

URML/MCX
UYTASH



MAKHACHKALA, RUSSIA

25 APR 08

10-2

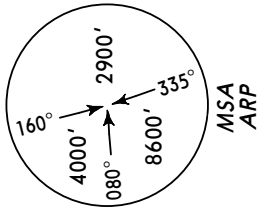
Eff 8 May

STAR

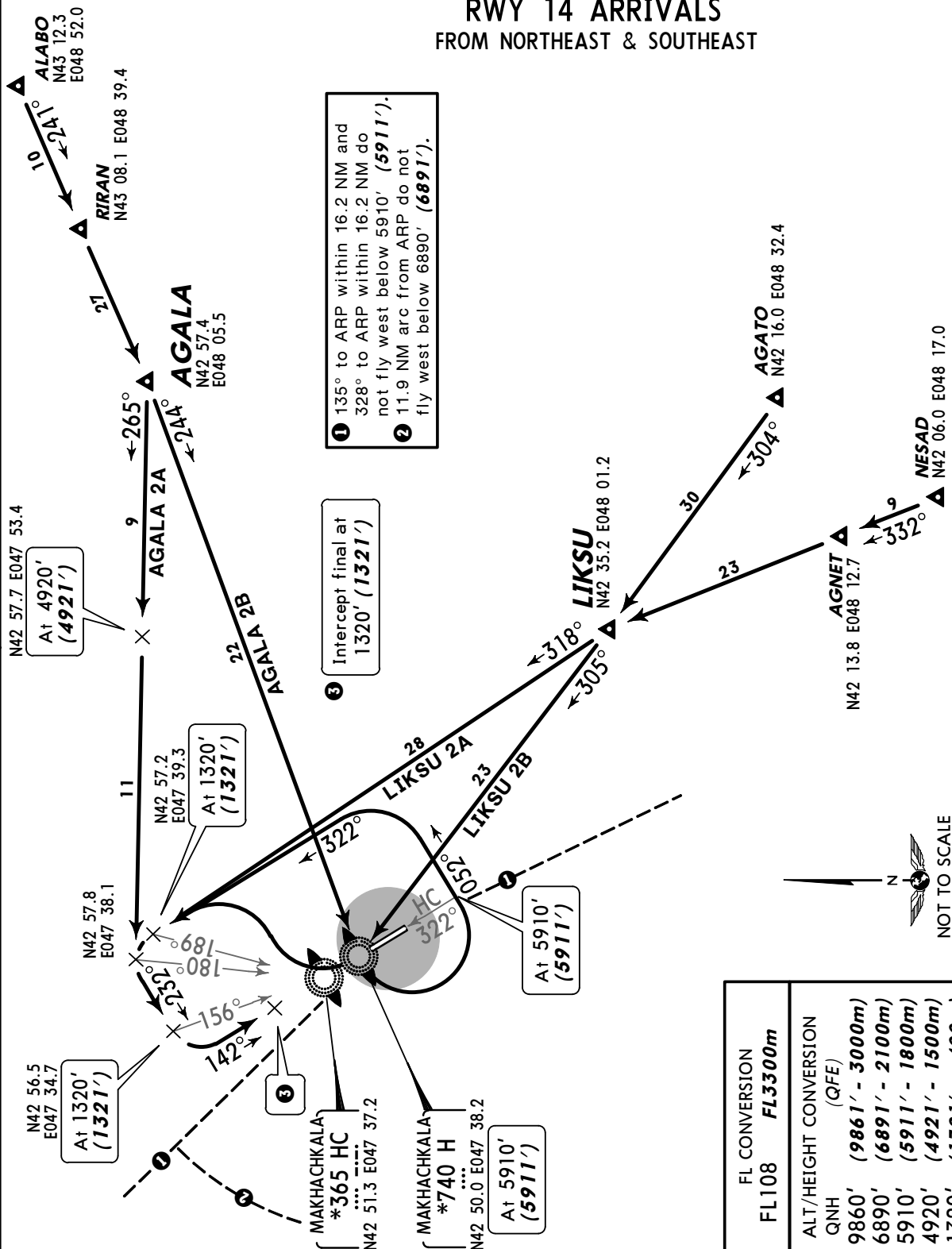
Apt Elev
15'

Alt Set: MM (hPa on request) QNH on request **(QFE)**Trans level: FL108 Trans alt: 9860' **(9861')**

1. 4920' (**4921'**) shall be reached by aircraft with more than 165 KT at 10.8 NM before base turn when proceeding on track 265° till N42 57.7 E047 53.4, with 165 KT or less at 10.8 NM before base turn when proceeding on track 263° till 223°, 10.8 NM to ARP.
2. Crossings at airway exit points by ATC.



AGALA 2A [AGAL2A]
AGALA 2B [AGAL2B]
LIKSU 2A [LIKS2A]
LIKSU 2B [LIKS2B]
RWY 14 ARRIVALS
FROM NORTHEAST & SOUTHEAST



FL CONVERSION FL108 FL3300m	ALT/HEIGHT CONVERSION QNH (QFE)
	9860' (9861' - 3000m)
	6890' (6891' - 2100m)
	5910' (5911' - 1800m)
	4920' (4921' - 1500m)
	1320' (1321' - 400m)

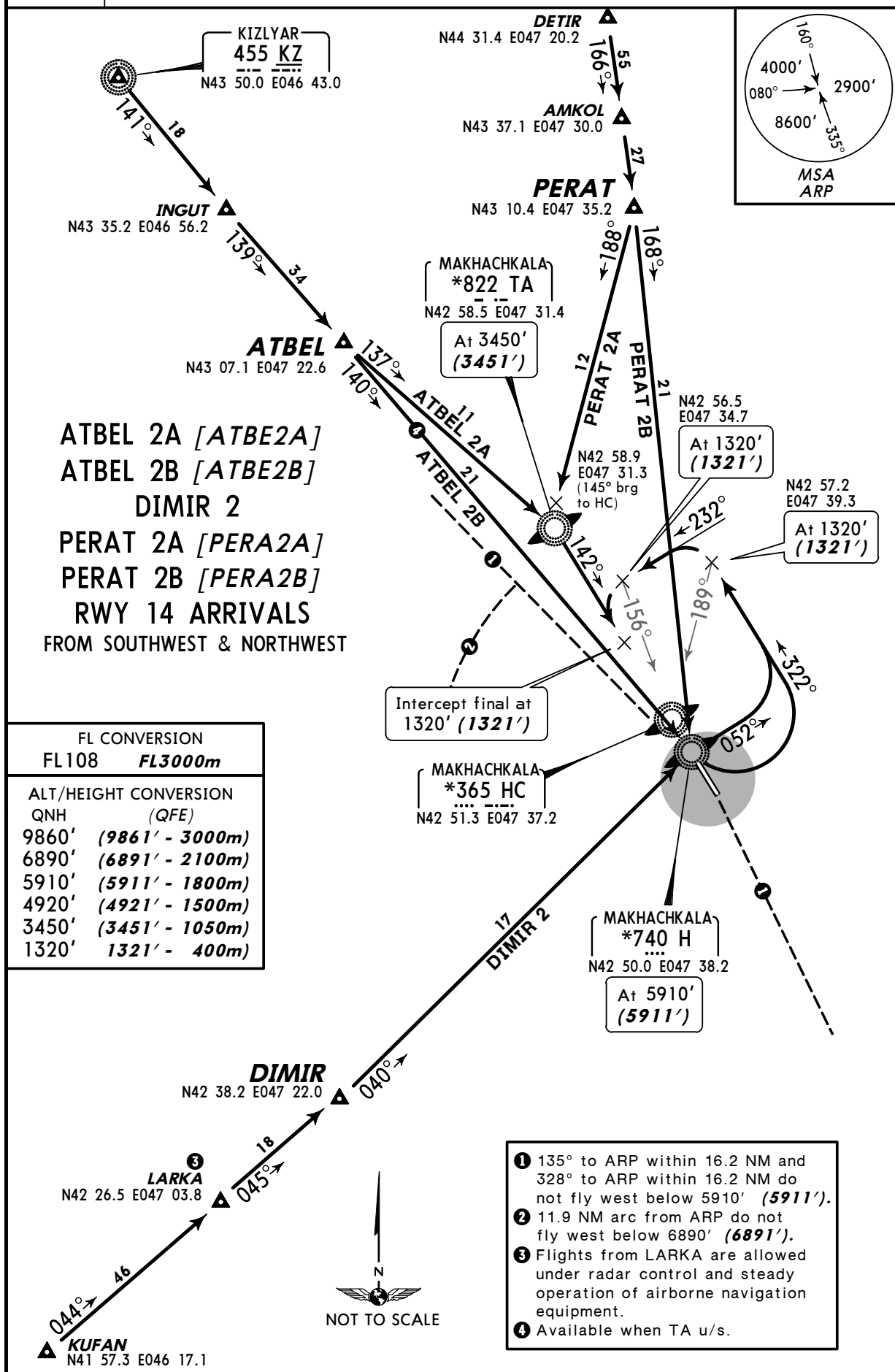
URML/MCX
UYTASH

JEPPESEN MAKHACHKALA, RUSSIA
25 APR 08 **10-2A** Eff 8 May **STAR**

Apt Elev
15'

Alt Set: MM (hPa on request) QNH on request **(QFE)**
Trans level: FL108 Trans alt: 9860' **(9861')**

- 4920' **(4921')** shall be reached by aircraft with MAX 165 KT at 12.4 NM before final turn when proceeding on track 176° till 334°, 16.7 NM to ARP.
- Crossings at airway exit points by ATC.



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JEPPESEN MAKHACHKALA, RUSSIA
25 APR 08 (10-2B) Eff 8 May STAR

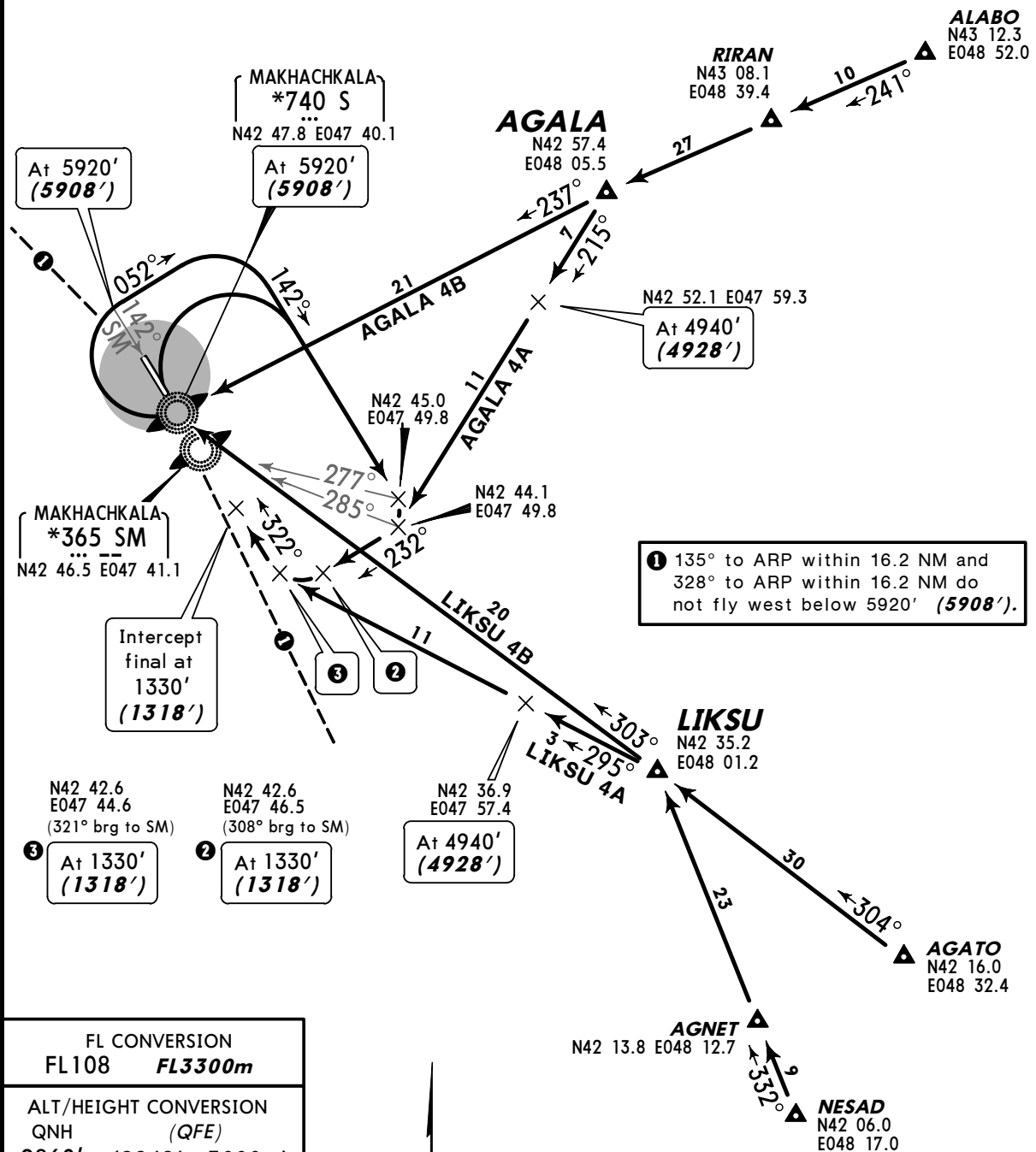
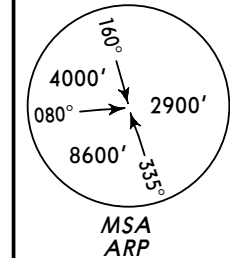
Apt Elev
15'

Alt Set: MM (hPa on request) QNH on request **(QFE)**

Trans level: FL108 Trans alt: 9860' **(9848')**

1. 4940' (**4928'**) shall be reached by aircraft with more than 165 KT at 10.8 NM before base turn when proceeding on track 215° till N42 52.1 E047 59.3, and at 12.4 NM before glide slope interception when proceeding on track 295° till N42 36.9 E047 57.4, with 165 KT or less at 9.7 NM before base turn when proceeding on track 226° till 260°, 13 NM to ARP, and at 12.4 NM before glide slope interception when proceeding on track 296° till 307°, 16.7 NM to ARP.
2. Crossings at airway exit points by ATC.

AGALA 4A [AGAL4A]
AGALA 4B [AGAL4B]
LIKSU 4A [LIKS4A]
LIKSU 4B [LIKS4B]
RWY 32 ARRIVALS
FROM NORTHEAST & SOUTHEAST



FL CONVERSION
FL108 ***FL3300m***

ALT/HEIGHT CONVERSION	
QNH	(QFE)
9860'	(9848' - 3000m)
5920'	(5908' - 1800m)
4940'	(4928' - 1500m)
1330'	(1318' - 400m)

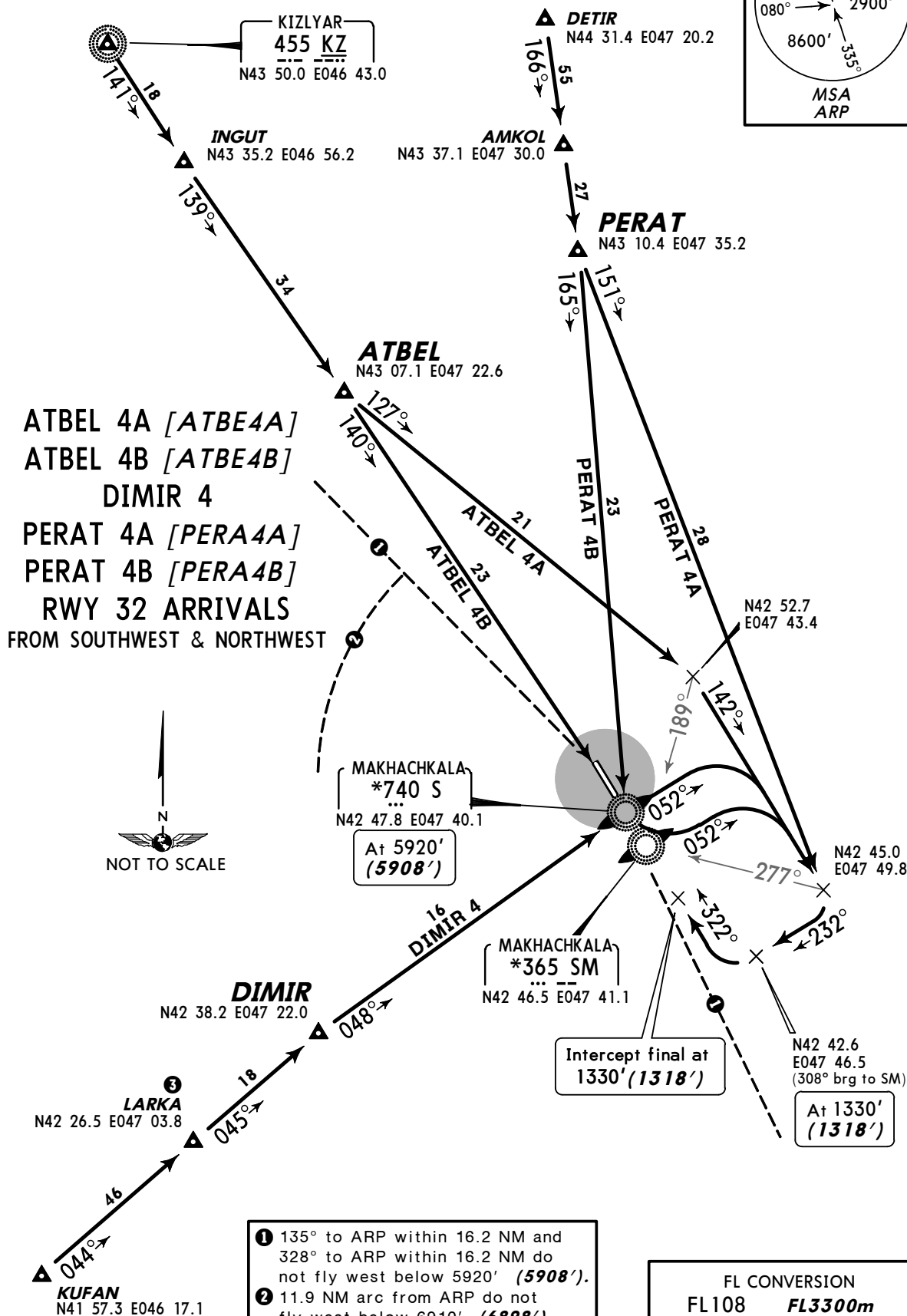
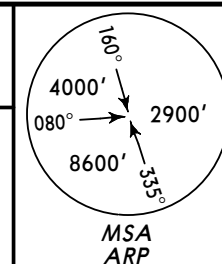
NOT TO SCALE

URML/MCX
UYTASH

JEPPESEN MAKHACHKALA, RUSSIA
25 APR 08 (10-2C) Eff 8 May STAR

Apt Elev
15'

Alt Set: MM (hPa on request) QNH on request (QFE)
Trans level: FL108 Trans alt: 9860' (**9848'**)
Crossings at airway exit points by ATC.



- 1** 135° to ARP within 16.2 NM and 328° to ARP within 16.2 NM do not fly west below 5920' (**5908'**).
- 2** 11.9 NM arc from ARP do not fly west below 6910' (**6898'**).
- 3** Flights from LARKA are allowed under radar control and steady operation of airborne navigation equipment.

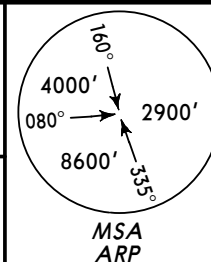
FL CONVERSION	
FL108	<i>FL3300m</i>
ALT/HEIGHT CONVERSION	
QNH	(<i>QFE</i>)
9860'	(<i>9848' - 3000m</i>)
6910'	(<i>6898' - 2100m</i>)
5920'	(<i>5908' - 1800m</i>)
1330'	(<i>1318' - 400m</i>)

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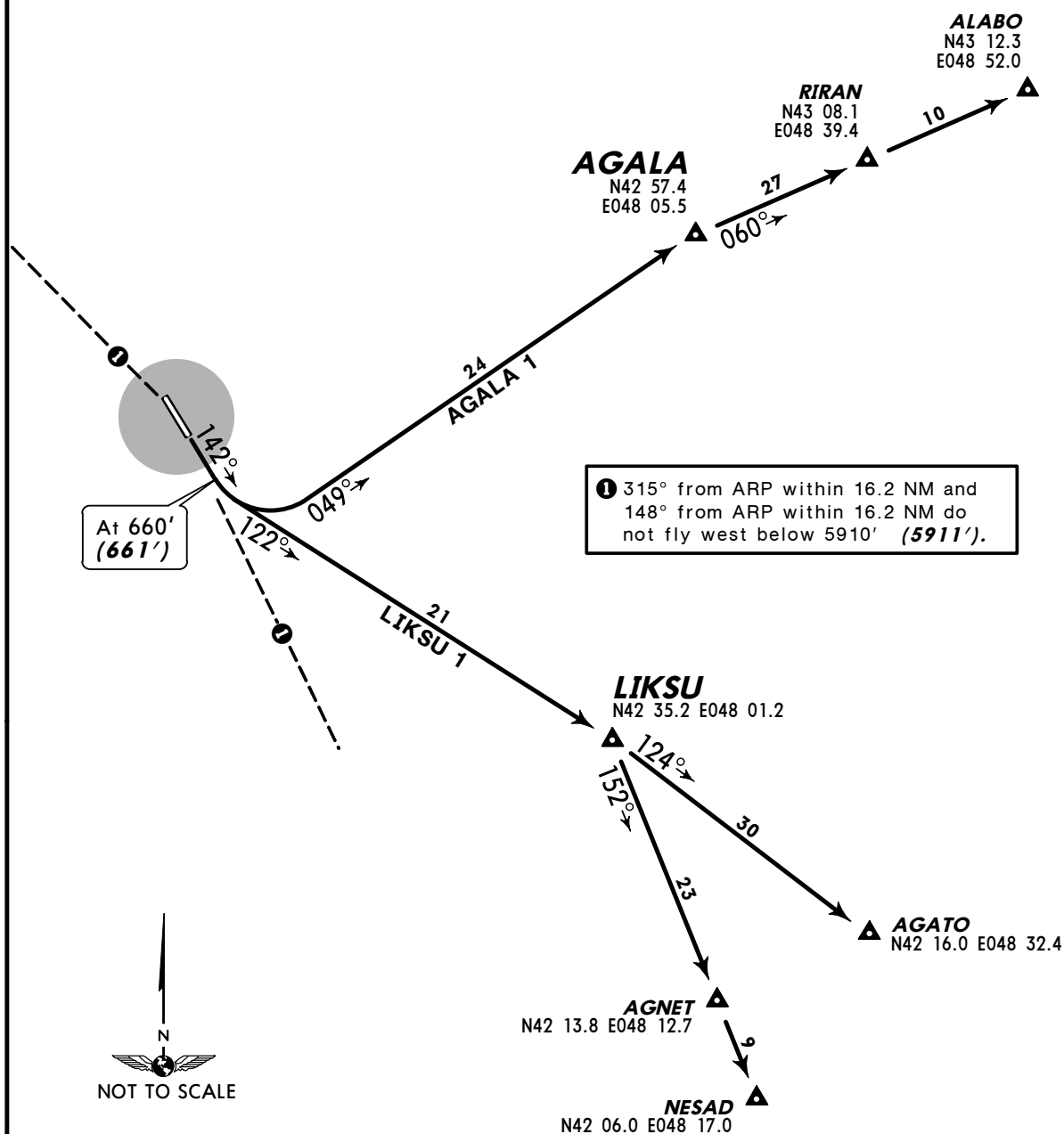
JEPPESEN MAKHACHKALA, RUSSIA
25 APR 08 10-3 Eff 8 May SID

Apt Elev
15'

QNH on request (QFE)
Trans level: FL108 Trans alt: 9860' (9861')
1. Mountains between 1320' (1321') and 1970' (1971') within 200°-300° at 2.2 NM - 2.7 NM from airport.
2. Crossings at airway entry points by ATC.



AGALA 1
LIKSU 1
RWY 14 DEPARTURES
TO NORTHEAST & SOUTHEAST



ALT/HEIGHT CONVERSION	
QNH	(QFE)
660'	(661' - 200m)
1320'	(1321' - 400m)
1970'	(1971' - 600m)
5910'	(5911' - 1800m)
9860'	(9861' - 3000m)

FL CONVERSION
FL108 FL3300m

URML/MCX
UYTASH

JEPPESSEN MAKHACHKALA, RUSSIA
25 APR 08 (10-3A) Eff 8 May

SID

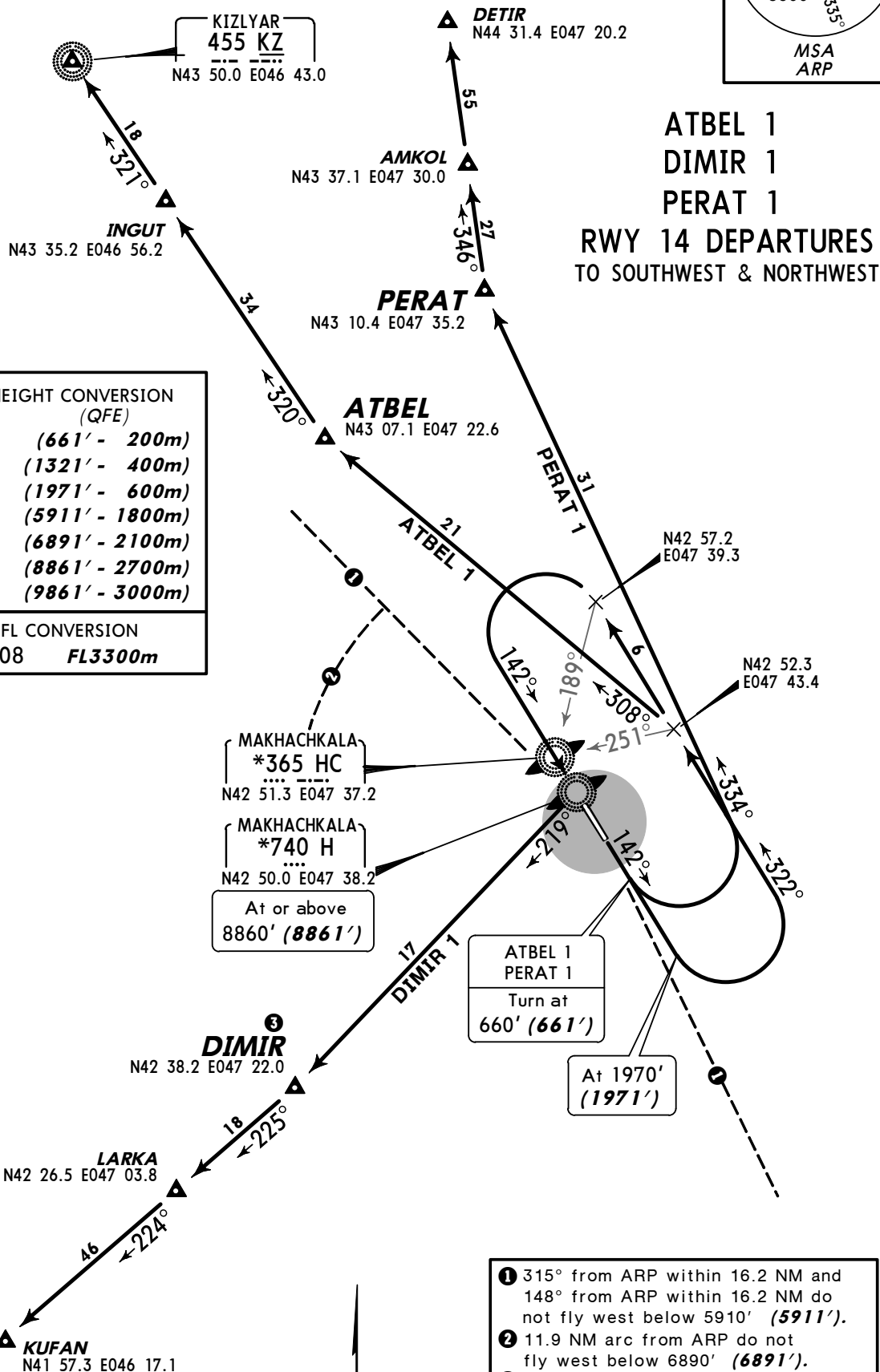
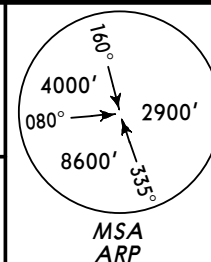
Apt Elev
15'

QNH on request (QFE)

Trans level: FL108 Trans alt: 9860' (9861')

1. Mountains between 1320' (1321') and 1970' (1971') within 200°-300° at 2.2 NM - 2.7 NM from airport.

2. Crossings at airway entry points by ATC.

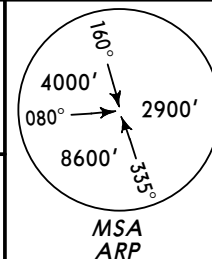


URML/MCX
UYTASH

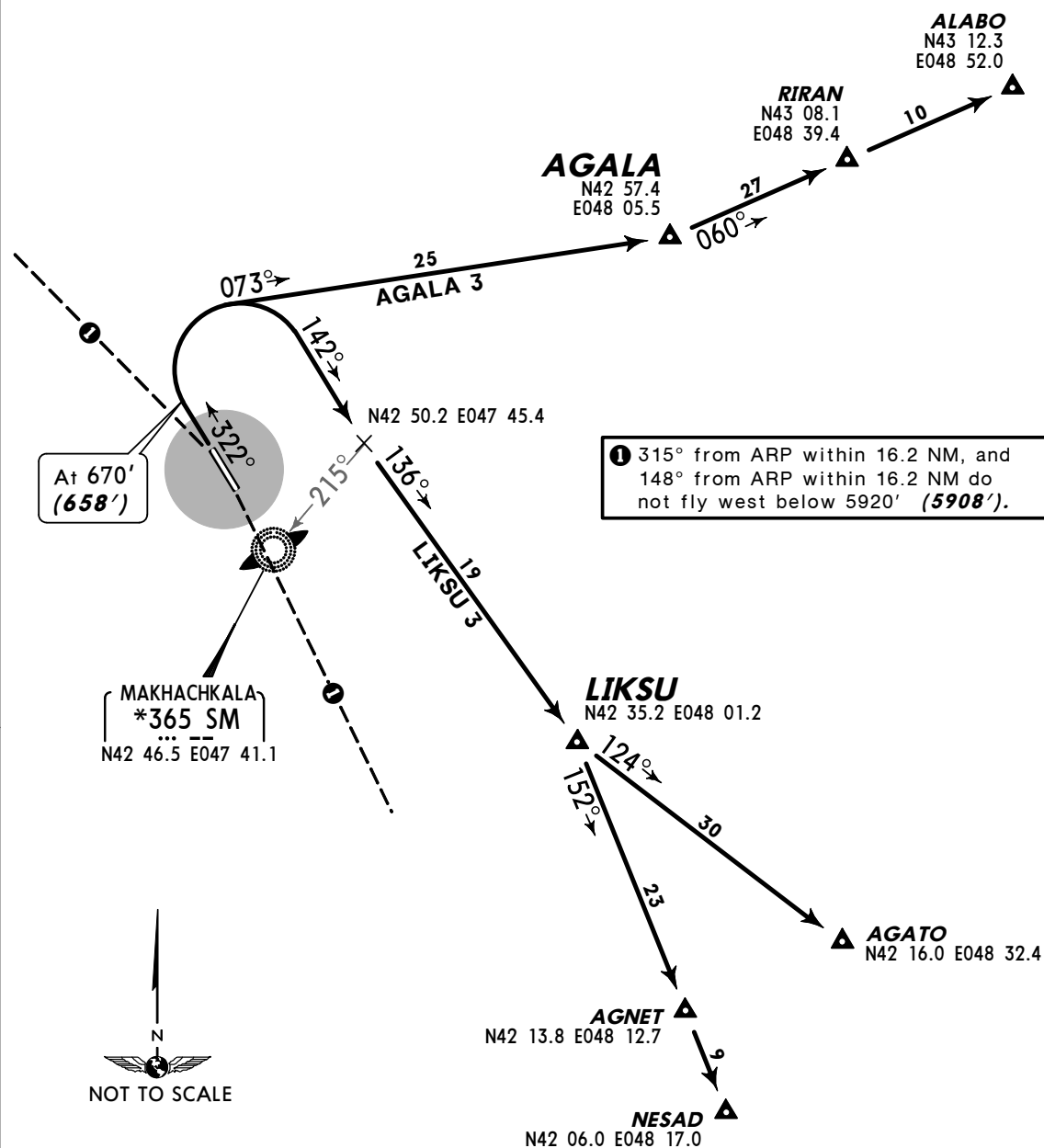
JEPPESEN MAKHACHKALA, RUSSIA
25 APR 08 (10-3B) Eff 8 May SID

Apt Elev
15'

QNH on request (QFE)
Trans level: FL108 Trans alt: 9860' (9848')
1. Mountains between 1330' (1318') and 1990' (1978') within 200°-300° at 2.2 NM - 2.7 NM from airport.
2. Crossings at airway entry points by ATC.



AGALA 3
LIKSU 3
RWY 32 DEPARTURES
TO NORTHEAST & SOUTHEAST



ALT/HEIGHT CONVERSION	
QNH	(QFE)
670'	(658' - 200m)
1330'	(1318' - 400m)
1990'	(1978' - 600m)
5920'	(5908' - 1800m)
9860'	(9848' - 3000m)

FL CONVERSION	
FL108	FL3300m

URML/MCX
UYTASH

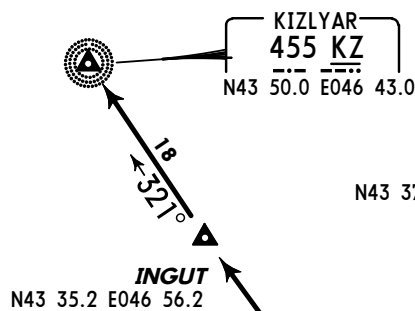
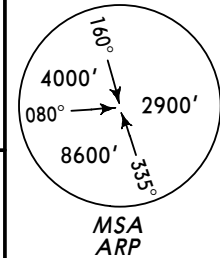
JEPPESSEN MAKHACHKALA, RUSSIA
25 APR 08 10-3C Eff 8 May SID

Apt Elev
15'

QNH on request (QFE)

Trans level: FL108 Trans alt: 9860' (9848')

1. Mountains between 1330' (1318') and 1990' (1978') within 200°-300° at 2.2 NM - 2.7 NM from airport.
2. Crossings at airway entry points by ATC.



ATBEL 3
DIMIR 3
PERAT 3
RWY 32 DEPARTURES
TO SOUTHWEST & NORTHWEST

ALT/HEIGHT CONVERSION	
QNH	(QFE)
670'	(658' - 200m)
1330'	(1318' - 400m)
1990'	(1978' - 600m)
5920'	(5908' - 1800m)
6910'	(6898' - 2100m)
8880'	(8868' - 2700m)
9860'	(9848' - 3000m)

FL CONVERSION
FL108 FL3300m

MAKHACHKALA
*740 S
N42 47.8 E047 40.1
At or above
8880' (8868')

ATBEL 3
PERAT 3
Turn at
670' (658')

MAKHACHKALA
*365 SM
N42 46.5 E047 41.1



- 1 315° from ARP within 16.2 NM and 148° from ARP within 16.2 NM do not fly west below 5920' (5908').
- 2 11.9 NM arc from ARP do not fly west below 6910' (6898').
- 3 Flights to DIMIR are allowed under radar control and steady operation of airborne navigation equipment.

URML/MCX

Apt Elev 15'
N42 49.0 E047 39.2

JEPPESEN

MAKHACHKALA, RUSSIA

13 OCT 06

(10-9)

Eff 26 Oct

UYTASH

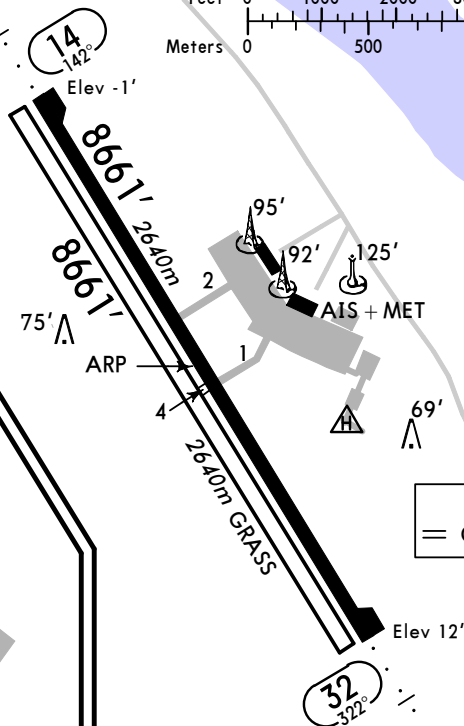
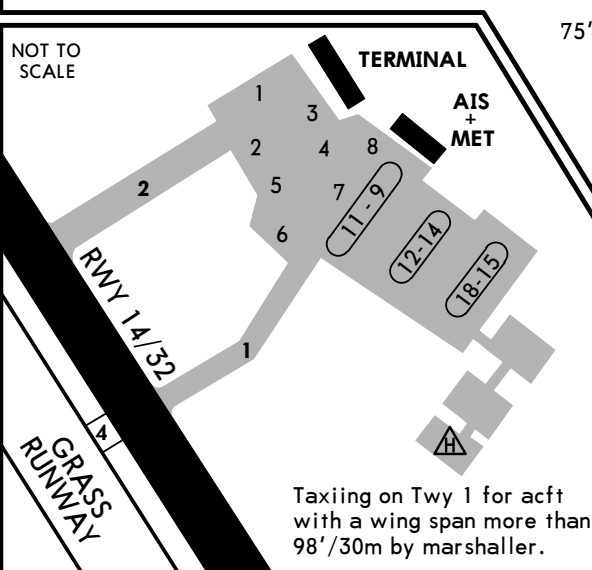
MAKHACHKALE Start (TWR)

121.3

Taxiing along twy 1 & 2 is at minimum speed strictly along the centerline under inner engines power.

STAND	COORDINATES
1	N42 49.3 E047 39.3
2, 3	N42 49.2 E047 39.3

NOT TO SCALE



LEGEND

— Grass taxiway

ADDITIONAL RUNWAY INFORMATION

RWY			USABLE LENGTHS		TAKE-OFF	WIDTH
			Threshold	Landing Beyond Glide Slope		
14	32	RL(60m) ALS	RVR	7628' 2325m 7932' 2418m	1	138' 42m
14	32	Grass runway				230' 70m

1 TAKE-OFF RUN AVAILABLE

RWY 14: From rwy head 8661' (2640m)
twy 2 int 5249' (1600m)
twy 1 int 4134' (1260m)

RWY 32: From rwy head 8661' (2640m)
twy 1 int 4528' (1380m)
twy 2 int 3412' (1040m)

TAKE-OFF

AIR CARRIER (JAA)

Main rwy 14/32

LVP must be in force

RCLM (DAY only)
or RL

RCLM (DAY only)
or RL

A
B
C
D

250m

300m

400m

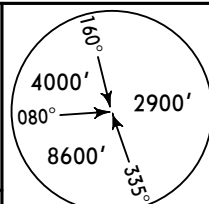
URML/MCX
UYTASH

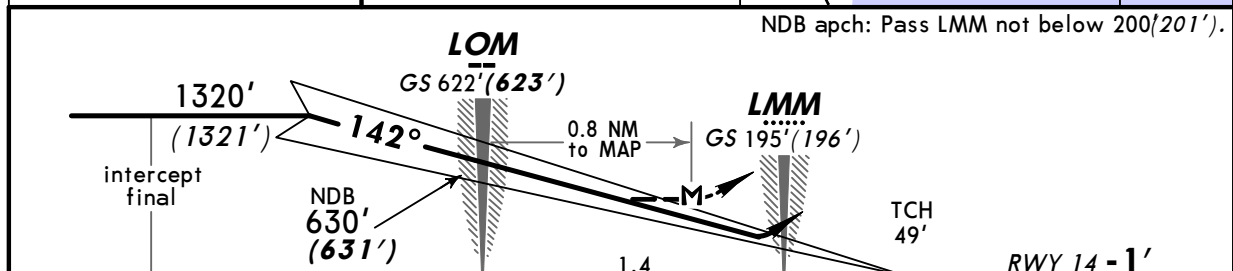
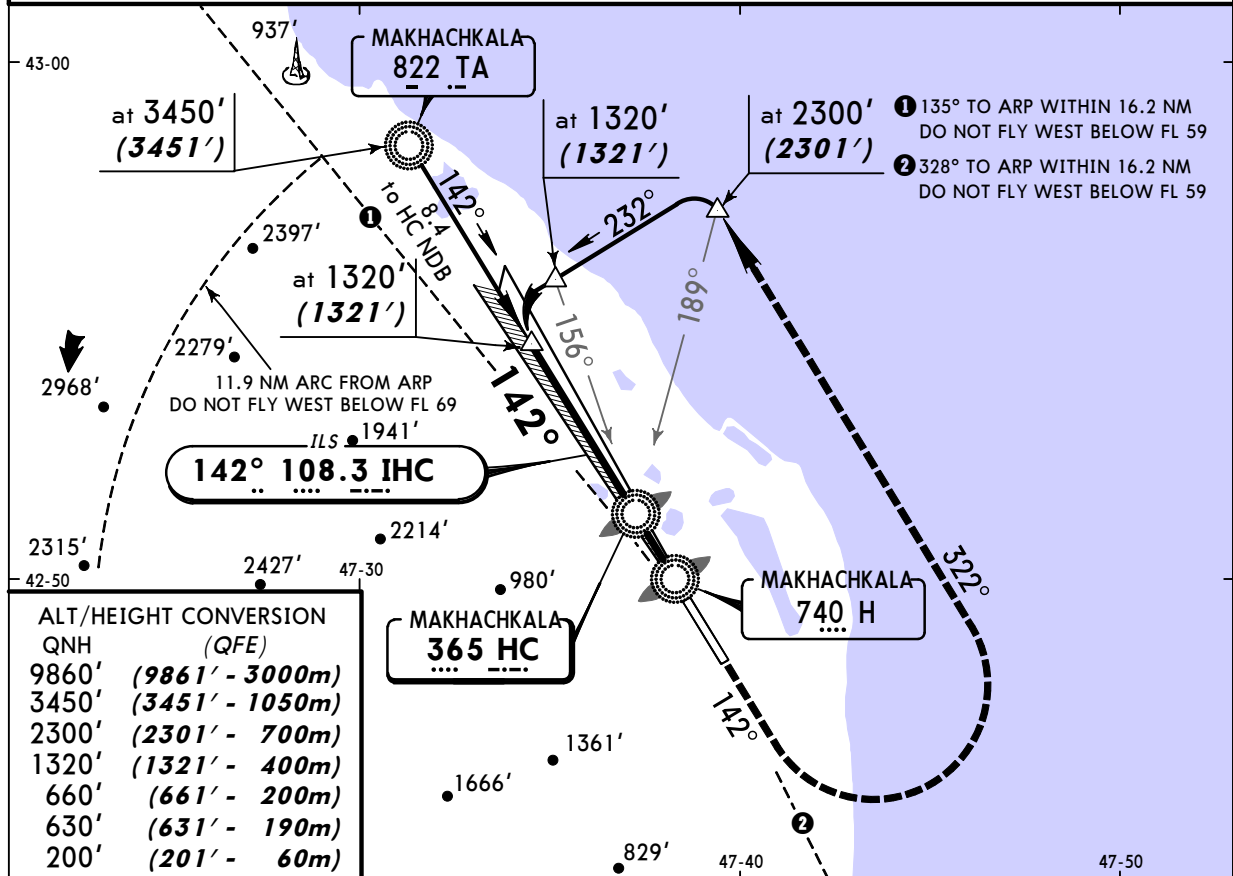
JEPPESEN

MAKHACHKALA, RUSSIA
ILS or 2 NDB RWY 14

13 OCT 06
Eff 26 Oct (11-1)

BRIEFING STRIP

MAKHACHKALA Approach (R)		MAKHACHKALA Krug (SRE)		MAKHACHKALA Start (TWR)	
119.7		121.3		121.3	
LOC IHC 108.3	Final Apch Crs 142°	GS LOM 622' (623')	ILS DA(H) Refer to Minimums	Apt Elev 15'	
NDB HC 365		Minimum Alt LOM 630' (631')	NDB MDA(H) Refer to Minimums	RWY -1'	
(BELOW SEA LEVEL)					
MISSED APCH: Climb on 142° to 660' (661'), then turn LEFT onto 322° climbing to 2300' (2301'), then according to chart.					
Alt Set: MM (hPa on req)		QNH on req (QFE)		Trans level: FL 108	
				Trans alt: 9860' (9861')	



Gnd speed-Kts	70	90	100	120	140	160	ALS	660' (661') on 142°	322° LT	2300' (2301')
ILS GS 2.67° or NDB Desc Grad 4.7%	336	432	480	576	671	767				
LOM to MAP 0.8	0:41	0:32	0:29	0:24	0:21	0:18				

ILS		STRAIGHT-IN LANDING RWY 14		NDB	
AB: 199'(200')		LOC (GS out)		ABC: 330'(331')	
CD: 229'(230')				D: 400'(401')	
FULL	ALS out			ALS out	
A					
B					
C	1200m	NOT AUTHORIZED		2200m	
D					

PANS OPS

URML/MCX
UYTASH

JEPPESEN

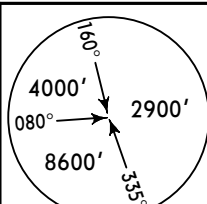
13 OCT 06

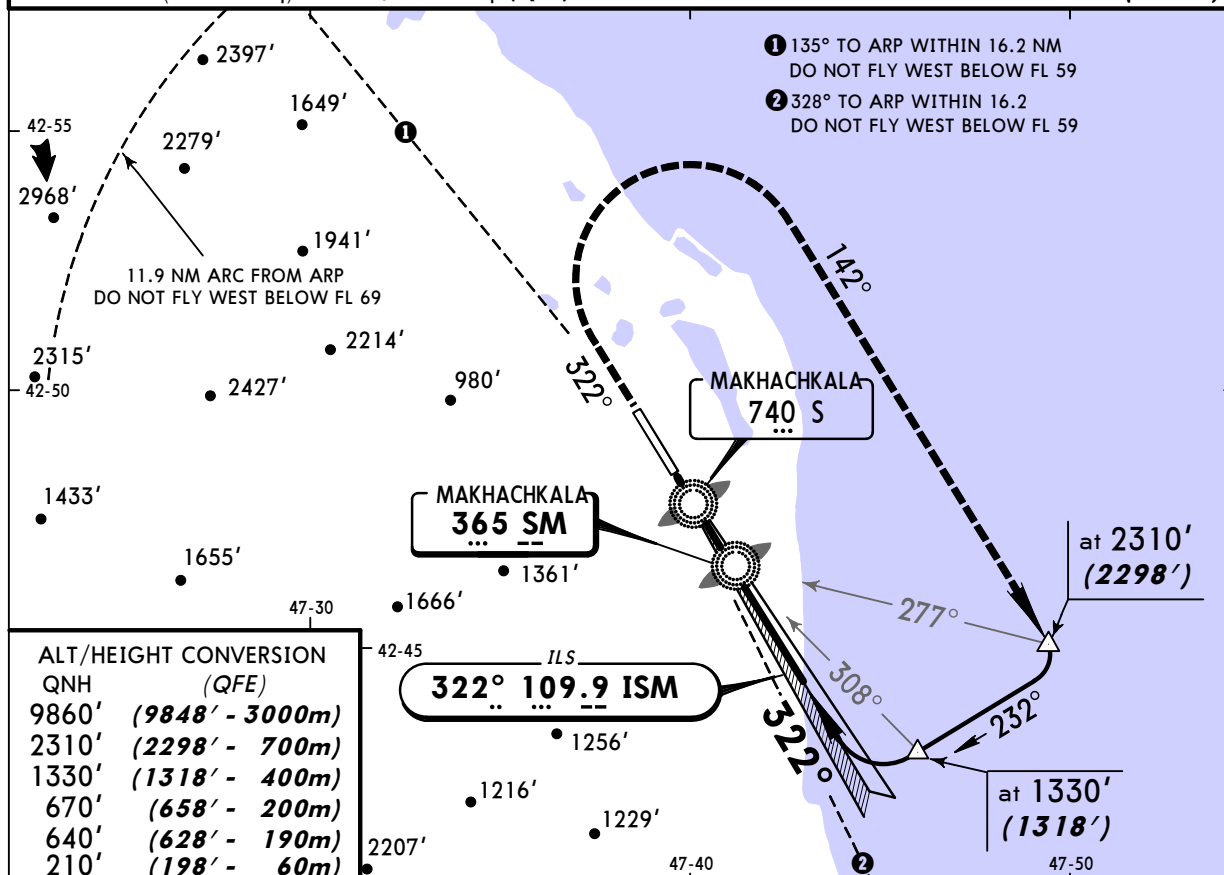
Eff 26 Oct

(11-2)

MAKHACHKALA, RUSSIA
ILS or 2 NDB Rwy 32

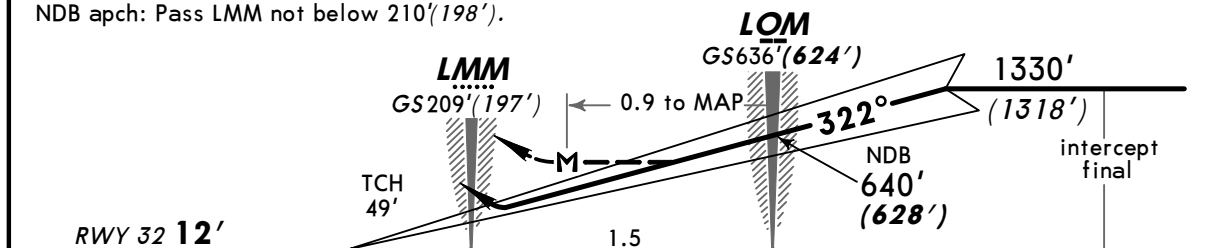
BRIEFING STRIP

MAKHACHKALA Approach (R)		MAKHACHKALA Krug (SRE)		MAKHACHKALA Start (TWR)		
119.7		121.3		121.3		
LOC ISM 109.9	Final Apch Crs 322°	GS LOM 636' (624')	ILS DA(H) Refer to Minimums	Apt Elev 15' RWY 12'	 MSA ARP	
NDB SM 365		Minimum Alt LOM 640' (628')	NDB MDA(H) Refer to Minimums			
MISSED APCH: Climb on 322° to 670' (658'), then turn RIGHT onto 142° climbing to 2310' (2298'), then according to chart.						
Alt Set: MM (hPa on req)		QNH on req (QFE)		Trans level: FL 108		
				Trans alt: 9860' (9848')		



ALT/HEIGHT CONVERSION	QNH	(QFE)
9860'	(9848' - 3000m)	
2310'	(2298' - 700m)	
1330'	(1318' - 400m)	
670'	(658' - 200m)	
640'	(628' - 190m)	
210'	(198' - 60m)	

NDB apch: Pass LMM not below 210' (198').



Gnd speed-Kts	70	90	100	120	140	160	ALS	670' (658') on 322°	142° RT	2310' (2298')
ILS GS 2.67° or NDB Desc Grad 4.7%	336	432	480	576	671	767				
LOM to MAP 0.9	0:46	0:36	0:32	0:27	0:23	0:20				

STRAIGHT-IN LANDING RWY 32									
ILS				LOC (GS out)		NDB			
DA(H) AB: 212'(200')						MDA(H) ABC: 350'(338')			
CD: 242'(230')						D: 410'(398')			
FULL		ALS out						ALS out	
A	1200m			NOT AUTHORIZED		2300m			
B									
C									
D									

PANS OPS