

**GENERAL****Operational Hours**

**ATS Hours / AD OPS Hours:** MON-FRI: 0530-2200 $\pm$ , SAT, SUN and HOL: 0630-2200 $\pm$ .

**Airport Information**

**RFF:** CAT 7, CAT 8 AVBL O/R with 24HR PN

**PCN:** RWY 05/23: 61/F/B/W/T

**Operation****Low Visibility Procedure**

LVP in force when VIS at or below 1500m and CEIL at or below 300ft. Four low VIS phases are recognized. During phase A MNM separation will be increased. During other phases also the RWY use will be restricted.

**RWY Restriction**

Turnpad at RWY 05 must be used by ACFT with wingspan >24m / 79ft in case of:

- Full length TKOF RWY 05
- LDG RWY 23 and missing exit TWY C
- Rejected TKOF RWY 23 and missing exit TWY C

**TWY Restriction**

TWY G width 10m / 33ft.

TWY E2, S3 MAX wingspan 36m / 118ft.

**Taxi/Parking**

Follow-me AVBL.

**ARRIVAL****Communication****COM Failure****Inbound CLR not received:**

- Proceed according to FPL to HLDG SO NDB.
- Maintain last cleared and acknowledged FL.
- Commence descent in HLDG to 2000ft at or near as possible to ETO over SO NDB.
- After reaching 2000ft leave SO NDB and carry out instrument APCH to most convenient RWY.

**Inbound CLR received:**

- Proceed according current FPL to HLDG SO or VZ NDB, if specified in the inbound CLR.
- Maintain last cleared and acknowledged FL.
- After arrival over SO or VZ, intercept the HLDG pattern.
- Commence descent in HLDG to 2000ft at the EAT last received and acknowledged.
- When no EAT has been received and acknowledged, commence descent to 2000ft at or near as possible to the ETO over HLDG.
- After reaching 2000ft leave HLDG and carry out instrument APCH to appropriate RWY.

Inbound TOLKO or on RNAV to ILS APCH: proceed to TOLKO and execute RNAV to ILS APCH PROC.

Inbound AMREG, IDAKA, SIPLO, TUVOX, VEXAR, XOMBI or RNAV (GNSS) APCH: proceed to IAF/IF and execute RNAV (GNSS) APCH PROC in accordance with the applicable IAC.

**ARRIVAL****MISAP during Instrument APCH****RWY 05**

Fly RWY MAG track and climb to 3000ft. When passing 2000ft start left turn to HDG 320°. When reaching 3000ft proceed to VZ NDB. After arriving over VZ NDB hold or descend to 2000ft in an outbound turn, intercept final APCH and execute IAP.

**RWY 23**

Fly RWY MAG track and climb to 3000ft. When passing 2000ft start right turn to HDG 320°. When reaching 3000ft proceed to SO NDB. After arriving over SO NDB hold or descend to 2000ft in an outbound turn, intercept final APCH and execute IAP.

**MISAP during visual APCH**

Turn to the intended LDG RWY, intercept the RWY MAG track of that RWY while:

When visual:

- Remain visual and execute another circuit for that RWY, or

When unable to remain visual:

- Climb to 3000ft.
- When passing 2000ft start the shortest climbing turn to HDG 320°.
- When reaching 3000ft proceed to VZ NDB (APCH RWY 05), proceed to SO NDB (APCH RWY 23),
- After arriving over SO/VZ NDB hold or descend to 2000ft in an outbound turn, intercept final APCH and execute instrument APCH.

**MISAP during circling**

- Turn to the intended LDG RWY,
- Intercept RWY MAG track while climbing to 3000ft.
- When passing 2000ft start the shortest climbing turn to HDG 320°.
- In case a circling made to RWY 05: when reaching 3000ft proceed to VZ NDB hold or descend to 2000ft in an outbound turn, intercept final APCH and execute instrument APCH PROC again.
- In case a circling made to RWY 23: when reaching 3000ft proceed to SO NDB hold or descend to 2000ft in an outbound turn, intercept final APCH and execute instrument APCH PROC again.

**Arrival Procedure****Visual APCH**

Only allowed or offered when VIS MNM 5km and ceiling 1200ft AMSL. To minimize noise intercept final at an ALT of at least 1000ft AMSL.

**DEPARTURE****Take-off Minima**

RWY		05/23	
All ACFT	ft - m/km	0 - 400R/400V	HJ only
		0 - 800R/800V	HN

**DEPARTURE****Speed**

MAX IAS 250KT below FL100, irrespective of ICAO airspace class.

**Departure Procedure**

**Noise Abatement Procedure:** Climb ASAP to 2000ft.

**Departure Notes****ENKOS 3C, 1D**

Only for DEST EHLE and EHRD.

**NAPRO 2C, 1D**

DEP crossing conditions for the ATS route T50 (U) Z738/Z739:

- if requested FL is a LVL between FL205 and FL245, cross DEPAD at or above FL210.
- if requested FL is a LVL above FL245, cross DEPAD at or above FL210; cross AMOSU at or above FL250.

**NOVEN 2C, 1D**

Only AVBL for DEST EHAM and intending to operate above FL70 or for training purposes within Eelde TMA.

**ROLDU 3C, 1D**

Only for DEST EHLE at FLO60 or below during UDP.

**RUMER 3C, 2D**

Only for DEST EHEH, EHBD and EHBK, MAX FL95.

**TEBRO 3C, 2D**

Only for DEST EDDL, EDLN and EDLV.

**ATC Slot, Clearance**

REQ start-up CLR when fully ready on DLV. Report:

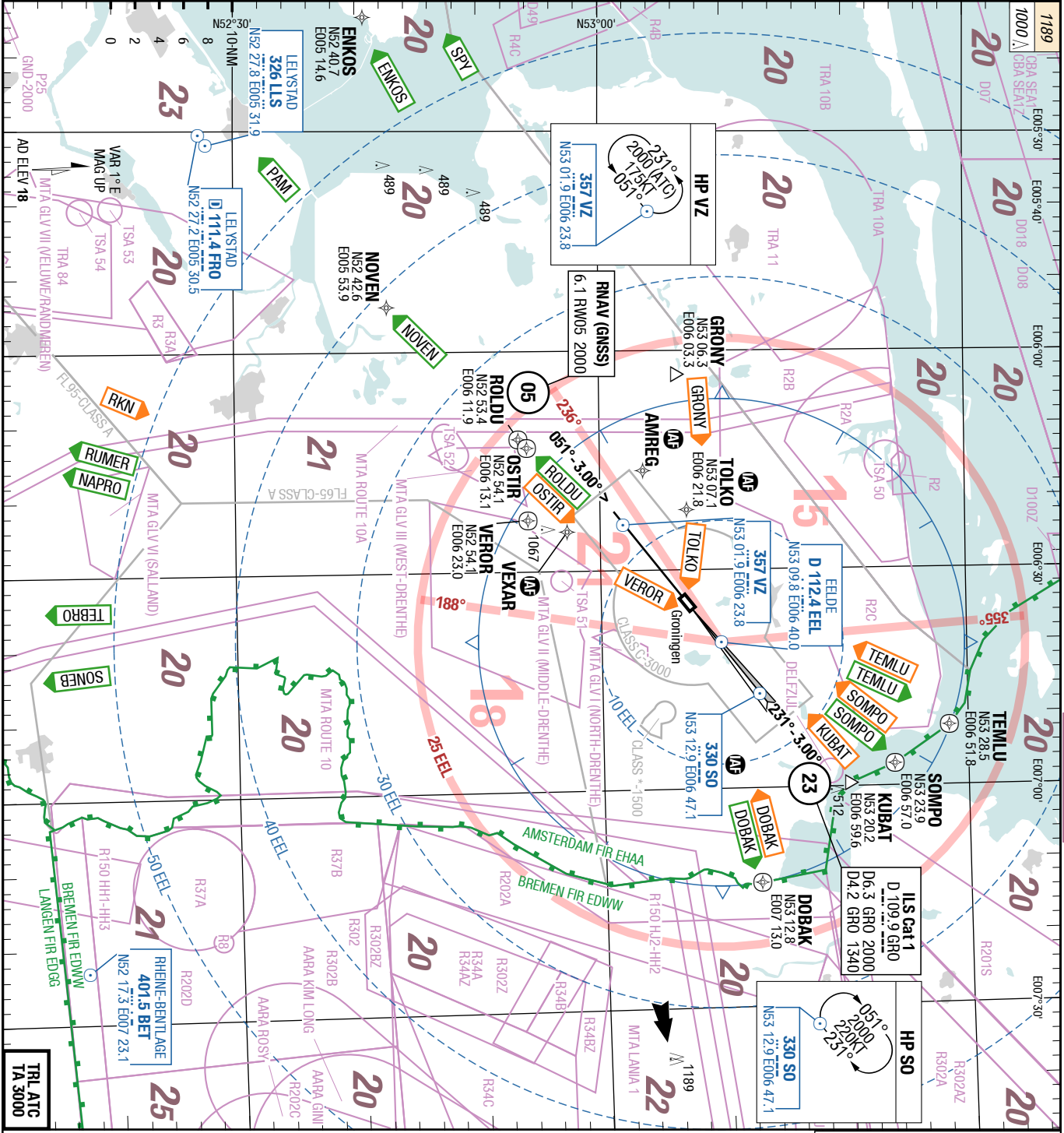
- call-sign
- PSN
- ATIS Info
- Flight Rules
- DEST

ACFT departing to Germany/Denmark may REQ start-up before ready. Report: DEST and time when ready to start ENGs.

REQ taxi CLR on TWR.

**De-Icing**

AVBL.



ATIS	133.555	MON-FRI 0530-2200h
	SAT, SUN 0630-2200h	
Eelde APP	120.305	MON-FRI 0800-1800h
	119.705	MON-FRI 0800-1800h
Eelde TWR	118.705	MON-FRI 0530-2200h
	SAT, SUN, HOL	0630-2200h
	119.705	MON-FRI 0530-2200h
	SAT, SUN, HOL	0630-2200h
Eelde DLV	121.705	MON-FRI 0530-2200h
	SAT, SUN, HOL	0630-2200h

**Landing RWY system:**

05

HL-S

THR 13 (0hPa) / TDZ --- (---%)

83.0°

2500 x 45

30 HL

45 x 2500

3.0°

TDZ 18 (---%) / THR 13 (0hPa)

HL-P1

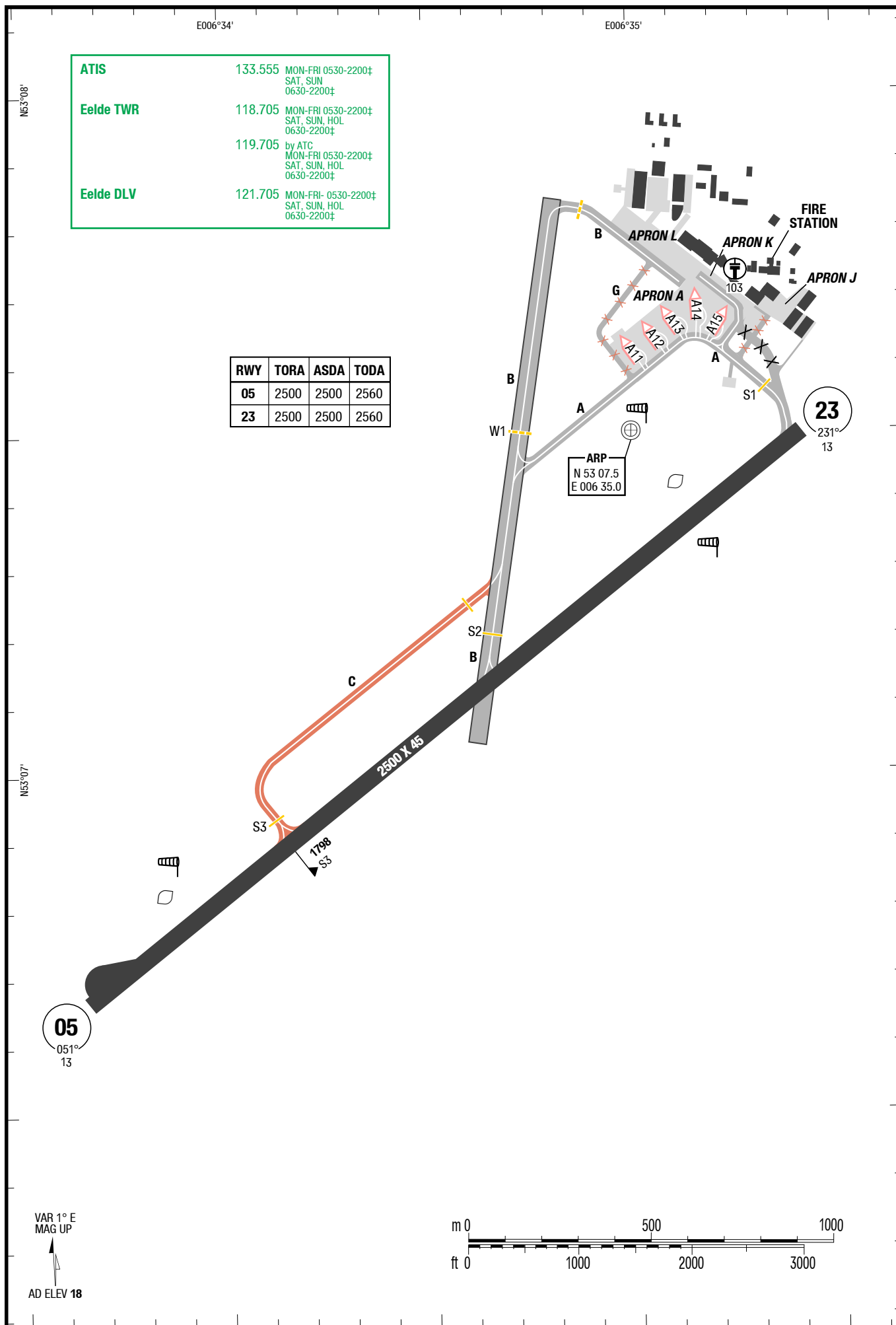
23

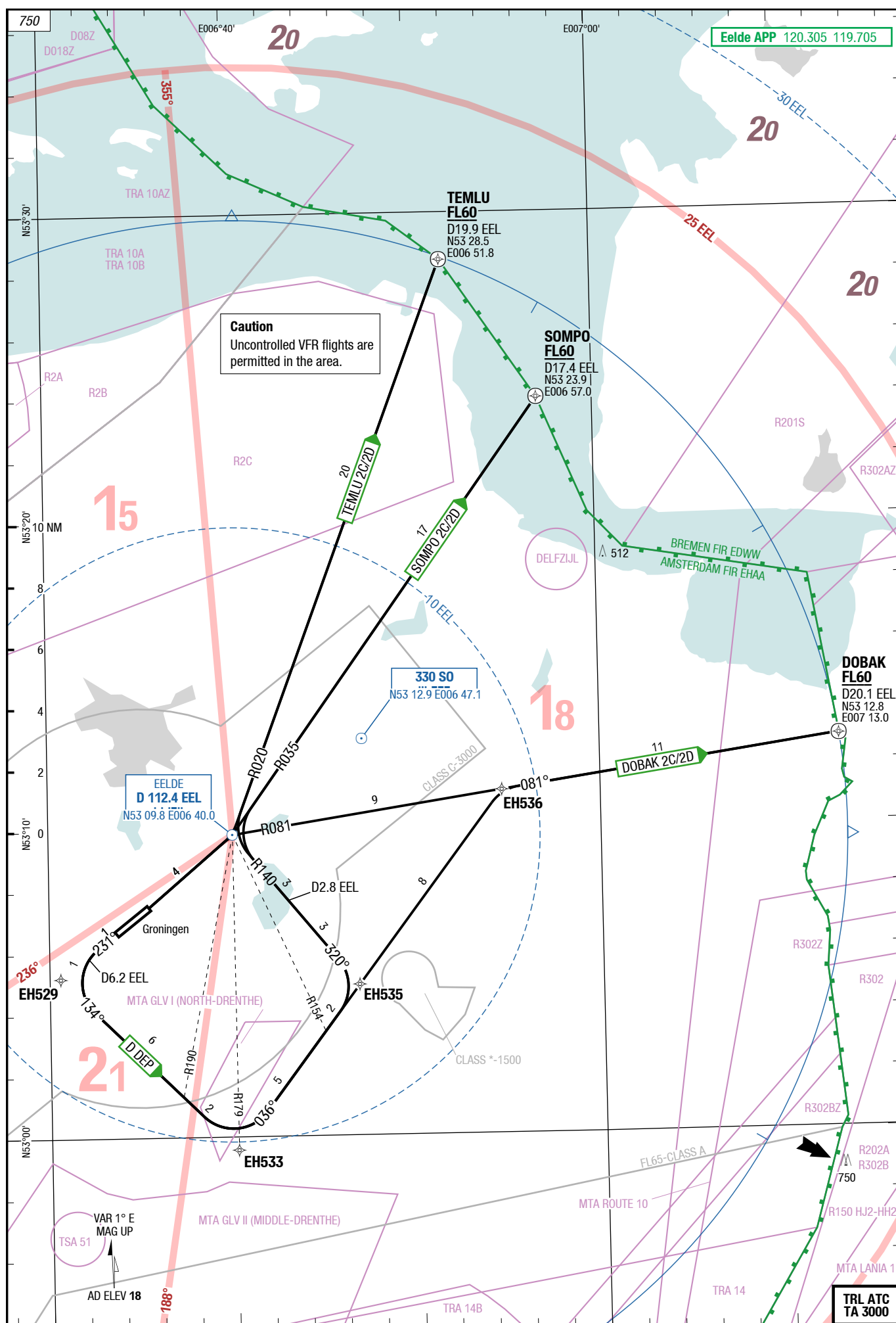
60 HL

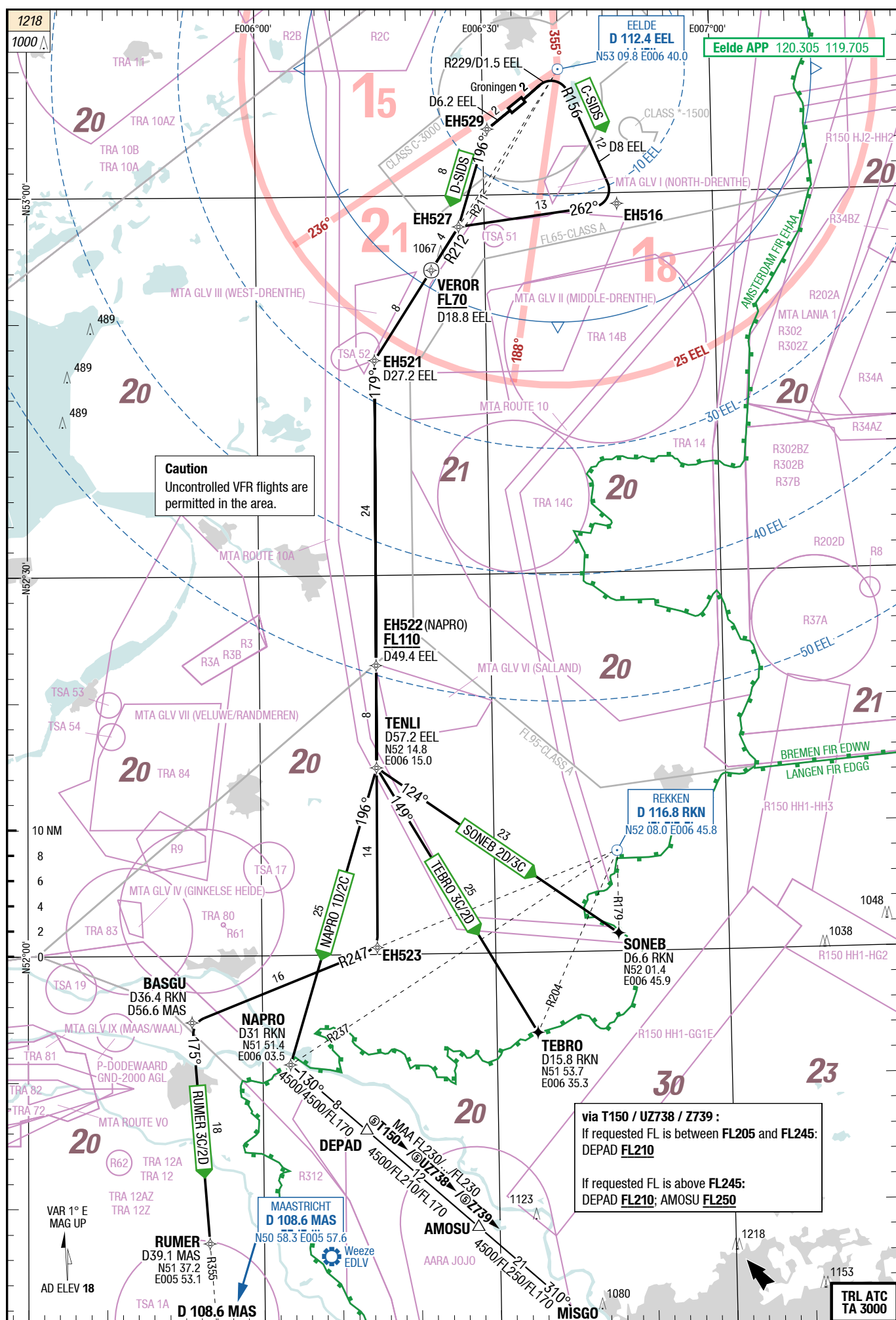
30 HL

0.0%

Changes: WDI









22-MAR-2018

**GRQ-EHGG**

Netherlands **Groningen** Eelde

NIL

4-30

### SIDs West (RNAV Overlay)

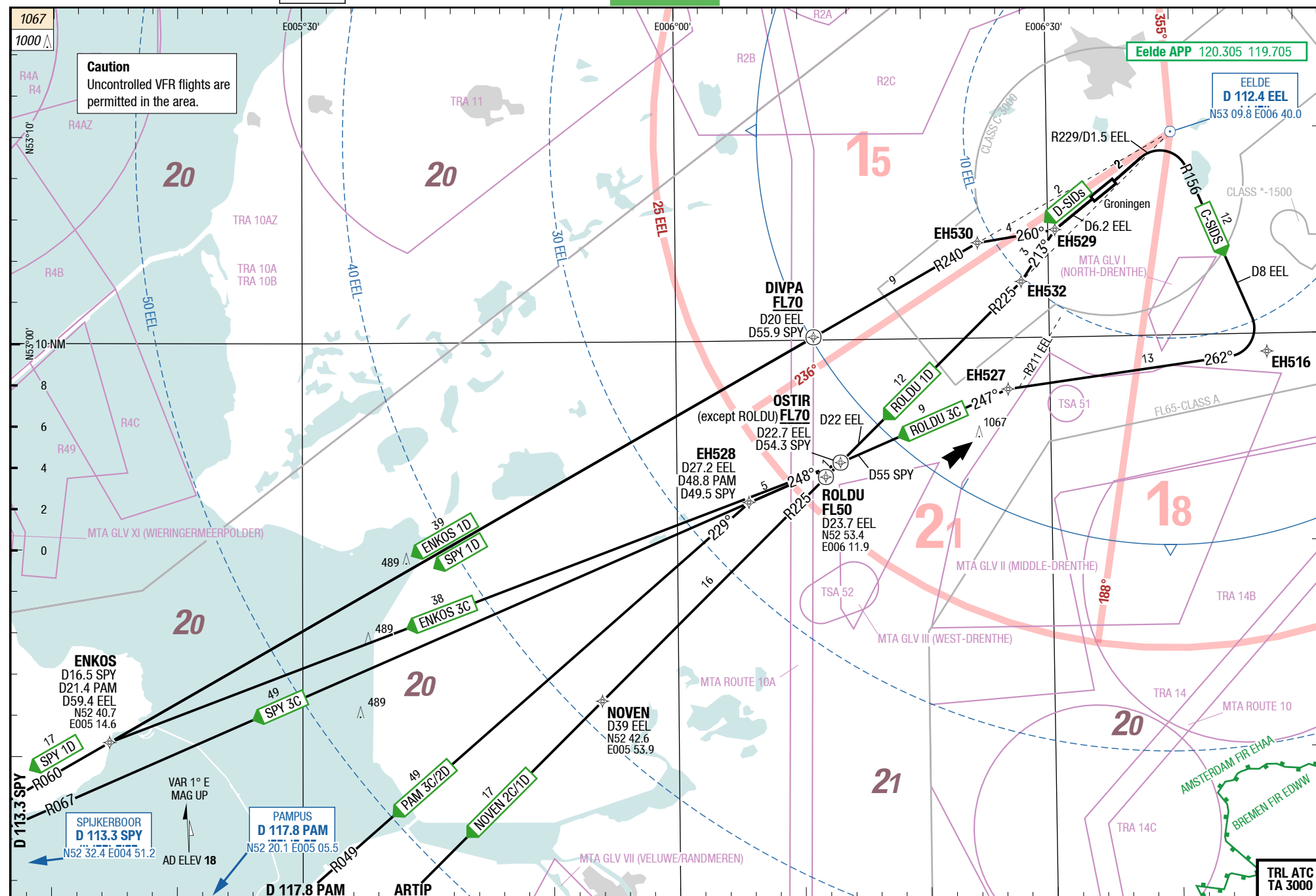
SID

SID

Eelde **Groningen** Netherlands

NIL

### SIDs West (RNAV Overlay)



Changes: Track, PROC, SUAs, Editorial



**DOBAK 2C / SOMPO 2C / TEMLU 2C**

RWY 05 (051°)

DESIGNATOR	ROUTING	ALTITUDES
	<b>Runway 05</b>	
<b>DOBAK 2C</b> <b>120.305</b> ①	direct <b>EEL</b> - R081 <b>EEL</b> to DOBAK  <b>FMS</b> EEL - <u>DOBAK</u>	DOBAK (D20.1 <b>EEL</b> ) MNM <b>FL60</b>  DOBAK MNM <b>FL60</b>  <b>initial climb FL60</b>
<b>SOMPO 2C</b> <b>120.305</b> ①	direct <b>EEL</b> - R035 <b>EEL</b> to SOMPO  <b>FMS</b> EEL - <u>SOMPO</u>	SOMPO (D17.4 <b>EEL</b> ) MNM <b>FL60</b>  SOMPO MNM <b>FL60</b>  <b>initial climb FL60</b>
<b>TEMLU 2C</b> <b>120.305</b> ①	direct <b>EEL</b> - R020 <b>EEL</b> to TEMLU  <b>FMS</b> EEL - <u>TEMLU</u>	TEMLU (D19.9 <b>EEL</b> ) MNM <b>FL60</b>  TEMLU MNM <b>FL60</b>  <b>initial climb FL60</b>

① If unable to comply with the crossing conditions, inform Eelde DLV before departure.

## DOBAK 2D / SOMPO 2D / TEMPLU 2D

RWY 23 (231°)

DESIGNATOR	ROUTING	ALTITUDES
	Runway 23	
<b>DOBAK 2D</b> <b>120.305</b> ①	at D6.2 <b>EEL LT</b> 134° - crossing R190 <b>EEL LT</b> 036° - intercept R081 <b>EEL</b> to DOBAK  <b>FMS</b> EH529 - EH533 - EH536 - <u>DOBAK</u>	DOBAK (D20.1 <b>EEL</b> ) MNM <b>FL60</b>  DOBAK MNM <b>FL60</b> initial climb <b>FL60</b>
<b>SOMPO 2D</b> <b>120.305</b> ①	at D6.2 <b>EEL LT</b> 134° - crossing R190 <b>EEL LT</b> 036° - crossing R154 <b>EEL LT</b> intercept R140 <b>EEL</b> inbound - at D2.8 <b>EEL RT</b> intercept R035 <b>EEL</b> to SOMPO  <b>FMS</b> EH529 - EH533 - EH535 - EEL - <u>SOMPO</u>	SOMPO (D17.4 <b>EEL</b> ) MNM <b>FL60</b>  SOMPO MNM <b>FL60</b> initial climb <b>FL60</b>
<b>TEMPLU 2D</b> <b>120.305</b> ①	at D6.2 <b>EEL LT</b> 134° - crossing R190 <b>EEL LT</b> 036° - crossing R154 <b>EEL LT</b> intercept R140 <b>EEL</b> inbound - at D2.8 <b>EEL RT</b> intercept R020 <b>EEL</b> to TEMPLU  <b>FMS</b> EH529 - EH533 - EH535 - EEL - <u>TEMPLU</u>	TEMPLU (D19.9 <b>EEL</b> ) MNM <b>FL60</b>  TEMPLU MNM <b>FL60</b> initial climb <b>FL60</b>

① If unable to comply with the crossing conditions, inform Eelde DLV before departure.

## NAPRO 2C / RUMER 3C / SONEB 3C / TEBRO 3C

RWY 05 (051°)

DESIGNATOR	ROUTING	ALTITUDES
	Runway 05	
<b>NAPRO 2C</b> <b>120.305</b> ①	direct <b>EEL</b> - at R229 / D1.5 <b>EEL RT</b> intercept R156 <b>EEL</b> - at D8 <b>EEL RT</b> 262° - crossing R211 <b>EEL LT</b> intercept R212 <b>EEL</b> - at D27.2 <b>EEL LT</b> 179° to TENLI - <b>RT</b> 196° to NAPRO  <b>FMS</b> EEL - EH516 - EH527 - <u>VEROR</u> - EH521 - EH522 - TENLI - NAPRO	R212/D18.8 <b>EEL MNM FL70</b> D49.4 <b>EEL MNM FL110</b>  VEROR MNM <b>FL70</b> EH522 MNM <b>FL110</b>  <b>initial climb FL70</b>
<b>RUMER 3C</b> <b>120.305</b> ①	direct <b>EEL</b> - at R229 / D1.5 <b>EEL RT</b> intercept R156 <b>EEL</b> - at D8 <b>EEL RT</b> 262° - crossing R211 <b>EEL LT</b> intercept R212 <b>EEL</b> - at D27.2 <b>EEL LT</b> 179° to TENLI - Continue on 179° to intercept R247 <b>RKN</b> - at BASGU <b>LT</b> intercept R355 <b>MAS</b> to RUMER  <b>FMS</b> EEL - EH516 - EH527 - <u>VEROR</u> - EH521 - TENLI - EH523 - BASGU - RUMER	R212/D18.8 <b>EEL MNM FL70</b>  VEROR MNM <b>FL70</b>  <b>initial climb FL70</b>
<b>SONEB 3C</b> <b>120.305</b> ①	direct <b>EEL</b> - at R229 / D1.5 <b>EEL RT</b> intercept R156 <b>EEL</b> - at D8 <b>EEL RT</b> 262° - crossing R211 <b>EEL LT</b> intercept R212 <b>EEL</b> - at D27.2 <b>EEL LT</b> 179° to TENLI - <b>LT</b> 124° to SONEB  <b>FMS</b> EEL - EH516 - EH527 - <u>VEROR</u> - EH521 - TENLI - SONEB	R212/D18.8 <b>EEL MNM FL70</b>  VEROR MNM <b>FL70</b>  <b>initial climb FL70</b>
<b>TEBRO 3C</b> <b>120.305</b> ①	direct <b>EEL</b> - at R229 / D1.5 <b>EEL RT</b> intercept R156 <b>EEL</b> - at D8 <b>EEL RT</b> 262° - crossing R211 <b>EEL LT</b> intercept R212 <b>EEL</b> - at D27.2 <b>EEL LT</b> 179° to TENLI - <b>LT</b> 149° to TEBRO  <b>FMS</b> EEL - EH516 - EH527 - <u>VEROR</u> - EH521 - TENLI - TEBRO	R212/D18.8 <b>EEL MNM FL70</b>  VEROR MNM <b>FL70</b>  <b>initial climb FL70</b>

① If unable to comply with the crossing conditions, inform Eelde DLV before departure.

## NAPRO 1D / RUMER 2D / SONEB 2D / TEBRO 2D

RWY 23 (231°)

DESIGNATOR	ROUTING	ALTITUDES
	Runway 23	
<b>NAPRO 1D</b> <b>120.305</b> ①	at D6.2 <b>EEL LT</b> 196° - intercept R212 <b>EEL</b> - at D27.2 <b>EEL LT</b> 179° to TENLI - <b>RT</b> 196° to NAPRO  <b>FMS</b> EH529 - EH527 - <u>VEROR</u> - EH521 - EH522 - TENLI - NAPRO	R212/D18.8 <b>EEL MNM FL70</b> D49.4 <b>EEL MNM FL110</b>  VEROR MNM <b>FL70</b> EH522 MNM <b>FL110</b>  <b>initial climb FL70</b>
<b>RUMER 2D</b> <b>120.305</b> ①	at D6.2 <b>EEL LT</b> 196° - intercept R212 <b>EEL</b> - at D27.2 <b>EEL LT</b> 179° to TENLI - Continue on 179° to intercept R247 <b>RKN</b> - at BASGU <b>LT</b> intercept R355 <b>MAS</b> to RUMER  <b>FMS</b> EH529 - EH527 - <u>VEROR</u> - EH521 - TENLI - EH523 - BASGU - RUMER	R212/D18.8 <b>EEL MNM FL70</b>   VEROR MNM <b>FL70</b>  <b>initial climb FL70</b>
<b>SONEB 2D</b> <b>120.305</b> ①	at D6.2 <b>EEL LT</b> 196° - intercept R212 <b>EEL</b> - at D27.2 <b>EEL LT</b> 179° to TENLI - <b>LT</b> 124° to SONEB  <b>FMS</b> EH529 - EH527 - <u>VEROR</u> - EH521 - TENLI - SONEB	R212/D18.8 <b>EEL MNM FL70</b>  VEROR MNM <b>FL70</b>  <b>initial climb FL70</b>
<b>TEBRO 2D</b> <b>120.305</b> ①	at D6.2 <b>EEL LT</b> 196° - intercept R212 <b>EEL</b> - at D27.2 <b>EEL LT</b> 179° to TENLI - <b>LT</b> 149° to TEBRO  <b>FMS</b> EH529 - EH527 - <u>VEROR</u> - EH521 - TENLI - TEBRO	R212/D18.8 <b>EEL MNM FL70</b>  VEROR MNM <b>FL70</b>  <b>initial climb FL70</b>

① If unable to comply with the crossing conditions, inform Eelde DLV before departure.

ENKOS 3C / NOVEN 2C / PAMPUS 3C / ROLDU 3C / SPIJKERBOOR 3C

RWY 05 (051°)

DESIGNATOR	ROUTING	ALTITUDES
	Runway 05	
<b>ENKOS 3C</b> <b>120.305</b> ①	direct <b>EEL</b> - at R229/D1.5 <b>EEL RT</b> intercept R156 <b>EEL</b> - at D8 <b>EEL RT</b> 262° - crossing R211 <b>EEL LT</b> intercept R067 <b>SPY</b> inbound - at D55 <b>SPY RT</b> 248° to ENKOS  <b>FMS</b> EEL - EH516 - EH527 - <u>OSTIR</u> - ENKOS	R225/D22.7 <b>EEL MNM</b> <b>FL70</b>  OSTIR MNM <b>FL70</b> <b>initial climb FL70</b>
<b>NOVEN 2C</b> <b>120.305</b> ①	direct <b>EEL</b> - at R229/D1.5 <b>EEL RT</b> intercept R156 <b>EEL</b> - at D8 <b>EEL RT</b> 262° - crossing R211 <b>EEL LT</b> intercept R067 <b>SPY</b> inbound - at D22.7 <b>EEL LT</b> intercept R225 <b>EEL</b> to NOVEN - ARTIP  <b>FMS</b> EEL - EH516 - EH527 - <u>OSTIR</u> - NOVEN - ARTIP	R225/D22.7 <b>EEL MNM</b> <b>FL70</b>  OSTIR MNM <b>FL70</b> <b>initial climb FL70</b>
<b>PAMPUS 3C</b> <b>PAM 3C</b> <b>120.305</b> ①	direct <b>EEL</b> - at R229/D1.5 <b>EEL RT</b> intercept R156 <b>EEL</b> - at D8 <b>EEL RT</b> 262° - crossing R211 <b>EEL LT</b> intercept R067 <b>SPY</b> inbound - at D27.2 <b>EEL LT</b> intercept R049 <b>PAM</b> to <b>PAM</b>  <b>FMS</b> EEL - EH516 - EH527 - <u>OSTIR</u> - EH528 - PAM	R225/D22.7 <b>EEL MNM</b> <b>FL70</b>  OSTIR MNM <b>FL70</b> <b>initial climb FL70</b>
<b>ROLDU 3C</b> <b>120.305</b> ①	direct <b>EEL</b> - at R229/D1.5 <b>EEL RT</b> intercept R156 <b>EEL</b> - at D8 <b>EEL RT</b> 262° - crossing R211 <b>EEL LT</b> intercept R067 <b>SPY</b> inbound - at D22.7 <b>EEL LT</b> intercept R225 <b>EEL</b> to ROLDU  <b>FMS</b> EEL - EH516 - EH527 - <u>OSTIR</u> - <u>ROLDU</u>	R225/D23.7 <b>EEL</b> at <b>FL50</b>  ROLDU at <b>FL50</b> <b>initial climb FL50</b>
<b>SPIJKERBOOR 3C</b> <b>SPY 3C</b> <b>120.305</b> ①	direct <b>EEL</b> - at R229/D1.5 <b>EEL RT</b> intercept R156 <b>EEL</b> - at D8 <b>EEL RT</b> 262° - crossing R211 <b>EEL LT</b> intercept R067 <b>SPY</b> to <b>SPY</b>  <b>FMS</b> EEL - EH516 - EH527 - <u>OSTIR</u> - SPY	R225/D22.7 <b>EEL MNM</b> <b>FL70</b>  OSTIR MNM <b>FL70</b> <b>initial climb FL70</b>

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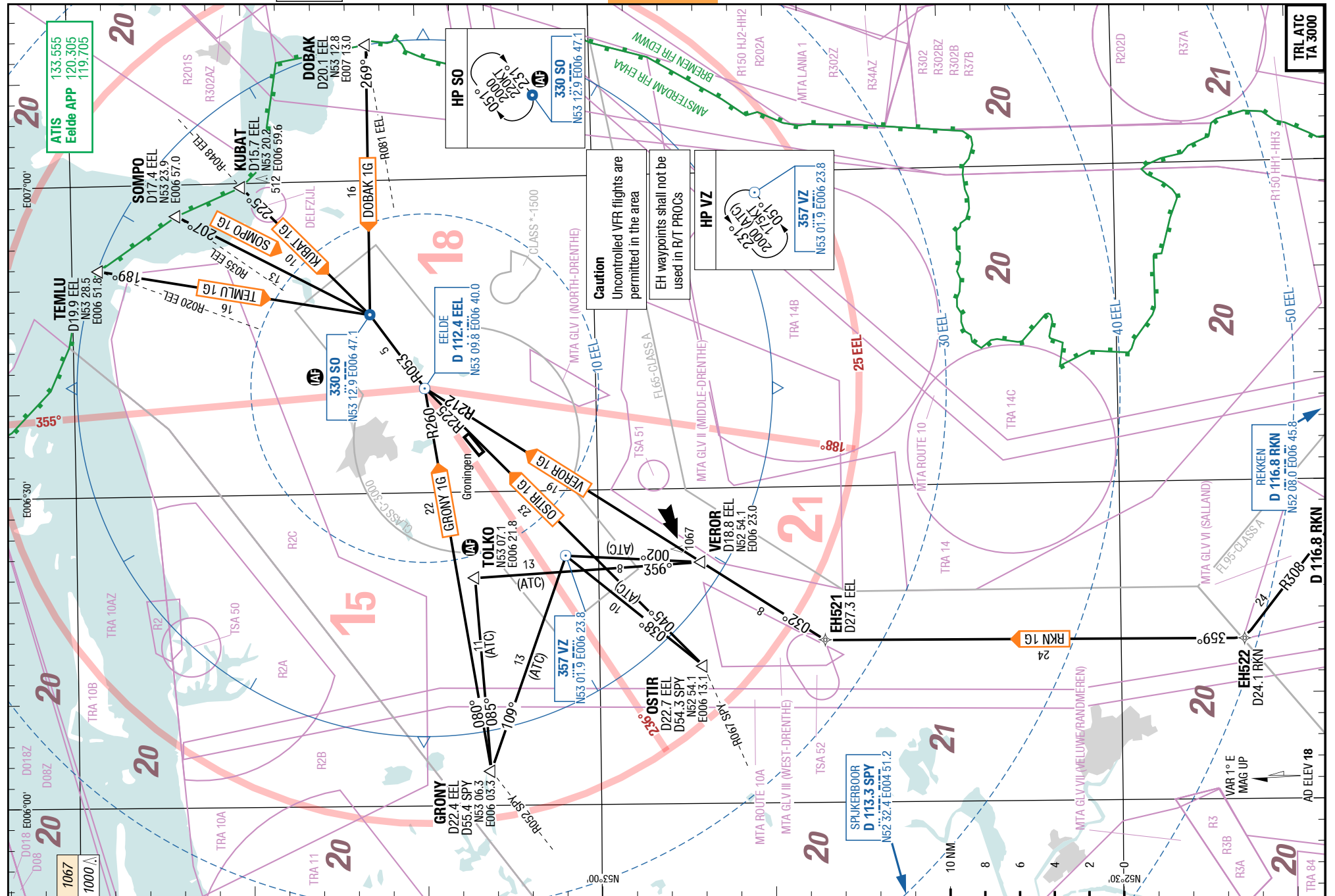
ENKOS 1D / NOVEN 1D / PAMPUS 2D / ROLDU 1D / SPIJKERBOOR 1D

RWY 23 (231°)

DESIGNATOR	ROUTING	ALTITUDES
	Runway 23	
<b>ENKOS 1D</b> <b>120.305</b> ①	at D6.2 <b>EEL RT 260°</b> - intercept R240 <b>EEL</b> to ENKOS  <b>FMS</b> EH529 - EH530 - <u>DIVPA</u> - ENKOS	R240/D20 <b>EEL MNM FL70</b>  DIVPA MNM <b>FL70</b>  <u>initial climb</u> <b>FL70</b>
<b>NOVEN 1D</b> <b>120.305</b> ①	at D6.2 <b>EEL LT 213°</b> - intercept R225 <b>EEL</b> to NOVEN - ARTIP  <b>FMS</b> EH529 - EH532 - <u>OSTIR</u> - NOVEN - ARTIP	R225/D22.7 <b>EEL MNM FL70</b>  OSTIR MNM <b>FL70</b>  <u>initial climb</u> <b>FL70</b>
<b>PAMPUS 2D</b> <b>PAM 2D</b> <b>120.305</b> ①	at D6.2 <b>EEL LT 213°</b> - intercept R225 <b>EEL</b> - at D22 <b>EEL RT 248°</b> - intercept R049 <b>PAM</b> to <b>PAM</b>  <b>FMS</b> EH529 - EH532 - <u>OSTIR</u> - EH528 - PAM	R225/D22.7 <b>EEL MNM FL70</b>  OSTIR MNM <b>FL70</b>  <u>initial climb</u> <b>FL70</b>
<b>ROLDU 1D</b> <b>120.305</b> ①	at D6.2 <b>EEL LT 213°</b> - intercept R225 <b>EEL</b> to ROLDU  <b>FMS</b> EH529 - EH532 - <u>OSTIR</u> - <u>ROLDU</u>	R225/D23.7 <b>EEL at FL50</b>  ROLDU at <b>FL50</b>  <u>initial climb</u> <b>FL50</b>
<b>SPIJKERBOOR 1D</b> <b>SPY 1D</b> <b>120.305</b> ①	at D6.2 <b>EEL RT 260°</b> - intercept R240 <b>EEL</b> to <b>SPY</b>  <b>FMS</b> EH529 - EH530 - <u>DIVPA</u> - SPY	R240/D20 <b>EEL MNM FL70</b>  DIVPA MNM <b>FL70</b>  <u>initial climb</u> <b>FL70</b>

① If unable to comply with the crossing conditions, inform Eelde DLV before departure.

6-10

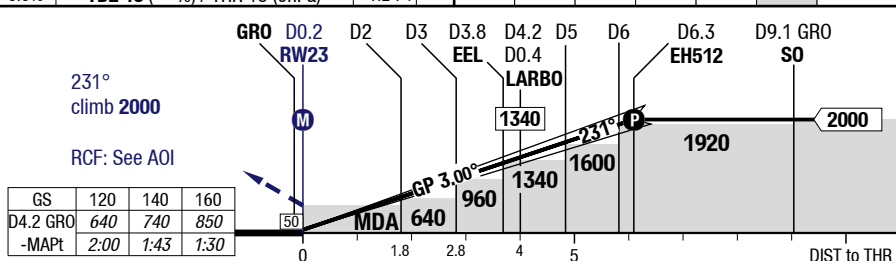
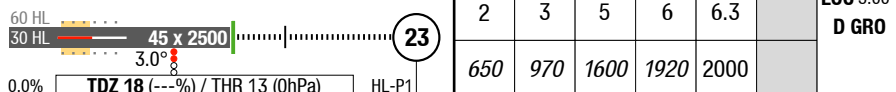
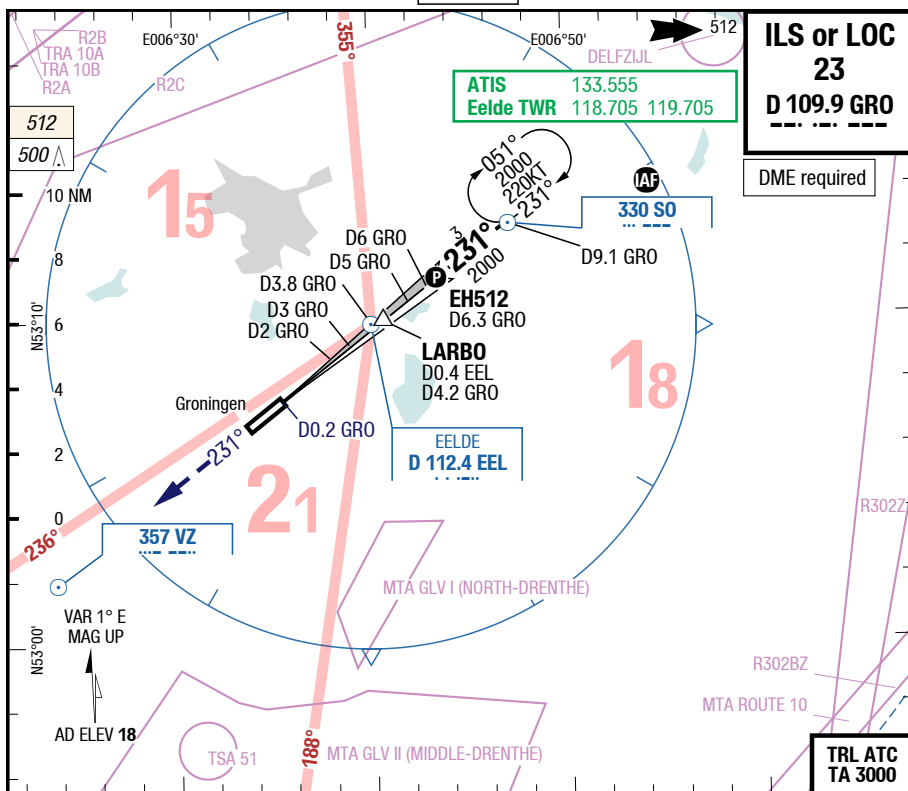




## GRQ-EHGG

7-10

ILS or LOC 23



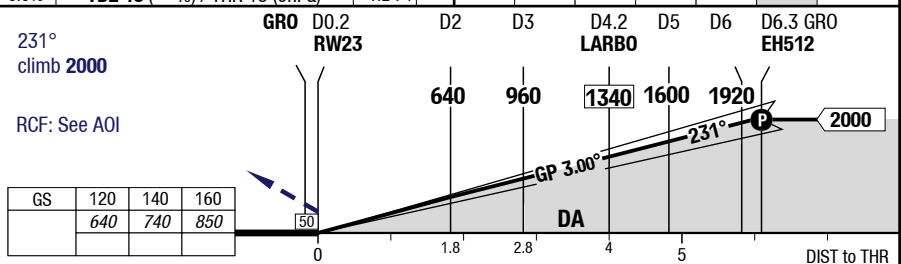
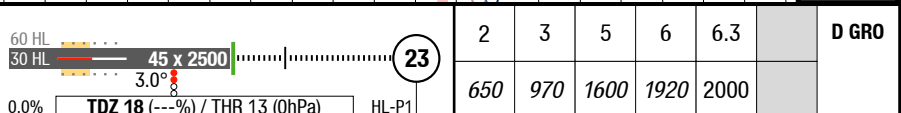
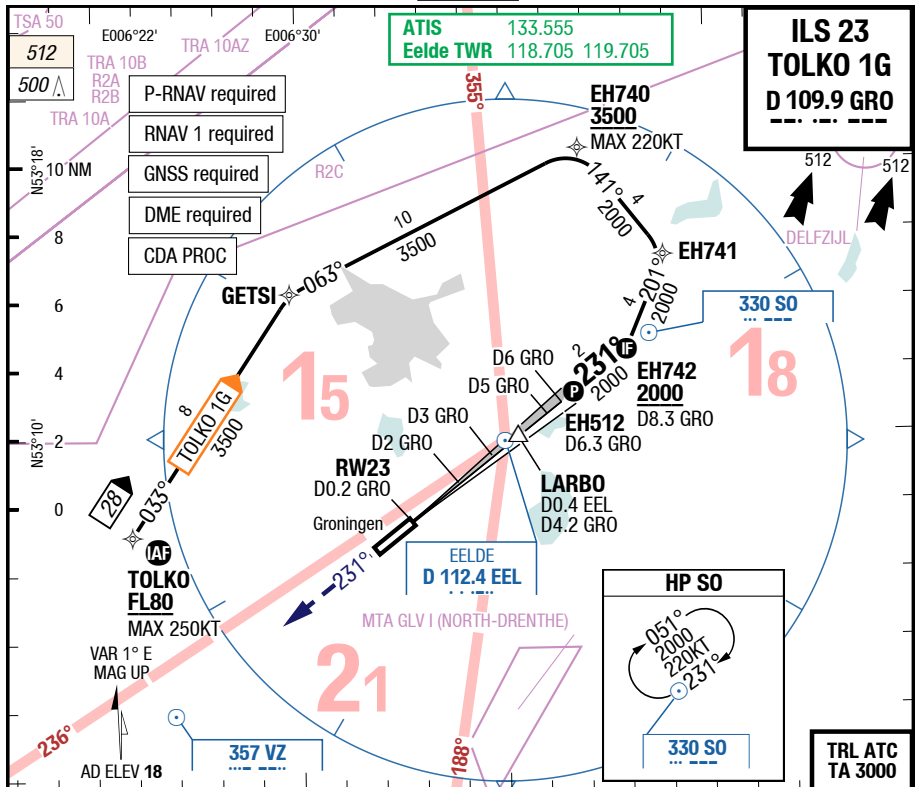
23	Cat 1 DME	LOC DME				Circling <sup>1)</sup>
C	ft - m/km ft	200 - 550 220	420 - 1.2 430			610 - 2.4V 620
D	ft - m/km ft	200 - 550 220	420 - 1.2 430			830 - 3.6V 840

1) SE of AD only unless otherwise instructed by ATC

## GRQ-EHGG

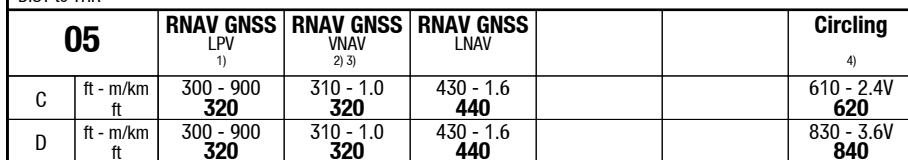
**7-20**

# ILS 23 TOLKO 1G



23		Cat 1 DME	LOC				Circling 1)
C	ft - m/km ft	200 - 550 220	Not authorized				610 - 2.4V 620
D	ft - m/km ft	200 - 550 220	Not authorized				830 - 3.6V 840

1) SE of AD only unless otherwise instructed by ATC

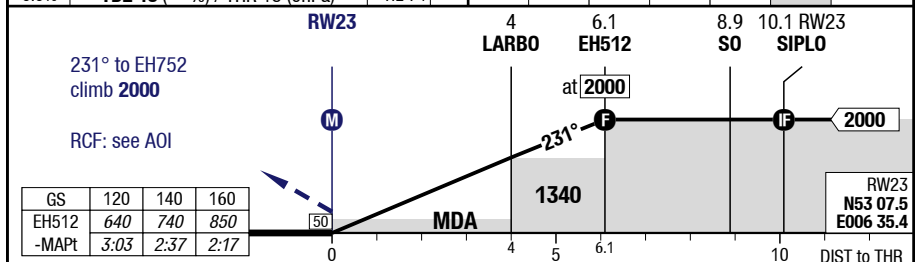
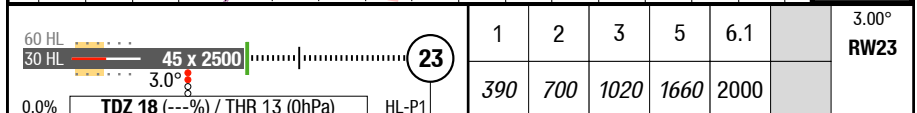
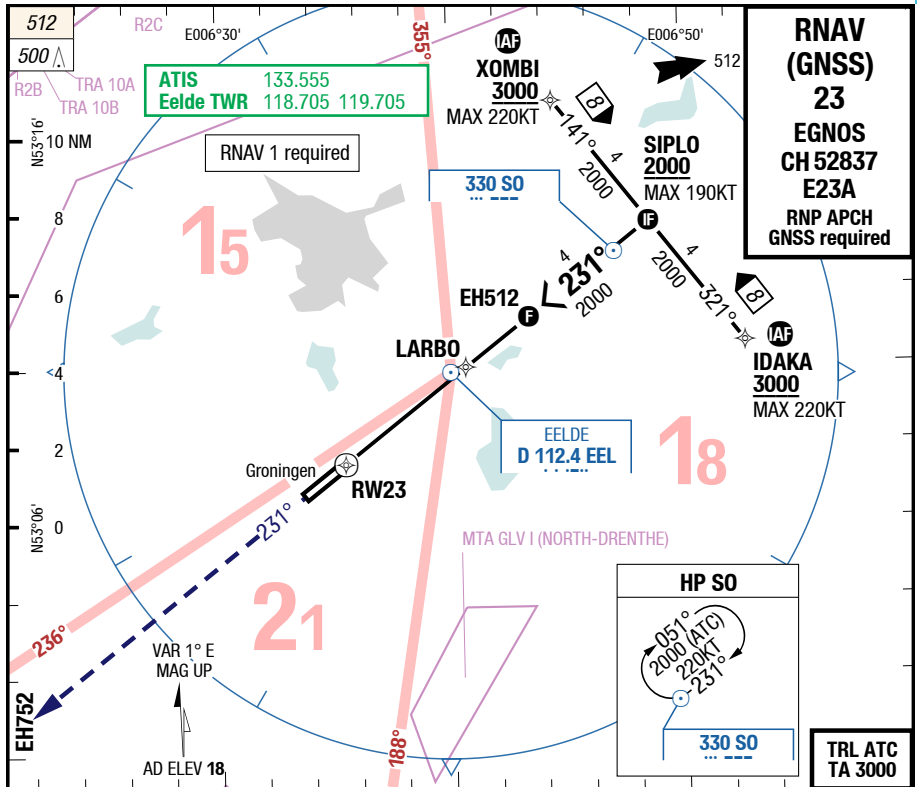


Changes: MIN, RWY polygon

## GRQ-EHGG

7-40

## RNAV (GNSS) 23



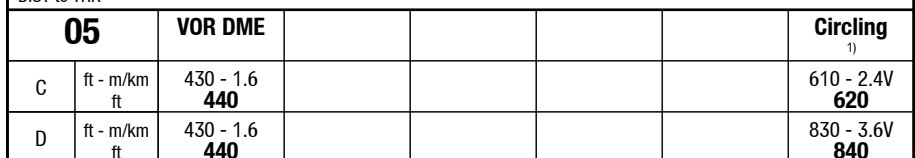
23		RNAV GNSS LPV 1)	RNAV GNSS VNAV 1) 2)	RNAV GNSS LNAV	Circling 3)	
C	ft - m/km ft	250 - 750 270	290 - 750 300	430 - 1.3 440		610 - 2.4V 620
D	ft - m/km ft	250 - 750 270	300 - 750 310	430 - 1.3 440		830 - 3.6V 840

1) With EVS 550m

2) Uncompensated BARO VNAV NA below -15°C (5°F)

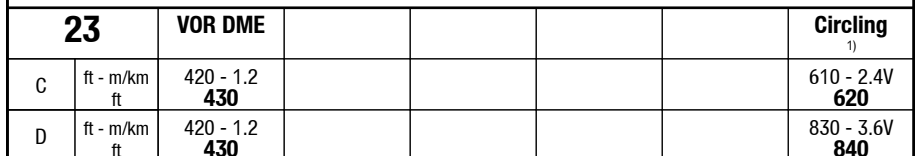
3) SE of AD only unless otherwise instructed by ATC

Changes: MIN, RWY polygon

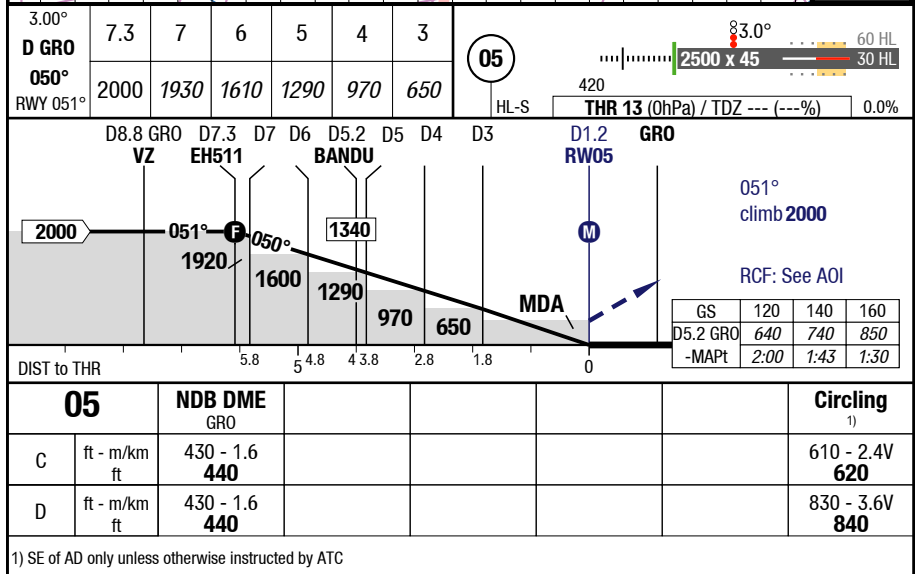


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**VOR 23**



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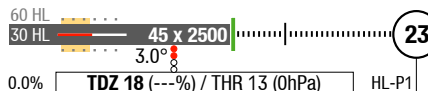
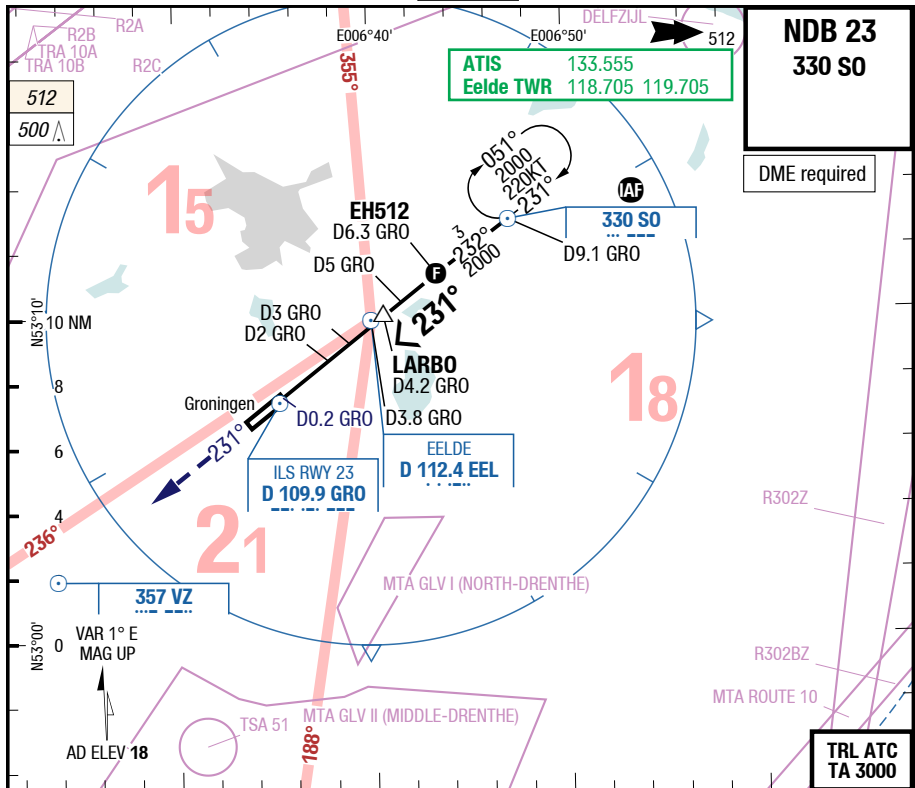
22-MAR-2018

GRQ-EHGG

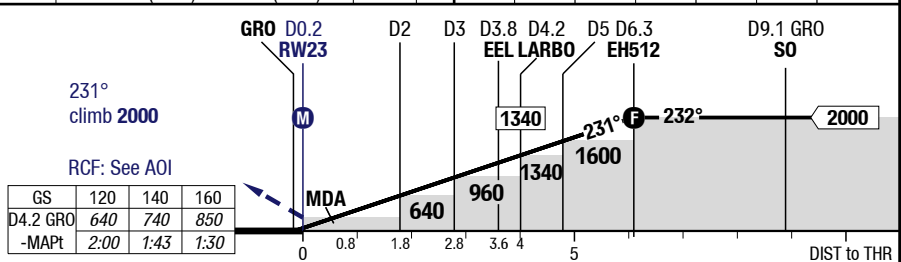
7-80

NDB 23

IAC



2	3	4	5	6	6.3	3.00° D GRO
650	970	1280	1600	1920	2000	



23	NDB DME GRO					Circling 1)
C	ft - m/km ft	420 - 1.2 430				610 - 2.4V 620
D	ft - m/km ft	420 - 1.2 430				830 - 3.6V 840

1) SE of AD only unless otherwise instructed by ATC

Changes: Nil

## GRQ-EHGG

# Netherlands **Groningen** Eelde

# MRC

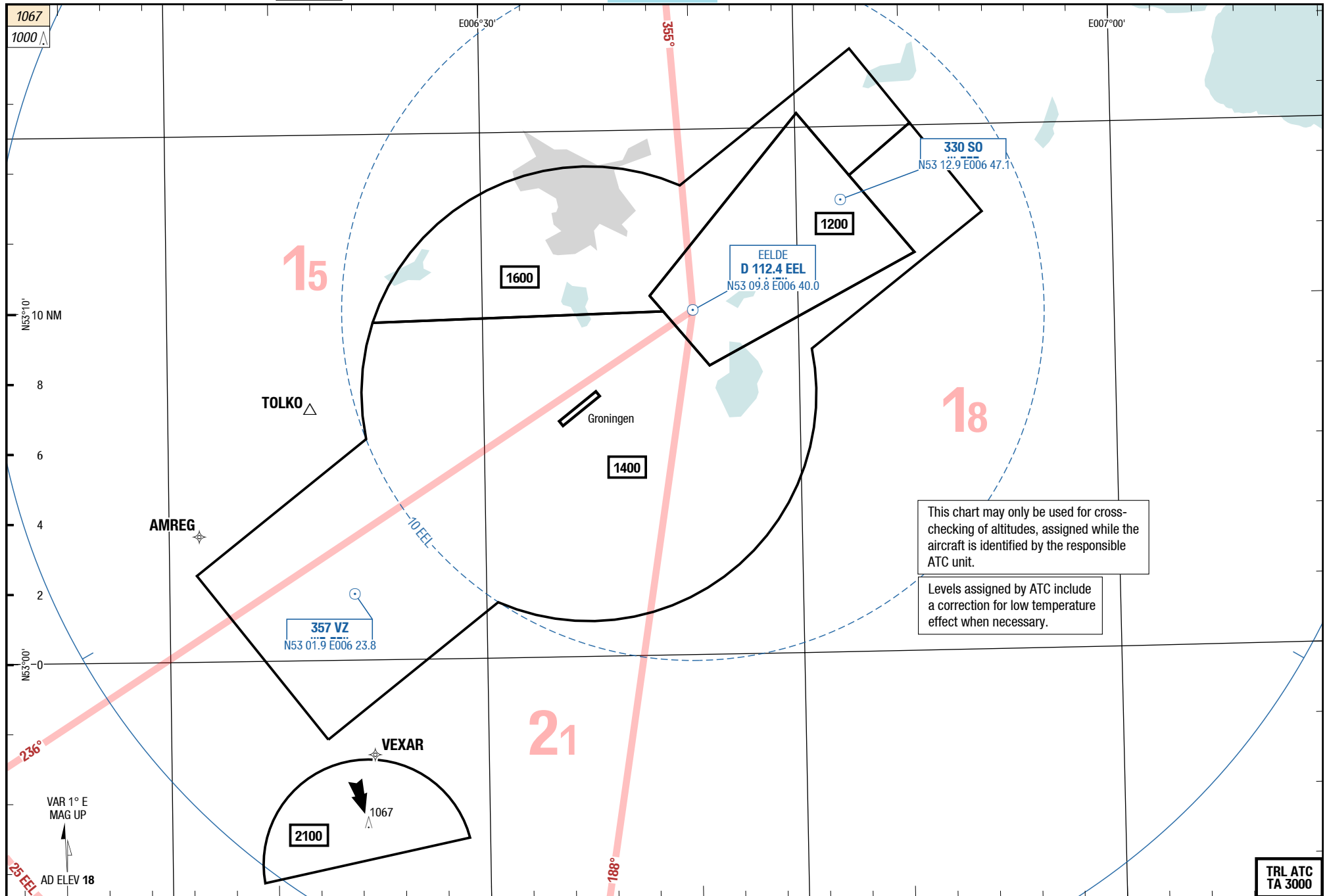
**MRC**

**MRC**

# Eelde **Groningen** Netherlands

# MRC

## 8-10



Changes: RWY polygon

TRL ATC  
TA 3000

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