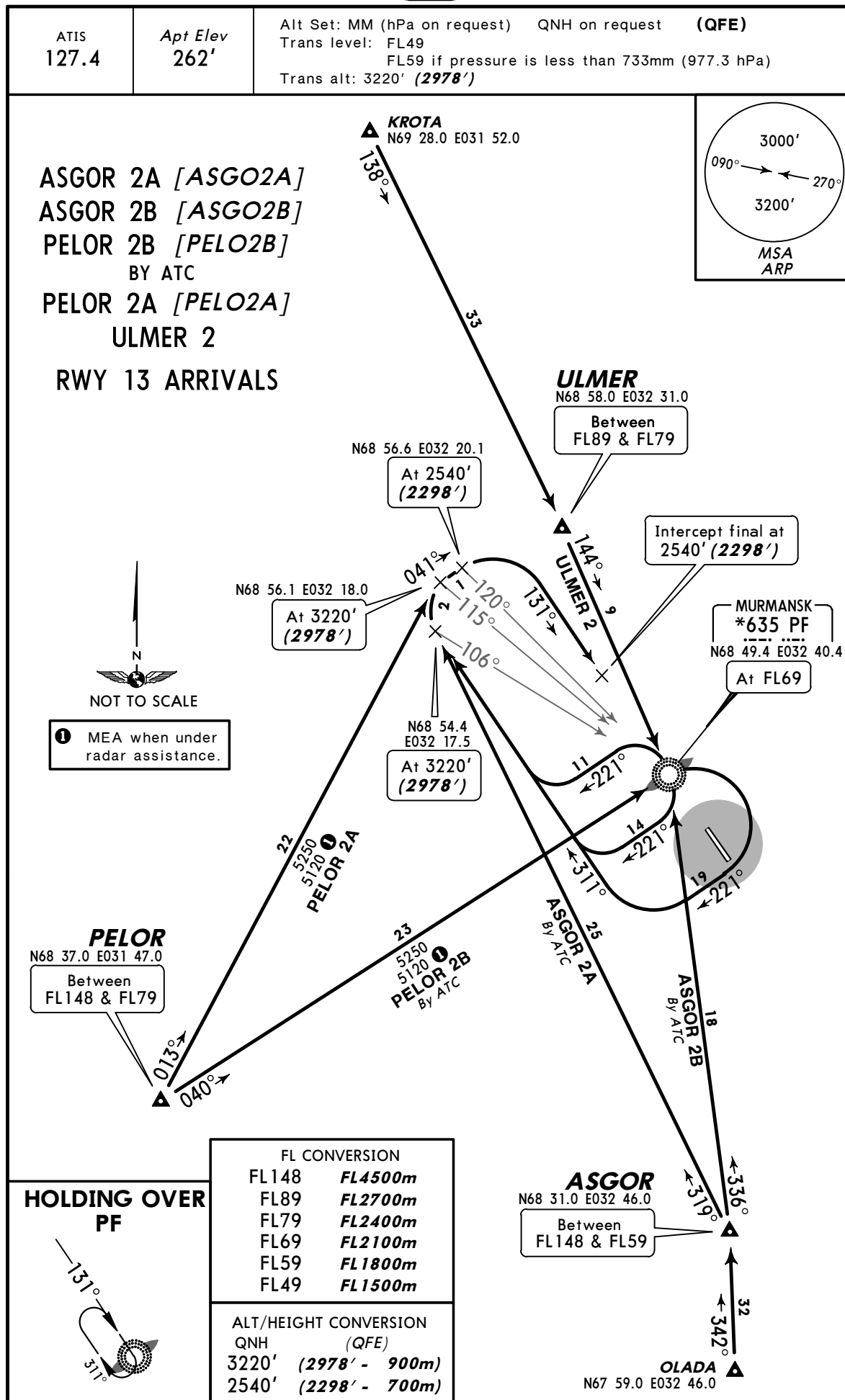


ULMM/MMK
MURMANSK

JEPPESSEN
30 SEP 11 **10-2**

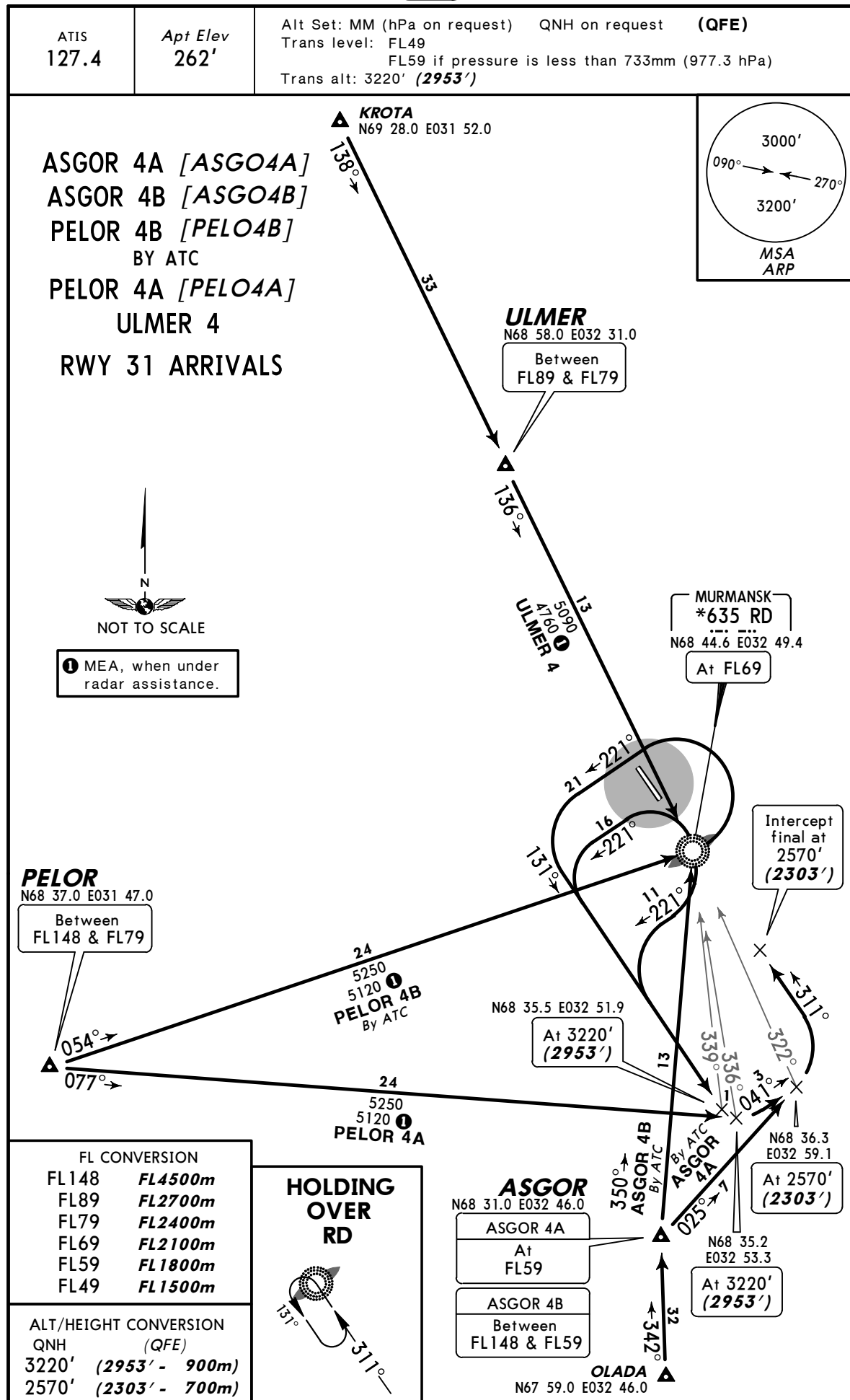
MURMANSK, RUSSIA
STAR



ULMM/MMK
MURMANSK

JEPPesen
30 SEP 11 **(10-2A)**

MURMANSK, RUSSIA
STAR



ULMM/MMK
MURMANSK

JEPPESSEN
30 SEP 11 **10-3**

MURMANSK, RUSSIA

SID

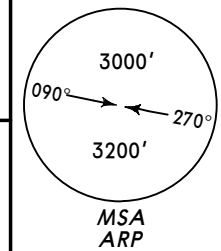
Apt Elev
262'

QNH on request (**QFE**)

Trans level: FL49

FL59 if pressure is less than 733mm (977.3 hPa)

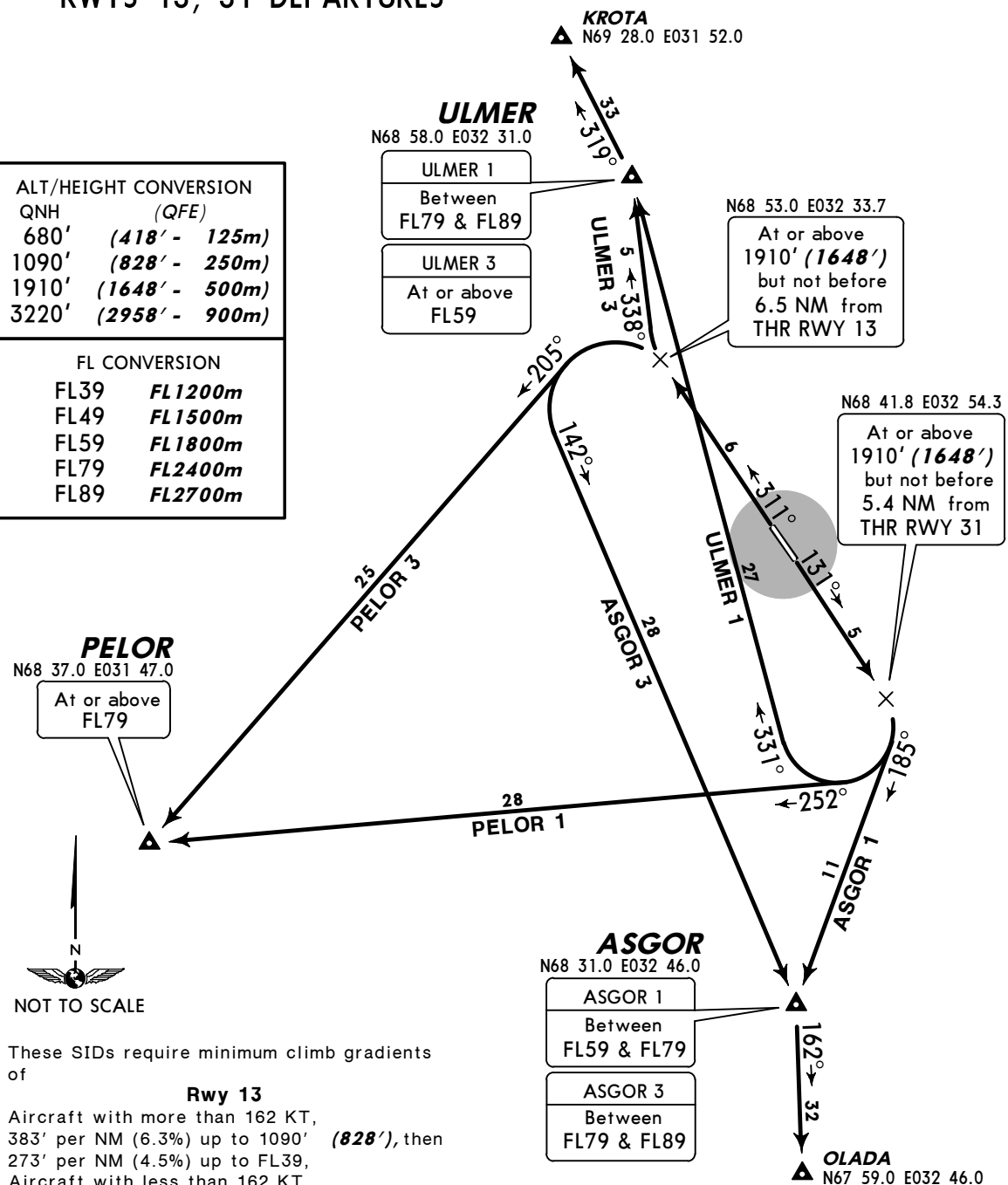
Trans alt: 3220' (**2958'**)



ASGOR 1, ASGOR 3
PELOR 1, PELOR 3
ULMER 1, ULMER 3
RWYS 13, 31 DEPARTURES

ALT/HEIGHT CONVERSION	
QNH	(QFE)
680'	(418' - 125m)
1090'	(828' - 250m)
1910'	(1648' - 500m)
3220'	(2958' - 900m)

FL CONVERSION	
FL39	FL1200m
FL49	FL1500m
FL59	FL1800m
FL79	FL2400m
FL89	FL2700m



NOT TO SCALE

These SIDs require minimum climb gradients of

Rwy 13

Aircraft with more than 162 KT, 383' per NM (6.3%) up to 1090' (**828'**), then 273' per NM (4.5%) up to FL39, Aircraft with less than 162 KT, 383' per NM (6.3%) up to 680' (**418'**), then 273' per NM (4.5%) up to FL39.

Rwy 31

243' per NM (4%) up to 1910' (**1648'**), then 213' per NM (3.5%) up to FL39.

Further climb according to Flight Operation Manual.

If unable to reach assigned FL climb in the established rectangular traffic pattern and by ATC instruction.

Gnd speed-KT	75	100	150	200	250	300
383' per NM	479	638	957	1276	1595	1914
273' per NM	342	456	684	911	1139	1367
243' per NM	304	405	608	810	1013	1215
213' per NM	266	354	532	709	886	1063

ULMM/MMK

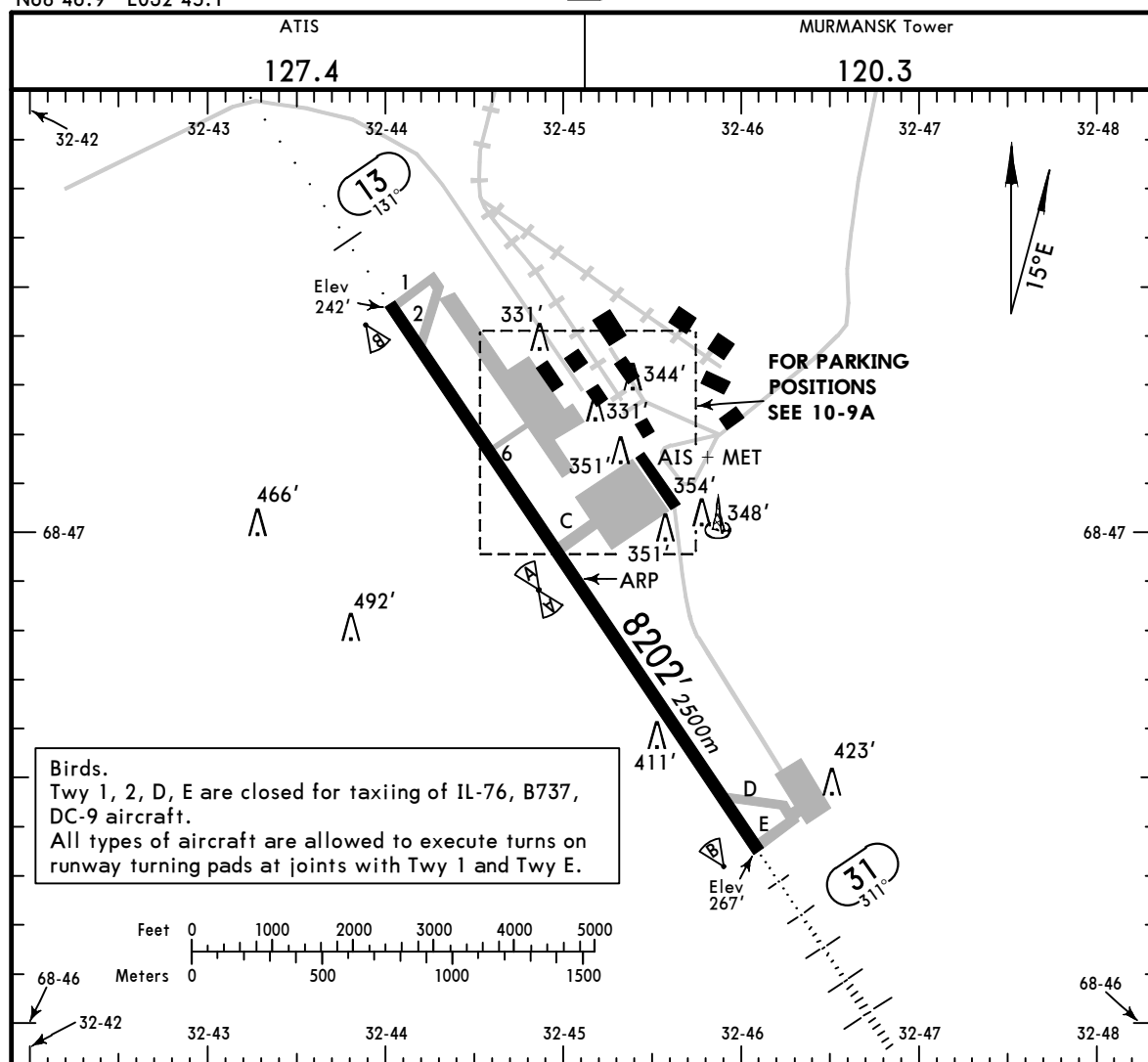
Apt Elev **262'**
N68 46.9 E032 45.1

JEPPesen

30 SEP 11 (10-9)

MURMANSK, RUSSIA

MURMANSK



ADDITIONAL RUNWAY INFORMATION

					USABLE LENGTHS		WIDTH
					LANDING BEYOND		
RWY					Threshold	Glide Slope	
13	HIRL (60m)	ALS		RVR		7382' 2250m	
31	HIRL (60m)	HIALS	PAPI (angle 3.0°)	RVR		7482' 2281m	

TAKE-OFF

AIR CARRIER (JAA)

All Rwys

LVP must be in force

RCLM (DAY only)
or RL

RCLM (DAY only)
or RL

A

B

C

D

250m

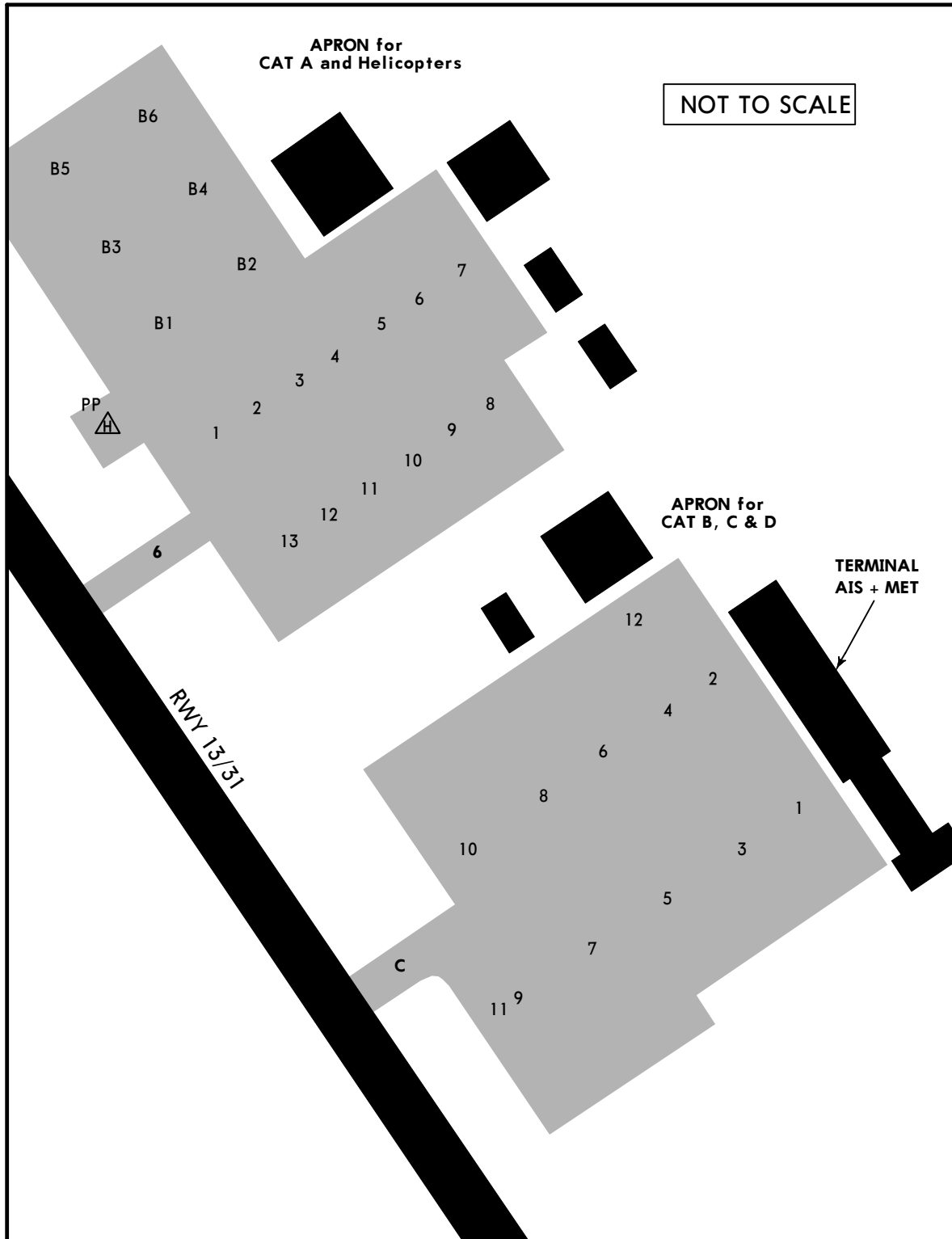
300m

400m

ULMM/MMK

JEPPESEN
30 SEP 11 (10-9A)

MURMANSK, RUSSIA
MURMANSK



INS COORDINATES

APRON for CAT B, C & D		APRON for CAT A	
STAND No.	COORDINATES	STAND No.	COORDINATES
3 thru 8	N68 47.0 E032 45.1	PP	N68 47.2 E032 44.6

Stand PP for helicopters only.

On the apron for acft CAT A stands 1-13 & B1-B6 for helicopters.

On the apron for acft CAT B, C & D:

1. When facing SE acft with an operating radius of 72'/22m or less shall taxi out of stands 3, 5, 7 and 9 under own power only, other acft shall be towed.
2. When facing NW acft with an operating radius of 72'/22m or less shall taxi out of stands 4, 6, 8 and 10 under own power only, other acft shall be towed.

ULMM/MMK


JEPPesen
 30 SEP 11 **10-9S**
Standard
MURMANSK, RUSSIA
MURMANSK

STRAIGHT-IN RWY		A	B	C	D
13	ILS	505' (263') R1100m	505' (263') R1100m	505' (263') R1100m	505' (263') R1100m
	<i>ALS out</i>	R1300m	R1300m	R1300m	R1300m
	LOC	NOT AUTH	NOT AUTH	NOT AUTH	NOT AUTH
	NDB ❶	720' (478') R2000m	720' (478') R2000m	720' (478') R2000m	720' (478') R2000m
	<i>ALS out</i>	C2200m	C2200m	C2200m	C2200m
31	ILS	467' (200') R550m	467' (200') R550m	467' (200') R550m	467' (200') R550m
	<i>FULL</i>	R750m	R750m	R750m	R750m
	<i>Limited</i>	R1200m	R1200m	R1200m	R1200m
	<i>ALS out</i>				
	LOC	NOT AUTH	NOT AUTH	NOT AUTH	NOT AUTH
	NDB ❶	1010' (743') C2700m	1010' (743') C2700m	1010' (743') C2700m	1010' (743') C2700m
	<i>ALS out</i>	C3500m	C3500m	C3500m	C3500m

❶ Continuous Descent Final Approach.

TAKE-OFF RWY 13, 31 ❷

LVP must be in Force			
RCLM (DAY only) or RL		RCLM (DAY only) or RL	NIL (DAY only)
A	250m	400m	500m
B			
C			
D	300m		

❷ Operators applying U.S. Ops Specs: CL required below 300m.

ULMM/MMK

30 SEP 11 **JEPPESEN**
(10-9X)

JAA MINIMUMS
MURMANSK, RUSSIA
MURMANSK

STRAIGHT-IN RWY		A	B	C	D
13	ILS	505' (263')	505' (263')	505' (263')	505' (263')
		R900m	R900m	R900m	R900m
	ALS out	R1200m	R1200m	R1200m	R1200m
	LOC	NOT AUTHORIZED			
	NDB	720' (478')	720' (478')	720' (478')	720' (478')
		R1500m	R1500m	R1800m	R2000m
	ALS out	R1500m	R1500m	R2000m	R2000m
	LOC	NOT AUTHORIZED			
31	ILS	467' (200')	467' (200')	467' (200')	467' (200')
		R550m	R550m	R550m	R550m
	ALS out	R1000m	R1000m	R1000m	R1000m
	LOC	NOT AUTHORIZED			
	NDB	1010' (743')	1010' (743')	1010' (743')	1010' (743')
		R1200m	R1400m	R1400m	R1800m
	ALS out	R1500m	R1500m	R2000m	R2000m
	LOC	NOT AUTHORIZED			

TAKE-OFF RWY 13, 31

LVP must be in Force			
RCLM (DAY only) or RL		RCLM (DAY only) or RL	NIL (DAY only)
A	250m	400m	500m
B			
C			
D	300m		

