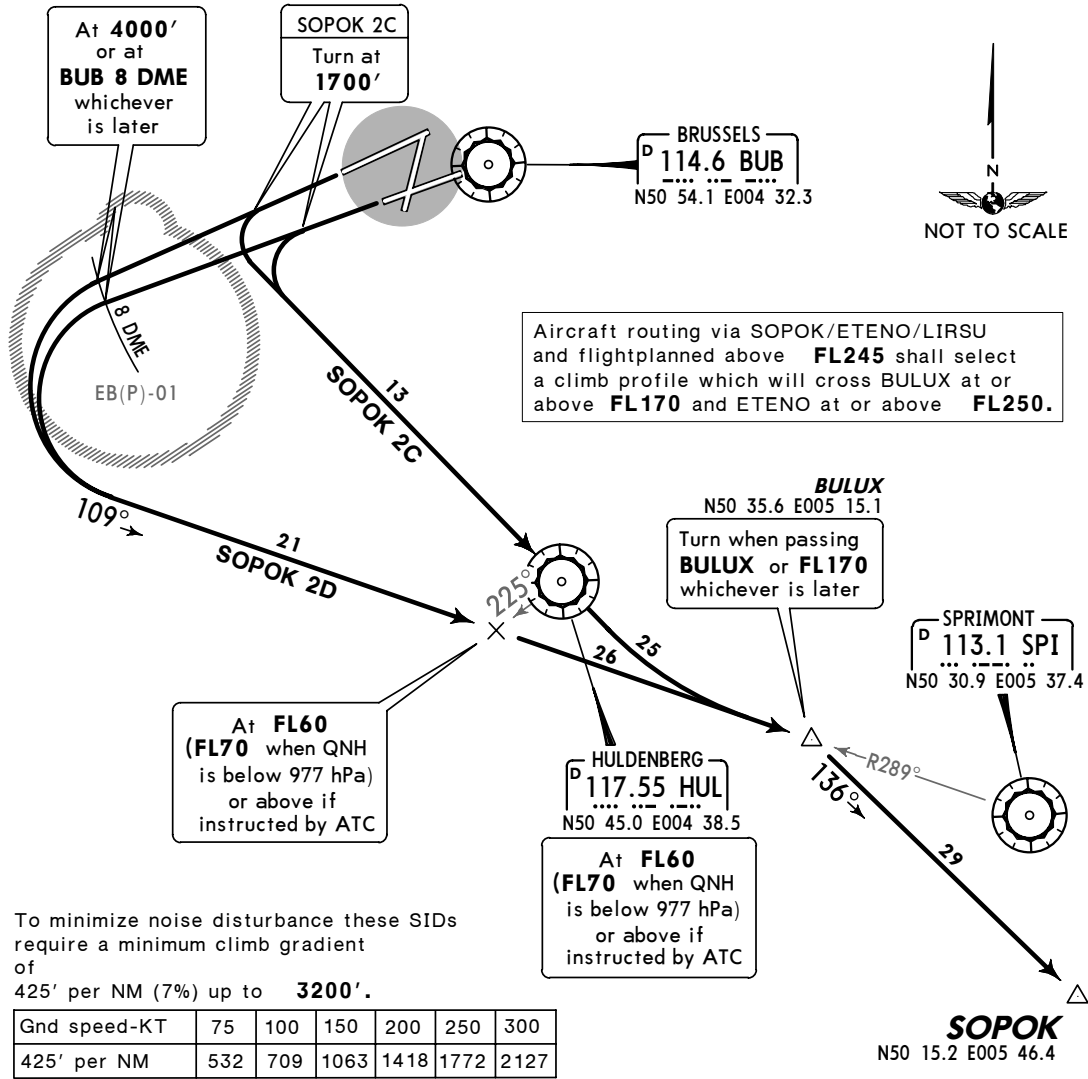
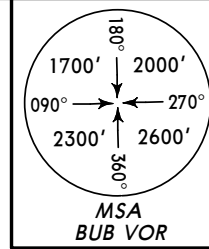
**SID**

BRUSSELS Tower <b>118.6</b> <b>120.77</b>	Apt Elev <b>184'</b>	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.
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**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**



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>SOPOK 2C</b> [SOPO2C] ①	Climb straight ahead, at <b>1700'</b> turn LEFT to HUL, intercept SPI R-289 inbound, when passing BULUX or <b>FL170</b> , whichever is later, turn RIGHT to SOPOK.
<b>SOPOK 2D</b> [SOPO2D] ②	Climb straight ahead, at <b>4000'</b> or at BUB 8 DME, whichever is later, turn LEFT, intercept SPI R-289 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**

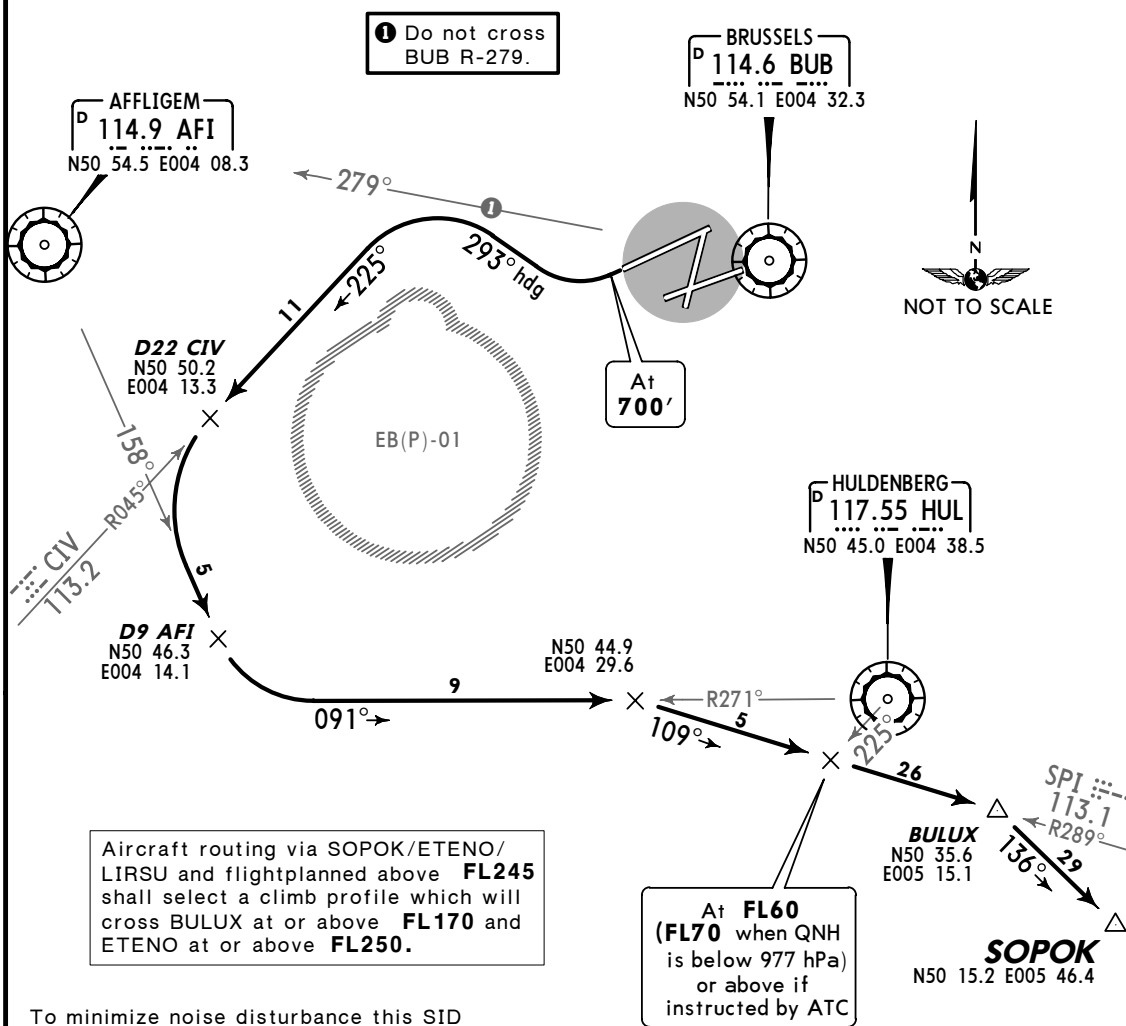
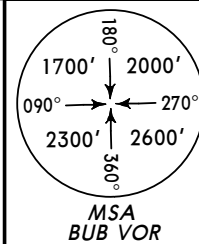
**BRUSSELS, BELGIUM**

24 DEC 04 (10-3X1)

**SID**

BRUSSELS Tower <b>118.6</b> <b>120.77</b>	Apt Elev <b>184'</b>	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.
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**SOPOK THREE ZULU (SOPOK 3Z) [SOPO3Z]**  
**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, 293° heading, intercept CIV R-045 inbound, at D22 CIV turn LEFT, intercept AFI R-158, at D9 AFI turn LEFT, intercept HUL R-271 inbound, intercept SPI R-289 inbound to BULUX, then to SOPOK.

**EBBR/BRU**  
BRUSSELS NATIONAL

**JEPPESEN**

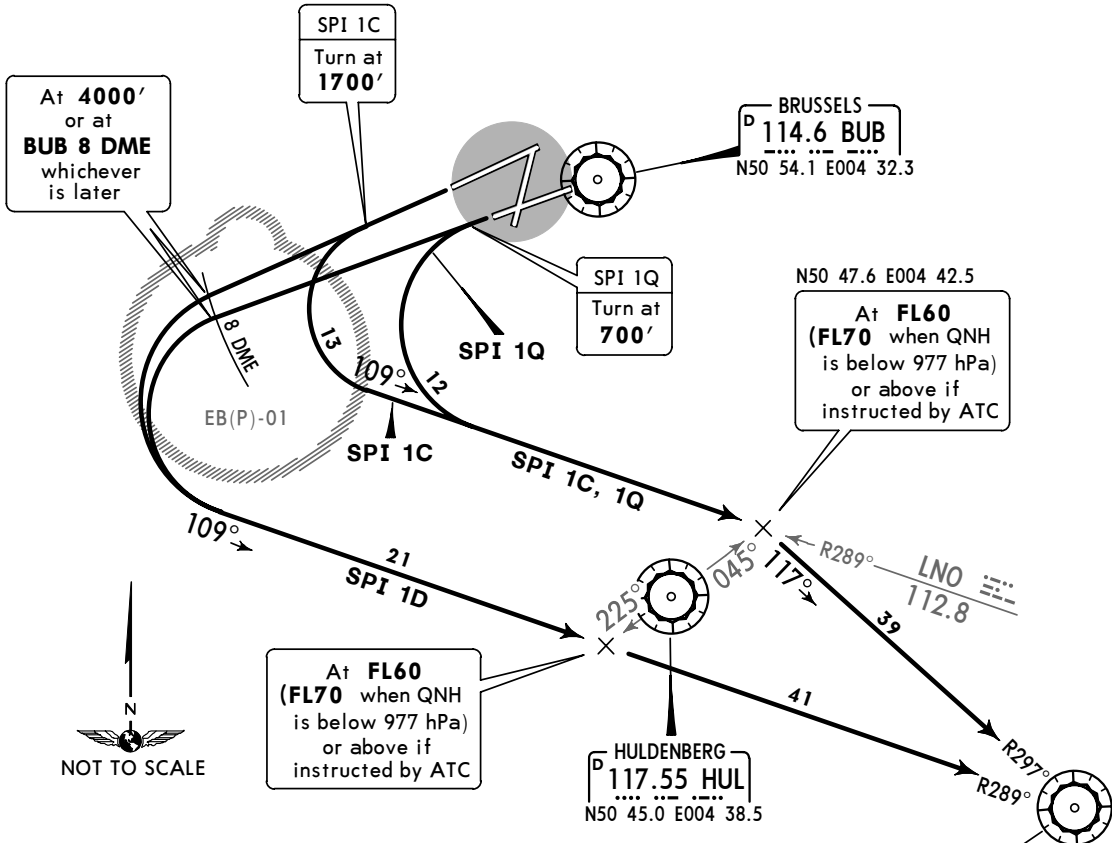
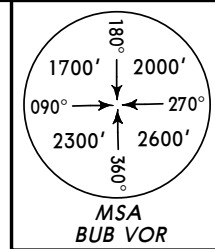
**BRUSSELS, BELGIUM**

24 DEC 04 (10-3X2)

**SID**

BRUSSELS Tower <b>118.6</b> <b>120.77</b>	Apt Elev <b>184'</b>	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.
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**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 1C</b> ① ②	<b>25R</b>	Climb straight ahead, at <b>1700'</b> turn LEFT, intercept LNO R-289 inbound, turn RIGHT, intercept SPI R-297 inbound to SPI.
<b>SPI 1D</b> 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-289 inbound to SPI.
<b>SPI 1Q</b> ①	<b>25L</b>	Climb to <b>700'</b> , turn LEFT, intercept LNO R-289 inbound, turn RIGHT, intercept SPI R-297 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.

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BRUSSELS NATIONAL

**JEPPesen**

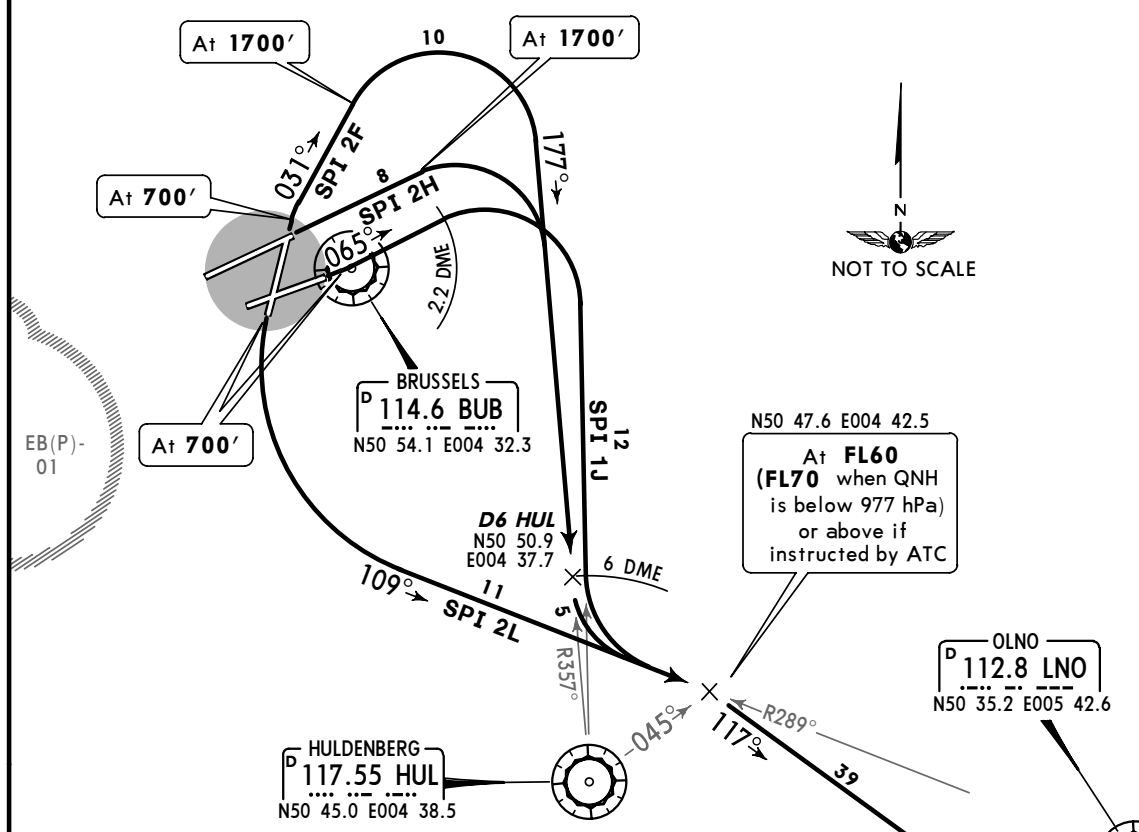
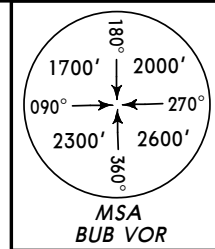
**BRUSSELS, BELGIUM**

24 DEC 04 (10-3X3)

**SID**

BRUSSELS Tower <b>118.6</b> <b>120.77</b>	Apt Elev <b>184'</b>	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.
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**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<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 <b>FL60</b> , higher level by BRUSSELS Departure or BRUSSELS Control as soon as traffic permits		
SID	RWY	INITIAL CLIMB/ROUTING
<b>SPI 2F</b>	<b>02</b>	Climb to <b>700'</b> , <b>031°</b> track, at <b>1700'</b> turn <b>RIGHT</b> , intercept HUL R-357 inbound to D6 HUL, turn <b>LEFT</b> , intercept LNO R-289 inbound, turn <b>RIGHT</b> , intercept SPI R-297 inbound to SPI.
<b>SPI 2H</b>	<b>07L</b>	Climb straight ahead, at <b>1700'</b> turn <b>RIGHT</b> , intercept HUL R-357 inbound to D6 HUL, turn <b>LEFT</b> , intercept LNO R-289 inbound, turn <b>RIGHT</b> , intercept SPI R-297 inbound to SPI.
<b>SPI 1J</b>	<b>07R</b>	Climb to <b>700'</b> , <b>065°</b> track to BUB 2.2 DME, turn <b>RIGHT</b> towards HUL, at HUL 6 DME turn <b>LEFT</b> , intercept LNO R-289 inbound, turn <b>RIGHT</b> , intercept SPI R-297 inbound to SPI.
<b>SPI 2L</b>	<b>20</b>	Climb to <b>700'</b> , turn <b>LEFT</b> , intercept LNO R-289 inbound, turn <b>RIGHT</b> , intercept SPI R-297 inbound to SPI.

**EBBR/BRU**  
BRUSSELS NATIONAL

**JEPPESEN**

**BRUSSELS, BELGIUM**

24 DEC 04 (10-3X4)

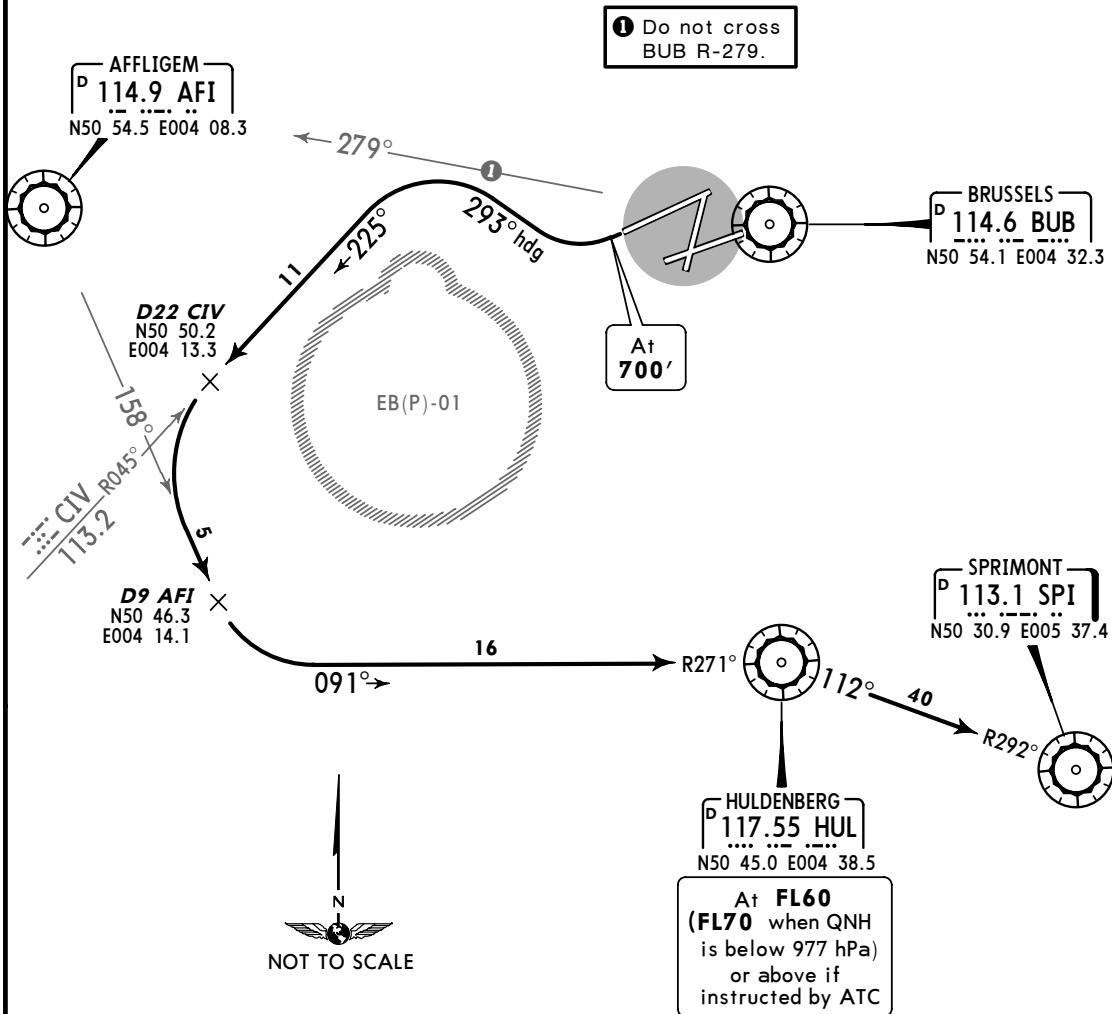
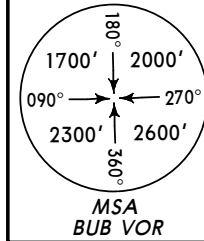
**SID**

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

*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 THREE ZULU (SPI 3Z)**  
**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, 293° heading, intercept CIV R-045 inbound, at D22 CIV turn LEFT, intercept AFI R-158, at D9 AFI turn LEFT, intercept HUL R-271 inbound to HUL, intercept SPI R-292 inbound to SPI.

**EBBR/BRU**  
BRUSSELS NATIONAL

**JEPPesen**

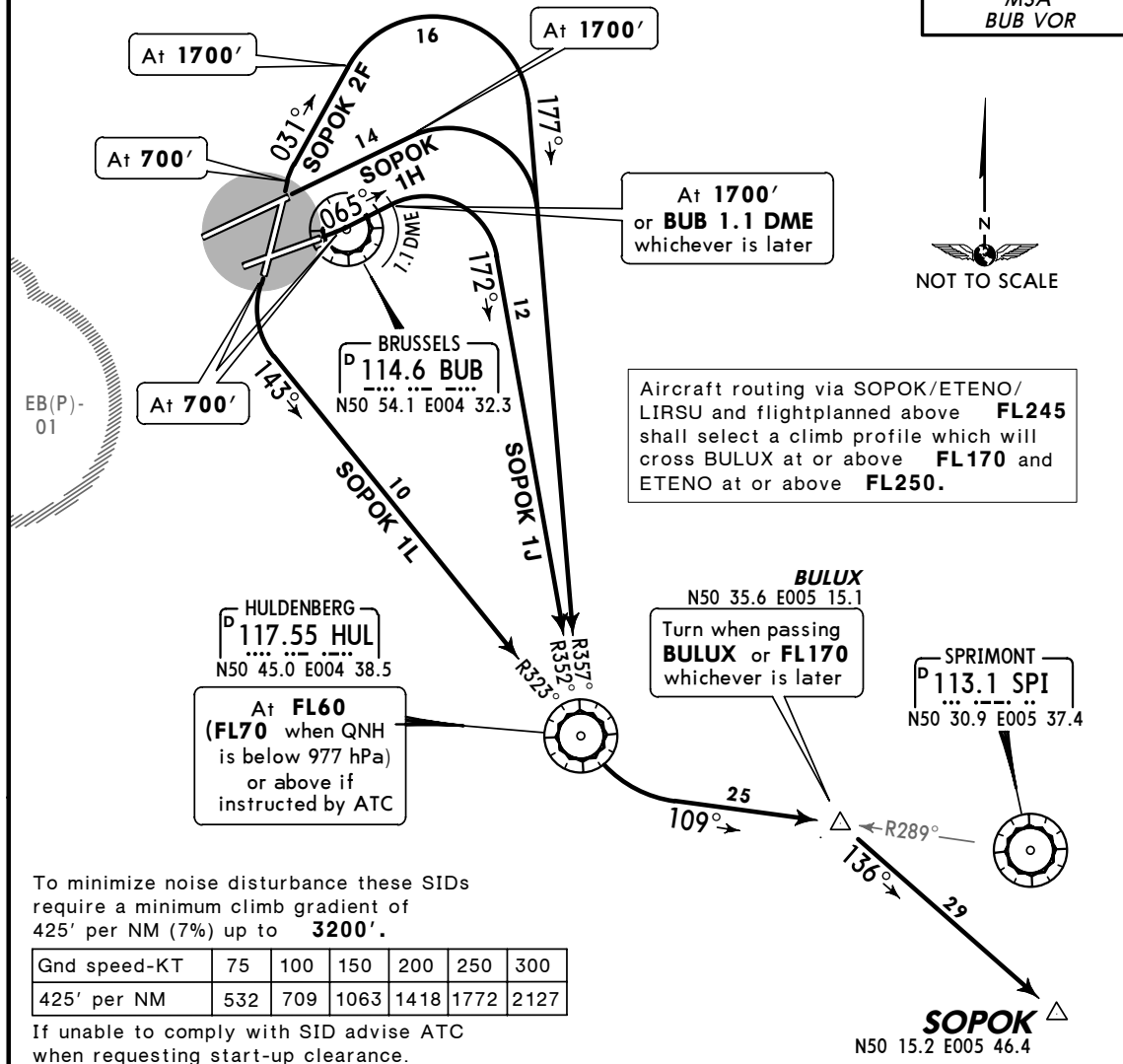
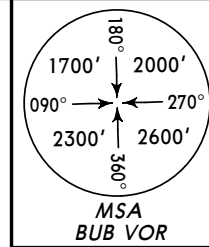
**BRUSSELS, BELGIUM**

24 DEC 04 (10-3X)

**SID**

BRUSSELS Tower <b>118.6</b> <b>120.77</b>	Apt Elev <b>184'</b>	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.
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**SOPOK**  
**RWYS 02, 07L/R, 20 DEPARTURES**  
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**



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>SOPOK 2F</b> [SOPO2F]	<b>02</b>	Climb to <b>700'</b> , 031° track, at <b>1700'</b> turn RIGHT, intercept HUL R-357 inbound to HUL, turn LEFT, intercept SPI R-289 inbound, when passing BULUX or <b>FL170</b> , whichever is later, turn RIGHT to SOPOK.
<b>SOPOK 1H</b> [SOPO1H]	<b>07L</b>	Climb straight ahead, at <b>1700'</b> , turn RIGHT, intercept HUL R-357 inbound to HUL, turn LEFT, intercept SPI R-289 inbound, when passing BULUX or <b>FL170</b> , whichever is later, turn RIGHT to SOPOK.
<b>SOPOK 1J</b> [SOPO1J]	<b>07R</b>	Climb to <b>700'</b> , 065° track, at <b>1700'</b> or BUB 1.1 DME, whichever is later, turn RIGHT, intercept HUL R-352 inbound to HUL, turn LEFT, intercept SPI R-289 inbound, when passing BULUX or <b>FL170</b> , whichever is later, turn RIGHT to SOPOK.
<b>SOPOK 1L</b> [SOPO1L]	<b>20</b>	Climb to <b>700'</b> , turn LEFT, intercept HUL R-323 inbound to HUL, turn LEFT, intercept SPI R-289 inbound, when passing BULUX or <b>FL170</b> , whichever is later, turn RIGHT to SOPOK.

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BRUSSELS, BELGIUM

BRUSSELS NATIONAL

9 JUL 04

10-4

NOISE

## NOISE ABATEMENT PROCEDURES

<b>SUMMER</b>	<b>: LT minus 2 HOURS = UTC (Z)</b>
<b>WINTER</b>	<b>: LT minus 1 HOUR = UTC (Z)</b>

## PREFERENTIAL RUNWAY SYSTEM

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

The term "runway-in-use" shall be used to indicate the runway that at a particular time is considered by a unit providing aerodrome control service to be the most suitable for use by the types of aircraft expected to land or take off at the aerodrome.

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

Accepting a runway is a pilots decision. If the PIC considers that the operation involved is not feasible for safety and performance reasons on the runway-in-use, he shall request permission to use another runway. ATC will accede to such request, provided traffic and air safety conditions permit.

Take-off from another runway than the assigned one will be allowed after approval from the Airport Authority. When the pilot requests to use another runway, he must submit a written report (the operator is responsible for proper reporting procedures).

During daytime (0600-2259LT) following procedure will be applied:

MON - FRI 0600-2259: Take-off runway 25R - Landing runways 25R/L;  
 SAT 0600-2259: Take-off runway 07R (to CIV, LNO, PITES, ROUSY, SOPOK, SPI),  
 07L (to NIK), 02 (to DENUT & HELEN) (odd week) or 25R (even week) - Landing runway 02 (odd week) or 25R/L (even week);  
 SUN 0600-1659: Take-off runway 20 - Landing runways 25R/L;  
 SUN 1700-2259: Take-off runway 25R - Landing runways 25R/L.

During the night period (2300-0559LT) following procedure will be applied:

MON 2300-TUE 0259: Take-off runway 20 - Landing runways 25R/L;  
 TUE 0300-0559: Take-off runways 07R (to CIV, LNO, PITES, ROUSY, SOPOK, SPI), 07L (to NIK), 02 (to DENUT & HELEN) - Landing runway 02;  
 TUE 2300-WED 0559: Take-off runways 25R, 20 - Landing runways 25L/R;  
 WED 2300-THU 0259: Take-off runway 25R - Landing runways 25R/L;  
 THU 0300-0559: Take-off runways 02 (to DENUT & HELEN), 07R (to CIV, LNO, PITES, ROUSY, SOPOK, SPI), 07L (to NIK) - Landing runway 02;  
 THU 2300-FRI 0559: Take-off runways 25R, 20 - Landing runways 25R/L;  
 FRI 2300-SAT 0259: Take-off runway 20 - Landing runways 25R/L;  
 SAT 0300-0559: Take-off runways 02 (to DENUT & HELEN), 07R (to CIV, LNO, PITES, ROUSY, SOPOK, SPI), 07L (to NIK) - Landing runway 02;  
 SAT 2300-SUN 0559: Take-off runway 25L - Landing runway 25R;  
 SUN 2300-MON 0559: Take-off runways 25R, 20 - Landing runways 25R/L.

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

- runways 25R/L, 07L/R: when runways are dry or wet and the cross- and/or tailwind components exceed respectively 15 KT and 5 KT (gusts included);
- runways 20, 02: for landing aircraft when runways are dry or wet and the cross- and/or tailwind components exceed respectively 15 KT and 5 KT (gusts included);
- runways 20, 02: for departing aircraft between 2300-0559LT when runways are dry or wet and the cross- and/or tailwind components exceed respectively 15 KT and 5 KT (gusts included);

cont'd



EBBR/BRU



BRUSSELS, BELGIUM

BRUSSELS NATIONAL

9 JUL 04

10-4A

NOISE

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**NOISE ABATEMENT PROCEDURES**


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**PREFERENTIAL RUNWAY SYSTEM (cont'd)**

- runways 20, 02: for departing aircraft between 0600-2259LT when runways are dry or wet and the cross- and/or tailwind components exceed respectively 15 KT and 0 KT (gusts included);
- when runways are contaminated or when braking action is less than good;
- during low visibility operations;
- when alternative runways are successively requested by pilots for safety reasons;
- when wind shear has been reported or forecasted or when thunderstorms are expected to affect the approach or departure.

When the components exceed the values stated above, a runway more nearly into wind will be assigned. However, runways 07L and 07R shall not be used for landing, except when no other suitable runway is available. When runway 02 is in use and in order to expedite departing traffic, departures from runway 07R from line-up position "H", intersection C6 or PAPI position can be intercalated between arrivals on runway 02.

In headwind configurations the crosswind component is not a limiting factor for take-off which are conducted on pilots' responsibility and at ATC discretion.

Times of runways 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 taken into account traffic conditions.

**ARRIVALS**

Avoid overflying the city of Brussels.

Aircraft using the ILS shall intercept the glide path at or above 2000' for runways 25L and 25R, respectively 3000' and 2000' when simultaneous approaches are in progress, 2000' for runway 02 and 3000' for runway 20, nor thereafter fly below the corresponding glide path.

Aircraft making 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 glide path of 3°. Aircraft making 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 by all aircraft when operating conditions are as follows:

- ILS available;
- Runway clear and dry;
- Visibility higher than 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 (such as reported or forecasted wind shears or thunderstorms).

The pilot-in-command of a turbo-jet powered aircraft shall use, as a final flap setting, the minimum certificated landing flap setting set forth in the approved Aircraft Flight Manual for the applicable conditions.

However, each pilot-in-command has the final authority and responsibility for the safe operation of his aircraft and may use a different flap setting approved for that aircraft if he determines that it is necessary in the interest of safety.

**DEPARTURES****TURBO-JET POWERED AIRCRAFT**

- |                   |  |
|-------------------|--|
| Take-off to 1700' | Take-off power;  |
|                   | Take-off flaps;  |
|                   | 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. |

**cont'd**

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15 OCT 04 (10-4B) Eff 28 Oct
BRUSSELS, BELGIUM  
NOISE

## NOISE ABATEMENT PROCEDURES

DEPARTURES (cont'd)  
PROPELLER AIRCRAFT

Take-off to 1700'	Take-off power; Climb at the maximum gradient compatible with safety; 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.
Above 3200'	Accelerate smoothly to enroute climb speed.

## NIGHTTIME RESTRICTIONS

Between 2300-0600LT only four aircraft will be authorized to taxi at the same time to the holding position of the runway in use. Additionally only three aircraft will be allowed to remain at the holding position awaiting take-off clearance.

## AIRCRAFT CLASSIFIED ACCORDING TO ICAO ANNEX 16, CHAPTER 2

Take-off and landing of aircraft classified according to ICAO Annex 16, Chapter 2 are forbidden.

Excluded are:

- Take-offs and landings of aircraft carrying members of the Belgian Royal Family, of the Belgian 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;
- Take-offs and landings performed with regard to missions in case of disasters or for the purpose of medical assistance;
- Take-offs and landings concerning military missions;
- Take-offs and landings performed in exceptional conditions such as:
  - flights on which there is an immediate danger to the life or health of persons as well as animals or
  - flights diverted to Brussels National for meteorological reasons.

The Minister of Mobility and Transport may exceptionally and on explicitly justified request authorize the take-off or landing of a non compliant aircraft.

PPR obtainable from:

Civil Aviation Authority

CCN

Rue du Progres/Vooruitgangstraat, 80/5

B-1030 Brussels

Belgium

Tel: ++ 32(0) 2 206 32 11 / Fax: ++ 32(0) 2 203 15 28

E-mail: civilair@mobiliteit.fgov.be

SPECIAL NOISE ABATEMENT PROCEDURES FOR ARRIVALS AT NIGHT  
(2300-0559LT)

In addition to the other rules published the following procedures will be applied by air traffic controllers and pilots-in-command:

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

When simultaneous dependent IFR approaches are in progress, the minimum altitude to intercept the ILS LOC/glide path will be respectively 3000' for runway 25R and 4000' for runway 25L.

The minimum flight level available for arrivals within the Belgian airspace for General Aviation Traffic is FL 50.

cont'd

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BRUSSELS NATIONAL**JEPPESEN**  
15 OCT 04 **10-4C** Eff 28 Oct**BRUSSELS, BELGIUM**  
**NOISE****NOISE ABATEMENT PROCEDURES****NIGHTTIME RESTRICTIONS (cont'd)****SPECIAL NOISE ABATEMENT PROCEDURES FOR DEPARTURES AT NIGHT (2300-0559LT)**

Take-off from another runway than the assigned one will only be allowed after approval from the airport authority. This approval can only be granted for safety reasons. If such approval has been obtained, this will be stated when requesting start-up and ATC clearance.

All departures from runway 25R shall start their take-off at the beginning of the runway and preferably an uninterrupted take-off from P3 will be made after entering the runway. When runway 25R and 20 are take-off runway in use, runway 20 will be assigned to traffic routing via LNO, PITES, ROUSY, SOPOK or SPI. Other traffic will be assigned runway 25R.

When runway 25R or 25L is take-off runway in use, special types of acft only will be allocated CIV 6D or CIV 1Q if routing via CIV.

The minimum flight level available for departures within the Belgian airspace for General Aviation Traffic is FL50.

**NOISE QUOTA SYSTEM DURING NIGHT (2300-0600LT) AND EARLY MORNING (0601-0700LT)**

For movements with aircraft with MTOW of 8618 KGS or less or any other aircraft that has been certified according to ICAO Annex 16 with exception of chapter 2, 3 and 5 the Quota Count (QC) is 1.

Take-off and landing with QC > 12 is forbidden between 2300-0600LT.

Take-off and landing with QC > 24 is forbidden between 0601-0700LT.

Excluded are:

- Take-offs and landings of aircraft carrying members of the Belgian Royal Family, the Belgian government, the Regional and Community governments, foreign royal families, heads of state or leaders of foreign governments, presidents and commissioners of the European Union on official mission;
- Take-offs and landings performed with regard to missions in case of disasters or for the purpose of medical assistance;
- Take-offs and landings concerning military missions;
- Take-offs and landings performed in exceptional conditions such as:
  - flights on which there is an immediate danger to the life or health of persons as well as animals or
  - flights diverted to Brussels National for meteorological reasons.

The Director General of the CAA may exceptionally and on explicitly justified request authorize the take-off or landing of a non compliant aircraft.

PPR obtainable from:

Civil Aviation Authority

CCN

Rue du Progres/Vooruitgangstraat, 80/5

B-1030 Brussels

Belgium

Tel: ++ 32(0) 2 206 32 11 / Fax: ++ 32(0) 2 203 15 28

E-mail: civilair@mobiliteit.fgov.be

**REVERSE THRUST**

Reverse thrust or reverse pitch propeller other than idle thrust or power shall not be used between 2300-0559LT except for safety reasons.

**RUN-UP TESTS**

It is applied as a general rule that idle thrust engine test-runs in the open air and without silencers must be restricted to the very minimum. The previous authorization of the Airport Management - Airport Inspection Department - is required. The Airport Management has the right to stop or restrict all ongoing manoeuvres in the event of airport regulations being violated or circumstances arising that necessitate such a decision.

Engine test-runs in the open air and without silencers may only take place:

**cont'd**

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**JEPPESEN**  
15 OCT 04 **(10-4D)** **Eff 28 Oct**

**BRUSSELS, BELGIUM**  
**NOISE**

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## NOISE ABATEMENT PROCEDURES

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### RUN-UP TESTS (cont'd)

- at the crossing of taxiways F3, Y, W1 and W2 or
- on holding bay P7 (only in case of unavailability of the crossing of taxiways F3, Y, W1 and W2)  
and only between 0700-2200LT on the condition that a previous authorization was obtained from the Airport Inspection.  
Between 2300-0600LT run-ups of engines are not allowed at the holding position, except for run-up tests made immediately before the take-off as part of the take-off procedure.

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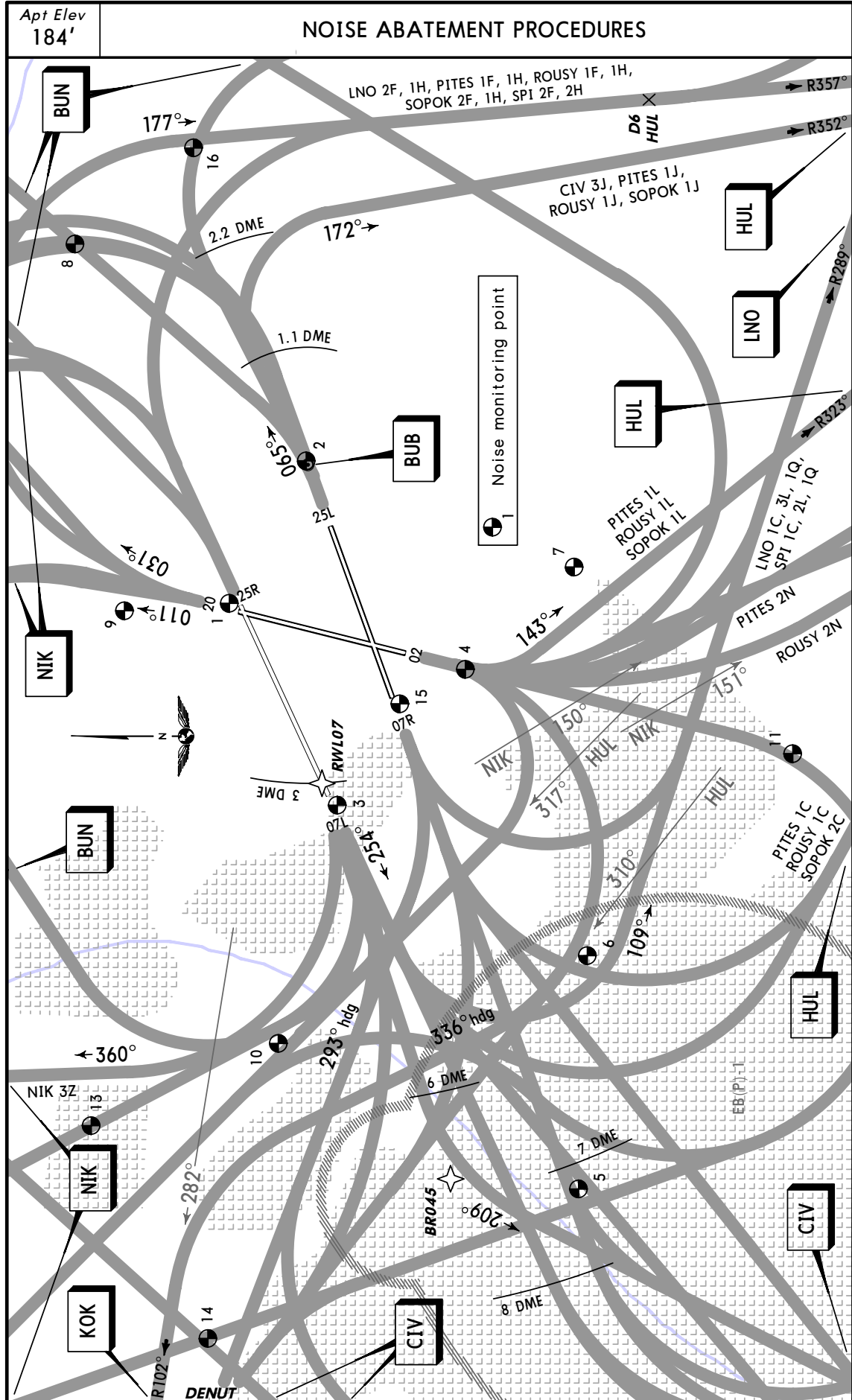
**BRUSSELS, BELGIUM**

15 OCT 04

**10-4E**

**Eff 28 Oct**

**NOISE**



CHANGES: New chart.

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**EBBR/BRU**  
 Apt Elev 184'  
 NS0 54.1 E004 29.1

ACARS:

BRUSSELS Delivery (Cp1)

North

Ground

South

Tower

BRUSSELS Departure (R)

**JEPPESEN BRUSSELS, BELGIUM**  
 10-9 4 FEB 05  
 BRUSSELS NATIONAL

121.75

121.95

118.05

121.87

118.6

120.77

126.62

04-27

04-28

04-29

04-30

04-31

04-32

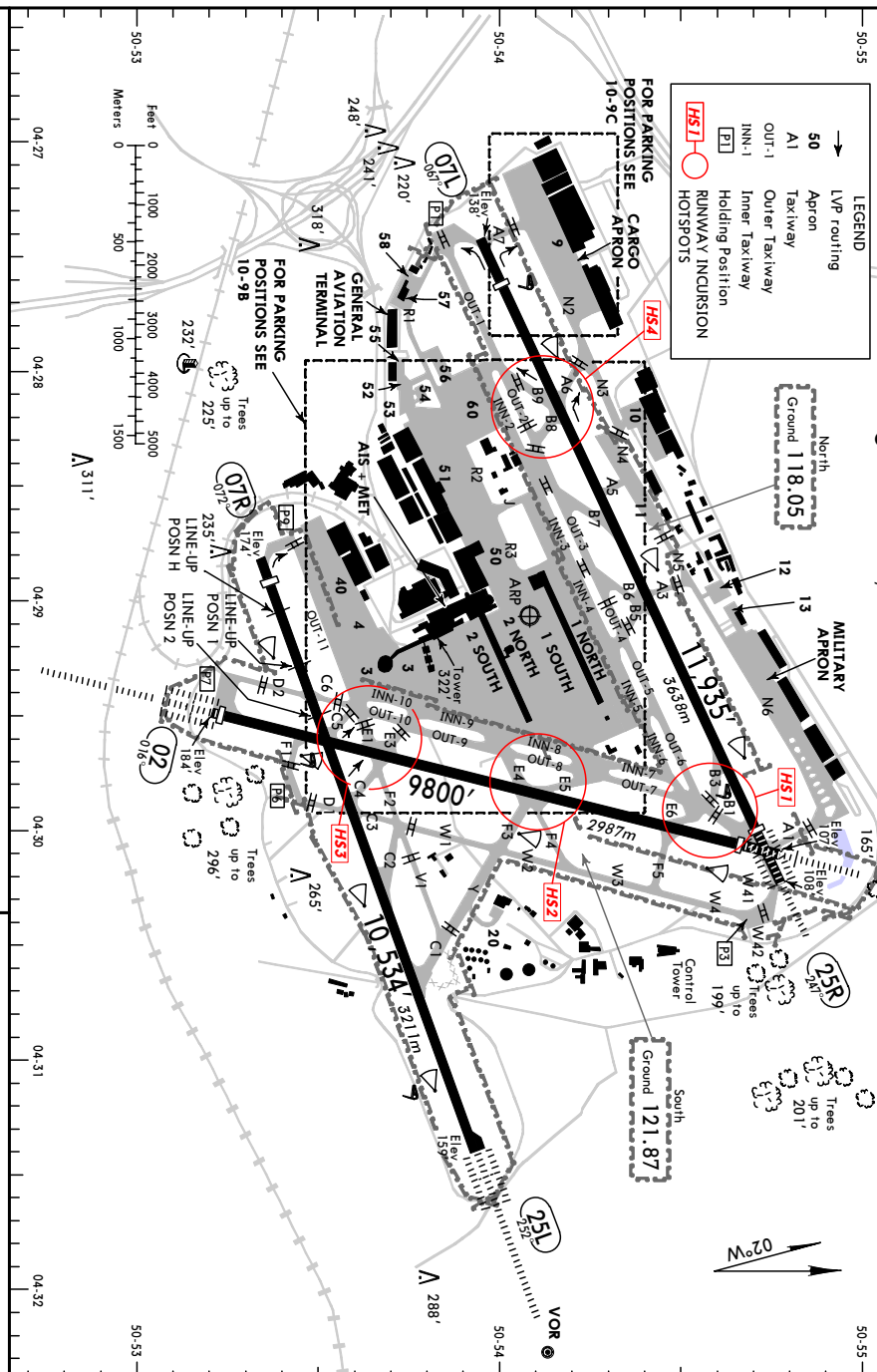
04-31

04-32

04-32

LEGEND

- LVP routing
- 50 Apron
- A1 Taxiway
- OUT-1 Outer Taxiway
- INN-1 Inner Taxiway
- [ETD] Holding Position
- [R] Runway Incursion
- [HS1] HOTSPOTS



**LOW VISIBILITY PROCEDURES**

**GENERAL**  
 Low Visibility Procedure will be in force when RVR falls to 800m or ceiling is 200' or below.  
 Pilots will be informed by ATIS or RTF.  
 When RVR value at TDZ is less than 400m, "Follow-Me" car is available on request.

**HS2** Confusing taxiway crossing of the Runway.  
**HS3** Runway.  
**HS4** Runway.

**RUNWAY INCURSION "HOT SPOTS"**

(For information only, not to be construed as ATC instructions.)  
**HS1** Twy B1: Confusing Runway entry. Make sure you are lining up on the correct Runway.  
**HS2** Twys B3 and E6: Make sure not to cross the holding position markings without a clearance.

**Taxiway Restrictions**  
 An explicit clearance shall ALWAYS be obtained before crossing or entering any rwy.  
 Adhere strictly to ATC instructions when taxiing.  
 When CAT II operations are in progress on rwy 25R, taxiing should be done via twys OUTER 2, INNER 3 thru INNER 6 in order to avoid signal disturbances of ILS Rwy 25R.  
 Twys A1 and N3 thru N6 may be used by wide-bodied military a/ct.  
 Twys A1, A3, D1, F1, N3, N4, N5, N6, V1, W1 and W2 can be used by wide-bodied a/ct only when the distance between the outer engine nacelles do not exceed 66'/20m, i.e. 33'/10m to each side of the taxiway centerline, unless when in tow. However, all types of aircraft can use these twy after prior request to the airport inspection and under the responsibility of the pilot in command.

**Parking Procedure**  
 When arriving on remote stands or on stands w/o docking device contact BRUSSELS Ground for marshaller assistance. Wait for marshaller on twy line before turning into the stand. Use of reverse thrust on apron is prohibited at any time.

**Use of APU/GPU/400Hz**  
 The act stands 140 thru 172, 201 thru 240 and 680 thru 699 are fully equipped with 400Hz and pre-conditioned air (PCA).  
 When arriving at one of these stands and as soon as possible (MAX 5 min after docking), the 400Hz shall be immediately connected and the APU shall be switched off.  
 When departing (15 min before ETD) from one of these stands, the APU is allowed to be started and the 400Hz shall be disconnected.

When one of the systems is unserviceable, the APU may be used.  
 When no PCA is available, the use of the APU is allowed during periods of extreme high or low temperatures for an act docked for more than one hour at the stand and on the condition that a previous authorization was obtained from the airport inspection.

Notice: After 17.3.2005 0901Z this chart should not be used without first checking JeppView or NOTAMs.

**START-UP PROCEDURE**

**START-UP APPROVAL**

Start-up approval must be obtained from "Brussels Delivery" or via Digital Data Link.

The TOBT procedure is complementary to the present CFMU slot concept, the CPDLC concept and the procedure for pilots to "report ready".

EOBT is automatically considered as TOBT-H for non TOBT participants and for all flights without a TOBT-H.

TOBT participants shall transmit their TOBT-H to BLAC CDB either directly, or via Belgocontrol AMS.

Transmission of TOBT-H: From EOBT -40 min till EOBT -20 min.

For non-regulated flights: ETOT = EOBT + taxi out time.

Taxi out time is set at 15 min (under normal weather conditions) for departure Rwy 25R and 20 min for Rwy 20, 23L and the combination Rwy 02 and 07R.

Transmission of new TOBT-H is limited to a maximum of 3 times.

Processing of TOBT-H by ATC (Tower delivery position), resulting in acceptance or change into new value: TOBT-S (can never be earlier than TOBT-H).

TOBT Acronyms:

TOBT	Target off block time
TOBT-H	Target off block time with indicator H: Confirmation of estimated ready time by the Airliner/Handler
TOBT-C	Target off block time Void (by Aircraft operator or Handler) (VOID = Cancelled)
TOBT-S	Target off block time Start-Up Sequence confirmation of the aircraft based on the TOBT-time (by Tower Delivery Controller)
TOBT-D	Target off block time Denied (by Tower Delivery Controller)
TOBT-N	Target off block time New (Renewal of TOBT-S) (by Tower Delivery Controller)
TOBT-X	Target off block time Void, e.g. in case of airport disruption (fog, de-icing,...) (by Tower Delivery Controller)

Pilots will call "Brussels Delivery" only when they will be ready for start-up in accordance with their CFMU slot (and related TOBT-S +3 min) if any, for push-back and/or ready for taxi immediately after reception of ATC clearance.

**ATC CLEARANCE**

The TOBT-S will be transmitted within a period of 5 min after receipt of the TOBT-H according a strict ATC procedure, in function of CFMU slots, the airport's operational status and at the latest at the end of the TOBT-H window + 5 min.

Start-up earlier than EOBT -3 min or TOBT-S -3 min will depend on ATC discretion (pre-departure sequence availability).

Pilots not calling or starting at EOBT or TOBT-S:

- If at EOBT + 3 min (for non TOBT flights) or at TOBT-S + 3 min (for TOBT participants) no taxi request, no Actual Off Block Time (AOBT) or no Start-Up Request (SUR) has been received by Belgocontrol, the aircraft loses its number in sequence and will only be re-sequenced after pilot's call.

- A new TOBT-H (for TOBT participants) may be sent accordingly by the Airline/Handler to ensure the appropriate place in the departing sequencing.

Aircraft requiring full rwy length shall include this in their start-up request. Pilots are reminded that noise abatement procedures affecting declared distances of some rwys remain to be adhered to.

**GENERAL**  
Rwy 25L approved for CAT II/III and Rwy 25R for CAT II operations, special aircrew and acft certification required.  
All rwys have an anti-skid layer.

**ADDITIONAL RUNWAY INFORMATION**

RWY	HIRL CL (15m) / HIALS-II TDZ PAPI-L (3.0°)	RVR	USABLE LENGTHS		TAKE-OFF WIDTH
			LANDING BEYOND Threshold	Glide Slope	
02	HIRL CL (15m) / HIALS PAPI-L (3.0°)	1 RVR	9649' / 2941m	8541' / 2603m	164' / 50m

**1 HST-E5 TAKE-OFF RUN AVAILABLE**

RWY 02L	RWY 20L
From rwy head	From rwy head
twy C5 Int	twy B1 Int
twy E1 Int	twy E6 Int
twy E3 Int	twy E4/E5 Int
twy E4 Int	
9800' (2987m)	9800' (2987m)
7628' (2325m)	8776' (2675m)
6808' (2075m)	7100' (2164m)
6654' (2028m)	5112' (1558m)
4111' (1253m)	

Intersection take-off run available on pilot's acceptance if pilots unable to accept should advise ATC duly in advance. **VIS is 2km or more.**

07L	HIRL CL (15m) / PAPI-L (3.0°)	HIRL CL (15m) / HIALS-II TDZ PAPI-L (3.0°)	RVR	11 089' / 3380m	10 033' / 3058m	148' / 45m
25R	HIRL CL (15m) / PAPI-L (3.0°)	HIALS-II TDZ PAPI-L (3.0°)	3 RVR	10 951' / 3338m	10 033' / 3058m	148' / 45m

**3 HST-B6, B7, B9 TAKE-OFF RUN AVAILABLE**

RWY 07L	RWY 25R
From rwy head	From rwy head
twy B8 Int	twy B1 Int
twy A6 Int	twy B3 Int
twy B9 Int	twy B5 Int
twy A5 Int	twy A3 Int
twy B7 Int	twy B6 Int
twy A3 Int	twy B7 Int
twy B5 Int	twy B5 Int
	twy A5 Int
11 935' (3658m)	11 935' (3658m)
9537' (2892m)	10 719' (3267m)
8481' (2585m)	9088' (2770m)
8261' (2518m)	6552' (1997m)
7047' (2148m)	6453' (1967m)
6086' (1855m)	6447' (1965m)
5151' (1570m)	4970' (1515m)
4941' (1506m)	twy B7 Int
4557' (1389m)	twy A5 Int

Intersection take-off run available on pilot's acceptance if pilots unable to accept should advise ATC duly in advance. **VIS is 2km or more.**

07R	HIRL CL (15m) / PAPI-L (angle 3.0°)	HIRL CL (15m) / HIALS-II TDZ PAPI-L (3.0°)	RVR	10 121' / 3085m	9393' / 2865m	148' / 45m
25L	HIRL CL (15m) / PAPI-L (3.0°)	HIALS-II TDZ PAPI-L (3.0°)	3 RVR	10 121' / 3085m	9393' / 2865m	148' / 45m

**5 HST-C2 TAKE-OFF RUN AVAILABLE**

RWY 07R	RWY 25L
From Line-up PSN H	From rwy head
Line-up PSN I	twy C1 Int
twy C6 Int	twy C2 Int
Line-up PSN 2	twy C3/C4 Int
twy C5 Int	
twy C3/C4 Int	
9485' (2891m)	10 534' (3211m)
8609' (2624m)	7251' (2210m)
7890' (2405m)	5345' (1630m)
7680' (2341m)	4058' (1237m)
7047' (2148m)	
5879' (1792m)	

Intersection take-off run available on pilot's acceptance if pilots unable to accept should advise ATC duly in advance. **VIS is 2km or more.**

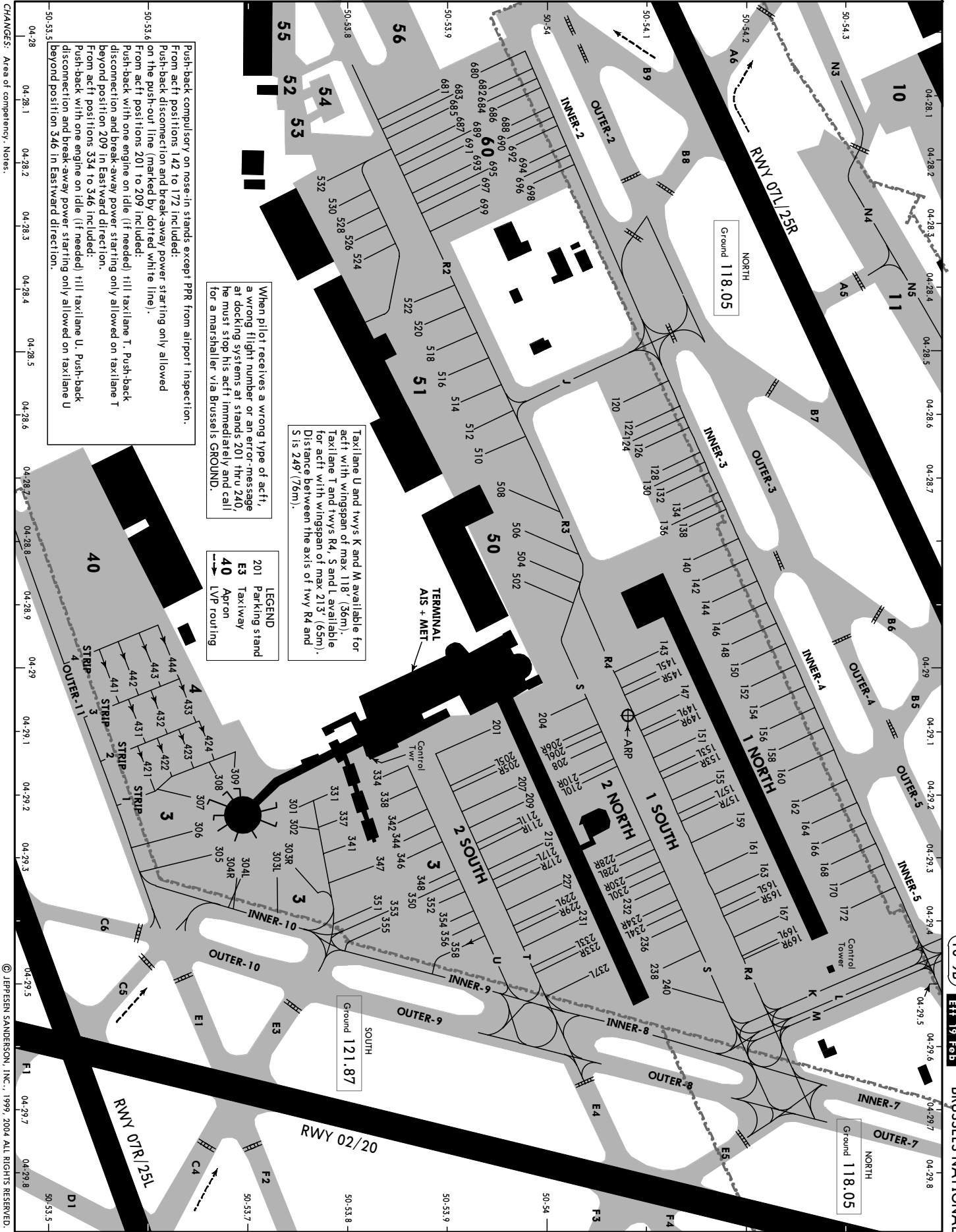
RWYS 02, 25L/R		RWYS 02, 07L/R, 25L/R		ALL RWYS	
Approved Operators	LVP must be in Force	LVP must be in Force	RCLM (DAY only) or RL	RCLM (DAY only) or RL	NIL (DAY only)
HIRL CL & mult. RVR req	RL CL & mult. RVR req	RL & CL	RCLM (DAY only) or RL	RCLM (DAY only) or RL	
A	150m	150m	200m	250m	400m
B	150m	150m	200m	250m	500m
C	150m	150m	200m	250m	500m
D	150m	150m	200m	250m	500m

1 Operators applying U.S. Ops Specs: CL required below 300m.

Notice: After 17.3.2005 0901Z this chart should not be used without first checking JeppView or NOTAMs.

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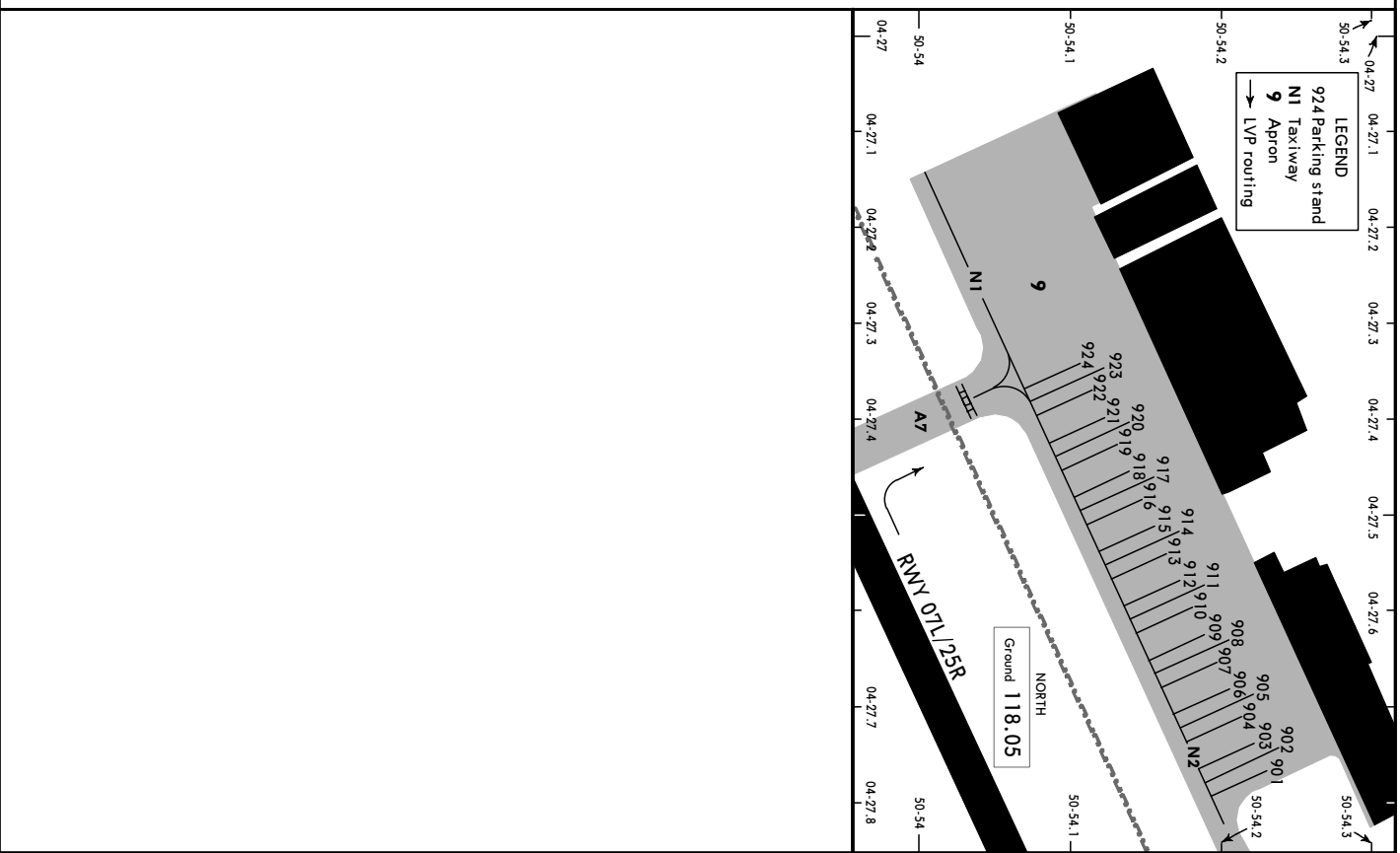
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10-9B 6 FEB 04 EFB 13 Feb BRUSSELS NATIONAL



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INS COORDINATES			
STAND No.	COORDINATES	STAND No.	COORDINATES
120 thru 126	<b>APRON 1 NORTH</b>	352	N50 53.9 E004 29.4
128 thru 134	N50 54.1 E004 28.6	353	N50 53.8 E004 29.4
136 thru 140	N50 54.1 E004 28.7	354	N50 53.9 E004 29.4
142 thru 146	N50 54.1 E004 28.8	355	N50 53.8 E004 29.4
148 thru 152	N50 54.2 E004 28.9	356, 358	N50 53.9 E004 29.5
154 thru 158	N50 54.2 E004 29.0		<b>APRON 4</b>
160	N50 54.2 E004 29.1	421 thru 423	N50 53.6 E004 29.2
162, 164	N50 54.2 E004 29.2	424 thru 433	N50 53.6 E004 29.1
166 thru 170	N50 54.3 E004 29.2	441	N50 53.5 E004 29.0
172	N50 54.3 E004 29.3	442 thru 444	N50 53.6 E004 29.0
143 thru 147	<b>APRON 1 SOUTH</b>	901 thru 903	N50 54.2 E004 27.7
149L/R thru 153L/R	N50 54.1 E004 29.0	904 thru 908	N50 54.2 E004 27.6
155 thru 159	N50 54.2 E004 29.1	909 thru 913	N50 54.2 E004 27.5
161 thru 165L	N50 54.2 E004 29.2	914 thru 917	N50 54.2 E004 27.4
165R, 167	N50 54.2 E004 29.3	918, 919	N50 54.1 E004 27.4
		920 thru 924	N50 54.1 E004 27.3
169L/R	N50 54.3 E004 29.4		
			<b>APRON 50</b>
204, 206L/R	<b>APRON 2 NORTH</b>	502	N50 54.0 E004 28.9
208, 210L/R	N50 54.0 E004 29.2	504, 506	N50 54.0 E004 28.8
228L/R	N50 54.1 E004 29.3	508	N50 54.0 E004 28.7
230L	N50 54.1 E004 29.4		<b>APRON 51</b>
230R	N50 54.1 E004 29.3	510	N50 53.9 E004 28.7
		512, 514	N50 53.9 E004 28.6
232 thru 236	N50 54.1 E004 29.4	516, 518	N50 53.9 E004 28.5
238, 240	N50 54.1 E004 29.5	520, 522	N50 53.9 E004 28.4
		524 thru 528	N50 53.8 E004 28.3
201	<b>APRON 2 SOUTH</b>	530, 532	N50 53.8 E004 28.2
205L/R thru 209	N50 53.9 E004 29.1		<b>APRON 60</b>
211L/R thru 217L/R	N50 54.0 E004 29.2	680, 681	N50 53.9 E004 28.0
227 thru 233L	N50 54.0 E004 29.3	682 thru 691	N50 53.9 E004 28.1
233R	N50 54.0 E004 29.4	692, 693	N50 53.9 E004 28.2
		694	N50 54.0 E004 28.2
237L	N50 54.1 E004 29.5	695	N50 53.9 E004 28.2
			<b>APRON 3</b>
301	N50 53.7 E004 29.2	696	N50 54.0 E004 28.2
302 thru 306	N50 53.7 E004 29.3	697	N50 53.9 E004 28.2
307	N50 53.6 E004 29.2	698	N50 54.0 E004 28.2
308, 309	N50 53.7 E004 29.2	699	N50 53.9 E004 28.2
331, 334	N50 53.8 E004 29.2		
337	N50 53.8 E004 29.3		
338	N50 53.8 E004 29.2		
341 thru 347	N50 53.8 E004 29.3		
348, 350	N50 53.9 E004 29.4		
351	N50 53.8 E004 29.4		



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 4 FEB 05 (10-9D)

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### DOCKING GUIDANCE SYSTEM

A docking guidance system is available at aircraft parking positions 140 till 172, 201 till 240 and 680 till 699. The guidance to those positions may be executed by marshallsers on request via the Ground Frequencies.

#### 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 till 172 and 680 till 699**

<b>Flight number/Aircraft type:</b>	The gate is ready for docking
<b>flashing</b>	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
>	Correction right required
<b>STOP:</b>	Stop now, the docking position is reached
<b>OK:</b>	Docking succesful
<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 till 699). <b>Stop the aircraft</b> , wait for marshaller instructions.

#### Note

Pilot must stop and contact Ground Control and wait for marshaller guidance:

- if the pilot does not get a steady aircraft type read out on the top of display and an indication on guidance by system until the aircraft nose reached the passengers boarding bridge;
- if the pilot believes system is transmitting erroneous docking data.

##### **Aircraft parking positions 201 till 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

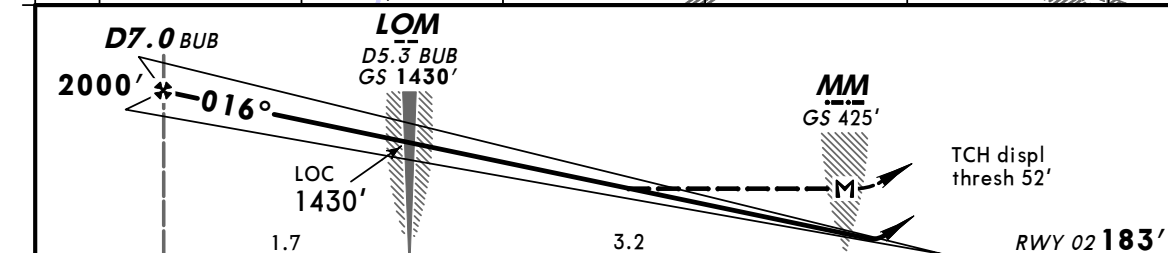
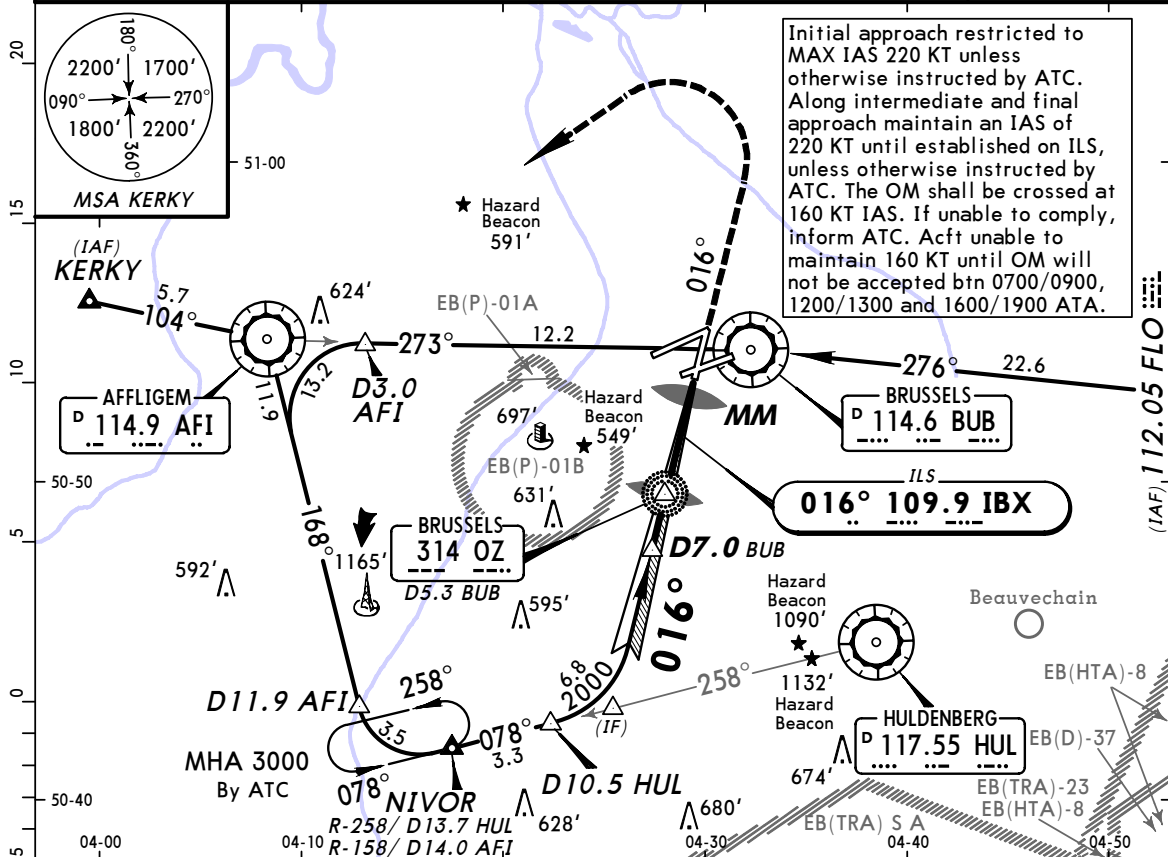
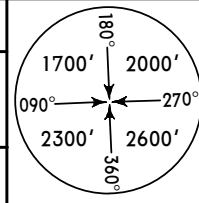
Two messages at the same time are always shown in an alternate way.

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

**JEPPESEN**  
24 DEC 04 **(11-1)**

**BRUSSELS, BELGIUM**  
**ILS Rwy 02**

110.6 112.05 114.6 114.9 117.55 132.47					BRUSSELS Arrival (R) 118.25	BRUSSELS Tower 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 IBX <b>109.9</b>	Final Apch Crs <b>016°</b>	GS LOM <b>1430'</b> (1247')	ILS DA(H) Refer to Minimums	Apt Elev <b>184'</b>	RWY <b>183'</b>	
<b>MISSED APCH: Climb on track 016° to 1500', then climbing turn LEFT to 4000' inbound AFI VOR. Report to ATC.</b>						
Alt Set: hPa		Rwy Elev: 7 hPa		Trans level: By ATC		Trans alt: 4500'



TO DISPL THRESH	1.7	3.2	0.6	0		
Gnd speed-Kts	70	90	100	120	140	160
ILS GS 3.00° or LOC Descent Gradient 5.2%	377	484	538	646	753	861
MAP at MM						

<b>JAR-OPS</b>		STRAIGHT-IN LANDING RWY 02				CIRCLE-TO-LAND	
ILS		LOC (GS out)					
DA(H) ABC: <b>383'</b> (200')		MDA(H) <b>560'</b> (377')					
D: <b>388'</b> (205')							
	FULL	ALS out	MM out	ALS out			
A					A		
B	RVR 550m			RVR 1500m	B		
C		RVR 1000m	NOT AUTH	RVR 1800m	C	NOT AUTH	
D	RVR 600m			RVR 2000m	D		

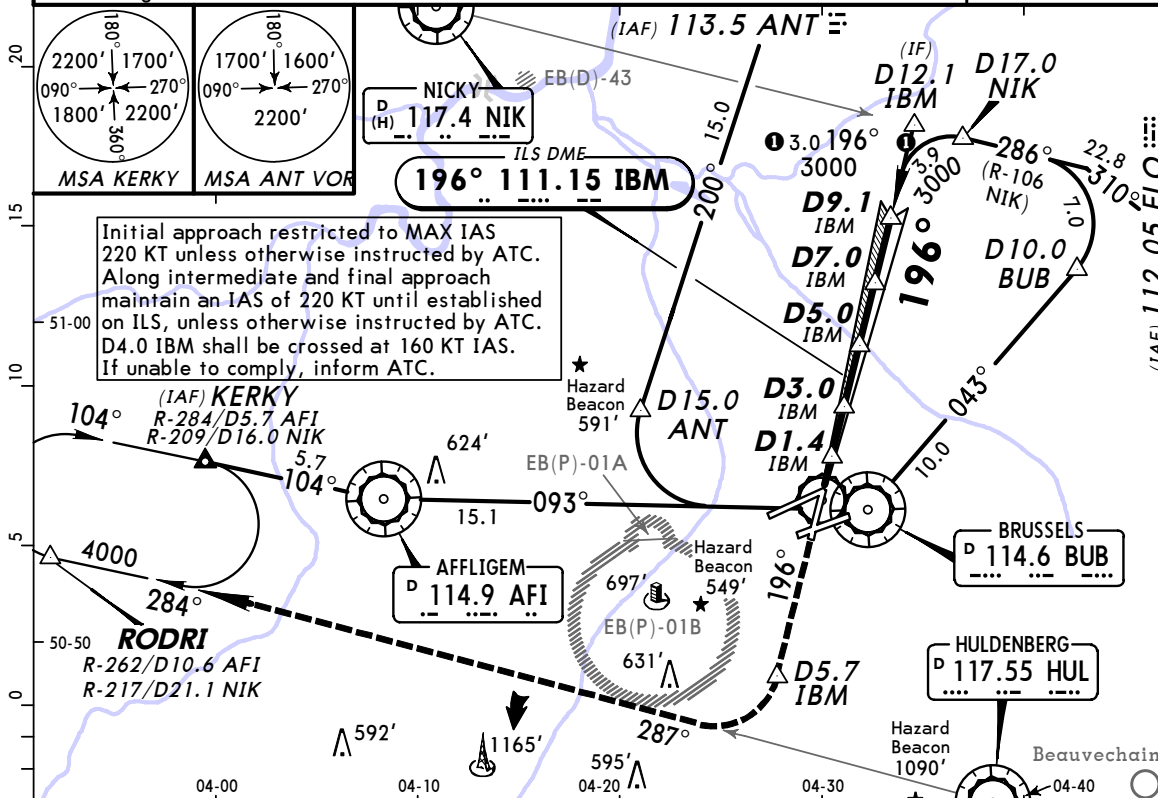
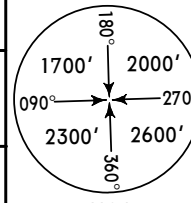
PANS OPS 3

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

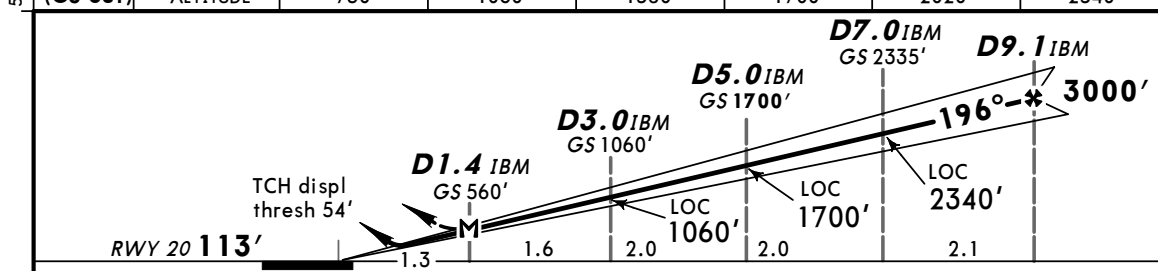
**JEPPESEN**  
24 DEC 04 (11-2)

**BRUSSELS, BELGIUM**  
**ILS DME Rwy 20**

110.6 112.05 114.6 114.9 117.55 132.47				BRUSSELS Arrival (R) 118.25		BRUSSELS Tower 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 IBM <b>111.15</b>	Final Apch Crs <b>196°</b>	GS <b>D5.0 IBM</b> 1700' (1587')	ILS DA(H) Refer to Minimums	Apt Elev <b>184'</b>	RWY <b>113'</b>		
<b>MISSED APCH: Climb STRAIGHT AHEAD. Turn RIGHT to intercept R-287 HUL to RODRI climbing to 4000'. Report to ATC.</b>							
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.							



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



Gnd speed-Kts	70	90	100	120	140	160	HIALS PAPI Refer to Missed Apch above
ILS GS 3.00° or	377	484	538	646	753	861	
LOC Descent Gradient 5.2%							

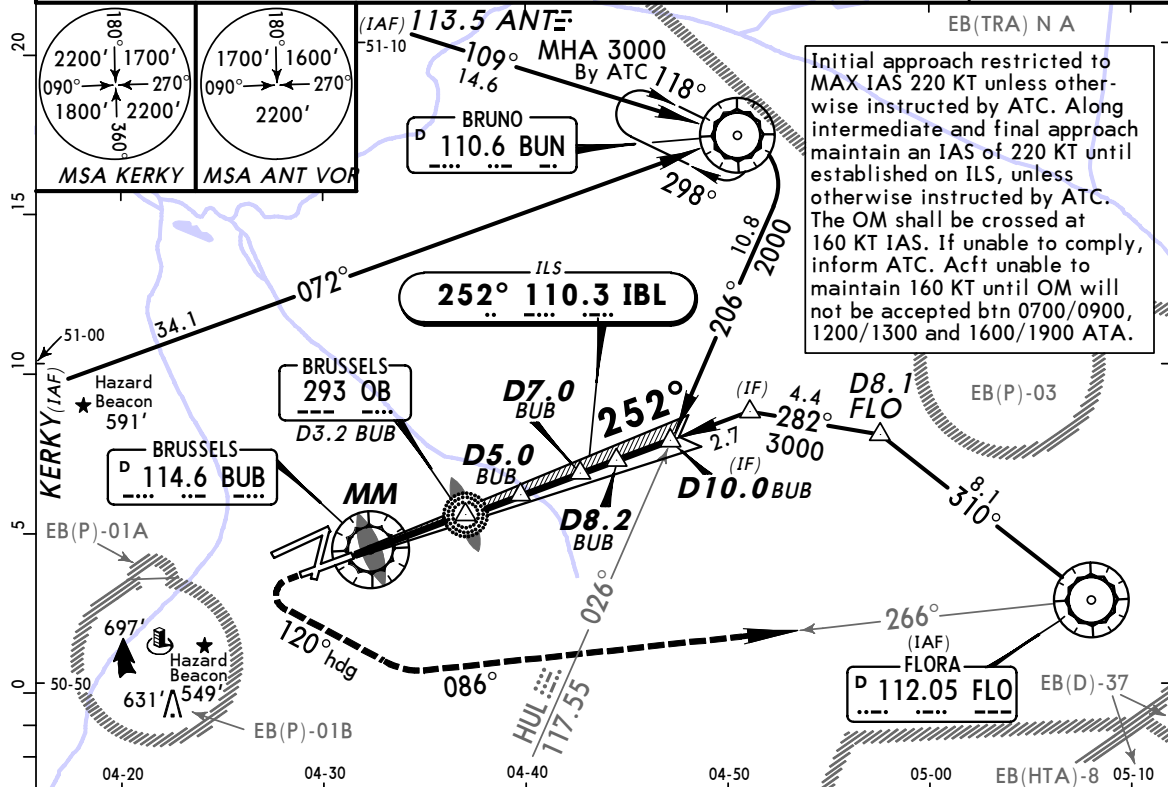
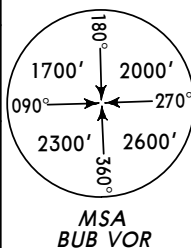
<b>JAR-OPS</b>		STRAIGHT-IN LANDING RWY 20				CIRCLE-TO-LAND	
ILS		LOC (GS out)					
DA(H) A: 313' (200') C: 322' (209')		MDA(H) 560' (447')					
B: 314' (201') D: 333' (220')							
FULL		ALS out		ALS out			
A			RVR 1200m		RVR 1500m	A	
B			RVR 1300m		RVR 1800m	B	
C	RVR 800m	RVR 1000m	RVR 1400m		RVR 2000m	C	NOT AUTH
D			RVR 1600m			D	

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**BRUSSELS NATIONAL**

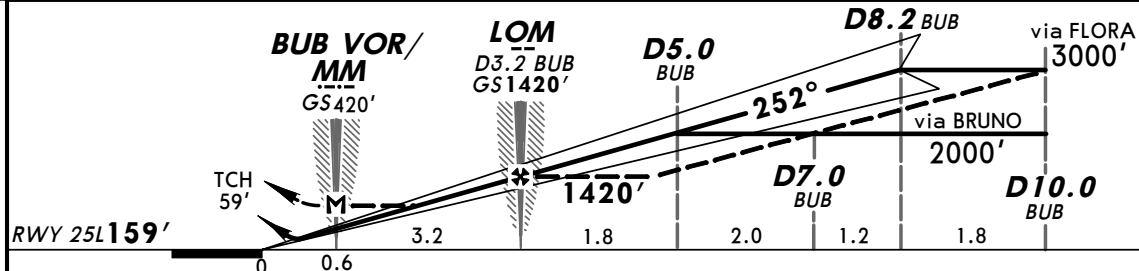
**JEPPESEN**  
24 DEC 04 (11-3)

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

110.6 112.05 114.6 114.9 117.55 132.47				BRUSSELS Arrival (R) 118.25	BRUSSELS Tower 118.6 120.77
Ground 121.87 for apron 2 North and North of it 121.87 for apron 2 South and South of it					
LOC IBL <b>110.3</b>	Final Apch Crs <b>252°</b>	GS LOM <b>1420'</b> (1261')	ILS DA(H) <b>359'</b> (200')	Apt Elev <b>184'</b>	RWY <b>159'</b>
<b>MISSED APCH:</b> Climb STRAIGHT AHEAD. When passing 700' turn LEFT onto hdg 120° climbing to 2500'. Intercept 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 (GS out)	BUB DME	1.0	2.0	3.0
	ALTITUDE	730'	1050'	1370'



Gnd speed-Kts	70	90	100	120	140	160	HTALS-II PAPI 700'
ILS GS 3.00° or	377	484	538	646	753	861	
LOC Descent Gradient 5.2%							

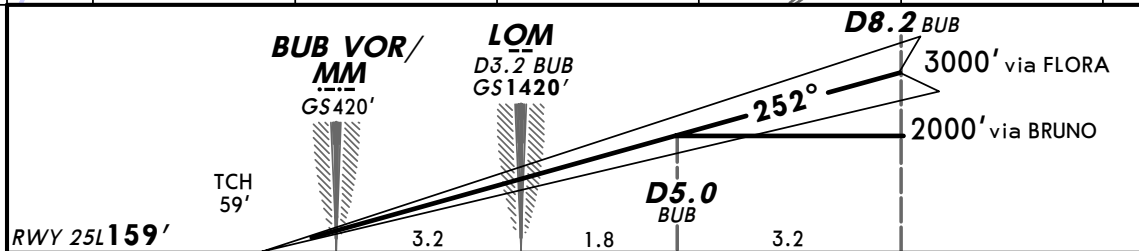
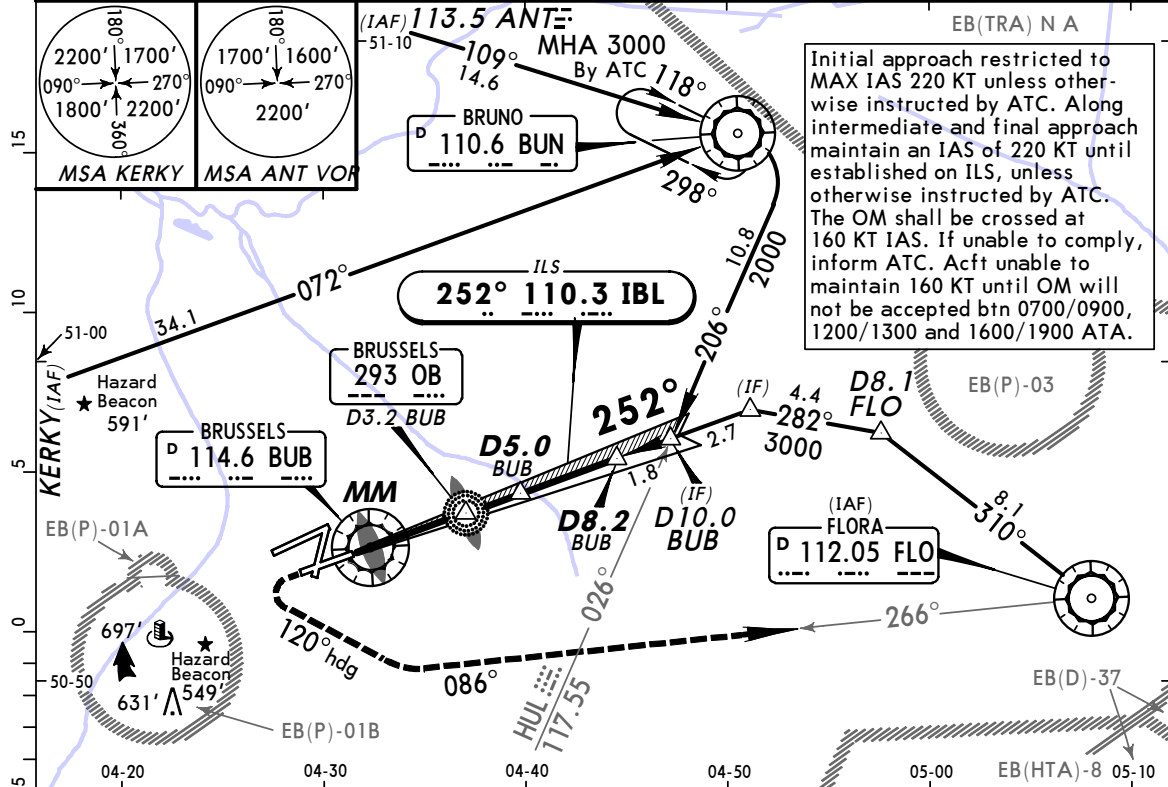
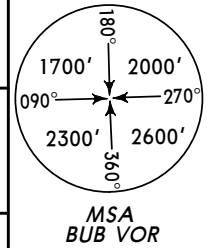
JAR-OPS STRAIGHT-IN LANDING RWY 25L				CIRCLE-TO-LAND	
ILS DA(H) <b>359'</b> (200')		LOC (GS out) MDA(H) <b>530'</b> (371')			
FULL		ALS out		ALS out	
A		RVR 900m		A	NOT AUTH
B			RVR 1500m	B	
C	RVR 550m	RVR 1000m	RVR 1800m	C	
D		RVR 1400m	RVR 2000m	D	

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

**JEPPESSEN**  
24 DEC 04 **(11-3A)**

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

ATIS 110.6 112.05 114.6 114.9 117.55 132.47				BRUSSELS Arrival (R) 118.25	BRUSSELS Tower 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 IBL <b>110.3</b>	Final Apch Crs <b>252°</b>	GS LOM <b>1420'</b> (1261')	CAT II ILS RA/DA(H) Refer to Minimums	Apt Elev <b>184'</b>	<b>RWY 159'</b>
<b>MISSED APCH:</b> Climb STRAIGHT AHEAD. When passing 700' turn LEFT onto hdg 120° climbing to 2500'. Intercept 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.					



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

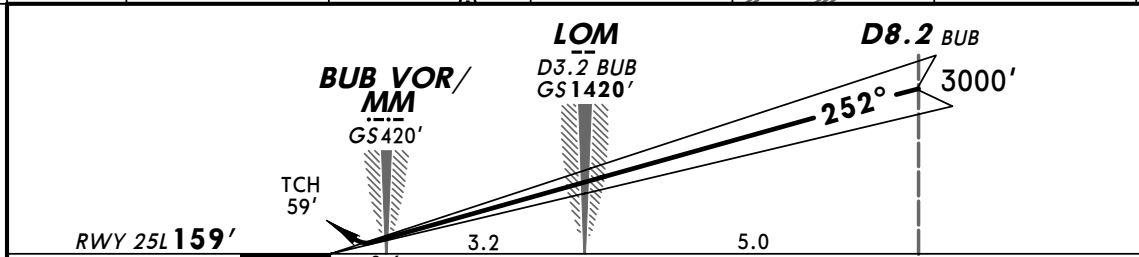
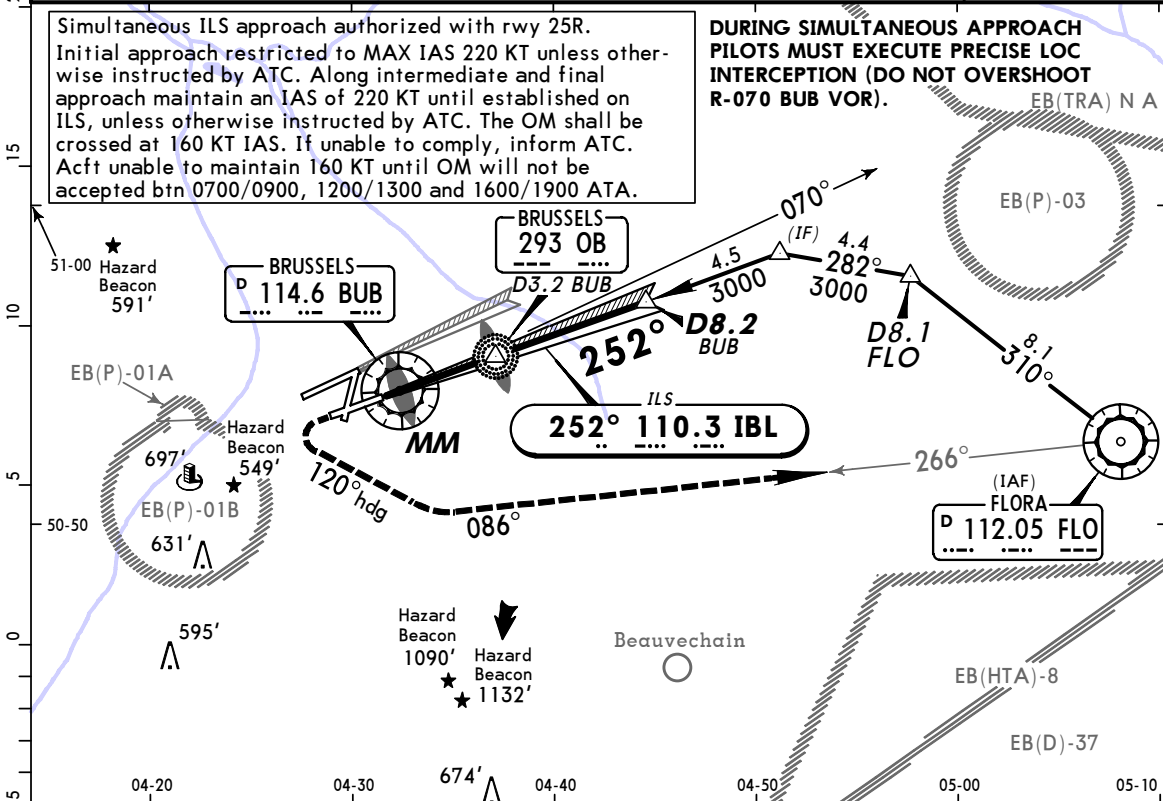
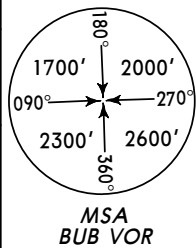
<b>JAR-OPS</b>			STRAIGHT-IN LANDING RWY 25L CAT II ILS		
AB <b>RA 113'</b> DA(H) <b>259'</b> (100')	C <b>RA 122'</b> DA(H) <b>267'</b> (108')	D <b>RA 131'</b> DA(H) <b>280'</b> (121')			
RVR <b>350m</b>			RVR <b>400m</b>		

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

**JEPPESEN**  
24 DEC 04 **(11-4)**

**BRUSSELS, BELGIUM**  
**SIMULTANEOUS DEPENDENT APCH ILS Rwy 25L**

ATIS 110.6 112.05 114.6 114.9 117.55 132.47				BRUSSELS Arrival (R) 118.25	BRUSSELS Tower 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 IBL <b>110.3</b>	Final Apch Crs <b>252°</b>	GS LOM <b>1420'</b> (1261')	ILS DA(H) <b>359'</b> (200')	Apt Elev <b>184'</b>	RWY <b>159'</b>
<b>MISSED APCH: Climb STRAIGHT AHEAD. When passing 700' turn LEFT onto hdg 120° climbing to 2500'. Intercept R-266 inbound FLO VOR and climb to 4500'. Report to ATC as soon as practicable. No LEFT turn before BUB VOR/MM.</b>					
Alt Set: hPa		Rwy Elev: 6 hPa		Trans level: By ATC	
				Trans alt: 4500'	



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

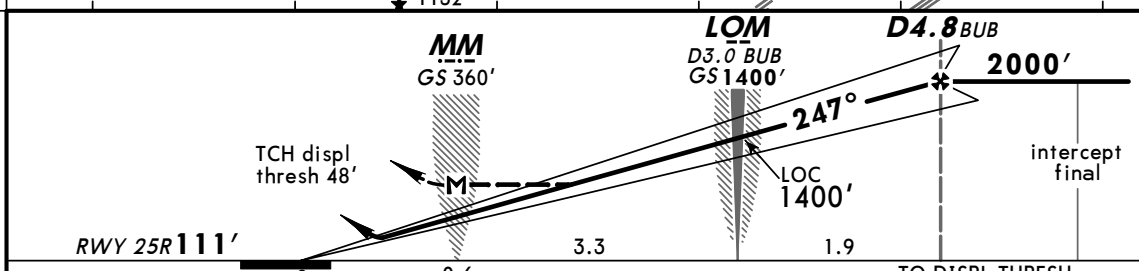
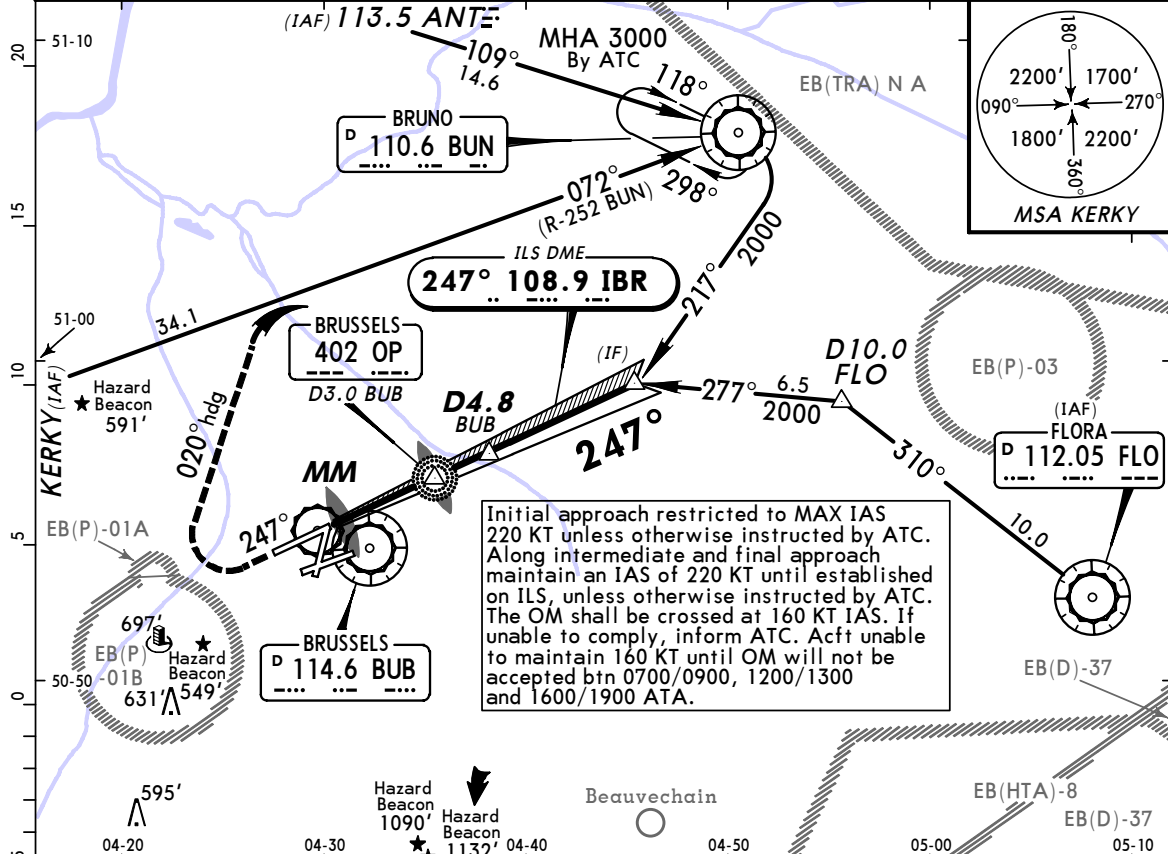
<b>JAR-OPS</b>		STRAIGHT-IN LANDING RWY 25L		CEILING REQUIRED	CIRCLE-TO-LAND
ILS DA(H) <b>359'</b> (200')		LOC (GS out)			
FULL		ALS out			
A	600' - 2000m		NOT APPLICABLE		A
B					B
C					C
D					D

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

**JEPPESEN**  
24 DEC 04 (11-5)

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

110.6 112.05 114.6 114.9 117.55 132.47				BRUSSELS Arrival (R) 118.25		BRUSSELS Tower 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 IBR <b>108.9</b>	Final Apch Crs <b>247°</b>	GS LOM <b>1400'</b> (1289')	ILS DA(H) Refer to Minimums	Apt Elev 184'	RWY 111'		
<b>MISSED APCH:</b> Climb to 2000. When passing 700' turn RIGHT onto hdg 020°. Intercept and follow R-252 inbound BUN VOR and climb to 3000'. Report to ATC. No RIGHT turn before OP Lctr/OM.							
Alt Set: hPa		Rwy Elev: 4 hPa		Trans level: By ATC		Trans alt: 4500'	



Gnd speed-Kts	70	90	100	120	140	160	HIALS-II PAPI <b>700'</b>
ILS GS 3.00° or	377	484	538	646	753	861	
LOC Descent Gradient 5.2%							

<b>JAR-OPS</b>				<b>STRAIGHT-IN LANDING RWY 25R</b>		<b>CIRCLE-TO-LAND</b>	
ILS		LOC (GS out)		CIRCLE-TO-LAND			
DA(H) ABC: <b>311'</b> (200')		MDA(H) <b>450'</b> (339')					
D: <b>312'</b> (201')							
FULL		ALS out		MM out		ALS out	
A			RVR 1200m			A	
B			RVR 1300m			B	
C	RVR 800m	RVR 1000m	RVR 1400m	NOT AUTH		C	NOT AUTH
D			RVR 1600m			D	

CHANGES: MSA. ILS DME.



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

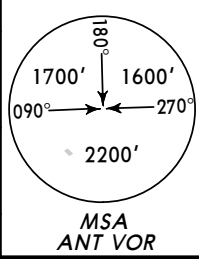
**JEPPESSEN**  
24 DEC 04 **(11-5A)**

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

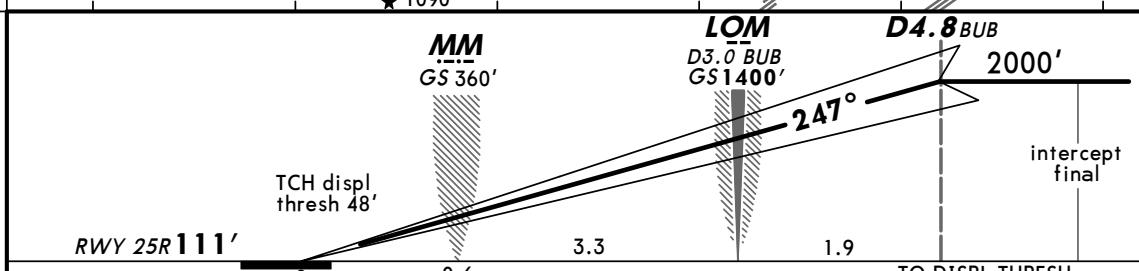
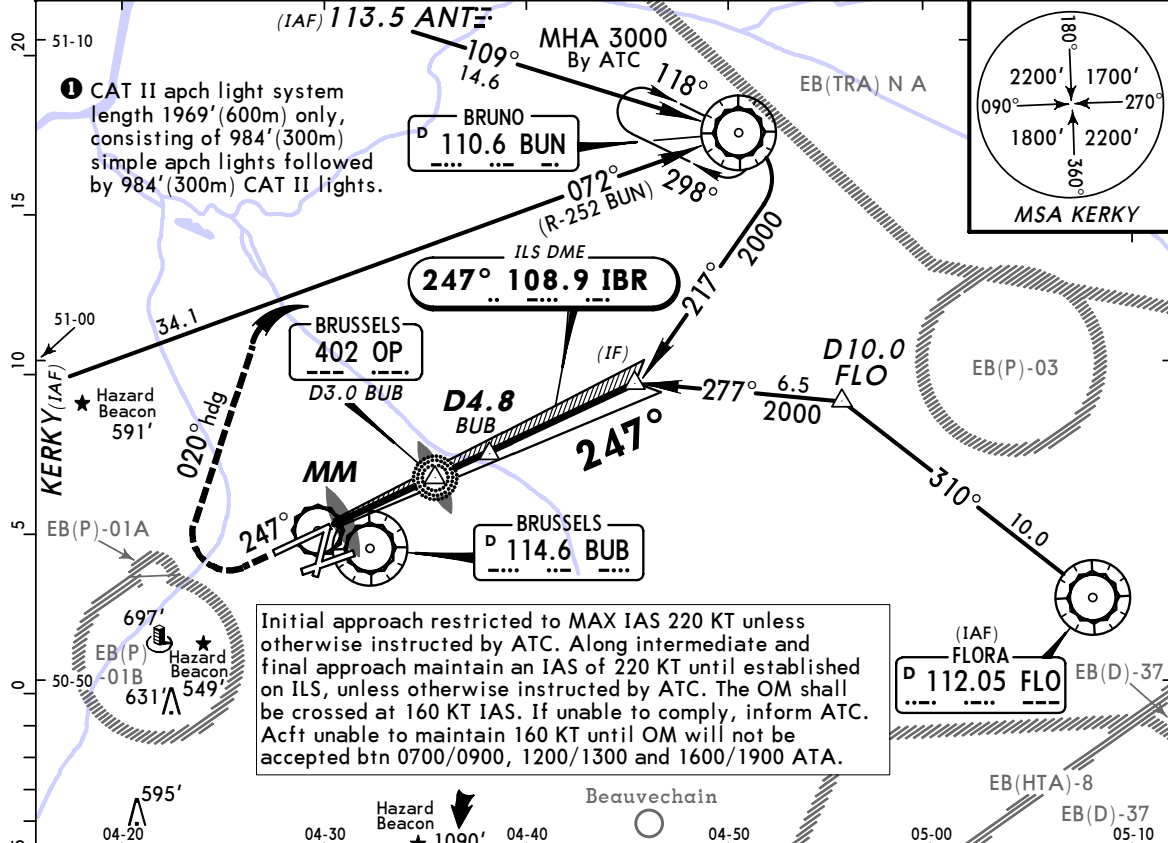
ATIS Arrival				BRUSSELS Arrival (R)		BRUSSELS Tower	
110.6	112.05	114.6	114.9	117.55	132.47	118.25	118.6 120.77

BRIEFING STRIP™

118.05 for apron 2 North and North of it		Ground 121.87 for apron 2 South and South of it	
LOC IBR <b>108.9</b>	Final Apch Crs <b>247°</b>	GS LOM <b>1400'</b> (1289')	CAT II ILS RA/DA(H) Refer to Minimums Apt Elev <b>184'</b> RWY <b>111'</b>



**MISSED APCH:** Climb to 2000. When passing 700' turn RIGHT onto hdg 020°. Intercept and follow R-252 inbound BUN VOR and climb to 3000'. Report to ATC. 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.



Gnd speed-Kts	70	90	100	120	140	160	HIALS-II PAPI <b>700'</b>
GS	3.00°	377	484	538	646	753 861	

JAR-OPS STRAIGHT-IN LANDING RWY 25R CAT II ILS		
AB <b>RA 104'</b> DA(H) <b>211'</b> (100')	C <b>RA 113'</b> DA(H) <b>220'</b> (109')	D <b>RA 126'</b> DA(H) <b>230'</b> (119')

RVR **350m**

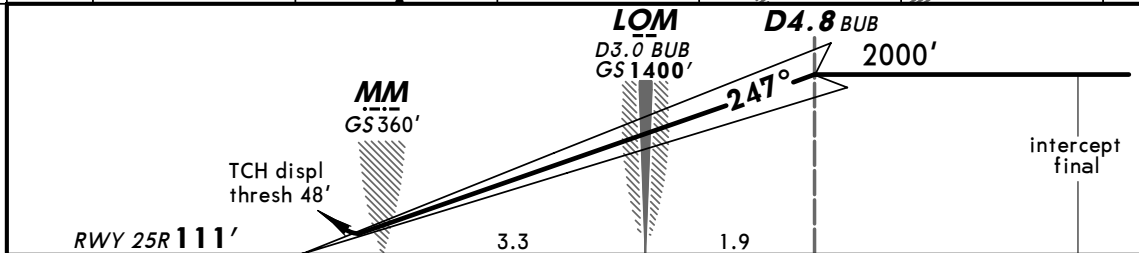
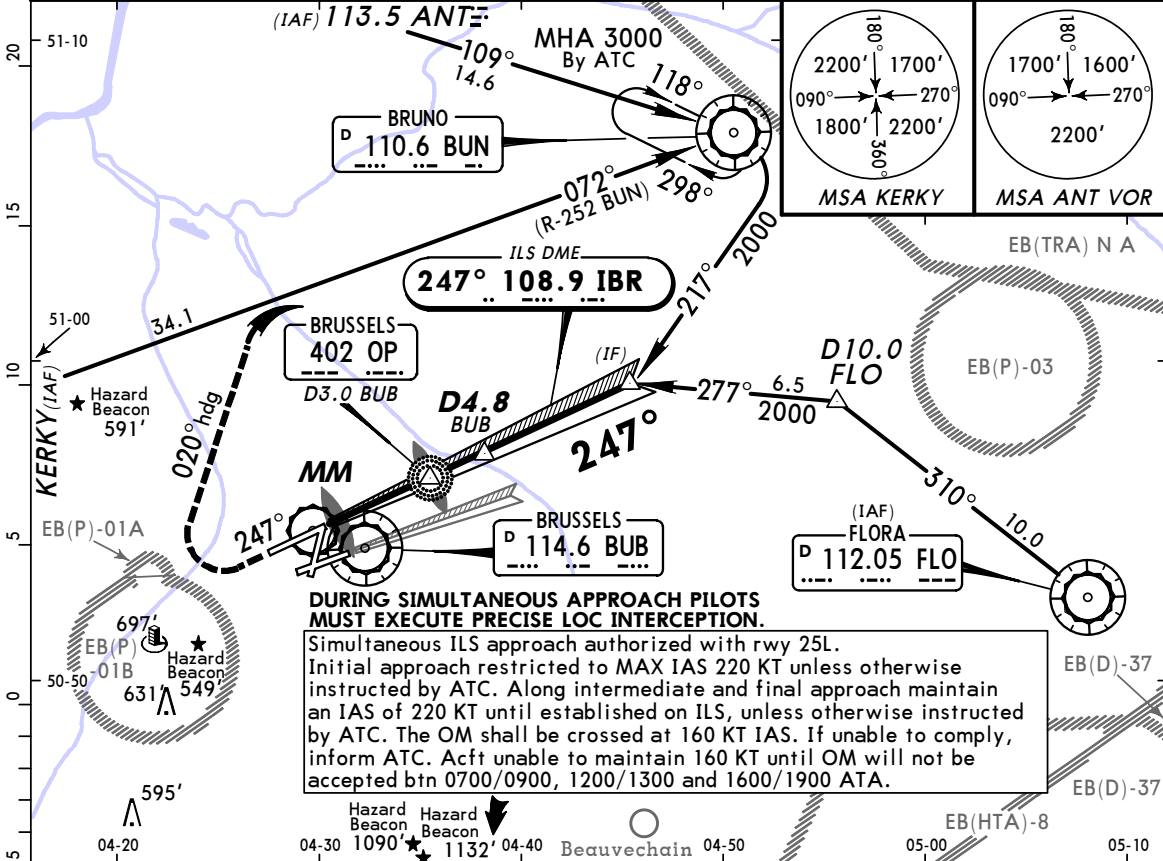
PANS OPS 3

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

**JEPPesen**  
24 DEC 04 **(11-6)**

**BRUSSELS, BELGIUM**  
**SIMULTANEOUS DEPENDENT APCH ILS Rwy 25R**

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 IBR <b>108.9</b>	Final Apch Crs <b>247°</b>	GS LOM <b>1400'</b> (1289')	ILS DA(H) Refer to Minimums		Apt Elev <b>184'</b> RWY <b>111'</b>		
<b>MISSED APCH:</b> Climb to 2000. When passing 700' turn RIGHT onto hdg 020°. Intercept and follow R-252 inbound BUN VOR and climb to 3000'. Report to ATC. No RIGHT turn before OP Lctr/OM.							
Alt Set: hPa		Rwy Elev: 4 hPa		Trans level: By ATC		Trans alt: 4500'	



Gnd speed-Kts						TO DISPL THRESH	
70	90	100	120	140	160	HIALS-II	700'
GS	3.00°	377	484	538	646	PAPI	↑

<b>JAR-OPS</b>		STRAIGHT-IN LANDING RWY 25R		CEILING REQUIRED	CIRCLE-TO-LAND
ILS		LOC (GS out)			
ABC: <b>311'</b> (200')					
DA(H) D: <b>312'</b> (201')					
FULL		ALS out			
A	600' - 2000m		NOT APPLICABLE		A
B					B
C					C
D					D
				NOT AUTH	

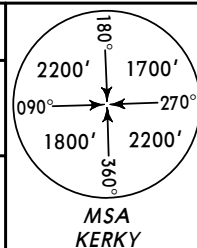
**EBBR/BRU**  
BRUSSELS NATIONAL

**JEPPESEN**  
24 DEC 04 (13-1)

**BRUSSELS, BELGIUM**  
VOR DME Rwy 07R

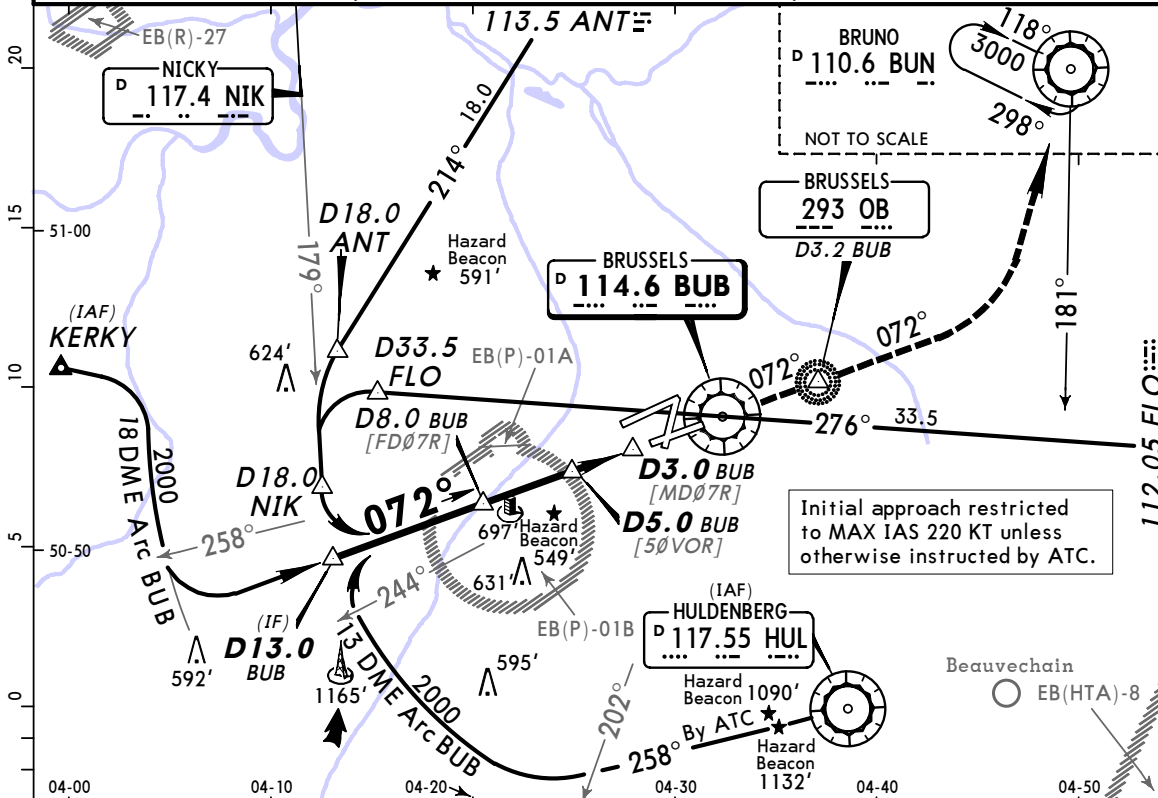
ATIS Arrival					BRUSSELS Arrival (R)		BRUSSELS Tower	
110.6	112.05	114.6	114.9	117.55	132.47	118.25		118.6 120.77

Ground				121.87 for apron 2 South and South of it	
118.05 for apron 2 North and North of it					
VOR BUB	Final Apch Crs	Minimum Alt	MDA(H)	Apt Elev	184'
<b>114.6</b>	<b>072°</b>	<b>D8.0 BUB</b>	<b>570' (395')</b>	<b>RWY 175'</b>	

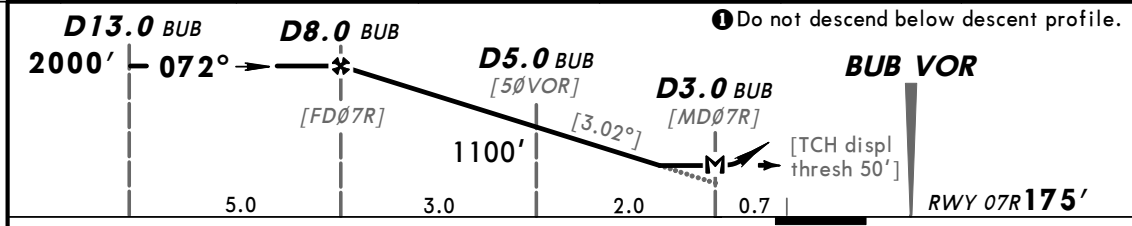


**MISSED APCH:** Climb on 072° via Lctr to 2000', then climbing turn LEFT to 3000' inbound BUN VOR. (MAX IAS 185 KT. Do not cross R-181 BUN VOR.) Report to ATC.

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



1	BUB DME	8.0	7.0	6.0	5.0	4.0
	ALTITUDE	2000'	1740'	1420'	1100'	790'



Gnd speed-Kts	70	90	100	120	140	160			
Descent Gradient 5.26% or	374	481	534	641	748	855			
Descent angle [3.02°]									
MAP at D3.0 BUB									

<b>JAR-OPS</b>	STRAIGHT-IN LANDING RWY 07R	CIRCLE-TO-LAND
MDA(H) <b>570' (395')</b>		

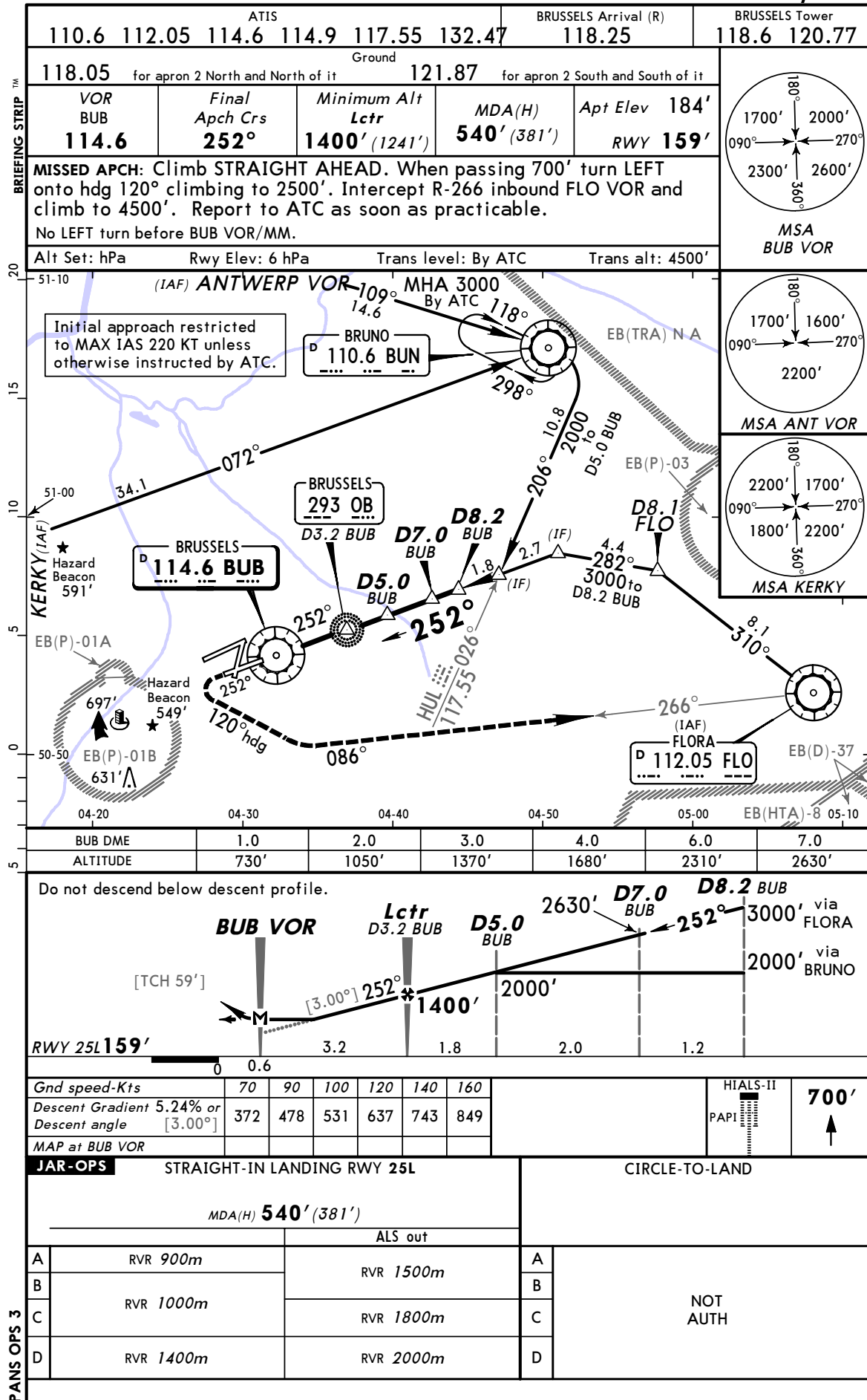
A		A	
B	RVR 1500m	B	
C	RVR 1800m	C	NOT AUTH
D	RVR 2000m	D	

PANS OPS 3

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

**JEPPESEN**  
24 DEC 04 (13-2)

**BRUSSELS, BELGIUM**  
**VOR DME Rwy 25L**



PANS OPS 3

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

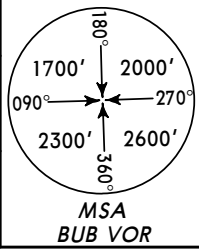
**JEPPESEN**  
24 DEC 04 (13-3)

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

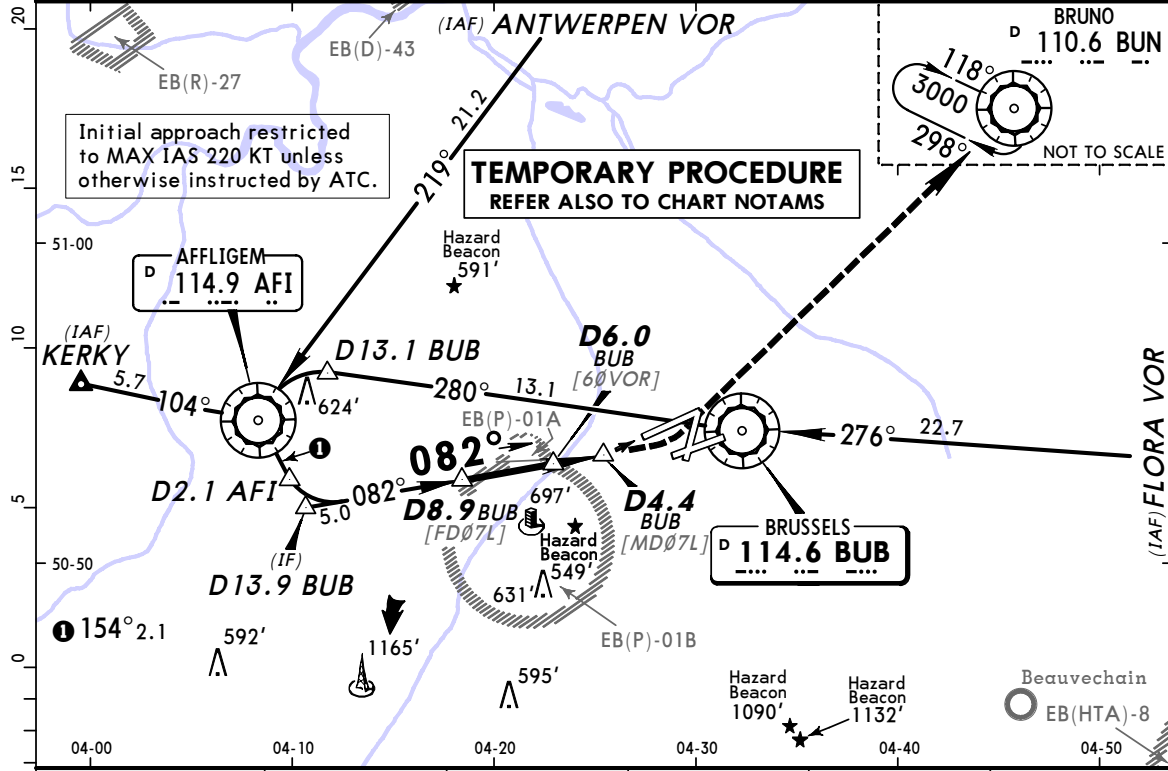
ATIS Arrival					BRUSSELS Arrival (R)	BRUSSELS Tower		
110.6	112.05	114.6	114.9	117.55	132.47	118.25	118.6	120.77

118.05 for apron 2 North and North of it		121.87 for apron 2 South and South of it			
VOR BUB	Final Apch Crs	Minimum Alt	MDA(H) (CONDITIONAL)	Apt Elev	184'
114.6	082°	2000' (1871')	640' (511')	RWY	129'

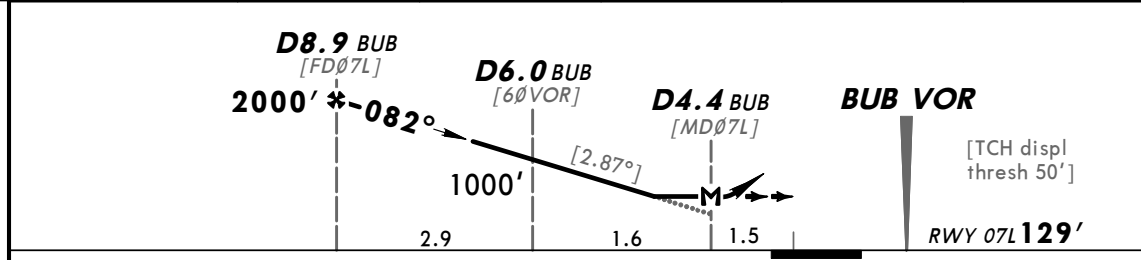
**MISSED APCH: Climb STRAIGHT AHEAD to 700', then turn LEFT to BUN VOR climbing to 3000'. Report to ATC.**



Alt Set: hPa Rwy Elev: 5 hPa Trans level: By ATC Trans alt: 4500'



BUB DME	8.9	8.0	7.0	6.0	5.0
ALTITUDE	2000'	1730'	1430'	1120'	820'



Gnd speed-Kts	70	90	100	120	140	160	PAPI-L	700'	3000'	BUN
Descent Gradient 5.00% or Descent angle [2.87°]	355	457	508	609	711	812		↑	LT	110.6
MAP at D4.4 BUB										

<b>JAR-OPS</b>	STRAIGHT-IN LANDING RWY 07L		CIRCLE-TO-LAND	
	with D6.0 BUB	w/o D6.0 BUB		
	MDA(H) 640' (511')	MDA(H) 820' (691')		

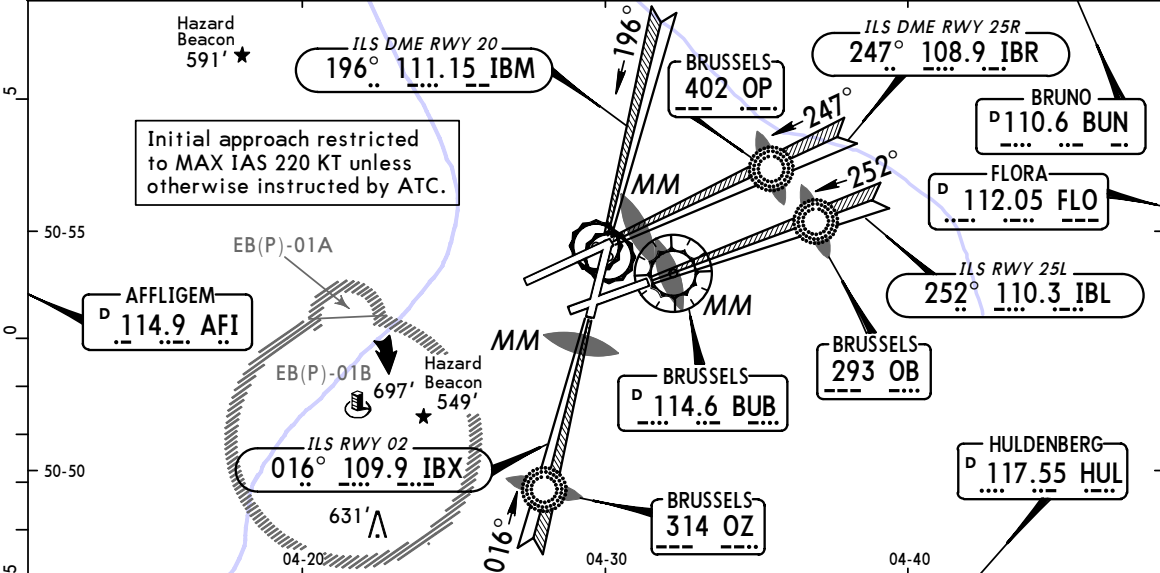
PANS OPS 3	A	2800m	A	NOT AUTH
	B		B	
	C		C	
	D		D	

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

**JEPPESEN**  
24 DEC 04 (18-1)

**BRUSSELS, BELGIUM**  
**SRE Rwy 02, 07R, 20, 25L/R**

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		
BRUSSELS Tower		Ground			for apron 2 North and North of it				for apron 2 South and South of it	
118.6	120.77	118.05			121.87					
<b>RADAR</b>	<i>Final Apch Crs</i> By ATC	<i>Minimum Alt</i> No FAF	<i>MDA(H)</i> Refer to Minimums		<i>Apt Elev 184'</i> <i>RWY - See below</i>					
<b>Missed Approach - See below</b>										
Alt Set: hPa		Apt Elev: 7 hPa		Trans level: By ATC		Trans alt: 4500'				



<b>RWY</b>	<b>RADAR FIX</b>	2.0	3.0	4.0	5.0	6.0
<b>02, 25L</b>	<b>ALTITUDE</b>	800'	1100'	1500'	1800'	2000'
<b>RWY</b>	<b>RADAR FIX</b>	2.0	3.0	4.0	5.0	6.0
<b>07R</b>	<b>ALTITUDE</b>	800'	1200'	1500'	1800'	2000'
<b>RWY</b>	<b>RADAR FIX</b>	2.0	3.0	4.0	5.0	6.0
<b>20</b>	<b>ALTITUDE</b>	800'	1100'	1400'	1700'	2000'
<b>RWY</b>	<b>RADAR FIX</b>	2.0	3.0	4.0	5.0	6.0
<b>25R</b>	<b>ALTITUDE</b>	800'	1100'	1400'	1800'	2000'
<b>RWY</b>		02	07R	20	25L	25R
<b>ELEV</b>		183'	175'	113'	159'	111'

**MISSED APPROACH:**

**Runway 02:** Climb on track 016° to 1500', then climbing turn LEFT to 4000' inbound AFI VOR. Report to ATC.

**Runway 07R:** Climb on 072° via OB Lctr to 2000', then climbing turn LEFT to 3000' inbound BUN VOR. (MAX IAS 185 KT. Do not cross R-181 BUN VOR). Report to ATC.

**Runway 20:** Climb STRAIGHT AHEAD. Turn RIGHT to intercept R-287 HUL to RODRI climbing to 4000'. Report to ATC.

**Runway 25L:** Climb STRAIGHT AHEAD. When passing 700' turn LEFT onto hdg 120° climbing to 2500'. Intercept R-266 inbound FLO VOR and climb to 4500'. Report to ATC as soon as practicable. No LEFT turn before BUB VOR/MM.

**Runway 25R:** Climb STRAIGHT AHEAD. At D4.0 BUB climbing turn RIGHT to 3000' inbound BUN VOR. Report to ATC.

<b>Gnd speed-Kts</b>	70	90	100	120	140	160	Lighting-Refer to Airport Chart	Refer to Missed Apch above
<b>Descent Gradient</b>	5.2%	369	474	527	632	737		

<b>JAR-OPS</b>		<b>STRAIGHT-IN LANDING</b>					<b>CIRCLE-TO-LAND</b>		
<b>SRE 02</b> MDA(H) <b>690' (507')</b>		<b>SRE 07R</b> MDA(H) <b>820' (645')</b>		<b>SRE 20</b> MDA(H) <b>530' (417')</b>		<b>SRE 25L</b> MDA(H) <b>490' (331')</b>		<b>SRE 25R</b> MDA(H) <b>490' (379')</b>	
ALS out		ALS out		ALS out		ALS out		ALS out	
<b>A</b>	RVR 1000m	RVR 1500m	RVR 1500m	RVR 1200m	RVR 1500m	RVR 900m	RVR 1500m	RVR 1200m	RVR 1500m
<b>B</b>	RVR 1200m			RVR 1300m	RVR 1800m	RVR 1000m	RVR 1800m	RVR 1300m	RVR 1800m
<b>C</b>		RVR 2000m	RVR 2000m	RVR 1400m	RVR 2000m	RVR 1400m	RVR 1800m	RVR 1400m	RVR 1800m
<b>D</b>	RVR 1600m			RVR 1600m	RVR 2000m	RVR 1400m	RVR 2000m	RVR 1600m	RVR 2000m
									<b>NOT AUTH</b>