

## Differentiated instrument approach procedures to EKRN Bornholm/Rønne aerodrome

*This AIRAC AIP SUP 23/26 replaces AIRAC AIP SUP 04/26 on AIRAC 09 JUL 2026.*

### 1 Introduction

From December 2025 to December 31, 2028, several land based cranes extending from 193 FT MSL to 492 FT MSL will be working in Rønne Harbour in periods of several months.

During the same period, several vessel based cranes extending from 400 FT MSL to 722 FT MSL will be working in Rønne Harbour in periods varying from several hours to several days.

All of these cranes penetrate the Inner Horizontal Surface and/or the Conical Surface and some will impact the instrument flight procedures at EKRN Bornholm/Rønne aerodrome.

To address this, three separate sets of instrument flight procedures have been established and these procedures will include additional instructions, guidelines, limitations or restrictions, to ensure the safe navigation of aircraft in the vicinity of the cranes. ATC will notify aircraft of which set of procedures are in use.

### 2 Operational Implications

#### 2.1 Temporary obstacles.

The temporary obstacles are described in the AIRAC AIP SUP Cranes operating in Rønne Harbour (near EKRN Bornholm/Rønne aerodrome).

#### 2.2 Instrument approach procedures

As of AIRAC 28 NOV 2024, all existing procedures are renamed with identification Z. In addition to existing instrument approach procedures, temporary procedures with identification Y and X are published. Certain 2D instrument approach procedures are temporarily suspended and not issued in the Y and X versions.

Procedures are listed below:

Existing IAC	Renamed/temporary IAC	Operational use
ILS RWY 11	ILS Z RWY 11	When cranes up to <b>348 FT</b> are in operation / Cranes shown on chart
ILS RWY 29	ILS Z RWY 29	
RNP RWY 11	RNP Z RWY 11	
RNP RWY 29	RNP Z RWY 29	
VOR RWY 11	VOR Z RWY 11	
VOR RWY 29	VOR Z RWY 29	
	ILS Y RWY 11	When cranes between <b>349 FT</b> to <b>525 FT</b> are in operation / Cranes shown on chart
	ILS Y RWY 29	
	RNP Y RWY 11	
	RNP Y RWY 29	
	VOR Y RWY 29	When cranes between <b>526 FT</b> to <b>722 FT</b> are in operation / Cranes shown on chart
	ILS X RWY 11	
	ILS X RWY 29	
	RNP X RWY 11	
	RNP X RWY 29	
	VOR X RWY 29	

#### 2.3 Departure procedures

Omnidirectional departure:

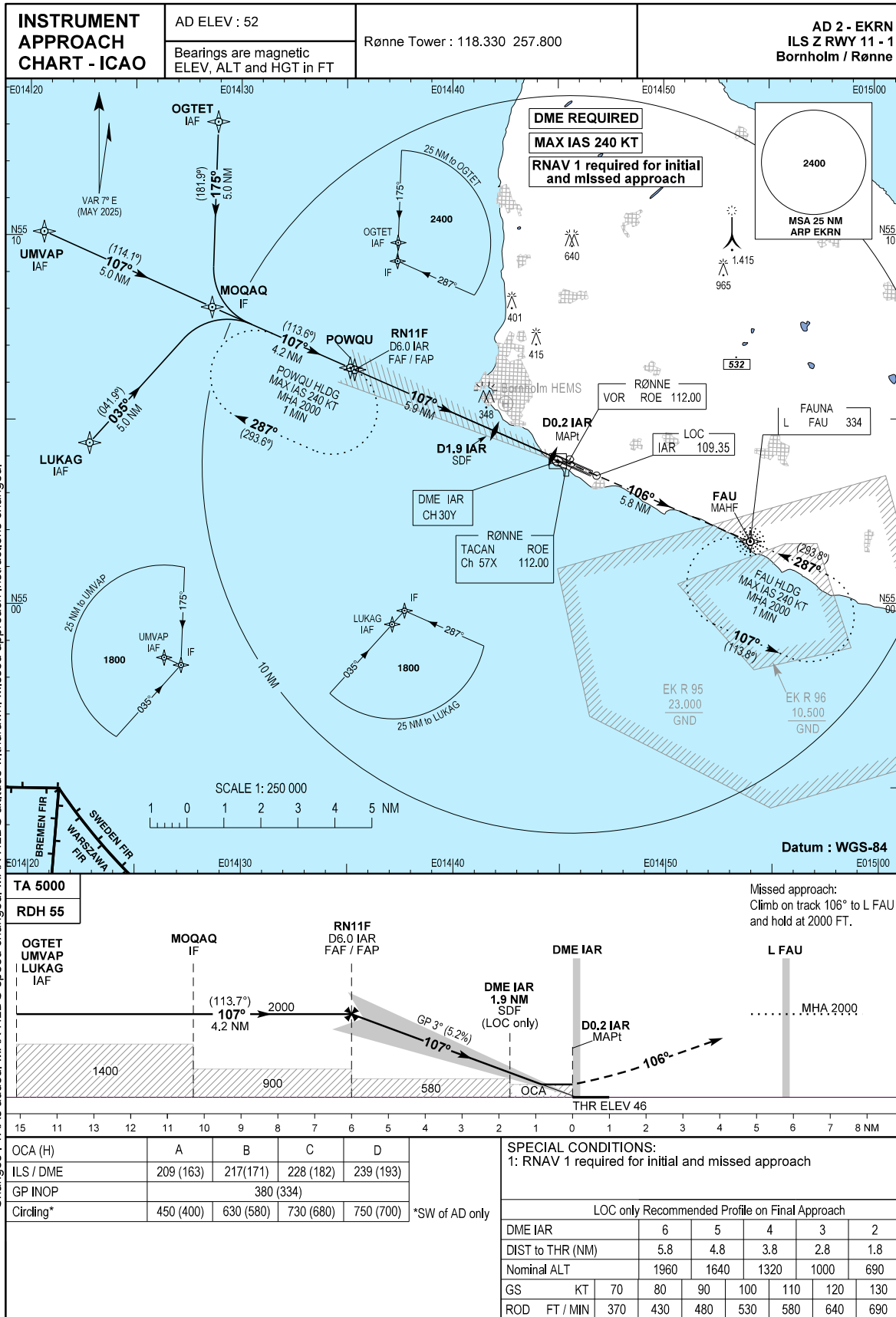
RWY 11: No changes.

RWY 29: After departure turn left, climb on track 272° to 1000 FT MSL before turn is commenced. Procedure design gradient 6.1% to 1000 FT MSL, due to cranes at 722 FT / 2.1 NM NW of THR RWY 11.

*Remark RWY 29: Can Aircraft not comply contact ATC 24H before ETD for alternative departure. Availability depending on OBST in Rønne Havn. Alternative Omnidirectional departure RWY 29: After departure turn left, climb on track 272° to 700 FT MSL before turn is commenced.*

#### 2.4 Noise Abatement Provisions

RWY 29: IFR: After departure turn left, climb on track 272° until ROE DME 5.0 NM.



Changes : TAAs added. MAX HLDG speed changed. MAX HLDG altitude withdrawn. Missed approach instructions changed.

**INSTRUMENT APPROACH  
CHART - ICAO**

**AD 2 - EKRN  
ILS Z RWY 11 - 2  
Bornholm/Rønne**

**TABULAR DESCRIPTION**

**EKRN ILS Z RWY 11 initial approach via OGTET, UMVAP and LUKAG**

Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course/Track °M(°T)	Magnetic Variation	Distance	Turn Direction	Altitude (ft)	Speed (kt)	VPA/TCH	Navigation Specification
010	IF	OGTET	-	-	7.0E	-	-	+2400	-240	-	RNAV 1
020	TF	MOQAQ	-	175 / (181.9)	7.0E	5.0	L	+2000	-	-	RNAV 1
010	IF	UMVAP	-	-	7.0E	-	-	+2400	-240	-	RNAV 1
020	TF	MOQAQ	-	107 / (114.1)	7.0E	5.0	-	+2000	-	-	RNAV 1
010	IF	LUKAG	-	-	7.0E	-	-	+2400	-240	-	RNAV 1
020	TF	MOQAQ	-	035 / (041.9)	7.0E	5.0	R	+2000	-	-	RNAV 1
010	IF	MOQAQ	-	-	7.0E	-	-	+2000	-240	-	RNAV 1
020	TF	RN11F	-	107 / (113.6)	7.0E	4.2	-	@2000	-	-	RNAV 1

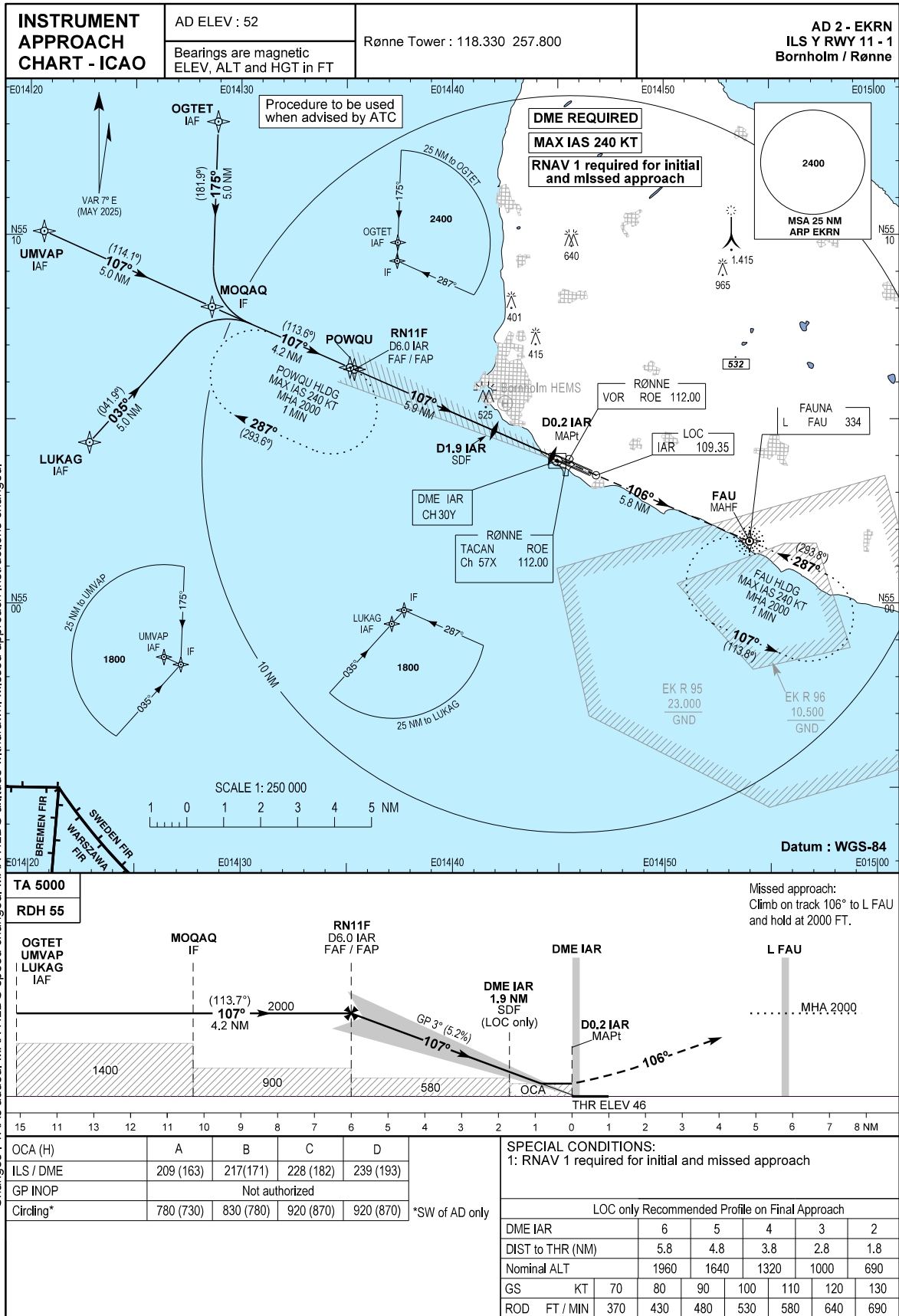
**EKRN ILS Z RWY 11 missed approach procedure**

Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course/Track °M(°T)	Magnetic Variation	Distance	Turn Direction	Altitude (ft)	Speed (kt)	VPA/TCH	Navigation Specification
010	CF	FAU	-	106 / (113.4)	7.0E	5.8	-	+2000	-240	-	RNAV 1
020	HM	FAU	-	287 / (293.8)	7.0E	-	L	+2000	-240	-	RNAV 1

**EKRN ILS Z RWY 11 waypoint coordinates**

Waypoint Identifier	Coordinates
OGTET (IAF)	55 13 04.93N 014 28 53.52E
UMVAP (IAF)	55 10 05.95N 014 20 38.82E
LUKAG (IAF)	55 04 22.18N 014 22 49.96E
MOQAQ (IF)	55 08 03.45N 014 28 36.48E
RN11F (FAF/FAP)	55 06 21.80N 014 35 21.33E
D0.2 IAR (MAPt)	55 04 00.78N 014 44 42.77E
FAU (MAHF)	55 01 41.49N 014 54 01.79E
POWQU (HF)	55 06 24.93N 014 35 08.92E

Changes : MAX HLDG speed changed. MAX HLDG altitude withdrawn.



Changes : TAAs added. MAX HLDG speed changed. MAX HLDG altitude withdrawn. Missed approach instructions changed.

**INSTRUMENT APPROACH  
CHART - ICAO**

**AD 2 - EKRN  
ILS Y RWY 11 - 2  
Bornholm/Rønne**

**TABULAR DESCRIPTION**

**EKRN ILS Y RWY 11 initial approach via OGTET, UMVAP and LUKAG**

Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course/Track °M(°T)	Magnetic Variation	Distance	Turn Direction	Altitude (ft)	Speed (kt)	VPA/TCH	Navigation Specification
010	IF	OGTET	-	-	7.0E	-	-	+2400	-240	-	RNAV 1
020	TF	MOQAQ	-	175 / (181.9)	7.0E	5.0	L	+2000	-	-	RNAV 1
010	IF	UMVAP	-	-	7.0E	-	-	+2400	-240	-	RNAV 1
020	TF	MOQAQ	-	107 / (114.1)	7.0E	5.0	-	+2000	-	-	RNAV 1
010	IF	LUKAG	-	-	7.0E	-	-	+2400	-240	-	RNAV 1
020	TF	MOQAQ	-	035 / (041.9)	7.0E	5.0	R	+2000	-	-	RNAV 1
010	IF	MOQAQ	-	-	7.0E	-	-	+2000	-240	-	RNAV 1
020	TF	RN11F	-	107 / (113.6)	7.0E	4.2	-	@2000	-	-	RNAV 1

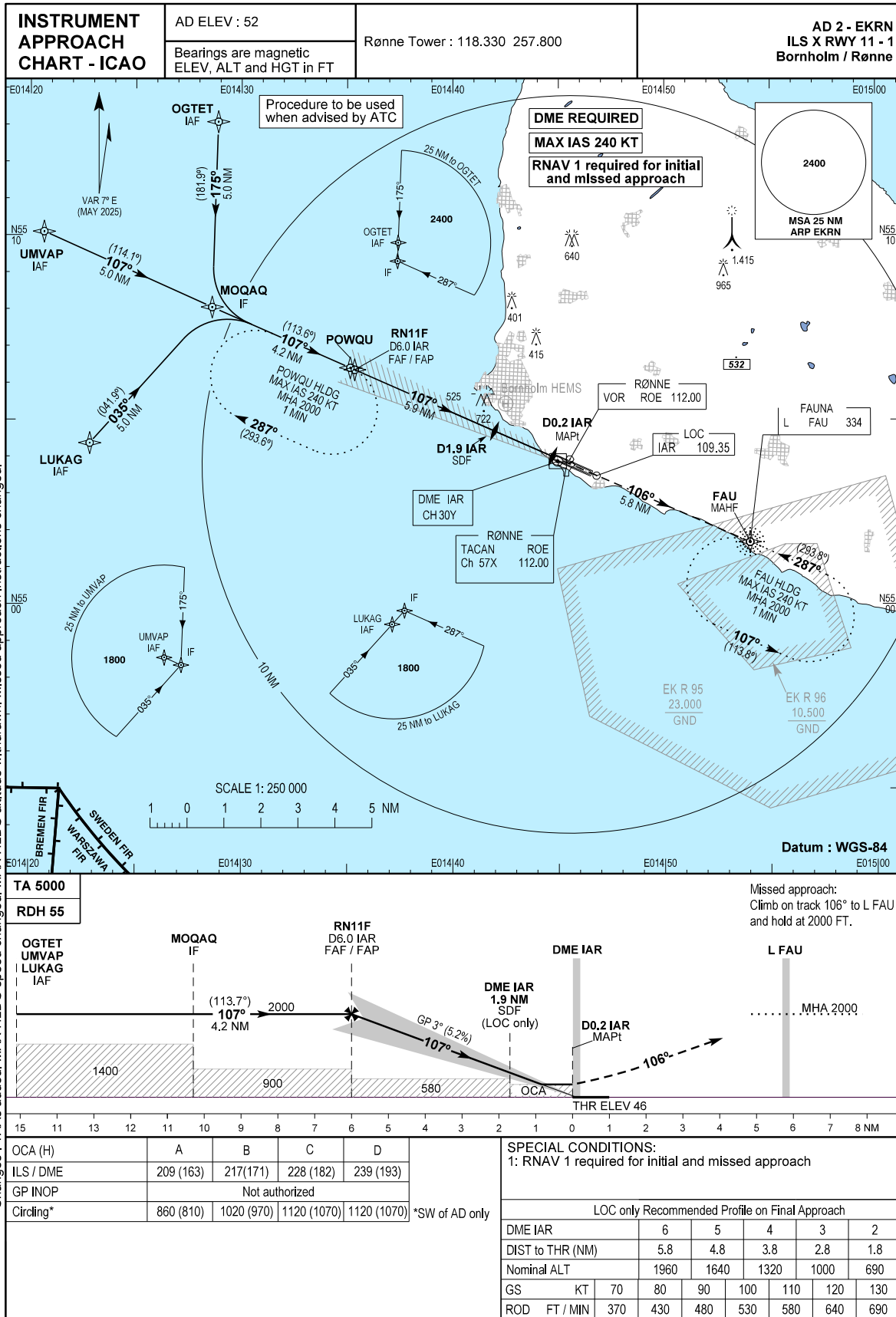
**EKRN ILS Y RWY 11 missed approach procedure**

Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course/Track °M(°T)	Magnetic Variation	Distance	Turn Direction	Altitude (ft)	Speed (kt)	VPA/TCH	Navigation Specification
010	CF	FAU	-	106 / (113.4)	7.0E	5.8	-	+2000	-240	-	RNAV 1
020	HM	FAU	-	287 / (293.8)	7.0E	-	L	+2000	-240	-	RNAV 1

**EKRN ILS Y RWY 11 waypoint coordinates**

Waypoint Identifier	Coordinates
OGTET (IAF)	55 13 04.93N 014 28 53.52E
UMVAP (IAF)	55 10 05.95N 014 20 38.82E
LUKAG (IAF)	55 04 22.18N 014 22 49.96E
MOQAQ (IF)	55 08 03.45N 014 28 36.48E
RN11F (FAF/FAP)	55 06 21.80N 014 35 21.33E
D0.2 IAR (MAPt)	55 04 00.78N 014 44 42.77E
FAU (MAHF)	55 01 41.49N 014 54 01.79E
POWQU (HF)	55 06 24.93N 014 35 08.92E

Changes : MAX HLDG speed changed. MAX HLDG altitude withdrawn.



Changes : TAAs added. MAX HLDG speed changed. MAX HLDG altitude withdrawn. Missed approach instructions changed.

**INSTRUMENT APPROACH  
CHART - ICAO**

**AD 2 - EKRN  
ILS X RWY 11 - 2  
Bornholm/Rønne**

**TABULAR DESCRIPTION**

**EKRN ILS X RWY 11 initial approach via OGTET, UMVAP and LUKAG**

Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course/Track °M(°T)	Magnetic Variation	Distance	Turn Direction	Altitude (ft)	Speed (kt)	VPA/TCH	Navigation Specification
010	IF	OGTET	-	-	7.0E	-	-	+2400	-240	-	RNAV 1
020	TF	MOQAQ	-	175 / (181.9)	7.0E	5.0	L	+2000	-	-	RNAV 1
010	IF	UMVAP	-	-	7.0E	-	-	+2400	-240	-	RNAV 1
020	TF	MOQAQ	-	107 / (114.1)	7.0E	5.0	-	+2000	-	-	RNAV 1
010	IF	LUKAG	-	-	7.0E	-	-	+2400	-240	-	RNAV 1
020	TF	MOQAQ	-	035 / (041.9)	7.0E	5.0	R	+2000	-	-	RNAV 1
010	IF	MOQAQ	-	-	7.0E	-	-	+2000	-240	-	RNAV 1
020	TF	RN11F	-	107 / (113.6)	7.0E	4.2	-	@2000	-	-	RNAV 1

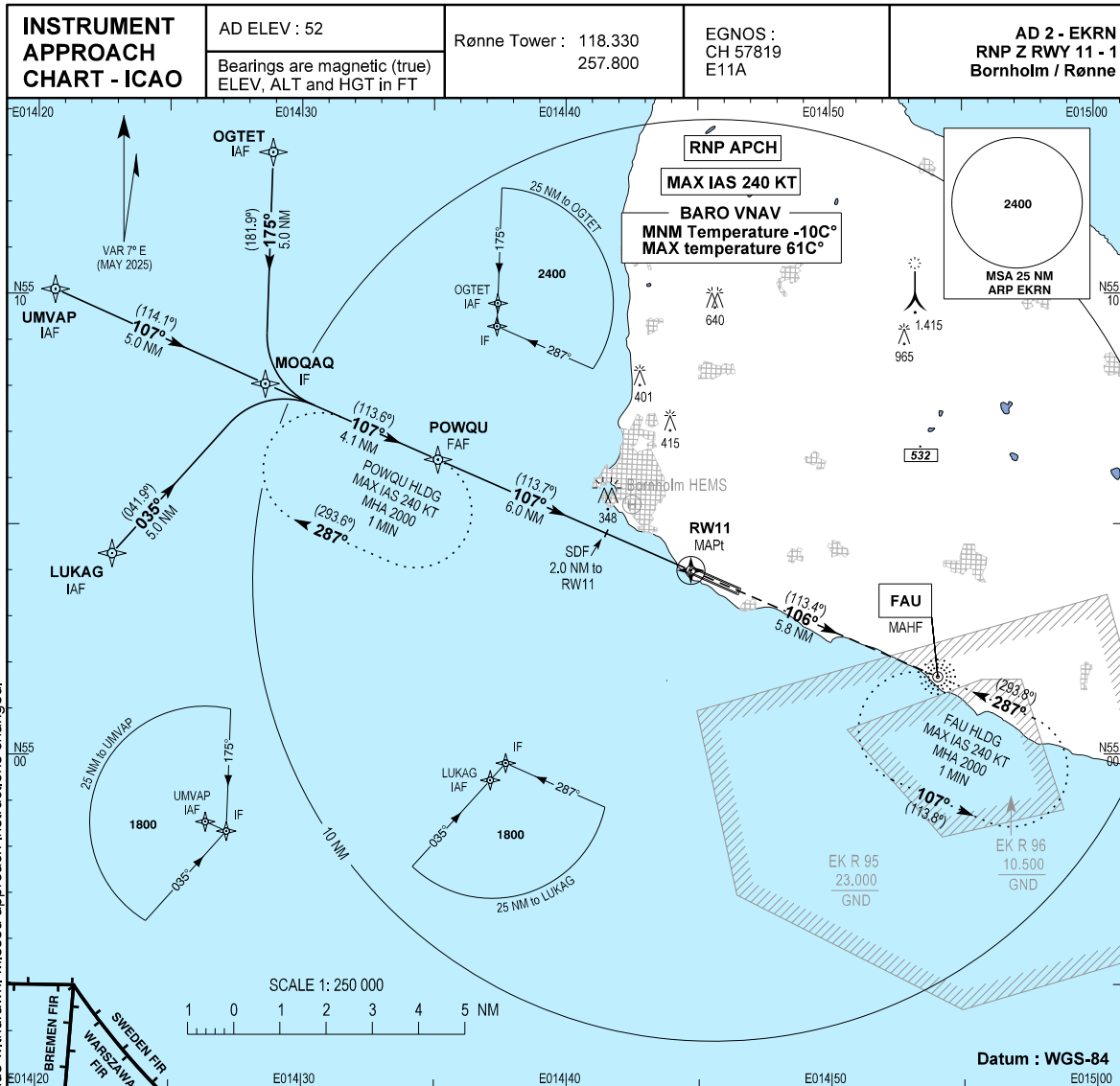
**EKRN ILS X RWY 11 missed approach procedure**

Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course/Track °M(°T)	Magnetic Variation	Distance	Turn Direction	Altitude (ft)	Speed (kt)	VPA/TCH	Navigation Specification
010	CF	FAU	-	106 / (113.4)	7.0E	5.8	-	+2000	-240	-	RNAV 1
020	HM	FAU	-	287 / (293.8)	7.0E	-	L	+2000	-240	-	RNAV 1

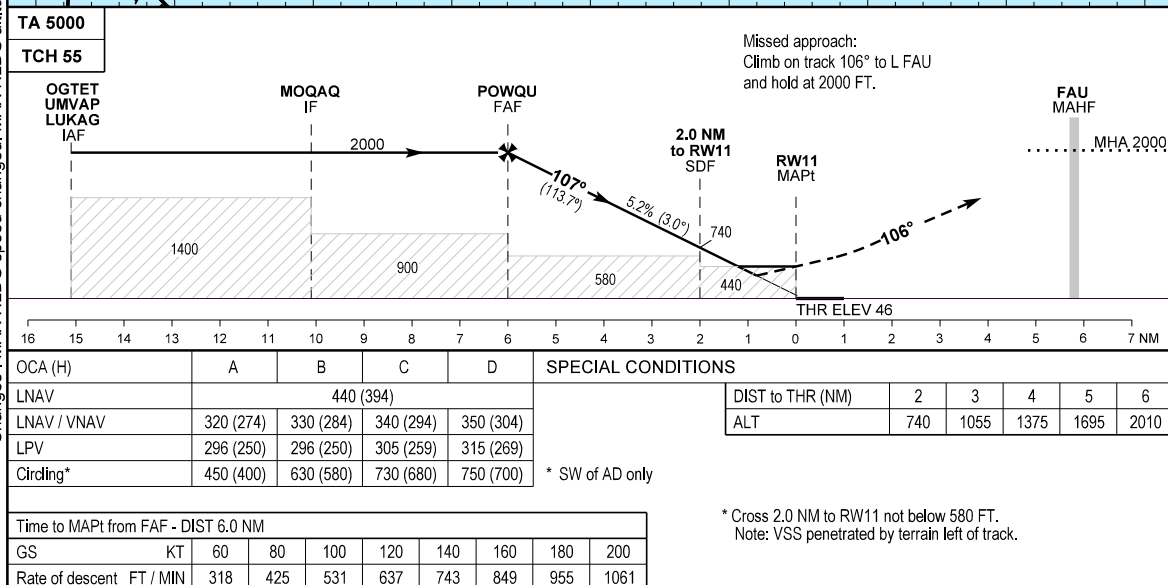
**EKRN ILS X RWY 11 waypoint coordinates**

Waypoint Identifier	Coordinates
OGTET (IAF)	55 13 04.93N 014 28 53.52E
UMVAP (IAF)	55 10 05.95N 014 20 38.82E
LUKAG (IAF)	55 04 22.18N 014 22 49.96E
MOQAQ (IF)	55 08 03.45N 014 28 36.48E
RN11F (FAF/FAP)	55 06 21.80N 014 35 21.33E
D0.2 IAR (MAPt)	55 04 00.78N 014 44 42.77E
FAU (MAHF)	55 01 41.49N 014 54 01.79E
POWQU (HF)	55 06 24.93N 014 35 08.92E

Changes : MAX HLDG speed changed. MAX HLDG altitude withdrawn.



Changes : MAX HLDG altitude withdrawn. Missed approach instructions changed. MAX HLDG speed changed.



**INSTRUMENT APPROACH CHART -  
ICAO**

**AD 2 - EKRN  
RNP Z RWY 11 - 2  
Bornholm/Rønne**

**TABULAR DESCRIPTION**

**EKRN RNP Z RWY 11 via OGTET**

Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course/Track °M(°T)	Magnetic Variation	Distance	Turn Direction	Altitude (ft)	Speed (kt)	VPA/TCH	Navigation Specification
005	IF	OGTET	-	-	7.0E	-	-	+2000	-240	-	RNP APCH
010	TF	MOQAQ	-	175 / (181.9)	7.0E	5.0	-	+2000	-240	-	RNP APCH
020	TF	POWQU	-	107 / (113.6)	7.0E	4.1	L	@2000	-	-	RNP APCH
030	TF	RW11	Y	107 / (113.7)	7.0E	6.0	-	-	-	3.0°/55	RNP APCH
040	TF	FAU	-	106 / (113.4)	7.0E	5.8	-	+2000	-	-	RNP APCH
050	HM	FAU	-	287 / (293.8)	7.0E	-	L	+2000	-240	-	RNP APCH

**EKRN RNP Z RWY 11 via UMVAP**

Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course/Track °M(°T)	Magnetic Variation	Distance	Turn Direction	Altitude (ft)	Speed (kt)	VPA/TCH	Navigation Specification
005	IF	UMVAP	-	-	7.0E	-	-	+2000	-240	-	RNP APCH
010	TF	MOQAQ	-	107 / (114.1)	7.0E	5.0	-	+2000	-240	-	RNP APCH
020	TF	POWQU	-	107 / (113.6)	7.0E	4.1	-	@2000	-	-	RNP APCH
030	TF	RW11	Y	107 / (113.7)	7.0E	6.0	-	-	-	3.0°/55	RNP APCH
040	TF	FAU	-	106 / (113.4)	7.0E	5.8	-	+2000	-	-	RNP APCH
050	HM	FAU	-	287 / (293.8)	7.0E	-	L	+2000	-240	-	RNP APCH

**EKRN RNP Z RWY 11 via LUKAG**

Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course/Track °M(°T)	Magnetic Variation	Distance	Turn Direction	Altitude (ft)	Speed (kt)	VPA/TCH	Navigation Specification
005	IF	LUKAG	-	-	7.0E	-	-	+2000	-240	-	RNP APCH
010	TF	MOQAQ	-	035 / (041.9)	7.0E	5.0	-	+2000	-240	-	RNP APCH
020	TF	POWQU	-	107 / (113.6)	7.0E	4.1	R	@2000	-	-	RNP APCH
030	TF	RW11	Y	107 / (113.7)	7.0E	6.0	-	-	-	3.0°/55	RNP APCH
040	TF	FAU	-	106 / (113.4)	7.0E	5.8	-	+2000	-	-	RNP APCH
050	HM	FAU	-	287 / (293.8)	7.0E	-	L	+2000	-240	-	RNP APCH

**EKRN RNP Z RWY 11 waypoint coordinates**

Waypoint Identifier	Coordinates
OGTET (IAF)	55 13 04.93N 014 28 53.52E
UMVAP (IAF)	55 10 05.95N 014 20 38.82E
LUKAG (IAF)	55 04 22.18N 014 22 49.96E
MOQAQ (IF)	55 08 03.45N 014 28 36.48E
POWQU (FAF)	55 06 24.93N 014 35 08.92E
RW11 (MAPt)	55 04 00.78N 014 44 42.77E
FAU (MAHF)	55 01 41.49N 014 54 01.79E

Changes : MAX HLDG speed changed. MAX HLDG altitude withdrawn.

**INSTRUMENT APPROACH  
 CHART - ICAO**

**AD 2 - EKRN  
 RNP Z RWY 11 - 3  
 Bornholm / Rønne**

**SBAS FAS DATA BLOCK**

**Input data**

Operation Type	0
SBAS Provider	1 (EGNOS)
Airport Identifier	EKRN
Runway	11
Runway Letter	0 (None)
Approach Performance Designator	0
Route Indicator	Z
Reference Path Data Selector	0
Reference Path Identifier	E11A
LTP/FTP Latitude	550400.7800N
LTP/FTP Longitude	0144442.7700E
LTP/FTP Ellipsoidal Height (metres)	47.9
FPAP Latitude	550333.4395N
Delta FPAP Latitude (seconds)	-27.3405
FPAP Longitude	0144631.2000E
Delta FPAP Longitude (seconds)	108.4300
Threshold Crossing Height	55.0
TCH Units Selector	0 (feet)
Glidepath Angle (degrees)	3.00
Course Width (metres)	105.00
Length Offset (metres)	104
HAL (metres)	40.0
VAL (metres)	50.0

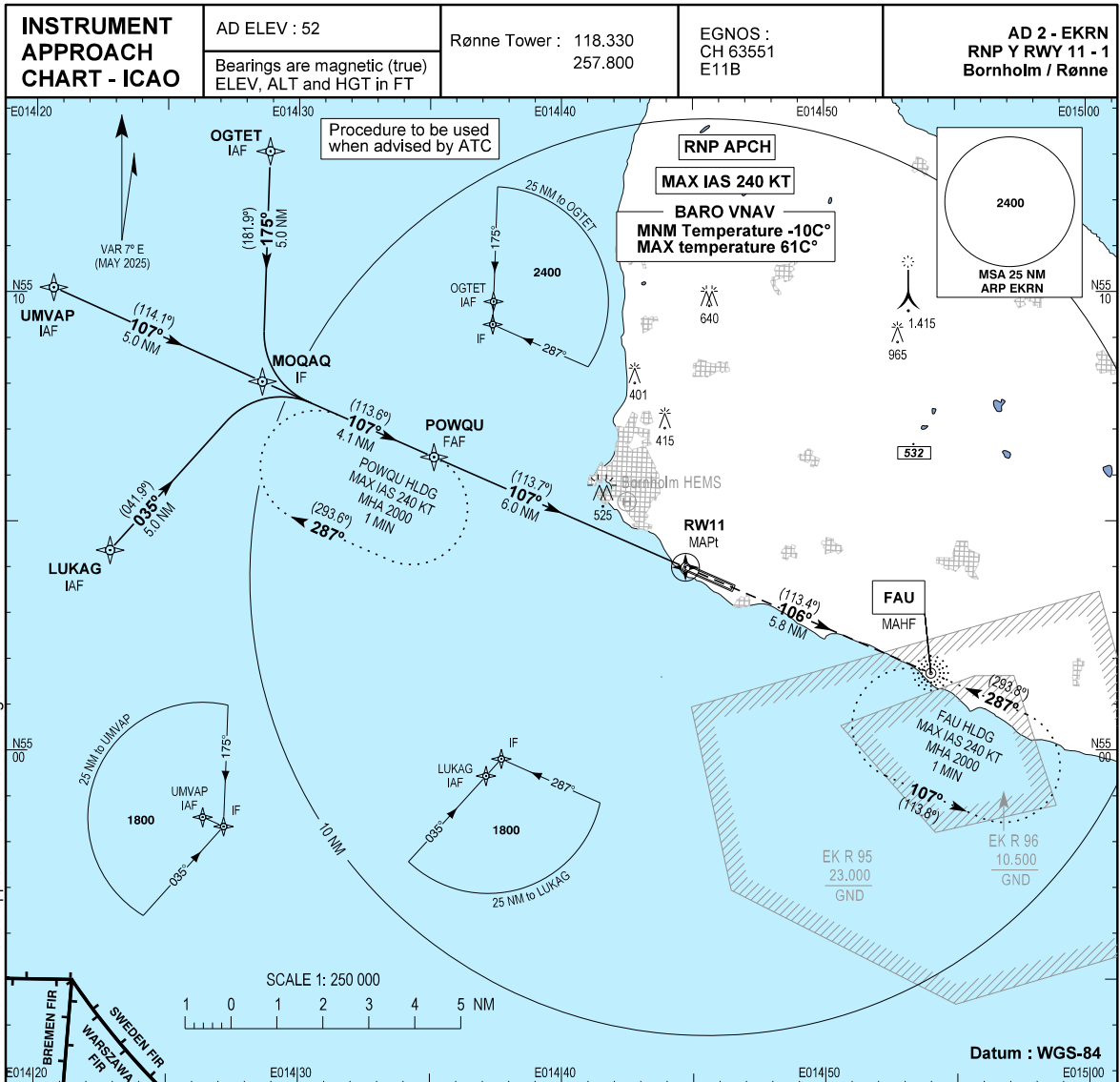
**Output data**

Data Block	10 0E 12 0B 05 0B D0 00 01 31 31 05 18 D4 A1 17 24 F5 53 06 DF 15 67 2A FF 1C 4F 03 26 02 2C 01 64 0D C8 FA FA 68 02 B2
Calculated CRC Value	FA6802B2

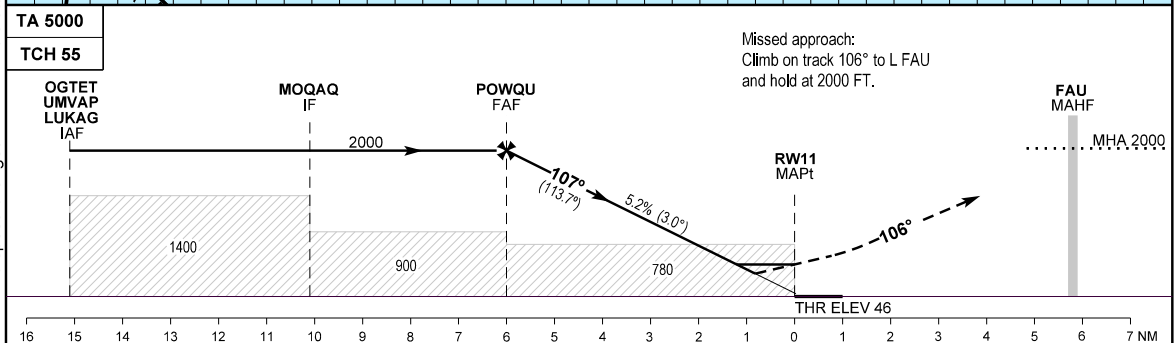
**Required Additional Data**

ICAO Code	EK
LTP/FTP Orthometric Height (metres)	14.0

EUROCONTROL FAS DB tool Version 3.2.1



Changes: MAX HLDG speed changed. MAX HLDG altitude withdrawn. Missed approach instructions changed.



OCA (H)	A	B	C	D	SPECIAL CONDITIONS					
LNAV	Not authorized				DIST to THR (NM)					
LNAV / VNAV	660 (608)	670 (618)	680 (628)	690 (638)	2	3	4	5	6	
LPV	296 (250)	296 (250)	305 (259)	315 (269)	ALT					
Circling*	780 (730)	830 (780)	920 (870)	920 (870)	740	1055	1375	1695	2010	

Time to MAPt from FAF - DIST 6.0 NM									
GS	KT	60	80	100	120	140	160	180	200
Rate of descent	FT / MIN	318	425	531	637	743	849	955	1061

Note: VSS penetrated by terrain left of track.

NAVAIR

**INSTRUMENT APPROACH CHART -  
 ICAO**

**AD 2 - EKRN  
 RNP Y RWY 11 - 2  
 Bornholm/Rønne**

**TABULAR DESCRIPTION**

**EKRN RNP Y RWY 11 via OGTET**

Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course/Track °M(°T)	Magnetic Variation	Distance	Turn Direction	Altitude (ft)	Speed (kt)	VPA/TCH	Navigation Specification
005	IF	OGTET	-	-	7.0E	-	-	+2000	-240	-	RNP APCH
010	TF	MOQAQ	-	175 / (181.9)	7.0E	5.0	-	+2000	-240	-	RNP APCH
020	TF	POWQU	-	107 / (113.6)	7.0E	4.1	L	@2000	-	-	RNP APCH
030	TF	RW11	Y	107 / (113.7)	7.0E	6.0	-	-	-	3.0°/55	RNP APCH
040	TF	FAU	-	106 / (113.4)	7.0E	5.8	-	+2000	-	-	RNP APCH
050	HM	FAU	-	287 / (293.8)	7.0E	-	L	+2000	-240	-	RNP APCH

**EKRN RNP Y RWY 11 via UMVAP**

Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course/Track °M(°T)	Magnetic Variation	Distance	Turn Direction	Altitude (ft)	Speed (kt)	VPA/TCH	Navigation Specification
005	IF	UMVAP	-	-	7.0E	-	-	+2000	-240	-	RNP APCH
010	TF	MOQAQ	-	107 / (114.1)	7.0E	5.0	-	+2000	-240	-	RNP APCH
020	TF	POWQU	-	107 / (113.6)	7.0E	4.1	-	@2000	-	-	RNP APCH
030	TF	RW11	Y	107 / (113.7)	7.0E	6.0	-	-	-	3.0°/55	RNP APCH
040	TF	FAU	-	106 / (113.4)	7.0E	5.8	-	+2000	-	-	RNP APCH
050	HM	FAU	-	287 / (293.8)	7.0E	-	L	+2000	-240	-	RNP APCH

**EKRN RNP Y RWY 11 via LUKAG**

Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course/Track °M(°T)	Magnetic Variation	Distance	Turn Direction	Altitude (ft)	Speed (kt)	VPA/TCH	Navigation Specification
005	IF	LUKAG	-	-	7.0E	-	-	+2000	-240	-	RNP APCH
010	TF	MOQAQ	-	035 / (041.9)	7.0E	5.0	-	+2000	-240	-	RNP APCH
020	TF	POWQU	-	107 / (113.6)	7.0E	4.1	R	@2000	-	-	RNP APCH
030	TF	RW11	Y	107 / (113.7)	7.0E	6.0	-	-	-	3.0°/55	RNP APCH
040	TF	FAU	-	106 / (113.4)	7.0E	5.8	-	+2000	-	-	RNP APCH
050	HM	FAU	-	287 / (293.8)	7.0E	-	L	+2000	-240	-	RNP APCH

**EKRN RNP Y RWY 11 waypoint coordinates**

Waypoint Identifier	Coordinates
OGTET (IAF)	55 13 04.93N 014 28 53.52E
UMVAP (IAF)	55 10 05.95N 014 20 38.82E
LUKAG (IAF)	55 04 22.18N 014 22 49.96E
MOQAQ (IF)	55 08 03.45N 014 28 36.48E
POWQU (FAF)	55 06 24.93N 014 35 08.92E
RW11 (MAPt)	55 04 00.78N 014 44 42.77E
FAU (MAHF)	55 01 41.49N 014 54 01.79E

Changes : MAX HLDG speed changed. MAX HLDG altitude withdrawn.

**INSTRUMENT APPROACH  
CHART - ICAO**

**AD 2 - EKRN  
RNP Y RWY 11 - 3  
Bornholm / Rønne**

**SBAS FAS DATA BLOCK**

**Input data**

Operation Type	0
SBAS Provider	1 (EGNOS)
Airport Identifier	EKRN
Runway	11
Runway Letter	0 (None)
Approach Performance Designator	0
Route Indicator	Y
Reference Path Data Selector	0
Reference Path Identifier	E11B
LTP/FTP Latitude	550400.7800N
LTP/FTP Longitude	0144442.7700E
LTP/FTP Ellipsoidal Height (metres)	47.9
FPAP Latitude	550333.4395N
Delta FPAP Latitude (seconds)	-27.3405
FPAP Longitude	0144631.2000E
Delta FPAP Longitude (seconds)	108.4300
Threshold Crossing Height	55.0
TCH Units Selector	0 (feet)
Glidepath Angle (degrees)	3.00
Course Width (metres)	105.00
Length Offset (metres)	104
HAL (metres)	40.0
VAL (metres)	50.0

**Output data**

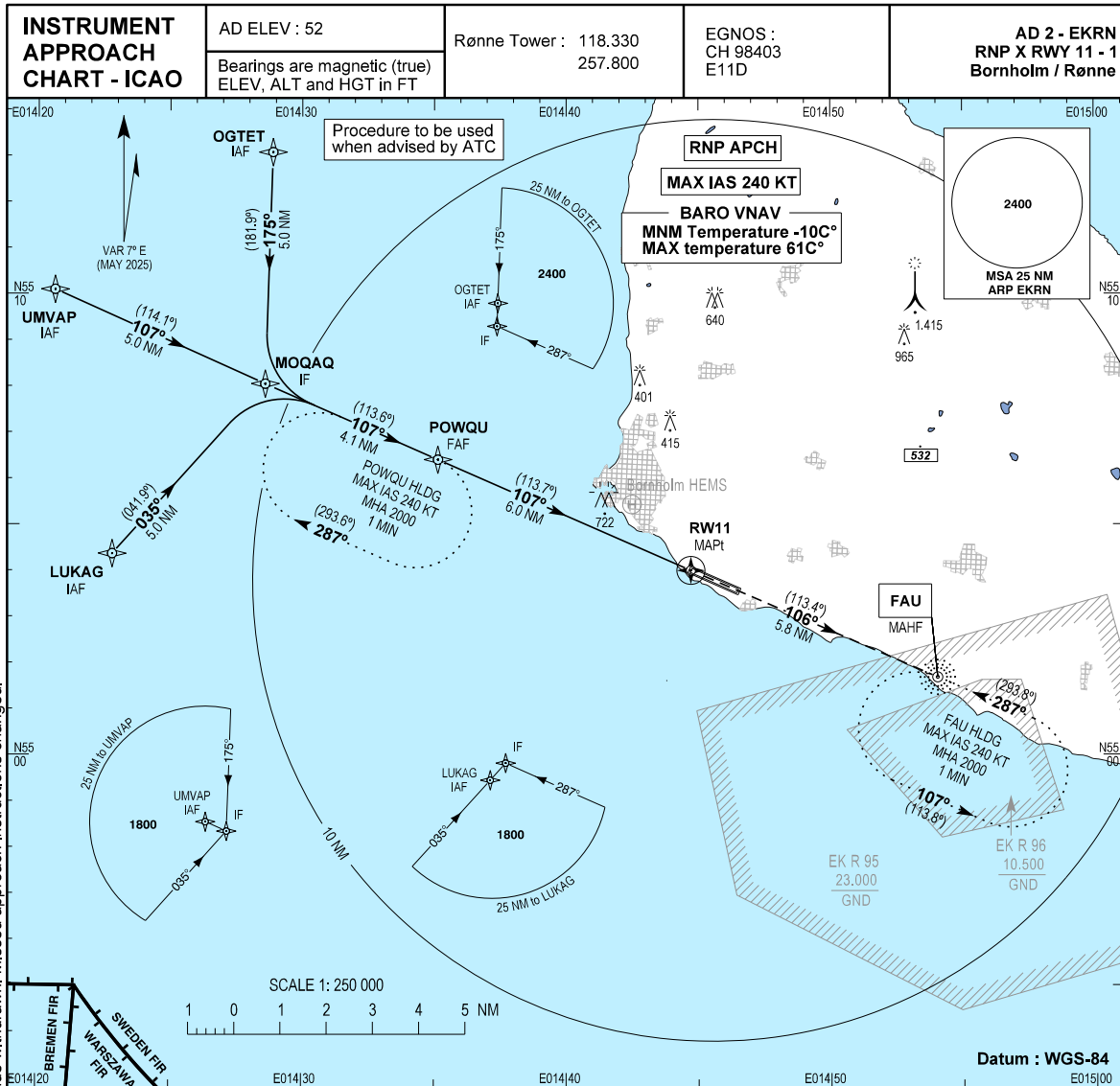
Data Block	10 0E 12 0B 05 0B C8 00 02 31 31 05 18 D4 A1 17 24 F5 53 06 DF 15 67 2A FF 1C 4F 03 26 02 2C 01 64 0D C8 FA A2 58 BE F5
Calculated CRC Value	A258BEF5
Supplied CRC Value	A258BEF5
Comparison Result	OK

**Required Additional Data**

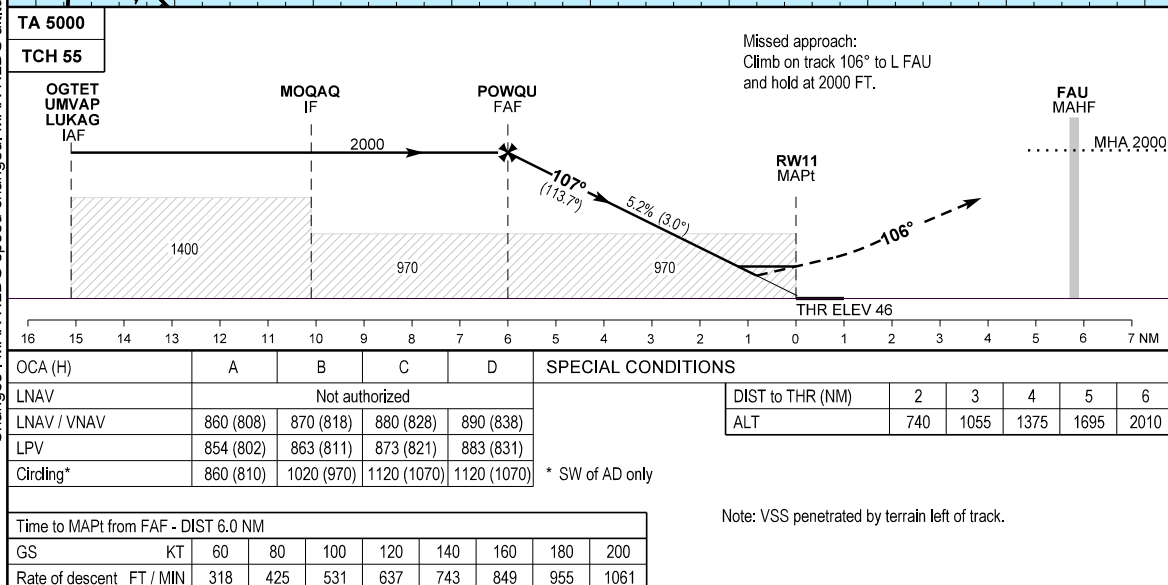
ICAO Code	EK
LTP/FTP Orthometric Height (metres)	14.0

EUROCONTROL FAS DB tool Version 3.2.1

Changes: No changes.



Changes : MAX HLDG altitude withdrawn. Missed approach instructions changed. MAX HLDG speed changed.



OCA (H)	A	B	C	D	SPECIAL CONDITIONS					
LNAV	Not authorized				DIST to THR (NM)					
LNAV / VNAV	860 (808)	870 (818)	880 (828)	890 (838)	2	3	4	5	6	
LPV	854 (802)	863 (811)	873 (821)	883 (831)	ALT	740	1055	1375	1695	2010
Circling*	860 (810)	1020 (970)	1120 (1070)	1120 (1070)	* SW of AD only					

Time to MAPt from FAF - DIST 6.0 NM									
GS	KT	60	80	100	120	140	160	180	200
Rate of descent	FT / MIN	318	425	531	637	743	849	955	1061

Note: VSS penetrated by terrain left of track.

**INSTRUMENT APPROACH  
CHART - ICAO**

**AD 2 - EKRN  
RNP X RWY 11 - 2  
Bornholm / Rønne**

**TABULAR DESCRIPTION**

**EKRN RNP X RWY 11 via OGTET**

Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course/Track °M(°T)	Magnetic Variation	Distance	Turn Direction	Altitude (ft)	Speed (kt)	VPA/TCH	Navigation Specification
005	IF	OGTET	-	-	7.0E	-	-	+2000	-240	-	RNP APCH
010	TF	MOQAQ	-	175 / (181.9)	7.0E	5.0	-	+2000	-240	-	RNP APCH
020	TF	POWQU	-	107 / (113.6)	7.0E	4.1	L	@2000	-	-	RNP APCH
030	TF	RW11	Y	107 / (113.7)	7.0E	6.0	-	-	-	3.0°/55	RNP APCH
040	TF	FAU	-	106 / (113.4)	7.0E	5.8	-	+2000	-	-	RNP APCH
050	HM	FAU	-	287 / (293.8)	7.0E	-	L	+2000	-240	-	RNP APCH

**EKRN RNP X RWY 11 via UMVAP**

Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course/Track °M(°T)	Magnetic Variation	Distance	Turn Direction	Altitude (ft)	Speed (kt)	VPA/TCH	Navigation Specification
005	IF	UMVAP	-	-	7.0E	-	-	+2000	-240	-	RNP APCH
010	TF	MOQAQ	-	107 / (114.1)	7.0E	5.0	-	+2000	-240	-	RNP APCH
020	TF	POWQU	-	107 / (113.6)	7.0E	4.1	-	@2000	-	-	RNP APCH
030	TF	RW11	Y	107 / (113.7)	7.0E	6.0	-	-	-	3.0°/55	RNP APCH
040	TF	FAU	-	106 / (113.4)	7.0E	5.8	-	+2000	-	-	RNP APCH
050	HM	FAU	-	287 / (293.8)	7.0E	-	L	+2000	-240	-	RNP APCH

**EKRN RNP X RWY 11 via LUKAG**

Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course/Track °M(°T)	Magnetic Variation	Distance	Turn Direction	Altitude (ft)	Speed (kt)	VPA/TCH	Navigation Specification
005	IF	LUKAG	-	-	7.0E	-	-	+2000	-240	-	RNP APCH
010	TF	MOQAQ	-	035 / (041.9)	7.0E	5.0	-	+2000	-240	-	RNP APCH
020	TF	POWQU	-	107 / (113.6)	7.0E	4.1	R	@2000	-	-	RNP APCH
030	TF	RW11	Y	107 / (113.7)	7.0E	6.0	-	-	-	3.0°/55	RNP APCH
040	TF	FAU	-	106 / (113.4)	7.0E	5.8	-	+2000	-	-	RNP APCH
050	HM	FAU	-	287 / (293.8)	7.0E	-	L	+2000	-240	-	RNP APCH

**EKRN RNP X RWY 11 waypoint coordinates**

Waypoint Identifier	Coordinates
OGTET (IAF)	55 13 04.93N 014 28 53.52E
UMVAP (IAF)	55 10 05.95N 014 20 38.82E
LUKAG (IAF)	55 04 22.18N 014 22 49.96E
MOQAQ (IF)	55 08 03.45N 014 28 36.48E
POWQU (FAF)	55 06 24.93N 014 35 08.92E
RW11 (MAPt)	55 04 00.78N 014 44 42.77E
FAU (MAHF)	55 01 41.49N 014 54 01.79E

Changes : MAX HLDG speed changed. MAX HLDG altitude withdrawn.

**INSTRUMENT APPROACH  
 CHART - ICAO**

**AD 2 - EKRN  
 RNP X RWY 11 - 3  
 Bornholm / Rønne**

**Input data  
 SBAS FAS DATA BLOCK**

Operation Type	0
SBAS Provider	1 (EGNOS)
Airport Identifier	EKRN
Runway	11
Runway Letter	0 (None)
Approach Performance Designator	0
Route Indicator	X
Reference Path Data Selector	0
Reference Path Identifier	E11D
LTP/FTP Latitude	550400.7800N
LTP/FTP Longitude	0144442.7700E
LTP/FTP Ellipsoidal Height (metres)	47.9
FPAP Latitude	550333.4395N
Delta FPAP Latitude (seconds)	-27.3405
FPAP Longitude	0144631.2000E
Delta FPAP Longitude (seconds)	108.4300
Threshold Crossing Height	55.0
TCH Units Selector	0 (feet)
Glidepath Angle (degrees)	3.00
Course Width (metres)	105.00
Length Offset (metres)	104
HAL (metres)	40.0
VAL (metres)	50.0

**Output data**

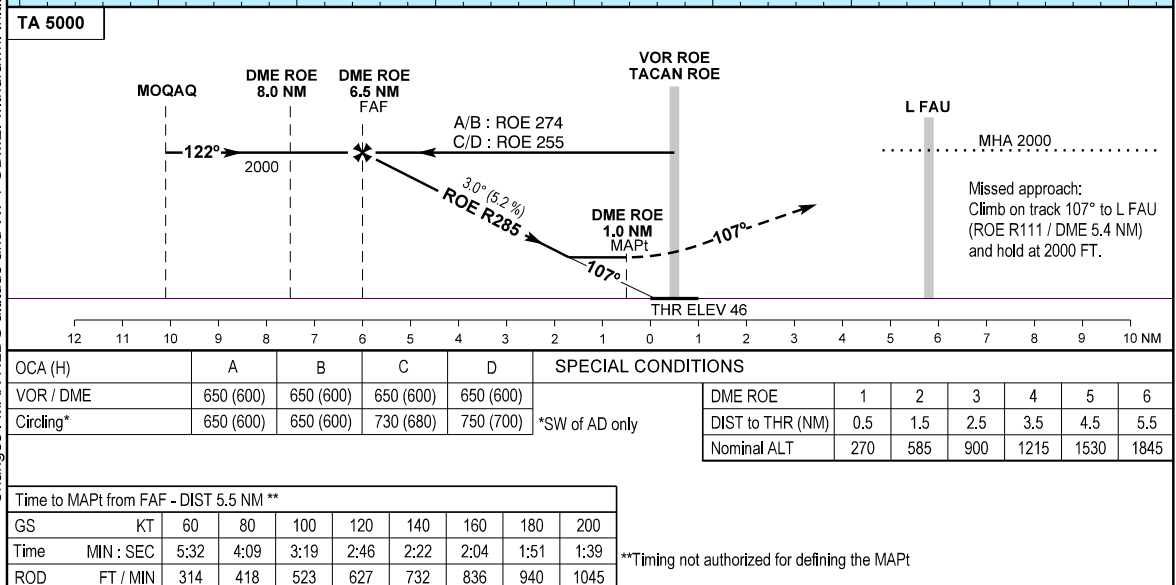
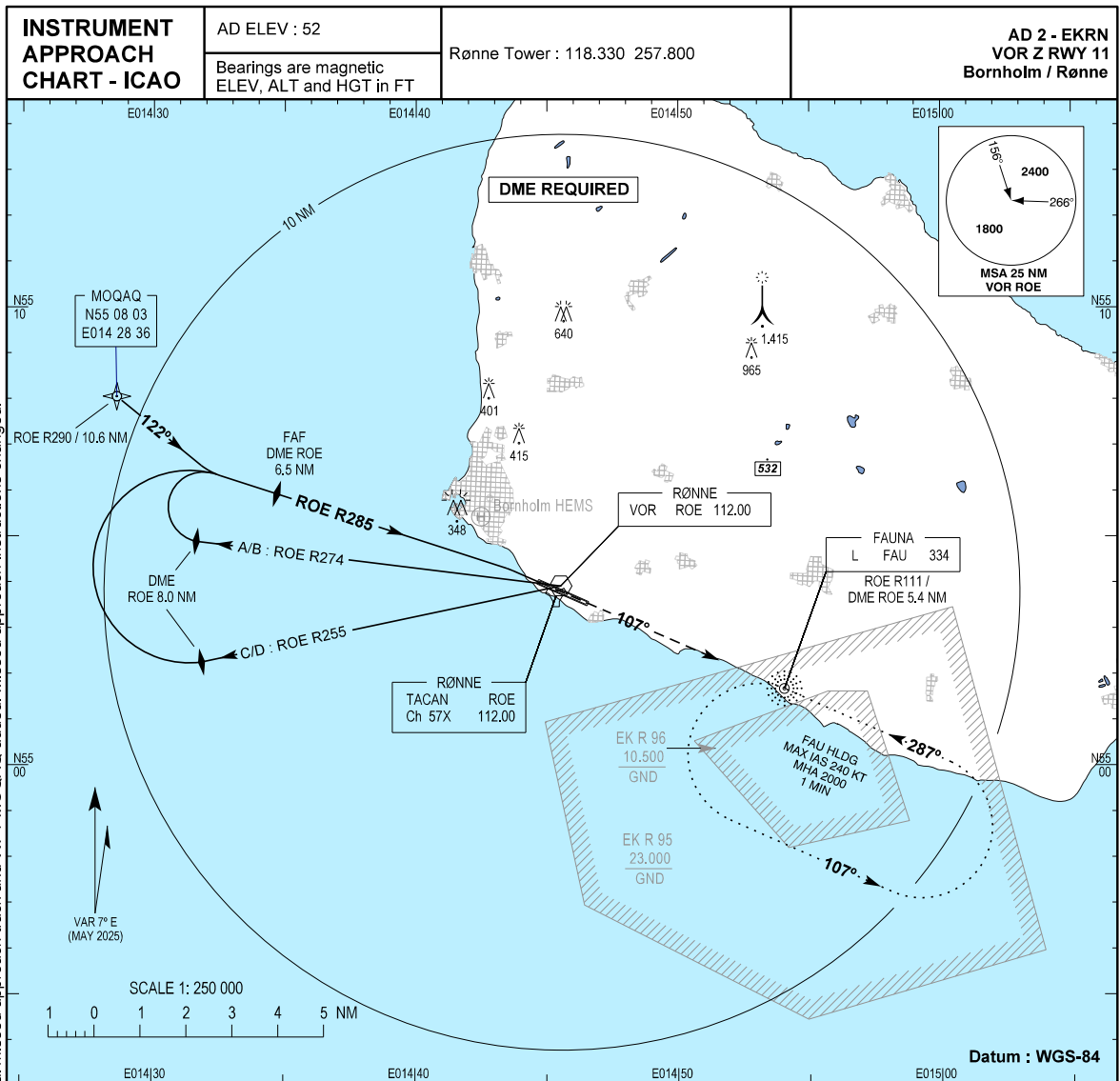
Data Block	10 0E 12 0B 05 0B C0 00 04 31 31 05 18 D4 A1 17 24 F5 53 06 DF 15 67 2A FF 1C 4F 03 26 02 2C 01 64 0D C8 FA FD D9 09 B3
Calculated CRC Value	FDD909B3
Supplied CRC Value	FDD909B3
Comparison Result	OK

**Required Additional Data**

ICAO Code	EK
LTP/FTP Orthometric Height (metres)	14.0

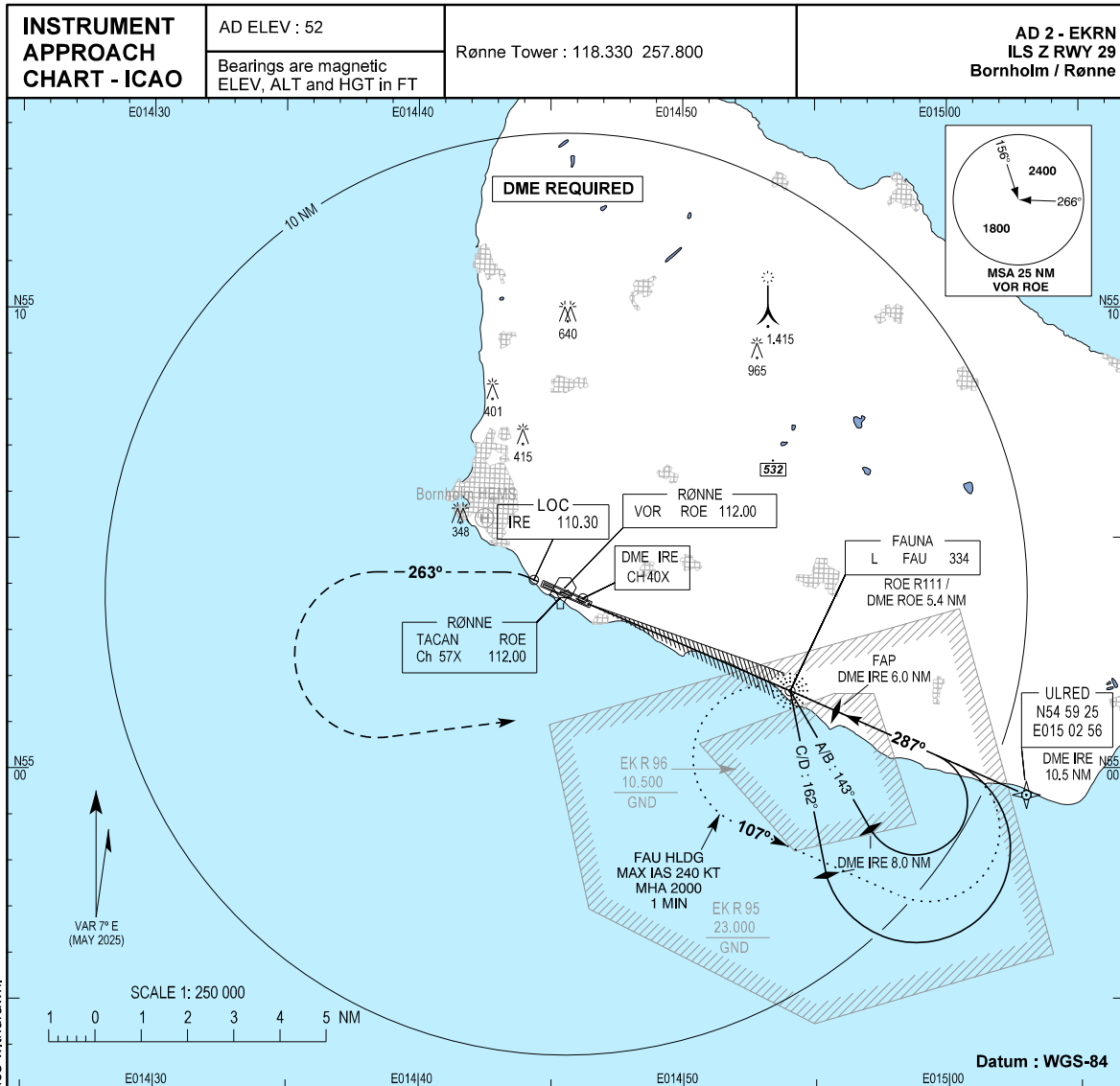
EUROCONTROL FAS DB tool Version 3.2.1

Changes: No changes.



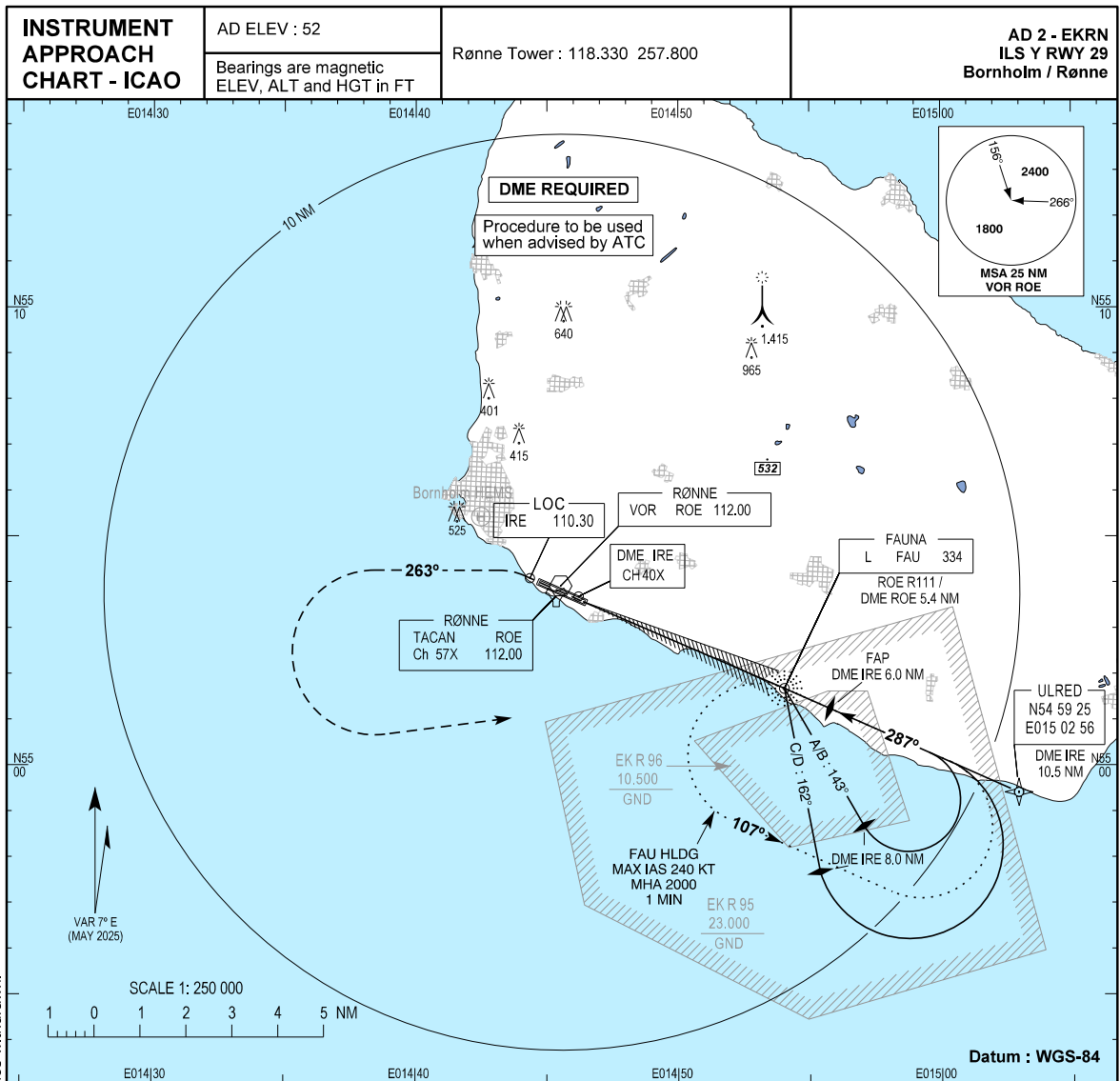
Changes : MAX HLDG altitude and WPT ODMEI withdrawn. Initial missed approach track and WPT MOQAQ added. Missed approach instructions changed.

NAVAIR

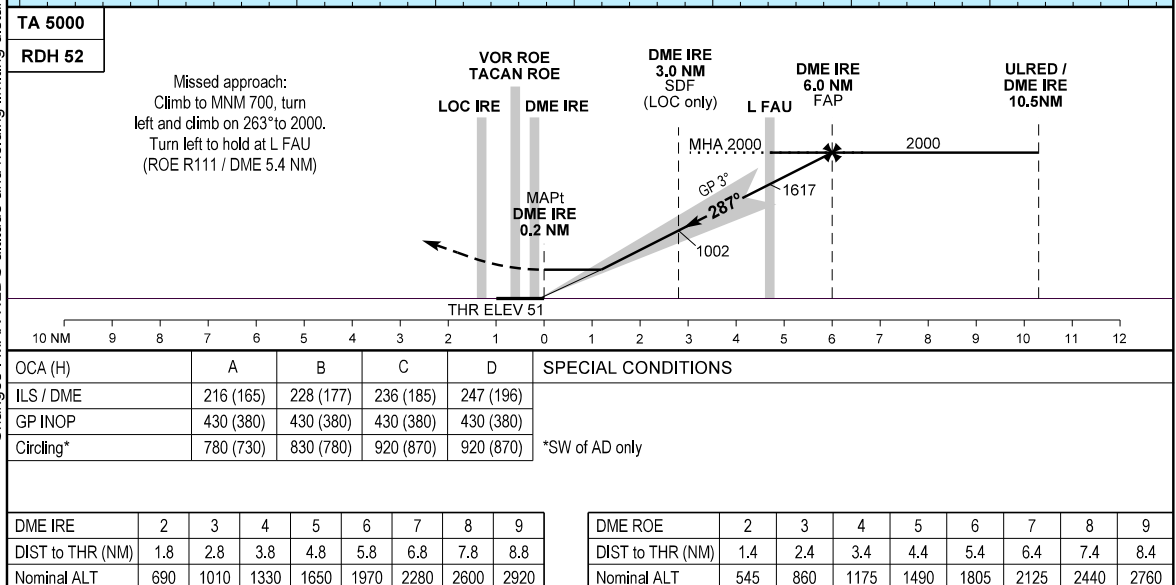


Changes : MAX HLDG altitude and holding limiting distance withdrawn.

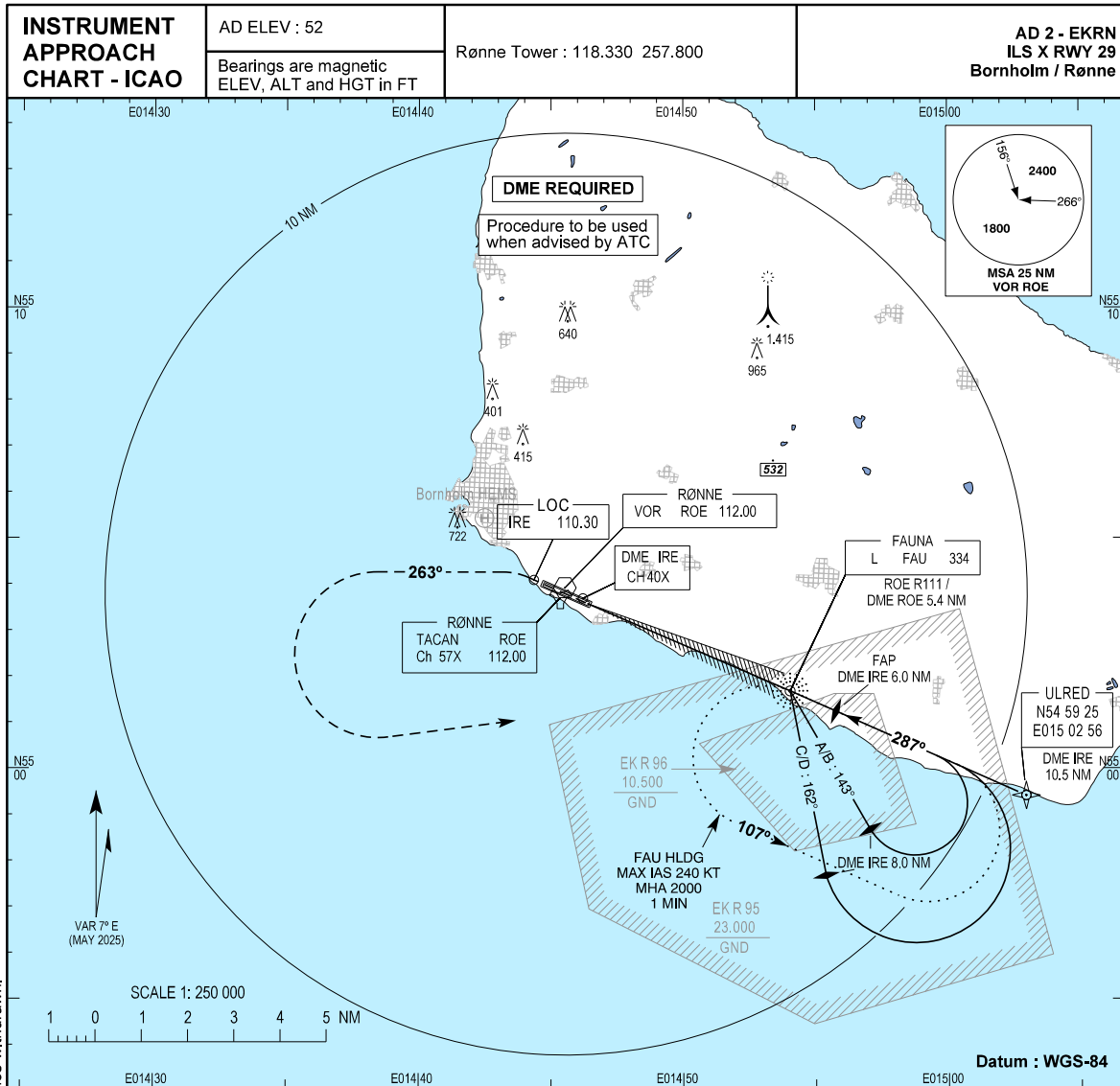
<b>TA 5000</b>																																																																
<b>RDH 52</b>																																																																
Missed approach: Climb to MNM 700, turn left and climb on 263° to 2000. Turn left to hold at L FAU (ROE R111 / DME 5.4 NM)																																																																
OCA (H)      A      B      C      D      SPECIAL CONDITIONS																																																																
ILS / DME      216 (165)      228 (177)      236 (185)      247 (196)																																																																
GP INOP      430 (380)      430 (380)      430 (380)      430 (380)																																																																
Circling*      450 (400)      630 (580)      730 (680)      750 (700)      *SW of AD only																																																																
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>DME IRE</td> <td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td> <td>DME ROE</td> <td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td> </tr> <tr> <td>DIST to THR (NM)</td> <td>1.8</td><td>2.8</td><td>3.8</td><td>4.8</td><td>5.8</td><td>6.8</td><td>7.8</td><td>8.8</td> <td>DIST to THR (NM)</td> <td>1.4</td><td>2.4</td><td>3.4</td><td>4.4</td><td>5.4</td><td>6.4</td><td>7.4</td><td>8.4</td> </tr> <tr> <td>Nominal ALT</td> <td>690</td><td>1010</td><td>1330</td><td>1650</td><td>1970</td><td>2280</td><td>2600</td><td>2920</td> <td>Nominal ALT</td> <td>545</td><td>860</td><td>1175</td><td>1490</td><td>1805</td><td>2125</td><td>2440</td><td>2760</td> </tr> </table>											DME IRE	2	3	4	5	6	7	8	9	DME ROE	2	3	4	5	6	7	8	9	DIST to THR (NM)	1.8	2.8	3.8	4.8	5.8	6.8	7.8	8.8	DIST to THR (NM)	1.4	2.4	3.4	4.4	5.4	6.4	7.4	8.4	Nominal ALT	690	1010	1330	1650	1970	2280	2600	2920	Nominal ALT	545	860	1175	1490	1805	2125	2440	2760
DME IRE	2	3	4	5	6	7	8	9	DME ROE	2	3	4	5	6	7	8	9																																															
DIST to THR (NM)	1.8	2.8	3.8	4.8	5.8	6.8	7.8	8.8	DIST to THR (NM)	1.4	2.4	3.4	4.4	5.4	6.4	7.4	8.4																																															
Nominal ALT	690	1010	1330	1650	1970	2280	2600	2920	Nominal ALT	545	860	1175	1490	1805	2125	2440	2760																																															



Changes : MAX HLDG altitude and holding limiting distance withdrawn.

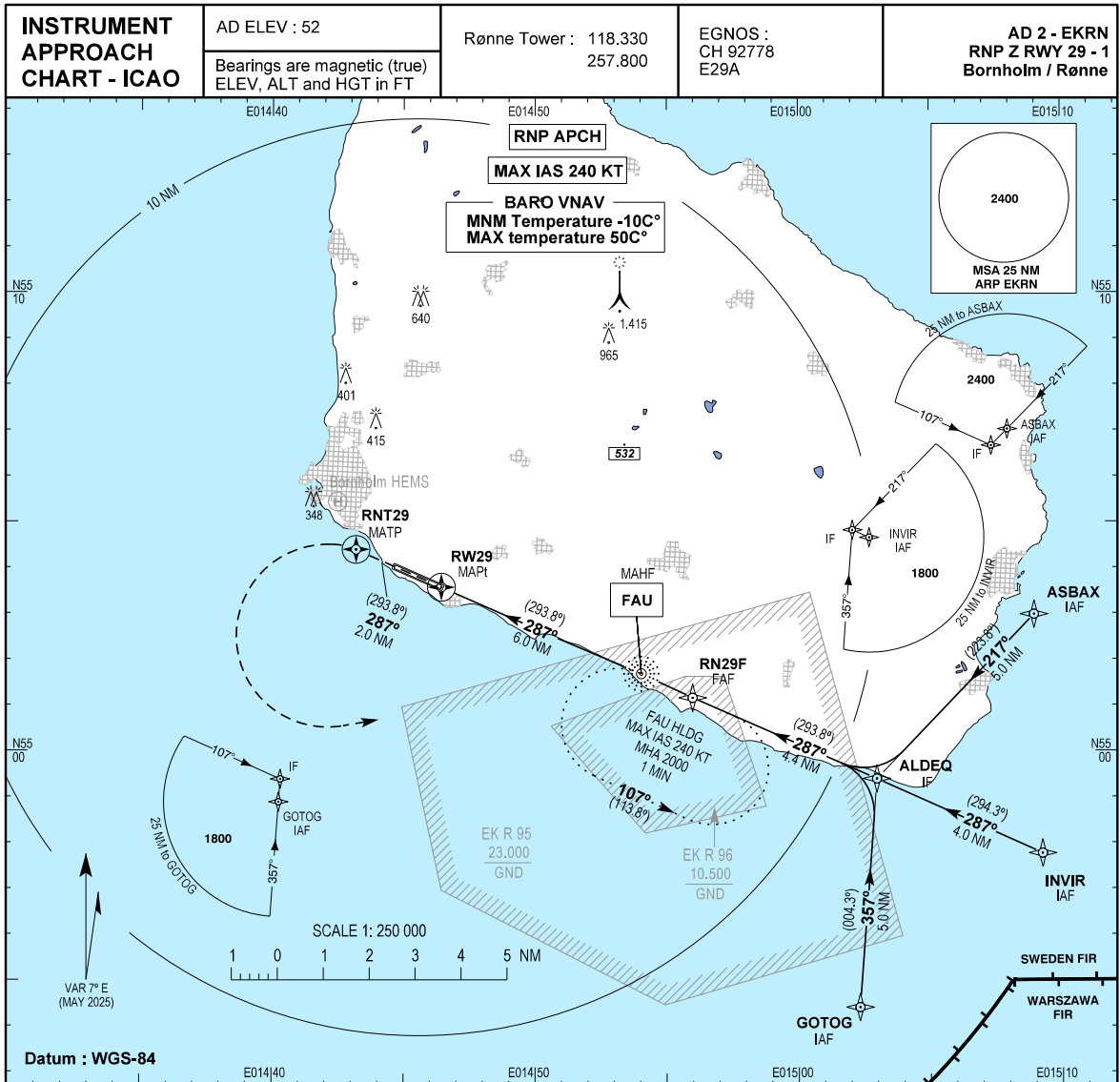


NAVIAIR



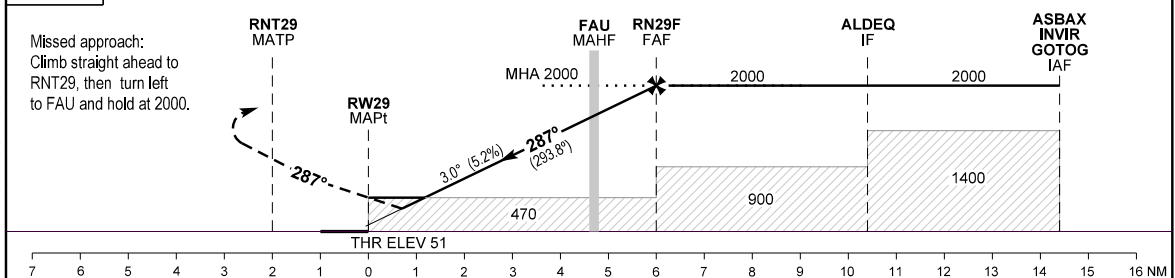
Changes : MAX HLDG altitude and holding limiting distance withdrawn.

<b>TA 5000</b>																																																						
<b>RDH 52</b>																																																						
Missed approach: Climb to MNM 900, turn left and climb on 263° to 2000. Turn left to hold at L FAU (ROE R111 / DME 5.4 NM)																																																						
THR ELEV 51																																																						
<table border="1"> <tr> <td>OCA (H)</td> <td>A</td> <td>B</td> <td>C</td> <td>D</td> <td colspan="6">SPECIAL CONDITIONS</td> </tr> <tr> <td>ILS / DME</td> <td>308 (257)</td> <td>318 (267)</td> <td>328 (277)</td> <td>341 (290)</td> <td colspan="6"></td> </tr> <tr> <td>GP INOP</td> <td colspan="4">590 (540)</td> <td colspan="6"></td> </tr> <tr> <td>Circling*</td> <td>860 (810)</td> <td>1020 (970)</td> <td>1120 (1070)</td> <td>1120 (1070)</td> <td colspan="6">*SW of AD only</td> </tr> </table>											OCA (H)	A	B	C	D	SPECIAL CONDITIONS						ILS / DME	308 (257)	318 (267)	328 (277)	341 (290)							GP INOP	590 (540)										Circling*	860 (810)	1020 (970)	1120 (1070)	1120 (1070)	*SW of AD only					
OCA (H)	A	B	C	D	SPECIAL CONDITIONS																																																	
ILS / DME	308 (257)	318 (267)	328 (277)	341 (290)																																																		
GP INOP	590 (540)																																																					
Circling*	860 (810)	1020 (970)	1120 (1070)	1120 (1070)	*SW of AD only																																																	
<table border="1"> <tr> <td>DME IRE</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> <td>7</td> <td>8</td> <td>9</td> <td colspan="2"></td> </tr> <tr> <td>DIST to THR (NM)</td> <td>1.8</td> <td>2.8</td> <td>3.8</td> <td>4.8</td> <td>5.8</td> <td>6.8</td> <td>7.8</td> <td>8.8</td> <td colspan="2"></td> </tr> <tr> <td>Nominal ALT</td> <td>690</td> <td>1010</td> <td>1330</td> <td>1650</td> <td>1970</td> <td>2280</td> <td>2600</td> <td>2920</td> <td colspan="2"></td> </tr> </table>											DME IRE	2	3	4	5	6	7	8	9			DIST to THR (NM)	1.8	2.8	3.8	4.8	5.8	6.8	7.8	8.8			Nominal ALT	690	1010	1330	1650	1970	2280	2600	2920													
DME IRE	2	3	4	5	6	7	8	9																																														
DIST to THR (NM)	1.8	2.8	3.8	4.8	5.8	6.8	7.8	8.8																																														
Nominal ALT	690	1010	1330	1650	1970	2280	2600	2920																																														
<table border="1"> <tr> <td>DME ROE</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> <td>7</td> <td>8</td> <td>9</td> <td colspan="2"></td> </tr> <tr> <td>DIST to THR (NM)</td> <td>1.4</td> <td>2.4</td> <td>3.4</td> <td>4.4</td> <td>5.4</td> <td>6.4</td> <td>7.4</td> <td>8.4</td> <td colspan="2"></td> </tr> <tr> <td>Nominal ALT</td> <td>545</td> <td>860</td> <td>1175</td> <td>1490</td> <td>1805</td> <td>2125</td> <td>2440</td> <td>2760</td> <td colspan="2"></td> </tr> </table>											DME ROE	2	3	4	5	6	7	8	9			DIST to THR (NM)	1.4	2.4	3.4	4.4	5.4	6.4	7.4	8.4			Nominal ALT	545	860	1175	1490	1805	2125	2440	2760													
DME ROE	2	3	4	5	6	7	8	9																																														
DIST to THR (NM)	1.4	2.4	3.4	4.4	5.4	6.4	7.4	8.4																																														
Nominal ALT	545	860	1175	1490	1805	2125	2440	2760																																														



<b>TA 5000</b>
<b>TCH 52</b>

Changes : MAX. HLDG altitude withdrawn.



OCA (H)	A	B	C	D	SPECIAL CONDITIONS					
LNAV	470 (420)				DIST to THR (NM)					
LNAV / VNAV	330 (279)	340 (289)	360 (309)	390 (339)	2	3	4	5	6	
LPV	301 (250)	302 (251)	312 (261)	324 (273)	ALT					
Circling*	450 (400)	630 (580)	730 (680)	750 (700)	740	1060	1375	1695	2015	

Time to MATP from FAF - DIST 6.0 NM									
GS	KT	60	80	100	120	140	160	180	200
Rate of descent	FT / MIN	318	425	531	637	743	849	955	1061

NAVAIR

**INSTRUMENT APPROACH  
 CHART - ICAO**

**AD 2 - EKRN  
 RNP Z RWY 29 - 2  
 Bornholm/Rønne**

**Instrument Approach Procedure Coding Tables:**

**EKRN RNP Z RWY 29 via ASBAX**

Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course/Track °M(°T)	Magnetic Variation	Distance	Turn Direction	Altitude (ft)	Speed (kt)	VPA/TCH	Navigation Specification
005	IF	ASBAX	-	-	7.0E	-	-	+2000	-240	-	RNP APCH
010	TF	ALDEQ	-	217 / (223.8)	7.0E	5.0	-	+2000	-240	-	RNP APCH
020	TF	RN29F	-	287 / (293.8)	7.0E	4.4	R	@2000	-	-	RNP APCH
040	TF	RW29	Y	287 / (293.8)	7.0E	6.0	-	-	-	3.0°/52	RNP APCH
050	CF	RNT29	Y	287 / (293.8)	7.0E	2.0	-	-	-	-	RNP APCH
060	DF	FAU	-	-	7.0E	-	L	+2000	-	-	RNP APCH
070	HM	FAU	-	287 / (293.8)	7.0E	-	L	+2000	-240	-	RNP APCH

**EKRN RNP Z RWY 29 via INVIR**

Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course/Track °M(°T)	Magnetic Variation	Distance	Turn Direction	Altitude (ft)	Speed (kt)	VPA/TCH	Navigation Specification
005	IF	INVIR	-	-	7.0E	-	-	+2000	-240	-	RNP APCH
010	TF	ALDEQ	-	287 / (294.3)	7.0E	4.0	-	+2000	-240	-	RNP APCH
020	TF	RN29F	-	287 / (293.8)	7.0E	4.4	-	@2000	-	-	RNP APCH
040	TF	RW29	Y	287 / (293.8)	7.0E	6.0	-	-	-	3.0°/52	RNP APCH
050	CF	RNT29	Y	287 / (293.8)	7.0E	2.0	-	-	-	-	RNP APCH
060	DF	FAU	-	-	7.0E	-	L	+2000	-	-	RNP APCH
070	HM	FAU	-	287 / (293.8)	7.0E	-	L	+2000	-240	-	RNP APCH

**EKRN RNP Z RWY 29 via GOTOG**

Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course/Track °M(°T)	Magnetic Variation	Distance	Turn Direction	Altitude (ft)	Speed (kt)	VPA/TCH	Navigation Specification
005	IF	GOTOG	-	-	7.0E	-	-	+2000	-240	-	RNP APCH
010	TF	ALDEQ	-	357 / (004.3)	7.0E	5.0	-	+2000	-240	-	RNP APCH
020	TF	RN29F	-	287 / (293.8)	7.0E	4.4	L	@2000	-	-	RNP APCH
040	TF	RW29	Y	287 / (293.8)	7.0E	6.0	-	-	-	3.0°/52	RNP APCH
050	CF	RNT29	Y	287 / (293.8)	7.0E	2.0	-	-	-	-	RNP APCH
060	DF	FAU	-	-	7.0E	-	L	+2000	-	-	RNP APCH
070	HM	FAU	-	287 / (293.8)	7.0E	-	L	+2000	-240	-	RNP APCH

**EKRN RNP Z RWY 29 waypoint coordinates**

Waypoint Identifier	Coordinates
ASBAX (IAF)	55 02 58.91N 015 08 57.25E
INVIR (IAF)	54 57 46.11N 015 09 15.45E
GOTOG (IAF)	54 54 24.69N 015 02 19.26E
ALDEQ (IF)	54 59 23.86N 015 02 58.40E
RN29F (FAF)	55 01 09.98N 014 55 58.76E
RW29 (MAPt)	55 03 34.73N 014 46 26.05E
RNT29 (MATP)	55 04 24.04N 014 43 11.23E
FAU (MAHF)	55 01 41.49N 014 54 01.79E

Changes: Max holding altitude deleted.

**INSTRUMENT APPROACH  
CHART - ICAO**

**AD 2 - EKRN  
RNP Z RWY 29 - 3  
Bornholm / Rønne**

**SBAS FAS DATA BLOCK**

**Input data**

Operation Type	0
SBAS Provider	1 (EGNOS)
Airport Identifier	EKRN
Runway	29
Runway Letter	0 (None)
Approach Performance Designator	0
Route Indicator	Z
Reference Path Data Selector	0
Reference Path Identifier	E29A
LTP/FTP Latitude	550334.7300N
LTP/FTP Longitude	0144626.0500E
LTP/FTP Ellipsoidal Height (metres)	50.2
FPAP Latitude	550402.3125N
Delta FPAP Latitude (seconds)	27.5825
FPAP Longitude	0144437.1280E
Delta FPAP Longitude (seconds)	-108.9220
Threshold Crossing Height	52.0
TCH Units Selector	0 (feet)
Glidepath Angle (degrees)	3.00
Course Width (metres)	105.00
Length Offset (metres)	56
HAL (metres)	40.0
VAL (metres)	50.0

**Output data**

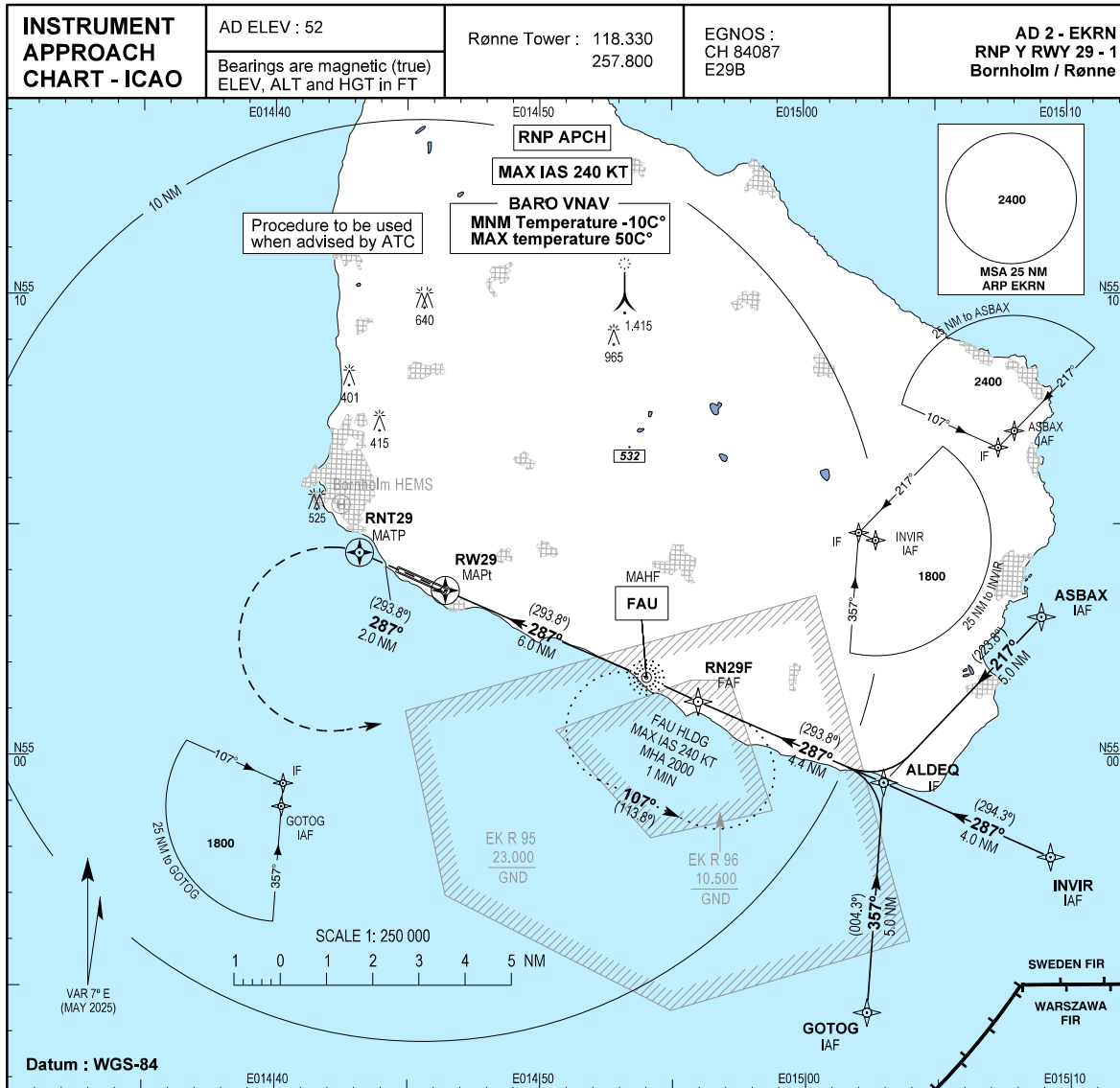
Data Block	10 0E 12 0B 05 1D D0 00 01 39 32 05 94 08 A1 17 04 1C 57 06 F6 15 7D D7 00 0C AD FC 08 02 2C 01 64 07 C8 FA 04 B4 63 B7
Calculated CRC Value	04B463B7
Supplied CRC Value	04B463B7
Comparison Result	OK

**Required Additional Data**

ICAO Code	EK
LTP/FTP Orthometric Height (metres)	15.5

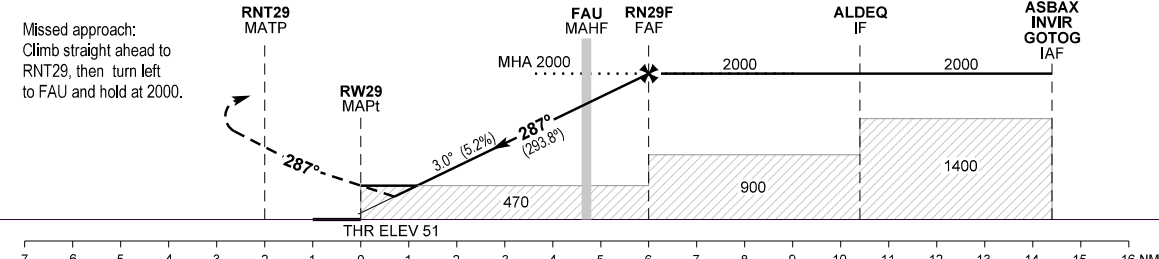
EUROCONTROL FAS DB tool Version 3.2.1

Changes : No changes.



TA 5000  
 TCH 52

Changes : MAX HLDG altitude withdrawn.



OCA (H)	MA climb gradient	A	B	C	D	SPECIAL CONDITIONS										
LNAV	2.5%	470 (420)														
LNAV / VNAV	2.5%	350 (299)	360 (309)	380 (329)	400 (349)											
LPV	2.5%	390 (339)	400 (349)	410 (359)	420 (369)											
LPV	3.4%	301 (250)	302 (251)	312 (261)	324 (273)											
Circling*		780 (730)	830 (780)	920 (870)	920 (870)											
Time to MAPt from FAF - DIST 6.0 NM																
GS	KT	60	80	100	120	140	160	180	200							
Rate of descent	FT / MIN	318	425	531	637	743	849	955	1061							
										*SW of AD only						
										DIST to THR (NM)		2	3	4	5	6
										ALT		740	1060	1375	1695	2015

NAVIAIR

**INSTRUMENT APPROACH  
CHART - ICAO**

**AD 2 - EKRN  
RNP Y RWY 29 - 2  
Bornholm / Rønne**

**Instrument Approach Procedure Coding Tables:**

**EKRN RNP Y RWY 29 via ASBAX**

Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course/Track °M(°T)	Magnetic Variation	Distance	Turn Direction	Altitude (ft)	Speed (kt)	VPA/TCH	Navigation Specification
005	IF	ASBAX	-	-	7.0E	-	-	+2000	-240	-	RNP APCH
010	TF	ALDEQ	-	217 / (223.8)	7.0E	5.0	-	+2000	-240	-	RNP APCH
020	TF	RN29F	-	287 / (293.8)	7.0E	4.4	R	@2000	-	-	RNP APCH
040	TF	RW29	Y	287 / (293.8)	7.0E	6.0	-	-	-	3.0°/52	RNP APCH
050	CF	RNT29	Y	287 / (293.8)	7.0E	2.0	-	-	-	-	RNP APCH
060	DF	FAU	-	-	7.0E	-	L	+2000	-	-	RNP APCH
070	HM	FAU	-	287 / (293.8)	7.0E	-	L	+2000	-240	-	RNP APCH

**EKRN RNP Y RWY 29 via INVIR**

Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course/Track °M(°T)	Magnetic Variation	Distance	Turn Direction	Altitude (ft)	Speed (kt)	VPA/TCH	Navigation Specification
005	IF	INVIR	-	-	7.0E	-	-	+2000	-240	-	RNP APCH
010	TF	ALDEQ	-	287 / (294.3)	7.0E	4.0	-	+2000	-240	-	RNP APCH
020	TF	RN29F	-	287 / (293.8)	7.0E	4.4	-	@2000	-	-	RNP APCH
040	TF	RW29	Y	287 / (293.8)	7.0E	6.0	-	-	-	3.0°/52	RNP APCH
050	CF	RNT29	Y	287 / (293.8)	7.0E	2.0	-	-	-	-	RNP APCH
060	DF	FAU	-	-	7.0E	-	L	+2000	-	-	RNP APCH
070	HM	FAU	-	287 / (293.8)	7.0E	-	L	+2000	-240	-	RNP APCH

**EKRN RNP Y RWY 29 via GOTOG**

Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course/Track °M(°T)	Magnetic Variation	Distance	Turn Direction	Altitude (ft)	Speed (kt)	VPA/TCH	Navigation Specification
005	IF	GOTOG	-	-	7.0E	-	-	+2000	-240	-	RNP APCH
010	TF	ALDEQ	-	357 / (004.3)	7.0E	5.0	-	+2000	-240	-	RNP APCH
020	TF	RN29F	-	287 / (293.8)	7.0E	4.4	L	@2000	-	-	RNP APCH
040	TF	RW29	Y	287 / (293.8)	7.0E	6.0	-	-	-	3.0°/52	RNP APCH
050	CF	RNT29	Y	287 / (293.8)	7.0E	2.0	-	-	-	-	RNP APCH
060	DF	FAU	-	-	7.0E	-	L	+2000	-	-	RNP APCH
070	HM	FAU	-	287 / (293.8)	7.0E	-	L	+2000	-240	-	RNP APCH

**EKRN RNP Y RWY 29 waypoint coordinates**

Waypoint Identifier	Coordinates
ASBAX (IAF)	55 02 58.91N 015 08 57.25E
INVIR (IAF)	54 57 46.11N 015 09 15.45E
GOTOG (IAF)	54 54 24.69N 015 02 19.26E
ALDEQ (IF)	54 59 23.86N 015 02 58.40E
RN29F (FAF)	55 01 09.98N 014 55 58.76E
RW29 (MAPt)	55 03 34.73N 014 46 26.05E
RNT29 (MATP)	55 04 24.04N 014 43 11.23E
FAU (MAHF)	55 01 41.49N 014 54 01.79E

Changes: Max holding altitude deleted.

**INSTRUMENT APPROACH  
 CHART - ICAO**

**AD 2 - EKRN  
 RNP Y RWY 29 - 3  
 Bornholm / Rønne**

**SBAS FAS DATA BLOCK**

**Input data**

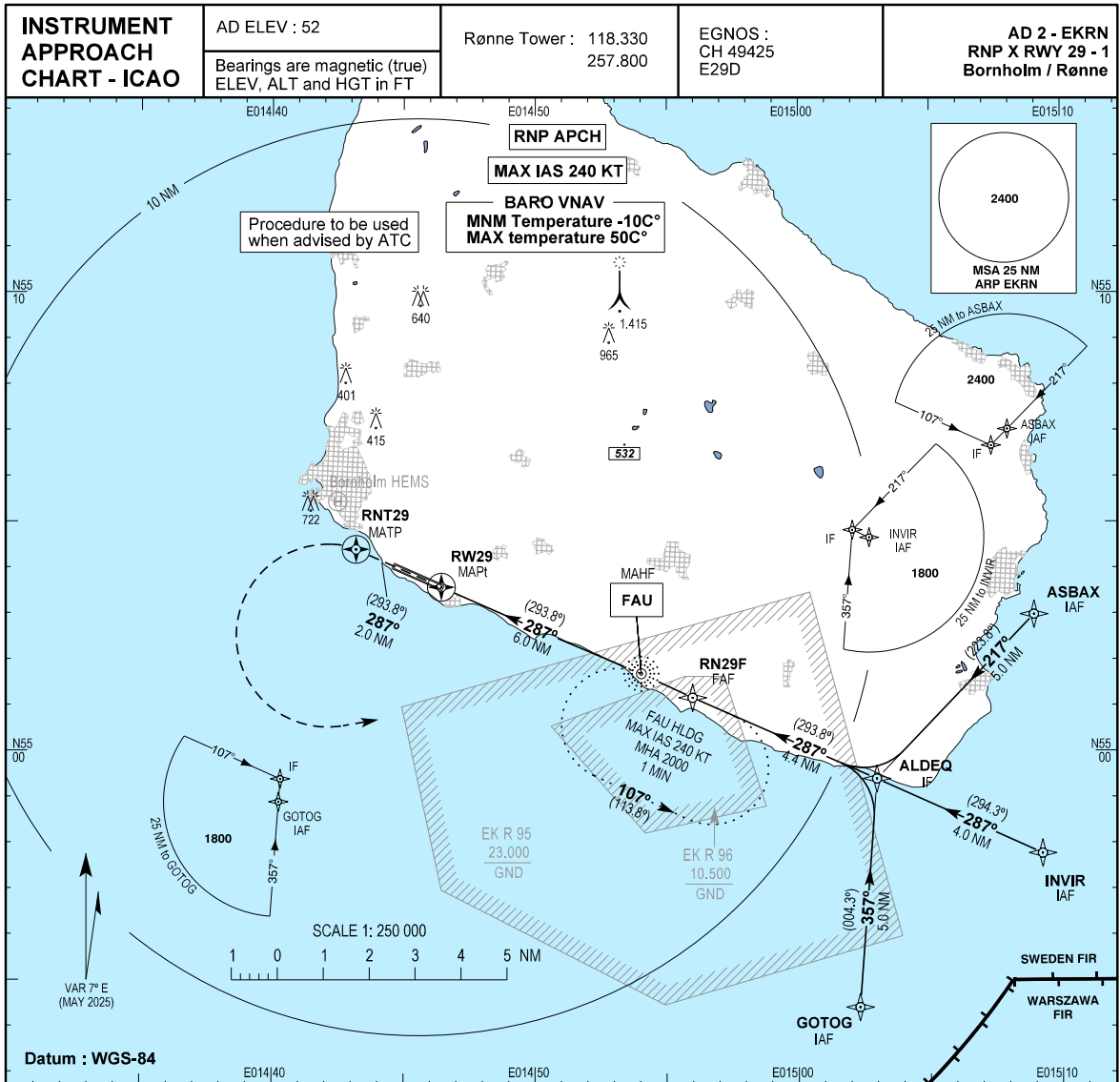
Operation Type	0
SBAS Provider	1 (EGNOS)
Airport Identifier	EKRN
Runway	29
Runway Letter	0 (None)
Approach Performance Designator	0
Route Indicator	Y
Reference Path Data Selector	0
Reference Path Identifier	E29B
LTP/FTP Latitude	550334.7300N
LTP/FTP Longitude	0144626.0500E
LTP/FTP Ellipsoidal Height (metres)	50.2
FPAP Latitude	550402.3125N
Delta FPAP Latitude (seconds)	27.5825
FPAP Longitude	0144437.1280E
Delta FPAP Longitude (seconds)	-108.9220
Threshold Crossing Height	52.0
TCH Units Selector	0 (feet)
Glidepath Angle (degrees)	3.00
Course Width (metres)	105.00
Length Offset (metres)	56
HAL (metres)	40.0
VAL (metres)	50.0

**Output data**

Data Block	10 0E 12 0B 05 1D C8 00 02 39 32 05 94 08 A1 17 04 1C 57 06 F6 15 7D D7 00 0C AD FC 08 02 2C 01 64 07 C8 FA 5C 84 DF F0
Calculated CRC Value	5C84DFF0
Supplied CRC Value	5C84DFF0
Comparison Result	OK

**Required Additional Data**

ICAO Code	EK
LTP/FTP Orthometric Height (metres)	15.5



<b>TA 5000</b>																							
<b>TCH 52</b>																							
Missed approach: Climb straight ahead to RNT29, then turn left to FAU and hold at 2000.																							
THR ELEV 51																							
OCA (H)		MA climb gradient		A				B				C				D				SPECIAL CONDITIONS			
LNAV		2.5%		600 (550)																			
LNAV / VNAV		2.5%		480 (429)		490 (439)		510 (459)		540 (489)													
LPV		2.5%		520 (469)		530 (479)		540 (489)		550 (499)													
LPV		4.6%		301 (250)		302 (251)		312 (261)		324 (273)													
Circling*				860 (810)		1020 (970)		1120 (1070)		1120 (1070)													
Time to MAPt from FAF - DIST 6.0 NM																							
GS		KT		60		80		100		120		140		160		180		200					
Rate of descent		FT / MIN		318		425		531		637		743		849		955		1061					
				DIST to THR (NM)		2		3		4		5		6									
				ALT		740		1060		1375		1695		2015									

Changes : MAX. HLDG altitude withdrawn.

NAVAIR

**INSTRUMENT APPROACH  
 CHART - ICAO**

**AD 2 - EKRN  
 RNP X RWY 29 - 2  
 Bornholm/Rønne**

**Instrument Approach Procedure Coding Tables:**

**EKRN RNP X RWY 29 via ASBAX**

Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course/Track °M(°T)	Magnetic Variation	Distance	Turn Direction	Altitude (ft)	Speed (kt)	VPA/TCH	Navigation Specification
005	IF	ASBAX	-	-	7.0E	-	-	+2000	-240	-	RNP APCH
010	TF	ALDEQ	-	217 / (223.8)	7.0E	5.0	-	+2000	-240	-	RNP APCH
020	TF	RN29F	-	287 / (293.8)	7.0E	4.4	R	@2000	-	-	RNP APCH
040	TF	RW29	Y	287 / (293.8)	7.0E	6.0	-	-	-	3.0°/52	RNP APCH
050	CF	RNT29	Y	287 / (293.8)	7.0E	2.0	-	-	-	-	RNP APCH
060	DF	FAU	-	-	7.0E	-	L	+2000	-	-	RNP APCH
070	HM	FAU	-	287 / (293.8)	7.0E	-	L	+2000	-240	-	RNP APCH

**EKRN RNP X RWY 29 via INVIR**

Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course/Track °M(°T)	Magnetic Variation	Distance	Turn Direction	Altitude (ft)	Speed (kt)	VPA/TCH	Navigation Specification
005	IF	INVIR	-	-	7.0E	-	-	+2000	-240	-	RNP APCH
010	TF	ALDEQ	-	287 / (294.3)	7.0E	4.0	-	+2000	-240	-	RNP APCH
020	TF	RN29F	-	287 / (293.8)	7.0E	4.4	-	@2000	-	-	RNP APCH
040	TF	RW29	Y	287 / (293.8)	7.0E	6.0	-	-	-	3.0°/52	RNP APCH
050	CF	RNT29	Y	287 / (293.8)	7.0E	2.0	-	-	-	-	RNP APCH
060	DF	FAU	-	-	7.0E	-	L	+2000	-	-	RNP APCH
070	HM	FAU	-	287 / (293.8)	7.0E	-	L	+2000	-240	-	RNP APCH

**EKRN RNP X RWY 29 via GOTOG**

Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course/Track °M(°T)	Magnetic Variation	Distance	Turn Direction	Altitude (ft)	Speed (kt)	VPA/TCH	Navigation Specification
005	IF	GOTOG	-	-	7.0E	-	-	+2000	-240	-	RNP APCH
010	TF	ALDEQ	-	357 / (004.3)	7.0E	5.0	-	+2000	-240	-	RNP APCH
020	TF	RN29F	-	287 / (293.8)	7.0E	4.4	L	@2000	-	-	RNP APCH
040	TF	RW29	Y	287 / (293.8)	7.0E	6.0	-	-	-	3.0°/52	RNP APCH
050	CF	RNT29	Y	287 / (293.8)	7.0E	2.0	-	-	-	-	RNP APCH
060	DF	FAU	-	-	7.0E	-	L	+2000	-	-	RNP APCH
070	HM	FAU	-	287 / (293.8)	7.0E	-	L	+2000	-240	-	RNP APCH

**EKRN RNP X RWY 29 waypoint coordinates**

Waypoint Identifier	Coordinates
ASBAX (IAF)	55 02 58.91N 015 08 57.25E
INVIR (IAF)	54 57 46.11N 015 09 15.45E
GOTOG (IAF)	54 54 24.69N 015 02 19.26E
ALDEQ (IF)	54 59 23.86N 015 02 58.40E
RN29F (FAF)	55 01 09.98N 014 55 58.76E
RW29 (MAPt)	55 03 34.73N 014 46 26.05E
RNT29 (MATP)	55 04 24.04N 014 43 11.23E
FAU (MAHF)	55 01 41.49N 014 54 01.79E

Changes: Max holding altitude deleted.

**INSTRUMENT APPROACH  
CHART - ICAO**

**AD 2 - EKRN  
RNP X RWY 29 - 3  
Bornholm / Rønne**

**SBAS FAS DATA BLOCK**

**Input data**

Operation Type	0
SBAS Provider	1 (EGNOS)
Airport Identifier	EKRN
Runway	29
Runway Letter	0 (None)
Approach Performance Designator	0
Route Indicator	X
Reference Path Data Selector	0
Reference Path Identifier	E29D
LTP/FTP Latitude	550334.7300N
LTP/FTP Longitude	0144626.0500E
LTP/FTP Ellipsoidal Height (metres)	50.2
FPAP Latitude	550402.3125N
Delta FPAP Latitude (seconds)	27.5825
FPAP Longitude	0144437.1280E
Delta FPAP Longitude (seconds)	-108.9220
Threshold Crossing Height	52.0
TCH Units Selector	0 (feet)
Glidepath Angle (degrees)	3.00
Course Width (metres)	105.00
Length Offset (metres)	56
HAL (metres)	40.0
VAL (metres)	50.0

**Output data**

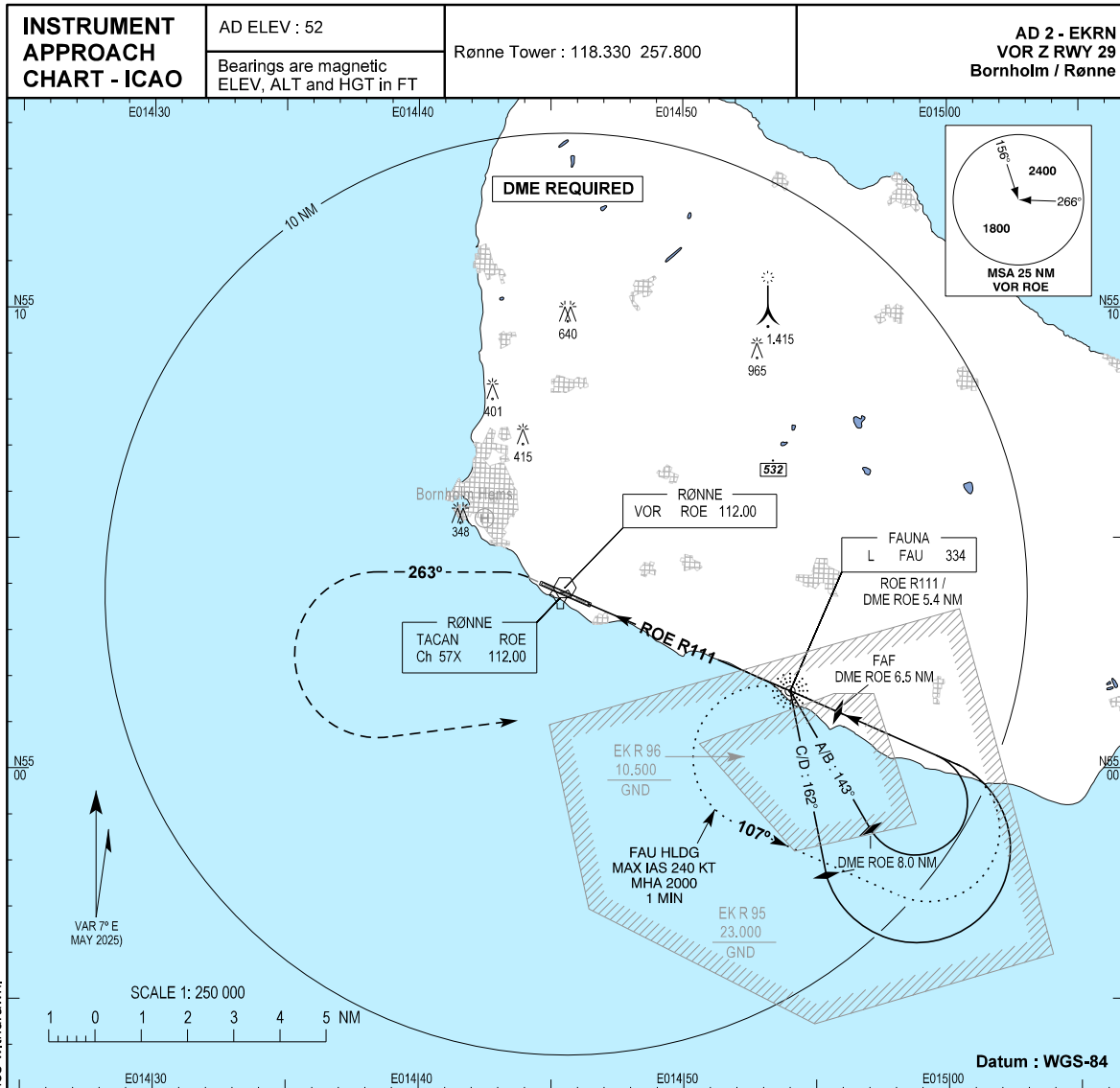
Data Block	10 0E 12 0B 05 1D C0 00 04 39 32 05 94 08 A1 17 04 1C 57 06 F6 15 7D D7 00 0C AD FC 08 02 2C 01 64 07 C8 FA 03 05 68 B6
Calculated CRC Value	030568B6
Supplied CRC Value	030568B6
Comparison Result	OK

**Required Additional Data**

ICAO Code	EK
LTP/FTP Orthometric Height (metres)	15.5

EUROCONTROL FAS DB tool Version 3.2.1

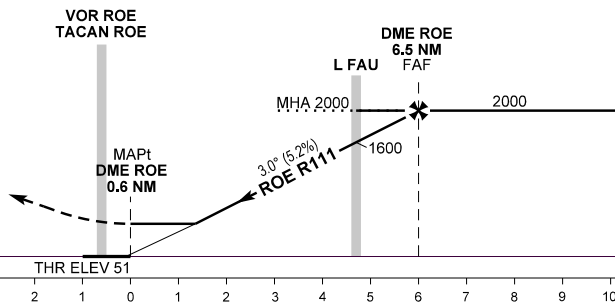
Changes: No changes.



Changes : MAX HLDG altitude and holding limiting distance withdrawn.

**TA 5000**

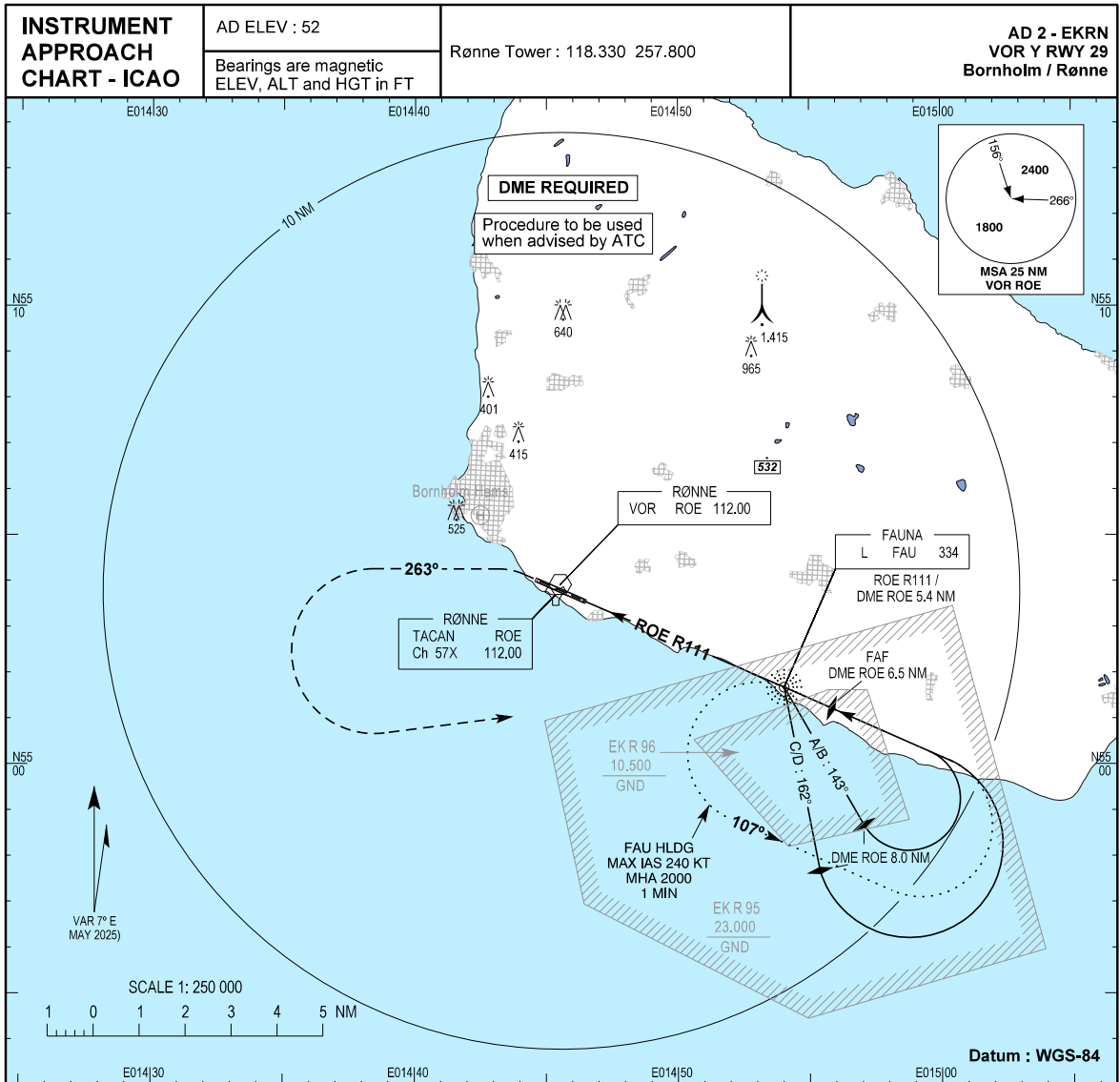
Missed approach:  
 Climb to MNM 500, turn  
 left and climb on 263° to 2000.  
 Turn left to hold at L FAU  
 (ROE R111 / DME 5.4 NM)



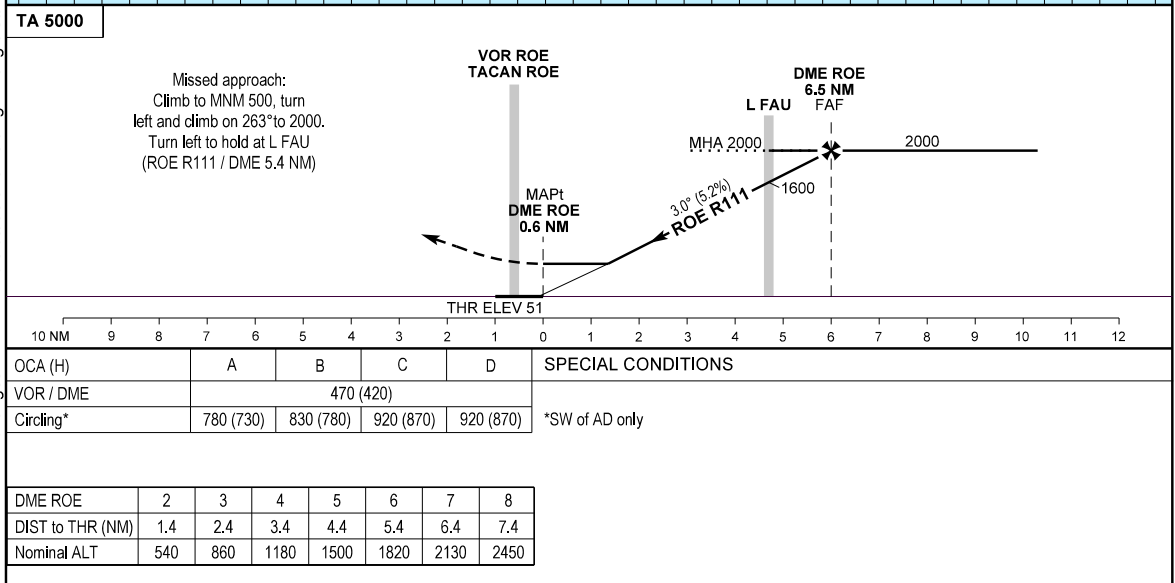
OCA (H)	A	B	C	D	SPECIAL CONDITIONS
VOR / DME	470 (420)				
Circling*	470 (420)	630 (580)	730 (680)	750 (700)	*SW of AD only

DME ROE	2	3	4	5	6	7	8
DIST to THR (NM)	1.4	2.4	3.4	4.4	5.4	6.4	7.4
Nominal ALT	540	860	1180	1500	1820	2130	2450

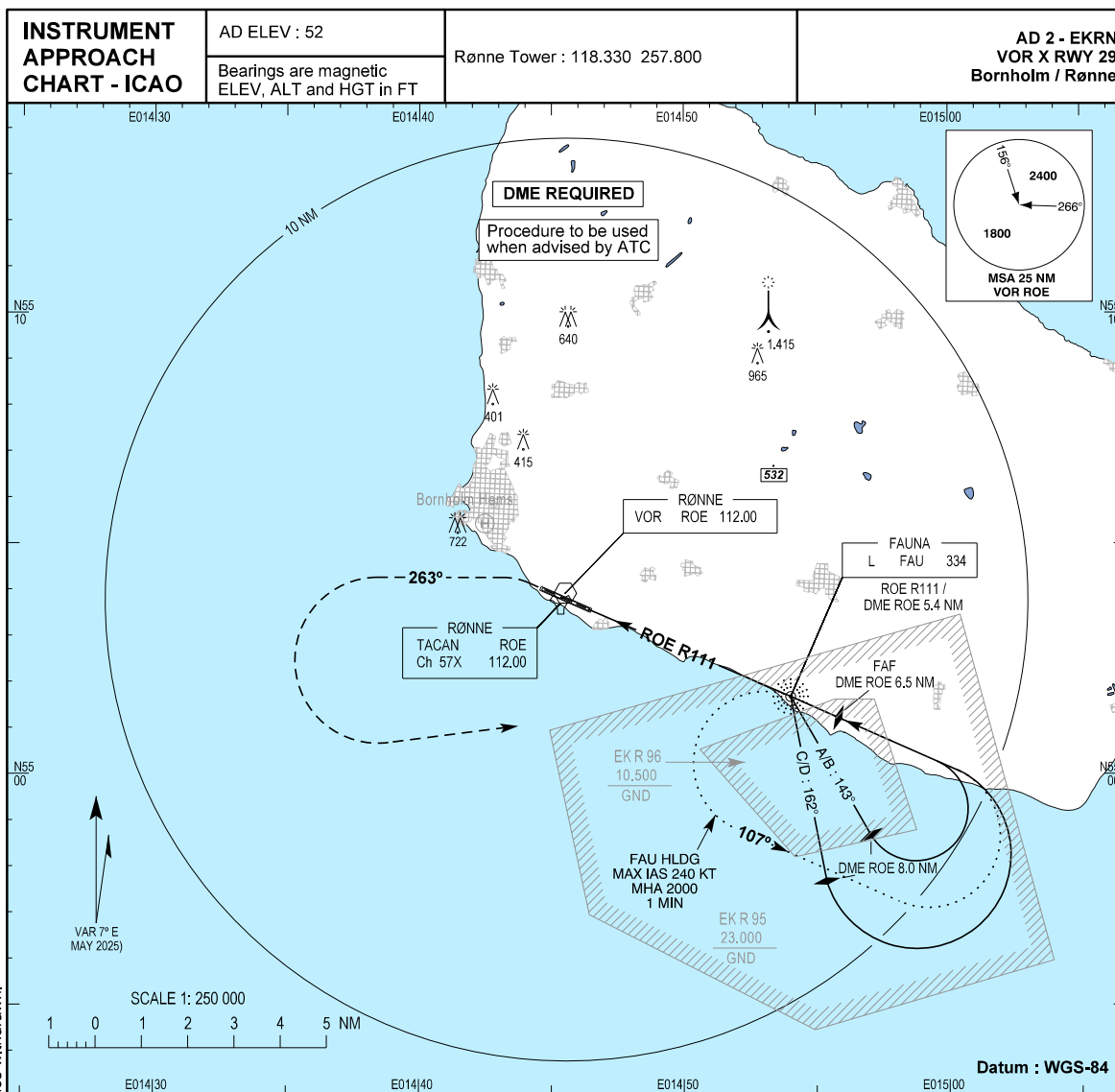
NAVIAIR



Changes : MAX. HLDG altitude and holding limiting distance withdrawn.



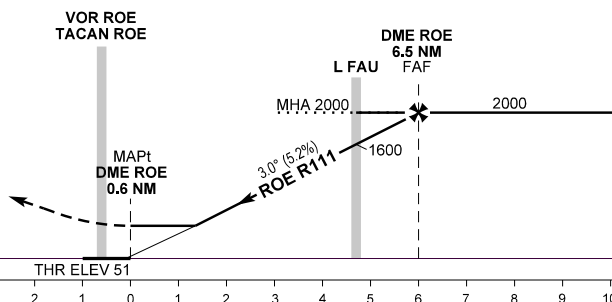
NAVIAIR



Changes : MAX HLDG altitude and holding limiting distance withdrawn.

**TA 5000**

Missed approach:  
 Climb to MNM 900, turn left and climb on 263° to 2000.  
 Turn left to hold at L FAU (ROE R111 / DME 5.4 NM)



OCA (H)	A	B	C	D	SPECIAL CONDITIONS
VOR / DME	550 (500)				
Circling*	860 (810)	1020 (970)	1120 (1070)	1120 (1070)	*SW of AD only

DME ROE	2	3	4	5	6	7	8
DIST to THR (NM)	1.4	2.4	3.4	4.4	5.4	6.4	7.4
Nominal ALT	540	860	1180	1500	1820	2130	2450

NAVAIR