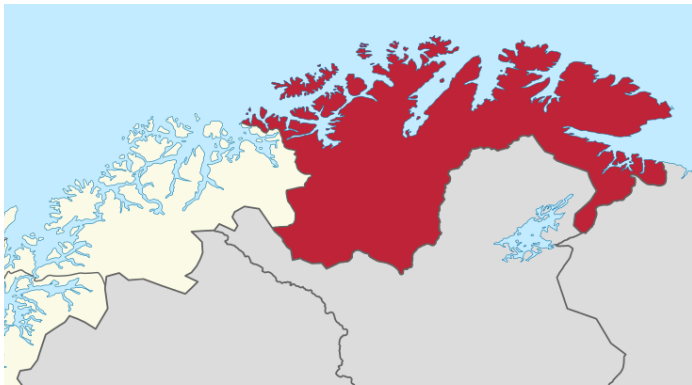


389th OPS Gun Støre

Introduction

Les Russes ont lancé l'opération Iliouchine II-2 pour récupérer le matériel entreposé dans le musée de Kirkenes. Cet avion piloté par le grand **Popov Polipov** héro de la grande guerre, ne peut rester entre des mains occidentales impies.



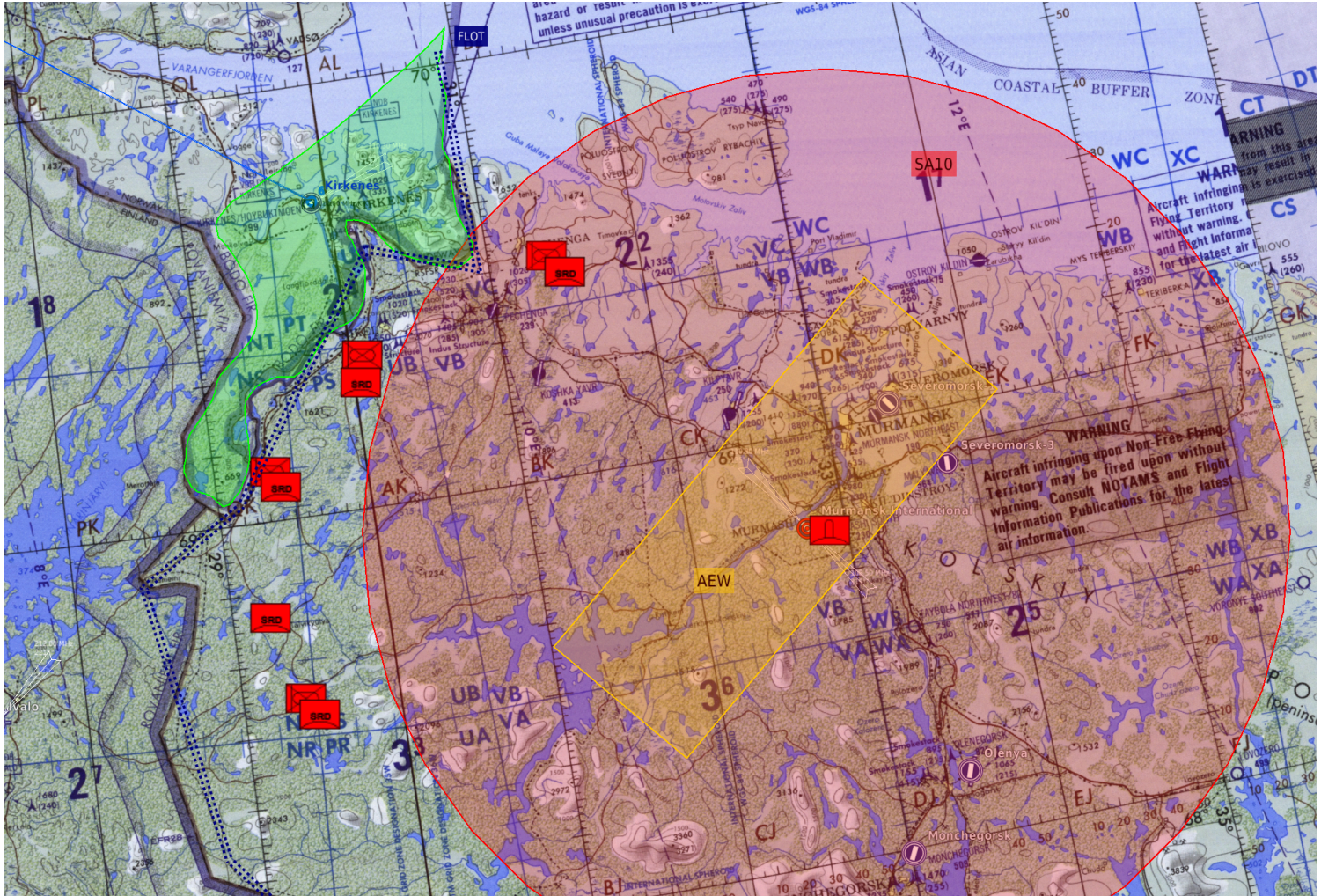
En réalité, cette opération préparée depuis plusieurs semaines vise à annexer le bord est du comté de Finnmark incluant les villages et l'aéroport autour de Kirkenes.

Pourquoi se lancent-ils dans une quête comme celle-ci en plein hivers avec des températures sous les -20°C ? Seule la vodka de Murmansk est en mesure de l'expliquer !

Réputée pour sa pureté et la concentration stœchiométrique de composés alcooliques, elle est utilisée également pour dégivrer les parebrises, en liquide de refroidissement antigel l'hiver pour les véhicules...



SITAC



Des colonnes de véhicules russes se sont massés sur 5 localisations, leurs mouvements concertés en direction de la frontière font craindre le début des opérations d'invasion du territoire norvégien amis et membre actif de l'OTAN.

MENACES

Un site SAM SA-10 "Grumble" est positionné sur Murmansk et protège la totalité de la zone russe.

AAA dans les convois,
SAM courte portée IR type SA-13 "Gopher" et/ou SA-19 "Grouse"

La base aérienne de Murmansk est dotée de 10x MiG-29S, de 6x Su-27, de 10x MiG-23 et un escadron de 6x Su-25T.

Potentiel < 50% OPS

ROEs

A/A : OUTLAW = BEYOND FLOT NOT IN 10Nm

A/A : SPADES = LACK OF CORRECT M3

A/A : HOSTILE = BEYOND FLOT IN 10Nm

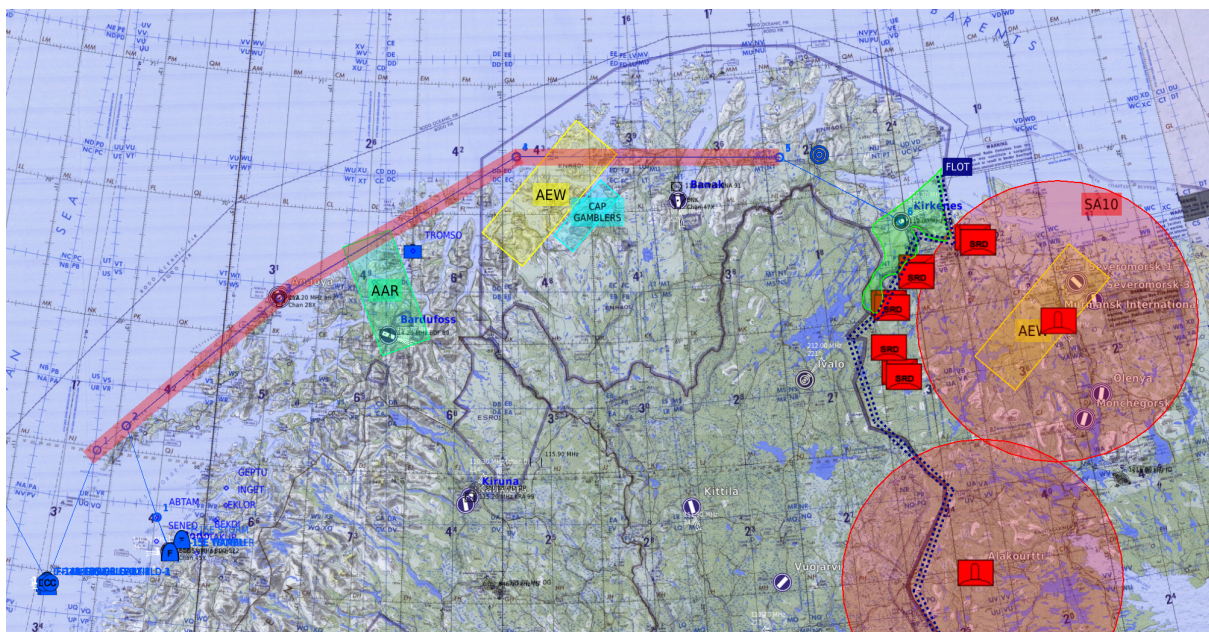
A/A : HOSTILE = Clearance To Engage

A/G : Visual target ID or Thermal Imaging, L16, SAT or other means, MANDATORY PRIOR ENGAGEMENT !

MISSION

1. Maintenir la Supériorité aérienne
2. Détruire tout véhicule passant la frontière
3. Coordination du package

MISSION OVERVIEW



Le groupe naval se trouve au large de Bodo, un port avion le "Forrestal" est composé de la flottille VF-31 "Tomcatters" de 8 Tomcat F-14B

Le 389th FS "Thunderbolts" est positionné sur Bodo, doté de 8 F-15E et de l'armement associé.

Formation du package réalisé en arrivant sur l'AIRWAY réservé

Escorte du package par le VF-31 jusqu'à "TANGO".

Mise en place de la supériorité aérienne et ensuite engagement des cibles au sol par le 389th FS.

COMM FLOW

BODO TWR -	ATC#1 257.750
BARDUFOSS TWR	ATC#2 258.450
BANAK TWR	ATC#3 325.450
OVERLORD	322.150
PACKAGE	331.400
ARCO 2	138.600
TEXACO 3	135.600
RECOVERY	243.000

ROUTE

WPT #1 - Sortie zone / SID
WPT #2 - PACKAGE FORMATION
WPT #5 - IN
WPT #6 - FIGHT ZONE

BARDUFOSS ALTN RTB

BANAK ALTN REARM/REFUEL

CARTES

ENBO/BOO

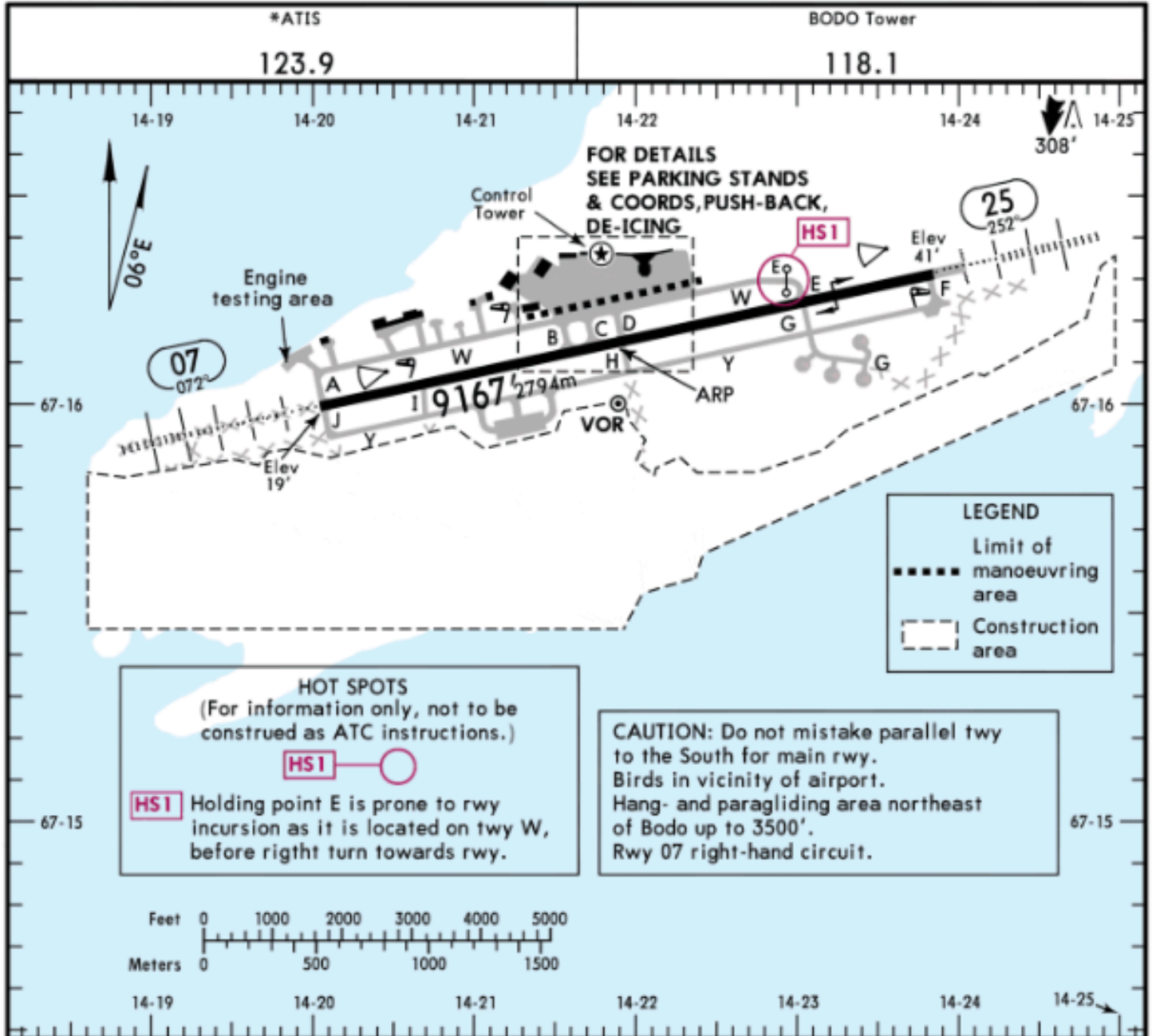
Apt Elev **44'**
N67 16.2 E014 21.9

JEPPESEN

25 OCT 24 **(10-9)** Eff 31 Oct

BODO, NORWAY

BODO

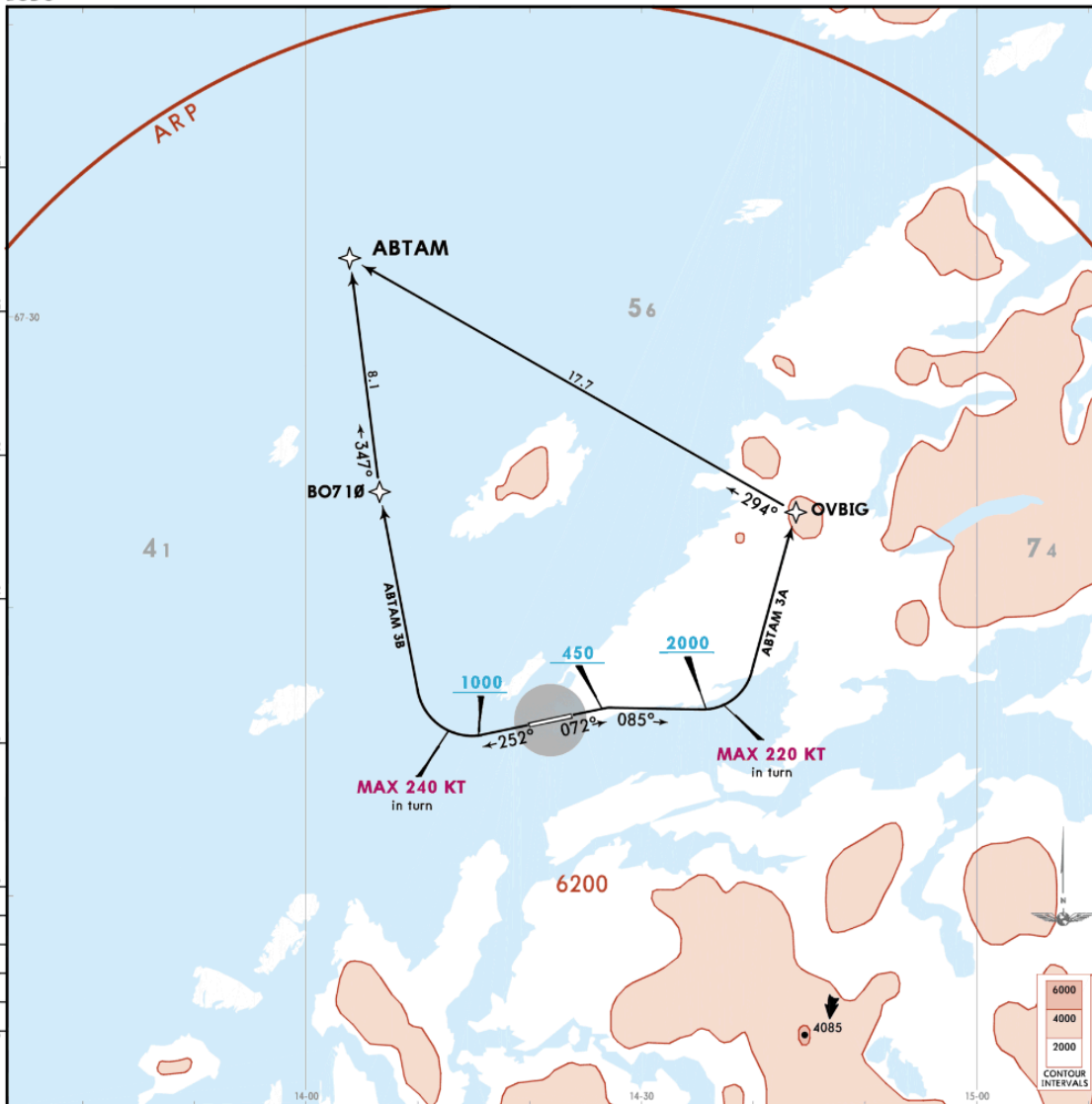


ADDITIONAL RUNWAY INFORMATION

RWY					USABLE LENGTHS		TAKE-OFF	WIDTH
	HIRL (60m)	HIALS		RVR	Threshold	Glide Slope		
07	HIRL (60m)	HIALS	①	RVR		8195' 2498m	③	148' 45m
25	HIRL (60m)	HIALS	SFL ②	RVR		8377' 2553m		

ENBO/BOO
BODO

JEPPESSEN BODO, NORWAY
6 AUG 21 10-3 Eff 12 Aug RNAV SID



*BODO Departure (R) 119.7	Apt Elev 43
------------------------------	----------------

Trans alt: 7000
 1. RNAV 1.
 2. GNS5 required.
 3. Contact BODO Departure when instructed by BODO TWR.
 4. Surveillance service shall be available.
 5. Non RNAV 1 ACFT: at first contact with BODO TWR state "unable RNAV 1 DUE (reason)".
 6. Omnidirectional departure available.
 7. When being vectored or cleared for DCT routing, climb gradients apply.
 8. RWY 07: No turn before DER.

**ABTAM 3A [ABTA3A]
 ABTAM 3B [ABTA3B]
 RNAV DEPARTURES
 (ALL RWYS)**

LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼
 MAINTAIN last assigned level until passing
 ABTAM 3A: OVBIG,
 ABTAM 3B: BO710,
 then climb to the cruising level stated in the CPL.
 If no further climb received prior to
 ABTAM 3A: OVBIG,
 ABTAM 3B: BO710,
 climb to the cruising level stated in CPL.
 Aircraft under RADAR vectoring shall proceed
 in the most direct manner possible to rejoin the
 current flight plan route no later than the next
 significant point, climbing to CPL cruising level
 taking into consideration the applicable minimum
 flight altitude.
 ▲ SSWW0 C0 J501 ▲ SSWW0 C0 J501 ▲ SSWW0 C0 J501 ▲ SSWW0 C0 J501

Close-in obstacles - RWY 07:
 Terrain and trees close to THR25 require a climb
 gradient more than 7.0% and must be avoided
 visually or by other means.
 These SIDs require a minimum climb gradient
 of
 425 per NM (7.0%)
 ABTAM 3A: up to 4000.
 ABTAM 3B: up to 7000.

Gnd speed-KT	75	100	150	200	250	300
425 per NM	532	709	1063	1418	1772	2127

If unable to comply inform ATC.

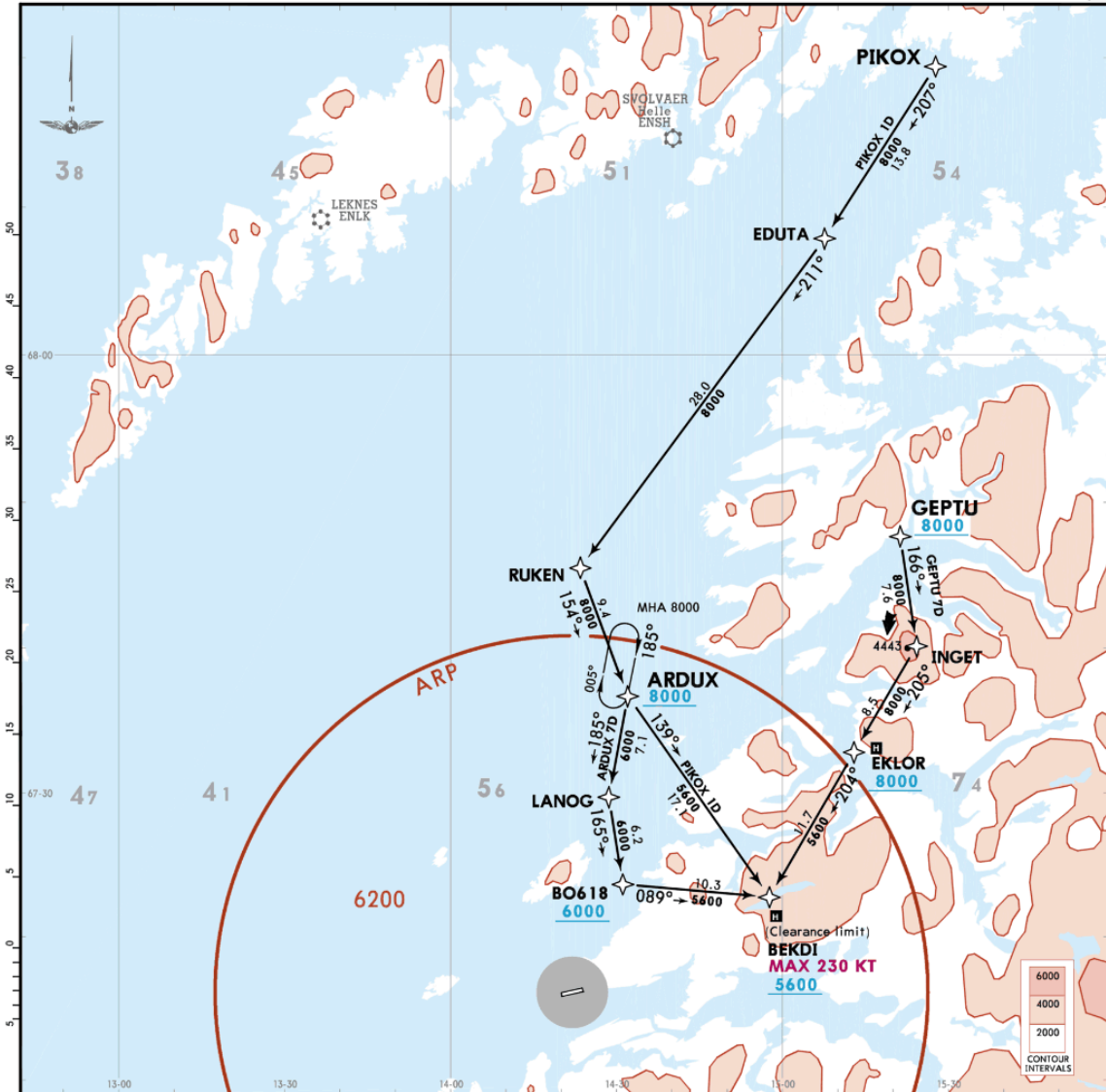
Initial climb clearance **7000**
 ABTAM 3B: EXPECT further climb from
 BODO Departure.

SID	RWY	ROUTING
ABTAM 3A	07	Climb on 072° track to 450, 085° track, at or above 2000 turn direct to OVBIG - ABTAM.
ABTAM 3B	25	Climb on 252° track to 1000, turn RIGHT direct to BO710 - ABTAM.

ENBO/BOO
BODO

JEPPESEN
19 MAR 21 (10-2A) Eff: 25 Mar

BODO, NORWAY
RNAV STAR



*ATIS 123.9	Apt Elev 43
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Alt Set: hPa Trans level: By ATC
 1. RNAV 1.
 2. GNSS required.
 3. When loss of RNAV capability, request vectoring.
 4. Vectoring may be used for sequencing.
 5. Surveillance service shall be available.
 6. Descend as cleared by ATC.

ARDUX 7D [ARDU7D]
GEPTU 7D [GEPT7D]
PIKOX 1D [PIKO1D]
RWY 25 RNAV ARRIVALS

HOLDINGS OVER

BEKDI	EKLOR
MHA 5600 179° 359°	MHA 8000 203° 023°

LOST COMMS ▼ LOST COMMS ▼ LOST
 Proceed on STAR and start approach to RWY 25.
 LOST COMMS ▲ LOST COMMS ▲ LOST

STAR	ROUTING
ARDUX 7D	ARDUX - LANOG - BO618 - BEKDI.
GEPTU 7D	GEPTU - INGET - EKLOR - BEKDI.
PIKOX 1D	PIKOX - EDUTA - RUKEN - ARDUX - BEKDI.

CHANGES: RNAV STARs completely revised & transferred.

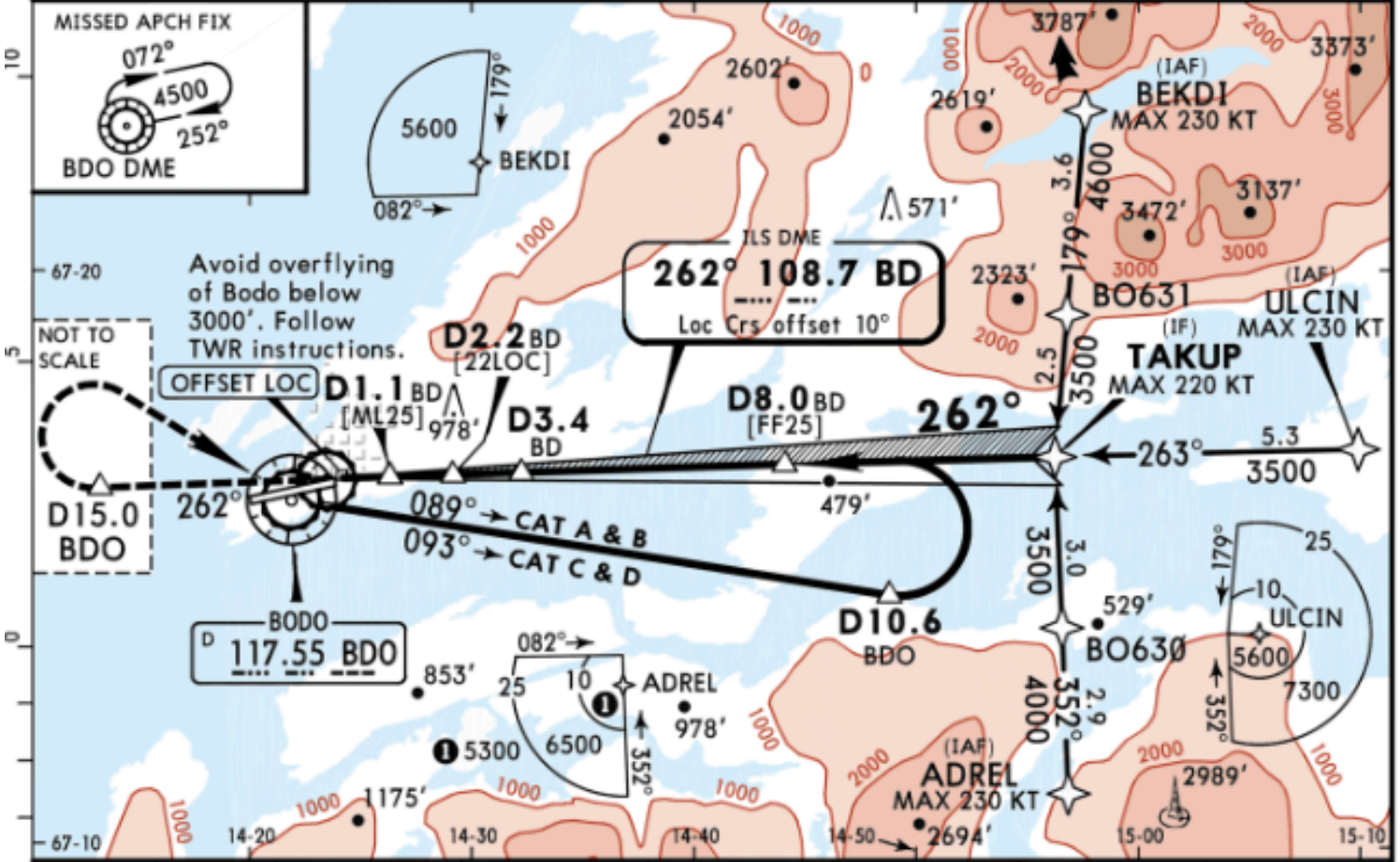
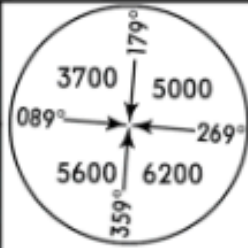
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ENBO/BOO
BODO

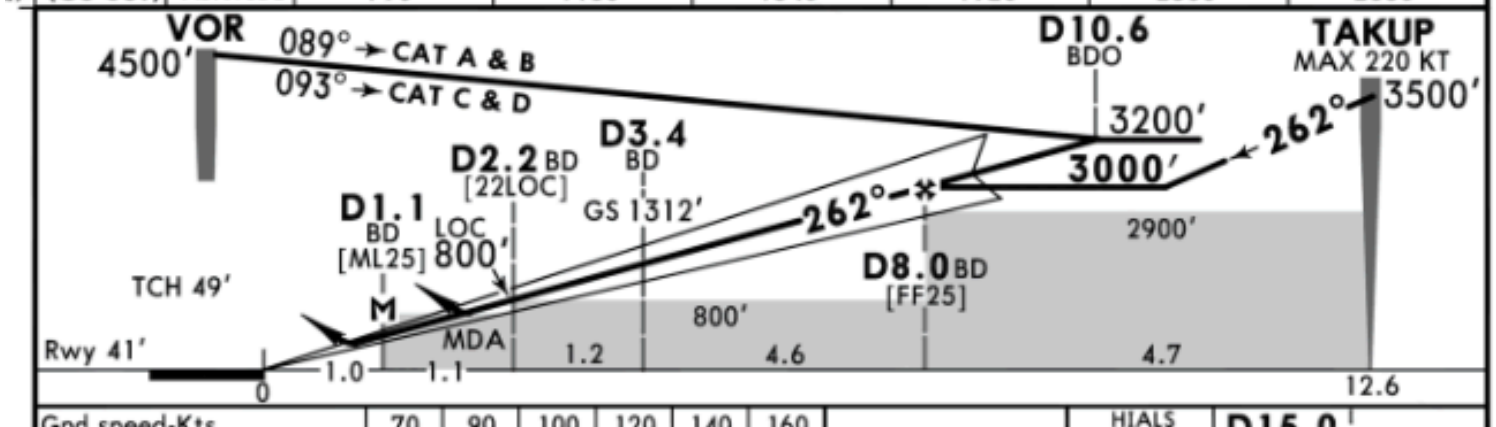
JEPPESEN
26 JAN 24 (11-2)

BODO, NORWAY
ILS or LOC Rwy 25

*ATIS 123.9		*BODO Approach 119.7 124.0		BODO Tower 118.1	
LOC BD 108.7	Final Apch Crs 262°	D8.0 BD 3000' (2959')	ILS DA(H) Refer to Minimums	Apt Elev 44' Rwy 41'	
MISSED APCH: Climb on 262° to D15.0 BDO, then turn RIGHT direct to VOR and join holding climbing to 4500'. Expect vectoring.					
Alt Set: hPa		Rwy Elev: 2 hPa	Trans level: By ATC	Trans alt: 7000'	
MSA BDO VOR					
1. DME, VOR required. 2. RNAV transitions: RNAV1 (GNSS required). 3. Possible fluctuation of ILS LOC signal when preceding acft is btn MAP and rwy 25 thresh. 4. Baseturn restricted to MAX 185 KT.					



LOC (GS out)	BD DME	2.0	3.0	4.0	5.0	6.0	7.0
	ALTITUDE	790'	1160'	1540'	1920'	2300'	2680'



Grnd speed-Kts	70	90	100	120	140	160	185
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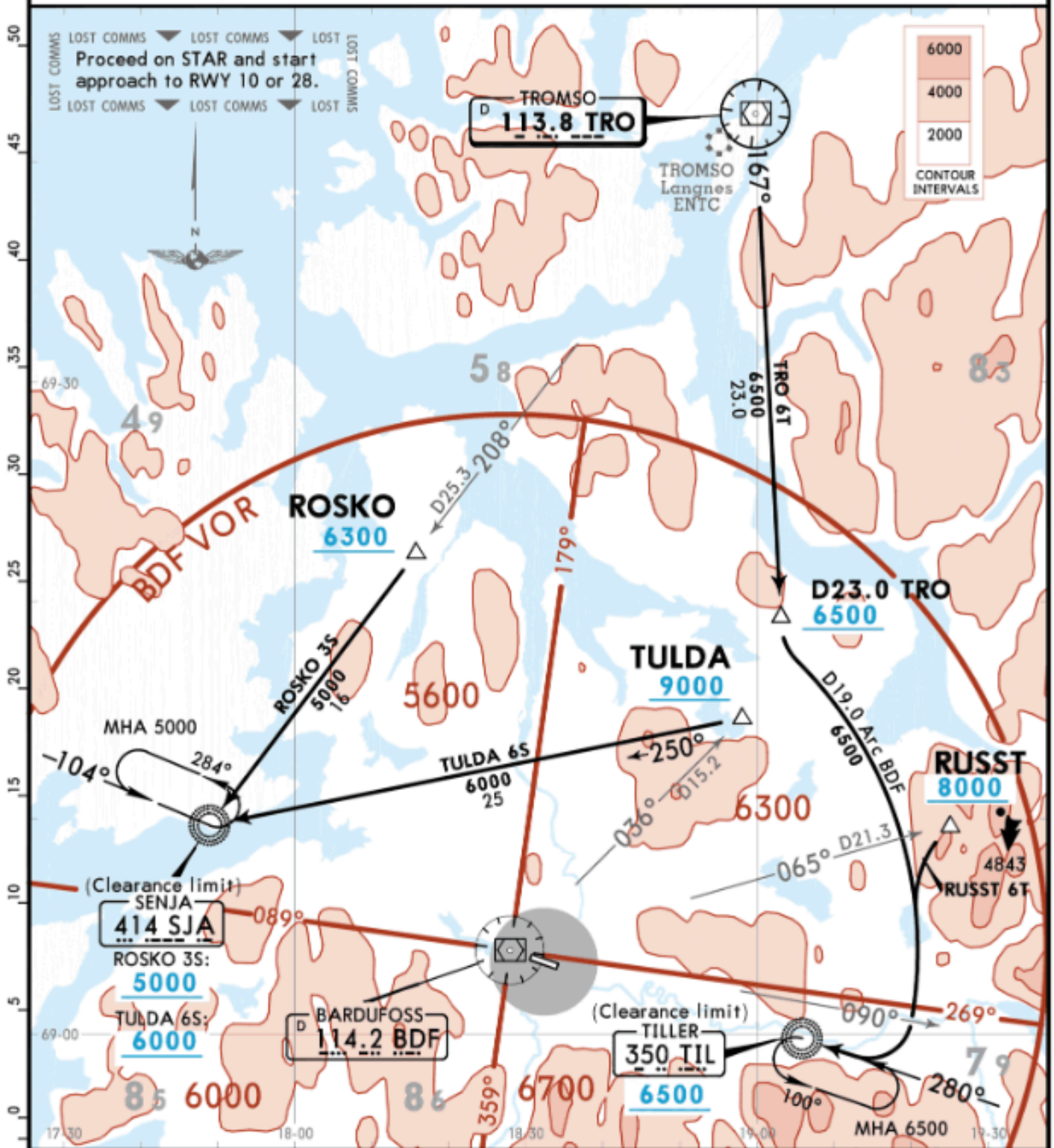
ATIS
129.725

Apt Elev
253

- Alt Set: hPa Trans level: By ATC
1. ADF, DME & VOR required.
 2. Surveillance service shall be available.
 3. Vectoring may be used for sequencing.
 4. Descend as cleared by ATC.

ROSKO 3S [ROSK3S]
RUSST 6T [RUST6T]
TROMSO 6T (TRO 6T)
TULDA 6S [TULD6S]
ARRIVALS

TACAN
BDF 114X



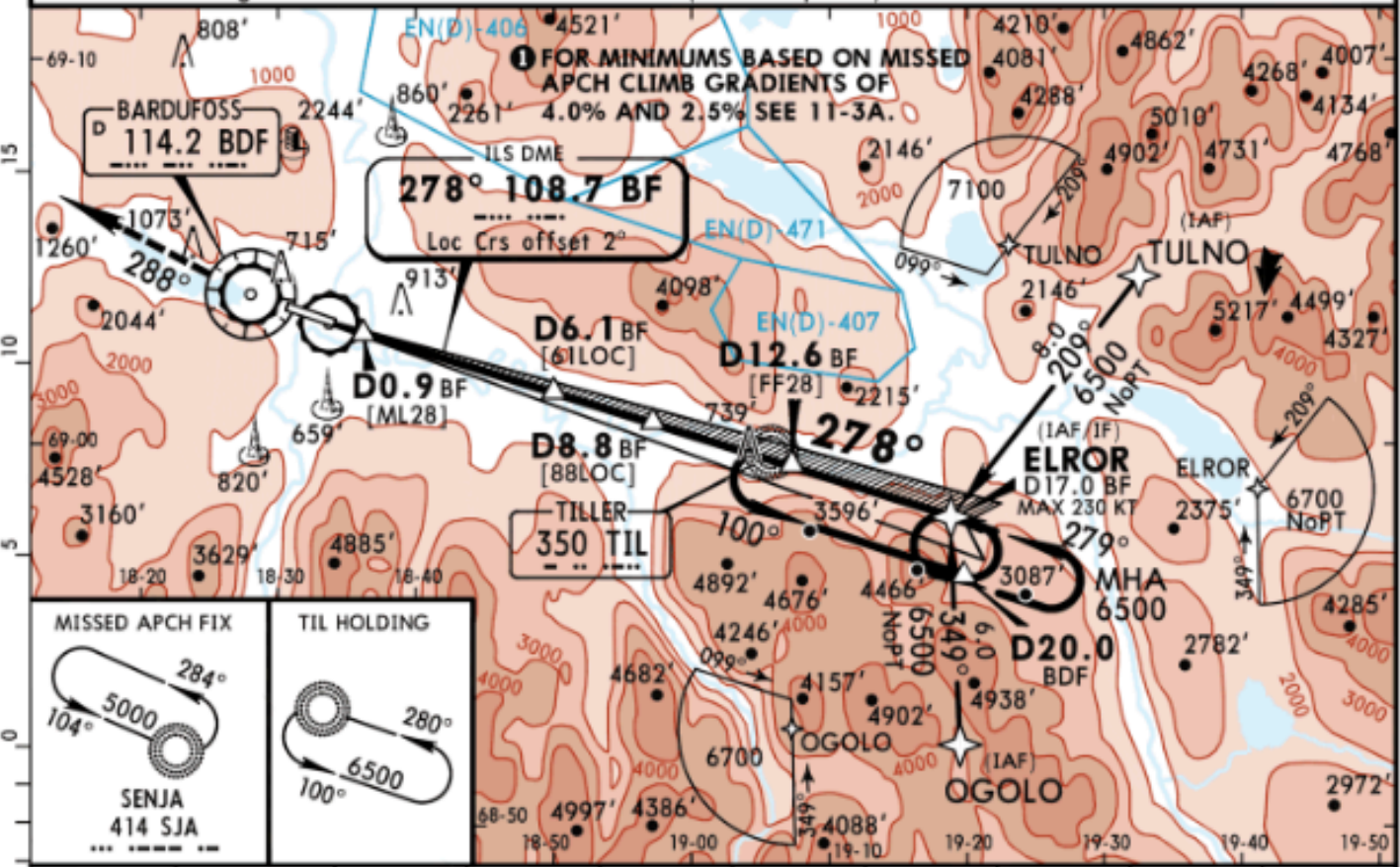
**ENDU/BDU
BARDUFOSS**

JEPPESEN
3 MAR 23 (11-3)

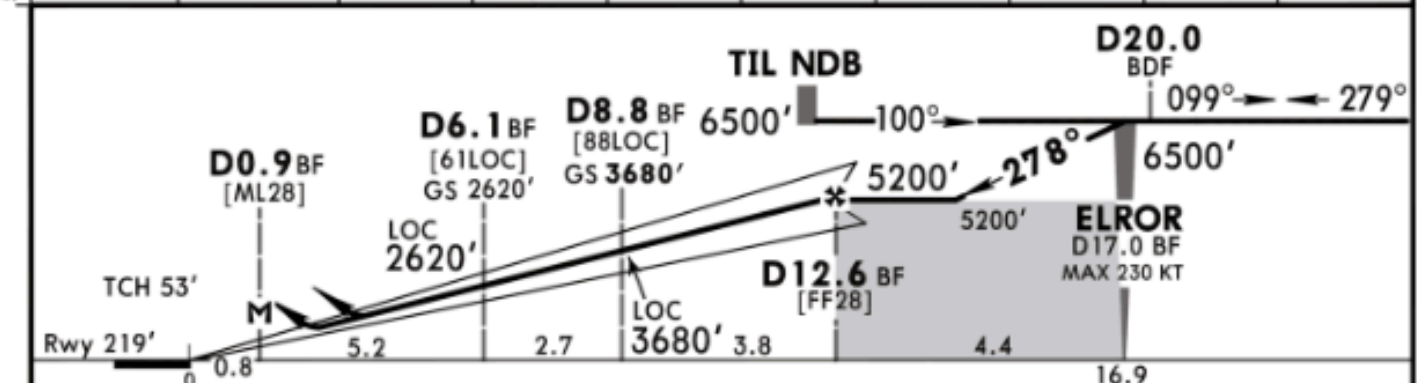
BARDUFOSS, NORWAY
ILS or LOC Rwy 28

*ATIS 129.725		*BARDUFOSS Approach (R) 118.8 125.850X			*BARDUFOSS Tower 118.1	
LOC BF 108.7	Final Apch Crs 278°	GS D8.8 BF 3680' (3461')	ILS DA(H) 659' (440')	Apt Elev 254' Rwy 219'		
MISSED APCH: Climb STRAIGHT AHEAD to ABEAM VOR, continue climb on R-288 (MAX 185 KT). At 5000' proceed direct to SJA NDB. Enter holding at 5000'.						

Alt Set: hPa Rwy Elev: 8 hPa Trans level: By ATC Trans alt: 7000'
 1. ADF, DME, VOR required. 2. WARNING: Steep angle apch. 3. GP not consistent with PAPI angle.
 4. WARNING: Rate of descent for CAT D acft exceeds the max value recommended. 5. No flat segment in intermediate segment. 6. RNAV transitions: RNAV1 (GNSS required).



LOC (GS out)	BF DME	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0
	ALTITUDE	1010'	1410'	1800'	2200'	2590'	2990'	3380'	3780'

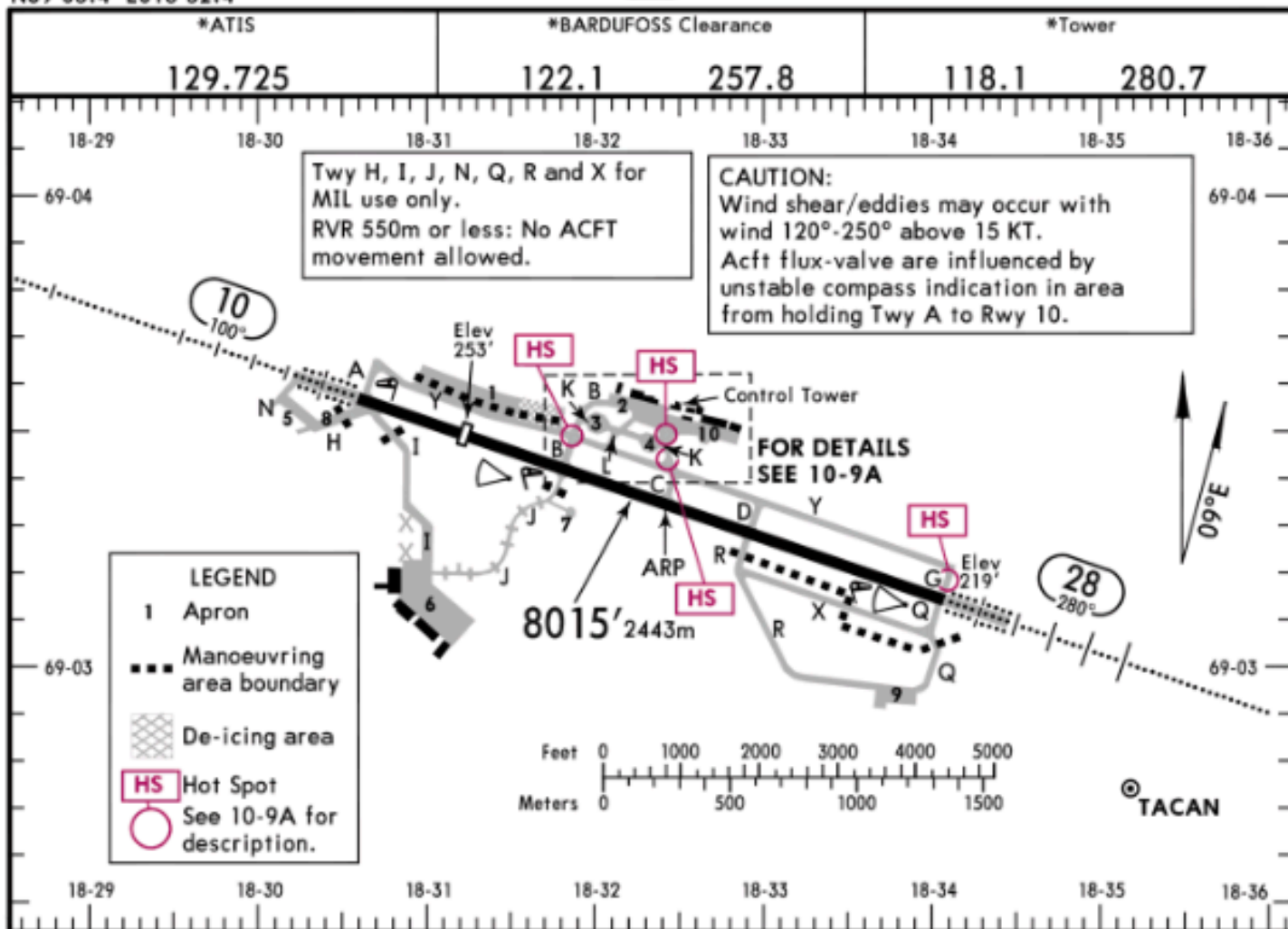


Gnd speed-Kts	70	90	100	120	140	160		BDF 114.2	
ILS GS or LOC Descent Angle	3.70°	458	589	655	786	917			1048
MAP at D0.9 BF									

ENDU/BDU
 Apt Elev 254'
 N69 03.4 E018 32.4

JEPPESEN
 9 DEC 22 (10-9)

BARDUFOSS, NORWAY
 BARDUFOSS



ADDITIONAL RUNWAY INFORMATION

RWY					USABLE LENGTHS		TAKE-OFF	WIDTH
					LANDING BEYOND			
	HIRL (60m)	HIALS	SFL	PAPI (4.0°)	Threshold	Glide Slope		
10	HIRL (60m)	HIALS ②	SFL ③	PAPI (4.0°)	RVR 6565'	2001m		148'
28	HIRL (60m)	HIALS	SFL ③	PAPI (3.4°)	RVR	7287'	2221m	45m

ENNA/LKL
BANAK

JEPPESEN

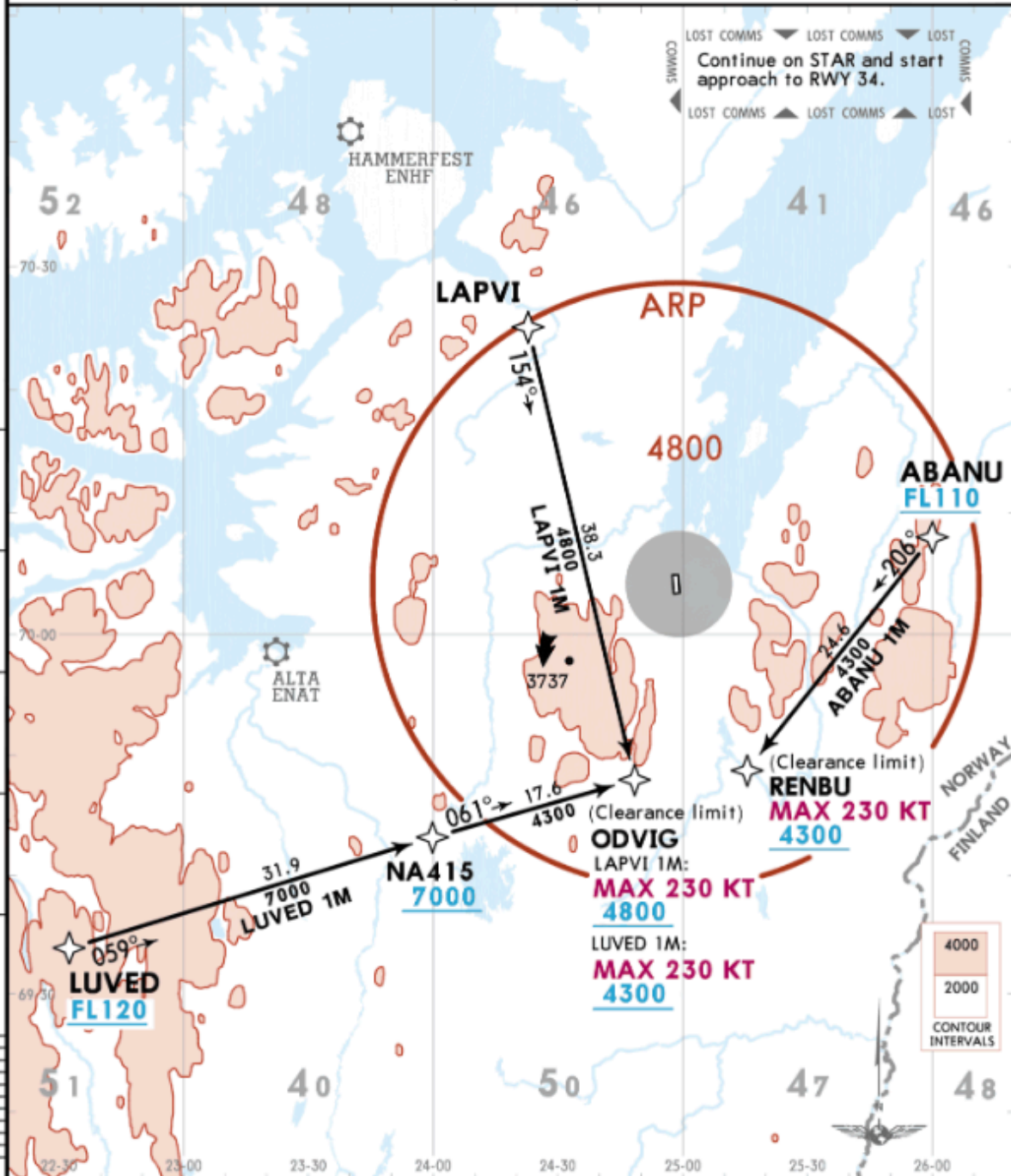
LAKSELV, NORWAY

18 MAR 22 10-2A Eff 24 Mar

RNAV STAR

*ATIS 136.325	Apt Elev 25	Alt Set: hPa Trans level: By ATC
		RNAV 1. GNSS required.
1. Surveillance service shall be available. 2. Loss of RNAV 1 capability, request vectoring. 3. Vectoring may be used for sequencing. 4. Descend as cleared by ATC.		

ABANU 1M [ABAN1M]
LAPVI 1M [LAPV1M]
LUVED 1M [LUV1M]
RNAV ARRIVALS
(RWY 34)



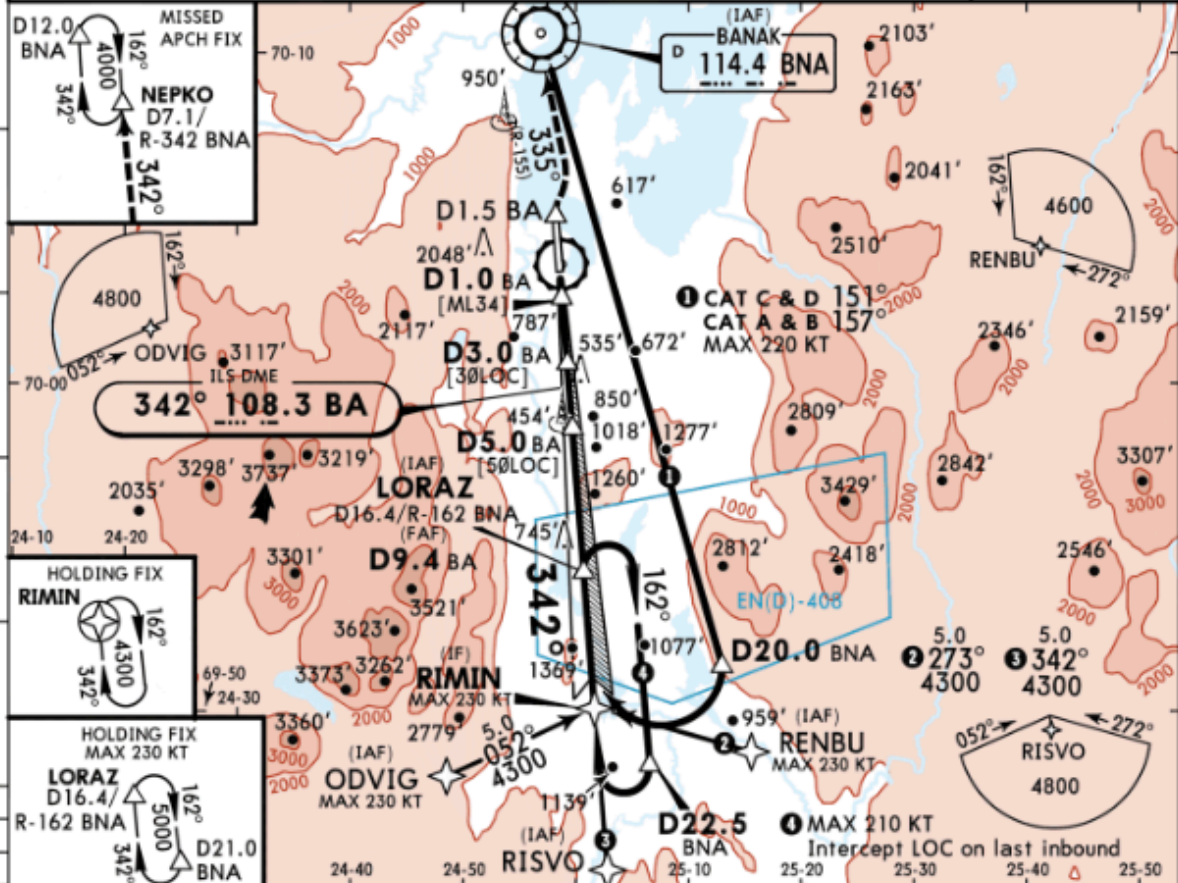
STAR	ROUTING
ABANU 1M	ABANU - RENBU.
LAPVI 1M	LAPVI - ODVIG.
LUVED 1M	LUVED - NA415 - ODVIG.

ENNA/LKL
BANAK

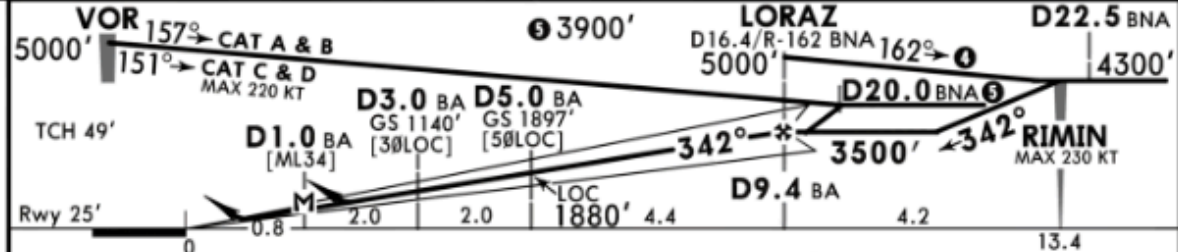
JEPPESEN
30 AUG 24 (11-3) Eff 5 Sep

LAKSELV, NORWAY
ILS or LOC Rwy 34

*ATIS 136.325		*BANAK Approach 118.9 257.8		*BANAK Tower 118.9 257.8		
LOC BA 108.3	Final Apch Crs 342°	D9.4 BA 3500' (3475')	ILS DA(H) Refer to Minimums	Apt Elev 26' Rwy 25'		
MISSED APCH: Climb STRAIGHT AHEAD to D1.5 BA, then turn RIGHT to intercept and follow R-155 BNA inbound to VOR. Continue on R-342 BNA to NEPKO. Enter holding climbing to 4000'.						
Alt Set: hPa Rwy Elev: 1 hPa Trans level: By ATC Trans alt: 7000' 1. VOR and DME required. 2. RNAV transitions: RNAV 1 (GNSS required).						



LOC (GS out)	BA DME	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0
	ALTITUDE	770'	1140'	1510'	1880'	2250'	2620'	3000'	3370'



Gnd speed-Kts	70	90	100	120	140	160	HIALS PAPI 	D1.5 BA ↑	BNA 114.4 on RT	BNA 114.4 ↓ R-155
ILS GS or LOC Descent Angle	3.50°	434	557	619	743	867				

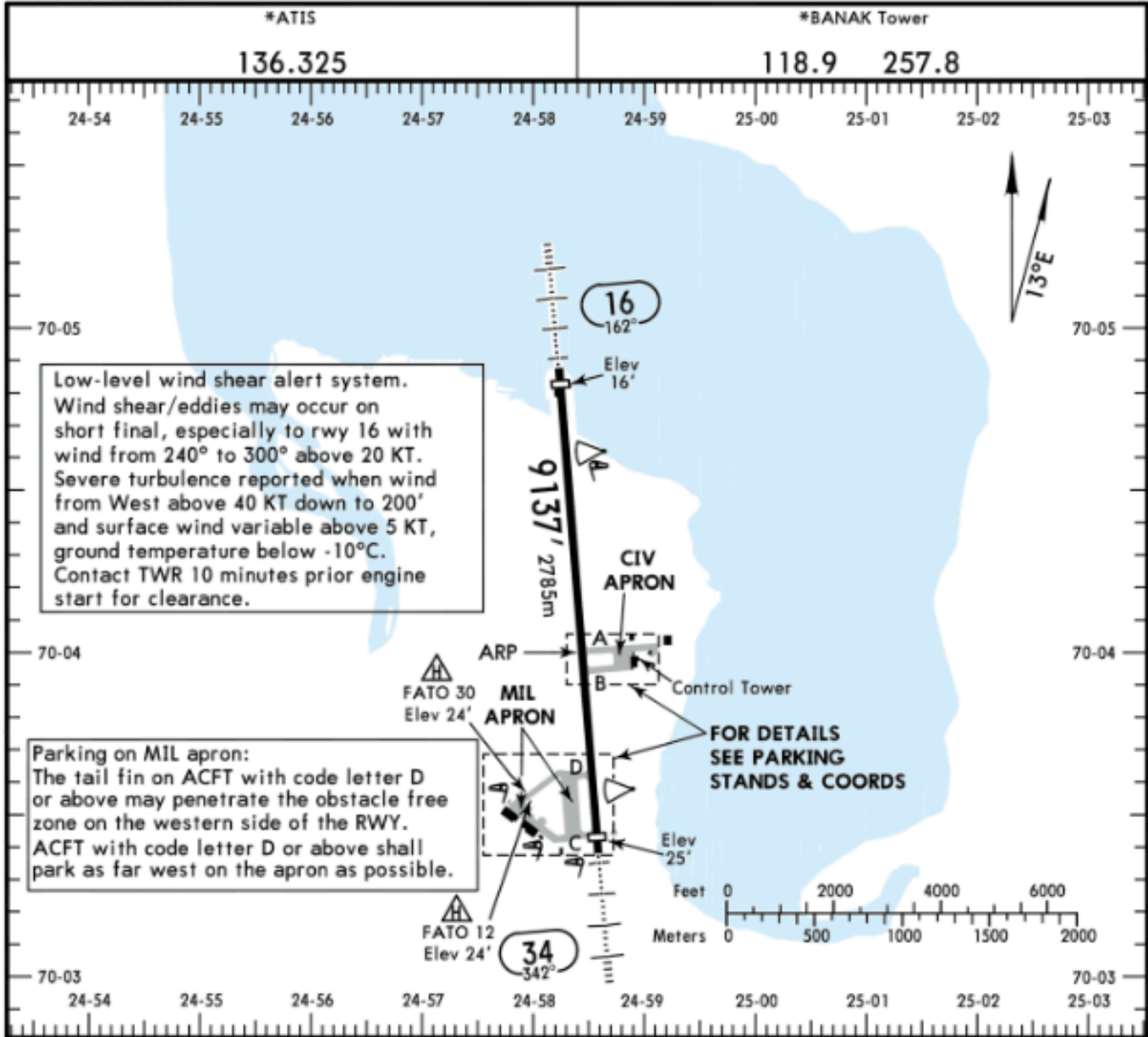
MAP at D1.0 BA

ENNA/LKL

Apt Elev 26'
N70 04.0 E024 58.4

JEPPESEN
11 OCT 24 (10-9)

LAKSELV, NORWAY
BANAK



ADDITIONAL RUNWAY INFORMATION

RWY		USABLE LENGTHS		TAKE-OFF	WIDTH
		Threshold	Glide Slope		
16	HIRL (60m) ② CL (60m) ②③ HIALS PAPI-L (3.0°) RVR	8839'	2694m	⑤	148' 45m
34	HIRL (60m) ② CL (60m) ②④ HIALS PAPI-L (3.5°) RVR	8543'	2604m		

① Rwy 16/34 grooved.

② LED lights

③ length 720m

④ length 737m

⑤ TAKE-OFF RUN AVAILABLE

RWY 16:

From rwy head 9137' (2785m)

THR 16 int 8839' (2694m)

twy A int 3829' (1167m)

twy B int 3465' (1056m)

RWY 34:

From rwy head 8839' (2694m)

twy C int 8543' (2604m)

twy B int 5449' (1661m)

twy A int 5089' (1551m)

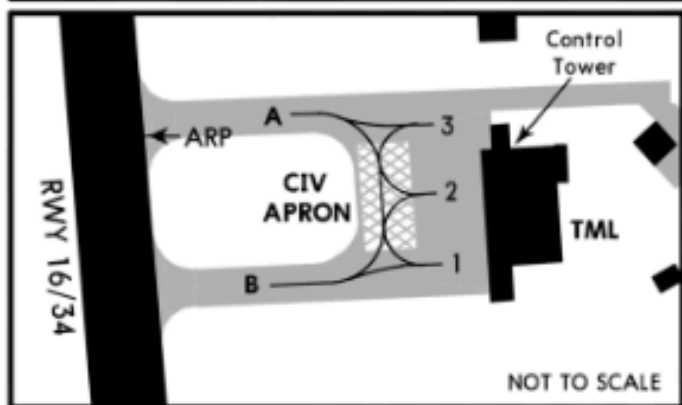
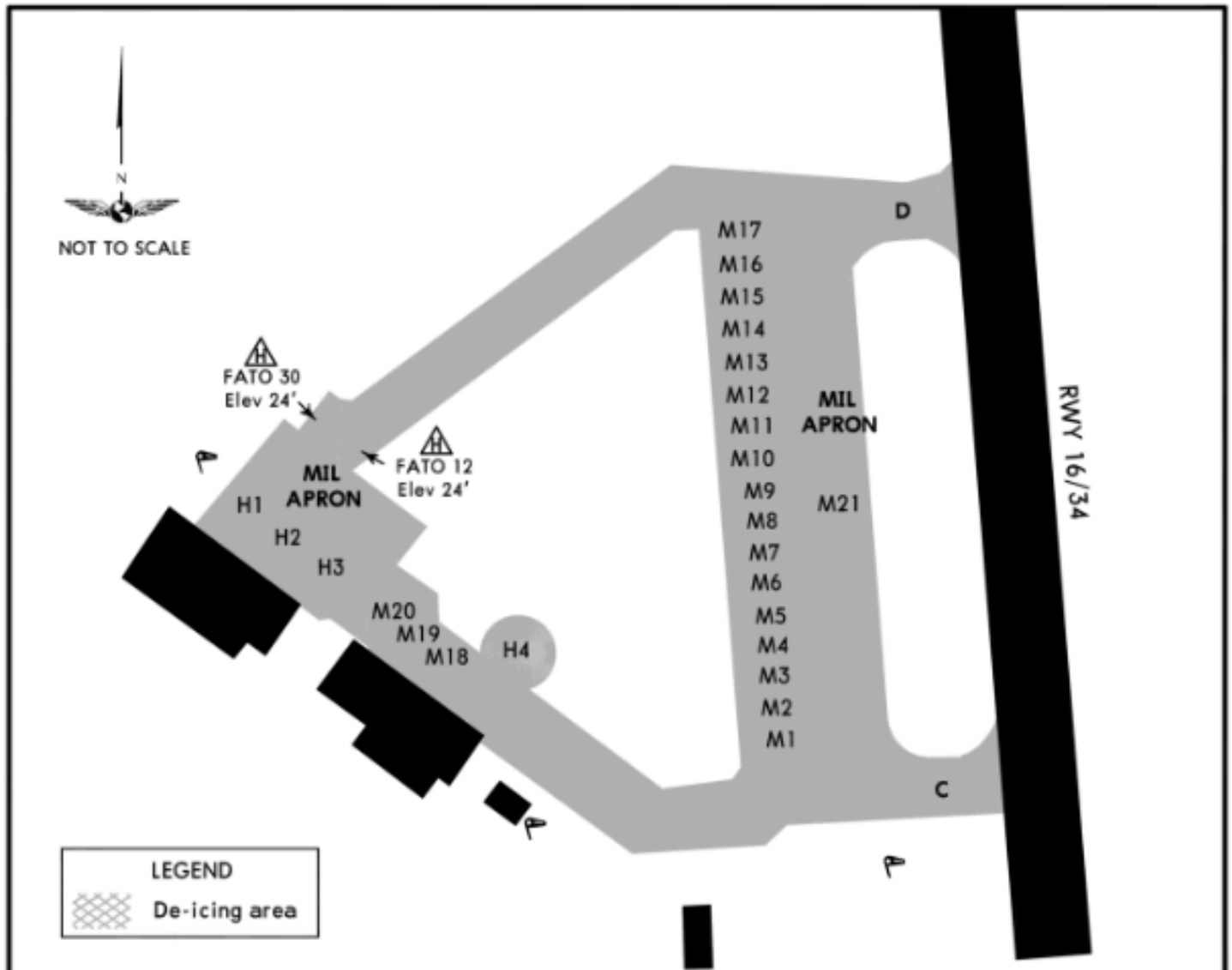
LOW VISIBILITY PROCEDURE

LVP become active when RVR is 800m or less. If RVR is less than 550m, all operations are stopped.

ENNA/LKL

JEPPESEN
11 OCT 24 (10-9A)

LAKSELV, NORWAY
BANAK



INS COORDINATES		
STAND No.	COORDINATES	ELEV
1, 2	N70 04.0 E024 58.8	17
3	N70 04.0 E024 58.8	16
H1	N70 03.5 E024 57.8	27
H2, H3	N70 03.5 E024 57.9	27
H4	N70 03.5 E024 58.1	26
M1	N70 03.4 E024 58.3	26
M2 thru M10	N70 03.5 E024 58.3	26
M11 thru M17	N70 03.6 E024 58.3	26
M18 thru M20	N70 03.5 E024 58.0	27
M21	N70 03.5 E024 58.4	26