

PART 3 – AERODROMES (AD)

AD 0.

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DE PEEL

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PART 3 – AERODROMES (AD)

AD 1.

AD 1.1 AERODROME/HELIPORT AVAILABILITY

AD 1. AERODROMES/HELIPORTS - INTRODUCTION

AD 1.1 AERODROME/HELIPORT AVAILABILITY

AD 1.1.1 OCCASIONAL USE OF MIL AERODROMES BY CIV ACFT

By decree of the Minister of Defence several MIL ADs in the Netherlands may occasionally be used by CIV ACFT. Use of the MIL ADs concerned is subject to the particulars published in the AIP Netherlands.

AD 1.1.2 OCCASIONAL USE OF CIV AERODROMES BY MIL ACFT

By decree of the Director-General of Civil Aviation a number of CIV ADs may occasionally be used by MIL ACFT. These ADs shall only be used in case of emergency, in times of tension and/or with special permission of the Chief of the Airstaff. Exercise flights are not included in aforementioned exceptions. The ADs concerned are:

For national and international flights:

- Amsterdam/Schiphol
- Deventer/Teuge
- Groningen/Eelde
- Hilversum
- Hoeven/Seppe
- Maastricht/Zuid-Limburg
- Middelburg/Midden-Zeeland
- Rotterdam
- Texel

For national flights only:

- Ameland
- Weert/Budel
- Hoogeveen
- Emmeloord/Noordoostpolder

Detailed information concerning above mentioned ADs is listed in the AIP Netherlands.

AD 1.1.3 PERSONS ON BOARD (POB)

At first radiocontact with the ATC unit of a MIL AD (APP, CAPP or TWR) the Pilot in Command shall report the number of POB. In case of omission the ATC unit will request this information.

AD 1.1.4 HEL LANDING SITES NOT PUBLISHED IN THE (MIL)AIP

Information about HEL landing sites not published in the (Mil)AIP may be obtained through MOD The Hague or from Wing Operations Gilze-Rijen. Use of these landing sites is subject to prior permission by the Military Aviation Authority.

AD 1.1.5 SPECIAL ARRANGEMENTS

HEL, belonging to the SAR organisation of the 'Bundeswehr' stationed at Rheine and Wuersele, are exempted from the rules, as stated in AD 1.1.3. For special agreement upon SAR operations within the sea- and coastal area see GEN 3.6.

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PART 3 – AERODROMES (AD)

AD 1.

AD 1.2 RESCUE AND FIRE FIGHTING SERVICES AND SNOW PLAN

AD 1.2 RESCUE AND FIRE FIGHTING SERVICES AND SNOW PLAN

AD 1.2.1 RESCUE AND FIREFIGHTING SERVICES

The crash, rescue and fire fighting capacity at the Netherlands MIL ADs is in accordance with STANAG 3712.

The crash equipment categories on the respective ADs are given on the relevant page of each AD.

AD 1.2.2 SNOW PLAN

During the winter season MIL ADs will issue SNOWTAM containing information according to the SNOWTAM format of ICAO Annex 15, Appendix 2 (STANAG 3634).

Numbering of the SNOWTAM for each AD will start with 01 at the beginning of the season.

A SNOWTAM will be issued immediately when circumstances so require like snow, ice, slush, etc. on runways, taxiways and aprons.

A new SNOWTAM will be issued when conditions have changed significantly, including the return to normal conditions.

If, during operational HRS, conditions have not changed a new SNOWTAM will be issued in principle every 6 HRS confirming the unchanged conditions.

In case where no 6-hourly confirmation by SNOWTAM is given, the maximum validity of the last issued SNOWTAM concerning that AD is 24 HRS.

Notification of the closure or reopening of an AD or RWY, as a result of snow and ice conditions, will be promulgated by NOTAM.



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PART 3 – AERODROMES (AD)

AD 1.

AD 1.3 INDEX TO AERODROMES AND HELIPORTS

AD 1.3 INDEX TO AERODROMES AND HELIPORTS

NAME	LOCATION INDICATOR	OPERATED BY
Deelen	EHDL	Royal Netherlands Air Force
De Kooy	EHKD	Royal Netherlands Air Force
Eindhoven	EHEH	Royal Netherlands Air Force
Gilze-Rijen	EHGR	Royal Netherlands Air Force
Leeuwarden	EHLW	Royal Netherlands Air Force
Volkel	EHVK	Royal Netherlands Air Force
Woensdrecht	EHWO	Royal Netherlands Air Force

NOTE: Use of HEL landing sites outside ADs is subject to prior approval by CLSK/Breda.

MIL AERODROME INDEX



PART 3 – AERODROMES (AD)

AD 2.

**AD 2. AERODROMES
DEELN**

AD 2. AERODROMES

DEELEN

EHDL AD 2.1 Aerodrome location indicator and name

EHDL - Deelen

EHDL AD 2.2 Geographical and administrative data

1	ARP	52°03'35.02"N 005°52'18.97"E
2	Direction and distance from city	340° MAG/4.5 NM ARNHEM
3	Elevation/Reference temperature	+ 158 ft AMSL/22.0° C (AUG)
4	MAG VAR/Annual change	1°58'E (JAN 2020)/11'E
5	AD operating authority Postal address Visitors' address Telephone Telefax AFTN	RNLAF DHC Vliegbasis Gilze-Rijen attn C931 tav Vliegbasis Deelen MPC 89A P.O. Box 8762 4820 BB Breda Koningsweg 30 F 6816 TG ARNHEM +31(0)346 335901/902 +31(0)26 3531325 No
6	Types of TFC permitted (IFR/VFR)	IFR/VFR
7	Remarks	Nil

EHDL AD 2.3 Operational hours

1	AD OPR HR	OPN for RNLAF HEL at various times
2	Customs and immigration	48 HR PN
3	Health and sanitation	O/R
4	AIS Briefing office	Via EHGR
5	MET Briefing Office	Via EHGR
6	ATS	HO
7	Security	HO
8	Remarks	PPR 24 HRS

EHDL AD 2.4 Handling services and facilities

Not AVBL

EHDL AD 2.5 Passenger facilities

1	Remain overnight	Nil
2	Medical facilities	O/R
3	Remarks	Nil

EHDL AD 2.6 Rescue and fire fighting services

1	AD category for fire fighting	NATO CAT 4 NATO H-3
2	Remarks	Nil

EHDL AD 2.7 Seasonal availability - clearing

Not AVBL

EHDL AD 2.8 Aprons, taxiways and check locations/positions data

1	Apron surface and strength	Concrete, LCN 30 (PCN not AVBL)
2	TWY width, surface and strength	Width 36 ft, tarmac/concrete, LCN 30 (PCN not AVBL)
3	Remarks	Nil

EHDL AD 2.9 Surface movement guidance and control system and markings

According to STANAG 3158

1	Remarks	Nil
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EHDL AD 2.10 Aerodrome obstacles

See Aerodrome Chart

EHDL AD 2.11 Meteorological information provided

1	Associated MET Office	Joint Meteorological Group
2	Hours of service MET Office outside hours	HO N/A
3	Office responsible for TAF preparation Periods of validity	Joint Meteorological Group 12 hrs
4	Type of landing forecast Interval of issuance	None N/A
5	Flight documentation Language(s) used	Reports, forecast and charts. English and Dutch.
6	Charts and other information AVBL for briefing or consultation	GSA, GSP, LGF, Cross section, Upperair forecasts, NVG, Radar- and Satellite Images
7	Supplementary equipment AVBL for providing information	PBS (pilot briefing system)
8	Remarks	Tel JMG 0164-693111 or mail JMG.WX.PLANNING@mindef.nl

EHDL AD 2.12 Runway physical characteristics

1	RWY dimensions/a-gear	See Aerodrome Chart. Values in ft.
2	RWY surface	Tarmac/concrete
3	RWY strength	LCN 30 (PCN not AVBL)

EHDL AD 2.13 Declared distances

See Aerodrome Chart. Values in ft.

EHDL AD 2.14 Approach and runway lighting

According STANAG 3316		
1	Approach lighting	RWY 19: CAT I. 420 m RWY 01: Nil
2	RWY lighting	RWY 19 VHI/VCL, RWY 01 VHI
3	Remarks	Nil

EHDL AD 2.15 Other lighting, secondary power supply

1	LDI	Nil
2	TWY edge lighting	Nil
3	Emergency RWY lighting	Nil
4	Emergency TWY edge lighting	Nil
5	Secondary power supply/switch-over	AVBL, switch over time 15 seconds
6	Remarks	Nil

EHDL AD 2.16 Helicopter landing area

1	Location	Four helisquares (non-STANAG) are situated in main grass area east of RWY 19/01.
2	Marking	Daylight marking
3	Lighting	Yes
4	Remarks	Nil

EHDL AD 2.17 Air traffic services airspace

1	Designation and lateral limits	Deelen control zone 52°09'57.93"N 005°50'23.30"E; 52°12'05.96"N 005°51'26.74"E; 52°10'20.78"N 006°00'46.06"E; 52°08'12.82"N 005°59'42.21"E; along clockwise arc (radius 6.5 NM, centre 52°03'35.02"N 005°52'18.97"E) to 51°57'12.08"N 005°54'14.21"E; 51°55'03.92"N 005°53'10.91"E; 51°56'48.76"N 005°43'54.59"E; 51°58'56.70"N 005°44'57.34"E; along clockwise arc (radius 6.5 NM, centre 52°03'35.02"N 005°52'18.97"E) to point of origin.
2	Vertical limits	GND to 3000 ft AMSL
3	Airspace classification	D
4	ATS unit call sign Language(s)	Contact initially Deelen TWR. English
5	Transition altitude	IFR: 3000 ft AMSL; VFR: 3500 ft AMSL
6	Remarks	Nil

EHDL AD 2.18 Air traffic services communication facilities

STATION/ SERVICE	CALL SIGN OR IDENTIFICATION	FREQUENCY MHz	HOURS	REMARKS
1	2	3	4	5
	As appropriate	121.500 243.000	HO	Emergency FREQ for all services
TWR	Deelen Tower	129.930 ^{*)} 122.100 ^{**)} 312.400 ^{*)} 257.800 ^{**)}	HO	^{*)} Primary FREQ ^{**)} O/R
APP	RAPCON West	123.580 399.725	HO	Radar equipped

EHDL AD 2.19 Radio navigation and landing aids

FACILITY	ID	CHANNEL FREQ.	HOURS	CO-ORD.	RANGE/ ALTITUDE	REMARKS
1	2	3	4	5	6	7
TACAN	DLN	CH 59X	H24	52°03'26.45"N 005°52'21.47"E	40 NM/25000 ft	FREQ protected
ILS19 LOCAL- IZER	DNS	108.700	H24	52°02'45.383"N 005°51'54.422"E		
GLIDE- PATH		330.500	H24	52°04'02.944"N 005°52'27.312"E		ILS-antenna 201ft AMSL
DME 19	DNS	CH 24X	H24	52°04'02.944"N 005°52'27.312"E		Situated on Glidepath 20. One direction only.

EHDL AD 2.20 Local traffic regulations

Glider- and Light ACFT flying

Glidersite Terlet is located within the Deelen CTR/RMZ. Daily SR/SS the areas Terlet 1, Terlet 2, and Terlet 3 (see Local map) can be activated. Intensive gliderflying may be expected during activation of these areas.

EHDL AD 2.21 Noise abatement procedures

To be developed.

EHDL AD 2.22 Flight procedures

IFR procedures

The IAP and SID procedures are established in accordance with the 'Criteria for the preparation of Instrument Approach and Departure Procedures (APATC-1)'.

VFR procedures

APPROACH PROCEDURES:

HEL are to approach at 750 ft via one of the following IPs:	
IP Woeste Hoeve (WH)	PSN approx. 3 NM north-east of the AD
IP West:	PSN approx. 2 NM south-west of the AD
IP East:	PSN along road Apeldoorn-Arnhem, 1 NM north of intersection with motorway A-50.

DEPARTURE PROCEDURES:
Departure depending on intentions as directed by ATC.

REPORTING POINTS:

IP WH:	52°06,04.20"N 005°57'07.20"E
IP West:	52°02'09.00"N 005°48'56.40"E
IP East:	52°01'48.60"N 005°55'44.40"E

CIRCUIT PROCEDURES:
Circuit altitude 750 ft AMSL, direction 19 L/H, 01 R/H, 13 L/H, 31 R/H, 07 L/H and 25 R/H

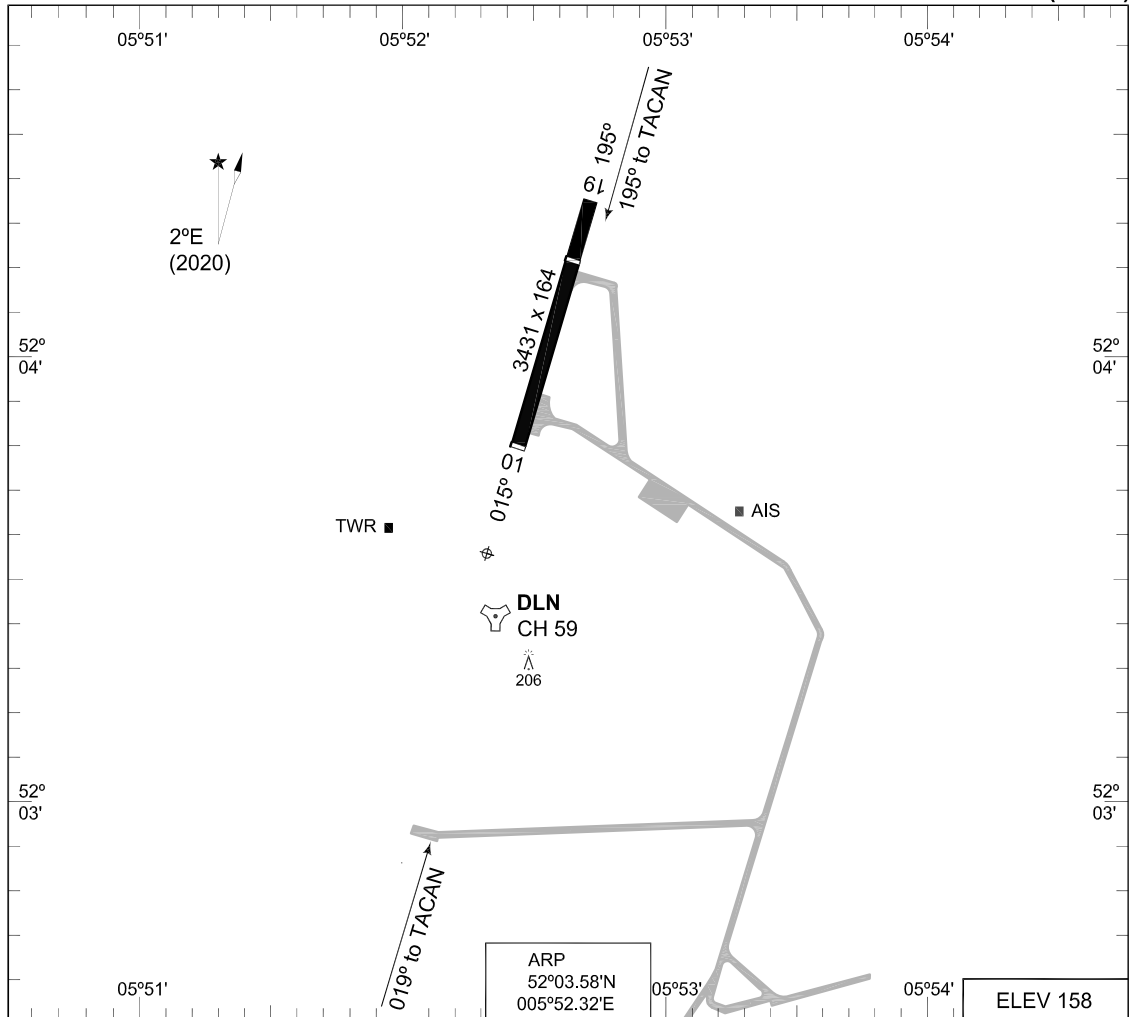
EHDL AD 2.23 Additional information

Approach control through Rapcon West.

EHDL AD 2.24 Charts related to an aerodrome

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Instrument approach chart Copter TACAN 01	EHDL AD 2-12
Instrument approach chart ILS or LOC RWY 19	EHDL AD 2-13
Instrument approach chart TACAN RWY 19	EHDL AD 2-14
Instrument approach chart Copter TACAN 19	EHDL AD 2-15

MIPS AERODROME CHART DEELEN (EHDL)



RWY	LCN	TORA	ASDA	TODA	LDA					TDZE	THR PSN
19	30	3431	3431	3431	2536					158	52°04.20'N 005°52.62'E
01	30	3431	3431	3431	3411					151	52°03.81'N 005°52.43'E

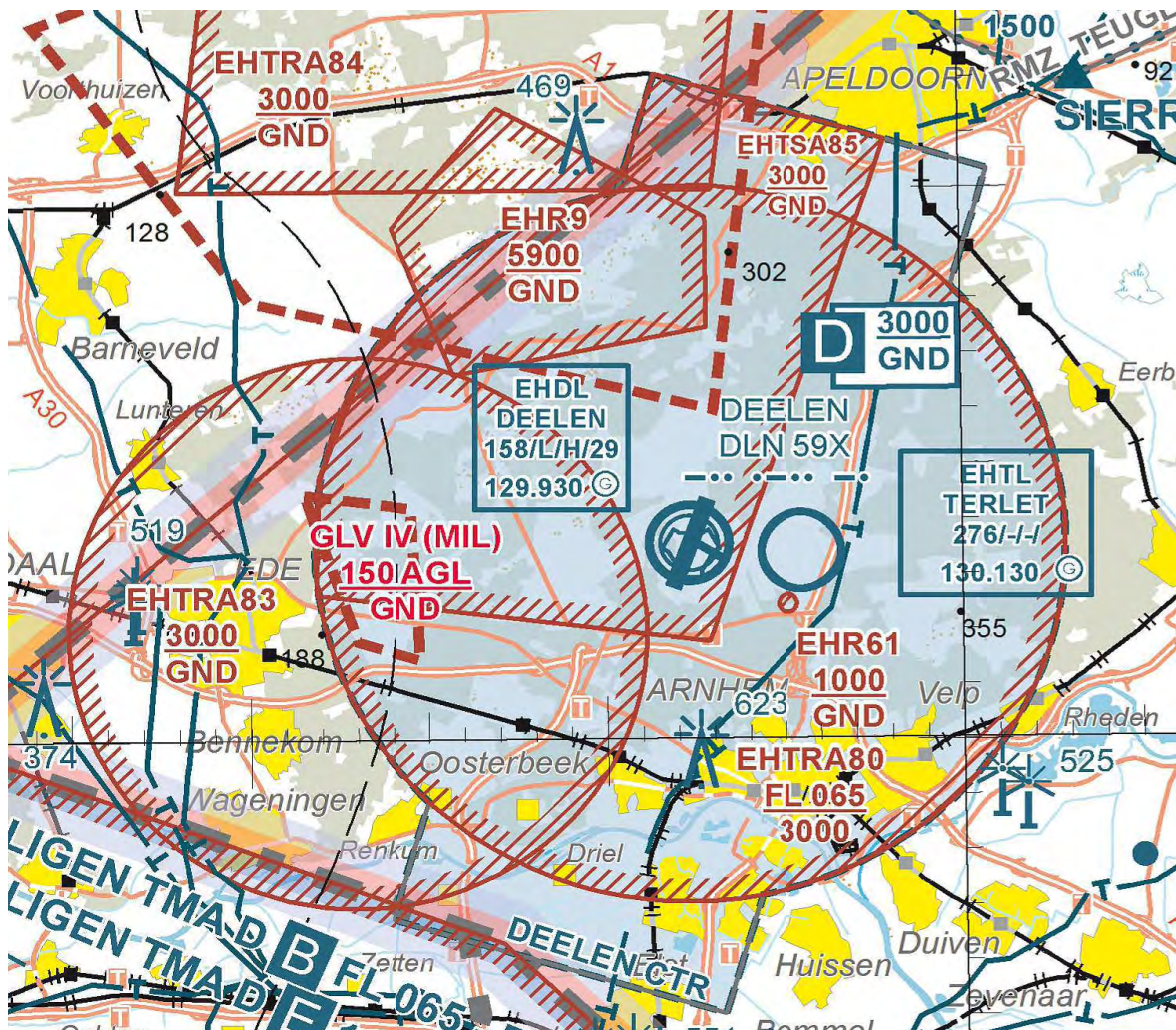
DEELEN TWR	312.400	129.930
RAPCON WEST	399.725	123.580

	PROC. CRITERIA	RWY	GS	TCH	OTCH	RPI	CAT	MINIMA CRITERIA	MINIMA

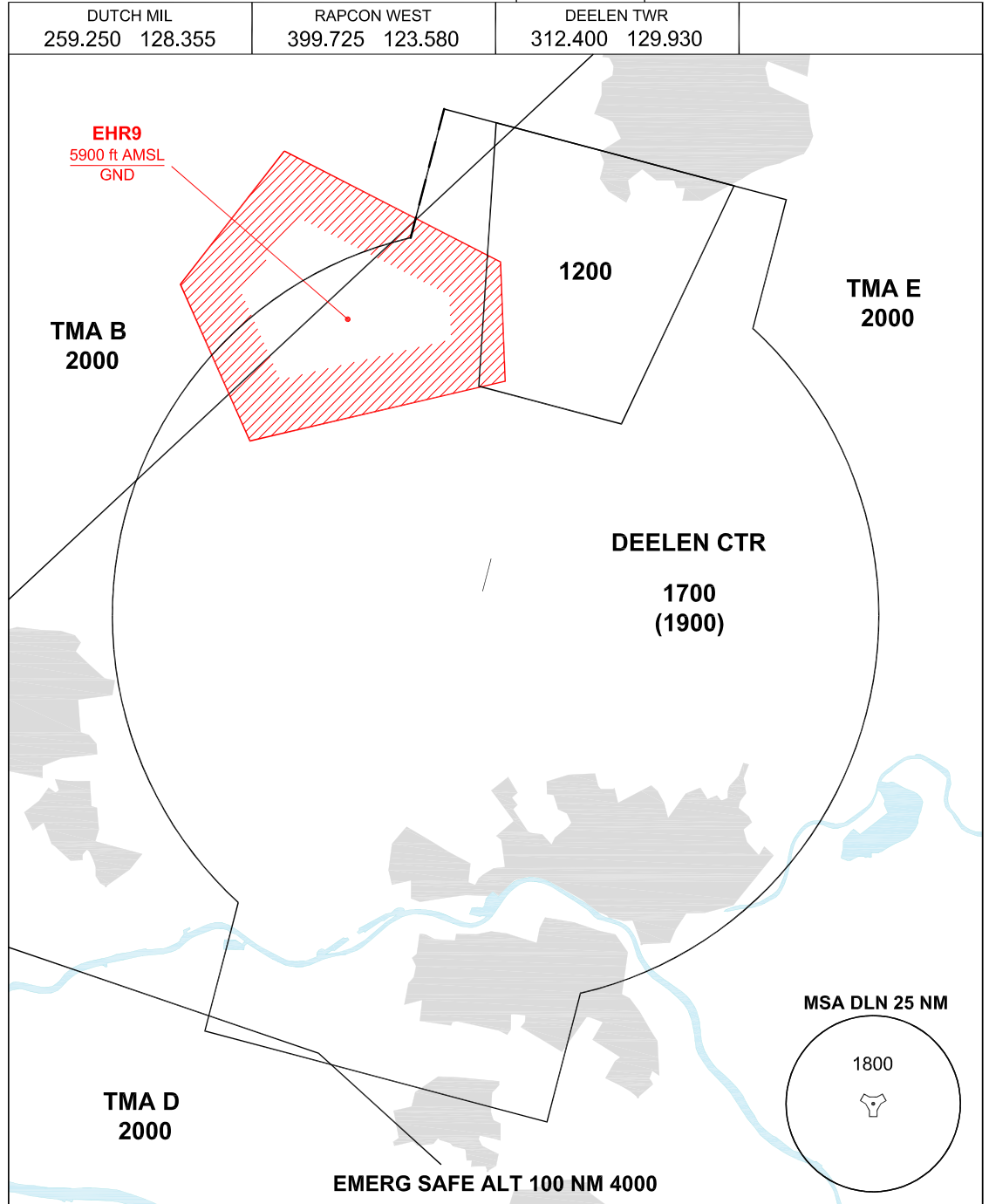
CHANGES: EDITORIAL

RNLAF 01 DEC 2022

LOCAL MAP



MIPS **MINIMUM VECTORING ALTITUDE** **MVA CHART**
DEELEN (EHDL)



- THE ALTITUDE BETWEEN BRACKETS IS TO BE USED FOR THE CORRESPONDING SECTOR WHEN AIR TEMPERATURE AT AIRBASE ALTITUDE IS LOWER THAN -15°.

- ALTITUDES ONLY AVAILABLE IF THE RADAR COVERAGE PERMITS.

CHANGES: MSA

RNLAf 18 MAY 2023

Co-ordinates

TERLET 1:

For execution of flying activities, within the CTR/RMZ Deelen the following area can be assigned to the NZC Terlet up to the tower boundary of Terlet-2 or Terlet-3, limited by the following co-ordinates:

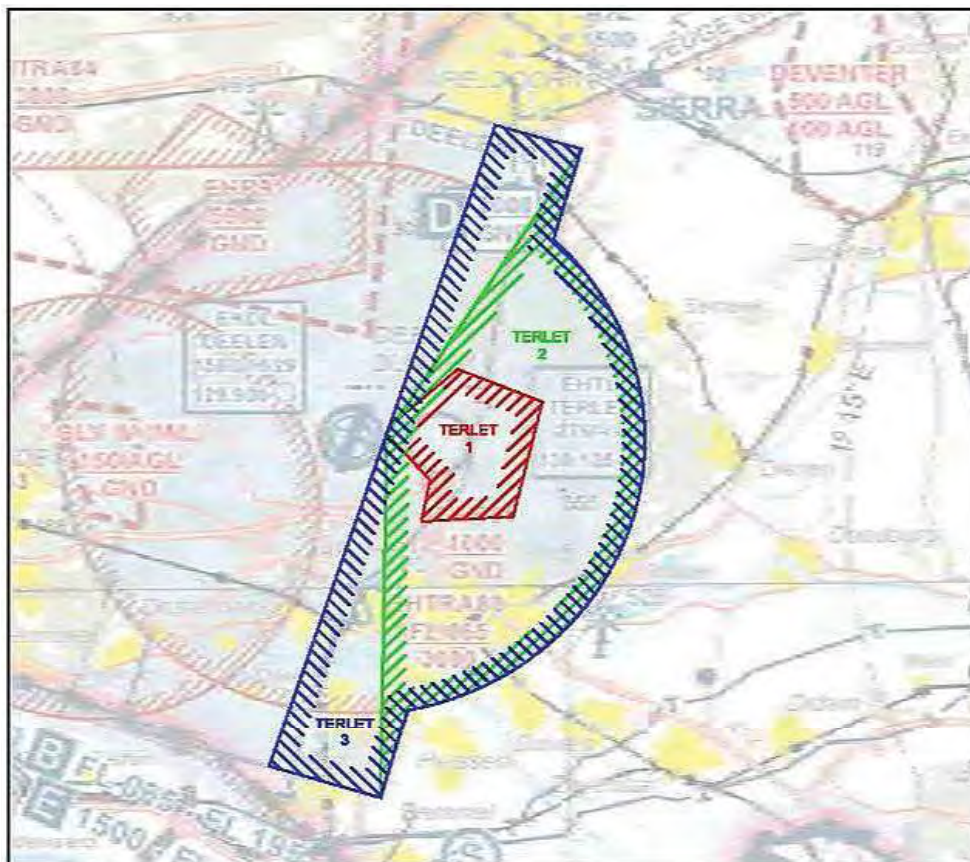
<p>Terlet-1</p> <p>52°05'18.00"N 005°56'03.00"E; 52°04'47.00"N 005°58'54.00"E; 52°02'22.62"N 005°58'20.14"E; 52°02'16.67"N 005°55'05.35"E; 52°02'57.94"N 005°55'13.66"E; 52°03'41.40"N 005°53'53.77"E; 52°04'07.26"N 005°54'09.39"E; to point of origin.</p> <p>vertical limits; GND-925 ft AMSL</p>

As supplement to area Terlet 1, area Terlet 2 or Terlet 3 needs to be assigned.

TERLET-2, TERLET-3:

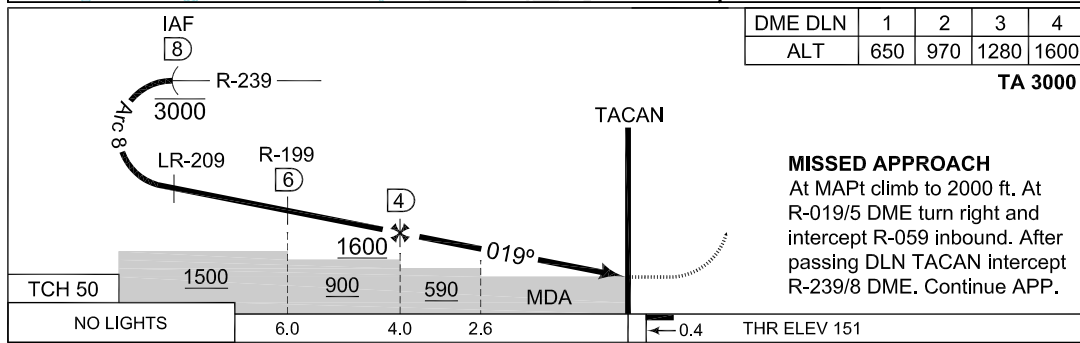
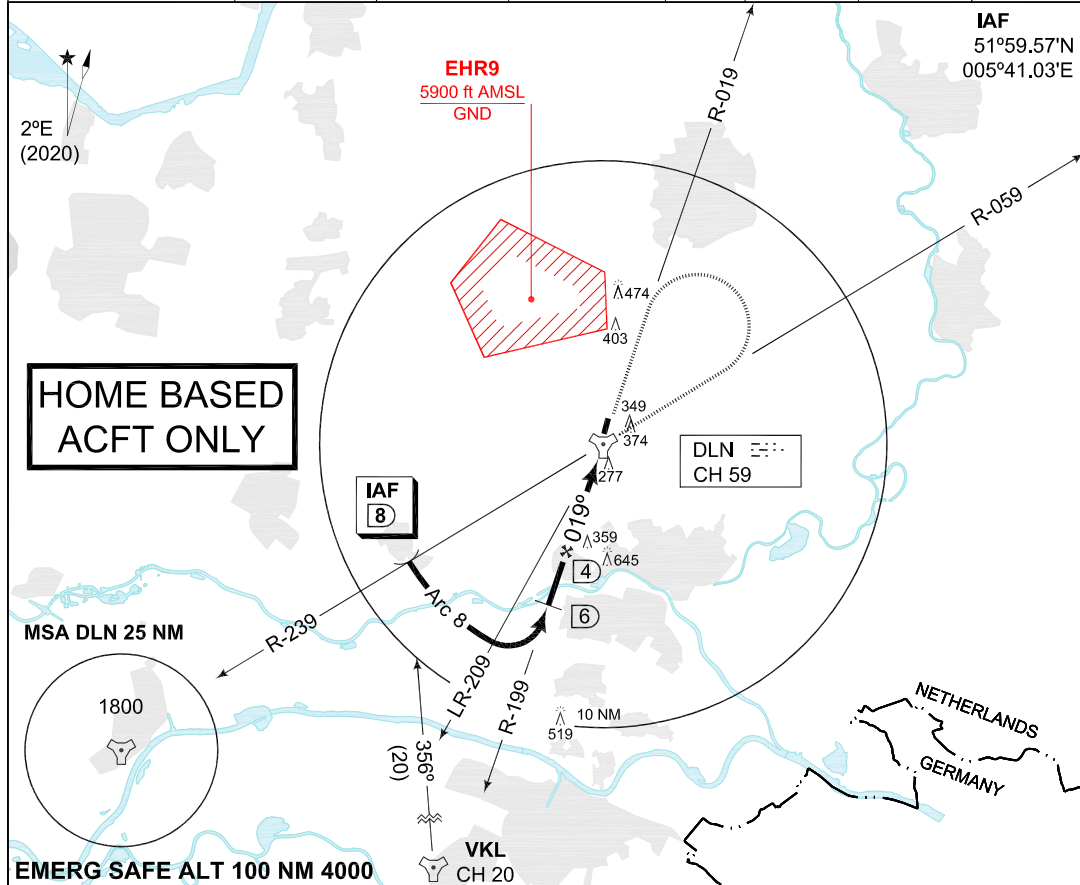
The upper limit is equal to the upper limit of the CTR/RMZ Deelen limited by the following coordinates:

<p>Terlet-2</p> <p>52°03'41.40"N 005°53'53.77"E; 52°10'20.78"N 006°00'46.09"E; 52°08'12.82"N 005°59'42.21 "E; along clockwise arc (radius 6.5 NM, centre 52°03'35.02"N 005°52'18.97"E) to 51°57'12.08"N 005°54'14.21"E; 51°55'03.92"N 005°53'10.91"E; to point of origin.</p> <p>vertical limits; 925 ft AMSL- 3000 ft AMSL</p>	<p>Terlet-3</p> <p>52°10'53.01"N 005°57'54.56"E; 52°10'20.78"N 006°00'46.06"E; 52°08'12.82"N 005°59'42.21"E; along clockwise arc (radius 6.5 NM, centre 52°03'35.02"N 005°52'18.97"E;) to 51°57'12.08"N 005°54'14.21"E; 51°55'03.92"N 005°53'10.91"E; 51°55'45.67"N 005°49'29.94"E; to point of origin.</p> <p>vertical limits; 925 ft AMSL- 3000 ft AMSL</p>
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MIPS INSTRUMENT APPROACH CHART **TACAN RWY 01 DEELEN (EHDL)**

DUTCH MIL 259.250 128.355		RAPCON WEST 399.725 123.580		DEELEN TWR 312.400 129.930			
TACAN DLN CH 59	APP COURSE 019°	FAF ALT 1600 FT	Descent GR 5.2%	MDA 530	THR ELEV 151	ALS -	LDA 3411 FT



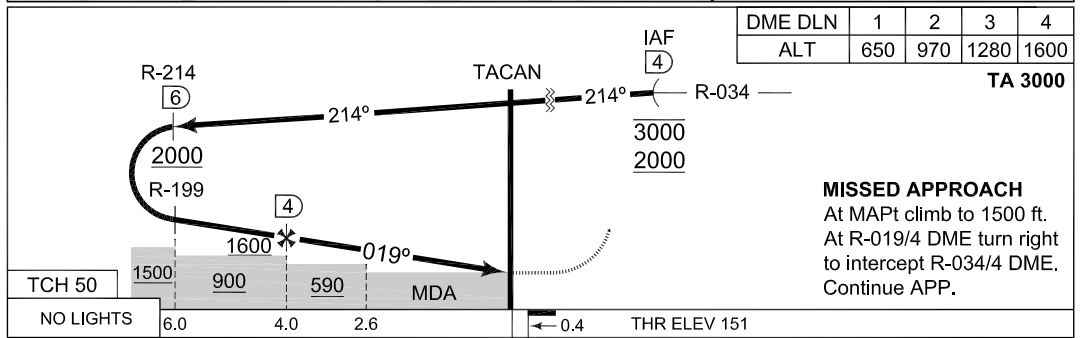
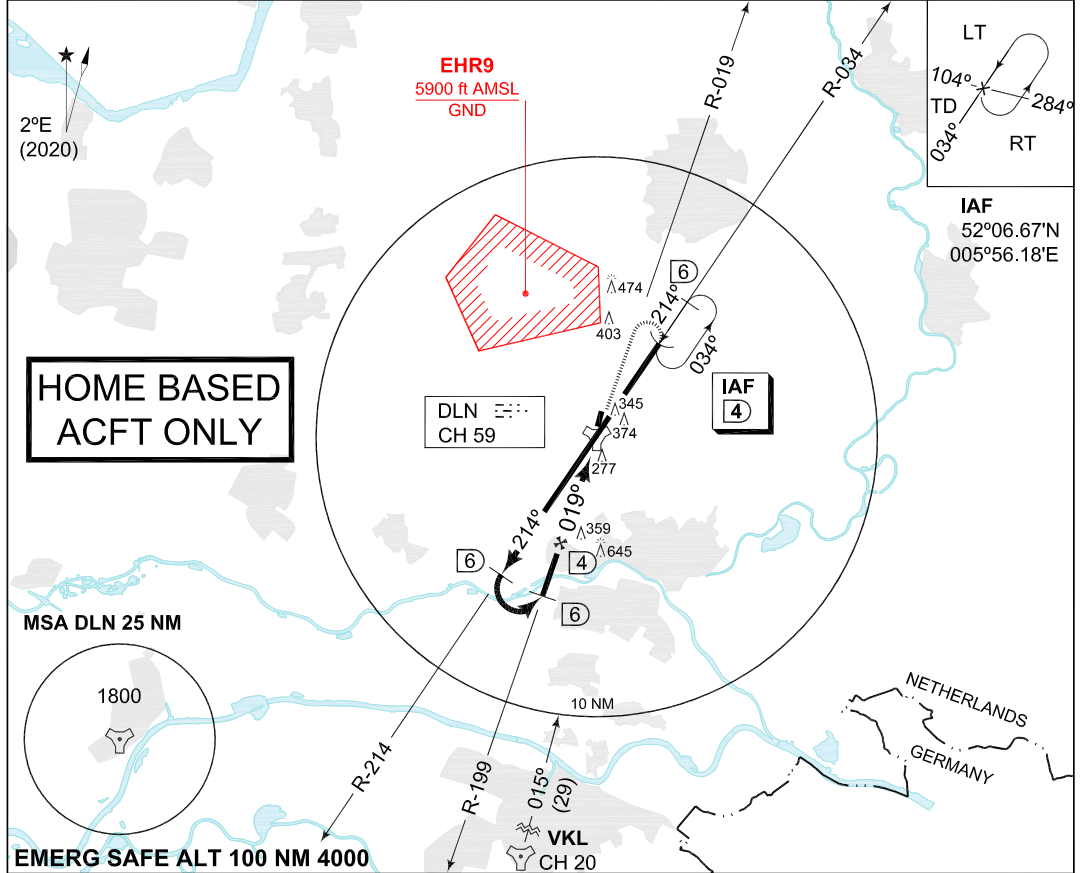
	CATEGORY	COPTER	A	B	C
	S-TACAN 01	530 -800 379 (400-0.8/0.8)	530 -1700 379 (400-1.7/1.7)		
	CIRCLING	NOT AUTHORIZED			

CHANGES: MSA
MIPS

RNLAf 18 MAY 2023

MIPS INSTRUMENT APPROACH CHART **COPTER TACAN RWY 01 DEELEN (EHDL)**

DUTCH MIL 259.250 128.355		RAPCON WEST 399.725 123.580		DEELEN TWR 312.400 129.930		AD ELEV 158	
TACAN DLN CH 59	APP COURSE 019°	FAF ALT 1600 FT	Descent GR 5.2%	MDA 530	THR ELEV 151	ALS -	LDA 3411 FT



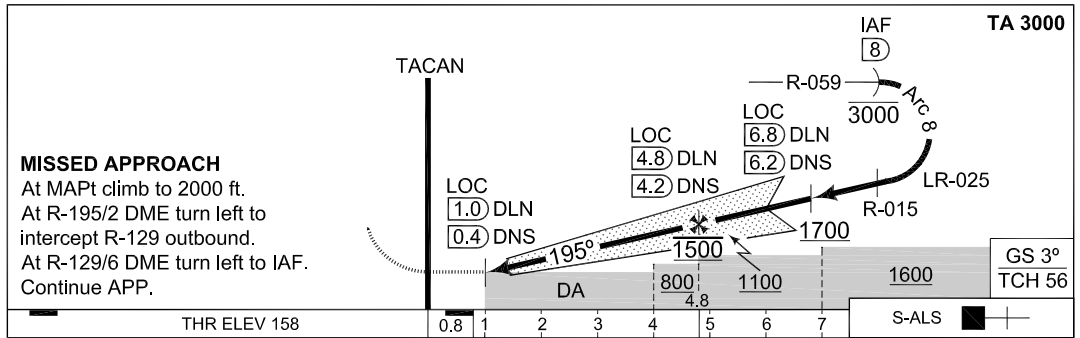
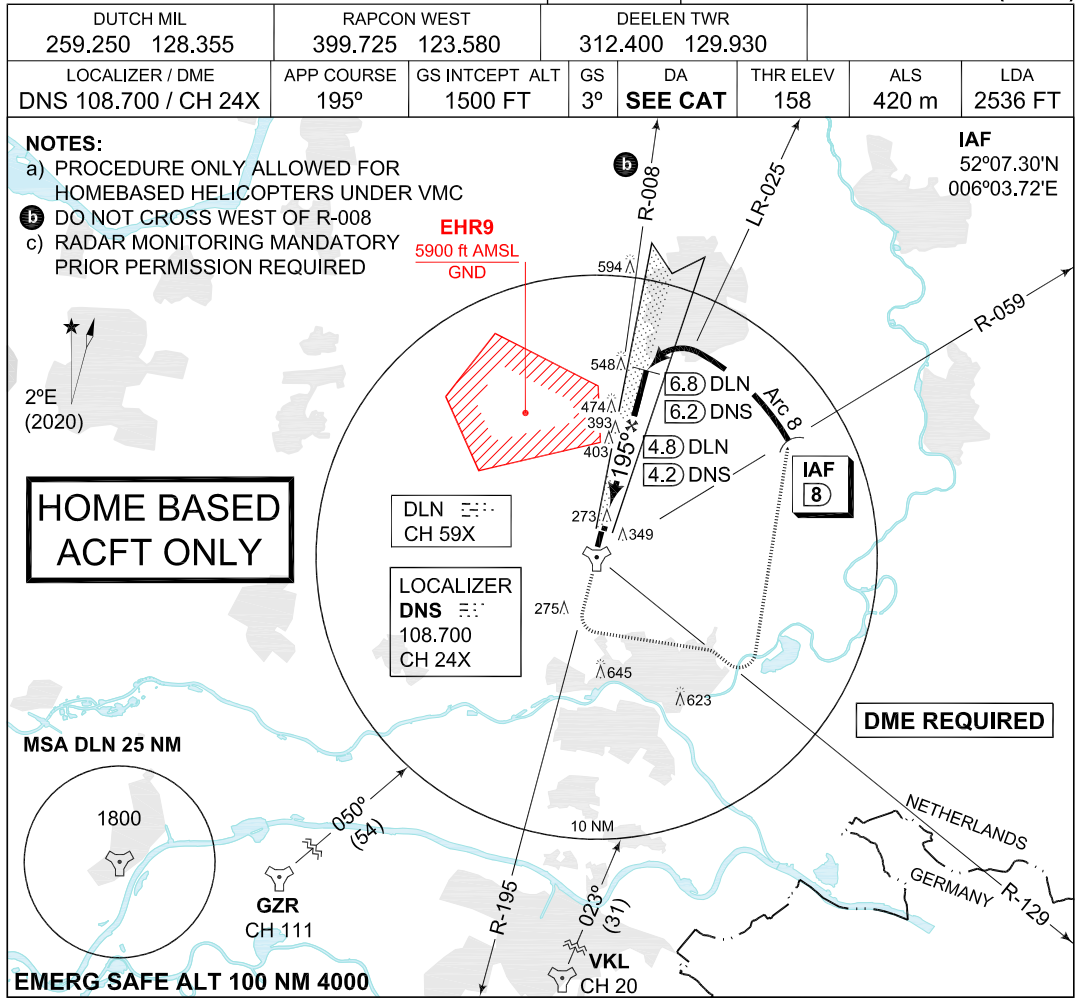
	CATEGORY	COPTER
S-TACAN 01	530 -800 379 (400-0.8/0.8)	
CIRCLING	NOT AUTHORIZED	

CHANGES: MSA

MIPS

RNLAF 18 MAY 2023

MIPS INSTRUMENT APPROACH CHART **ILS or LOC RWY 19 DEELEN (EHDL)**



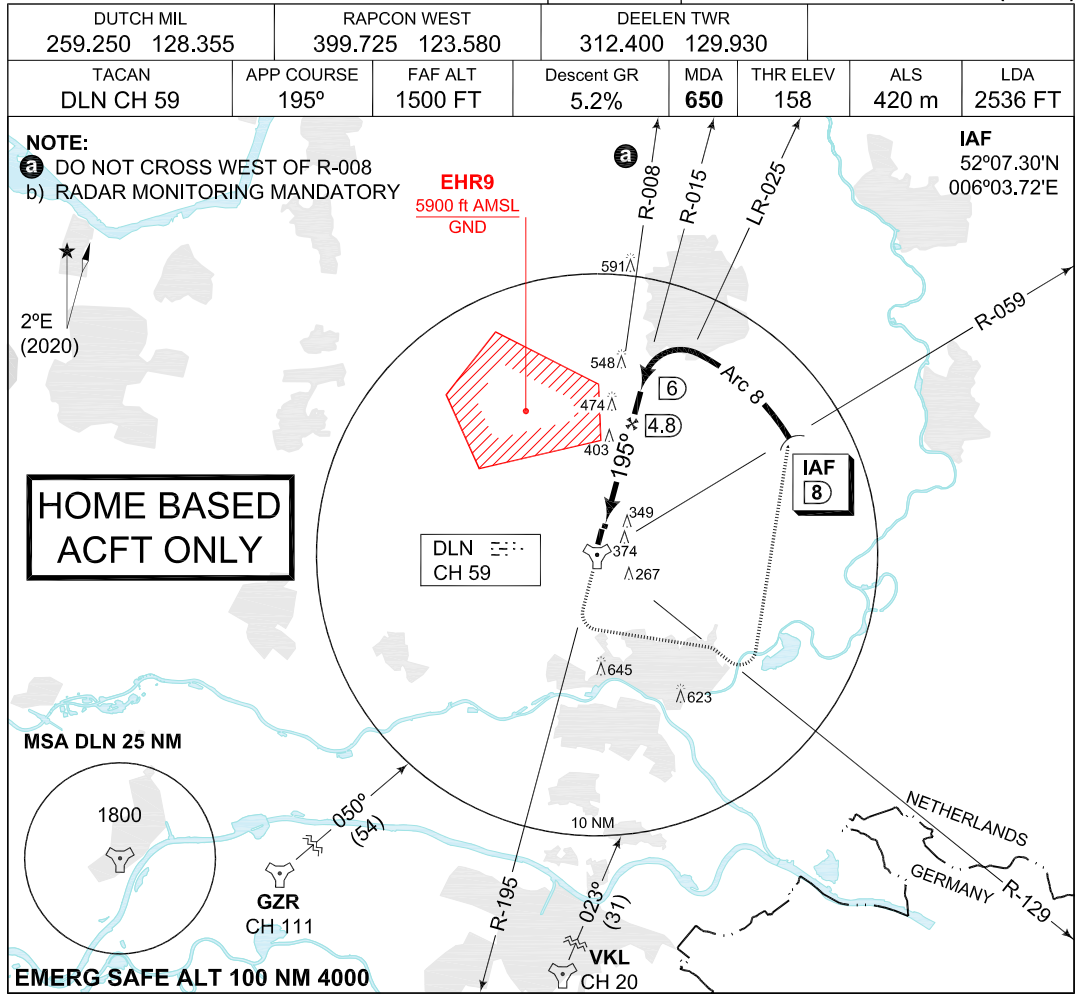
CATEGORY	COPTER	A	B	C
S-ILS 20	388 -400 230 (300-0.4/0.8)	404 -800 246 (300-0.8/1.2)	414 -800 256 (300-0.8/1.3)	424 -900 266 (300-0.9/1.3)
S-LOC 20	640 -400 482 (500-0.4/0.8)	640 -1800 482 (500-1.8/2.3)		
CIRCLING	NOT AUTHORIZED			

CHANGES: MSA

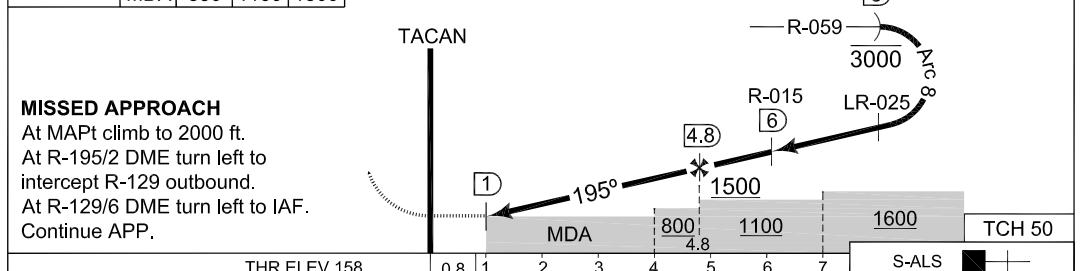
MIPS

RNLAF 18 MAY 2023

MIPS INSTRUMENT APPROACH CHART **TACAN RWY 19 DEELEN (EHDL)**



DME DLN	2	3	4	4.8					
ALT	MDA	850	1160	1500					TA 3000



CATEGORY		COPTER	A	B	C
S-TACAN 19		650 -400 492 (500-0.4/0.8)	650 -1800 492 (500-1.8/2.3)		
CIRCLING		NOT AUTHORIZED			

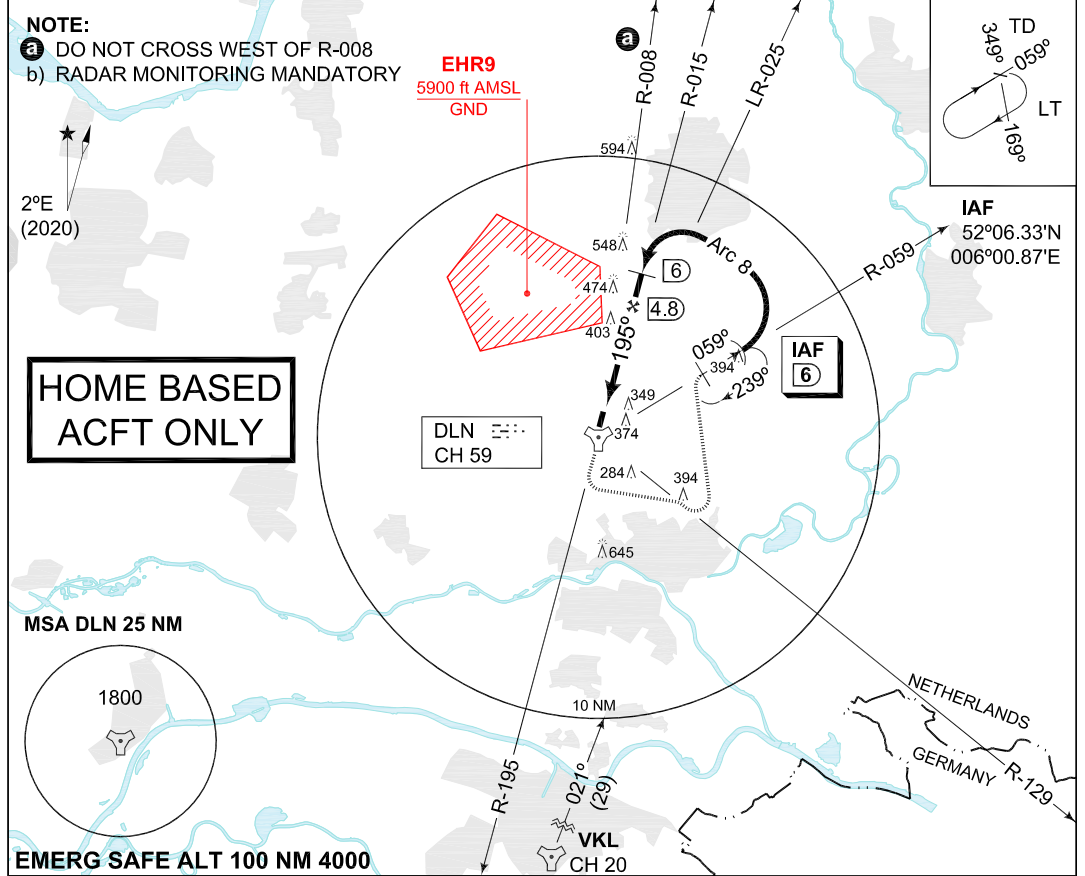
CHANGES: MSA

MIPS

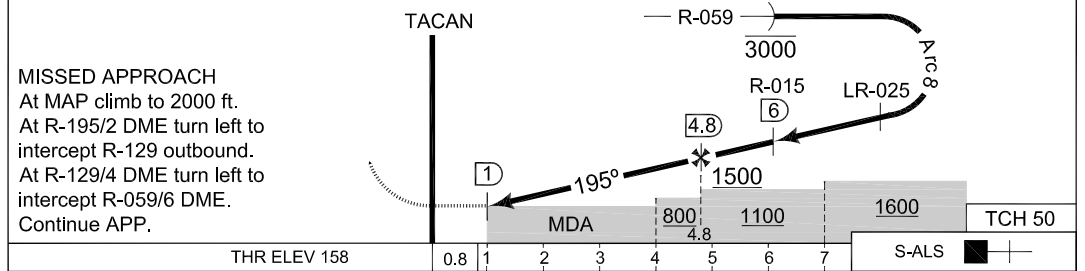
RNLAf 18 MAY 2023

MIPS INSTRUMENT APPROACH CHART **COPTER TACAN RWY 19 DEELEEN (EHDL)**

DUTCH MIL 259.250 128.355		RAPCON WEST 399.725 123.580		DEELEEN TWR 312.400 129.930		AD ELEV 158	
TACAN DLN CH 59	APP COURSE 195°	FAF ALT 1500 FT	Descent GR 5.2%	MDA 650	THR ELEV 158	ALS 420 m	LDA 2536 FT



DME DLN	2	3	4	4.8	TA 3000
ALT	MDA	850	1160	1500	



CATEGORY	COPTER
S-TACAN 19	650-400 492 (500-0.4/0.8)
CIRCLING	NOT AUTHORIZED

CHANGES: MSA

RNLAf 18 MAY 2023



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PART 3 – AERODROMES (AD)

AD 2.

**AD 2. AERODROMES
DE PEEL**

DE PEEL

EHDP AD 2.1 Aerodrome location indicator and name

EHDP - De Peel

EHDP AD 2.2 Geographical and administrative data

1	ARP	513102.2N0055120.3E
2	Direction and distance from city	077° MAG/ 7.5 NM HELMOND
3	Elevation/Reference temperature	+ 98 ft AMSL / Not available
4	MAG VAR/Annual change	1°07'E (JAN 2015)/8'E
5	AD operating authority Postal address/Visitors' address Telephone Telefax AFTN	RNLAF Groep Geleide Wapens De Peel MPC 88A Ripseweg 1 5816 AC VREDEPEEL +31(0)493 598911 +31(0)493 598910 Nil
6	Types of TFC permitted (IFR/VFR)	Nil
7	Remarks	Nil

EHDP AD 2.3 Operational hours

1	AD OPR HR	AD closed
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EHDP AD 2.17 Air traffic services airspace

1	Designation and lateral limits	De Peel control zone 51°37'09.82"N 005°54'46.89"E; along clockwise arc (radius 6.5 NM, centre 51°31'02.20"N 005°51'20.30"E) to 51°24'49.79"N 005°54'23.09"E; 51°19'23.04"N 005°26'17.58"E; along anti-clockwise arc (radius 8 NM, centre 51°27'00.48"N 005°22'28.25"E) to 51°21'21.33"N 005°31'29.98"E; 51°33'45.27"N 005°51'29.87"E; along anti-clockwise arc (radius 8 NM, centre 51°39'25.95"N 005°42'28.17"E) to point of origin.
2	Vertical limits	GND to 3000ft AMSL
3	Airspace classification	D
4	ATS unit call sign Language(s)	ATC in De Peel CTR is provided by Eindhoven TWR and Volkel TWR. For crossing clearance of De Peel CTR adjacent to Eindhoven CTR contact Eindhoven TWR. For crossing clearance of De Peel CTR adjacent to Volkel CTR contact Volkel TWR. English Outside HO DUTCH MIL INFO FREQ 132.350 MHZ.
5	Transition altitude	IFR: 3000 ft AMSL; VFR: 3500 ft AMSL
6	Remarks	Nil



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PART 3 – AERODROMES (AD)

AD 2.

**AD 2. AERODROMES
EINDHOVEN**

EINDHOVEN

EHEH AD 2.1 Aerodrome location indicator and name

EHEH - Eindhoven

EHEH AD 2.2 Geographical and administrative data

1	ARP	51°27'00.48"N 005°22'28.25"E
2	Direction and distance from city	281° MAG/4 NM EINDHOVEN
3	Elevation/Reference temperature	+74 ft AMSL/22.3o C (JUL)
4	MAG VAR/Annual change	1°50'E (JAN 2020)/11'E
5	AD operating authority Postal address Visitors' address Telephone Telefax AFTN	RNLAF Vliegbasis Eindhoven MPC 87A P.O. Box 8762 4820 BB Breda Flight Forum 1550 5657 EZ Eindhoven +31(0)40 2896911 +31(0)40 2896466 EHEHZTX
6	Types of TFC permitted (IFR/VFR)	IFR/VFR
7	Remarks	Nil

EHEH AD 2.3 Operational hours

1	AD OPR HR	MON/FRI 0600/2200 (0500/2100)
2	Customs and immigration	30 MIN PN
3	Health and sanitation	HO
4	AIS Briefing office	See 2.23
5	ATS Reporting Office (ARO)	See 2.23
6	MET Briefing Office	HO
7	ATS	MIL and CIV HO
8	Fuelling	HO
9	Handling	HO
10	Security	HO
11	De-icing	HO
12	Remarks	For CIV OPR HRS see AIP Netherlands EHEH AD 2.3

EHEH AD 2.4 Handling services and facilities

1	Cargo-handling facilities	Yes
2	Fuel/oil types	F-34, H-515, O-147, O-148, O-156
3	Fuelling facilities/capacity	No limitations
4	Oxygen	No
5	De-icing facilities/type	S-742
6	Starting units	DSA 150, DSA 600, DSA 900, JAS, DC 3500
7	Hangar space for visiting ACFT	O/R
8	Repair facilities	C130
9	Remarks	No X-servicing for armed ACFT

EHEH AD 2.5 Passenger facilities

1	Remain overnight	AVBL O/R
2	Medical facilities	First Aid treatment and first responders on site. Hospitals in Eindhoven (8km)
3	Remarks	Nil

EHEH AD 2.6 Rescue and fire fighting services

1	AD category for fire fighting	Fire NATO CAT 8 higher O/R 48 HR PN
2	Remarks	Nil

EHEH AD 2.7 Seasonal availability - clearing

1	Seasonal availability	All seasons
2	Snow removal equipment	Yes
3	Remarks	Caution advised in winter during ice conditions

EHEH AD 2.8 Aprons, taxiways and check locations/positions data

1	Apron surface and strength	West:Concrete, PCN 61 R/B/W/T East:Concrete, PCN 61 R/B/W/T
2	TWY width, surface and strength	Width minimal 54 ft, concrete, PCN 61 R/B/W/T
3	Remarks	TWY R6: PCN 52 R/B/W/T

EHEH AD 2.9 Surface movement guidance and control system and markings

	According to STANAG 3158	
1	Remarks	'Follow-me' car is AVBL

EHEH AD 2.10 Aerodrome obstacles

See Aerodrome Chart

EHEH AD 2.11 Meteorological information provided

1	Associated MET Office	Eindhoven
2	Hours of service MET Office outside hours	HO Joint Meteorological Group
3	Office responsible for TAF preparation Periods of validity	Joint Meteorological Group 30 hrs
4	Type of landing forecast Interval of issuance	TREND Every 30 min during opr hrs
5	Flight documentation Language(s) used	Reports, forecasts and charts. English and Dutch.
6	Charts and other information AVBL for briefing or consultation	GSA, GSP, LGF, Cross section, Upperair forecasts, NVG, Radar- and Satellite Images
7	Supplementary equipment AVBL for providing information	PBS (pilot briefing system)
8	Remarks	Tel EHEH 040-2896483 or mail EHV.METEO@mindef.nl Tel JMG 0164-693111 or mail JMG.WX.PLANNING@mindef.nl

EHEH AD 2.12 Runway physical characteristics

1	RWY dimensions	See Aerodrome Chart. Values in ft.
2	RWY surface	Tarmac
3	RWY strength	PCN 62 F/A/W/T

EHEH AD 2.13 Declared distances

See Aerodrome Chart. Values in ft.

EHEH AD 2.14 Approach and runway lighting

According STANAG 3316		
1	Approach lighting	RWY 21: CAT I. 869 m RWY 03: CAT I. 892 m
2	RWY lighting	RWY 03/21 VCL/VHI
3	PAPI	Situated on the left side of both RWYs
4	Remarks	Nil

EHEH AD 2.15 Other lighting, secondary power supply

1	LDI	Nil
2	TWY edge lighting	VB
3	Emergency RWY lighting	Nil
4	Emergency TWY edge lighting	Retroreflective markers
5	Secondary power supply/switch-over	AVBL switch over time within 1 second
6	Remarks	Nil

EHEH AD 2.16 Helicopter landing area

1	Location	See Aerodrome Chart
2	Marking	Daylight marking
3	Lighting	No
4	Remarks	Nil

EHEH AD 2.17 Air traffic services airspace

1	Designation and lateral limits	EINDHOVEN CTR 51°38'52.86"N 005°23'22.88"E; 51°27'33.73"N 005°41'28.57"E; 51°21'21.33"N 005°31'29.98"E; along clockwise arc (radius 8 NM, centre 51°27'00.48"N 005°22'28.25"E) to 51°32'38.93"N 005°13'24.29"E; to point of origin.
2	Vertical limits	GND to 3000 ft AMSL
3	Airspace classification	D
4	ATS unit call sign Language(s)	Contact initially Eindhoven TWR, outside HO Dutch Mil Info 132.350 MHz. English
5	Transition altitude	IFR: 3000 ft AMSL; VFR: 3500 ft AMSL
6	Remarks	Nil

EHEH AD 2.18 Air traffic services communication facilities

STATION/ SERVICE	CALL SIGN OR IDENTIFICATION	FREQUENCY MHz	HOURS	REMARKS
1	2	3	4	5
	As appropriate	121.500 243.000	HO	Emergency FREQ for all services
TWR	Eindhoven Tower	131.005*)**) 122.100 241.550*) 257.800	HO	*)Primary FREQ **)VDF
GND CTL	Eindhoven Ground	335.750 121.930	HO	
APP	RAPCON South	123.180*) 122.100 388.525*)	HO	Radar equipped
RADAR	Eindhoven Arrival	124.530**) 122.100 265.975	HO	Through APP
ATIS		126.030		Coverage 60 NM/20000 ft

EHEH AD 2.19 Radio navigation and landing aids

FACILITY	ID	CHANNEL FREQ.	HOURS	CO-ORD.	RANGE/ ALTITUDE	REMARKS
1	2	3	4	5	6	7
TACAN	EHV	CH 119X	H24	51°26'53.39"N 005°22'29.78"E	150 NM/60000 ft	FREQ protected
ILS 03 LOCALIZER	EHZ	109.750	H24	51°27'45.01"N 005°23'18.19"E		033° MAG 0.23 NM from the THR RWY 21
GLIDEPATH		333.050	H24	51°26'34.18"N 005°22'06.36"E		0.20 NM past THR RWY 03
DME 03	EHZ	CH 34Y	H24	51°26'34.18"N 005°22'06.36"E		Situated on Glide- path 03. One direc- tion only.
ILS 21 LOCALIZER	EHO	109.750	H24	51°26'15.09"N 005°21'37.39"E		213° MAG 0.25 NM from the THR RWY 03
GLIDEPATH		333.050	H24	51°27'22.30"N 005°23'01.56"E		0.19 NM past THR RWY 21
DME 21	EHO	CH 34Y	H24	51°27'22.30"N 005°23'01.56"E		Situated on Glide- path 21. One direc- tion only.

EHEH AD 2.20 Local traffic regulations

START UP PROCEDURES

For pushback and start-up permission contact Eindhoven Ground 121.930 this request shall include Person On Board and parking position.

TAXI PROCEDURES

Eindhoven Ground is operational during aerodrome operational hours. On taxiway no turns larger than 90° allowed. ATC may assign an intersection take-off to any aircraft for operational reasons. During low visibility procedures (visibility < 1500 m and cloudbase < 200 ft) limited use of intersection take-offs are allowed.

EHEH AD 2.21 Noise abatement procedures

RWY 03: Climb on RWY track until 4 DME and at least 1000 ft.

RWY 21: Climb on RWY track until 3 DME and at least 1000 ft.

Instrument approaches mandatory, light ACFT exempted.

EHEH AD 2.22 Flight procedures

IFR procedures

The IAP and SID procedures are established in accordance with STANAG 3759 and AATCP-1.

NOTE: Exercise caution when intercepting the glide slope from above as this increases the risk of false glide slope captur

RNP Z approach RWY 03

Serial number	Path Des-criptior	WPT Ident	Fly Over	Course Mag°/(T°)	Recom navaid	Dist nm	turn	Altitude (ft AMSL)	Speed (KIAS)	VPA (°TCH(ft))	NAV Spec
001	IF	TILVU						+2000			RNAV1
002	TF	RUSAL		170/(171.9)		8.3					RNAV1
003	TF	ERSUL		124/(126.0)		5.0		+2000	-220		RNAV1
004	IF	MITSA						+2000			RNAV1
005	TF	ERSUL		302/(303.8)		5.0		+2000	-220		RNAV1
006	IF	ERSUL						+2000	-220		RNAV1
007	TF	EH573		033/(034.9)		2.1		+2000			RNP APCH
008	TF	THR03	Y	033/(034.9)		5.9				-3.00/50	RNP APCH
009	TF	EH550	Y	033/(035.0)		4.6					RNP APCH
010	DF	EHOJI					L	@3000			

FAS data block- RNP Z RWY 03

Input data	
Operation Type	0
SBAS Provider	1 (EGNOS)
Airport Identifier	EHEH
Runway	03
Runway Letter	0 (None)
Approach Performance Designator	0
Route Indicator	Z
Reference Path Data Selector	0
Reference Path Identifier	E03A
LTP/FTP Latitude	512627.1400 N
LTP/FTP Longitude	0052150.900 E
LTP/FTP Ellipsoidal Height (metres)	66.6
FPAP Latitude	512740.2215 N
Delta FPAP latitude (seconds)	73.0815
FPAP longitude	0052312.8100 E
Delta FPAP Longitude (seconds)	81.9100
Threshold Crossing Height	50.0
TCH Units Selector	0 (feet)
Glidepath Angle (degrees)	3.00
Course Width (metres)	105.00
Length Offset (metres)	0
HAL (metres)	40.0
VAL (metres)	35.0

Output data	
Data Block	10 08 05 08 05 03 D0 00 01 33 30 05 88 76 13 16 68 52 4D 02 9A 16 F3 3A 02 EC 7F 02 F4 01 2C 01 64 00 C8 AF D6 A5 BA 99
Calculated CRC Value	D6A5BA99
Supplied CRC Value	D6A5BA99
Comparison Result	OK

Required Additional Data	
ICAO Code	EH
LTP/FTP Orthometric Height (metres)	22.3

NOTE: EUROCONTROL FAS DB tool Version 3.2.0

RNP Z approach RWY 21

Serial Number	Path Descriptor	WPT Ident	Fly Over	Course Mag°/(T°)	Recom navaid	Dist nm	turn	Altitude (ft AMSL)	Speed (KIAS)	VPA (°TCH(ft))	NAV spec
001	IF	BESTI						+2000			RNAV1
002	TF	GILIV		123/(124.2)		5.0		+2000			RNAV1
003	IF	GEMTI						+2000			RNAV1
004	TF	GILIV		304/(306.1)		5.0		+2000			RNAV1
005	IF	GILIV						+2000			RNAV1
006	TF	EH567		213/(215.1)		4.1		+2000			RNP APCH
007	TF	THR21	Y	213/(215.1)		5.9				-3.00/50	RNP APCH
008	TF	EH558	Y	213/(215.1)		3.8					RNP APCH
009	DF	EHOJI					R	@3000			

RNP Z RWY 21

Operation Type	0
SBAS Provider	1 (EGNOS)
Airport Identifier	EHEH
Runway	21
Runway Letter	0 (None)
Approch Performance Designator	0
Route Indicator	Z
Reference Path Data Selector	0
Reference Path Identifier	E21A
LTP/FTP Latitude	512733.7900 N
LTP/FTP Longitude	0052305.6000 E
LTP/FTP Ellipsoidal Height (metres)	64.5
FPAP Latitude	512620.6850 N
Delta FPAP latitude (seconds)	-73.1050
FPAP longitude	0052143.6855 E
Delta FPAP Longitude (seconds)	-81.9145
Threshold Crossing Height	50.0
TCH Units Selector	0 (feet)
Glidepath Angle (degrees)	3.00
Course Width (metres)	105.00
Length Offset (metres)	0
HAL (metres)	40.0
VAL (metres)	35.0

Output data	
Data Block	10 08 05 08 05 15 D0 00 01 31 32 05 3C 7F 15 16 00 9A 4F 02 85 16 DE C4 FD 0B 80 FD F4 01 2C 01 64 00 C8 AF 3E 0B 00 1D
Calculated CRC Value	3E0B001D
Supplied CRC Value	3E0B001D
Comparison Result	OK

Required Additional Data	
ICAO Code	EH
LTP/FTP Orthometric Height (metres)	20.3

NOTE: EUROCONTROL FAS DB tool Version 3.2.0

VFR procedures

Arrival, departure and crossing VFR flights shall be carried out via the arrival/departure routes unless otherwise instructed by ATC or approved on pilots request.

CONVENTIONAL ACFT:

AD control is to be called 15 MIN prior LDG and ACFT have to join the circuit under a 90° angle to the ordered down wind.

HEL:

Approach and departure procedures to be carried out from north-west. When approaching from/departing to north-west HEL may cross RWY 03/21 after R/T permission has been obtained. In order to avoid built-up areas, sector 060/120 is prohibited.

REPORTING POINTS:

Echo: 51°24'24"N 005°33'40"E
 Hotel: 51°28'45"N 005°19'16"E
 Mike: 51°26'12"N 005°25'34"E
 Oscar: 51°29'59"N 005°17'23"E
 Tango: 51°34'20"N 005°17'00"E
 Victor: 51°24'18"N 005°25'53"E
 Whiskey: 51°30'00"N 005°11'42"E
 X-Ray: 51°20'35"N 005°25'14"E
 Zulu: 51°18'59"N 005°27'09"E

CIRCUIT HEIGHTS:

Conventional ACFT: 1500 ft
 Light ACFT: 1000 ft
 HEL: 600 ft

NOTE: R/H circuit on RWY 21

LOW VISIBILITY PROCEDURES

During periods of low visibility the overall ATC capacity is reduced. To guarantee aircraft safety an optimal use of ATC capacity, Eindhoven Airport uses low visibility procedures. When the visibility ≤ 1500 m and/or cloud base ≤ 300 ft cautionary measures are taken and the following low visibility procedures will be initiated.

Four low visibility phases are recognised:

Phase	Conditions	Procedure
A	RVR ¹ ≤ 1500 m and/or ceiling ≤ 300 ft	Limited use of intersection take-offs.; All WIP on airside will be terminated. No conditional clearances
B	RVR < 1100 m and/or ceiling < 200 ft	Separation BTN landing acft will be increased to 8 Nm
C	RVR < 550 m	Tfc will be reduced to "one movement a time"
D	RVR < 300 m	The airport is below operational minima for arriving and departing aircraft

NOTE: ¹ RVR of the runway in use is mandatory

NOTE: During low visibility procedures taxi instructions to cross the runway and use taxiway Romeo will be provided on the EHEH TWR frequency

EHEH AD 2.23 Additional information

Approach control through Rapcon South. ILS approaches for RWY 03/21 from 2000 ft. RVR AVBL for RWY 03/21¹⁾.

AIS Briefing office facility and the ATS Reporting Office (ARO) is only available through the Flight Data and Notam Office (FDNO) located at MIIATCC Schiphol.

Tel: +31(0)20 4062840
Tel: +31(0)20 4062841
E-mail: aocs.fdns@mindef.nl
AFTN: EHMCZPZX

avlbl H24

PPR 24 HRS: for Prior Permission Request contact Mission Support

Tel: +31(0)40 2896837
Fax: +31(0)40 2896815
E-mail: amc.occ@mindef.nl

CIV training flights prohibited except for home-based ACFT.

No X-servicing for armed ACFT.

1) Aircraft crossing the runway could cause interference to the ILS signal that may result in significant ILS signal deviations.

EHEH AD 2.24 Charts related to an aerodrome

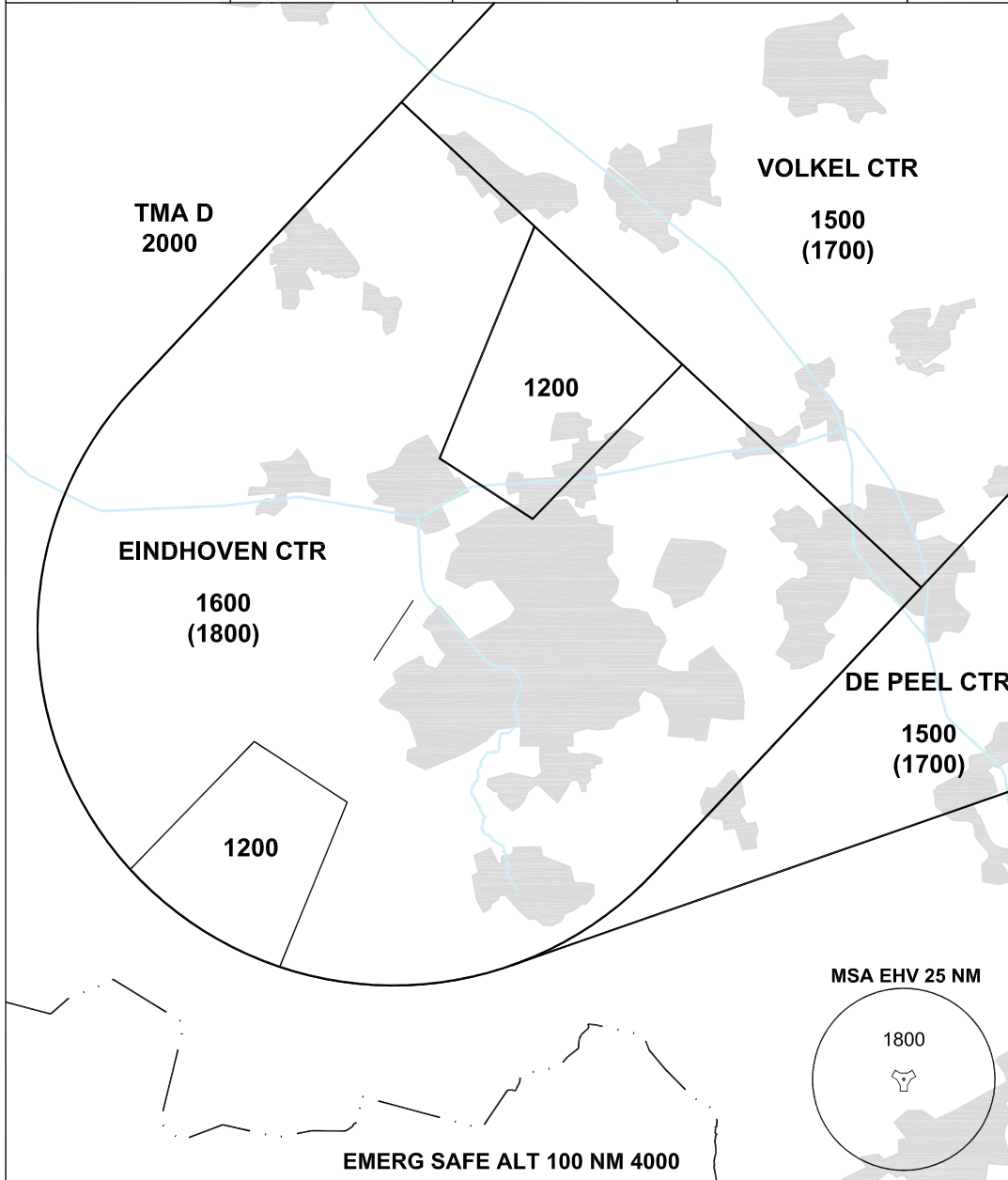
	Aerodrome Chart	EHEH AD 2-12
	Local map	EHEH AD 2-13
	MVA chart	EHEH AD 2-14
	Instrument departure chart EH1	EHEH AD 2-15
	Instrument departure chart EH3	EHEH AD 2-16
	Instrument departure chart EH5	EHEH AD 2-17
	Instrument departure chart EH7	EHEH AD 2-18
	Instrument approach chart HI-ILS or LOC RWY 03	EHEH AD 2-19
	Instrument approach chart ILS Z or LOC RWY 03	EHEH AD 2-20
	Instrument approach chart HI-TACAN RWY 03	EHEH AD 2-21
	Instrument approach chart TACAN RWY 03	EHEH AD 2-22
	Instrument approach chart RNP Z RWY 03	EHEH AD 2-23
	Instrument approach chart HI-ILS or LOC RWY 21	EHEH AD 2-24
	Instrument approach chart ILS Z or LOC RWY 21	EHEH AD 2-25
	Instrument approach chart HI-TACAN RWY 21	EHEH AD 2-26
	Instrument approach chart TACAN RWY 21	EHEH AD 2-27
	Instrument approach chart RNP Z RWY 21	EHEH AD 2-28

LOCAL MAP

See: AIP NL EH-AD-2 EHEH-VAC-1

MIPS **MINIMUM VECTORING ALTITUDE** AD ELEV 74 **MVA CHART**
EINDHOVEN (EHEH)

DUTCH MIL		RAPCON SOUTH		EINDHOVEN TWR		GND CTL		ATIS*
336.325	125.930	388.525	123.180	241.550	131.005	335.750	121.930	126.030



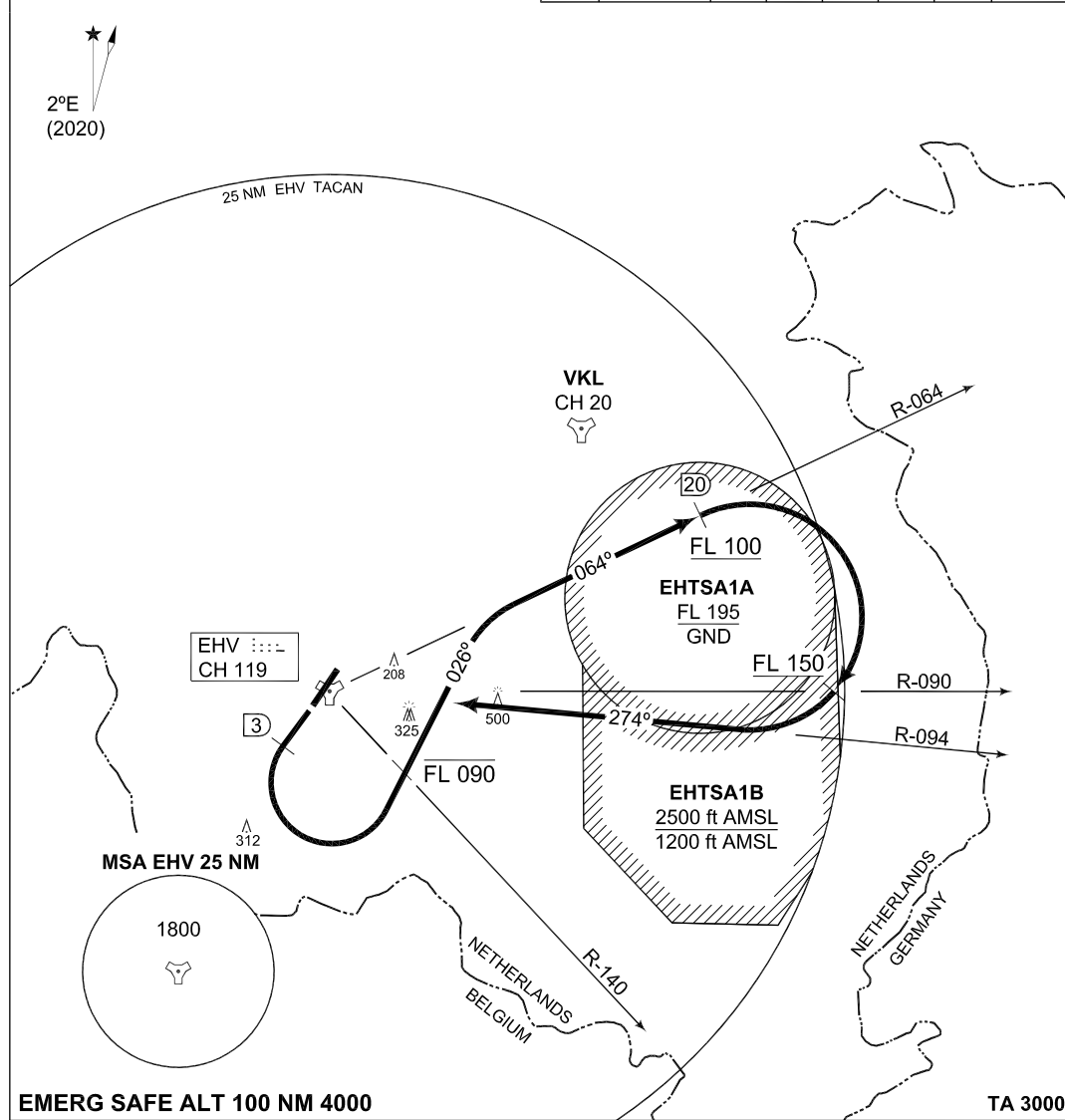
CHANGES: EDITORIAL

- THE ALTITUDE BETWEEN BRACKETS IS TO BE USED FOR THE CORRESPONDING SECTOR WHEN AIR TEMPERATURE AT AIRBASE ALTITUDE IS LOWER THAN -16°.
- ALTITUDES ONLY AVAILABLE IF THE RADAR COVERAGE PERMITS.

RNLAF 30 DEC 2021

MIPS INSTRUMENT DEPARTURE CHART **EH1 EINDHOVEN (EHEH)**

GND CTL 335.750 121.930	EINDHOVEN TWR 241.550 131.005	RAPCON SOUTH 388.525 123.180	DUTCH MIL 336.325 125.930
		AD ELEV 74	
		RWY	Knots
		21	V/V (fpm)
			500 750 1000 1250 1500 3000 ft
			V/V (fpm)
			600 900 1200 1500 1800 FL 150



EINDHOVEN 1 (RWY 21)

- Climb straight ahead.
- At 3 DME and at least at 1000 ft from Eindhoven TACAN turn left, heading 026° to intercept R-064 outbound.
- FLIGHT LEVEL RESTRICTION: Cross R-140 at FL 090 or below.
- At 20 DME turn right to intercept R-094 inbound Eindhoven TACAN.
- FLIGHT LEVEL RESTRICTION: Pass 20 DME/R-064 at FL 100 or above, cross R-090 at FL 150 or above.

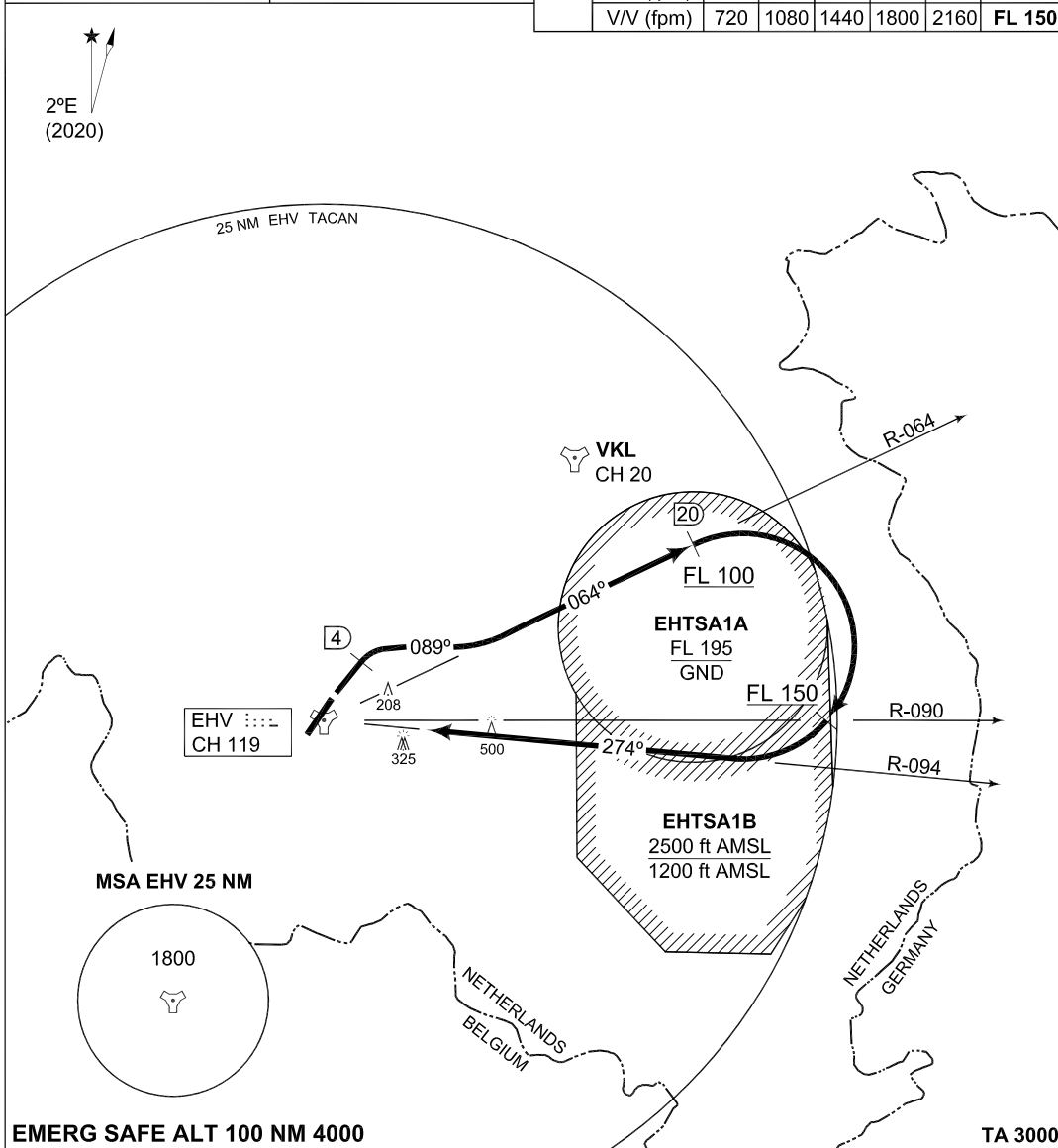
CHANGES: MSA RNLAJ 09 SEP 2021

**MIPS
INSTRUMENT DEPARTURE CHART**

**EH3
EINDHOVEN (EHEH)**

AD ELEV 74

GND CTL 335.750 121.930		EINDHOVEN TWR 241.550 131.005		RAPCON SOUTH 388.525 123.180				DUTCH MIL 336.325 125.930			
RWY 03	V/V (fpm)	960	1440	1920	2400	2880	FL 100	to	FL 150		
	V/V (fpm)	720	1080	1440	1800	2160					



EMERG SAFE ALT 100 NM 4000

TA 3000

EINDHOVEN 3 (RWY 03)

- Climb straight ahead.
- At 4 DME and at least at 1000 ft from Eindhoven TACAN turn right, heading 089° to intercept R-064 outbound.
- At 20 DME turn right to intercept R-094 inbound Eindhoven TACAN.

FLIGHT LEVEL RESTRICTION: Pass 20 DME/R-064 at FL 100 or above, cross R-090 at FL 150 or above.

NOTE: ATC required minimum climb rate exceeds 300 ft/NM.

CHANGES: MSA

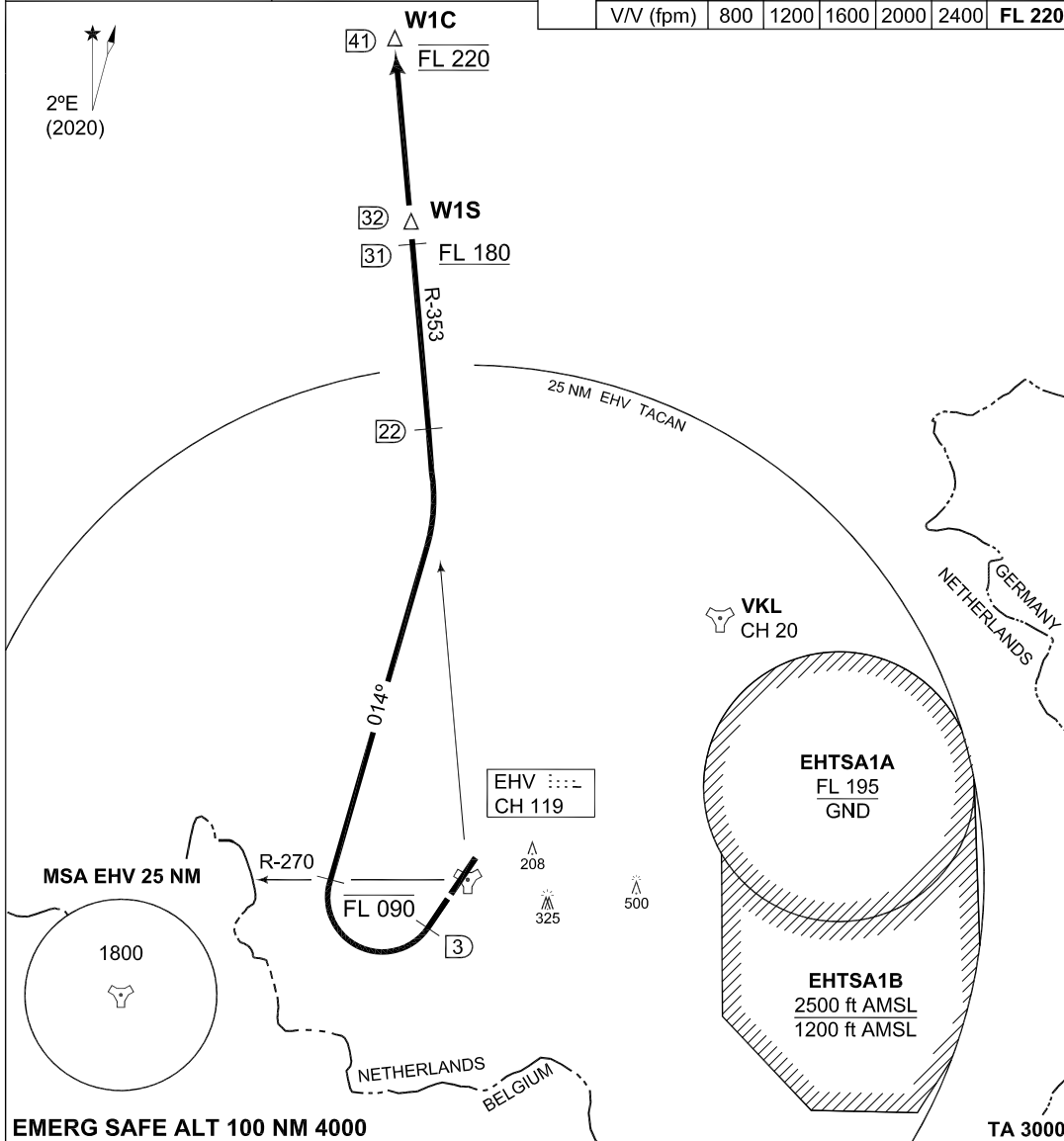
RNLAf 09 SEP 2021

**MIPS
INSTRUMENT DEPARTURE CHART**

**EH5
EINDHOVEN (EHEH)**

AD ELEV 74

GND CTL 335.750 121.930		EINDHOVEN TWR 241.550 131.005		RAPCON SOUTH 388.525 123.180				DUTCH MIL 336.325 125.930			
EINDHOVEN ARRIVAL 265.975 124.530				RWY	Knots	120	180	240	300	360	to
				21	V/V (fpm)	860	1290	1720	2150	2580	FL 180
					V/V (fpm)	800	1200	1600	2000	2400	FL 220



EMERG SAFE ALT 100 NM 4000

TA 3000

EINDHOVEN 5 (RWY 21)	<ul style="list-style-type: none"> - Climb straight ahead to 3 DME from Eindhoven TACAN (EHV). - Turn right heading 014° to intercept EHV R-353 outbound. - FLIGHT LEVEL RESTRICTION: Cross EHV R-270 at FL 090 or below. - Cross EHV R-353 outbound, 31 DME at FL 180 or above. - Cross EHV R-353 outbound, 41 DME at FL 220, unless instructed otherwise by ATC.
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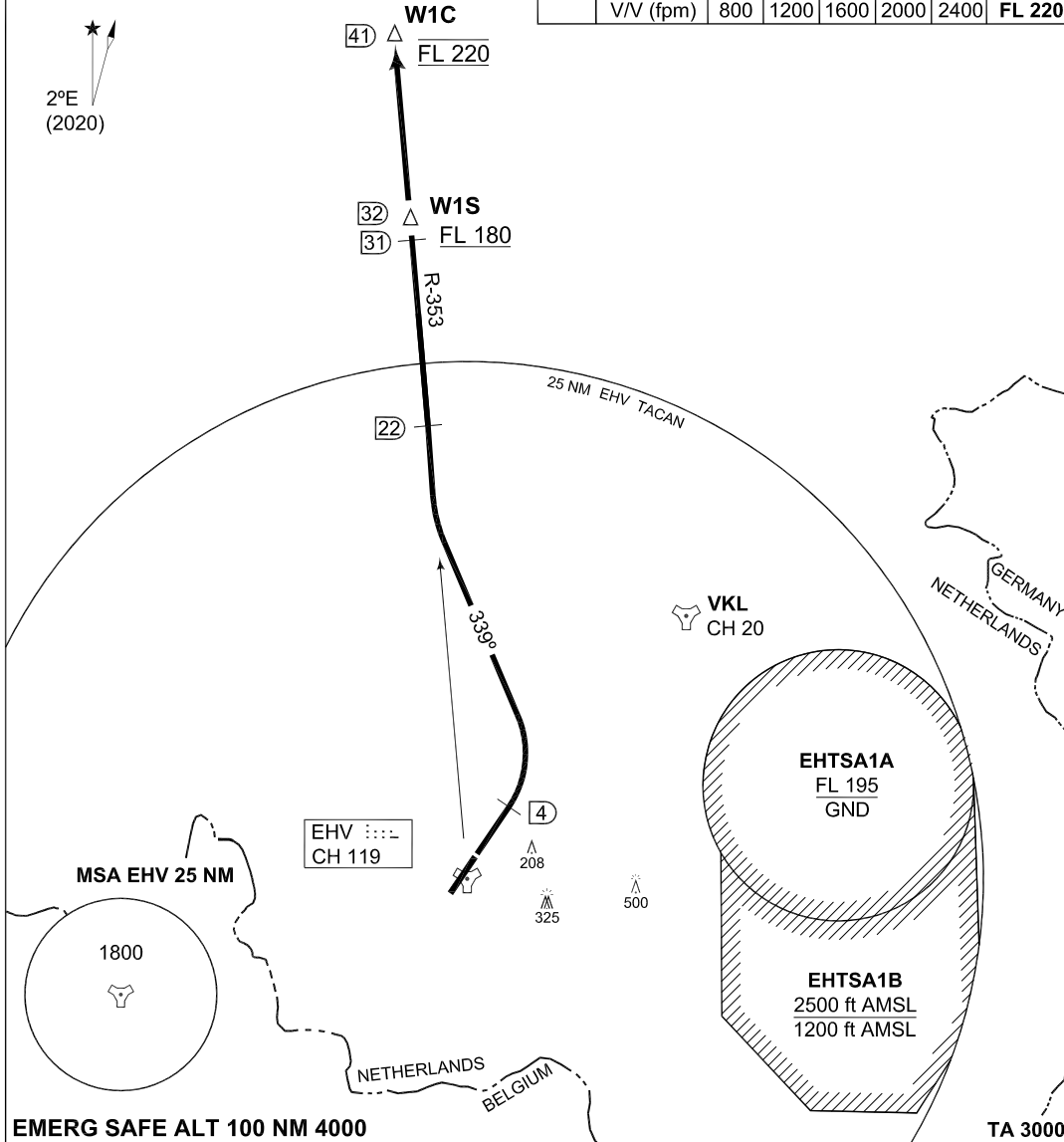
NOTES:	<ul style="list-style-type: none"> - Departure end crossing height: RWY 21: 74 ft. - If no radiocontact with Dutch Mil at EHV 22 DME turn right inbound EHV TACAN and contact RAPCON SOUTH.
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CHANGES: MSA

RNLAf 09 SEP 2021

MIPS INSTRUMENT DEPARTURE CHART **EH7 EINDHOVEN (EHEH)**

GND CTL 335.750 121.930	EINDHOVEN TWR 241.550 131.005	RAPCON SOUTH 388.525 123.180	DUTCH MIL 336.325 125.930
EINDHOVEN ARRIVAL 265.975 124.530		RWY 03	
		V/V (fpm)	1140 1710 2280 2840 3410 FL 180
		V/V (fpm)	800 1200 1600 2000 2400 FL 220



EMERG SAFE ALT 100 NM 4000 **TA 3000**

EINDHOVEN 7 (RWY 03)

- Climb straight ahead to 4 DME from Eindhoven TACAN (EHV).
- Turn left heading 339° to intercept EHV R-353 outbound.
- Cross EHV R-353 outbound, 31 DME at FL 180 or above.
- Cross EHV R-353 outbound, 41 DME at FL 220, unless instructed otherwise by ATC.

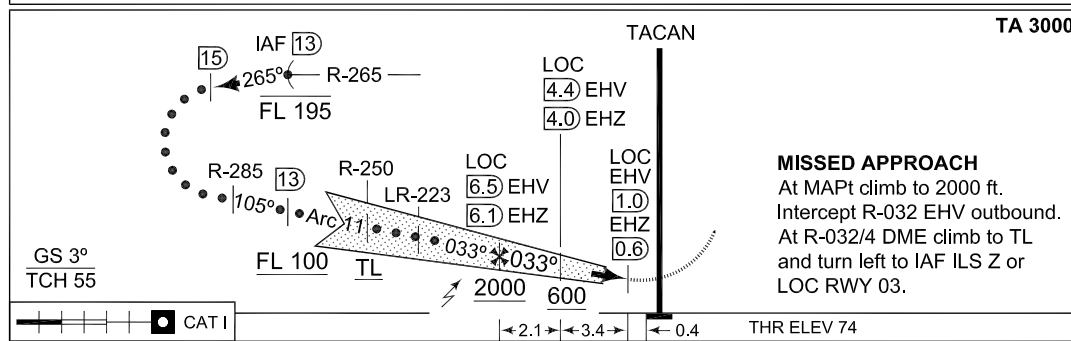
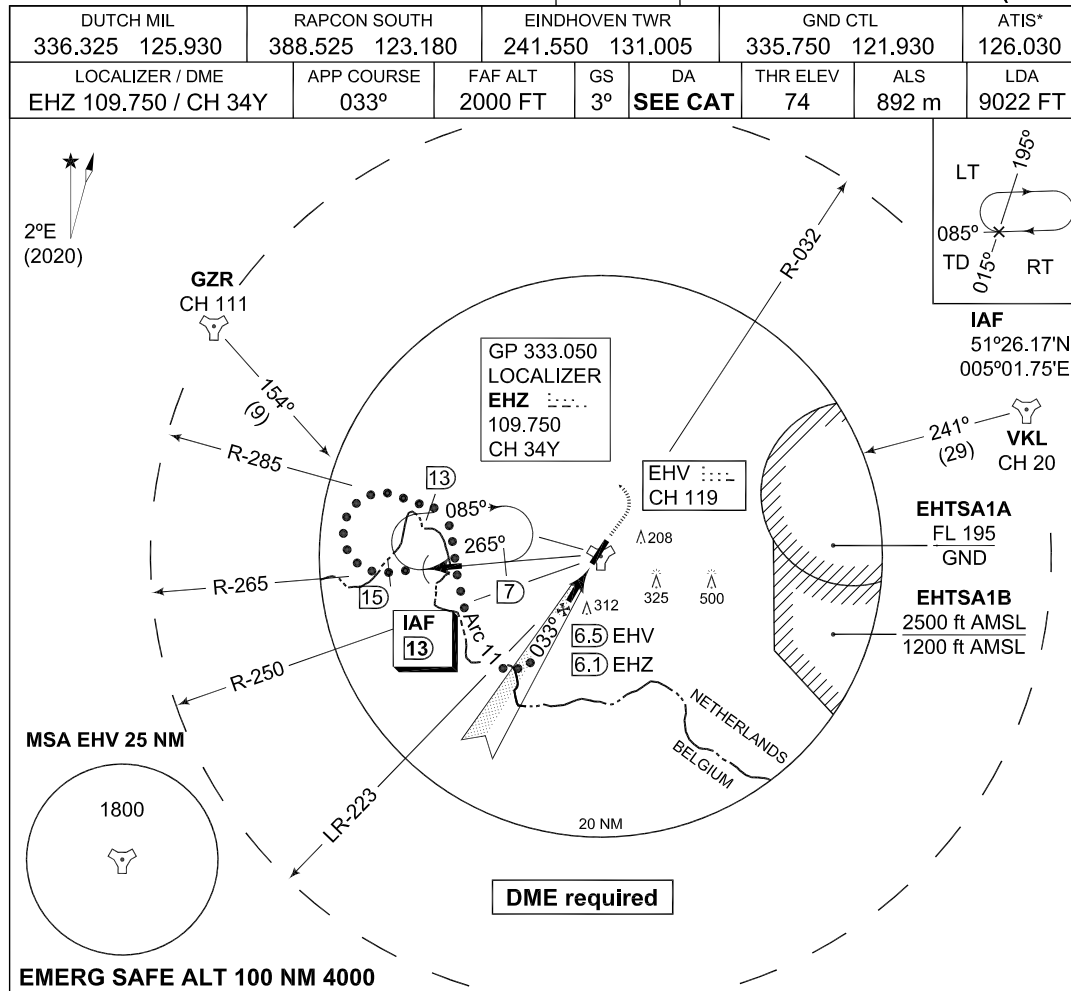
NOTES:

- Departure end crossing height: RWY 03: 66 ft.
- If no radiocontact with Dutch Mil at EHV 22 DME turn right inbound EHV TACAN and contact RAPCON SOUTH.

CHANGES: MSA

RNLAF 09 SEP 2021

MIPS INSTRUMENT APPROACH CHART **HI-ILS or LOC RWY 03 EINDHOVEN (EHEH)**

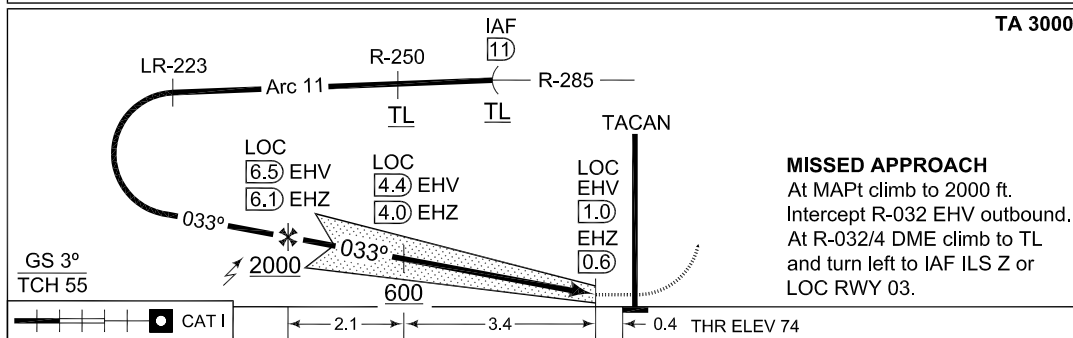
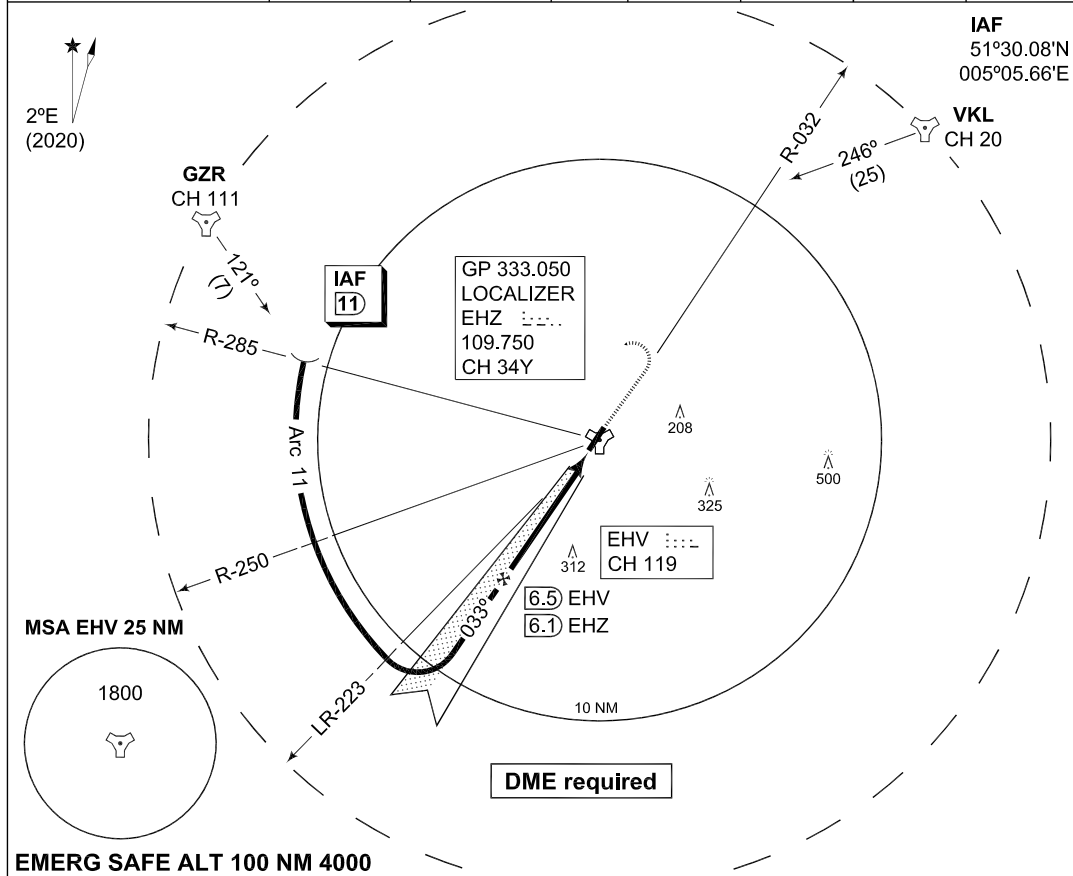


CATEGORY	C	D	E
S-ILS 03	274 -800 200 (200-0.8)		288 -800 214 (300-0.8)
S-LOC 03	420 -800 346 (400-0.8)	420 -1200 346 (400-1.2)	
CIRCLING	NOT AUTHORIZED		

CHANGES: MSA RNLAF 09 SEP 2021

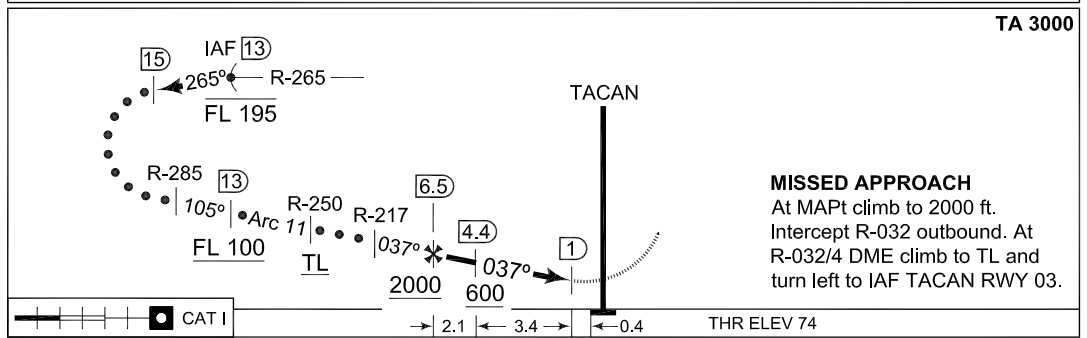
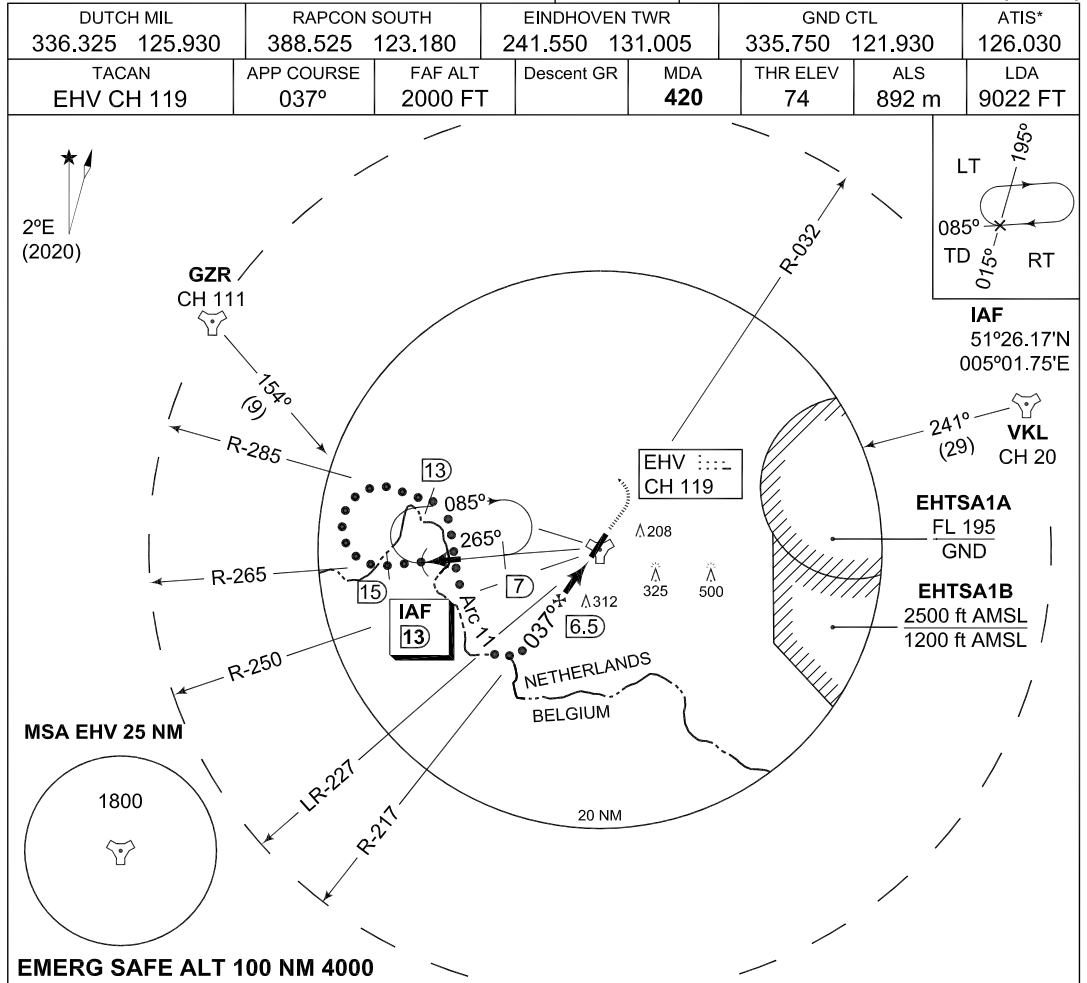
MIPS INSTRUMENT APPROACH CHART **ILS Z or LOC RWY 03 EINDHOVEN (EHEH)**

DUTCH MIL 336.325 125.930		RAPCON SOUTH 388.525 123.180		EINDHOVEN TWR 241.550 131.005		GND CTL 335.750 121.930		ATIS* 126.030
LOCALIZER / DME EHZ 109.750 / CH 34Y		APP COURSE 033°	FAF ALT 2000 FT	GS 3°	DA SEE CAT	THR ELEV 74	ALS 892 m	LDA 9022 FT



CATEGORY	A	B	C	D	E
S-ILS 03	274 -800 200 (200-0.8)				288 -800 214 (300-0.9)
S-LOC 03	420 -800 346 (400-0.8)		420 -1200 346 (400-1.2)		
CIRCLING	NOT AUTHORIZED				

MIPS INSTRUMENT APPROACH CHART **HI-TACAN RWY 03 EINDHOVEN (EHEH)**



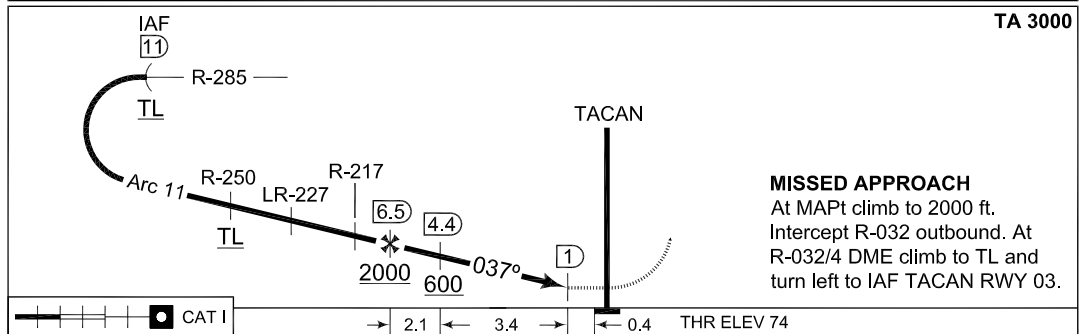
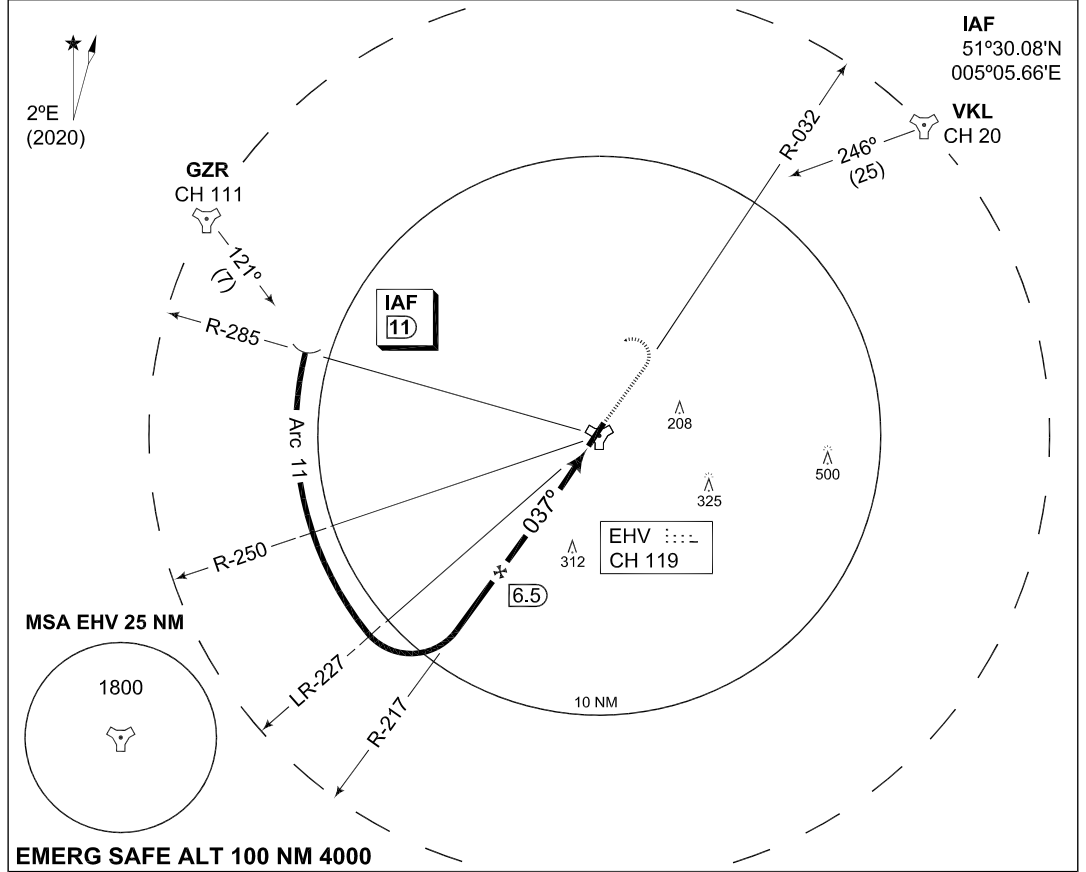
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">CATEGORY</td> <td style="width: 50%; text-align: center;">C</td> </tr> <tr> <td style="width: 50%;">S-TACAN 03</td> <td style="width: 50%; text-align: center;">420 -800 346 (400-0.8)</td> </tr> <tr> <td style="width: 50%;">CIRCLING</td> <td style="width: 50%; text-align: center;">NOT AUTHORIZED</td> </tr> </table>	CATEGORY	C	S-TACAN 03	420 -800 346 (400-0.8)	CIRCLING	NOT AUTHORIZED	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">CATEGORY</td> <td style="width: 50%; text-align: center;">D</td> </tr> <tr> <td style="width: 50%;">S-TACAN 03</td> <td style="width: 50%; text-align: center;">420 -1200 346 (400-1.2)</td> </tr> <tr> <td style="width: 50%;">CIRCLING</td> <td style="width: 50%; text-align: center;">NOT AUTHORIZED</td> </tr> </table>	CATEGORY	D	S-TACAN 03	420 -1200 346 (400-1.2)	CIRCLING	NOT AUTHORIZED	
CATEGORY	C														
S-TACAN 03	420 -800 346 (400-0.8)														
CIRCLING	NOT AUTHORIZED														
CATEGORY	D														
S-TACAN 03	420 -1200 346 (400-1.2)														
CIRCLING	NOT AUTHORIZED														

CHANGES: MSA
MIPS

RNLAf 09 SEP 2021

MIPS INSTRUMENT APPROACH CHART **TACAN RWY 03 EINDHOVEN (EHEH)**

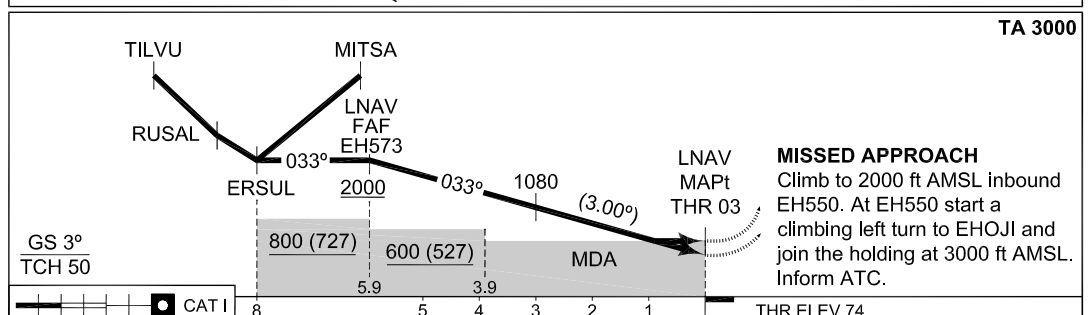
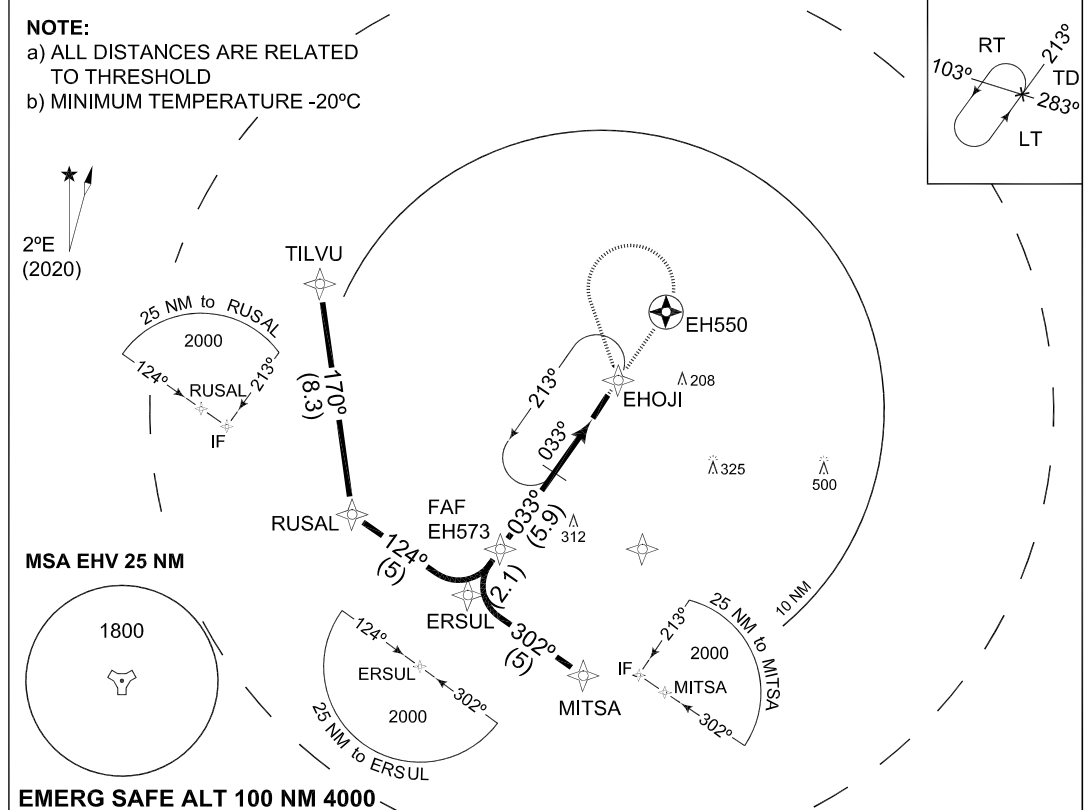
DUTCH MIL 336.325 125.930		RAPCON SOUTH 388.525 123.180		EINDHOVEN TWR 241.550 131.005		GND CTL 335.750 121.930		ATIS* 126.030	
TACAN EHV CH 119		APP COURSE 037°		FAF ALT 2000 FT		Descent GR 5.24%		MDA 420	
						THR ELEV 74		ALS 892 m	
								LDA 9022 FT	



	CATEGORY	A	B	C	D	E
CHANGES: MSA MIPS	S-TACAN 03	420 -800 346 (400-0.8)			420 -1200 346 (400-1.2)	
	CIRCLING	NOT AUTHORIZED				

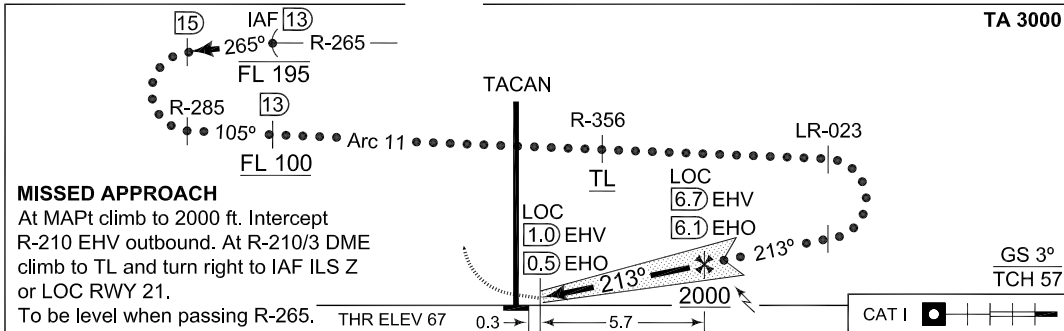
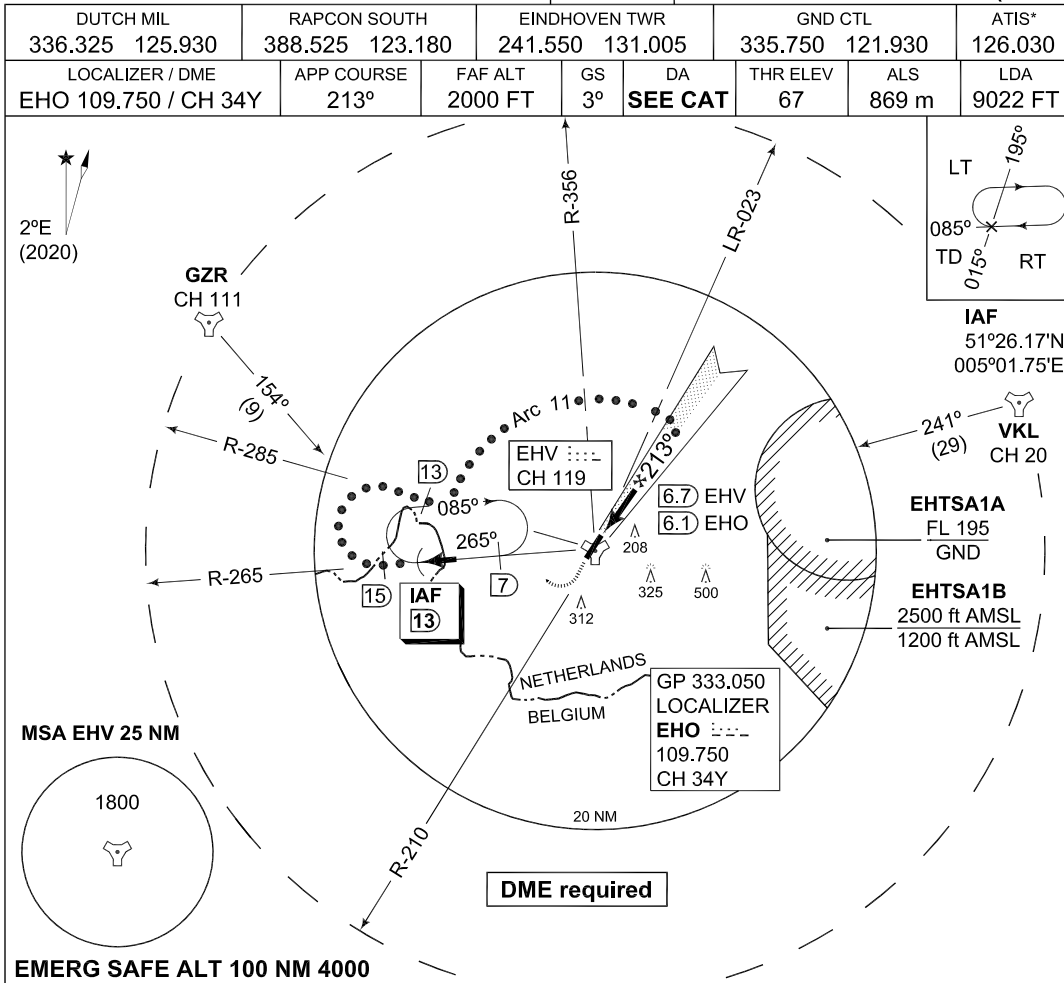
PANS OPS INSTRUMENT APPROACH CHART **RNP Z RWY 03 EINDHOVEN (EHEH)**

DUTCH MIL 336.325 125.930		RAPCON SOUTH 388.525 123.180		EINDHOVEN TWR 241.550 131.005		GND CTL 335.750 121.930		ATIS* 126.030	
EGNOS CHANNEL 89942 E03A		APP COURSE 033°		FAF ALT 2000 FT		Descent GR 5.24% / 3°		MDA 420	
						DA SEE CAT		THR ELEV 74	
						ALS 892 m		LDA 9022 FT	



CATEGORY		A		B		C		D	
EU-OPS	DA(H) LPV	274 -550 200 (200-0.8/1.2)						278 -550 204 (300-0.8/1.2)	
	DA(H) LNAV / VNAV	324 -550 250 (300-0.8/1.3)						329 -600 255 (300-0.8/1.3)	
	MDA(H) LNAV	420 -900 346 (400-0.9/1.6)							
IAWP	TILVU	51°31.07'N	005°06.23'E	FAWP	EH573	51°21.63'N	005°16.46'E		
WP	RUSAL	51°22.85'N	005°08.09'E	MAWP	THR 03	51°26.45'N	005°21.85'E		
IAWP	MITSA	51°17.13'N	005°21.16'E	MATWP	EH550	51°30.21'N	005°26.06'E		
IWP	ERSUL	51°19.91'N	005°14.54'E	HF	EHOJI	51°28.07'N	005°23.69'E		

MIPS INSTRUMENT APPROACH CHART **HI-ILS or LOC RWY 21 EINDHOVEN (EHEH)**



CATEGORY	C	D	E
S-ILS 21	267-800 200 (200-0.8)		275-800 208 (300-0.8)
S-LOC 21	500-1200 433 (500-1.2)	500-1600 433 (500-1.6)	
CIRCLING	NOT AUTHORIZED		

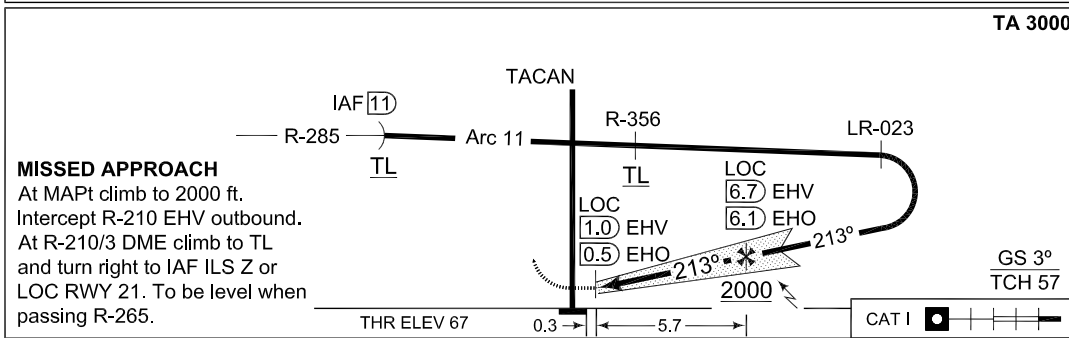
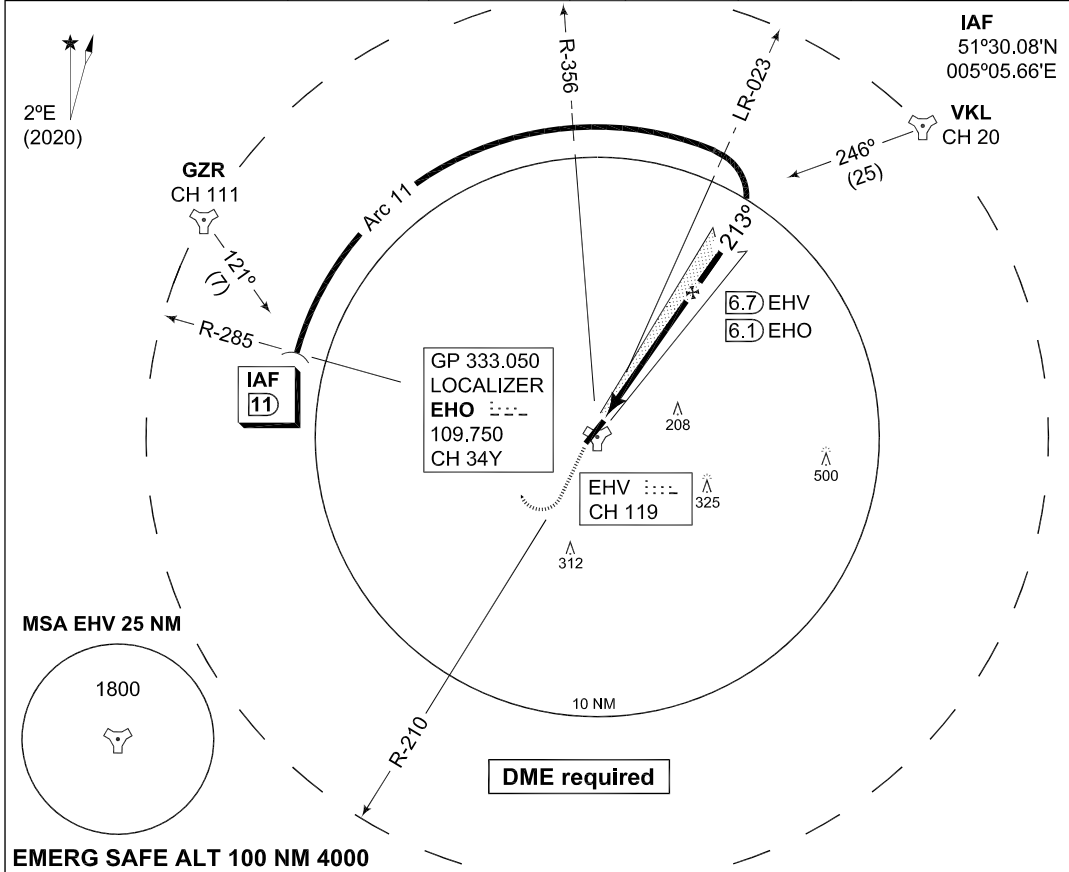
CHANGES: MSA

MIPS

RNLAF 09 SEP 2021

MIPS INSTRUMENT APPROACH CHART **ILS Z or LOC RWY 21 EINDHOVEN (EHEH)**

DUTCH MIL 336.325 125.930	RAPCON SOUTH 388.525 123.180	EINDHOVEN TWR 241.550 131.005	GND CTL 335.750 121.930	ATIS* 126.030
LOCALIZER / DME EHO 109.750 / CH 34Y	APP COURSE 213°	FAF ALT 2000 FT	GS 3°	DA SEE CAT
		THR ELEV 67	ALS 869 m	LDA 9022 FT



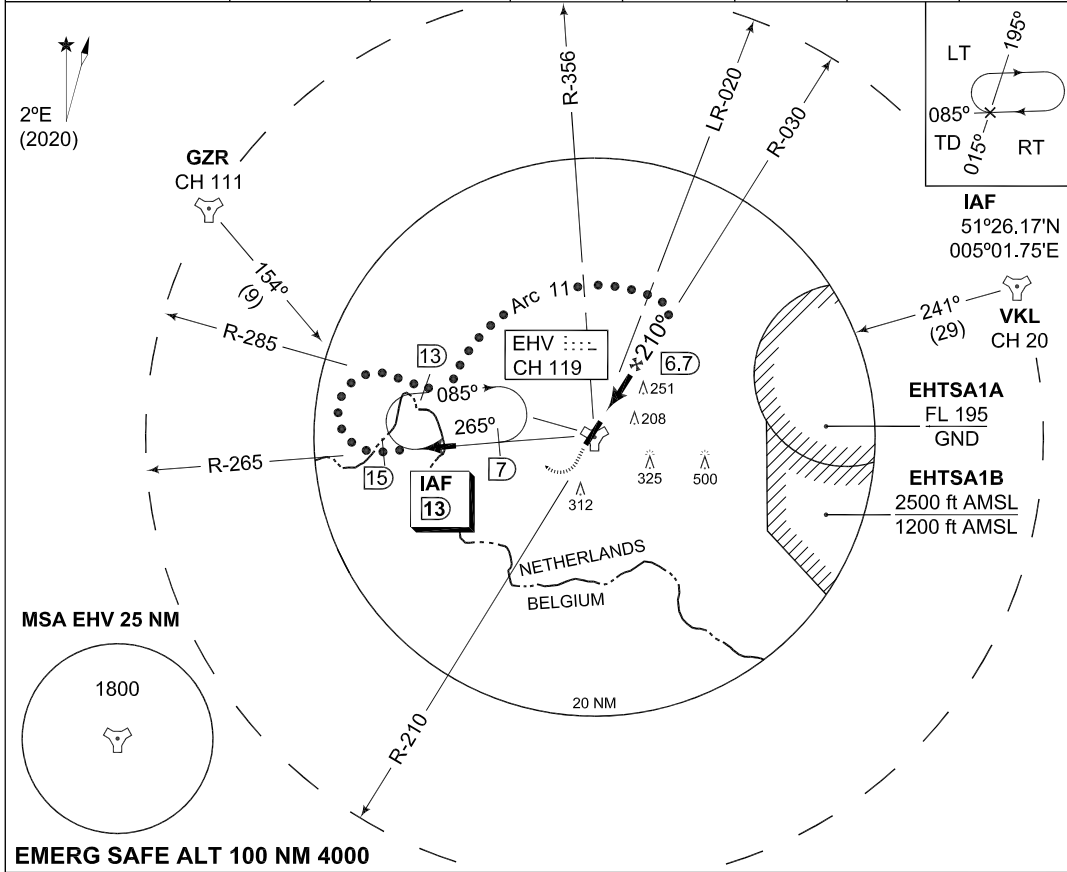
CATEGORY	A	B	C	D	E
S-ILS 21	267 -800 200 (200-0.8)				275 -800 208 (300-0.8)
S-LOC 21	500 -800 433 (500-0.8)	500 -1200 433 (500-1.2)	500 -1600 433 (500-1.6)		
CIRCLING	NOT AUTHORIZED				

CHANGES: MSA MIPS

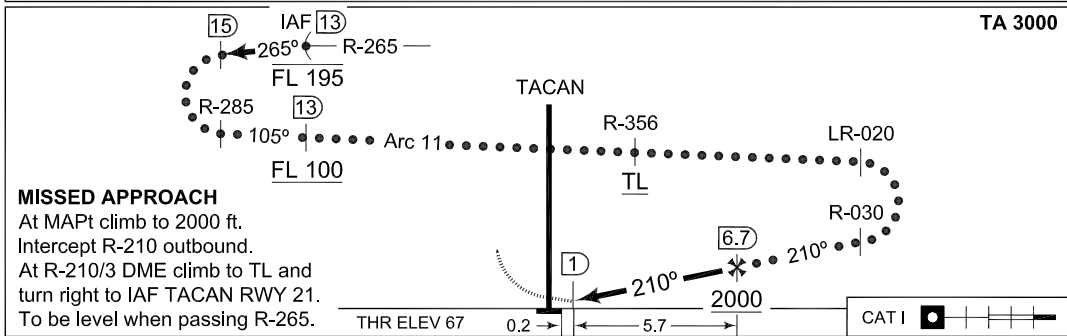
RNLAF 09 SEP 2021

MIPS INSTRUMENT APPROACH CHART **HI-TACAN RWY 21 EINDHOVEN (EHEH)**

DUTCH MIL 336.325 125.930		RAPCON SOUTH 388.525 123.180		EINDHOVEN TWR 241.550 131.005		GND CTL 335.750 121.930		ATIS* 126.030
TACAN EHV CH 119		APP COURSE 210°	FAF ALT 2000 FT	Descent GR 5.24%	MDA 500	THR ELEV 67	ALS 869 m	LDA 9022 FT



EMERG SAFE ALT 100 NM 4000



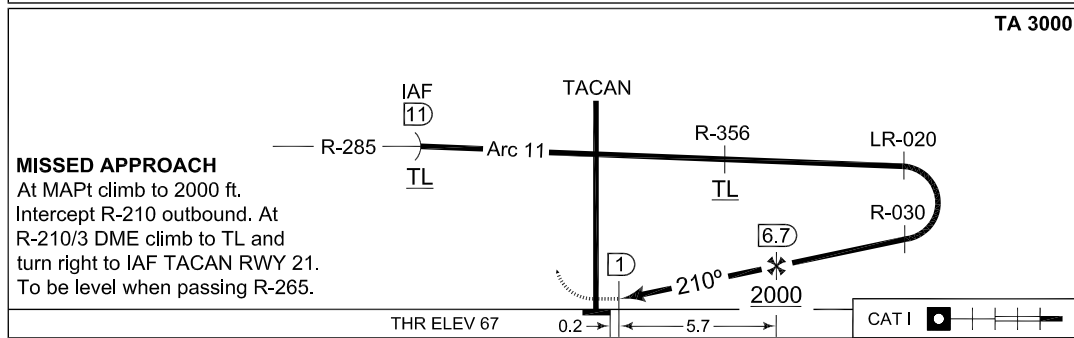
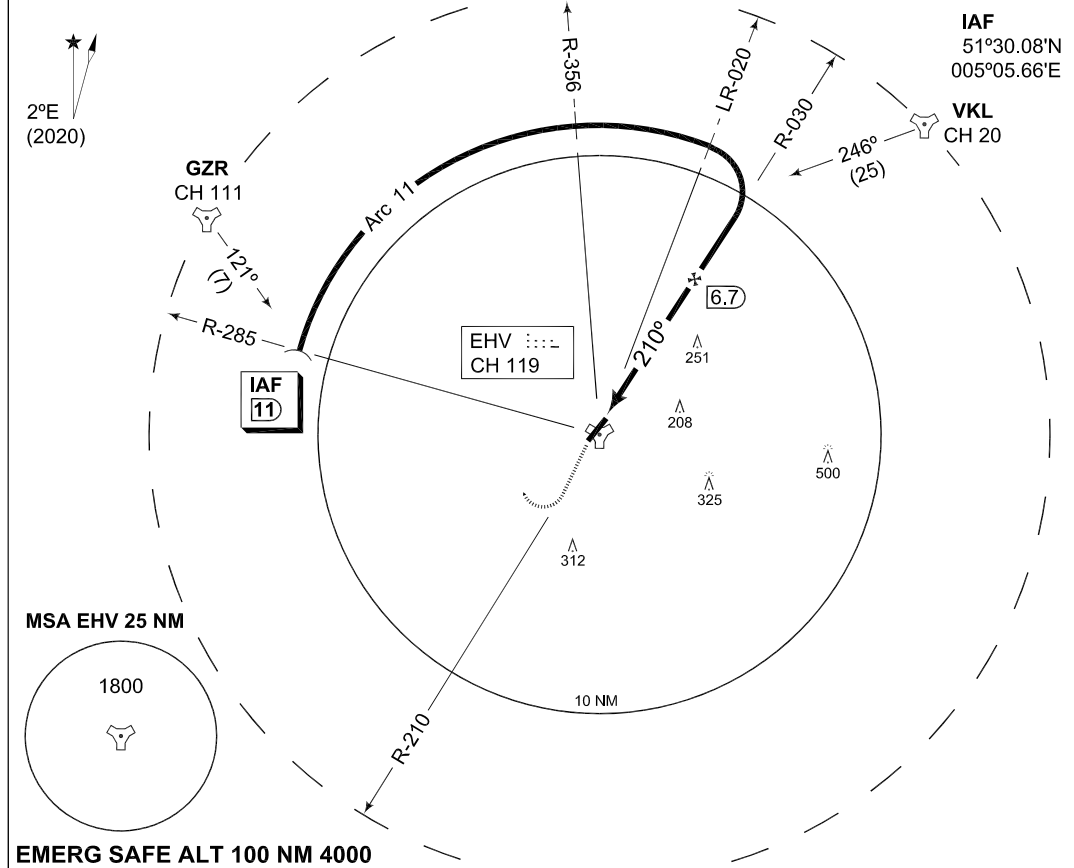
CATEGORY	C	D	E
S-TACAN 21	500 -1200 433 (500-1.2)	500 -1600 433 (500-1.6)	
CIRCLING	NOT AUTHORIZED		

CHANGES: MSA
MIPS

RNLAf 09 SEP 2021

MIPS INSTRUMENT APPROACH CHART **TACAN RWY 21 EINDHOVEN (EHEH)**

DUTCH MIL 336.325 125.930		RAPCON SOUTH 388.525 123.180		EINDHOVEN TWR 241.550 131.005		GND CTL 335.750 121.930		ATIS* 126.030	
TACAN EHV CH 119		APP COURSE 210°		FAF ALT 2000 FT		Descent GR 5.24%		MDA 500	
						THR ELEV 67		ALS 869 m	
								LDA 9022 FT	



CATEGORY	A	B	C	D	E
S-TACAN 21	500 -800 433 (500-0.8)		500 -1200 433 (500-1.2)	500 -1600 433 (500-1.6)	
CIRCLING	NOT AUTHORIZED				

CHANGES: MSA

MIPS

RNLAF 09 SEP 2021

**PANS OPS
INSTRUMENT APPROACH CHART**

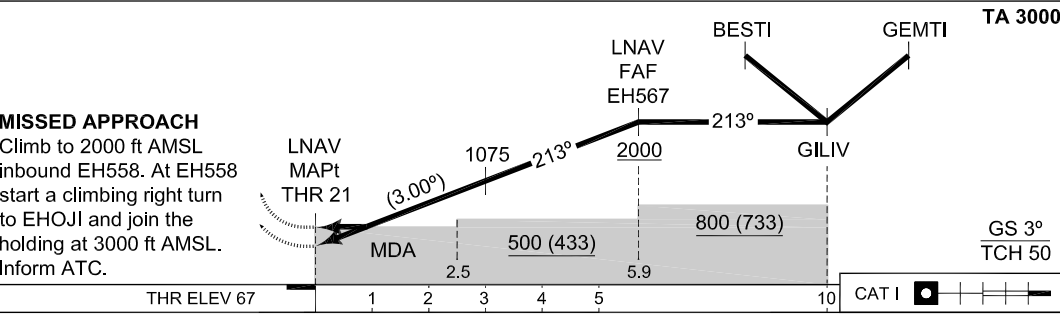
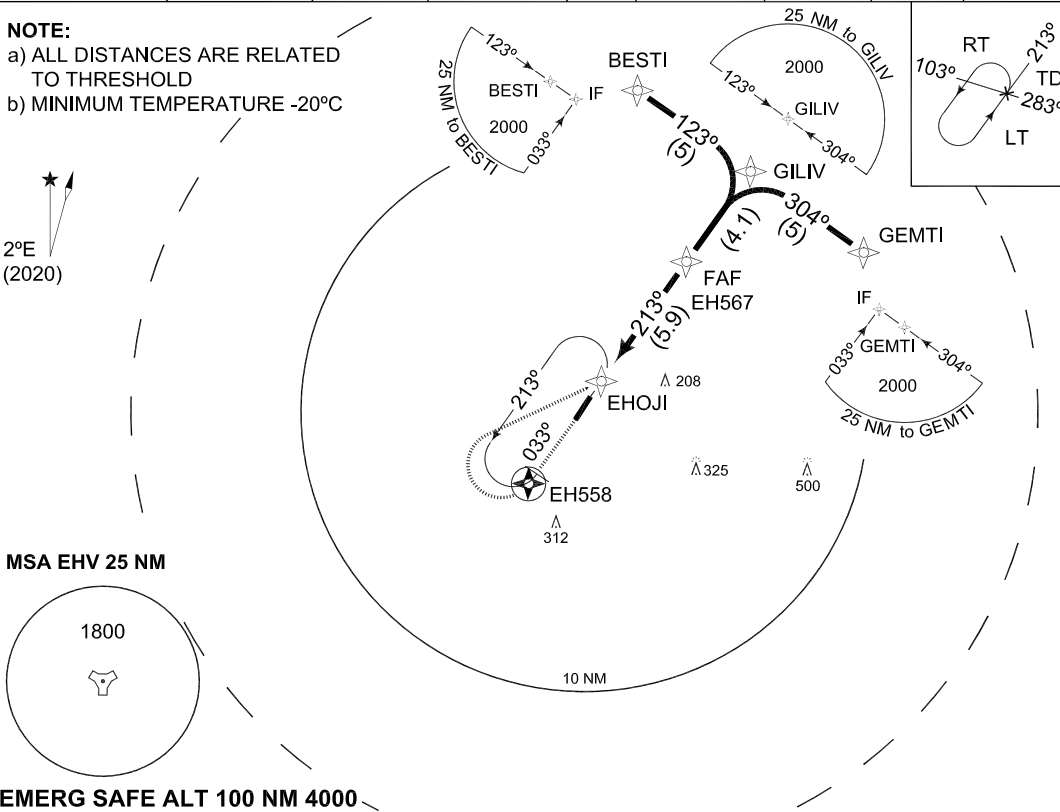
**RNP Z RWY 21
EINDHOVEN (EHEH)**

AD ELEV 74

DUTCH MIL 336.325 125.930		RAPCON SOUTH 388.525 123.180		EINDHOVEN TWR 241.550 131.005		GND CTL 335.750 121.930		ATIS* 126.030	
EGNOS CHANNEL 42264 E21A	APP COURSE 213°	FAF ALT 2000 FT	Descent GR 5.24% / 3°	MDA 450	DA SEE CAT	THR ELEV 67	ALS 869 m	LDA 9022 FT	

NOTE:

- a) ALL DISTANCES ARE RELATED TO THRESHOLD
- b) MINIMUM TEMPERATURE -20°C



CATEGORY		A	B	C	D
EU-OPS	DA(H) LPV	278-550 211 (300-0.8/1.2)	288-550 221 (300-0.8/1.2)	298-550 231 (300-0.8/1.2)	308-550 241 (300-0.8/1.3)
	DA(H) LNAV / VNAV	334-600 267 (300-0.8/1.3)	344-600 277 (300-0.8/1.3)	354-650 287 (300-0.8/1.4)	364-650 297 (300-0.8/1.4)
	MDA(H) LNAV	450-1100 383 (400-1.1/1.8)			

IAWP	BESTI	51°38.54'N	005°25.66'E	MAWP	THR 21	51°27.56'N	005°23.09'E
IAWP	GEMTI	51°32.80'N	005°38.77'E	MATWP	EH558	51°24.48'N	005°19.65'E
IWP	GILIV	51°35.74'N	005°32.29'E	HF	EHOJI	51°28.07'N	005°23.69'E
FAWP	EH567	51°32.40'N	005°28.53'E				

CHANGES: MSA

RNLAF 09 SEP 2021

PART 3 – AERODROMES (AD)

AD 2.

**AD 2. AERODROMES
GILZE RIJEN**

GILZE RIJEN

EHGR AD 2.1 Aerodrome location indicator and name

EHGR - Gilze-Rijen

EHGR AD 2.2 Geographical and administrative data

1	ARP	51°34'02.56"N 004°55'54.61"E
2	Direction and distance from city	280° MAG/6.1 NM TILBURG
3	Elevation/Reference temperature	+ 49 ft AMSL/22.1° C (JUL)
4	MAG VAR/Annual change	1°41'E (JAN 2020)/11'E
5	AD operating authority Postal address Visitors' address Telephone Telefax AFTN	RNLAF DHC Vliegbasis Gilze-Rijen MPC 89A P.O. Box 8762 4820 BB Breda Rijksweg 121 5121 RD Rijen +31(0)161 296523 +31(0)161 296525 EHGRZTZX
6	Types of TFC permitted (IFR/VFR)	IFR/VFR
7	Remarks	Nil

EHGR AD 2.3 Operational hours

1	AD OPR HR	MON/FRI 0800/1530 (0700/1430)
2	Customs and immigration	30 MIN PN
3	Health and sanitation	HO
4	AIS Briefing office	See 2.23
5	ATS Reporting Office (ARO)	See 2.23
6	MET Briefing Office	HO
7	ATS	HO
8	Fuelling	HO
9	Handling	NIL
10	Security	HO
11	De-icing	Nil
12	Remarks	PPR 24 HRS See 2.23 OPR HR regulary MON/THU until 2200 (2100)

EHGR AD 2.4 Handling services and facilities

1	Cargo-handling facilities	Yes
2	Fuel/oil types	F-34, F-18, H-515
3	Fuelling facilities/capacity	No limitations
4	Oxygen	Nil
5	De-icing facilities/type	Nil
6	Starting units	DSA 150, DSA 600, JAS
7	Hangar space for visiting ACFT	Limited
8	Repair facilities	AH64, AS32, H47
9	Remarks	Nil

EHGR AD 2.5 Passenger facilities

1	Remain overnight	AVBL O/R
2	Medical facilities	Medical officer, ambulance
3	Remarks	Nil

EHGR AD 2.6 Rescue and fire fighting services

1	AD category for fire fighting	NATO CAT 7 NATO H-3
2	Remarks	Nil

EHGR AD 2.7 Seasonal availability - clearing

1	Seasonal availability	All seasons
2	Snow removal equipment	Yes
3	Remarks	Caution advised in winter during ice conditions

EHGR AD 2.8 Aprons, taxiways and check locations/positions data

1	Apron surface and strength	Concrete, 298: PCN 47 R/C/W/T 300: PCN 36 R/C/W/T 301: PCN 27 R/C/W/T Ref: PCN 27 R/C/W/T
2	TWY width, surface and strength	Width 39 ft, tarmac/concrete, PCN 45 R/C/W/T
3	Remarks	Nil

EHGR AD 2.9 Surface movement guidance and control system and markings

According STANAG 3158		
1	Remarks	Nil

EHGR AD 2.10 Aerodrome obstacles

Obstacles along RWYs and TWYs are not conform to standard obstacle clearance requirements. Further details in Aerodrome Chart.

EHGR AD 2.11 Meteorological information provided

1	Associated MET Office	Gilze-Rijen
2	Hours of service MET Office outside hours	HO Joint Meteorological Group
3	Office responsible for TAF preparation Periods of validity	Joint Meteorological Group 12 hrs
4	Type of landing forecast Interval of issuance	TREND Every 30 min during opr hrs
5	Flight documentation Language(s) used	Reports, forecasts and charts. English and Dutch.
6	Charts and other information AVBL for briefing or consultation	GSA, GSP, LGF, Cross section, Upperair forecasts, NVG, Radar- and Satellite Images
7	Supplementary equipment AVBL for providing information	PBS (pilot briefing system)
8	Remarks	Tel EHGR 0161-296552 or mail Afdeling.Meteo.GilzeRijen@mindef.nl Tel JMG 0164-693111 or mail JMG.WX.PLANNING@mindef.nl

EHGR AD 2.12 Runway physical characteristics

1	RWY dimensions/a-gear	See Aerodrome Chart. Values in ft.
2	RWY surface	Tarmac/concrete
3	RWY strength	PCN: RWY 10: 55 F/A/W/T RWY 28: 55 F/A/W/T RWY 02: 55 F/A/W/T RWY 20: 55 F/A/W/T

EHGR AD 2.13 Declared distances

See Aerodrome Chart. Values in ft.

EHGR AD 2.14 Approach and runway lighting

According STANAG 3316		
1	Approach lighting	RWY 28: CAT I. 780 m RWY 10: SALS. 420 m RWY 20: Nil RWY 02: Nil
2	RWY lighting	RWY 10/28 VCL/ VHI, RWY 02/20 VHI
3	PAPI	Situated on the left side of RWY 10/28
4	Remarks	Nil

EHGR AD 2.15 Other lighting, secondary power supply

1	LDI	Nil
2	TWY edge lighting	VB
3	Emergency RWY lighting	Nil
4	Emergency TWY edge lighting	Retroreflective markers
5	Secondary power supply/switch-over	AVBL, switch over time 15 seconds
6	Remarks	Nil

EHGR AD 2.16 Helicopter landing area

1	Location	Centre of the north-west corner RWY 10/28 and 02/20
2	Marking	Daylight marking
3	Lighting	Yes, non NATO standard
4	Remarks	Nil

EHGR AD 2.17 Air traffic services airspace

1	Designation and lateral limits	Gilze-Rijen control zone 51°29'58.19"N 004°47'48.26"E; along clockwise arc (radius 6.5 NM, centre 51°34'02.56"N 004°55'54.61"E) to 51°28'56.13"N 005°02'20.09"E; along Dutch-Belgian border to 51°28'14.92"N 005°00'36.24"E; along clockwise arc (radius 6.5 NM, centre 51°34'02.56"N 004°55'54.61"E) to 51°28'32.16"N 004°50'23.92"E; along Dutch-Belgian border to point of origin.
2	Vertical limits	GND to 3000 ft AMSL
3	Airspace classification	D
4	ATS unit call sign Language(s)	Contact initially Gilze-Rijen TWR. English
5	Transition altitude	IFR: 3000 ft AMSL; VFR: 3500 ft AMSL
6	Remarks	Nil

EHGR AD 2.18 Air traffic services communication facilities

STATION/ SERVICE	CALL SIGN OR IDENTIFICATION	FREQUENCY MHz	HOURS	REMARKS
1	2	3	4	5
	As appropriate	121.500 243.000	HO	Emergency FREQ for all services
TWR	Gilze-Rijen Tower	125.330 ^{*)} 122.100 277.350 ^{*)} 257.800	HO	^{*)} Primary FREQ
GND CTL	Gilze-Rijen Ground	123.300 278.125	HO	
APP	Rapcon West	123.580 281.475	HO	Radar equipped
	Gilze Arrival	123.580 359.975	HO	Through APP
	Gilze Monitor	128.990	HO	Nieuw Milligen TMA D1

EHGR AD 2.19 Radio navigation and landing aids

FACILITY	ID	CHANNEL FREQ.	HOURS	CO-ORD.	RANGE/ ALTITUDE	REMARKS
1	2	3	4	5	6	7
TACAN	GZR	CH 111X	H24	51°33'57.73"N 004°56'00.68"E	40 NM/ 25000 ft	FREQ protected
ILS LOCALIZER	GZO	111.900	H24	51°34'11.49"N 004°54'34.82"E		ILS-antenna 55 ft AMSL
GLIDEPATH		331.100		51°33'54.24"N 004°56'42.50"E		
DME		CH 56X	H24	51°33'54.24"N 004°56'42.50"E		

EHGR AD 2.20 Local traffic regulations

Glider- and Light ACFT flying

Glider- and light ACFT flying outside OPR HR SR/SS.

EHGR AD 2.21 Noise abatement procedures

Noise abatement procedures in the CTR. Except for tactical entries during rejoining and landing-procedures flying with a speed of 300 KTS or more is forbidden. Unless safety- or operational reasons dictate otherwise the use of afterburner is prohibited. No practice-approaches are to be made after 2100 (2000) HRS. VFR and IFR departure/approach procedures are projected in such a way that noise hindrance is minimized as much as possible.

EHGR AD 2.22 Flight procedures

IFR procedures

The IAP and SID procedures are established in accordance with STANAG 3759 and AATCP-1.

VFR procedures

APPROACH PROCEDURES FOR JET ACFT (for RWY 10/28 only):

Approach at 2000 ft AMSL from the NE intercepting inbound R-045 GZR TACAN. Report at 6.5 DME (reporting point 'the Kets'). Maintain 2000 ft AMSL and proceed to overhead GZR TACAN. For RWY 28 turn left to IP, followed by a L/H circuit at 1500 ft AMSL. For RWY 10 turn right to IP, followed by a R/H circuit at 1500 ft AMSL.

DEPARTURE PROCEDURES FOR JET ACFT:

RWY 28: Maintain RWY heading until reaching 500 ft AMSL. Do not exceed 1000 ft AMSL over the RWY. Turn left to 240° magnetic climbing to 1500 ft AMSL; maintain heading until abeam Ulvenhout.

RWY 10: Maintain RWY heading until reaching 500 ft AMSL. Do not exceed 1000 ft AMSL over the RWY. Turn right to 145° magnetic climbing to 1500 ft AMSL; maintain heading until abeam Goirle.

LIGHT ACFT AND CONVENTIONAL ACFT

Approach and depart the CTR at least at 500 ft AMSL. Circuit instructions will be provided by ATC.

HELICOPTERS

For noise abatement and separation of inbound and outbound helicopters, six corridors have been established. The corridors are established along multiple ground reference points, one of which is an IP(Initial point). The dimensions of the corridors are: Width: 500 metres to either side of the line between the reference points. All traffic shall proceed on the right-hand side of the (imaginary line between the) reference points, to achieve a safe flow of inbound and outbound traffic altitude: 1000 ft AMSL. Altitude deviations shall be requested. When departing from or arriving at the airfield via one of the corridors, the overflying of built-up areas has to be avoided at all times.

An IP is a reference point and should NOT be overflown directly. An R/T call 'passing IP' is mandatory when abeam the IP. IP altitude for all helicopters is 1000 ft AMSL.

Corridor W2 (West 2)			
Reference point	IP NW (North-West)	W1	W2
51°35'07.00"N 004°53'35.00"E	51°36'22.00"N 004°52'16.00"E	51°37'11.00"N 004°49'50.00"E	51°37'44.00"N 004°46'04.00"E
	The most northern tip of a pond	Road intersection	Canal perpendicular to the road

Corridor N1 (North 1)		
Reference point	IP NW (North-West)	N1
51°35'07.00"N 004°53'35.00"E	51°36'22.00"N 004°52'16.00"E	51°40'21.73"N 004°55'29.96"E
	The most northern tip of a pond	Water intersection

Corridor N2 (North 2)		
Reference point	IP NE (North-East)	N2
51°34'45.00"N 004°57'33.00"E	51°36'16.00"N 004°58'12.00"E	51°40'22.09"N 004°59'58.94"E
	The north-easterly corner of the tree line just south of the Wilhelminakanaal	Demolition company

Corridor E (East)		
Reference point	IP NE (North-East)	E
51°34'45.00"N 004°57'33.00"E	51°36'16.00"N 004°58'12.00"E	51°38'05.03"N 005°03'38.12"E
	The north-easterly corner of the tree line just south of the Wilhelminakanaal	T-junction parallel road next to the N261

Corridor SE (South-East)		
Reference point 1	IP SE (South-East)	Reference point 2
51°33'20.00"N 004°57'53.00"E	51°31'09.00"N 005°00'42.00"E	51°29'51.00"N 005°03'11.00"E
	Bend in the road 500 meters southwest of Riel	

Corridor SW (South-West)	
Reference point	IP SW (South-West)
51°33'28.00"N 004°53'39.00"E	51°31'54.00"N 004°49'33.00"E
	Bend in the road 2 km southeast of Ulvenhout

EHGR AD 2.23 Additional information

AIS Briefing office facility and the ATS Reporting Office (ARO) is only available through the Flight Data and Notam Office (FDNO) located at MilATCC Schiphol.

Tel: +31(0)20 4062840

Tel: +31 (0)20 4062841

E-mail: aocs.fdns@mindef.nl

AFTN: EHMCZPZX

avlbl H24

PPR 24 HRS:for Prior Permission Request contact:

Operational and Co-ordination Centre

Tel: +31(0)161 296770

Fax: +31(0)161 296785

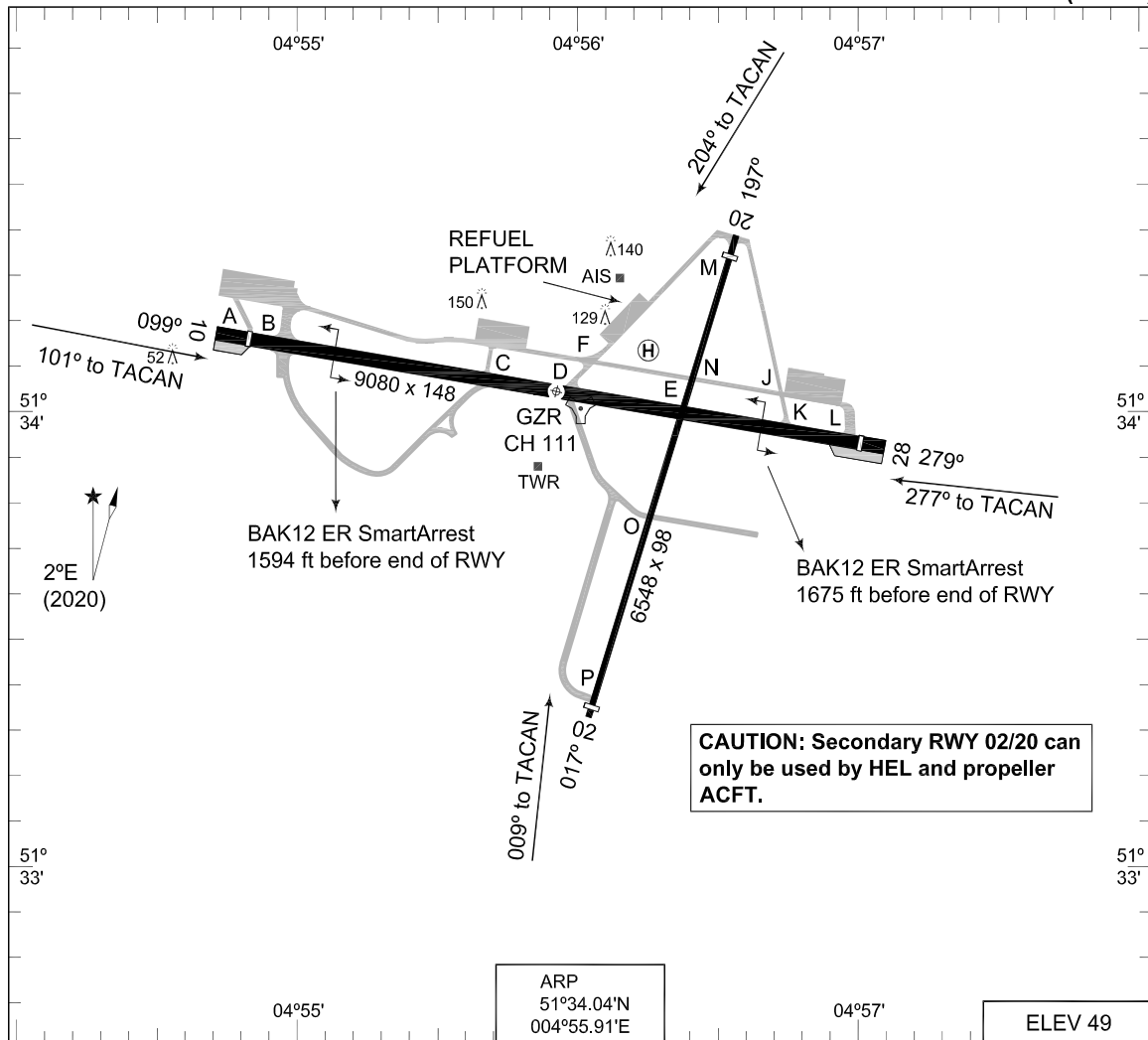
E-mail: dhc.sopp.occ@mindef.nl

EHGR AD 2.24 Charts related to an aerodrome

	Aerodrome Chart	EHGR AD 2-10
	Local map	EHGR AD 2-11
	MVA chart	EHGR AD 2-12
	Instrument departure chart GR1	EHGR AD 2-13
	Instrument departure chart GR3	EHGR AD 2-14
	Instrument approach chart COPTER TACAN 008	EHGR AD 2-15
	Instrument approach chart HI-TACAN RWY 10	EHGR AD 2-16
	Instrument approach chart TACAN RWY 10	EHGR AD 2-17
	Instrument approach chart COPTER TACAN 101	EHGR AD 2-18
	Instrument approach chart COPTER TACAN 204	EHGR AD 2-19
	Instrument approach chart ILS OR LOC RWY 28	EHGR AD 2-20
	Instrument approach chart HI-TACAN RWY 28	EHGR AD 2-21
	Instrument approach chart TACAN RWY 28	EHGR AD 2-22
	Instrument approach chart COPTER TACAN 277	EHGR AD 2-23

**MIPS
AERODROME CHART**

GILZE-RIJEN (EHGR)



ARP
51°34.04'N
004°55.91'E

ELEV 49

RWY	PCN	TORA	ASDA	TODA	LDA	PAPI	THR ELEV	THR PSN
28	55 F/W/A/T	9080	9080	9080	8806	3.0°	35	51°33.92'N 004°57.00'E
10	55 F/W/A/T	9080	9080	9080	8672	3.0°	41	51°34.16'N 004°54.82'E
20	55 F/W/A/T	6548	6548	6548	6181		36	51°34.31'N 004°56.51'E
02	55 F/W/A/T	6548	6548	6548	6249		48	51°33.39'N 004°56.03'E

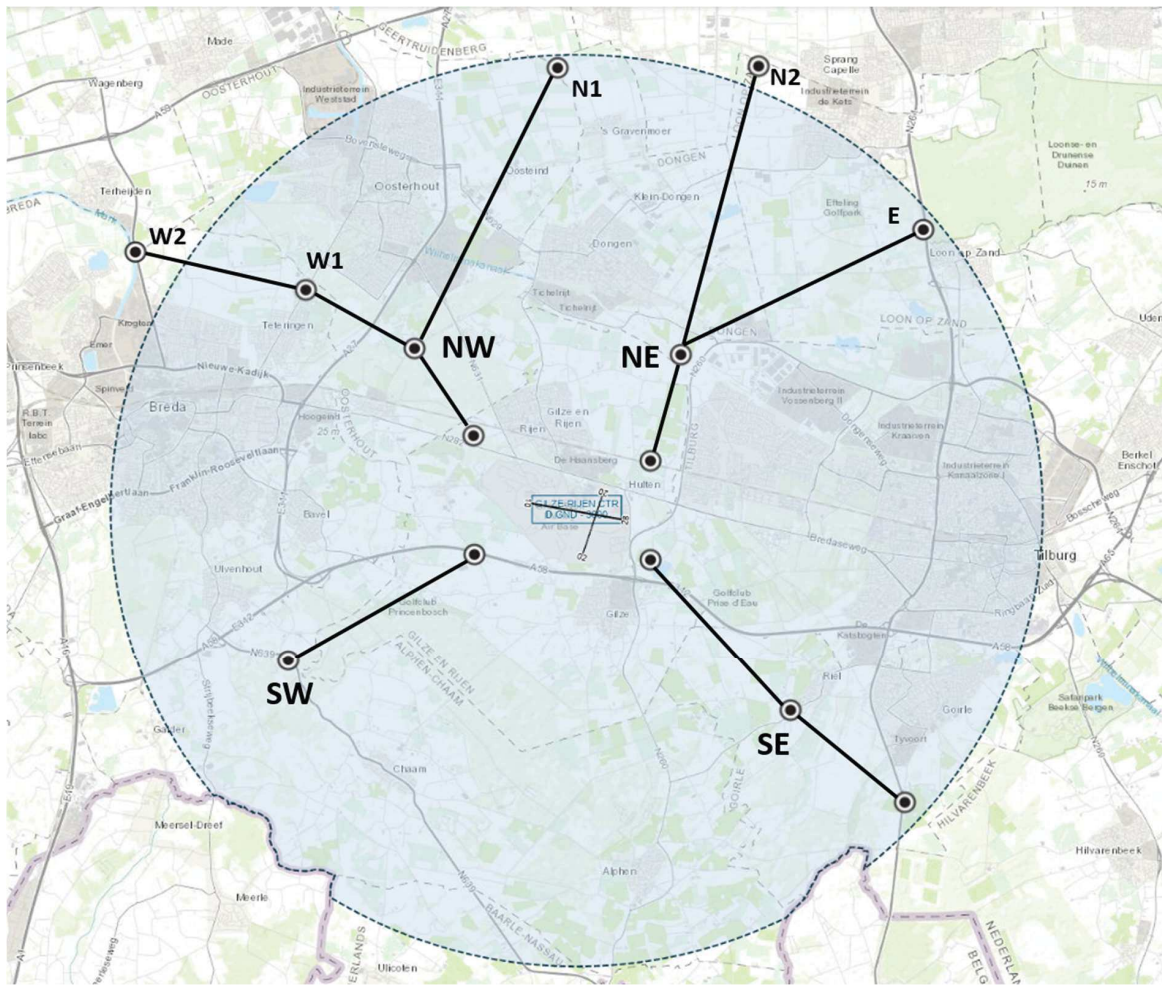
GILZE-RIJEN TWR 277.350 125.330 (Ground Control) 278.125 121.680
 GILZE-RIJEN ARRIVAL 359.975
 RAPCON WEST 399.725 123.580

PROC. CRITERIA	RWY	GS	TCH	OTCH	RPI	CAT	MINIMA CRITERIA	MINIMA

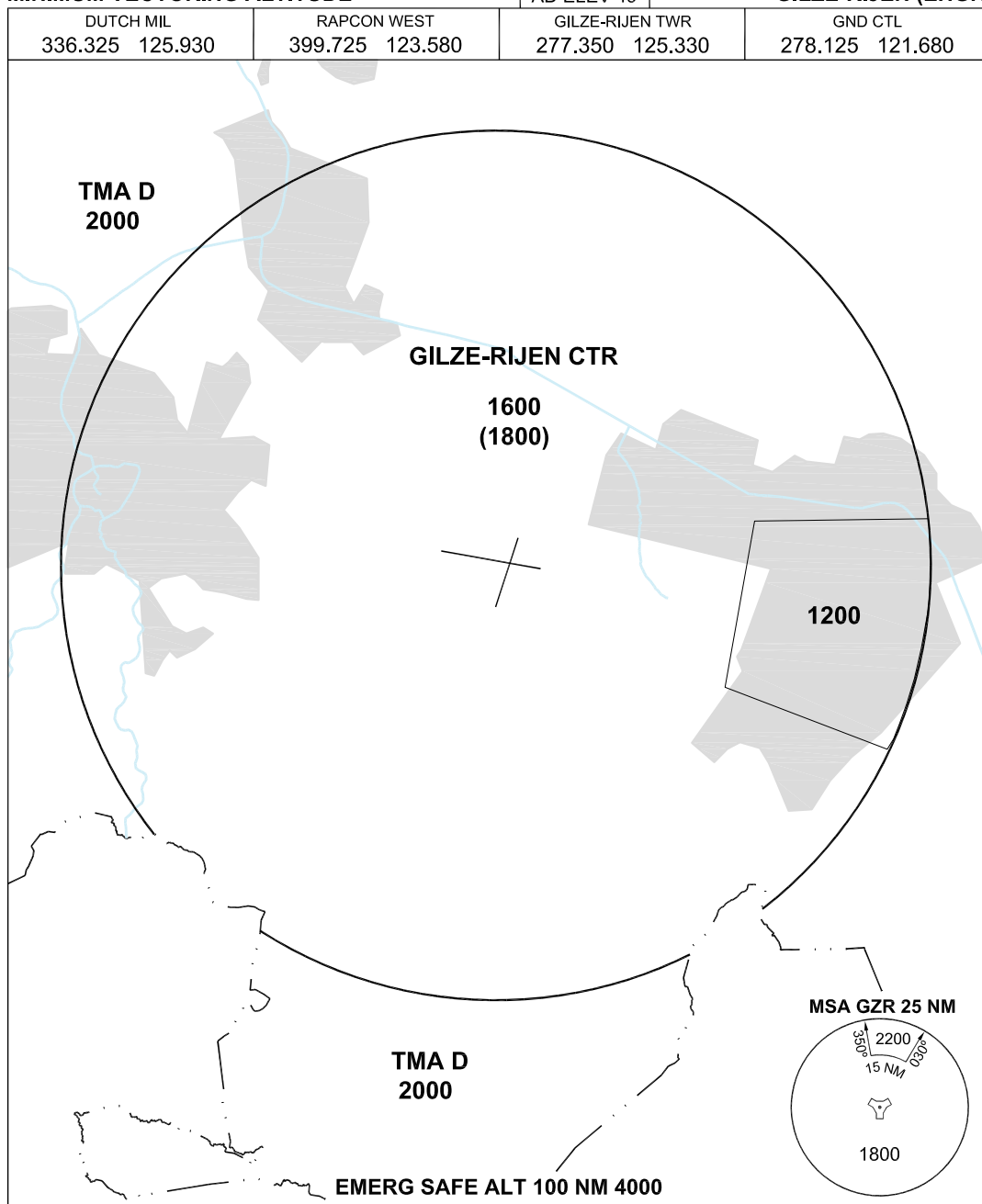
CHANGES: CABLES

RNLAF 04 NOV 2021

LOCAL MAP



MIPS **MINIMUM VECTORING ALTITUDE** AD ELEV 49 **MVA CHART**
GILZE-RIJEN (EHGR)



CHANGES: EDITORIAL

- THE ALTITUDE BETWEEN BRACKETS IS TO BE USED FOR THE CORRESPONDING SECTOR WHEN AIR TEMPERATURE AT AIRBASE ALTITUDE IS LOWER THAN -16°.
- ALTITUDES ONLY AVAILABLE IF THE RADAR COVERAGE PERMITS.

RNLAf 30 DEC 2021

**TERPS
INSTRUMENT DEPARTURE CHART**

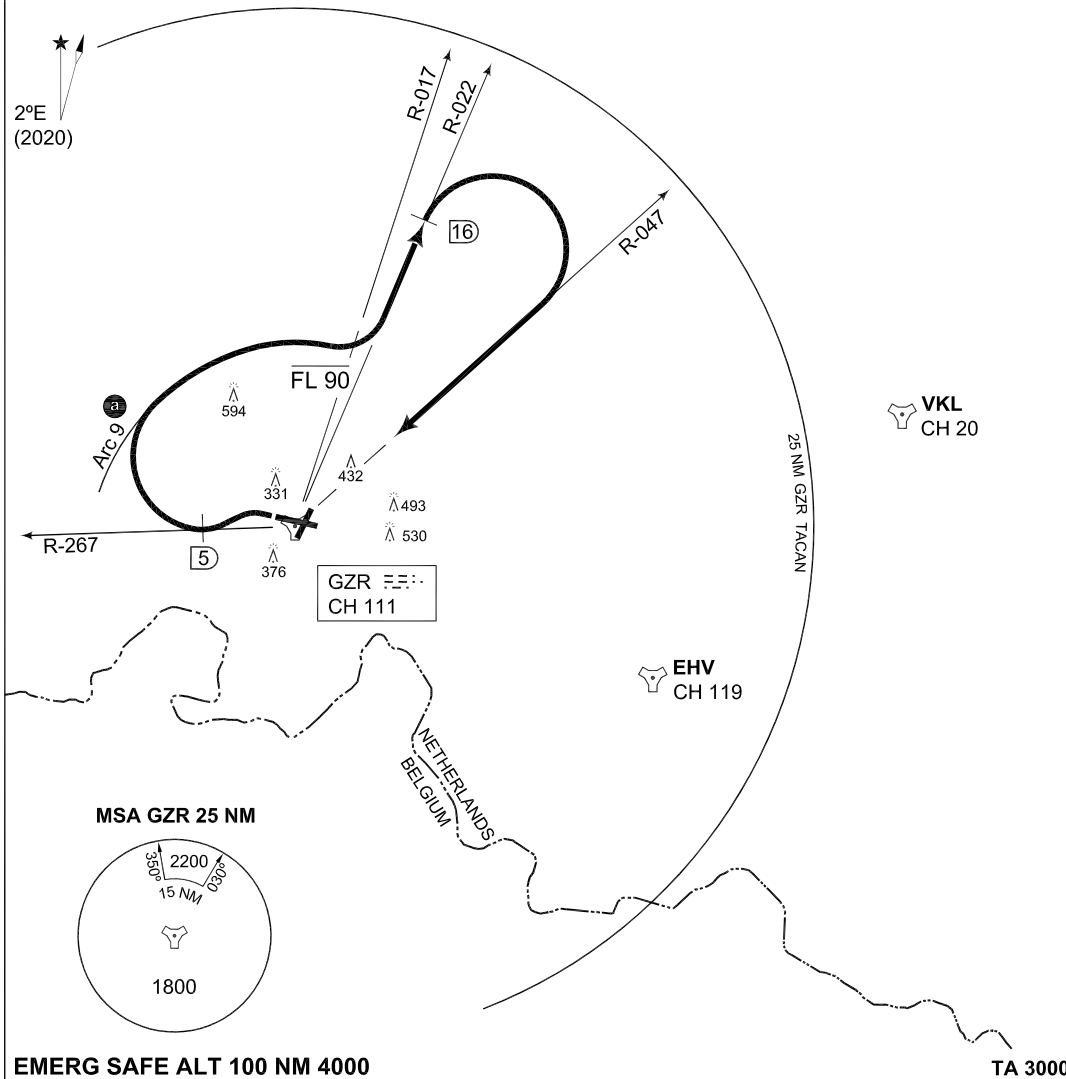
AD ELEV 49

**GR1
GILZE-RIJEN (EHGR)**

GND CTL 278.125 121.680		GILZE-RIJEN TWR 277.350 125.330		RAPCON WEST 399.725 123.580				DUTCH MIL 336.325 125.930			
				RWY	Knots	120	180	240	300	360	to
				28	V/V (fpm)	480	720	960	1200	1440	150 ft

NOTE:

ⓐ DO NOT EXCEED 10 DME



EMERG SAFE ALT 100 NM 4000 **TA 3000**

**GILZE-RIJEN 1
(RWY 28)**

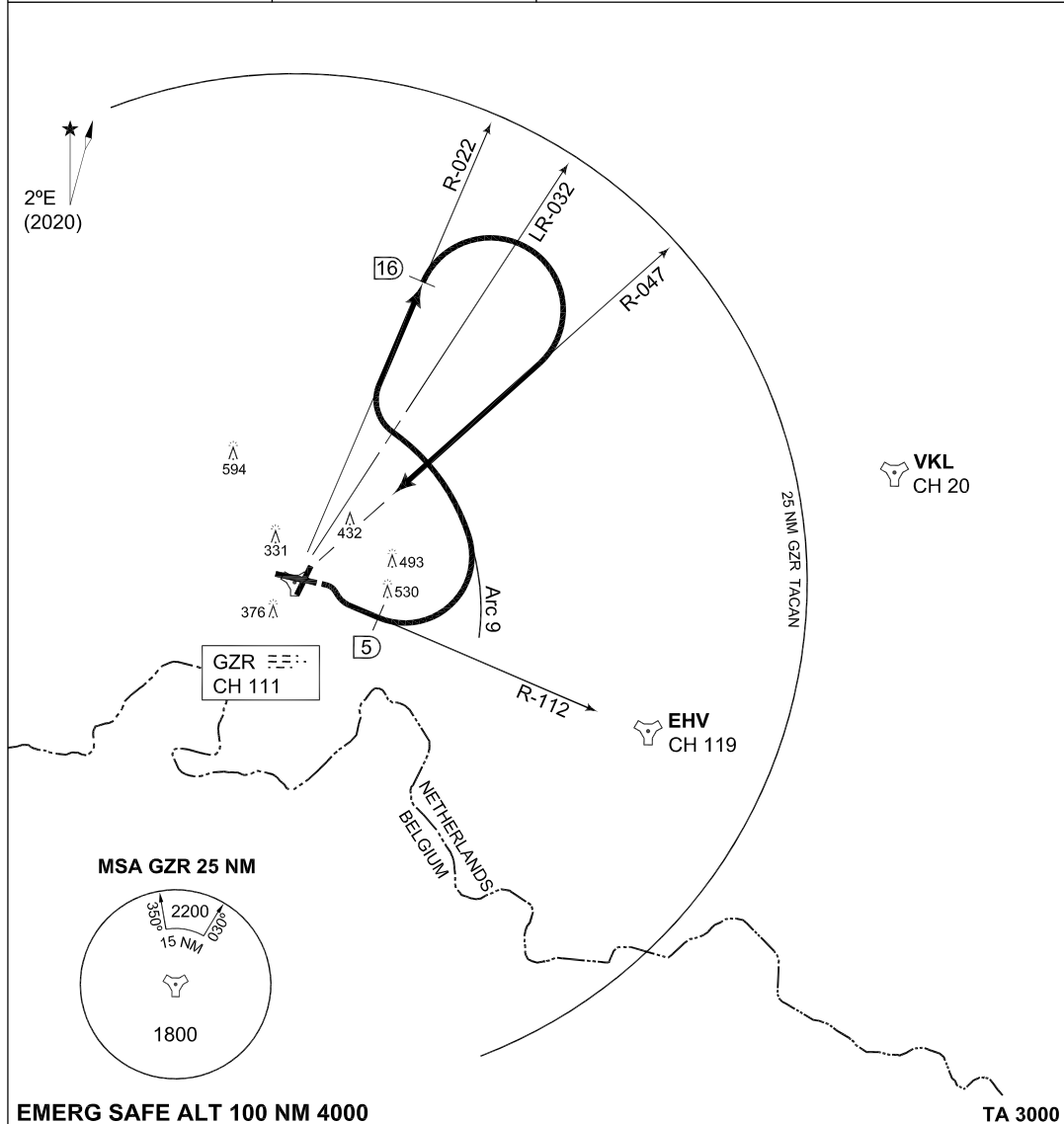
- At 1.3 DME turn left to intercept R-267 outbound, level off at FL 90.
- At 5 DME turn right to intercept Arc 9.
- Intercept R-022 outbound, when crossing R-017 continue climb.
- At 16 DME turn right to intercept R-047 inbound.

CHANGE: IMAG/AVR

RNLAf 03 DEC 2020

TERPS INSTRUMENT DEPARTURE CHART **GR3 GILZE-RIJEN (EHGR)**

GND CTL 278.125 121.680	GILZE-RIJEN TWR 277.350 125.330	AD ELEV 49 RAPCON WEST 399.725 123.580	DUTCH MIL 336.325 125.930
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<p>GILZE-RIJEN 3 (RWY 10)</p>	<ul style="list-style-type: none"> - At 1 DME turn right to intercept R-112 outbound. - At 5 DME turn left to intercept Arc 9. - When crossing R-032 turn right to intercept R-022 outbound. - At 16 DME turn right to intercept R-047 inbound.
--------------------------------------	---

CHANGES: MAG/VAR

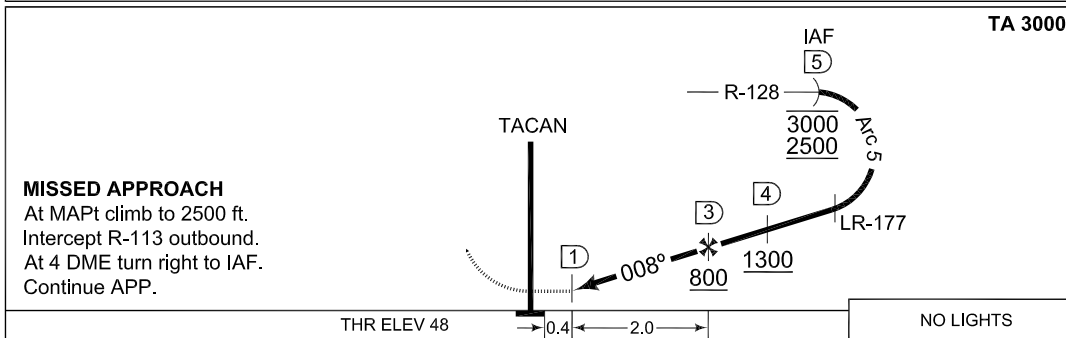
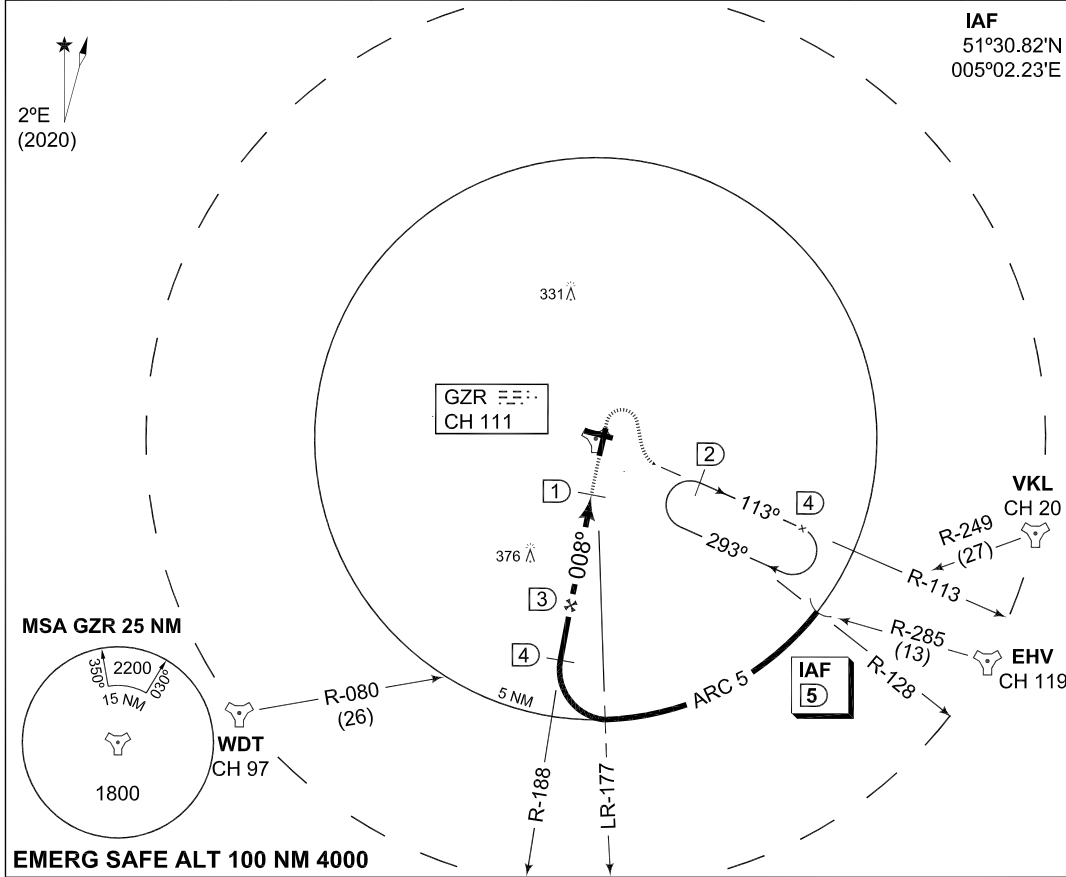
RNLAf 03 DEC 2020

MIPS INSTRUMENT APPROACH CHART

COPTER TACAN 008 GILZE-RIJEN (EHGR)

AD ELEV 49

DUTCH MIL 336.325 125.930		RAPCON WEST 399.725 123.580		GILZE-RIJEN TWR 277.350 125.330		GND CTL 278.125 121.680	
TACAN GZR CH 111	APP COURSE 008°	FAF ALT 800 FT	Descent GR	MDA 460	THR ELEV 48	ALS -	LDA 6249 FT

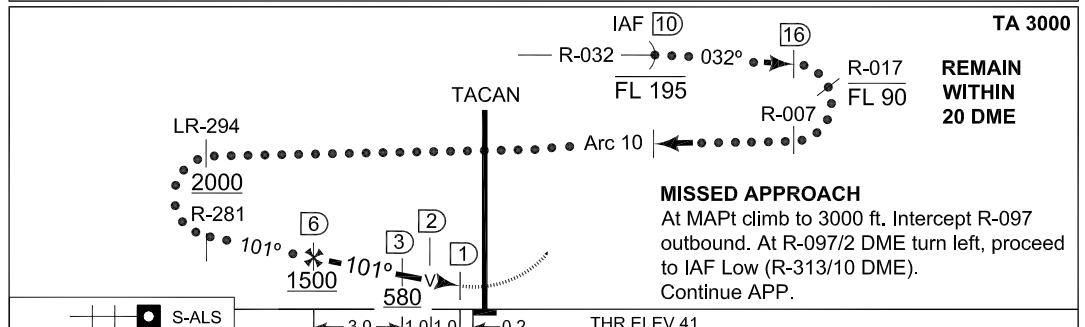
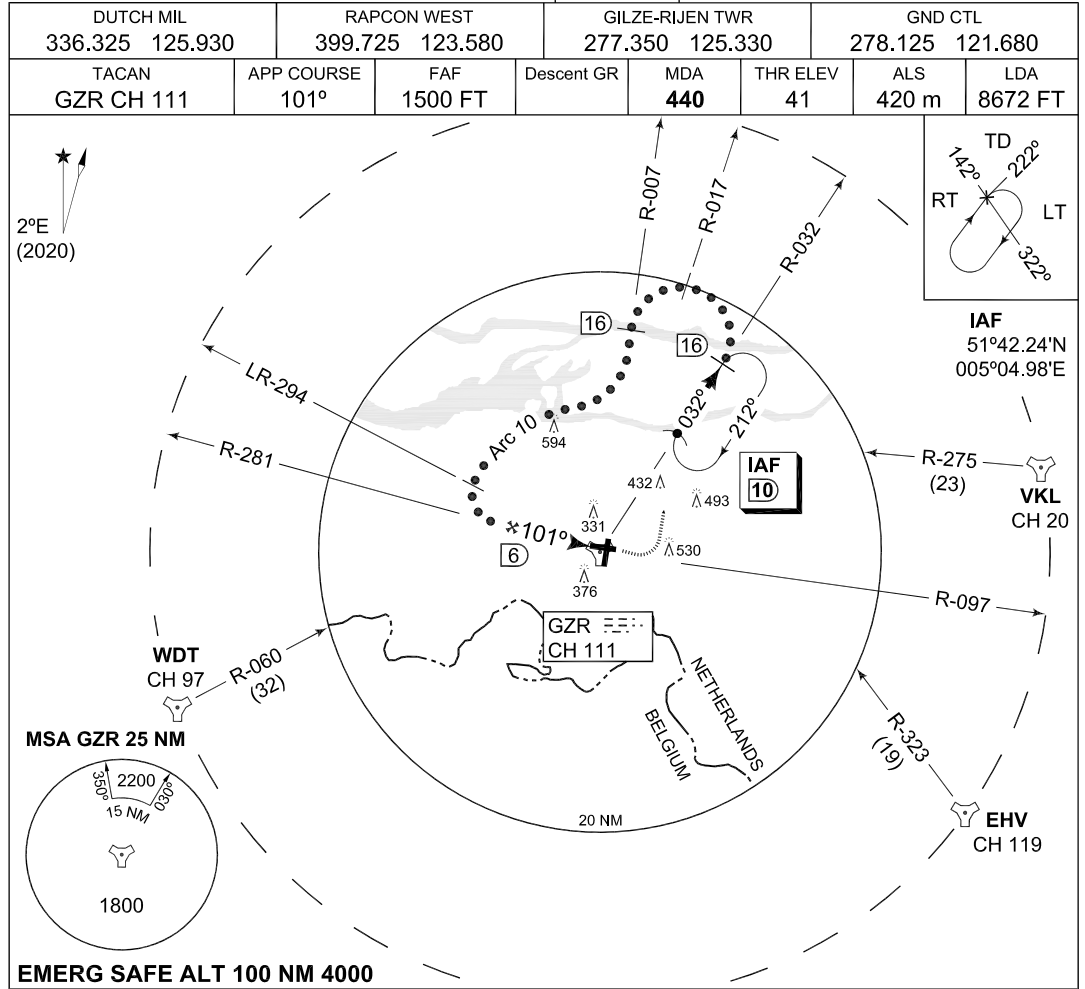


CATEGORY	COPTER	
S-TACAN 008	460 -800 412 (500-0.8)	
CIRCLING	540 -1900 491 (500-1.9)	

CHANGES: MAGYAR
MIPS

RNLAF 03 DEC 2020

MIPS INSTRUMENT APPROACH CHART **HI-TACAN RWY 10 GILZE-RIJEN (EHGR)**

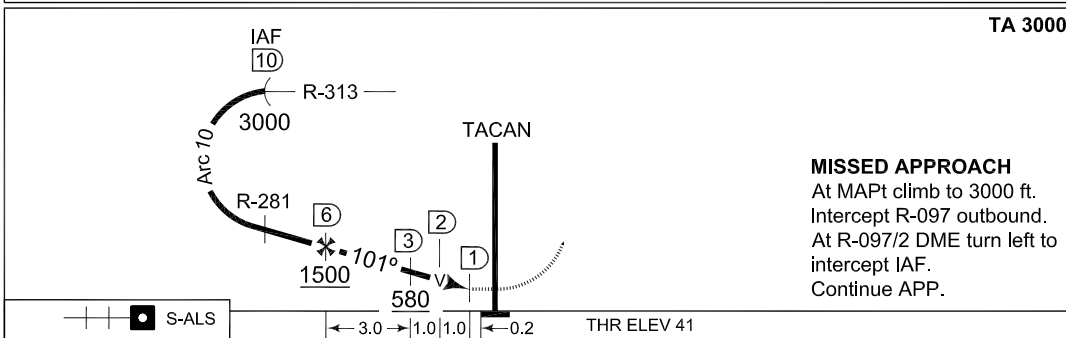
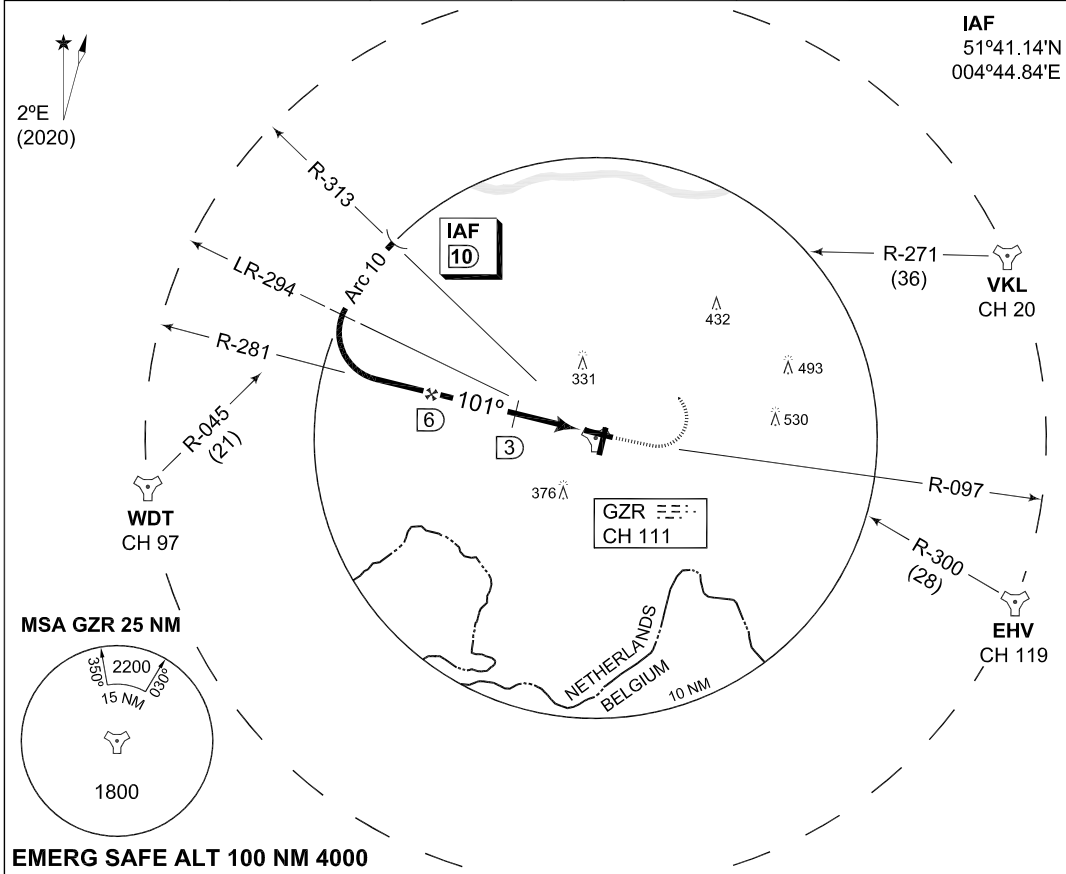


CATEGORY	MINIMA ACCORDING TO PANS-OPS; NOT ACCORDING TO APATC-1	
	C	D
S-TACAN 10	440 -1.6 399 (400-1.6)	440 -2.0 399 (400-2.0)
CIRCLING	770 -3700 721 (800-3.7)	910 -4600 861 (900-4.6)
		1000 -6500 951 (1000-6.5)

MIPS INSTRUMENT APPROACH CHART **TACAN RWY 10 GILZE-RIJEN (EHGR)**

AD ELEV 49

DUTCH MIL 336.325 125.930		RAPCON WEST 399.725 123.580		GILZE-RIJEN TWR 277.350 125.330		GND CTL 278.125 121.680	
TACAN GZR CH 111	APP COURSE 101°	FAF ALT 1500 FT	Descent GR	MDA 440	THR ELEV 41	ALS 420 m	LDA 8672 FT



CATEGORY	A	B	C	D	E
MINIMA ACCORDING TO PANS-OPS; NOT ACCORDING TO APATC-1					
S-TACAN 10	440 -1.6 399 (400-1.6)				440 -2.0 399 (400-2.0)
CIRCLING	540 -1900 491 (500-1.9)	670 -2800 621 (700-2.8)	770 -3700 721 (800-3.7)	910 -4600 861 (900-4.6)	1000 -6500 951 (1000-6.5)

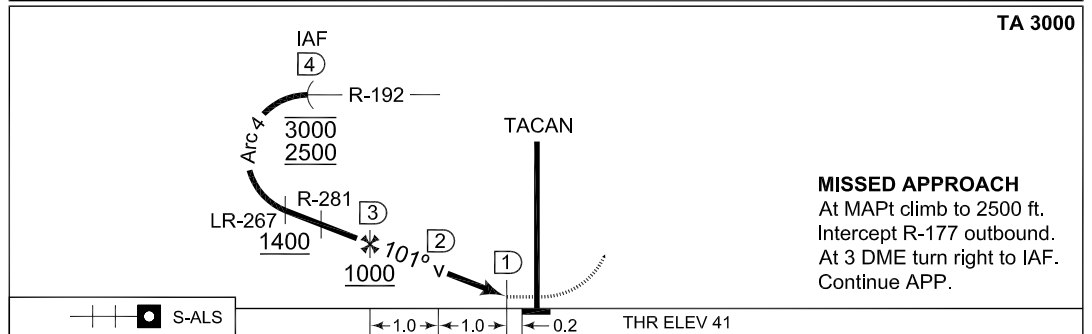
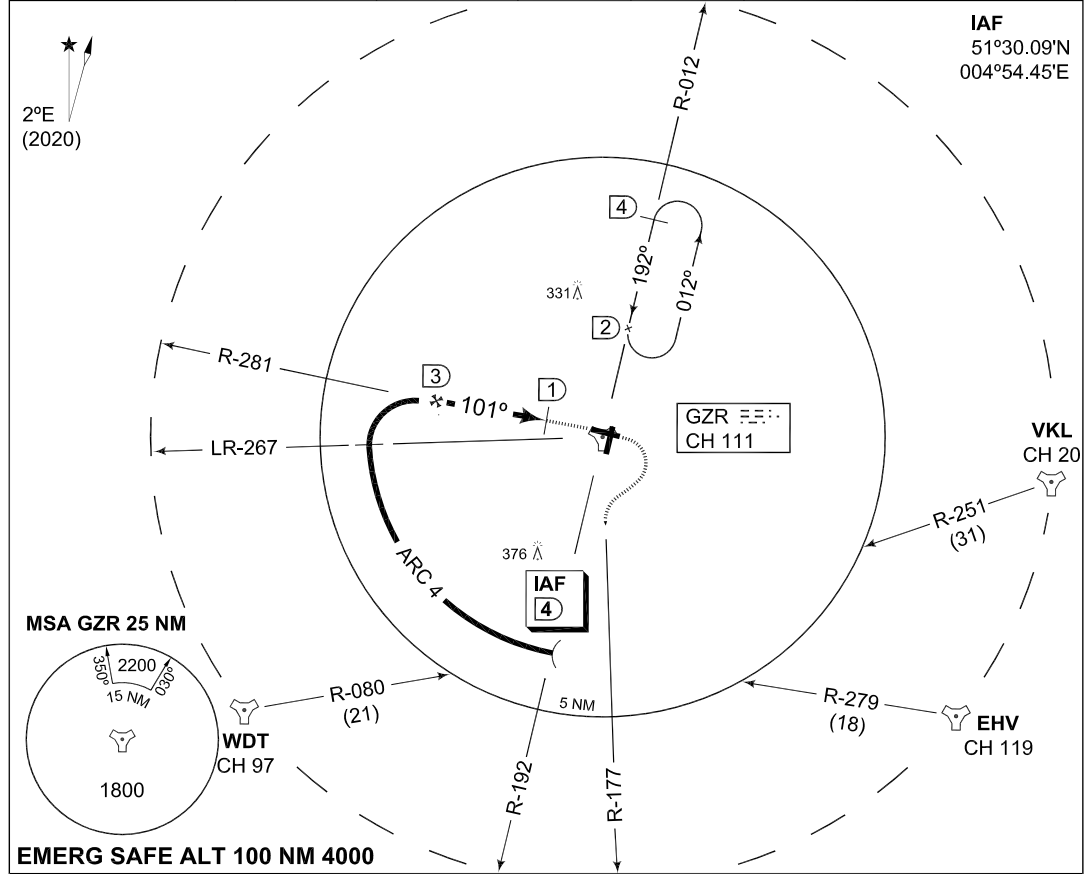
CHANGES: EDITORIAL

MIPS

RNLAF 24 FEB 2022

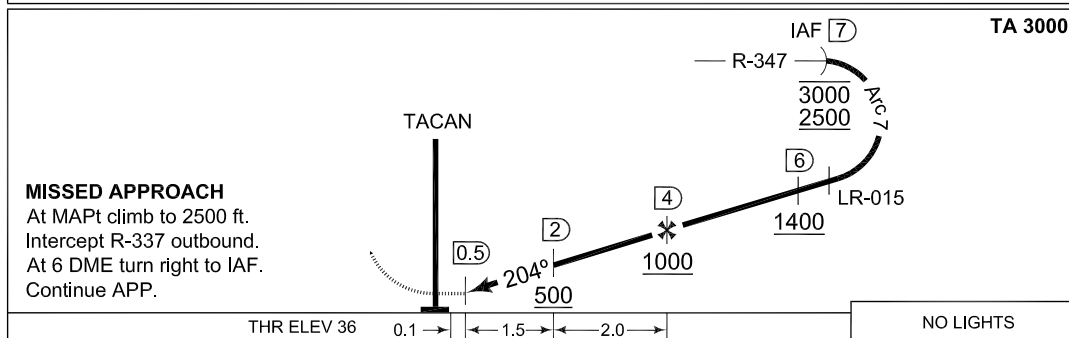
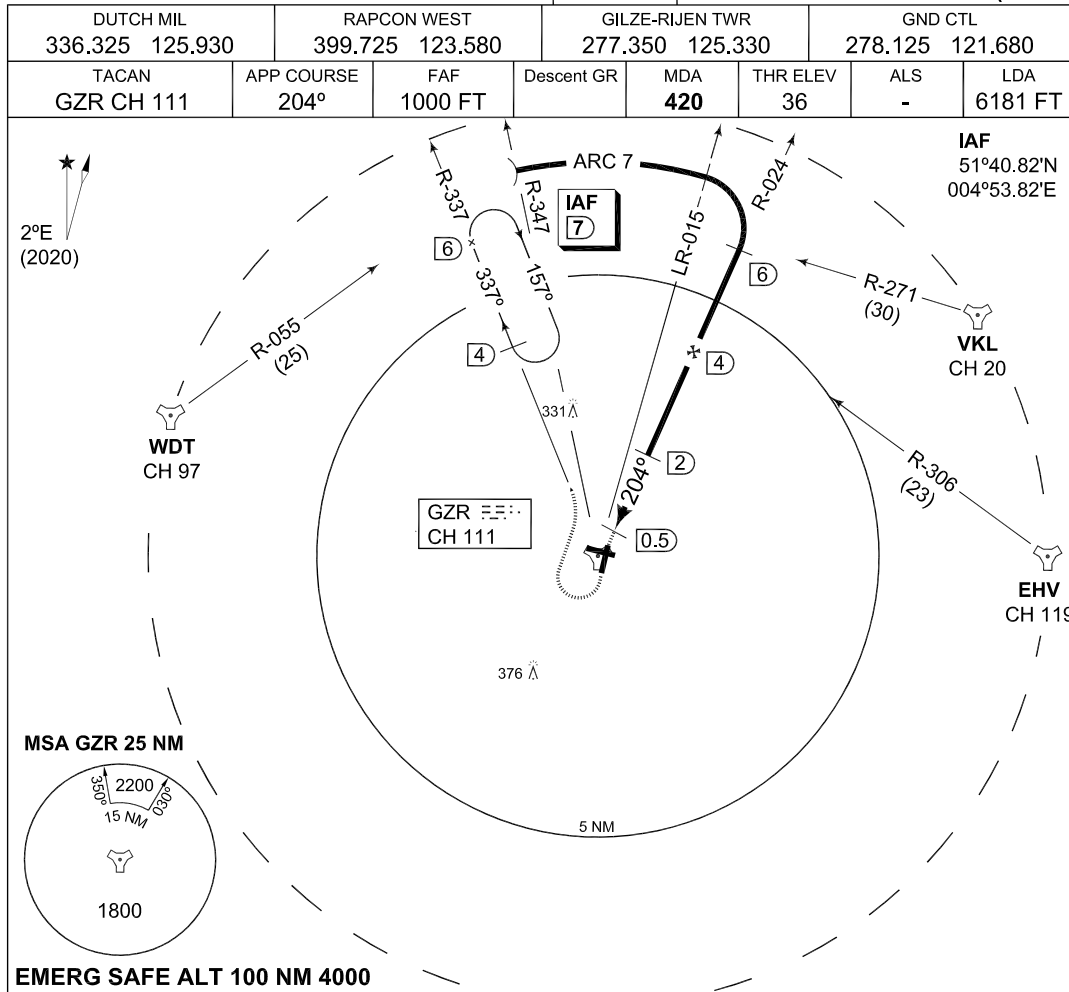
MIPS INSTRUMENT APPROACH CHART **COPTER TACAN 101 GILZE-RIJEN (EHGR)**

DUTCH MIL 336.325 125.930		RAPCON WEST 399.725 123.580		GILZE-RIJEN TWR 277.350 125.330		GND CTL 278.125 121.680	
TACAN GZR CH 111	APP COURSE 101°	FAF 1000 FT	Descent GR	MDA 440	THR ELEV 41	ALS 420 m	LDA 8672 FT



	CATEGORY	COPTER
MIPS	S-TACAN 101	440 -400 399 (400-0.4)
	CIRCLING	540 -1900 491 (500-1.9)

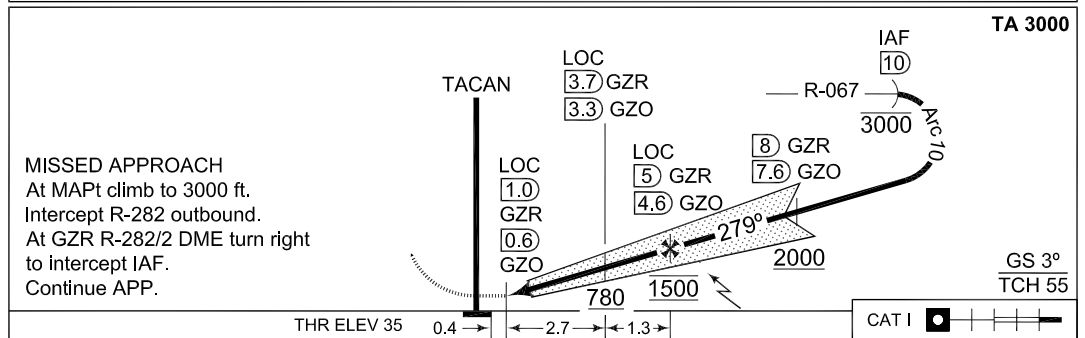
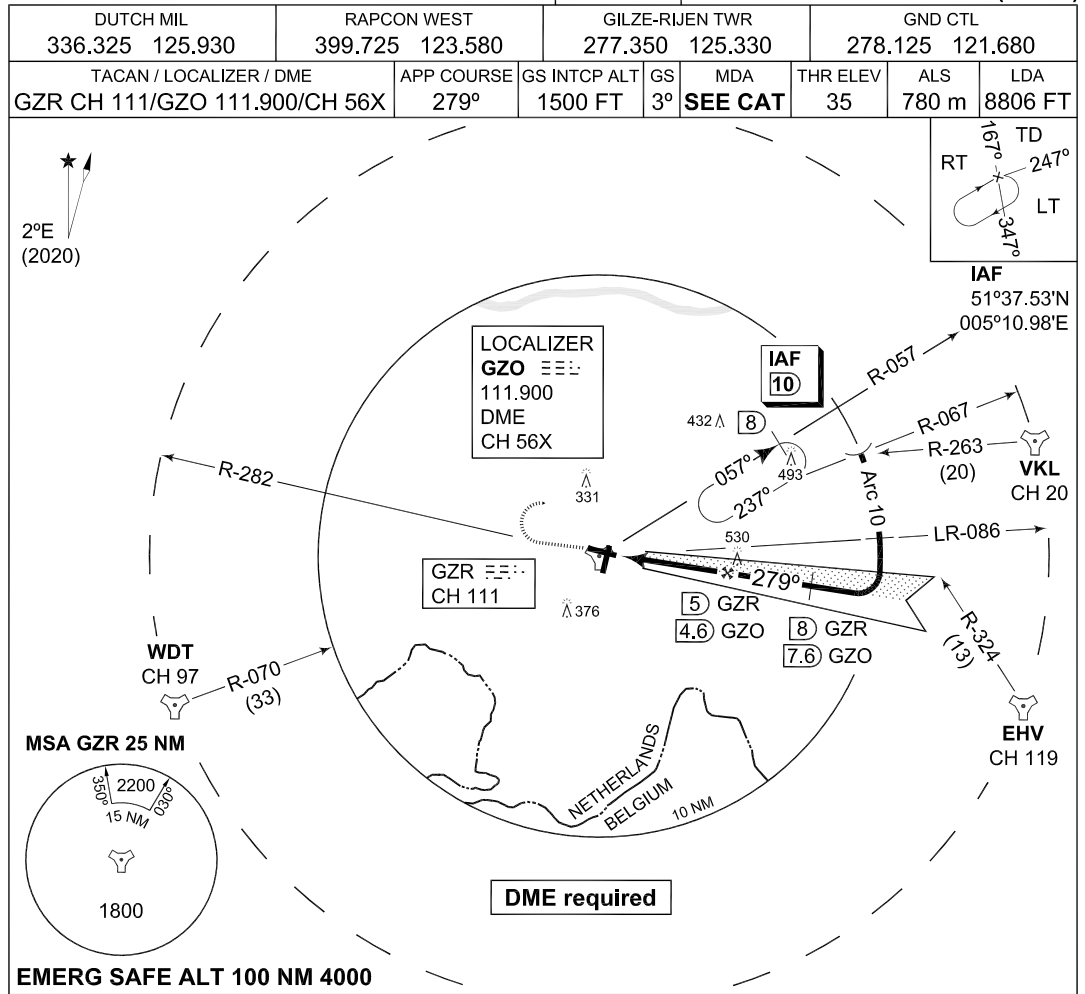
MIPS INSTRUMENT APPROACH CHART **COPTER TACAN 204 GILZE-RIJEN (EHGR)**



CHANGES: MAGVAR	MIPS	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>CATEGORY</th> <th>COPTER</th> </tr> <tr> <td>S-TACAN 204</td> <td>420-800 384 (400-0.8)</td> </tr> <tr> <td>CIRCLING</td> <td>540-1900 491 (500-1.9)</td> </tr> </table>	CATEGORY	COPTER	S-TACAN 204	420-800 384 (400-0.8)	CIRCLING	540-1900 491 (500-1.9)
	CATEGORY	COPTER						
	S-TACAN 204	420-800 384 (400-0.8)						
CIRCLING	540-1900 491 (500-1.9)							

RNLAF 03 DEC 2020

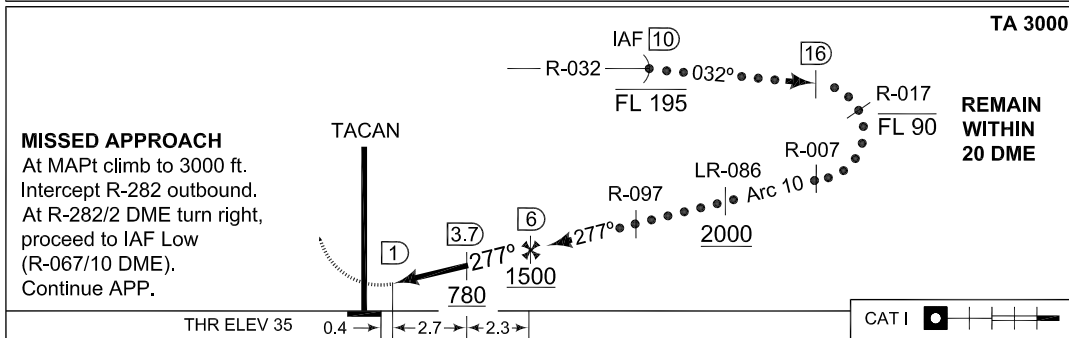
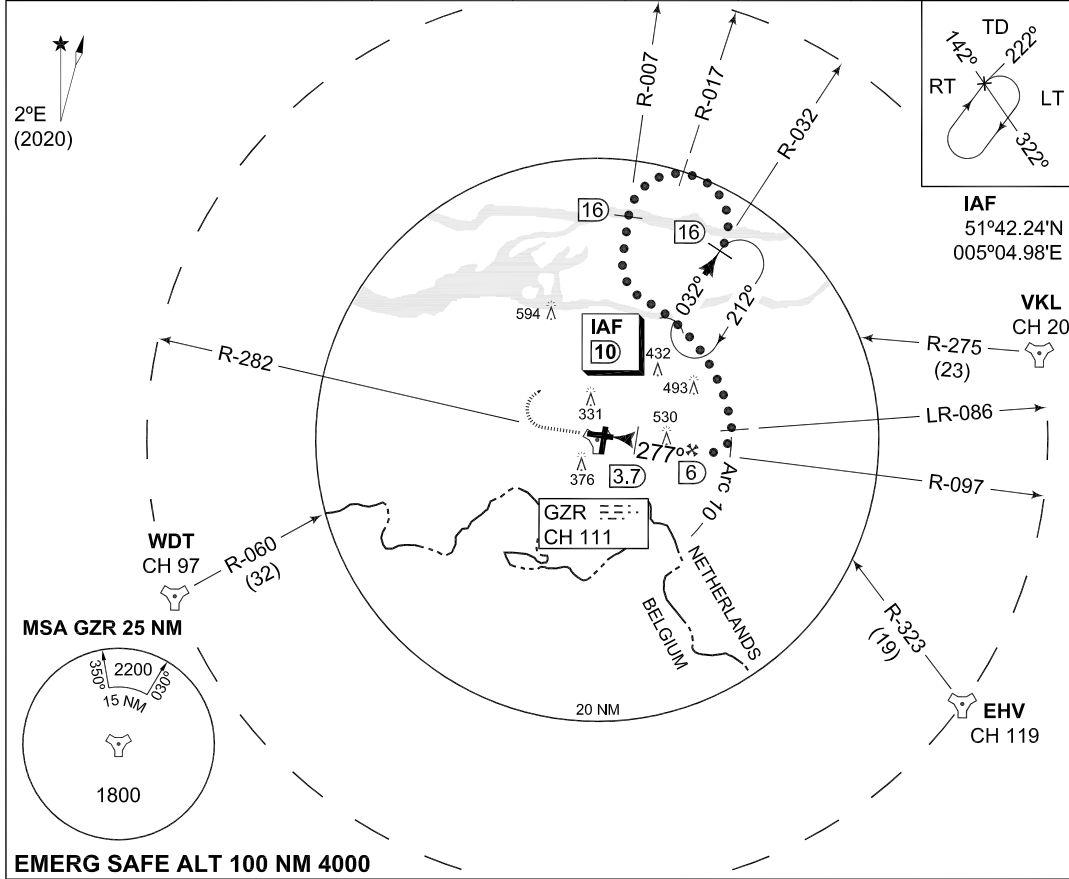
MIPS INSTRUMENT APPROACH CHART **ILS or LOC RWY 28 GILZE-RIJEN (EHGR)**



CATEGORY	COPTER	A	B	C	D
ILS MINIMA ACCORDING TO PANS-OPS; NOT ACCORDING TO APATC-1					
S-ILS 28	235 -400 200 (200-0.4)	235 -800 200 (200-0.8)			245 -800 210 (300-0.8)
S-LOC 28	380 -400 345 (400-0.4)	380 -1200 345 (400-1.2)			
CIRCLING	540 -1900 491 (500-1.9)	670 -2800 621 (700-2.8)	770 -3700 721 (800-3.7)	910 -4600 861 (900-4.6)	

MIPS INSTRUMENT APPROACH CHART **HI-TACAN RWY 28 GILZE-RIJEN (EHGR)**

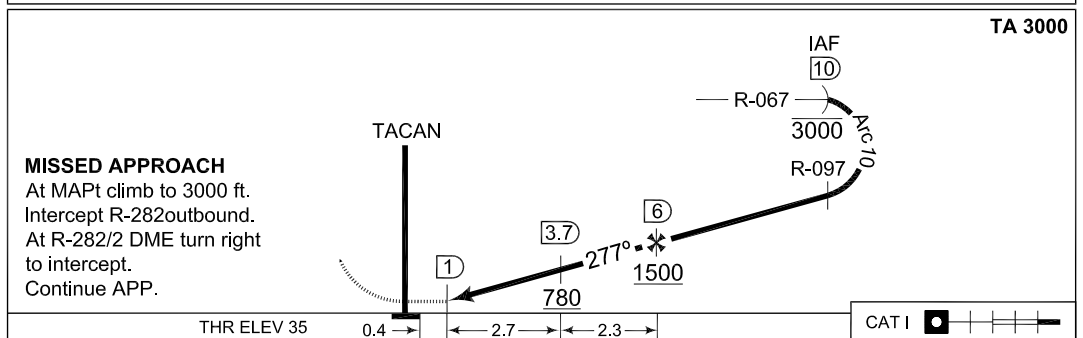
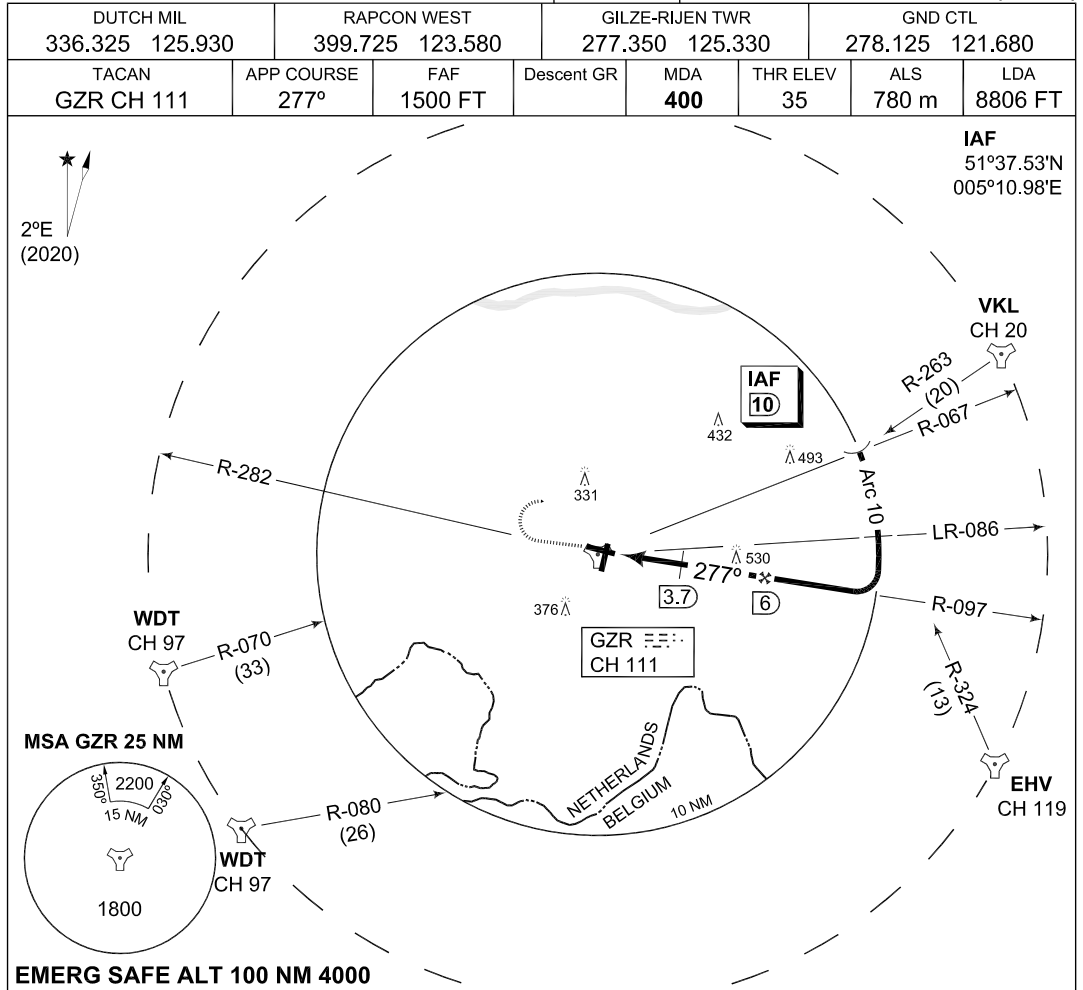
DUTCH MIL 336.325 125.930	RAPCON WEST 399.725 123.580	GILZE-RIJEN TWR 277.350 125.330	GND CTL 278.125 121.680
TACAN GZR CH 111	APP COURSE 277°	FAF 1500 FT	Descent GR MDA 400 THR ELEV 35
		ALS 780 m	LDA 8806 FT



	CATEGORY	C	D	E
CHANGES: MAG/VAR MIPS	MINIMA ACCORDING TO PANS-OPS; NOT ACCORDING TO APATC-1			
	S-TACAN 28	400 -800 365 (400-0.8)	400 -1200 365 (400-1.2)	
	CIRCLING	770 -3700 721 (800-3.7)	910 -4600 861 (900-4.6)	1000 -6500 951 (1000-6.5)

RNLAF 03 DEC 2020

MIPS INSTRUMENT APPROACH CHART **TACAN RWY 28 GILZE-RIJEN (EHGR)**

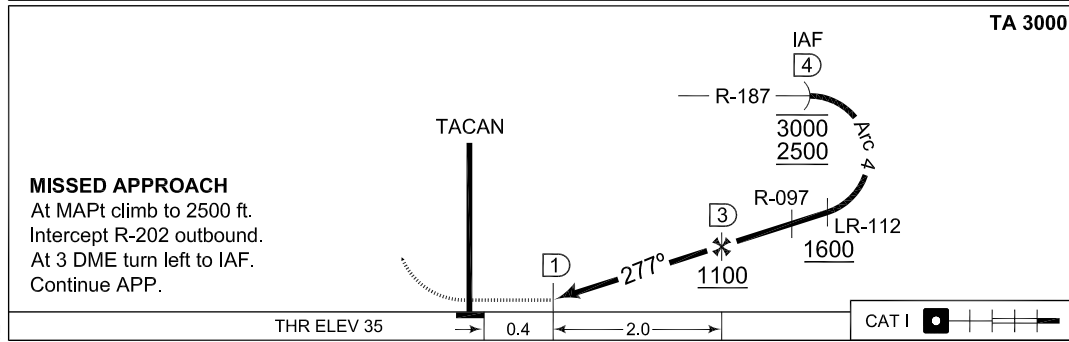
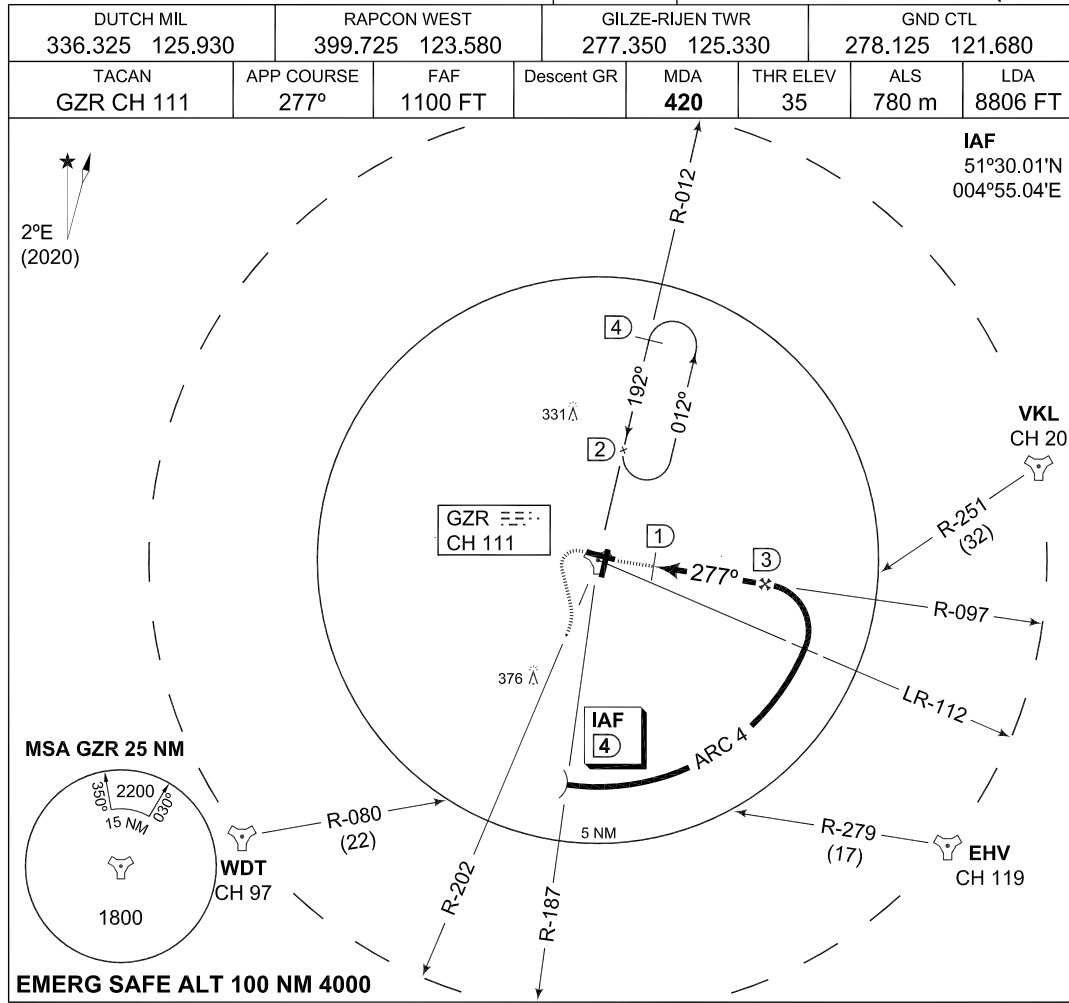


CATEGORY	A	B	C	D	E
MINIMA ACCORDING TO PANS-OPS; NOT ACCORDING TO APATC-1					
S-TACAN 28	400-800 365 (400-0.8)			400-1200 365 (400-1.2)	
CIRCLING	540-1900 491 (500-1.9)	670-2800 621 (700-2.8)	770-3700 721 (800-3.7)	910-4600 861 (900-4.6)	1000-6500 951 (1000-6.5)

CHANGES: MAG/AVR

RNLAF 03 DEC 2020

MIPS INSTRUMENT APPROACH CHART **COPTER TACAN 277 GILZE-RIJEN (EHGR)**



CATEGORY	COPTER
S-TACAN 277	420-400 385 (400-0.4)
CIRCLING	540-1900 491 (500-1.9)

CHANGES: IAF COORDINATE

MIPS

RNLAF 18 MAY 2023



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PART 3 – AERODROMES (AD)

AD 2.

**AD 2. AERODROMES
DE KOOY**

DE KOOY

EHKD AD 2.1 Aerodrome location indicator and name

EHKD - De Kooy

EHKD AD 2.2 Geographical and administrative data

1	ARP	52°55'25"N 004°46'50"E
2	Direction and distance from city	172° MAG/2.9 NM DEN HELDER
3	Elevation/Reference temperature	+ 4 ft AMSL/19.6° C (JUL)
4	MAG VAR/Annual change	1°35'E (JAN 2020)/12'E
5	AD operating authority Postal address Visitors' address Telephone Airfield Manager Mon-Fri between 0700-1530 (0600-1430): ATC (AD OPR HR only): LCC (outside OPR HR): E-mail AFTN	DHC Maritiem Vliegekamp De Kooy MPC 10A P.O. Box 8762 4820 BB Breda Rijksweg 20 1780 CA Den Helder 088 - 9563130 088 - 9583310 088 - 9583300 vva.ehkd@mindef.nl EHKDZTZX
6	Types of TFC permitted (IFR/VFR)	IFR/VFR
7	Remarks	For CIV use see AIP Netherlands For request regarding UAS operations within EHKD CTR contact RPASdeKOOY@mindef.nl

EHKD AD 2.3 Operational hours

1	AD OPR HR	Between April 1st and November 1st MON/THU 0700/0000 (0600/2300), FRI 0700/1530 (0600/1430) and between November 1st and April 1st MON/THU 0700/2200 (0600/2100), FRI 0700/1530 (0600/1430).
2	Customs and immigration	30 MIN PN
3	Health and sanitation	HO
4	AIS Briefing office	See 2.23 para 5
5	ATS Reporting Office (ARO)	See 2.23 para 5
6	MET Briefing Office	Between April 1st and November 1st MON/THU 0500/0000 (0400/2300), FRI 0500/2100 (0400/2000) and between November 1st and April 1st MON/THU 0500/2200 (0400/2100), FRI 0500/2100 (0400/2000). SAT,SUN and HOL 0530/1100 (0430/1000) and 1330/1900 (1230/1800).
7	ATS	HO
8	Fuelling	HO
9	Handling	HO
10	Security	HO
11	De-icing	Not AVBL
12	Remarks	1. AD CIV OPR HR MON/FRI 0600/2100 (0500/2000). SAT/SUN and legal HOL 0600/1100 (0500/1000) and 1400/1900 (1300/1800) 2. PPR see 2.23 para 2 3. Drone activities in harbor of Den Helder MON-FRI 0600-1430 details known by ATC

EHKD AD 2.4 Handling services and facilities

1	Cargo-handling facilities	AVBL
2	Fuel/oil types	100LL, JET A-1, F-18, F-35, F-44 Oil, all regular types
3	Fuelling facilities/capacity	100LL, limited. JET A-1, F-18, F-35, F-44, unlimited
4	Oxygen	No
5	De-icing facilities/type	No
6	Starting units	DSA 150, ST 56
7	Hangar space for visiting ACFT	O/R
8	Repair facilities	O/R
9	Remarks	Nil

EHKD AD 2.5 Passenger facilities

1	Remain overnight	AVBL O/R and also in Den Helder and surroundings
2	Medical facilities	Medical officer, ambulance, hospital in Den Helder and Alkmaar
3	Remarks	Nil

EHKD AD 2.6 Rescue and fire fighting services

1	AD category for fire fighting	CAT 7
2	Remarks	Nil

EHKD AD 2.7 Seasonal availability - clearing

1	Type of clearing equipment	Snowplough and snowsweeper
2	Clearance priorities	SAR-spot, RWY and MIL/CIV apron
3	Remarks	Caution advised during snow and ice conditions

EHKD AD 2.8 Aprons, taxiways and check locations/positions data

1	Apron surface and strength	Tarmac/concrete, MIL Apron PCN 35 F/A/W/T
2	TWY width, surface and strength	TWY DELTA : Width 12 m PCN 33 F/A/W/T TWY DELTA 1: Width 12 m PCN 38 F/A/W/T TWY DELTA 2: Width 12 m PCN 47 F/A/W/T TWY DELTA 2X: Width 9,50 m PCN 21 F/A/W/T TWY DELTA 4: Width 12 m PCN 47 F/A/W/T TWY LIMA : Width 12 m PCN 33 F/A/W/T TWY PAPA: Width 12 m PCN 42 F/A/W/T
3	Altimeter checkpoint location elevation	Location 1: MIL apron (52° 55'31"N 004°47'04"E) Elevation: 2 ft AMSL Location 2: TWY LIMA (52°55'17"N 004°46'54"E) Elevation: 2 ft AMSL
4	Remarks	Dummy deck: PCN: 37 F/A/W/T

EHKD AD 2.9 Surface movement guidance and control system and markings

According STANAG 3158		
1	Remarks	Nil

EHKD AD 2.10 Aerodrome obstacles

see Aerodrome Chart.		
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EHKD AD 2.11 Meteorological information provided

1	Associated MET Office	De Kooy
2	Hours of service MET Office outside hours	HO Joint Meteorological Group
3	Office responsible for TAF preparation Periods of validity	Joint Meteorological Group 12 hrs
4	Type of landing forecast Interval of issuance	TREND Every 30 min during opr hrs
5	Flight documentation Language(s) used	Reports, forecasts and charts. English and Dutch.
6	Charts and other information AVBL for briefing or consultation	GSA, GSP, LGF, Cross section, Upperair forecasts, NVG, Radar- and Satellite Images
7	Supplementary equipment AVBL for providing information	PBS (pilot briefing system)
8	Remarks	Tel EHKD 088-9563140 or mail CLSK.DHC.LVL.METEO.MetBriefer@mindef.nl Tel JMG 0164-693111 or mail JMG.WX.PLANNING@mindef.nl

EHKD AD 2.12 Runway physical characteristics

1	RWY dimensions/a-gear	See Aerodrome Chart. Values in ft.
2	RWY surface	Tarmac/concrete
3	RWY strength	PCN 03: 62 F/A/W/T 21: 62 F/A/W/T

EHKD AD 2.13 Declared distances

RWY designator	TORA (FT)	TODA (FT)	ASDA (FT)	LDA (FT)	Remarks
03	4184	4381	4184	3377	Take-off from runway extremity
		2379			Take-off from intersection with D3
		1924			Take-off from intersection with D2X
		1418			Take-off from intersection with D2
21	3789	3986	3789	3334	Take-off from runway extremity
		2861			Take-off from intersection with D2
		2347			Take-off from intersection with D2X
		1909			Take-off from intersection with D3
For determination of the datum line for an intersection take-off, see EHKD AD 2.23 paragraf 6					

EHKD AD 2.14 Approach and runway lighting

According STANAG 3316		
1	Approach lighting	RWY 21: CAT I. 870 m RWY 03: S-ALS. 360 m
2	RWY lighting	VHI
3	PAPI	Situated on the left side of both RWYs
4	Remarks	Nil

EHKD AD 2.15 Other lighting, secondary power supply

1	LDI	Nil
2	TWY edge lighting	VB
3	Emergency RWY lighting	No
4	Emergency TWY edge lighting	No
5	Secondary power supply/switch-over	AVBL, switch over time <1 seconds
6	Remarks	Anemometer in front of TWR, lighted

EHKD AD 2.16 Helicopter landing area

Helipad 1		
1	Co-ordinates TLOF or THR of FATO Geoid undulation	52°55'40"N 004°47'08"E Located on runway in pre-threshold area RWY 21
2	TLOF and/or FATO elevation FT	3 FT
3	TLOF and FATO area dimensions, surface, strength, marking	rectangular 20 M x 20 M, CONC, PCN 62/F/A/W/T, White edges and white letter "H" and white identification number "1"
4	true bearing of FATO	034° / 214°
5	Declared distances available	43 M to end of runway pavement in direction 03, 1233 M to runway end in direction 21
6	APCH and FATO lighting	NIL
7	Remarks	Surface beyond FATO is RWY which extends to a width of 30 M

Helipad 2		
1	Co-ordinates TLOF or THR of FATO Geoid undulation	52°55'30"N 004°46'56"E Located on runway at intersection D2
2	TLOF and/or FATO elevation FT	3 FT
3	TLOF and FATO area dimensions, surface, strength, marking	rectangular 20 M x 20 M, ASPH, PCN 62/F/A/W/T, White edges and white identification number "2"
4	true bearing of FATO	034° / 214°
5	Declared distances available	418 M to end of runway pavement in direction 03, 857 M to runway end in direction 21
6	APCH and FATO lighting	NIL
7	Remarks	Surface beyond FATO is RWY which extends to a width of 30 M, Marking non-standard due to touchdown zone marking RWY 21

Helipad 3		
1	Co-ordinates TLOF or THR of FATO Geoid undulation	52°55'25"N 004°46'50"E Located on runway in vicinity of intersection D2X
2	TLOF and/or FATO elevation FT	3 FT
3	TLOF and FATO area dimensions, surface, strength, marking	rectangular 20 M x 20 M, ASPH, PCN 62/F/A/W/T, White edges and white letter "H" and white identification number "3"
4	true bearing of FATO	034° / 214°
5	Declared distances available	622 M to end of runway pavement in direction 03, 654 M to runway end in direction 21
6	APCH and FATO lighting	NIL
7	Remarks	Surface beyond FATO is RWY which extends to a width of 30 M

Helipad 4		
1	Co-ordinates TLOF or THR of FATO Geoid undulation	52°55'18"N 004°46'43"E Located on runway in vicinity of aiming point marking RWY 03
2	TLOF and/or FATO elevation FT	3 FT
3	TLOF and FATO area dimensions, surface, strength, marking	rectangular 20 M x 20 M, ASPH, PCN 62/F/A/W/T, White edges and white identification number "4"
4	true bearing of FATO	034° / 214°
5	Declared distances available	865 M to end of runway pavement in direction 03, 410 M to runway end in direction 21
6	APCH and FATO lighting	NIL
7	Remarks	Surface beyond FATO is RWY which extends to a width of 30 M, Marking non-standard due to aiming point marking RWY 03

Helipad 5		
1	Co-ordinates TLOF or THR of FATO Geoid undulation	52°55'14"N 004°46'45"E Located on TWY D
2	TLOF and/or FATO elevation FT	3 FT
3	TLOF and FATO area dimensions, surface, strength, marking	rectangular 25 M x 25 M, ASPH, PCN 62/F/A/W/T, White edges and white identification number "5"
4	true bearing of FATO	034° / 214°
5	Declared distances available	400 M both directions
6	APCH and FATO lighting	NIL
7	Remarks	Surface beyond FATO is extends to a width of 30 M, TLOF Lighting

Helipad 6		
1	Co-ordinates TLOF or THR of FATO Geoid undulation	52°55'11"N 004°46'46"E Located on grass area A north of TWY P
2	TLOF and/or FATO elevation FT	2 FT
3	TLOF and FATO area dimensions, surface, strength, marking	rectangular 30 M x 30 M, grass fitted with reinforcing grass paving grids, PCN not AVBL, edges and "H" created with less conspicuous marking by use of concrete pavement
4	true bearing of FATO	170° / 350°
5	Declared distances available	Information not available
6	APCH and FATO lighting	NIL
7	Remarks	

Helipad 7		
1	Co-ordinates TLOF or THR of FATO Geoid undulation	52°55'00"N 004°46'56"E Located on southeast corner of grass area A
2	TLOF and/or FATO elevation FT	1 FT
3	TLOF and FATO area dimensions, surface, strength, marking	rectangular 30 M x 30 M, grass fitted with reinforcing grass paving grids, PCN not AVBL, edges and "H" created with less conspicuous marking by use of concrete pavement
4	true bearing of FATO	090° / 270°
5	Declared distances available	Information not available
6	APCH and FATO lighting	NIL
7	Remarks	

Dummydeck		
1	Co-ordinates TLOF or THR of FATO Geoid undulation	52°55'02"N 004°46'48"E Located on south part of grass area A
2	TLOF and/or FATO elevation FT	2 FT
3	TLOF and FATO area dimensions, surface, strength, marking	rectangular 63 M x 26 M, CONC, PCN 37 F/A/W/T, marking consistent with naval vessel 2 landing spots
4	true bearing of FATO	NIL
5	Declared distances available	Information not available
6	APCH and FATO lighting	Lighting consistent with naval vessel
7	Remarks	

Slope		
1	Co-ordinates TLOF or THR of FATO Geoid undulation	52°55'02"N 004°46'48"E Located on grass area A south of Den Helder Airport
2	TLOF and/or FATO elevation FT	inconsistent due to sloped area
3	TLOF and FATO area dimensions, surface, strength, marking	grass fitted with reinforcing grass paving grids, PCN not AVBL, no marking
4	true bearing of FATO	NIL
5	Declared distances available	NIL
6	APCH and FATO lighting	NIL
7	Remarks	Sloped exercise landing area 5° an 10°

EHKD AD 2.17 Air traffic services airspace

1	Designation and lateral limits	DE KOOY CTR 52°59'13.58"N 004°55'32.06"E; along clockwise arc (radius 6.5 NM, centre 52°55'25.00"N 004°46'50.00"E) to 53°01'42.82"N 004°49'26.26"E; 53°02'11.88"N 004°49'38.31"E; along clockwise arc (radius 7 NM, centre 52°55'25.00"N 004°46'50.00"E) to 52°59'31.13"N 004°56'12.28"E; to point of origin.
2	Vertical limits	GND to 3000 ft AMSL
3	Airspace classification	D
4	ATS unit call sign Language(s)	Contact initially De Kooy TWR. English Outside HO DUTCH MIL INFO FREQ 132.350 MHZ.
5	Transition altitude	IFR: 3000 ft AMSL; VFR: 3500 ft AMSL
6	Remarks	Caution: EHR 8 is active MON-THU 0700-2300 (0600-2200), FRI 0700-1600 (0600-1500), or activated by NO-TAM. Request ATC for crossing clearance.

EHKD AD 2.18 Air traffic services communication facilities

STATION/ SERVICE	CALL SIGN OR IDENTIFICATION	FREQUENCY MHz	HOURS	REMARKS
1	2	3	4	5
	As appropriate	121.500 243.000	HO	Emergency FREQ for all services
TWR	De Kooy Tower	120.130 ^{*)} 122.100 379.750 ^{*)} 257.800	HO	*) Primary FREQ
GND CTL	De Kooy Ground De Kooy Tower	121.730 379.750	HO	
APP	De Kooy Arrival	124.230 ^{*)} 372.150 ^{*)}	HO	
	De Kooy Final	123.305 359.100	HO	SSR only
	ATIS	133.010	H24	

EHKD AD 2.19 Radio navigation and landing aids

FACILITY	ID	CHANNEL FREQ.	HOURS	CO-ORD.	RANGE/ ALTITUDE	REMARKS
1	2	3	4	5	6	7
DME	HDR	115.550 CH102Y	H24	52°54'24.68"N 004°45'56.60"E	120 NM/FL 250 90 NM/FL 250 BTN 015/150° MAG	210° MAG 0.9 DME from THR RWY 03
ILS LOCALIZER	DKY	108.900	H24	52°55'04.99"N 004°46'28.51"E		
GLIDEPATH		329.300	H24	52°55'28.66"N 004°46'47.38"E		
DME	DKY	CH26X	H24	52°55'28.66"N 004°46'47.38"E		DME reading at THR RWY21: 0.2 NM

EHKD AD 2.20 Local traffic regulations

1. Intensive training operations with helicopter and light aircraft. Light aircraft and model flying daily outside OPR HR. Glider site Wieringermeer is located 8NM SE of ARP, just outside CTR/RMZ.
2. VFR traffic crossing the CTR shall be carried out via the VFR reporting points (see visual approach chart) at 1500 ft AMSL, unless otherwise instructed or approved by ATC.
3. Visual traffic circuit: RWY 03 right-hand 1000 ft AMSL; RWY 21 left-hand 1000 ft AMSL.
4. Overflying the gas plant (0.5 NM east of ARP) is prohibited

EHKD AD 2.21 Noise abatement procedures

ARR + DEP procedures are according standard VFR/IFR routes. Avoid overflying of Den Helder (2 NM NNW of ARP) and built-up areas as much as possible.

Avoid overflying camping southeast of FOXTROT below 1500 ft AMSL (see AIP Netherlands EHKA AD 2.21).

Due to noise abatement over Julianadorp RNP Y RWY 03 only available when reported cloud-base is below 500 ft.

EHKD AD 2.22 Flight procedures

IFR procedures

The IAP and SID procedures are established in accordance with STANAG 3759 and AATCP-1.

RNP Z approach RWY 03 (offset)

Serial Number	Path Descriptor	WPT Ident	Fly Over	Course Mag ^o /(T ^o)	Recom navaid	Dist nm	turn	Altitude (ft AMSL)	Speed (KIAS)	VPA(° TCH (ft))	NAV spec
001	IF	NIXCO	-	-	-	-	-	+ 2000	-	-	-
002	TF	EDFOS	-	070 (072.0)	-	3.0	-	-	-	-	RNAV1
003	IF	ASTUW	-	-	-	-	-	+ 2000	-	-	-
004	TF	KD441	-	259 (260.4)	-	1.9	-	+ 2000	-	-	RNAV1
005	TF	EDFOS	-	279 (280.7)	-	2.0	-	+ 2000	-	-	RNAV1
006	IF	EDFOS	-	-	-	-	-	+ 2000	-	-	-
007	TF	KD442	-	009 (010.6)	-	3.0	-	+ 2000	-	-	RNAV1
008	TF	HDR MAPt	Y	009 (010.6)	-	5.2	-	-	-	-3.00/50	RNP APCH
009	CA	-	-	009 (010.6)	-	-	-	+1000	-	-	RNP APCH
010	DF	KD444	Y	-	-	-	R	-	-	-	RNP APCH
011	DF	HDR	-	-	-	-	R	@2000	-	-	RNP APCH

RNP Y approach RWY 03

Serial Number	Path Descriptor	WPT Ident	Fly Over	Course Mag ^o /(T ^o)	Recom navaid	Dist nm	turn	Altitude (ft AMSL)	Speed (KIAS)	VPA(° TCH (ft))	NAV spec
001	IF	NOFUD	-	-	-	-	-	+ 2000	-	-	-
002	TF	KOPFA	-	032 (033.8)	-	3.0	-	+ 1200	-	-	RNAV1
003	IF	FEWEX	-	-	-	-	-	+ 2000	-	-	-
004	TF	KOPFA	-	102 (103.8)	-	3.0	-	+ 1200	-	-	RNAV1
005	IF	TAFTU	-	-	-	-	-	+ 2000	-	-	-
006	TF	KOPFA	-	322 (323.8)	-	3.0	-	+ 1200	-	-	RNAV1
007	IF	KOPFA	-	-	-	-	-	+ 1200	-	-	-
008	TF	KD445	-	032 (033.8)	2.5	2.5	-	+ 1200	-	-	RNP APCH
009	TF	THR03	Y	032 (033.8)	-	2.9	-	-	-	-3.72/50	RNP APCH
010	CA	-	-	032 (033.8)	-	-	-	+1000	-	-	RNP APCH
011	DF	KD444	Y	-	-	-	R	-	-	-	RNP APCH
012	DF	HDR	-	-	-	-	R	@2000	-	-	RNP APCH

FAS DATA BLOCK - RNP Y RWY 03

Input data	
Operation Type	0
SBAS Provider	1 (EGNOS)
Airport Identifier	EHKD
Runway	03
Runway Letter	0 (None)
Approach Performance Designator	0
Route Indicator	Y
Reference Path Data Selector	0
Reference Path Identifier	E03A
LTP/FTP Latitude	525511.1730N
LTP/FTP Longitude	0044635.3850E
LTP/FTP Ellipsoidal Height (metres)	43.0
FPAP Latitude	525538.4540N
Delta FPAP Latitude (seconds)	27.2810
FPAP Longitude	0044705.7330E
Delta FPAP Longitude (seconds)	30.3480
Threshold Crossing Height	50.0
TCH Units Selector	0 (feet)
Glidepath Angle (degrees)	3.72
Course Width (metres)	105.00
Length Offset (metres)	0
HAL (metres)	40.0
VAL (metres)	35.0

Output data	
Data Block	10 04 0B 08 05 03 C8 00 01 33 30 05 8A F0 B5 16 F2 C2 0C 02 AE 15 22 D5 00 18 ED 00 F4 01 74 01 64 00 C8 AF 3E 74 39 A7
Calculated CRC Value	3E7439A7
Supplied CRC Value	3E7439A7
Comparison Result	OK

Required Additional Data	
ICAO Code	EH
LTP/FTP Orthometric Height (metres)	0.8

NOTE: EUROCONTROL FAS DB tool Version 3.2.0

RNP Z approach RWY 21

Serial Number	Path Descriptor	WPT Ident	Fly Over	Course Mag°/(T°)	Recom navaid	Dist nm	turn	Altitude (ft AMSL)	Speed (KIAS)	VPA(° TCH (ft)	NAV spec
001	IF	PUFLA	-	-	-	-	-	+ 2000	-	-	-
002	TF	KD451	-	122 (124.0)	-	4.5	-	+ 2000	-	-	RNAV1
003	TF	ZOJIK	-	122 (124.0)	-	3.0	-	+ 1700	-	-	RNAV1
004	IF	JOPFI	-	-	-	-	-	+ 2000	-	-	-
005	TF	ZOJIK	-	302 (304.0)	-	3.0	-	+ 1700	-	-	RNAV1
006	IF	FAFLO	-	-	-	-	-	+ 2000	-	-	-
007	TF	ZOJIK	-	212 (214.0)	-	3.0	-	+ 1700	-	-	RNAV1
008	IF	ZOJIK	-	-	-	-	-	+ 1700	-	-	-
009	TF	KD452	-	212 (214.0)	-	3.0	-	+ 1700	-	-	RNP APCH
010	TF	THR21	Y	212 (214.0)	-	5.2	-	-	-	-3.00/50	RNP APCH
011	CA	KD453	Y	212 (214.0)	-	-	-	+500	-	-	RNP APCH
012	DF	-	-	-	-	-	L	-	-	-	RNP APCH
013	DF	HDR	-	-	-	-	R	@2000	-120	-	RNP APCH

FAS DATA BLOCK - RNP Z RWY 21

Input data	
Operation Type	0
SBAS Provider	1 (EGNOS)
Airport Identifier	EHKD
Runway	21
Runway Letter	0 (None)
Approach Performance Designator	0
Route Indicator	Z
Reference Path Data Selector	0
Reference Path Identifier	E21A
LTP/FTP Latitude	525535.0820N
LTP/FTP Longitude	0044701.9810E
LTP/FTP Ellipsoidal Height (metres)	42.8
FPAP Latitude	525507.4490N
Delta FPAP Latitude (seconds)	-27.6330
FPAP Longitude	0044631.2450E
Delta FPAP Longitude (seconds)	-30.7360
Threshold Crossing Height	50.0
TCH Units Selector	0 (feet)
Glidepath Angle (degrees)	3.00
Course Width (metres)	105.00
Length Offset (metres)	0
HAL (metres)	40.0
VAL (metres)	35.0

Output data	
Data Block	10 04 0B 08 05 15 D0 00 01 31 32 05 54 AB B6 16 BA 92 0D 02 AC 15 1E 28 FF E0 0F FF F4 01 2C 01 64 00 C8 AF 02 C1 6B ED
Calculated CRC Value	02C16BED
Supplied CRC Value	02C16BED
Comparison Result	OK

Required Additional Data	
ICAO Code	EH
LTP/FTP Orthometric Height (metres)	0.6

NOTE: EUROCONTROL FAS DB tool Version 3.2.0

RNP Y approach RWY 21

Serial Number	Path Descriptor	WPT Ident	Fly Over	Course Mag°(T°)	Recom navaid	Dist nm	turn	Altitude (ftAMSL)	Speed (KIAS)	VPA(° TCH (ft))	NAV spec
001	IF	LOCFU	-	-	-	-	-	+ 2000	-	-	-
002	TF	KD454	-	122 (124.0)	-	5.0	-	+ 1500	-	-	RNAV1
003	TF	HOXZA	-	122 (124.0)	-	2.0	-	+ 1200	-	-	RNAV1
004	IF	YOJUP	-	-	-	-	-	+ 2000	-	-	-
005	TF	HOXZA	-	302 (304.0)	-	3.0	-	+ 1200	-	-	RNAV1
006	IF	GOHEM	-	-	-	-	-	+ 2000	-	-	-
007	TF	HOXZA	-	212 (214.0)	-	-	-	+ 1200	-	-	RNAV1
008	IF	HOXZA	-	-	-	-	-	+ 1200	-	-	-
009	TF	KD455	-	212 (214.0)	-	2.8	-	+ 1200	-	-	RNP APCH
010	TF	THR21	Y	212 (214.0)	-	2.4	-	-	-	-4.50/50	RNP APCH
011	CA	-	-	212 (214.0)	-	-	-	+ 500	-	-	RNP APCH
012	DF	KD453	Y	-	-	-	L	-	-	-	RNP APCH
013	DF	HDR	-	-	-	-	R	@2000	-	-	RNP APCH

FAS DATA BLOCK RNP Y RWY 21

Input data	
Operation Type	0
SBAS Provider	1 (EGNOS)
Airport Identifier	EHKD
Runway	21
Runway Letter	0 (None)
Approach Performance Designator	0
Route Indicator	Y
Reference Path Data Selector	0
Reference Path Identifier	E21B
LTP/FTP Latitude	525535.0820N
LTP/FTP Longitude	0044701.9810E
LTP/FTP Ellipsoidal Height (metres)	42.8
FPAP Latitude	525507.4490N
Delta FPAP Latitude (seconds)	-27.6330
FPAP Longitude	0044631.2450E
Delta FPAP Longitude (seconds)	-30.7360
Threshold Crossing Height	50.0
TCH Units Selector	0 (feet)
Glidepath Angle (degrees)	4.50
Course Width (metres)	105.00
Length Offset (metres)	0
HAL (metres)	40.0
VAL (metres)	35.0

Output data	
Data Block	10 04 0B 08 05 15 C8 00 02 31 32 05 54 AB B6 16 BA 92 0D 02 AC 15 1E 28 FF E0 0F FF F4 01 C2 01 64 00 C8 AF 7B 17 85 05
Calculated CRC Value	7B178505
Supplied CRC Value	7B178505
Comparison Result	OK

Required Additional Data	
ICAO Code	EH
LTP/FTP Orthometric Height (metres)	0.6

NOTE: EUROCONTROL FAS DB tool Version 3.2.0

VFR procedures

APPROACH PROCEDURES:

Contact De Kooy TWR 2 minutes before reaching the CTR BDRY, for permission to enter the CTR. Unless otherwise instructed, enter the CTR via designated reporting points at 1500 ft and maintain. Descent to circuit altitude according the joining procedure which will be instructed by ATC.

- a. Overhead joining. Report overhead, join downwind and descent to 1000 ft.
- b. Direct joining (ATC discretion only). After passing one of the following reporting points (Hotel, Bravo, Romeo or Foxtrot) join the circuit and descent to circuit altitude as instructed by ATC.

The following arrivals have been established.

- a. Whiskey arrival: proceed via Whiskey to Hotel.
- b. Oscar arrival: proceed via Oscar to Hotel.
- c. Echo arrival: proceed via Echo to Bravo.
- d. Zulu arrival: proceed via Zulu to Romeo.

ATC discretion only, when EHR 8 (partly) inactive.

- e. Foxtrot arrival: at CTR BDRY proceed to Foxtrot.
- f. Mike arrival: at CTR BDRY proceed via Mike to Hotel.

(see visual local map)

DEPARTURE PROCEDURES:

Unless otherwise instructed or approved climb after take-off to 1000 ft. The following departures have been established.

- a. Whiskey departure: proceed via Hotel to Whiskey.
- b. Oscar departure: proceed via Hotel to Oscar.
- c. Echo departure: proceed via Bravo to Echo.
- d. Zulu departure: proceed via Romeo to Zulu.

ATC discretion only, when EHR 8 (partly) inactive:

- e. Foxtrot departure: proceed via Foxtrot to CTR BDRY.
- f. Mike departure: proceed via Hotel and Mike to CTR BDRY.

Leave the CTR via the designated reporting points.

REPORTING POINTS in degrees, minutes and seconds:

The following reporting points have been established (see local map):

- Hotel: 200 m north-east of the Drydock
52°57'52"N 004°48'12"E).
- Bravo: Intersection Zandvaart/Balgzandkanaal
52°54'08"N 004°49'58"E).
- Echo: South-east bank of Amstelmeer
52°52'19"N 004°56'08"E).
- Romeo: Intersection N9 - Callantsoogervaart
52°52'36"N 004°46'06"E).
- Zulu: Bridge de Stolpen - N9 - Noordhollandskanaal
52°48'52"N 004°44'25"E).
- Foxtrot: Intersection Middenvliet/Zanddijk
52°55'02"N 004°43'15"E).
- Whiskey: Car park near beach Jan Ayeslag
53°02'21"N 004°42'58"E).

Oscar: Fort de Schans
53°01'56"N 004°49'36"E).

Mike: North-east corner of sandbank Noorderhaaks
52°58'50"N 004°41'37"E).

CIRCUIT PROCEDURES:

Circuit ALT 1000 ft. RWY 21 L/H circuit RWY 03 R/H circuit. Landing direction 270°, 090°, 350° and 170° may be used for HEL flying, circuit direction as instructed by ATC.

Low visibility procedures

During periods of low visibility the overall ATC capacity could be reduced. To guarantee aircraft safety and optimal use of ATC capacity, De Kooy uses Low Visibility Procedures.

Phase	Conditions	Procedure
A	RVR \leq 1500 m and/or ceiling \leq 300ft	All WIP on airside will be terminated. Separation between landing aircraft will be increased to 8 nm. No opposite runway take-off and landings.
B	RVR < 550 m	Departures only. No simultaneous ground movements.
C	RVR < 300 m	The airport is below operational minima for arriving and departing aircraft.

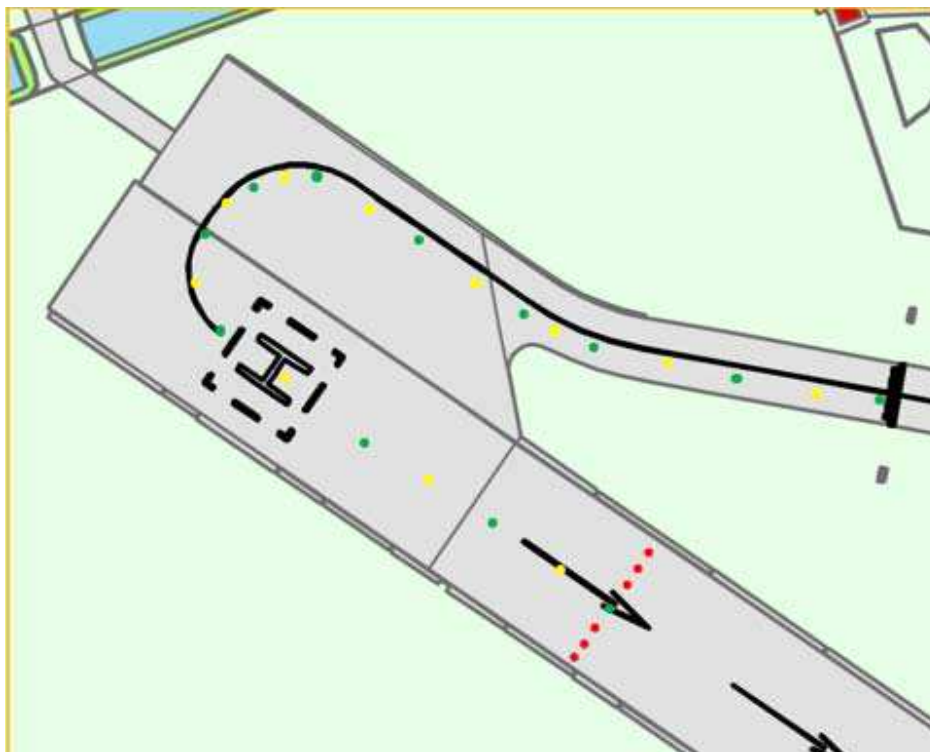
NOTE: In contrast to annex 2 military aerodromes define ceiling as 3/8 (SCT) or more.

EHKD AD 2.23 Additional information

1. DISPLACED RUNWAY END RWY 03:

After landing RWY 03, passing the runway end lights at taxiing speed is allowed. Beyond the runway end lights the pavement is classified as taxiway and equipped with alternating green/yellow centre line lights upto exit D1.

Take-off RWY 21 is allowed from the runway extremity.



2. EHR8 (prohibited/gunfiring) extending in the CTR. The eastboundary is east of the dunes.

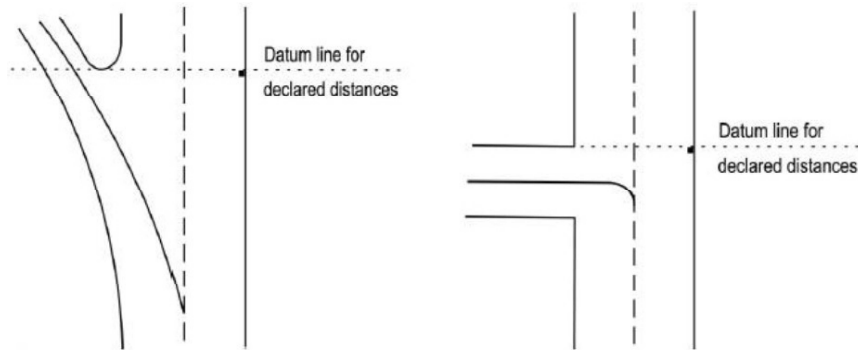
3. PPR: for PPR Request contact:

LCC De Kooy Flight Information Office via e-mail: DHC.LCC.MVKK@mindef.nl

Requests must contain the following information.

- a. Inbound De Kooy for practice approaches only or full stop landing.
- b. Name and phonenumber concerning person of contact.
- c. Call sign and/or ACFT registration.
- d. Type of ACFT.
- e. DOF (Date Of Flight).
- f. Aerodrome of departure.
- g. ETA (Estimated Time of Arrival) at De Kooy.
- h. ETD (Estimated Time of Departure) from De Kooy.
- i. Aerodrome of arrival.
- j. Name of aircraft operator. Incomplete requests will NOT be considered. A standard request form may be obtained through previously mentioned e-mail address.

4. When intending a full stop landing at de Kooy please also include if refuel, hangar space, accommodation or other is required.
5. AIS Briefing office facility and the ATS Reporting Office (ARO) is only available through the Flight Data and Notam Office (FDNO) located at MilATCC Schiphol.
 Tel: +31(0)20 4062840
 Tel: +31(0)20 4062841
 E-mail: aocs.fdns@mindef.nl
 AFTN: EHMCPZX
 avlbl H24
6. **DETERMINATION OF DATUM LINE FOR INTERSECTION TAKE-OFF**
 The datum line from which the reduced runway declared distances for take-off should be determined is defined by the intersection of the downwind edge of the specific taxiway with the runway edge as shown in the diagram below. The loss of runway length due to alignment of the aircraft prior to take-off should be taken into account by the operators for the calculation of the aircraft's take-off mass (ICAO Annex 6, Part 1, paragraph 5.2.8)

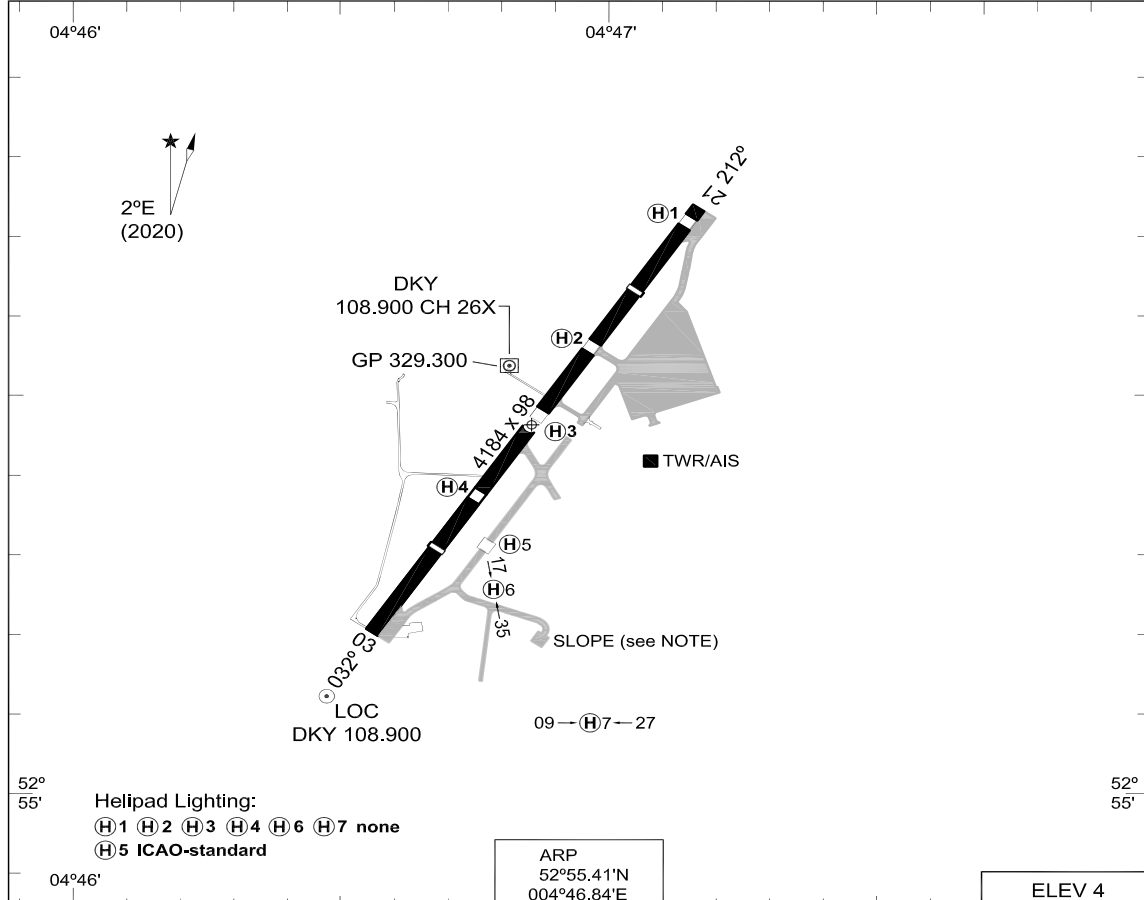


EHKD AD 2.24 Charts related to an aerodrome

Aerodrome chart	EHKD AD 2-21
Local map	EHKD AD 2-22
MVA chart	EHKD AD 2-23
Instrument approach chart RNP Z RWY 03	EHKD AD 2-24
Instrument approach chart RNP Y RWY 03	EHKD AD 2-25
Instrument approach chart ILS or LOC RWY 21	EHKD AD 2-26
Instrument approach chart COP ILS or LOC RWY 21	EHKD AD 2-27
Instrument approach chart RNP Z RWY 21	EHKD AD 2-28
Instrument approach chart RNP Y RWY 21	EHKD AD 2-29

**MIPS
AERODROME CHART**

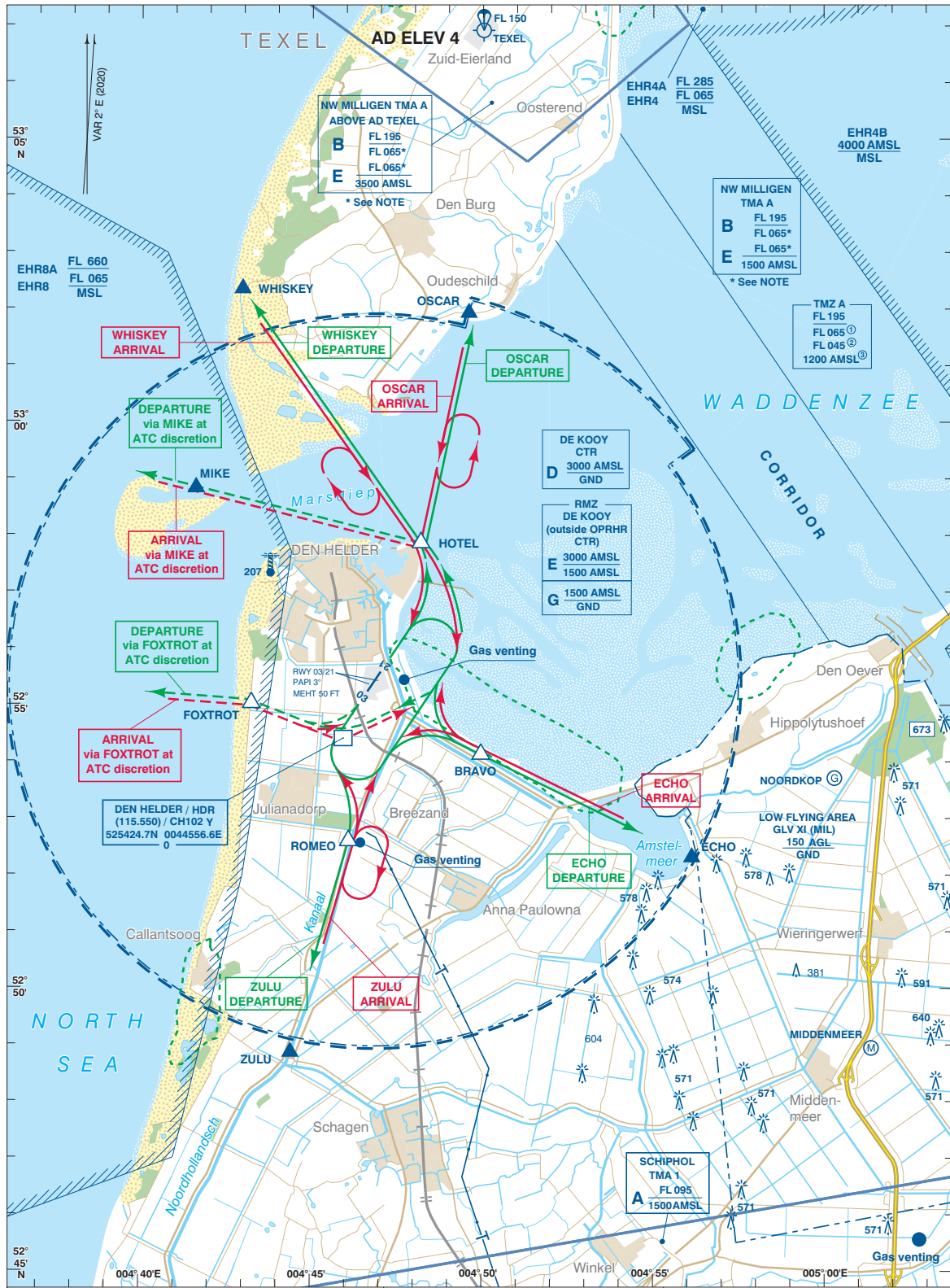
DE KOOY (EHKD)



CHANGES: MINIMA

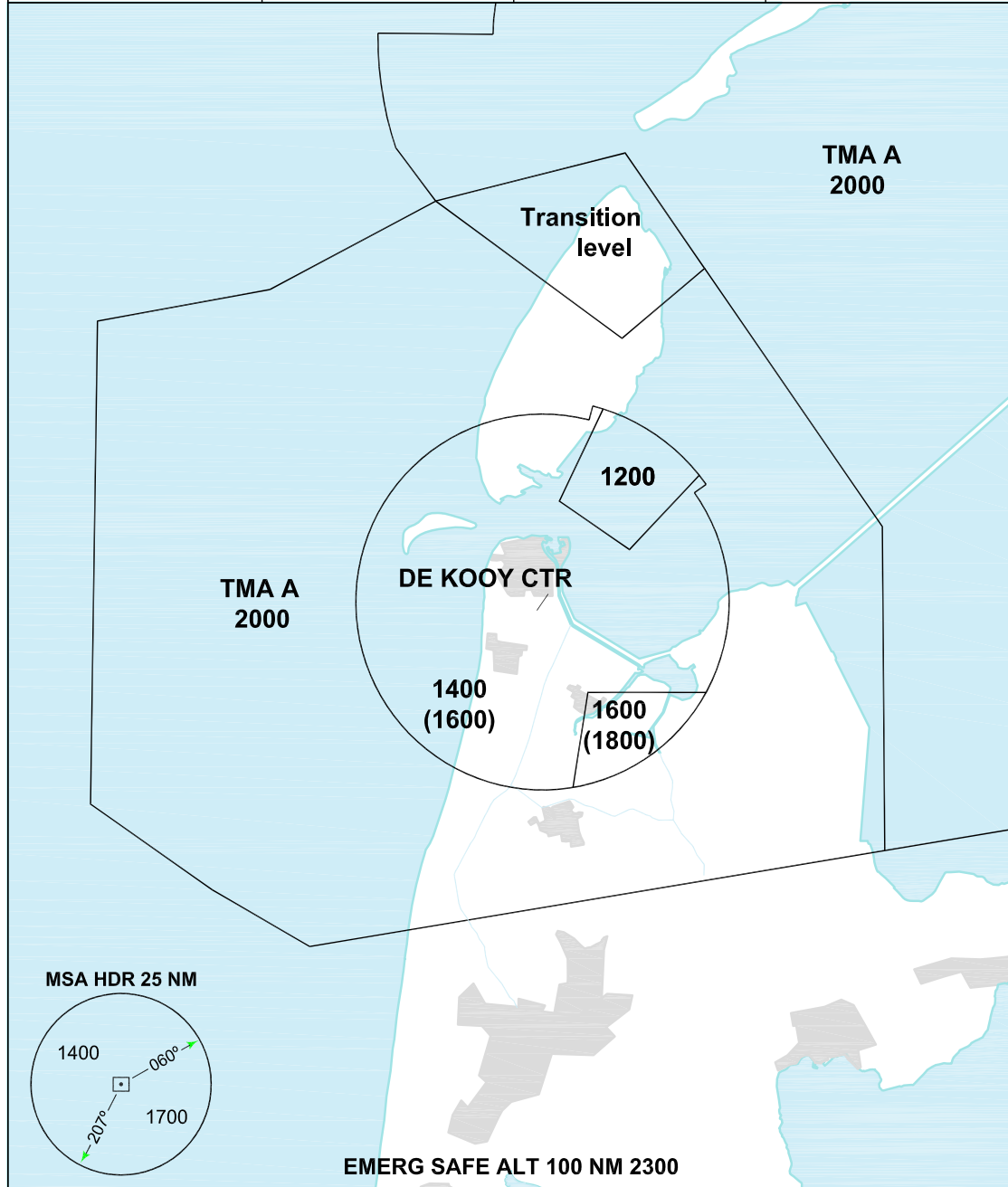
RNLAF 07 SEP 2023

LOCAL MAP



MIPS **MINIMUM VECTORING ALTITUDE** AD ELEV 4 **MVA CHART**
DE KOOY (EHKD)

DUTCH MIL	DE KOOY ARRIVAL	DE KOOY TWR	GND CTL
259.250 128.355	372.150 124.230	379.750 120.130	379.750 121.730



CHANGES: EDITORIAL

- THE ALTITUDE BETWEEN BRACKETS IS TO BE USED FOR THE CORRESPONDING SECTOR WHEN AIR TEMPERATURE AT AIRBASE ALTITUDE IS LOWER THAN -16°.
- ALTITUDES ONLY AVAILABLE IF THE RADAR COVERAGE PERMITS.

RNLAf 30 DEC 2021

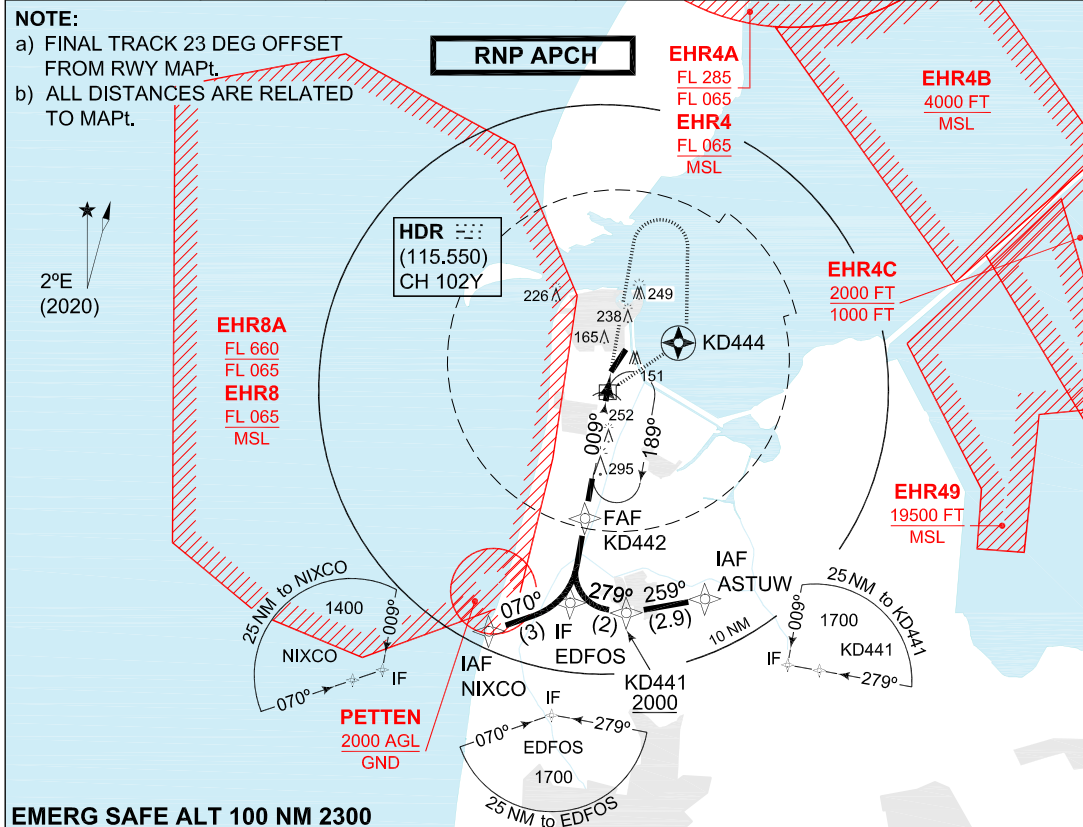
MIPS INSTRUMENT APPROACH CHART **RNP Z RWY 03 DE KOOY (EHKD)**

AD ELEV 4

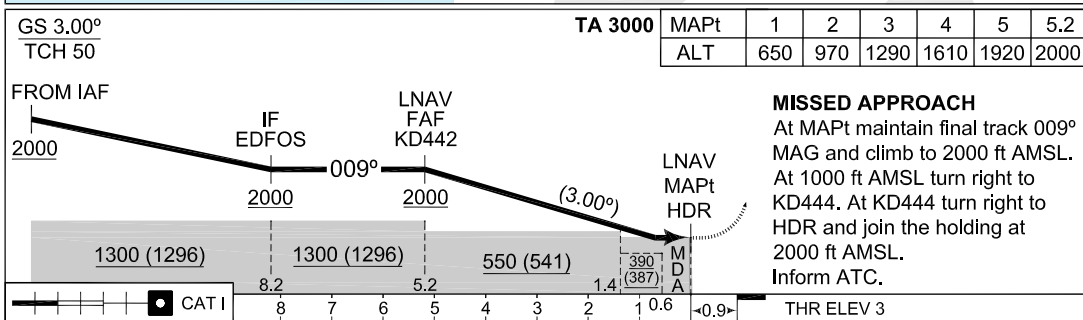
DUTCH MIL 259.250 128.355		DE KOOY ARRIVAL 372.150 124.230		DE KOOY TWR 379.750 120.130		GND CTL 379.750 121.730		ATIS* 133.010	
EGNOS CHANNEL N.A.	APP COURSE 009°	FAF ALT 2000 FT	Descent GR 5.24% / 3.00°	MDA SEE CAT	DA N.A.	THR ELEV 3	ALS 360 m	LDA 3334 FT	

NOTE:

- a) FINAL TRACK 23 DEG OFFSET FROM RWY MAPt.
- b) ALL DISTANCES ARE RELATED TO MAPt.



EMERG SAFE ALT 100 NM 2300



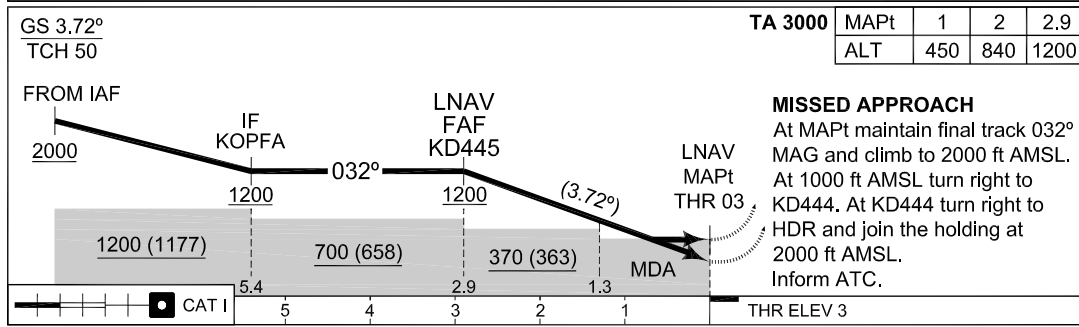
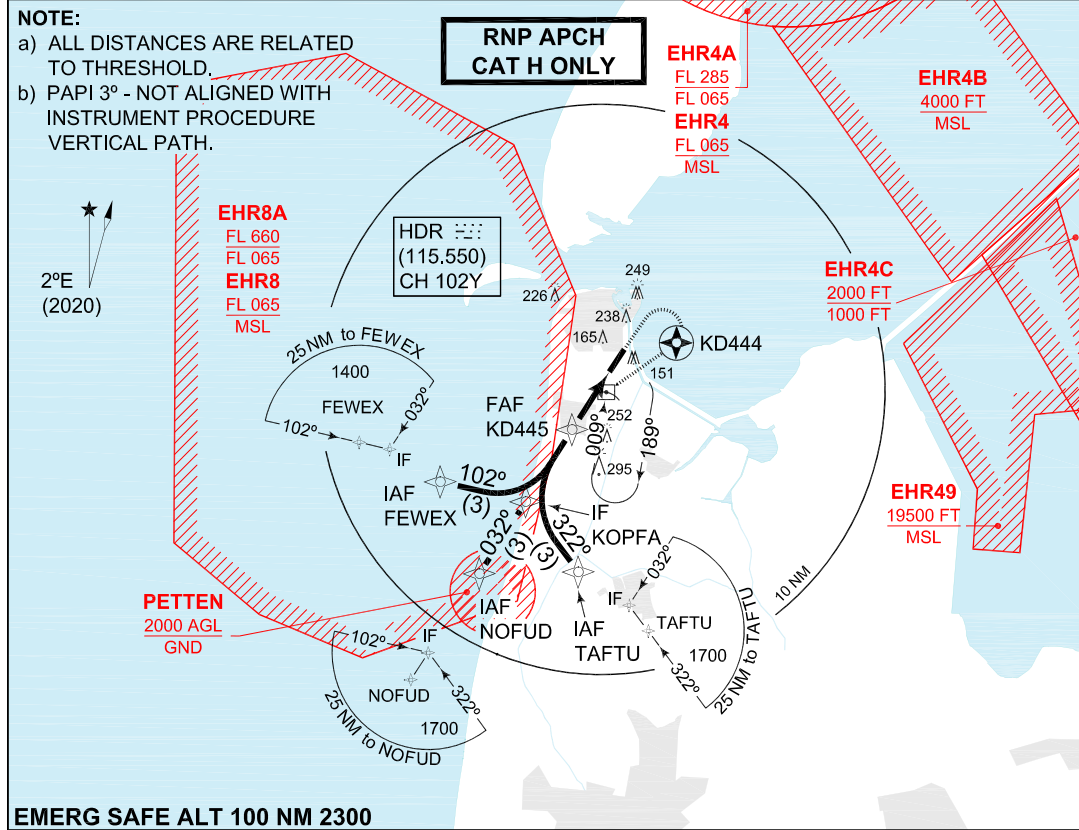
CATEGORY	A		B		H	
DA(H) LPV	NOT AUTHORIZED					
DA(H) LNAV / VNAV	NOT AUTHORIZED					
MDA(H) LNAV	390 -1600 387 (400-1.6/1.8)		420 -1700 417 (500-1.7/1.9)		320 -1200 317 (400-1.2/1.4)	
IAPW	ASTUW	52°46.47'N	004°51.35'E	FAWP	KD442	52°49.31'N 004°44.36'E
WP	KD441	52°46.00'N	004°46.68'E	MAWP	HDR	52°54.41'N 004°45.94'E
IAPW	NIXCO	52°45.44'N	004°38.75'E	MATWP	KD444	52°56.31'N 004°49.78'E
IWP	EDFOS	52°46.36'N	004°43.44'E	HF	HDR	52°54.41'N 004°45.94'E

CHANGES: EDITORIAL

ENLAF 13 JUL 2023

MIPS INSTRUMENT APPROACH CHART **RNP Y RWY 03 DE KOOY (EHKD)**

DUTCH MIL 259.250 128.355		DE KOOY ARRIVAL 372.150 124.230		DE KOOY TWR 379.750 120.130		GND CTL 379.750 121.730		ATIS* 133.010	
EGNOS CHANNEL 69781 E03A		APP COURSE 032°	FAF ALT 1200 FT	Descent GR 6.5% / 3.72°	MDA 350	DA 203	THR ELEV 3	ALS 360 m	LDA 3334 FT

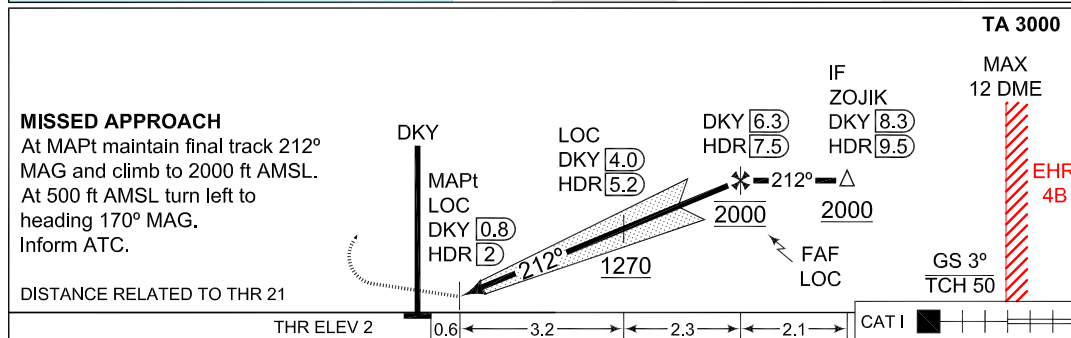
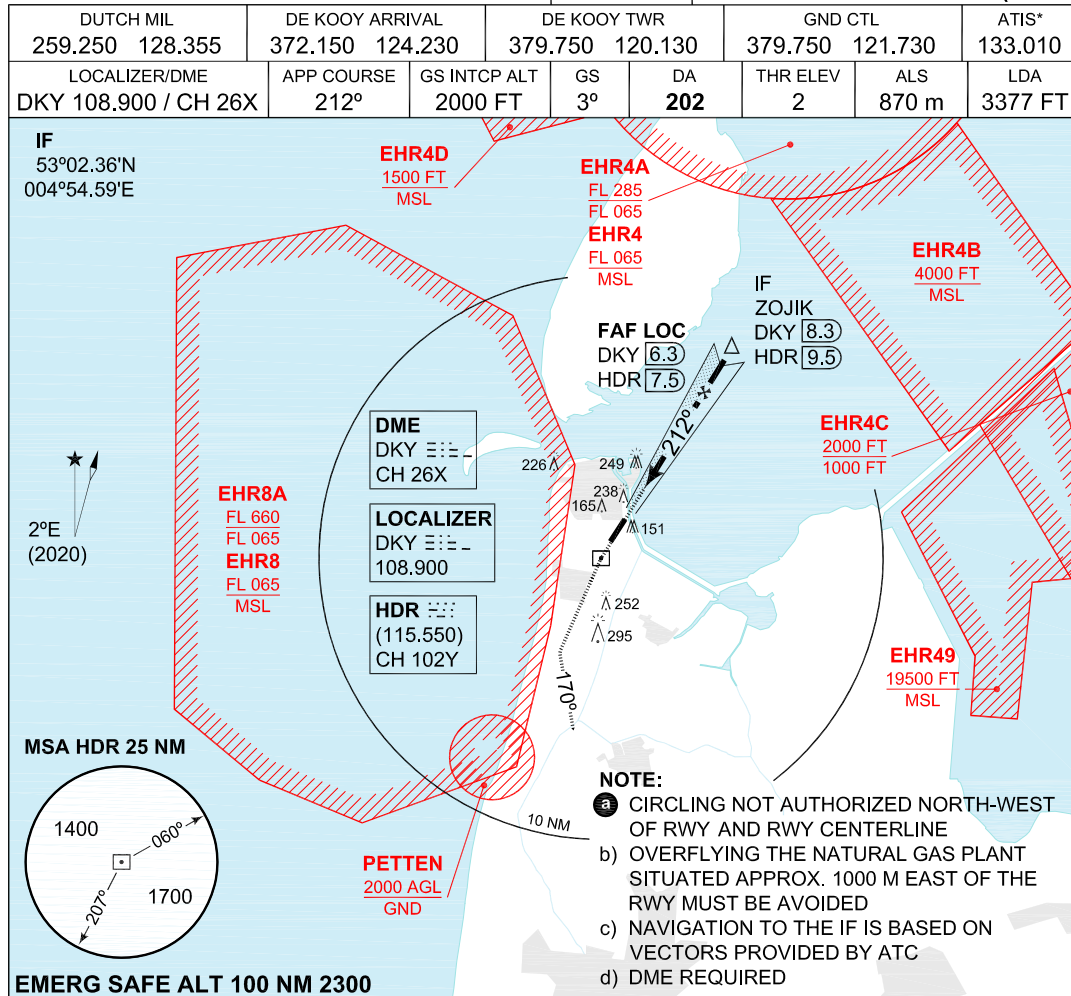


CATEGORY		H					
MIPS	DA(H) LPV	203-1000 200 (200-1.0/1.2)					
	DA(H) LNAV / VNAV	NOT AUTHORIZED					
	MDA(H) LNAV	350-1400 347 (400-1.4/1.6)					
IAWP	FEWEX	52°51.42'N	004°36.82'E	FAWP	KD445	52°52.78'N	004°43.92'E
IAWP	NOFUD	52°48.22'N	004°38.87'E	MAWP	THR 03	52°55.19'N	004°46.59'E
IAWP	TAFTU	52°48.29'N	004°44.54'E	MATWP	KD444	52°56.31'N	004°49.78'E
IWP	KOPFA	52°50.71'N	004°41.62'E	HF	HDR	52°54.41'N	004°45.94'E

CHANGES: EDITORIAL

RNLAF 26 JAN 2023

MIPS INSTRUMENT APPROACH CHART **ILS or LOC RWY 21 DE KOOY (EHKD)**

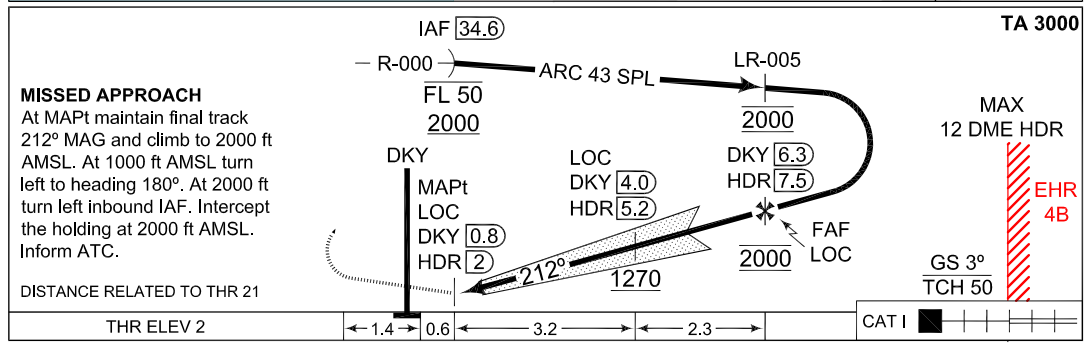
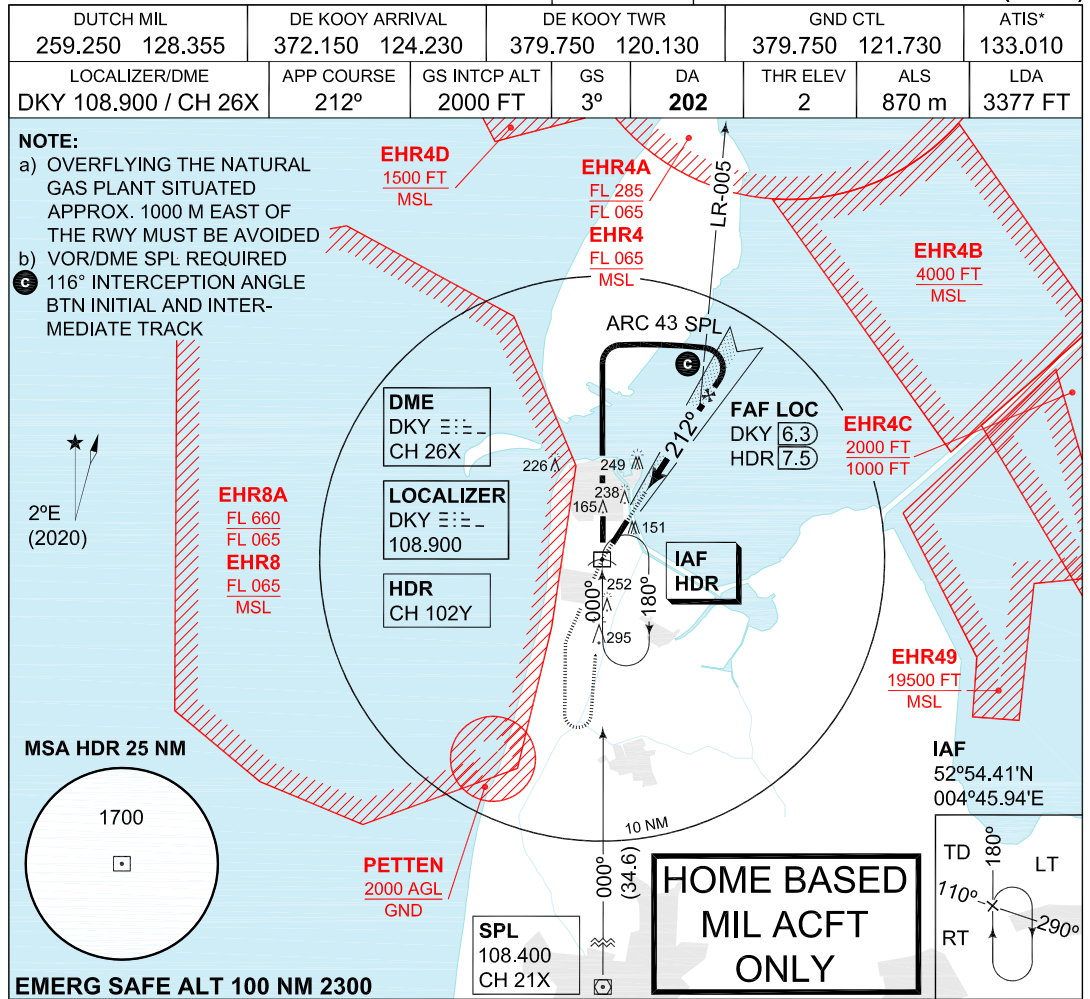


CATEGORY	A	B	H
S-ILS 21	202 -800 200 (200-0.8)		202 -400 200 (200-0.4)
CIRCLING ^a	510 -1900 506 (600-1.9)	550 -2800 546 (600-2.8)	510 -1900 506 (600-1.9)
S-LOC 21	330 -800 328 (400-0.8)		330 -400 328 (400-0.4)

CHANGES: NEW LAYOUT

RNLA F 11 AUG 2022

MIPS INSTRUMENT APPROACH CHART **COPTER ILS or LOC RWY 21 DE KOOY (EHKD)**

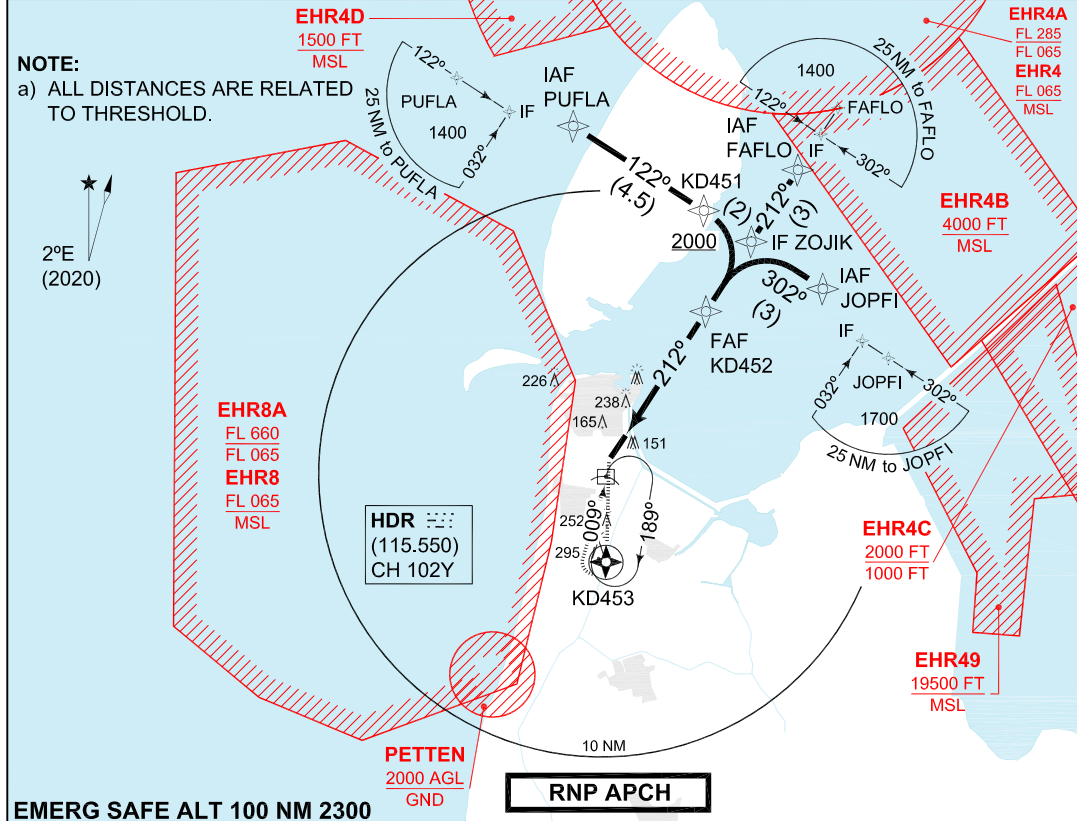


	CATEGORY	H	
CHANGES: NEW LAYOUT MIPS	S-ILS 21	202-400 200 (200-0.4/0.8)	
	S-LOC 21	330-400 328 (400-0.4/0.8)	

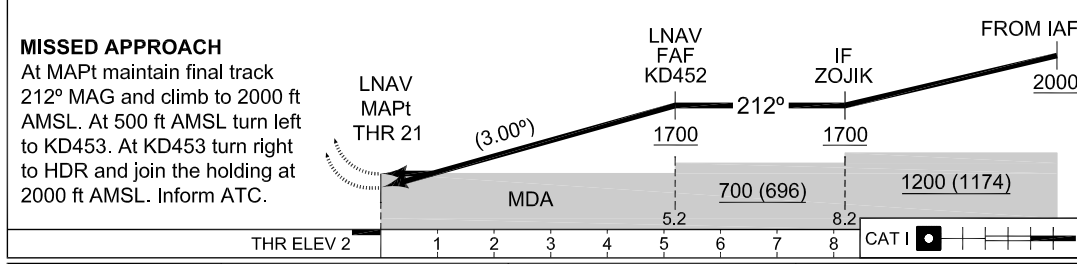
RNLAF 11 AUG 2022

MIPS INSTRUMENT APPROACH CHART **RNP Z RWY 21 DE KOOY (EHKD)**

DUTCH MIL 259.250 128.355		DE KOOY ARRIVAL 372.150 124.230		DE KOOY TWR 379.750 120.130		GND CTL 379.750 121.730		ATIS* 133.010	
EGNOS CHANNEL 62338 E21A	APP COURSE 212°	FAF ALT 1700 FT	Descent GR 5.24% / 3.00°	MDA SEE CAT	DA SEE CAT	THR ELEV 2	ALS 870 m	LDA 3377 FT	

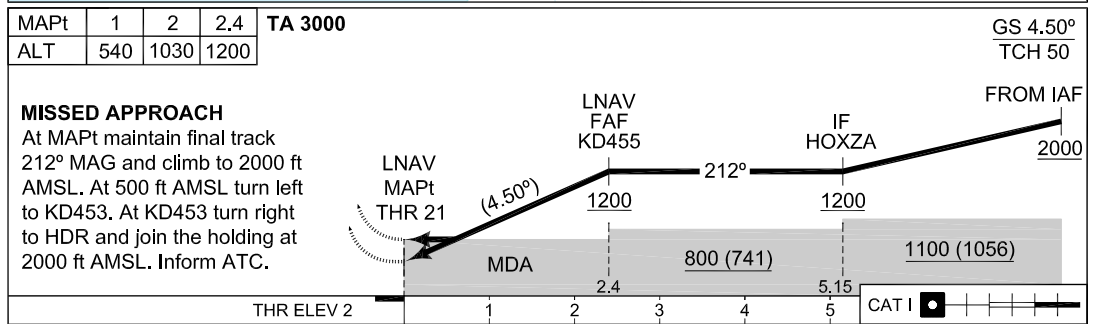
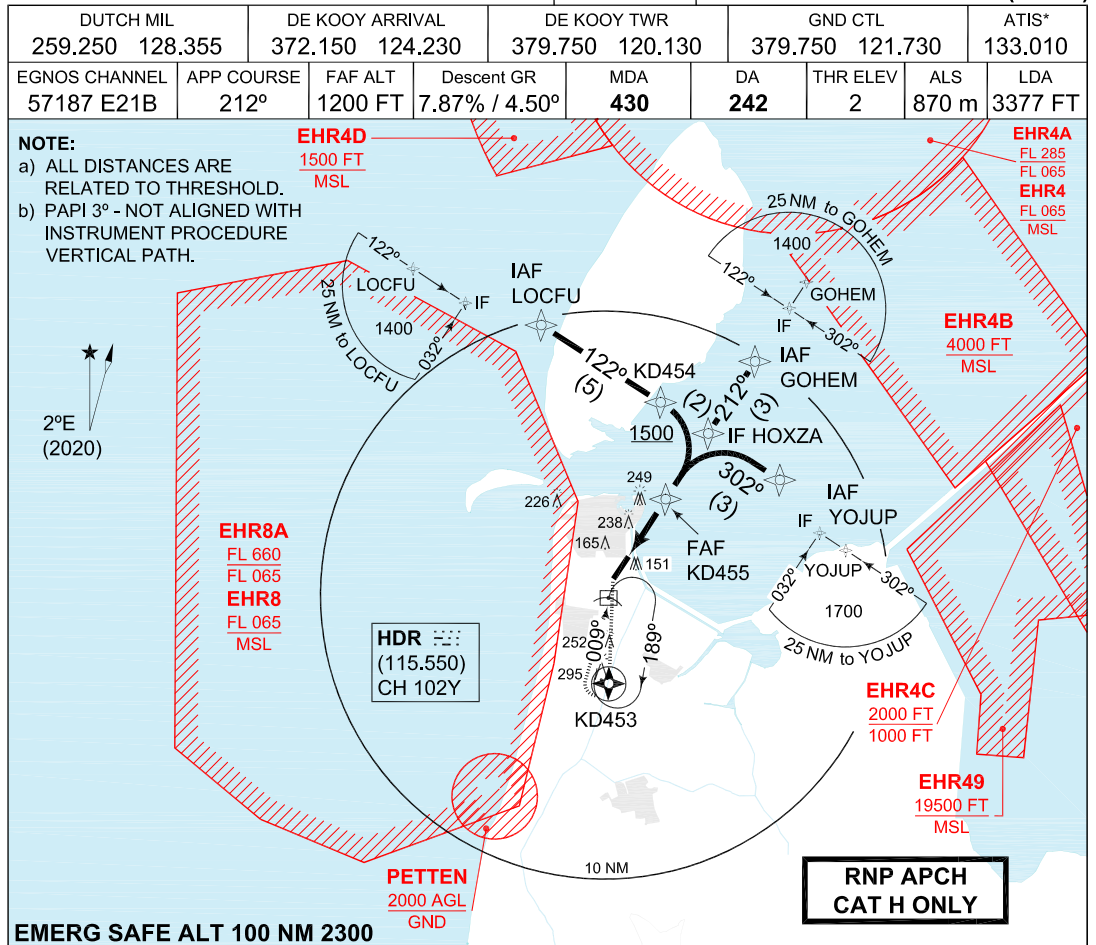


MAPt	1	2	3	4	5	5.2	TA 3000	GS 3°
ALT	370	690	1010	1330	1650	1700		TCH 50



CATEGORY		A		B		H	
DA(H)	LPV	238 -800 236 (300-0.8/1.2)		248 -800 246 (300-0.8/1.3)		222 -800 220 (300-0.8/1.2)	
DA(H)	LNAV / VNAV	NOT AUTHORIZED					
MDA(H)	LNAV	480 -1500 478 (500-1.5/2.2)				430 -1300 428 (500-1.3/2.0)	
IAWP	PUFLA	53°06.54'N	004°44.28'E	FAWP	KD452	52°59.87'N	004°51.81'E
WP	KD451	53°04.03'N	004°50.47'E	MAWP	THR 21	52°55.58'N	004°47.03'E
IAWP	FAFLO	53°04.84'N	004°57.38'E	MATWP	KD453	52°51.42'N	004°45.89'E
IAWP	JOPFI	53°00.68'N	004°58.71'E	HF	HDR	52°54.41'N	004°45.94'E
IWP	ZOJIK	53°02.36'N	004°54.59'E				

MIPS INSTRUMENT APPROACH CHART **RNP Y RWY 21 DE KOOY (EHKD)**



MIPS	CATEGORY	H					
	DA(H) LPV	222-800 220 (300-0.8/1.2)					
	DA(H) LNAV / VNAV	NOT AUTHORIZED					
	MDA(H) LNAV	430-1300 428 (500-1.3/2.0)					
IAWP	LOCFU	53°03.75'N	004°42.16'E	FAWP	KD455	52°57.57'N	004°49.25'E
WP	KD454	53°00.97'N	004°49.04'E	MAWP	THR 21	52°55.58'N	004°47.03'E
IAWP	GOHEM	53°02.34'N	004°54.56'E	MATWP	KD453	52°51.42'N	004°45.89'E
IAWP	YOJUP	52°58.17'N	004°55.90'E	HF	HDR	52°54.41'N	004°45.94'E
IWP	HOXZA	52°59.85'N	004°51.79'E				



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PART 3 – AERODROMES (AD)

AD 2.

**AD 2. AERODROMES
LEEWARDEN**

LEEWARDEN

EHLW AD 2.1 Aerodrome location indicator and name

EHLW Leeuwarden

EHLW AD 2.2 Geographical and administrative data

1	ARP	53°13'30.98"N 005°45'09.12"E
2	Direction and distance from city	325° MAG/2 NM LEEWARDEN
3	Elevation/Reference temperature	+ 3 ft AMSL/20.5° C (AUG)
4	MAG VAR/Annual change	2°E (JAN 2020)/12'E
5	AD operating authority Postal address Visitors' address Telephone Telefax AFTN	RNLAF Vliegbasis Leeuwarden MPC 80A P.O. Box 8762 4820 BB Breda Keegsdijkje 7 8919 AK Leeuwarden +31(0)58 2346911 +31(0)58 2346982 EHLWZTZX
6	Types of TFC permitted (IFR/VFR)	IFR/VFR
7	Remarks	Nil

EHLW AD 2.3 Operational hours

1	AD OPR HR	MON/FRI 0700/1530 (0600/1430)
2	Customs and immigration	45 MIN PN
3	Health and sanitation	HO
4	AIS Briefing office	See 2.23
5	ATS Reporting Office (ARO)	See 2.23
6	MET Briefing Office	HO
7	ATS	HO
8	Fuelling	HO
9	Handling	HO
10	Security	HO
11	De-icing	HO
12	Remarks	PPR 24 HRS See 2.23

EHLW AD 2.4 Handling services and facilities

1	Cargo-handling facilities	Yes
2	Fuel/oil types	F-34, H-515, H-537, O-133, O-142, O-147, O-148, O-149, O-153, O-155, O-156, O-157, O-158, O-190, O-192
3	Fuelling facilities/capacity	No limitations
4	Oxygen	LHOX, LOX
5	De-icing facilities/type	S-738, S-742
6	Starting units	DSA 150, DSA 600, FC 15, FC 30, JAS, EC 3500
7	Hangar space for visiting ACFT	No
8	Repair facilities	F16, F35
9	Remarks	Nil

EHLW AD 2.5 Passenger facilities

1	Remain overnight	AVBL O/R
2	Medical facilities	Medical officer, ambulance
3	Remarks	Nil

EHLW AD 2.6 Rescue and fire fighting services

1	AD category for fire fighting	NATO CAT 7
2	Remarks	Nil

EHLW AD 2.7 Seasonal availability - clearing

1	Seasonal availability	All seasons
2	Snow removal equipment	Yes
3	Remarks	Caution advised in winter during ice conditions

EHLW AD 2.8 Aprons, taxiways and check locations/positions data

1	Apron surface and strength	Concrete, Three areas along southern TWY. PCN: South 1 44 R/C/W/T South 2 44 R/C/W/T South 3 30 R/C/W/T One area along northern TWY. PCN: North 39 R/C/W/T
2	TWY width, surface and strength	Width 39 ft tarmac/concrete, PCN: North 69 F/B/W/T East 75 F/B/W/T South 75 F/B/W/T West 65 F/B/W/T
3	Remarks	Obstacle, due to installation of the M.A.A.S. (and orange shelter), 56 ft from taxiway centreline at intersection C and 59 ft from taxiway centreline at intersection B Southside. Maximum allowed wingspan is 98 ft (30m) for both intersections.

EHLW AD 2.9 Surface movement guidance and control system and markings

According STANAG 3158		
1	Remarks	Nil

EHLW AD 2.10 Aerodrome obstacles

See Aerodrome Chart

EHLW AD 2.11 Meteorological information provided

1	Associated MET Office	Leeuwarden
2	Hours of service MET Office outside hours	HO Joint Meteorological Group
3	Office responsible for TAF preparation Periods of validity	Joint Meteorological Group 12 hrs
4	Type of landing forecast Interval of issuance	TREND Every 30 min during opr hrs
5	Flight documentation Language(s) used	Reports, forecasts and charts. English and Dutch.
6	Charts and other information AVBL for briefing or consultation	GSA, GSP, LGF, Cross section, Upperair forecasts, NVG, Radar- and Satellite Images
7	Supplementary equipment AVBL for providing information	PBS (pilot briefing system)
8	Remarks	Tel EHLW 058-2346056 or mail LW.Meteo@mindef.nl Tel JMG 0164-693111 or mail JMG.WX.PLANNING@mindef.nl

EHLW AD 2.12 Runway physical characteristics

1	RWY dimensions/a-gear	See Aerodrome Chart. Values in ft.
2	RWY surface	Tarmac/concrete
3	RWY strength	PCN: 23 64 F/B/W/T (Stopway 23 24 F/B/W/T) 05 64 F/B/W/T (Stopway 05 24 F/B/W/T) 27 52 F/B/W/T 09 52 F/B/W/T
4	Remarks	RWY 09/27 no Touchdown Zone Marking and Aiming Point Marking available. RWY 23/05 no SWY-marking available on both SWYs. RWY-distance markers provide distance available till RWY end (SWY excluded). RWY 27/07 no Touchdown Zone marking Aiming Point marking available.

EHLW AD 2.13 Declared distances

See Aerodrome Chart. Values in ft.

EHLW AD 2.14 Approach and runway lighting

According STANAG 3316		
1	Approach lighting	RWY 23: CAT I. 720 m RWY 05: CAT I. 660 m RWY 27: Nil RWY 09: Nil
2	RWY lighting	RWY 05/23 VHI/VCL, RWY 09/27 VHI
3	PAPI	Situated on the left side of RWY 23 and RWY 05
4	Remarks	RWY 23/05 RWY-end installed at end of the SWY. Beginning of SWY should be considered as RWY-end, due to low PCN of SWY (24). SWY is marked with red SWY edge lights.

EHLW AD 2.15 Other lighting, secondary power supply

1	LDI	Nil
2	TWY edge lighting	VB
3	Emergency RWY lighting	Nil
4	Emergency TWY edge lighting	Retroreflective markers
5	Secondary power supply/switch-over	AVBL, switch over time 15 seconds
6	Remarks	Nil

EHLW AD 2.16 Helicopter landing area

1	Location	200 m Northeast of TWR. See Aerodrome Chart.
2	Marking	Daylight marking
3	Lighting	No
4	Remarks	Nil

EHLW AD 2.17 Air traffic services airspace

1	Designation and lateral limits	Leeuwarden control zone 53°20'10.90"N 005°52'29.80"E; 53°21'38.51"N 005°56'03.02"E; 53°16'41.94"N 006°01'42.19"E; 53°15'14.48"N 005°58'09.16"E; along clockwise arc (radius 8 NM, centre 53°13'30.98"N 005°45'09.12"E) to 53°06'50.46"N 005°37'51.08"E; 53°05'22.29"N 005°34'19.67"E; 53°10'17.48"N 005°28'38.65"E; 53°11'45.80"N 005°32'10.23"E; along clockwise arc (radius 8 NM, centre 53°13'30.98"N 005°45'09.12"E) to point of origin.
2	Vertical limits	GND to 3000 ft AMSL
3	Airspace classification	D
4	ATS unit call sign Language(s)	Contact initially Leeuwarden TWR. English
5	Transition altitude	IFR: 3000 ft AMSL; VFR: 3500 ft AMSL
6	Remarks	Nil

EHLW AD 2.18 Air traffic services communication facilities

STATION/ SERVICE	CALL SIGN OR IDENTIFICATION	FREQUENCY MHz	HOURS	REMARKS
1	2	3	4	5
	As appropriate	121.500 243.000	HO	Emergency FREQ for all services
TWR	Leeuwarden Tower	120.705 ^{*)} 122.100 344.850 ^{*)} 257.800	HO	^{*)} Primary FREQ
GND CTL	Leeuwarden Ground	362.525	HO	Radar equipped
APP	RAPCON North	132.030 ^{*)} 284.475 ^{*)}	HO	
RADAR	Leeuwarden Arrival	132.030 339.700	HO	Through APP

EHLW AD 2.19 Radio navigation and landing aids

FACILITY	ID	CHANNEL FREQ.	HOURS	CO-ORD.	RANGE/ ALTITUDE	REMARKS
1	2	3	4	5	6	7
TACAN	LWD	CH 94X	H24	53°13'25.08"N 005°45'06.64"E	150 NM/60000 ft	FREQ pro- tected
ILS 05 LOCALIZER	LWZ	111.750	HO	53°13'59.14"N 005°46'17.18"E		
GLIDEPATH		333.350	HO	53°13'17.66"N 005°44'27.50"E		
DME 05		CH 54Y	HO	53°13'17.66"N 005°44'27.50"E		
ILS 23 LOCALIZER	LWO	111.750	HO	53°13'04.37"N 005°44'04.89"E		
GLIDEPATH		333.350	HO	53°13'50.75"N 005°45'46.46"E		
DME 23		CH 54Y	HO	53°13'50.75"N 005°45'46.46"E		
ILS 09 LOCALIZER	WOL	109.750	HO	53°13'42.54"N 005°46'20.19"E		
GLIDEPATH		333.050	HO	53°13'39.59"N 005°44'43.45"E		
DME 09		CH 34Y	HO	53°13'39.59"N 005°44'43.45"E		
ILS 27 LOCALIZER	LOB	109.750	HO	53°13'42.90"N 005°44'16.77"E		
GLIDEPATH		333.050	HO	53°13'39.38"N 005°45'54.62"E		
DME 27		CH 34Y	HO	53°13'39.38"N 005°45'54.62"E		

EHLW AD 2.20 Local traffic regulations

Glider- and Light ACFT flying

Gliderflying outside OPR HR SR/SS.

EHLW AD 2.21 Noise abatement procedures

Special rules for visiting jet ACFT:

a. APPROACHING:

- normal circuit procedures, except R/H circuits for RWY 23 and 27;
- jet ACFT full-stop landings only;
- practice diversions may only be executed by ACFT on IF-training missions.

b. DEPARTING:

- after take off climb ASAP to at least 1000 ft AGL;
- (if possible) use of afterburner to be terminated before reaching Marssum (end of RWY 23) or Jelsum (end of RWY 05);
- low level departures: after take off straight ahead to at least 1500 ft AGL before turning on course;
- high level departures: only SIDs are allowed;
- afterburner climbouts are not permitted.

EHLW AD 2.22 Flight procedures**IFR procedures**

The IAP and SID procedures are established in accordance with STANAG 3759 AND AATCP-1.

RNP Y approach RWY 05

Serial Number	Path Descriptor	WPT Ident	Fly Over	Course Mag°/(T°)	Recom navaid	Dist nm	turn	Altitude (ft AMSL)	Speed (KIAS)	VPA(° TCH (ft)	NAV spec
001	IF	DUTCU	-	-	-	-	-	+ 1500	-	-	-
002	TF	BOCOC	-	143 (145)	-	3	-	+ 1500	-	-	RNAV1
003	IF	TOHAR	-	-	-	-	-	+ 1500	-	-	-
004	TF	BOCOC	-	053 (055)	-	3	-	+ 1500	-	-	RNAV1
005	IF	VEFKI	-	-	-	-	-	+ 1500	-	-	-
006	TF	BOCOC	-	323 (325)	-	3	-	+ 1500	-	-	RNAV1
007	IF	BOCOC	-	-	-	-	-	+ 1500	-	-	-
008	TF	LW444	-	053 (055)	-	3	-	+ 1500	-	-	RNP APCH
009	TF	THR05	Y	053 (055)	-	3.7	-	-	-	-3.72/50	RNP APCH
010	CA	-	-	053 (055)	-	-	-	+1200	-	-	RNP APCH
011	DF	DUTCU	-	-	-	-	L	+ 1500	-	-	RNP APCH

FAS data block – RNP Y RWY 05

Input data	
Operation Type	0
SBAS Provider	1 (EGNOS)
Airport Identifier	EHLW
Runway	05
Runway Letter	0 (None)
Approach Performance Designator	0
Route Indicator	Y
Reference Path Data Selector	0
Reference Path Identifier	E05A
LTP/FTP Latitude	531308.9900N
LTP/FTP Longitude	0054416.0400E
LTP/FTP Ellipsoidal Height (metres)	42.6
FPAP Latitude	531358.5755N
Delta FPAP Latitude (seconds)	49.5855
FPAP Longitude	0054615.8275E
Delta FPAP Longitude (seconds)	119.7875
Threshold Crossing Height	50.0
TCH Units Selector	0 (feet)
Glidepath Angle (degrees)	3.72
Course Width (metres)	105.00
Length Offset (metres)	0
HAL (metres)	40.0
VAL (metres)	35.0

Output data	
Data Block	10 17 0C 08 05 05 C8 00 01 35 30 05 FC D4 D6 16 50 5F 76 02 AA 15 63 83 01 D7 A7 03 F4 01 74 01 64 00 C8 AF 28 A6 73 8E
Calculated CRC Value	28A6738E
Supplied CRC Value	28A6738E
Comparison Result	OK

Required Additional Data	
ICAO Code	LW
LTP/FTP Orthometric Height (metres)	1.2

NOTE: EUROCONTROL FAS DB tool Version 3.2.0

RNP Y approach RWY 23

Serial Number	Path Descriptor	WPT Ident	Fly Over	Course Mag°/(T°)	Recom navaid	Dist nm	turn	Altitude (ft AMSL)	Speed (KIAS)	VPA(° TCH (ft)	NAV spec
001	IF	IPCOL	-	-	-	-	-	+ 1500	-	-	-
002	TF	LIWOB	-	143 (145)	-	3	-	+ 1500	-	-	RNAV1
003	IF	XOZEP	-	-	-	-	-	+ 1500	-	-	-
004	TF	LIWOB	-	233 (235)	-	3	-	+ 1500	-	-	RNAV1
005	IF	RACLE	-	-	-	-	-	+ 1500	-	-	-
006	TF	LIWOB	-	323 (325)	-	3	-	+ 1500	-	-	RNAV1
007	IF	LIWOB	-	-	-	-	-	+ 1500	-	-	-
008	TF	LW434	-	233 (235)	-	3	-	+ 1500	-	-	RNP APCH
009	TF	THR23	Y	233 (235)	-	3.7	-	-	-	-3.72/50	RNP APCH
010	CA	-	-	233 (235)	-	-	-	+ 1200	-	-	RNP APCH
011	DF	IPCOL	-	-	-	-	R	+ 1500	-	-	RNP APCH

FAS data block – RNP Y RWY 23

Input data	
Operation Type	0
SBAS Provider	1 (EGNOS)
Airport Identifier	EHLW
Runway	23
Runway Letter	0 (None)
Approach Performance Designator	0
Route Indicator	Y
Reference Path Data Selector	0
Reference Path Identifier	E23A
LTP/FTP Latitude	531352.9500N
LTP/FTP Longitude	0054602.2300E
LTP/FTP Ellipsoidal Height (metres)	42.5
FPAP Latitude	531304.5415N
Delta FPAP Latitude (seconds)	-48.4085
FPAP Longitude	0054405.3015E
Delta FPAP Longitude (seconds)	-116.9285
Threshold Crossing Height	50.0
TCH Units Selector	0 (feet)
Glidepath Angle (degrees)	3.72
Course Width (metres)	105.00
Length Offset (metres)	0
HAL (metres)	40.0
VAL (metres)	35.0

Output data	
Data Block	10 17 0C 08 05 17 C8 00 01 33 32 05 6C 2C D8 16 EC 9C 79 02 A9 15 CF 85 FE 7F 6E FC F4 01 74 01 64 00 C8 AF 56 6E 17 51
Calculated CRC Value	566E1751
Supplied CRC Value	566E1751
Comparison Result	OK

Required Additional Data	
ICAO Code	EH
LTP/FTP Orthometric Height (metres)	1.2

NOTE: EUROCONTROL FAS DB tool Version 3.2.0

VFR procedures

CONVENTIONAL ACFT:

Join R/H - or L/H baseleg for RWY in use as directed by ATC.

LIGHT ACFT/HEL:

Join circuit from the south at 600 ft. This altitude is to be reached at a distance of at least 5 NM from the AD. Departure from the AD to be carried out in a southern direction at 600 ft. In both the landing pattern and after take off RWYs 05/23 and 09/27 are not to be crossed.

EHLW AD 2.23 Additional information

AIS Briefing office facility and the ATS Reporting Office (ARO) is only available through the Flight Data and Notam Office (FDNO) located at MilATCC Schiphol.

Tel: +31(0)20 4062840

Tel: +31(0)20 4062841

E-mail: aocs.fdns@mindef.nl

AFTN: EHMCZPZX

avbl H24

PPR 24 HRS: for Prior Permission Request contact:

Leeuwarden AB

Operational Centre

Tel: +31(0)58 2346004/6006

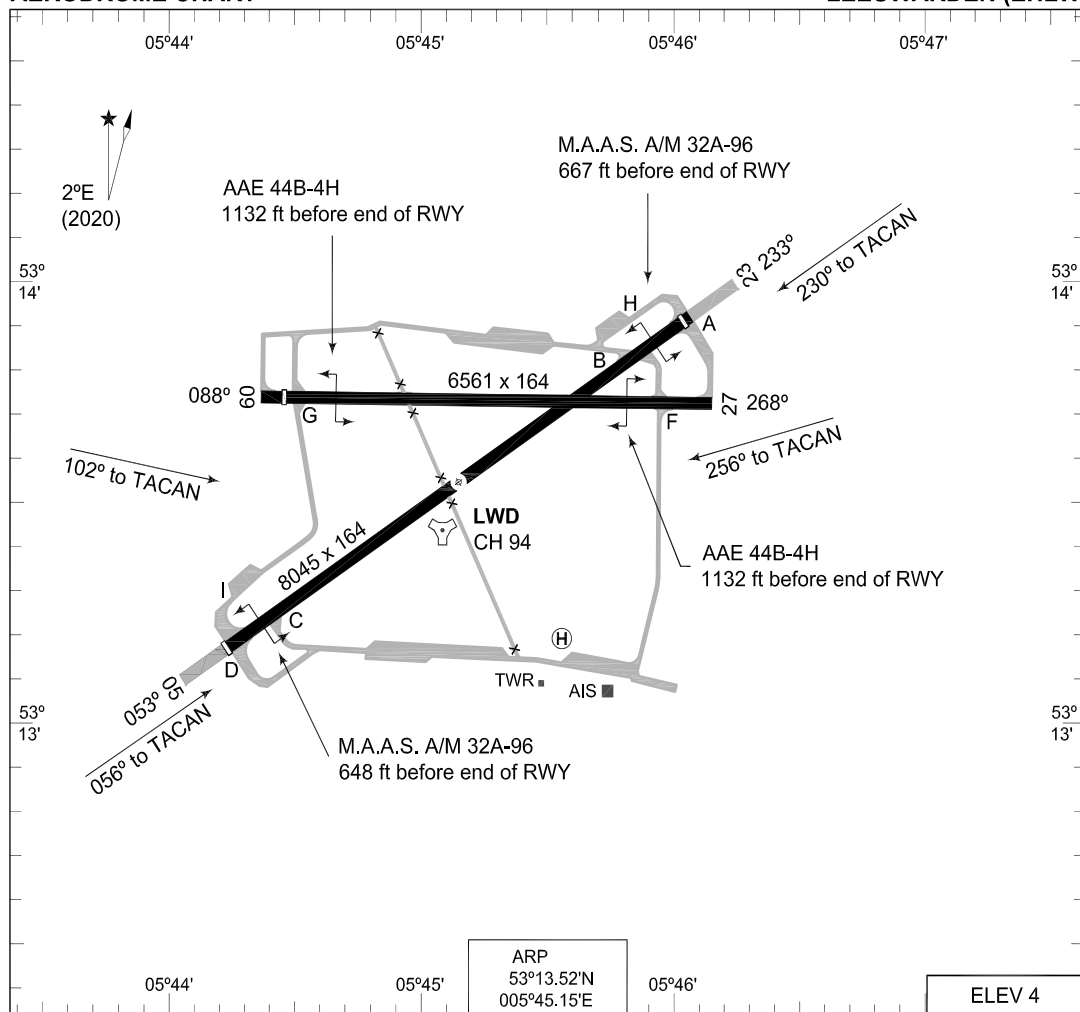
E-mail: LW.IPCC.Daily.Ops@mindef.nl

EHLW AD 2.24 Charts related to an aerodrome

Aerodrome Chart	EHLW AD 2-12
Local map	EHLW AD 2-13
MVA chart	EHLW AD 2-14
Aerodrome obstacle chart RWY 05-23	EHLW AD 2-15
Aerodrome obstacle chart RWY 09-27	EHLW AD 2-16
Instrument departure chart LW1	EHLW AD 2-17
Instrument departure chart LW3	EHLW AD 2-18
Instrument departure chart LW5	EHLW AD 2-19
Instrument departure chart LW7	EHLW AD 2-20
Instrument approach chart ILS or LOC RWY 05	EHLW AD 2-21
Instrument approach chart HI-TACAN RWY 05	EHLW AD 2-22
Instrument approach chart TACAN RWY 05	EHLW AD 2-23
Instrument approach chart COPTER ILS or LOC 053	EHLW AD 2-24
Instrument approach chart COPTER TACAN 056	EHLW AD 2-25
Instrument approach chart RNP Z RWY 05	EHLW AD 2-26
Instrument approach chart RNP Y RWY 05	EHLW AD 2-27
Instrument approach chart ILS or LOC RWY 09	EHLW AD 2-28
Instrument approach chart HI-TACAN RWY 09	EHLW AD 2-29
Instrument approach chart TACAN RWY 09	EHLW AD 2-30
Instrument approach chart ILS or LOC RWY 23	EHLW AD 2-31
Instrument approach chart HI-TACAN RWY 23	EHLW AD 2-32
Instrument approach chart TACAN RWY 23	EHLW AD 2-33
Instrument approach chart COPTER ILS or LOC 233	EHLW AD 2-34
Instrument approach chart COPTER TACAN 230	EHLW AD 2-35
Instrument approach chart RNP Z RWY 23	EHLW AD 2-36
Instrument approach chart RNP Y RWY 23	EHLW AD 2-37
Instrument approach chart ILS or LOC RWY 27	EHLW AD 2-38
Instrument approach chart HI-TACAN RWY 27	EHLW AD 2-39
Instrument approach chart TACAN RWY 27	EHLW AD 2-40

**MIPS
AERODROME CHART**

LEEUWARDEN (EHLW)



RWY	PCN	TORA	ASDA	TODA	LDA	PAPI	THR ELEV	THR PSN
23	64 F/B/W/T	8045	8045	8832	7863	3.0°	4	53°13.88'N 005°46.04'E
05	64 F/B/W/T	8045	8045	8865	8036	3.0°	4	53°13.15'N 005°44.27'E
27	52 F/B/W/T	6561	6561	6561	6561		3	53°13.71'N 005°46.18'E
09	52 F/B/W/T	6561	6561	6561	6368		3	53°13.71'N 005°44.44'E

LEEUWARDEN TWR 344.850 120.705 (Ground Control) 362.525
 LEEUWARDEN ARRIVAL 339.700
 RAPCON NORTH 284.475 132.030

	PROC. CRITERIA	RWY	GS	TCH	OTCH	RPI	CAT	MINIMA CRITERIA	MINIMA
SRA	MIPS	23					AB	MIPS	450-1100 446 (500-1.1/1.9)
							C		450-1200 446 (500-1.2/2.0)
							D		450-1600 446 (500-1.6/2.4)
							E		450-2000 446 (500-2.0/2.8)
									470-1100 446 (500-1.1/1.9)
	MIPS	05					AB	MIPS	470-1100 446 (500-1.1/1.9)
							C		470-1200 446 (500-1.2/2.0)
							D		470-1600 446 (500-1.6/2.4)
							E		470-2000 446 (500-2.0/2.8)
									420-1900 417 (500-1.9/1.9)
	MIPS	27					AB	MIPS	420-1900 417 (500-1.9/1.9)
							CD		420-2000 417 (500-2.0/2.0)
							E		420-2400 417 (500-2.4/2.4)
									460-1900 458 (500-1.9/1.9)
									460-2000 458 (500-2.0/2.0)
	MIPS	09					AB	MIPS	460-1900 458 (500-1.9/1.9)
C							460-2000 458 (500-2.0/2.0)		
DE							460-2400 458 (500-2.4/2.4)		

CHANGES: MAGVAR, CABLE

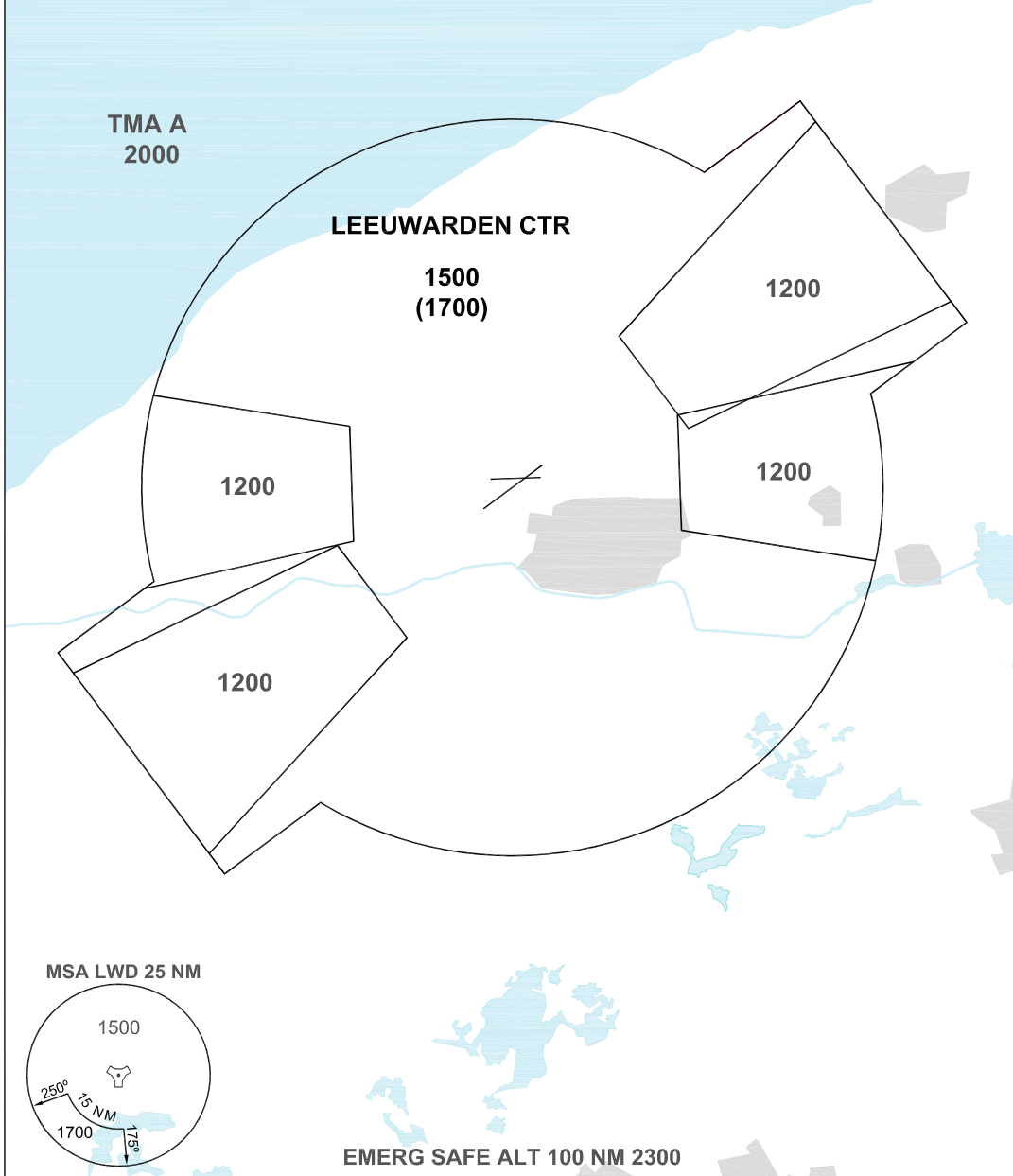
RNLAf 03 DEC 2020

LOCAL MAP



MIPS **MINIMUM VECTORING ALTITUDE** AD ELEV 4 **MVA CHART**
LEEUWARDEN (EHLW)

DUTCH MIL 259.250 128.355	RAPCON NORTH 284.475 132.030	LEEUWARDEN TWR 344.850 120.705	GND CTL 362.525
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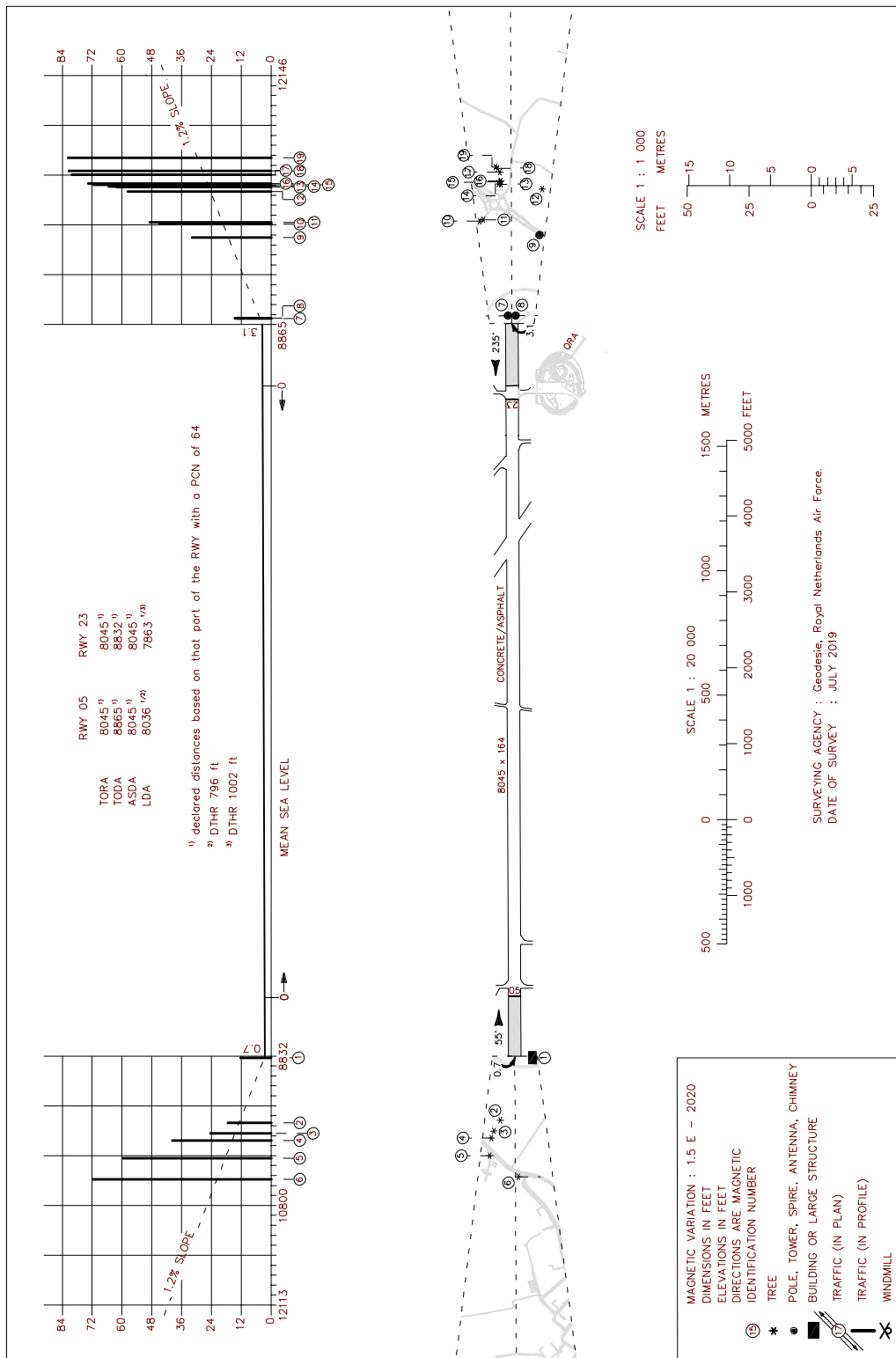


- THE ALTITUDE BETWEEN BRACKETS IS TO BE USED FOR THE CORRESPONDING SECTOR WHEN AIR TEMPERATURE AT AIRBASE ALTITUDE IS LOWER THAN -16°.
- ALTITUDES ONLY AVAILABLE IF THE RADAR COVERAGE PERMITS.

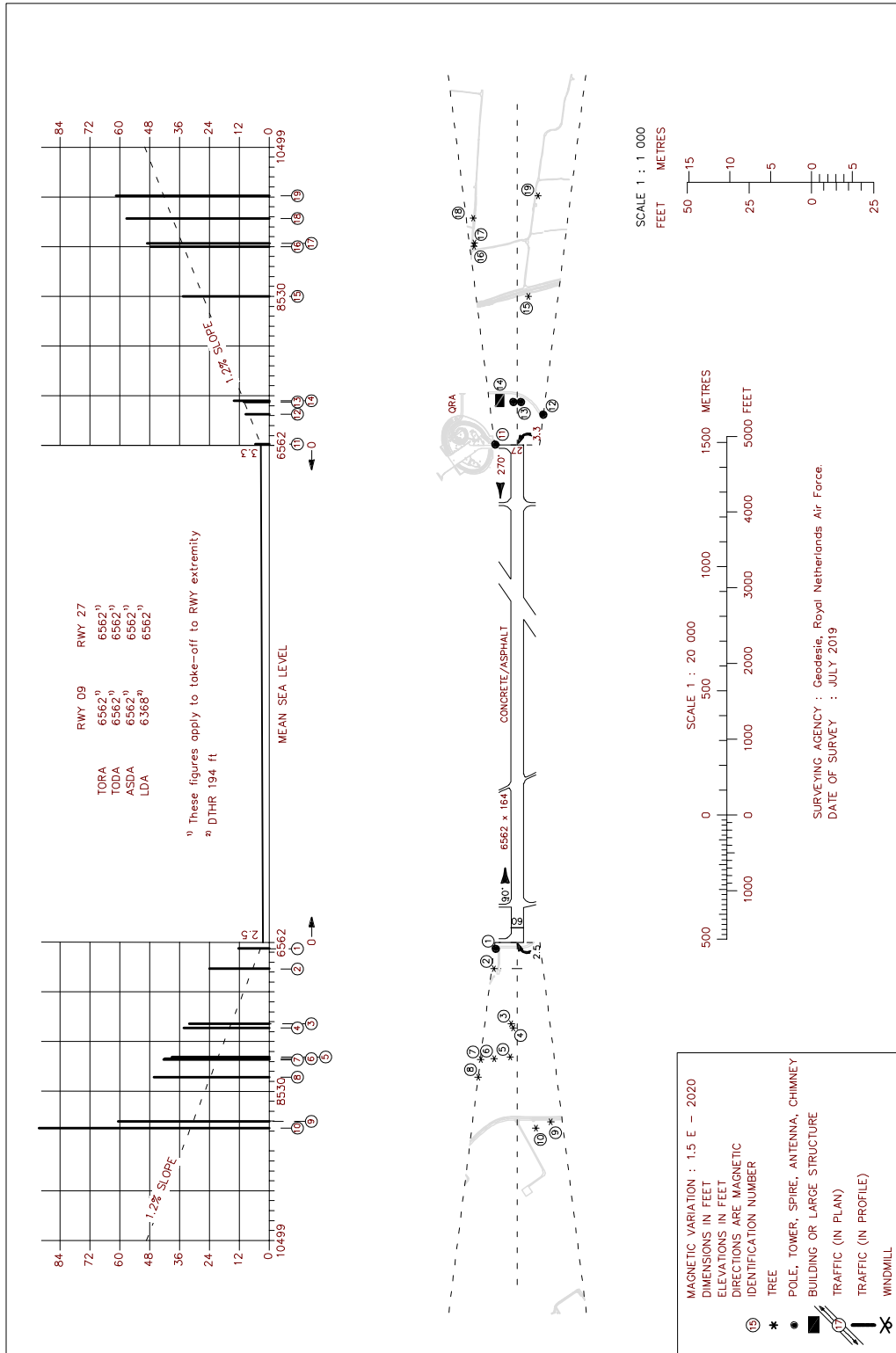
CHANGES: MSA

RNLAF 24 FEB 2022

LEEWARDEN RWY 05 - 23
AERODROME OBSTACLE CHART TYPE A

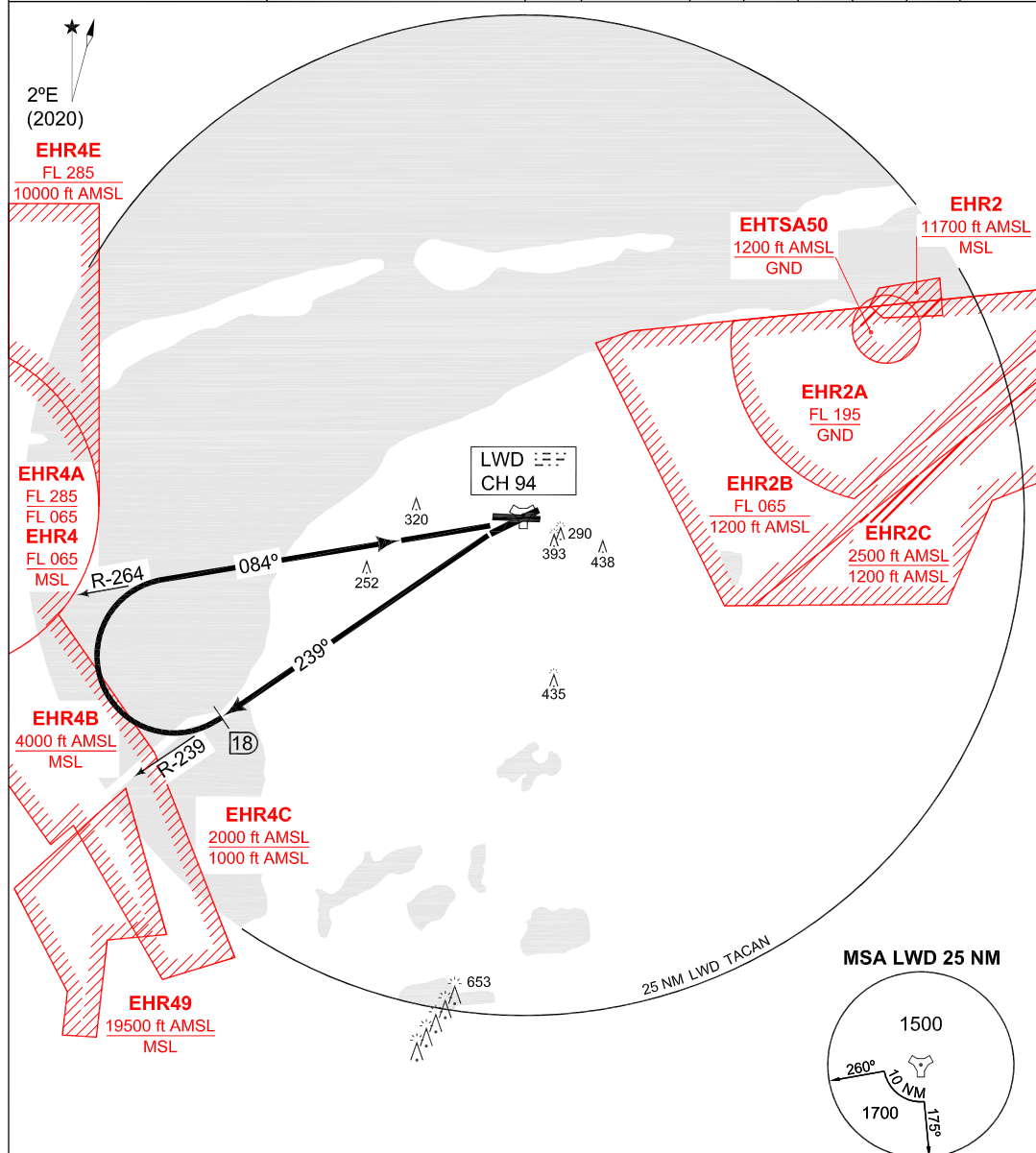


LEEWARDEN RWY 09 - 27
AERODROME OBSTACLE CHART TYPE A



TERPS INSTRUMENT DEPARTURE CHART **LW1**
LEEUWARDEN (EHLW)

GND CTL 362.525	LEEUWARDEN TWR 344.850 120.705	AD ELEV 4				RAPCON NORTH 284.475 132.030				DUTCH MIL 259.250 128.355			
		RWY 23	Knots V/V (fpm)	120 600	180 900	240 1200	300 1500	360 1800	to 1000 ft				



EMERG SAFE ALT 100 NM 2300 **TA 3000**

LEEUWARDEN 1 (RWY 23)	- Climb on R-239 outbound Leeuwarden TACAN. - At 18 DME turn right to intercept R-264 inbound and proceed to Leeuwarden TACAN.
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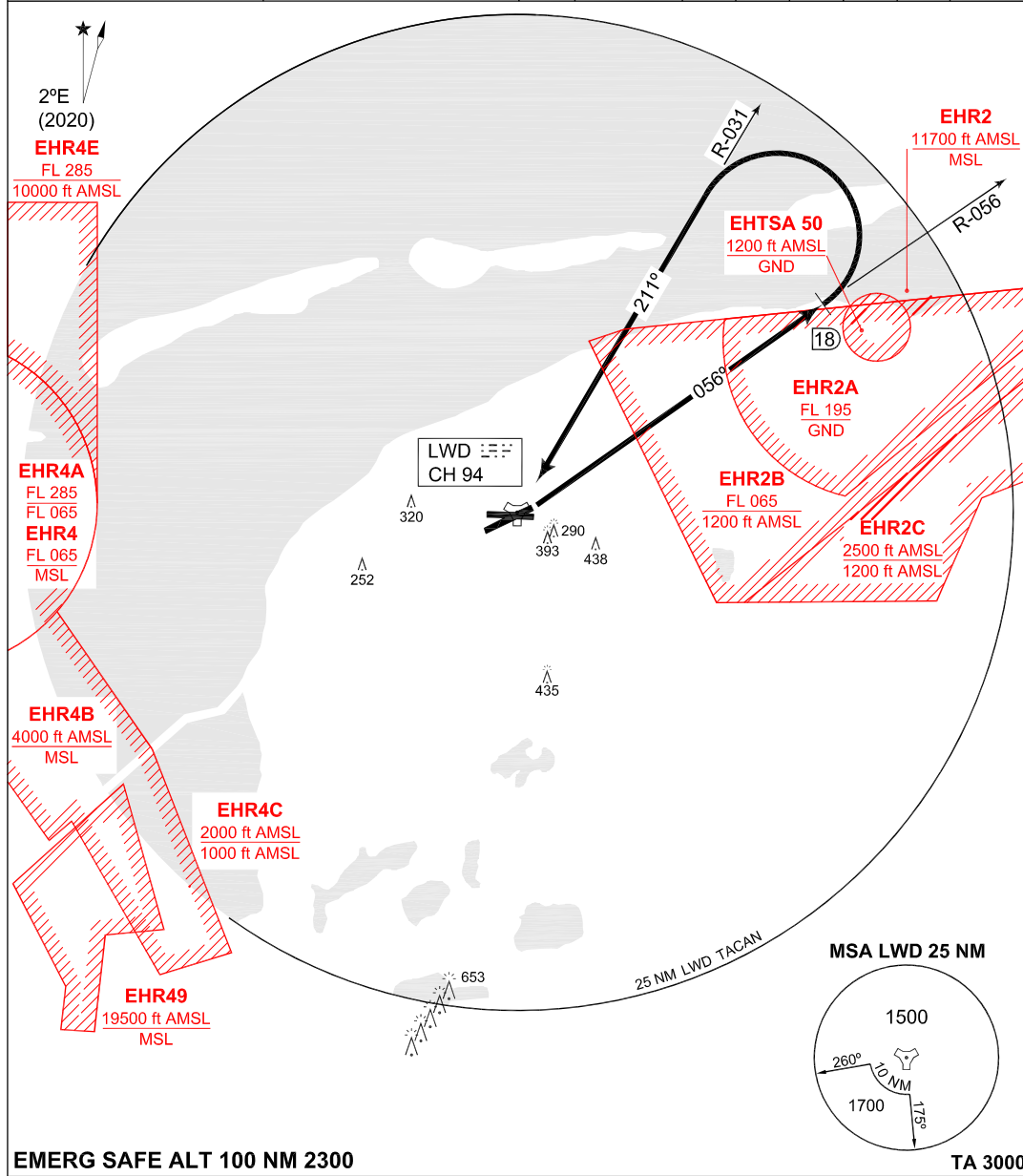
NOTE: Procedure may be changed by ATC when BREEZANDDIJK firing range is active.

CHANGES: MSA

RNLAf 23 MAR 2023

TERPS INSTRUMENT DEPARTURE CHART **LW3 LEEUWARDEN (EHLW)**

GND CTL 362.525		LEEUWARDEN TWR 344.850 120.705		RAPCON NORTH 284.475 132.030				DUTCH MIL 259.250 128.355			
				RWY	Knots	120	180	240	300	360	to
				05	V/V (fpm)	540	810	1080	1350	1620	1000 ft



CHANGES: MSA

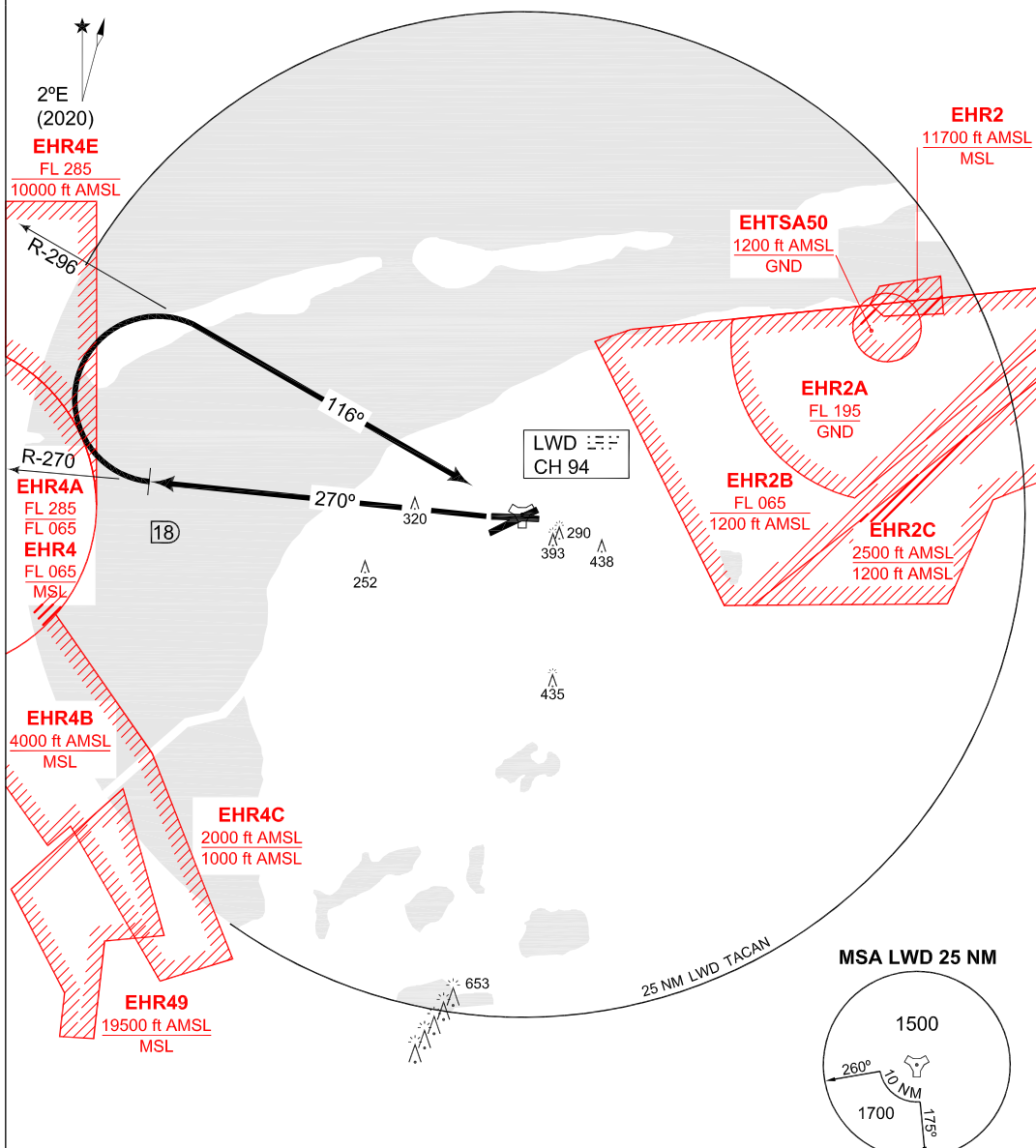
LEEUWARDEN 3 (RWY 05)

- Climb on R-056 outbound Leeuwarden TACAN.
- At 18 DME turn left to intercept R-031 inbound and proceed to Leeuwarden TACAN.

RNLAF 23 MAR 2023

TERPS INSTRUMENT DEPARTURE CHART **LW5 LEEUWARDEN (EHLW)**

GND CTL 362.525	LEEUWARDEN TWR 344.850 120.705	RAPCON NORTH 284.475 132.030		DUTCH MIL 259.250 128.355					
		RWY 27	Knots V/V (fpm)	120 550	180 825	240 1100	300 1375	360 1700	to 1000 ft



EMERG SAFE ALT 100 NM 2300 **TA 3000**

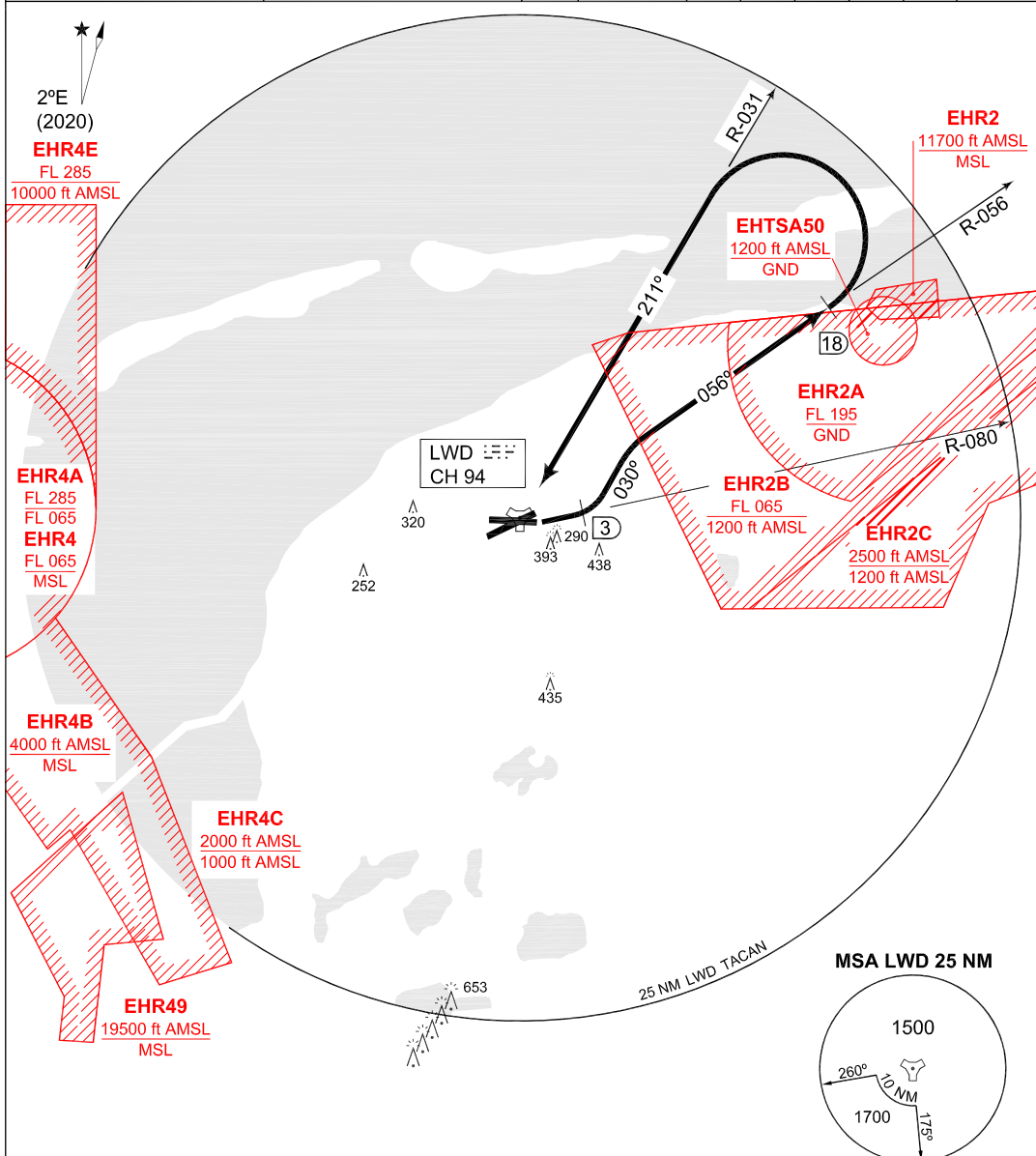
LEEUWARDEN 5 (RWY 27) - After take-off RWY 27 intercept R-270 outbound Leeuwarden TACAN.
 - At 18 DME turn right to intercept R-296 inbound Leeuwarden TACAN.

CHANGES: MSA

RNIAF 23 MAR 2023

TERPS INSTRUMENT DEPARTURE CHART **LW7 LEEUWARDEN (EHLW)**

GND CTL 362.525	LEEUWARDEN TWR 344.850 120.705	AD ELEV 4				RAPCON NORTH 284.475 132.030				DUTCH MIL 259.250 128.355			
		RWY	Knots	120	180	240	300	360	to				
		09	V/V (fpm)	750	1125	1500	1875	2250	1000 ft				

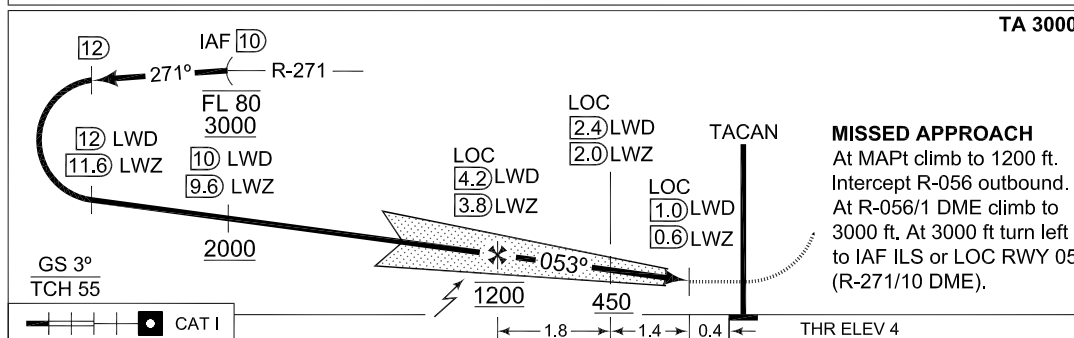
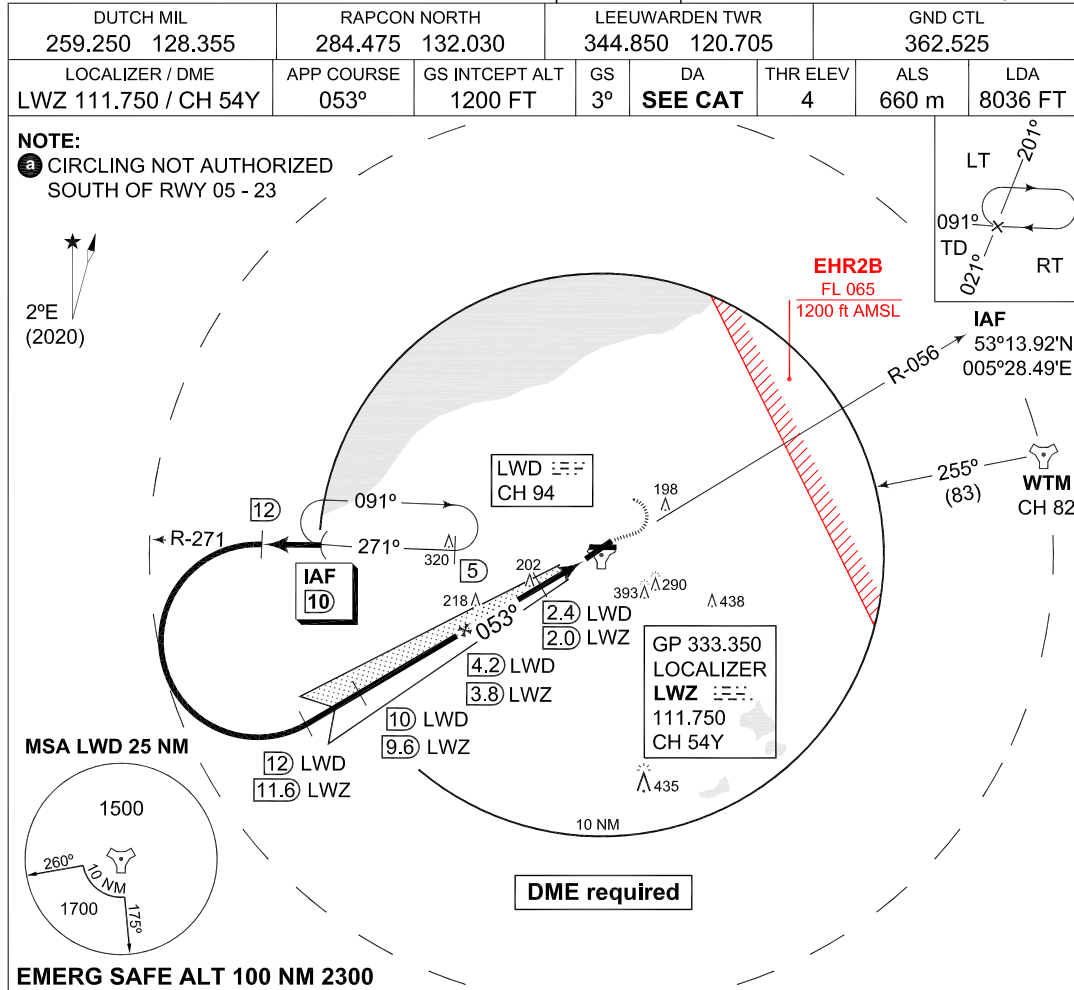


EMERG SAFE ALT 100 NM 2300 **TA 3000**

<p>CHANGES: MSA</p> <p>LEEUWARDEN 7 (RWY 09)</p>	<ul style="list-style-type: none"> - After take-off intercept R-080 outbound Leeuwarden TACAN. - At 3 DME turn left heading 030° to intercept R-056 Leeuwarden TACAN. - At 18 DME turn left to intercept R-031 inbound Leeuwarden TACAN.
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RNLAF 23 MAR 2023

MIPS INSTRUMENT APPROACH CHART **ILS or LOC RWY 05 LEEUWARDEN (EHLW)**



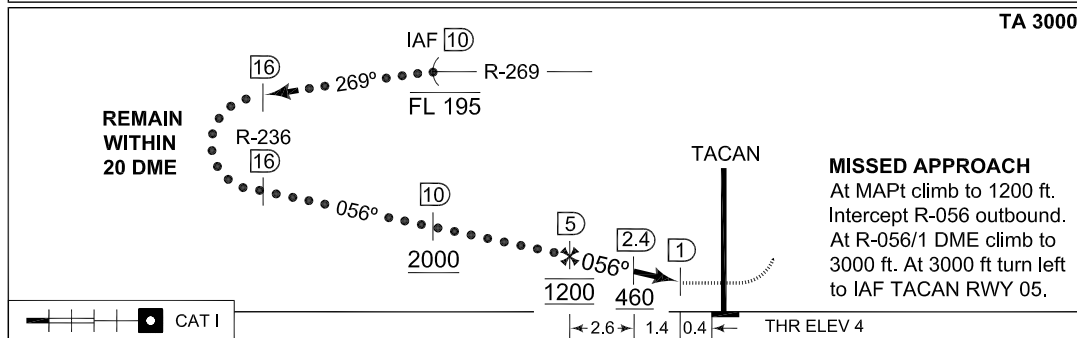
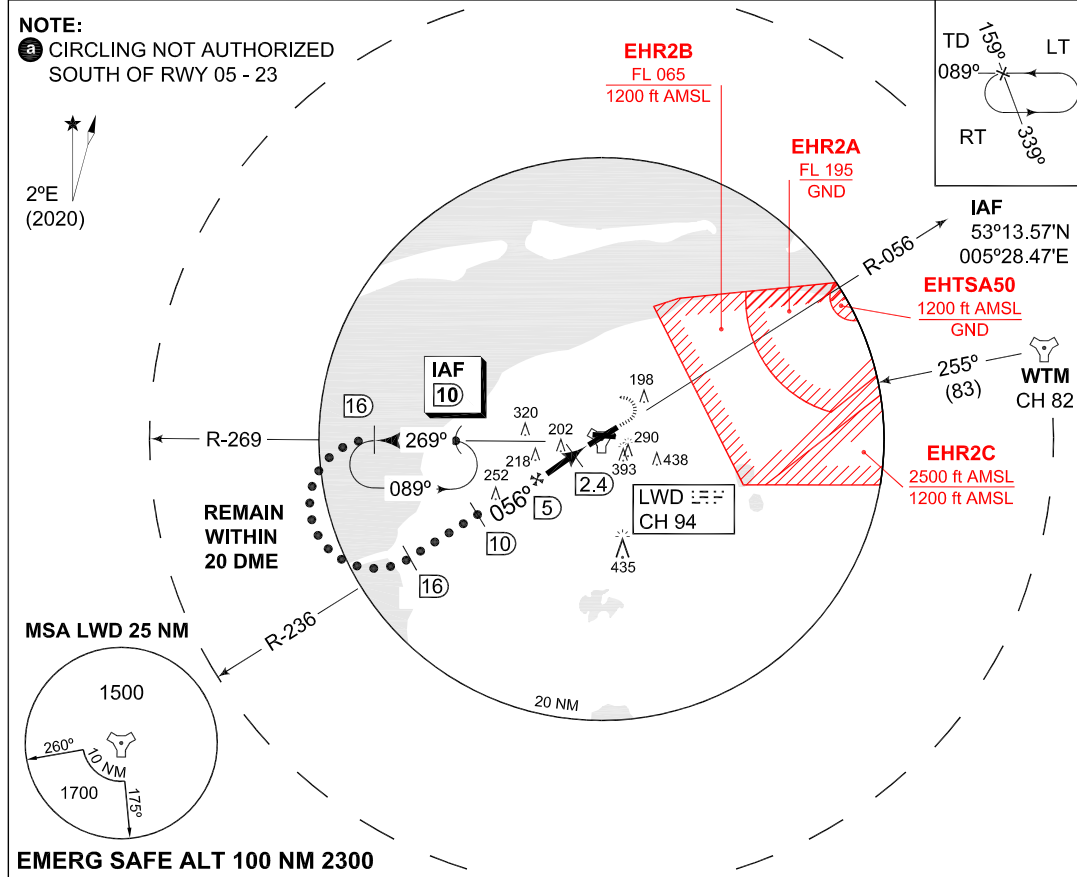
CATEGORY	A	B	C	D	E
MINIMA ACCORDING TO PANS-OPS; NOT ACCORDING TO APATC-1					
S-ILS 05	204-800 200 (200-0.8/1.6)	208-800 204 (300-0.8/1.6)	218-800 214 (300-0.8/1.6)	227-800 223 (300-0.8/1.6)	246-800 242 (300-0.8/1.6)
S-LOC 05	350-800 346 (400-0.8/1.6)		350-1200 346 (400-1.2/1.6)	350-1200 346 (400-1.2/2.0)	
CIRCLING ⓐ	500-1900 496 (500-1.9)	510-2800 506 (600-2.8)	610-3700 606 (700-3.7)	720-4600 716 (800-4.6)	820-6500 816 (900-6.5)

CHANGES: MSA
MIPS

RNLAF 23 MAR 2023

MIPS INSTRUMENT APPROACH CHART **HI-TACAN RWY 05 LEEUWARDEN (EHLW)**

DUTCH MIL 259.250 128.355		RAPCON NORTH 284.475 132.030		LEEUWARDEN TWR 344.850 120.705		GND CTL 362.525	
TACAN LWD CH 94	APP COURSE 056°	FAF ALT 1200 FT	Descent GR	MDA 380	THR ELEV 4	ALS 660 m	LDA 8036 FT



CATEGORY	MINIMA ACCORDING TO PANS-OPS; NOT ACCORDING TO APATC-1		
	C	D	E
S-TACAN 05	380-1200 376 (400-1.2/1.6)	380-1200 376 (400-1.2/2.0)	
CIRCLING a	610-3700 606 (700-3.7)	720-4600 716 (800-4.6)	820-6500 816 (900-6.5)

CHANGES: MSA
MIPS

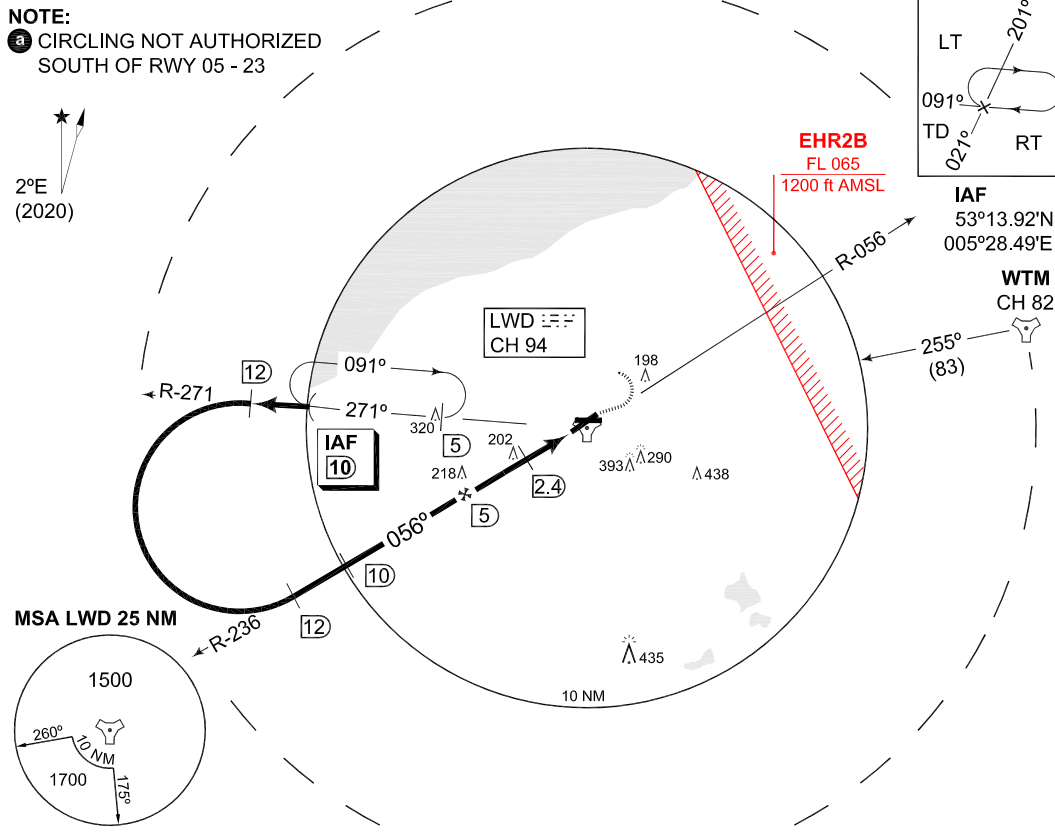
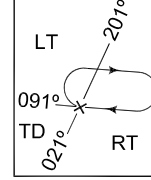
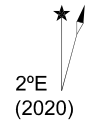
RNIAF 23 MAR 2023

MIPS INSTRUMENT APPROACH CHART **TACAN RWY 05 LEEUWARDEN (EHLW)**

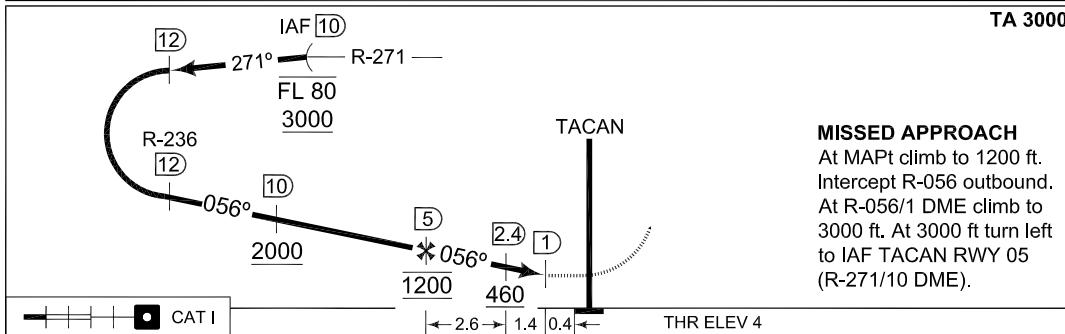
DUTCH MIL 259.250 128.355		RAPCON NORTH 284.475 132.030		LEEUWARDEN TWR 344.850 120.705		GND CTL 362.525	
TACAN LWD CH 94	APP COURSE 056°	FAF ALT 1200 FT	Descent GR	MDA 380	THR ELEV 4	ALS 660 m	LDA 8036 FT

NOTE:

ⓐ CIRCLING NOT AUTHORIZED SOUTH OF RWY 05 - 23



EMERG SAFE ALT 100 NM 2300



MISSED APPROACH
At MAPt climb to 1200 ft. Intercept R-056 outbound. At R-056/1 DME climb to 3000 ft. At 3000 ft turn left to IAF TACAN RWY 05 (R-271/10 DME).

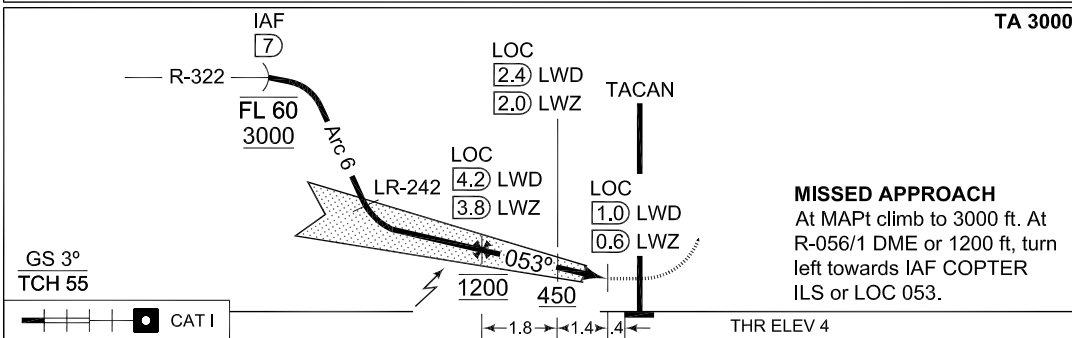
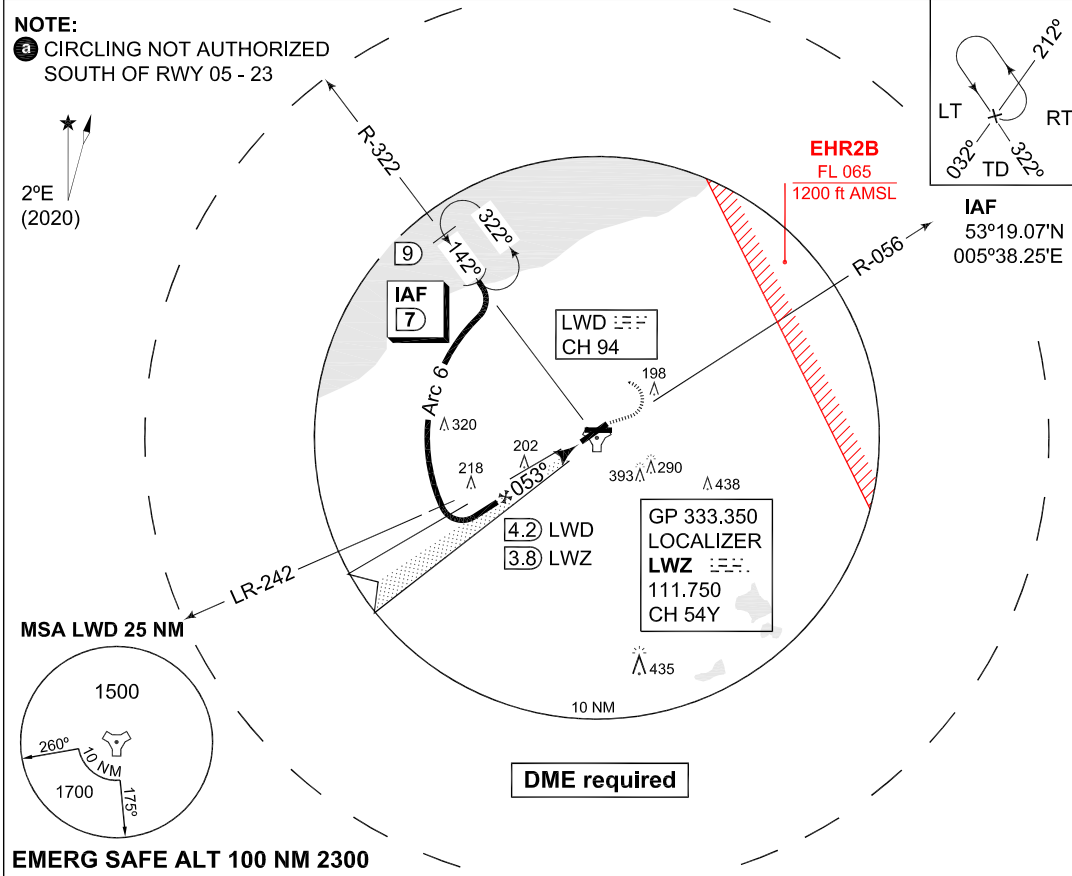
CATEGORY	MINIMA ACCORDING TO PANS-OPS; NOT ACCORDING TO APATC-1				
	A	B	C	D	E
S-TACAN 05	380 -800 376 (400-0.8/1.6)	380 -1200 376 (400-1.2/1.6)	380 -1200 376 (400-1.2/2.0)		
CIRCLING ⓐ	500 -1900 496 (500-1.9)	510 -2800 506 (600-2.8)	610 -3700 606 (700-3.7)	720 -4600 716 (800-4.6)	820 -6500 816 (900-6.5)

CHANGES: MSA

RNLAF 23 MAR 2023

MIPS INSTRUMENT APPROACH CHART AD ELEV 4 **COPTER ILS or LOC 053 LEEUWARDEN (EHLW)**

DUTCH MIL 259.250 128.355	RAPCON NORTH 284.475 132.030	LEEUWARDEN TWR 344.850 120.705	GND CTL 362.525
LOCALIZER / DME LWZ 111.750 / CH 54Y	APP COURSE 053°	GS INTCEPT ALT 1200 FT	GS 3°
		DA 204	THR ELEV 4
		ALS 660 m	LDA 8036 FT



CATEGORY	H
	MINIMA ACCORDING TO PANS-OPS; NOT ACCORDING TO APATC-1
S-ILS 053	204 -400 200 (200-0.4/0.8)
S-LOC 053	350 -400 346 (400-0.4/0.8)
CIRCLING ⓐ	500 -1900 496 (500-1.9)

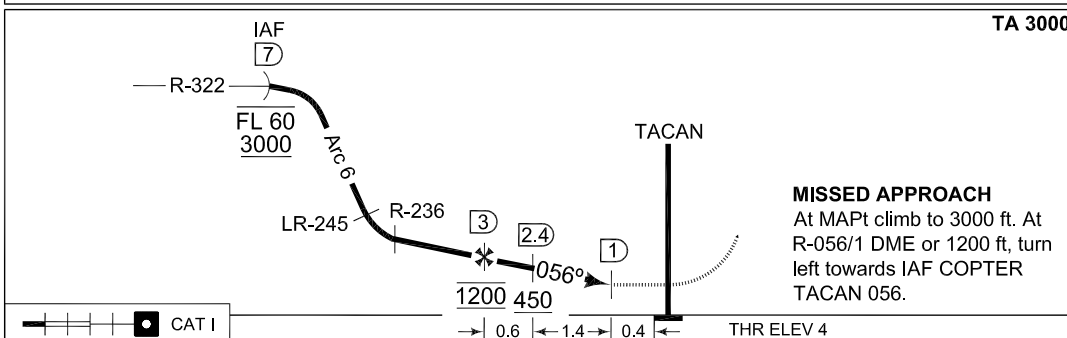
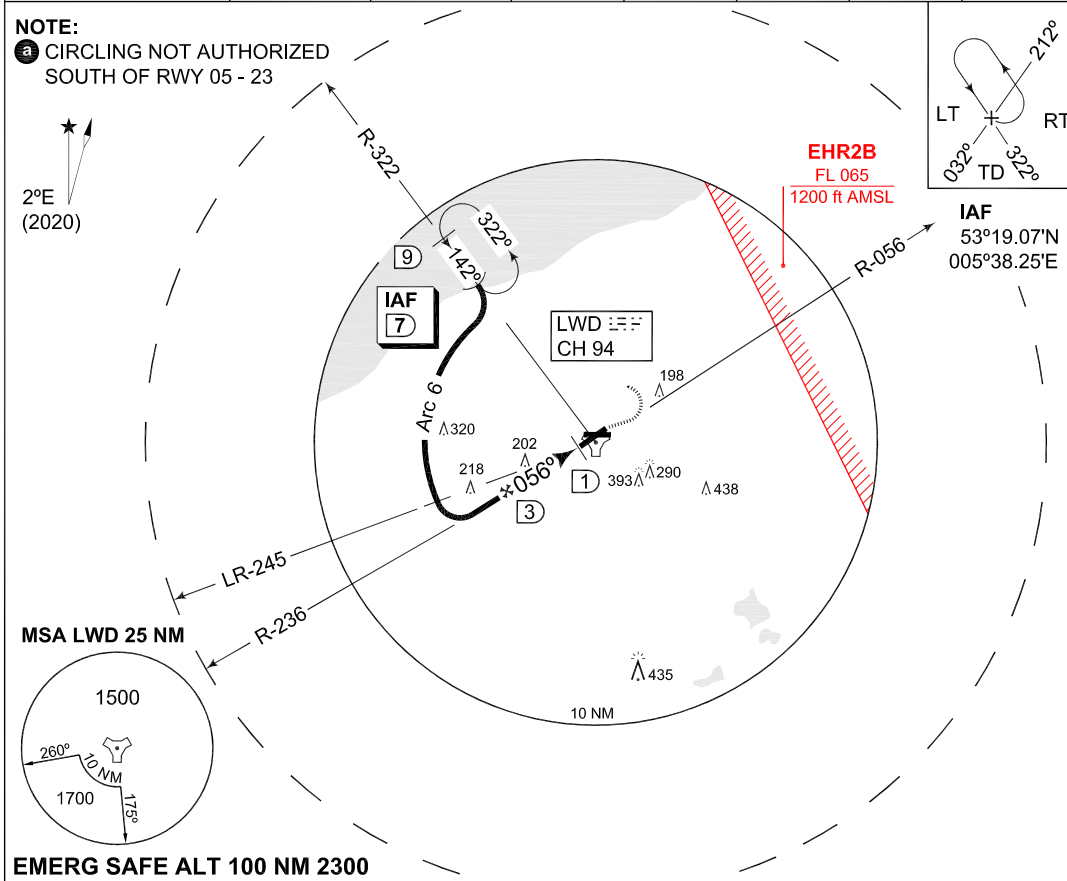
CHANGES: MSA

MIPS

RNLAf 23 MAR 2023

MIPS INSTRUMENT APPROACH CHART **COPTER TACAN 056 LEEUWARDEN (EHLW)**

DUTCH MIL 259.250 128.355		RAPCON NORTH 284.475 132.030		LEEUWARDEN TWR 344.850 120.705		GND CTL 362.525	
TACAN LWD CH 94	APP COURSE 056°	FAF ALT 1200 FT	Descent GR	MDA 380	THR ELEV 4	ALS 660 m	LDA 8036 FT



CATEGORY	A
COPTER TACAN 056	380-400 376 (400-0.4/0.8)
CIRCLING a	500-1900 496 (500-1.9)

CHANGES: MSA
MIPS

RNLAF 23 MAR 2023

**PANS OPS
INSTRUMENT APPROACH CHART**

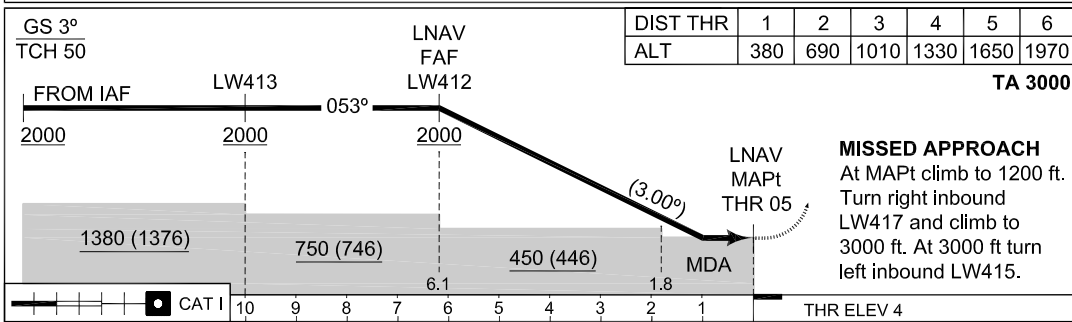
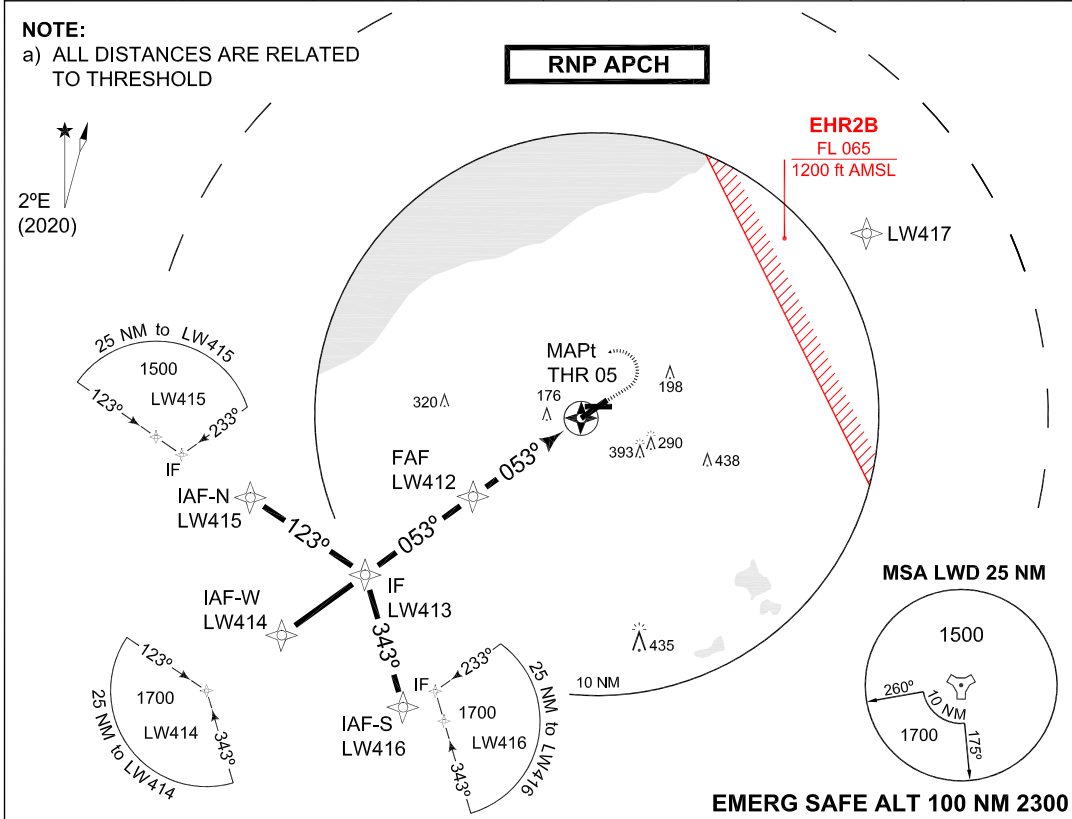
**RNP Z RWY 05
LEEUWARDEN (EHLW)**

AD ELEV 4

DUTCH MIL 259.250 128.355		RAPCON NORTH 284.475 132.030		LEEUWARDEN TWR 344.850 120.705		GND CTL 362.525		
EGNOS CHANNEL	APP COURSE 053°	FAF ALT 2000 FT	Descent GR 5.24% / 3°	MDA 380	DA SEE CAT	THR ELEV 4	ALS 660 m	LDA 8036 FT

NOTE:

a) ALL DISTANCES ARE RELATED TO THRESHOLD



CATEGORY		A		B		C		D	
MIPS	DA(H) LPV	N.A.							
	DA(H) LNAV / VNAV	N.A.							
	MDA(H) LNAV	380-1300 376 (400-1.3/1.7)							
IAF-N	LW415	53°10.34'N	005°23.82'E	FAF	LW412	53°09.68'N	005°35.91'E		
IAF-W	LW414	53°04.61'N	005°23.80'E	MAPt	THR05	53°13.15'N	005°44.27'E		
IAF-S	LW416	53°02.64'N	005°32.72'E	MATF	LW417	53°23.00'N	006°10.44'E		
IF	LW413	53°07.47'N	005°30.61'E						

**PANS OPS
INSTRUMENT APPROACH CHART**

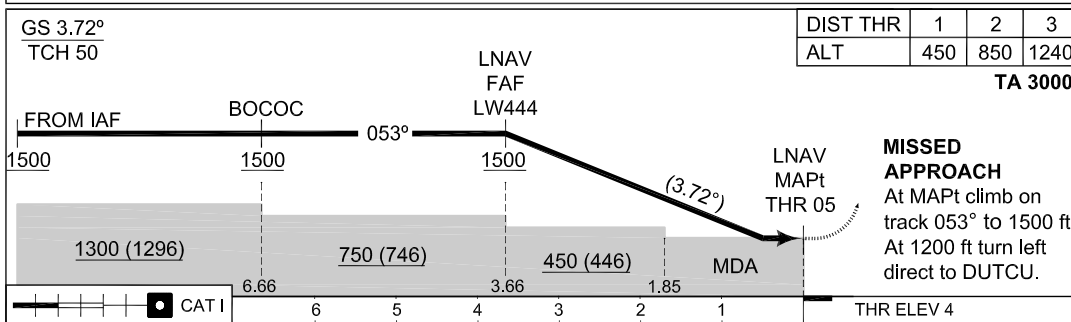
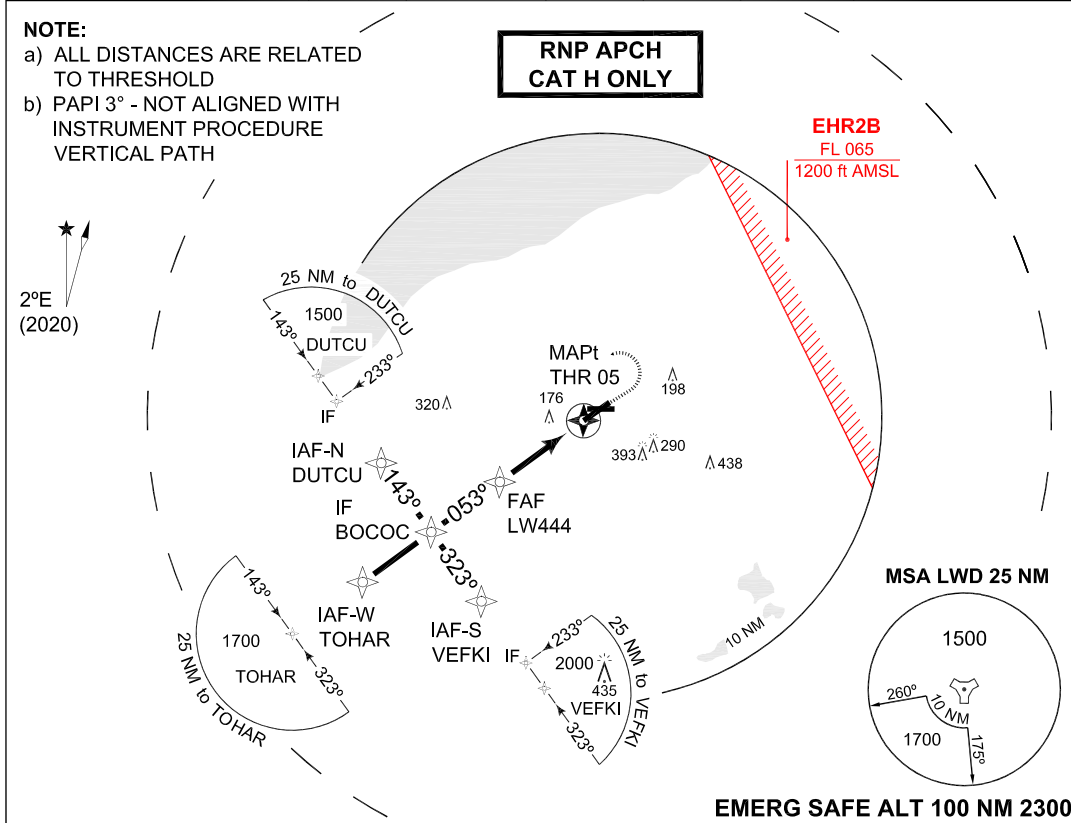
**RNP Y RWY 05
LEEUWARDEN (EHLW)**

AD ELEV 4

DUTCH MIL 259.250 128.355		RAPCON NORTH 284.475 132.030		LEEUWARDEN TWR 344.850 120.705		GND CTL 362.525		
EGNOS CHANNEL 67430 E05A	APP COURSE 053°	FAF ALT 1500 FT	Descent GR 6.5% / 3.72°	MDA 380	DA 204	THR ELEV 4	ALS 660 m	LDA 8036 FT

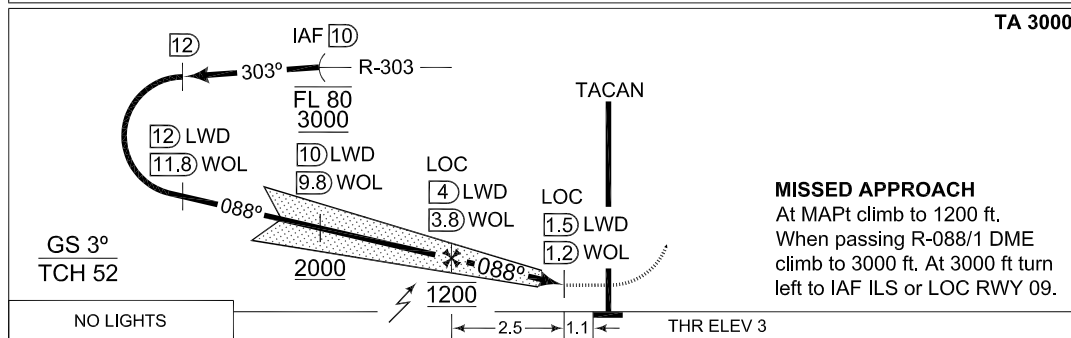
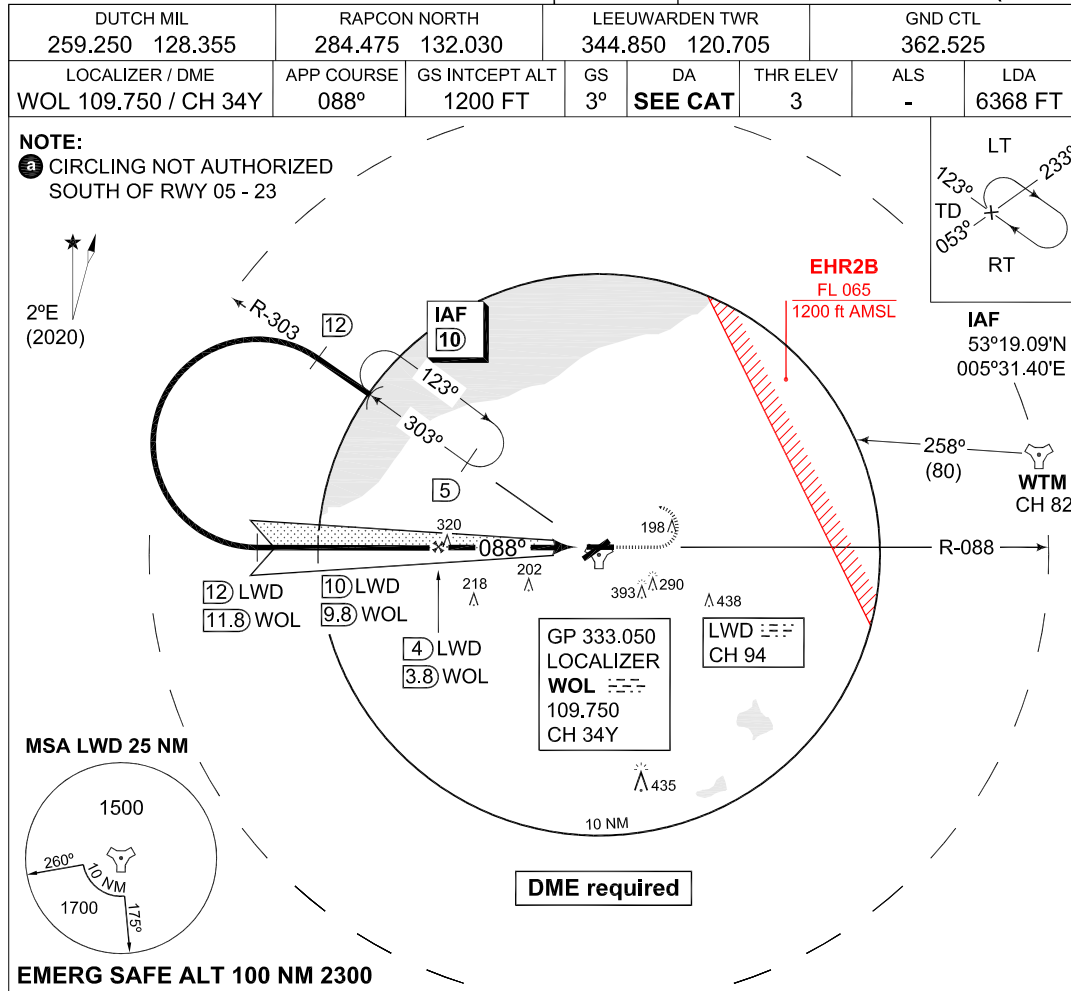
NOTE:

- a) ALL DISTANCES ARE RELATED TO THRESHOLD
- b) PAPI 3° - NOT ALIGNED WITH INSTRUMENT PROCEDURE VERTICAL PATH



CATEGORY		H					
MIPS	DA(H) LPV	204-400 200 (200-0.4/1.2)					
	DA(H) LNAV / VNAV	N.A.					
	MDA(H) LNAV	380-1300 376 (400-1.3/1.7)					
IAF-N	DUTCU	53°11.83'N	005°32.32'E	IF	BOCOC	53°09.37'N	005°35.16'E
IAF-W	TOHAR	53°07.66'N	005°31.07'E	FAF	LW444	53°11.07'N	005°39.26'E
IAF-S	VEFKI	53°06.90'N	005°38.00'E	MAPt	THR05	53°13.15'N	005°44.27'E

MIPS INSTRUMENT APPROACH CHART **ILS or LOC RWY 09 LEEUWARDEN (EHLW)**



CATEGORY	A	B	C	D	E	H
MINIMA ACCORDING TO PANS-OPS; NOT ACCORDING TO APATC-1						
S-ILS 09	221 -1600 218 (300-1.6/1.6)	231 -1600 228 (300-1.6/1.6)	240 -1600 237 (300-1.6/1.6)	250 -1600 247 (300-1.6/1.6)	268 -1600 265 (300-1.6/1.6)	205 -800 202 (300-0.8/0.8)
S-LOC 09	430 -1600 427 (500-1.6/1.6)	430 -2000 427 (500-2.0/2.0)	430 -2000 427 (500-2.0/2.0)	430 -2400 427 (500-2.4/2.4)	430 -800 427 (500-0.8/0.8)	
CIRCLING a	500 -1900 496 (500-1.9)	510 -2800 506 (600-2.8)	610 -3700 606 (700-3.7)	720 -4600 716 (800-4.6)	820 -6500 816 (900-6.5)	N.A.

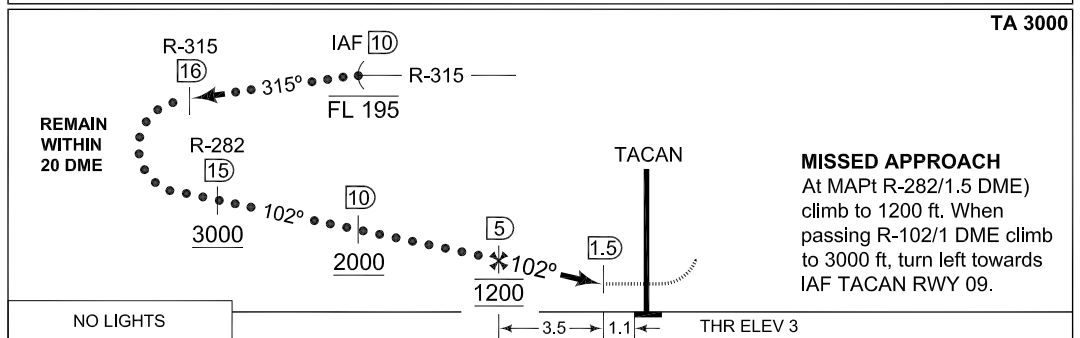
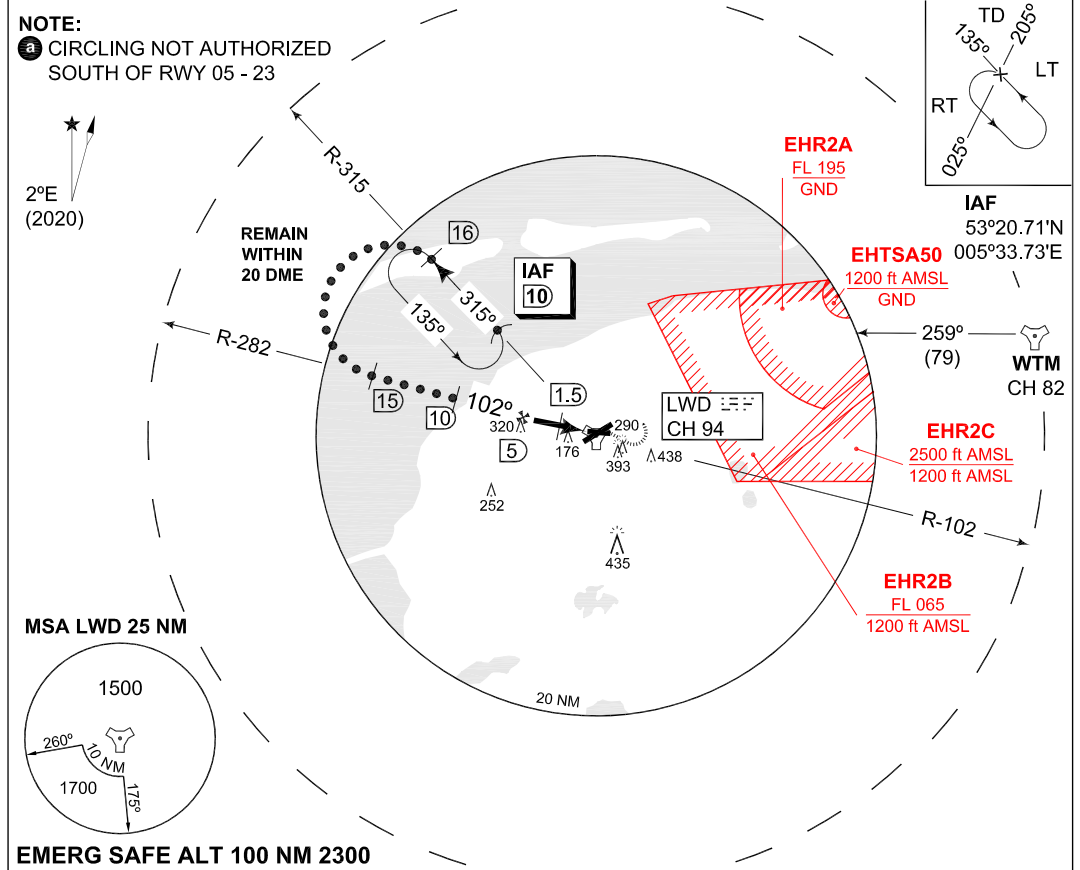
CHANGES: MSA

MIPS

RNLAf 23 MAR 2023

MIPS INSTRUMENT APPROACH CHART **HI-TACAN RWY 09 LEEUWARDEN (EHLW)**

DUTCH MIL 259.250 128.355		RAPCON NORTH 284.475 132.030		LEEUWARDEN TWR 344.850 120.705		GND CTL 362.525	
TACAN LWD CH 94	APP COURSE 102°	FAF ALT 1200 FT	Descent GR	MDA 440	THR ELEV 3	ALS -	LDA 6368 FT



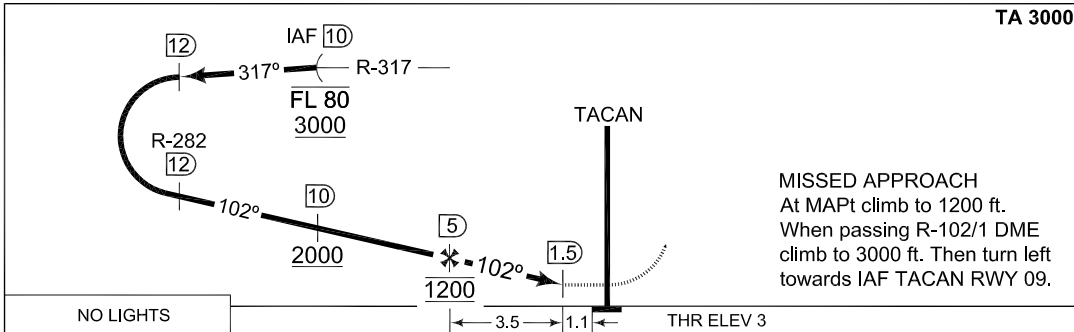
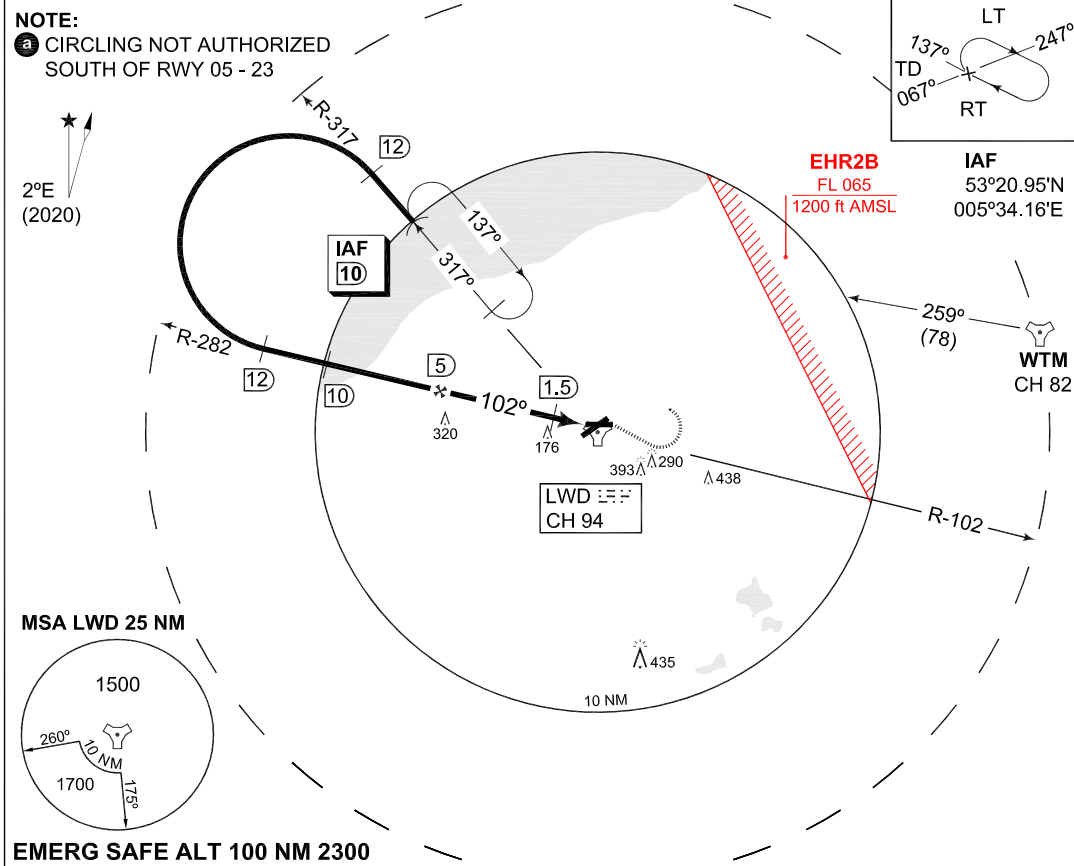
CATEGORY	C		D		E	
	MINIMA ACCORDING TO PANS-OPS; NOT ACCORDING TO APATC-1					
S-TACAN 09	440 -2000 437 (500-2.0/2.0)		440 -2400 437 (500-2.4/2.4)			
CIRCLING Ⓢ	610 -3700 606 (700-3.7)		720 -4600 716 (800-4.6)		820 -6500 816 (900-6.5)	

CHANGES: MSA
MIPS

RNLAF 23 MAR 2023

MIPS INSTRUMENT APPROACH CHART **TACAN RWY 09**
LEEUWARDEN (EHLW)

DUTCH MIL 259.250 128.355		RAPCON NORTH 284.475 132.030		LEEUWARDEN TWR 344.850 120.705		GND CTL 362.525	
TACAN LWD CH 94	APP COURSE 102°	FAF ALT 1200 FT	Descent GR	MDA 440	THR ELEV 3	ALS -	LDA 6368 FT



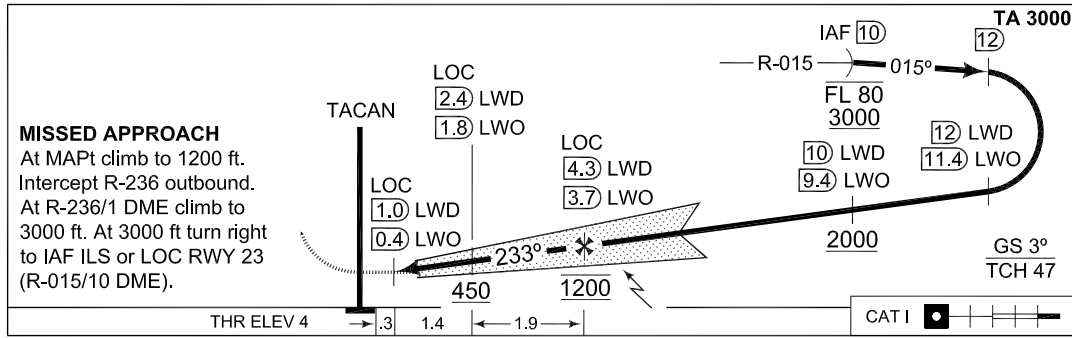
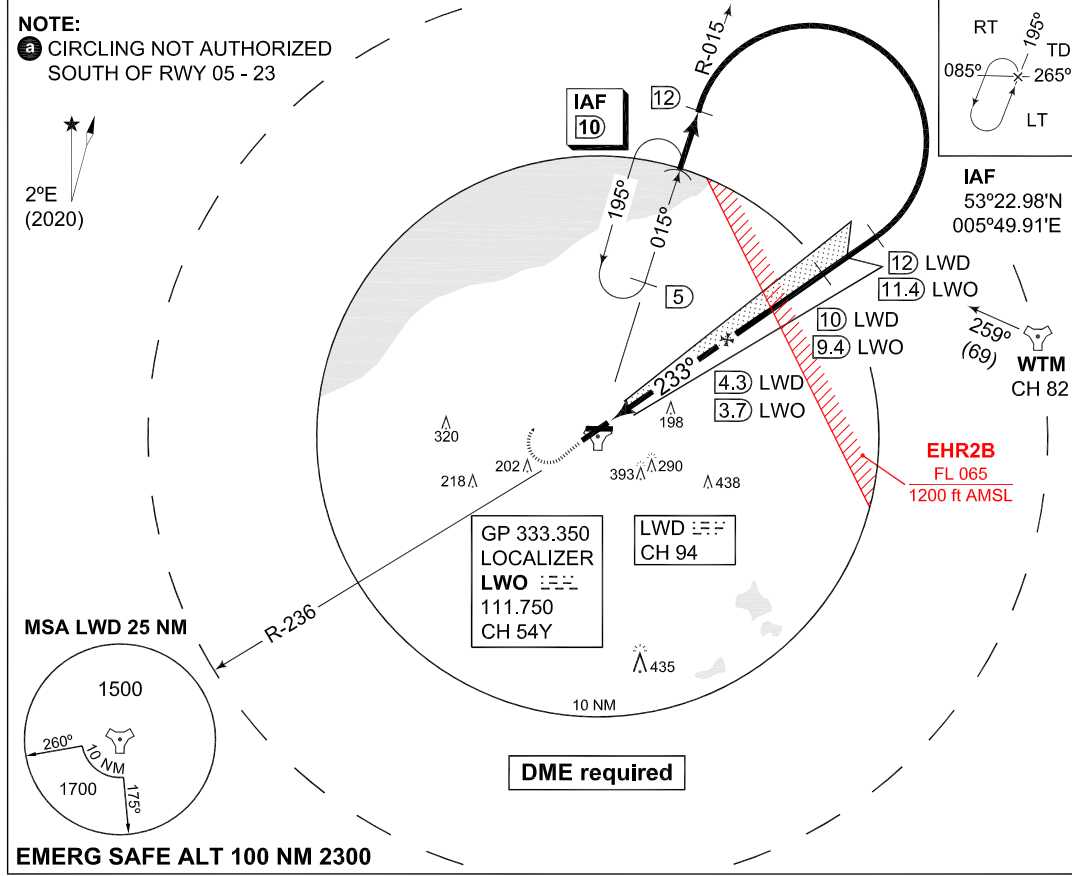
TA 3000	NO LIGHTS	3.5	1.1	THR ELEV 3	
CATEGORY	A	B	C	D	E
MINIMA ACCORDING TO PANS-OPS; NOT ACCORDING TO APATC-1					
S-TACAN 09	440 -1900 437 (500-1.6/1.6)	440 -2000 437 (500-2.0/2.0)	440 -2400 437 (500-2.4/2.4)		
CIRCLING ⓐ	500 -1900 496 (500-1.9)	510 -2800 506 (600-2.8)	610 -3700 606 (700-3.7)	720 -4600 716 (800-4.6)	820 -6500 816 (900-6.5)

CHANGES: MSA
MIPS

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MIPS INSTRUMENT APPROACH CHART AD ELEV 4 **ILS or LOC RWY 23 LEEUWARDEN (EHLW)**

DUTCH MIL 259.250 128.355		RAPCON NORTH 284.475 132.030		LEEUWARDEN TWR 344.850 120.705		GND CTL 362.525		
LOCALIZER / DME LWO 111.750 / CH 54Y		APP COURSE 233°	GS INTCEPT ALT 1200 FT	GS 3°	DA SEE CAT	THR ELEV 4	ALS 720 m	LDA 7863 FT

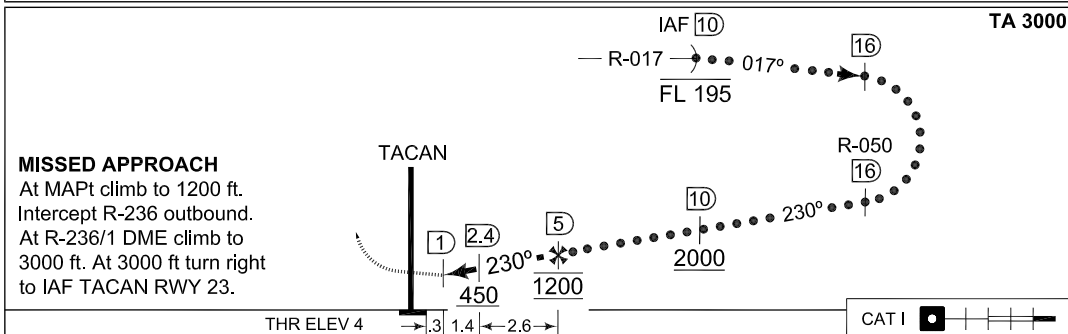
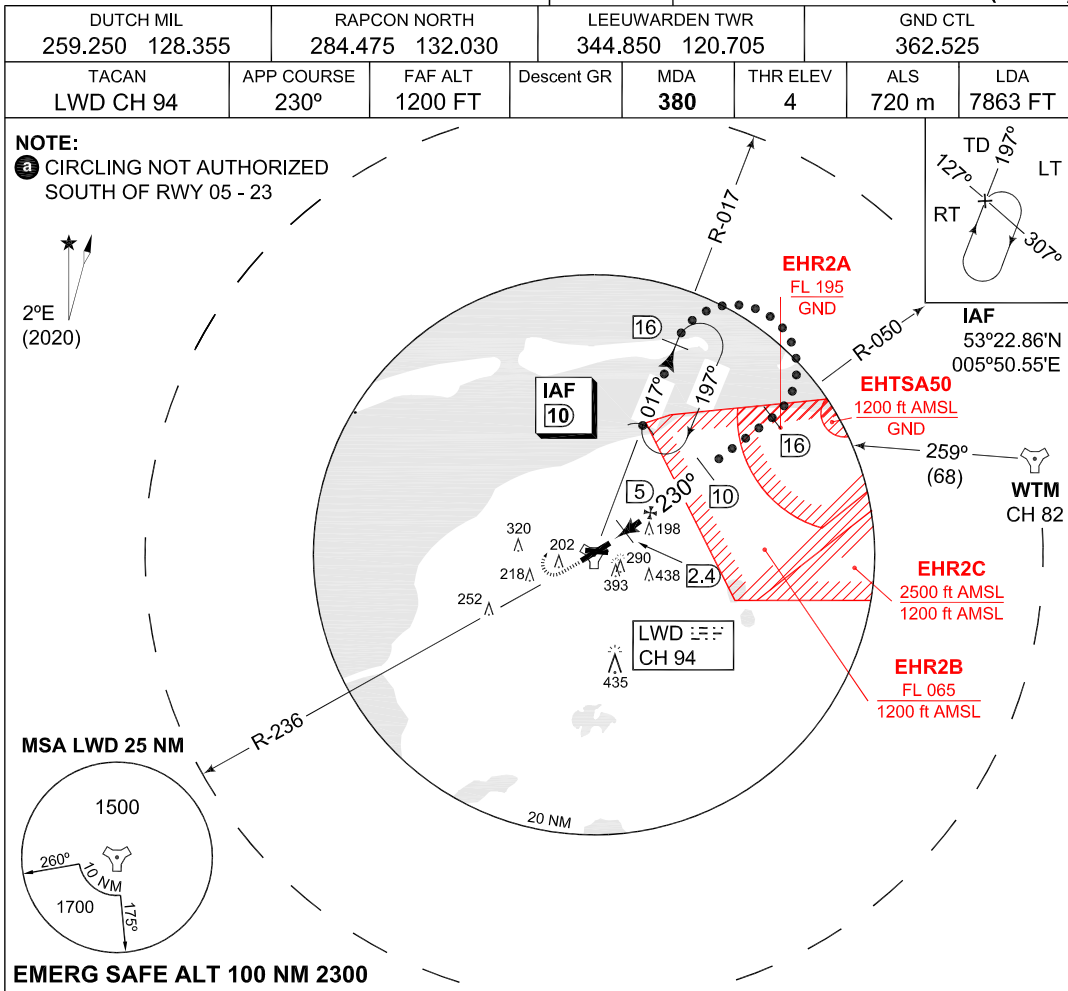


CATEGORY	A	B	C	D	E
MINIMA ACCORDING TO PANS-OPS; NOT ACCORDING TO APATC-1					
S-ILS 23	217-800 213 (300-0.8/1.6)	227-800 223 (300-0.8/1.6)	237-800 233 (300-0.8/1.6)	247-800 243 (300-0.8/1.6)	265-800 262 (300-0.8/1.6)
S-LOC 23	340-800 336 (400-0.8/1.6)		340-1200 336 (400-1.2/1.6)	340-1200 336 (400-1.2/2.0)	
CIRCLING a	500-1900 496 (500-1.9)	510-2800 506 (600-2.8)	610-3700 606 (700-3.7)	720-4600 716 (800-4.6)	820-6500 816 (900-6.5)

CHANGES: MSA MIPS

RNLAF 23 MAR 2023

MIPS **HI-TACAN RWY 23**
INSTRUMENT APPROACH CHART **LEEWARDEN (EHLW)**



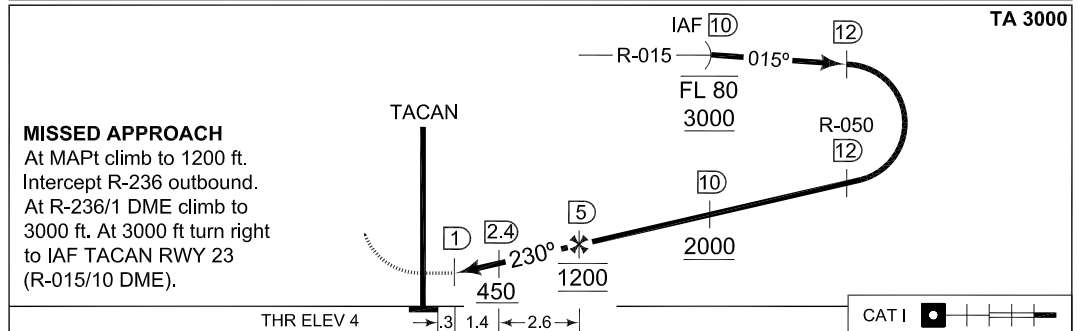
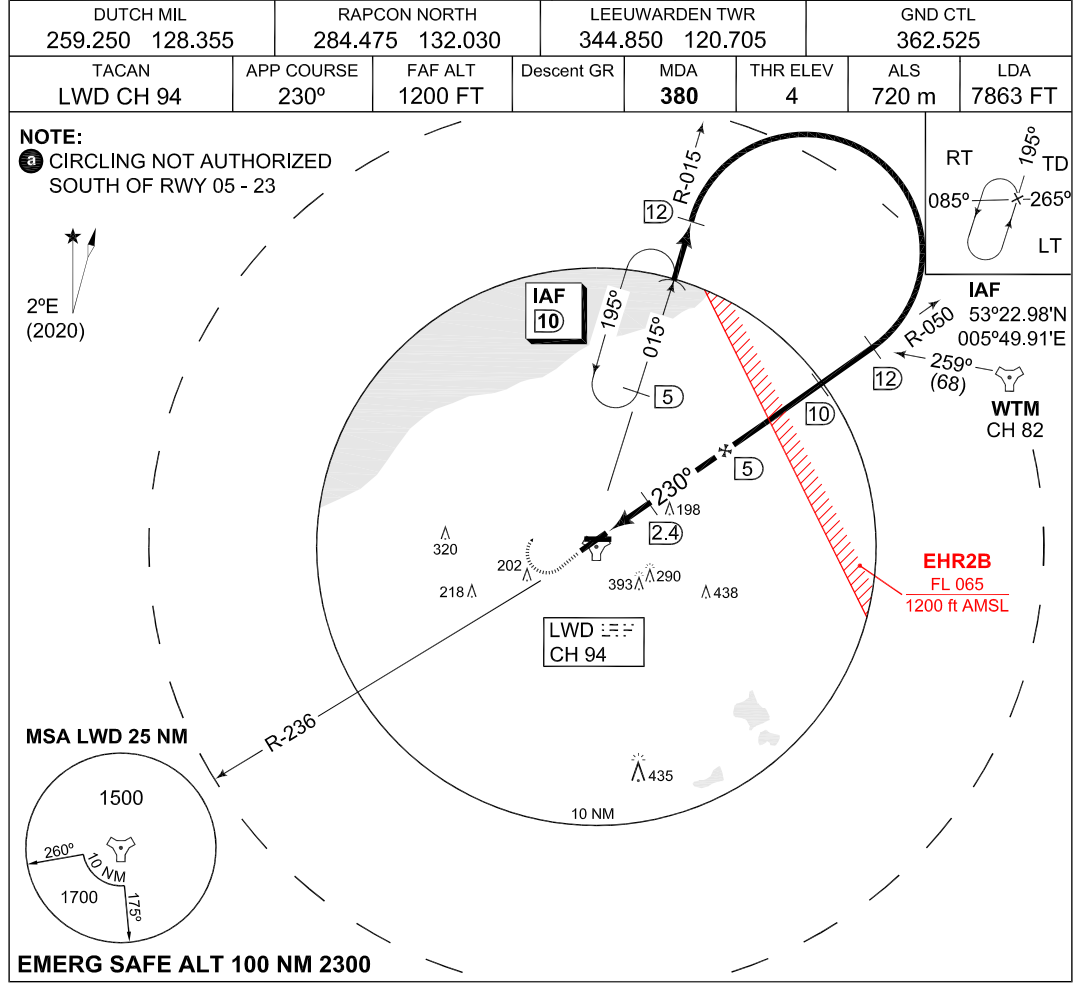
CATEGORY	C		D		E
	MINIMA ACCORDING TO PANS-OPS; NOT ACCORDING TO APATC-1				
S-TACAN 23	380 -1200 376 (400-1.2/1.6)		380 -1200 376 (400-1.2/2.0)		
CIRCLING a	610 -3700 606 (700-3.7)		720 -4600 716 (800-4.6)		820 -6500 816 (900-6.5)

CHANGES: MSA

MIPS

RNLAF 23 MAR 2023

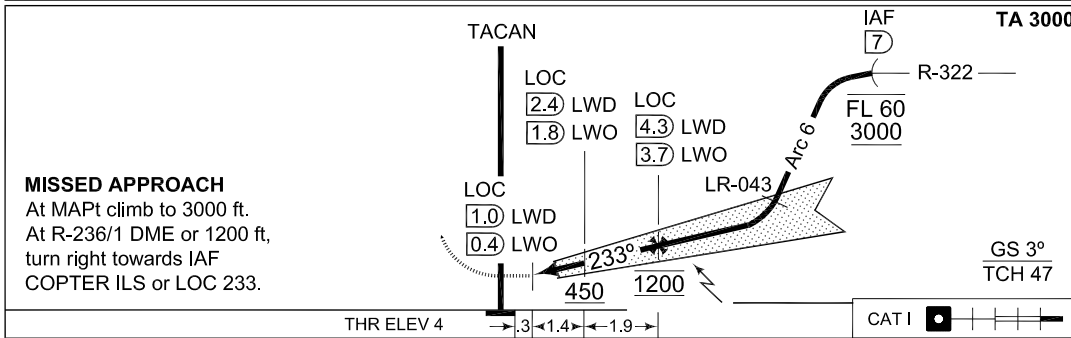
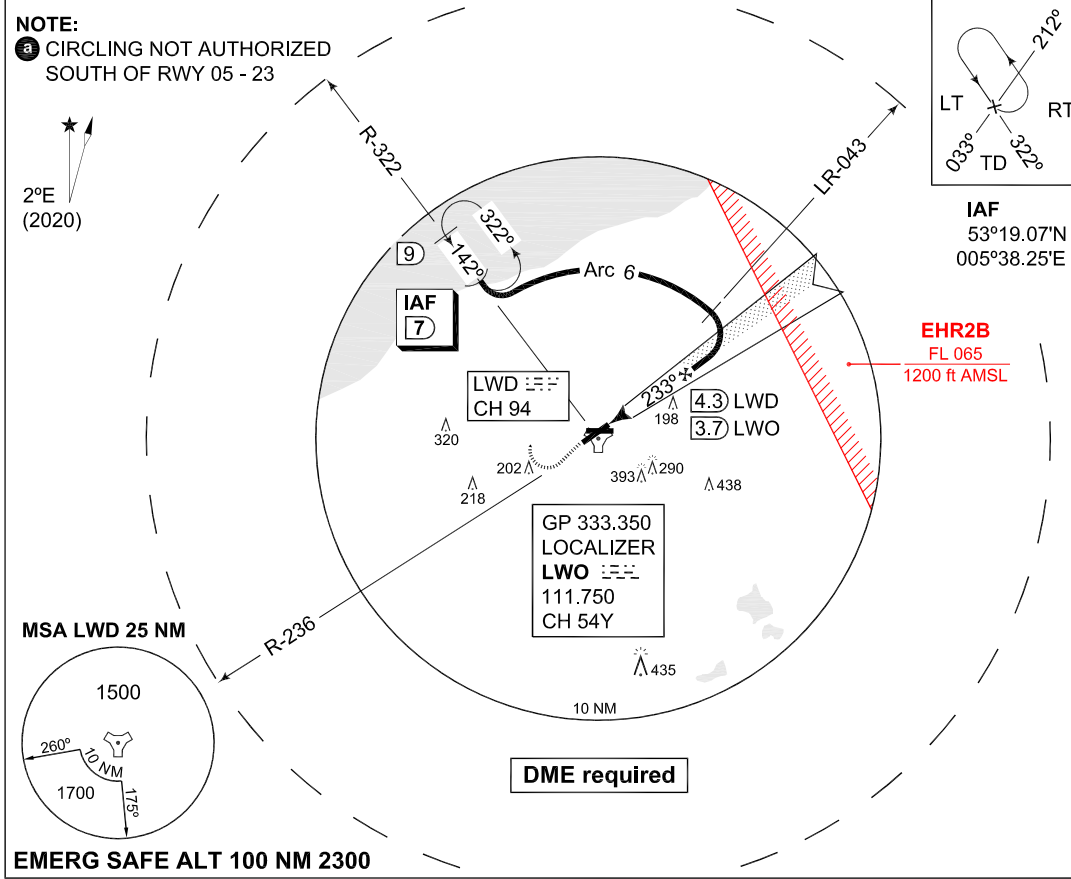
MIPS INSTRUMENT APPROACH CHART **TACAN RWY 23 LEEUWARDEN (EHLW)**



CATEGORY	MINIMA ACCORDING TO PANS-OPS; NOT ACCORDING TO APATC-1				
	A	B	C	D	E
S-TACAN 23	380 -800 376 (400-0.8/1.6)		380 -1200 376 (400-1.2/1.6)	380 -1200 376 (400-1.2/2.0)	
CIRCLING a	500 -1900 496 (500-1.9)	510 -2800 506 (600-2.8)	610 -3700 606 (700-3.7)	720 -4600 716 (800-4.6)	820 -6500 816 (900-6.5)

MIPS INSTRUMENT APPROACH CHART AD ELEV 4 **COPTER ILS or LOC 233 LEEUWARDEN (EHLW)**

DUTCH MIL 259.250 128.355	RAPCON NORTH 284.475 132.030	LEEUWARDEN TWR 344.850 120.705	GND CTL 362.525
LOCALIZER / DME LWO 111.750 / CH 54Y	APP COURSE 233°	GS INTCEPT ALT 1200 FT	GS 3° DA 204 THR ELEV 4 ALS 720 m LDA 7863 FT



CATEGORY	H
	MINIMA ACCORDING TO PANS-OPS; NOT ACCORDING TO APATC-1
S-ILS 233	204 -400 200 (200-0.4/0.8)
S-LOC 233	340 -400 336 (400-0.4/0.8)
CIRCLING	500 -1900 496 (500-1.9)

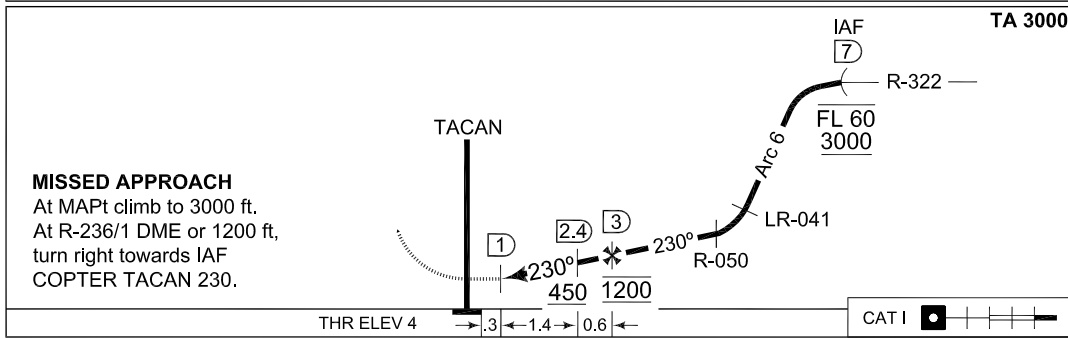
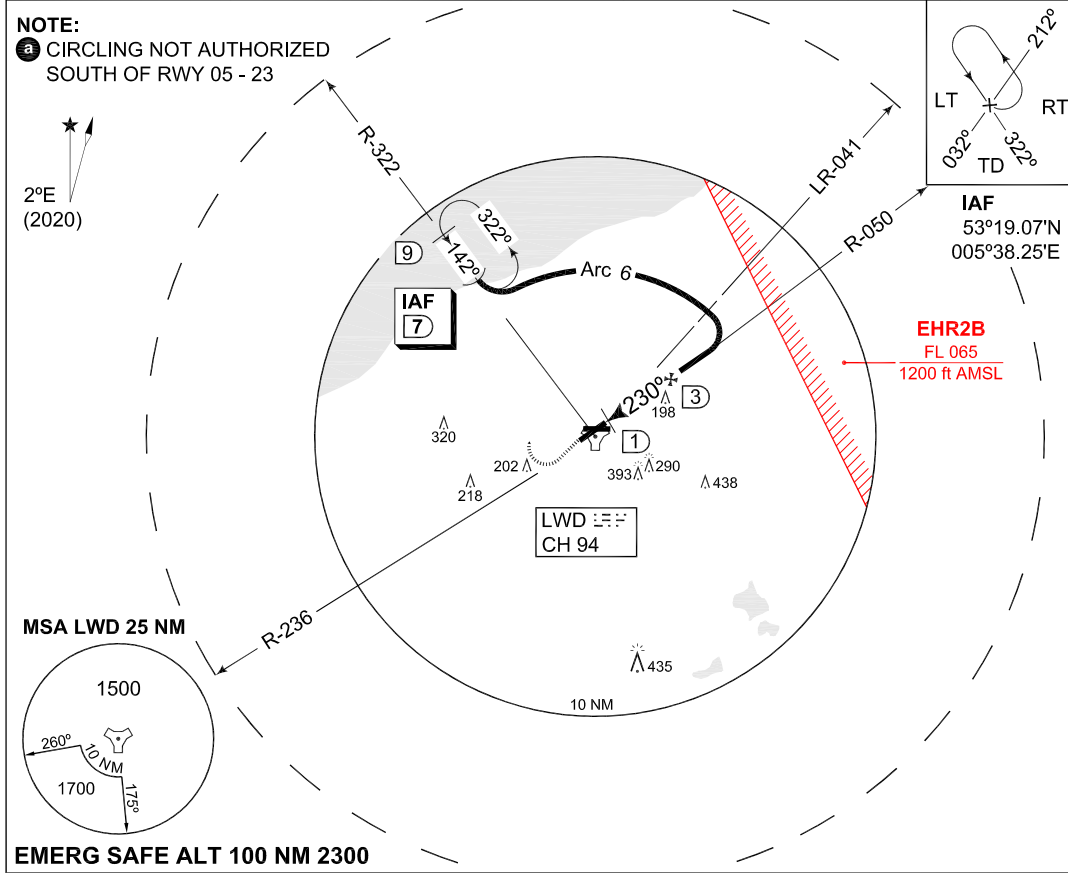
CHANGES: MSA

MIPS

RNLAIF 23 MAR 2023

MIPS INSTRUMENT APPROACH CHART **COPTER TACAN 230 LEEUWARDEN (EHLW)**

DUTCH MIL 259.250 128.355		RAPCON NORTH 284.475 132.030		LEEUWARDEN TWR 344.850 120.705		GND CTL 362.525	
TACAN LWD CH 94	APP COURSE 230°	FAF ALT 1200 FT	Descent GR	MDA 380	THR ELEV 4	ALS 720 m	LDA 7863 FT



CATEGORY	A
COPTER TACAN 230	380 -400 376 (400-0.4/0.8)
CIRCLING (a)	500 -1900 496 (500-1.9)

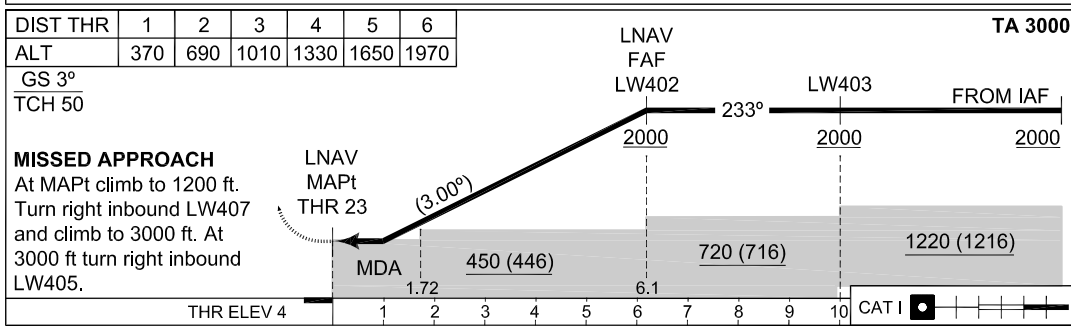
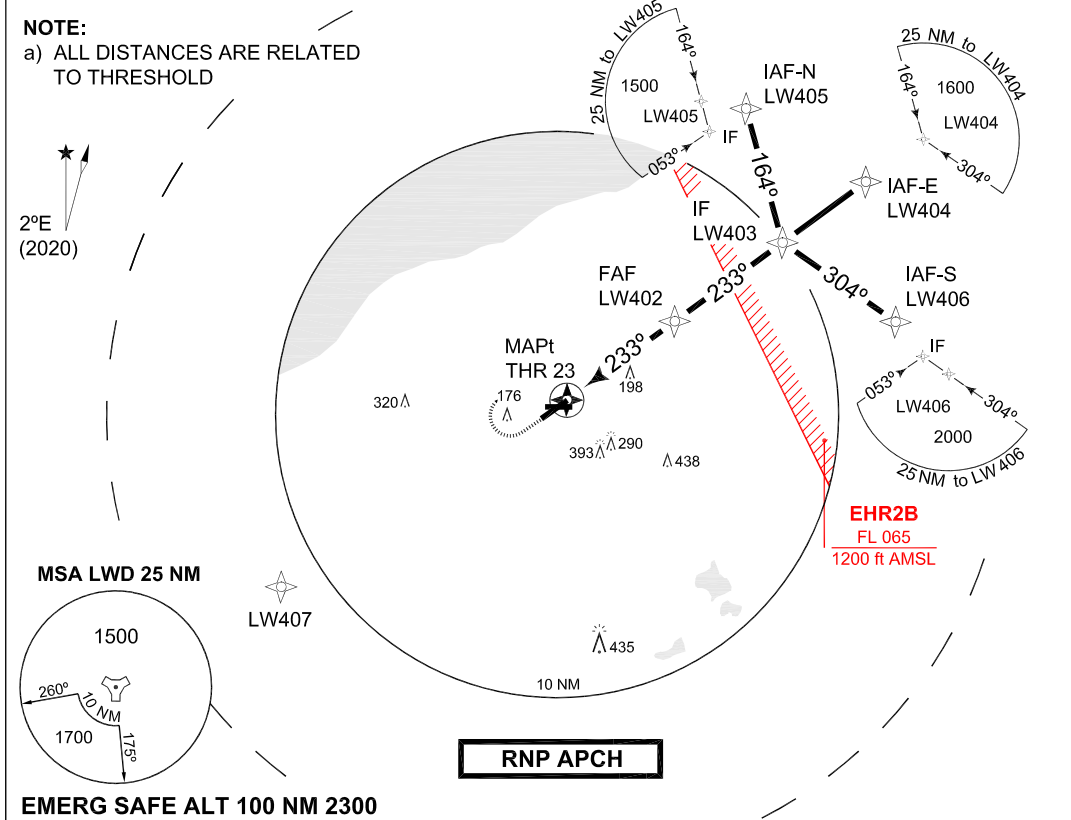
CHANGES: MSA

MIPS

RNLAF 23 MAR 2023

PANS OPS INSTRUMENT APPROACH CHART **RNP Z RWY 23 LEEUWARDEN (EHLW)**

DUTCH MIL 259.250 128.355		RAPCON NORTH 284.475 132.030		LEEUWARDEN TWR 344.850 120.705		GND CTL 362.525		
EGNOS CHANNEL	APP COURSE 233°	FAF ALT 2000 FT	Descent GR 5.24% / 3°	MDA 370	DA SEE CAT	THR ELEV 4	ALS 720 m	LDA 7863 FT



MIPS	CATEGORY	A	B	C	D
	DA(H) LPV	N.A.			
	DA(H) LNAV / VNAV	N.A.			
MDA(H) LNAV	370 -1000 366 (400-1.0/1.7)				

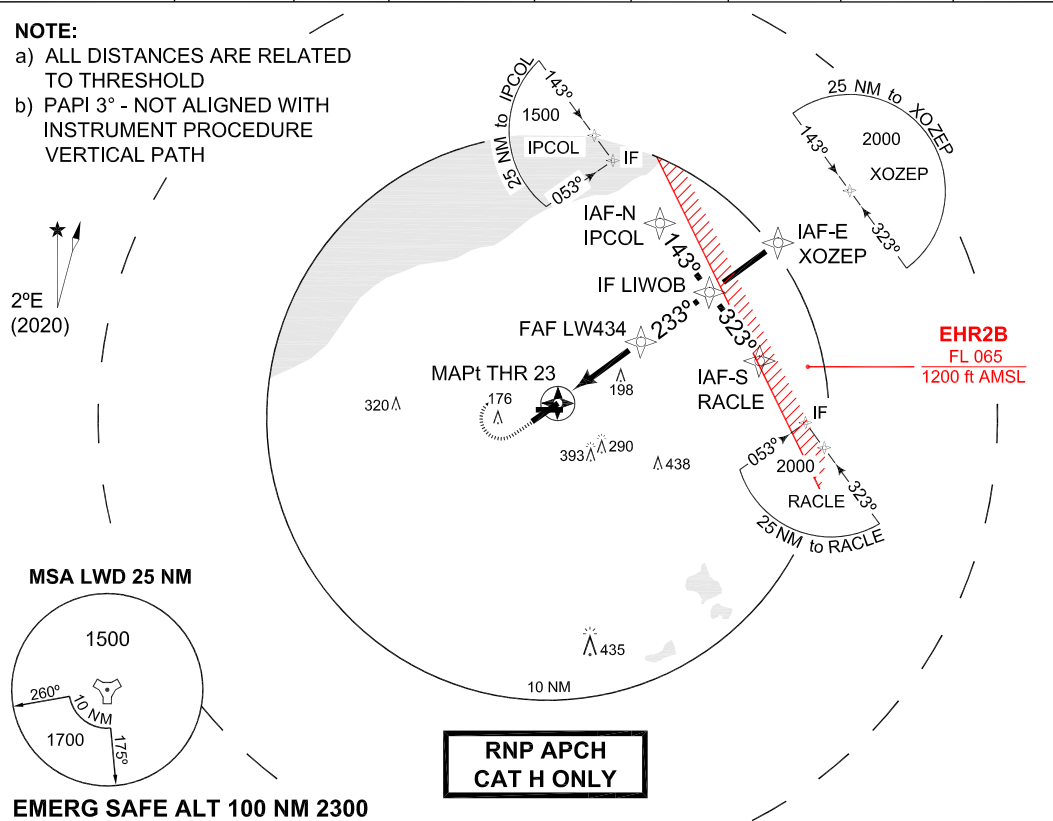
IAF-N	LW405	53°24.36'N	005°57.71'E	FAF	LW402	53°17.34'N	005°54.42'E
IAF-E	LW404	53°22.35'N	006°06.65'E	MAPt	THR23	53°13.88'N	005°46.04'E
IAF-S	LW406	53°16.61'N	006°06.56'E	MATF	LW407	53°03.94'N	005°20.04'E
IF	LW403	53°19.54'N	005°59.77'E				

PANS OPS INSTRUMENT APPROACH CHART **RNP Y RWY 23 LEEUWARDEN (EHLW)**

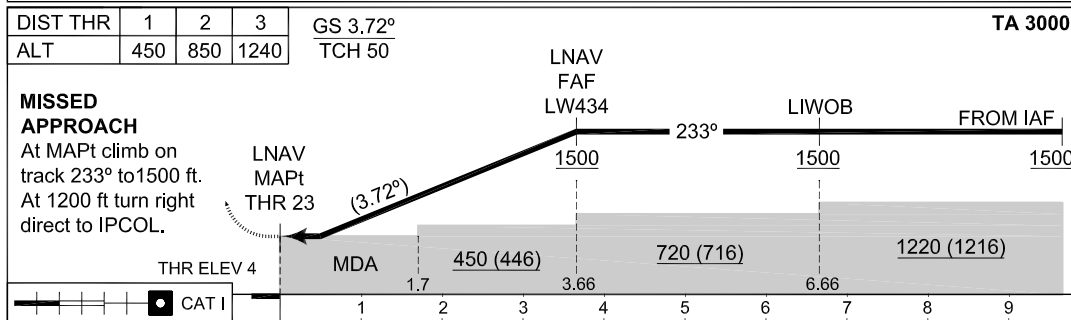
DUTCH MIL 259.250 128.355		RAPCON NORTH 284.475 132.030		LEEUWARDEN TWR 344.850 120.705		GND CTL 362.525		
EGNOS CHANNEL 92974 E23A	APP COURSE 233°	FAF ALT 1500 FT	Descent GR 6.5% / 3.72°	MDA 370	DA 204	THR ELEV 4	ALS 720 m	LDA 7863 FT

NOTE:

- a) ALL DISTANCES ARE RELATED TO THRESHOLD
- b) PAPI 3° - NOT ALIGNED WITH INSTRUMENT PROCEDURE VERTICAL PATH



EMERG SAFE ALT 100 NM 2300



MIPS	CATEGORY	H						
	DA(H) LPV	204 -400 200 (200-0.4/1.2)						
	DA(H) LNAV / VNAV	N.A.						
	MDA(H) LNAV	370 -1000 366 (400-1.0/1.7)						
CHANGES: MSA	IAF-N	IPCOL	53°20.12'N	005°52.34'E	IF	LIWOB	53°17.65'N	005°55.18'E
	IAF-E	XOZEP	53°19.35'N	005°59.30'E	FAF	LW434	53°15.95'N	005°51.06'E
	IAF-S	RACLE	53°15.18'N	005°58.00'E	MAPt	THR23	53°13.88'N	005°46.04'E

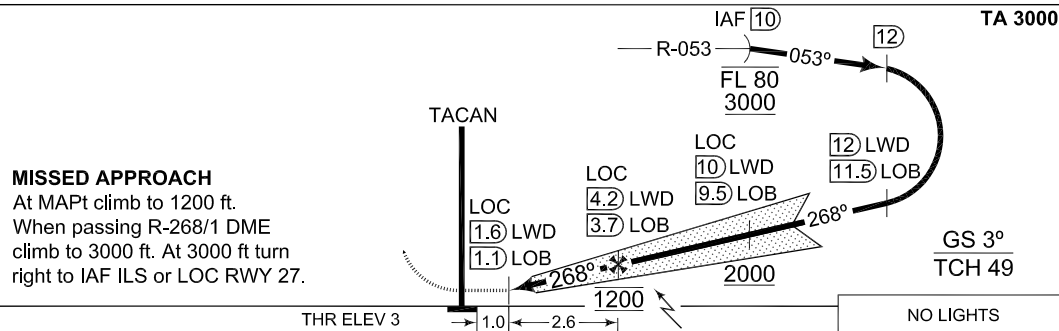
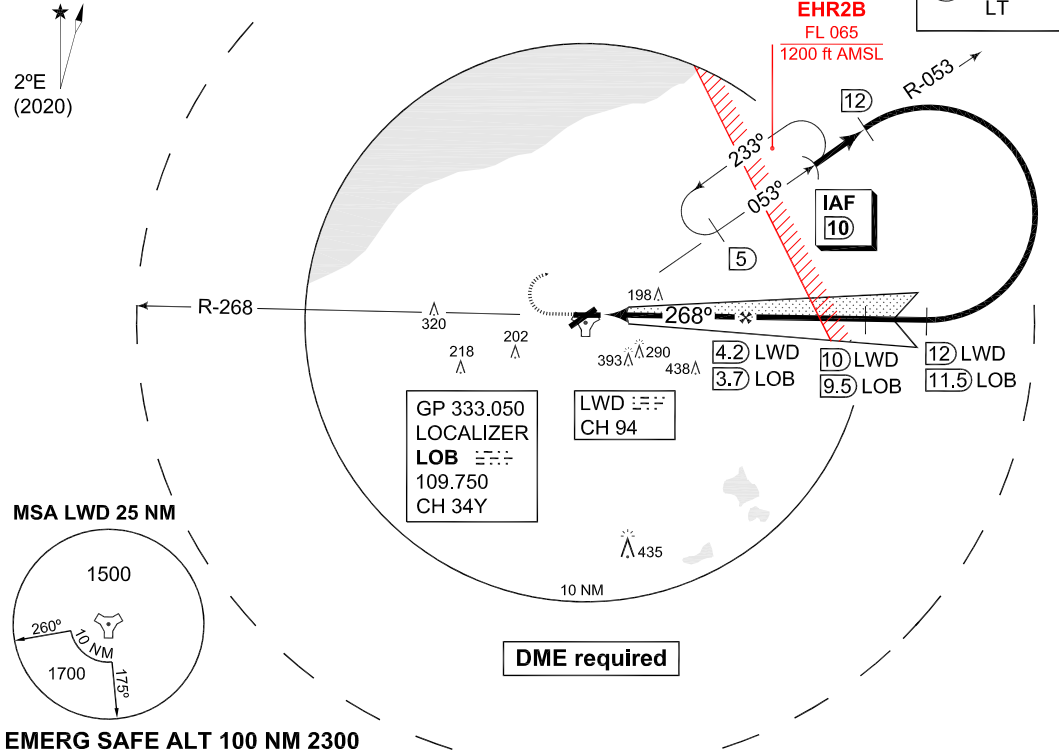
MIPS INSTRUMENT APPROACH CHART AD ELEV 4 **ILS or LOC RWY 27 LEEUWARDEN (EHLW)**

DUTCH MIL 259.250 128.355		RAPCON NORTH 284.475 132.030		LEEUWARDEN TWR 344.850 120.705		GND CTL 362.525		
LOCALIZER / DME LOB 109.750 / CH 34Y		APP COURSE 268°	GS INTCEPT ALT 1200 FT	GS 3°	DA SEE CAT	THR ELEV 3	ALS -	LDA 6561 FT

NOTE:
 a CIRCLING NOT AUTHORIZED SOUTH OF RWY 05 - 23

IAF
 53°19.17'N
 005°58.72'E

EHR2B
 FL 065
 1200 ft AMSL



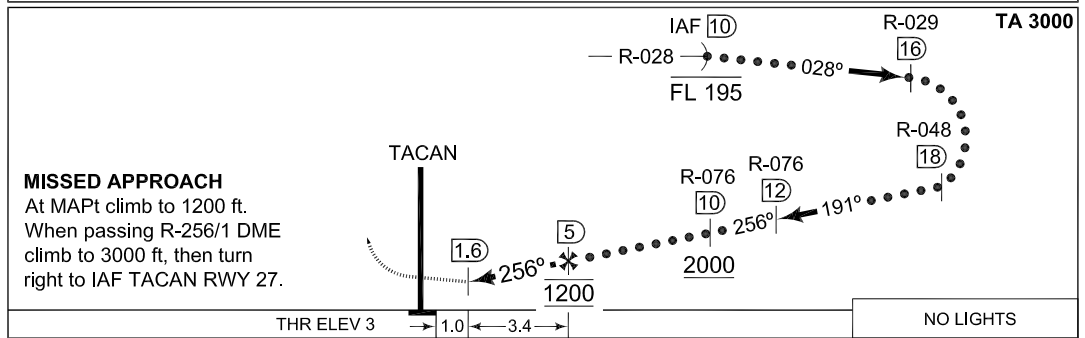
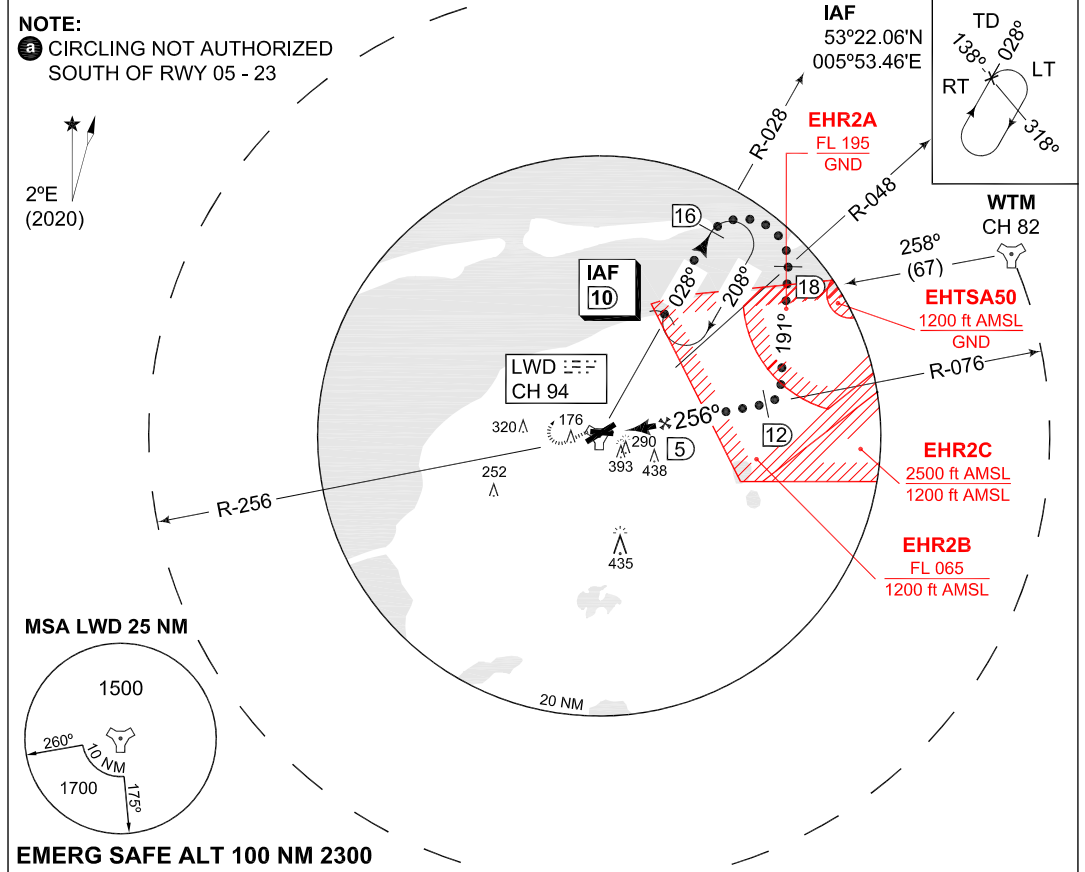
CATEGORY	A	B	C	D	E	H
MINIMA ACCORDING TO PANS-OPS; NOT ACCORDING TO APATC-1						
S-ILS 27	203-1600 200 (200-1.6/1.6)	211-1600 208 (300-1.6/1.6)	220-1600 217 (300-1.6/1.6)	230-1600 227 (300-1.6/1.6)	240-1600 237 (300-1.6/1.6)	203-800 200 (200-0.8/0.8)
S-LOC 27	360-1600 357 (400-1.6/1.6)			360-2000 357 (400-2.0/2.0)		360-800 357 (400-0.8/0.8)
CIRCLING a	500-1900 496 (500-1.9)	510-2800 506 (600-2.8)	610-3700 606 (700-3.7)	720-4600 716 (800-4.6)	820-6500 816 (900-6.5)	N.A.

CHANGES: MSA MIPS

RNLAF 23 MAR 2023

MIPS INSTRUMENT APPROACH CHART **HI-TACAN RWY 27 LEEUWARDEN (EHLW)**

DUTCH MIL 259.250 128.355		RAPCON NORTH 284.475 132.030		LEEUWARDEN TWR 344.850 120.705		GND CTL 362.525	
TACAN LWD CH 94	APP COURSE 256°	FAF ALT 1200 FT	Descent GR	MDA 390	THR ELEV 3	ALS -	LDA 6561 FT



CATEGORY	C	D	E
MINIMA ACCORDING TO PANS-OPS; NOT ACCORDING TO APATC-1			
S-TACAN 27	390 -1600 387 (400-1.6/1.6)	390 -2000 387 (400-2.0/2.0)	
CIRCLING ⓐ	610 -3700 606 (700-3.7)	720 -4600 716 (800-4.6)	820 -6500 816 (900-6.5)

CHANGES: MSA
MIPS

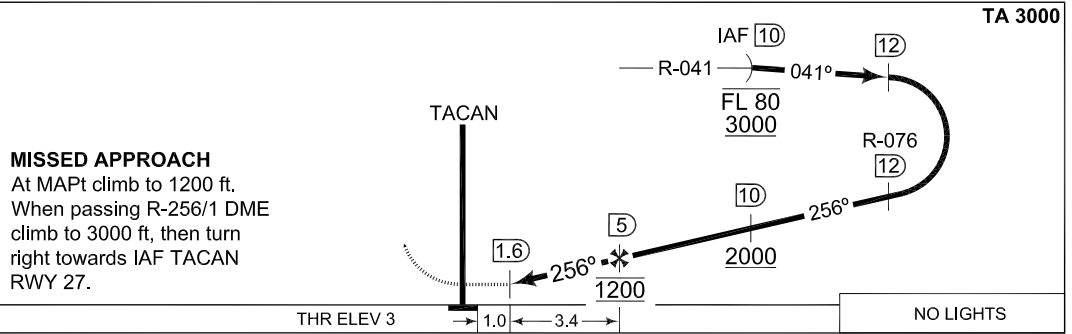
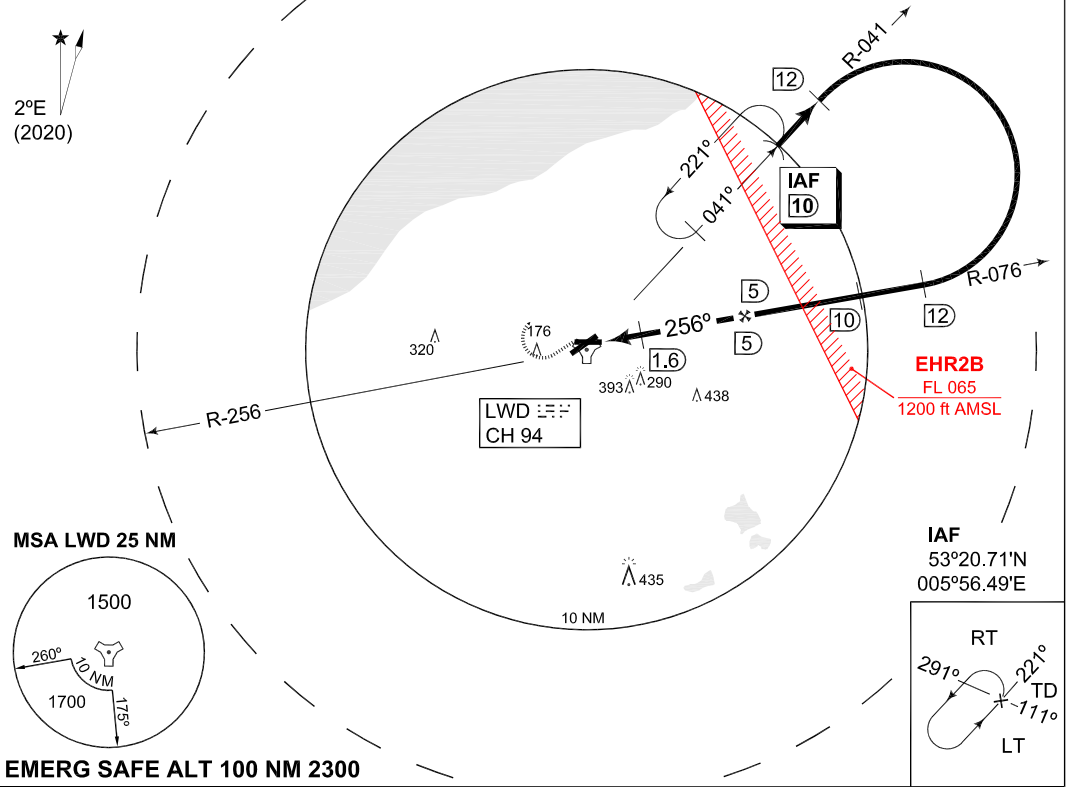
RNLAf 23 MAR 2023

MIPS INSTRUMENT APPROACH CHART **TACAN RWY 27 LEEUWARDEN (EHLW)**

DUTCH MIL 259.250 128.355		RAPCON NORTH 284.475 132.030		LEEUWARDEN TWR 344.850 120.705		GND CTL 362.525	
TACAN LWD CH 94		APP COURSE 256°	FAF ALT 1200 FT	Descent GR	MDA 390	THR ELEV 3	ALS -
						LDA 6561 FT	

NOTE:

a CIRCLING NOT AUTHORIZED SOUTH OF RWY 05 - 23



CATEGORY	A	B	C	D	E
MINIMA ACCORDING TO PANS-OPS; NOT ACCORDING TO APATC-1					
S-TACAN 27	390 -1600 387 (400-1.6/1.6)			390 -2000 387 (400-2.0/2.0)	
CIRCLING a	500 -1900 496 (500-1.9)	510 -2800 506 (600-2.8)	610 -3700 606 (700-3.7)	720 -4600 716 (800-4.6)	820 -6500 816 (900-6.5)

CHANGES: MSA

MIPS

RNLAF 23 MAR 2023

PART 3 – AERODROMES (AD)

AD 2.

**AD 2. AERODROMES
VOLKEL**

VOLKEL

EHVK AD 2.1 Aerodrome location indicator and name

EHVK - Volkel

EHVK AD 2.2 Geographical and administrative data

1	ARP	51°39'25.95"N 005°42'28.17"E
2	Direction and distance from city	213° MAG/12.6 NM NIJMEGEN
3	Elevation/Reference temperature	+ 73 ft AMSL/22.2° C (JUL)
4	MAG VAR/Annual change	1°56' E (JAN 2020)/11'E
5	AD operating authority Postal address Visitors' address Telephone E-mail AFTN	RNLAF DIB loket CLSK Vliegbasis Volkel MPC 86A P.O. Box 8762 4820 BB Breda Zeelandsedijk 10 5408 ZW Volkel +31(0)413 276911 vkl.lvl.lw.clsk@mindef.nl EHVKZTZX
6	Types of TFC permitted (IFR/VFR)	IFR/VFR
7	Remarks	Nil

EHVK AD 2.3 Operational hours

1	AD OPR HR	MON/FRI 0700/1545 (0600/1445)
2	Customs and immigration	2 HR PN
3	Health and sanitation	HO
4	AIS Briefing office	HO
5	ATS Reporting Office (ARO)	HO
6	MET Briefing Office	HO
7	ATS	HO
8	Fuelling	HO
9	Handling	HO
10	Security	HO
11	De-icing	HO
12	Remarks	PPR 24 HRS. See 2.23

EHVK AD 2.4 Handling services and facilities

1	Cargo-handling facilities	Yes
2	Fuel/oil types	F-34, H-515, O-148, O-155, O-156
3	Fuelling facilities/capacity	No limitations
4	Oxygen	LHOX, LOX
5	Nitrogen	LPNIT, HPNIT
6	De-icing facilities/type	S-738, S-742
7	Starting units	DSA 150, DSA600, SO 8.5, JAS, EC 3500, DC 3500
8	Hangar space for visiting ACFT	No
9	Repair facilities	F16
10	Remarks	Nil

EHVK AD 2.5 Passenger facilities

1	Remain overnight	AVBL O/R
2	Medical facilities	Medical officer, ambulance
3	Remarks	Nil

EHVK AD 2.6 Rescue and fire fighting services

1	AD category for fire fighting	NATO CAT 7
2	Remarks	Nil

EHVK AD 2.7 Seasonal availability - clearing

1	Seasonal availability	All seasons
2	Snow removal equipment	Yes
3	Remarks	Caution advised in winter during ice conditions

EHVK AD 2.8 Aprons, taxiways and check locations/positions data

1	Apron surface and strength	North of beginning RWY 06, PCN: 61 R/B/W/T E – E1, PCN 65 R/B/W/T
2	TWY width, surface and strength	Width 39 ft, PCN: 42 R/B/W/T
3	Remarks	Max. Wingspan TWY: 39 ft

EHVK AD 2.9 Surface movement guidance and control system and markings

According to STANAG 3158	
1	Remarks
	Nil

EHVK AD 2.10 Aerodrome obstacles

Obstacles along RWYs and TWYs do not confirm to standard obstacle clearance requirements. See Aerodrome Chart.

EHVK AD 2.11 Meteorological information provided

1	Associated MET Office	Volkel
2	Hours of service MET Office outside hours	HO Joint Meteorological Group
3	Office responsible for TAF preparation Periods of validity	Joint Meteorological Group 12 hrs
4	Type of landing forecast Interval of issuance	TREND Every 30 min during opr hrs
5	Flight documentation Language(s) used	Reports, forecasts and charts. English and Dutch.
6	Charts and other information AVBL for briefing or consultation	GSA, GSP, LGF, Cross section, Upperair forecasts, NVG, Radar- and Satellite Images
7	Supplementary equipment AVBL for providing information	PBS (pilot briefing system)
8	Remarks	Tel EHVK 0413-278047 or mail VKL.Meteo@mindef.nl Tel JMG 0164-693111 or mail JMG.WX.PLANNING@mindef.nl

EHVK AD 2.12 Runway physical characteristics

1	RWY dimensions/a-gear	See Aerodrome Chart. Values in ft.
2	RWY surface	Tarmac/concrete
3	RWY strength	24R: 30 R/B/W/T 06L: 30 R/B/W/T 24L: 27 R/B/W/T 06R: 27 R/B/W/T

EHVK AD 2.13 Declared distances

RWY	TORA	TODA	ASDA	LDA	RMK
24R	9922	9922	9922	9498	
	9479	9479	9479	NA	Take-off from intersection A
	8307	8307	8307	NA	Take-off from intersection B
	7631	7631	7631	NA	Take-off from intersection C
	6787	6787	6787	NA	Take-off from intersection D
	5500	5500	5500	NA	Take-off from intersection E
06L	9922	9922	9922	9500	
	9481	9481	9481	NA	Take-off from intersection H
	8976	8976	8976	NA	Take-off from intersection G
	6851	6851	6851	NA	Take-off from intersection F
	4776	4776	4776	NA	Take-off from intersection E
24L	9931	9931	9931	9487	
	9484	9484	9484	NA	Take-off from intersection AP
	8314	8314	8314	NA	Take-off from intersection BP
	6897	6897	6897	NA	Take-off from intersection DP
	5486	5486	5486	NA	Take-off from intersection EP
06R	9931	9931	9931	9485	
	9483	9483	9483	NA	Take-off from intersection HP
	6751	6751	6751	NA	Take-off from intersection FP
	4649	4649	4649	NA	Take-off from intersection EP

EHVK AD 2.14 Approach and runway lighting

According STANAG 3316		
1	Approach lighting	RWY 24R: CAT I. 852 m RWY 06L: CAT I. 880 m RWY 24L: SALS. 423 m RWY 06R: SALS. 420 m
2	RWY lighting	VCL, VHI
3	PAPI	Situated on the left side of all RWYs
4	Remarks	Nil

EHVK AD 2.15 Other lighting, secondary power supply

1	LDI	Nil
2	TWY edge lighting	VB
3	Emergency RWY lighting	Nil
4	Emergency TWY edge lighting	Retroreflective markers
5	Secondary power supply/switch-over	AVBL, switch over time 15 seconds
6	Remarks	Nil

EHVK AD 2.16 Helicopter landing area

1	Location	Westside of the AD, between TWY and RWY, north of the beginning of RWY 06L. See Aerodrome Chart
2	Marking	Daylight marking
3	Lighting	Yes
4	Remarks	Nil

EHVK AD 2.17 Air traffic services airspace

1	Designation and lateral limits	Volkel control zone 51°38'52.86"N 005°23'22.88"E; 51°45'05.93"N 005°33'24.21"E; along clockwise arc (radius 8 NM, centre 51°39'25.95"N 005°42'28.17"E) to 51°33'45.27"N 005°51'29.87"E; 51°27'33.73"N 005°41'28.57"E; to point of origin.
2	Vertical limits	GND to 3000 ft AMSL
3	Airspace classification	D
4	ATS unit call sign Language(s)	Contact initially Volkel TWR. English Outside HO DUTCH MIL INFO FREQ 132.350 MHZ.
5	Transition altitude	IFR: 3000 ft AMSL; VFR: 3500 ft AMSL
6	Remarks	Nil

EHVK AD 2.18 Air traffic services communication facilities

STATION/ SERVICE	CALL SIGN OR IDENTIFICATION	FREQUENCY MHz	HOURS	REMARKS
1	2	3	4	5
	As appropriate	121.500 243.000	HO	Emergency FREQ for all services
TWR	Volkel Tower	136.080*) 122.100 291.100*) 257.800	HO	*) Primary FREQ Radar equipped
GND CTL	Volkel Ground	386.775	HO	
APP	RAPCON South	123.180*) 122.100 388.525*)	HO	
RADAR	Volkel Arrival	122.100 291.200	HO	

EHVK AD 2.19 Radio navigation and landing aids

FACILITY	ID	CHANNEL FREQ.	HOURS	CO-ORD.	RANGE/ ALTITUDE	REMARKS
1	2	3	4	5	6	7
DME 24R	VLO	CH 44Y	HO	51°39'46.53"N 005°43'12.18"E		
ILS 24R LOCALIZER	VLO	110.750	HO	51°38'57.80"N 005°41'15.89"E		
GP 24R		330.050	HO	51°39'46.53"N 005°43'12.18"E		
DME 06L	VLZ	CH 44Y	HO	51°39'04.57"N 005°41'45.19"E		
ILS 06L LOCALIZER	VLZ	110.750	HO	51°39'53.89"N 005°43'39.91"E		
GP 06L		330.050	HO	51°39'04.57"N 005°41'45.19"E		
TACAN	VKL	CH 20X	H24	51°39'19.55"N 005°42'25.12"E	200 NM/60000 ft	FREQ pro- tected

EHVK AD 2.20 Local traffic regulations

Glider- and Light ACFT flying

Gliderflying outside OPR HR SR/SS.

EHVK AD 2.21 Noise abatement procedures

Noise abatement procedures are included in the flight procedures.

EHVK AD 2.22 Flight procedures

IFR procedures

The IAP and SID procedures are established in accordance STANAG 3759 and AATCP-1.

VFR Departure procedures

JET AIRCRAFT.

Runway 24: Leaving procedures are standard to the north. Standard leaving altitude is 2000 ft AMSL. Stay clear of the village of Volkel. Turn to the north-west and proceed between Uden and Veghel. Leaving procedures following a route between Airbase Volkel and Uden is prohibited.

Runway 06: Leaving procedures are standard to the North. Standard leaving altitude is 2000 ft AMSL. Do not turn to the north before 1,5 DME TACAN. Stay clear of the villages of Zeeland and Mill.

Note: Deviation from the above mentioned procedures i.e. leaving direction or altitude only after permission from TWR.

HELICOPTERS.

As directed by TWR.

CONVENTIONAL AIRCRAFT.

As directed by TWR.

VFR ARRIVAL PROCEDURES

JET AIRCRAFT.

Overhead Pattern: Initial points (IP) are approximately 3 NM from threshold, just north of the extended centerlines. IP's shall be joined from the north at 2500 ft AMSL. Joining from the south only after permission from TWR. IP shall be joined at 2000 ft AMSL. The break shall be executed to the south: a left-hand break for runway 24, a right-hand break for runway 06, at 1500 ft AMSL.

Closed-pattern: Rejoining downwind only after permission from TWR. Aircraft shall not exceed 1000 ft AMSL until clear of airfield boundaries, in order to stay clear of traffic on the break. Aircraft shall proceed to the end of the runway before turning to downwind in order to avoid Odiliapeel.

Straight-in approaches: Only allowed after permission from TWR. Aircraft shall report 8 NM final (Cuijk or Veghel) at 1500 ft AMSL.

HELICOPTERS.

Standard helicopter approach is from the north at 500 ft AMSL. Populated areas shall be avoided. For landing the helicopter square shall be used or as directed by TWR.

CONVENTIONAL ACFT.

Conventional Pattern: Conventional traffic should join from the north at 1000 ft AMSL.

Downwind is on the north side of the runway or as directed by TWR.

Straight-in approaches: Only allowed after permission from Volkel TWR. Aircraft shall report 8 NM final (CUIJK or VEGHEL) at 1500 ft AMSL.

WARNING

Avoid Reek Area (EHR 62)(demolition of explosives) position
51°43'42.00"N 005°41'33.00"E, radius 1 NM altitude 1000 ft AMSL.
See also AIP Netherlands ENR 5.1

EHVK AD 2.23 Additional information

AIS Briefing office facility and the ATS Reporting Office (ARO) is only available through the Flight Data and Notam Office (FDNO) located at MilATCC Schiphol.

Tel: +31(0)20 4062840

Tel: +31(0)20 4062841

E-mail: aocs.fdns@mindef.nl

AFTN: EHMCZPZX

available H24

PPR 24 HRS: for Prior Permission Request contact:

Operational and Co-ordination Centre

Tel: +31(0)413 278001/8002

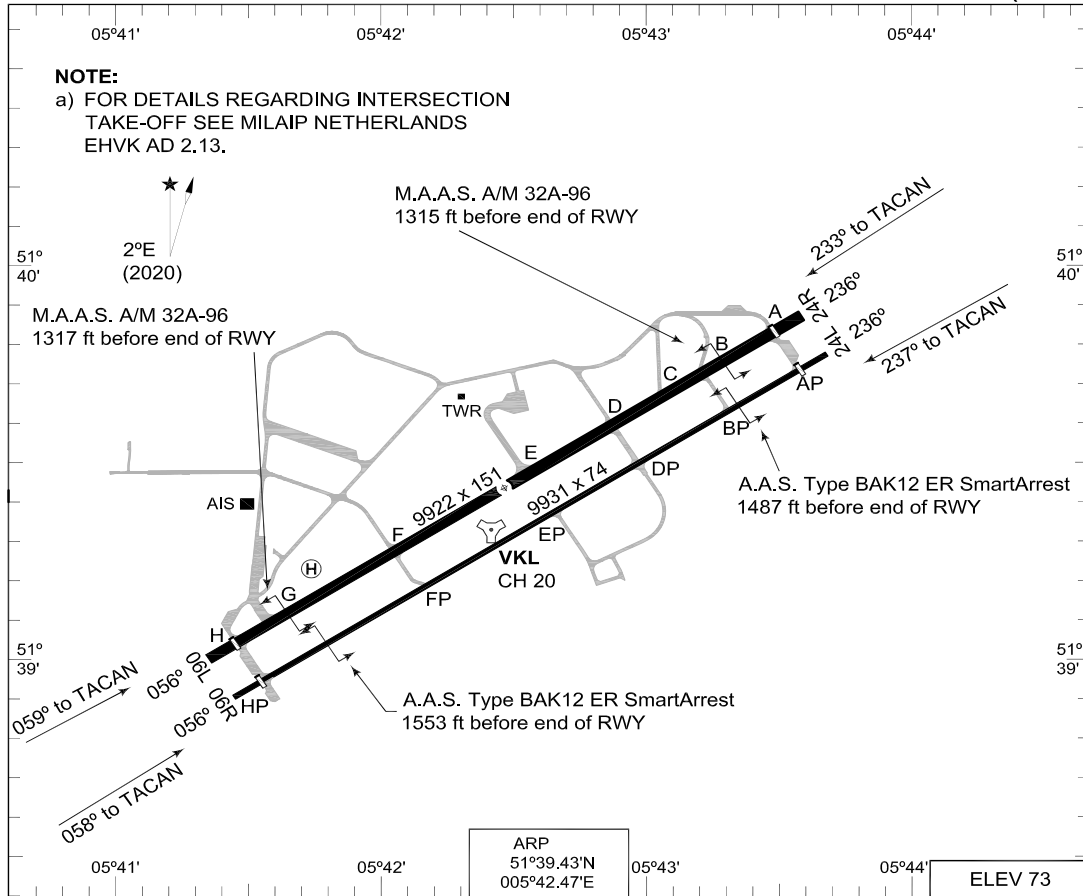
Fax: +31(0)413 276558

E-mail: vkl.oc.ops@mindef.nl

EHVK AD 2.24 Charts related to an aerodrome

Aerodrome Chart	EHVK AD 2-9
Local map	EHVK AD 2-10
MVA chart	EHVK AD 2-11
Instrument departure chart VK1	EHVK AD 2-12
Instrument departure chart VK2	EHVK AD 2-13
Instrument departure chart VK3	EHVK AD 2-14
Instrument departure chart VK5	EHVK AD 2-15
Instrument departure chart VK6	EHVK AD 2-16
Instrument departure chart VK7	EHVK AD 2-17
Instrument approach chart ILS or LOC RWY 06L	EHVK AD 2-18
Instrument approach chart TACAN RWY 06L/06R	EHVK AD 2-19
Instrument approach chart ILS or LOC RWY 24R	EHVK AD 2-20
Instrument approach chart TACAN RWY 24R/24L	EHVK AD 2-21

MIPS AERODROME CHART VOLKEL (EHVK)



RWY	PCN	TORA	ASDA	TODA	LDA	PAPI	THR ELEV	THR PSN
24R	30 R/B/W/T	9922	9922	9922	9498	3.0°	62	51°39.83'N 005°43.49'E
06L	30 R/B/W/T	9922	9922	9922	9500	3.0°	72	51°39.04'N 005°41.45'E
24L	27 R/B/W/T	9931	9931	9931	9487	3.0°	62	51°39.73'N 005°43.58'E
06R	27 R/B/W/T	9931	9931	9931	9485	3.0°	73	51°38.94'N 005°41.55'E

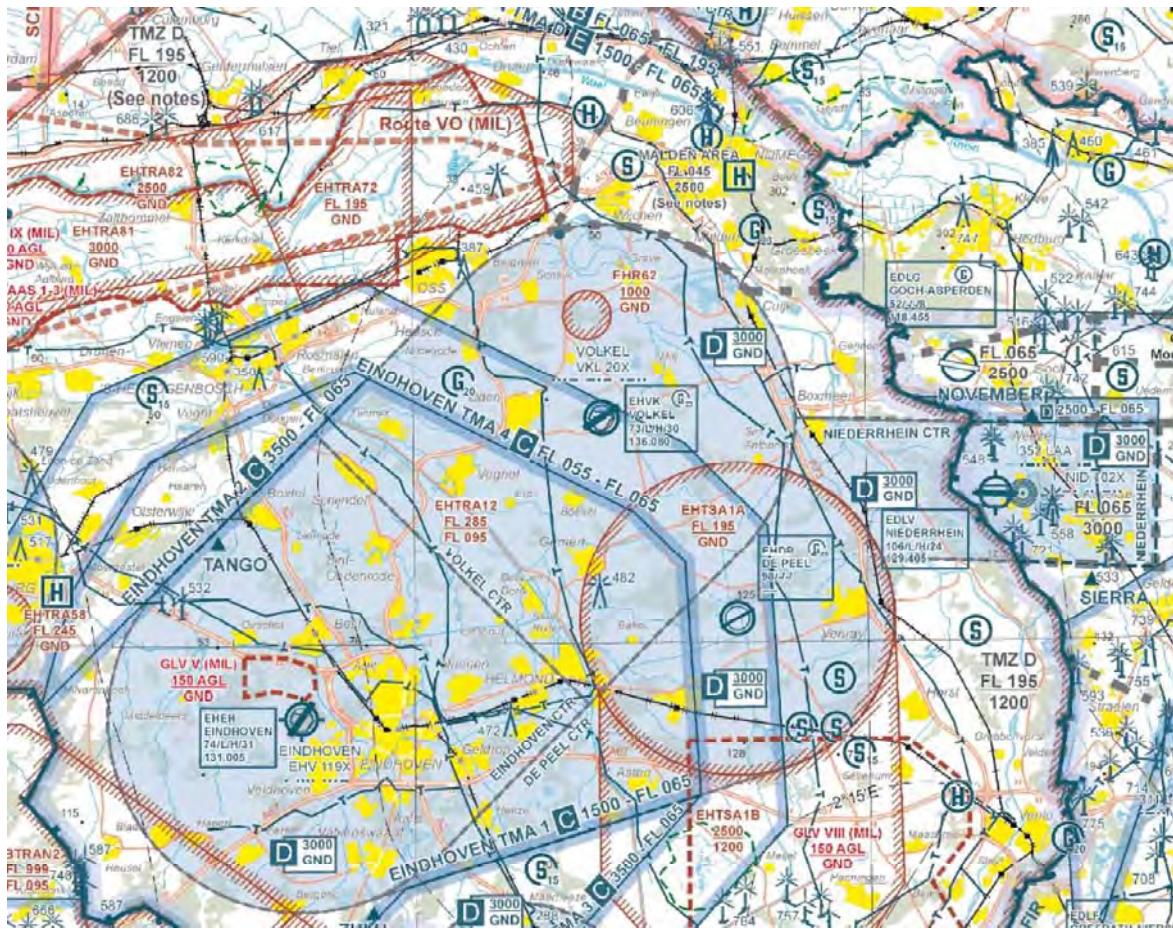
* SWY 24L PCN 16 R/B/W/T, SWY 06R 17 R/B/W/T
 VOLKEL TWR 291.100 136.080 (Ground Control) 386.775
 VOLKEL ARRIVAL 291.200
 RAPCON SOUTH 388.525 123.180

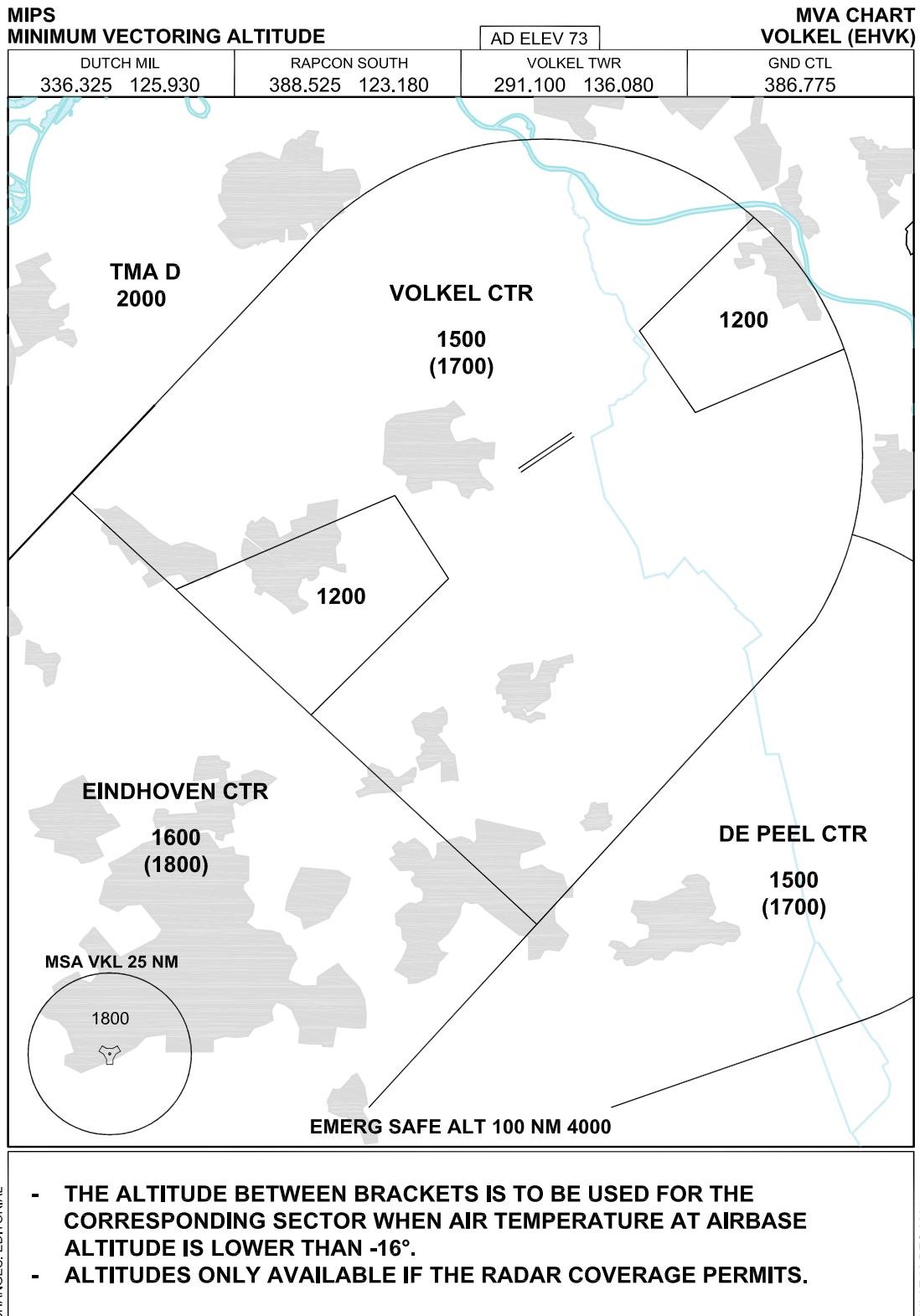
SRA	PROC. CRITERIA	RWY	GS	TCH	OTCH	RPI	CAT	MINIMA CRITERIA	MINIMA
	MIPS	24R					ABCDE	MIPS	460-1100 398 (400-1.1/1.8)
	MIPS	24L					ABCDE	MIPS	460-1400 398 (400-1.4/1.8)
	MIPS	06L					ABCDE	MIPS	460-1100 388 (400-1.1/1.8)
	MIPS	06R					ABCDE	MIPS	460-1400 387 (400-1.4/1.8)

CHANGES: DISTANCE M.A.A.S AND A.A.S

RNLAf 18 APR 2024

LOCAL MAP





CHANGES: EDITORIAL

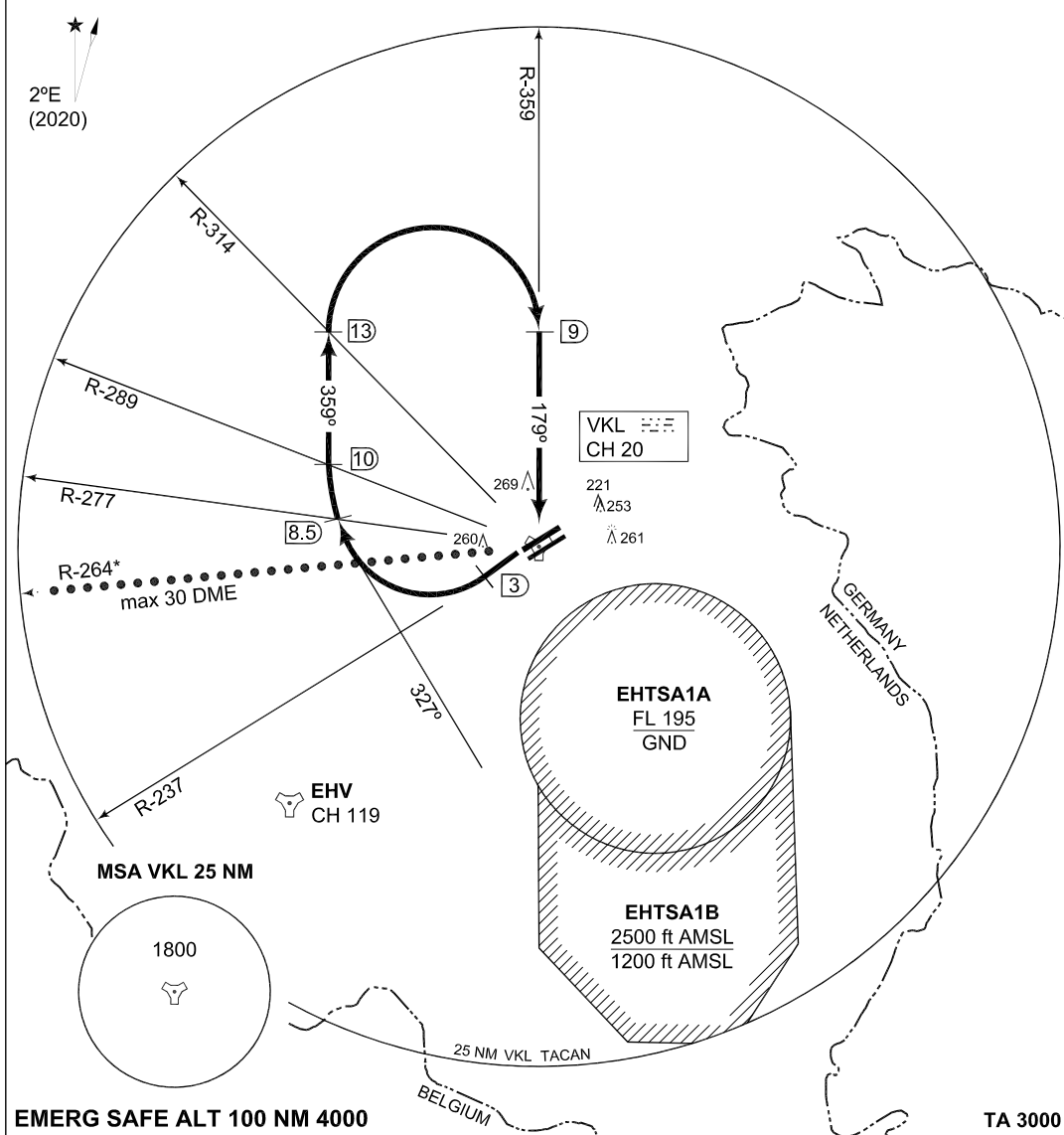
RNLAf 30 DEC 2021

**MIPS
INSTRUMENT DEPARTURE CHART**

**VK1
VOLKEL (EHVK)**

AD ELEV 73

GND CTL 386.775	VOLKEL TWR 291.100 136.080	RAPCON SOUTH 388.525 123.180				DUTCH MIL 336.325 125.930			
		RWY	Knots	120	180	240	300	360	to
		24	V/V (fpm)	540	810	1070	1340	1610	400 ft



EMERG SAFE ALT 100 NM 4000 **TA 3000**

VOLKEL 1 (RWY 24)

- Climb straight ahead to 3 DME from Volkel TACAN.
- Turn right, heading 327°.
- When passing R-277 turn right, heading 359°.
- When passing R-314 turn right (remain within 20 DME) to intercept R-359 inbound.

* Afterburner climb not approved until cleared by ATC. When cleared climb on R-264 outbound max. to 30 DME.

NOTE: Departure end crossing height: RWY 24R: 39 ft; RWY 24L: 24 ft.

CHANGES: MAGVAR

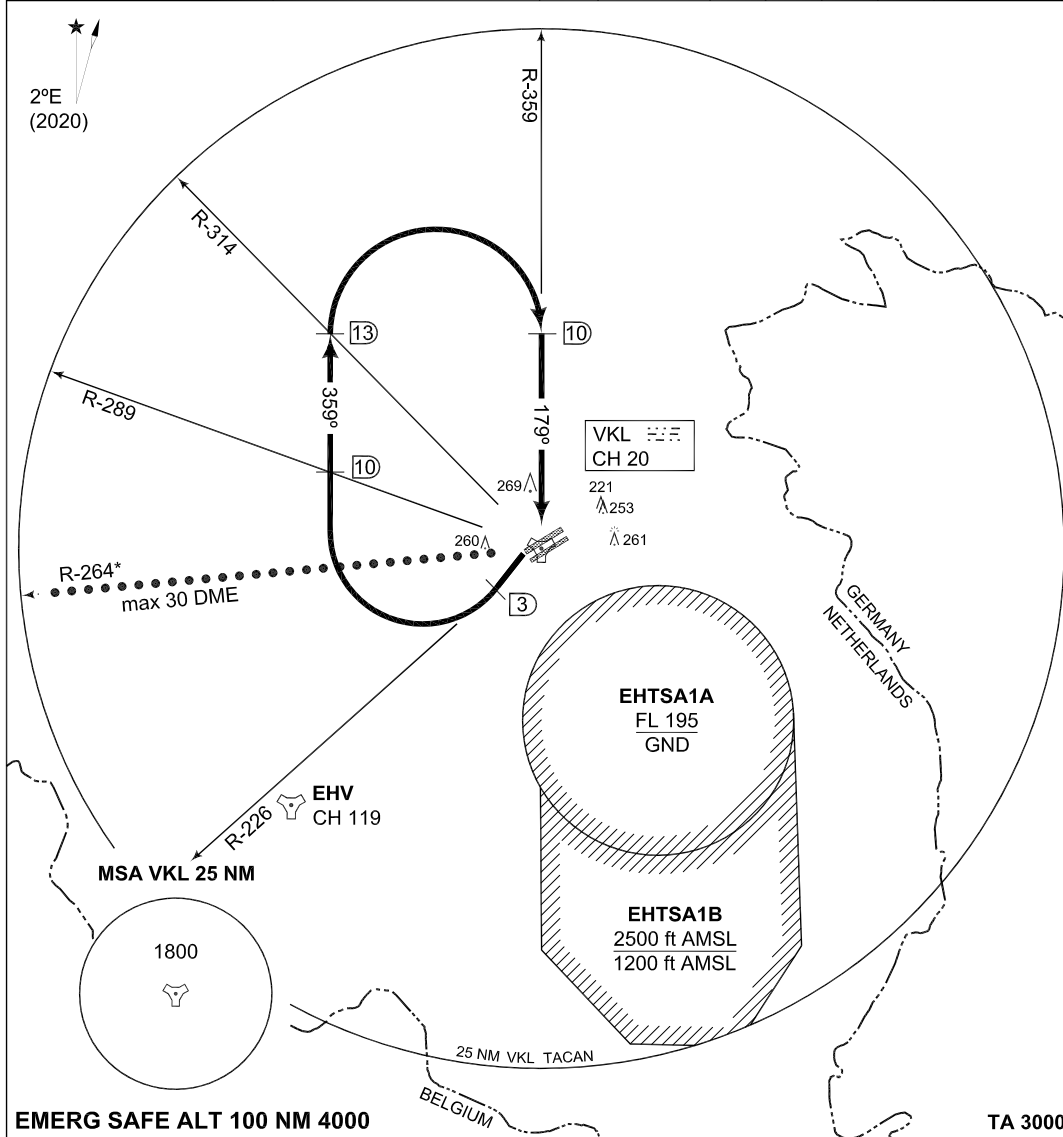
RNLAf 03 DEC 2020

**MIPS
INSTRUMENT DEPARTURE CHART**

AD ELEV 73

**VK2
VOLKEL (EHVK)**

GND CTL 386.775	VOLKEL TWR 291.100 136.080	RAPCON SOUTH 388.525 123.180				DUTCH MIL 336.325 125.930			
		RWY	Knots	120	180	240	300	360	to
		24	V/V (fpm)	540	810	1070	1340	1610	400 ft



VOLKEL 2 (RWY 24)

- Climb and turn left to intercept R-226.
- At 3 DME turn right, heading 359°.
- When passing R-314 turn right (remain within 20 DME) to intercept R-359 inbound.
- * Afterburner climb not approved until cleared by ATC. When cleared climb on R-264 outbound max. to 30 DME.

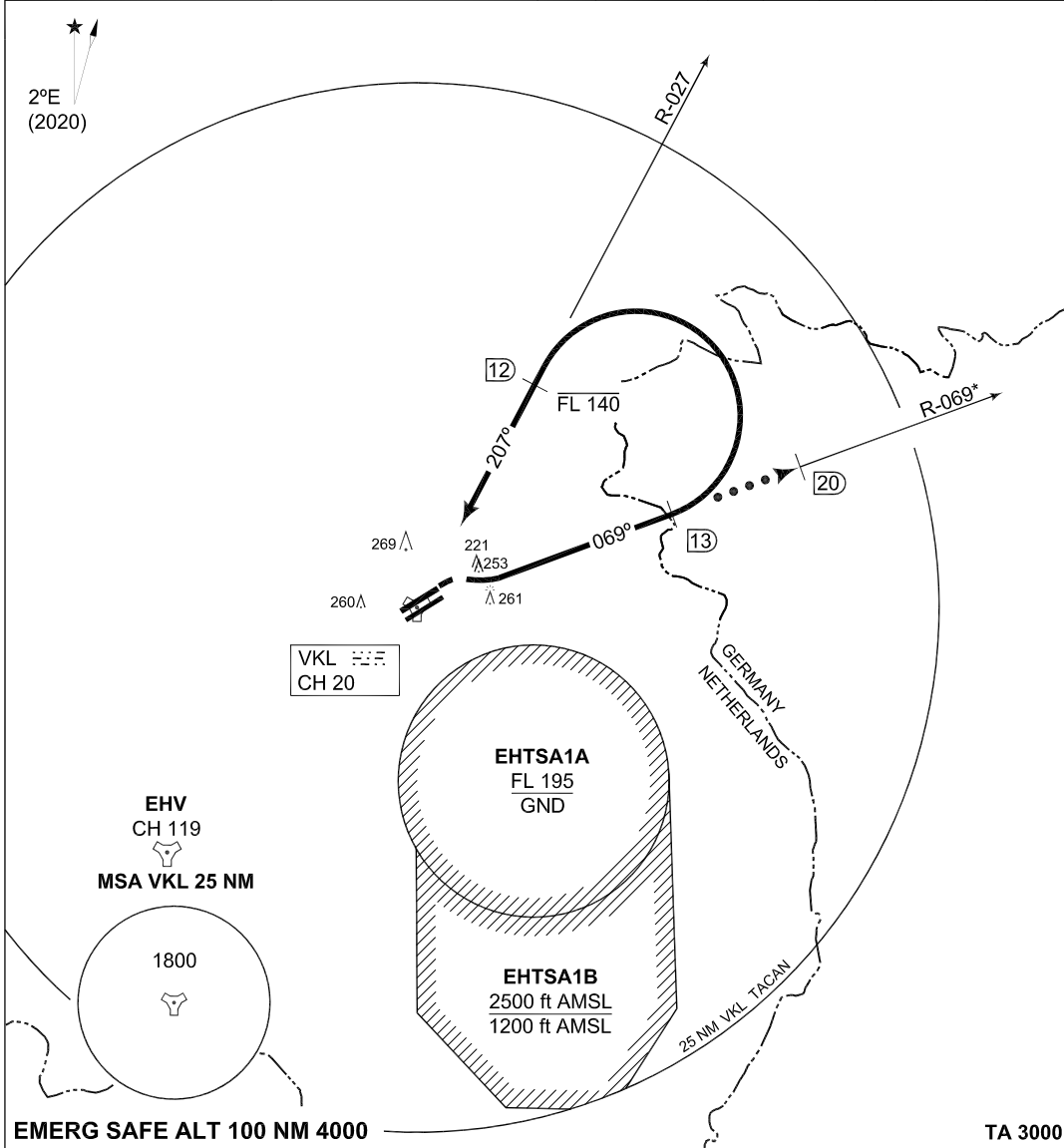
NOTE: Departure end crossing height: RWY 24R: 39 ft; RWY 24L: 24 ft.

CHANGES: MAG/VAR

RNLAf 03 DEC 2020

MIPS INSTRUMENT DEPARTURE CHART **VK3 VOLKEL (EHVK)**

GND CTL 386.775	VOLKEL TWR 291.100 136.080	AD ELEV 73		RAPCON SOUTH 388.525 123.180		DUTCH MIL 336.325 125.930			
		RWY	Knots	120	180	240	300	360	to
		06	V/V (fpm)	1440	2160	2880	3600	4320	100 ft

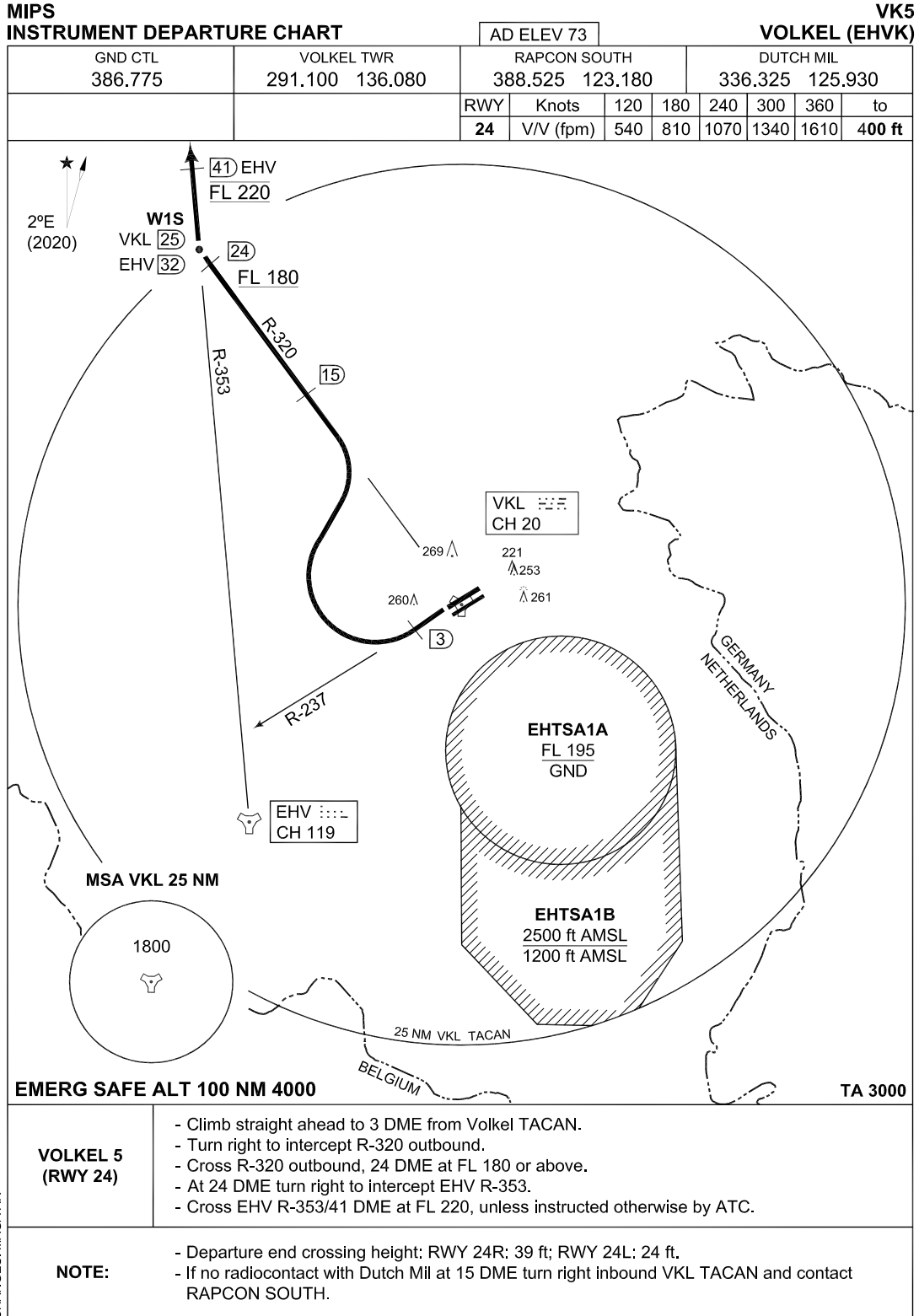


VOLKEL 3 (RWY 06)	<ul style="list-style-type: none"> - Intercept and proceed outbound on R-069 from Volkel TACAN, climb to FL 140. - At 13 DME turn left (remain within 20 DME) to intercept R-027 inbound. - When passing 12 DME on R-027 inbound continue climb. * Afterburner climb not approved until cleared by ATC. When cleared climb on R-069 outbound max. to 20 DME.
--------------------------	--

NOTE: - Departure end crossing height: RWY 06L: 17 ft; RWY 06R: 23 ft.

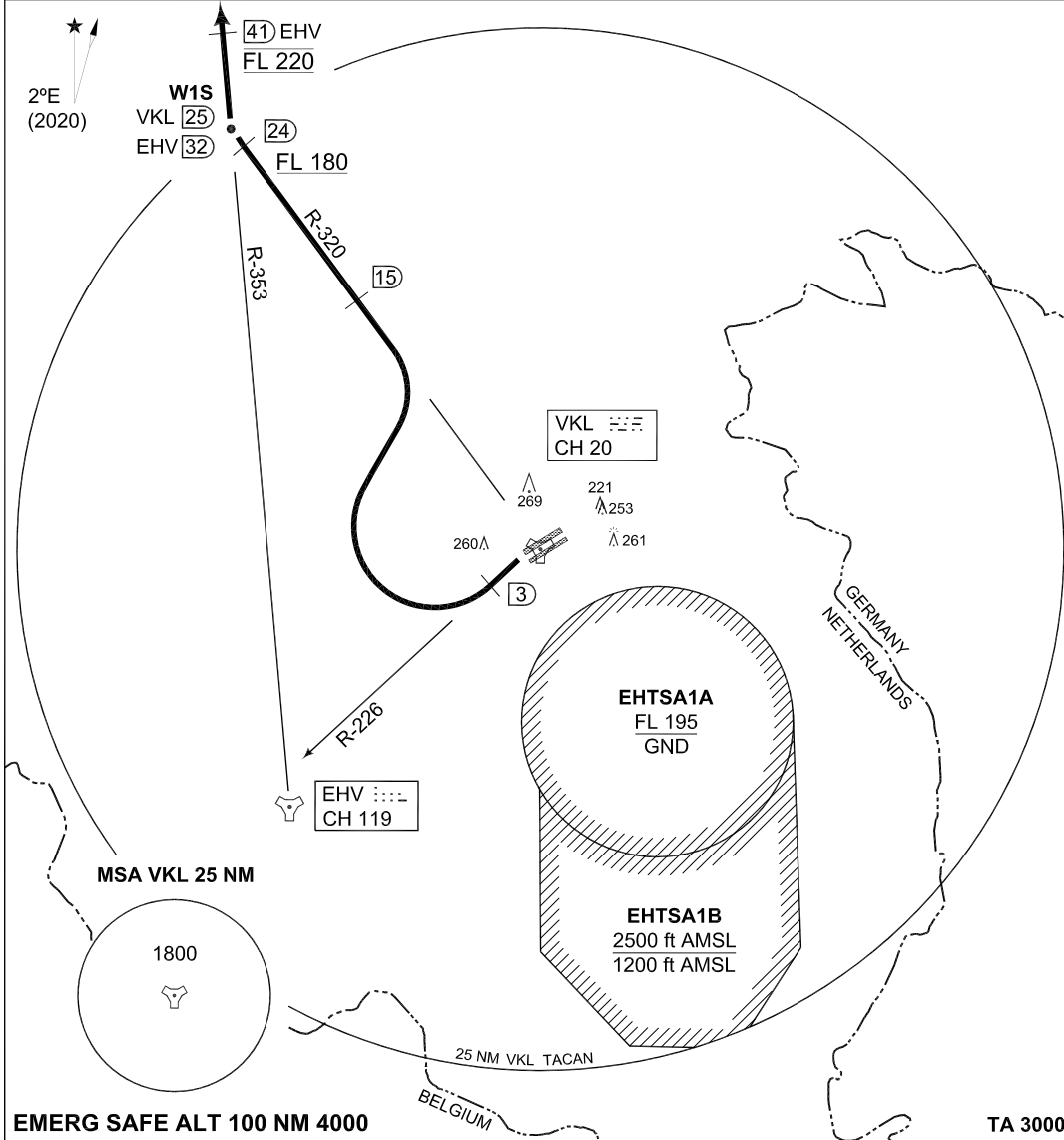
CHANGES: MAG/VAR

RNLAF 03 DEC 2020



MIPS INSTRUMENT DEPARTURE CHART **VK6 VOLKEL (EHVK)**

GND CTL 386.775	VOLKEL TWR 291.100 136.080	AD ELEV 73		RAPCON SOUTH 388.525 123.180				DUTCH MIL 336.325 125.930			
		RWY	Knots	120	180	240	300	360	to		
		24	V/V (fpm)	540	810	1070	1340	1610	400 ft		

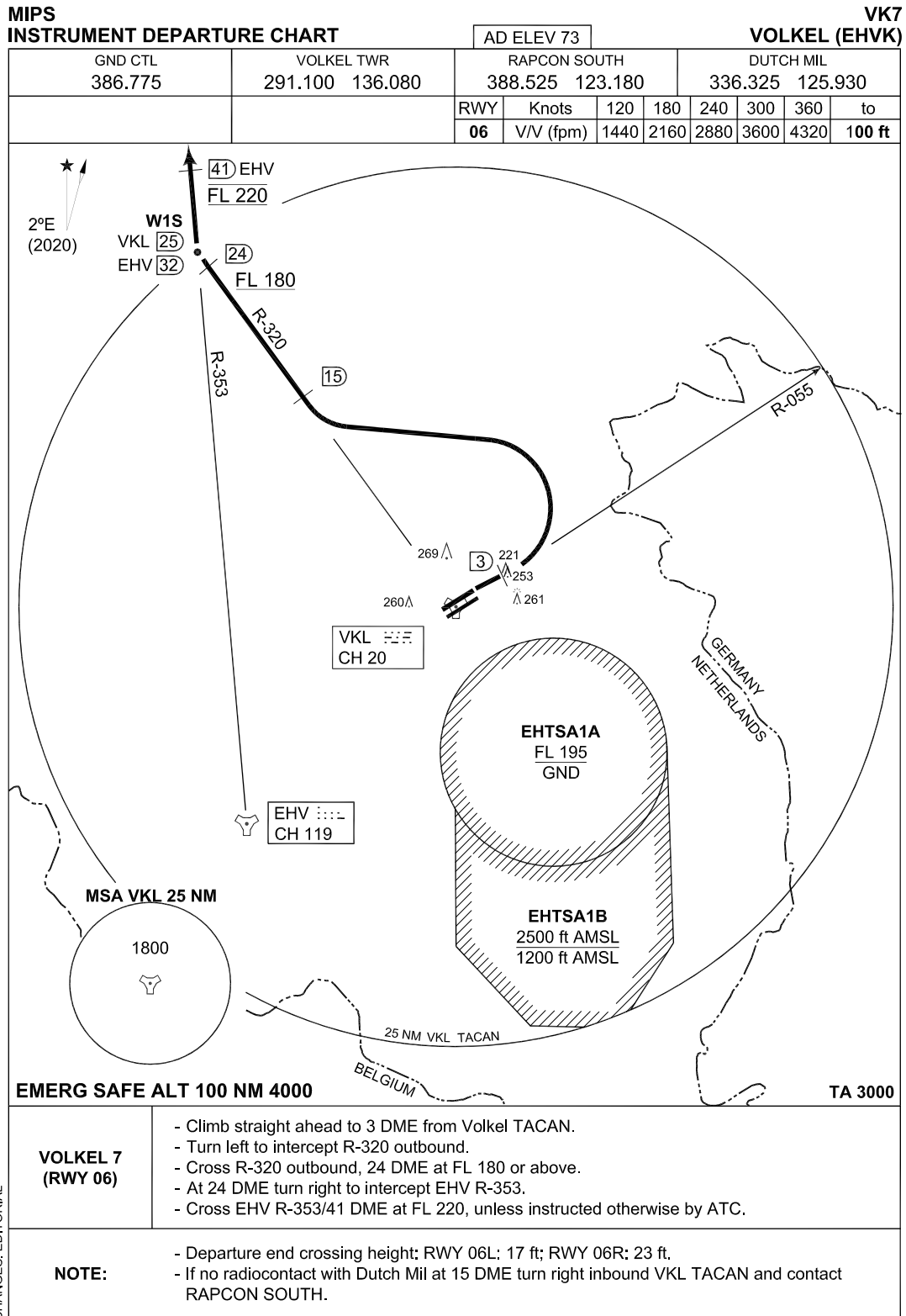


EMERG SAFE ALT 100 NM 4000	
VOLKEL 6 (RWY 24)	<ul style="list-style-type: none"> - Climb and turn left to intercept R-226. - At 3 DME turn right to intercept R-320 outbound. - Cross R-320 outbound, 24 DME at FL 180 or above. - At 24 DME turn right to intercept EHV R-353. - Cross EHV R-353/41 DME at FL 220, unless instructed otherwise by ATC.

NOTES:	<ul style="list-style-type: none"> - Departure end crossing height: RWY 24R: 39 ft; RWY 24L: 24 ft. - If no radiocontact with Dutch Mil at 15 DME turn right inbound VKL TACAN and contact RAPCON SOUTH.
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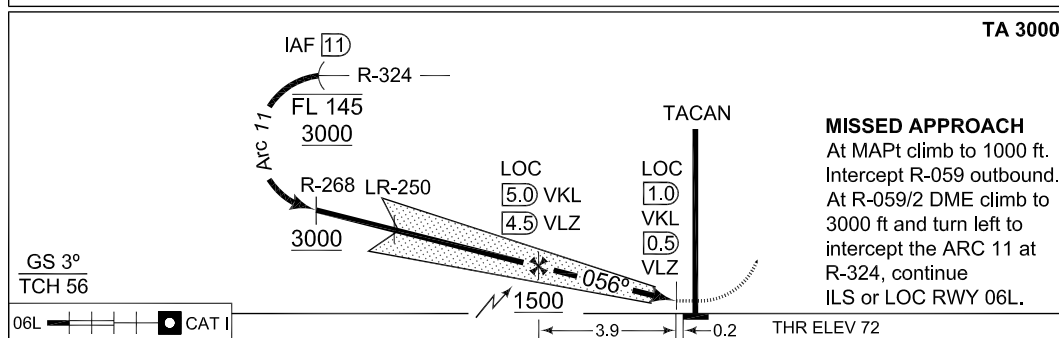
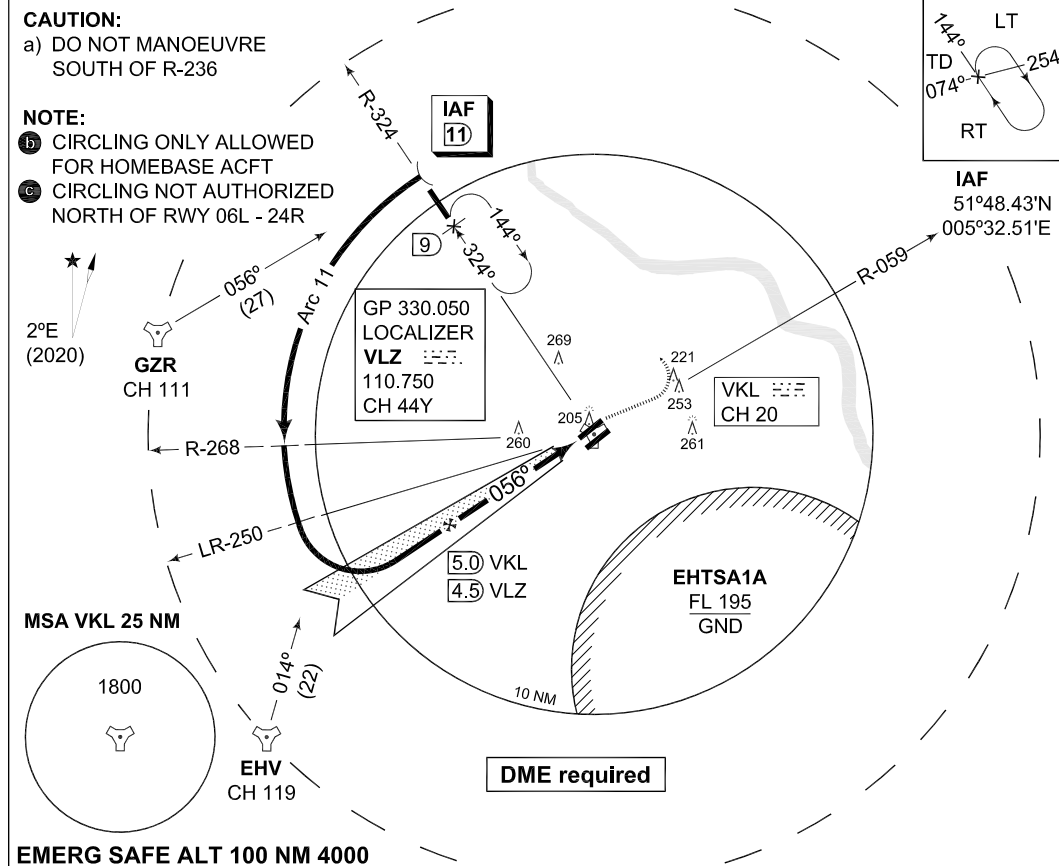
CHANGES: IMAGVAR

RNLAF 03 DEC 2020



MIPS INSTRUMENT APPROACH CHART **ILS or LOC RWY 06L VOLKEL (EHVK)**

DUTCH MIL 336.325 125.930	RAPCON SOUTH 388.525 123.180	VOLKEL TWR 291.100 136.080	GND CTL 386.775
LOCALIZER / DME VLZ 110.750 / CH 44 Y	APP COURSE 056°	GS INTCP ALT 1500 FT	GS DA THR ELEV 3° 272 72
		ALS 880 m	LDA 06L-9500 FT



CATEGORY	A	B	C	D	E
S-ILS 06L	272-800 200 (200-0.8/1.6)				
S-LOC 06L	370-800 298 (300-0.8/1.6)		370-1200 298 (300-1.2/1.6)		
CIRCLING b c	500-1900 427 (500-1.9)	570-2800 497 (500-2.8)	790-3700 717 (800-3.7)	790-4600 717 (800-4.6)	890-6500 817 (900-6.5)

CHANGES: MAGIVAR

MIPS

FNLAf 03 DEC 2020

MIPS INSTRUMENT APPROACH CHART

TACAN RWY 06L/06R VOLKEL (EHVK)

AD ELEV 73

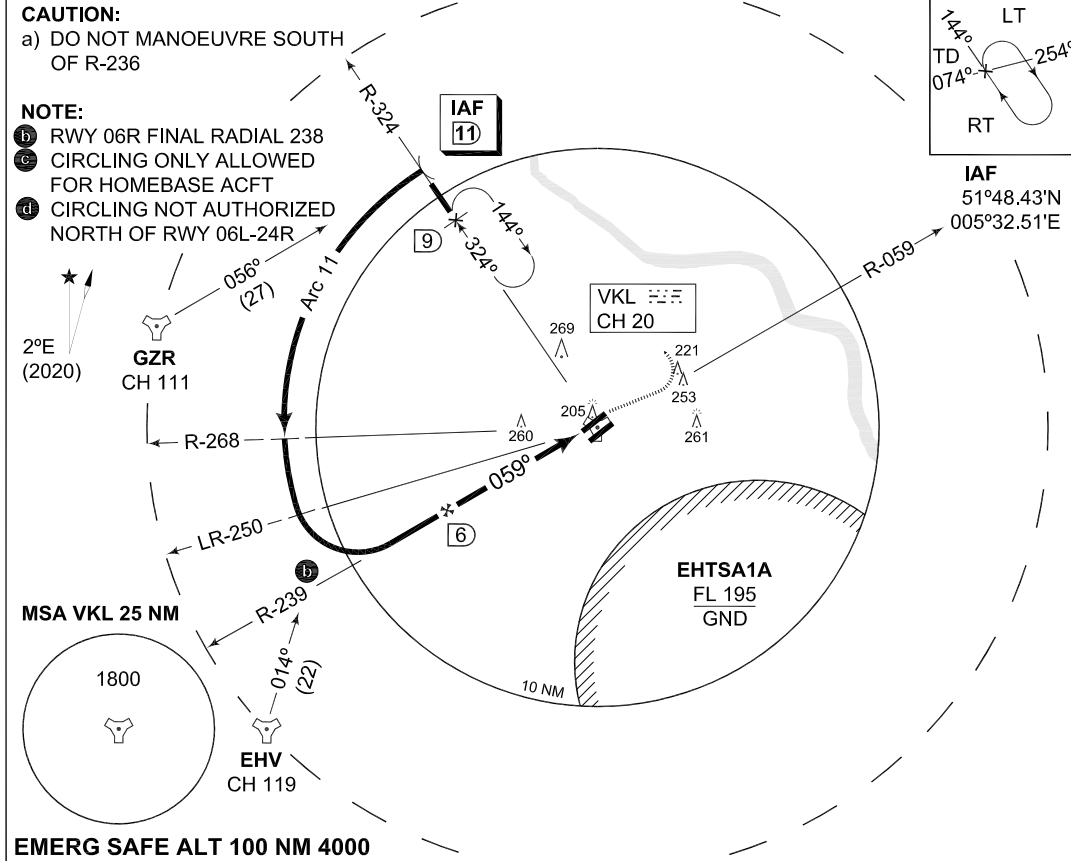
DUTCH MIL 336.325 125.930		RAPCON SOUTH 388.525 123.180		VOLKEL TWR 291.100 136.080		GND CTL 386.775	
TACAN VKL CH 20	APP COURSE 059°	FAF ALT 1500 FT	Descent GR	DA 430	THR ELEV 72	ALS 06L-880 m/06R-420m	LDA 06L-9500 FT/06R-9485 FT

CAUTION:

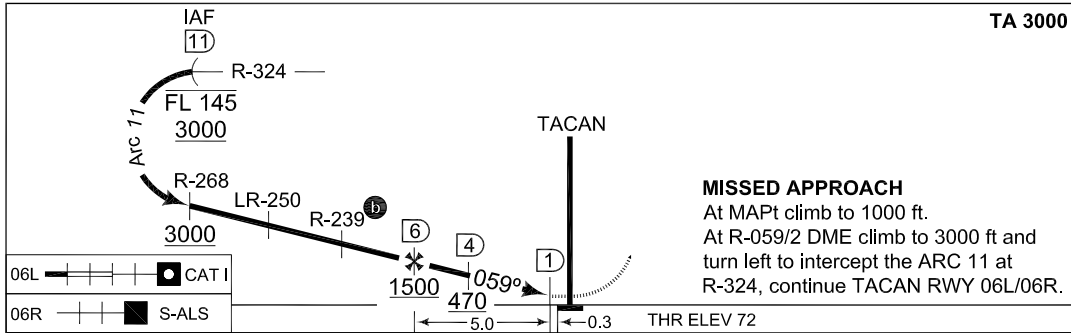
a) DO NOT MANOEUVRE SOUTH OF R-236

NOTE:

- b) RWY 06R FINAL RADIAL 238
- c) CIRCLING ONLY ALLOWED FOR HOMEBASE ACFT
- d) CIRCLING NOT AUTHORIZED NORTH OF RWY 06L-24R



EMERG SAFE ALT 100 NM 4000



CATEGORY	A	B	C	D	E
S-TAC 06L	430-800 358 (400-0.8/1.6)		430-1200 358 (400-1.2/1/6)	430-1200 358 (400-1.2/2.0)	
S-TAC 06R		430-1200 358 (400-1.2/1.6)		430-1600 358 (400-1.6/2.0)	
CIRCLING c d	500-1900 427 (500-1.9)	570-2800 497 (500-2.8)	790-3700 717 (800-3.7)	790-4600 717 (800-4.6)	890-6500 817 (900-6.5)

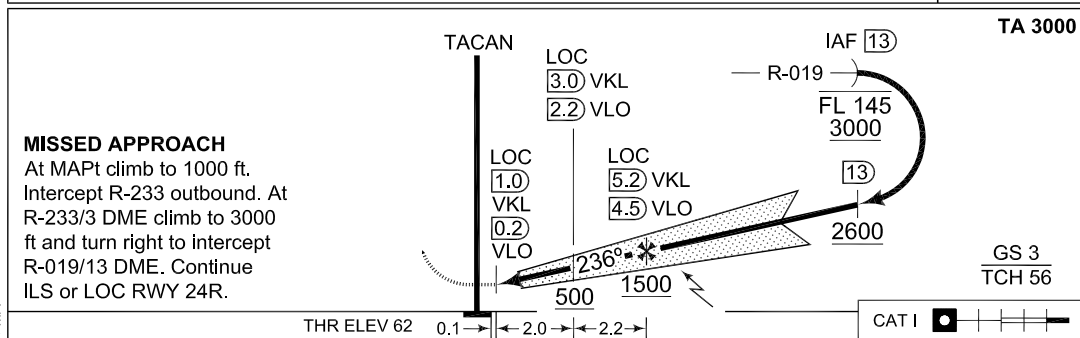
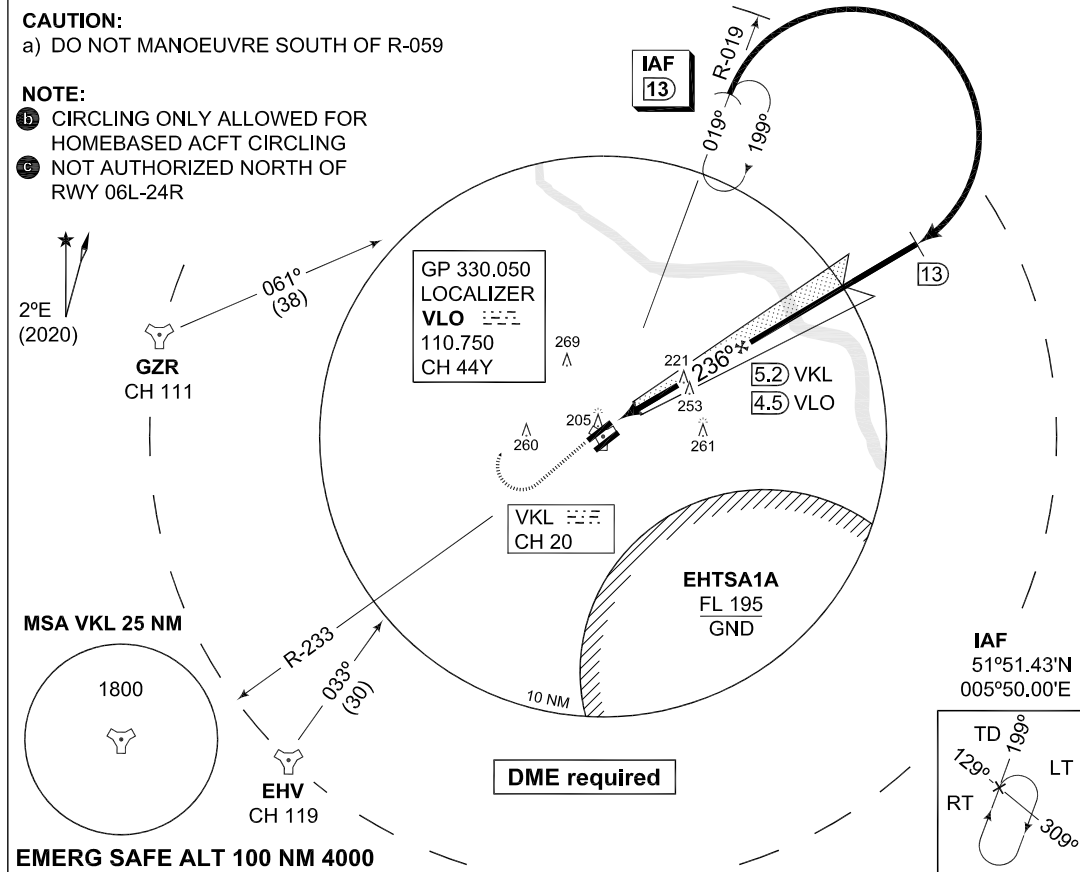
CHANGES: MAGVAR

MIPS

RNLAF 03 DEC 2020

MIPS INSTRUMENT APPROACH CHART **ILS or LOC RWY 24R VOLKEL (EHVK)**

DUTCH MIL 336.325 125.930		RAPCON SOUTH 388.525 123.180		VOLKEL TWR 291.100 136.080		GND CTL 386.775	
LOCALIZER / DME VLO 110.750 / CH 44 Y	APP COURSE 236°	GS INTCP ALT 1500 FT	GS 3°	DA 262	THR ELEV 62	ALS 852 m	LDA 24R-9498 FT



OPERATING MINIMA	CATEGORY	A	B	C	D	E
MIPS	S-ILS 24R	262 -800 200 (200-0.8/1.6)				
	S-LOC 24R	440 -800 378 (400-0.8/1.6)		440 -1200 378 (400-1.2/1.6)		440 -1200 378 (400-1.2/2.0)
	CIRCLING (b) (c)	500 -1900 427 (500-1.9)	570 -2800 497 (500-2.8)	790 -3700 717 (800-3.7)	790 -4600 717 (800-4.6)	890 -6500 817 (900-6.5)

MIPS INSTRUMENT APPROACH CHART **TACAN RWY 24R/24L VOLKEL (EHVK)**

DUTCH MIL 336.325 125.930		RAPCON SOUTH 388.525 123.180		VOLKEL TWR 291.100 136.080		GND CTL 386.775	
TACAN VKL CH 20	APP COURSE 233°	FAF ALT 1500 FT	Descent GR	DA 440	THR ELEV 62	ALS 24R-852 m / 24L-423 m	LDA 24R-9498FT/24L-9487FT

CAUTION:

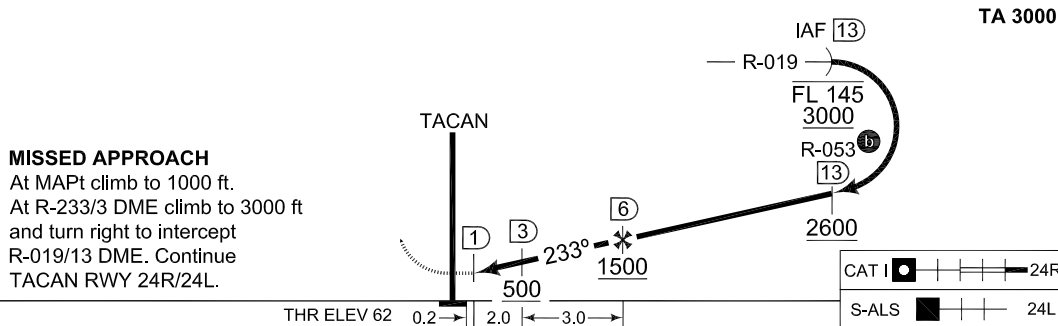
a) DO NOT MANOEUVRE SOUTH OF R-059

NOTE:

- b) RWY 24L FINAL RADIAL 057
- c) CIRCLING ONLY ALLOWED FOR HOMEBASED ACFT
- d) CIRCLING NOT AUTHORIZED NORTH OF RWY 06L-24R



EMERG SAFE ALT 100 NM 4000



CATEGORY	A	B	C	D	E
S-TACAN 24R	440-800 378 (400-0.8/1.6)		440-1200 378 (400-1.2/1.6)	440-1200 378 (400-1.2/2.0)	
S-TACAN 24L	440-1200 378 (400-1.2/1.6)			440-1600 378 (400-1.6/2.0)	
CIRCLING	500-1900 427 (500-1.9)	570-2800 497 (500-2.8)	790-3700 717 (800-3.7)	790-4600 717 (800-4.6)	890-6500 817 (900-6.5)

CHANGES: OPERATING MINIMA

MIPS

c) d)

RNLAF 09 SEP 2021



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PART 3 – AERODROMES (AD)

AD 2.

**AD 2. AERODROMES
WOENS DRECHT**

WOENSDRICHT

EHWO AD 2.1 Aerodrome location indicator and name

EHWO - Woensdrecht

EHWO AD 2.2 Geographical and administrative data

1	ARP	51°26'56.40"N 004°20'31.71"E
2	Direction and distance from city	150° MAG/3.5 NM BERGEN OP ZOOM
3	Elevation/Reference temperature	+ 63 ft AMSL/21.0° C (AUG)
4	MAG VAR/Annual change	1°31'E (JAN 2020)/11'E
5	AD operating authority Postal address Visitors' address Telephone E-mail AFTN	RNLAF Vliegbasis Woensdrecht MPC 91A P.O. Box 8762 4820 BB Breda Kooiweg 40 4631 SZ Hoogerheide +31(0)164 692365 kmsl.lvl@mindef.nl EHWOZTZX
6	Types of TFC permitted (IFR/VFR)	IFR/VFR
7	Remarks	Nil

EHWO AD 2.3 Operational hours

1	AD OPR HR	MON/FRI 0800/1545 (0700/1445)
2	Customs and immigration	1 HR PN
3	Health and sanitation	HO
4	AIS Briefing office	See AD 2.23
5	ATS Reporting Office (ARO)	See AD 2.23
6	MET Briefing Office	HO
7	ATS	HO
8	Fuelling	HO
9	Handling	Limited, check Operations and Coordination Centre for status. See AD 2.23
10	Security	HO
11	De-icing	Not AVBL
12	Remarks	PPR 24 HRS See AD 2.23

EHWO AD 2.4 Handling services and facilities

1	Cargo-handling facilities	No
2	Fuel/oil types	F-34
3	Fuelling facilities/capacity	O/R
4	Oxygen	LOX
5	De-icing facilities/type	No
6	Starting units	DSA 150, DSA 600
7	Hangar space for visiting ACFT	No
8	Repair facilities	No
9	Remarks	Nil

EHWO AD 2.5 Passenger facilities

1	Remain overnight	AVBL O/R
2	Medical facilities	First Aid treatment and first responders on site. Hospital in Bergen op Zoom.
3	Remarks	Nil

EHWO AD 2.6 Rescue and fire fighting services

1	AD category for fire fighting	NATO CAT 7
2	Remarks	Nil

EHWO AD 2.7 Seasonal availability - clearing

1	Seasonal availability	All seasons
2	Snow removal equipment	Yes
3	Remarks	Nil

EHWO AD 2.8 Aprons, taxiways and check locations/positions data

1	Apron surface and strength	Visitors apron: concrete , PCN 77 R/C/W/T EMVO apron: tarmac, PCN 62 F/A/W/T LCW apron: concrete, PCN 47 R/C/W/T
2	TWY width, surface and strength	TWY A: Width 15 m, tarmac, PCN 38 F/A/W/T TWY B: Width 22,5 m, tarmac/concrete, PCN 34 R/C/W/T TWY B1: Width 15 m, tarmac/concrete, PCN 48 R/C/W/T TWY B2: Width 11,9 m, tarmac/concrete, PCN 10 F/A/W/T TWY B3: Width 12 m, concrete, PCN 61 R/C/W/T TWY B4: Width 11,9 m, concrete, PCN 40 R/C/W/T TWY C: Width 14,8 m, tarmac, PCN 44 F/A/W/T TWY C1: Width 20 m, concrete, PCN 51 R/C/W/T TWY C2: Width 12 m, tarmac/concrete, PCN 32 R/C/W/T TWY C3: Width 12 m, tarmac/concrete, PCN 26 F/A/W/T TWY C4: Width 20 m, concrete, PCN 53 R/C/W/T TWY D: Width 12 m, tarmac/concrete, PCN 49 F/A/W/T
3	Remarks	TWY marking is general and not based on any ACFT type. Use caution when taxiing on intersections TWY B 2: only to be used by ACFT with ACN 10 or less TWY C: obstacle TACAN building 24,5 m from TWY centreline Compass swing area: concrete, PCN 34 R/C/W/T

EHWO AD 2.9 Surface movement guidance and control system and markings

According STANAG 3158		
1	Remarks	Nil

EHWO AD 2.10 Aerodrome obstacles

See Aerodrome Chart

EHWO AD 2.11 Meteorological information provided

1	Associated MET Office	Woensdrecht
2	Hours of service MET Office outside hours	HO Joint Meteorological Group
3	Office responsible for TAF preparation Periods of validity	Joint Meteorological Group 12 hrs
4	Type of landing forecast Interval of issuance	TREND Every 30 min during opr hrs
5	Flight documentation Language(s) used	Reports, forecasts and charts. English and Dutch.
6	Charts and other information AVBL for briefing or consultation	GSA, GSP, LGF, Cross section, Upperair forecasts, NVG, Radar- and Satellite Images
7	Supplementary equipment AVBL for providing information	PBS (pilot briefing system)
8	Remarks	Tel EHWO 0164-692268 Tel JMG 0164-693111 or mail JMG.WX.PLANNING@mindef.nl

EHWO AD 2.12 Runway physical characteristics

1	RWY dimensions/a-gear	See Aerodrome Chart. Values in ft.
2	RWY surface	Tarmac/concrete
3	RWY strength	PCN: 51 R/C/W/T

EHWO AD 2.13 Declared distances

See Aerodrome Chart. Values in ft.

EHWO AD 2.14 Approach and runway lighting

According STANAG 3316		
1	Approach lighting	RWY 25: CAT I. 900 m RWY 07: S-ALS 420 m
2	RWY lighting	RWY 07 VHI, RWY 25 VCL/VHI
3	PAPI	Situated on left side of both RWYs
4	Remarks	Nil

EHWO AD 2.15 Other lighting, secondary power supply

1	LDI	Not lighted
2	TWY edge lighting	AVBL
3	Emergency RWY lighting	No
4	Emergency TWY edge lighting	No
5	Secondary power supply/switch-over	AVBL, switch over time 15 seconds
6	Remarks	No TWY edge lighting along TWY Northern taxiway. Edge markers along RWY will be installed when heavy snowfall is expected. Edge markers along TWY will be installed when heavy snowfall is expected and deemed necessary.

EHWO AD 2.16 Helicopter landing area

1	Location	51°26'46.52"N 004°20'15.47"E and 600 m south of TWR. See Aerodrome Chart
2	Marking	Daylight marking
3	Lighting	No
4	Remarks	Nil

EHWO AD 2.17 Air traffic services airspace

1	Designation and lateral limits	Woensdrecht control zone 51°20'19.14"N 004°13'22.74"E; along clockwise arc (radius 8 NM, centre 51°26'56.40"N 004°20'31.71"E) to 51°25'38.09"N 004°33'08.47"E; along Dutch-Belgian border to point of origin.
2	Vertical limits	GND to 3000 ft AMSL
3	Airspace classification	D
4	ATS unit call sign Language(s)	Contact initially Woensdrecht TWR. English Outside HO DUTCH MIL INFO FREQ 132.350 MHZ.
5	Transition altitude	IFR: 3000 ft AMSL; VFR: 3500 ft AMSL
6	Remarks	Nil

EHWO AD 2.18 Air traffic services communication facilities

STATION/ SERVICE	CALL SIGN OR IDENTIFICATION	FREQUENCY MHz	HOURS	REMARKS
1	2	3	4	5
	As appropriate	121.500 243.000	HO	Emergency FREQ for all services
TWR	Woensdrecht Tower	120.430*) 122.100 339.000*) 257.800	HO	*) Primary FREQ
GND CTL	Woensdrecht Ground	121.680 356.875	HO	
APP	Rapcon West	123.580 399.725	HO	Radar equipped
	Woensdrecht Arrival	123.580 370.650	HO	Through APP
	Woensdrecht Monitor	128.990	HO	Nieuw Milligen TMA D1, TMA G1 (extended) Walcheren Area

EHWO AD 2.19 Radio navigation and landing aids

FACILITY	ID	CHANNEL FREQ.	HOURS	CO-ORD.	RANGE/ ALTITUDE	REMARKS
1	2	3	4	5	6	7
TACAN	WDT	CH 97X	H24	51°26'50.64"N 004°20'38.13"E	40 NM/25000 ft	FREQ protected
ILS 25 LOCALIZER	WDO	108.150	HO	51°26'40.78"N 004°19'25.34"E		
ILS 07 LOCALIZER	WDZ	108.150	HO	51°27'13.50"N 004°21'44.40"E		
GLIDEPATH 25		334.550	HO	51°27'10.401"N 004°21'13.239"E		center of central GP antenna
DME 25	WDO	CH 18Y	HO	51°27'10.401"N 004°21'13.239"E		center DME antenna
GLIDEPATH 07		334.550	HO	51°26'43.318"N 004°19'49.587"E		center of central GP antenna
DME 07	WDZ	CH 18Y	HO	51°26'43.318"N 004°19'49.587"E		center DME antenna

EHWO AD 2.20 Local traffic regulations

Glider- and Light ACFT flying

Glider- and modelflying outside OPR HR SR/SS.

EHWO AD 2.21 Noise abatement procedures

To be developed.

EHWO AD 2.22 Flight procedures

IFR procedures

The IAP and SID procedures are established in accordance STANAG 3759 and AATCP-1.

RNP approach RWY 07

serial number	Path Des ciptor	WPT ident	Fly Over	Mag°/(T°)	Recom navaid	Dist nm	turn	Altitude (ft AMSL)	Speed (KIAS)	VPA (°TCH(ft))	NAV Spec
001	IF	UCTOW	-	-	-	-	-	+2000	-	-	RNAV1
002	TF	FESWA	-	158/(159.2)	-	5.0	-	+2000	-	-	RNAV1
003	IF	PAFAZ	-	-	-	-	-	+2000	-	-	RNAV1
004	TF	FESWA	-	041/(042.3)	-	5.0	-	+2000	-	-	RNAV1
005	IF	FESWA	-	-	-	-	-	+2000	-	-	
006	TF	WO402	-	068/(069.2)	-	4.3	-	+2000	-	-	RNP APCH
007	TF	THR07	Y	068/(069.4)	-	6	-	-	-	-3.00/54	RNP APCH
008	CF	WO406	Y	068/(069.4)	-	2.7	-	-1000	-	-	RNP APCH
009	DF	UCTOW	-	-	-	-	L	+3000	-	-	RNP APCH

FAS data block - RWY 07

Input data	
Operation Type	0
SBAS Provider	1 (EGNOS)
Airport Identifier	EHWO
Runway	07
Runway Letter	0 (None)
Approach Performance Designator	0
Route Indicator	
Reference Path Data Selector	0
Reference Path Identifier	E07A
LTP/FTP Latitude	512642.4915N
LTP/FTP Longitude	0041932.5655E
LTP/FTP Ellipsoidal Height (metres)	56.4
FPAP Latitude	512710.3410N
Delta FPAP latitude (seconds)	27.8495
FPAP longitude	0042130.9220E
Delta FPAP Longitude (seconds)	118.3565
Threshold Crossing Height	54.0
TCH Units Selector	0 (feet)
Glidepath Angle (degrees)	3.00
Course Width (metres)	105.00
Length Offset (metres)	0
HAL (metres)	40.0
VAL (metres)	35.0

Output	
Data Block	10 0F 17 08 05 07 00 00 01 37 30 05 77 EE 13 16 AB 3C DB 01 34 16 93 D9 00 A9 9C 03 1C 02 2C 01 64 00 C8 AF 24 80 FC 79
Calculated CRC Value	2480FC79
Supplied CRC Value	2480FC79
Comparison Result	OK

Required Additional Data	
ICAO Code	WO
LTP/FTP Orthometric Height (metres)	11.9

RNP approach RWY 25

serial number	Path Descriptor	WPT ident	Fly Over	Course-Mag°/(T°)	Recom navaid	Dist nm	turn	Altitude (ft AMSL)	Speed (KIAS)	VPA (°TCH(ft))	NAV Spec
001	IF	BEXWI	-	-	-	-	-	+2000	-	-	RNAV1
002	TF	UPJEF	-	081/(082.4)	-	5.0	-	+2000	-	-	RNAV1
003	TF	NIRUC	-	158/(159.6)	-	5.0	-	+2000	-	-	RNAV1
004	IF	VUZCO	-	-	-	-	-	+2000	-	-	RNAV1
005	TF	NIRUC	-	248/(249.5)	-	5.0	-	+2000	-	-	RNAV1
006	IF	NIRUC	-	-	-	-	-	+2000	-	-	-
007	TF	WO412	-	248/(249.5)	-	4.3	-	+2000	-	-	RNP APCH
008	TF	THR25	Y	248/(249.4)	-	5.9	-		-	-3.00/54	RNP APCH
009	CF	WO416	Y	248/(249.3)	-	2.6	-	-1000	-	-	RNP APCH
010	DF	WO417	Y	248/(249.3)	-	3	-		-	-	RNP APCH
011	DF	WO418	-	-	-	-	R	+3000	-	-	RNP APCH
012	TF	BEXWI	-	081/(082.4)	-	8.8	-	+3000	-	-	RNP APCH

FAS data block RWY 25

Input data	
Operation Type	0
SBAS Provider	1 (EGNOS)
Airport Identifier	EHWO
Runway	25
Runway Letter	0 (None)
Approach Performance Designator	0
Route Indicator	
Reference Path Data Selector	0
Reference Path Identifier	E25A
LTP/FTP Latitude	512710.3410N
LTP/FTP Longitude	0042130.9220E
LTP/FTP Ellipsoidal Height (metres)	63.7
FPAP Latitude	512642.4915N
Delta FPAP latitude (seconds)	-27.8495
FPAP longitude	0041932.5655E
Delta FPAP Longitude (seconds)	-118.3565

Threshold Crossing Height	54.0
TCH Units Selector	0 (feet)
Glidepath Angle (degrees)	3.00
Course Width (metres)	105.00
Length Offset (metres)	0
HAL (metres)	40.0
VAL (metres)	35.0

Output	
Data Block	10 0F 17 08 05 19 00 00 01 35 32 05 0A C8 14 16 54 D9 DE 01 7D 16 6D 26 FF 57 63 FC 1C 02 2C 01 64 00 C8 AF 71 22 E2 EE
Calculated CRC Value	7122E2EE
Supplied CRC Value	7122E2EE
Comparison Result	OK

Required Additional Data	
ICAO Code	WO
LTP/FTP Orthometric Height (metres)	19.2

VFR procedures

APPROACH PROCEDURES:

Both circuits are to be flown to the north, R/H pattern for RWY 25 and L/H pattern for RWY 07. The part of the approach in the CTR towards IP shall be flown at 2000 ft. After passing IP descend to 1500 ft circuit altitude.

CIRCUIT ALTITUDES:

Overhead pattern: 1500 ft.

Rectangular pattern: 1000 ft.

HEL pattern: 500 ft.

INITIAL POINTS:

IP RWY 07: WDT R-257/4,3NM
51°25'41"N 004°14'03"E
A collection of bridges over the Kreekrak.

IP RWY 25: WDT R-072/3,3NM
51°28'13"N 004°26'41"E
A farm located west of the railway next to a line of trees between Wouwe Plantage and Essen.

IP North (HEL only): WDT R-027/4,1NM
51°30'29"N 004°23'38"E
Exit 25 'Wouwe Plantage' of the highway A58

REPORTING POINTS:

Kilo: WDT R-265/8NM
51°26'08"N 004°07'32"E
Triangular shaped beach north east of the village Krabbendijke.

Victor:	WDT R-329/8NM 51°33'47"N 004°13'55"E Most southern point of a forest on the Easterly border of the channel east of the village Oud Vossemeer. A small triangular cove marks the south point of the forest.
Romeo:	WDT R-033/8NM 51°33'27"N 004°27'26"E Four small lakes along the A17, west of Roosendaal, west of the industry park Borchwerf flyover nr 20 on the A17.
Echo:	WDT R-065/7,3NM 51°29'57"N 004°31'19"E Triangular shaped cove in the forest southwest of Rucphense heide

EHWO AD 2.23 Additional information

AIS Briefing office facility and the ATS Reporting Office (ARO) is only available through the Flight Data and Notam Office (FDNO) located at MilATCC Schiphol.

Tel: +31(0)20 4062840
Tel: +31(0)20 4062841
E-mail: aocs.fdns@mindef.nl
AFTN: EHMCZPZX
avbl H24

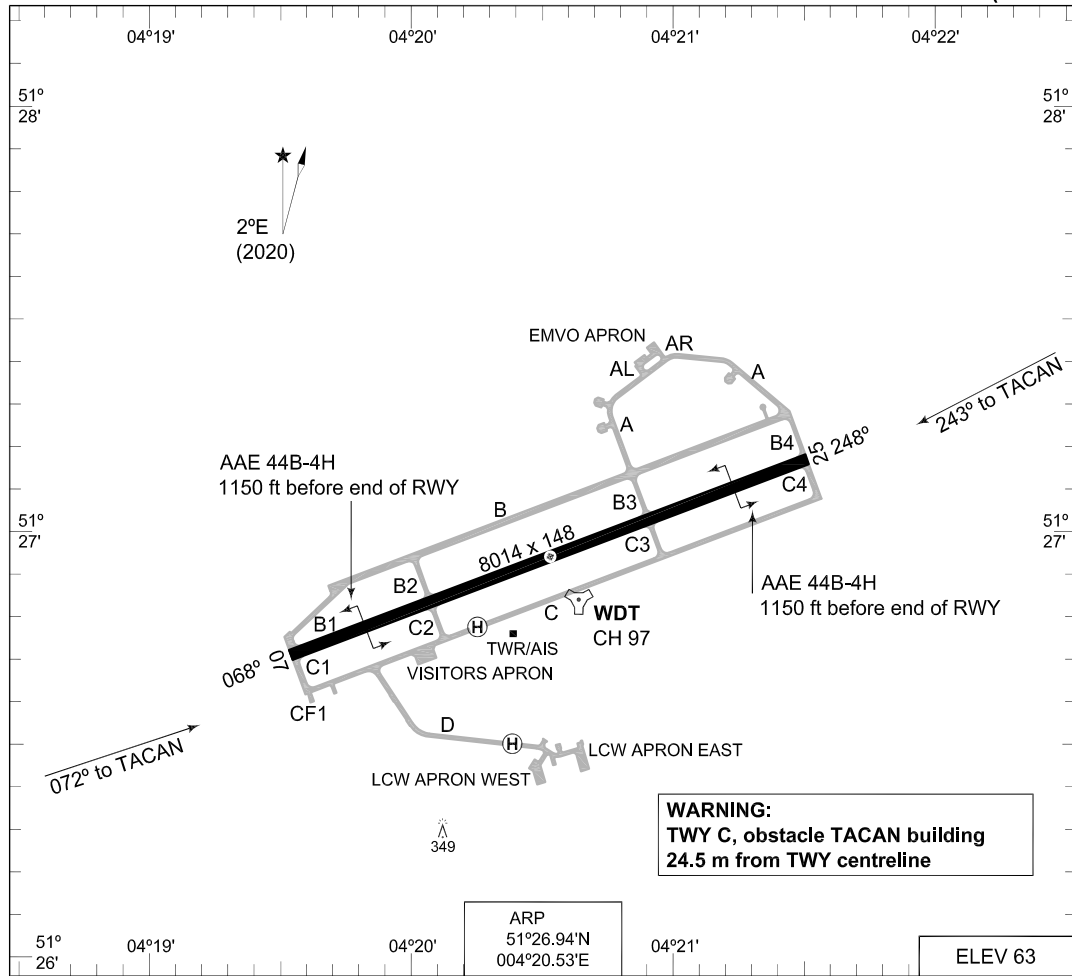
PPR 24 HRS: for Prior Permission Request contact:
Operations and Coordination Centre

TEL: +31(0)164-692365
FAX: N.A.
EMAIL: KMSL.OCC@MINDEF.NL

EHWO AD 2.24 Charts related to an aerodrome

Aerodrome Chart	EHWO AD 2-12
Local map	EHWO AD 2-13
MVA chart	EHWO AD 2-14
Instrument departure chart WO1	EHWO AD 2-15
Instrument departure chart WO3	EHWO AD 2-16
Instrument approach chart ILS or LOC RWY 07	EHWO AD 2-17
Instrument approach chart HI-TACAN RWY 07	EHWO AD 2-18
Instrument approach chart TACAN RWY 07	EHWO AD 2-19
Instrument approach chart RNP RWY 07	EHWO AD 2-20
Instrument approach chart ILS or LOC RWY 25	EHWO AD 2-21
Instrument approach chart HI-TACAN RWY 25	EHWO AD 2-22
Instrument approach chart TACAN RWY 25	EHWO AD 2-23
Instrument approach chart RNP RWY 25	EHWO AD 2-24

MIPS AERODROME CHART **WOENS DRECHT (EHWO)**

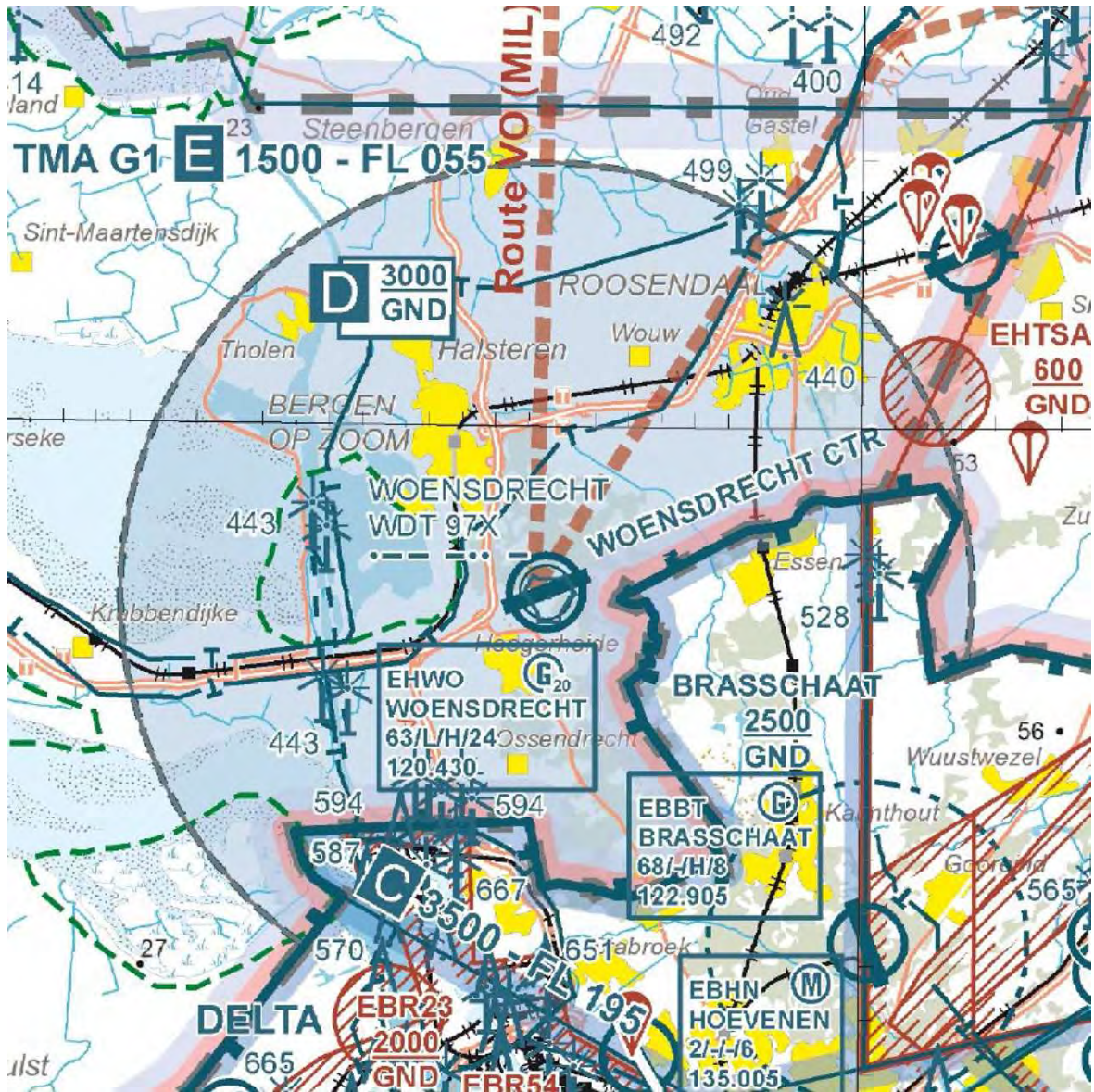


RWY	PCN	TORA	ASDA	TODA	LDA	PAPI	TDZE	THR PSN	
25	51 R/C/W/T	8014	8014	8014	8014	3.0°	63	51°27.17'N 004°21.51'E	
07	51 R/C/W/T	8014	8014	8014	8014	3.0°	39	51°26.71'N 004°19.54'E	
GROUND CONTROL				356.875	121.680				
WOENS DRECHT TWR				339.000	120.430				
RAPCON WEST				399.725	123.580				
WOENS DRECHT ARRIVAL				370.650					
SRA	PROC. CRITERIA	RWY	GS	TCH	OTCH	RPI	CAT	MINIMA CRITERIA	MINIMA
	MIPS	25					AB	MIPS	450-1100 387 (400-1.1)
	MIPS	07					CDE	MIPS	450-1200 387 (400-1.2)
							AB		600-1600 561 (600-1.6)
							C		600-2400 561 (600-2.4)
							D		600-2800 561 (600-2.8)
							E		600-3200 561 (600-3.2)

CHANGES: PAPI RWY 07

RNLAF 23 MAR 2023

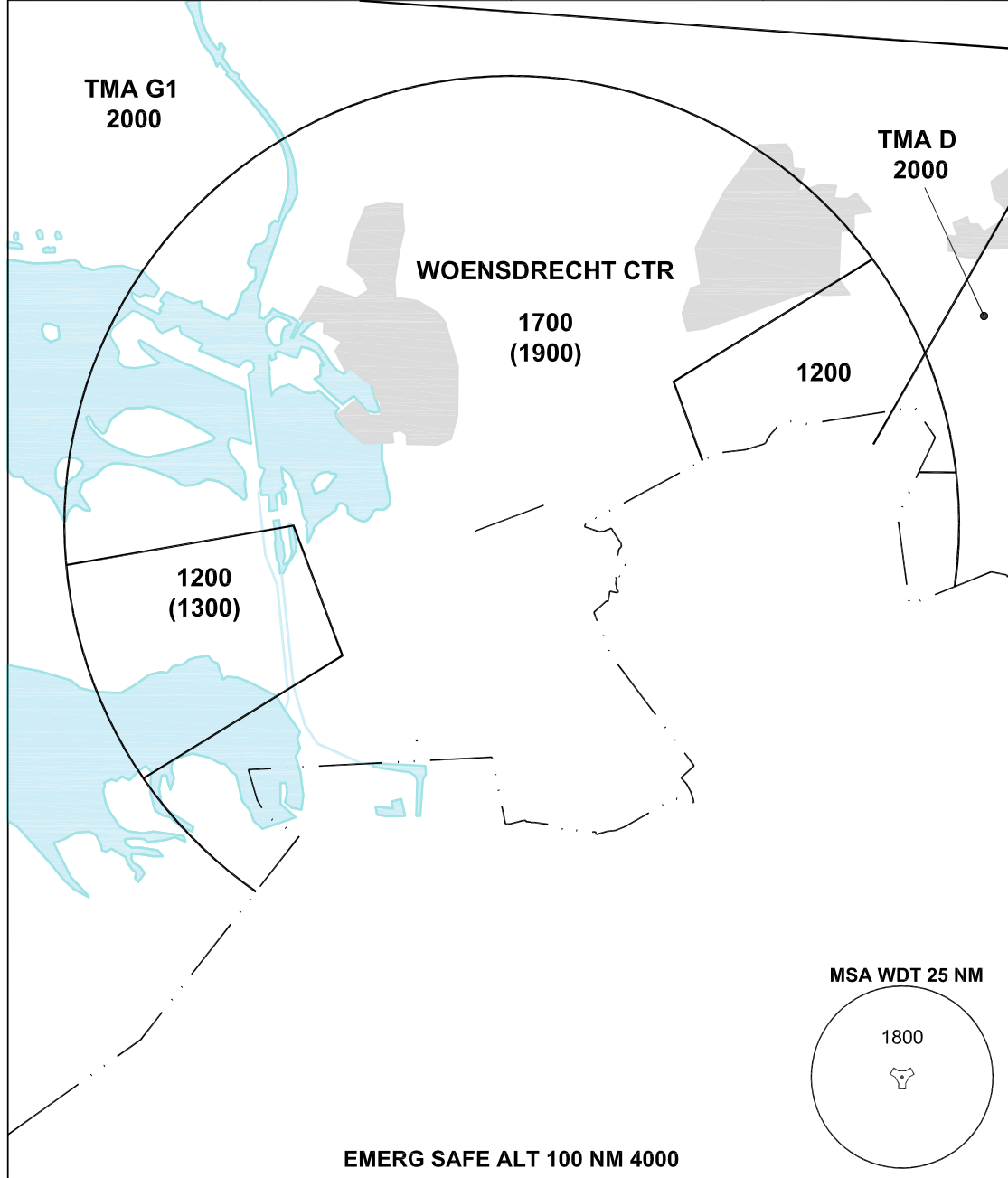
LOCAL MAP



MIPS **MVA CHART**
MINIMUM VECTORING ALTITUDE **WOENS DreCHT (EHWO)**

DUTCH MIL		RAPCON WEST		WOENS DreCHT TWR		GND	
336.325	125.930	399.725	123.580	339.000	120.430	356.875	121.680

AD ELEV 63



CHANGES: MSA, EDITORIAL

- THE ALTITUDE BETWEEN BRACKETS IS TO BE USED FOR THE CORRESPONDING SECTOR WHEN AIR TEMPERATURE AT AIRBASE ALTITUDE IS LOWER THAN -7°.
- ALTITUDES ONLY AVAILABLE IF THE RADAR COVERAGE PERMITS.

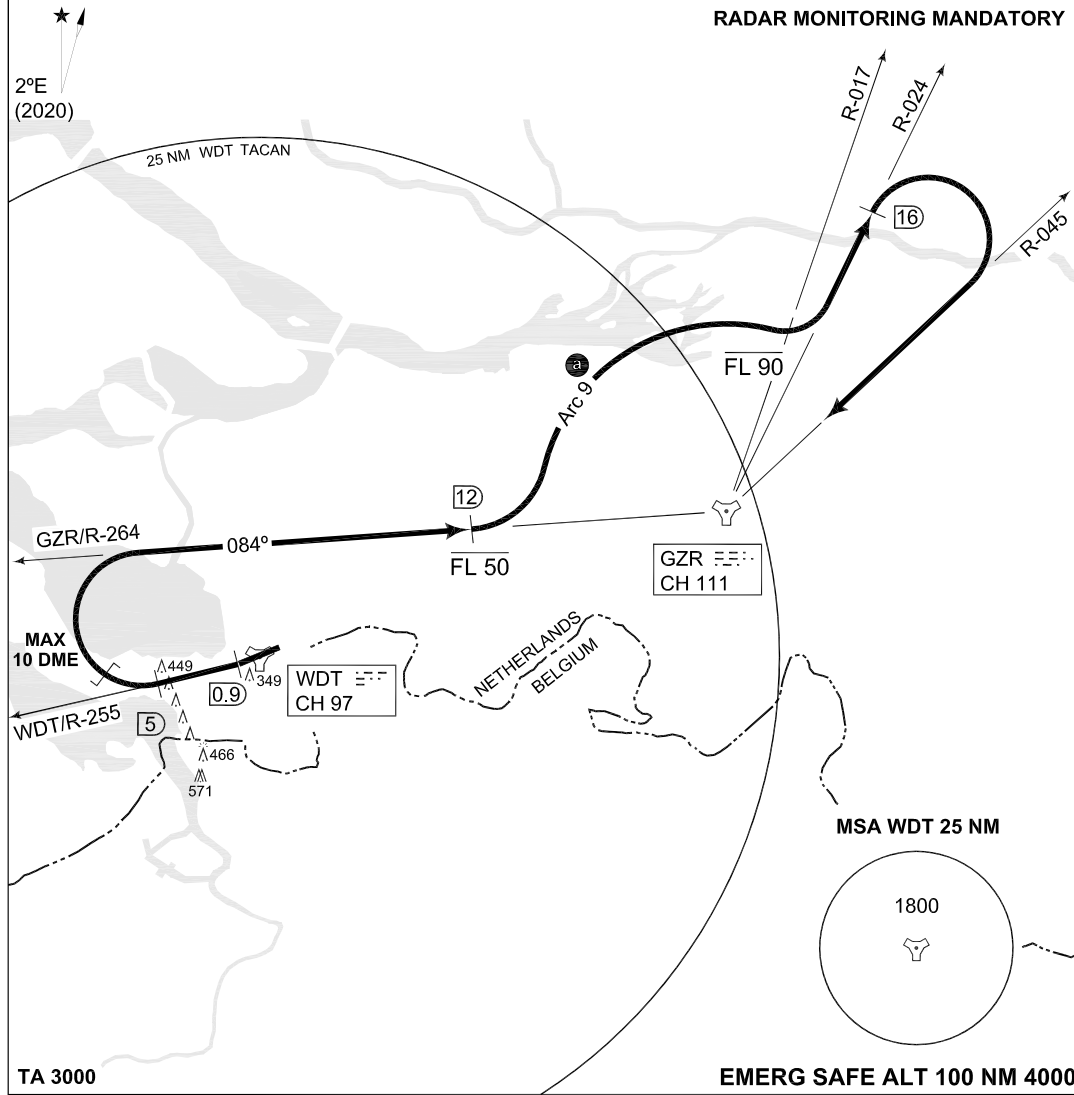
RNLAf 30 DEC 2021

MIPS INSTRUMENT DEPARTURE CHART **WO1 WOENS DRECHT (EHWO)**

GND CTL 356.875 121.680	WOENS DRECHT TWR 339.000 120.430	AD ELEV 63			RAPCON WEST 399.725 123.580			DUTCH MIL 336.325 125.930		
		RWY 25	Knots V/V (fpm)	120 360	180 540	240 720	300 900	360 1080	to 114 ft	

NOTE:

ⓐ WHEN IN ARC 9, DO NOT EXCEED 10 DME



CAUTION: Dep end crossing height 78 ft due to obstacle left of centerline. TORA 8014.

WOENS DRECHT 1 (RWY 25)

- At 0.9 DME intercept R-255 outbound, level off at FL 50.
- At 5 DME intercept GZR R-264 inbound.
- At R-264/12 DME climb to FL 90.
- Turn left to intercept Arc 9. ⓐ
- Intercept R-024 outbound, when crossing GZR R-017 continue climb.
- At 16 DME turn right to intercept R-045 inbound.

NOTE: Departure will be controlled by Rapcon West.

CHANGES: MSA

RNLAF 30 DEC 2021

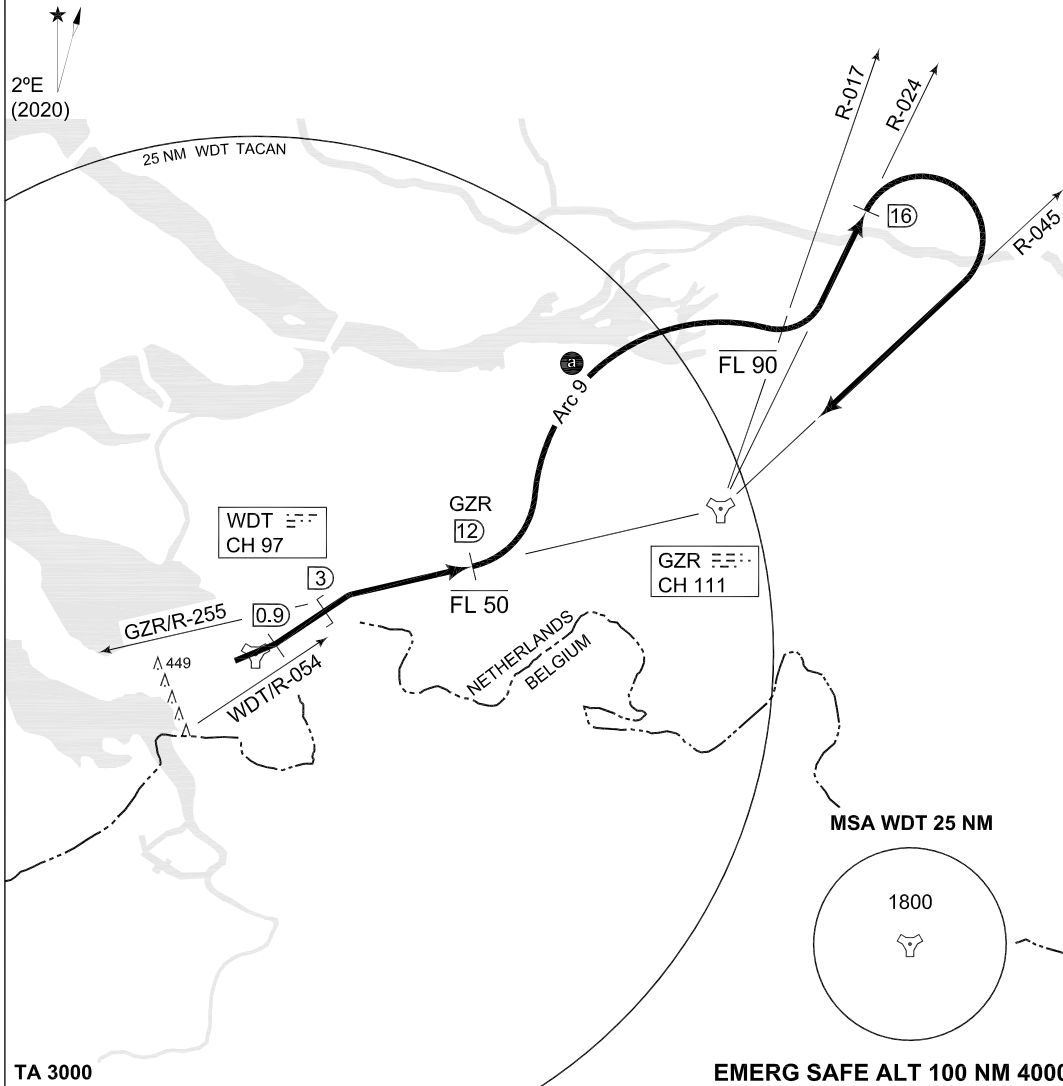
MIPS **WO3**
INSTRUMENT DEPARTURE CHART **WOENS DRECHT (EHWO)**

AD ELEV 63

GND CTL 356.875 121.680	WOENS DRECHT TWR 339.000 120.430	RAPCON WEST 399.725 123.580	DUTCH MIL 336.325 125.930
----------------------------	-------------------------------------	--------------------------------	------------------------------

NOTE:

ⓐ WHEN IN ARC 9, DO NOT EXCEED 10 DME



WOENS DRECHT 3
(RWY 07)

- At 0.9 DME turn left to intercept WDT R-054 outbound.
- At 3 DME intercept GZR R-255 inbound, level off at FL 50.
- At GZR R-255/12 DME climb to FL 90.
- Turn left to intercept Arc 9. ⓐ
- Intercept GZR R-024 outbound, when crossing GZR R-017 continue climb.
- At 16 DME turn right to intercept R-045 inbound.

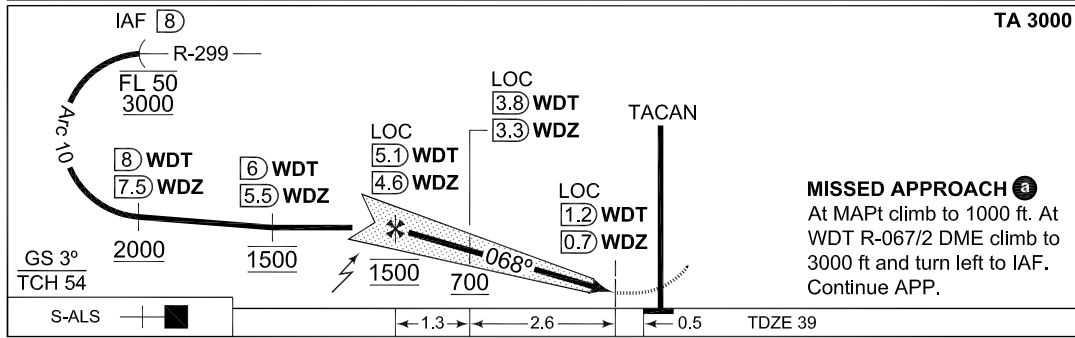
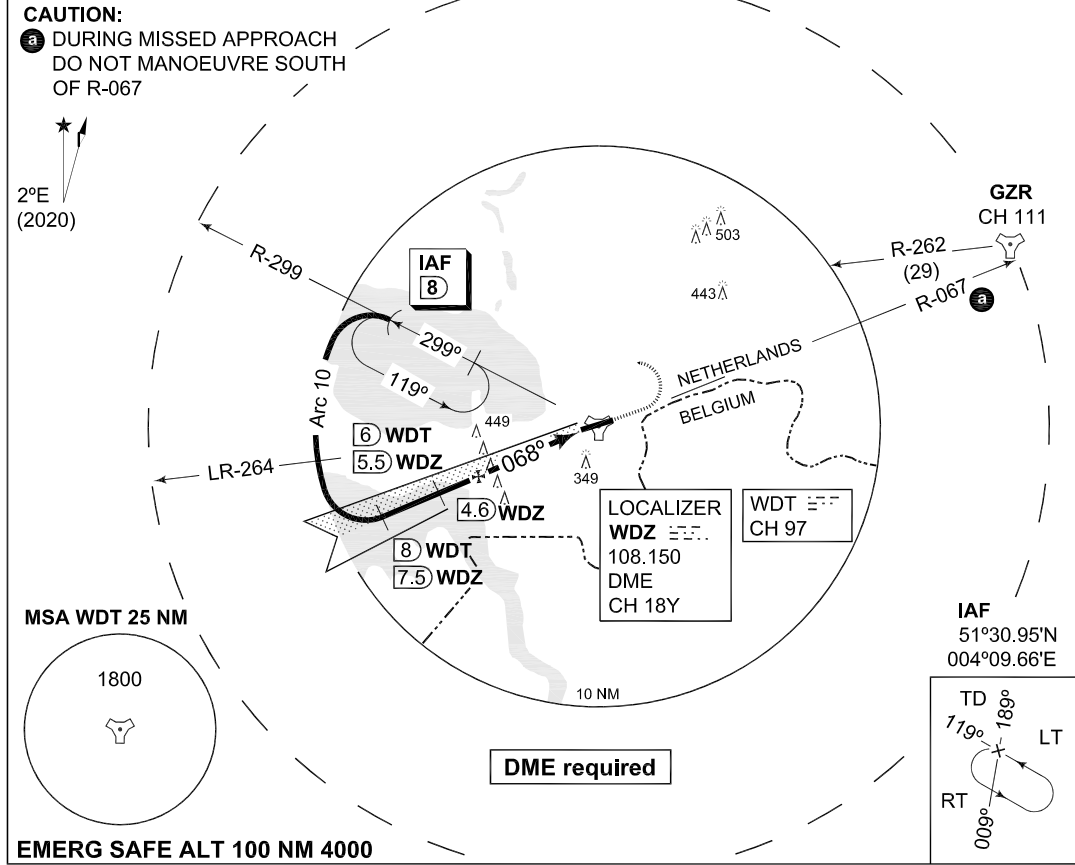
NOTE: Departure will be controlled by Rapcon West.

CHANGES: MSA

RNLAF 30 DEC 2021

MIPS INSTRUMENT APPROACH CHART **ILS or LOC RWY 07 WOENSDRECHT (EHWO)**

DUTCH MIL 336.325 125.930		RAPCON WEST 399.725 123.580		WOENSDRECHT TWR 339.000 120.430		GND 356.875 121.680			
TACAN / LOCALIZER / DME WDT CH 97 / WDT 108.150 / CH 18 Y			APP COURSE 068°	GS INTCP ALT 1500 FT	GS 3°	DA SEE CAT	TDZE 39	ALS 420 m	LDA 8014 FT



CATEGORY	A	B	C	D	E
S-ILS 07	239-800 200 (200-0.8)	246-1200 207 (300-1.2)	256-1200 217 (300-1.2)	266-1200 227 (300-1.2)	N.A.
S-LOC 07	480-1600 441 (500-1.6)		480-2000 441 (500-2.0)	480-2400 441 (500-2.4)	N.A.

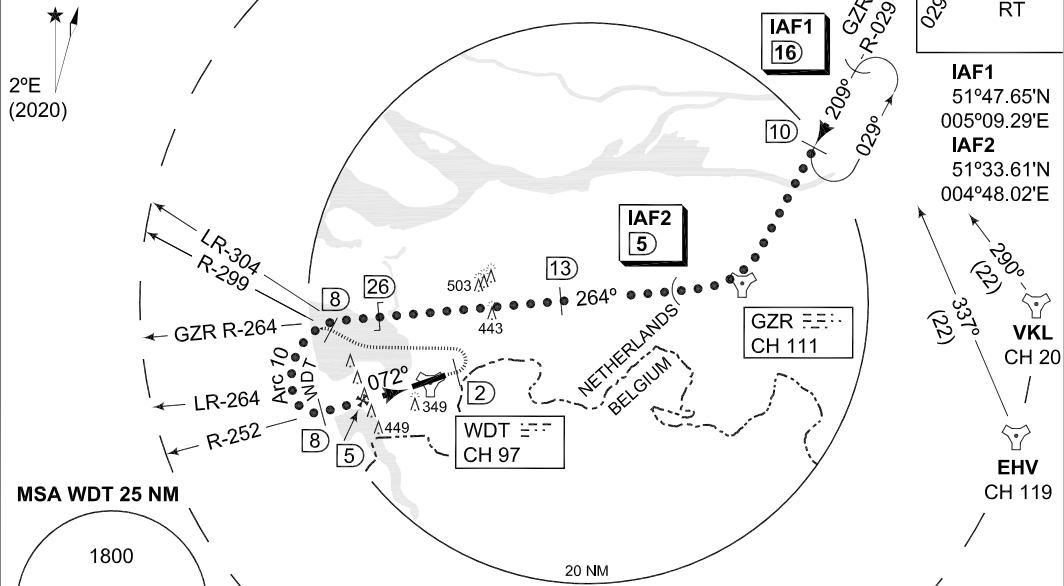
MIPS **HI-TACAN RWY 07**
INSTRUMENT APPROACH CHART **WOENS DreCHT (EHWO)**

AD ELEV 63

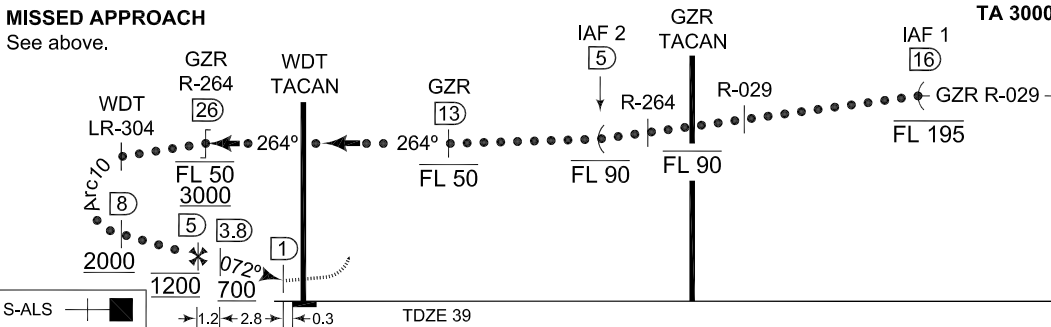
DUTCH MIL 336.325 125.930		RAPCON WEST 399.725 123.580		WOENS DreCHT TWR 339.000 120.430		GND 356.875 121.680	
TACAN WDT CH 97	APP COURSE 072°	FAF ALT 1200 FT	Descent GR	MDA 600	TDZE 39	ALS 420 m	LDA 8014 FT

CAUTION:

(a) DURING MISSED APPROACH
DO NOT MANOEUVRE SOUTH
OF R-067



EMERG SAFE ALT 100 NM 4000



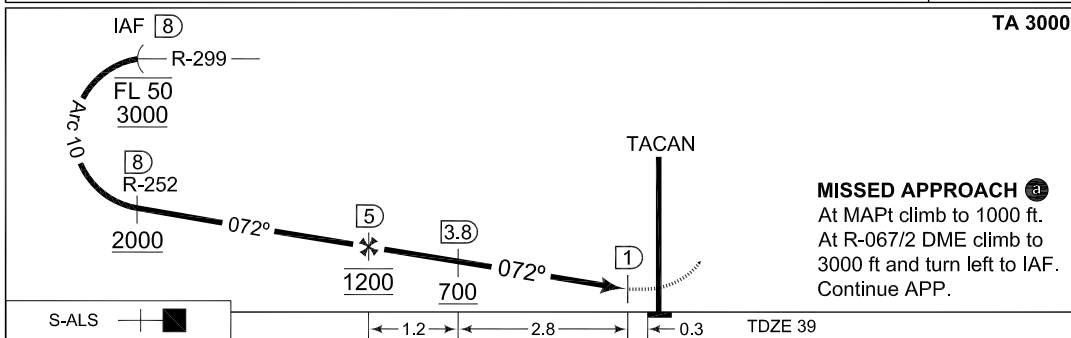
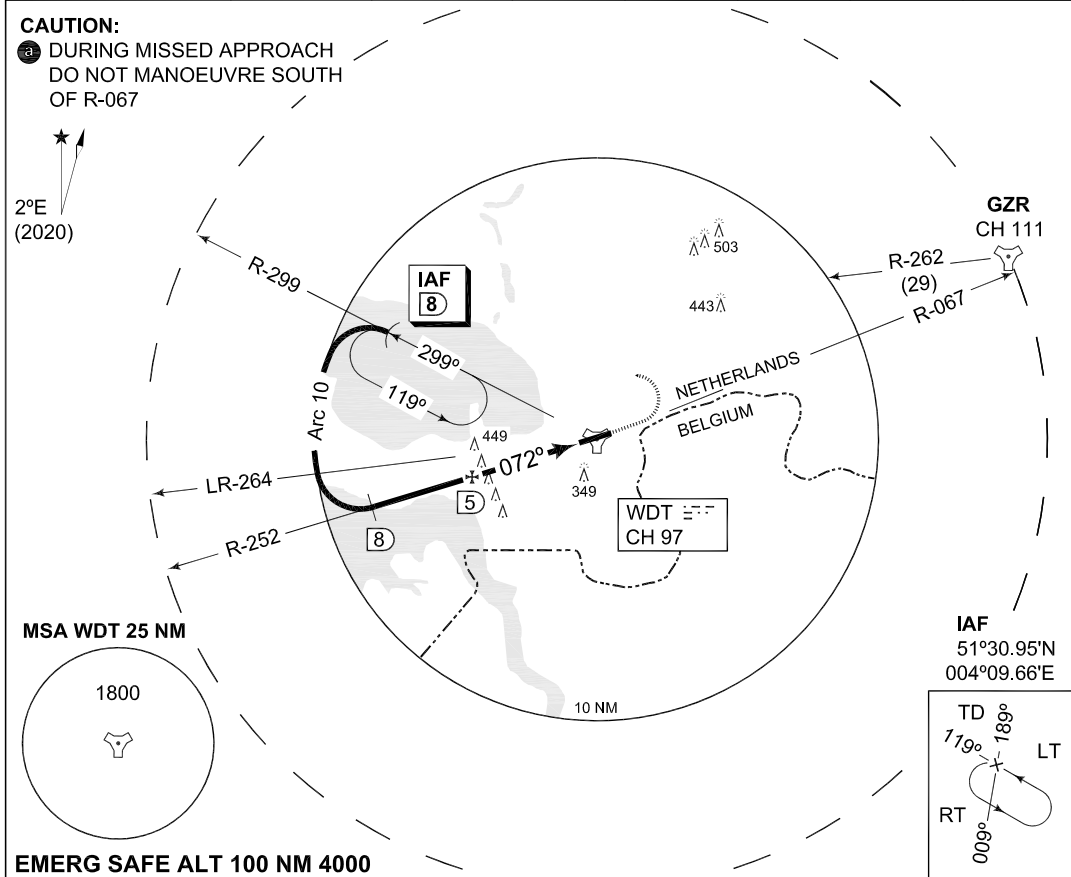
CATEGORY	A	B	C	D	E
S-TACAN 07	600-1600 561 (600-1.6)		600-2400 561 (600-2.4)	600-2800 561 (600-2.8)	600-3200 561 (600-3.2)
CIRCLING	NOT AUTHORIZED				

CHANGES: MSA
MIPS

RNLAF 30 DEC 2021

MIPS INSTRUMENT APPROACH CHART **TACAN RWY 07 WOENSDRECHT (EHWO)**

DUTCH MIL 336.325 125.930		RAPCON WEST 399.725 123.580		WOENSDRECHT TWR 339.000 120.430		GND 356.875 121.680	
TACAN WDT CH 97		APP COURSE 072°	FAF ALT 1200 FT	Descent GR	MDA 600	TDZE 39	ALS 420 m
							LDA 8014 FT



CATEGORY	A	B	C	D	E
S-TACAN 07	600 -1600 561 (600-1.6)		600 -2400 561 (600-2.4)	600 -2800 561 (600-2.8)	600 -3200 561 (600-3.2)
CIRCLING	NOT AUTHORIZED				

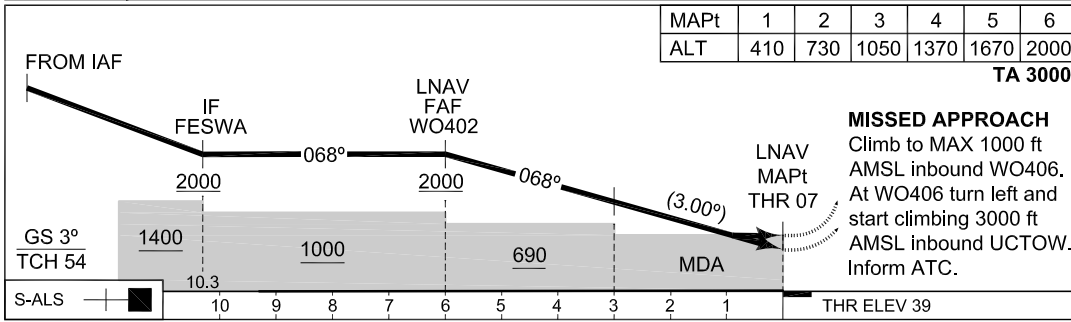
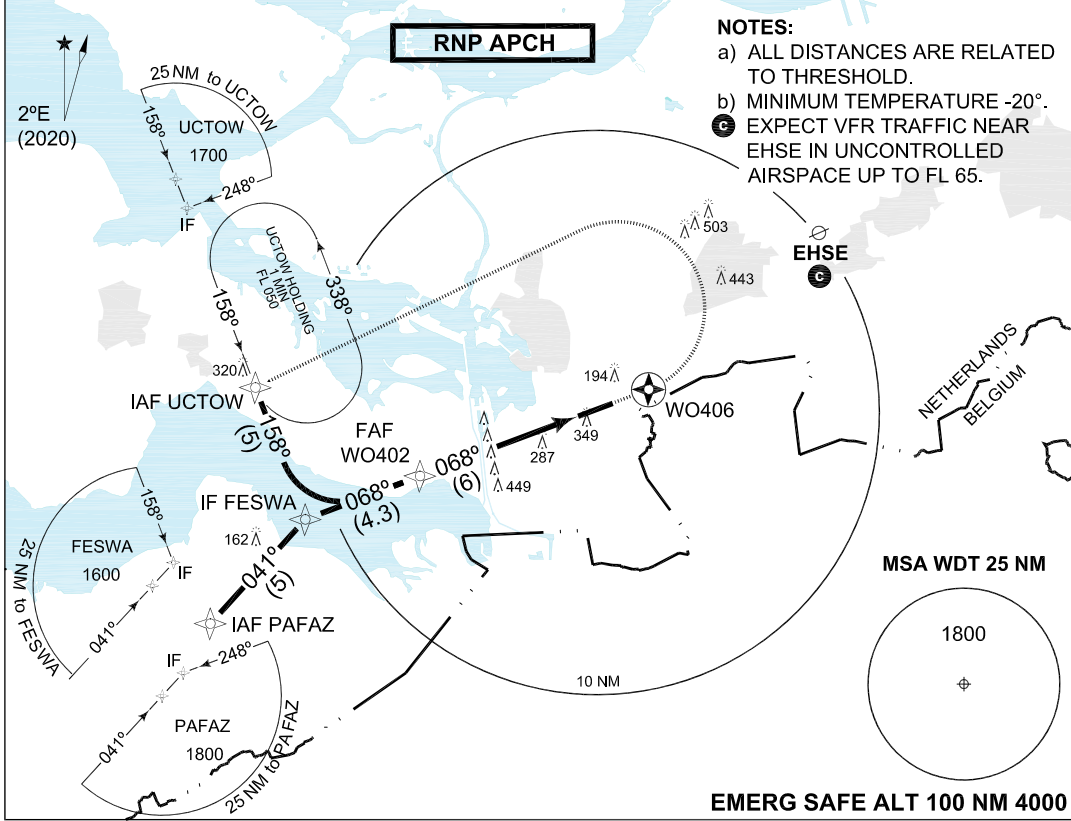
CHANGES: MSA

MIPS

RNLAF 30 DEC 2021

PANS OPS INSTRUMENT APPROACH CHART **RNP RWY 07**
WOENS DRECHT (EHWO)

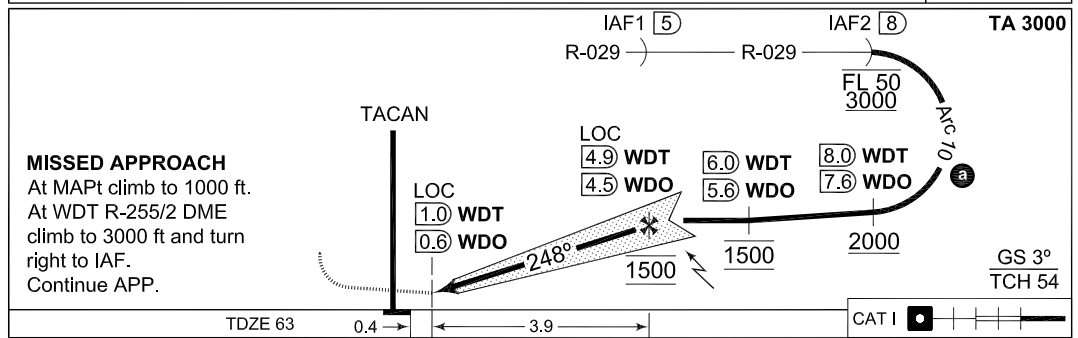
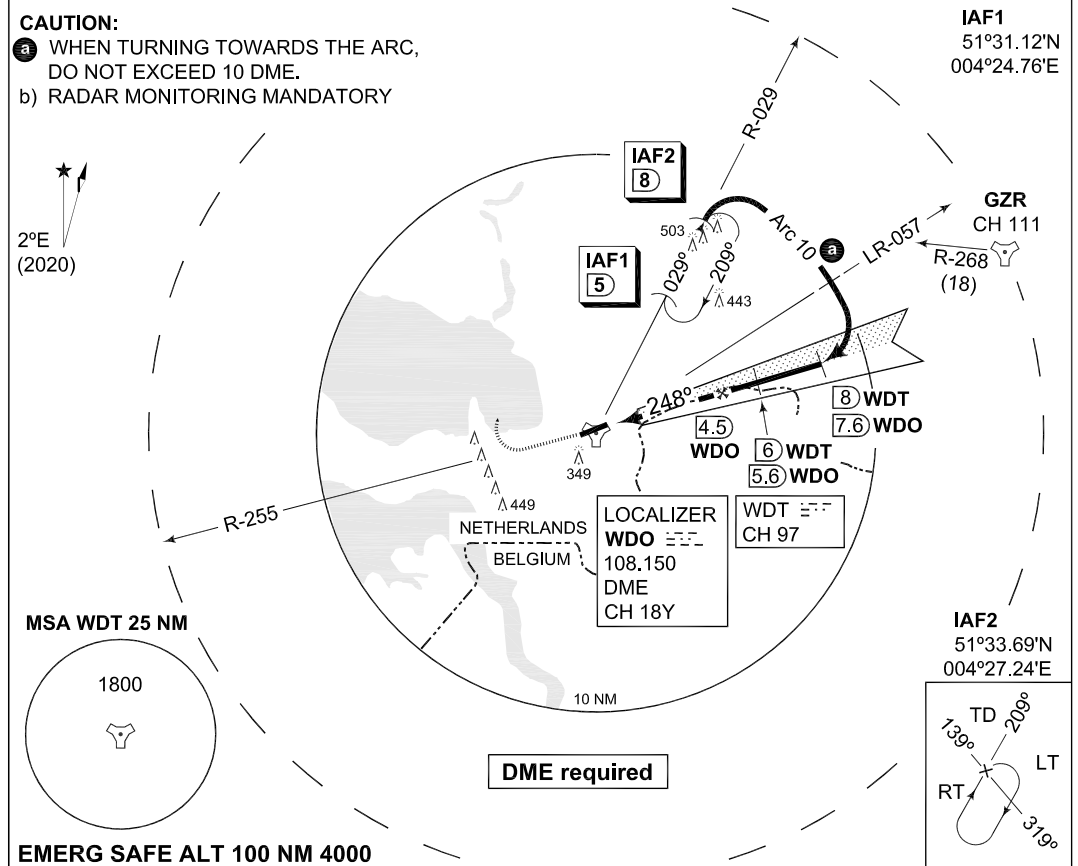
DUTCH MIL 336.325 125.930		RAPCON WEST 399.725 123.580		WOENS DRECHT TWR 339.000 120.430		GND CTL 356.875 121.680		ATIS*	
EGNOS CHANNEL 99205 E07A		APP COURSE 068°		FAF ALT 2000 FT		Descent GR 5.24% / 3.0°		MDA 600	
						DA SEE CAT		THR ELEV 39	
								ALS 420 m	
								LDA 8014 FT	



CATEGORY		A		B		C		D	
EU-OPS	DA(H) LPV	260 -800 221 (300-0.8/1.2)		270 -800 231 (300-0.8/1.2)		280 -800 241 (300-0.8/1.3)		289 -800 250 (300-0.8/1.3)	
	DA(H) LNAV / VNAV	481 -1700 442 (500-1.7/2.0)		491 -1700 452 (500-1.7/2.1)		501 -1800 462 (500-1.8/2.2)		511 -1800 472 (500-1.8/2.2)	
	MDA(H) LNAV	600 -2200 561 (600-2.2/2.6)							
CHANGES: INSERT EHSE, NOTES	IAWP	UCTOW	51°27.72'N	004°01.26'E	FAWP	WO402	51°24.59'N	004°10.59'E	
	IAWP	PAFAZ	51°19.35'N	003°58.74'E	MAWP	THR 07	51°26.71'N	004°19.54'E	
	IWP	FESWA	51°23.05'N	004°04.10'E	MATWP	WO406	51°27.65'N	004°23.56'E	

MIPS INSTRUMENT APPROACH CHART **ILS or LOC RWY 25 WOENS DRECHT (EHWO)**

DUTCH MIL 336.325 125.930	RAPCON WEST 399.725 123.580	WOENS DRECHT TWR 339.000 120.430	GND 356.875 121.680
TACAN / LOCALIZER / DME WDT CH 97/WDO 108.150/CH 18 Y		APP COURSE 248°	GS INTCP ALT 1500 FT
		GS 3°	DA SEE CAT
		TDZE 63	ALS 900 m
		LDA 8014 FT	



CATEGORY	A	B	C	D	E
S-ILS 25	263 -800 200 (200-0.8)			268 -800 205 (300-0.8)	N.A.
S-LOC 25	440 -800 377 (400-0.8)			440 -1200 377 (400-1.2)	N.A.

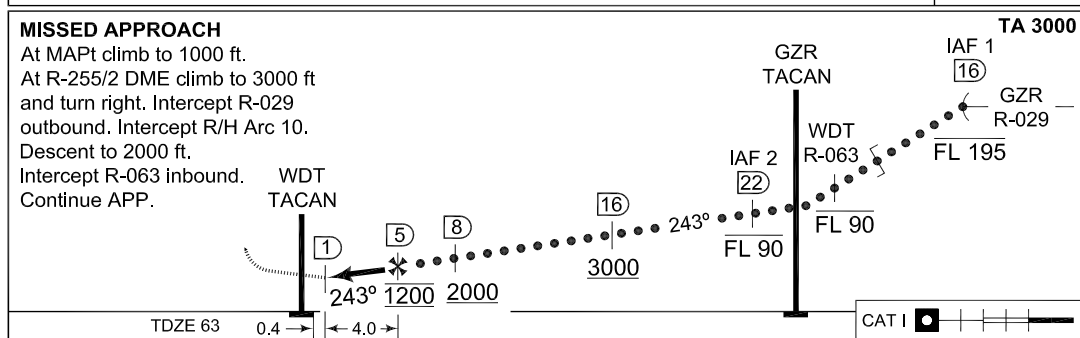
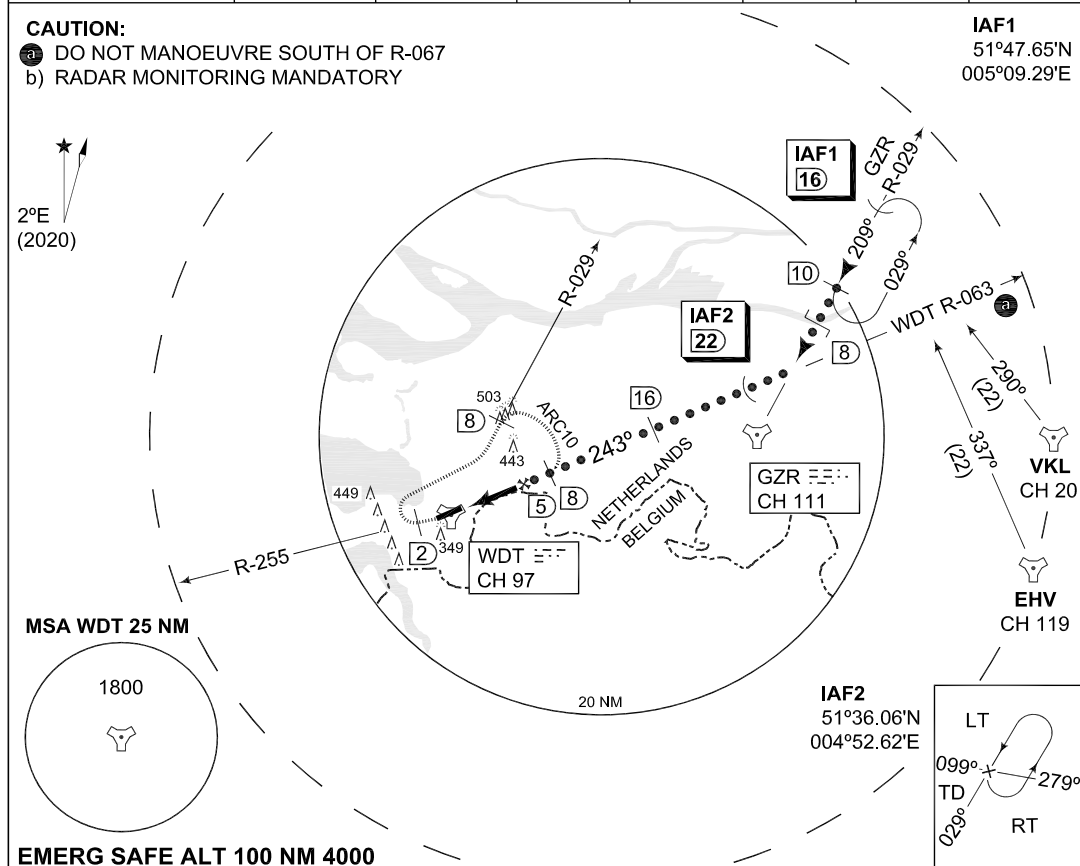
CHANGES: EDITORIAL

MIPS

RNLAF 21 APR 2022

MIPS INSTRUMENT APPROACH CHART **HI-TACAN RWY 25 WOENSDRECHT (EHWO)**

DUTCH MIL 336.325 125.930		RAPCON WEST 399.725 123.580		WOENSDRECHT TWR 339.000 120.430		GND 356.875 121.680	
TACAN WDT CH 97	APP COURSE 243°	FAF ALT 1200 FT	Descent GR	MDA 440	TDZE 63	ALS 900 m	LDA 8014 FT



CATEGORY	A	B	C	D	E
S-TACAN 25	440 -800 377 (400-0.8)			440 -1200 377 (400-1.2)	
CIRCLING	NOT AUTHORIZED				

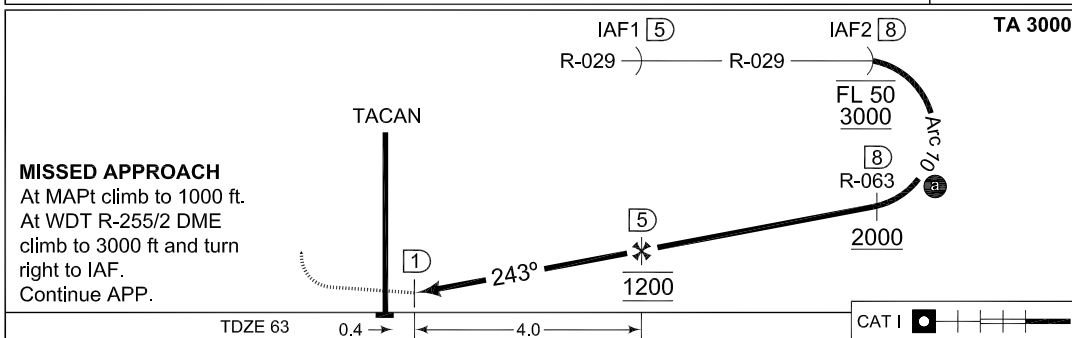
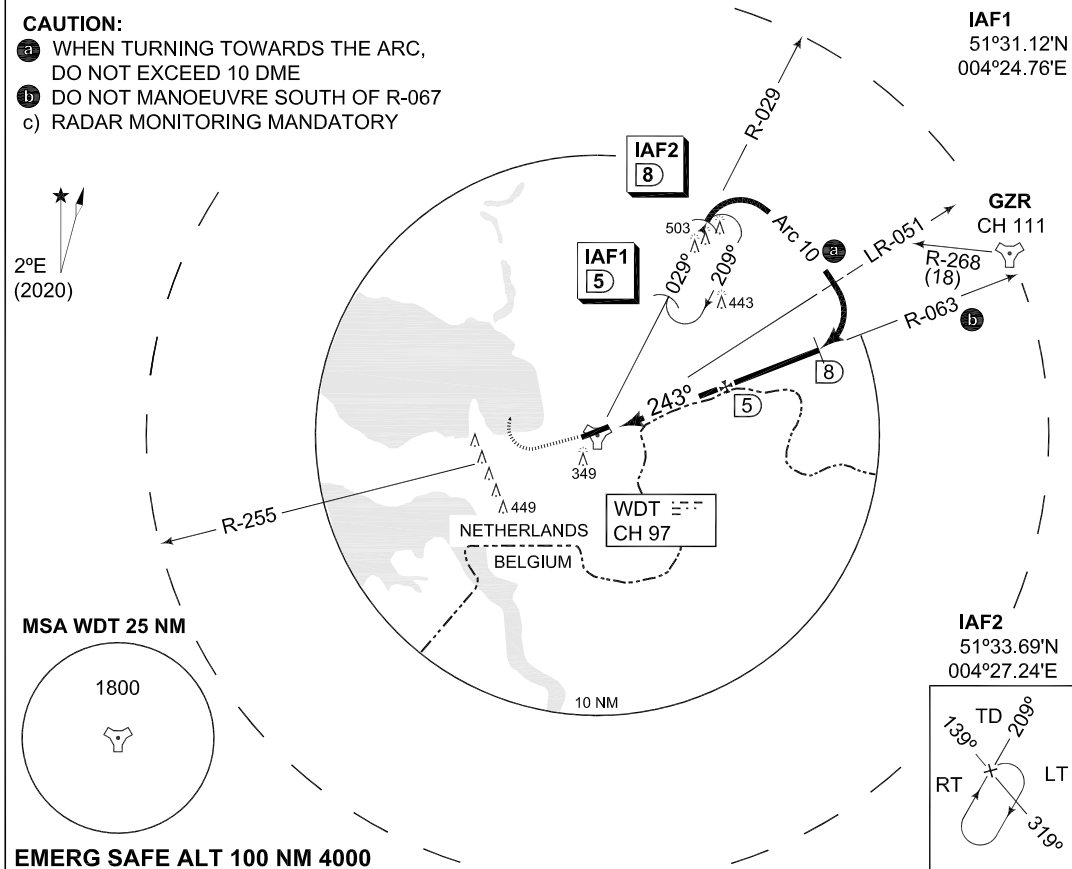
CHANGES: MSA

MIPS

RNLAF 30 DEC 2021

MIPS INSTRUMENT APPROACH CHART **TACAN RWY 25 WOENS DRECHT (EHWO)**

DUTCH MIL 336.325 125.930		RAPCON WEST 399.725 123.580		WOENS DRECHT TWR 339.000 120.430		GND 356.875 121.680	
TACAN WDT CH 97	APP COURSE 243°	FAF ALT 1200 FT	Descent GR	MDA 440	TDZE 63	ALS 900 m	LDA 8014 FT



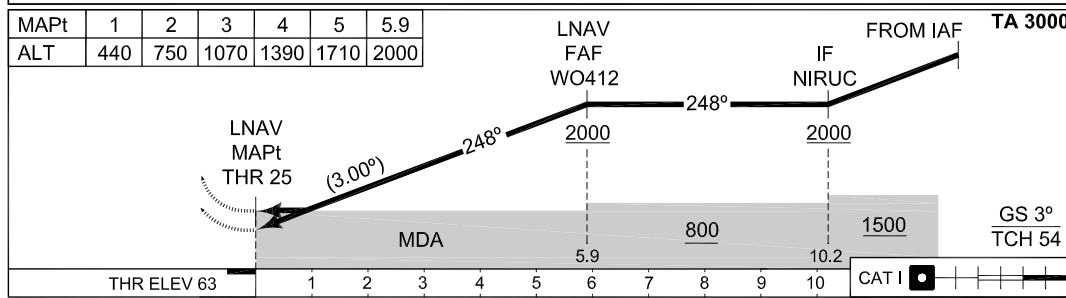
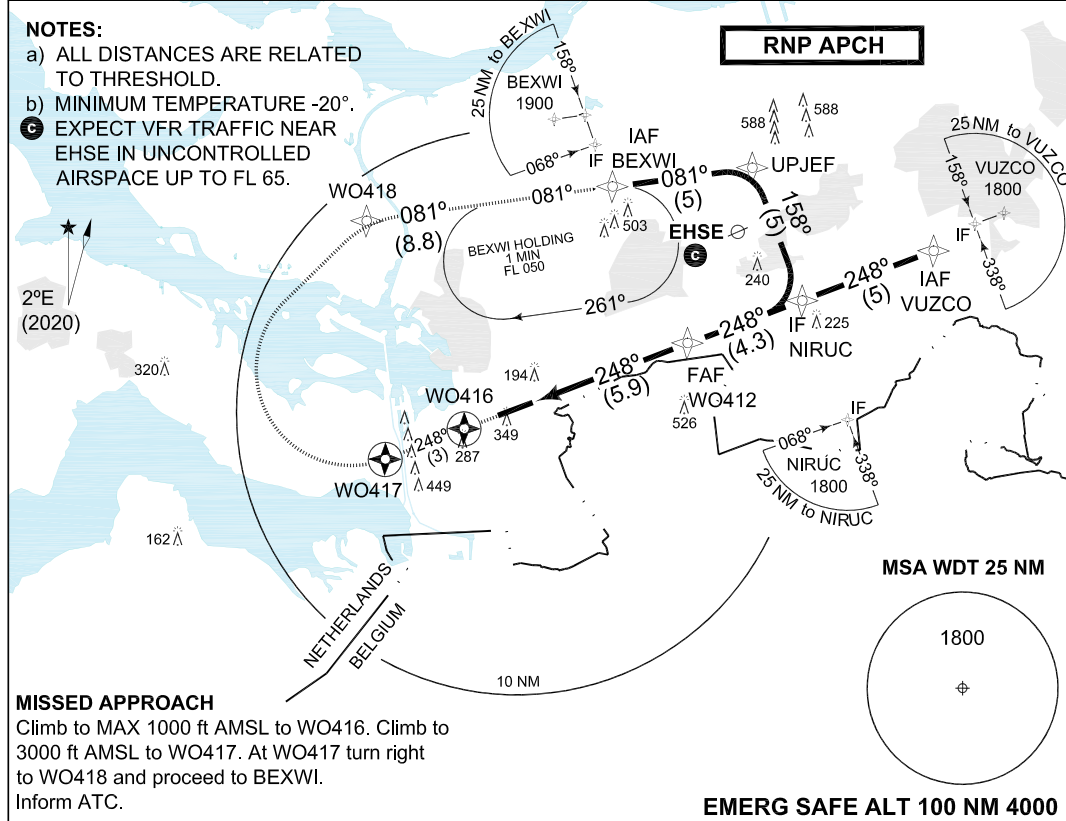
CATEGORY	A	B	C	D	E
S-TACAN 25	440-800 377 (400-0.8)			440-1200 377 (400-1.2)	
CIRCLING	NOT AUTHORIZED				

CHANGES: MSA
MIPS

RNLAF 30 DEC 2021

PANS OPS INSTRUMENT APPROACH CHART **RNP RWY 25 WOENSDRECHT (EHWO)**

DUTCH MIL 336.325 125.930		RAPCON WEST 399.725 123.580		WOENSDRECHT TWR 339.000 120.430		GND CTL 356.875 121.680		ATIS*	
EGNOS CHANNEL 51845 E25A	APP COURSE 248°	FAF ALT 2000 FT	Descent GR 5.24% / 3.0°	MDA SEE CAT	DA SEE CAT	THR ELEV 63	ALS 900 m	LDA 8014 FT	



CATEGORY		A	B	C	D
DA(H)	LPV	284 -550 221 (300-0.8/1.2)	294 -550 231 (300-0.8/1.2)	303 -550 240 (300-0.8/1.2)	313 -550 250 (300-0.8/1.3)
DA(H)	LNAV / VNAV	321 -600 258 (300-0.8/1.3)	331 -600 268 (300-0.8/1.3)	352 -650 289 (300-0.8/1.4)	379 -700 316 (400-0.8/1.4)
MDA(H)	LNAV	440 -1000 377 (400-1.0/1.7)		450 -1100 387 (400-1.1/1.8)	470 -1200 407 (500-1.2/1.9)

IAWP	VUZCO	51°32.51'N	004°44.39'E	MAWP	THR25	51°27.17'N	004°21.52'E
IAWP	BEXWI	51°34.79'N	004°26.14'E	MATWP	WO416	51°26.25'N	004°17.60'E
WP	UPJEF	51°35.44'N	004°34.09'E	MATWP	WO417	51°25.19'N	004°13.12'E
IWP	NIRUC	51°30.76'N	004°36.89'E	MATWP	WO418	51°33.61'N	004°12.09'E
FAWP	WO412	51°29.25'N	004°30.37'E	MAHF	BEXWI	51°34.79'N	004°26.14'E

CHANGES: INSERT EHSE, NOTES

RNLAF 23 MAR 2023