PART 3 – AERODROMES (AD)

AD 0.

AD 0.6 TABLE OF CONTENTS TO PART 3

PART 3 – AERODROMES (AD)

AD 0.

PART 3 – AERODROMES (AD)

AD 2. AERODROMES

DEELEN

DE PEEL

EINDHOVEN

GILZE RIJEN

DE KOOY

LEEUWARDEN

VOLKEL

WOENSDRECHT

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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 permisson by the Military Aviation Authoriry.

AD 1.1.5 SPECIAL ARRANGEMENTS

HEL, belonging to the SAR organisation of the 'Bundeswehr' stationed at Rheine and Wuerselen, 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 DEELEN

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 STANAG 3158		
1	Remarks	Nil

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 orgin.
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:
Circuitaltitude 750 ft AMSL, direction 19 L/H, 01 R/H, 13 L/H, 31 R/H, 07 L/H and 25 R/H

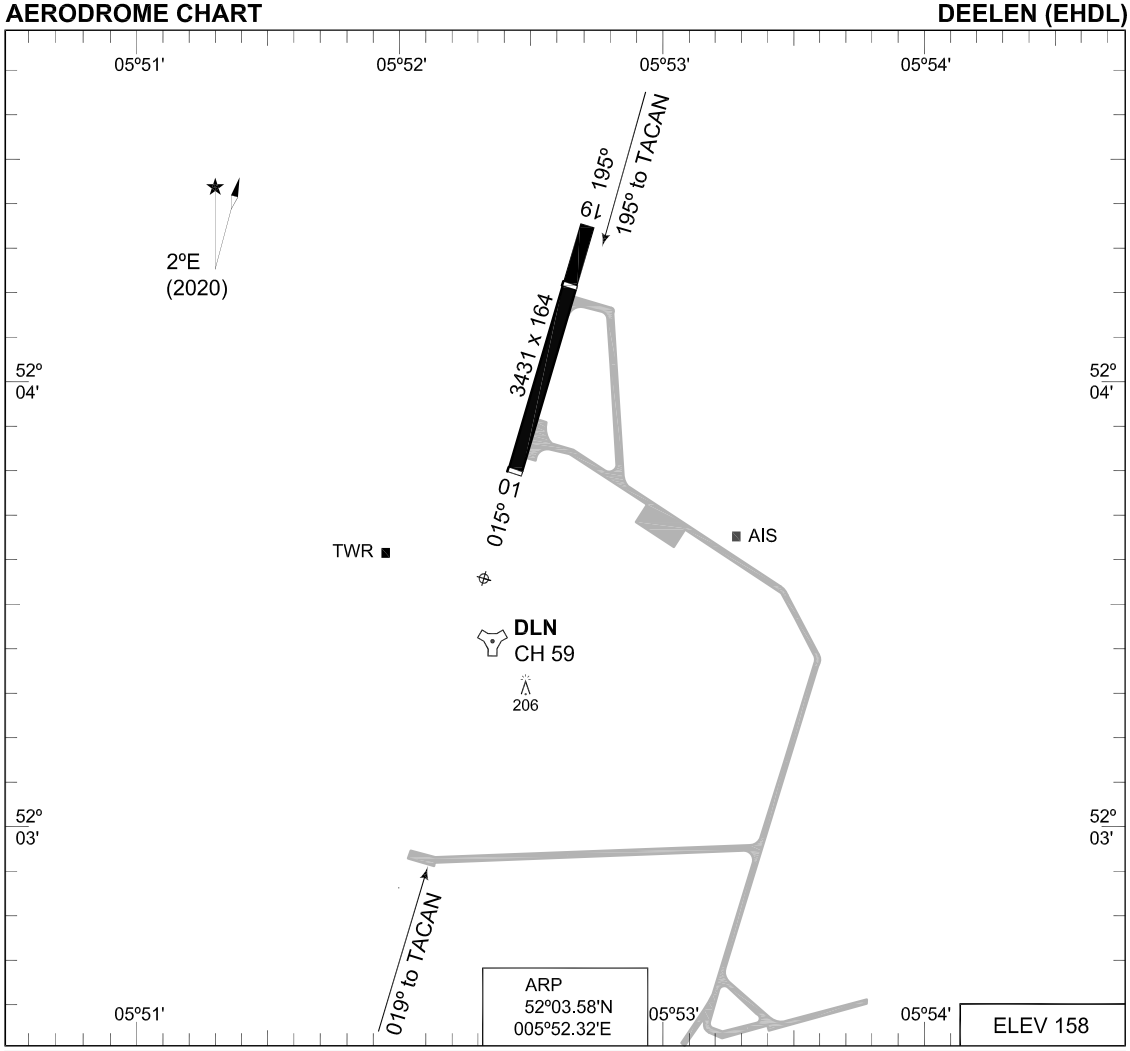
EHDL AD 2.23 Additional information

Approach control through Rapcon West.

EHDL AD 2.24 Charts related to an aerodrome

Aerodrome Chart	EHDL AD 2-7
Local map	EHDL AD 2-8
MVA chart	EHDL AD 2-9
Instrument approach chart TACAN RWY 01	EHDL AD 2-11
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

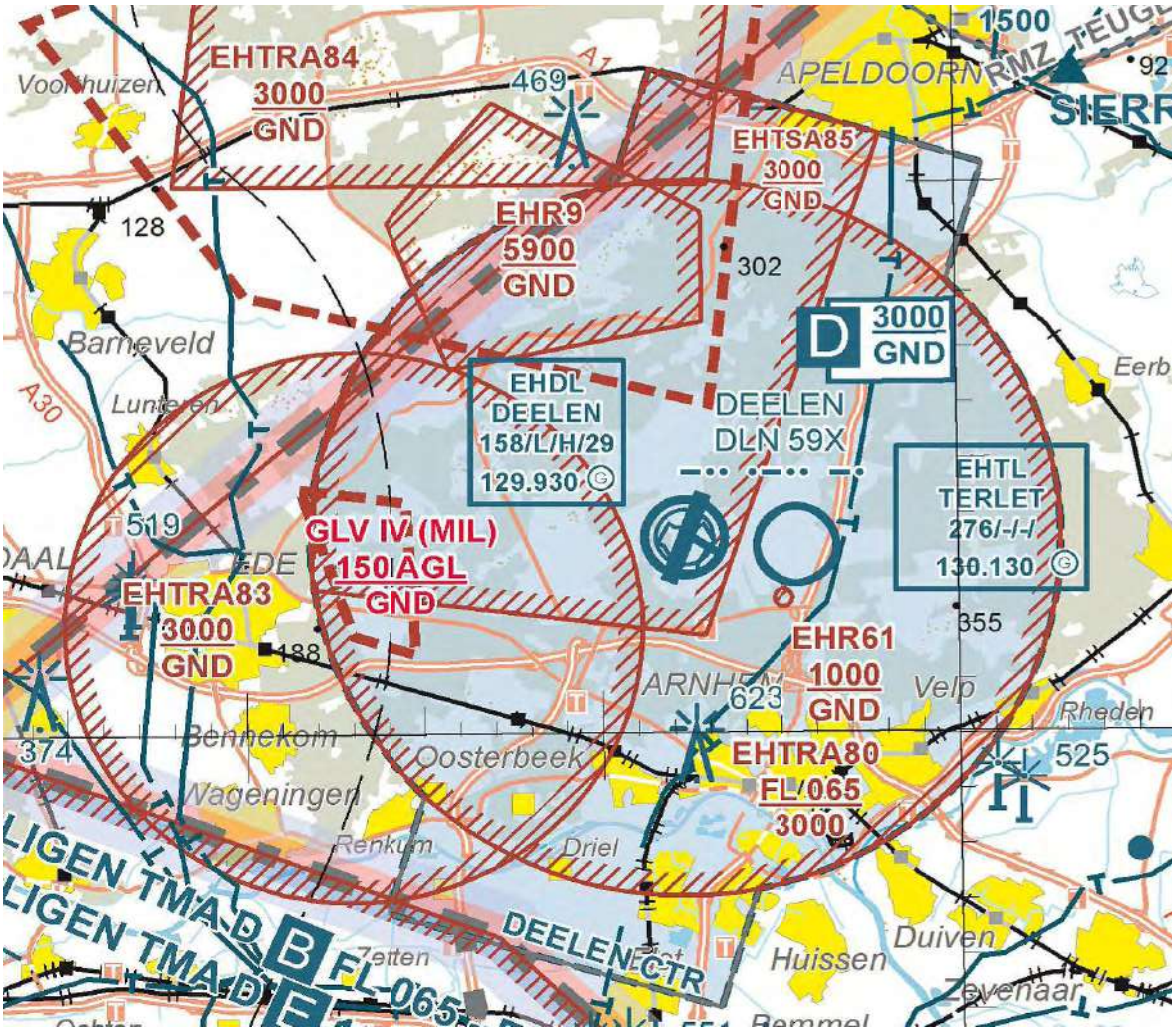
DEELEN TWR 312.400 129.930
RAPCON WEST 399.725 123.580

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

CHANGES: EDITORIAL

RNLAF 01 DEC 2022

LOCAL MAP


EHTRA84
3000
GND
EHTSA85
3000
GND
EHR9
5900
GND
D
3000
GND
EHDL
DEELEN
158/L/H/29
129.930
DEELEN
DLN 59X
EHTL
TERLET
276/-/-/-
130.130
GLV IV (MIL)
150 AGL
GND
EHTRA83
3000
GND
EHR61
1000
GND
EHTRA80
FL 065
3000
B
FL 065
DEELEN CTR
Voorthuizen
Barneveld
Lunteren
Ede
Bennekom
Wageningen
Oosterbeek
Renkum
Driel
Zetten
Huissen
Duiven
Velp
Rheden
Apeldoorn
Eerb
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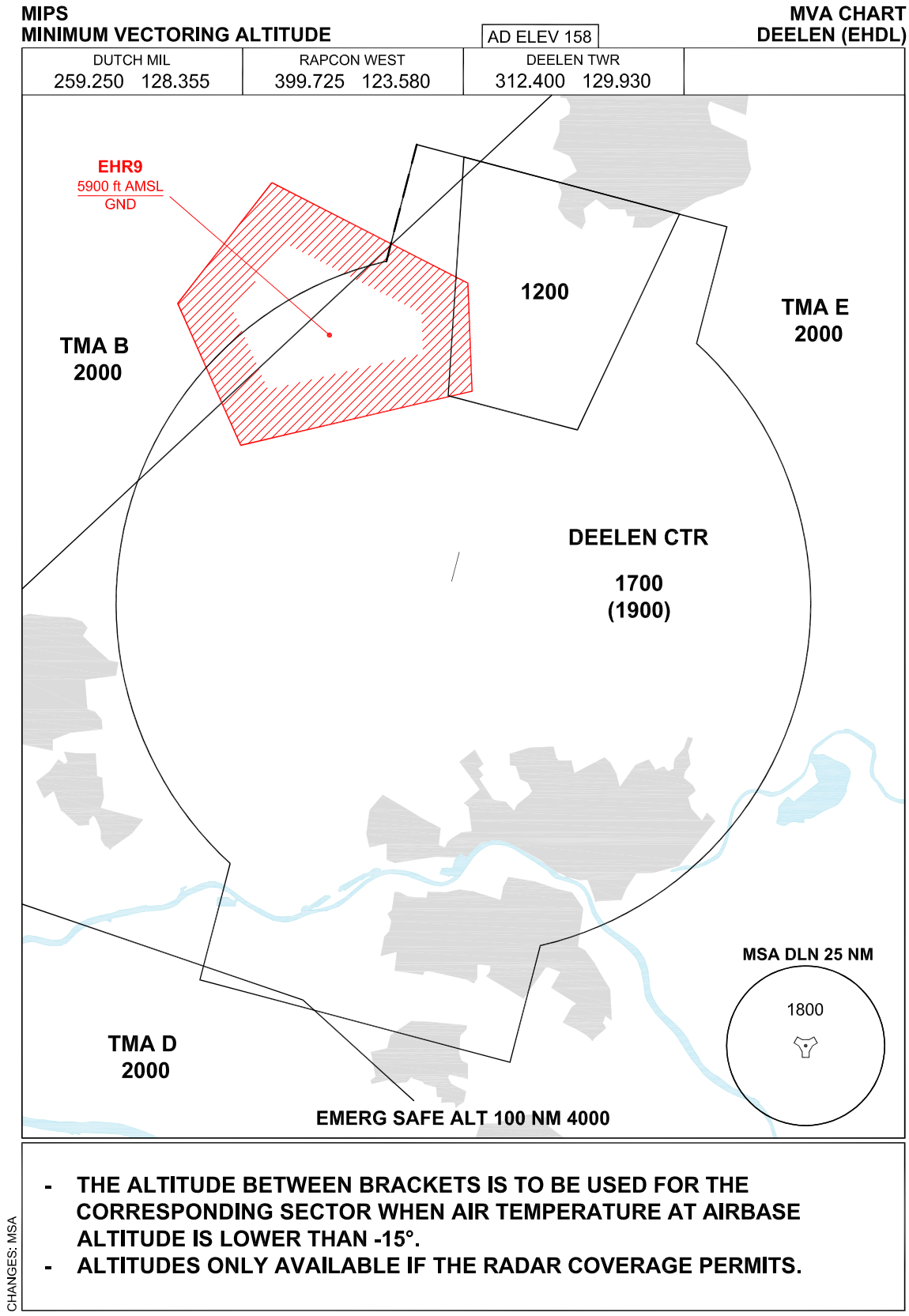
525
355
92


MIPS
MINIMUM VECTORING ALTITUDE
AD ELEV 158
MVA CHART
DEELEN (EHDL)
DUTCH MIL
259.250 128.355
RAPCON WEST
399.725 123.580
DEELEN TWR
312.400 129.930
EHR9
5900 ft AMSL
GND
1200
TMA E
2000
TMA B
2000
DEELEN CTR
1700
(1900)
MSA DLN 25 NM
1800
TMA D
2000
EMERG SAFE ALT 100 NM 4000
- 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:

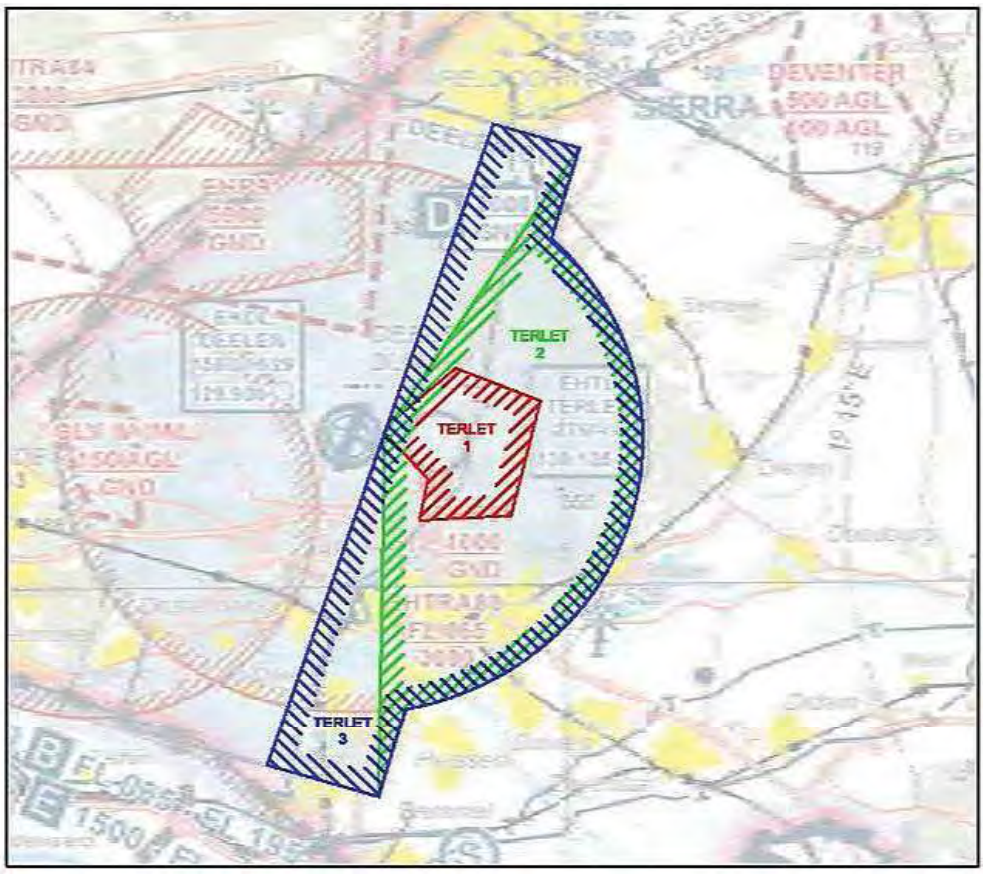
Terlet-1
52°05'18,00"N 005°56'03.00"E; 52°04'47.00"N 005°58'54.00"E; 52°02'22.62"N 005°58'20.14"E; 52°02'16.67"N 005°55'05.35"E; 52°02'57.94"N 005°55'13.66"E; 52°03'41.40"N 005°53'53.77"E; 52°04'07.26"N 005°54'09.39"E; to point of origin. vertical limits; GND-925 ft AMSL

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:

Terlet-2	Terlet-3
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. vertical limits; 925 ft AMSL- 3000 ft AMSL	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. vertical limits; 925 ft AMSL- 3000 ft AMSL



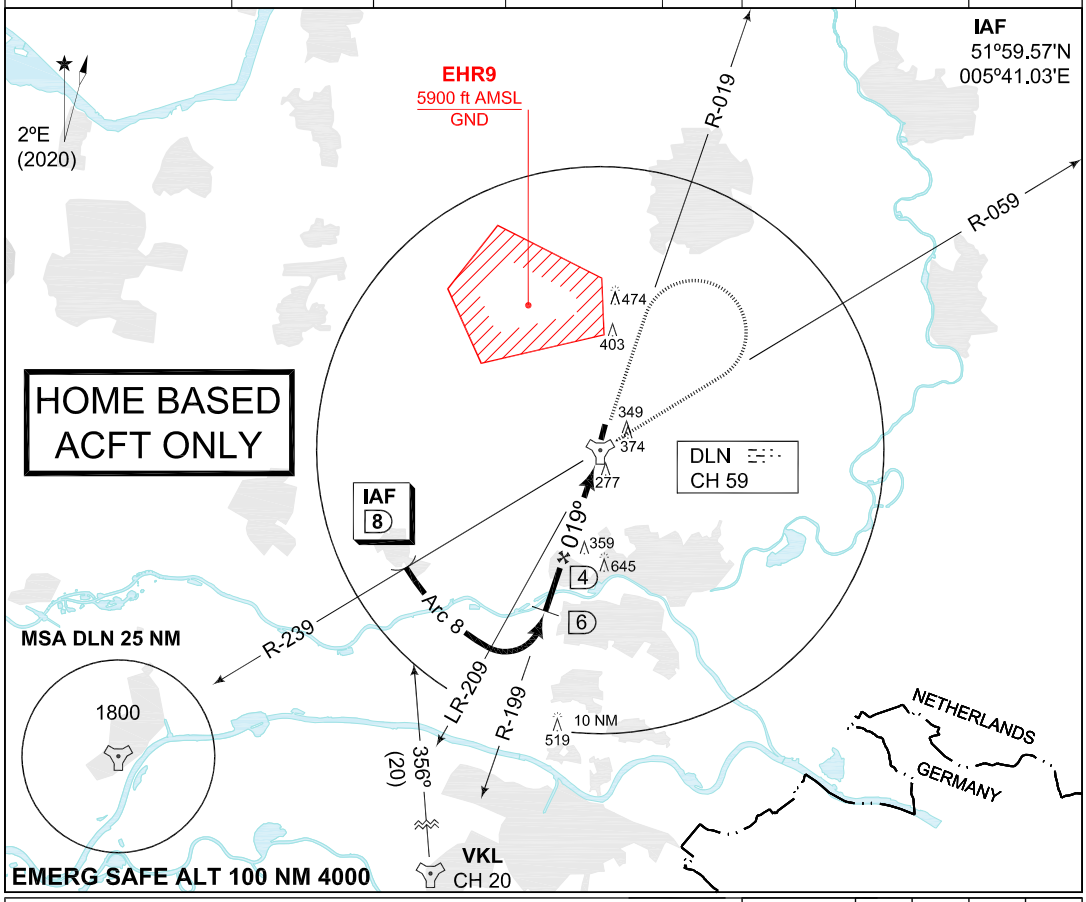
MIPS
INSTRUMENT APPROACH CHART

AD ELEV 158

TACAN RWY 01
DEELEN (EHDL)

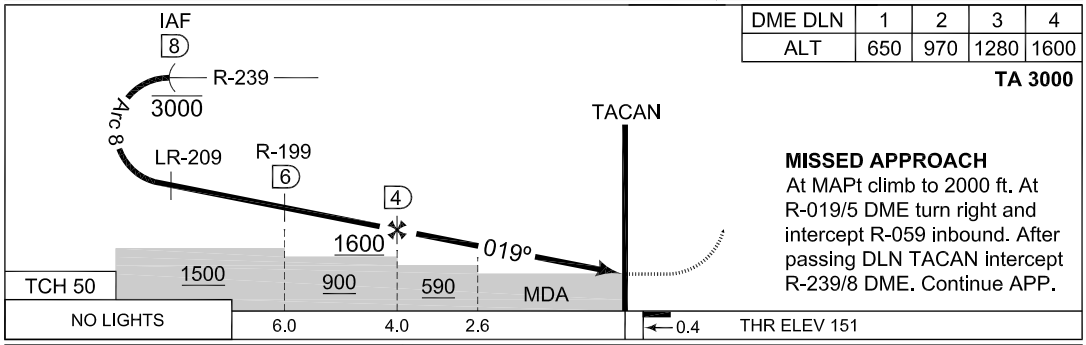
DUTCH MIL	RAPCON WEST	DEELEN TWR
259.250 128.355	399.725 123.580	312.400 129.930

TACAN	APP COURSE	FAF ALT	Descent GR	MDA	THR ELEV	ALS	LDA
DLN CH 59	019°	1600 FT	5.2%	**530**	151	-	3411 FT



DME DLN	1	2	3	4
ALT	650	970	1280	1600

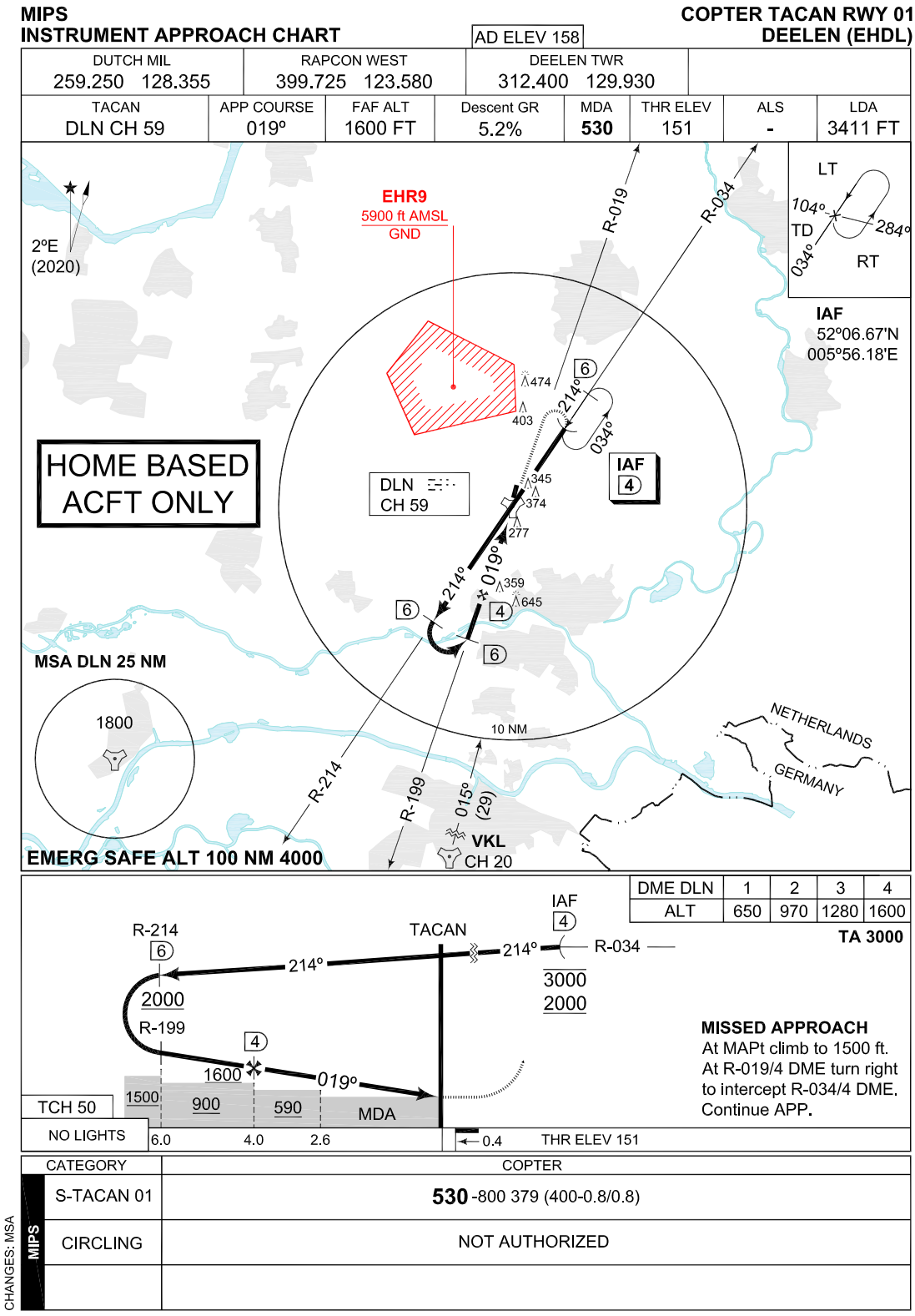
TA 3000



MISSED APPROACH
At MAPt climb to 2000 ft. At R-019/5 DME turn right and intercept R-059 inbound. After passing DLN TACAN intercept R-239/8 DME. Continue APP.

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
AD ELEV 158
COPTER 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
2°E
(2020)
EHR9
5900 ft AMSL
GND
HOME BASED
ACFT ONLY
DLN
CH 59
R-019
R-034
LT
104°
TD
284°
034°
RT
IAF
52°06.67'N
005°56.18'E
IAF
4
214°
034°
019°
MSA DLN 25 NM
1800
10 NM
R-214
R-199
015°
(29)
VKL
CH 20
EMERG SAFE ALT 100 NM 4000
NETHERLANDS
GERMANY
DME DLN 1 2 3 4
ALT 650 970 1280 1600
TA 3000
R-214
TACAN
214°
R-034
3000
2000
2000
R-199
1600
019°
TCH 50
NO LIGHTS
1500
900
590
MDA
6.0
4.0
2.6
0.4
THR ELEV 151
MISSED APPROACH
At MAPt climb to 1500 ft.
At R-019/4 DME turn right
to intercept R-034/4 DME.
Continue APP.
CATEGORY
COPTER
S-TACAN 01
530 -800 379 (400-0.8/0.8)
CIRCLING
NOT AUTHORIZED
CHANGES: MSA
MIPS
RNLAF 18 MAY 2023

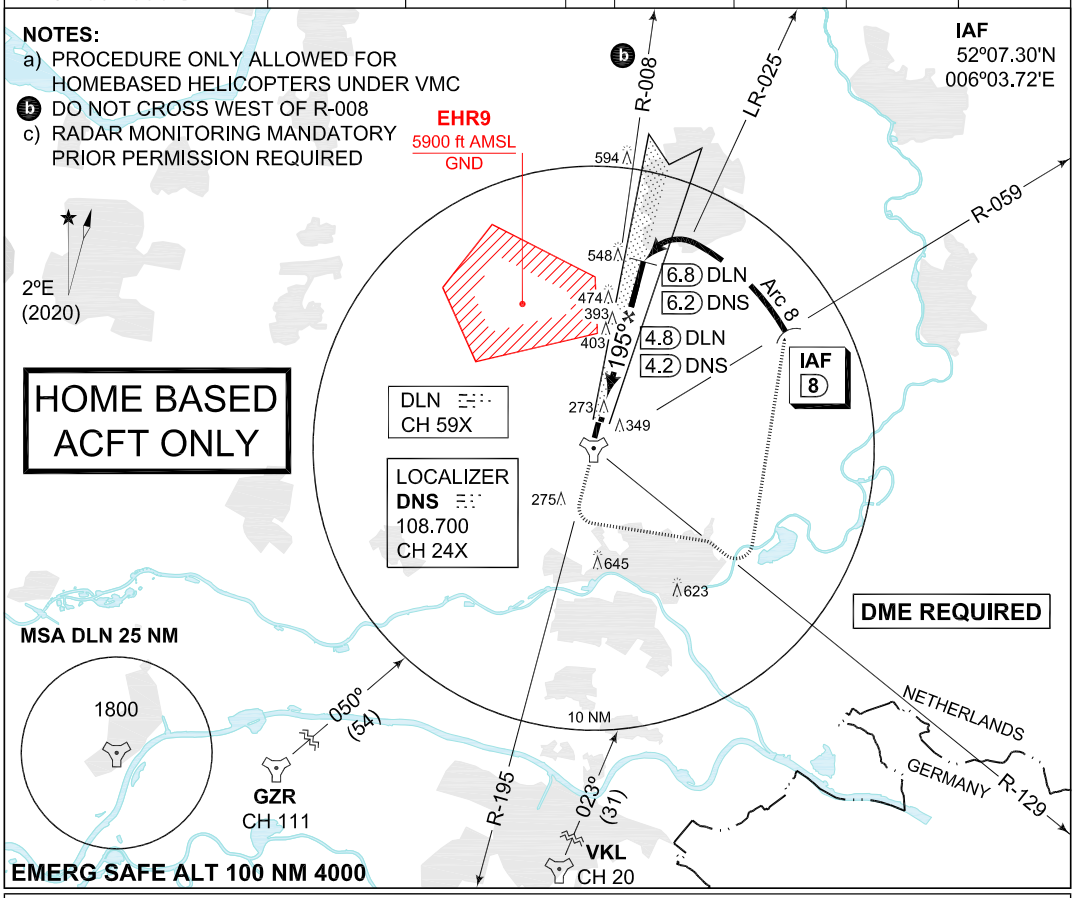
MIPS
INSTRUMENT APPROACH CHART

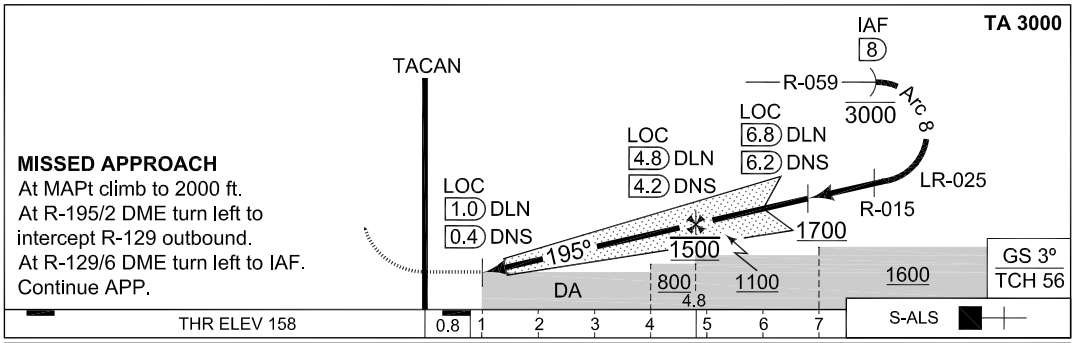
AD ELEV 158

ILS or LOC RWY 19
DEELEN (EHDL)

DUTCH MIL	RAPCON WEST	DEELEN TWR
259.250 128.355	399.725 123.580	312.400 129.930

LOCALIZER / DME	APP COURSE	GS INTCEPT ALT	GS	DA	THR ELEV	ALS	LDA
DNS 108.700 / CH 24X	195°	1500 FT	3°	SEE CAT	158	420 m	2536 FT

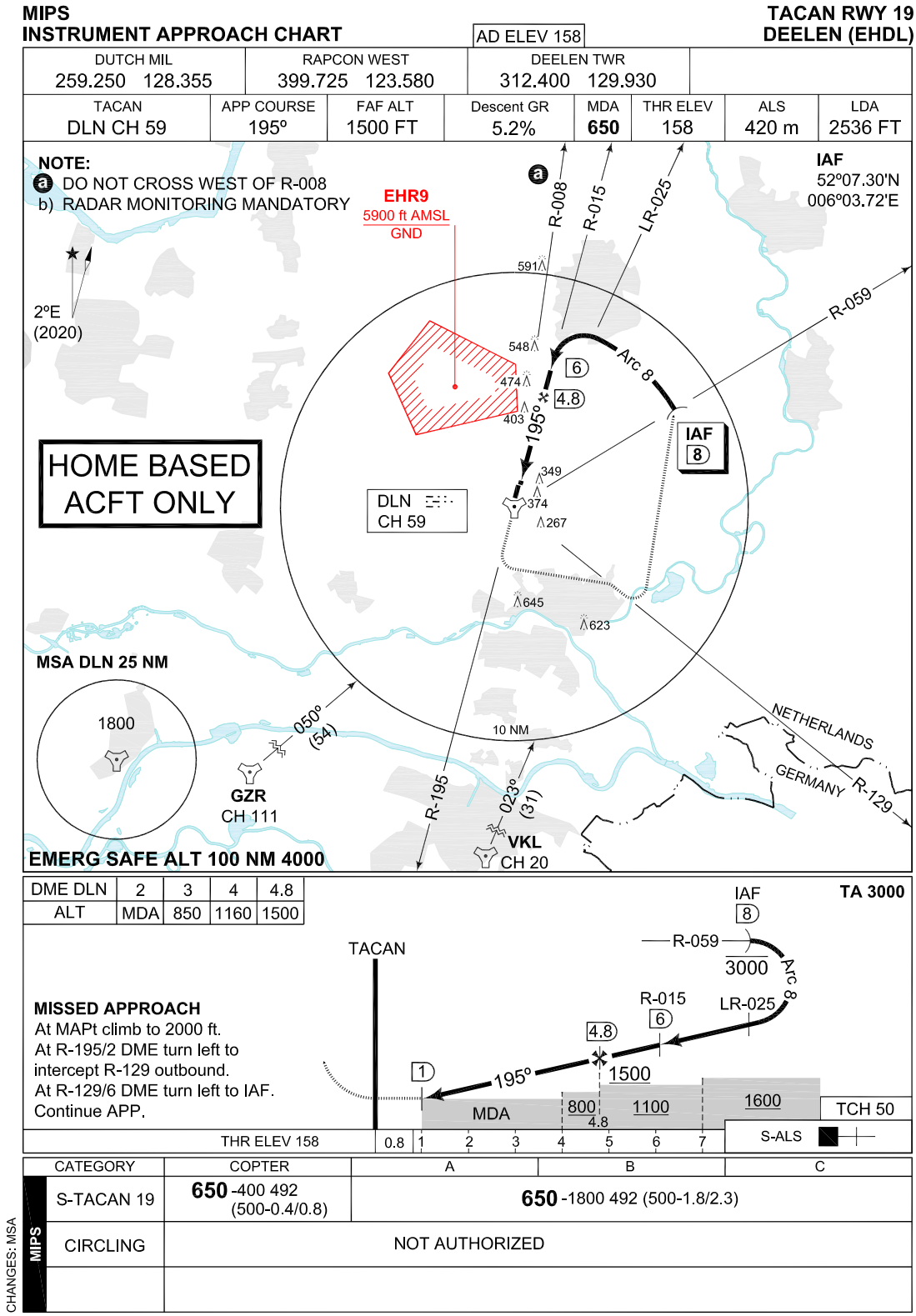


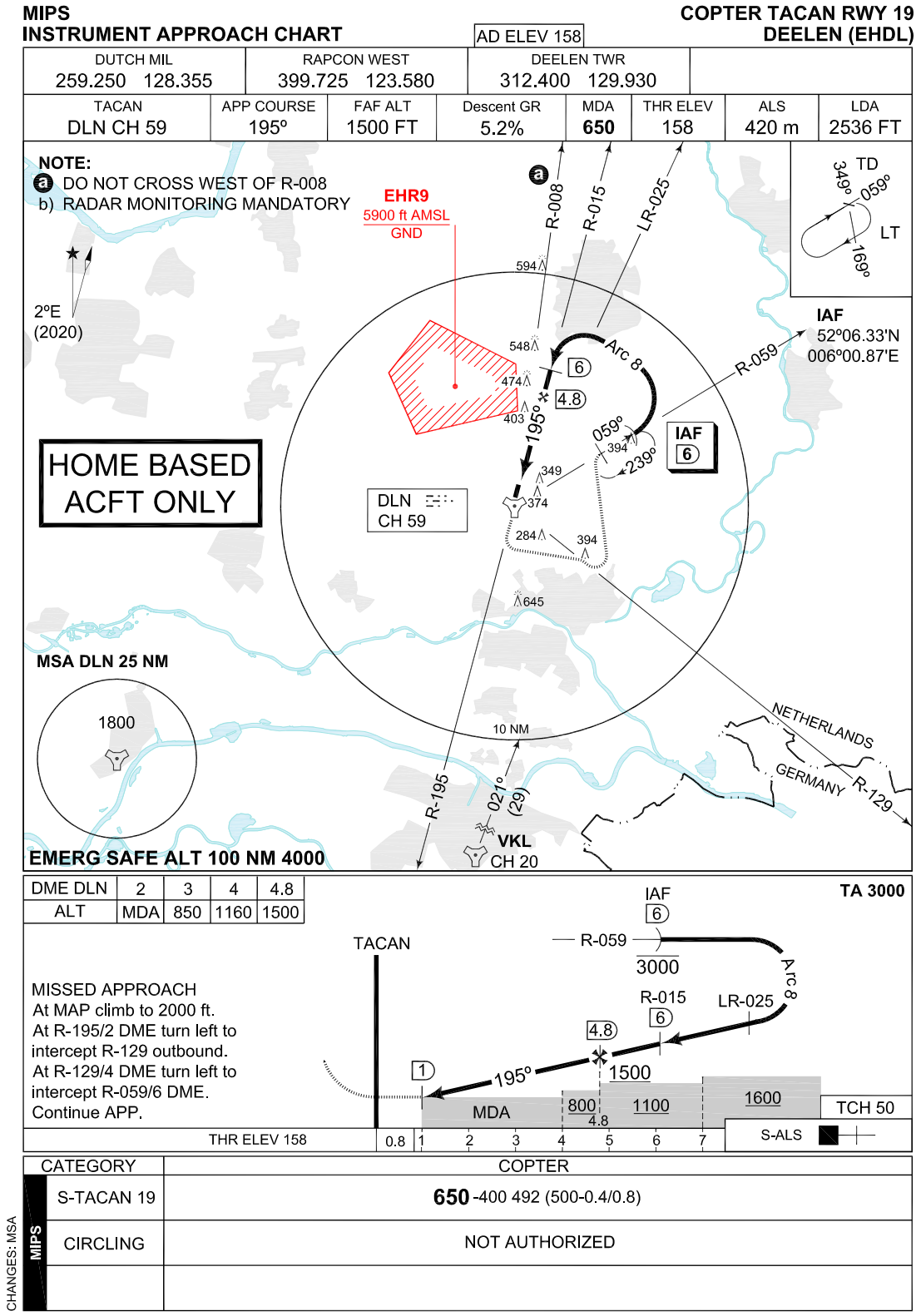


CATEGORY	COPTER	A	B	C
S-ILS 20	**388** -400 230 (300-0.4/0.8)	**404** -800 246 (300-0.8/1.2)	**414** -800 256 (300-0.8/1.3)	**424** -900 266 (300-0.9/1.3)
S-LOC 20	**640** -400 482 (500-0.4/0.8)	**640** -1800 482 (500-1.8/2.3)		
CIRCLING	NOT AUTHORIZED			

CHANGES: MSA MIPS

RNLAF 18 MAY 2023


MIPS
INSTRUMENT APPROACH CHART
AD ELEV 158
TACAN RWY 19
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
195°
FAF ALT
1500 FT
Descent GR
5.2%
MDA
650
THR ELEV
158
ALS
420 m
LDA
2536 FT
NOTE:
a DO NOT CROSS WEST OF R-008
b) RADAR MONITORING MANDATORY
EHR9
5900 ft AMSL
GND
IAF
52°07.30'N
006°03.72'E
2°E
(2020)
R-008
R-015
LR-025
R-059
591
548
474
403
Arc 8
6
4.8
195°
IAF
8
HOME BASED
ACFT ONLY
DLN
CH 59
349
374
267
645
623
MSA DLN 25 NM
1800
050°
(54)
10 NM
GZR
CH 111
R-195
023°
(31)
VKL
CH 20
NETHERLANDS
GERMANY
R-129
EMERG SAFE ALT 100 NM 4000
DME DLN 2 3 4 4.8
ALT MDA 850 1160 1500
TA 3000
TACAN
IAF
8
R-059
3000
Arc 8
R-015
6
LR-025
4.8
1
195°
1500
MISSED APPROACH
At MAPt climb to 2000 ft.
At R-195/2 DME turn left to
intercept R-129 outbound.
At R-129/6 DME turn left to IAF.
Continue APP.
MDA
800
1100
1600
TCH 50
4.8
THR ELEV 158
0.8 1 2 3 4 5 6 7
S-ALS
CATEGORY
COPTER
A
B
C
MIPS
S-TACAN 19
650 -400 492
(500-0.4/0.8)
650 -1800 492 (500-1.8/2.3)
CIRCLING
NOT AUTHORIZED
CHANGES: MSA
RNLAF 18 MAY 2023


MIPS
INSTRUMENT APPROACH CHART
AD ELEV 158
COPTER TACAN RWY 19
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
195°
FAF ALT
1500 FT
Descent GR
5.2%
MDA
650
THR ELEV
158
ALS
420 m
LDA
2536 FT
NOTE:
a DO NOT CROSS WEST OF R-008
b) RADAR MONITORING MANDATORY
EHR9
5900 ft AMSL
GND
2°E
(2020)
HOME BASED
ACFT ONLY
DLN
CH 59
IAF
52°06.33'N
006°00.87'E
IAF
6
R-008
R-015
LR-025
R-059
Arc 8
4.8
195°
059°
239°
TD
349°
059°
169°
LT
MSA DLN 25 NM
1800
10 NM
EMERG SAFE ALT 100 NM 4000
R-195
021°
(29)
VKL
CH 20
NETHERLANDS
GERMANY
R-129
DME DLN 2 3 4 4.8
ALT MDA 850 1160 1500
TA 3000
MISSED APPROACH
At MAP climb to 2000 ft.
At R-195/2 DME turn left to
intercept R-129 outbound.
At R-129/4 DME turn left to
intercept R-059/6 DME.
Continue APP.
TACAN
R-059
3000
R-015
LR-025
1500
MDA
800
1100
1600
TCH 50
THR ELEV 158
S-ALS
CATEGORY
COPTER
S-TACAN 19
650 -400 492 (500-0.4/0.8)
CIRCLING
NOT AUTHORIZED
CHANGES: MSA
MIPS
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

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 EHEHZTZX
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 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 FREQ 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		033º 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		213º 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-ciptor	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)
Approch 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 Des-ciptor	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^{o} 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	Seperation 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

GENERAL

Approach control through Rapcon South. ILS approaches for RWY 03/21 from 2000 ft.
RVR AVBL for RWY 03/21[1)].
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.fdno@mindef.nl
AFTN: EHMCZPZX
AVBL 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.

BIRD STATUS

(1) In accordance with CLSK IS OPS 0008 5.4 Vogelstatus, a bird migration warning (birdtam) will be issued and published in OMIS;

(2) In case of a bird strike risk intensity of 5 or higher TWR will inform RAPCON South;

(3) The Bird Control Unit (BCU) will issue a local bird strike warning. Outside UDP or in case Of absence of a certified BCU the local bird strike warning will be at least 'alert';

(4) In case of a local bird strike warning 'critical' the BCU shall advise TWR on the safest pattern to fly. ATIS (126.030) will inform aircrew with the text 'high bird intensity' and TWR will inform military traffic;

(5) The local bird strike warning is equal to or higher than the national bird migration warning.

LOCAL NATIONAL RESTRICTIONS

NORMAL	less than 5 None
ALERT	5 or 6 None, however be aware of increased bird intensity
CRITICAL	Full stop landing mandatory No touch-and-go or low approaches No formation take offs and landings

PROCEDURES

CONVENTIONAL AIRCRAFT

Conventional aircraft will join the circuit in accordance with instructions given by TWR, depending on their position and other traffic in the circuit;

Standard circuit altitude is 1500 ft;

For an overhead circuit, conventional aircraft are to enter the CTR to initial point (IP) at 1500 ft;

IP runway 03 is situated 4NM final;

For runway 03 a left-hand overhead circuit will be flown around the village of Wintelre;

IP runway 21 is situated 5NM final;

For runway 21 a right-hand overhead circuit will be flown inside the village of Best;

C130 aircraft will descend to 1000 ft from IP to the overhead break.

FIGHTER JETS

For an overhead circuit, fighter jet aircraft are to enter the CTR to initial point (IP) at 1500 ft;

IP runway 03 is situated 4NM final;

For runway 03 a left-hand overhead circuit will be flown around the village of Wintelre;

IP runway 21 is situated 5NM final;

For runway 21 a right-hand overhead circuit will be flown inside the village of Best;

Overhead circuit will be flown at 1500 ft;

Approaching from the southeast, a right turn for IP runway 03 or a left turn for IP runway 21 can be allowed by TWR;

Slow lane will be issued by TWR together with the landing clearance.

CIRCUIT PROCEDURES

GENERAL

Non home-based aircraft are limited to a maximum of 2 approaches per flight (Excluded are NL Coast Guard aircraft, RNLAF and KLPD helicopters);

Practice approaches are allowed on Monday till Thursday from 06:00Z - 20:00Z (07:00Z- 21:00Z) and on Friday from 06:00Z - 15:00Z (07:00Z - 16:00Z). Practice approaches are not allowed during weekends and/or public holidays;

Practice approaches only after permission of ATC and depending on traffic.

CONVENTIONAL AIRCRAFT

The visual circuit will be flown on the northwest side of the airfield around the villages of Wintelre and Best;

Standard circuit altitude is 1500 ft.

FIGHTER JETS

For runway 03 close circuit will be flown inside the village of Best, with a base leg outside the village of Wintelre;

For runway 21 a close circuit will be flown at least 1000 ft around the village of Wintelre, with a base leg inside the village of Best;

Standard circuit altitude is 1500 ft;

Returning initial runway 03 via at least 4NM runway track followed by a left turn to initial;

Returning initial runway 21 via at least 3NM runway track followed by a right turn to initial;

VFR (S)FO patterns in accordance with SOPs.

HELICOPTERS

Standard circuit altitude is 600 ft;

Circuit runway 03 is left-hand;

Circuit runway 21 is right-hand;

The village of Wintelre has to be avoided;

Only one helicopter is allowed in the circuit;

Circuits are allowed for runway 03/21 only;

The following types of approached may be executed:

- Normal landing;
- Roll on landing (simulated single engine);
- Pedal less landing (fixed pitch landing);
- Autorotations;
- Quick stops.

RADAR PATTERNS

Eindhoven runway 21:

Right-hand pattern. Downwind at 2000 ft. Baseleg at 2000 ft. Final according glideslope.

Eindhoven runway 03:

Left-hand pattern. Downwind at 2000 ft. Baseleg at 2000 ft. Final according glideslope.

BREAK-OFF PROCEDURES.

On final approach. Continue inbound or runway track and make altitude 2000 ft. Break-off can be initiated by both TWR and Radar. Immediate coordination between TWR and Radar will take place to fit break-off traffic in the situation.

LOST COMMUNICATION PROCEDURE.

When no transmissions are received for 1 minute in the pattern or 10 seconds on ASR final, proceed to the Final Approach Fix at published altitude for a TACAN / ILS straight in or continue on TACAN / ILS straight-in and try to contact Eindhoven Arrival or TWR on standard or emergency frequency.

In case of an inbound GAT non comms it is possible for the pilot to contact MilATCC Schiphol by SATCOM or mobile phone. Check the procedure in the emergency checklist at section A 04-03 COMMS FAIL. The Arrival controller will contact TWR controller for landing clearance.

EMERGENCY FUEL PATTERN

(Simulated) Emergency fuel patterns are flown at 1100 ft. In the same direction as the normal radar pattern. (Simulated) Emergency fuel patterns are made as short as possible aiming for approximately 4 NM final. Simulated Emergency fuel patterns are subject to approval by TWR.

ICING PROCEDURES.

Descent during Emergency Operating Procedures

To remain in the icing layer as short as possible a 15° descent is used till 1000 ft AGL. For a 15° descent 0.6 NM is needed per 1000 ft. The aircraft should arrive at 7 DME (4 NM before glide path intercept) at 1000 ft AGL.

NOTE: During expected icing conditions, all missions will execute an Ice Fod Alert (IFA) check.

NOTE: When aircraft is below icing level, ATC will order pilot to reduce to normal approach speed in order to maintain an orderly traffic flow.

AIRCRAFT WITH HAZARDOUS CARGO

Aircraft with hazardous cargo will be parked at the hot cargo platform situated at intersection L5 southeast side. IPCC will inform ATC as well as the fire department about the cargo.

DRAG CHUTE/CABLE PROCEDURES

Aircrew shall inform TWR as soon as possible;

Release of the deployed drag chute shall be on the taxi way Romeo. To facilitate a swift and safe removal, drop the drag chute close to the edge of the taxiway;

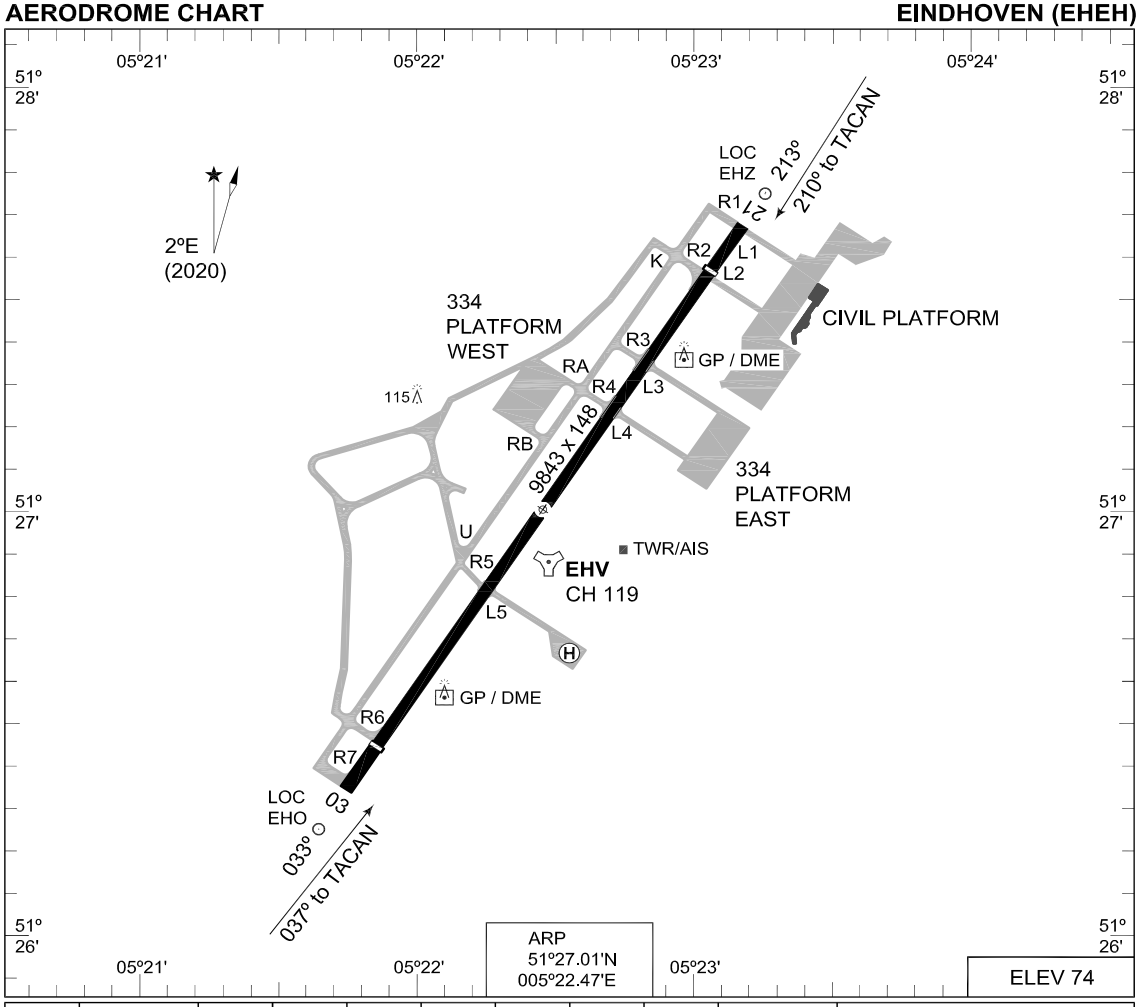
If unable to release inform TWR and await instructions. On the taxiway release the deployed drag chute when convenient, but as close to the taxiway edge as practicable;

The recovery vehicle shall remove the drag chute from the runway as soon as possible.

EHEH AD 2.24 Charts related to an aerodrome

Aerodrome Chart	EHEH AD 2-15
Local map	EHEH AD 2-16
MVA chart	EHEH AD 2-17
Instrument departure chart EH1	EHEH AD 2-18
Instrument departure chart EH3	EHEH AD 2-19
Instrument departure chart EH5	EHEH AD 2-20
Instrument departure chart EH7	EHEH AD 2-21
Instrument approach chart HI-ILS or LOC RWY 03	EHEH AD 2-22
Instrument approach chart ILS Z or LOC RWY 03	EHEH AD 2-23
Instrument approach chart HI-TACAN RWY 03	EHEH AD 2-24
Instrument approach chart TACAN RWY 03	EHEH AD 2-25
Instrument approach chart RNP Z RWY 03	EHEH AD 2-26
Instrument approach chart HI-ILS or LOC RWY 21	EHEH AD 2-27
Instrument approach chart ILS Z or LOC RWY 21	EHEH AD 2-28
Instrument approach chart HI-TACAN RWY 21	EHEH AD 2-29
Instrument approach chart TACAN RWY 21	EHEH AD 2-30
Instrument approach chart RNP Z RWY 21	EHEH AD 2-31

MIPS
AERODROME CHART **EINDHOVEN (EHEH)**



RWY	PCN	TORA	ASDA	TODA	LDA		PAPI		THR ELEV	THR PSN
21	62 F/A/W/T	9843	9843	10039	9022		3.0°		67	51°27.56'N 005°23.09'E
03	62 F/A/W/T	9843	9843	10039	9022		3.0°		74	51°26.45'N 005°21.85'E

EINDHOVEN TWR	241.550	131.005	(Ground Control)	335.750	121.930
EINDHOVEN ARRIVAL	265.975	124.530			
RAPCON SOUTH	388.525	123.180			

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

CHANGES: DELETE SRA

RNLAF 24 FEB 2022

LOCAL MAP

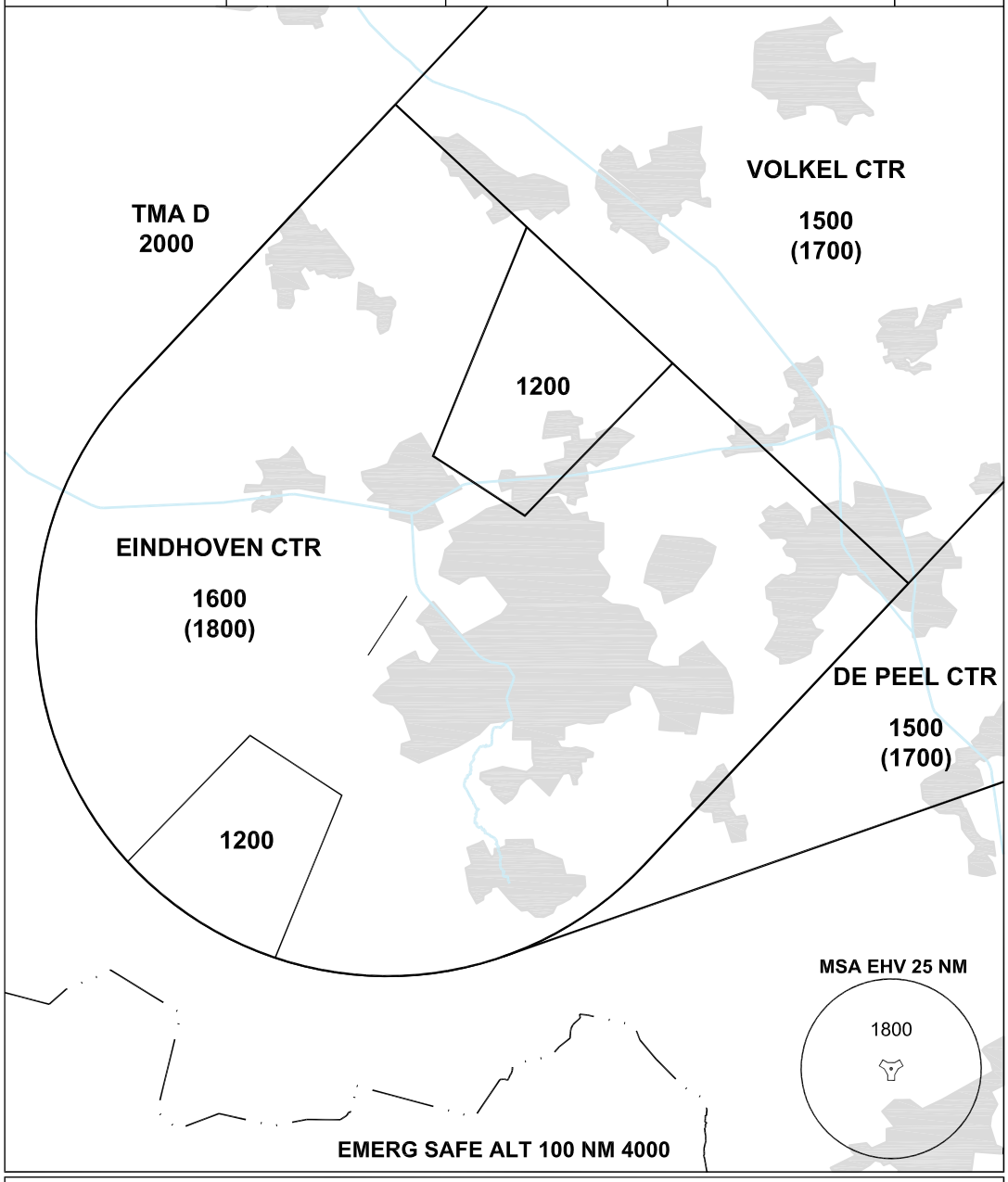
See: AIP NL EH-AD-2 EHEH-VAC-1

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



- **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: EDITORIAL

RNLAF 30 DEC 2021

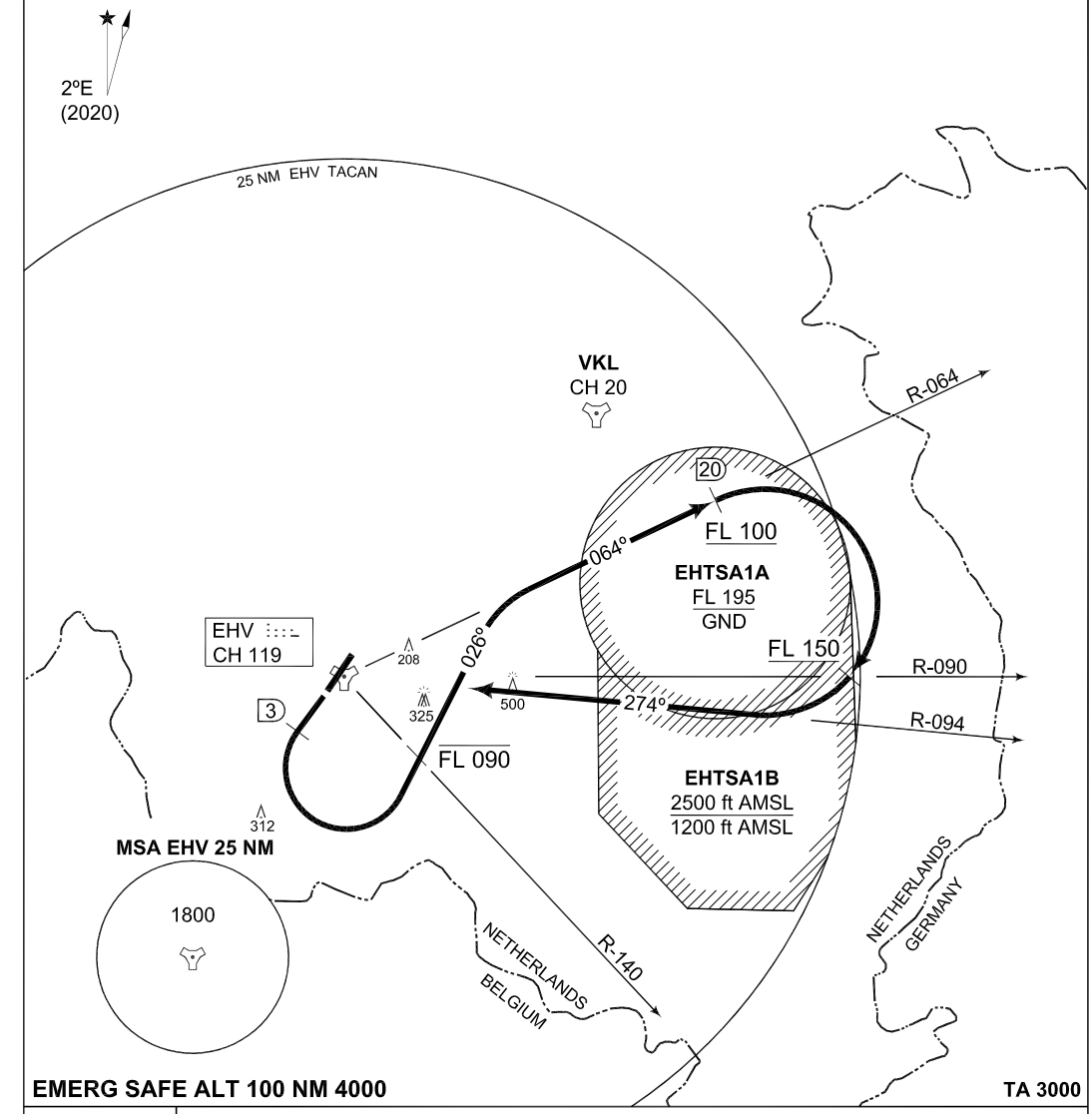
MIPS
INSTRUMENT DEPARTURE CHART

AD ELEV 74

EH1
EINDHOVEN (EHEH)

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

RWY	Knots	120	180	240	300	360	to
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

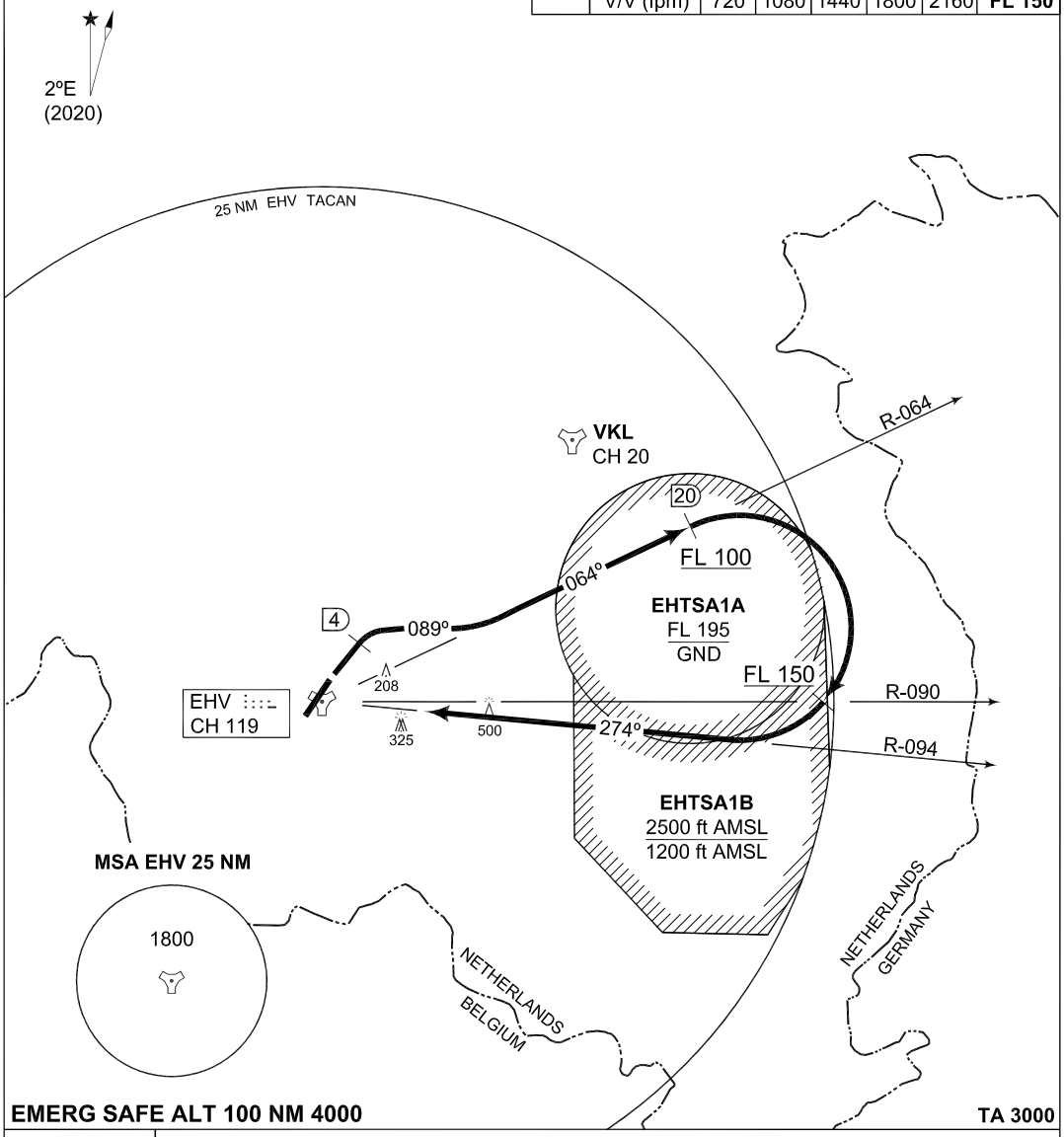
RNLAF 09 SEP 2021

MIPS **EH3**

INSTRUMENT DEPARTURE CHART AD ELEV 74 **EINDHOVEN (EHEH)**

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

RWY	Knots	120	180	240	300	360	to
03	V/V (fpm)	960	1440	1920	2400	2880	**FL 100**
	V/V (fpm)	720	1080	1440	1800	2160	**FL 150**



EINDHOVEN 3 (RWY 03)	- Climb straight ahead. - At 4 DME and at least at 1000 ft from Eindhoven TACAN turn right, heading 089º 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

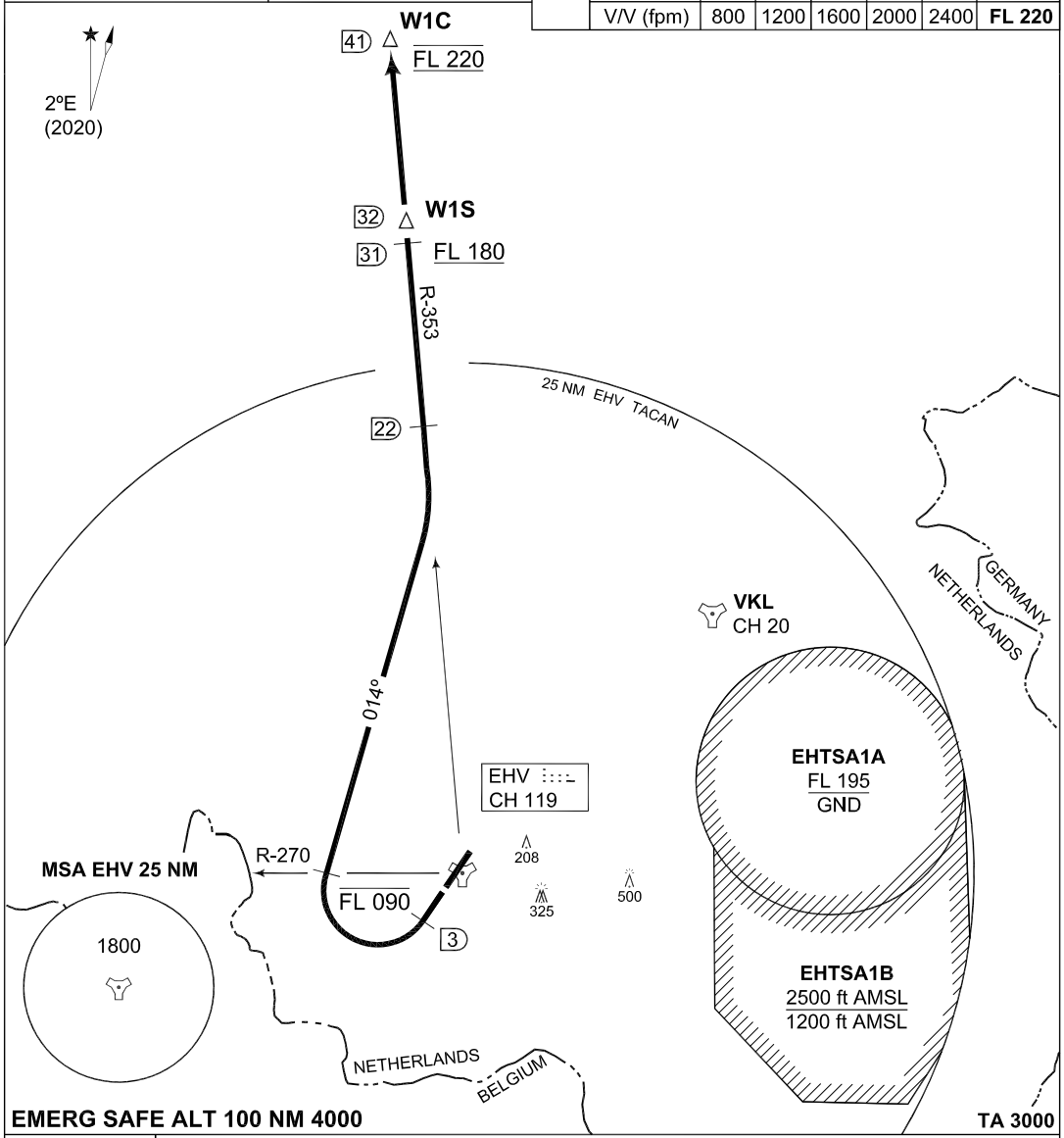
MIPS
INSTRUMENT DEPARTURE CHART

AD ELEV 74

EH5
EINDHOVEN (EHEH)

GND CTL	EINDHOVEN TWR	RAPCON SOUTH	DUTCH MIL
335.750 121.930	241.550 131.005	388.525 123.180	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**



EINDHOVEN 5 (RWY 21)	- 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.
NOTES:	- 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.

CHANGES: MSA

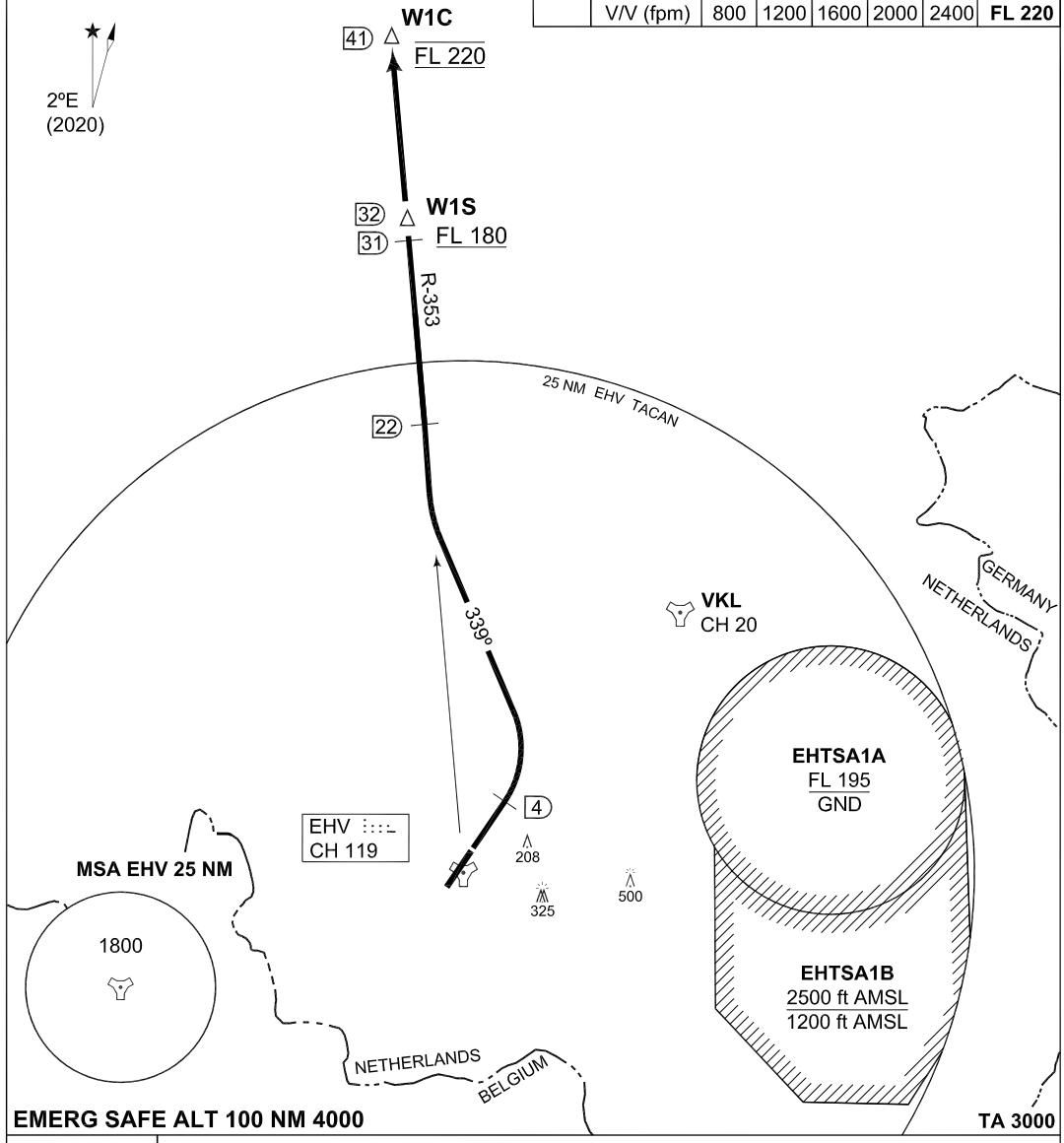
RNLAF 09 SEP 2021

MIPS **EH7**

INSTRUMENT DEPARTURE CHART AD ELEV 74 **EINDHOVEN (EHEH)**

GND CTL	EINDHOVEN TWR	RAPCON SOUTH	DUTCH MIL
335.750 121.930	241.550 131.005	388.525 123.180	336.325 125.930
EINDHOVEN ARRIVAL			
265.975 124.530			

RWY	Knots	120	180	240	300	360	to
03	V/V (fpm)	1140	1710	2280	2840	3410	FL 180
	V/V (fpm)	800	1200	1600	2000	2400	FL 220



EINDHOVEN 7 (RWY 03)	- Climb straight ahead to 4 DME from Eindhoven TACAN (EHV). - Turn left heading 339º 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

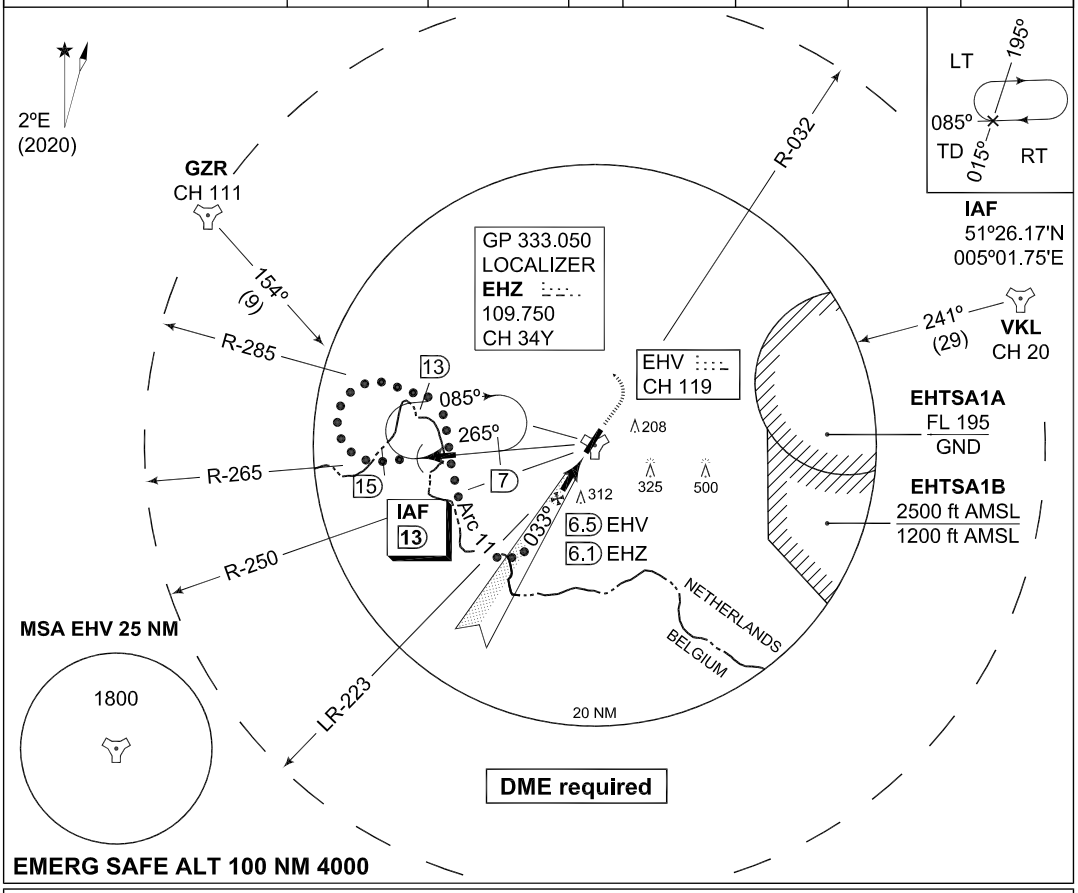
MIPS
INSTRUMENT APPROACH CHART

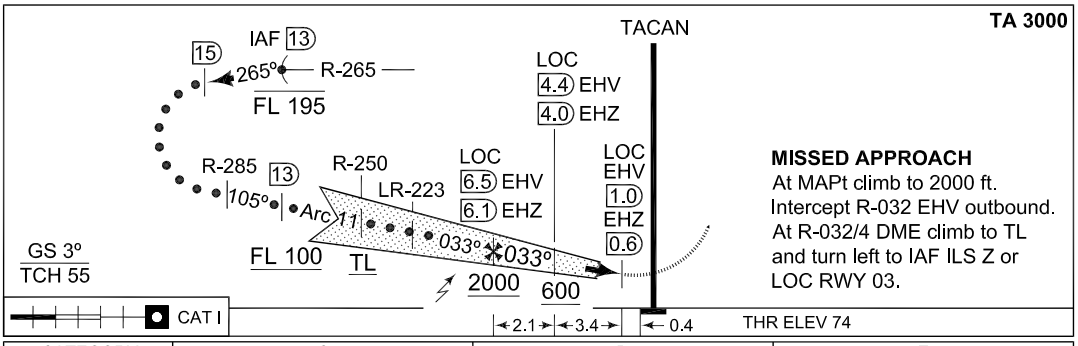
AD ELEV 74

HI-ILS or LOC RWY 03
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

LOCALIZER / DME	APP COURSE	FAF ALT	GS	DA	THR ELEV	ALS	LDA
EHZ 109.750 / CH 34Y	033°	2000 FT	3°	SEE CAT	74	892 m	9022 FT





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		

MIPS

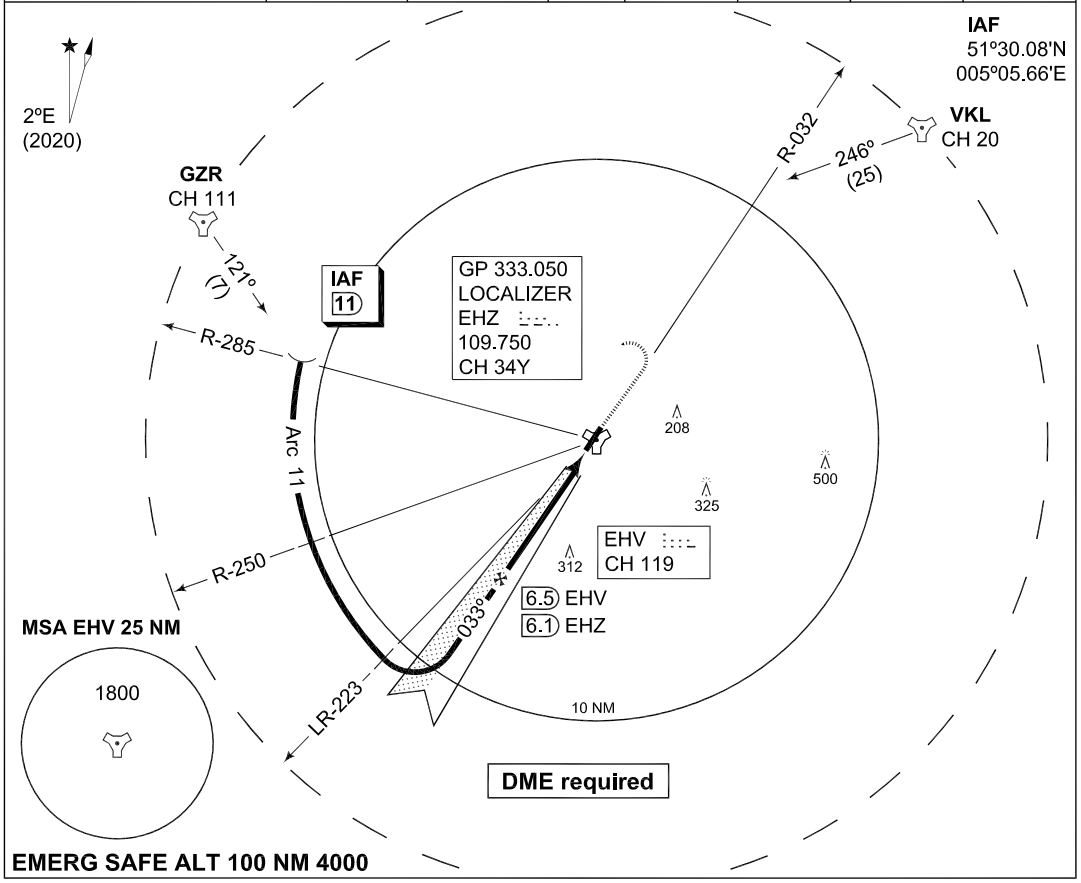
CHANGES: MSA

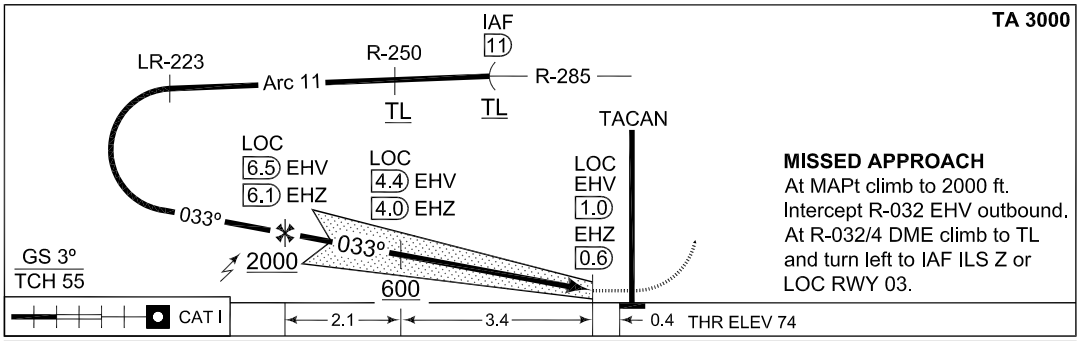
RNLAF 09 SEP 2021

MIPS
INSTRUMENT APPROACH CHART AD ELEV 74 **ILS Z or LOC RWY 03**
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

LOCALIZER / DME	APP COURSE	FAF ALT	GS	DA	THR ELEV	ALS	LDA
EHZ 109.750 / CH 34Y	033°	2000 FT	3°	SEE CAT	74	892 m	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				

CHANGES: MSA MIPS

RNLAF 09 SEP 2021

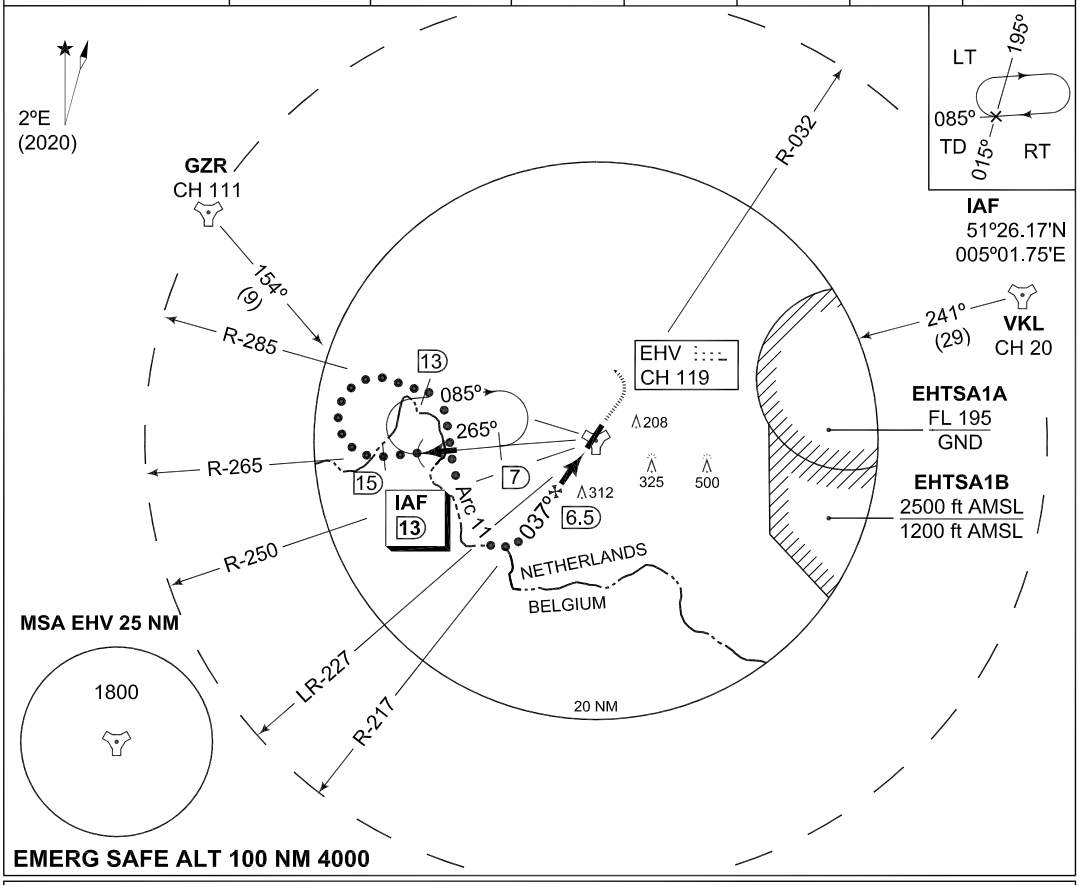
MIPS
INSTRUMENT APPROACH CHART

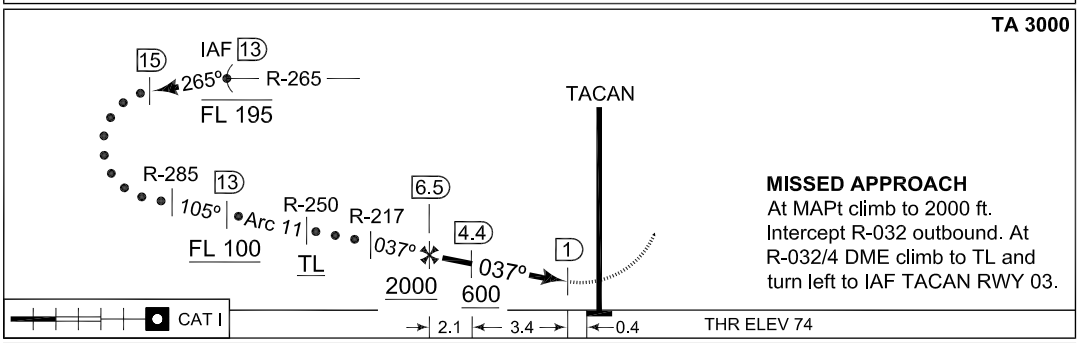
AD ELEV 74

HI-TACAN RWY 03
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

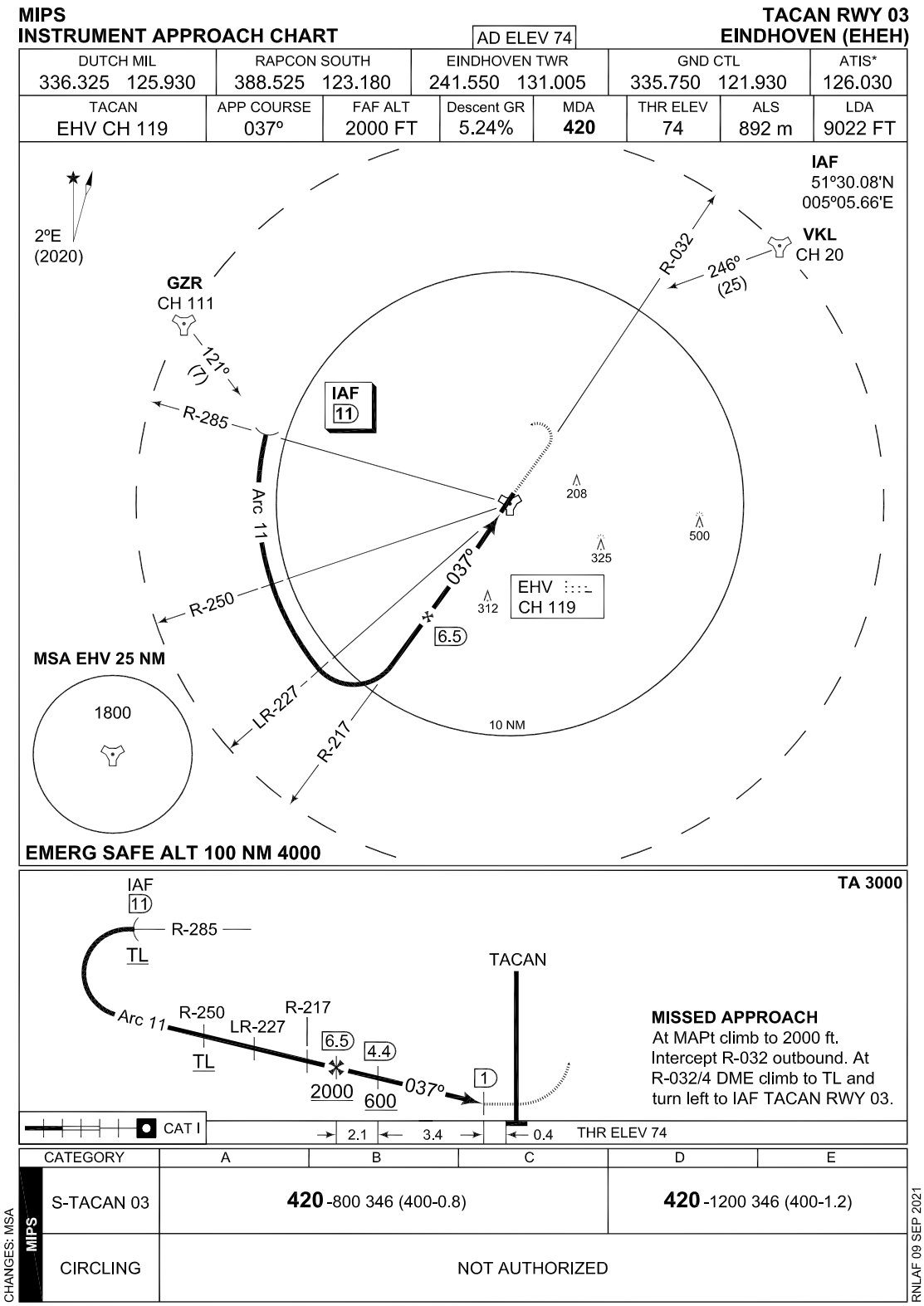
TACAN	APP COURSE	FAF ALT	Descent GR	MDA	THR ELEV	ALS	LDA
EHV CH 119	037°	2000 FT		**420**	74	892 m	9022 FT





CATEGORY	C	D	E
S-TACAN 03	**420** -800 346 (400-0.8)	**420** -1200 346 (400-1.2)	
CIRCLING	NOT AUTHORIZED		

CHANGES: MSA
MIPS
RNLAF 09 SEP 2021


MIPS
INSTRUMENT APPROACH CHART
AD ELEV 74
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
IAF 51°30.08'N 005°05.66'E
2°E (2020)
VKL CH 20
GZR CH 111
R-032
246° (25)
121° (7)
R-285
IAF 11
Arc 11
208
500
325
312
037°
6.5
EHV CH 119
R-250
MSA EHV 25 NM
1800
LR-227
R-217
10 NM
EMERG SAFE ALT 100 NM 4000
TA 3000
IAF 11
R-285
TL
TACAN
Arc 11
R-250
LR-227
R-217
6.5
4.4
TL
2000
600
037°
1
MISSED APPROACH
At MAPt climb to 2000 ft.
Intercept R-032 outbound. At
R-032/4 DME climb to TL and
turn left to IAF TACAN RWY 03.
CAT I
2.1
3.4
0.4
THR ELEV 74
CATEGORY A B C D E
MIPS
S-TACAN 03
420 -800 346 (400-0.8)
420 -1200 346 (400-1.2)
CIRCLING
NOT AUTHORIZED
CHANGES: MSA
RNLAF 09 SEP 2021

PANS OPS
INSTRUMENT APPROACH CHART

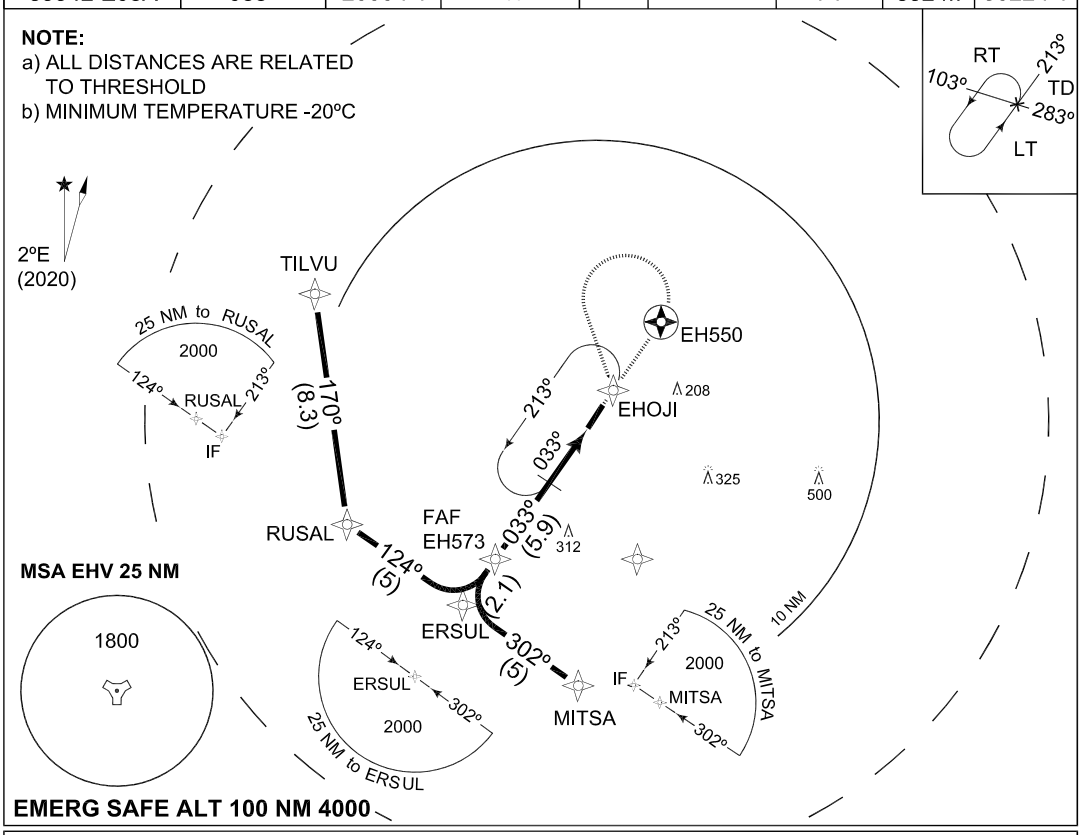
AD ELEV 74

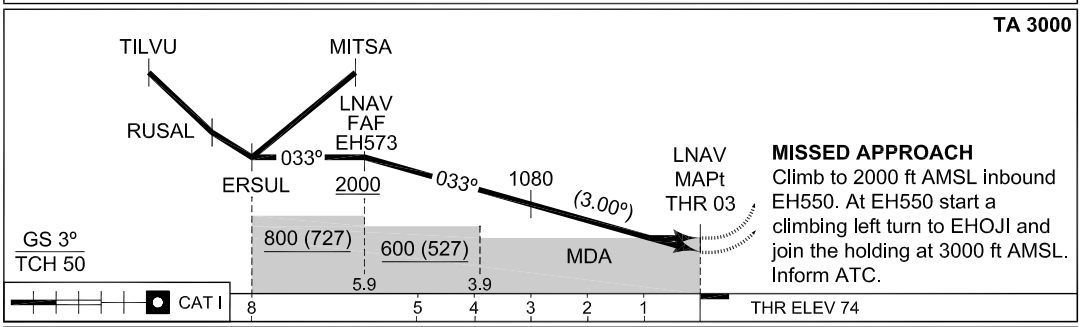
RNP Z RWY 03
EINDHOVEN (EHEH)

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

EGNOS CHANNEL	APP COURSE	FAF ALT	Descent GR	MDA	DA	THR ELEV	ALS	LDA
89942 E03A	033°	2000 FT	5.24% / 3°	**420**	**SEE CAT**	74	892 m	9022 FT

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





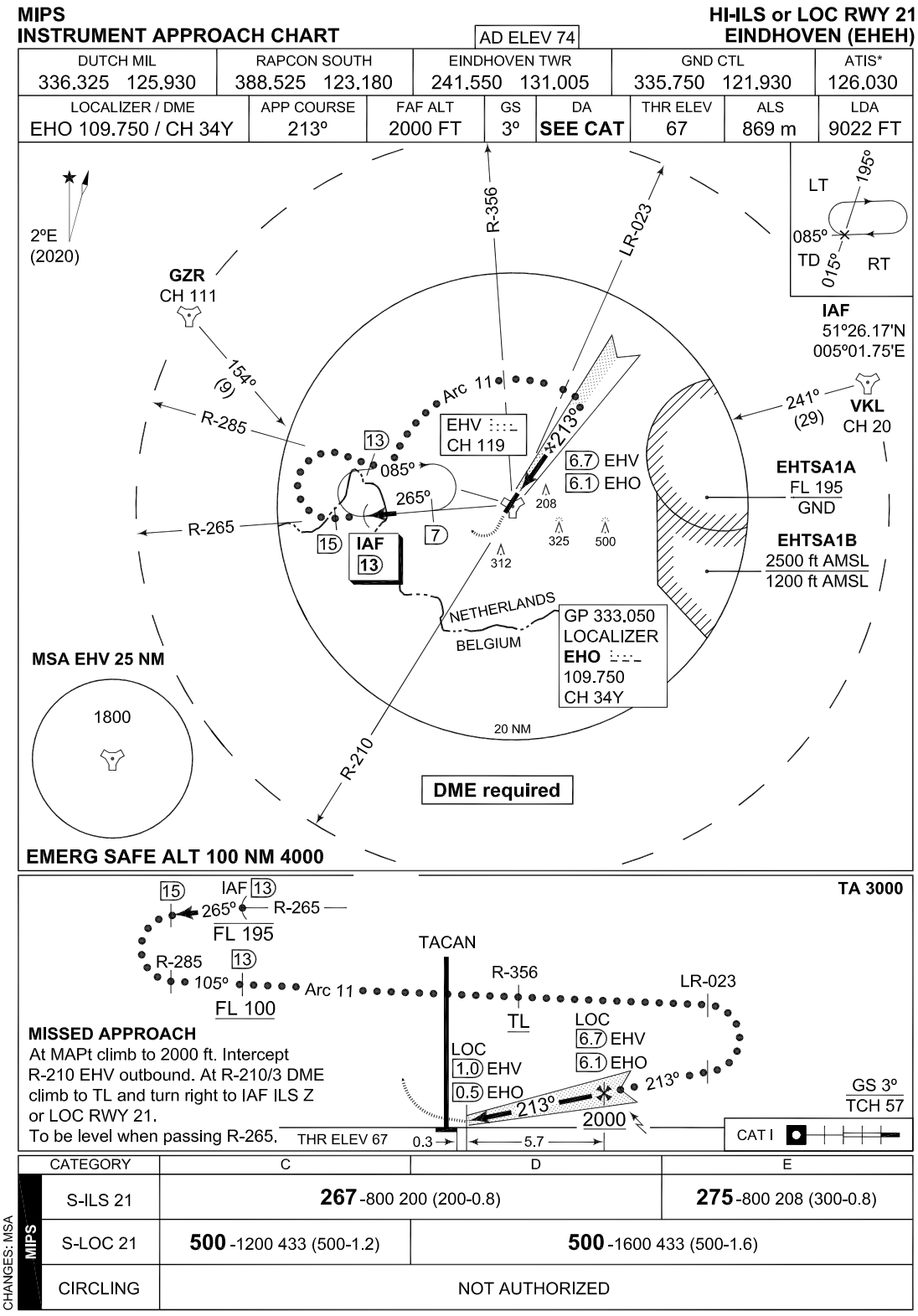
MISSED APPROACH
Climb to 2000 ft AMSL inbound EH550. At EH550 start a climbing left turn to EHOJI and join the holding at 3000 ft AMSL. Inform ATC.

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)
EU-OPS DA(H) LNAV / VNAV	**324** -550 250 (300-0.8/1.3)			**329** -600 255 (300-0.8/1.3)
EU-OPS 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

CHANGES: MSA

RNLAF 09 SEP 2021


MIPS
INSTRUMENT APPROACH CHART
AD ELEV 74
HI-ILS 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
2°E (2020)
GZR CH 111
154° (9)
R-285
R-265
R-356
LR-023
Arc 11
EHV CH 119
213°
085°
265°
6.7 EHV
6.1 EHO
208
325
500
312
IAF 13
15
7
LT
195°
085°
TD
015°
RT
IAF
51°26.17'N
005°01.75'E
241° (29)
VKL CH 20
EHTSA1A
FL 195
GND
EHTSA1B
2500 ft AMSL
1200 ft AMSL
NETHERLANDS
BELGIUM
GP 333.050
LOCALIZER
EHO
109.750
CH 34Y
MSA EHV 25 NM
1800
20 NM
R-210
DME required
EMERG SAFE ALT 100 NM 4000
TA 3000
IAF 13
265°
R-265
FL 195
R-285
105°
Arc 11
FL 100
TACAN
R-356
LR-023
TL
LOC
6.7 EHV
6.1 EHO
LOC
1.0 EHV
0.5 EHO
213°
2000
GS 3°
TCH 57
CAT I
THR ELEV 67
0.3
5.7
MISSED APPROACH
At MAPt climb to 2000 ft. Intercept
R-210 EHV outbound. At R-210/3 DME
climb to TL and turn right to IAF ILS Z
or LOC RWY 21.
To be level when passing R-265.
CATEGORY C D E
MIPS
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
RNLAF 09 SEP 2021

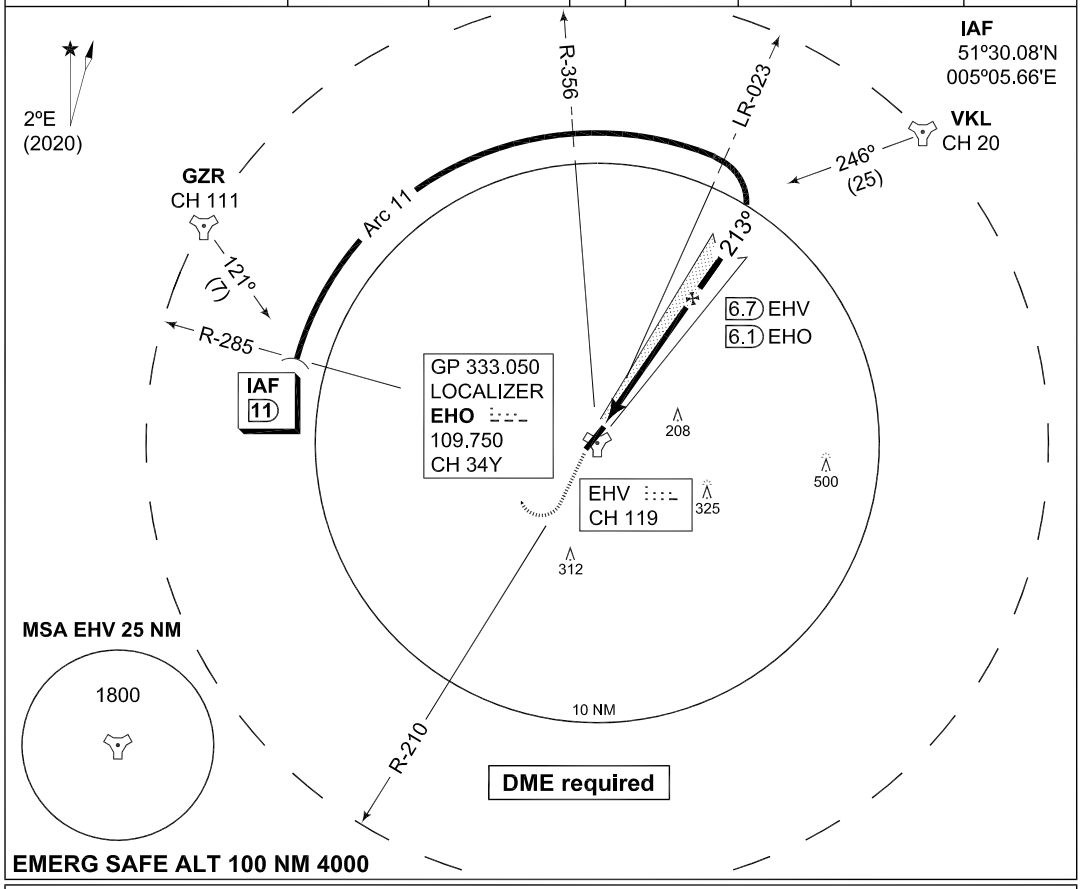
MIPS
INSTRUMENT APPROACH CHART

AD ELEV 74

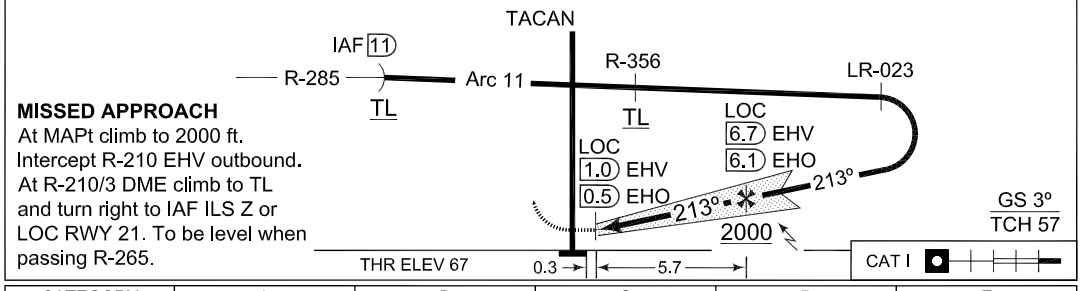
ILS Z or LOC RWY 21
EINDHOVEN (EHEH)

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

LOCALIZER / DME	APP COURSE	FAF ALT	GS	DA	THR ELEV	ALS	LDA
EHO 109.750 / CH 34Y	213°	2000 FT	3°	SEE CAT	67	869 m	9022 FT



TA 3000

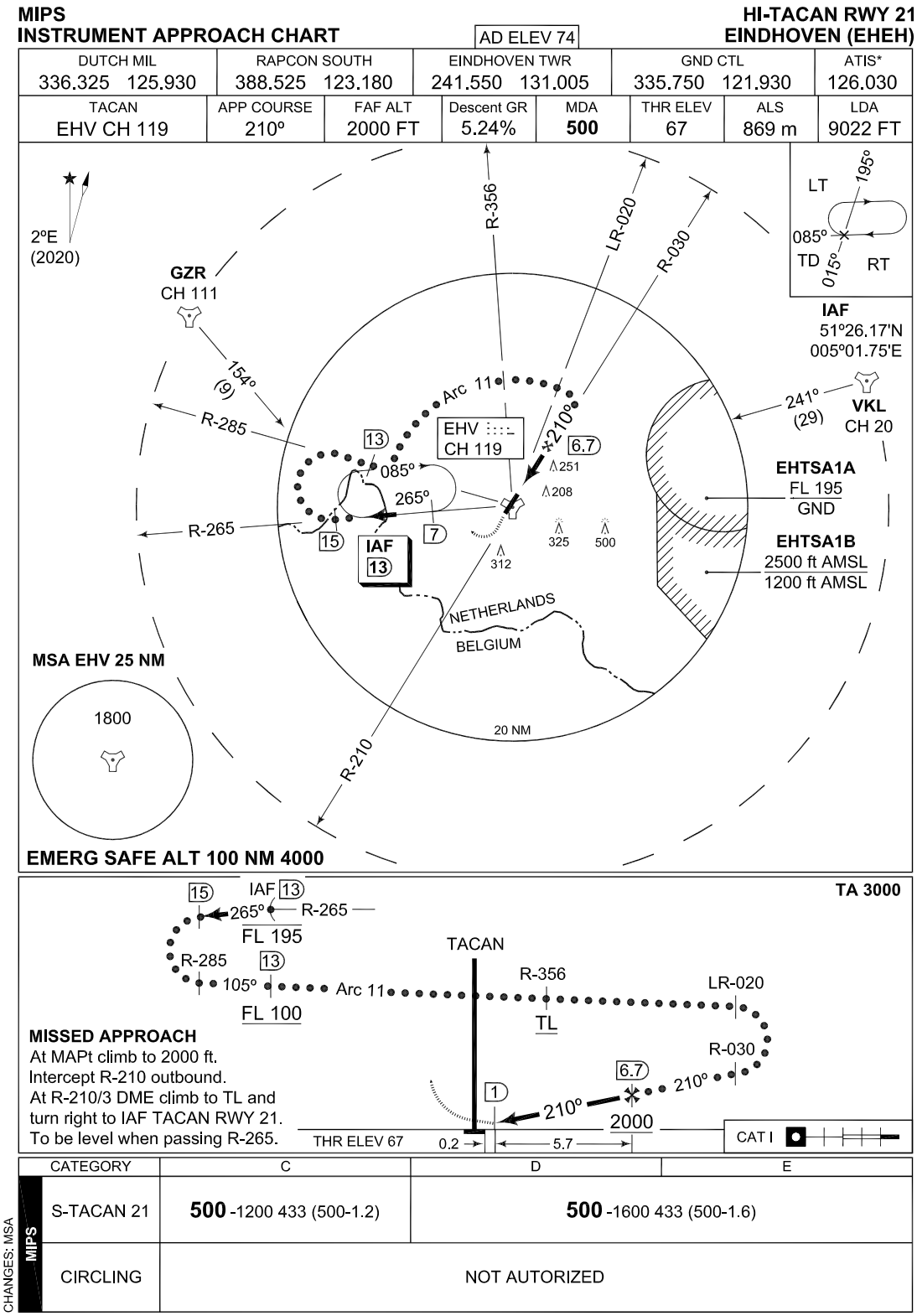


MISSED APPROACH
At MAPt climb to 2000 ft.
Intercept R-210 EHV outbound.
At R-210/3 DME climb to TL
and turn right to IAF ILS Z or
LOC RWY 21. To be level when
passing R-265.

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
AD ELEV 74
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
2°E (2020)
GZR CH 111
154° (9)
R-285
R-265
R-356
LR-020
R-030
R-210
Arc 11
EHV CH 119
210°
085°
265°
IAF 13
LT
195°
085°
TD
015°
RT
IAF
51°26.17'N
005°01.75'E
241° (29)
VKL CH 20
EHTSA1A
FL 195
GND
EHTSA1B
2500 ft AMSLL
1200 ft AMSL
NETHERLANDS
BELGIUM
MSA EHV 25 NM
1800
20 NM
EMERG SAFE ALT 100 NM 4000
TA 3000
IAF 13
265°
R-265
FL 195
R-285
105°
Arc 11
FL 100
TACAN
R-356
LR-020
TL
R-030
210°
2000
MISSED APPROACH
At MAPt climb to 2000 ft.
Intercept R-210 outbound.
At R-210/3 DME climb to TL and
turn right to IAF TACAN RWY 21.
To be level when passing R-265.
THR ELEV 67
0.2
5.7
CAT I
CATEGORY
C
D
E
S-TACAN 21
500 -1200 433 (500-1.2)
500 -1600 433 (500-1.6)
CIRCLING
NOT AUTORIZED
CHANGES: MSA
MIPS
RNLAF 09 SEP 2021

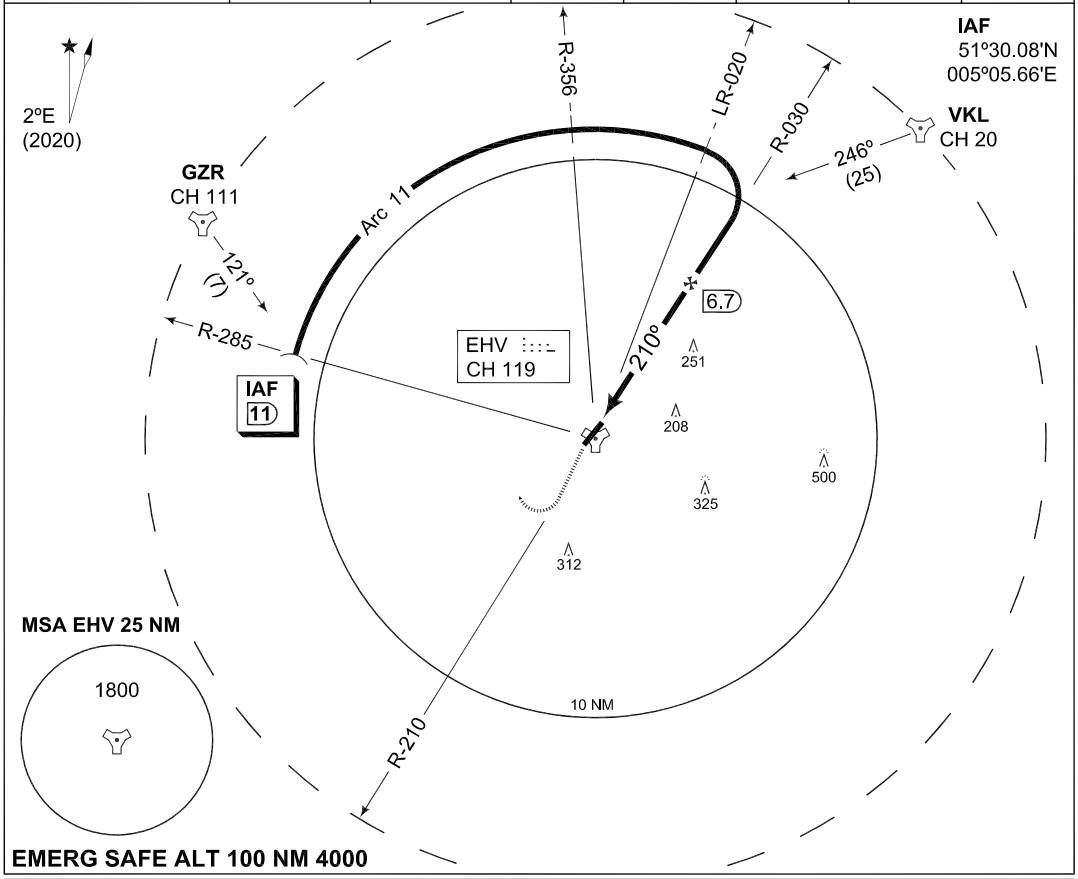
MIPS
INSTRUMENT APPROACH CHART

AD ELEV 74

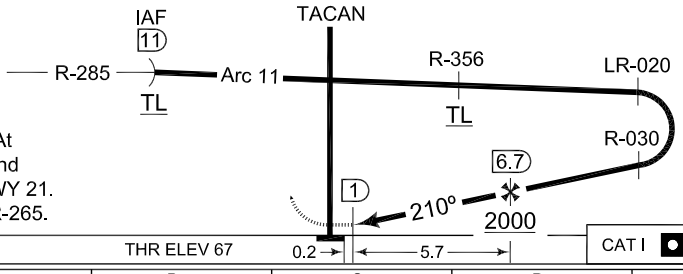
TACAN RWY 21
EINDHOVEN (EHEH)

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

TACAN	APP COURSE	FAF ALT	Descent GR	MDA	THR ELEV	ALS	LDA
EHV CH 119	210°	2000 FT	5.24%	**500**	67	869 m	9022 FT



TA 3000



MISSED APPROACH
At MAPt climb to 2000 ft.
Intercept R-210 outbound. At
R-210/3 DME climb to TL and
turn right to IAF TACAN RWY 21.
To be level when passing R-265.

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

CHANGES: MSA

RNLAF 09 SEP 2021

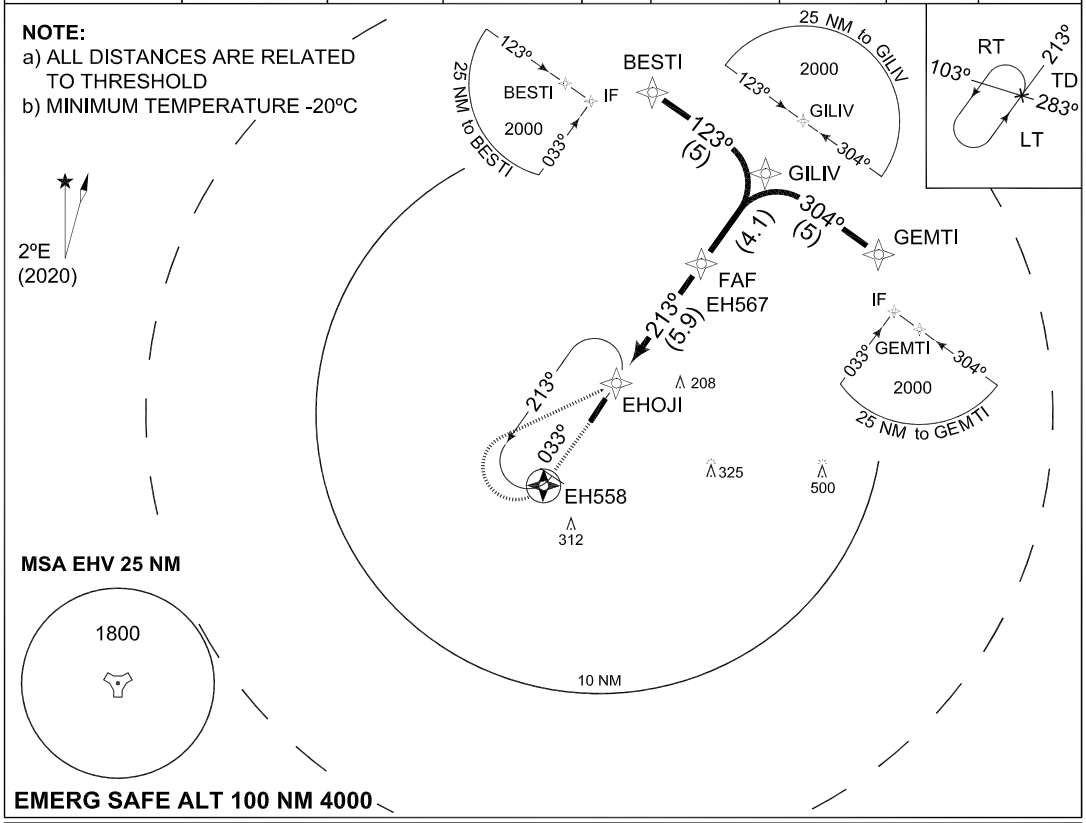
PANS OPS
INSTRUMENT APPROACH CHART

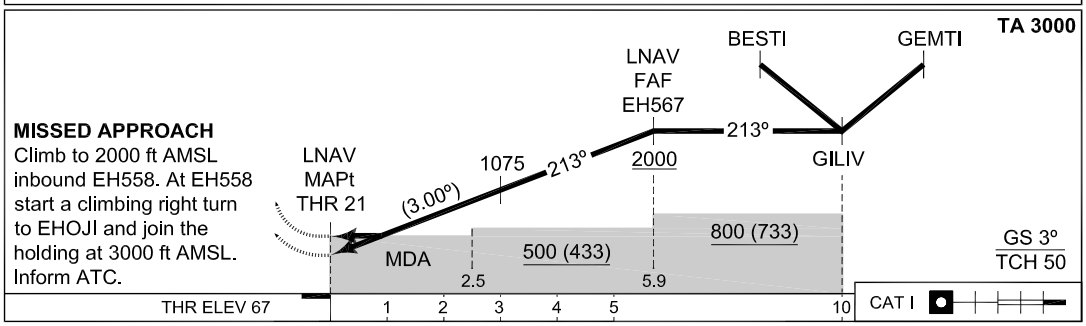
AD ELEV 74

RNP Z RWY 21
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

EGNOS CHANNEL	APP COURSE	FAF ALT	Descent GR	MDA	DA	THR ELEV	ALS	LDA
42264 E21A	213°	2000 FT	5.24% / 3°	**450**	**SEE CAT**	67	869 m	9022 FT





	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

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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 240º 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 145º 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

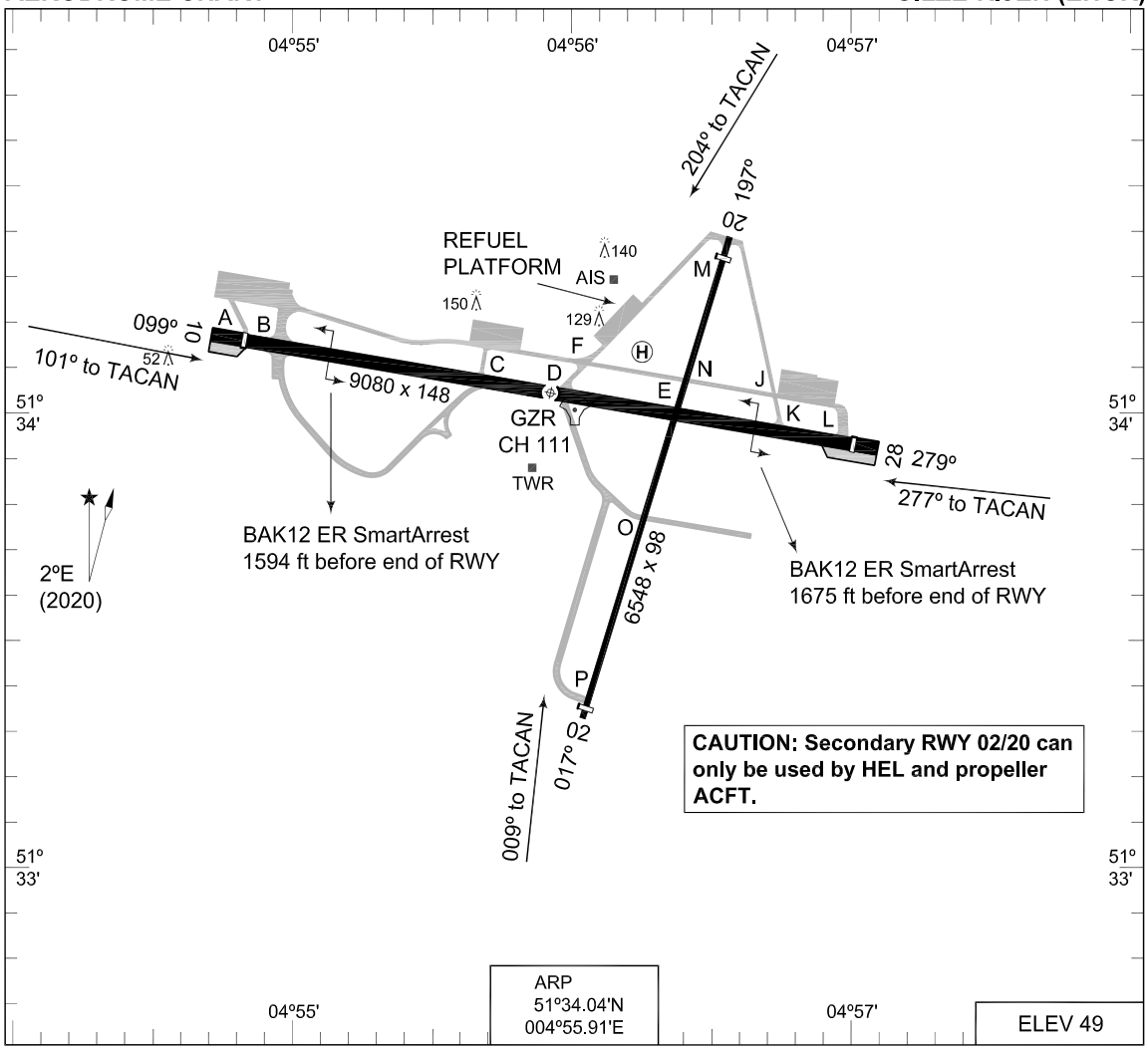
EHGR AD 2.23 Additional information

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.fdno@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)**



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

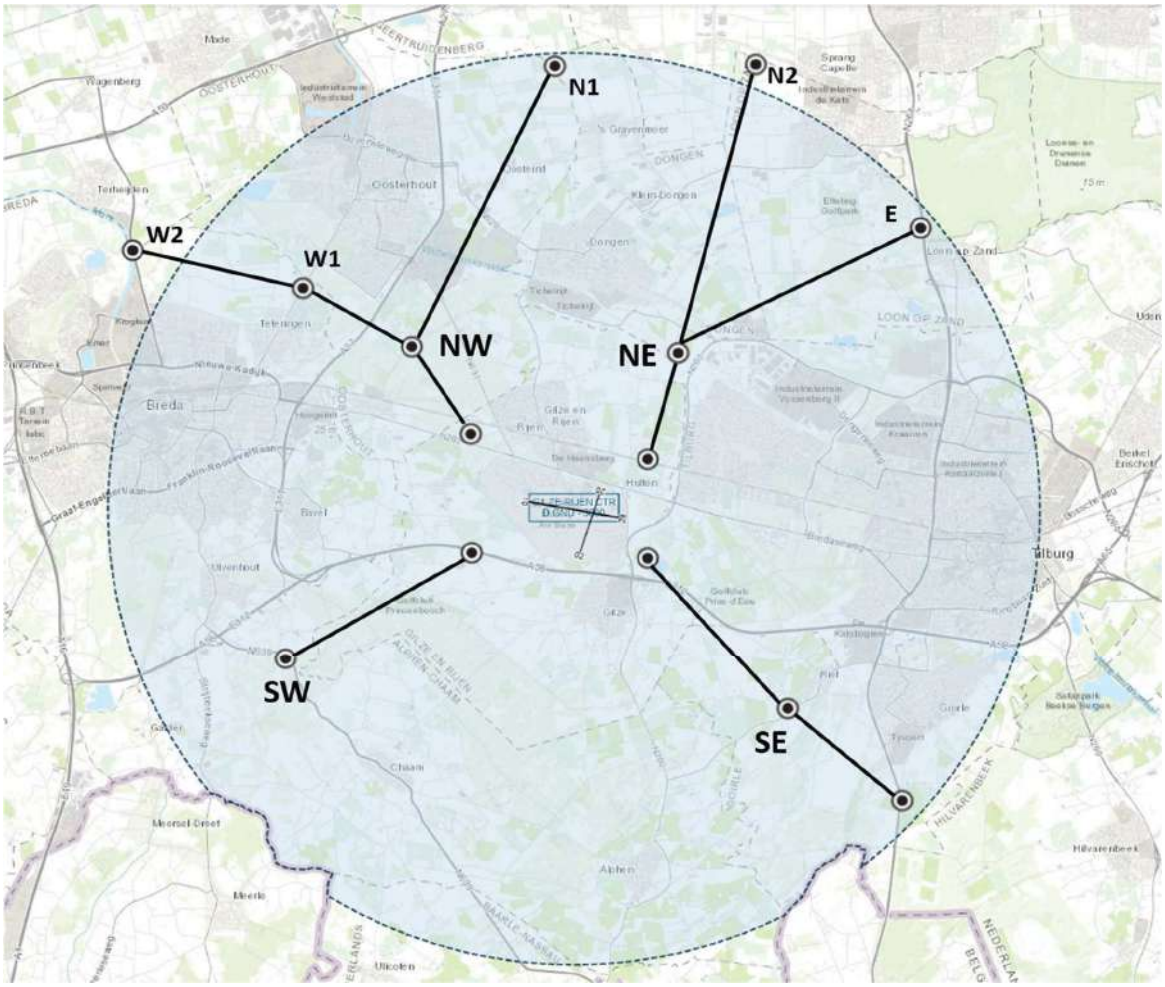
GILZE-RIJEN TWR	277.350	125.330	(Ground Control)	278.125	123.300				
GILZE-RIJEN ARRIVAL	359.975								
RAPCON WEST	399.725	123.580							

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

CHANGES: GROUND CONTROL FREQ

RNLAF 13 JUN 2024

LOCAL MAP

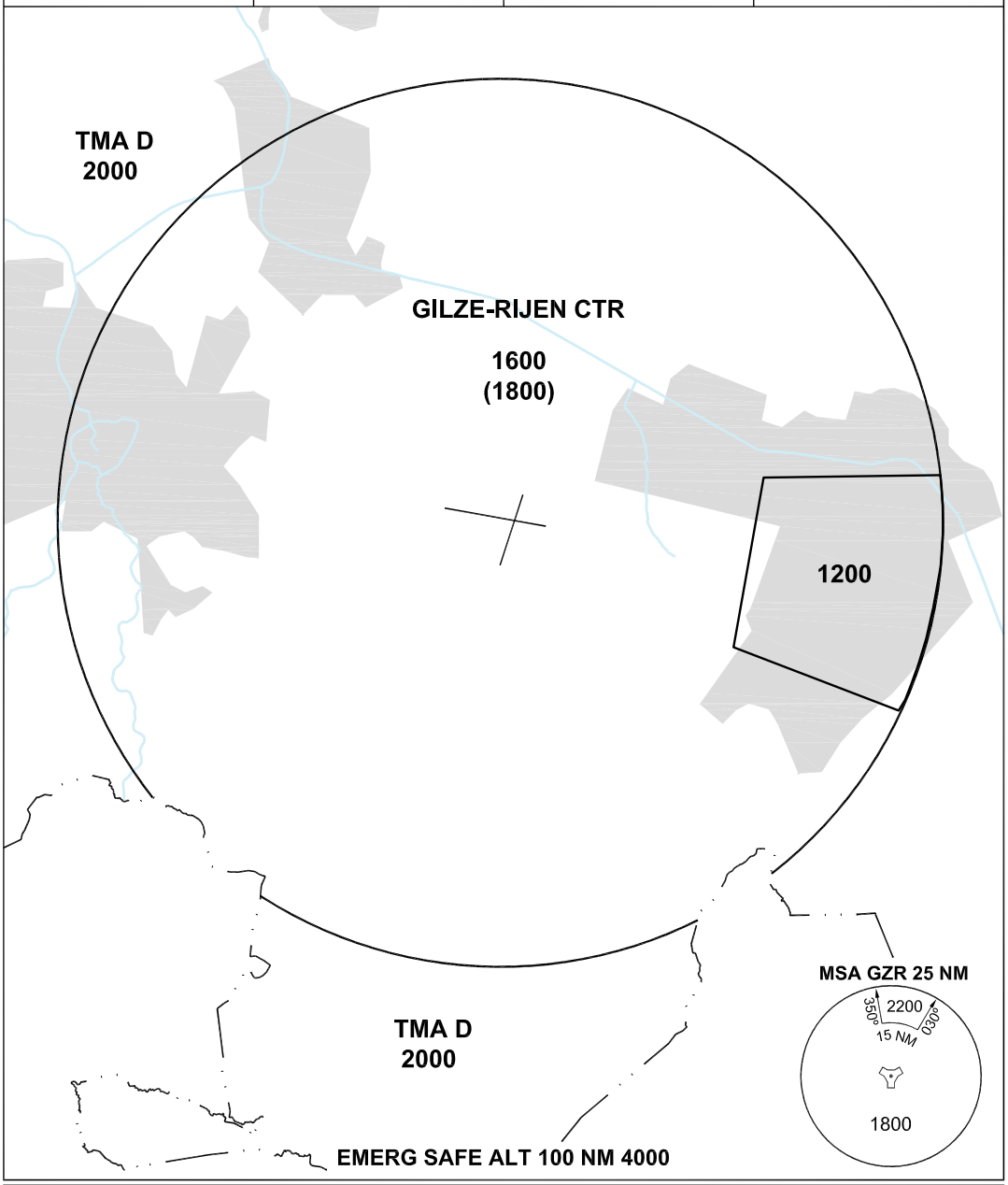


MIPS
MINIMUM VECTORING ALTITUDE

AD ELEV 49

MVA CHART
GILZE-RIJEN (EHGR)

DUTCH MIL	RAPCON WEST	GILZE-RIJEN TWR	GND CTL
336.325 125.930	399.725 123.580	277.350 125.330	278.125 123.300



- **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: GND CTL FREQ

RNLAF 13 JUN 2024

TERPS
INSTRUMENT DEPARTURE CHART

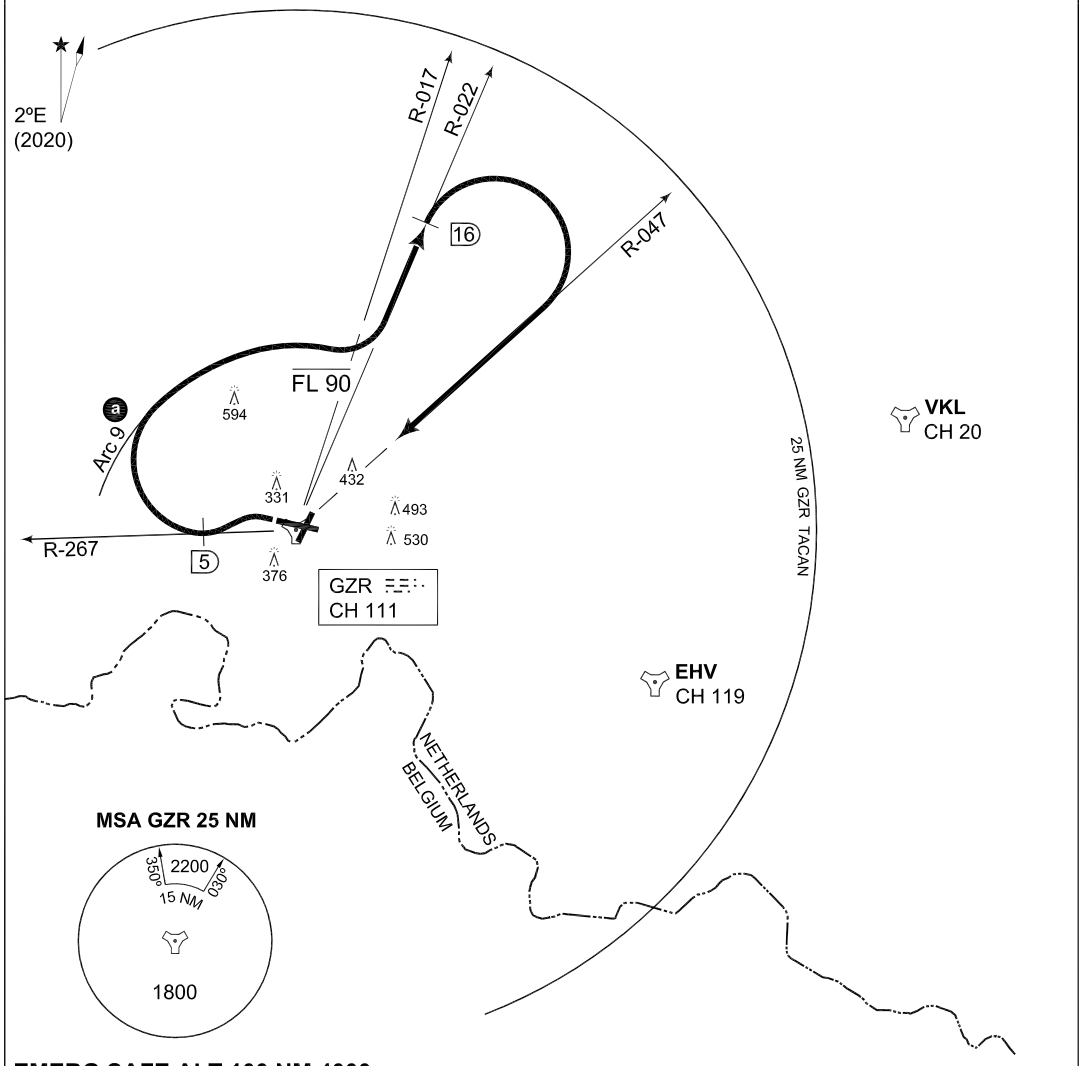
AD ELEV 49

GR1
GILZE-RIJEN (EHGR)

GND CTL	GILZE-RIJEN TWR	RAPCON WEST	DUTCH MIL
278.125 123.300	277.350 125.330	399.725 123.580	336.325 125.930

RWY	Knots	120	180	240	300	360	to
28	V/V (fpm)	480	720	960	1200	1440	150 **ft**

NOTE:
(a) 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: GND CTL FREQ

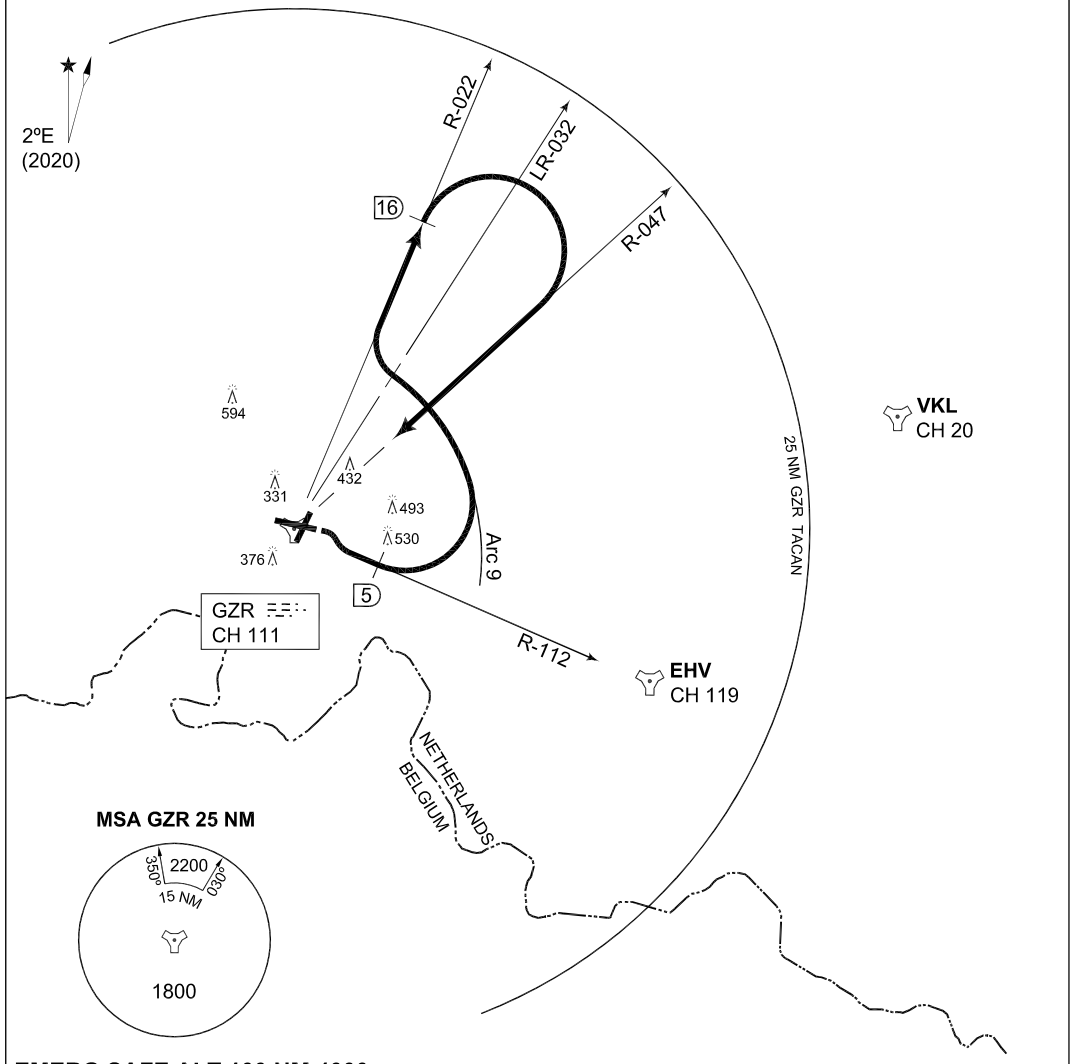
RNLAF 13 JUN 2024

TERPS
INSTRUMENT DEPARTURE CHART

AD ELEV 49

GR3
GILZE-RIJEN (EHGR)

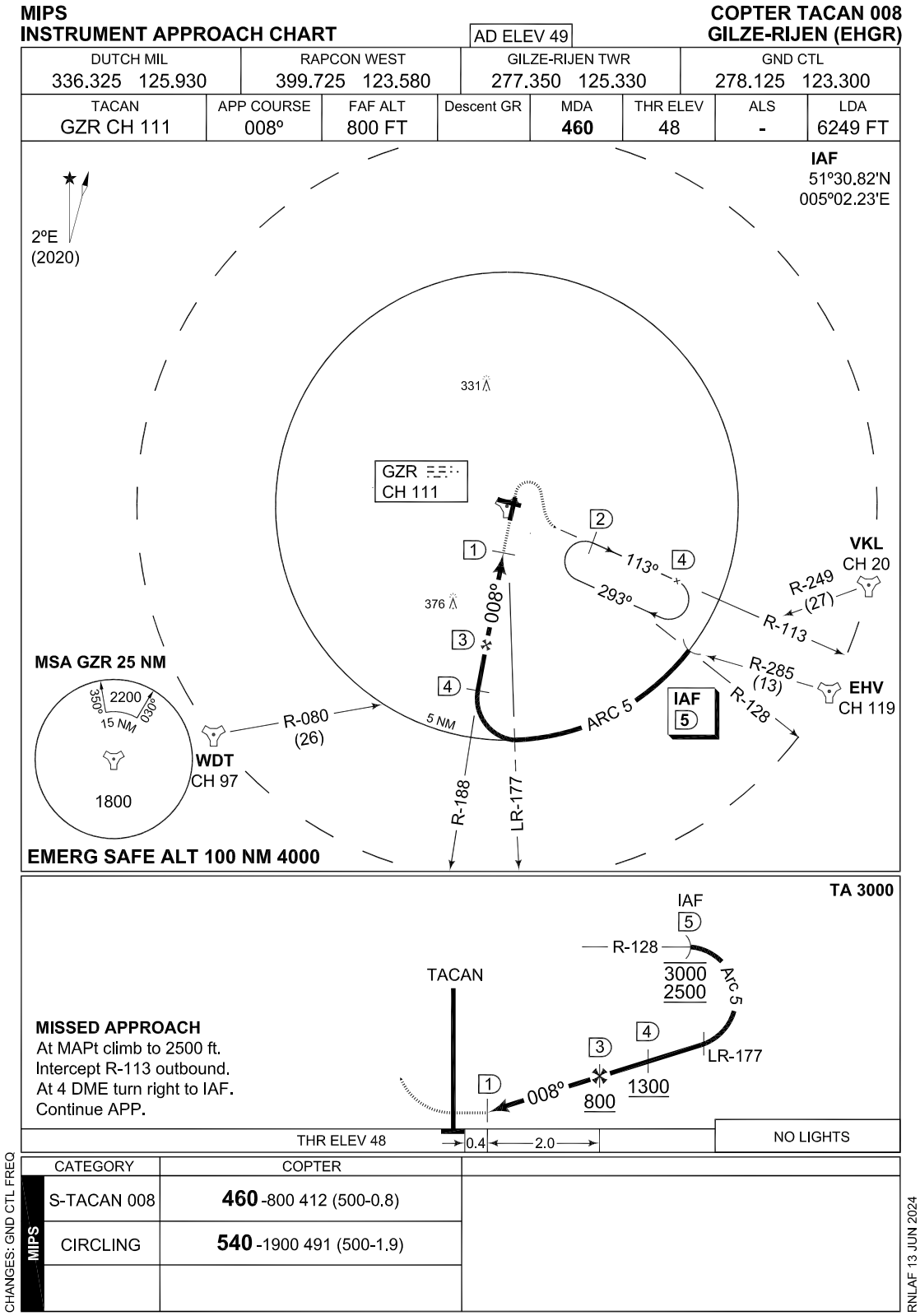
GND CTL	GILZE-RIJEN TWR	RAPCON WEST	DUTCH MIL
278.125 123.300	277.350 125.330	399.725 123.580	336.325 125.930

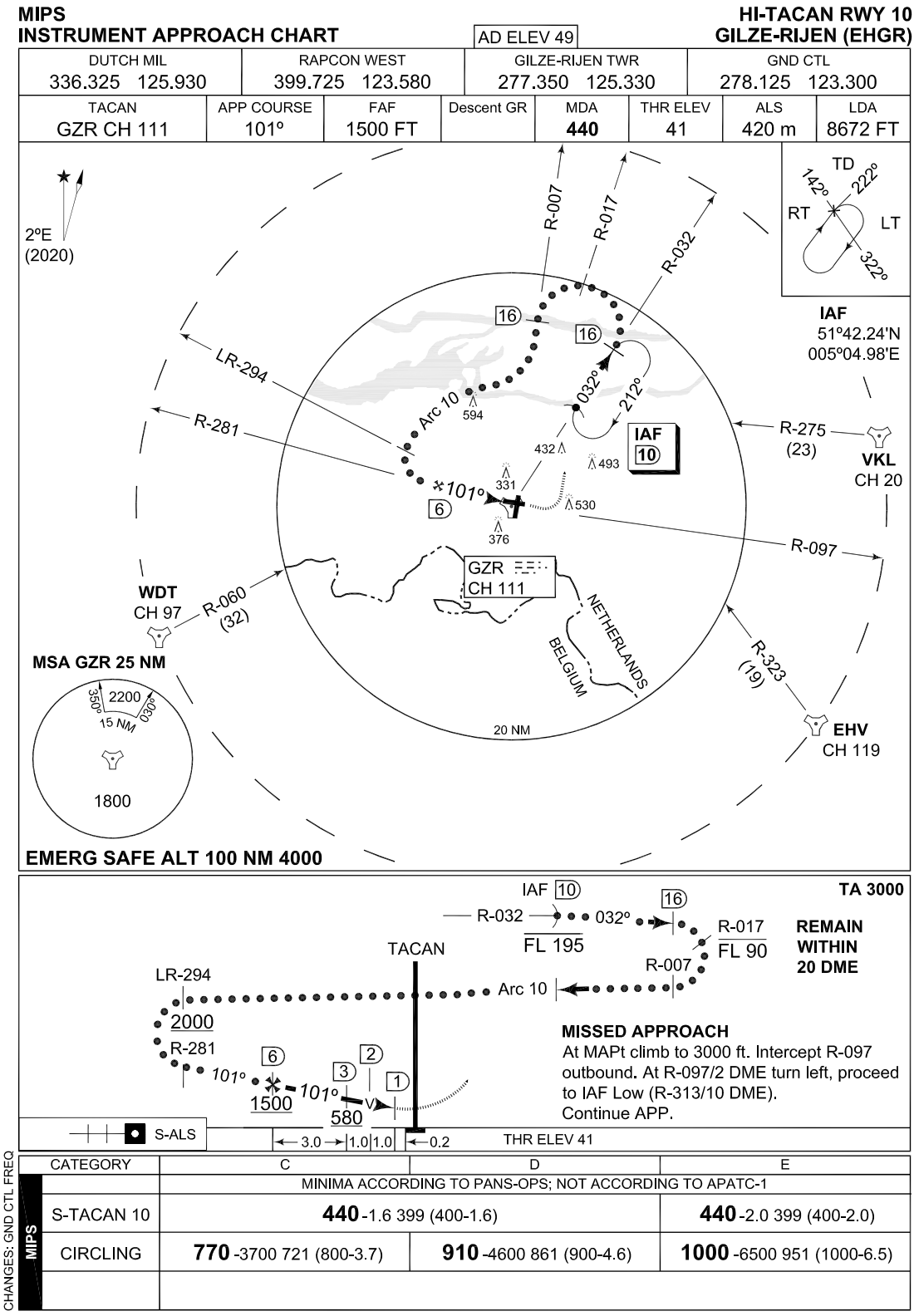


GILZE-RIJEN 3 (RWY 10)	- At 1 DME turn right to intercept R-112 outbound. - At 5 DME turn left to intercept Arc 9. - When crossing R-032 turn right to intercept R-022 outbound. - At 16 DME turn right to intercept R-047 inbound.

CHANGES: GND CTL FREQ

RNLAF 13 JUN 2024


MIPS
INSTRUMENT APPROACH CHART
AD ELEV 49
COPTER TACAN 008
GILZE-RIJEN (EHGR)
DUTCH MIL 336.325 125.930
RAPCON WEST 399.725 123.580
GILZE-RIJEN TWR 277.350 125.330
GND CTL 278.125 123.300
TACAN GZR CH 111
APP COURSE 008°
FAF ALT 800 FT
Descent GR
MDA 460
THR ELEV 48
ALS -
LDA 6249 FT
IAF
51°30.82'N
005°02.23'E
2°E
(2020)
331
376
GZR
CH 111
008°
113°
293°
VKL
CH 20
R-249
(27)
R-113
R-285
(13)
EHV
CH 119
R-128
IAF
5
ARC 5
5 NM
R-080
(26)
WDT
CH 97
MSA GZR 25 NM
2200
15 NM
350°
030°
1800
R-188
LR-177
EMERG SAFE ALT 100 NM 4000
TA 3000
IAF
5
R-128
3000
2500
Arc 5
TACAN
LR-177
008°
800
1300
MISSED APPROACH
At MAPt climb to 2500 ft.
Intercept R-113 outbound.
At 4 DME turn right to IAF.
Continue APP.
THR ELEV 48
0.4
2.0
NO LIGHTS
CATEGORY
COPTER
MIPS
S-TACAN 008
460 -800 412 (500-0.8)
CIRCLING
540 -1900 491 (500-1.9)
CHANGES: GND CTL FREQ
RNLAF 13 JUN 2024


MIPS
INSTRUMENT APPROACH CHART
AD ELEV 49
HI-TACAN RWY 10
GILZE-RIJEN (EHGR)
DUTCH MIL 336.325 125.930
RAPCON WEST 399.725 123.580
GILZE-RIJEN TWR 277.350 125.330
GND CTL 278.125 123.300
TACAN GZR CH 111
APP COURSE 101°
FAF 1500 FT
Descent GR
MDA 440
THR ELEV 41
ALS 420 m
LDA 8672 FT
2°E (2020)
R-007
R-017
R-032
LR-294
R-281
R-275 (23)
R-097
R-060 (32)
R-323 (19)
Arc 10
594
032°
212°
IAF 10
432
493
331
530
376
101°
6
16
TD
142°
222°
RT
LT
322°
IAF
51°42.24'N
005°04.98'E
VKL CH 20
WDT CH 97
GZR CH 111
NETHERLANDS
BELGIUM
20 NM
MSA GZR 25 NM
350°
2200
090°
15 NM
1800
EMERG SAFE ALT 100 NM 4000
IAF 10
R-032
032°
16
R-017
FL 90
R-007
FL 195
TACAN
LR-294
Arc 10
2000
R-281
101°
6
3
2
1
1500
101°
580
V
TA 3000
REMAIN WITHIN 20 DME
MISSED APPROACH
At MAPt climb to 3000 ft. Intercept R-097 outbound. At R-097/2 DME turn left, proceed to IAF Low (R-313/10 DME). Continue APP.
S-ALS
3.0
1.0
1.0
0.2
THR ELEV 41
CATEGORY 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 770 -3700 721 (800-3.7) 910 -4600 861 (900-4.6) 1000 -6500 951 (1000-6.5)
MIPS
CHANGES: GND CTL FREQ
RNLAF 13 JUN 2024

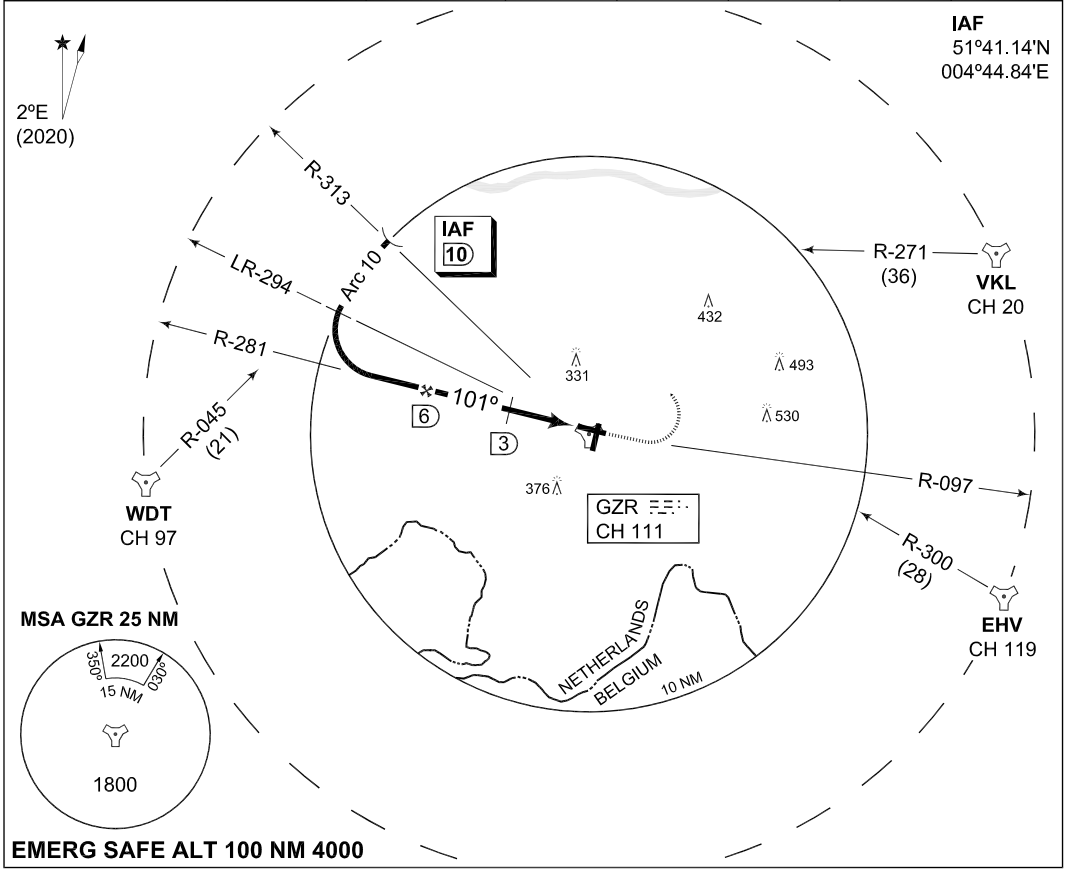
MIPS
INSTRUMENT APPROACH CHART

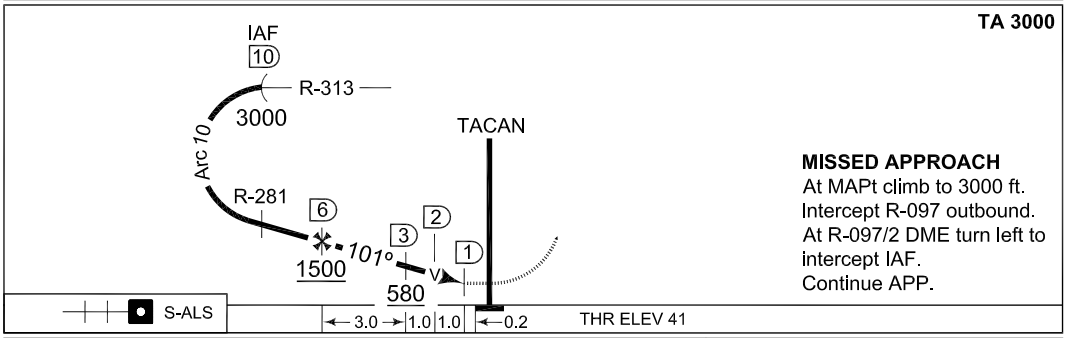
AD ELEV 49

TACAN RWY 10
GILZE-RIJEN (EHGR)

DUTCH MIL	RAPCON WEST	GILZE-RIJEN TWR	GND CTL
336.325 125.930	399.725 123.580	277.350 125.330	278.125 123.300

TACAN	APP COURSE	FAF ALT	Descent GR	MDA	THR ELEV	ALS	LDA
GZR CH 111	101°	1500 FT		**440**	41	420 m	8672 FT



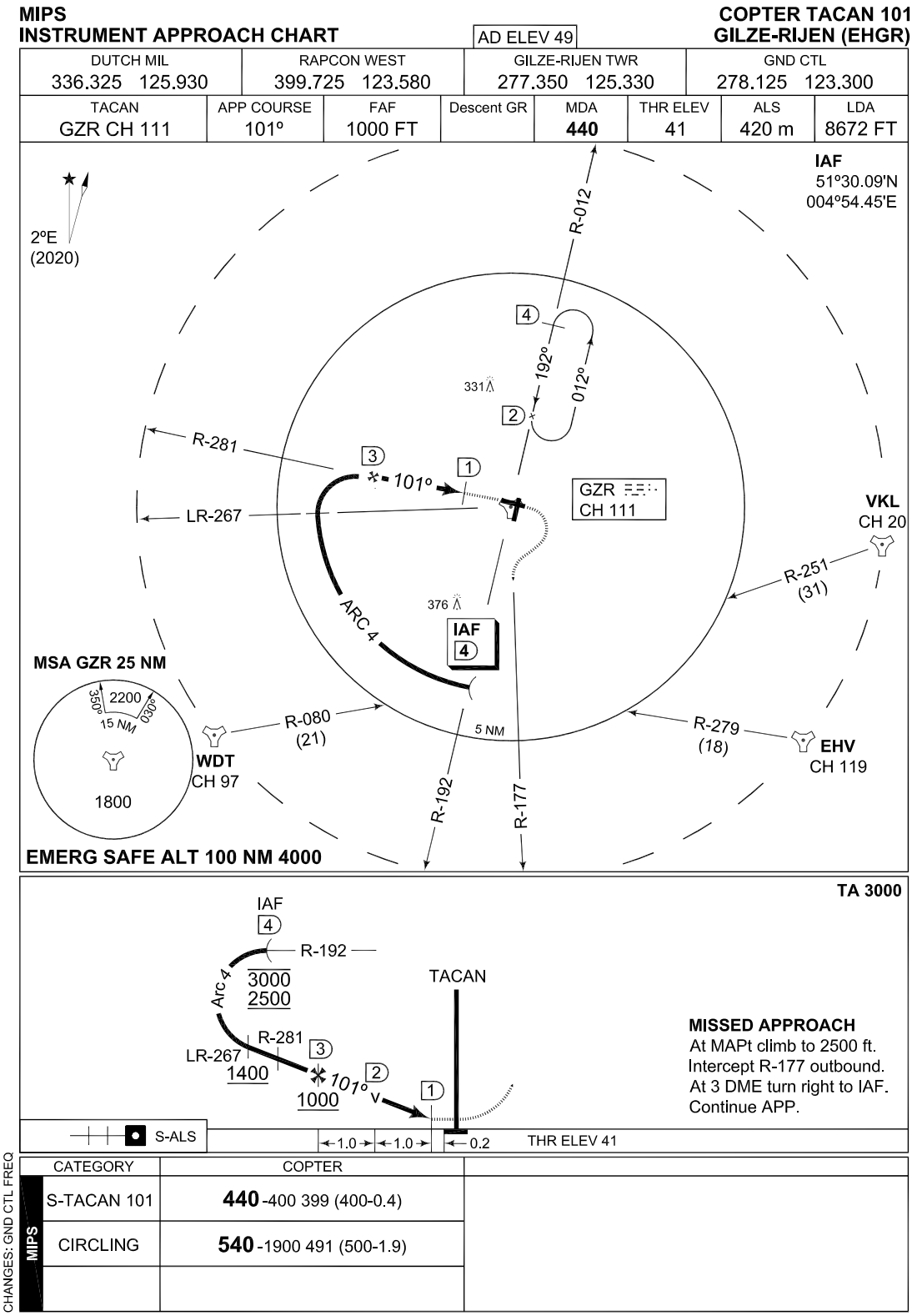


CATEGORY	A	B	C	D	E
	MINIMA ACCORDING TO PANS-OPS; NOT ACCORDING TO APATC-1				
S-TACAN 10	**440** -1.6 399 (400-1.6)				**440** -2.0 399 (400-2.0)
CIRCLING	**540** -1900 491 (500-1.9)	**670** -2800 621 (700-2.8)	**770** -3700 721 (800-3.7)	**910** -4600 861 (900-4.6)	**1000** -6500 951 (1000-6.5)

CHANGES: GND CTL FREQ

MIPS

RNLAF 13 JUN 2024


MIPS
INSTRUMENT APPROACH CHART
AD ELEV 49
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 278.125 123.300
TACAN GZR CH 111
APP COURSE 101°
FAF 1000 FT
Descent GR
MDA 440
THR ELEV 41
ALS 420 m
LDA 8672 FT
IAF 51°30.09'N 004°54.45'E
2°E (2020)
R-012
192°
012°
331
R-281
LR-267
101°
GZR CH 111
VKL CH 20
R-251 (31)
376
ARC 4
IAF 4
MSA GZR 25 NM
2200
350°
030°
15 NM
1800
WDT CH 97
R-080 (21)
5 NM
R-279 (18)
EHV CH 119
R-192
R-177
EMERG SAFE ALT 100 NM 4000
TA 3000
IAF 4
R-192
Arc 4
3000
2500
TACAN
R-281
LR-267
1400
1000
101°
MISSED APPROACH
At MAPt climb to 2500 ft.
Intercept R-177 outbound.
At 3 DME turn right to IAF.
Continue APP.
S-ALS
1.0
1.0
0.2
THR ELEV 41
CATEGORY
COPTER
S-TACAN 101
440 -400 399 (400-0.4)
CIRCLING
540 -1900 491 (500-1.9)
MIPS
CHANGES: GND CTL FREQ
RNLAF13 JUN 2024

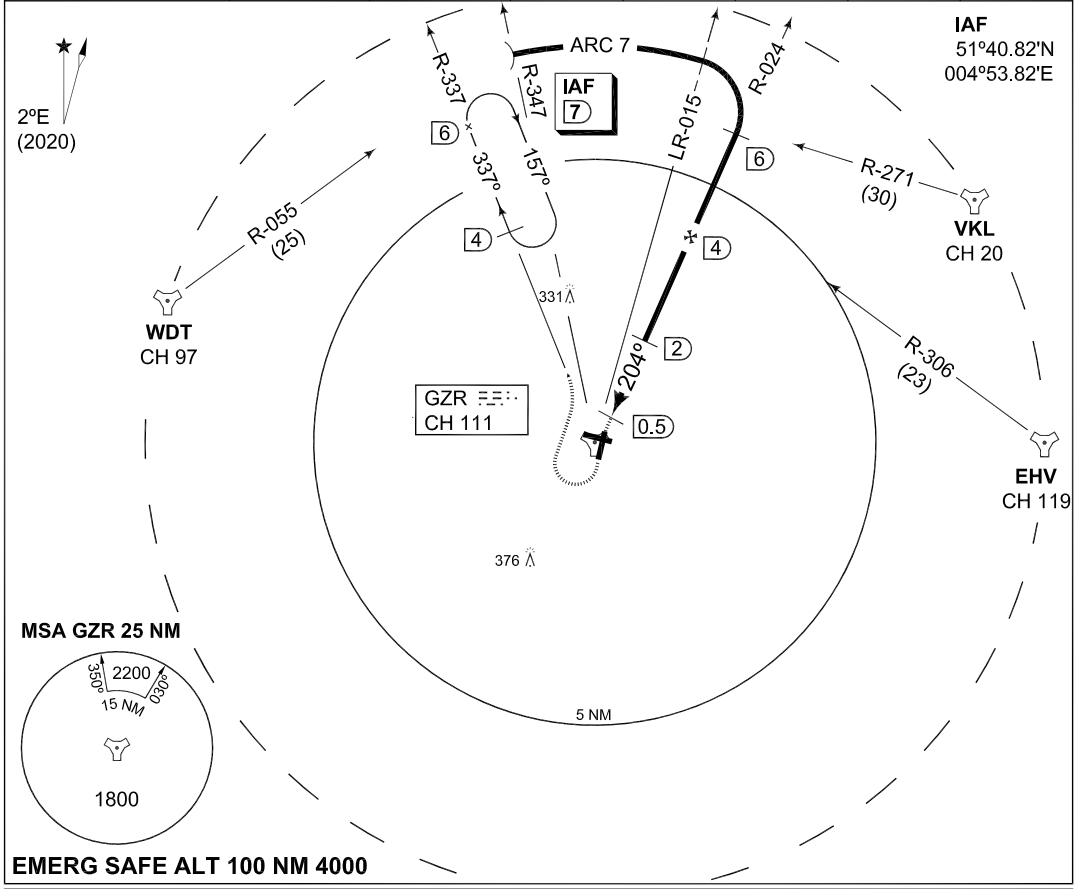
MIPS
INSTRUMENT APPROACH CHART

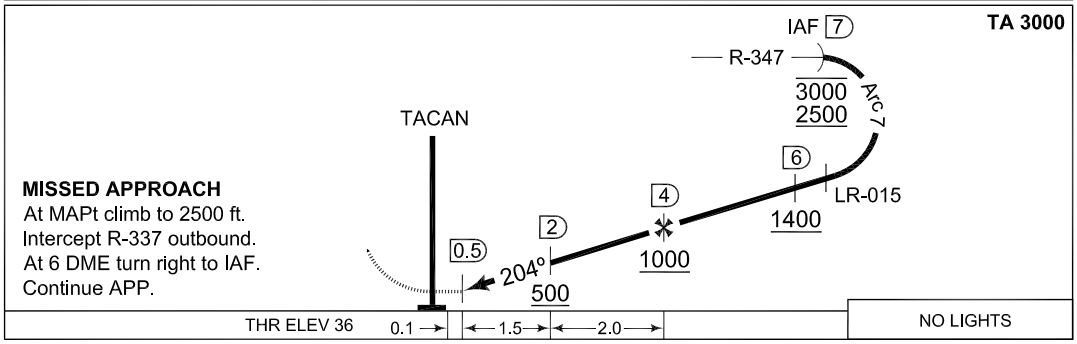
AD ELEV 49

COPTER TACAN 204
GILZE-RIJEN (EHGR)

DUTCH MIL	RAPCON WEST	GILZE-RIJEN TWR	GND CTL
336.325 125.930	399.725 123.580	277.350 125.330	278.125 123.300

TACAN	APP COURSE	FAF	Descent GR	MDA	THR ELEV	ALS	LDA
GZR CH 111	204°	1000 FT		**420**	36	-	6181 FT

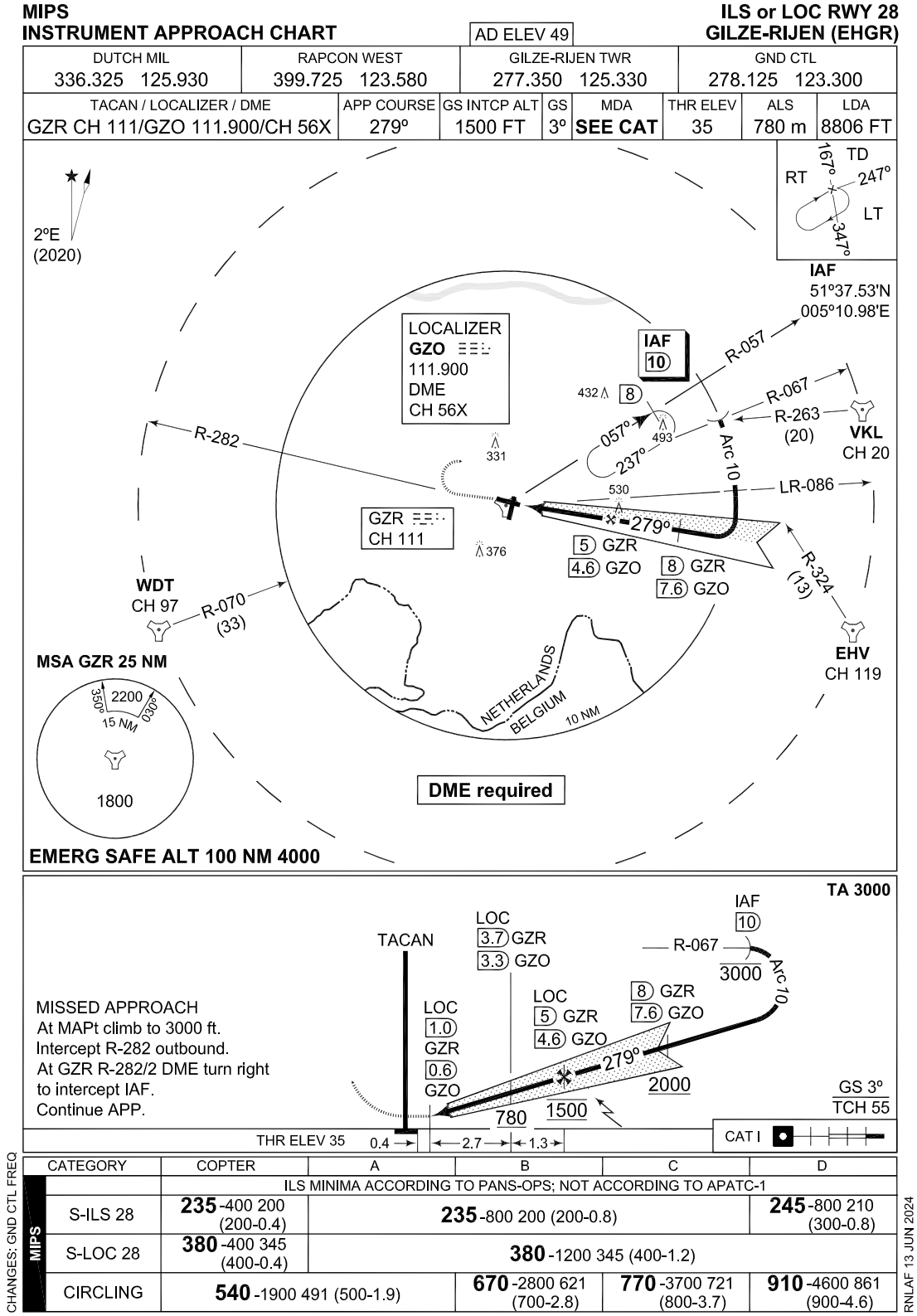


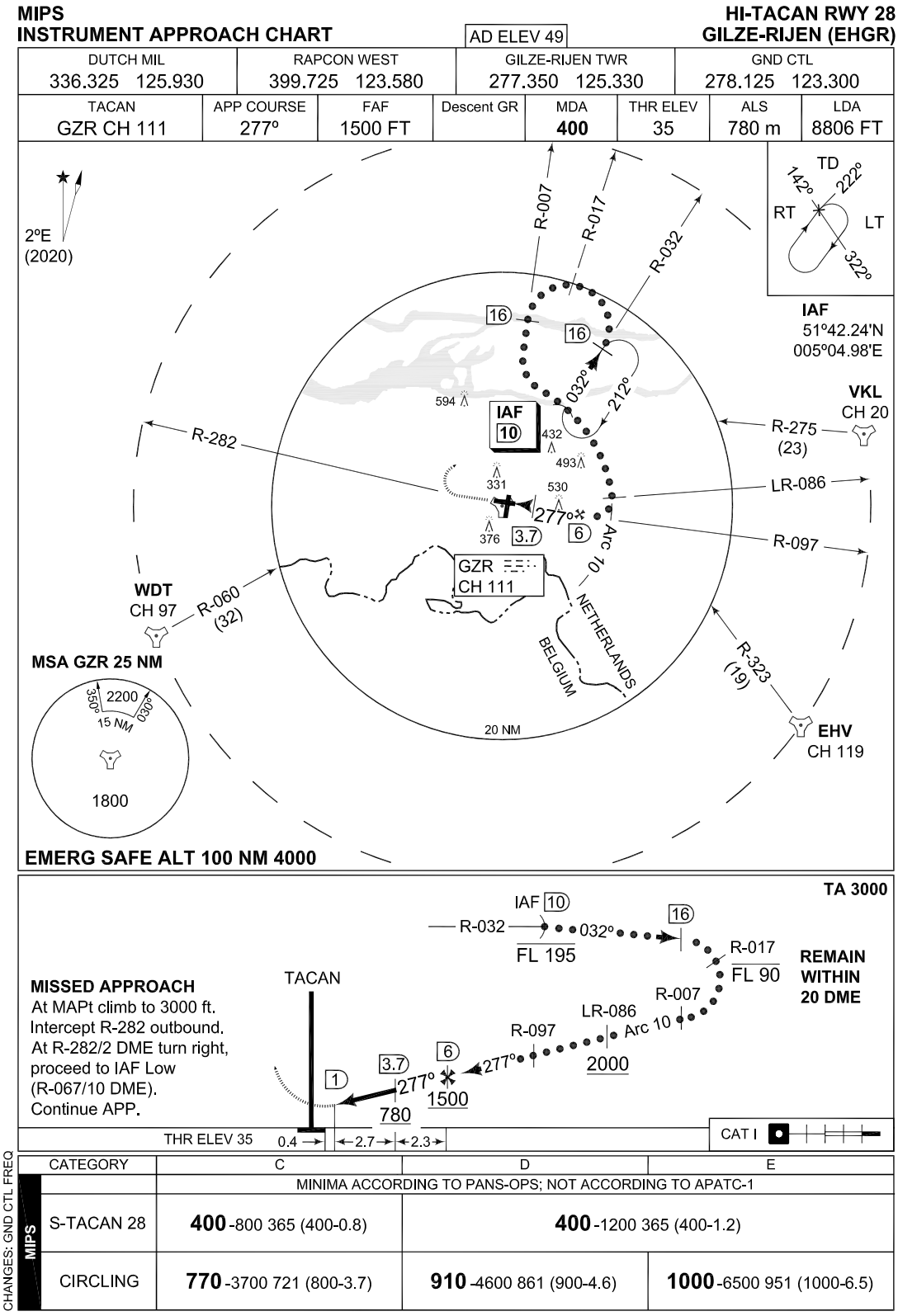


	CATEGORY	COPTER
MIPS	S-TACAN 204	**420** -800 384 (400-0.8)
	CIRCLING	**540** -1900 491 (500-1.9)

CHANGES: GND CTL FREQ

RNLAF 13 JUN 2024


MIPS
INSTRUMENT APPROACH CHART
AD ELEV 49
ILS or LOC 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 278.125 123.300
TACAN / LOCALIZER / DME
APP COURSE
GS INTCP ALT
GS
MDA
THR ELEV
ALS
LDA
GZR CH 111/GZO 111.900/CH 56X
279°
1500 FT
3°
SEE CAT
35
780 m
8806 FT
2°E
(2020)
RT
TD
LT
167°
247°
347°
IAF
51°37.53'N
005°10.98'E
LOCALIZER
GZO
111.900
DME
CH 56X
IAF
10
R-057
R-067
R-263
(20)
VKL
CH 20
R-282
057°
237°
Arc 10
LR-086
279°
GZR
CH 111
5 GZR
4.6 GZO
8 GZR
7.6 GZO
R-324
(13)
EHV
CH 119
WDT
CH 97
R-070
(33)
MSA GZR 25 NM
2200
15 NM
1800
NETHERLANDS
BELGIUM
10 NM
DME required
EMERG SAFE ALT 100 NM 4000
TA 3000
TACAN
LOC
3.7 GZR
3.3 GZO
LOC
1.0
GZR
0.6
GZO
LOC
5 GZR
4.6 GZO
8 GZR
7.6 GZO
IAF
10
R-067
3000
Arc 10
279°
2000
1500
780
GS 3°
TCH 55
MISSED APPROACH
At MAPt climb to 3000 ft.
Intercept R-282 outbound.
At GZR R-282/2 DME turn right
to intercept IAF.
Continue APP.
THR ELEV 35
0.4
2.7
1.3
CAT I
CHANGES: GND CTL FREQ
MIPS
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)
RNLAF 13 JUN 2024



CATEGORY	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	**770** -3700 721 (800-3.7)	**910** -4600 861 (900-4.6)	**1000** -6500 951 (1000-6.5)

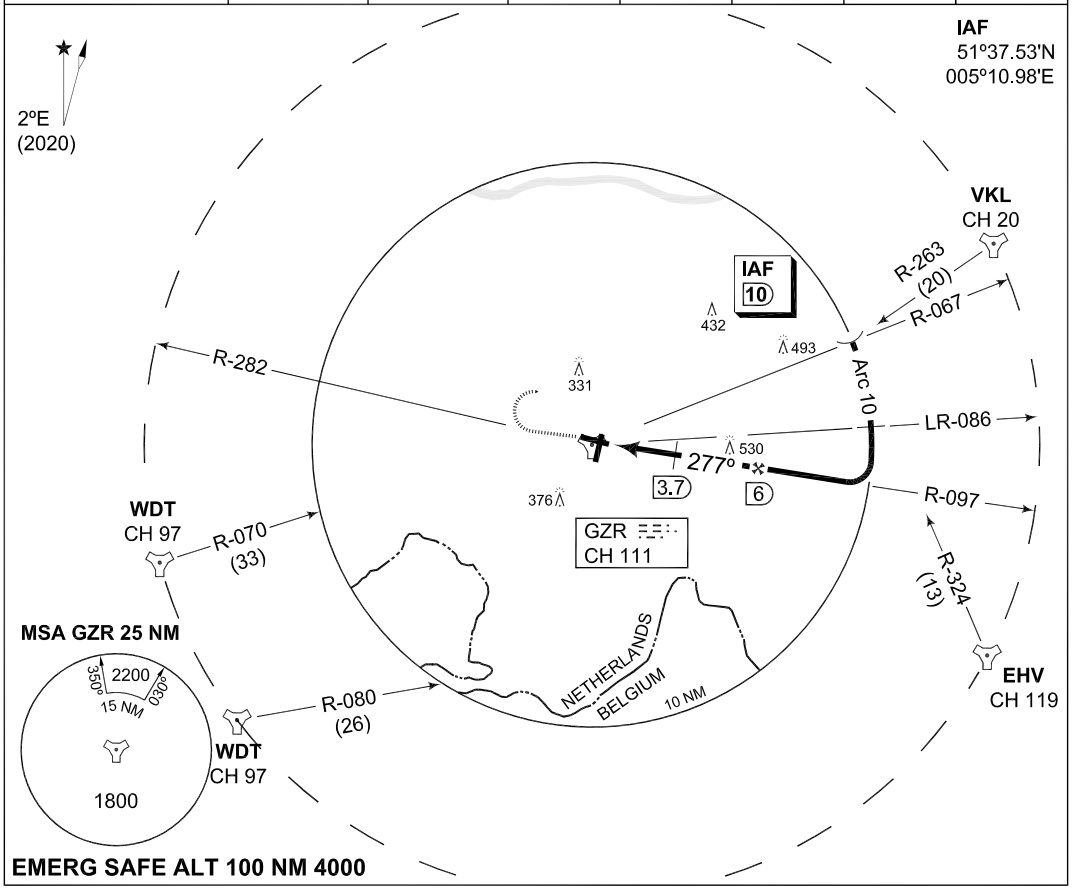
MIPS
INSTRUMENT APPROACH CHART

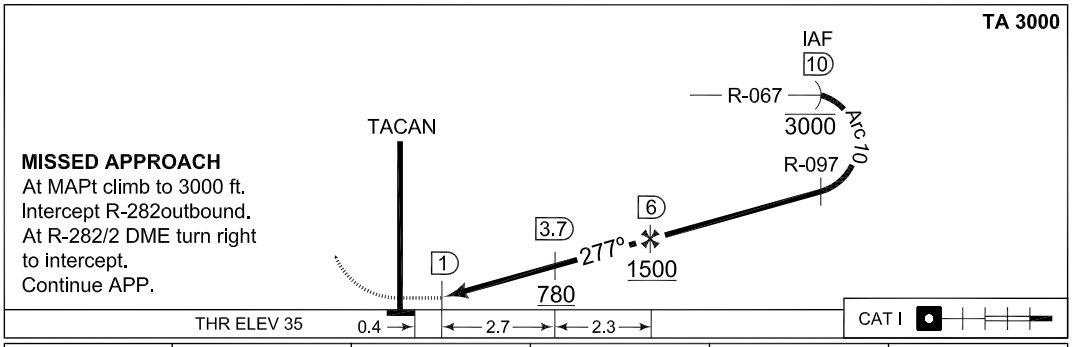
AD ELEV 49

TACAN RWY 28
GILZE-RIJEN (EHGR)

DUTCH MIL	RAPCON WEST	GILZE-RIJEN TWR	GND CTL
336.325 125.930	399.725 123.580	277.350 125.330	278.125 123.300

TACAN	APP COURSE	FAF	Descent GR	MDA	THR ELEV	ALS	LDA
GZR CH 111	277°	1500 FT		**400**	35	780 m	8806 FT



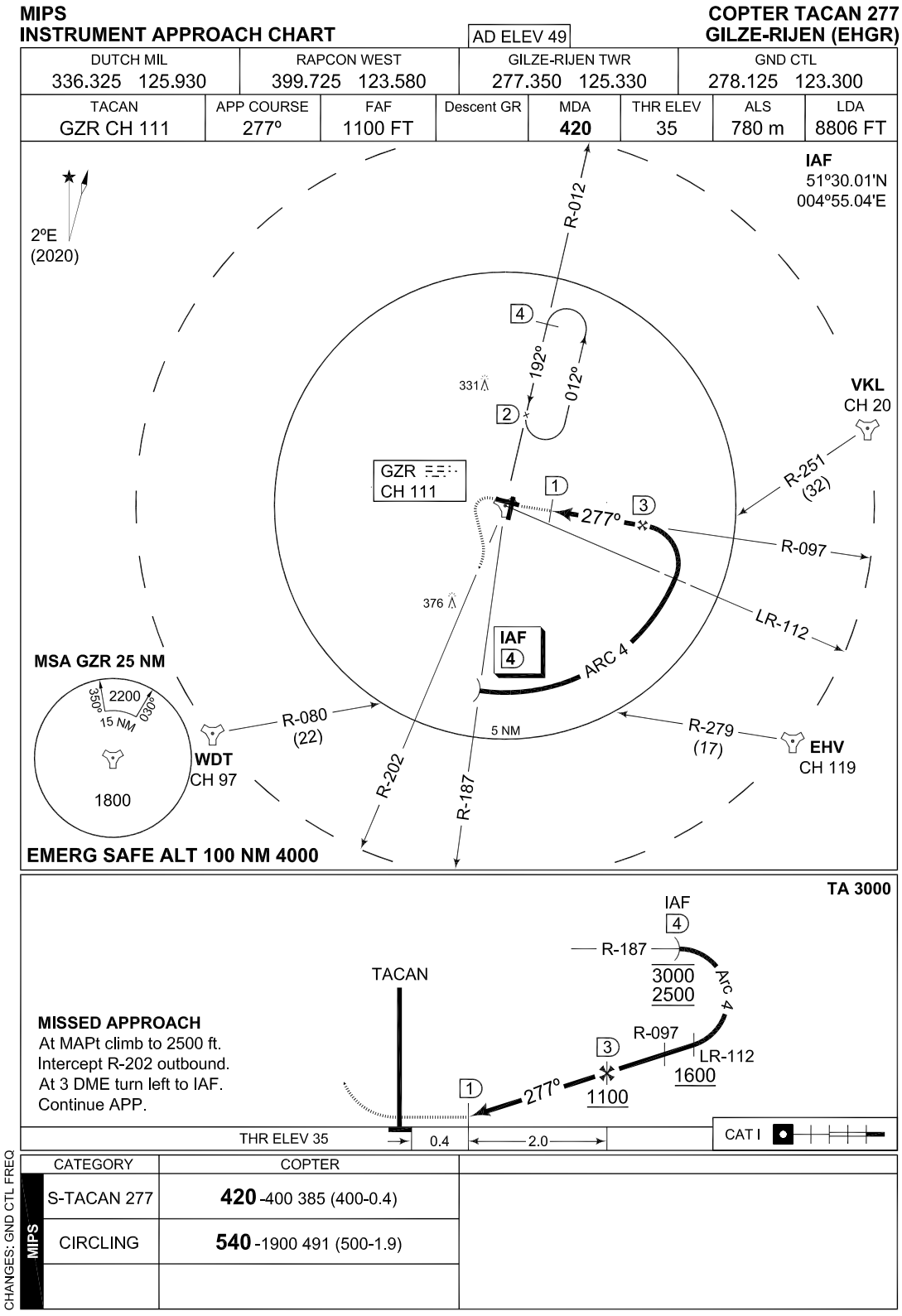


CATEGORY	A	B	C	D	E
	MINIMA ACCORDING TO PANS-OPS; NOT ACCORDING TO APATC-1				
S-TACAN 28	**400** -800 365 (400-0.8)			**400** -1200 365 (400-1.2)	
CIRCLING	**540** -1900 491 (500-1.9)	**670** -2800 621 (700-2.8)	**770** -3700 721 (800-3.7)	**910** -4600 861 (900-4.6)	**1000** -6500 951 (1000-6.5)

MIPS

CHANGES: GND CTL FREQ

RNLAF 13 JUN 2024


MIPS
INSTRUMENT APPROACH CHART
AD ELEV 49
COPTER TACAN 277
GILZE-RIJEN (EHGR)
DUTCH MIL 336.325 125.930
RAPCON WEST 399.725 123.580
GILZE-RIJEN TWR 277.350 125.330
GND CTL 278.125 123.300
TACAN GZR CH 111
APP COURSE 277°
FAF 1100 FT
Descent GR
MDA 420
THR ELEV 35
ALS 780 m
LDA 8806 FT
IAF
51°30.01'N
004°55.04'E
2°E
(2020)
R-012
192°
012°
331
VKL
CH 20
R-251
(32)
GZR
CH 111
277°
R-097
LR-112
376
IAF
ARC 4
MSA GZR 25 NM
350°
030°
2200
15 NM
1800
WDT
CH 97
R-080
(22)
5 NM
R-279
(17)
EHV
CH 119
R-202
R-187
EMERG SAFE ALT 100 NM 4000
TA 3000
IAF
R-187
3000
2500
ARC 4
TACAN
R-097
LR-112
1600
1100
277°
MISSED APPROACH
At MAPt climb to 2500 ft.
Intercept R-202 outbound.
At 3 DME turn left to IAF.
Continue APP.
THR ELEV 35
0.4
2.0
CAT I
CHANGES: GND CTL FREQ
MIPS
CATEGORY
COPTER
S-TACAN 277
420 -400 385 (400-0.4)
CIRCLING
540 -1900 491 (500-1.9)
RNLAF 13 JUN 2024

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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 Vliegkamp 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.

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 paragrapf 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	Declarded 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	Declarded 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	Declarded 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	Declarded 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	Declarded 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	Declarded 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	Declarded 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	Declarded 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	Declarded 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 015/150º MAG	210º 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 EHKD 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 Desciptor	WPT Ident	Fly Over	Course Mag°/(T°)	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 Desciptor	WPT Ident	Fly Over	Course Mag°/(T°)	Recom navaid	Dist nm	turn	Altitude (ft AMSL)	Speed (KIA S)	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 Desciptor	WPT Ident	Fly Over	Course Mag°/(T°)	Recom navaid	Dist nm	turn	Altitude (ft AMSL)	Speed (KIA S)	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 Desciptor	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 appoved climb after take-off to 1000 ft. The following departures have been established.

a. Whiskey departure: proceed via Hotel to Whiskey.

b. Oscar depature: 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”N004°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 270º, 090º, 350º and 170º 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. Seperation 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.

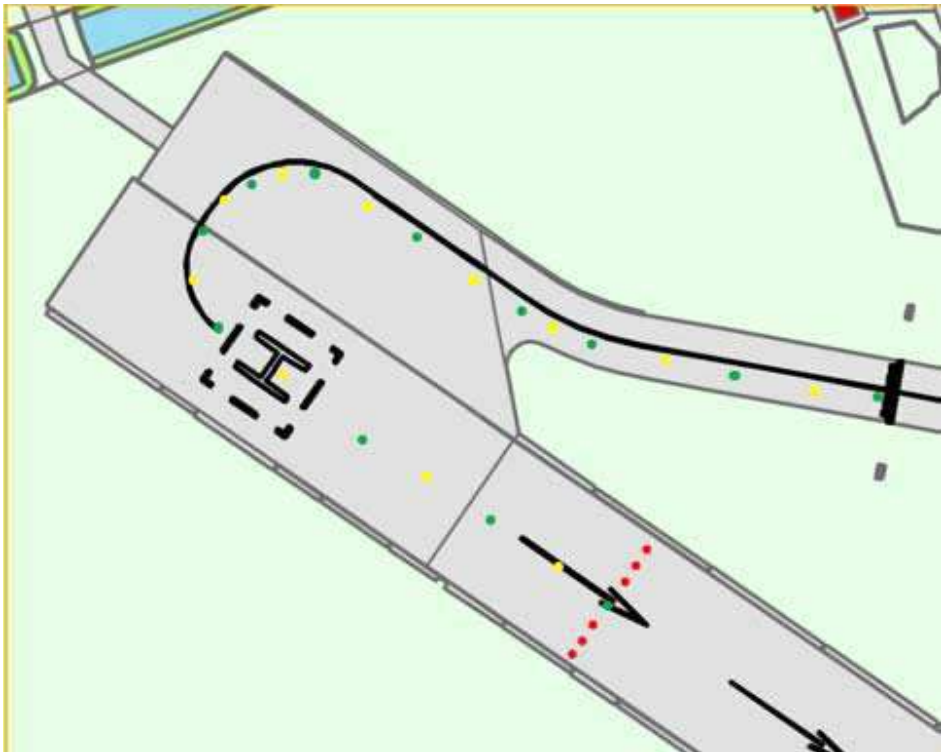
NOTE: In contrast to annex 2 military aerodromes define ceiling as 3/8 (SCT) or more.

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 uoto 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

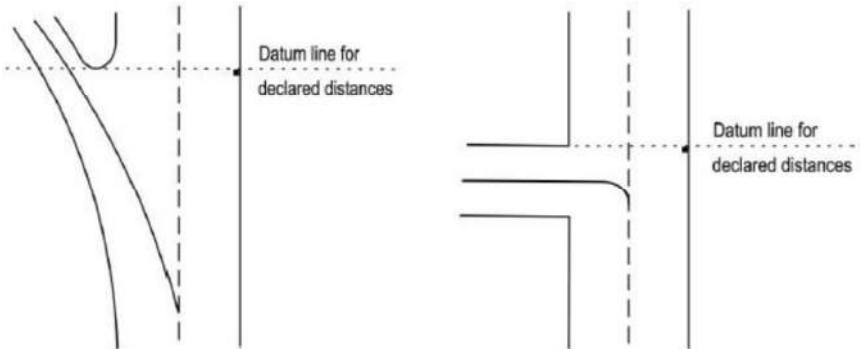
Requests must contain the following information.

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.fdno@mindef.nl
AFTN: EHMCZPZX
avlbl H24

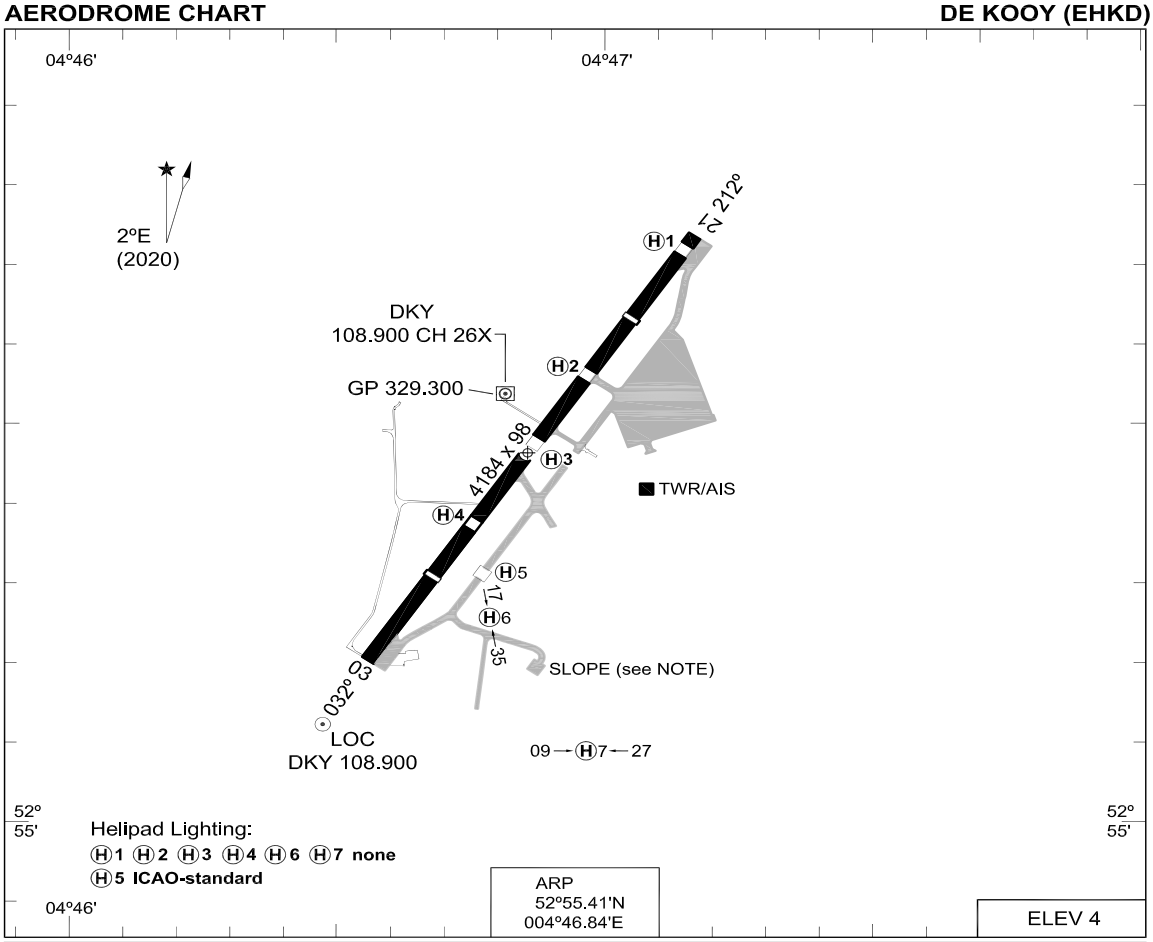
6. DETERMINATION OF DATUM LINE FOR INTERSECTION TAKE-OFF
The datum line from which the reduced runway declared distances for take-off should be determined is defined by the intersection of the downwind edge of the specific taxiway with the runway edge as shown in the diagram below. The loss of runway 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)**



RWY	PCN	TORA	ASDA	TODA	LDA				THR ELEV	THR PSN
21	62 F/A/W/T	4184	4184	4381	3377				2	52°55.58'N 004°47.03'E
03	62 F/A/W/T	3789	3789	3986	3334				3	52°55.19'N 004°46.59'E

DE KOOY TWR 379.750 120.130 121.730 or 379.750 (Ground Control)
DE KOOY ARRIVAL 372.150 124.230

	PROC. CRITERIA	RWY	GS	TCH	OTCH	RPI	CAT	MINIMA CRITERIA	MINIMA
SRA	MIPS	21					ABH	MIPS	500-1500 498 (500-1.5/2.3)
	MIPS	03					ABH	MIPS	420-1700 417 (500-1.7/1.9)

NOTE: SLOPE; WESTSIDE 5°, SOUTHSIDE 10°.

CHANGES: MINIMA

RNLAF 07 SEP 2023

LOCAL MAP

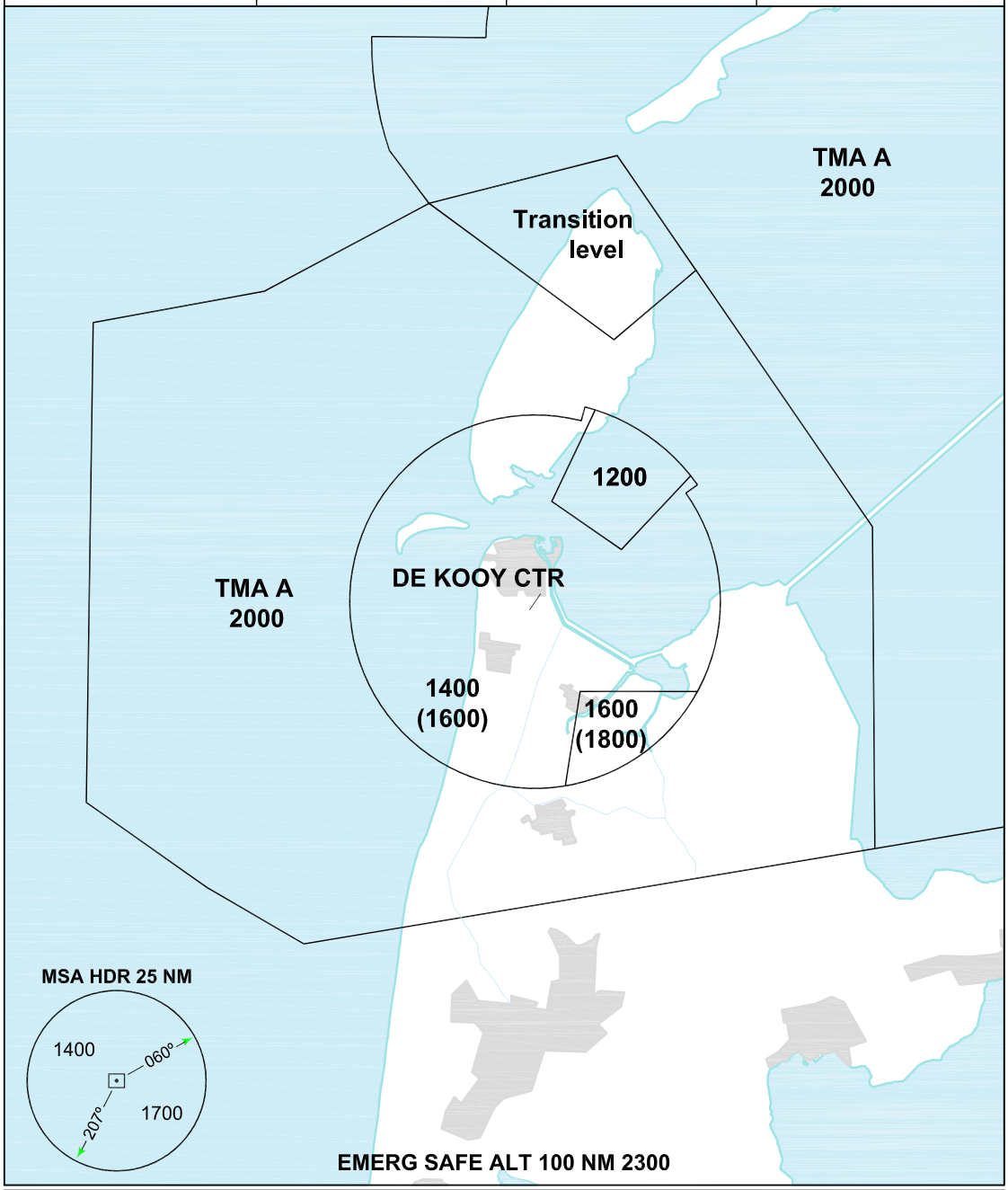

TEXEL
AD ELEV 4
FL 150
TEXEL
Zuid-Eierland
Oosterend
VAR 2° E (2020)
NW MILLIGEN TMA A
ABOVE AD TEXEL
B FL 195 / FL 065* / FL 065*
E 3500 AMSL
* See NOTE
EHR4A EHR4 FL 285 / FL 065 MSL
EHR4B 4000 AMSL MSL
NW MILLIGEN TMA A
B FL 195 / FL 065*
E FL 065* / 1500 AMSL
* See NOTE
Den Burg
EHR8A EHR8 FL 660 / FL 065 MSL
Oudeschild
WHISKEY
OSCAR
WHISKEY ARRIVAL
WHISKEY DEPARTURE
OSCAR DEPARTURE
OSCAR ARRIVAL
TMZ A
FL 195
FL 065 ①
FL 045 ②
1200 AMSL ③
DEPARTURE via MIKE at ATC discretion
MIKE
WADDENZEE
CORRIDOR
DE KOOY CTR
D 3000 AMSL / GND
Marsdiep
RMZ DE KOOY (outside OPRHR CTR)
E 3000 AMSL / 1500 AMSL
G 1500 AMSL / GND
ARRIVAL via MIKE at ATC discretion
DEN HELDER
HOTEL
207
DEPARTURE via FOXTROT at ATC discretion
Gas venting
RWY 03/21
PAPI 3°
MEHT 50 FT
Den Oever
FOXTROT
Hippolytushoef
673
ARRIVAL via FOXTROT at ATC discretion
BRAVO
ECHO ARRIVAL
NOORDKOP G
571
DEN HELDER / HDR
(115.550) / CH102 Y
525424.7N 0044556.6E
0
Julianadorp
Breezand
ROMEO
Gas venting
LOW FLYING AREA
GLV XI (MIL)
150 AGL
GND
Amstel-meer
ECHO
ECHO DEPARTURE
578
Anna Paulowna
Kanaal
Callantsoog
Wieringerwerf
574
381
591
640
ZULU DEPARTURE
ZULU ARRIVAL
MIDDENMEER
604
ZULU
NORTH SEA
Midden-meer
Schagen
Noordhollandsch
SCHIPHOL TMA 1
A FL 095 / 1500 AMSL
Winkel
Gas venting
53° 05' N
53° 00'
52° 55'
52° 50'
52° 45' N
004° 40'E
004° 45'
004° 50'
004° 55'
005° 00'E

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



- 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: EDITORIAL

RNLAF 30 DEC 2021

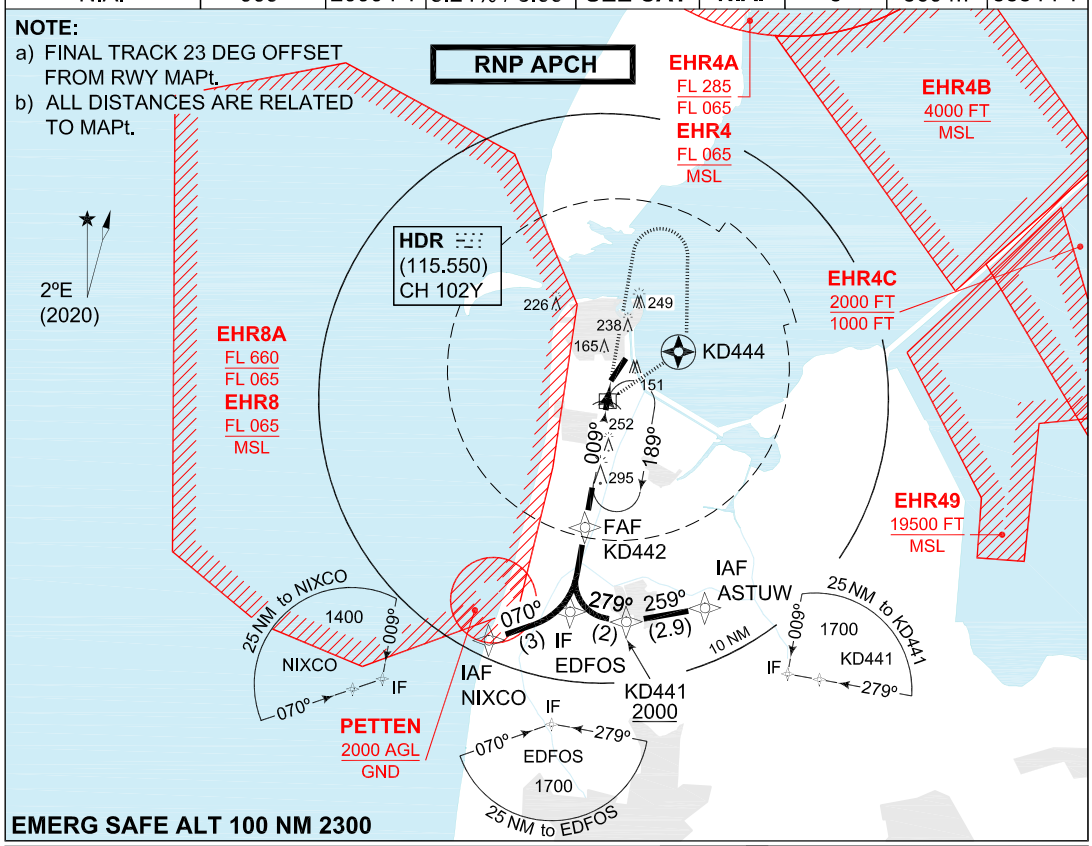
MIPS
INSTRUMENT APPROACH CHART

AD ELEV 4

RNP Z RWY 03
DE KOOY (EHKD)

DUTCH MIL	DE KOOY ARRIVAL	DE KOOY TWR	GND CTL	ATIS*
259.250 128.355	372.150 124.230	379.750 120.130	379.750 121.730	133.010

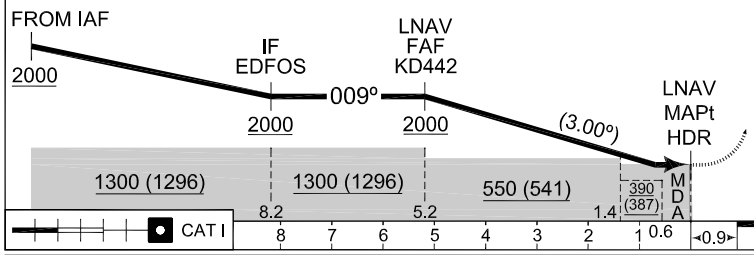
EGNOS CHANNEL	APP COURSE	FAF ALT	Descent GR	MDA	DA	THR ELEV	ALS	LDA
N.A.	009°	2000 FT	5.24% / 3.00°	SEE CAT	N.A.	3	360 m	3334 FT



GS 3.00°
TCH 50

TA 3000

MAPt	1	2	3	4	5	5.2
ALT	650	970	1290	1610	1920	2000



MISSED APPROACH
At MAPt maintain final track 009° MAG and climb to 2000 ft AMSL. At 1000 ft AMSL turn right to KD444. At KD444 turn right to HDR and join the holding at 2000 ft AMSL.
Inform ATC.

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)

IAWP	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
IAWP	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

RNLAF 13 JUL 2023

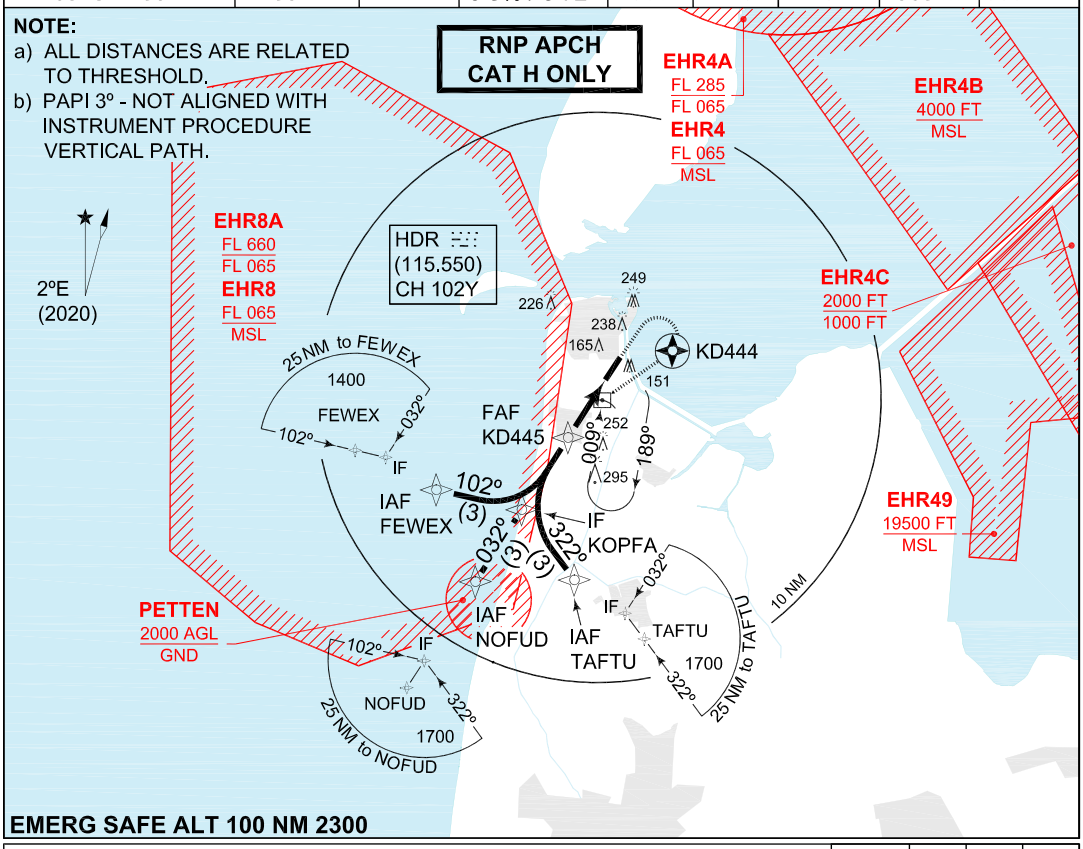
MIPS
INSTRUMENT APPROACH CHART

AD ELEV 4

RNP Y RWY 03
DE KOOY (EHKD)

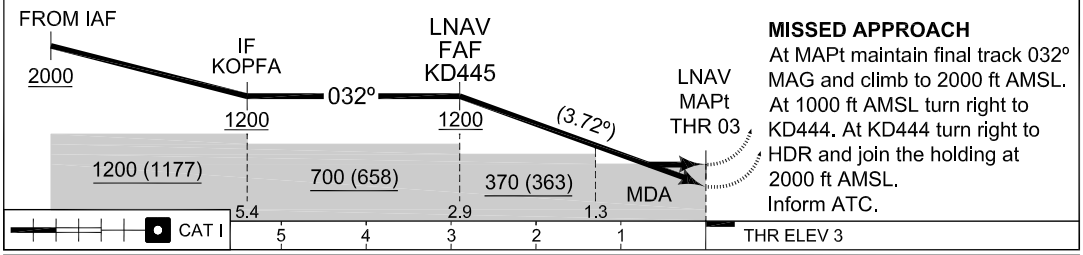
DUTCH MIL	DE KOOY ARRIVAL	DE KOOY TWR	GND CTL	ATIS*
259.250 128.355	372.150 124.230	379.750 120.130	379.750 121.730	133.010

EGNOS CHANNEL	APP COURSE	FAF ALT	Descent GR	MDA	DA	THR ELEV	ALS	LDA
69781 E03A	032°	1200 FT	6.5% / 3.72°	**350**	**203**	3	360 m	3334 FT



GS 3.72°
TCH 50

TA 3000	MAPt	1	2	2.9
	ALT	450	840	1200



MISSED APPROACH
At MAPt maintain final track 032° MAG and climb to 2000 ft AMSL. At 1000 ft AMSL turn right to KD444. At KD444 turn right to HDR and join the holding at 2000 ft AMSL.
Inform ATC.

MIPS	CATEGORY	H
	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

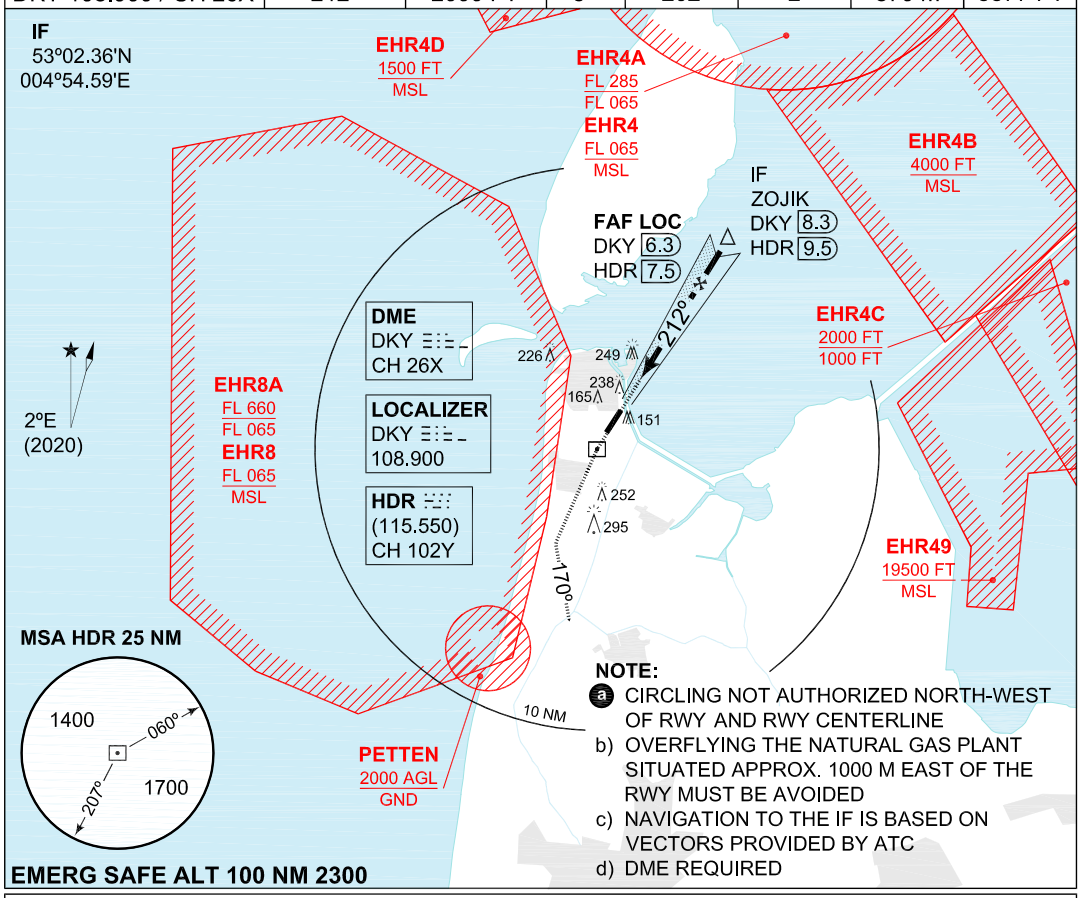
MIPS
INSTRUMENT APPROACH CHART

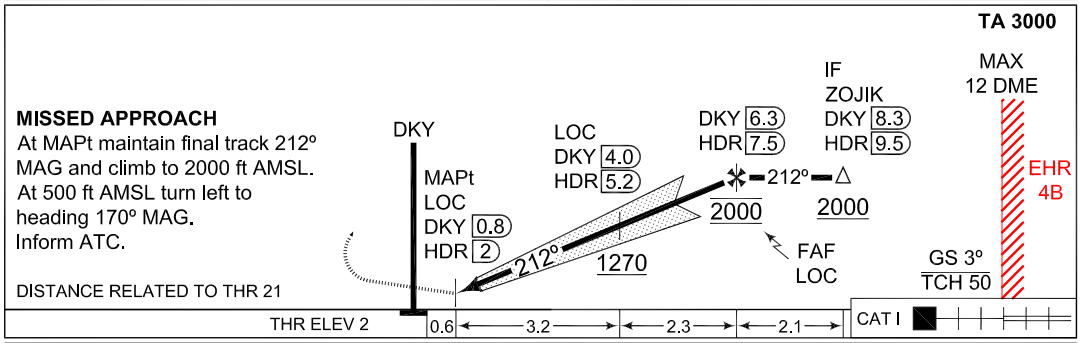
AD ELEV 4

ILS or LOC RWY 21
DE KOOY (EHKD)

DUTCH MIL	DE KOOY ARRIVAL	DE KOOY TWR	GND CTL	ATIS*
259.250 128.355	372.150 124.230	379.750 120.130	379.750 121.730	133.010

LOCALIZER/DME	APP COURSE	GS INTCP ALT	GS	DA	THR ELEV	ALS	LDA
DKY 108.900 / CH 26X	212°	2000 FT	3°	**202**	2	870 m	3377 FT





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)

MIPS

CHANGES: NEW LAYOUT

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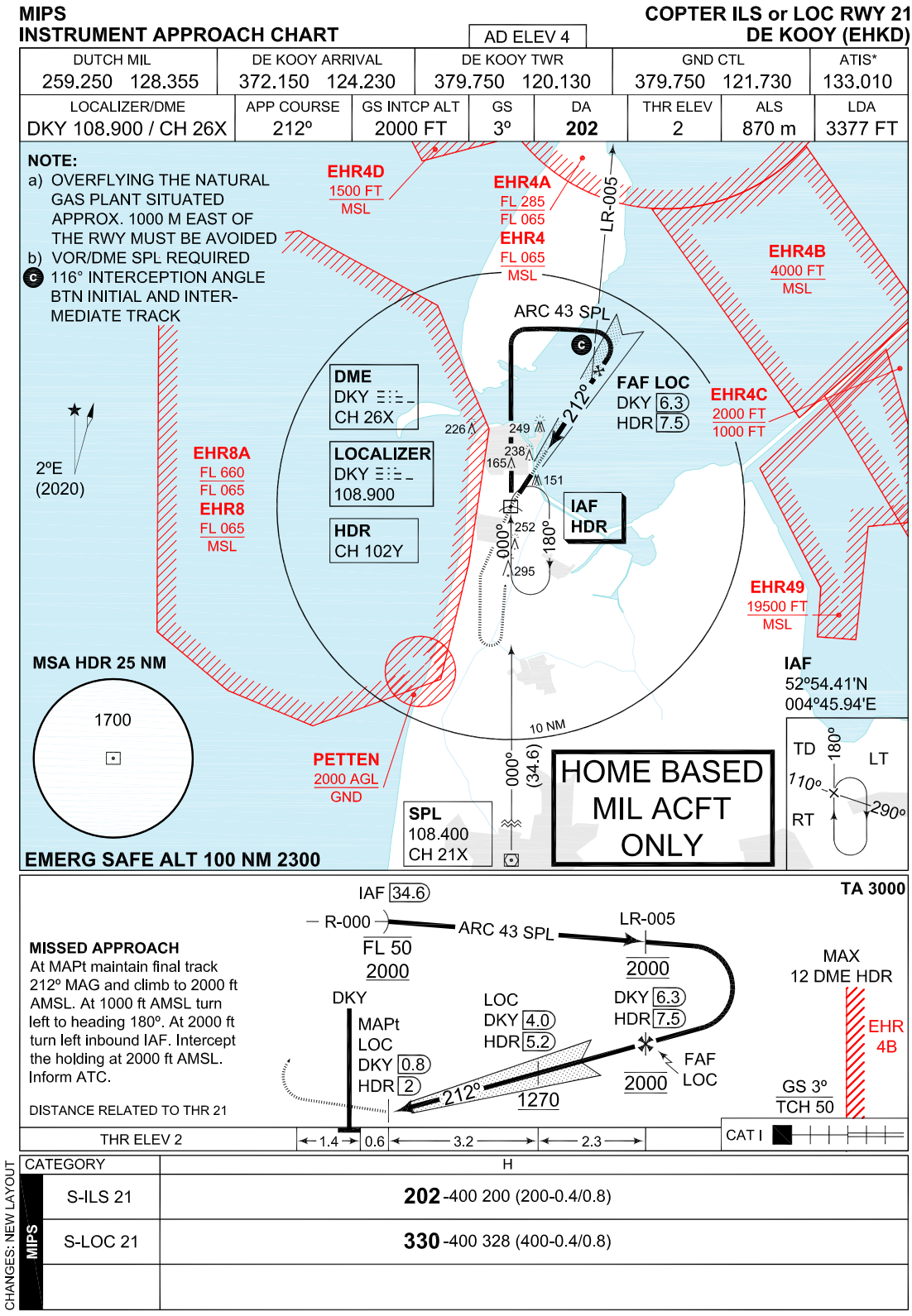

MIPS
INSTRUMENT APPROACH CHART
AD ELEV 4
COPTER ILS or LOC RWY 21
DE KOOY (EHKD)
DUTCH MIL 259.250 128.355
DE KOOY ARRIVAL 372.150 124.230
DE KOOY TWR 379.750 120.130
GND CTL 379.750 121.730
ATIS* 133.010
LOCALIZER/DME DKY 108.900 / CH 26X
APP COURSE 212°
GS INTCP ALT 2000 FT
GS 3°
DA 202
THR ELEV 2
ALS 870 m
LDA 3377 FT
NOTE:
a) OVERFLYING THE NATURAL GAS PLANT SITUATED APPROX. 1000 M EAST OF THE RWY MUST BE AVOIDED
b) VOR/DME SPL REQUIRED
c 116° INTERCEPTION ANGLE BTN INITIAL AND INTER-MEDIATE TRACK
EHR4D 1500 FT MSL
EHR4A FL 285 FL 065
EHR4 FL 065 MSL
LR-005
EHR4B 4000 FT MSL
ARC 43 SPL
DME DKY CH 26X
LOCALIZER DKY 108.900
HDR CH 102Y
FAF LOC DKY 6.3 HDR 7.5
EHR4C 2000 FT 1000 FT
212°
226
249
238
165
151
IAF HDR
000°
180°
252
295
2°E (2020)
EHR8A FL 660 FL 065
EHR8 FL 065 MSL
EHR49 19500 FT MSL
MSA HDR 25 NM
1700
10 NM
IAF 52°54.41'N 004°45.94'E
TD 180°
LT
110°
290°
RT
PETTEN 2000 AGL GND
000°
(34.6)
SPL 108.400 CH 21X
HOME BASED MIL ACFT ONLY
EMERG SAFE ALT 100 NM 2300
TA 3000
IAF 34.6
R-000
FL 50
2000
ARC 43 SPL
LR-005
2000
MISSED APPROACH
At MAPt maintain final track 212° MAG and climb to 2000 ft AMSL. At 1000 ft AMSL turn left to heading 180°. At 2000 ft turn left inbound IAF. Intercept the holding at 2000 ft AMSL. Inform ATC.
DISTANCE RELATED TO THR 21
DKY
MAPt
LOC DKY 0.8 HDR 2
LOC DKY 4.0 HDR 5.2
DKY 6.3 HDR 7.5
MAX 12 DME HDR
EHR 4B
FAF LOC
2000
212°
1270
GS 3°
TCH 50
THR ELEV 2
1.4
0.6
3.2
2.3
CAT I
CATEGORY
H
S-ILS 21
202-400 200 (200-0.4/0.8)
S-LOC 21
330-400 328 (400-0.4/0.8)
CHANGES: NEW LAYOUT
MIPS
RNLAF 11 AUG 2022

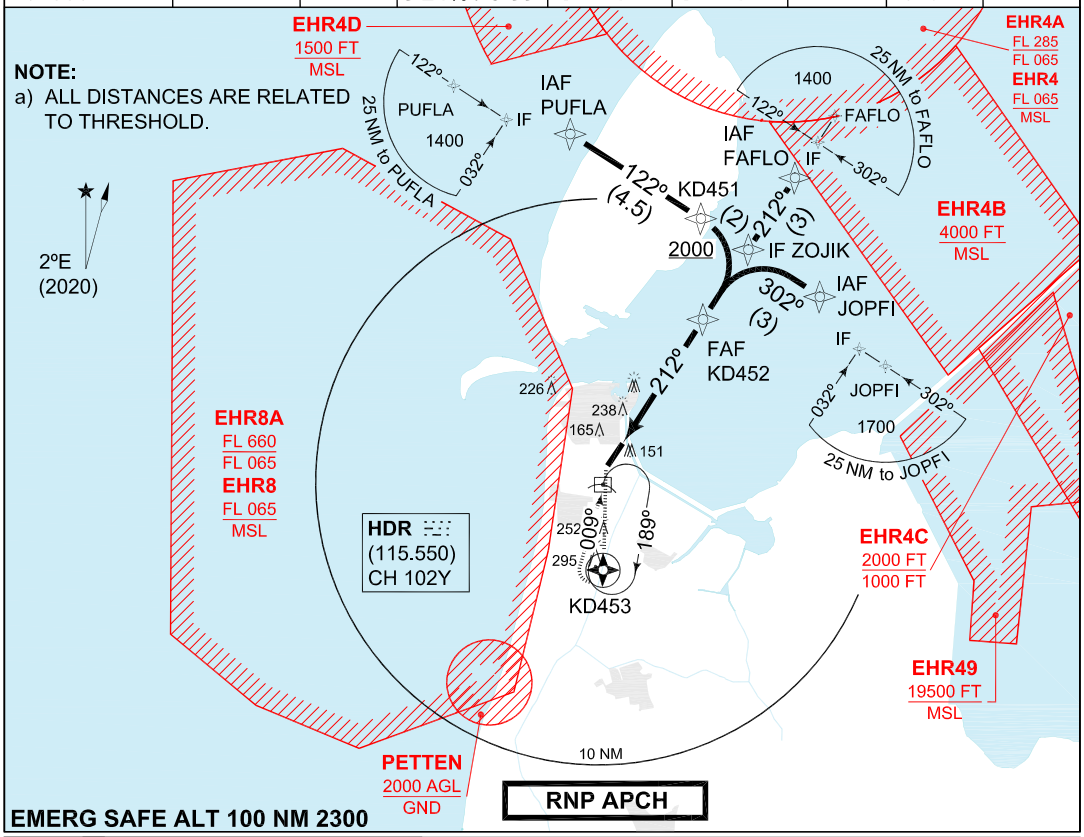
MIPS
INSTRUMENT APPROACH CHART

AD ELEV 4

RNP Z RWY 21
DE KOOY (EHKD)

DUTCH MIL	DE KOOY ARRIVAL	DE KOOY TWR	GND CTL	ATIS*
259.250 128.355	372.150 124.230	379.750 120.130	379.750 121.730	133.010

EGNOS CHANNEL	APP COURSE	FAF ALT	Descent GR	MDA	DA	THR ELEV	ALS	LDA
62338 E21A	212°	1700 FT	5.24% / 3.00°	**SEE CAT**	**SEE CAT**	2	870 m	3377 FT

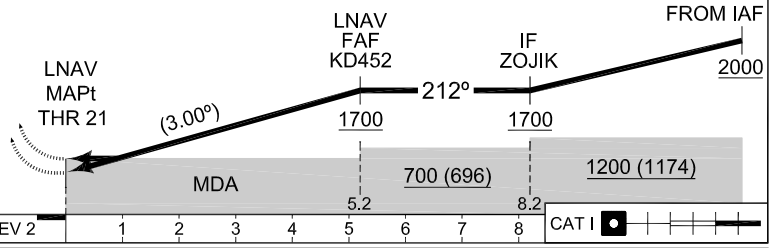


MAPt	1	2	3	4	5	5.2
ALT	370	690	1010	1330	1650	1700

TA 3000

GS 3°
TCH 50

MISSED APPROACH
At MAPt maintain final track 212° MAG and climb to 2000 ft AMSL. At 500 ft AMSL turn left to KD453. At KD453 turn right to HDR and join the holding at 2000 ft AMSL. Inform ATC.



CATEGORY		A	B	H
MIPS	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				

CHANGES: NEW LAYOUT

RNLAF 11 AUG 2022

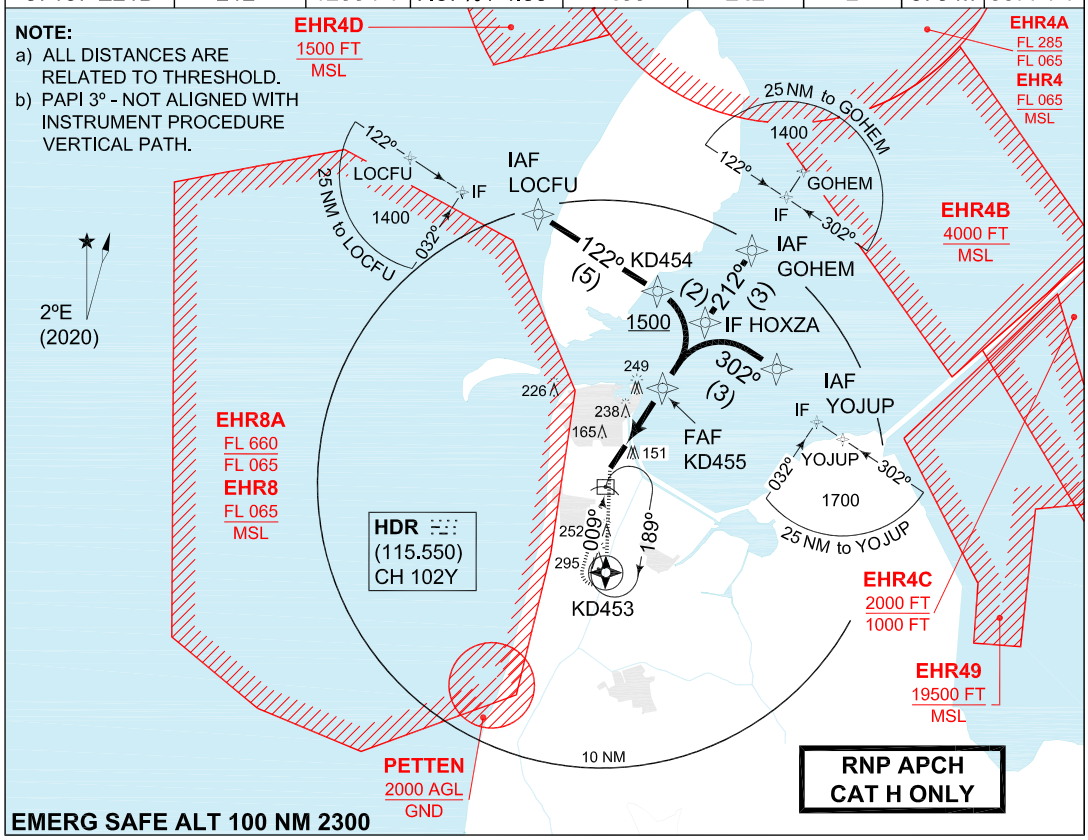
MIPS
INSTRUMENT APPROACH CHART

AD ELEV 4

RNP Y RWY 21
DE KOOY (EHKD)

DUTCH MIL	DE KOOY ARRIVAL	DE KOOY TWR	GND CTL	ATIS*
259.250 128.355	372.150 124.230	379.750 120.130	379.750 121.730	133.010

EGNOS CHANNEL	APP COURSE	FAF ALT	Descent GR	MDA	DA	THR ELEV	ALS	LDA
57187 E21B	212°	1200 FT	7.87% / 4.50°	**430**	**242**	2	870 m	3377 FT

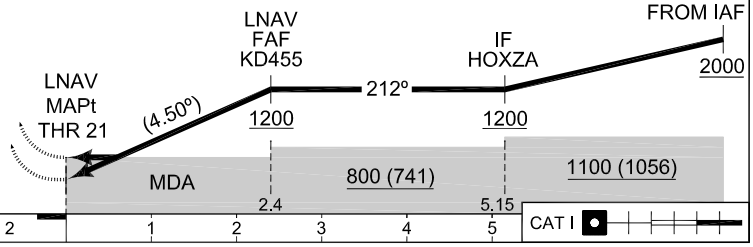


MAPt	1	2	2.4
ALT	540	1030	1200

TA 3000

GS 4.50°
TCH 50

MISSED APPROACH
At MAPt maintain final track 212° MAG and climb to 2000 ft AMSL. At 500 ft AMSL turn left to KD453. At KD453 turn right to HDR and join the holding at 2000 ft AMSL. Inform ATC.



CATEGORY		H
MIPS	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				

CHANGES: NEW LAYOUT

RNLAF 11 AUG 2022

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PART 3 – AERODROMES (AD)

AD 2.

AD 2. AERODROMES
LEEUWARDEN

LEEUWARDEN

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 LEEUWARDEN
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	
APP	RAPCON North	132.030*) 284.475*)	HO	Radar equipped
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 LOCALZER	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 Desciptor	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 Desciptor	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.

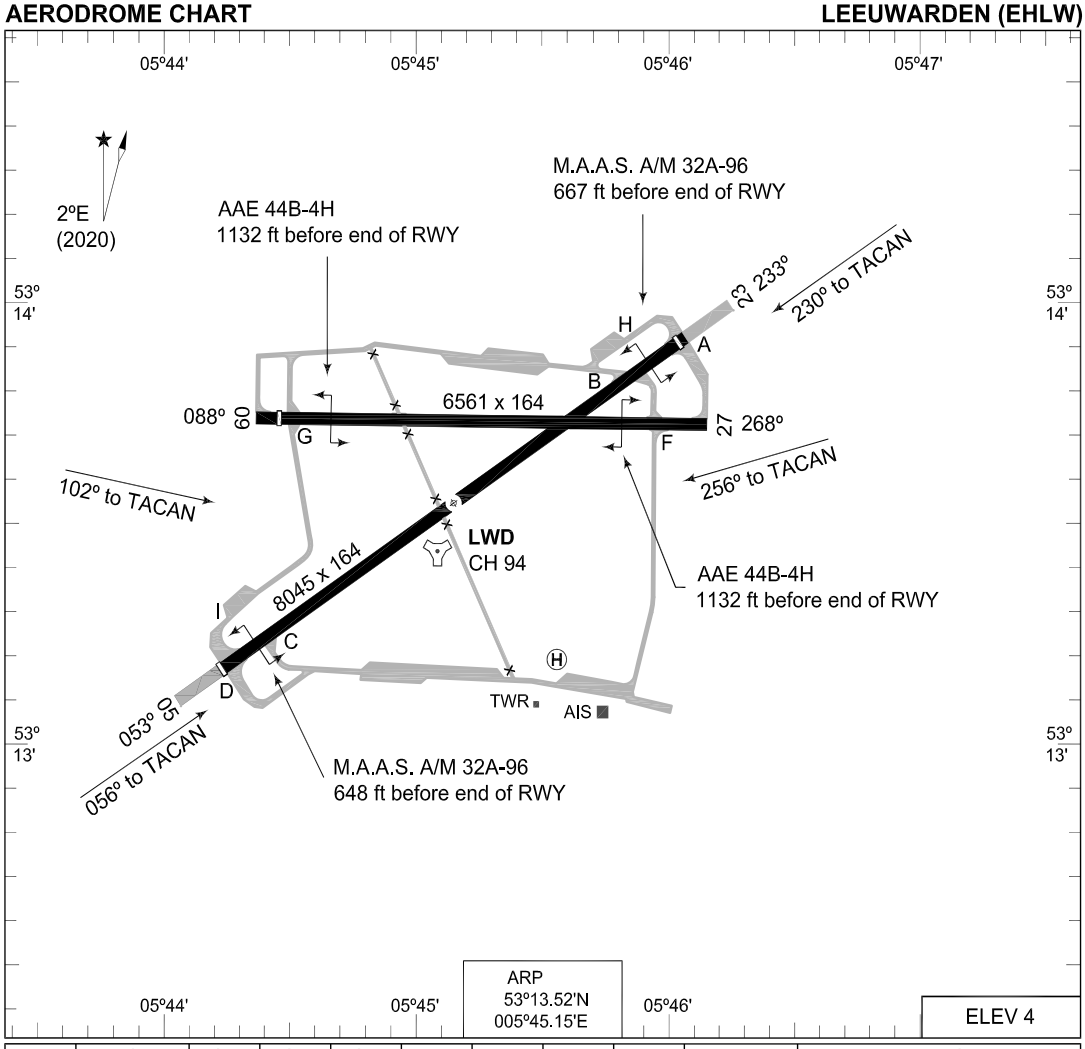
EHLW AD 2.23 Additional information

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.fdno@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

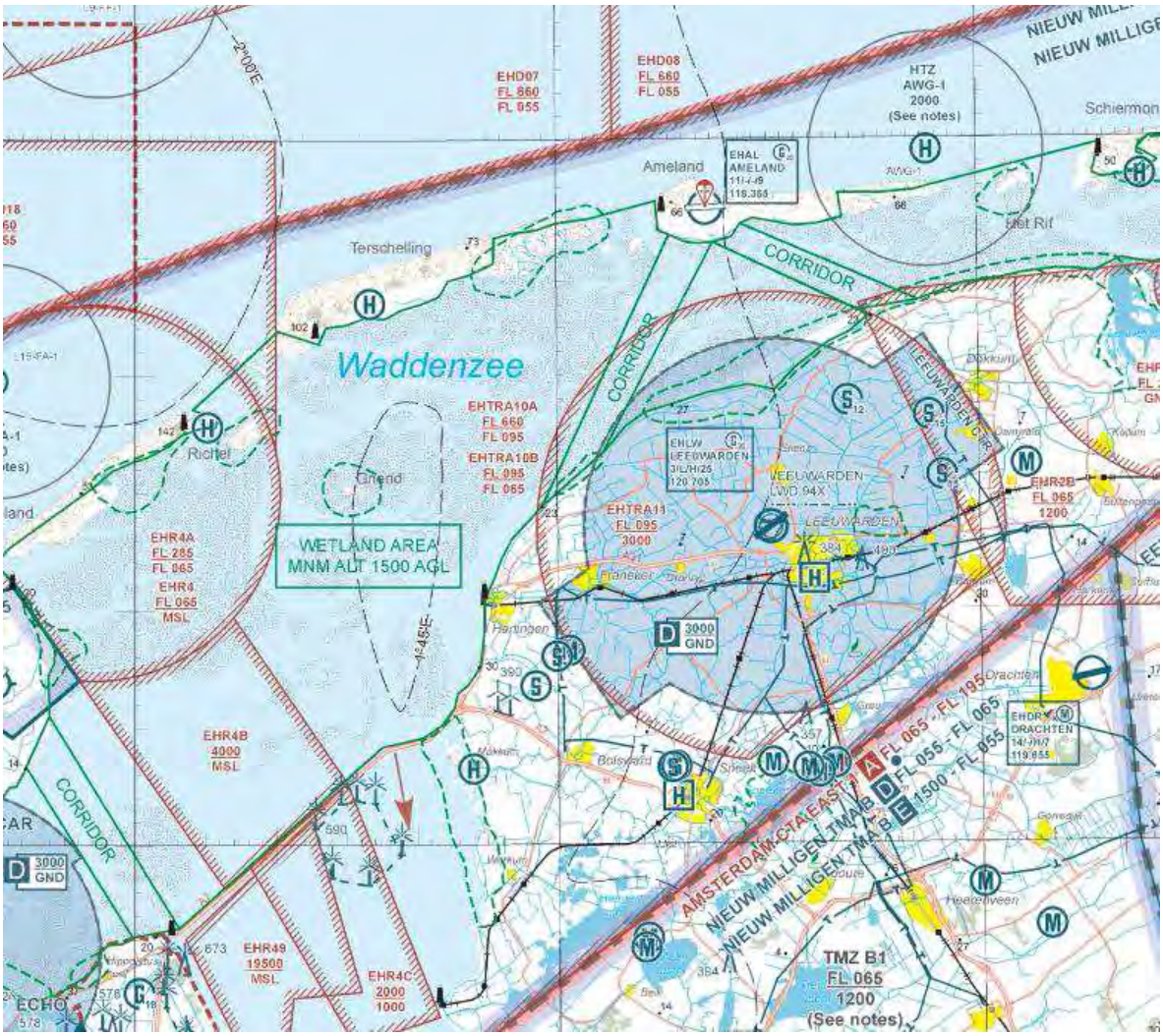
LEEUWARDEN TWR 344.850 120.705 (Ground Control) 362.525
LEEUWARDEN ARRIVAL 339.700
RAPCON NORTH 284.475 132.030

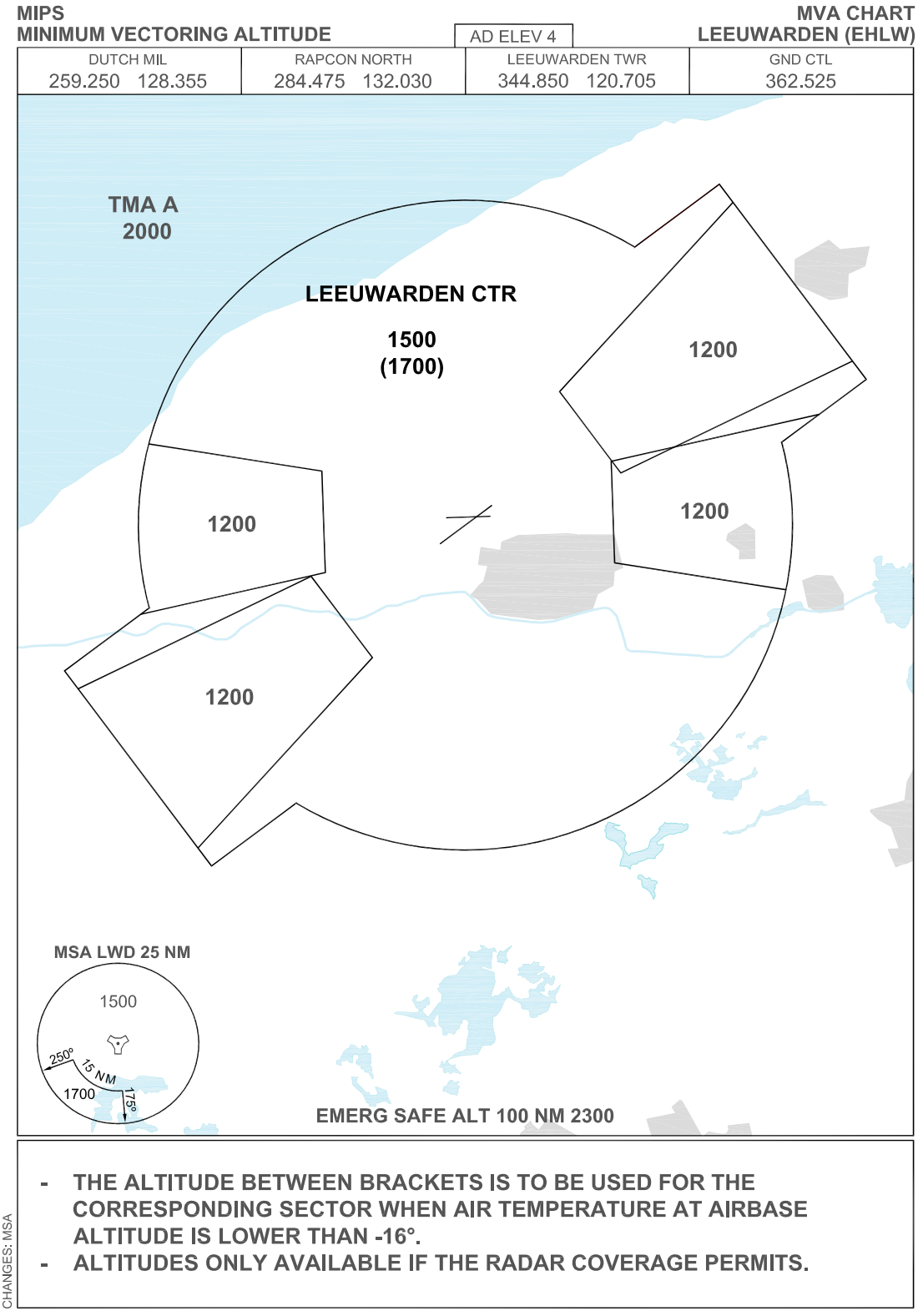
	PROC. CRITERIA	RWY	GS	TCH	OTCH	RPI	CAT	MINIMA CRITERIA	MINIMA
SRA	MIPS	23					AB	MIPS	450-1100 446 (500-1.1/1.9)
							C		450-1200 446 (500-1.2/2.0)
							D		450-1600 446 (500-1.6/2.4)
							E		450-2000 446 (500-2.0/2.8)
	MIPS	05					AB	MIPS	470-1100 446 (500-1.1/1.9)
							C		470-1200 446 (500-1.2/2.0)
							D		470-1600 446 (500-1.6/2.4)
							E		470-2000 446 (500-2.0/2.8)
	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)
	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)

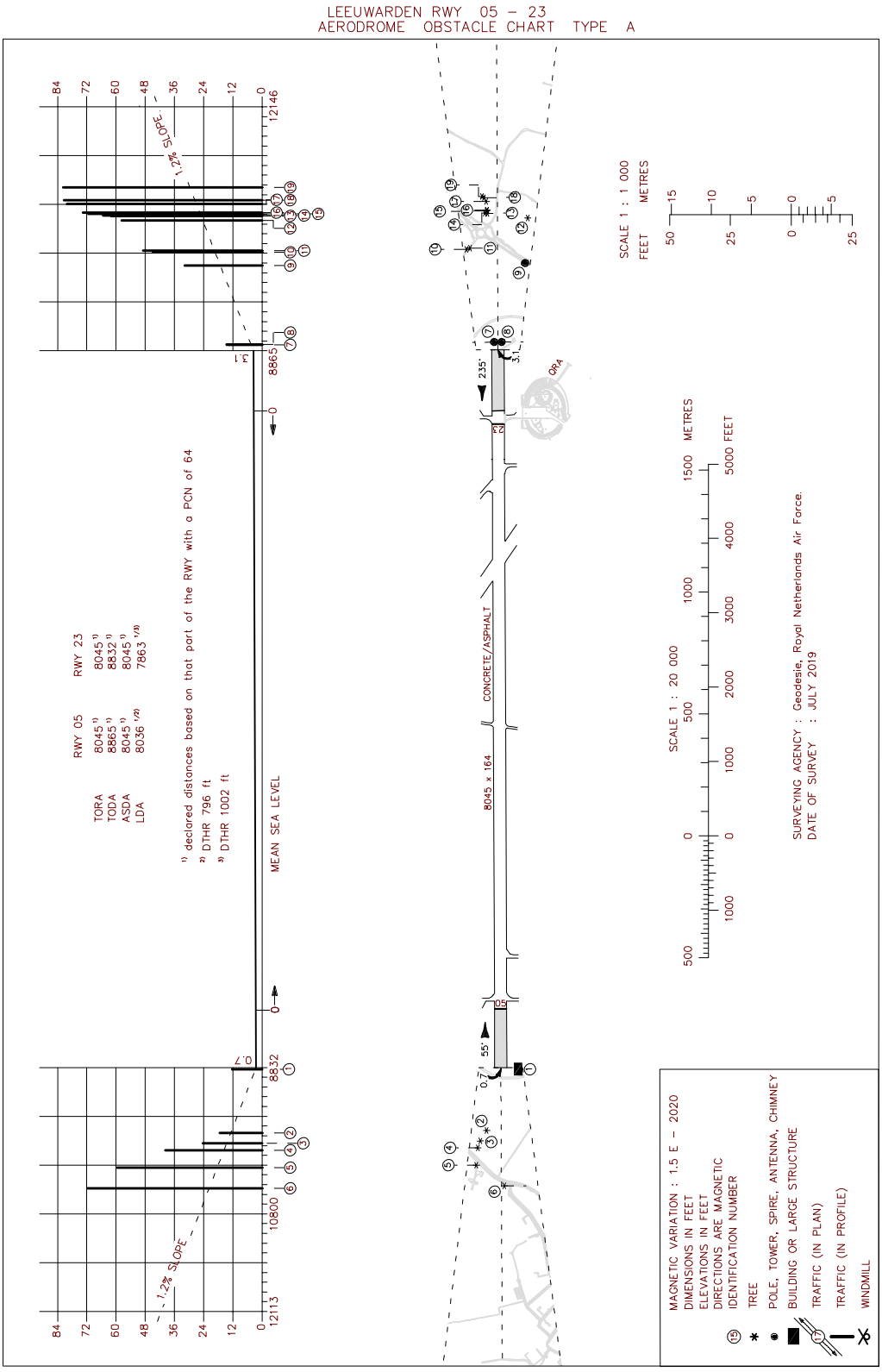
CHANGES: MAG/VAR, CABLE

RNLAF 03 DEC 2020

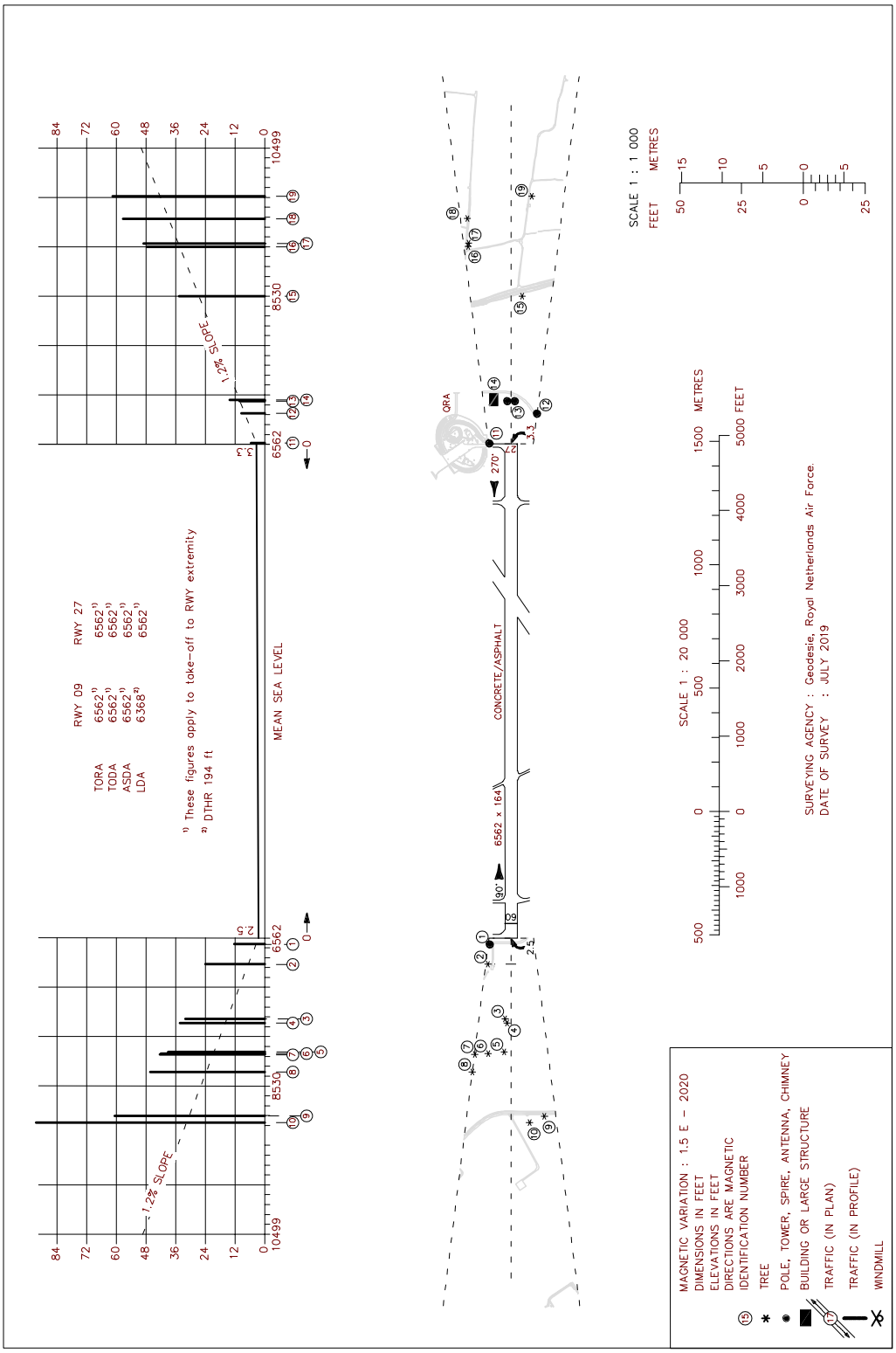
LOCAL MAP


Waddenzee
Terschelling
Ameland
Schiermonnikoog
CORRIDOR
EHD07
FL 660
FL 055
EHD08
FL 660
FL 055
HTZ
AWG-1
2000
(See notes)
EHAL
AMELAND
EHTRA10A
FL 660
FL 095
EHTRA10B
FL 095
FL 065
EHTRA11
FL 095
3000
WETLAND AREA
MNM ALT 1500 AGL
EHLW
LEEUWARDEN
EHR4A
FL 285
FL 065
EHR4
FL 066
MSL
EHR4B
4000
MSL
EHR49
19500
MSL
EHR4C
2000
1000
EHR2B
FL 065
1200
D 3000 GND
AMSTERDAM-TAE EAST
NIEUW MILLIGEN TMA 1
NIEUW MILLIGEN TMA 2
FL 065 - FL 195
FL 055 - FL 065
1500 - FL 055
TMZ B1
FL 065
1200
(See notes)
ECHO


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
TMA A
2000
LEEUWARDEN CTR
1500
(1700)
1200
1200
1200
1200
MSA LWD 25 NM
1500
250°
15 NM
175°
1700
EMERG SAFE ALT 100 NM 2300
- 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


LEEUWARDEN RWY 05 – 23
AERODROME OBSTACLE CHART TYPE A
RWY 05 RWY 23
TORA 8045 1) 8045 1)
TODA 8865 1) 8832 1)
ASDA 8045 1) 8045 1)
LDA 8036 1) 2) 7863 1) 3)
1) declared distances based on that part of the RWY with a PCN of 64
2) DTHR 796 ft
3) DTHR 1002 ft
MEAN SEA LEVEL
8045 x 164
CONCRETE/ASPHALT
1.2% SLOPE
1.2% SLOPE
SCALE 1 : 1 000
FEET METRES
SCALE 1 : 20 000
METRES FEET
SURVEYING AGENCY : Geodesie, Royal Netherlands Air Force.
DATE OF SURVEY : JULY 2019
MAGNETIC VARIATION : 1.5 E – 2020
DIMENSIONS IN FEET
ELEVATIONS IN FEET
DIRECTIONS ARE MAGNETIC
IDENTIFICATION NUMBER
TREE
POLE, TOWER, SPIRE, ANTENNA, CHIMNEY
BUILDING OR LARGE STRUCTURE
TRAFFIC (IN PLAN)
TRAFFIC (IN PROFILE)
WINDMILL
CHANGE: MAG VAR; editorial.

LEEUWARDEN RWY 09 – 27
AERODROME OBSTACLE CHART TYPE A



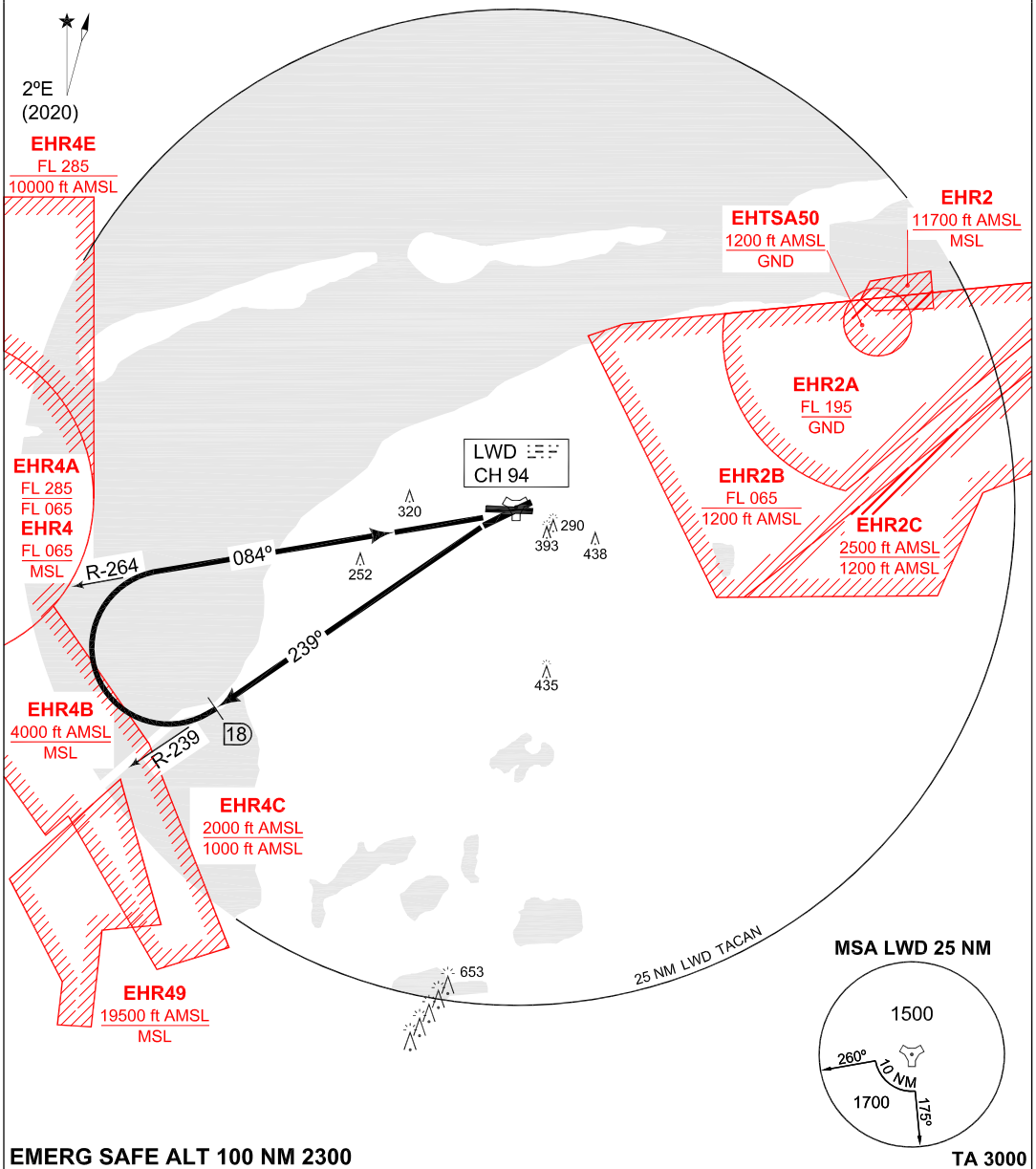
TERPS
INSTRUMENT DEPARTURE CHART

AD ELEV 4

LW1
LEEUWARDEN (EHLW)

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

RWY	Knots	120	180	240	300	360	to
23	V/V (fpm)	600	900	1200	1500	1800	**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.
NOTE:	Procedure may be changed by ATC when BREEZANDDIJK firing range is active.

CHANGES: MSA

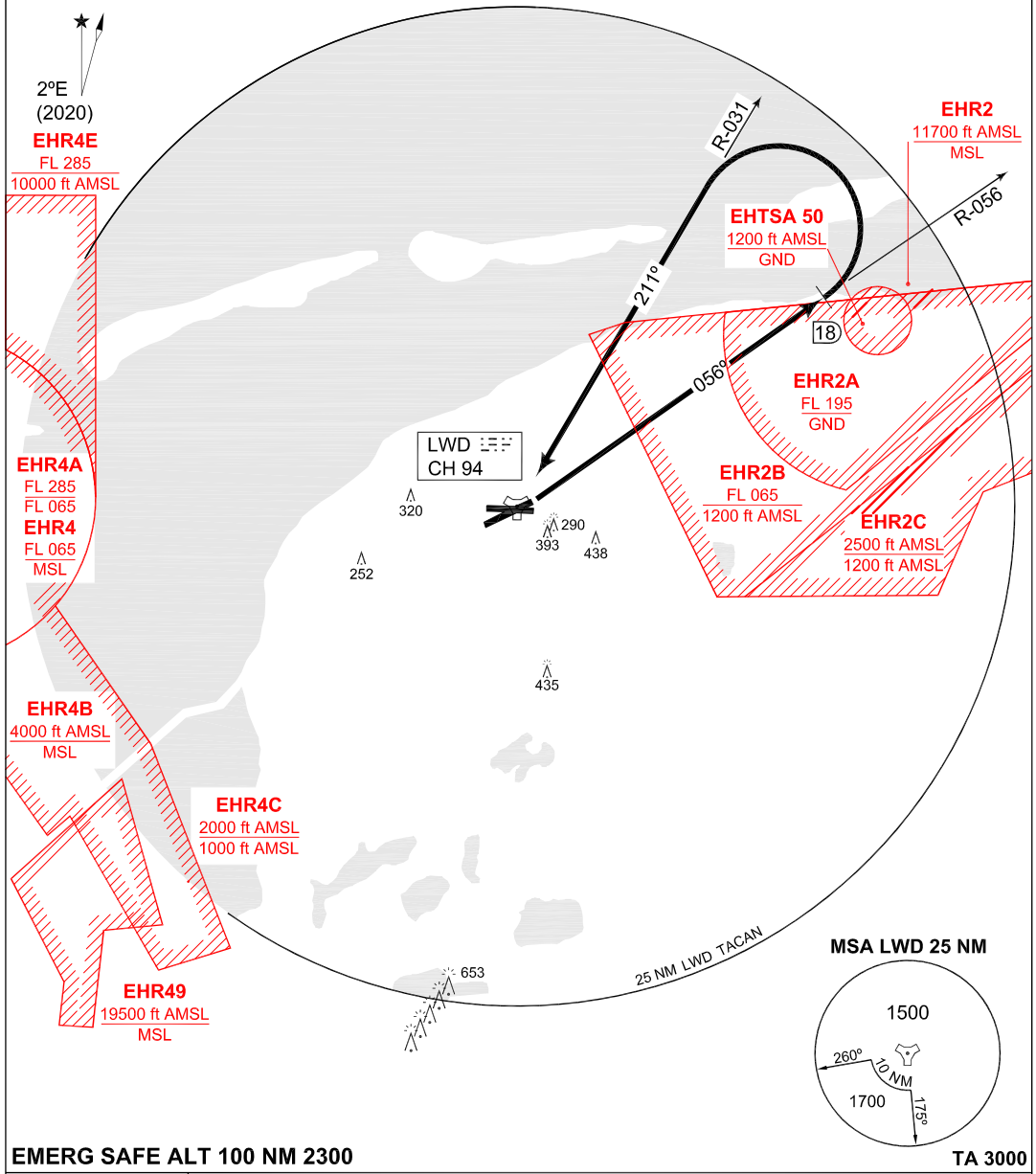
RNLAF 23 MAR 2023

TERPS **LW3**

INSTRUMENT DEPARTURE CHART AD ELEV 4 **LEEUWARDEN (EHLW)**

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

RWY	Knots	120	180	240	300	360	to
05	V/V (fpm)	540	810	1080	1350	1620	**1000 ft**



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.

CHANGES: MSA

RNLAF 23 MAR 2023

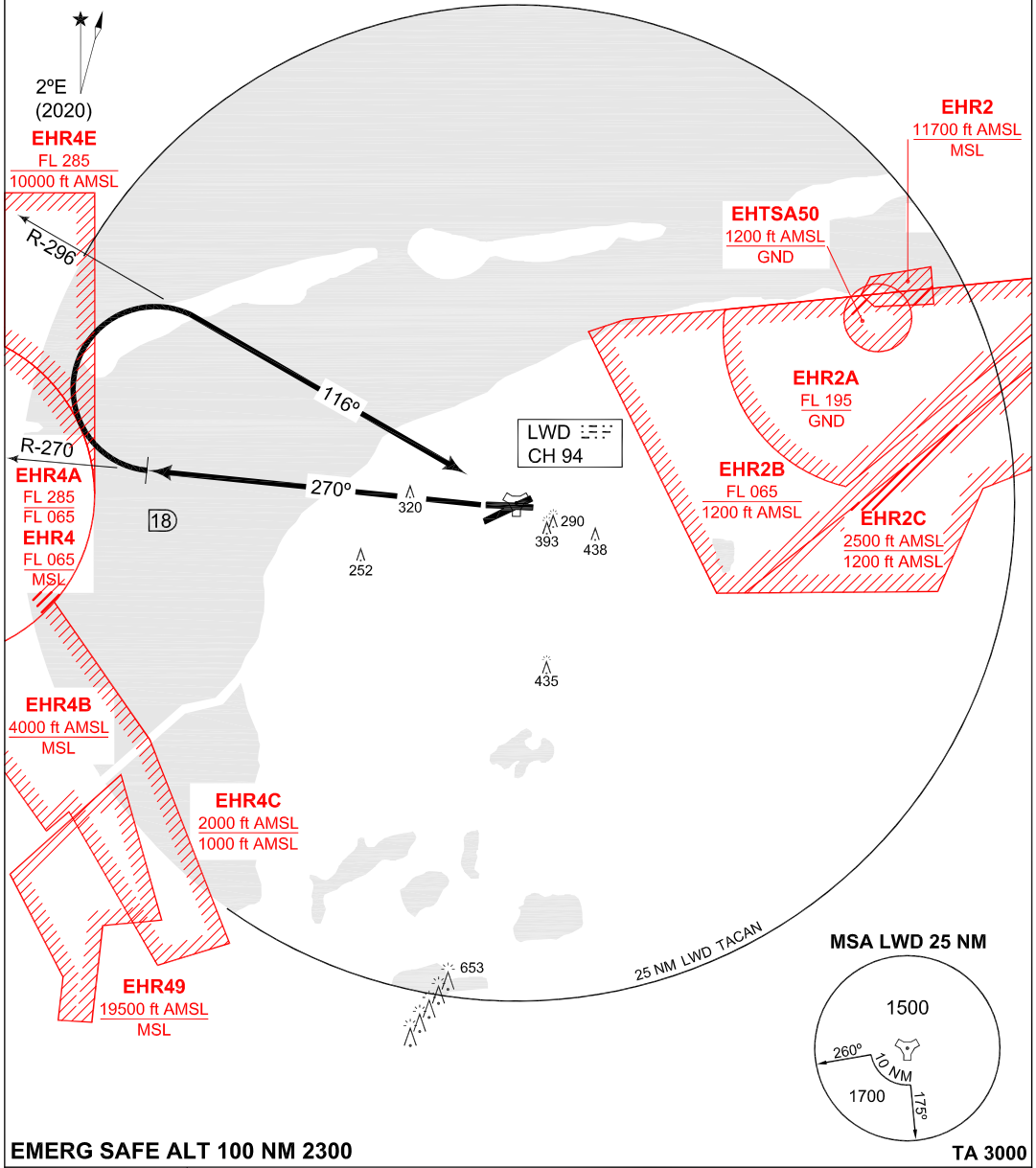
TERPS
INSTRUMENT DEPARTURE CHART

AD ELEV 4

LW5
LEEUWARDEN (EHLW)

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

RWY	Knots	120	180	240	300	360	to
27	V/V (fpm)	550	825	1100	1375	1700	**1000 ft**



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

RNLAF 23 MAR 2023

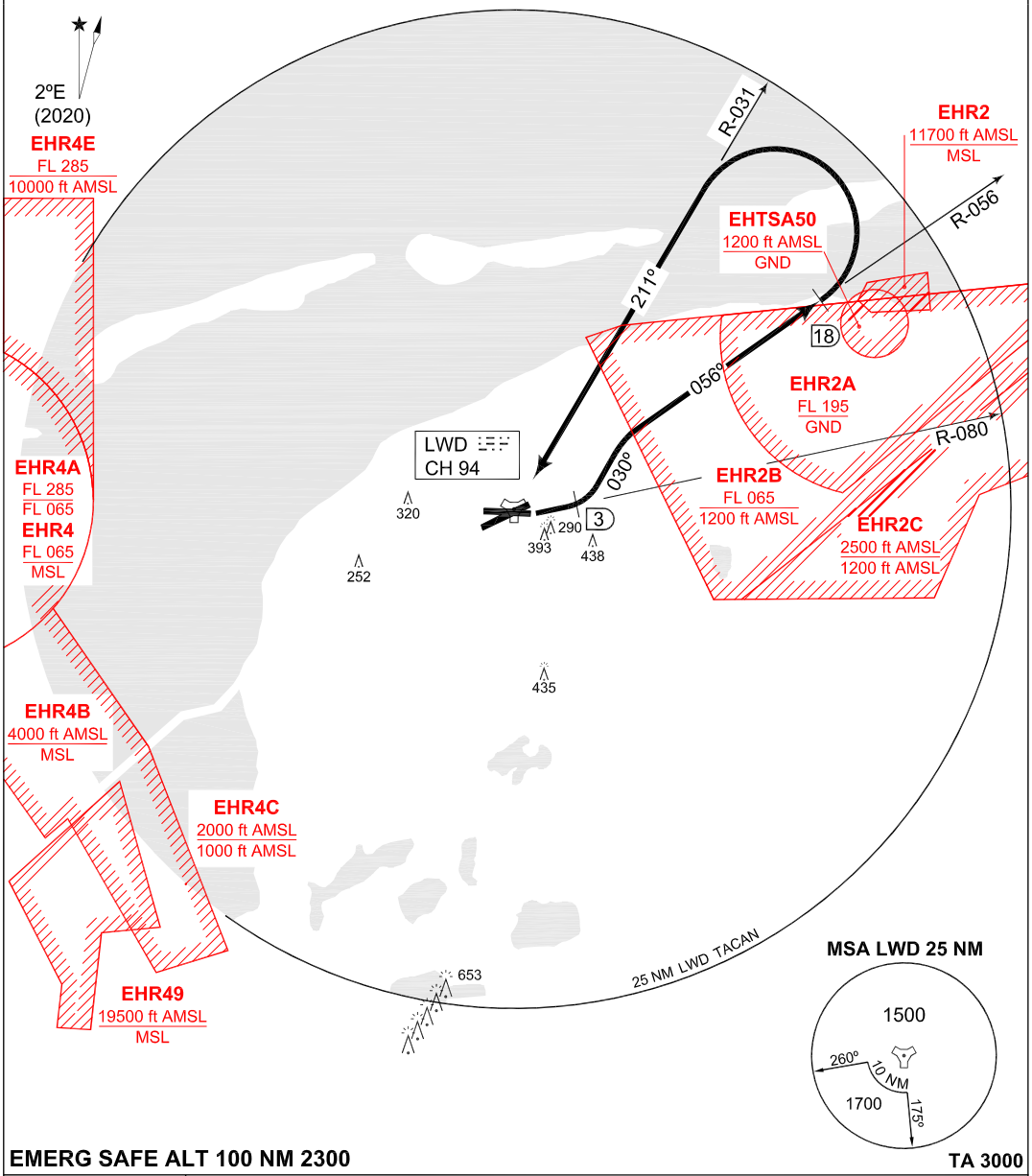
TERPS
INSTRUMENT DEPARTURE CHART

AD ELEV 4

LW7
LEEUWARDEN (EHLW)

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

RWY	Knots	120	180	240	300	360	to
09	V/V (fpm)	750	1125	1500	1875	2250	**1000 ft**



LEEUWARDEN 7 (RWY 09)	- 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.

CHANGES: MSA

RNLAF 23 MAR 2023

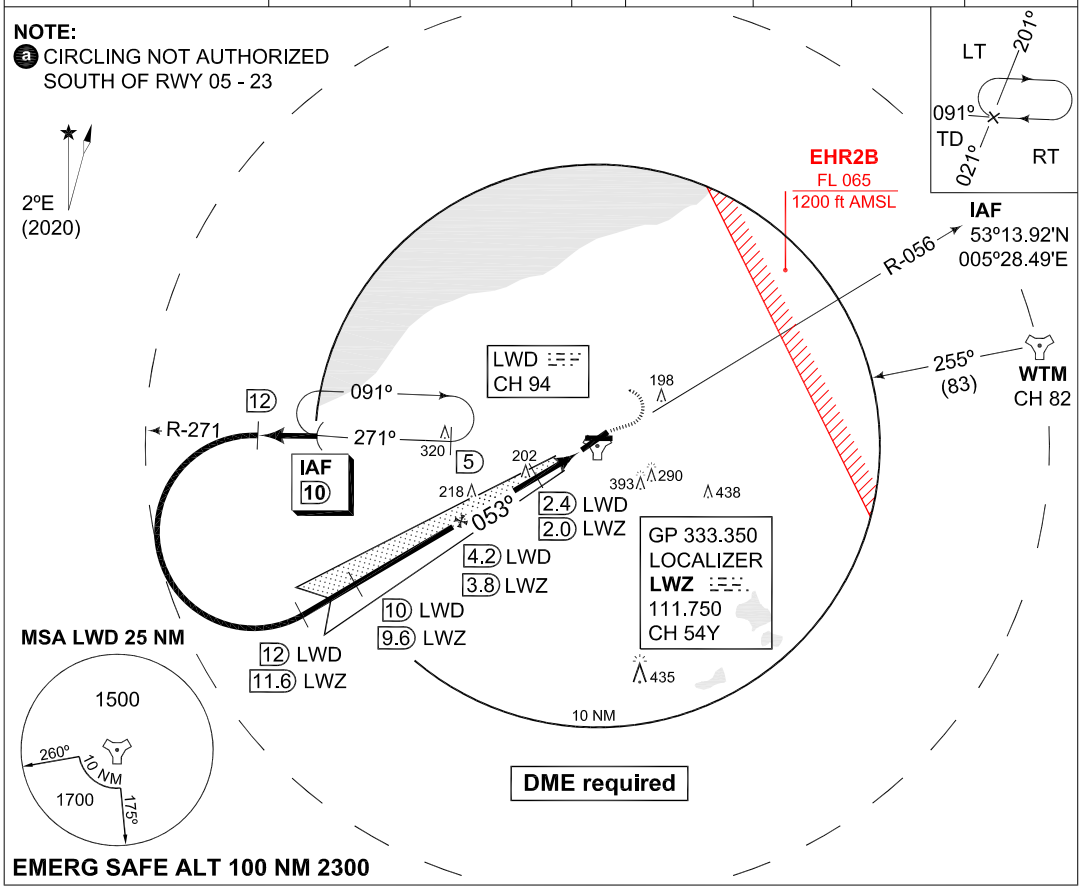
MIPS
INSTRUMENT APPROACH CHART

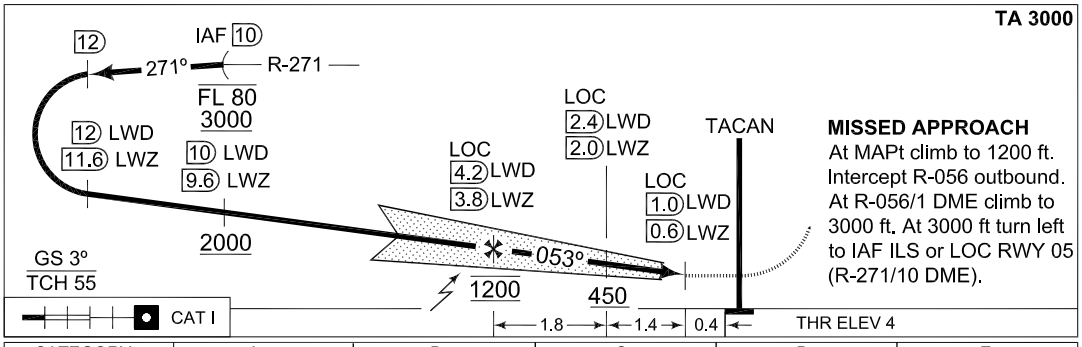
AD ELEV 4

ILS or LOC RWY 05
LEEUWARDEN (EHLW)

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

LOCALIZER / DME	APP COURSE	GS INTCEPT ALT	GS	DA	THR ELEV	ALS	LDA
LWZ 111.750 / CH 54Y	053°	1200 FT	3°	SEE CAT	4	660 m	8036 FT





CATEGORY	A	B	C	D	E
	MINIMA ACCORDING TO PANS-OPS; NOT ACCORDING TO APATC-1				
MIPS 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)
MIPS 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)	
MIPS 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

RNLAF 23 MAR 2023

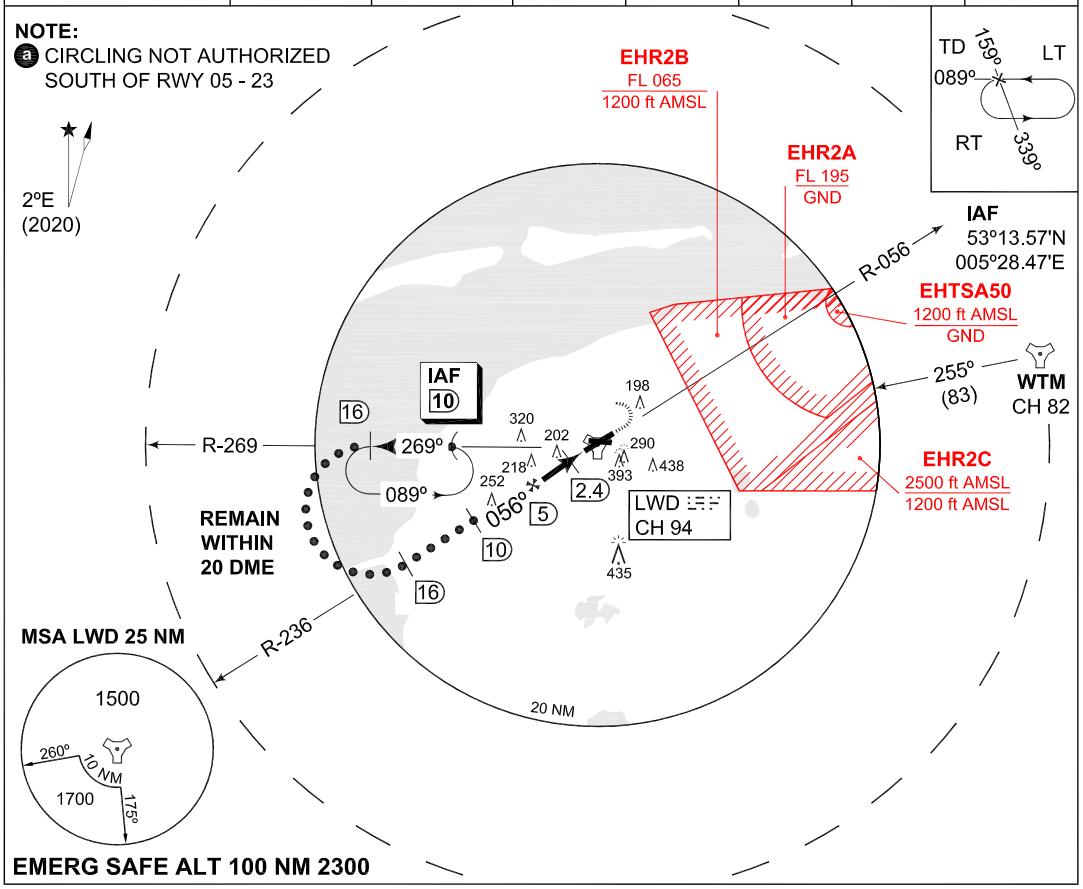
MIPS
INSTRUMENT APPROACH CHART

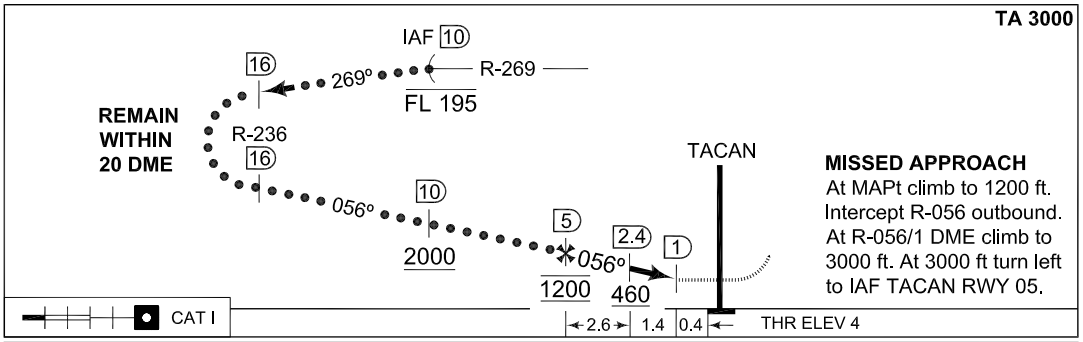
AD ELEV 4

HI-TACAN RWY 05
LEEUWARDEN (EHLW)

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

TACAN	APP COURSE	FAF ALT	Descent GR	MDA	THR ELEV	ALS	LDA
LWD CH 94	056°	1200 FT		**380**	4	660 m	8036 FT





CATEGORY	C	D	E
	MINIMA ACCORDING TO PANS-OPS; NOT ACCORDING TO APATC-1		
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

RNLAF 23 MAR 2023

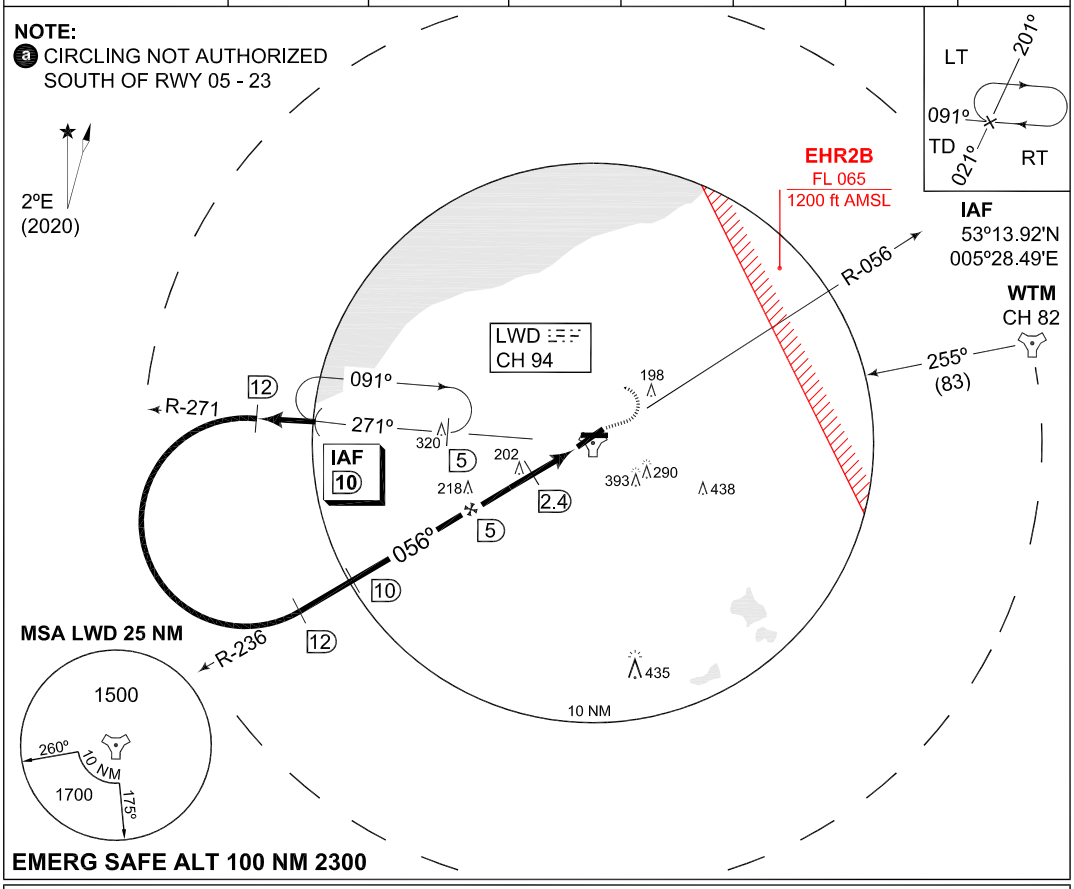
MIPS
INSTRUMENT APPROACH CHART

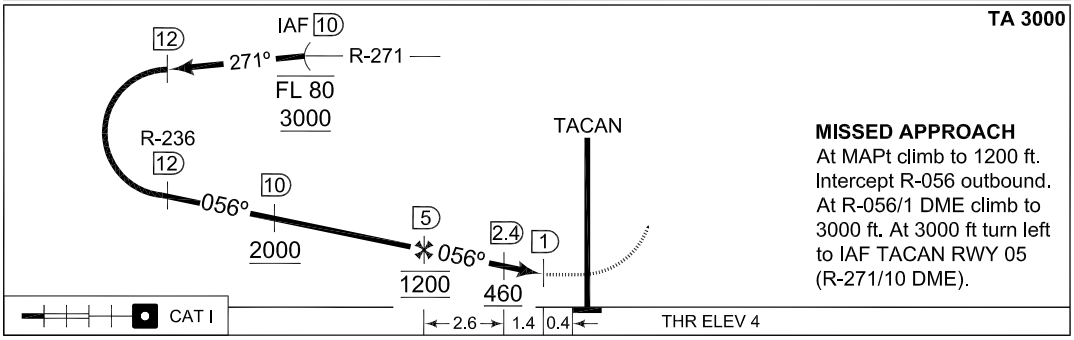
AD ELEV 4

TACAN RWY 05
LEEUWARDEN (EHLW)

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

TACAN	APP COURSE	FAF ALT	Descent GR	MDA	THR ELEV	ALS	LDA
LWD CH 94	056°	1200 FT		**380**	4	660 m	8036 FT





CATEGORY	A	B	C	D	E
	MINIMA ACCORDING TO PANS-OPS; NOT ACCORDING TO APATC-1				
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 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)

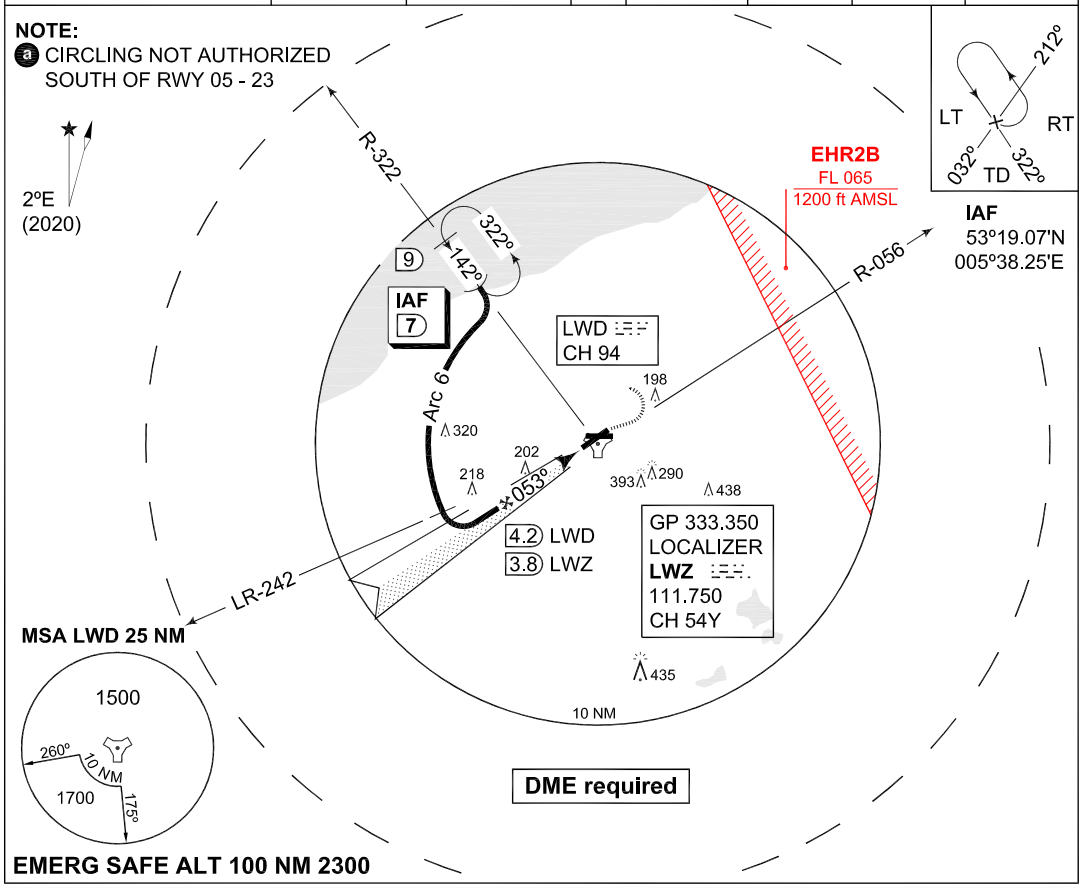
CHANGES: MSA
MIPS
RNLAF 23 MAR 2023

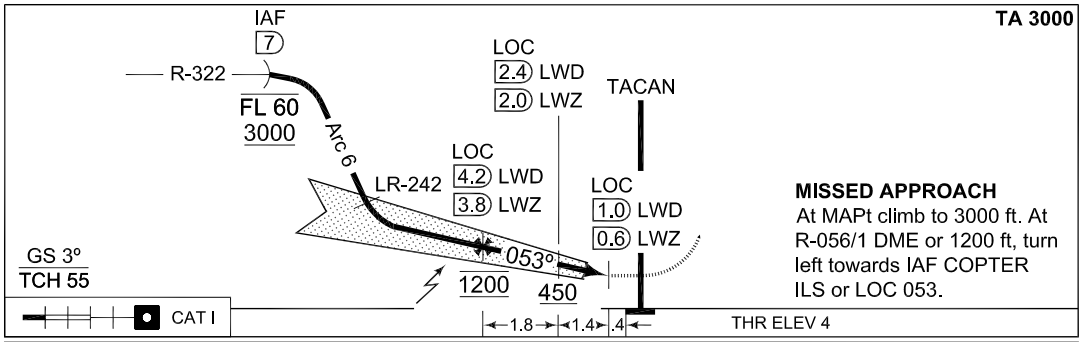
MIPS
INSTRUMENT APPROACH CHART AD ELEV 4

COPTER ILS or LOC 053
LEEUWARDEN (EHLW)

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

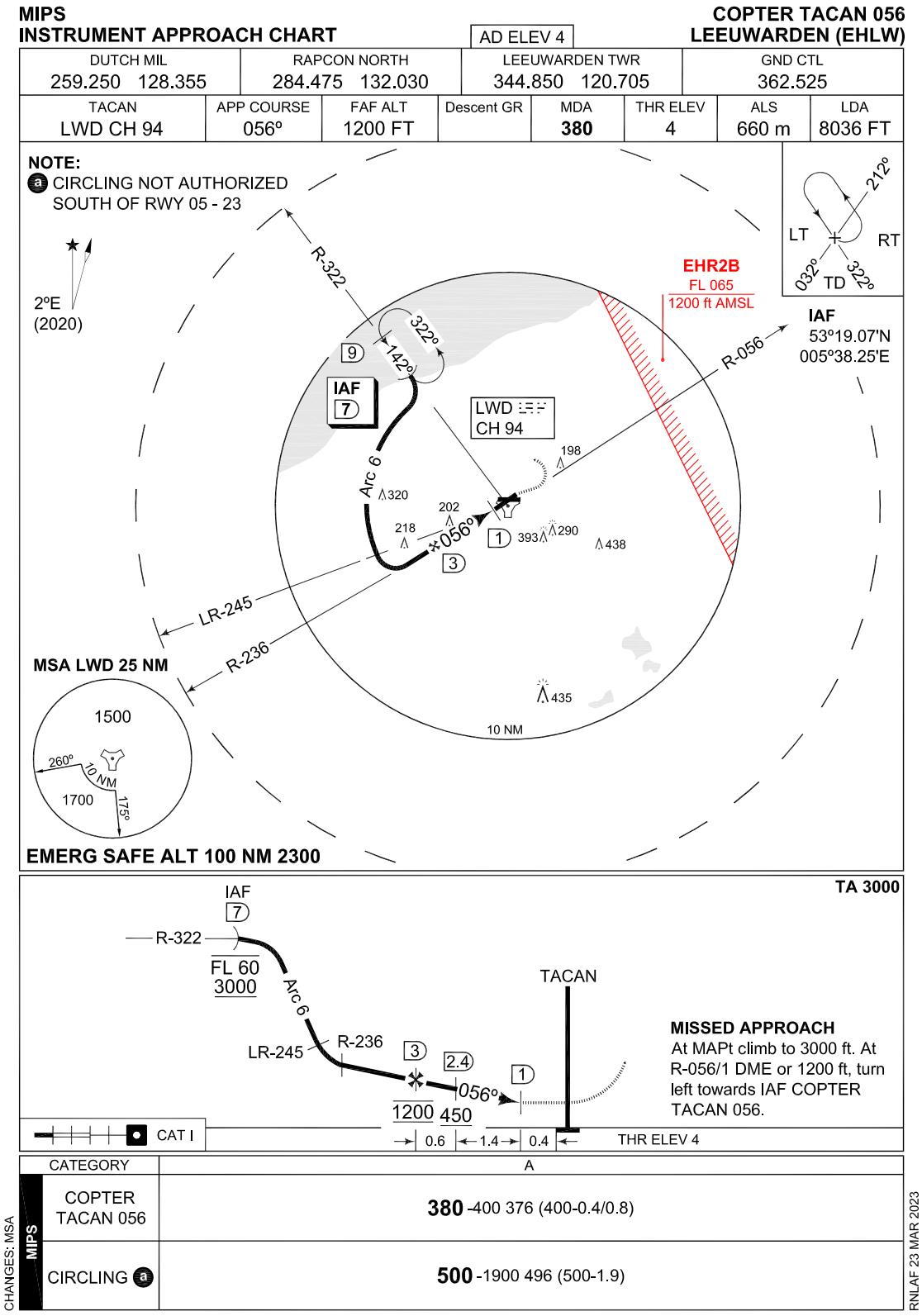
LOCALIZER / DME	APP COURSE	GS INTCEPT ALT	GS	DA	THR ELEV	ALS	LDA
LWZ 111.750 / CH 54Y	053°	1200 FT	3°	**204**	4	660 m	8036 FT





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 a	**500** -1900 496 (500-1.9)

CHANGES: MSA
MIPS
RNLAF 23 MAR 2023


MIPS
INSTRUMENT APPROACH CHART
AD ELEV 4
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
NOTE:
a CIRCLING NOT AUTHORIZED SOUTH OF RWY 05 - 23
2°E (2020)
R-322
322°
142°
9
IAF 7
LWD CH 94
Arc 6
320
198
202
218
056°
1
393
290
438
3
LR-245
R-236
R-056
EHR2B
FL 065
1200 ft AMSL
IAF
53°19.07'N
005°38.25'E
212°
LT
RT
032°
TD
322°
MSA LWD 25 NM
1500
260°
10 NM
1700
175°
435
10 NM
EMERG SAFE ALT 100 NM 2300
TA 3000
IAF 7
R-322
FL 60
3000
Arc 6
LR-245
R-236
3
2.4
1
056°
1200
450
TACAN
MISSED APPROACH
At MAPt climb to 3000 ft. At R-056/1 DME or 1200 ft, turn left towards IAF COPTER TACAN 056.
CAT I
0.6
1.4
0.4
THR ELEV 4
CATEGORY
A
MIPS
COPTER TACAN 056
380 -400 376 (400-0.4/0.8)
CIRCLING a
500 -1900 496 (500-1.9)
CHANGES: MSA
RNLAF 23 MAR 2023

PANS OPS
INSTRUMENT APPROACH CHART

AD ELEV 4

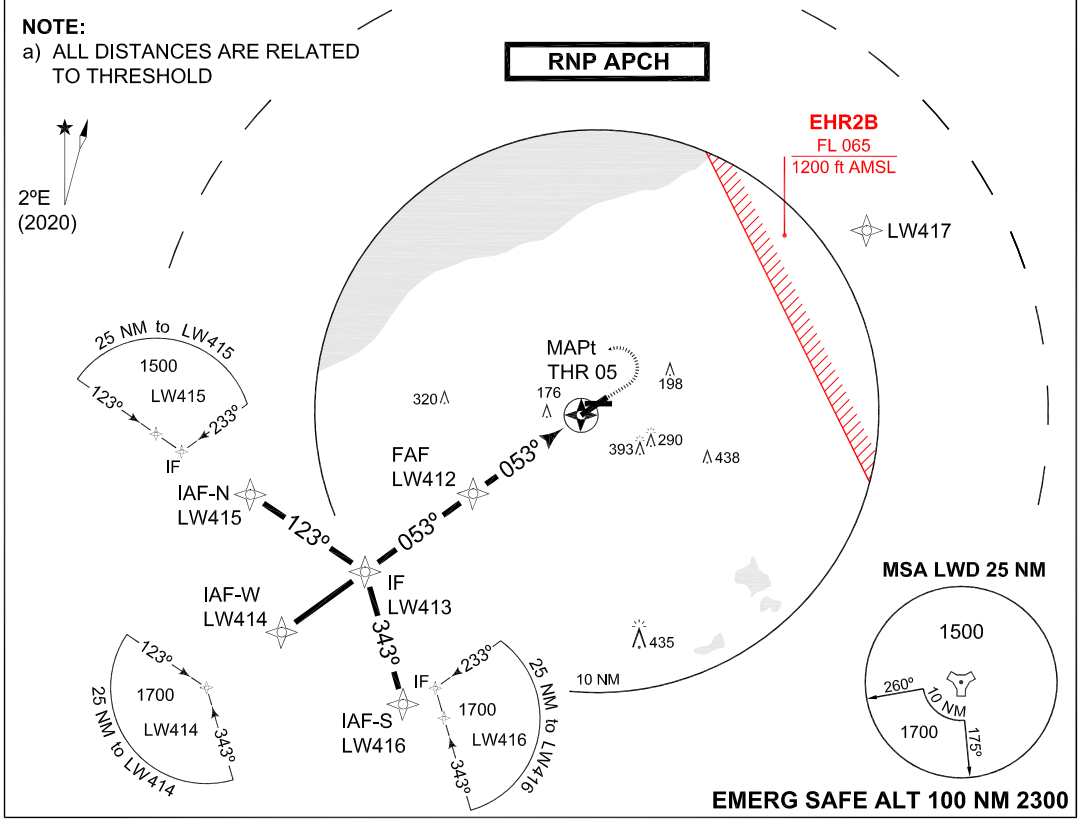
RNP Z RWY 05
LEEUWARDEN (EHLW)

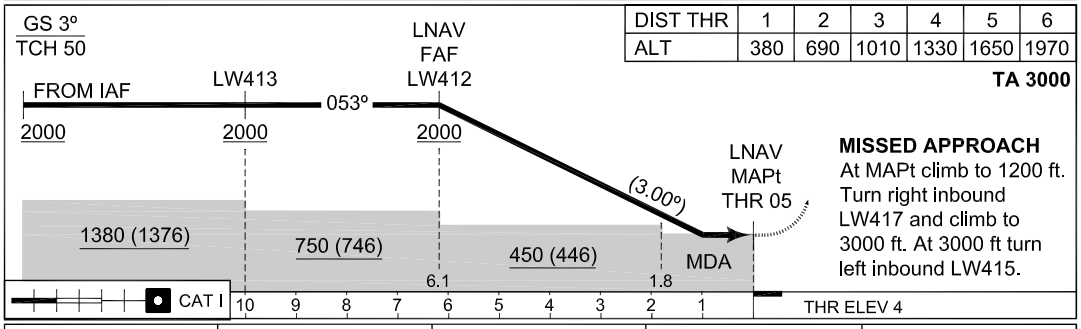
DUTCH MIL	RAPCON NORTH	LEEUWARDEN TWR	GND CTL
259.250 128.355	284.475 132.030	344.850 120.705	362.525

EGNOS CHANNEL	APP COURSE	FAF ALT	Descent GR	MDA	DA	THR ELEV	ALS	LDA
	053°	2000 FT	5.24% / 3°	**380**	**SEE CAT**	4	660 m	8036 FT

NOTE:
a) ALL DISTANCES ARE RELATED TO THRESHOLD

RNP APCH





DIST THR	1	2	3	4	5	6
ALT	380	690	1010	1330	1650	1970

TA 3000

MISSED APPROACH
At MAPt climb to 1200 ft. Turn right inbound LW417 and climb to 3000 ft. At 3000 ft turn left inbound LW415.

CATEGORY	A	B	C	D
MIPS DA(H) LPV	N.A.			
MIPS DA(H) LNAV / VNAV	N.A.			
MIPS 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				

CHANGES: MSA

RNLAF 23 MAR 2023

PANS OPS
INSTRUMENT APPROACH CHART

AD ELEV 4

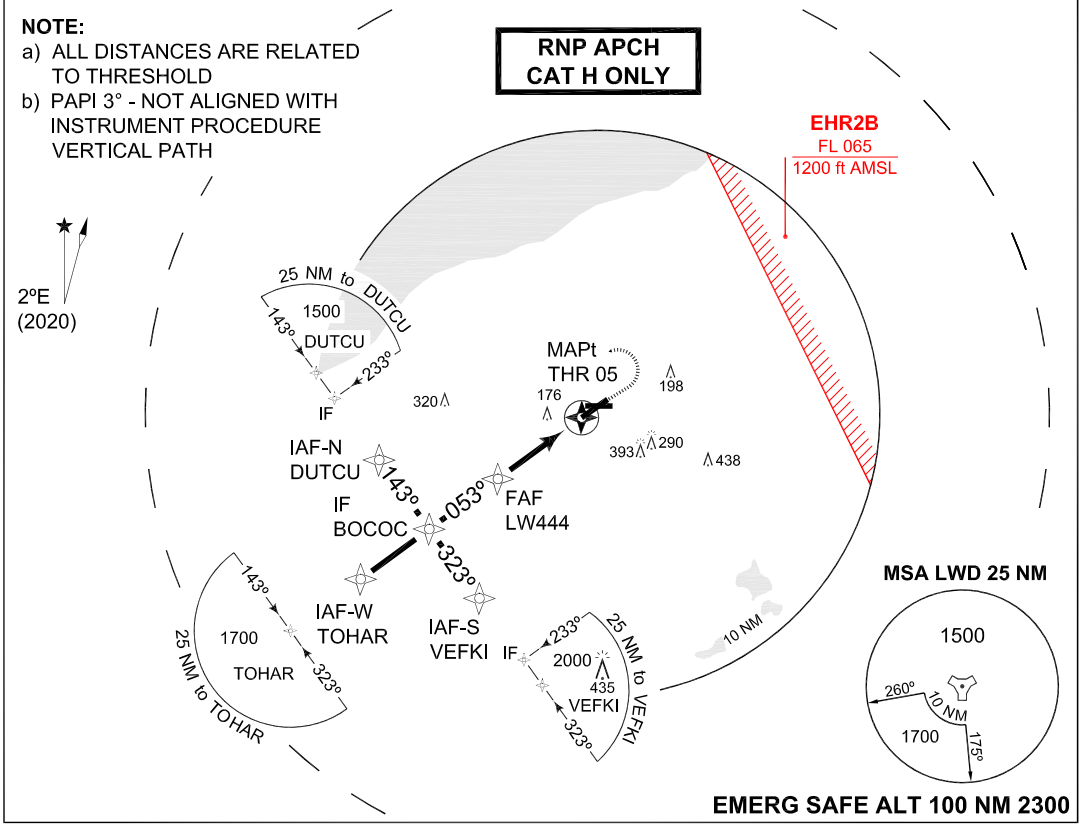
RNP Y RWY 05
LEEUWARDEN (EHLW)

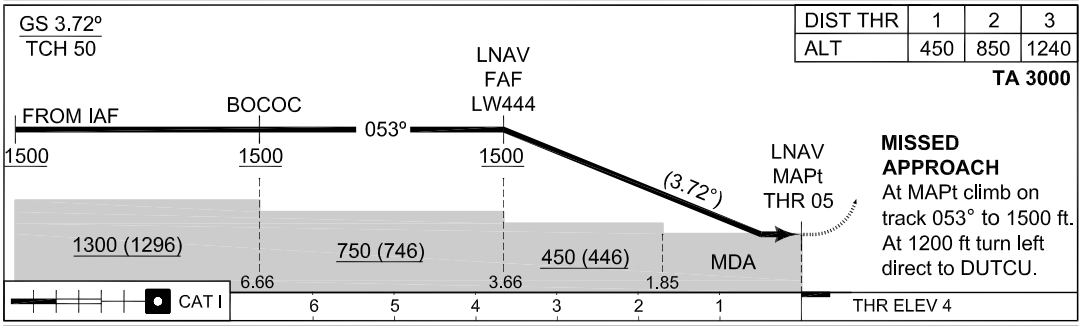
DUTCH MIL	RAPCON NORTH	LEEUWARDEN TWR	GND CTL
259.250 128.355	284.475 132.030	344.850 120.705	362.525

EGNOS CHANNEL	APP COURSE	FAF ALT	Descent GR	MDA	DA	THR ELEV	ALS	LDA
67430 E05A	053°	1500 FT	6.5% / 3.72°	**380**	**204**	4	660 m	8036 FT

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

RNP APCH CAT H ONLY





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

CHANGES: MSA

RNLAF 23 MAR 2023

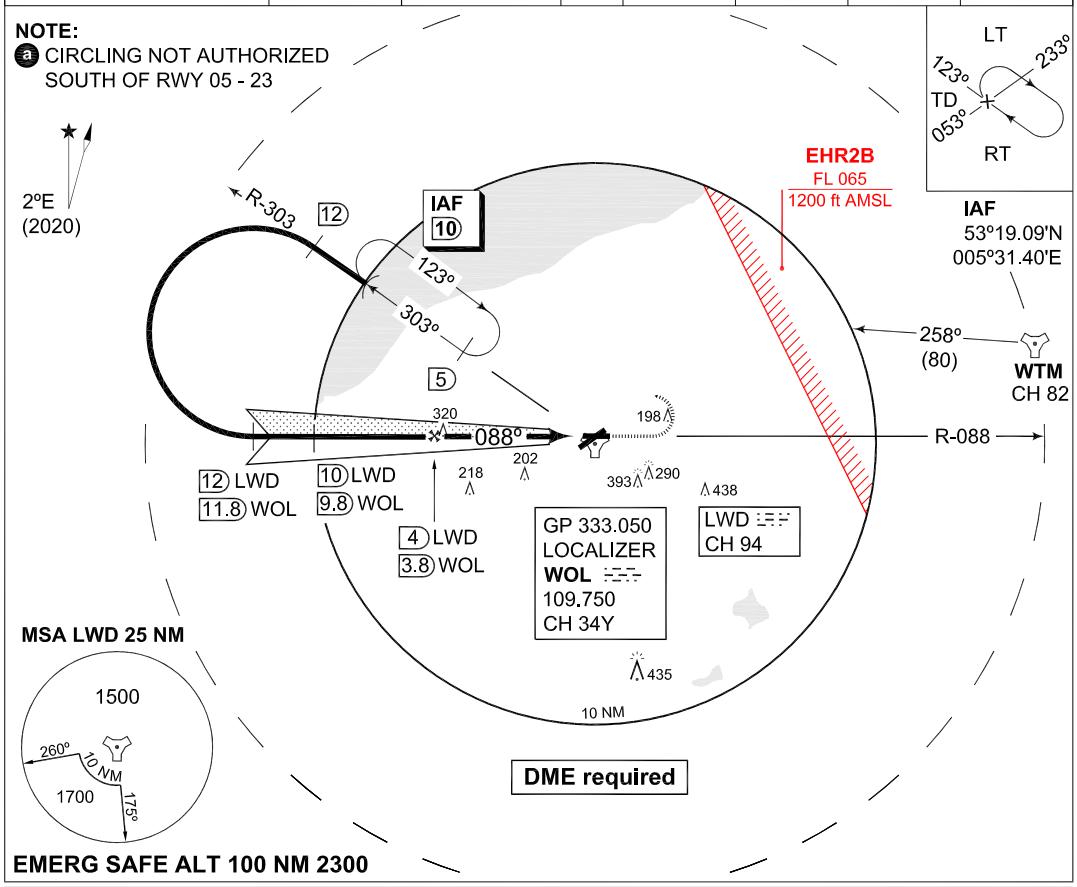
MIPS
INSTRUMENT APPROACH CHART

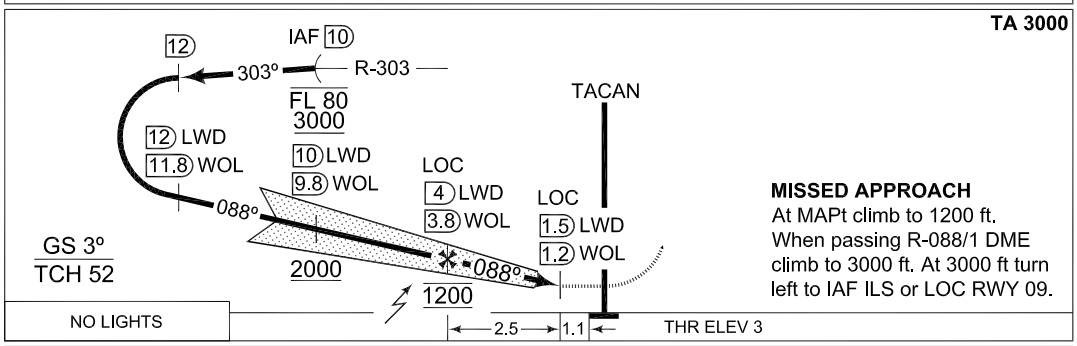
AD ELEV 4

ILS or LOC RWY 09
LEEUWARDEN (EHLW)

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

LOCALIZER / DME	APP COURSE	GS INTCEPT ALT	GS	DA	THR ELEV	ALS	LDA
WOL 109.750 / CH 34Y	088°	1200 FT	3°	**SEE CAT**	3	-	6368 FT





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** -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.

MIPS

CHANGES: MSA

RNLAF 23 MAR 2023

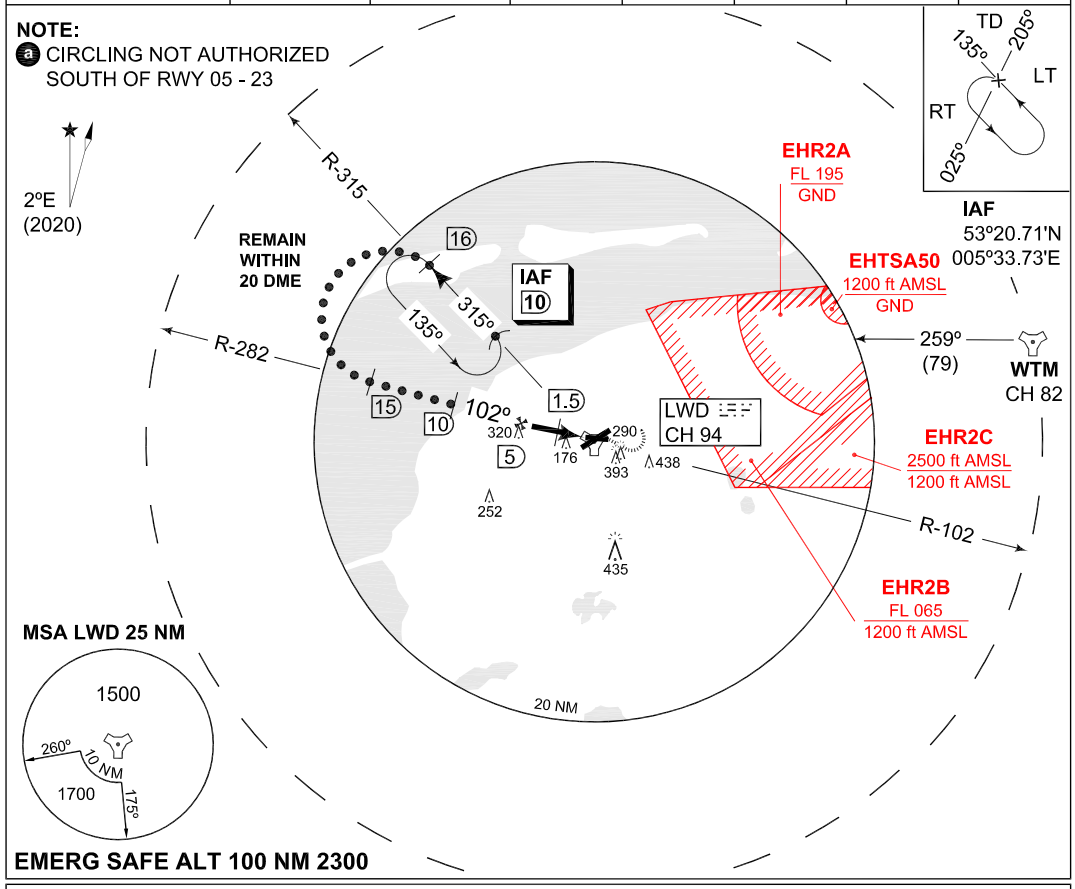
MIPS
INSTRUMENT APPROACH CHART

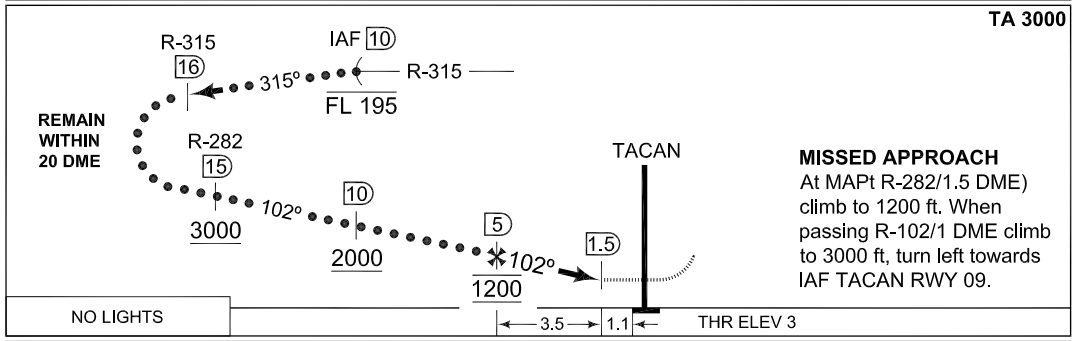
AD ELEV 4

HI-TACAN RWY 09
LEEUWARDEN (EHLW)

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

TACAN	APP COURSE	FAF ALT	Descent GR	MDA	THR ELEV	ALS	LDA
LWD CH 94	102°	1200 FT		**440**	3	-	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 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

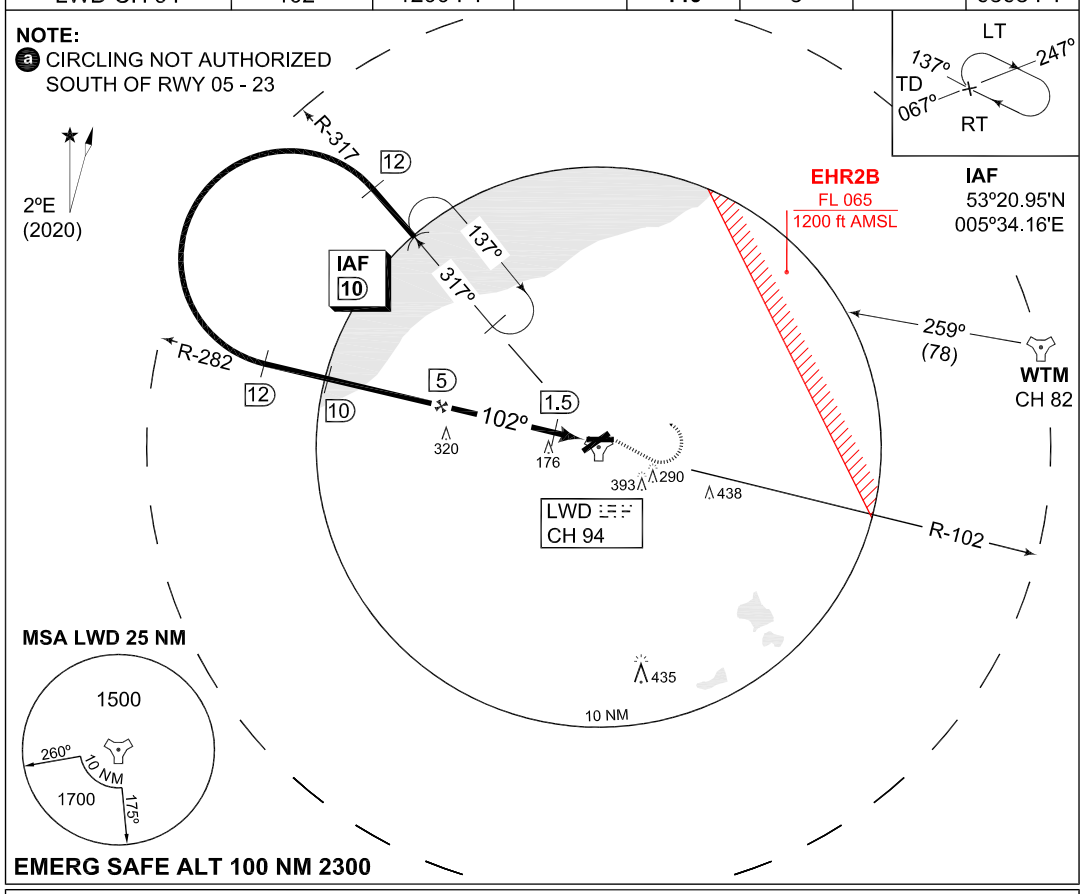
MIPS
INSTRUMENT APPROACH CHART

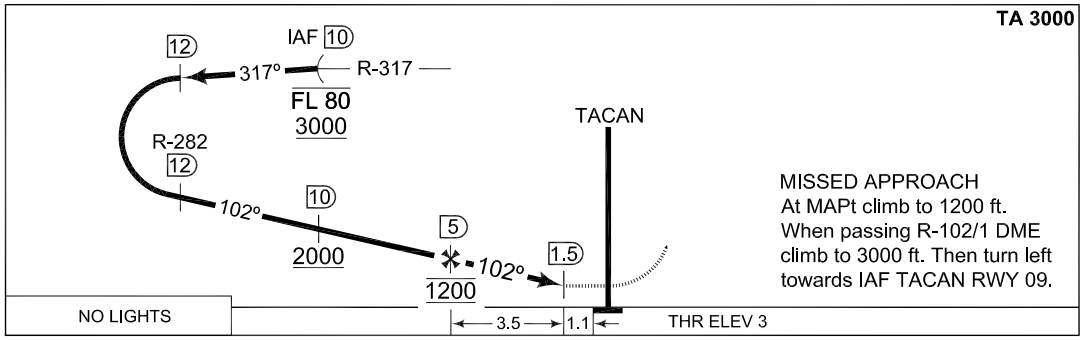
AD ELEV 4

TACAN RWY 09
LEEUWARDEN (EHLW)

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

TACAN	APP COURSE	FAF ALT	Descent GR	MDA	THR ELEV	ALS	LDA
LWD CH 94	102°	1200 FT		**440**	3	-	6368 FT





CATEGORY	A	B	C	D	E
	MINIMA ACCORDING TO PANS-OPS; NOT ACCORDING TO APATC-1				
S-TACAN 09	**440** -1600 437 (500-1.6/1.6)		**440** -2000 437 (500-2.0/2.0)	**440** -2400 437 (500-2.4/2.4)	
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

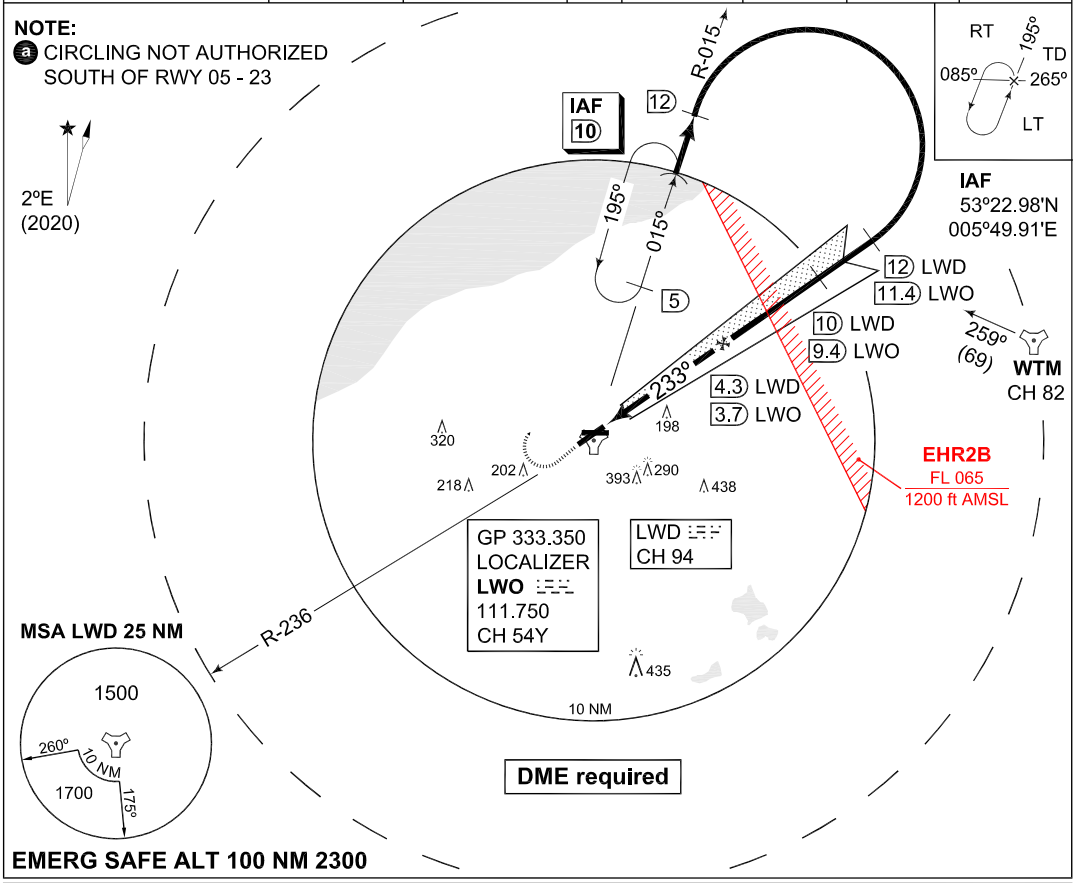
CHANGES: MSA

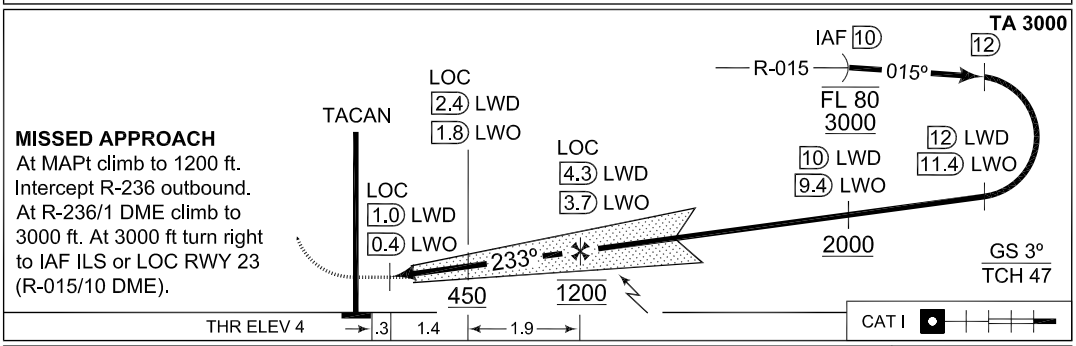
RNLAF 23 MAR 2023

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

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

LOCALIZER / DME	APP COURSE	GS INTCEPT ALT	GS	DA	THR ELEV	ALS	LDA
LWO 111.750 / CH 54Y	233°	1200 FT	3°	SEE CAT	4	720 m	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)

MIPS
CHANGES: MSA
RNLAF 23 MAR 2023

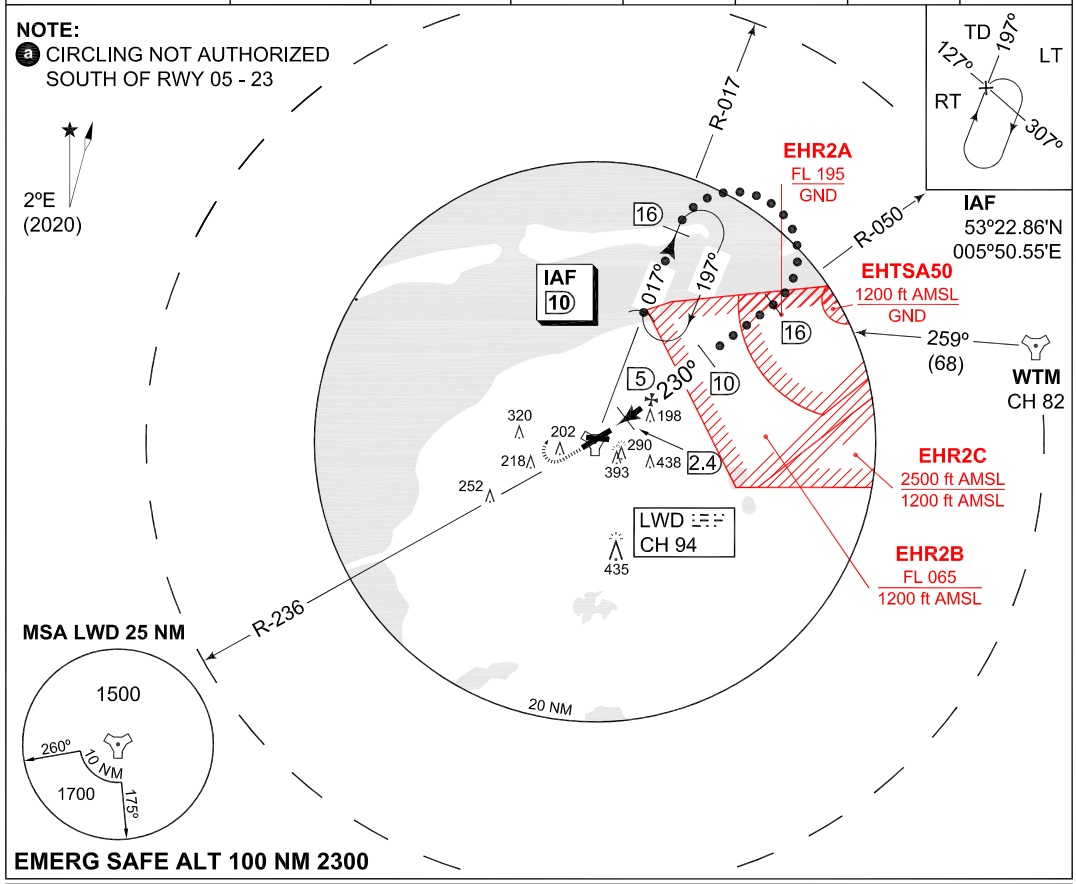
MIPS
INSTRUMENT APPROACH CHART

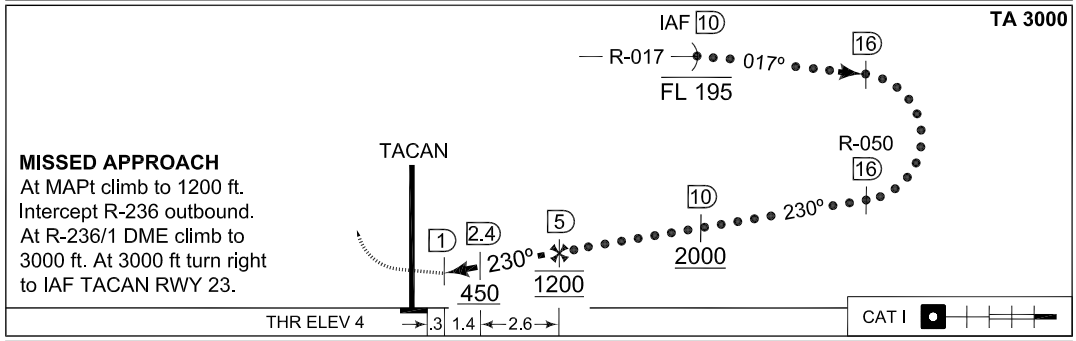
AD ELEV 4

HI-TACAN RWY 23
LEEUWARDEN (EHLW)

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

TACAN	APP COURSE	FAF ALT	Descent GR	MDA	THR ELEV	ALS	LDA
LWD CH 94	230°	1200 FT		**380**	4	720 m	7863 FT





MISSED APPROACH
At MAPt climb to 1200 ft.
Intercept R-236 outbound.
At R-236/1 DME climb to 3000 ft. At 3000 ft turn right to IAF TACAN RWY 23.

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

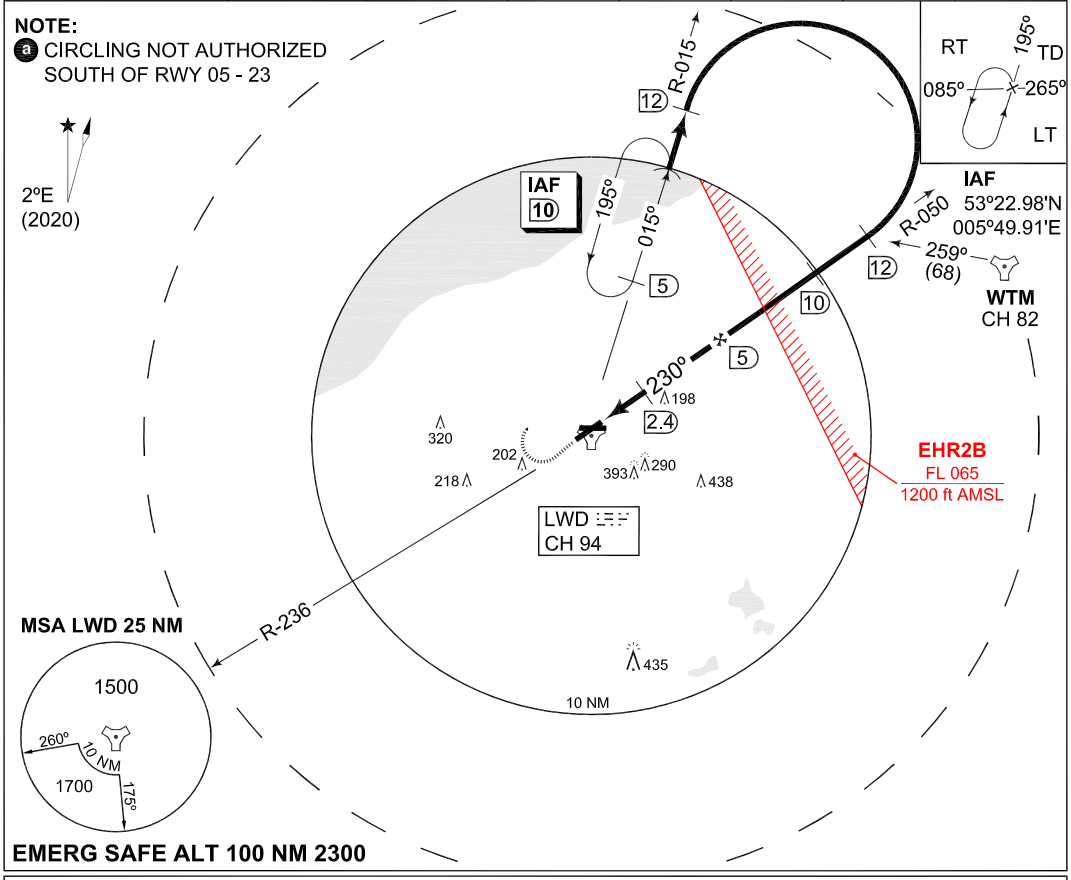
MIPS
INSTRUMENT APPROACH CHART

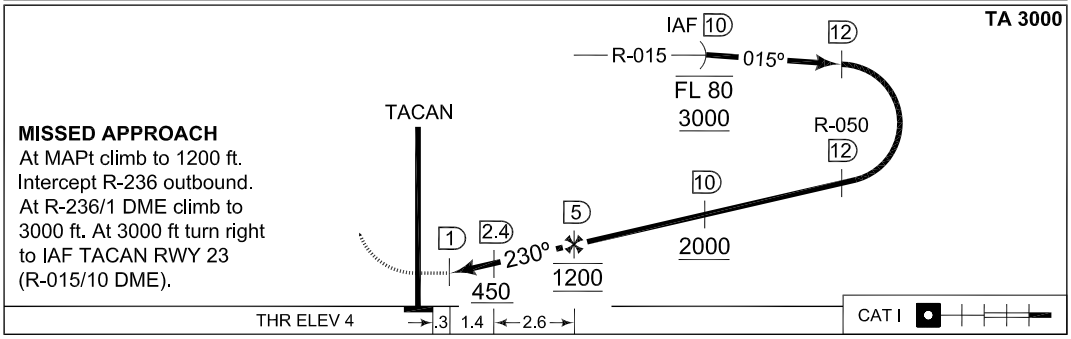
AD ELEV 4

TACAN RWY 23
LEEUWARDEN (EHLW)

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

TACAN	APP COURSE	FAF ALT	Descent GR	MDA	THR ELEV	ALS	LDA
LWD CH 94	230°	1200 FT		**380**	4	720 m	7863 FT

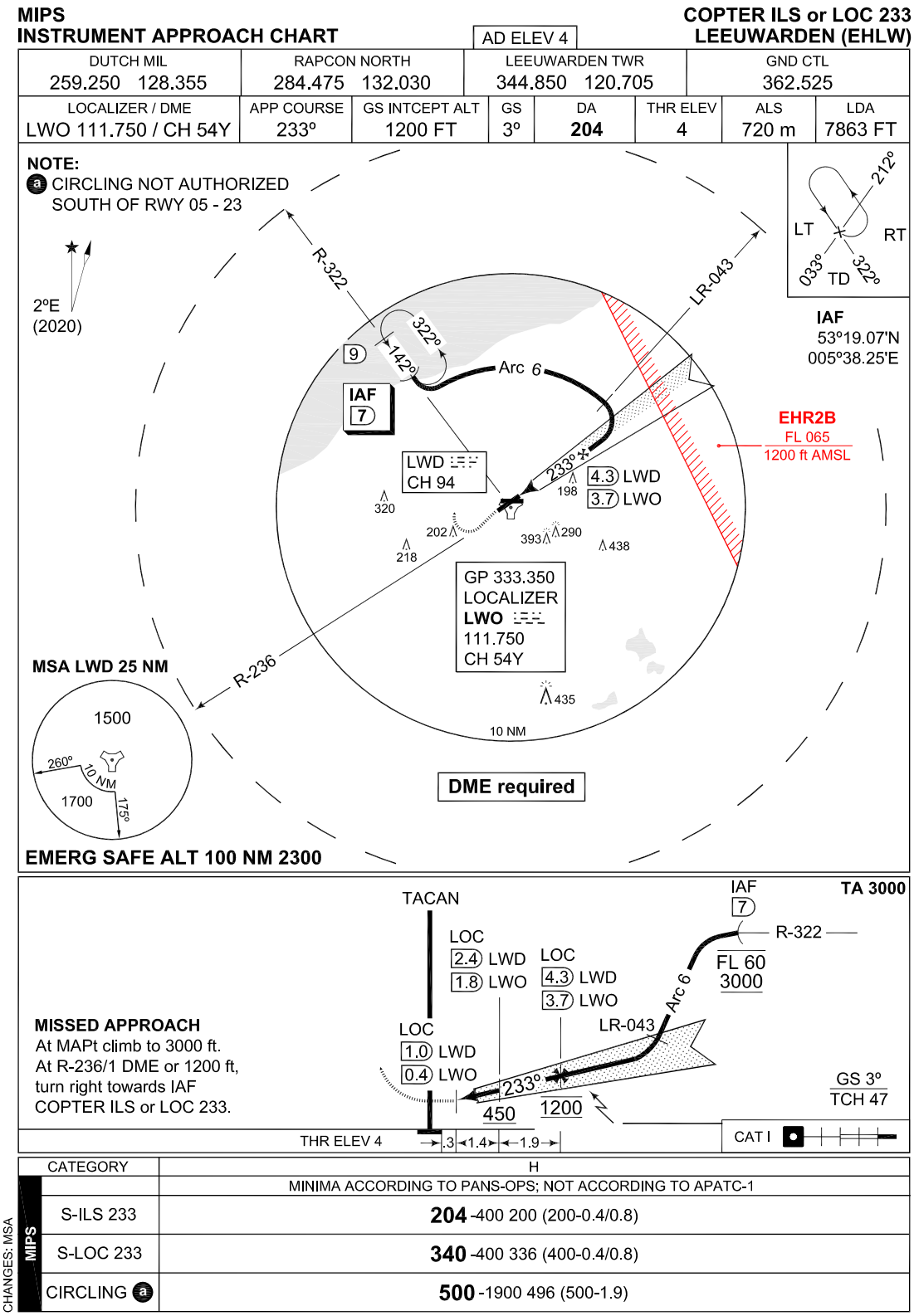




MISSED APPROACH
At MAPt climb to 1200 ft.
Intercept R-236 outbound.
At R-236/1 DME climb to 3000 ft. At 3000 ft turn right to IAF TACAN RWY 23 (R-015/10 DME).

CATEGORY	A	B	C	D	E
	MINIMA ACCORDING TO PANS-OPS; NOT ACCORDING TO APATC-1				
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)

CHANGES: MSA
MIPS
RNLAF 23 MAR 2023


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
NOTE:
a CIRCLING NOT AUTHORIZED SOUTH OF RWY 05 - 23
2°E (2020)
R-322
LR-043
322°
142°
9
Arc 6
IAF 7
LWD CH 94
233°
4.3 LWD
3.7 LWO
320
198
202
218
393
290
438
435
GP 333.350
LOCALIZER
LWO
111.750
CH 54Y
R-236
MSA LWD 25 NM
1500
1700
260°
10 NM
175°
10 NM
DME required
EMERG SAFE ALT 100 NM 2300
212°
LT
RT
033°
TD
322°
IAF
53°19.07'N
005°38.25'E
EHR2B
FL 065
1200 ft AMSLL
TACAN
LOC 2.4 LWD 1.8 LWO
LOC 4.3 LWD 3.7 LWO
LOC 1.0 LWD 0.4 LWO
IAF 7
R-322
FL 60
3000
Arc 6
LR-043
TA 3000
MISSED APPROACH
At MAPt climb to 3000 ft.
At R-236/1 DME or 1200 ft,
turn right towards IAF
COPTER ILS or LOC 233.
233°
450
1200
GS 3°
TCH 47
THR ELEV 4
.3
1.4
1.9
CAT I
CATEGORY
H
MINIMA ACCORDING TO PANS-OPS; NOT ACCORDING TO APATC-1
MIPS
S-ILS 233
204 -400 200 (200-0.4/0.8)
S-LOC 233
340 -400 336 (400-0.4/0.8)
CIRCLING a
500 -1900 496 (500-1.9)
CHANGES: MSA
RNLAF 23 MAR 2023

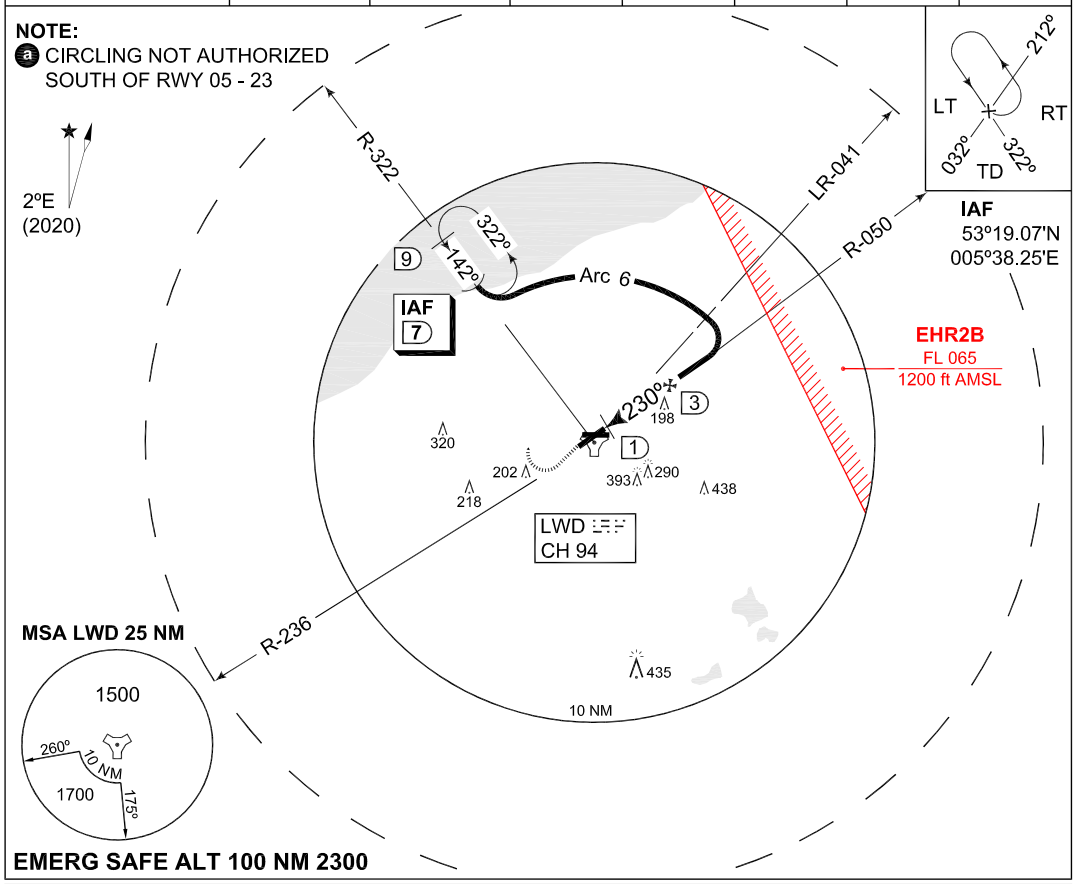
MIPS
INSTRUMENT APPROACH CHART

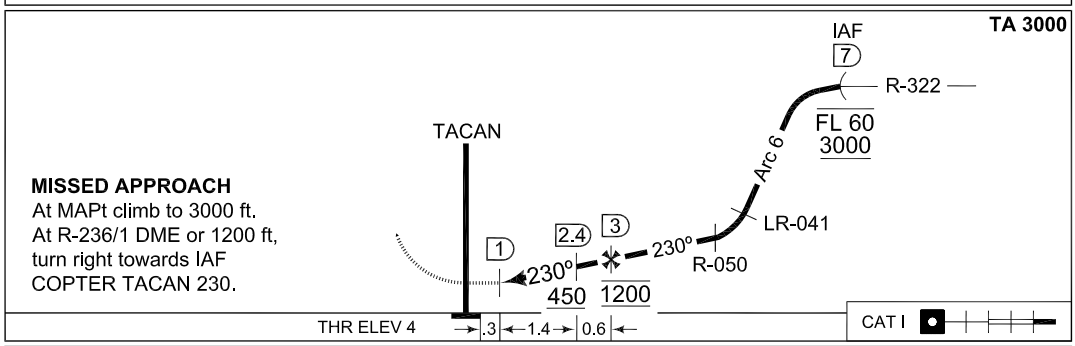
AD ELEV 4

COPTER TACAN 230
LEEUWARDEN (EHLW)

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

TACAN	APP COURSE	FAF ALT	Descent GR	MDA	THR ELEV	ALS	LDA
LWD CH 94	230°	1200 FT		**380**	4	720 m	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

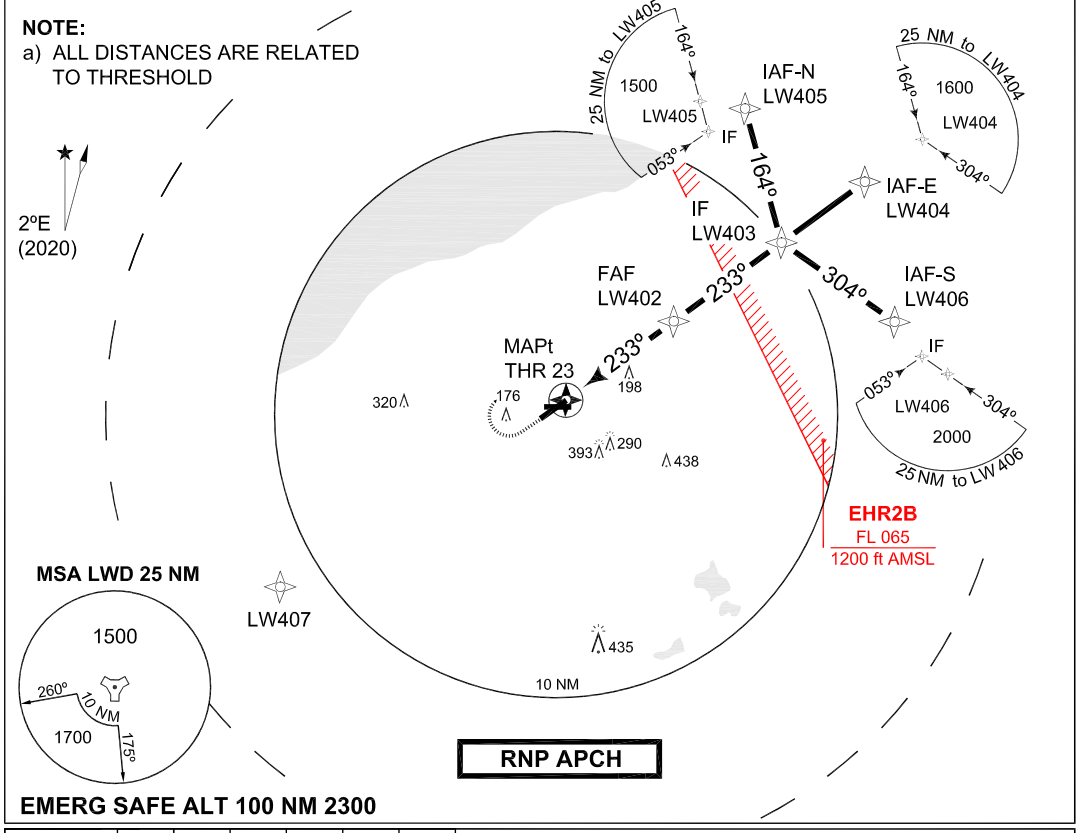
PANS OPS
INSTRUMENT APPROACH CHART

AD ELEV 4

RNP Z RWY 23
LEEUWARDEN (EHLW)

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

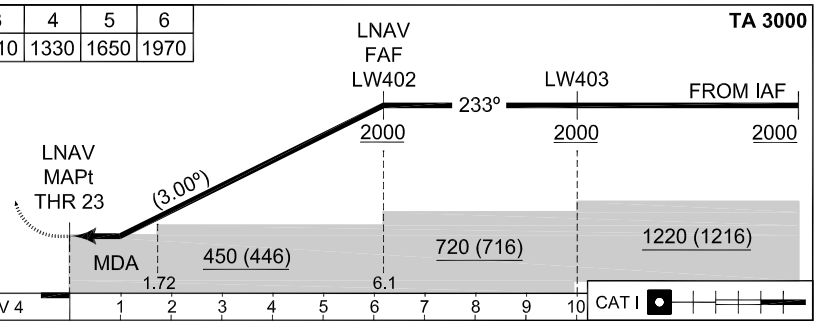
EGNOS CHANNEL	APP COURSE	FAF ALT	Descent GR	MDA	DA	THR ELEV	ALS	LDA
	233°	2000 FT	5.24% / 3°	**370**	**SEE CAT**	4	720 m	7863 FT



DIST THR	1	2	3	4	5	6
ALT	370	690	1010	1330	1650	1970

GS 3°
TCH 50

MISSED APPROACH
At MAPt climb to 1200 ft. Turn right inbound LW407 and climb to 3000 ft. At 3000 ft turn right inbound LW405.



CATEGORY	A	B	C	D
MIPS DA(H) LPV	N.A.			
MIPS DA(H) LNAV / VNAV	N.A.			
MIPS 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				

CHANGES: MSA

RNLAF 23 MAR 2023

PANS OPS
INSTRUMENT APPROACH CHART

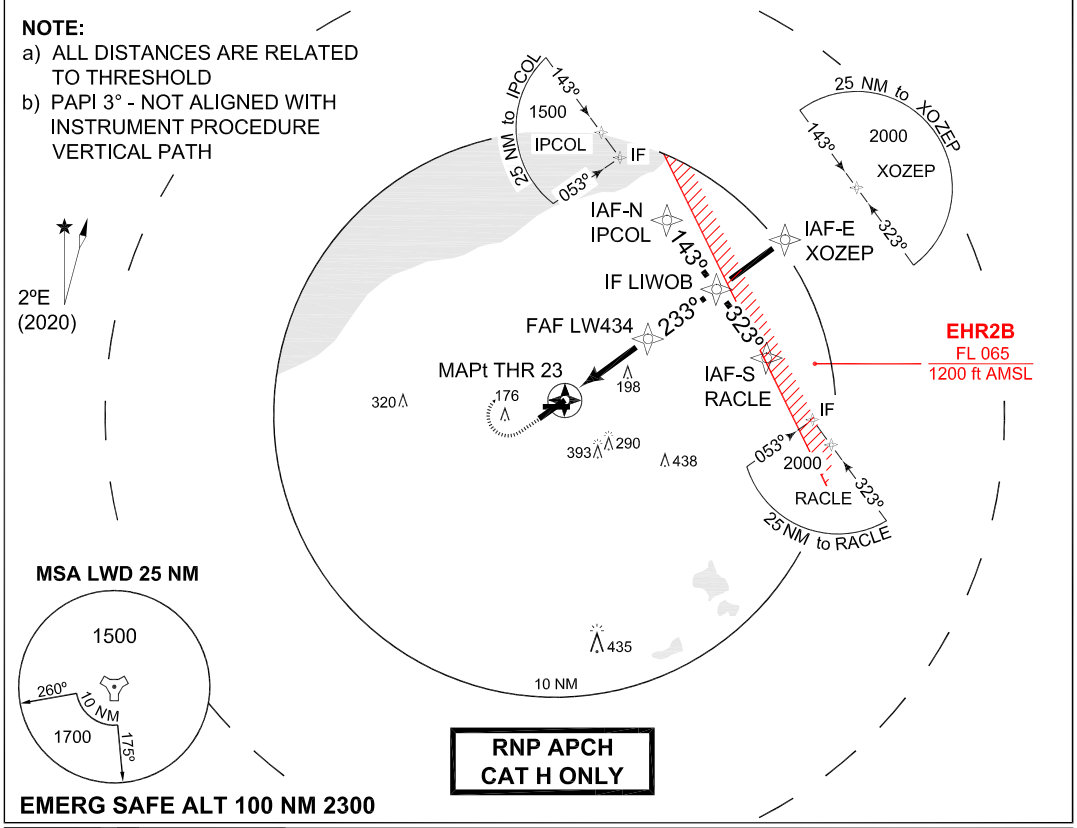
AD ELEV 4

RNP Y RWY 23
LEEUWARDEN (EHLW)

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

EGNOS CHANNEL	APP COURSE	FAF ALT	Descent GR	MDA	DA	THR ELEV	ALS	LDA
92974 E23A	233°	1500 FT	6.5% / 3.72°	**370**	**204**	4	720 m	7863 FT

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

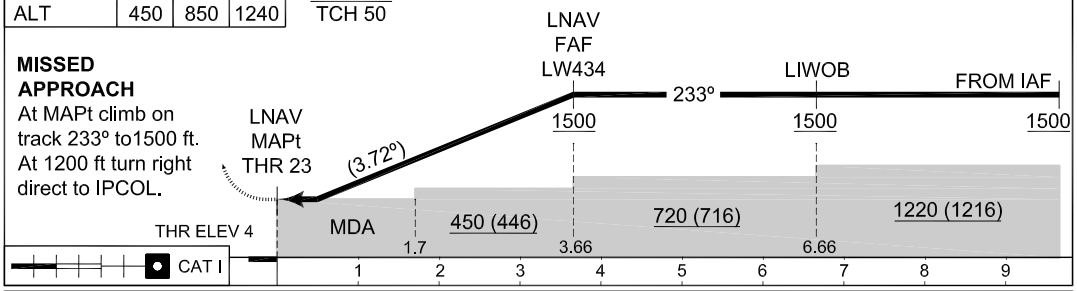


DIST THR	1	2	3
ALT	450	850	1240

GS 3.72°
TCH 50

TA 3000

MISSED APPROACH
At MAPt climb on track 233° to1500 ft. At 1200 ft turn right direct to IPCOL.



CATEGORY		H
MIPS	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)

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

CHANGES: MSA

RNLAF 23 MAR 2023

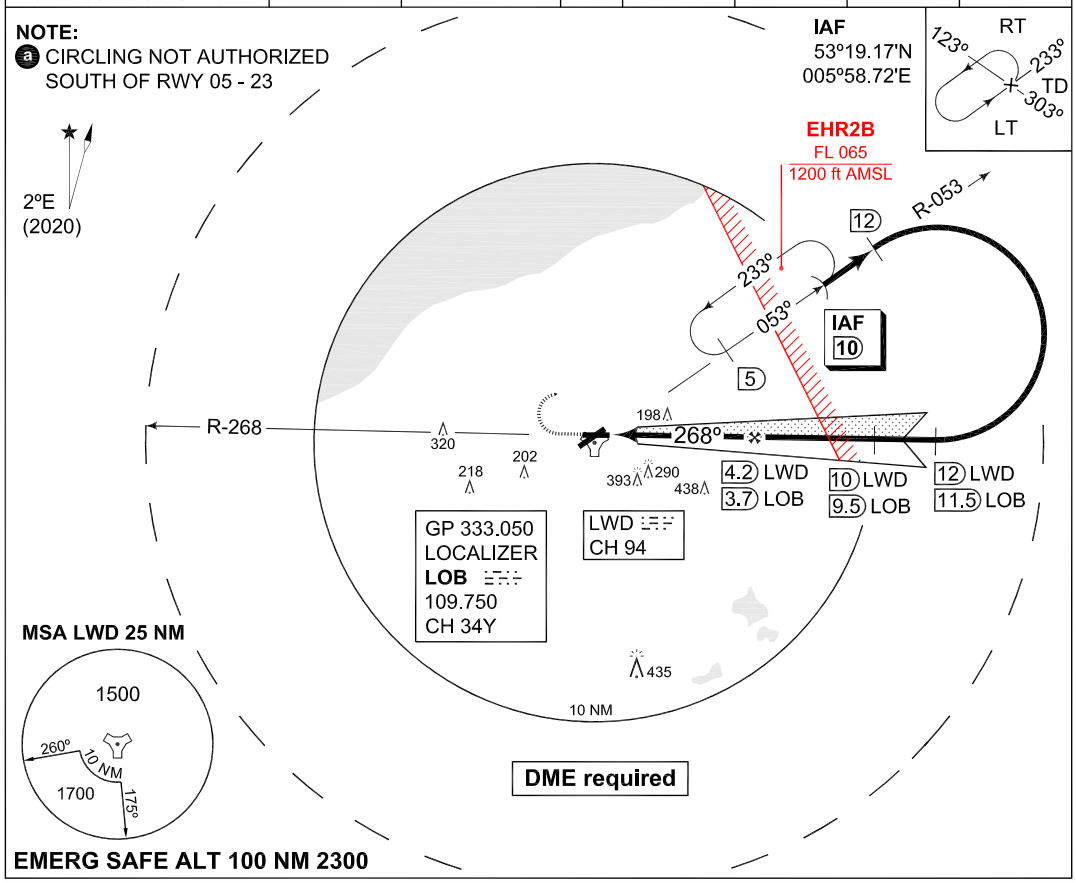
MIPS
INSTRUMENT APPROACH CHART

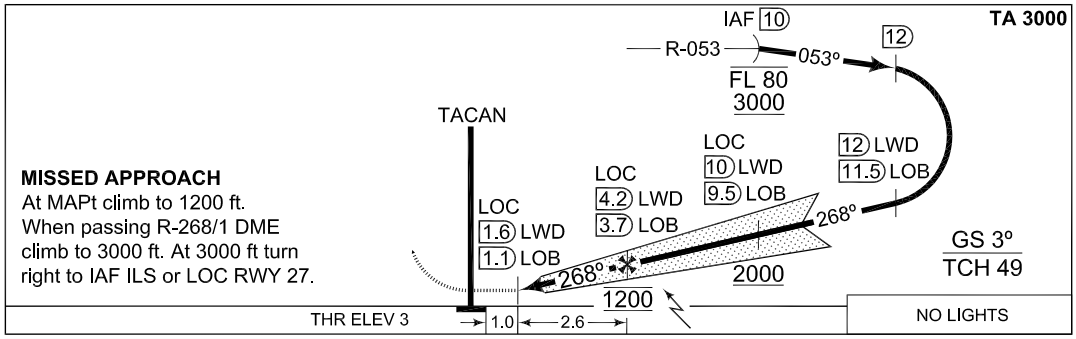
AD ELEV 4

ILS or LOC RWY 27
LEEUWARDEN (EHLW)

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

LOCALIZER / DME	APP COURSE	GS INTCEPT ALT	GS	DA	THR ELEV	ALS	LDA
LOB 109.750 / CH 34Y	268°	1200 FT	3°	SEE CAT	3	-	6561 FT





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.

MIPS
CHANGES: MSA
RNLAF 23 MAR 2023

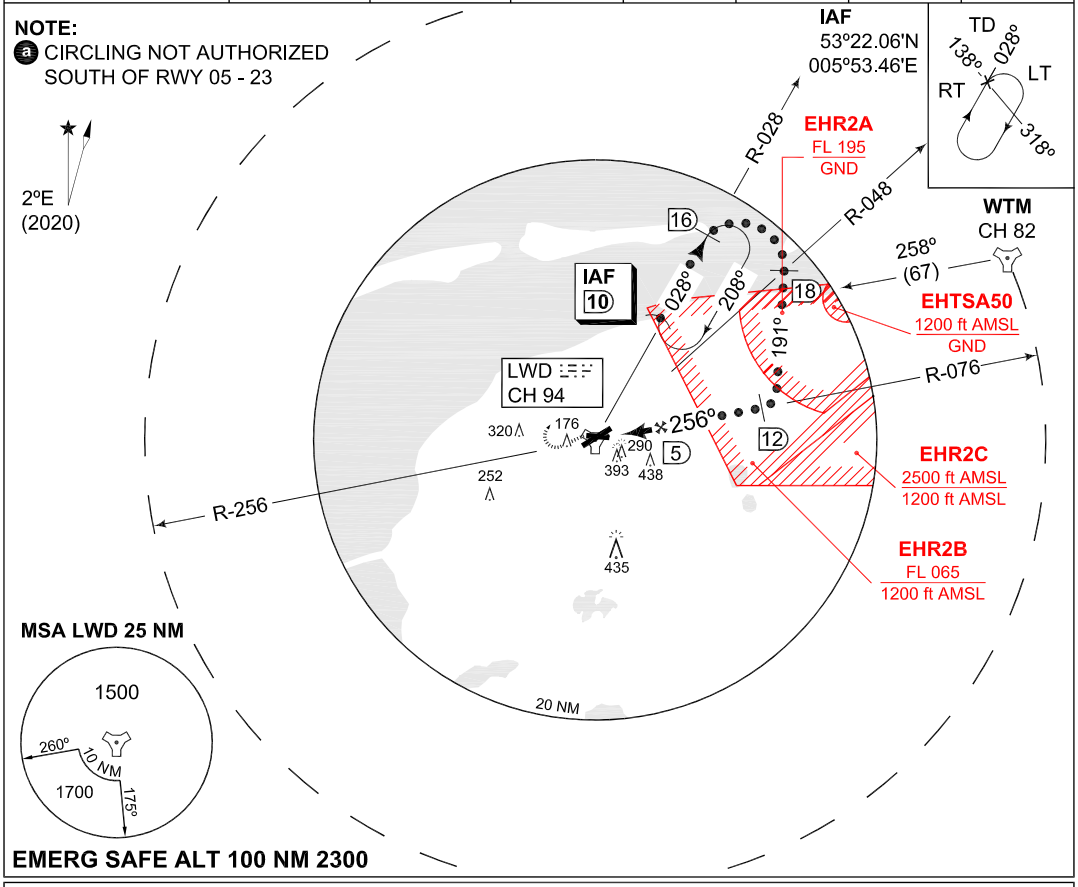
MIPS
INSTRUMENT APPROACH CHART

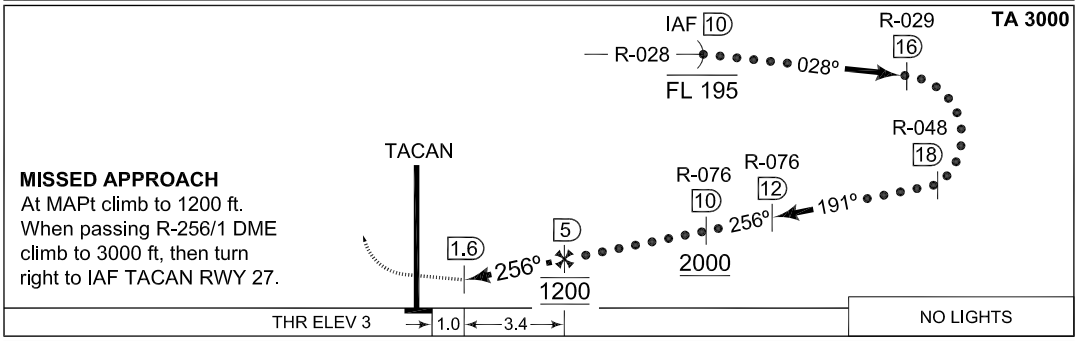
AD ELEV 4

HI-TACAN RWY 27
LEEUWARDEN (EHLW)

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

TACAN	APP COURSE	FAF ALT	Descent GR	MDA	THR ELEV	ALS	LDA
LWD CH 94	256°	1200 FT		**390**	3	-	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 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

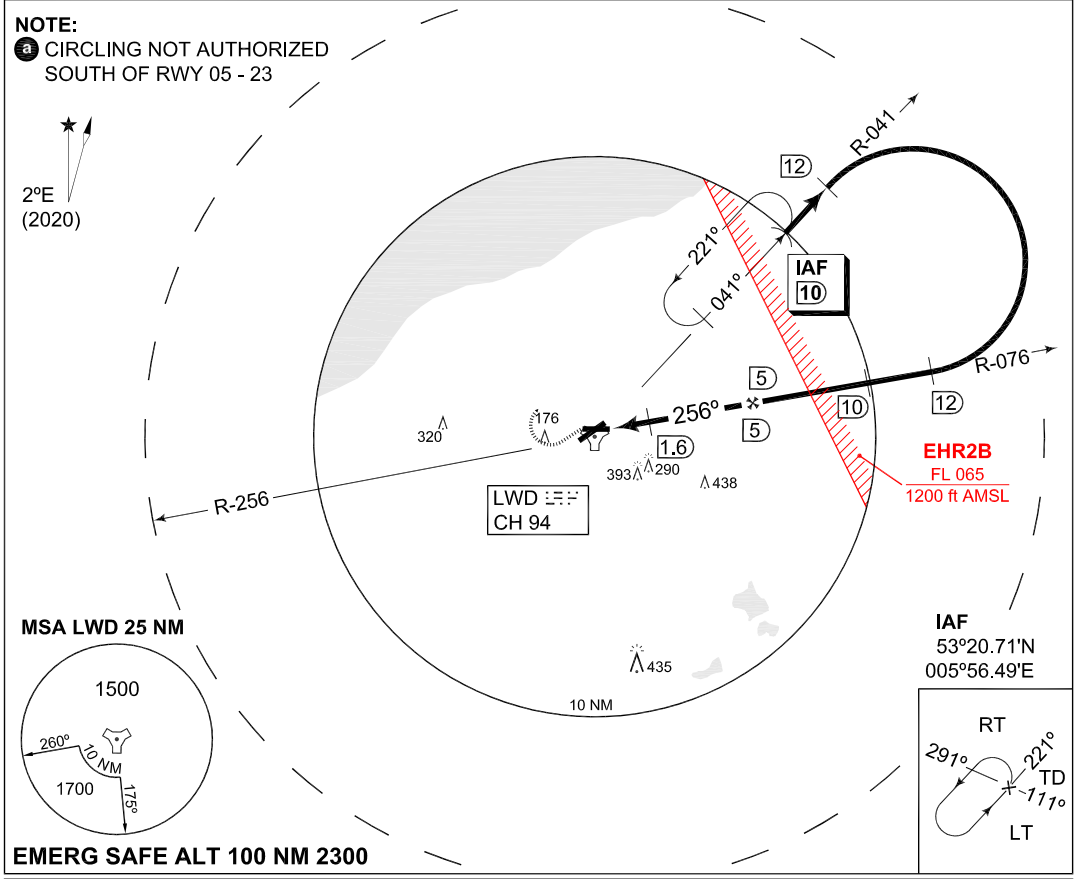
AD ELEV 4

TACAN RWY 27
LEEUWARDEN (EHLW)

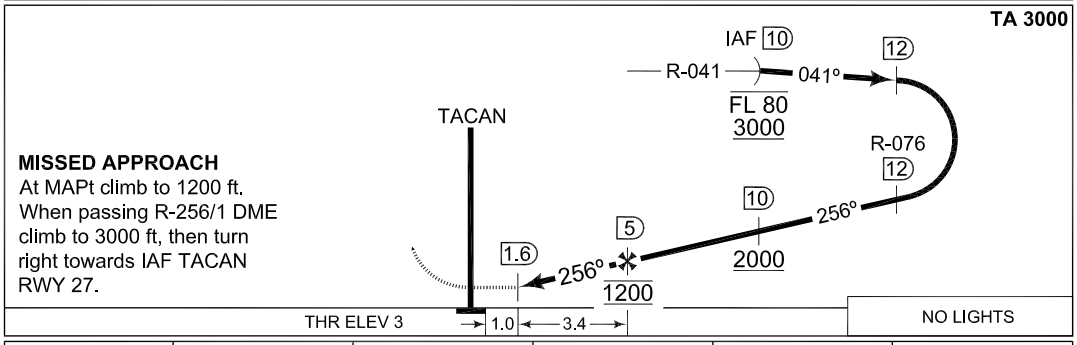
DUTCH MIL	RAPCON NORTH	LEEUWARDEN TWR	GND CTL
259.250 128.355	284.475 132.030	344.850 120.705	362.525

TACAN	APP COURSE	FAF ALT	Descent GR	MDA	THR ELEV	ALS	LDA
LWD CH 94	256°	1200 FT		**390**	3	-	6561 FT

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



TA 3000



MISSED APPROACH
At MAPt climb to 1200 ft.
When passing R-256/1 DME climb to 3000 ft, then turn right towards IAF TACAN RWY 27.

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)

MIPS

CHANGES: MSA

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	213º MAG/12.6 NM NIJMEGEN
3	Elevation/Reference temperature	+ 73 ft AMSL/22.2º C (JUL)
4	MAG VAR/Annual change	1º56' 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 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
GND CTL	Volkel Ground	386.775	HO	
APP	RAPCON South	123.180*) 122.100 388.525*)	HO	Radar equipped
RADAR	Volkel Arrival	122.100 291.200	HO	Through APP

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 Depature 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 procdures 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 sha'l 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.fdno@mindef.nl

AFTN: EHMCZPZX

avaible H24

PPR 24 HRS: for Prior Permission Request contact:

Operational and Co-ordination Centre

Tel: +31(0)413 278001/8002

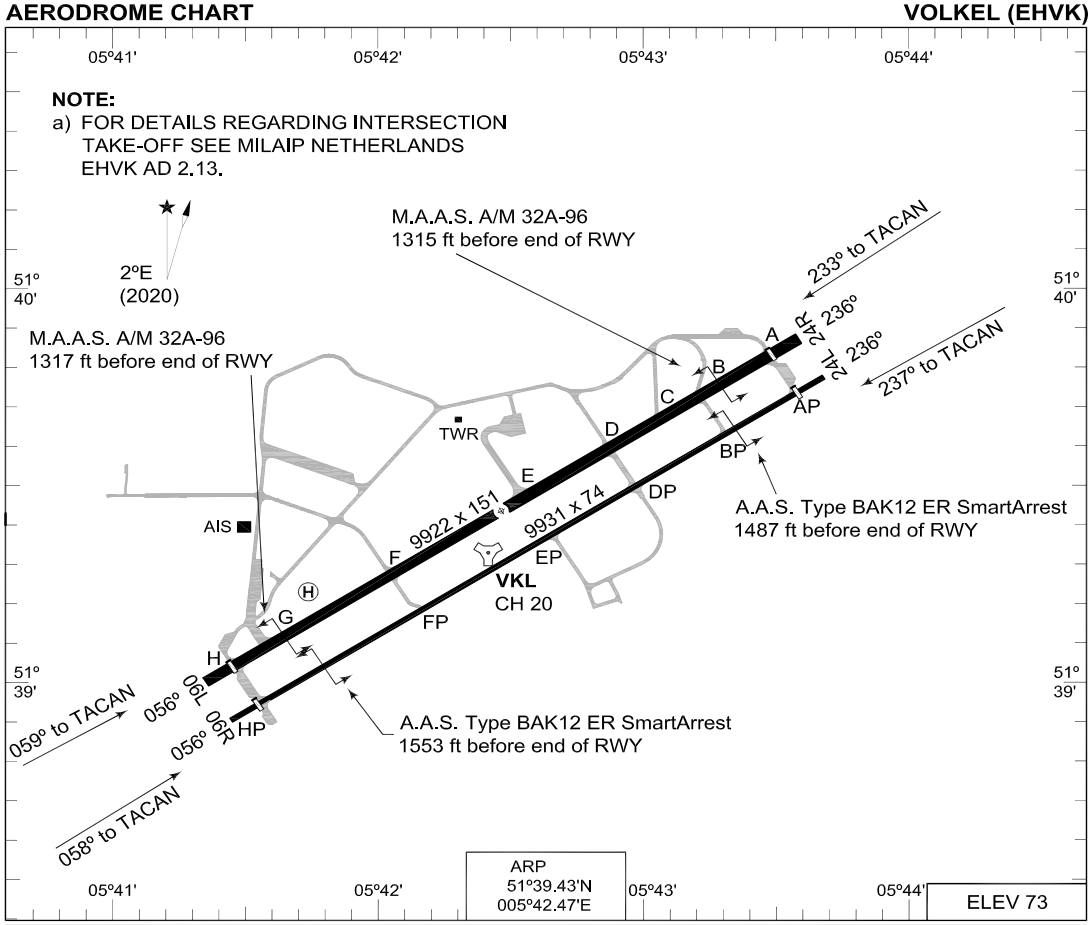
Fax: +31(0)413 276558

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

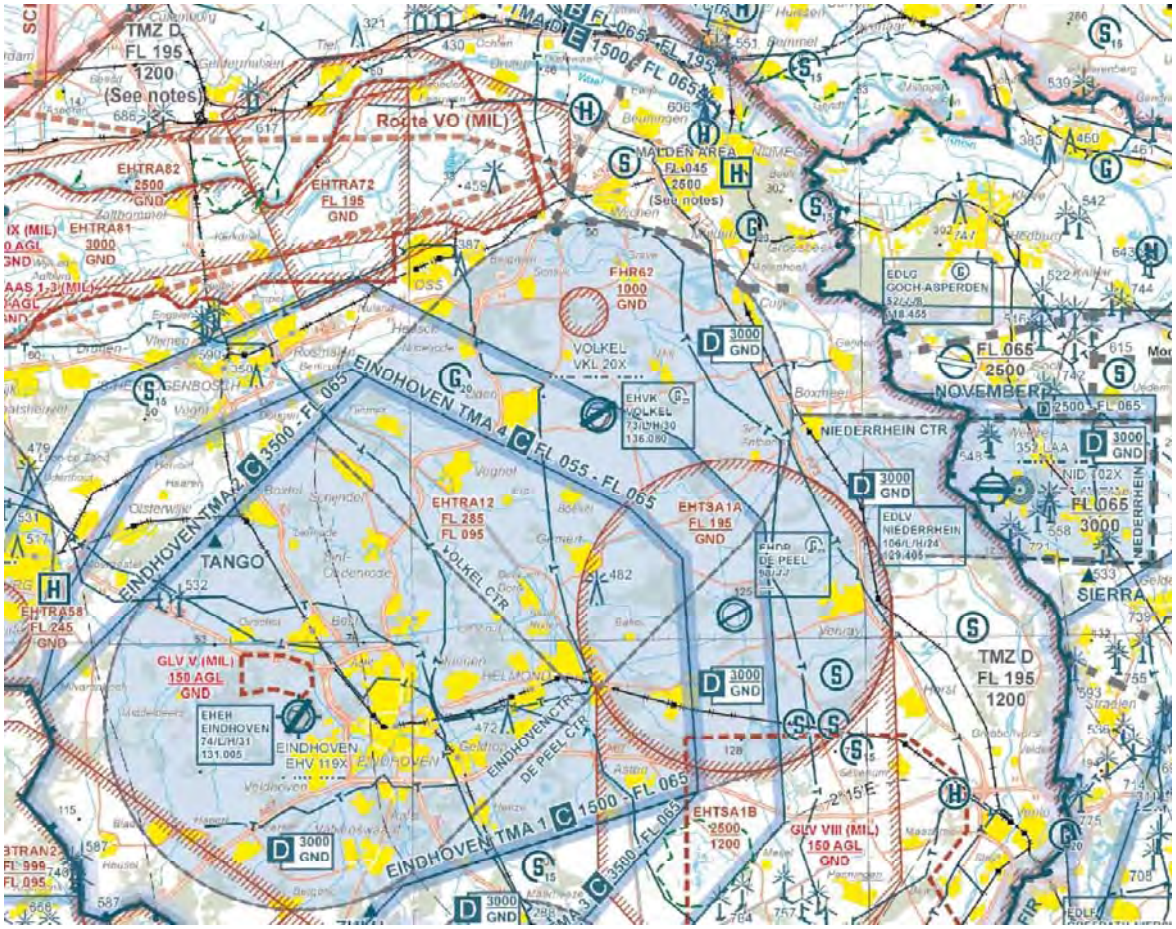
VOLKEL TWR	291.100	136.080	(Ground Control) 386.775
VOLKEL ARRIVAL	291.200		
RAPCON SOUTH	388.525	123.180	

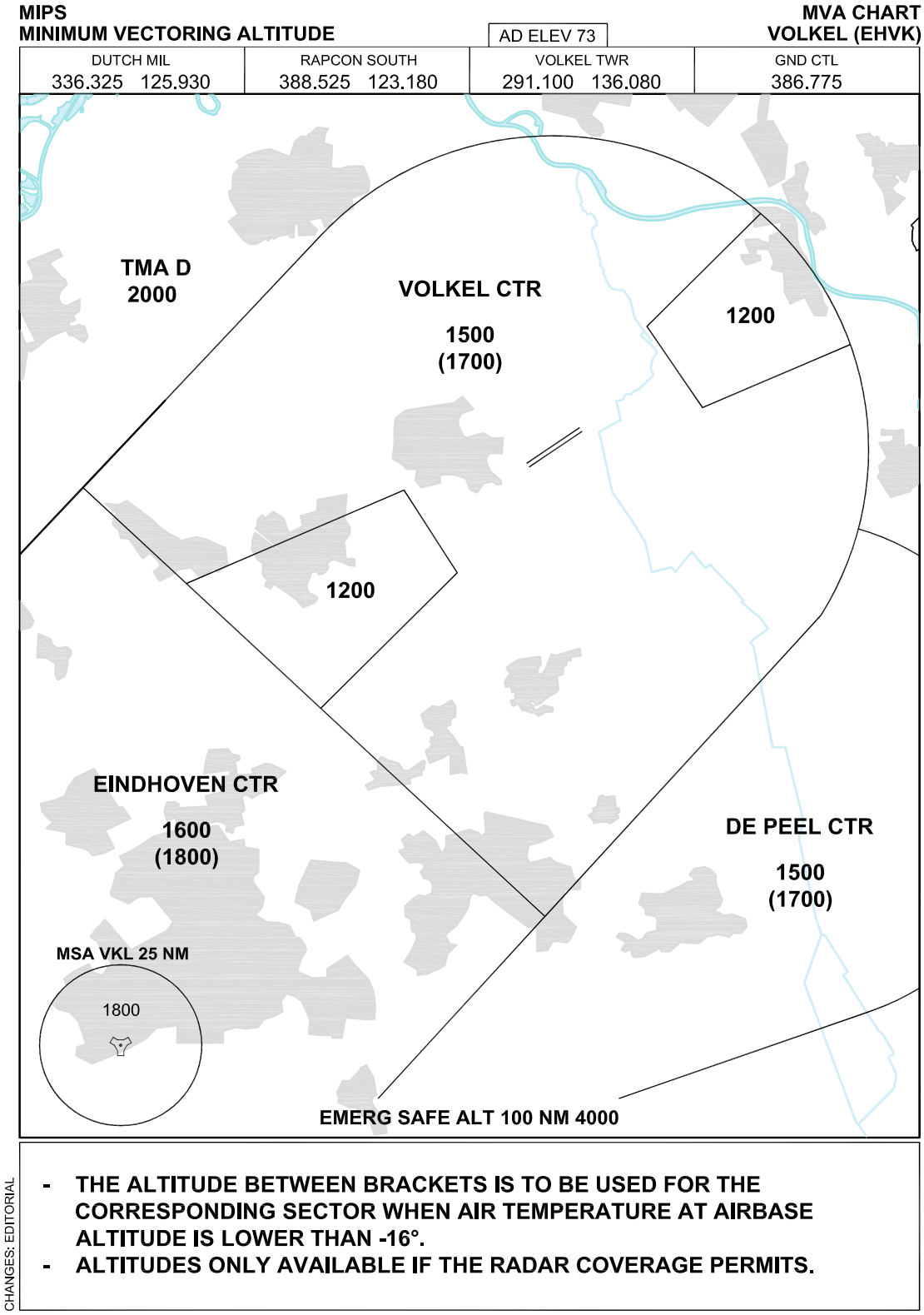
	PROC. CRITERIA	RWY	GS	TCH	OTCH	RPI	CAT	MINIMA CRITERIA	MINIMA
SRA	MIPS	24R					ABCDE	MIPS	460-1100 398 (400-1.1/1.8)
	MIPS	24L					ABCDE	MIPS	460-1400 398 (400-1.4/1.8)
	MIPS	06L					ABCDE	MIPS	460-1100 388 (400-1.1/1.8)
	MIPS	06R					ABCDE	MIPS	460-1400 387 (400-1.4/1.8)

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

RNLAF 18 APR 2024

LOCAL MAP


TMZ D
FL 195
1200
(See notes)
Route VO (MIL)
EHTRA82
2500
GND
EHTRA72
FL 195
GND
EHTRA81
3000
GND
MALDEN AREA
FL 045
2500
(See notes)
FHR62
1000
GND
VOLKEL
VKL 20X
EHVK
VOLKEL
73/L/H/30
136.080
EDLG
GOCH-ASPERDEN
EINDHOVEN TMA 4
C
FL 055 - FL 065
3500 - FL 065
EINDHOVEN TMA 2
EHTRA12
FL 285
FL 095
EHTSA1A
FL 195
GND
VOLKEL CTR
TANGO
EHTRA58
FL 245
GND
GLV V (MIL)
150 AGL
GND
EHEH
EINDHOVEN
74/L/H/31
131.005
EINDHOVEN
EHV 119X
EINDHOVEN CTR
DE PEEL CTR
EINDHOVEN TMA 1
1500 - FL 065
EHTSA1B
2500
1200
GLV VIII (MIL)
150 AGL
GND
FL 065
2500
NOVEMBER
NIEDERRHEIN CTR
EDLV
NIEDERRHEIN
106/L/H/24
129.405
SIERRA
TMZ D
FL 195
1200

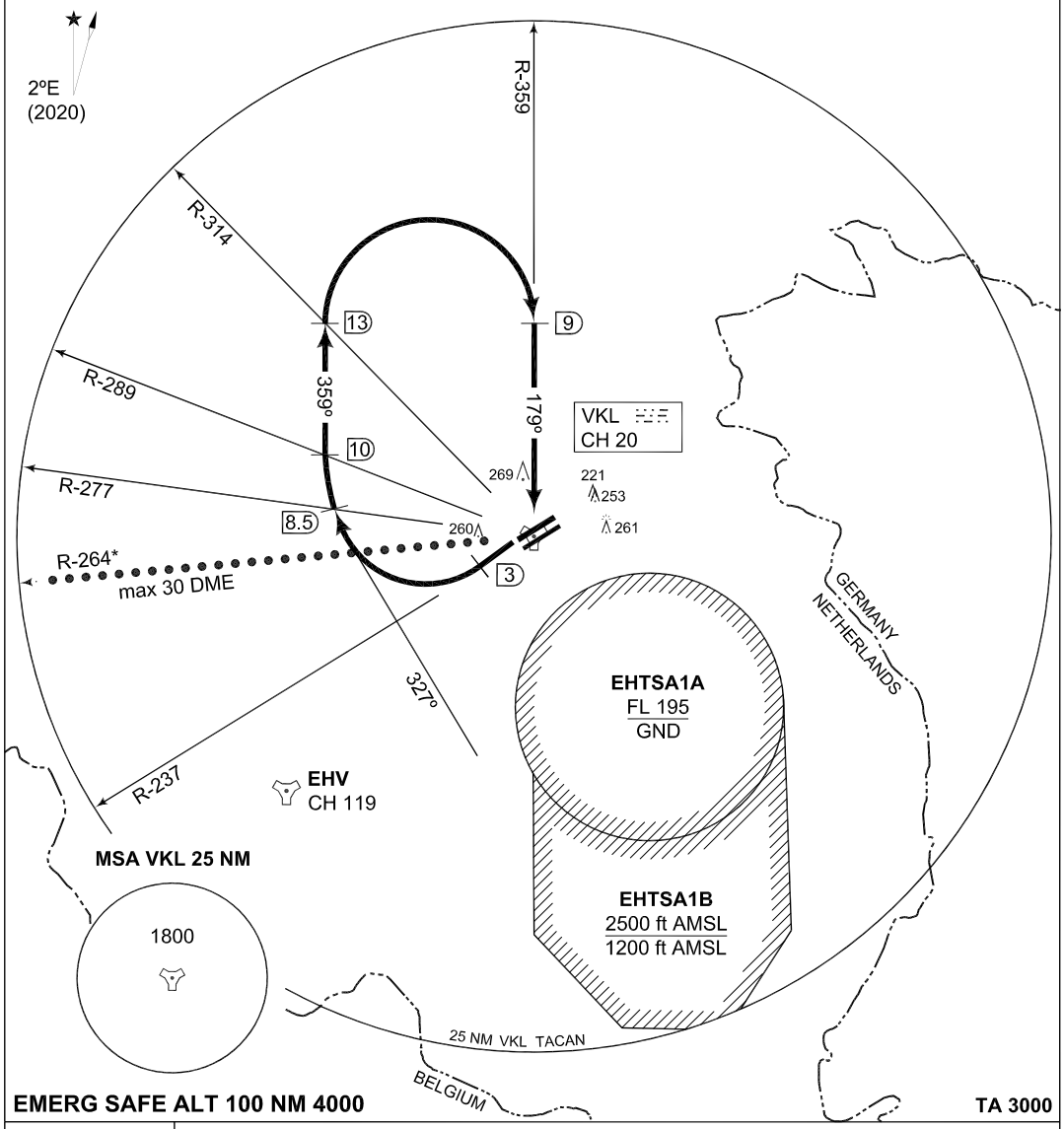

MIPS
MINIMUM VECTORING ALTITUDE
AD ELEV 73
MVA CHART
VOLKEL (EHVK)
DUTCH MIL
336.325 125.930
RAPCON SOUTH
388.525 123.180
VOLKEL TWR
291.100 136.080
GND CTL
386.775
TMA D
2000
VOLKEL CTR
1500
(1700)
1200
1200
EINDHOVEN CTR
1600
(1800)
DE PEEL CTR
1500
(1700)
MSA VKL 25 NM
1800
EMERG SAFE ALT 100 NM 4000
- 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: EDITORIAL
RNLAF 30 DEC 2021

MIPS **VK1**

INSTRUMENT DEPARTURE CHART AD ELEV 73 **VOLKEL (EHVK)**

GND CTL	VOLKEL TWR	RAPCON SOUTH	DUTCH MIL
386.775	291.100 136.080	388.525 123.180	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 327º. - When passing R-277 turn right, heading 359º. - 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

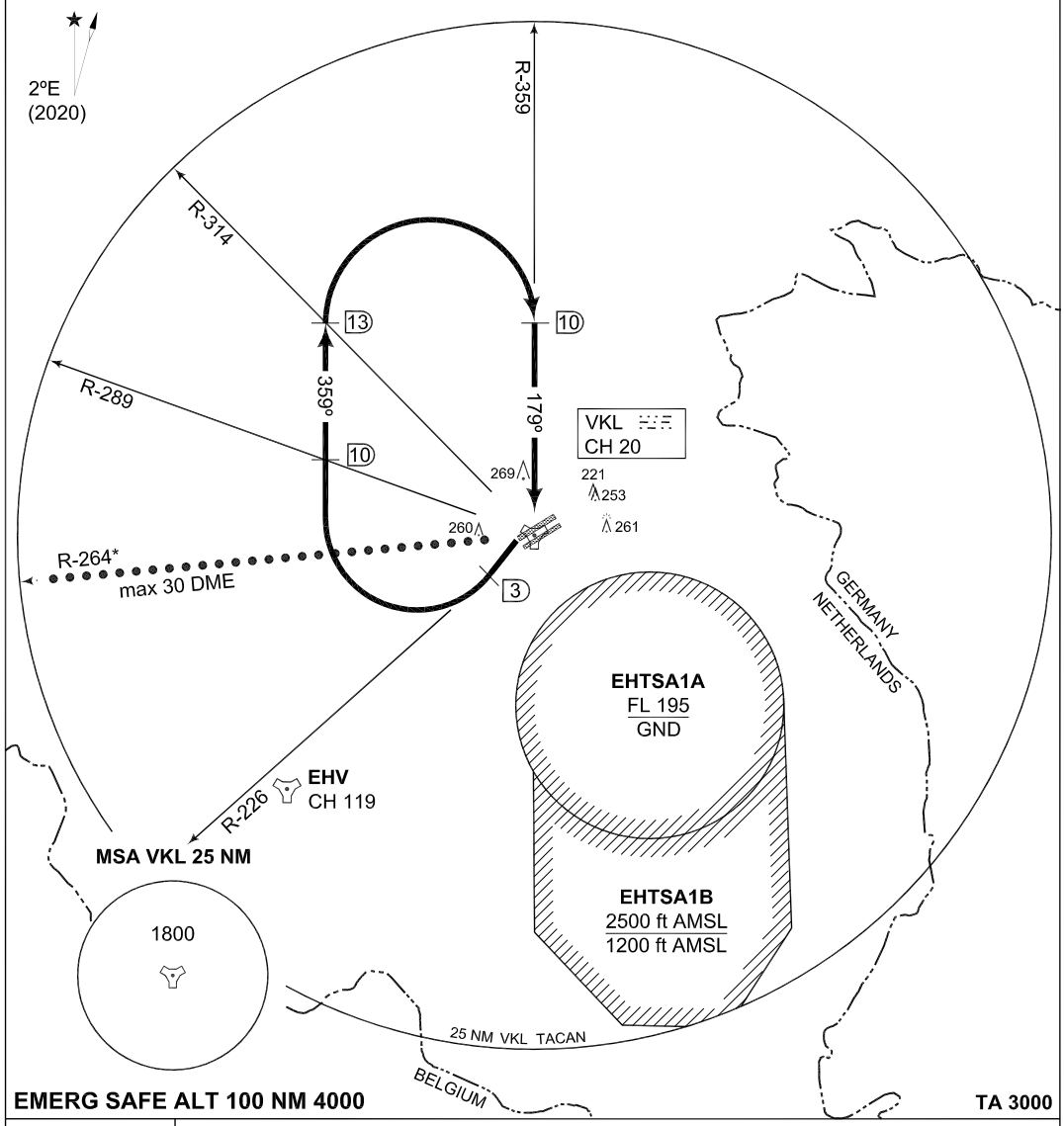
RNLAF 03 DEC 2020

MIPS **VK2**

INSTRUMENT DEPARTURE CHART AD ELEV 73 **VOLKEL (EHVK)**

GND CTL	VOLKEL TWR	RAPCON SOUTH	DUTCH MIL
386.775	291.100 136.080	388.525 123.180	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 359º. - 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

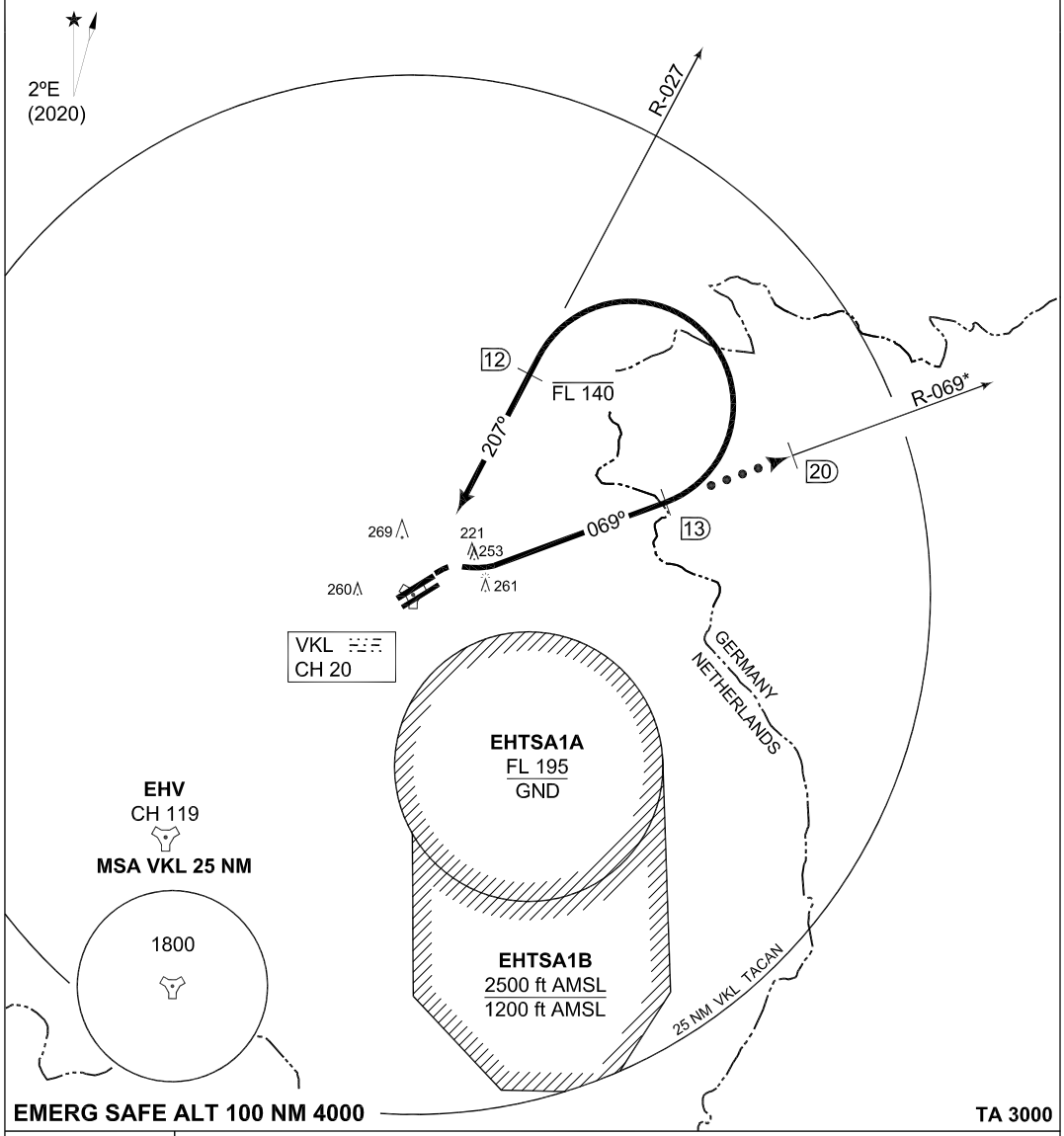
RNLAF 03 DEC 2020

MIPS **VK3**

INSTRUMENT DEPARTURE CHART AD ELEV 73 **VOLKEL (EHVK)**

GND CTL	VOLKEL TWR	RAPCON SOUTH	DUTCH MIL
386.775	291.100 136.080	388.525 123.180	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)	- 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

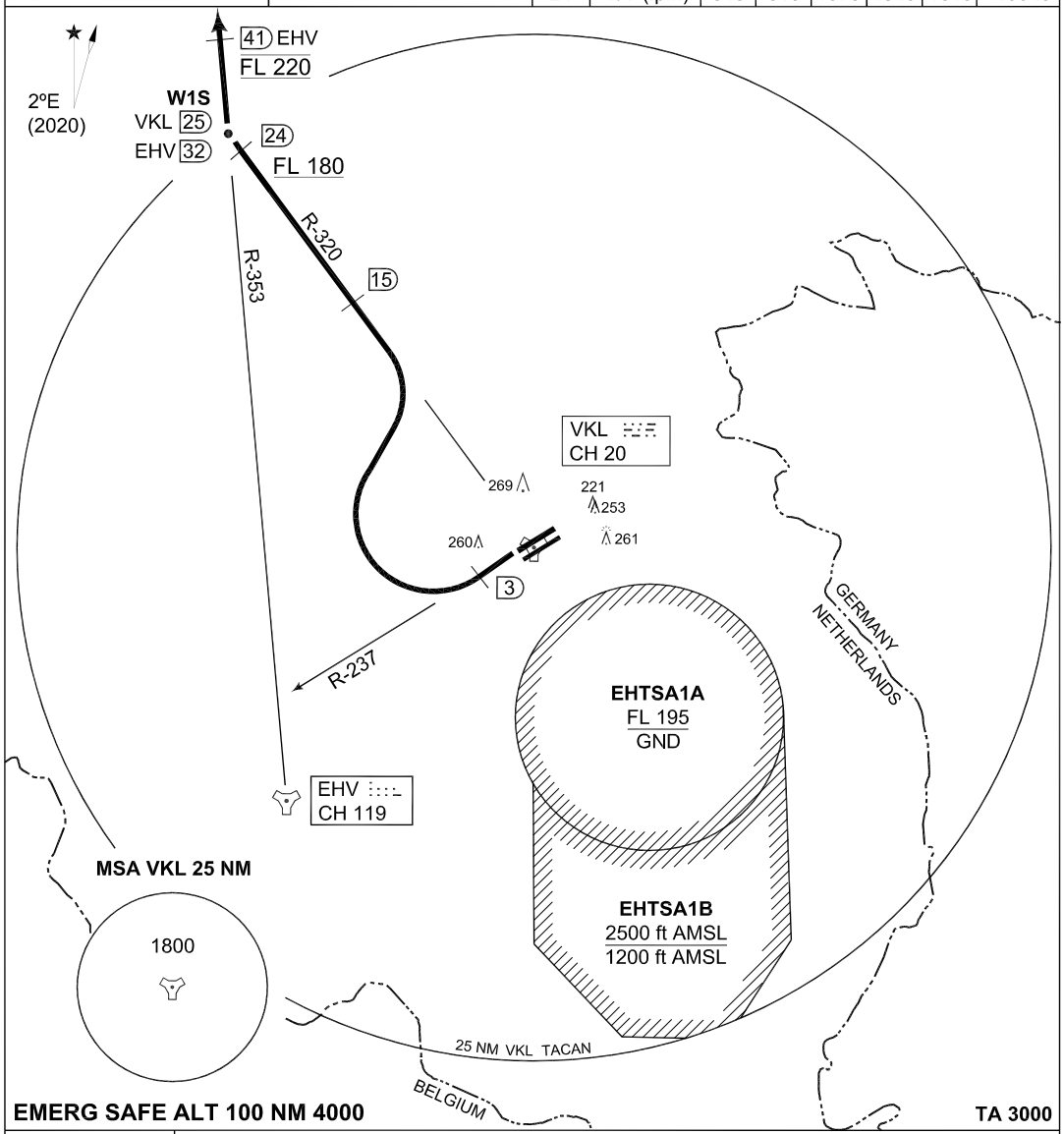
MIPS
INSTRUMENT DEPARTURE CHART

AD ELEV 73

VK5
VOLKEL (EHVK)

GND CTL	VOLKEL TWR	RAPCON SOUTH	DUTCH MIL
386.775	291.100 136.080	388.525 123.180	336.325 125.930

RWY	Knots	120	180	240	300	360	to
24	V/V (fpm)	540	810	1070	1340	1610	**400 ft**



VOLKEL 5 (RWY 24)	- Climb straight ahead to 3 DME from Volkel TACAN. - 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.
NOTE:	- 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.

CHANGES: MAG/VAR

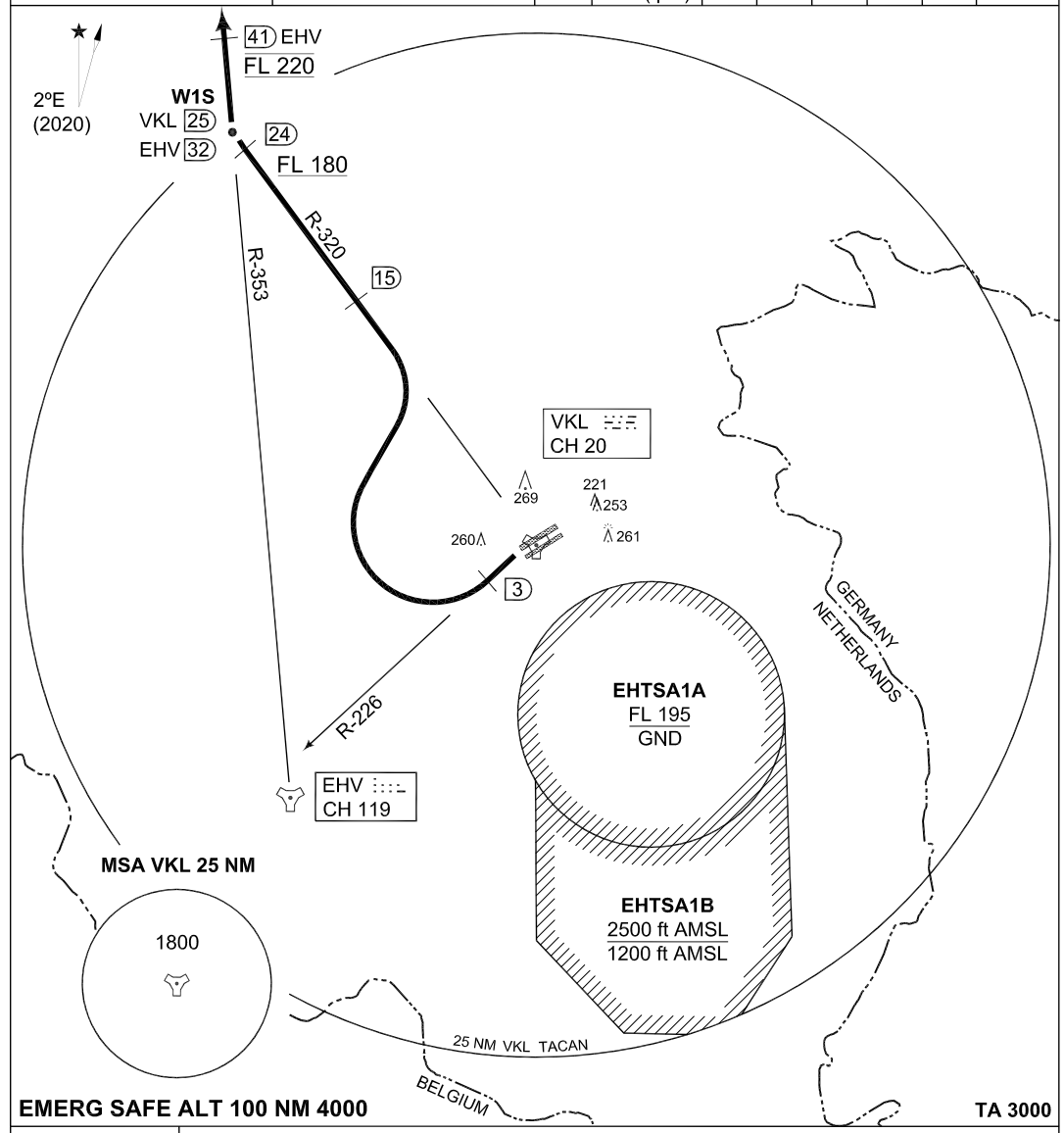
RNLAF 03 DEC 2020

MIPS **VK6**

INSTRUMENT DEPARTURE CHART AD ELEV 73 **VOLKEL (EHVK)**

GND CTL	VOLKEL TWR	RAPCON SOUTH	DUTCH MIL
386.775	291.100 136.080	388.525 123.180	336.325 125.930

RWY	Knots	120	180	240	300	360	to
24	V/V (fpm)	540	810	1070	1340	1610	**400 ft**



VOLKEL 6 (RWY 24)	- 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:	- 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.

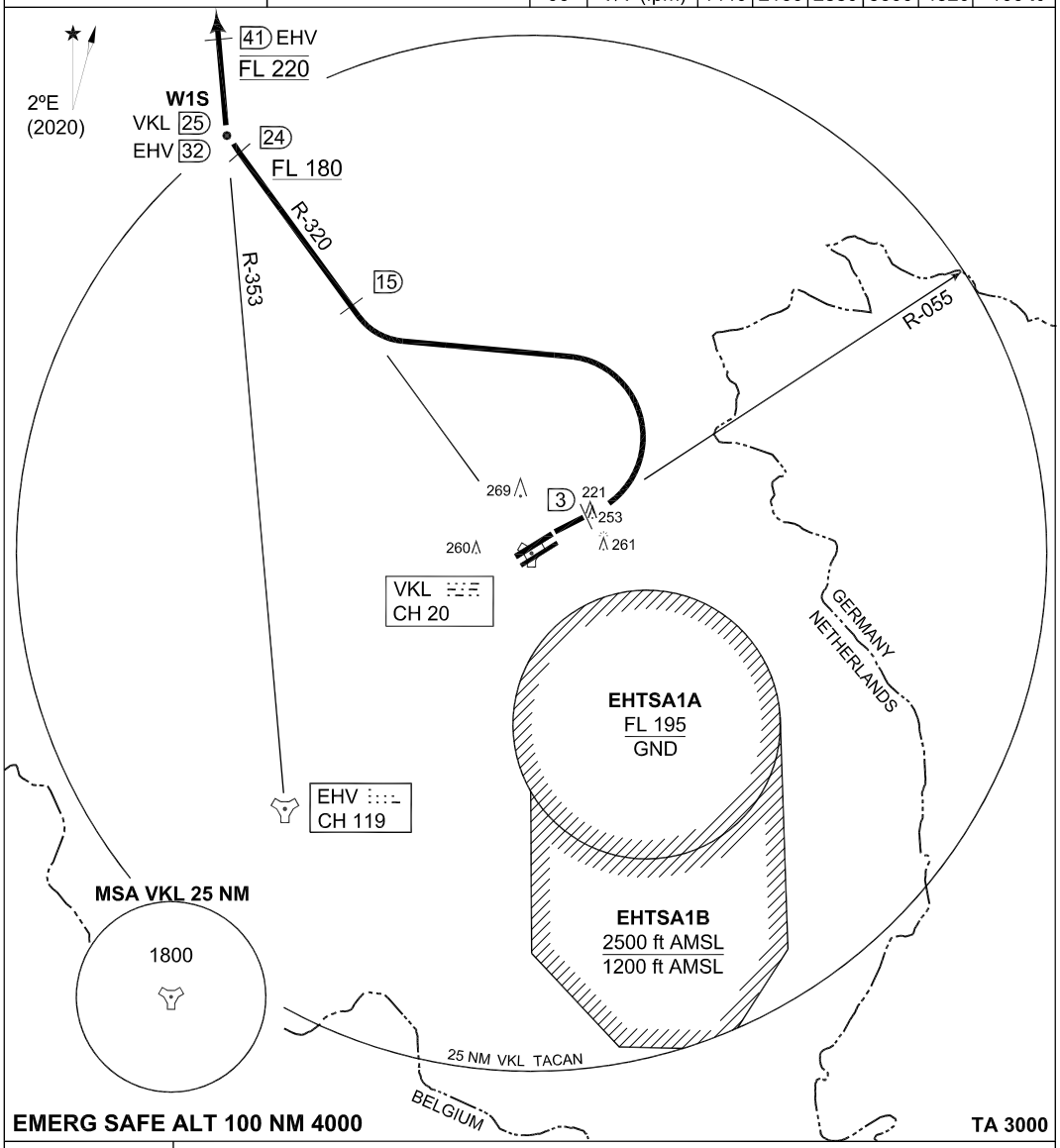
CHANGES: MAG/VAR

RNLAF 03 DEC 2020

MIPS
INSTRUMENT DEPARTURE CHART AD ELEV 73 **VK7**
VOLKEL (EHVK)

GND CTL	VOLKEL TWR	RAPCON SOUTH	DUTCH MIL
386.775	291.100 136.080	388.525 123.180	336.325 125.930

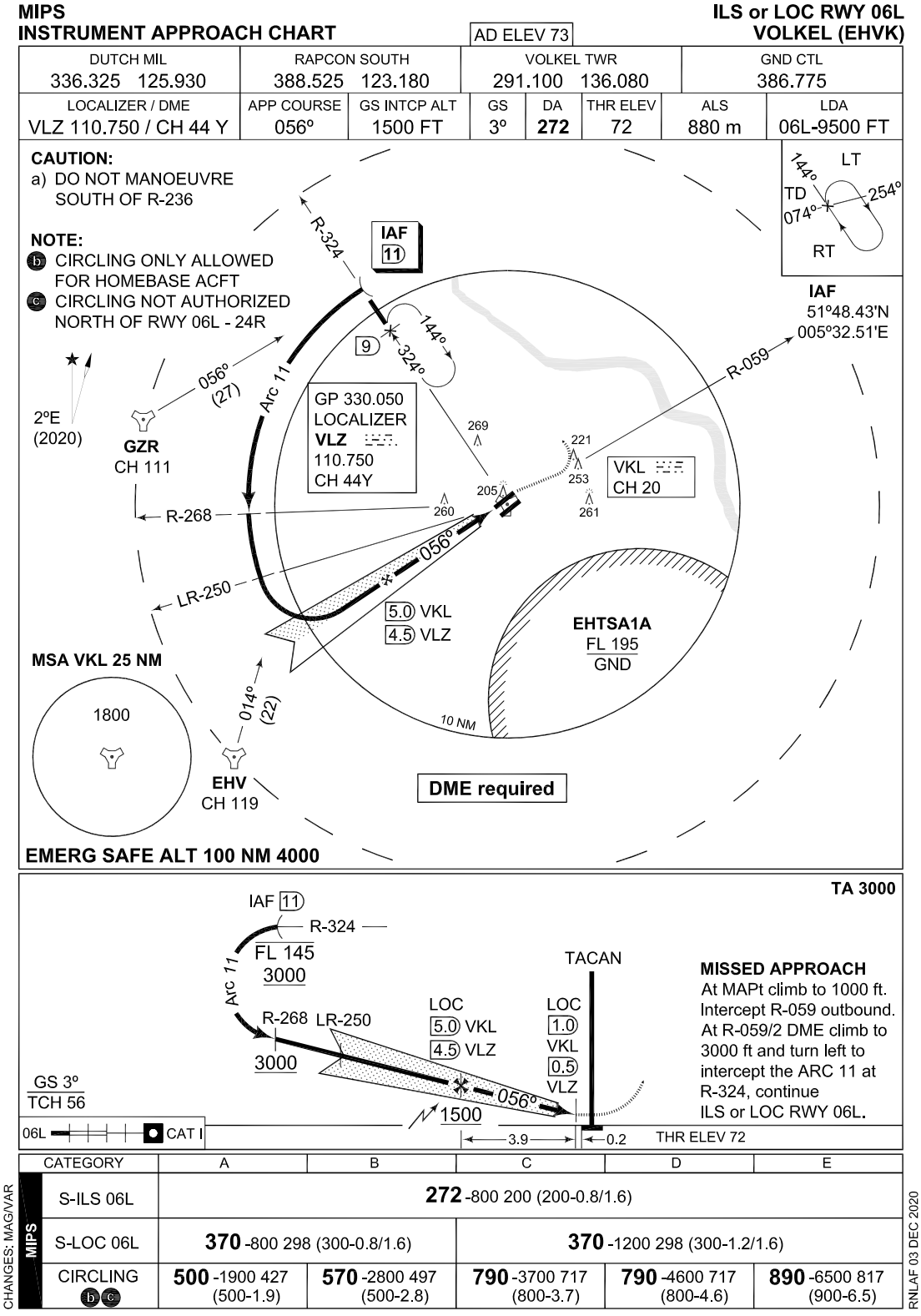
RWY	Knots	120	180	240	300	360	to
06	V/V (fpm)	1440	2160	2880	3600	4320	**100 ft**

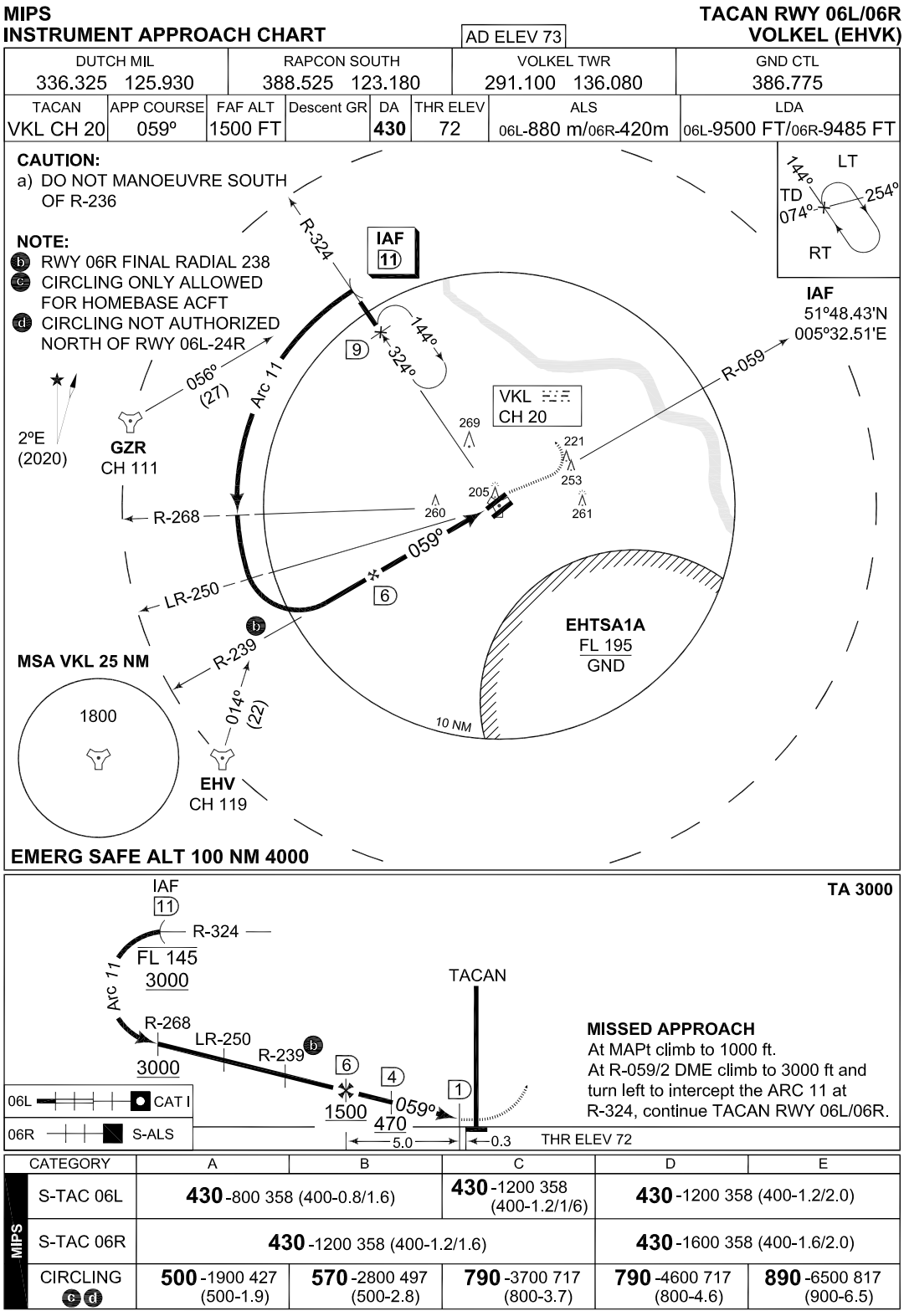


VOLKEL 7 (RWY 06)	- Climb straight ahead to 3 DME from Volkel TACAN. - Turn left to intercept R-320 outbound. - Cross R-320 outbound, 24 DME at FL 180 or above. - At 24 DME turn right to intercept EHV R-353. - Cross EHV R-353/41 DME at FL 220, unless instructed otherwise by ATC.
NOTE:	- Departure end crossing height: RWY 06L: 17 ft; RWY 06R: 23 ft. - If no radiocontact with Dutch Mil at 15 DME turn right inbound VKL TACAN and contact RAPCON SOUTH.

CHANGES: EDITORIAL

RNLAF 20 MAY 2021


MIPS
INSTRUMENT APPROACH CHART
AD ELEV 73
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 3°
DA 272
THR ELEV 72
ALS 880 m
LDA 06L-9500 FT
CAUTION:
a) DO NOT MANOEUVRE SOUTH OF R-236
NOTE:
b CIRCLING ONLY ALLOWED FOR HOMEBASE ACFT
c CIRCLING NOT AUTHORIZED NORTH OF RWY 06L - 24R
IAF 11
R-324
144°
324°
9
Arc 11
056° (27)
GZR CH 111
2°E (2020)
GP 330.050
LOCALIZER
VLZ
110.750
CH 44Y
R-268
LR-250
056°
5.0 VKL
4.5 VLZ
VKL CH 20
269
221
253
205
260
261
R-059
IAF
51°48.43'N
005°32.51'E
LT
TD
RT
144°
074°
254°
EHTSA1A
FL 195
GND
MSA VKL 25 NM
1800
014° (22)
EHV CH 119
10 NM
DME required
EMERG SAFE ALT 100 NM 4000
TA 3000
IAF 11
R-324
FL 145
3000
Arc 11
R-268
LR-250
3000
LOC 5.0 VKL 4.5 VLZ
TACAN
LOC 1.0 VKL 0.5 VLZ
056°
1500
GS 3°
TCH 56
06L
CAT I
3.9
0.2
THR ELEV 72
MISSED APPROACH
At MAPt climb to 1000 ft.
Intercept R-059 outbound.
At R-059/2 DME climb to 3000 ft and turn left to intercept the ARC 11 at R-324, continue ILS or LOC RWY 06L.
CATEGORY A B C D E
MIPS
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: MAG/VAR
RNLAF 03 DEC 2020



MIPS	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)

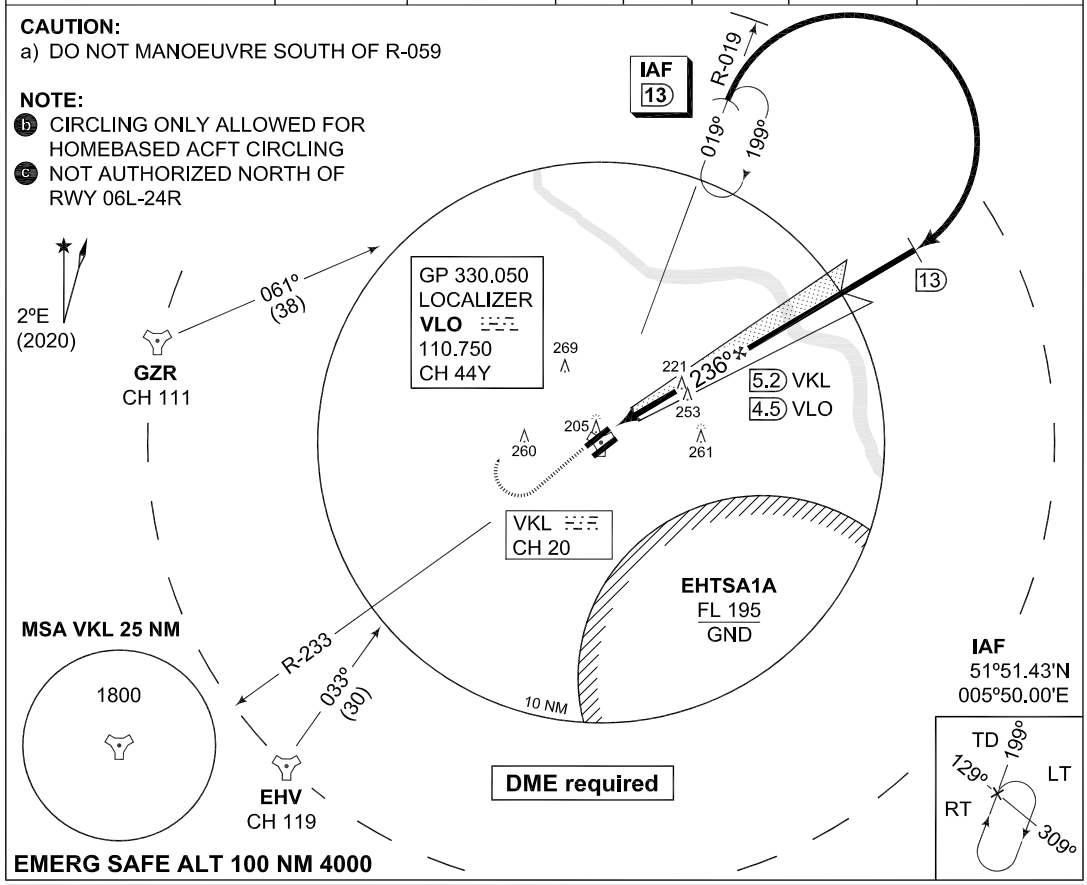
CHANGES: MAG/VAR

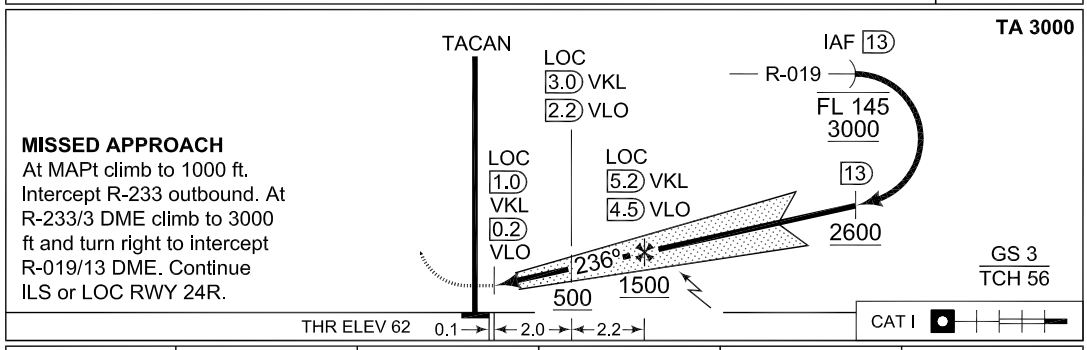
RNLAF 03 DEC 2020

MIPS
INSTRUMENT APPROACH CHART AD ELEV 73 **ILS or LOC RWY 24R**
VOLKEL (EHVK)

DUTCH MIL	RAPCON SOUTH	VOLKEL TWR	GND CTL
336.325 125.930	388.525 123.180	291.100 136.080	386.775

LOCALIZER / DME	APP COURSE	GS INTCP ALT	GS	DA	THR ELEV	ALS	LDA
VLO 110.750 / CH 44 Y	236°	1500 FT	3°	**262**	62	852 m	24R-9498 FT





MIPS	CATEGORY	A	B	C	D	E
	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)

CHANGES: OPERATING MINIMA

RNLAF 09 SEP 2021

MIPS
INSTRUMENT APPROACH CHART

AD ELEV 73

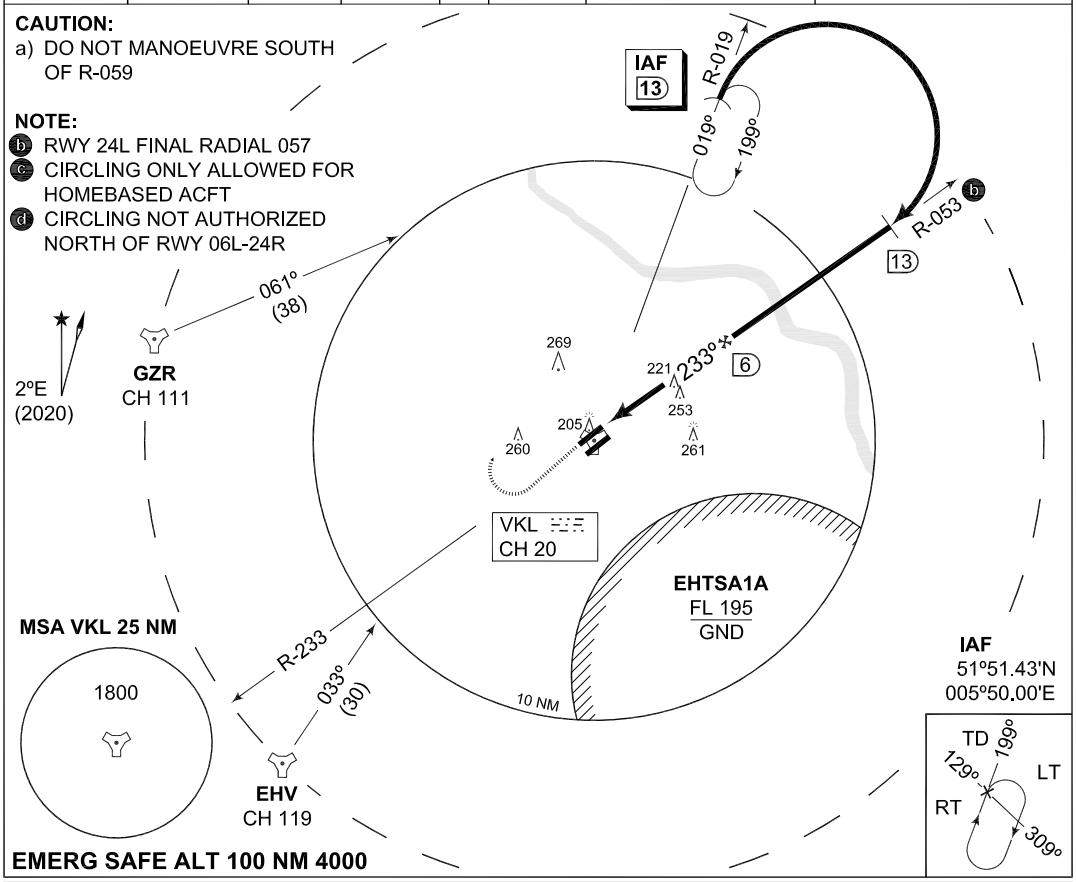
TACAN RWY 24R/24L
VOLKEL (EHVK)

DUTCH MIL	RAPCON SOUTH	VOLKEL TWR	GND CTL
336.325 125.930	388.525 123.180	291.100 136.080	386.775

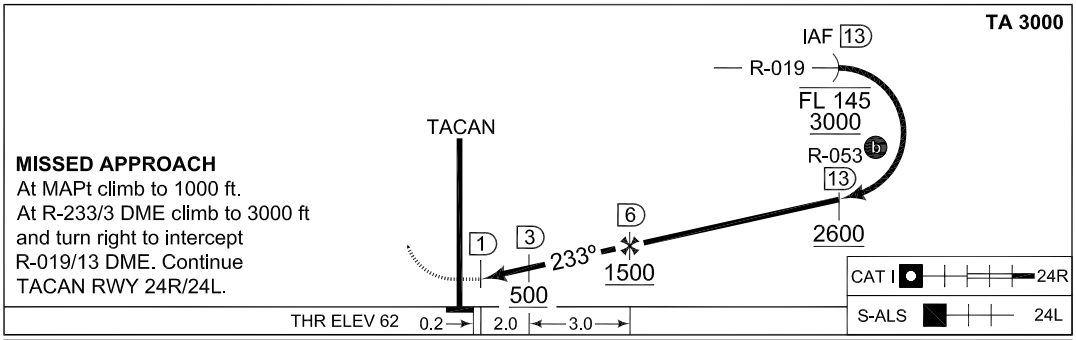
TACAN	APP COURSE	FAF ALT	Descent GR	DA	THR ELEV	ALS	LDA
VKL CH 20	233°	1500 FT		**440**	62	24R-852 m / 24L-423 m	24R-9498FT/24L-9487FT

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



TA 3000



MISSED APPROACH
At MAPt climb to 1000 ft.
At R-233/3 DME climb to 3000 ft and turn right to intercept R-019/13 DME. Continue TACAN RWY 24R/24L.

CHANGES: OPERATING MINIMA

	CATEGORY	A	B	C	D	E
MIPS	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 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)

RNLAF 09 SEP 2021

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PART 3 – AERODROMES (AD)

AD 2.

AD 2. AERODROMES
WOENSDRECHT

WOENSDRECHT

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 Descriptor	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

VFR EXIT POINTS

Delta

Just north of Kruisland (51.34'40"N 004.24'08"E)

Whiskey

Most southern point of Zuid Beveland (51.23'45"N 004.08'50"E)

Golf

Fields North of T-Cross N286 with N659 just West of Tholen (51.32'52"N 004.11'48"E)

STANDARD VFR DEPARTURE ROUTES PC7 INBOUND TRAINING AREAS:

DEPATURES PC-7.

Depature PC-7 RWY 25:

W25 Departure:

To the Walcheren area, proceed south of the A58 to leave the CTR south of Krabbendijke at exit point W (Whiskey).

G25 Departure:

To the G1/G1X, proceed over or west of the Oesterdam to leave the CTR north of Tholen at exit point G (Golf).

D25 Departure:

To the east, proceed west and north of Bergen op Zoom and Halsteren to leave the CTR northwest of Roosendaal at exit point D (Delta).

DEPARTURE PC-7 RWY 07:

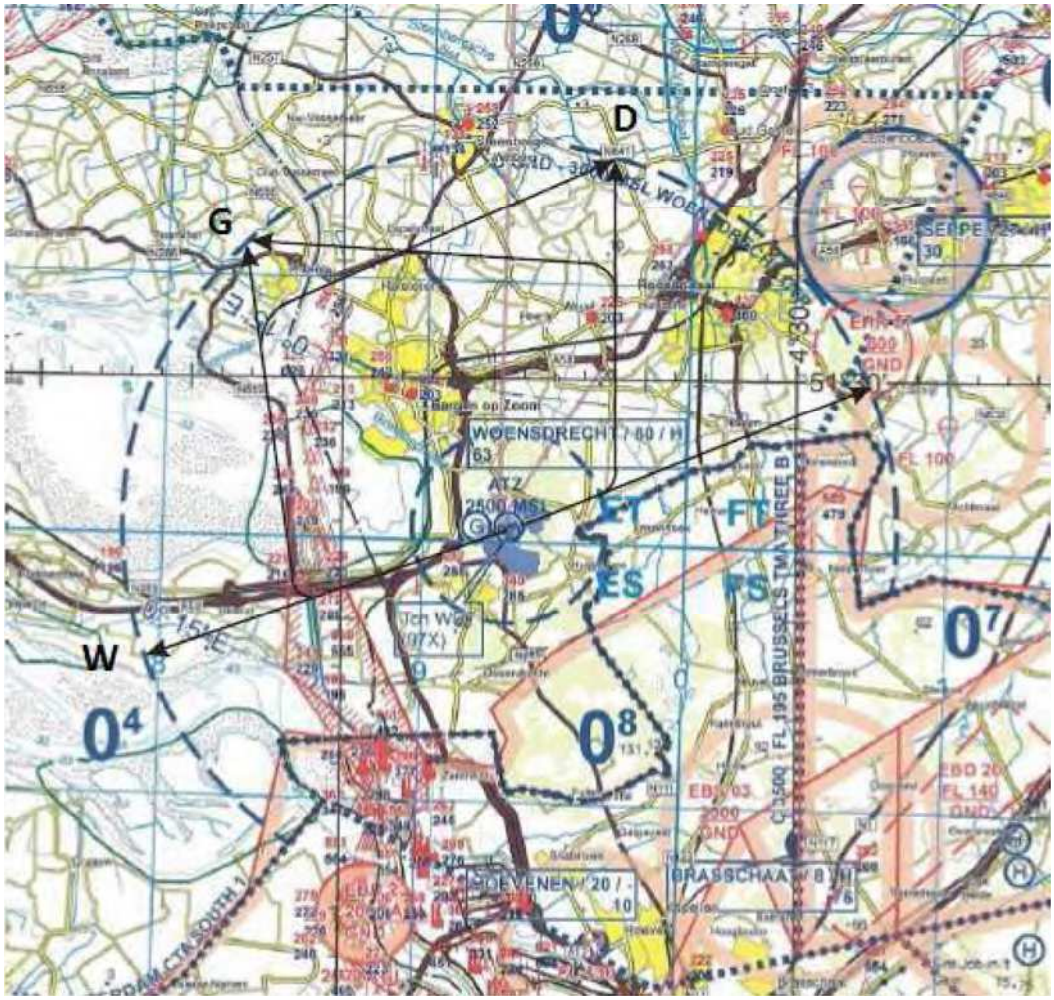
G07 Departure:

To the G1/G1X/Walcheren area, proceed east of Bergen op Zoom via north of Halsteren to leave the CTR north of Tholen at exit point G (Golf).

D07 Departure:

To the TMA D, proceed east of Bergen op Zoom and west of Roosendaal to leave the CTR north of Roosendaal at exit point D (Delta).

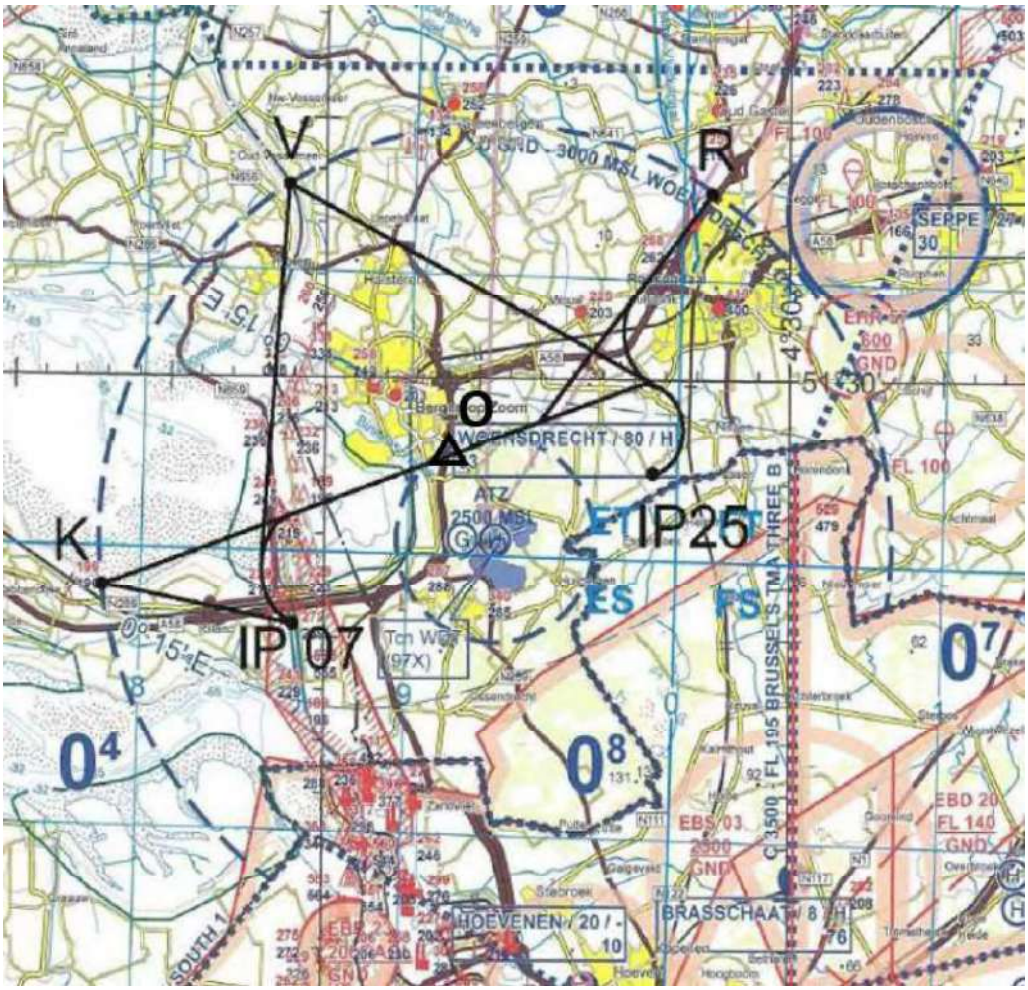
NOTE: PC-7 aircraft proceed at altitude 1500 ft.



VFR ARRIVAL AND CIRCUIT PROCEDURES

Oscar (O).

Crossing A4/A58 with Huijbergsebaan, between the hospital and the most southern residential area of Bergen op Zoom (51.28'44"N 004.18'56"E).



Closed or Downwind turn

When remaining in the circuit a closed or a downwind turn may be requested. A closed implies a climbing turn to downwind when passing the departure end of the runway. A downwind turn implies a turn to downwind when reaching circuit altitude.

Initial straight-in approach

From initial, a straight-in approach can be made. A one-minute prior initial, or abeam initial, shall be reported in order to sequence potential traffic in the circuit. A descent to 1000 ft AMSL will be initiated from the one-minute prior or abeam initial call towards initial.

Direct Downwind

From VFR entry points a direct path to downwind. A one-minute prior downwind shall be reported in order to sequencing potential traffic in the circuit. The descent to circuit altitude will be initiated from the one-minute prior call towards downwind.

Civil pattern

From VFR entry points, a direct path to downwind. Downwind will be entered at 700 ft AMSL.

Simulated Flame Out (SFO) specially for PC-7

High key will start at 2500 ft AMSL. The SFO pattern is standard in the north, however a pattern to the south may be applied to assure an expeditious flow of the potential traffic in the circuit.

LOW APPROACH, TOUCH AND GO, GO-AROUND.

After a Low Approach, Touch and Go or Go-around, traffic is to stop the climb at 1000 ft until passing airfield boundary at runway end.

SLOW LANE PROCEDURES

The slow-lane is standard on the northern side of the runway or otherwise instructed by ATC. Crossing the fast-lane is only allowed after permission from TWR. The slow lane is also to be used for dropping the drag chute.

EHWO AD 2.23 Additional information

Large air traffic Limitations

Due to protected nature reserve (Markiezaat) situated just north-west of the airbase, a restriction has been established to all aircraft with a wingspan > 30m. At all times this area must be avoided below 3000 ft. A map of the corresponding boundaries of this area is shown below.

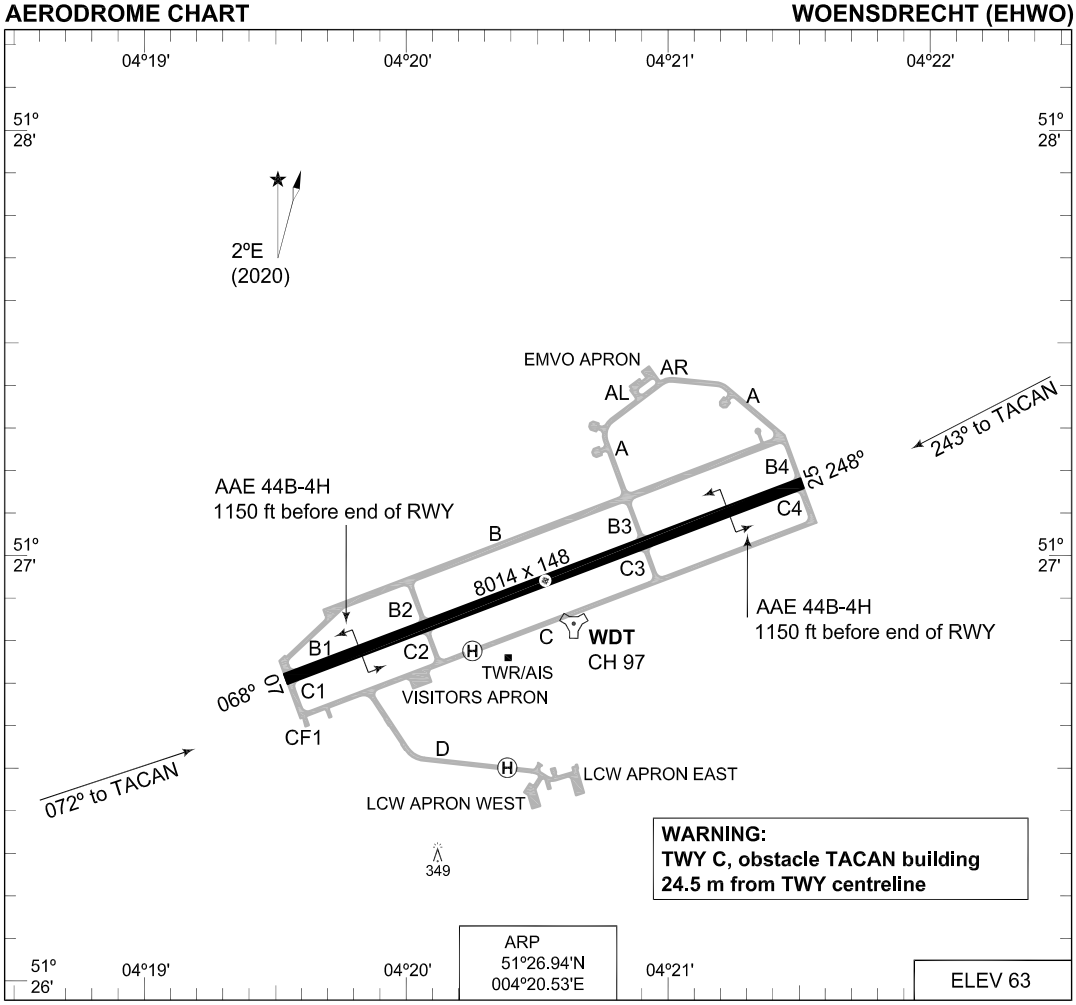
AIS Briefing office facility and the ATS Reporting Office (ARO) is only available through the Flight Data and Notam Office (FDNO) located at MilATCC Schiphol.

Tel:	+31(0)20 4062840
Tel:	+31(0)20 4062841
E-mail:	aocs.fdno@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 2-15
Local map	EHWO AD 2-16
MVA chart	EHWO AD 2-17
Instrument departure chart WO1	EHWO AD 2-18
Instrument departure chart WO3	EHWO AD 2-19
Instrument approach chart ILS or LOC RWY 07	EHWO AD 2-20
Instrument approach chart HI-TACAN RWY 07	EHWO AD 2-21
Instrument approach chart TACAN RWY 07	EHWO AD 2-22
Instrument approach chart RNP RWY 07	EHWO AD 2-23
Instrument approach chart ILS or LOC RWY 25	EHWO AD 2-24
Instrument approach chart HI-TACAN RWY 25	EHWO AD 2-25
Instrument approach chart TACAN RWY 25	EHWO AD 2-26
Instrument approach chart RNP RWY 25	EHWO AD 2-27

MIPS
AERODROME CHART **WOENSDRECHT (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

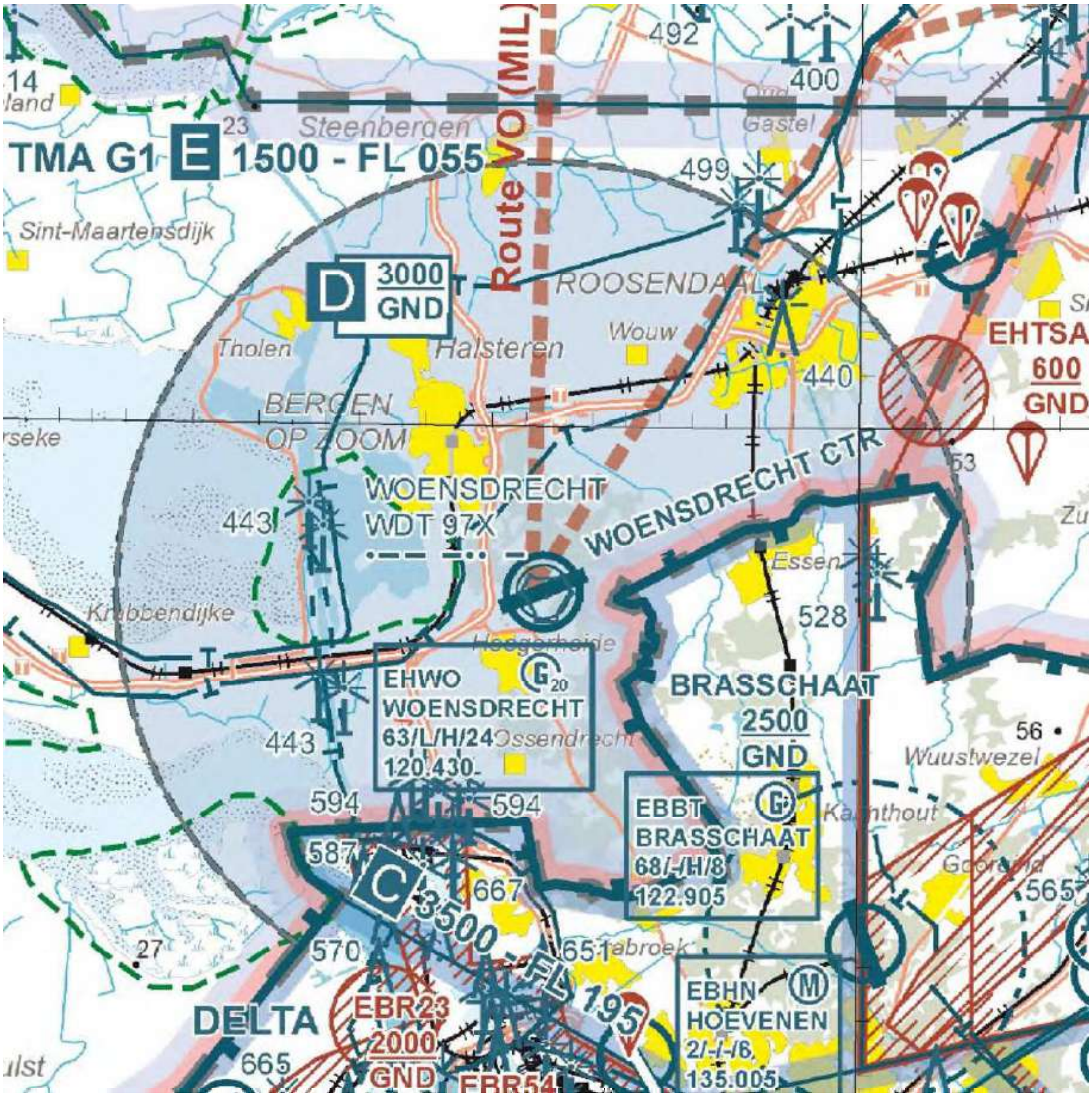
GROUND CONTROL	356.875	121.680
WOENSDRECHT TWR	339.000	120.430
RAPCON WEST	399.725	123.580
WOENSDRECHT ARRIVAL	370.650	

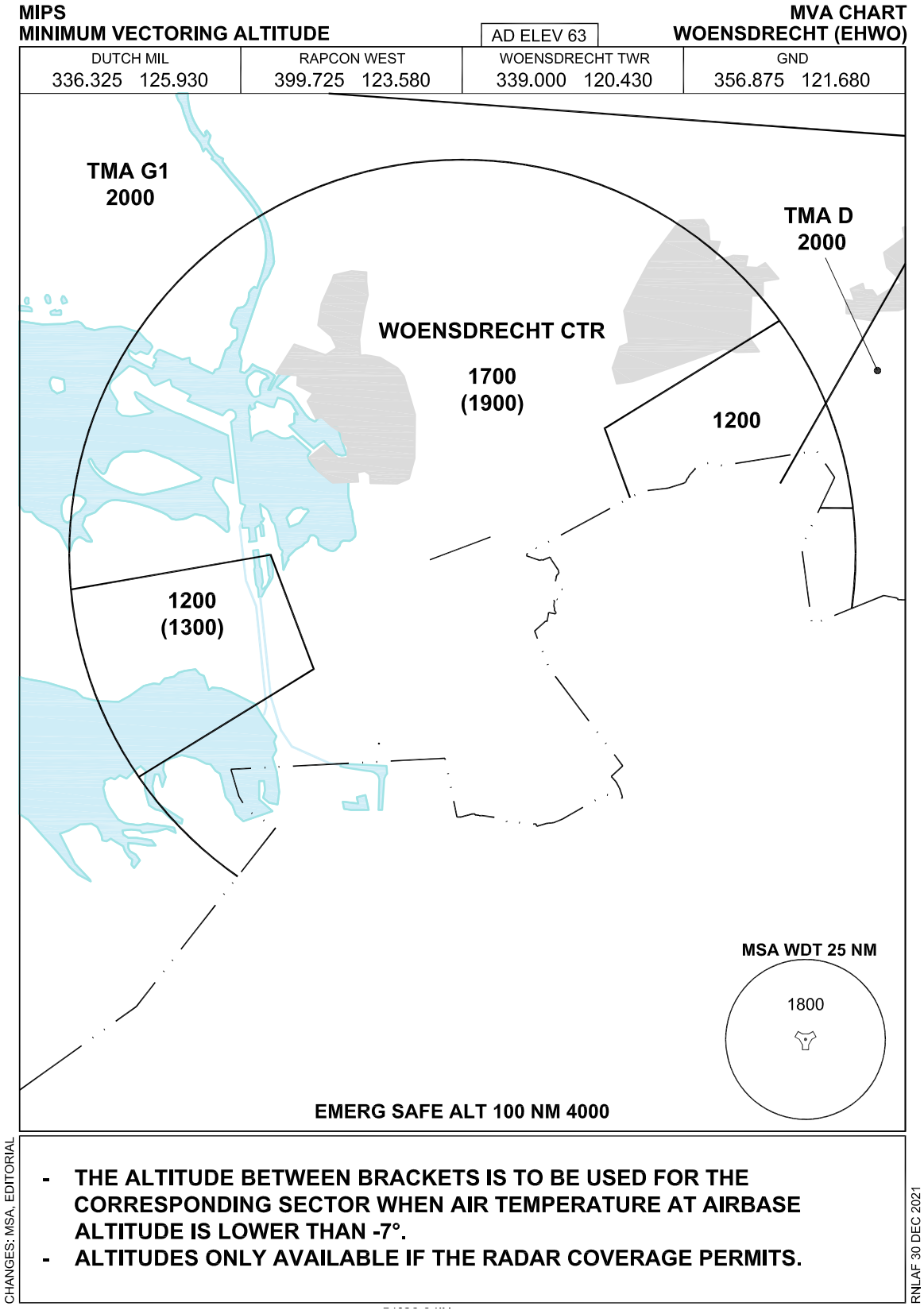
	PROC. CRITERIA	RWY	GS	TCH	OTCH	RPI	CAT	MINIMA CRITERIA	MINIMA
SRA	MIPS	25					AB	MIPS	450 -1100 387 (400-1.1)
							CDE		450 -1200 387 (400-1.2)
	MIPS	07					AB	MIPS	600 -1600 561 (600-1.6)
							C		600 -2400 561 (600-2.4)
							D		600 -2800 561 (600-2.8)
							E		600 -3200 561 (600-3.2)

CHANGES: PAPI RWY 07

RNLAF 23 MAR 2023

LOCAL MAP


TMA G1
E
1500 - FL 055
Steenbergen
Route VO (MIL)
Sint-Maartensdijk
D
3000
GND
ROOSENDAAL
Tholen
Halsteren
Wouw
EHTSA
600
GND
BERGEN OP ZOOM
WOENSDRECHT
WDT 97X
WOENSDRECHT CTR
Essen
Krabbendijke
EHWO
WOENSDRECHT
63/L/H/24
120.430
BRASSCHAAT
2500
GND
EBBT
BRASSCHAAT
68/-/H/8
122.905
C
3500
FL 195
DELTA
EBR23
2000
GND
EBHN
HOEVENEN
2/-/-/6
135.005
Wuustwezel


MIPS
MINIMUM VECTORING ALTITUDE
AD ELEV 63
MVA CHART
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
TMA G1
2000
TMA D
2000
WOENSDRECHT CTR
1700
(1900)
1200
1200
(1300)
MSA WDT 25 NM
1800
EMERG SAFE ALT 100 NM 4000
- 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.
CHANGES: MSA, EDITORIAL
RNLAF 30 DEC 2021

MIPS **WO1**

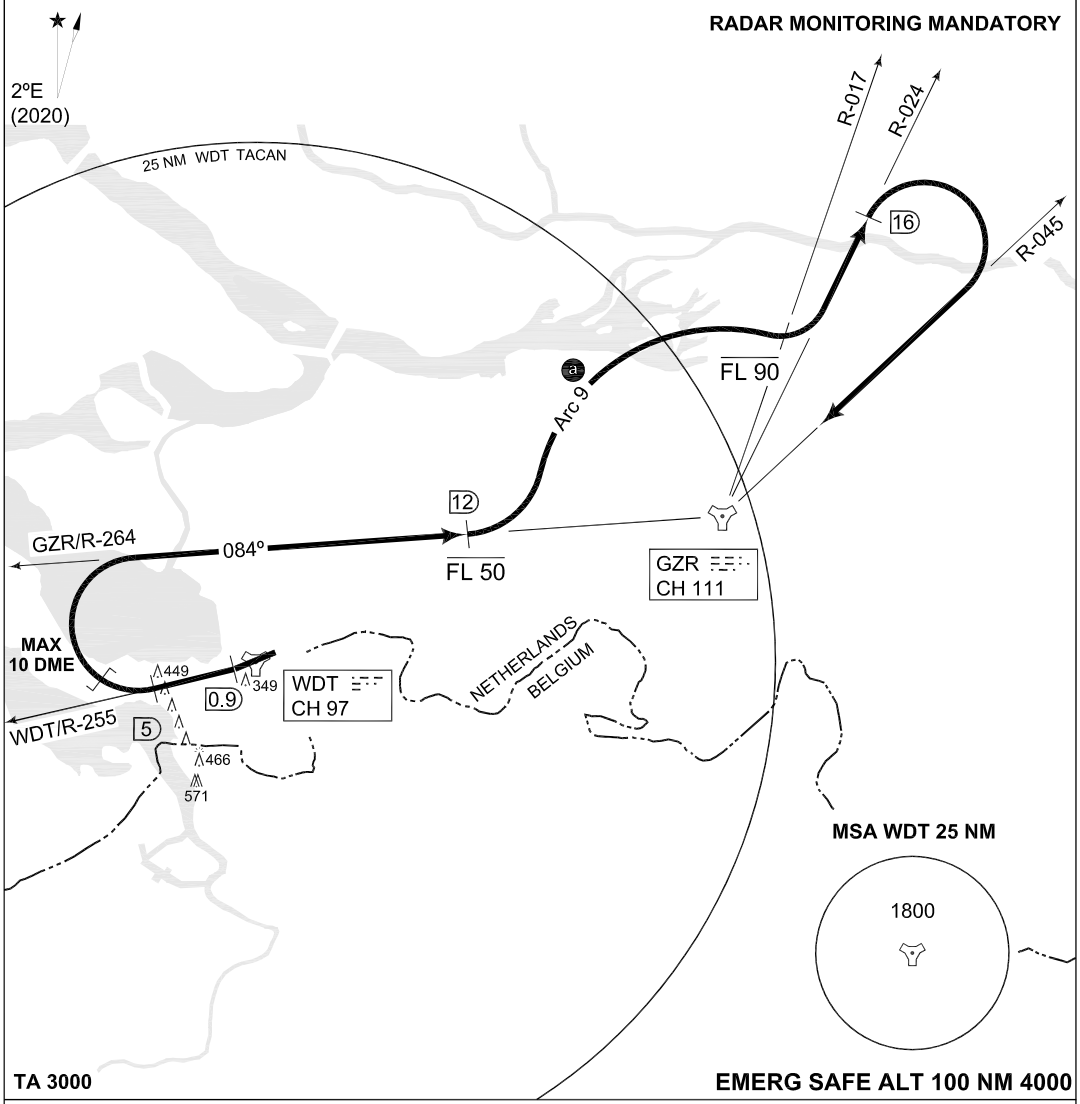
INSTRUMENT DEPARTURE CHART AD ELEV 63 **WOENSDRECHT (EHWO)**

GND CTL	WOENSDRECHT TWR	RAPCON WEST	DUTCH MIL
356.875 121.680	339.000 120.430	399.725 123.580	336.325 125.930

RWY	Knots	120	180	240	300	360	to
25	V/V (fpm)	360	540	720	900	1080	**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.

WOENSDRECHT 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

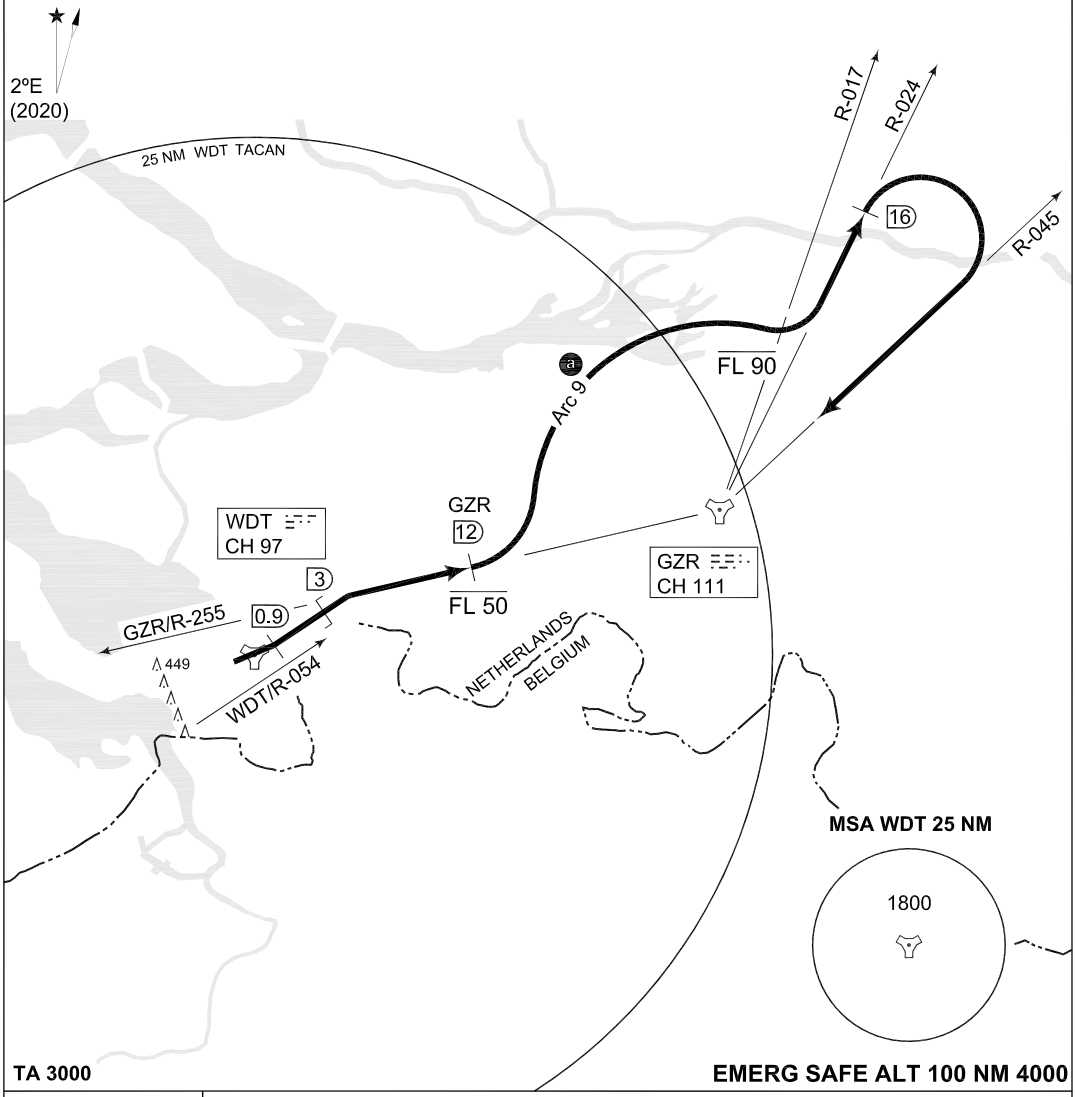
RNLAF 30 DEC 2021

MIPS **WO3**

INSTRUMENT DEPARTURE CHART AD ELEV 63 **WOENSDRECHT (EHWO)**

GND CTL	WOENSDRECHT TWR	RAPCON WEST	DUTCH MIL
356.875 121.680	339.000 120.430	399.725 123.580	336.325 125.930

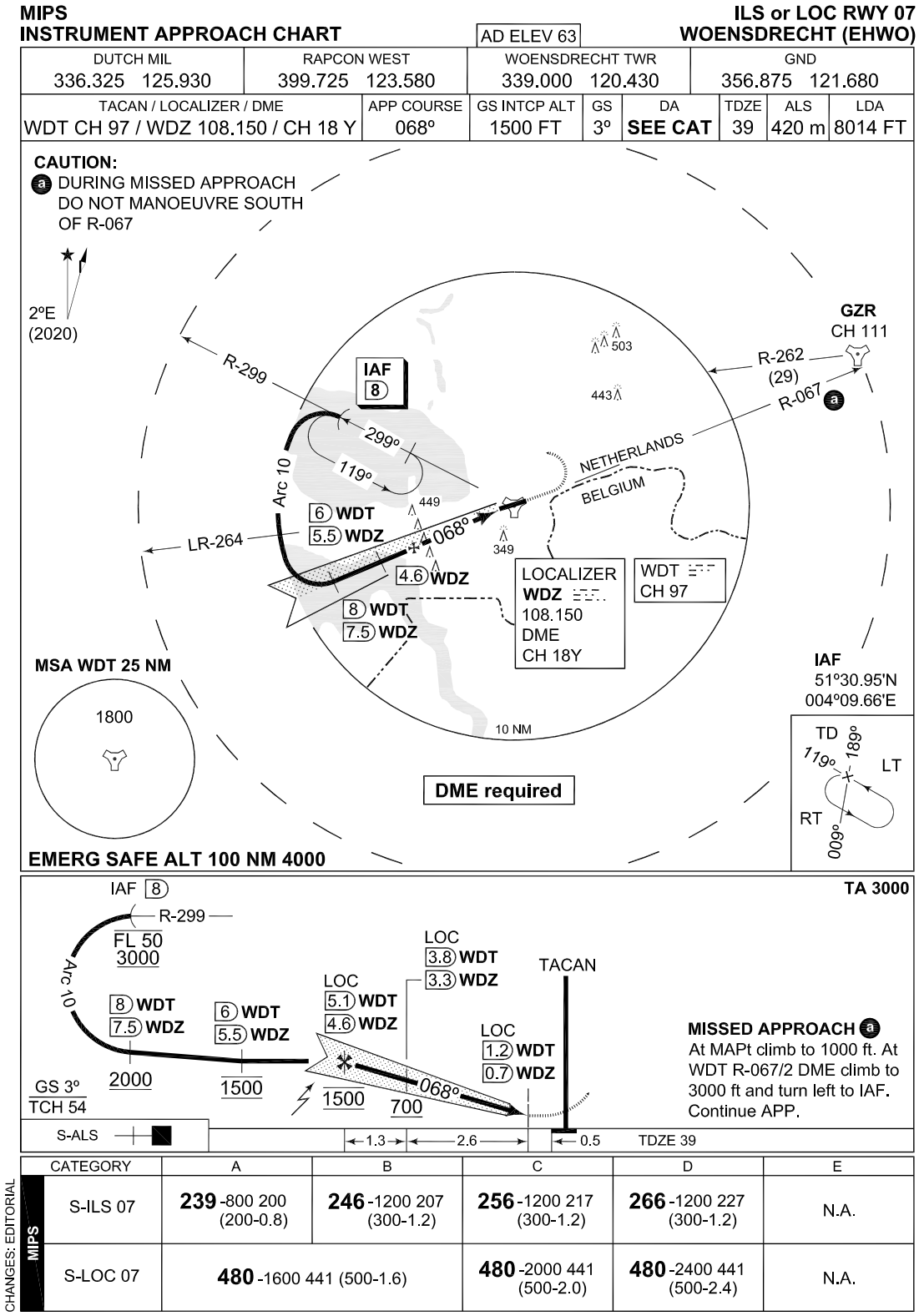
NOTE:
(a) WHEN IN ARC 9, DO NOT EXCEED 10 DME



WOENSDRECHT 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. (a) - 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
AD ELEV 63
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
APP COURSE
GS INTCP ALT
GS
DA
TDZE
ALS
LDA
WDT CH 97 / WDZ 108.150 / CH 18 Y
068°
1500 FT
3°
SEE CAT
39
420 m
8014 FT
CAUTION:
a DURING MISSED APPROACH DO NOT MANOEUVRE SOUTH OF R-067
2°E
(2020)
GZR
CH 111
R-299
R-262
(29)
R-067
IAF
8
299°
119°
Arc 10
NETHERLANDS
BELGIUM
503
443
449
349
6 WDT
5.5 WDZ
LR-264
068°
4.6 WDZ
8 WDT
7.5 WDZ
LOCALIZER
WDZ
108.150
DME
CH 18Y
WDT
CH 97
MSA WDT 25 NM
1800
10 NM
DME required
IAF
51°30.95'N
004°09.66'E
TD
189°
119°
LT
RT
009°
EMERG SAFE ALT 100 NM 4000
IAF 8
R-299
FL 50
3000
Arc 10
8 WDT
7.5 WDZ
2000
6 WDT
5.5 WDZ
1500
LOC
5.1 WDT
4.6 WDZ
1500
LOC
3.8 WDT
3.3 WDZ
700
TACAN
LOC
1.2 WDT
0.7 WDZ
068°
GS 3°
TCH 54
TA 3000
MISSED APPROACH a
At MAPt climb to 1000 ft. At WDT R-067/2 DME climb to 3000 ft and turn left to IAF. Continue APP.
S-ALS
1.3
2.6
0.5
TDZE 39
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.
CHANGES: EDITORIAL
MIPS
RNLAF 21 APR 2022

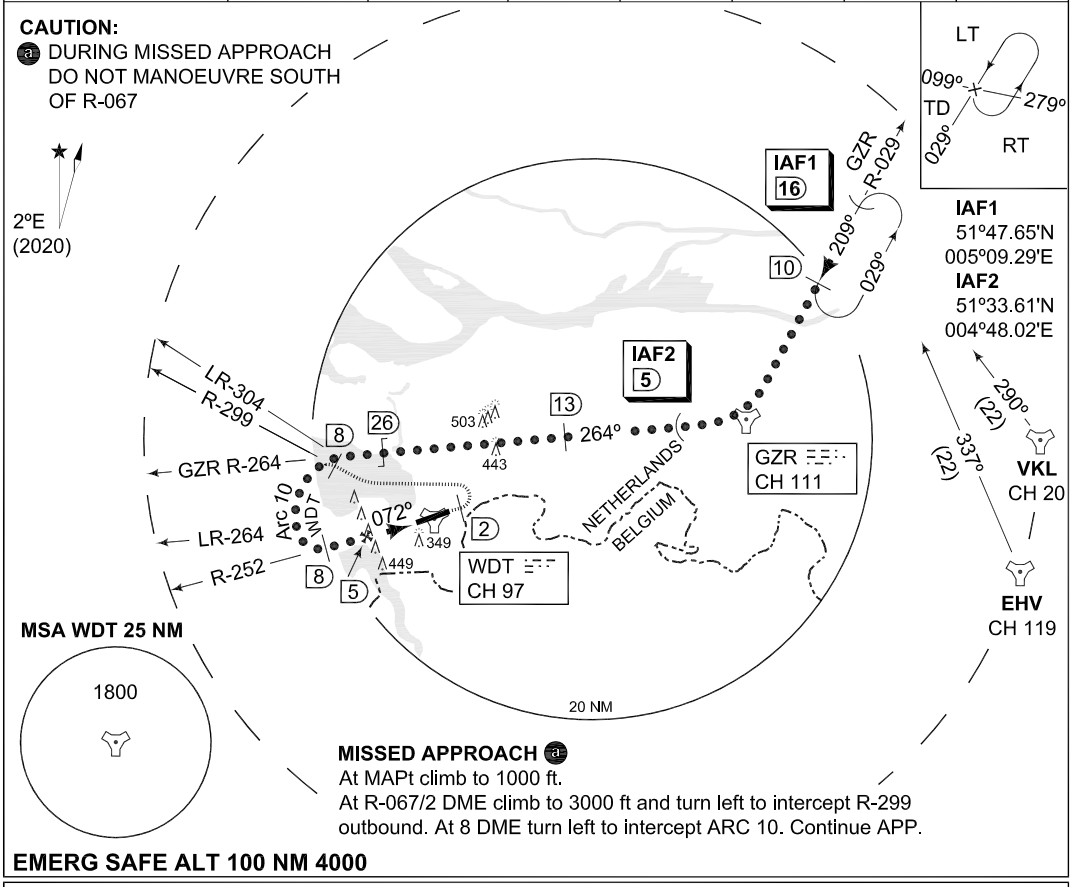
MIPS
INSTRUMENT APPROACH CHART

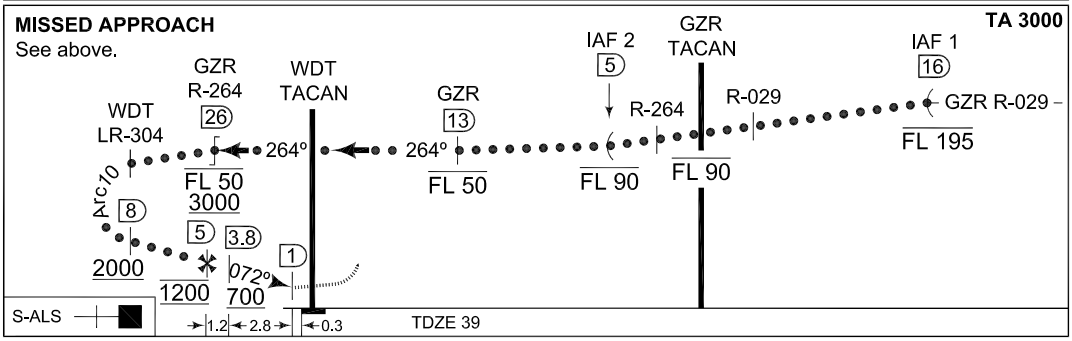
AD ELEV 63

HI-TACAN RWY 07
WOENSDRECHT (EHWO)

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

TACAN	APP COURSE	FAF ALT	Descent GR	MDA	TDZE	ALS	LDA
WDT CH 97	072°	1200 FT		**600**	39	420 m	8014 FT

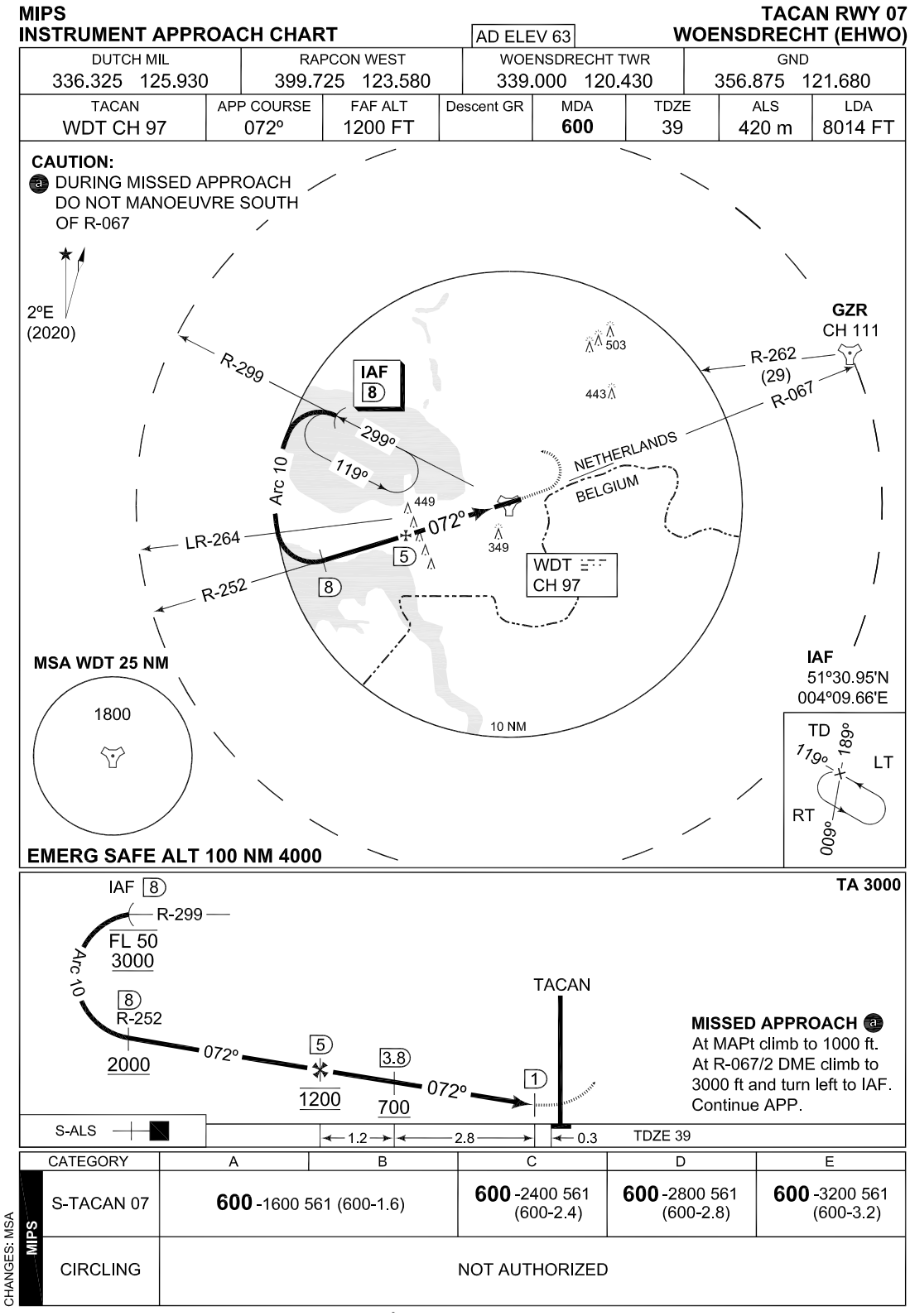




CATEGORY	A	B	C	D	E
S-TACAN 07	**600** -1600 561 (600-1.6)		**600** -2400 561 (600-2.4)	**600** -2800 561 (600-2.8)	**600** -3200 561 (600-3.2)
CIRCLING	NOT AUTHORIZED				

CHANGES: MSA MIPS

RNLAF 30 DEC 2021


MIPS
INSTRUMENT APPROACH CHART
AD ELEV 63
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
CAUTION:
a DURING MISSED APPROACH DO NOT MANOEUVRE SOUTH OF R-067
2°E (2020)
GZR CH 111
R-299
R-262 (29)
R-067
IAF 8
299°
119°
Arc 10
NETHERLANDS
BELGIUM
503
443
449
349
072°
LR-264
R-252
5
8
WDT CH 97
10 NM
MSA WDT 25 NM
1800
IAF 51°30.95'N 004°09.66'E
TD
LT
RT
189°
119°
009°
EMERG SAFE ALT 100 NM 4000
TA 3000
IAF 8
R-299
FL 50
3000
Arc 10
8
R-252
2000
072°
5
1200
3.8
700
072°
1
TACAN
MISSED APPROACH a
At MAPt climb to 1000 ft.
At R-067/2 DME climb to 3000 ft and turn left to IAF.
Continue APP.
S-ALS
1.2
2.8
0.3
TDZE 39
CATEGORY A B C D E
MIPS
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
RNLAF 30 DEC 2021

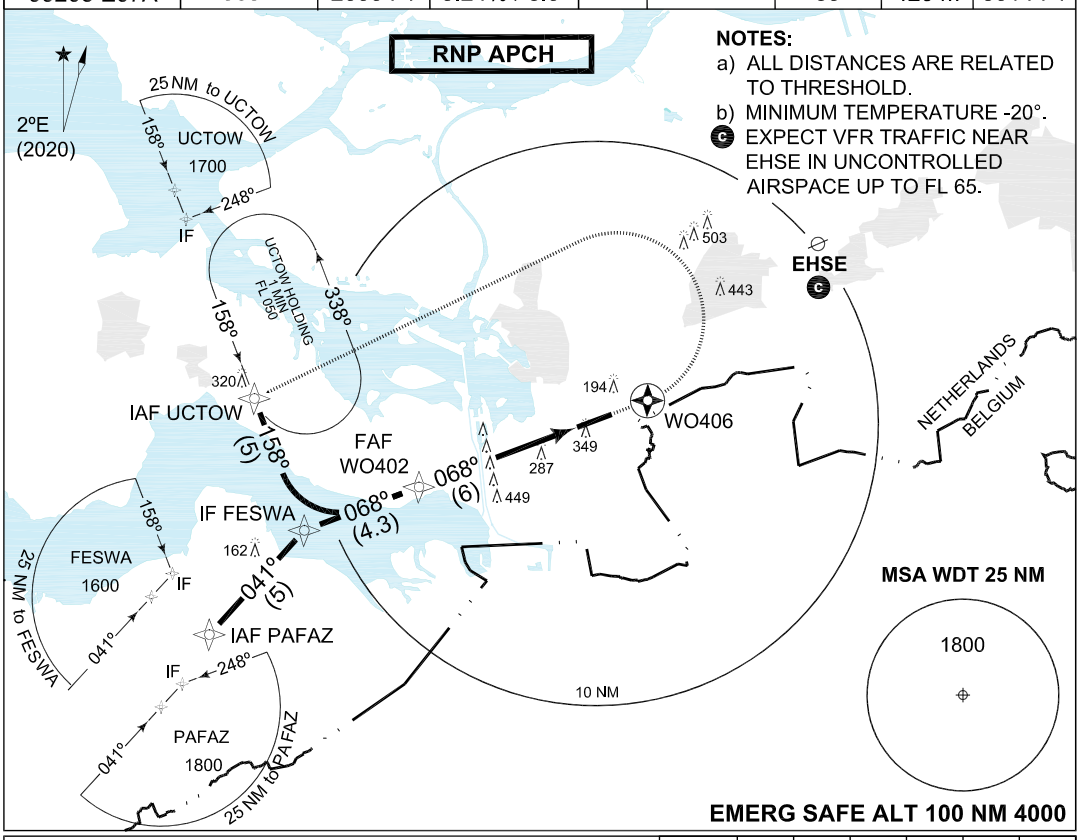
PANS OPS
INSTRUMENT APPROACH CHART

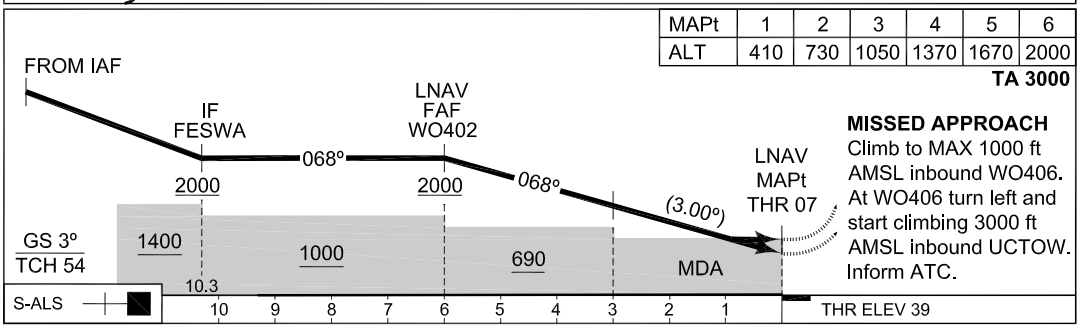
AD ELEV 63

RNP RWY 07
WOENSDRECHT (EHWO)

DUTCH MIL	RAPCON WEST	WOENSDRECHT TWR	GND CTL	ATIS*
336.325 125.930	399.725 123.580	339.000 120.430	356.875 121.680	

EGNOS CHANNEL	APP COURSE	FAF ALT	Descent GR	MDA	DA	THR ELEV	ALS	LDA
99205 E07A	068°	2000 FT	5.24% / 3.0°	**600**	**SEE CAT**	39	420 m	8014 FT





MAPt	1	2	3	4	5	6
ALT	410	730	1050	1370	1670	2000

TA 3000

MISSED APPROACH
Climb to MAX 1000 ft AMSL inbound WO406. At WO406 turn left and start climbing 3000 ft AMSL inbound UCTOW. Inform ATC.

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)			

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

CHANGES: INSERT EHSE, NOTES

RNLAF 23 MAR 2023

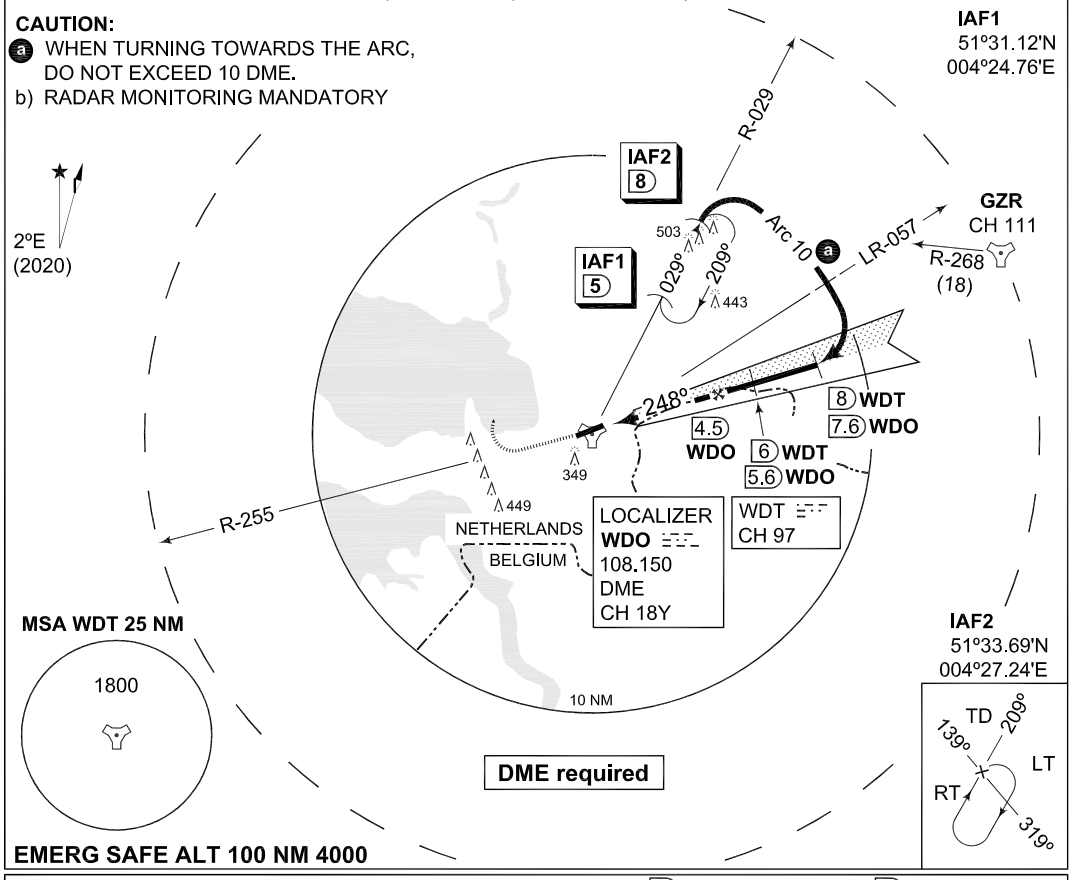
MIPS
INSTRUMENT APPROACH CHART

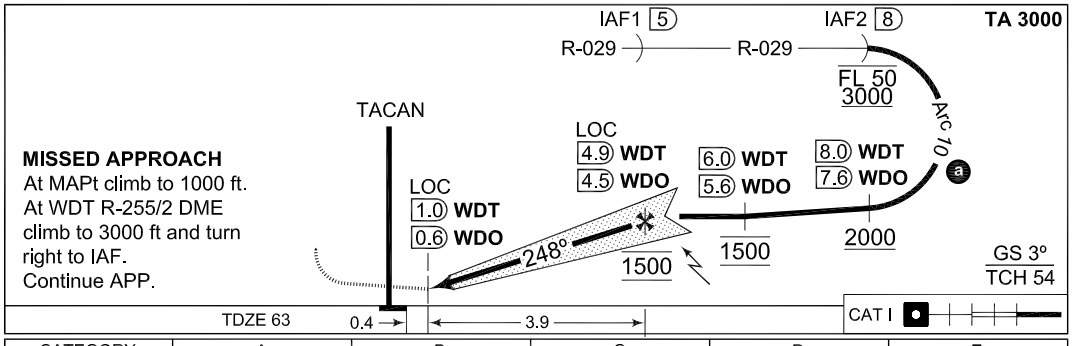
AD ELEV 63

ILS or LOC RWY 25
WOENSDRECHT (EHWO)

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

TACAN / LOCALIZER / DME	APP COURSE	GS INTCP ALT	GS	DA	TDZE	ALS	LDA
WDT CH 97/WDO 108.150/CH 18 Y	248°	1500 FT	3°	SEE CAT	63	900 m	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

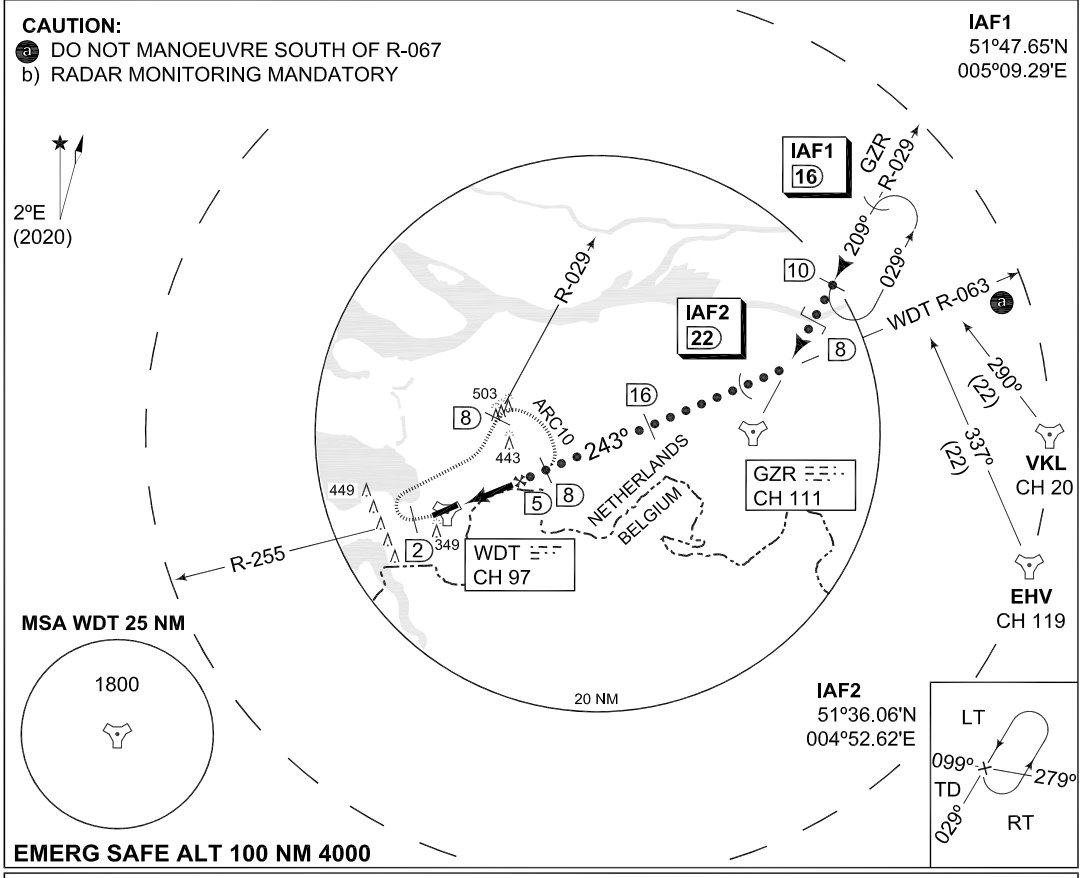
AD ELEV 63

HI-TACAN RWY 25
WOENSDRECHT (EHWO)

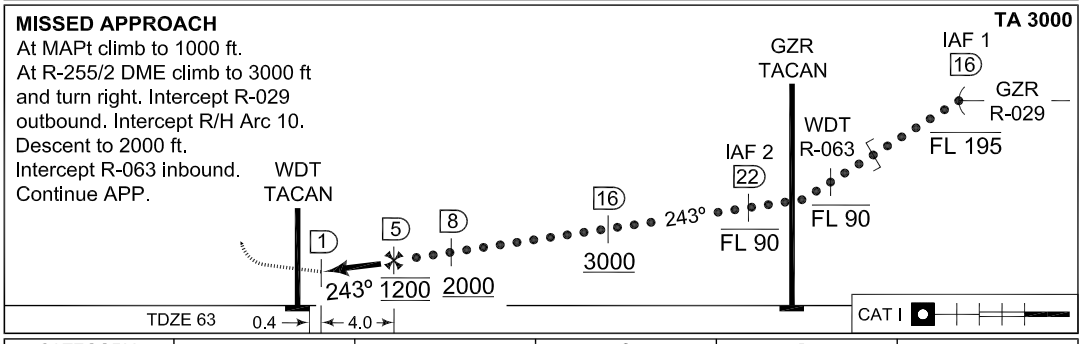
DUTCH MIL	RAPCON WEST	WOENSDRECHT TWR	GND
336.325 125.930	399.725 123.580	339.000 120.430	356.875 121.680

TACAN	APP COURSE	FAF ALT	Descent GR	MDA	TDZE	ALS	LDA
WDT CH 97	243°	1200 FT		440	63	900 m	8014 FT

CAUTION:
a) DO NOT MANOEUVRE SOUTH OF R-067
b) RADAR MONITORING MANDATORY



MISSED APPROACH
At MAPt climb to 1000 ft.
At R-255/2 DME climb to 3000 ft and turn right. Intercept R-029 outbound. Intercept R/H Arc 10. Descent to 2000 ft.
Intercept R-063 inbound. Continue APP.



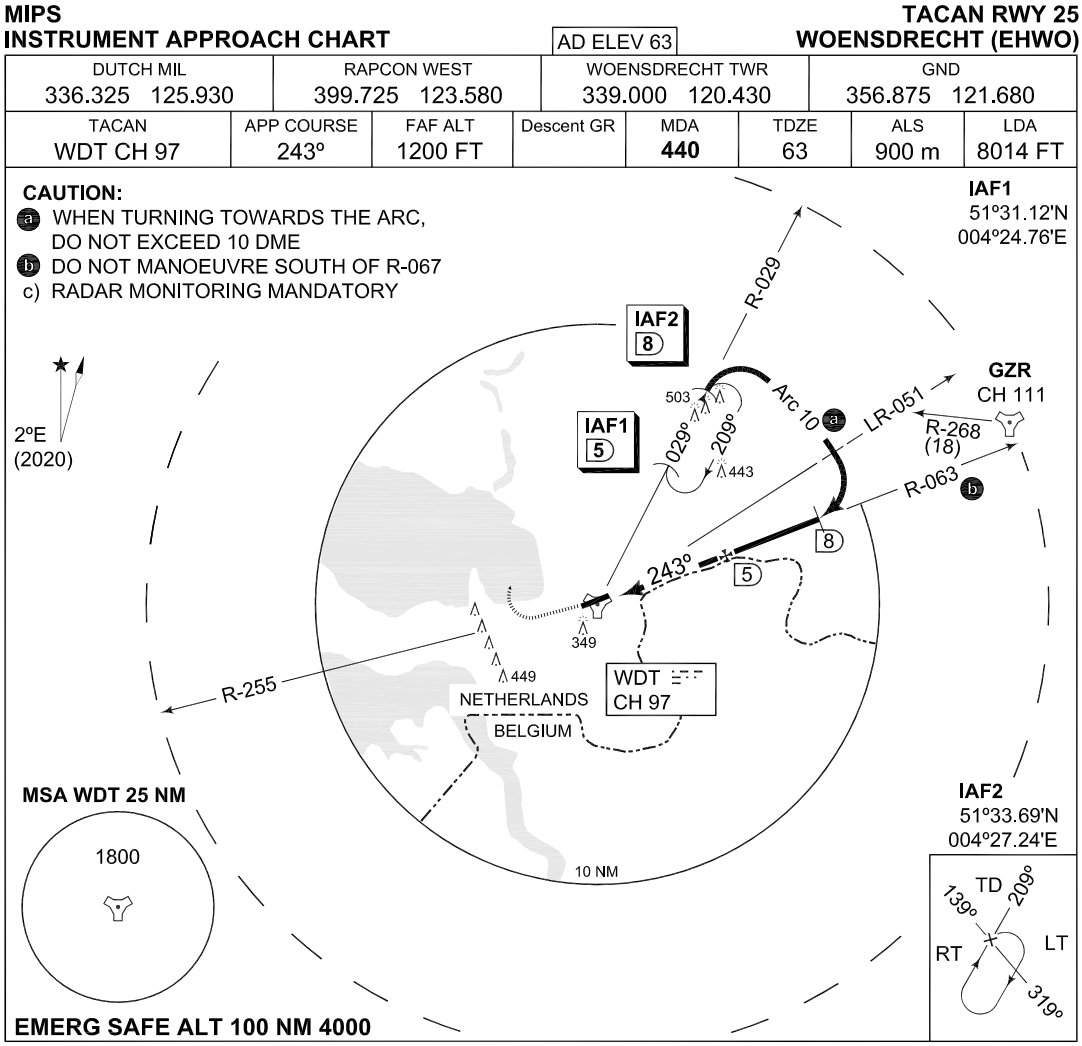
CATEGORY	A	B	C	D	E
S-TACAN 25	**440**-800 377 (400-0.8)			**440**-1200 377 (400-1.2)	
CIRCLING	NOT AUTHORIZED				

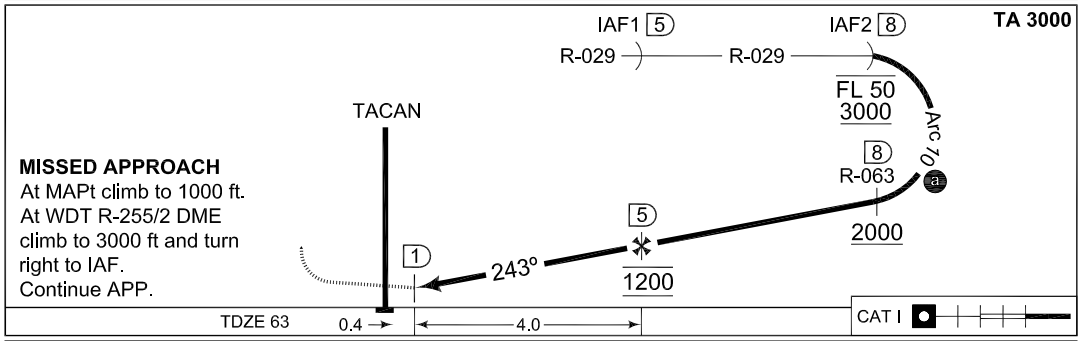
CHANGES: MSA
MIPS
RNLAF 30 DEC 2021

MIPS
INSTRUMENT APPROACH CHART AD ELEV 63 **TACAN RWY 25**
WOENSDRECHT (EHWO)

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

TACAN	APP COURSE	FAF ALT	Descent GR	MDA	TDZE	ALS	LDA
WDT CH 97	243°	1200 FT		**440**	63	900 m	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

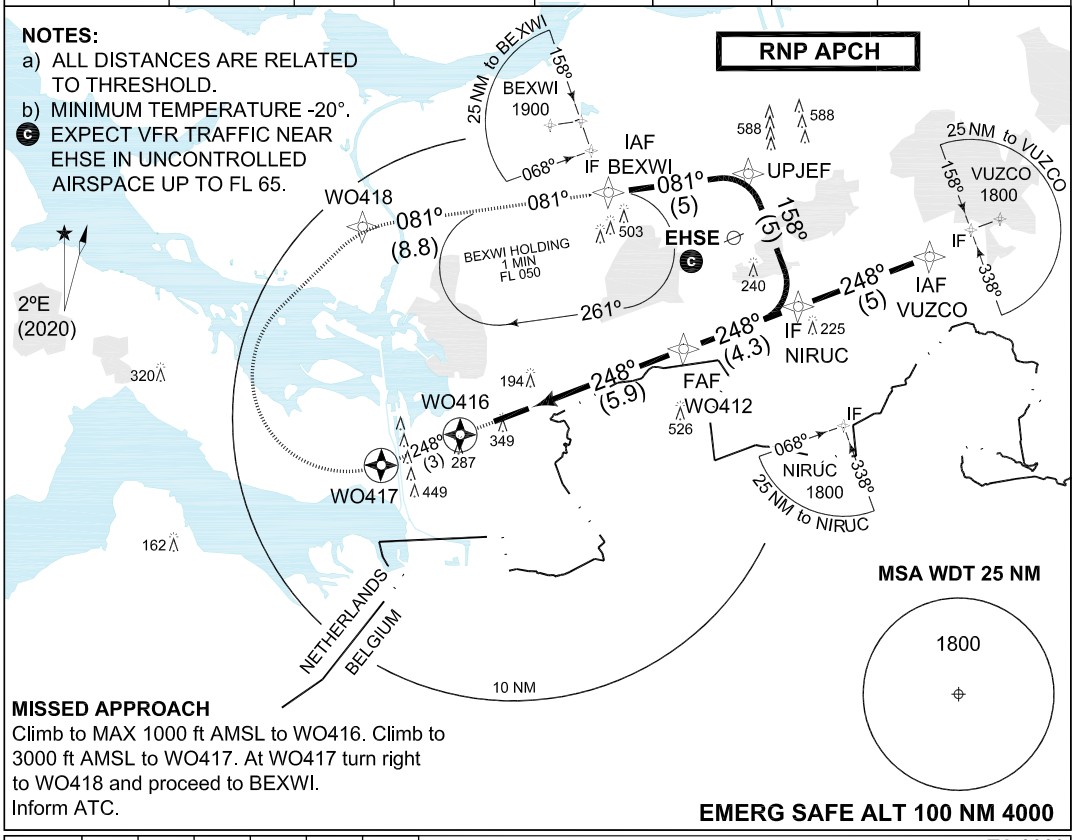
AD ELEV 63

RNP RWY 25
WOENSDRECHT (EHWO)

DUTCH MIL	RAPCON WEST	WOENSDRECHT TWR	GND CTL	ATIS*
336.325 125.930	399.725 123.580	339.000 120.430	356.875 121.680	

EGNOS CHANNEL	APP COURSE	FAF ALT	Descent GR	MDA	DA	THR ELEV	ALS	LDA
51845 E25A	248°	2000 FT	5.24% / 3.0°	SEE CAT	SEE CAT	63	900 m	8014 FT

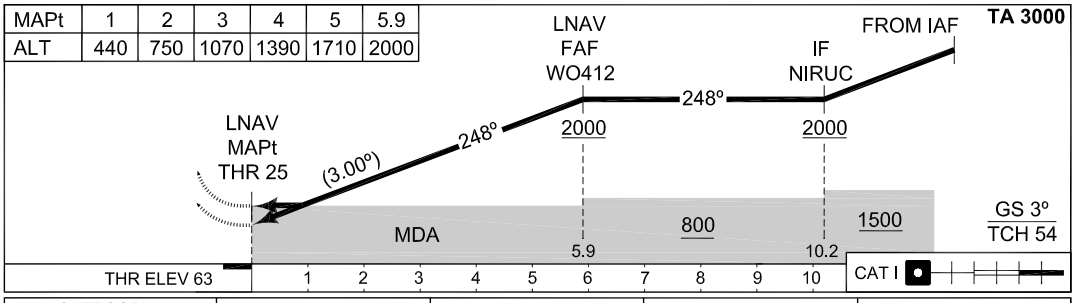
NOTES:
a) ALL DISTANCES ARE RELATED TO THRESHOLD.
b) MINIMUM TEMPERATURE -20°.
c) EXPECT VFR TRAFFIC NEAR EHSE IN UNCONTROLLED AIRSPACE UP TO FL 65.



MISSED APPROACH
Climb to MAX 1000 ft AMSL to WO416. Climb to 3000 ft AMSL to WO417. At WO417 turn right to WO418 and proceed to BEXWI.
Inform ATC.

EMERG SAFE ALT 100 NM 4000

MAPt	1	2	3	4	5	5.9
ALT	440	750	1070	1390	1710	2000



CATEGORY		A	B	C	D
EU-OPS	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

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