EBOS — OOSTENDE-BRUGGE / Oostende

EBOS AD 2.1 AERODROME LOCATION INDICATOR AND NAME

EBOS — OOSTENDE-BRUGGE / Oostende

EBOS AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

	1	ARP COORD and site at AD	511156N - 0025144E
_			213° MAG / 620 m from the TWR
	2	Direction and distance from (city)	2.7 NM SSW from Oostende
	3	ELEV / Reference temperature	13 ft / 21°C
	4	Geoid undulation	137 ft
	5	MAG VAR / Annual change	1° W (2005) / INFO not AVBL
←	6	AD Administration, address, TEL, FAX, telex and AFS	Mail: Internationale Luchthaven Oostende-Brugge Ostend-Bruges International Airport Nieuwpoortsesteenweg 889 B-8400 Oostende Tel:++32 (0) 59 55 12 02 Fax:++32 (0) 59 55 12 24 (Duty Operations Officers) Fax:++32 (0) 59 51 12 28 (Airport Operations Manager) Fax:++32 (0) 59 55 14 64 (Self-briefing) Fax:++32 (0) 59 51 29 51 (ATC) AFS:EBOSYDYX
•	7	Types of TFC permitted (IFR / VFR)	IFR / VFR
	8	RMK	NIL

EBOS AD 2.3 OPERATIONAL HOURS

1	AD Administration	H24
2	Customs and immigration	 Passengers (1) (2): Every day: 0500 - 2300 Goods (3): MON - FRI: 0700 - 1100 / 1200 - 1600 (EXC HOL) SAT: 0700 - 1100
3	Health and sanitation	H24
4	AIS Briefing Office	H24
5	ATS Reporting Office (ARO)	H24

6	MET Briefing Office	H24
7	ATS	H24
8	Fuelling	H24
9	Handling	H24
10	Security	H24
11	De-icing	H24
12	RMK	(1) Customs CLR outside these HR is possible; fees depending on the number of customs officers required and on the nature of operations. If customs and immigration personnel is absent, the AD Direction may authorize an ACFT to leave for or to arrive from abroad on the understanding that the pilot fills out and signs a written declaration that the ACFT carries no goods. (2) Customs CLR outside these HR is possible on the understanding that a 2 HR prior notice is given. (3) Customs CLR outside these HR is possible on the understanding that a request is made with the local customs authority before 1600.

EBOS AD 2.4 HANDLING SERVICES AND FACILITIES

	1	Cargo-handling facilities	Modern handling facilities, nearest railway siding: Oostende (6 km)
←	2	Fuel / Oil types	AVGAS 100 LL and JET A1
←	3	Fuelling facilities / Capacity	Merlin Fuel (a Skytanking company) also representing Air Total and Air BP Tel:++32 (0) 59 80 16 48 Fax:++32 (0) 59 50 65 13 Email:info@skytanking.be AVBL from 0600 to 1800 (after hours standby)
	4	De-icing facilities	AVBL
	5	Hangar space for visiting ACFT	NIL
	6	Repair facilities for visiting ACFT	Small repairs
	7	RMK	For shuttle service from Apron 3 to the navigation office, customs or immigration call 413.

EBOS AD 2.5 PASSENGER FACILITIES

1	Hotels	Near the AD and in the city
2	Restaurants	At AD: 0800 - 2000 (2000 - 0800 O/R) and in the city
3	Transportation	Tramways, taxis and buses
4	Medical facilities	First aid treatment and recovery room Hospitals in Oostende (5 km)
5	Bank / Post office	In the city
6	Tourist information	At AD. Office in the city
7	RMK	NIL

EBOS AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	AD CAT for fire fighting	CAT 9 - H24
2	Rescue equipment	NIL
3	Capability for removal of disabled ACFT	NIL
4	RMK	NIL

EBOS AD 2.7 SEASONAL AVAILABILITY - CLEARING

1	Types of clearing equipment	 1 tractor with snowplough (working width: 5.6 m) 1 "UNIMOG" with snowplough (working width: 3.65 m) 2 sweeper-blowers (sweeping width: 3.3 m) 1 sweeper-blower (sweeping width: 3.6 m) with snowplough (working width: 5 m) 1 sprayer of de-icing liquids (capacity: 2 200 I, spraying width: 10 m) 1 spreader (capacity: 4 m³, spreading width: 10 m) – liquid and granules
2	Clearance priorities	 RWY 08/26 TWY to the aprons 1 and 2 Important aircraft stands on the apron 1 and 2 Remaining part of the aprons and the access roads
3	RMK	Transmission of information by SNOWTAM, METAR and ATIS. Designated authority to co-ordinate information about the current state of progress of snow clearance operations and the conditions of the movement area are the Duty Operations Officers: Fax:++32 (0) 59 55 12 24 Braking action measured by SAAB Friction Tester.

EBOS AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS DATA

←	1	Apron surface and strength	Surface: CONC / ASPH
			Strength: Apron 1: PCN 101/R/D/W/T Apron 2: PCN 86/F/C/W/U Apron 3: PCN 28/R/A/W/U
ı	2	TWY width, surface and strength	 Width: TWY L and M: 23 m TWY K3, K4, K5, K6, K7 and K8: 20 m TWY G2 and H2: 15 m Surface: CONC / ASPH Strength: PCN 86/F/C/W/T, except:

		* TWY C1: MAX 5 700 kg MAX * TWY G2 and H2: PCN 28/R/A/W/U
3	ACL and ELEV	At Apron 2, ELEV 4 m (13 ft)
4	VOR / INS check points	VOR checkpoint: NIL
		INS checkpoints: see chart <u>AD 2 EBOS ADC.01</u>
5	RMK	TWY C1 can only be used from SR to SS by ACFT with a MAX weight of 5 700 kg.

EBOS AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

	1	Taxiing guidance system	 Illuminated taxi guidance signs Taxiway guidelines Aircraft stand ID markings Parking guidelines at all stands
-	2	RWY and TWY markings	 RWY: Designation, THR, TDZ, centre line and edge lines TWY: Centre line, edge lines and HLDG positions at the TWY / RWY intersections
←	3	Stop bars	Stop bars AVBL on all runway holding positions
•	4	RMK	NIL

EBOS AD 2.10 AERODROME OBSTACLES

See <u>Aerodrome Obstacle Chart - ICAO (Type A)</u> and <u>Precision Approach Terrain Charts - ICAO</u>.

Note: Pilots shall draw attention to the presence of two buildings (7.9 m AMSL) in the runway strip at 117 m south of the RWY axis, opposite between exit A and B2.

EBOS AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	Associated MET Office	EBOS MET
2	HR of service	H24
3	Office responsible for TAF preparation	EBBR
	Periods of validity	9 and 24 HR
4	Type of LDG forecast	TREND
	Interval of issuance	30 MIN
5	Briefing / consultation provided	Official in charge, telephone, personal consultation
6	Flight documentation / languages used	Charts, abbreviated plain language text / Ho and En

7	Charts and other information AVBL for briefing or consultation	Surface charts, ALT charts, prognostic ALT charts, prognostic chart of significant weather, TROP and MAX wind chart
8	Supplementary equipment AVBL for providing information	FAX
9	ATS units provided with information	TWR and APP
10	Additional information	 International aviation: Tel:++32 (0) 59 55 14 52 * Fax: ++32 (0) 2 206 28 49 (EBBR) TEL Briefing (VFR flights, gliding, ballooning,): CONSULTEL
		Tel:0902 / 88173 * * Communications automatically recorded on tape

EBOS AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

RWY designator	TRUE BRG	Dimensions of RWY (m)	Strength (PCN) and surface of RWY and SWY	THR COORD THR geoid undulation	THR ELEV and highest ELEV of TDZ of precision APCH RWY
1	2	3	4	5	6
08	076.51°	3 200 x 45	PCN 86/F/C/W/T CONC / ASPH	511149.85N 0025124.68E	THR 15 ft TDZ 16 ft
				137 ft	
26	256.51°	3 200 x 45	PCN 86/F/C/W/T CONC / ASPH	511208.57N 0025329.17E	THR 13 ft TDZ 13 ft
				137 ft	

Slope of	SWY	CWY	Strip dimensions	OFZ	RMK
RWY-SWY	dimensions (m)	dimensions (m)	(m)		
7	8	9	10	11	12
+0,03%	NIL	NIL	3 320 x 300	yes	NIL
-0,01%	NIL	NIL	3 320 x 300	yes	NIL

EBOS AD 2.13 DECLARED DISTANCES

RWY designator	TORA (m)	TODA (m)	ASDA (m)	LDA (m)	RMK
1	2	3	4	5	6
08	3 200	3 200	3 200	2 900	NIL
26	3 200	3 200	3 200	2 785	NIL

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Note: In order to reduce the taxi procedure, ATC may, subject to pilot's acceptance, authorize TKOF from one of the intersections below. Pilots unable to accept should advise ATC duly in advance.

RWY designator	FROM	TORA (m)	TODA (m)	ASDA (m)
08	C1 (*)	1 761	1 761	1 761
26	Α	2 178	2 178	2 178
	C1 (*)	1 438	1 438	1 438

(*) Intersection C1 can only be used from SR to SS by ACFT with a MAX weight of 5 700 kg.

EBOS AD 2.14 APPROACH AND RUNWAY LIGHTING

	RWY 08						
←	APCH LGT SYSTEM	Type: Length: Intensity:	PALS CAT I 870 m LIH		VASIS	Type: MEHT:	PAPI (left / 3°) 13 ft
	RWY THR LGT	Colour: Wing bars:	green NIL		TDZ LGT	900 m	
	RWY END LGT	Colour: Wing bars:	red NIL		SWY LGT	NIL	
← ← ←	RWY CENTRE LINE LGT	Length: Spacing: Intensity:	3 200 m 15 m LIH	white: red / white red:	from 0 to 2 30 from 2 300 to from 2 900 to	2 900 m	
←	RWY EDGE LGT	Length: Spacing: Intensity:	3 200 m 30 m LIH	red white:	from 0 to 300 rom 300 to 3 2		
←	REMARK	NIL					

	RWY 26						
←	APCH LGT	Туре:	PALS CAT I		VASIS	Туре:	PAPI (left / 3°)
•	SYSTEM	Length:	840 m			MEHT:	13 ft
		Intensity:	LIH				
	RWY THR LGT	Colour:	green		TDZ LGT	900 m	
		Wing bars:	NIL				
	RWY END LGT	Colour:	red		SWY LGT	NIL	
		Wing bars:	NIL				
←	RWY CENTRE	Length:	3 200 m	white:	from 0 to 2 30	0 m	
←	LINE LGT	Spacing:	15 m	red / white	e: from 2 300 to	2 900 m	
←		Intensity:	LIH	red:	from 2 900 to	3 200 m	
←	RWY EDGE LGT	Length:	3 200 m	red	from 0 to 415	m	
		Spacing:	30 m	white:	from 415 to 3	200 m	
		Intensity:	LIH				
←	REMARK	NIL					

EBOS AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	ABN / IBN location, characteristics and HR of operation	NIL
2	LDI location and LGT	NIL
	WDI location and lighting	At TDZ RWY 08 (lighted) At TDZ RWY 26 (lighted)
3	TWY edge and centre line lighting	Edge lights: TWY A, B1, B2, C2, D1, E1, E2, F, K3, K4, K5, K6, K7, K8, L, G2 and M
		Centre line lights: M
4	Secondary power supply	To all lighting at AD
	Switch-over time	Switch-over time: 0 SEC
5	RMK	NIL

EBOS AD 2.16 HELICOPTER LANDING AREA

Contact the Airport Authority

EBOS AD 2.17 ATS AIRSPACE

1	Designation and lateral limits	Oostende CTR 511412N 0030716E - an arc of circle, 5 NM radius, centred on 511305N 0025929E and traced clockwise to 510812N 0030119E - 510635N 0025022E - 511145N 0023423E - an arc of circle, 5 NM radius, centred on 510717N 0023045E and traced counterclockwise to 511124N 0022612E - 511935N 0024500E - 512018N 0025304E - an arc of circle, 8 NM radius, centred on 511221N 0025450E and traced clockwise to 511412N 0030716E.
2	Vertical limits	1 500 ft AMSL
3	Airspace classification	С
4	ATS unit call sign Language(s)	Oostende Tower En
5	Transition altitude	4 500 ft AMSL
6	RMK	NIL

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EBOS AD 2.18 ATS COMMUNICATION FACILITIES

	Service designation	Call sign	FREQ	HR of operation	RMK
	1	2	3	4	5
	APP TAR	Oostende APP	120.600 MHz (1) 234.250 MHz 121.500 MHz (2) 243.000 MHz (2) 127.325 MHz (3)	H24	(1): Primary FREQ (2): EMERG FREQ (3): Supplementary FREQ
-	TWR	Oostende TWR	118.175 MHz (1) 234.250 MHz 121.500 MHz (2) 243.000 MHz (2) 127.325 MHz (3)	H24	(1): Primary FREQ (2): EMERG FREQ (3): Supplementary FREQ
		Oostende GND	121.975 MHz 127.325 MHz (1)	H24	GND movement control (1): Supplementary FREQ
←	ATIS	Oostende INFO	126.125 MHz	H24	D-ATIS AVBL (see <u>GEN 3.4, § 3.3.2</u>)
	VDF	Oostende Homer	120.600 MHz 118.175 MHz 121.500 MHz 127.325 MHz (1)	H24	(1): Supplementary FREQ

EBOS AD 2.19 RADIO NAVIGATION AND LANDING AIDS

Type of MAG V		ID	FREQ	Hours of operation	Position of transmitting antenna	DME antenna elevation	RMK
1		2	3	4	5	6	7
NDB		ONO	399.5 kHz	H24	511313.1N 0030041.8E		Coverage: 50 NM Collocated with OM ILS 26
L		DD	352.5 kHz	H24	511138.1N 0025006.1E		257° GEO / 0.85 NM from THR 08 Coverage: 25 NM
L		00	375 kHz	H24	511216.6N 0025426.1E		Coverage: 25 NM Collocated with MM ILS 26
ILS 08 (C	CAT I)						
L	LZ	IMI	111.550 MHz	H24	511213.7N 0025403.2E		076° GEO / 1.71 NM from THR 08 No back beam AVBL LLZ only reliable within 35° either side of course line
(GP		332.750 MHz	H24	511148.4N 0025141.9E		Slope 3° RDH 52 ft
D	ME	IMI	CH 52Y	H24	511148.6N 0025141.8E	30 ft	Collocated with GP 0 at 315 m from THR 08

ILS 26	(CAT I)				
	LLZ	IOS	109.500 MHz	H24	511145.5N 0025056.0E	256° GEO / 1.65 NM from THR 26 No back beam AVBL LLZ only reliable within 35° either side of course line
	GP		332.600 MHz	H24	511201.8N 0025315.1E	Slope 3° RDH 51 ft
	OM	dash / dash	75 MHz	H24	511313.3N 0030042.5E	4.66 NM from THR 26
	MM	dot / dash	75 MHz	H24	511216.8N 0025425.3E	0.61 NM from THR 26

EBOS AD 2.20 LOCAL TRAFFIC REGULATIONS

1 GENERAL

Taking up or throwing off banners is prohibited (see also ENR 1.1, § 6).

2 TAXI REGULATIONS

NIL

3 APRON REGULATIONS

On apron 1 and 2, aircraft shall taxi to stand on engine power and will be pushed back with one engine on idle only (if needed).

Aircraft with a weight exceeding 5 700 kg shall enter apron 3 on tow only.

4 RUNWAY REGULATIONS

NII

► 5 SPECIFIC TRAFFIC REGULATIONS

5.1 AIRCRAFT WITHOUT RADIO

Aircraft without radio are permitted between 01 OCT and 30 APR, provided permission has been obtained before departure of the flight.

5.2 GLIDER FLIGHTS

Glider flights are prohibited.

5.3 ULM FLIGHTS

ULM flights will only be accepted within Oostende CTR if the traffic situation permits.

Take-off and landing is only allowed for ULM aircraft complying with the following:

- three-axis ULM
- Equipped with transponder
- · Equipped with radio able to communicate on VHF
- Able to maintain an airspeed of 80 KIAS MNM

5.4 BALLOON FLIGHTS

Balloon flights are prohibited.

5.5 PARACHUTING

NIL

5.6 ACROBATIC FLIGHTS

NIL

5.7 TRAINING AND TEST FLIGHTS

Training flights of aircraft with MTOW up to 6 t are allowed between 0800 and 2100.

Training flights of aircraft with MTOW above 6 t are allowed between 0800 and 1700, but no touch-and-go shall be performed during following periods:

- on SAT, SUN and HOL
- · on WED after 1100
- · from 01 JUN to 31 AUG
- from 15 DEC to 31 JAN
- · during the Easter holiday period

Military aircraft shall not perform more than three touch-and-go landings per day per aircraft.

EBOS AD 2.21 NOISE ABATEMENT PROCEDURES

1 GENERAL

1.1 NOISE QUOTA SYSTEM

Aircraft operating at EBOS shall be noise certificated according to Annex 16, Volume I. Between 2200 and 0500, movements of aircraft with MTOW over 8 618 kg and certified according to the standards of chapters 2, 3 or 5 of ICAO Annex 16, Volume I, are forbidden if their QC exceeds 37.

The QC is calculated using the formula QC = $10^{[(G-85)/10]}$, whereby "G" equals:

- · for take-off: half the sum of the certified fly-over and sideline noise levels in EPNdB of the aircraft at its MTOW
- · for landing: the certified approach noise level in EPNdB of the aircraft at its maximum landing weight, minus 9 EPNdB.

Operators shall provide the documents containing the certified fly-over, sideline and approach noise levels in EPNdB to the Airport Inspection on first request.

1.2 REVERSE THRUST

Except for safety reasons, reverse thrust shall not be used at other than idle power.

2 GROUND PROCEDURES

2.1 ENGINE TEST RUNS AND IDLE CHECKS

Engine test runs and idle checks in the open air and without silencers must be restricted to the very minimum and require prior permission from the Airport Inspection.

Engine test runs are only allowed between 0600 and 2200. They can only take place on the taxiways at the holding bays of RWY 08 or RWY 26, depending on the wind direction.

2.2 POWER SUPPLY

Pilots shall be aware of the noise impact the use of APU has on the local community, especially between 2200 and 0500.

The APU shall be shut down at the earliest opportunity after the arrival on stand and it may only be restarted when essential aircraft checks or cabin conditions require so before the planned departure. The APU shall not be left running without qualified attendance.

Any additional use of APU can only be allowed by the Airsport Inspection, on justified request. Unless for safety reasons, no exceptions will be allowed between 2200 and 0500.

3 ARRIVAL PROCEDURES

3.1 ILS APPROACH

Aircraft performing an ILS approach shall not intercept the GP below 2 000 ft. After interception, the aircraft shall not descend below the GP.

3.2 SURVEILLANCE RADAR APPROACH

Aircraft performing an SRA without ILS assistance, shall not descend below 2 000 ft QNH before 6 NM from touchdown, nor fly thereafter below a descent path of 3°.

3.3 VISUAL APPROACH

Aircraft performing a visual approach without ILS or radar assistance, shall not descend below 1 500 ft QNH before intercepting the PAPI approach slope, nor fly below it thereafter.

3.4 NOISE ABATEMENT APPROACH AND LANDING PROCEDURES

Noise abatement descend and approach procedures using continuous descent and reduced power / reduced drag techniques should be used when following conditions apply:

- ILS available
- runway clear and dry
- · visibility exceeding 1 900 m
- ceiling higher than 500 ft above AD ELEV
- cross wind component lower than 15 kt (gusts incl)
- tail wind component lower than 5 kt (gusts incl)
- · no adverse weather conditions that may affect the approach (wind shear, thunderstorms, etc)

Turbo-jet powered aircraft shall use as final flap setting the minimum certified landing flaps setting published in the Aircraft Flight Manual for the applicable conditions. However, each pilot-in-command may use a different flaps setting approved for the aircraft if he determines that it is necessary in the interest of safety.

4 DEPARTURE PROCEDURES

4.1 NOISE ABATEMENT TAKE-OFF AND CLIMB PROCEDURES

For turbo-jet aircraft:

- · From take-off to 1 500 ft QNH:
 - * take-off power
 - * take-off flaps
 - climb to V2 + 10 to 20 kt or as limited by body angle
- At 1 500 ft QNH:
 - * reduce thrust to not less than climb thrust
- From 1 500 ft QNH to 3 000 ft QNH:
 - * climb at V2 + 10 to 20 kt
- At 3 000 ft QNH:
 - * accelerate smoothly to the en-route climb speed with flaps retraction

For propeller aircraft:

- · From take-off to 1 000 ft QNH:
 - * take-off power
 - climb at a MAX gradient compatible with safety
 - speed not less than single engine climb speed nor higher than best rate of climb speed
- At 1 000 ft QNH:
 - 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
- From 1 000 ft QNH to 3 000 ft QNH:
 - * climb at the MAX gradient with reduced power, maintaining constant speed
- Above 3 000 ft QNH:
 - accelerate smoothly to the en-route climb speed

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EBOS AD 2.22 FLIGHT PROCEDURES

1 GENERAL

1.1 AERODROME MINIMA

Take-off: 200 m RVR.

Specific minima:

- ILS RWY 08/26: 550 m RVR
- LLZ RWY 08/26 (CAT A): 1 000 m RVR
- LLZ RWY 08/26 (CAT B/C): 1 200 m RVR
- LLZ RWY 08/26 (CAT B/C): 1 200 m RVR
- LLZ RWY 08/26 (CAT D): 1 600 m RVR
- L RWY 08 (CAT A): 1 000 m RVR
- L RWY 08 (CAT B/C): 1 200 m RVR
- L RWY 08 (CAT D): 1 600 m RVR
- 2 NDB RWY 26 (CAT A): 1 000 m RVR
- 2 NDB RWY 26 (CAT A): 1 000 m RVR
- 2 NDB RWY 26 (CAT B/C): 1 200 m RVR
- 2 NDB RWY 26 (CAT D): 1 600 m RVR
- SRA RWY 08/26: 3 500 m VIS

1.2 AIRCRAFT EQUIPMENT

In order to improve safety, aircraft operating within Oostende CTR and Oostende TMA One shall carry a serviceable transponder capable of replying to Mode A and C. An exception to this requirement may be granted by Oostende ATC upon request by telephone before the flight.

2 IFR FLIGHTS (INBOUND)

2.1 HOLDING PATTERN

The holding pattern shall be entered at 185 KIAS MAX.

OOSTENDE

Fix	ONO NDB
Turn / inbound track (MAG)	Right / 078°
Level (MNM)	3 000 ft AMSL
Remarks	NIL

2.2 APPROACH PROCEDURES

2.2.1 STANDARD INSTRUMENT ARRIVALS

STAR have been established as shown on chart AD2 EBOS STAR.01 and as listed below.

AMDT 05/2010

Designator	Significant Point	Track (MAG)	Distance (NM)	MNM IFR Level	Remarks
COA 2A	COA DVOR				NIL
		240°	15.0	3 000 ft QNH	
	ONO NDB				
DENUT 2A	DENUT				NIL
		302°	4.2	FL 60	
	9 DME COA				
		258°	-	R-180 COA / 3 000 ft QNH	
	ONO NDB				
FERDI 2A	FERDI				NIL
		339°	19.1	FL 60	
	9 DME COA				
		258°	-	R-180 COA / 3 000 ft QNH	
	ONO NDB				
KOK 2A	KOK VORTAC				NIL
		062°	15.6	3 000 ft QNH	
	ONO NDB				

2.2.2 SURVEILLANCE RADAR APPROACH

SRA is available on both runways and will be terminated either:

- · at a distance of 2 NM from THR
- · before the aircraft enters an area of continuous radar clutters
- when the aircraft reports that a visual approach can be made.

The aircraft will be informed at regular intervals of its position relative to the extended RCL and heading corrections will be given as necessary. The distance from THR will be passed on at each NM.

The levels through which the aircraft should be passing to maintain the glide path (3°) will be passed at each NM:

DIST TO THR (NM)	ALTITUDE (ft)
6	2 000
5	1 600
4	1 300
3	1 000
2	700

2.3 MISSED APPROACH

Unless instructed otherwise by Oostende APP, the missed approach procedures as published on the instrument approach charts (see <u>EBOS AD 2.24</u>) shall be followed.

3 IFR FLIGHTS (OUTBOUND)

3.1 DEPARTURE PROCEDURES

3.1.1 STANDARD INSTRUMENT DEPARTURES

SID have been established as shown on the EBOS SID charts (see EBOS AD 2.24) and as listed below.

RWY 08

Designator	Route	Remarks
COA 2S	Straight ahead to ONO. At ONO LT to intercept R-241 COA, INBD to COA.	NIL
KOK 2S	Straight ahead to ONO. At ONO RT to intercept R-084 KOK, INBD to KOK.	NIL

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MAK 2S	Straight ahead to ONO. At ONO RT to intercept QDM-132 MAK, INBD to MAK.	NIL
NIK 2S	Straight ahead to ONO. At ONO RT to intercept R-275 NIK, INBD to NIK.	NIL
SASKI 3S	Straight ahead to ONO. At ONO LT to intercept QDR-317 ONO to SASKI.	NIL

RWY 26

Designator	Route	Remarks
CARLA 3M	At 500 ft RT to intercept QDR-294 DD. When crossing R-021 KOK, or passing 2 000 ft whichever is later, intercept R-087 DVR, INBD to CARLA.	SID is crossing EBD07. Oostende ATC will, in all cases, coordinate before ACFT is airborne.
COA 4M	At 500 ft RT HDG 020 to intercept R-262 COA, INBD to COA.	SID is crossing EBD07. Oostende ATC will, in all cases, coordinate before ACFT is airborne.
KOK 2M	At 500 ft RT to intercept QDR-294 DD. When crossing R-021 KOK, or passing 2 000 ft whichever is later, LT direct to KOK.	SID is crossing EBD07. Oostende ATC will, in all cases, coordinate before ACFT is airborne.
SASKI 2M	At 500 ft RT to intercept QDR-294 DD. When crossing R-021 KOK, or passing 2 000 ft whichever is later, RT to intercept R-349 KOK to SASKI.	SID is crossing EBD07. Oostende ATC will, in all cases, coordinate before ACFT is airborne.

4 LOW VISIBILITY PROCEDURES

4.1 FACILITIES AND EQUIPMENT AVAILABLE

4.1.1 RUNWAYS

RWY 08 and 26 are equipped with ILS and are approved for CAT I. A minimum RVR of 550 m for landing applies. Low visibility take-off is available with a minimum RVR of 200 m.

Pilots requesting to land with RVR below 550 m will be advised that they are below minimum, but will not be refused landing clearance. Take-off clearance however, will be refused if RVR is below 200 m.

Landing aircraft should leave the ILS sensitive area as soon as possible and they shall declare runway vacated.

In order to provide adequate protection of the ILS system, no vehicle or aircraft shall infringe the ILS sensitive area when:

- · an arriving aircraft is within 2 NM from touchdown and has not completed its landing run.
- · a departing aircraft has started its take-off run and is not yet airborne.

4.1.2 TAXIWAYS

A follow-me car will guide aircraft from the runway exit to the aircraft stand and from the aircraft stand to the runway holding position.

Exceptions: no follow-me will be provided for departing aircraft leaving apron 1 when RWY 26 is in use or for arriving aircraft to apron 1 when RWY 08 is in use.

Aircraft on departure shall not leave the apron before the preceding aircraft has taken off.

4.1.3 COMMUNICATIONS

Pilots will be informed by ATC when LVP are in progress and when they are terminated.

4.2 CRITERIA FOR INITATION AND TERMINATION OF LVP

The preparation phase will start when visibility falls below 800 m. The operations phase will start when visibility falls below 600 m.

LVP will be terminated when RVR is greater than 600 m and a continuing improvement in these conditions is expected.

5 VFR FLIGHTS

5.1 GENERAL

Before entering Oostende TMA, pilots shall report at one of the visual reporting points listed below.

Special VFR flights may be performed if visibility is 2 500 m MNM and ceiling is 800 ft MNM. Helicopters may operate with ground visibility of 800 m MNM, if manoeuvred at a speed that will give adequate opportunity to observe other traffic or any obstacle in time to avoid collision.

5.2 VISUAL REPORTING POINTS

VFR traffic shall use following reporting points:

Name	Associated landmark	Position
AALTER	village of Aalter	510509N 0032655E
BRESKENS	village of Breskens	512343N 0033319E
DUNKERQUE	city of Dunkerque	510157N 0022225E
TORHOUT	city of Torhout	510358N 0030606E

6 RADIO COMMUNICATION FAILURE

If the aircraft does not succeed in landing within the 30 MIN normally allowed for approach and landing, it shall leave Oostende CTR and TMA on a track of 045° MAG below 1 650 ft QNH, and land at the first suitable aerodrome where the weather conditions permit visual appraach and landing.

EBOS AD 2.23 ADDITIONAL INFORMATION

1 ATIS

ATIS messages serving inbound and outbound traffic are broadcasted H24 (see EBOS AD 2.18).

The messages contain following elements in the order as listed:

Item	ATIS	Start of expression
Aerodrome name	OSTEND	Ostend
Alphabetical designator	INFO (A till Z)	Information (alfa - zulu)
Time of observation	HHMM	
Type of approach to be expected	TYP APCH	Expecting vectoring
Runway in use for landing	LDG RWY	Landing runway
Runway in use for take-off	TKOF RWY	Take-off runway
Braking action	BA (TDZ)	Braking action touchdown
	MID	Mid-point
	END	Stop-end
Operational status	OPS STS	Operational status
Surface wind, direction and speed (including significant variations)	WIND	Wind
Visibility	VIS	Visibility
RVR	RVR (RWY)	Runway visual range on runway
	TDZ / m	touchdown / metres
	MID / m	mid-point / metres
	END / m	stop-end / metres
Present weather	WX	Present weather
Cloud base	BASE	Cloud base
Air temperature	Т	Temperature
Dew point temperature	DP	Dew point
Altimeter setting	QNH	QNH
Transition level	TL	Transition level
Recent weather	RE	Recent weather

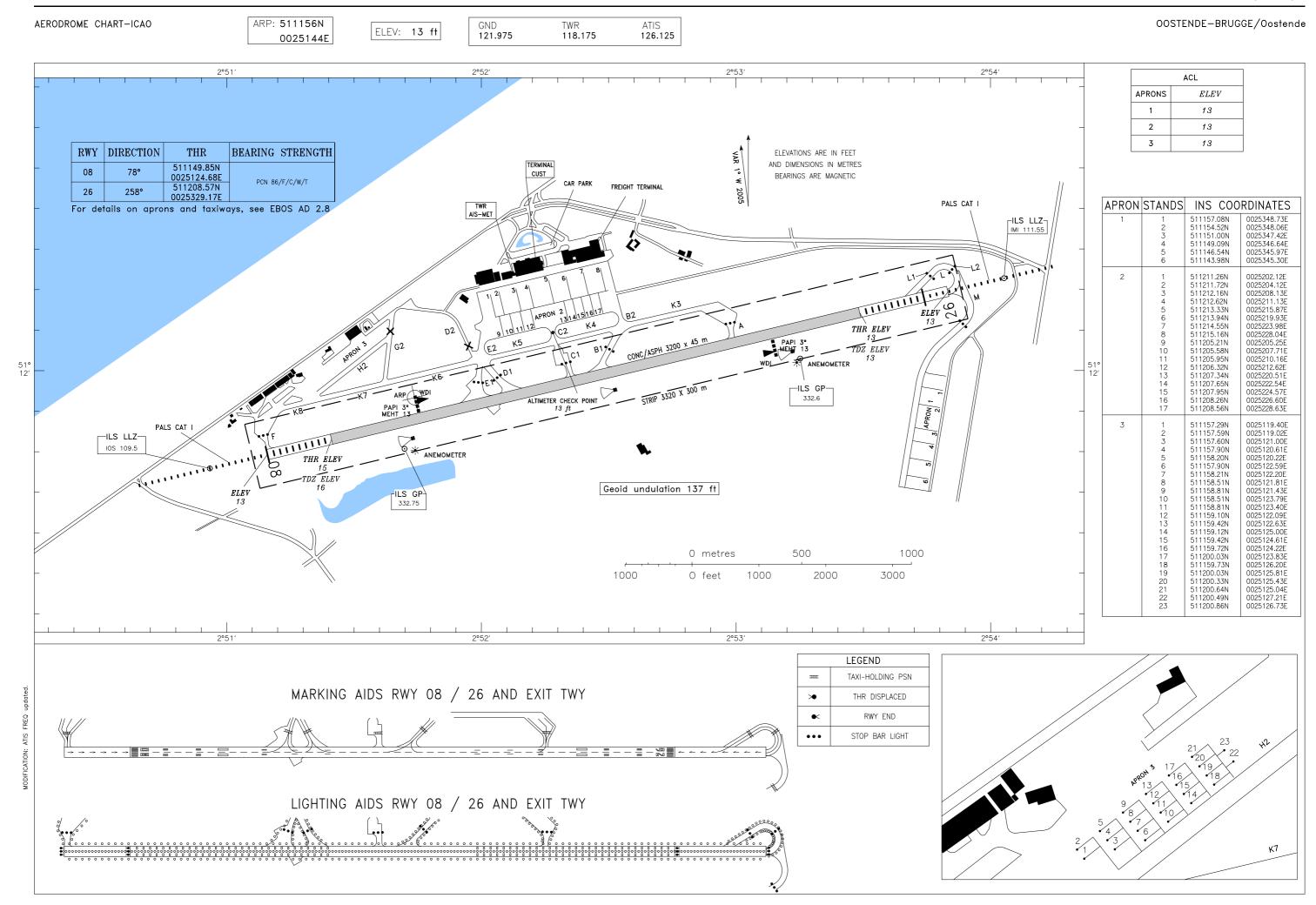
Wind shear	WS	Windshear
Landing forecast TREND	TREND	Trend

When rapidly changing weather conditions make it inadvisable to include a weather report in the ATIS broadcast, the weather data are omitted and replaced by the phrase "MET REPORT OMITTED DUE TO RAPID CHANGES". The omitted data can be requested from ATC.

Pilots are requested to listen to the ATIS broadcast prior to the first contact with ATS. When establishing communication with the relevant ATS unit, the pilot shall acknowledge receipt of ATIS message with the phrase "INFORMATION ... (alphabetical designator) RECEIVED". ATS will confirm the validity of the received alphabetical designator. If the designator has changed meanwhile, only the actually valid designator will be given.

EBOS AD 2.24 CHARTS RELATED TO EBOS

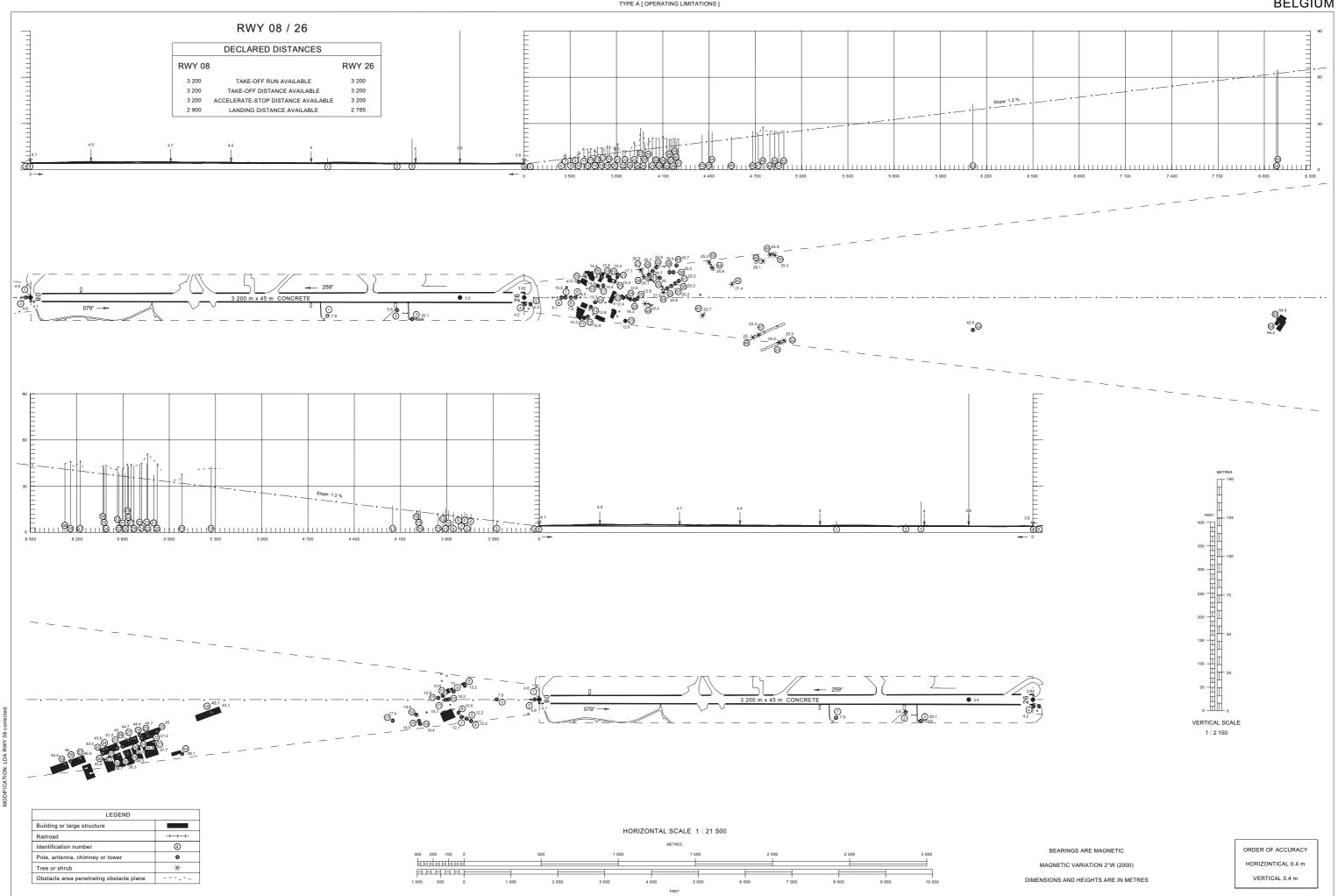
1.	Aerodrome Chart - ICAO	AD2 EBOS ADC.01
2.	Aerodrome Obstacle Chart - ICAO (Type A - Operating limitations)	
2.1.	RWY 08 / 26	AD2 EBOS AOC.01
3.	Precision Approach Terrain Chart -ICAO	
3.1.	RWY 08	AD2 EBOS PATC.01
3.2	RWY 26	AD2 EBOS PATC.02
4.	Standard Arrival Chart - Instrument - ICAO	AD2 EBOS STAR.01
5.	Standard Departure Chart - Instrument - ICAO	
5.1.	RWY 08	AD2 EBOS SID.01
5.2.	RWY 26	AD2 EBOS SID.02
6.	Instrument Approach Chart - ICAO	
6.1	L RWY 08	AD2 EBOS IAC.01
6.2	ILS or LLZ RWY 26	AD2 EBOS IAC.02
6.3	2 NDB RWY 26	AD2 EBOS IAC.03
6.4	ILS or LLZ RWY 08	AD2 EBOS IAC.04
7.	Visual Approach Chart - ICAO	AD2 EBOS VAC.01
8.	"Areas Requiring Special Attention" Chart	AD2 EBOS MISC.01



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OOSTENDE-BRUGGE / Oostende BELGIUM



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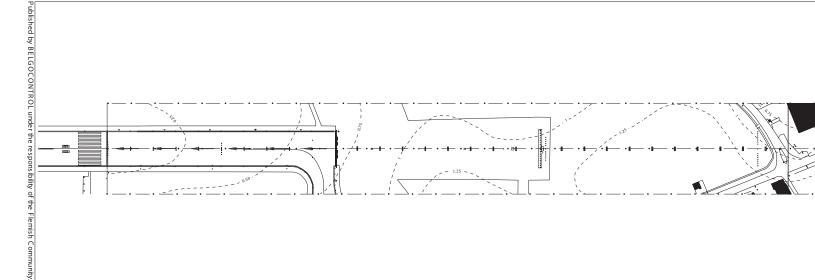
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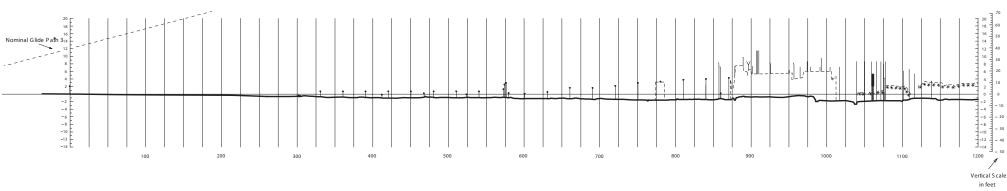
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HORIZONTAL SCALE

VERTICAL SCALE

DIMENSIONS AND HEIGHTS IN METERS



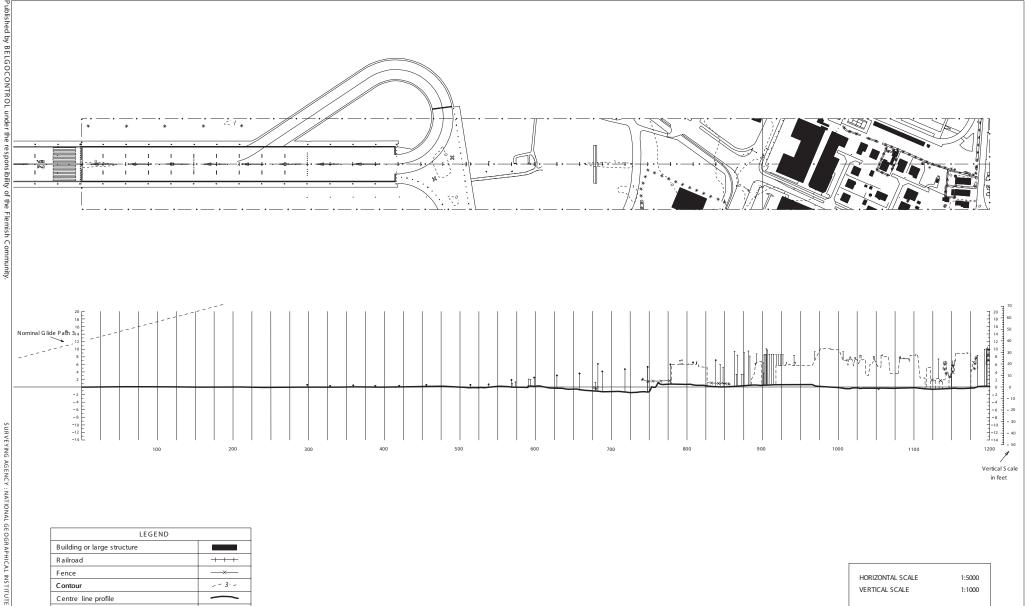


LEGEND	
Building or large structure	
Railroad	+++
Fence	—×—
Contour	3
Centre line profile	(
Deviation at least ± 3 m from Centre - I ine profile	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Approach lights	P
Tree or shrub	*
Pole, antenna	Т

SURVEYING AGENCY : NATIONAL GEOGRAPHICAL INSTITUTE DATE OF SURVEY: OCT 200



 \triangleright 0



_ - 3. -Contour Centre line profile Deviation at least ±3 m from Centre - I ine profile /---· Approach lights

Т

DATE OF SURVEY: OCT 2001

Tree or shrub

Pole, antenna

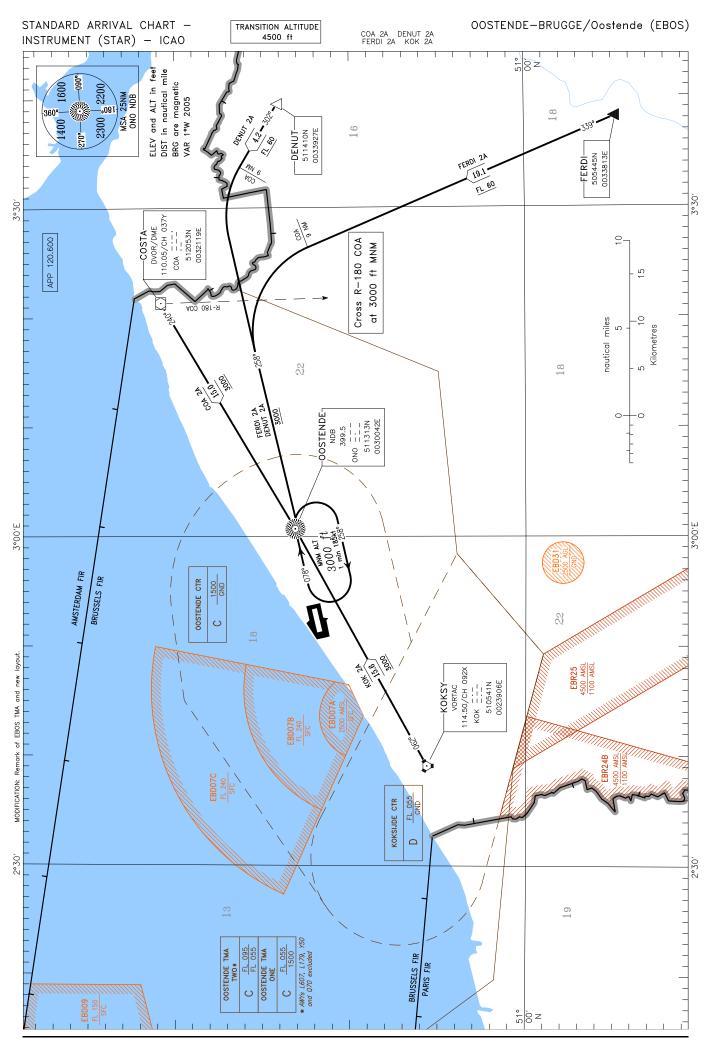
VERTICAL SCALE

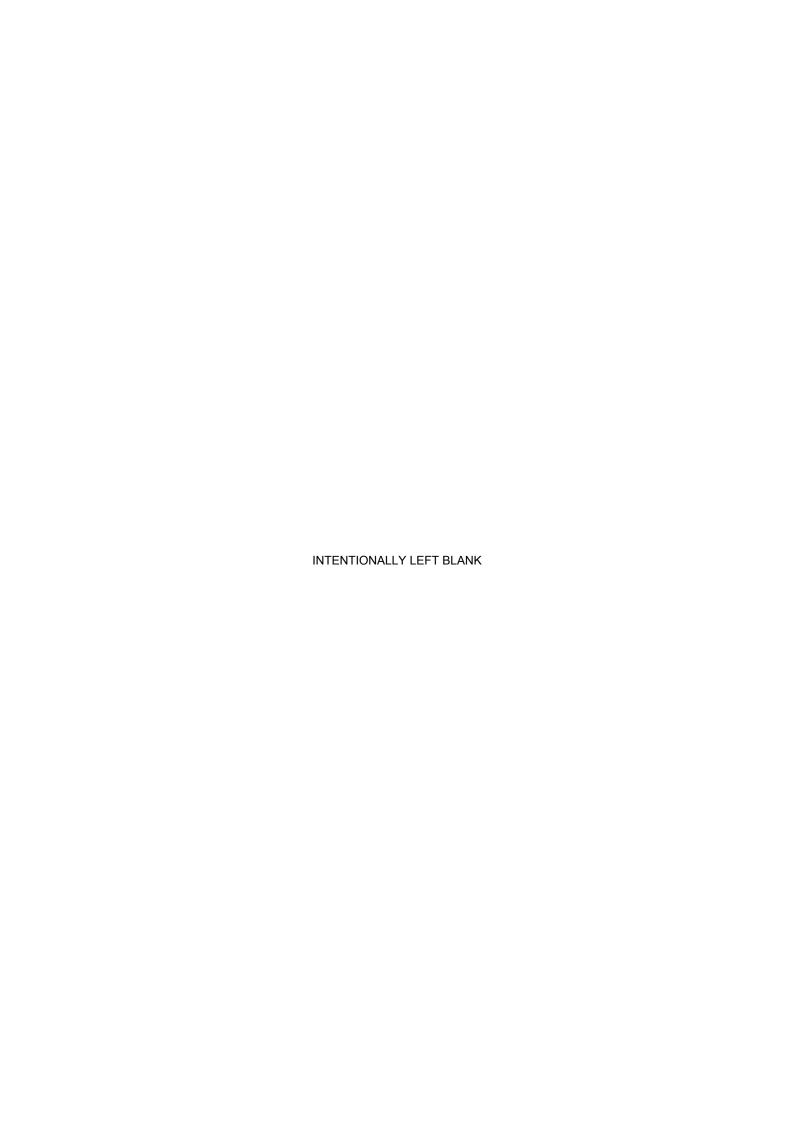
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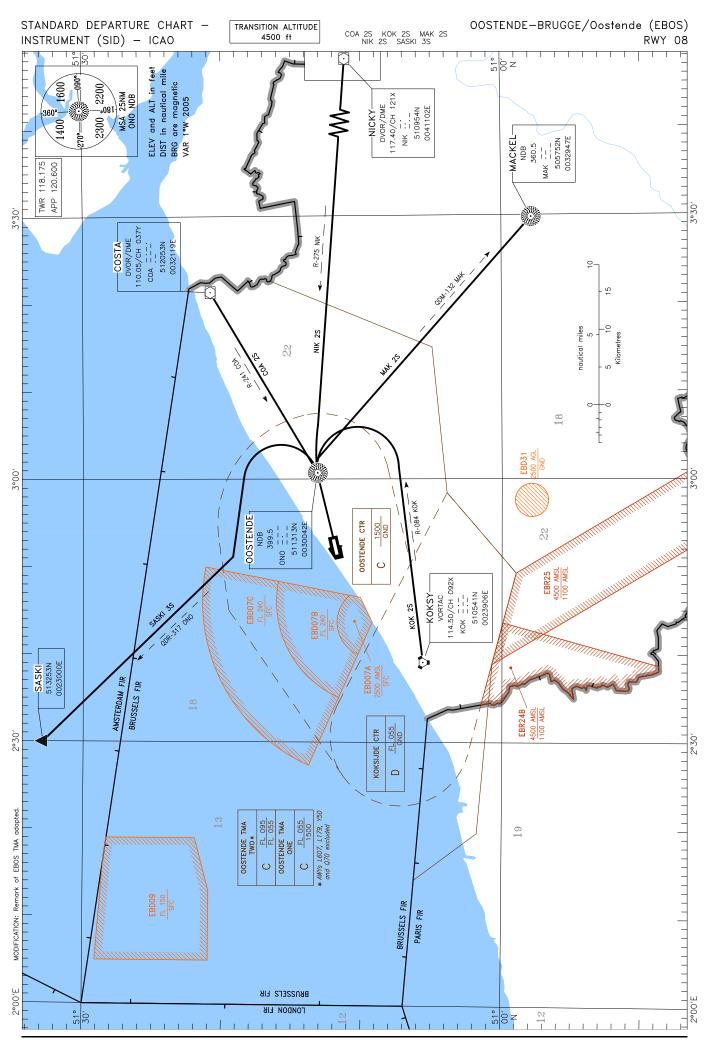
CONTOURS AND HEIGHTS ARE RELATED TO ELEVATION OF RWY THR

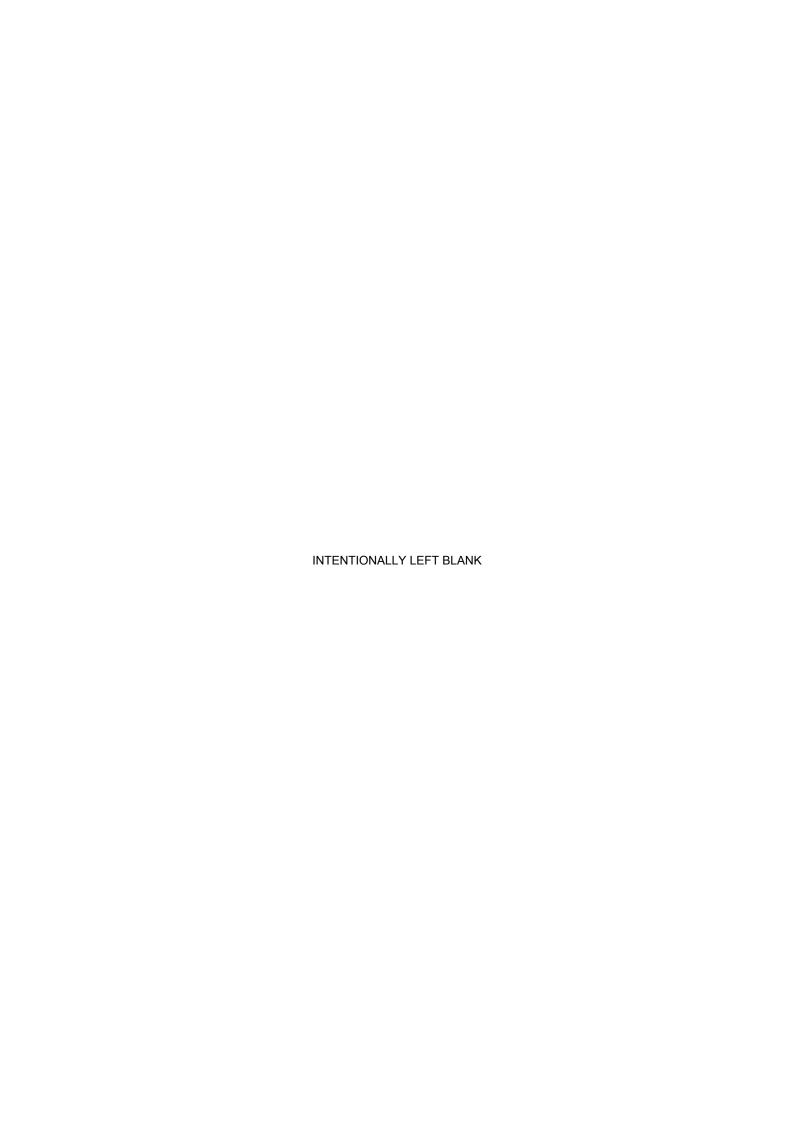
DIMENSIONS AND HEIGHTS IN METERS

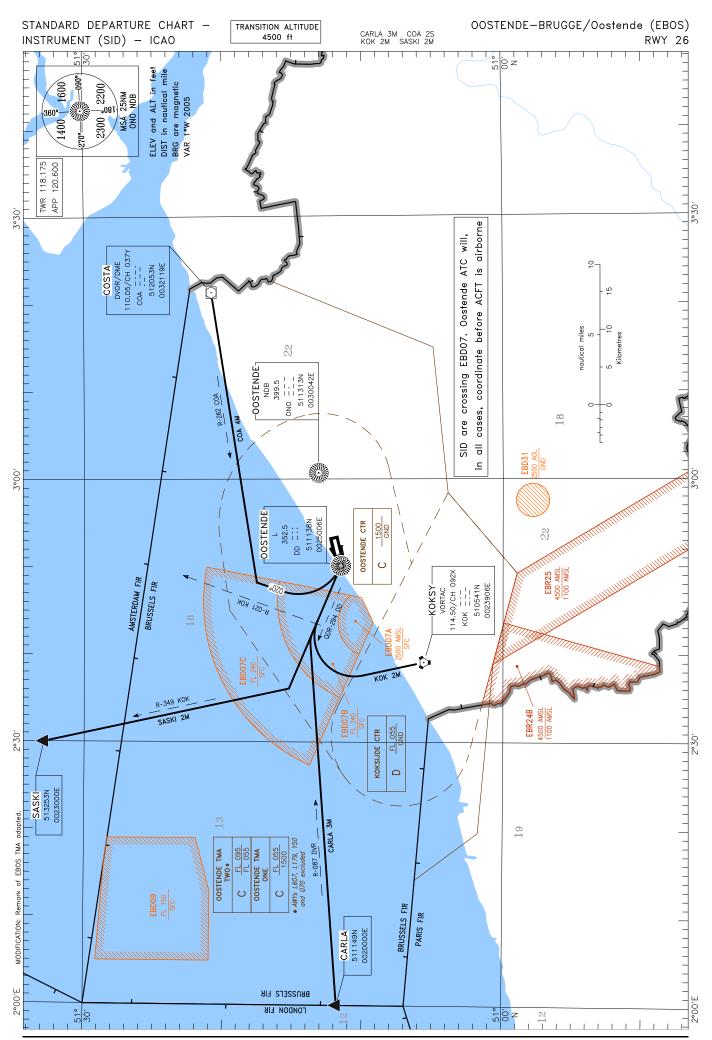


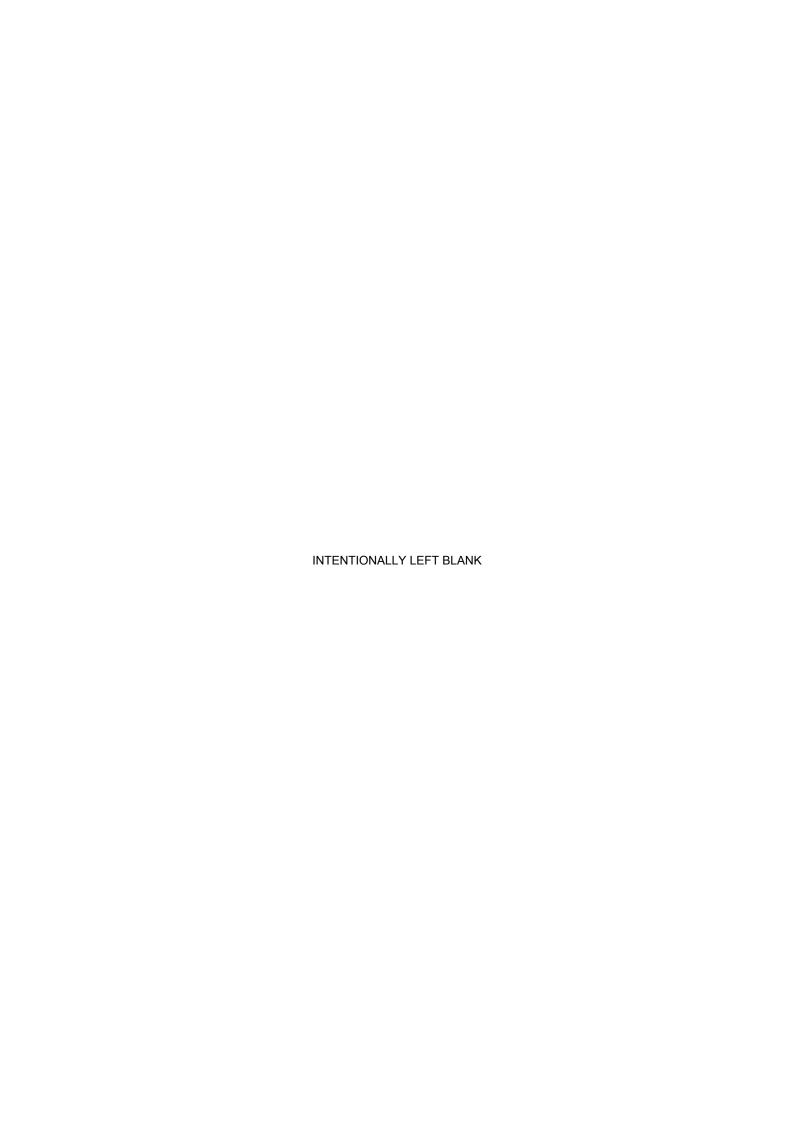






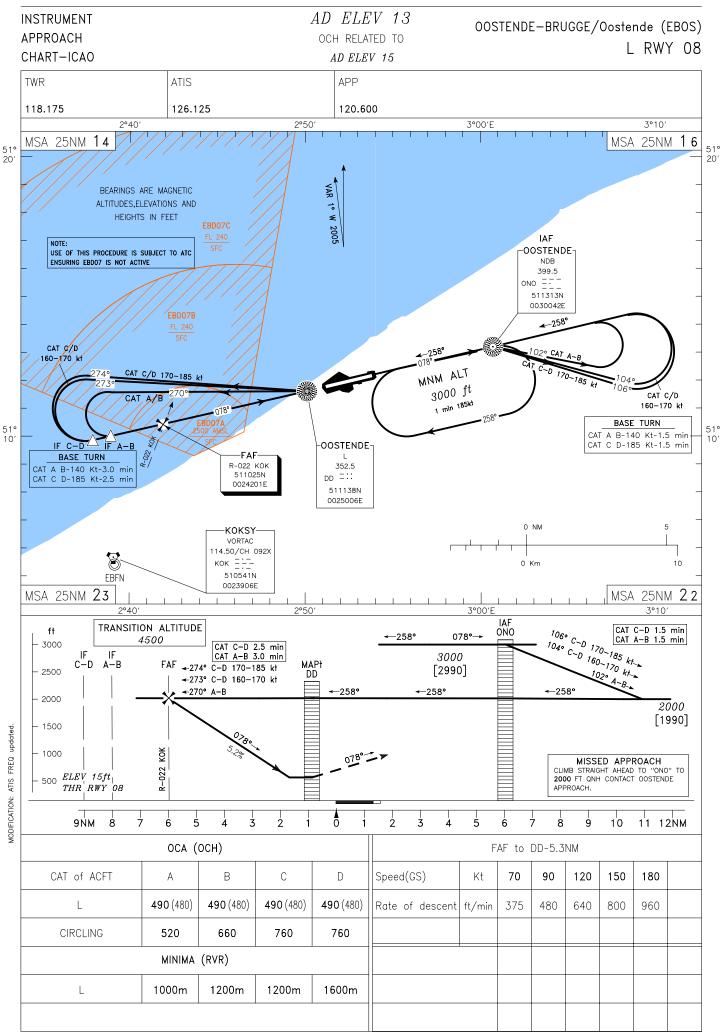


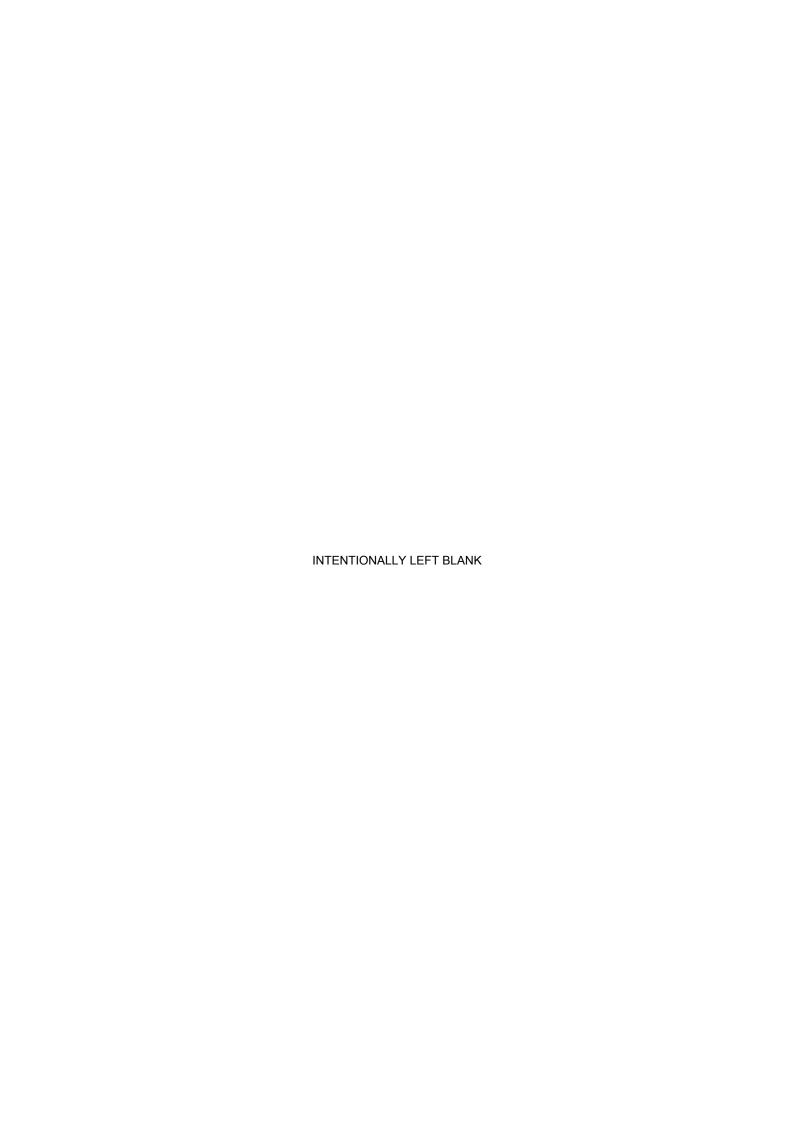




AD2 EBOS IAC.01

Effective: 10 MAR 2011

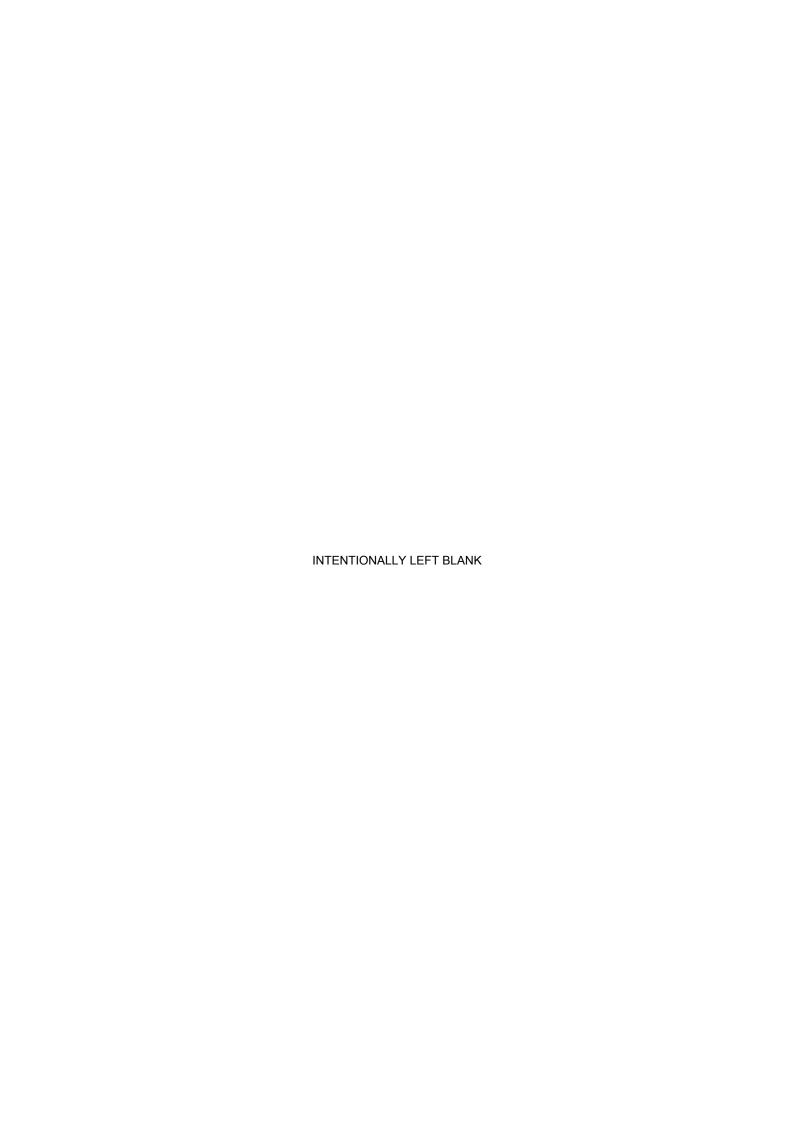




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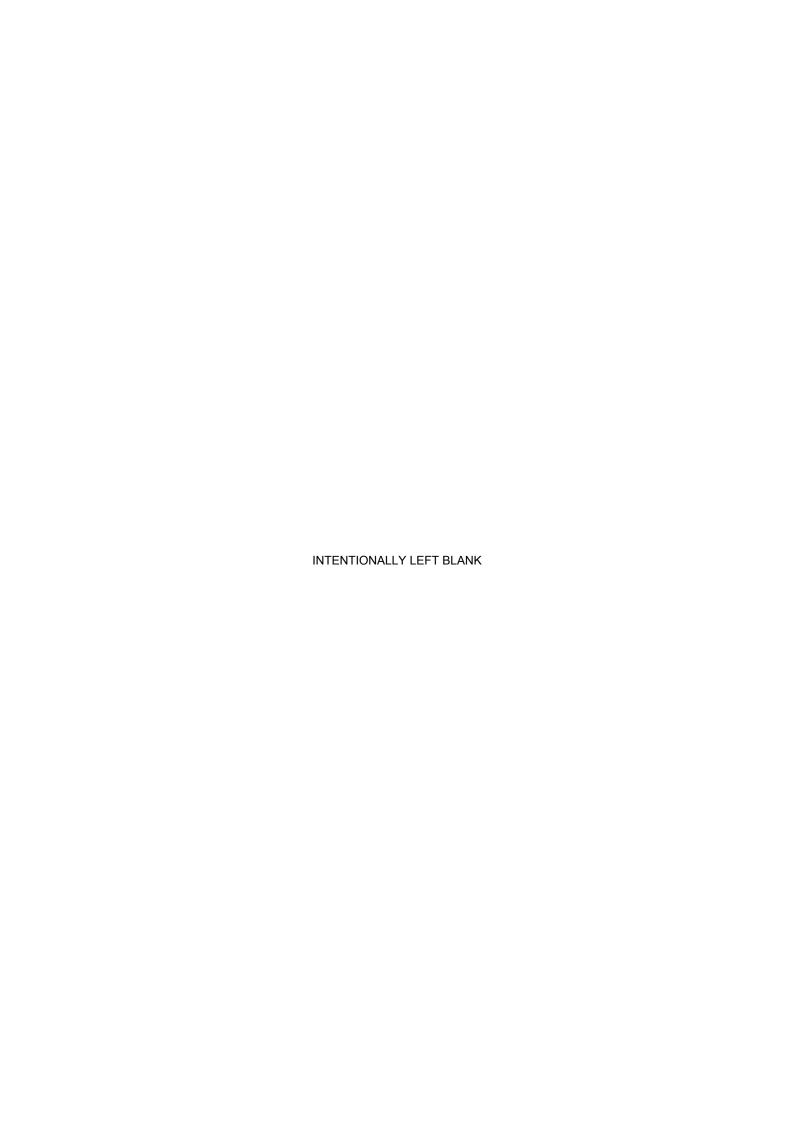
AD2 EBOS IAC.02 Effective: 10 MAR 2011

AD ELEV 13 INSTRUMENT OOSTENDE-BRUGGE/Oostende (EBOS) **APPROACH** OCH RELATED TO ILS or LLZ RWY 26 CHART-ICAO THR 26 ELEV 13 APP **TWR** ATIS 118.175 126.125 120.600 2°50′ 3°10′ 2°40 3°00′E MSA 25nm 16 MSA 25nm **14** BEARINGS ARE MAGNETIC ALTITUDES, ELEVATIONS AND HEIGHTS IN FEET γ̈́R っ OOSTENDE NDB 2005 399.5 ono =: 511313N ∑258° 0030042E В GP INOP MNM ALT CAT C-D 170-185 kt 3000 ft 06 1 min 185kt CAT C/D 160-170 kt OOSTENDE 51° 10′ 51° 10′ LLZ 109.5 IOS BASE TURN 352.5 COOSTENDE CAT A B-140 Kt-1.5 min 511138N CAT C D-185 Kt-1.5 min 0025006E 375.0 00 === 511217N 0025426E KOKSY 0 NM 114.50/CH 092X 8 0 Km 10 510541N **FBFN** 0023906E MSA 25nm 23 MSA 25nm **22** 3°10′ MAPt (GP INOP) 00 FAF (GP INOP) ONO TRANSITION ALTITUDE MISSED APPROACH
AT "DD" AT THE LATEST, RT HEADING 050° AND
CLIMB TO 3000 FT QNH, INTERCEPT QDM 130 ONO
INBD TO ONO. DO NOT CROSS R-040 KOK. 4500 ft ОМ ММ 106° C-D 170-185 kt. –258° 078°→ 3000 3000 C-D 160-170 kt CAT C-D 1.5 min CAT A-B 1.5 min [2990] 2500 2000 2000 [1990] 258° 1500 updated 1000 1540 ELEV 13ft [1530] MODIFICATION: ATIS FREQ ILS RDH 51ft THR RWY 26 Ô 5 2 2 5 3 3 4 6 8 ģ 10 12 13 14 6 11 OCA (OCH) FAF to MAPt-4.06NM CAT of ACFT В С D Speed(GS) 70 90 150 180 Α Κt 120 ILS CAT I 213 (200) 213 (200) 213 (200) 213 (200) Rate of descent 370 475 790 950 ft/min 630 LLZ 530 (520) 530 (520) 530 (520) 530 (520) **CIRCLING** 520 660 760 760 MINIMA (RVR) ILS 550m LLZ 1000m 1200m 1200m 1600m



AD2 EBOS IAC.03 Effective: 10 MAR 2011

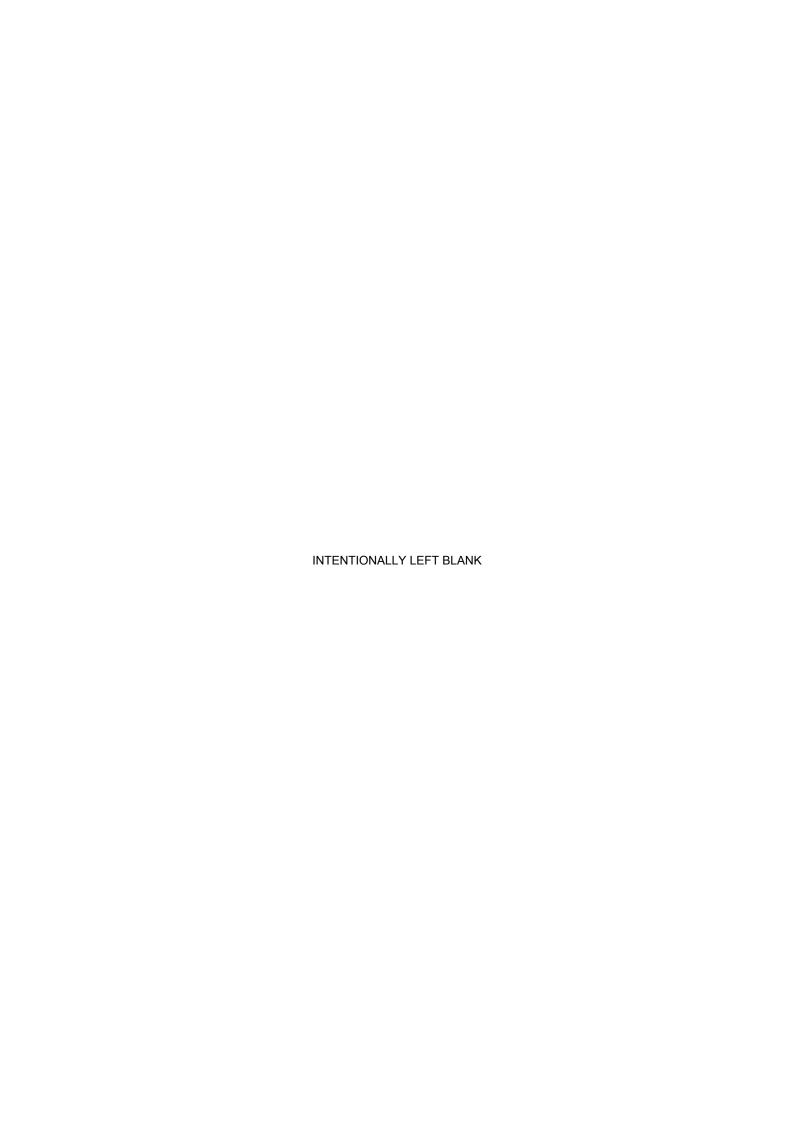
AD ELEV 13 **INSTRUMENT** OOSTENDE-BRUGGE/Oostende (EBOS) **APPROACH** OCH RELATED TO 2 NDB RWY 26 CHART-ICAO AD ELEV 13 TWR APP **ATIS** 118.175 126.125 120.600 2°40 2°50′ 3°00′E 3°10′ MSA 25nm 14 MSA 25nm 16 BEARINGS ARE MAGNETIC VAR ALTITUDES, ELEVATIONS AND HEIGHTS IN FEET EBD07C OOSTENDE NDB 399.5 ono =: 511313N 0030042E 258 EBD07B CAT A MNM ALT 3000 ft 185 kt 106° CAT C/D 1 min 185kt 160-170 kt 10' OOSTENDE-BASE TURN OOSTENDE 2500 AMSL 352.5 CAT A B-140 Kt-1.5 min DD =:: 375.0 CAT C D-185 Kt-1.5 min 00 === 511138N 0025006E 511217N 0025426E 0 NM KOKSY VORTAC 14.50/CH 092× кок = 10 0 Km 510541N EBFN 0023906E MSA 25nm 22 MSA 25nm 23 3°00′E 3°10′ FAF ONO 106° C-D 170-185 kt. TRANSITION ALTITUDE CAT C-D 1.5 min CAT A-B 1.5 min ft **-**-258° 078°-104° C-D 160-170 KI 3000 4500 3000 [2990] 2500 00 2000 2000 [1990] 1500 adapted. 050°-1540 MISSED APPROACH [1530] 1000 FREQ AT "DD" AT THE LATEST, RT HEADING 050° AND CLIMB TO 3000 FT ONH, INTERCEPT QDM 130 ONO INBD TO ONO. DO NOT CROSS R-040 KOK. 2580 ELEV 13ft MODIFICATION: ATIS 500 THR RWY 26 Ô 7 5 3 2 2 4 5 7ŃM 3 8 9 13 14NM 6 6 10 11 12 OCA (OCH) FAF TO MAPt-4.06NM CAT of ACFT Α В С D Speed(GS) 70 90 120 150 180 530 (520) 530 (520) 530 (520) 530 (520) 2 NDB Rate of descent 370 475 630 790 950 ft/min **CIRCLING** 660 520 760 760 MINIMA (RVR) 2 NDB 1000m 1200m 1200m 1600m



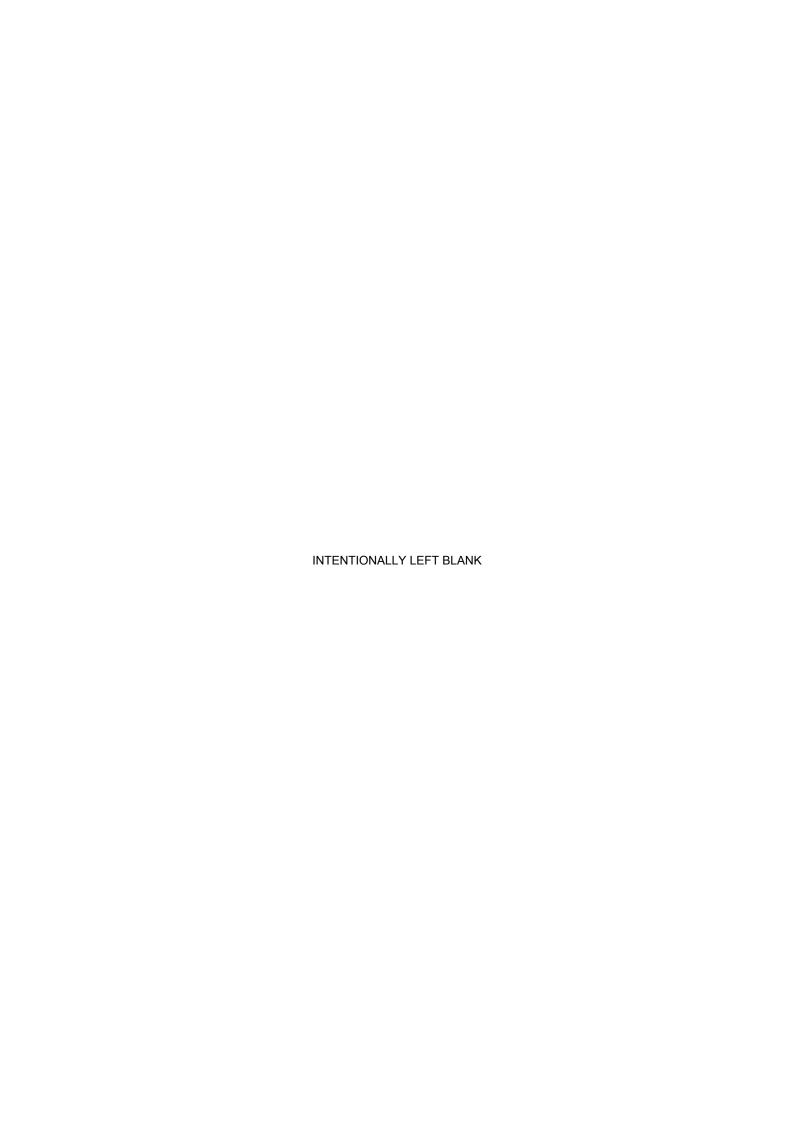
AD2 - EBOS IAC.04

Effective: 10 MAR 2011

AD ELEV 13 INSTRUMENT OOSTENDE-BRUGGE/Oostende (EBOS) **APPROACH** OCH RELATED TO ILS or LLZ RWY 08 CHART-ICAO THR 08 ELEV 15 **TWR ATIS** APP TAR 118.175 126.125 120.600 2°40' 2°50' 3°00′E 3°10 MSA 25NM 14 MSA 25NM 16 ¥, BEARINGS ARE MAGNETIC ALTITUDES, ELEVATIONS AND 2005 HEIGHTS IN FEET EBD07C IAF OOSTENDE USE OF THIS PROCEDURE IS SUBJECT TO ATC ENSURING EBD07 IS NOT ACTIVE NDB 399.5 оио \Xi 511313N IMI 0030042E EBD07B DME <u>~</u>258° 111.55/CH 052Y IMI -511149N 0025142E MNM ALT 3000 ft CAT C/D 1 min 185kt 160-170 kt -LĹZ-BASE TURN IMI 111.55 A B-140 Kt-1.5 min CAT C D-185 Kt-1.5 min -OOSTENDE-FAP/FAF 078° ÍF C−D 6.3 DME IMI B 511025N 352.5 0024201F DD =:: BASE TURN 511138N CAT A B-140 Kt CAT C D-185 Kt 0025006E DME required 0 NM KOKSY VORTAC 14.50/CH 092X кок = 10 0 Km 510541N EBFN 0023906E 25NM **22** MSA 25NM 23 MSA 2°50 3°10′ 106° C-D 170-185 kt. TRANSITION ALTITUDE CAT C-D 1.5 min FAP FAF(GP INOP) 6.3 DME IMI ft ONO **-**-258° 078°→ 1040 C-D 160-170 kt 4500 CAT A-B 1.5 min 3000 A-B 6. 8 DME IMI C-D 3000 DME IMI DD DME [2990] 2500 MAPt(GP INOP) IMI <-C-D 275° <u>←</u>A-B 273° **-**258° -25892000 2000 [1990] 1500 adapted 1000 MODIFICATION: ATIS FREQ MISSED APPROACH CLIMB STRAIGHT AHEAD TO "ONO" TO 2000 FT QNH CONTACT OOSTENDE APPROACH. 500 ELEV 15ft ILS RDH 52 THR RWY 08 Ô 3 4 7 7 2 3 5 8 5 4 2 6 ģ 6 Ŕ 10 11 12NM 9NM OCA (OCH) FAF to DD-5.3NM CAT of ACFT В С D Speed(GS) 70 90 120 150 180 Α 215 (200) 215 (200) 215 (200) ILS CAT I 215 (200) Rate of descent ft/min 375 480 640 800 960 490 (480) 490 (480) 490 (480) 490 (480) LLZ DME IMI 6.3 5 4 3 2 1 760 760 **CIRCLING** 520 660 MINIMA (RVR) DIST. THR 6.1 4.8 3.8 2.8 1.8 0.8 ILS 550m 330 **ALTITUDE** 2000 1600 1280 960 650 (630)(310)(1990) (1590)|(1270) (950)(HEIGHT) 117 1000m 1200m 1200m 1600m

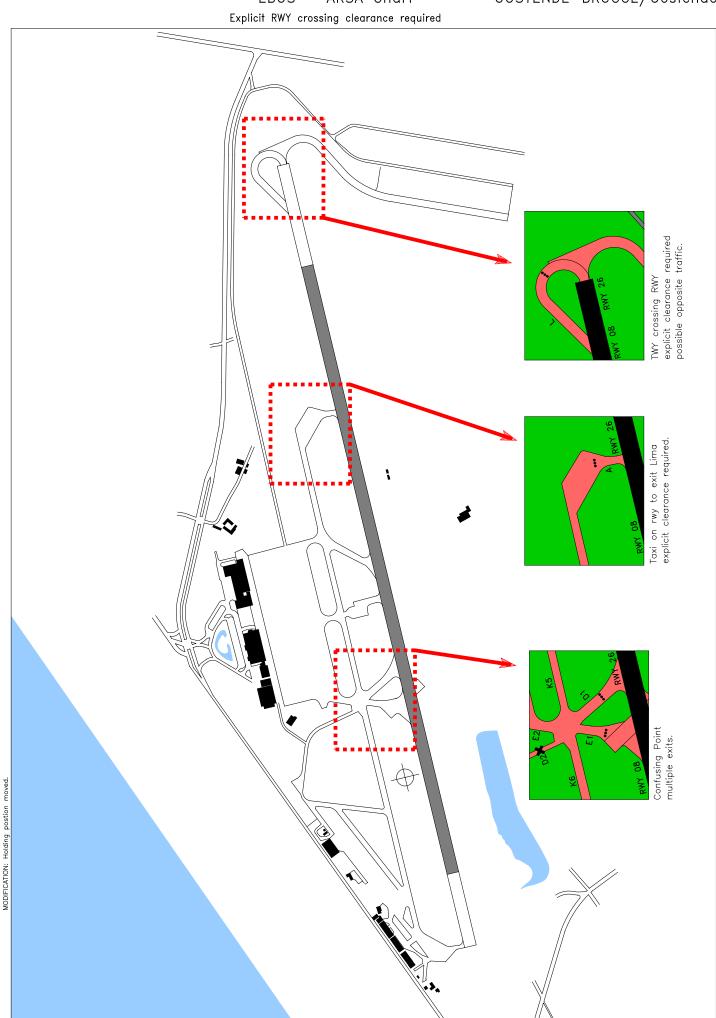


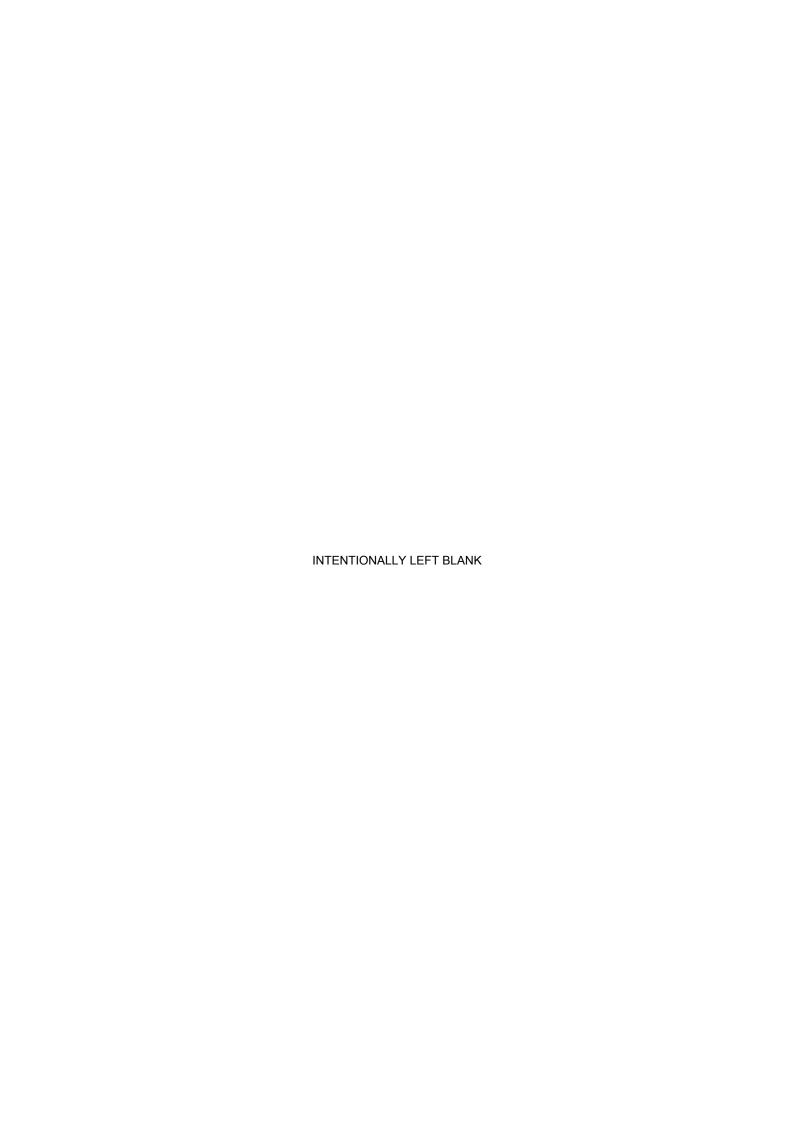


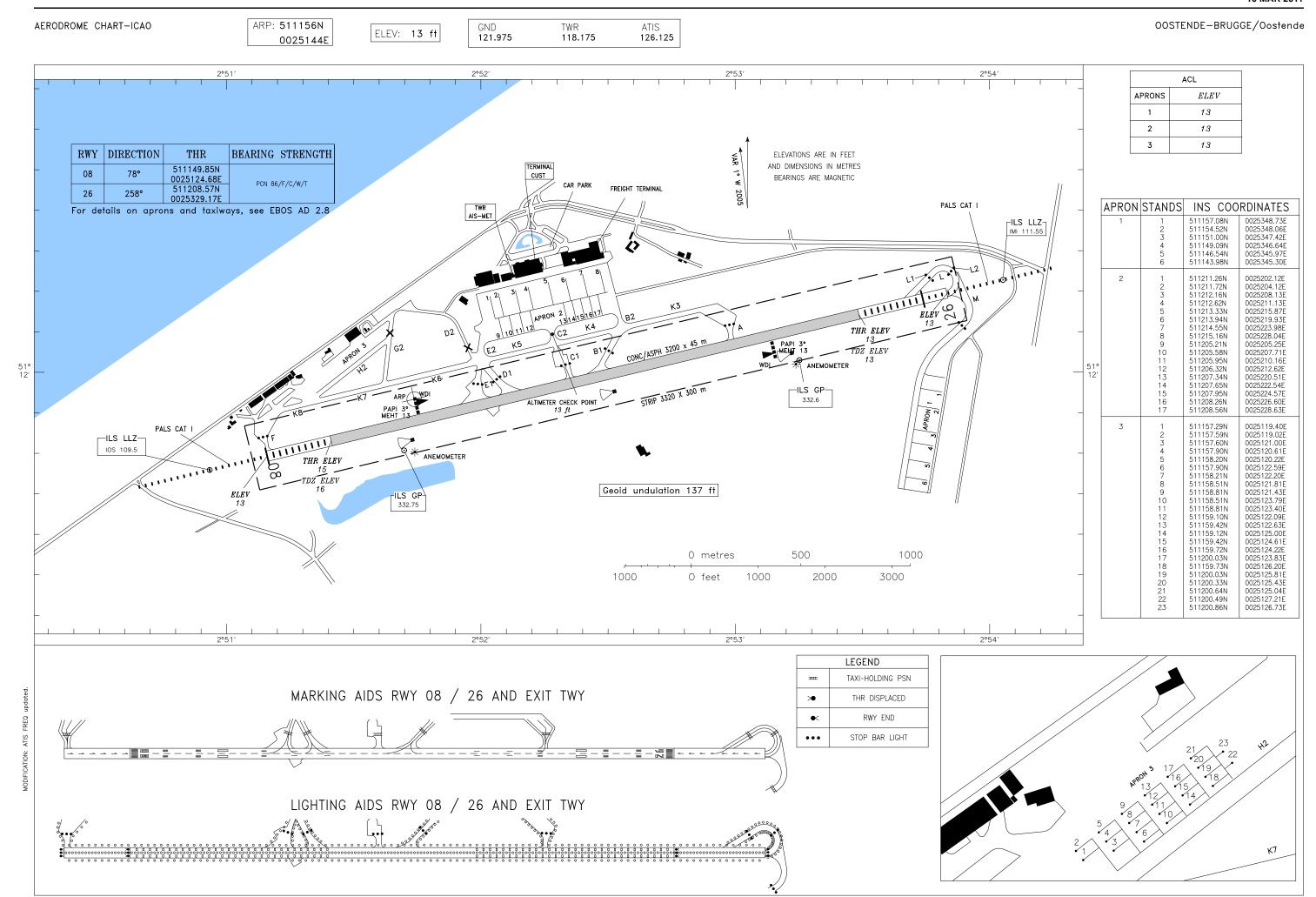


OOSTENDE-BRUGGE/Oostende

EBOS — ARSA Chart

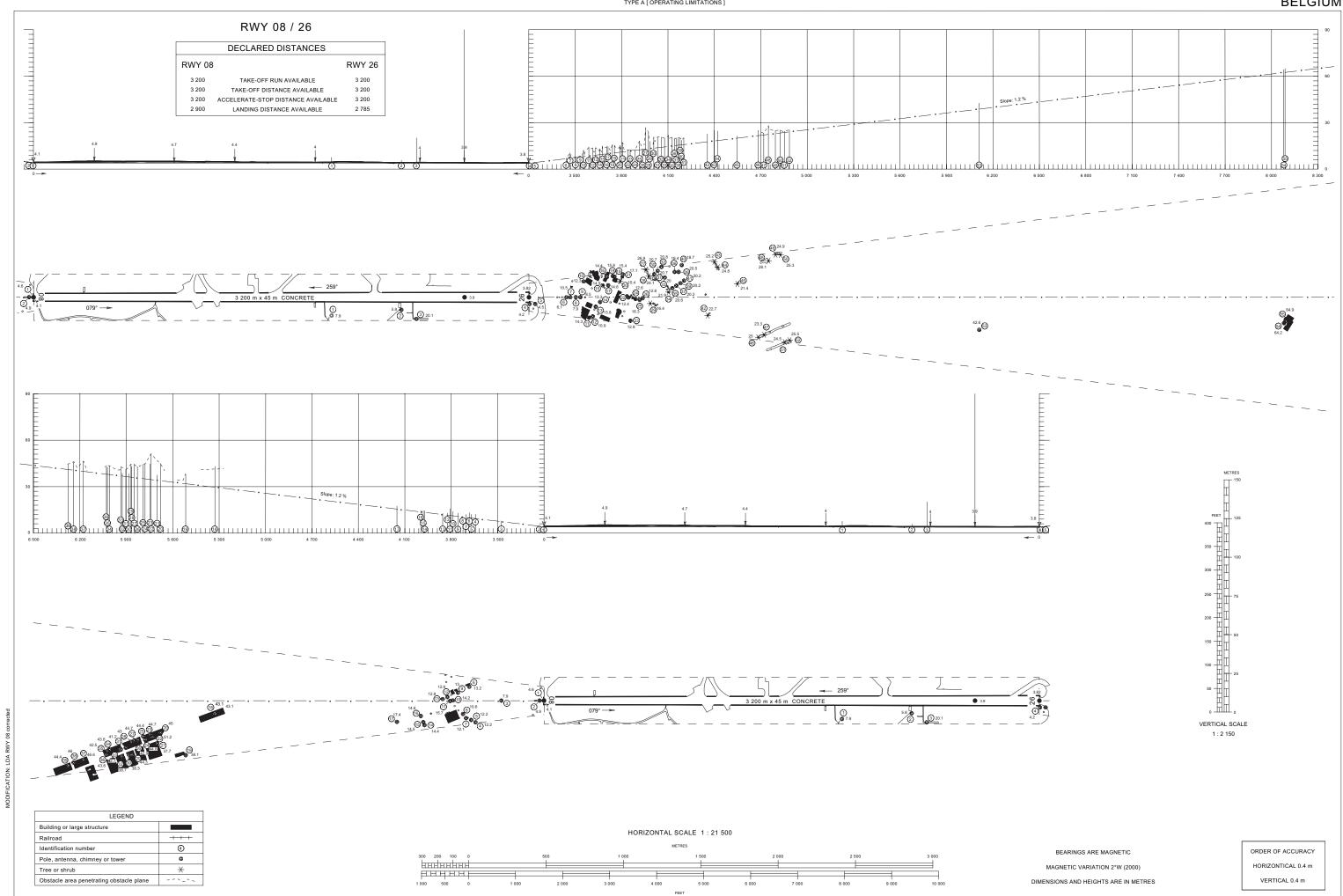








OOSTENDE-BRUGGE / Oostende BELGIUM



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AD2 EBOS IAC.01

Effective: 10 MAR 2011 AD ELEV 13 INSTRUMENT OOSTENDE-BRUGGE/Oostende (EBOS) **APPROACH** OCH RELATED TO L RWY 08 CHART-ICAO AD ELEV 15 ATIS TWR APP 118.175 126.125 120.600 2°40 2°50 3°00′E 3°10′ MSA 25NM 14 MSA 25NM 16 BEARINGS ARE MAGNETIC VAR 10 W ALTITUDES, ELEVATIONS AND HEIGHTS IN FEET EBD07C IAF NOTE: -OOSTENDE-USE OF THIS PROCEDURE IS SUBJECT TO ATC NDB ENSURING EBD07 IS NOT ACTIVE 399.5 ONO = : _ _ 511313N 0030042E EBD07B <u>--</u>258° 258° CAT C/D 160-170 kf MNM ALT C_D CAT C/D 170-185 kt 3000 ft 06 CAT C/D 1 min 185kt 160-170 kt BASE TURN CAT A B-140 Kt-1.5 min CAT C D-185 Kt-1.5 min 101 -OOSTENDE-BASE TURN FAF R-022 KOK 352.5 CAT A B-140 Kt-3.0 min CAT C D-185 Kt-2.5 min 511025N DD =:: 0024201E 511138N 0025006E 0 NM KOKSY VORTAC 114.50/CH 092X 8 кок =:--0 Km 10 510541N **EBFN** 0023906E MSA 25NM 22 MSA 25NM 23 2°40 3°10' IAF ONO TRANSITION ALTITUDE 106° C-D 170-185 kt CAT C-D 1.5 min CAT A-B 1.5 min ft <--258° 078°→ 1040 C-D 160-170 KI 4500 CAT C-D 2.5 min CAT A-B 3.0 min 3000 IF 3000 C-D A-B MAPt ←274° C-D 170-185 kt 2500 [2990] DD ←273° C-D 160-170 kt **-**-258° **←**270° A-B -258° **-**-258° 2000 2000 [1990] 1500 ATIS FREQ updated. Š 1000 0780 MISSED APPROACH
CLIMB STRAIGHT AHEAD TO "ONO" TO
2000 FT QNH CONTACT OOSTENDE R-022 500 ELEV 15ft THR RWY 08 MODIFICATION: 7 Ô 3 2 3 5 5 4 9 NM 8 6 4 6 8 ģ 11 12NM 2 10 OCA (OCH) FAF to DD-5.3NM С 70 CAT of ACFT В D Speed(GS) Κt 90 150 180 Α 120 490 (480) 490 (480) 490 (480) L 490 (480) Rate of descent 375 800 960 ft/min 480 640 **CIRCLING** 520 660 760 760 MINIMA (RVR) 1000m 1200m 1200m 1600m

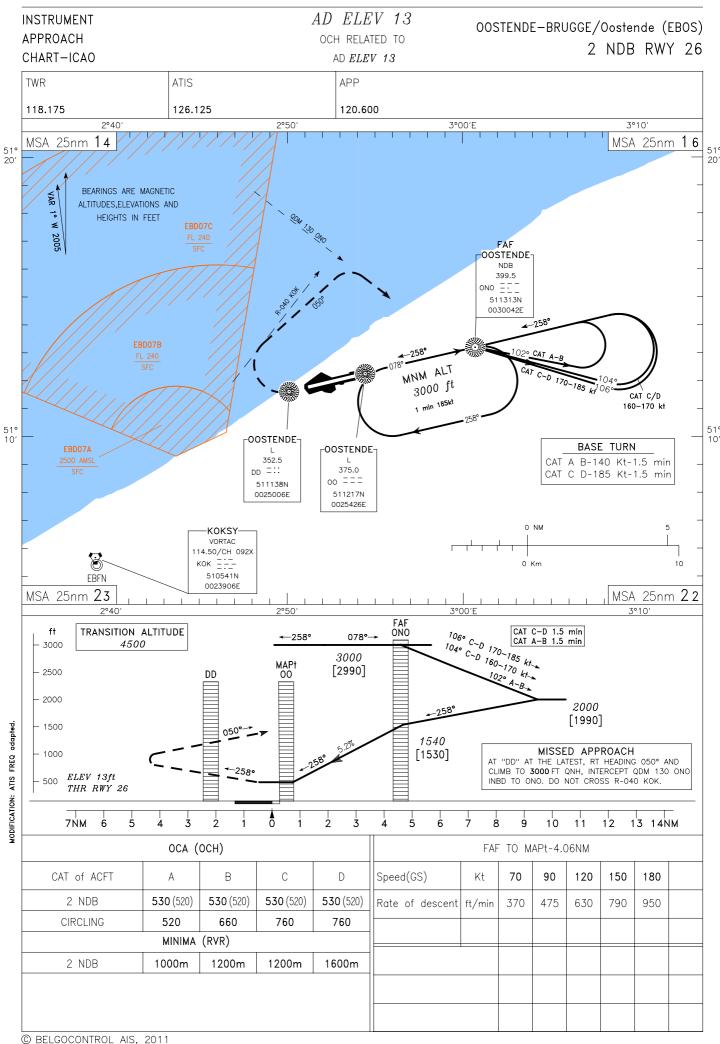
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AD2 EBOS IAC.02

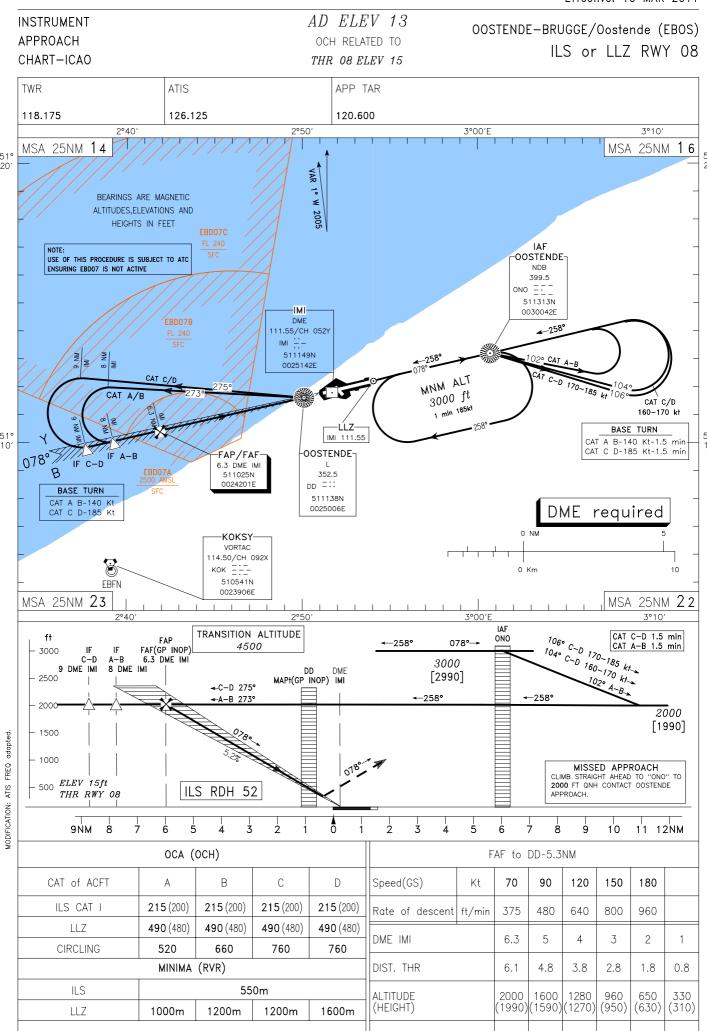
Effective: 10 MAR 2011 AD ELEV 13 INSTRUMENT OOSTENDE-BRUGGE/Oostende (EBOS) **APPROACH** OCH RELATED TO ILS or LLZ RWY 26 CHART-ICAO THR 26 ELEV 13 TWR **ATIS** APP 118.175 126.125 120.600 2°40 2°50′ 3°00′E 3°10′ MSA 25nm **14** MSA 25nm 16 519 BEARINGS ARE MAGNETIC ALTITUDES, ELEVATIONS AND VAR HEIGHTS IN FEET FAF 10 OOSTENDE-£ NDB 2005 399.5 ONO =: 511313N 0030042E ≤ 258° GP INOF EBD07B MNM ALT CAT C-D 170-185 kt 3000 ft 1 min 185kt CAT C/D 160-170 kt OOSTENDE 51° 10′ 51° 10′ LLZ 109.5 IOS BASE TURN 352.5 EBD07A DD =:: -OOSTENDE CAT A B-140 Kt-1.5 min 2500 AMSI 511138N CAT C D-185 Kt-1.5 min 375.0 0025006E 00 === 511217N 0025426E KOKSY 0 NM VORTAC 114.50/CH 092X кок = 8 0 Km 10 510541N **EBFN** 0023906E MSA 25nm 22 MSA 25nm 23 3°00′E MAPt (GP INOP) FAF (GP INOP) TRANSITION ALTITUDE MISSED APPROACH 4500 AT "DD" AT THE LATEST, RT HEADING 050° AND CLIMB TO 3000 FT QNH, INTERCEPT QDM 130 ONO INBD TO ONO. DO NOT CROSS R-040 KOK. 00 ONO ft ММ ОМ 106° C-D 170-185 kt <-258° 078°→ 3000 3000 C-D 160-170 kt [2990] CAT C-D 1.5 min CAT A-B 1.5 min 2500 **≺**—258° 2000 2000 [1990] GP INOP 258° 050° 1500 updated 1000 1540 **₹** 258° ELEV 13ft [1530] ATIS FREQ ILS RDH 51ft THR RWY 26 0 2 ż 2 5 4 3 3 4 5 6 8 ġ 10 11 12 13 14 MODIFICATION: FAF to MAPt-4.06NM OCA (OCH) CAT of ACFT С D 70 90 180 Α В Speed(GS) Κt 120 150 ILS CAT I 213 (200) 213 (200) 213 (200) 213 (200) Rate of descent ft/min 370 475 630 790 950 LLZ 530 (520) 530 (520) 530 (520) 530 (520) CIRCLING 520 660 760 760 MINIMA (RVR) ILS 550m LLZ 1200m 1200m 1600m 1000m

AD2 EBOS IAC.03

Effective: 10 MAR 2011

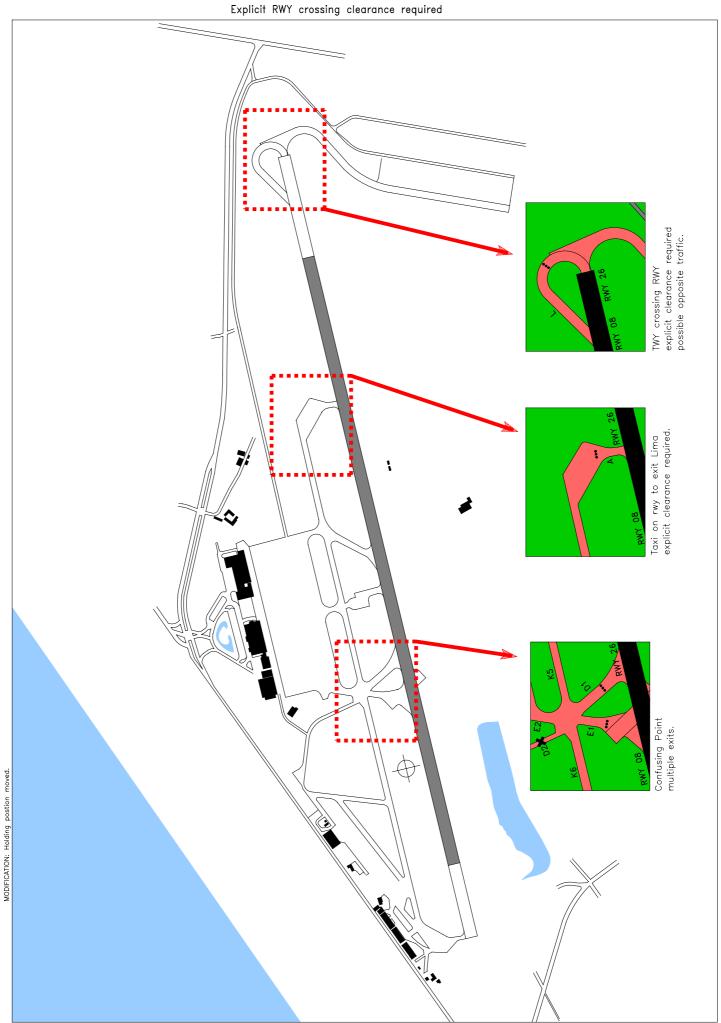


Effective: 10 MAR 2011



OOSTENDE-BRUGGE/Oostende

EBOS - ARSA Chart

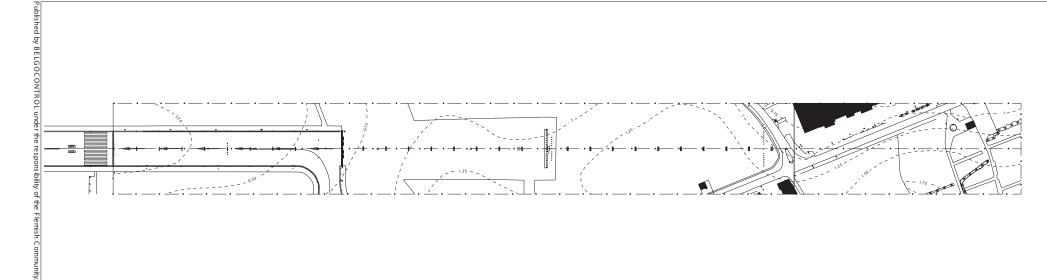


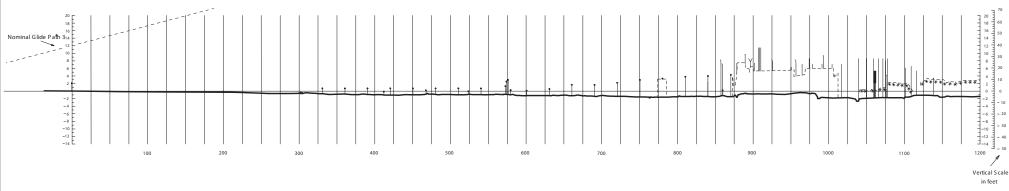
CONTOURS AND HEIGHTS ARE RELATED TO ELEVATION OF RWY THR

DIMENSIONS AND HEIGHTS IN METERS

HORIZONTAL SCALE

VERTICAL SCALE





LEGEND	
Building or large structure	
Railroad	+++
Fence	—×—
Contour	3
Centre line profile	
Deviation at least ± 3 m from Centre - I ine profile	,
Approach lights	P
Tree or shrub	*
Pole, antenna	Т

