

**ADD = Added chart, REV = Revised chart, DEL = Deleted chart.**

**No revision activity since Disc 09-2011**

## **TERMINAL CHART NOTAMs**

**No Chart NOTAMs for Airport URML**

**General Info**

Makhachkala, RUS

N 42° 49.0' E 47° 39.2' Mag Var: 5.5°E

Elevation: 15'

Public, IFR, Control Tower, Customs, Landing Fee

Fuel: Jet A-1

Time Zone Info: GMT+3:00 uses DST

**Runway Info**

Runway 14-32 8661' x 138' concrete

Runway 14 (142.0°M) TDZE -1'

Lights: Edge, ALS

Runway 32 (322.0°M) TDZE 12'

Lights: Edge, ALS

**Communications Info**ATIS **125.475**ATIS **124.8** Non-EnglishMakhachkala Start Tower **121.3** Non-EnglishMakhachkala Approach Control **119.7** Non-EnglishMakhachkala Krug Radar **121.3****Notebook Info**

**URML/MCX**  
**UYTASH**

11 SEP 09

**JEPPESEN**

## MAKHACHKALA, RUSSIA

**STAR**

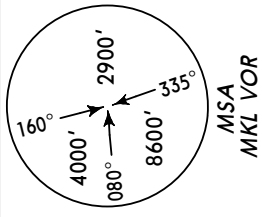
# ATIS

125.47 ( Russian 124.8)

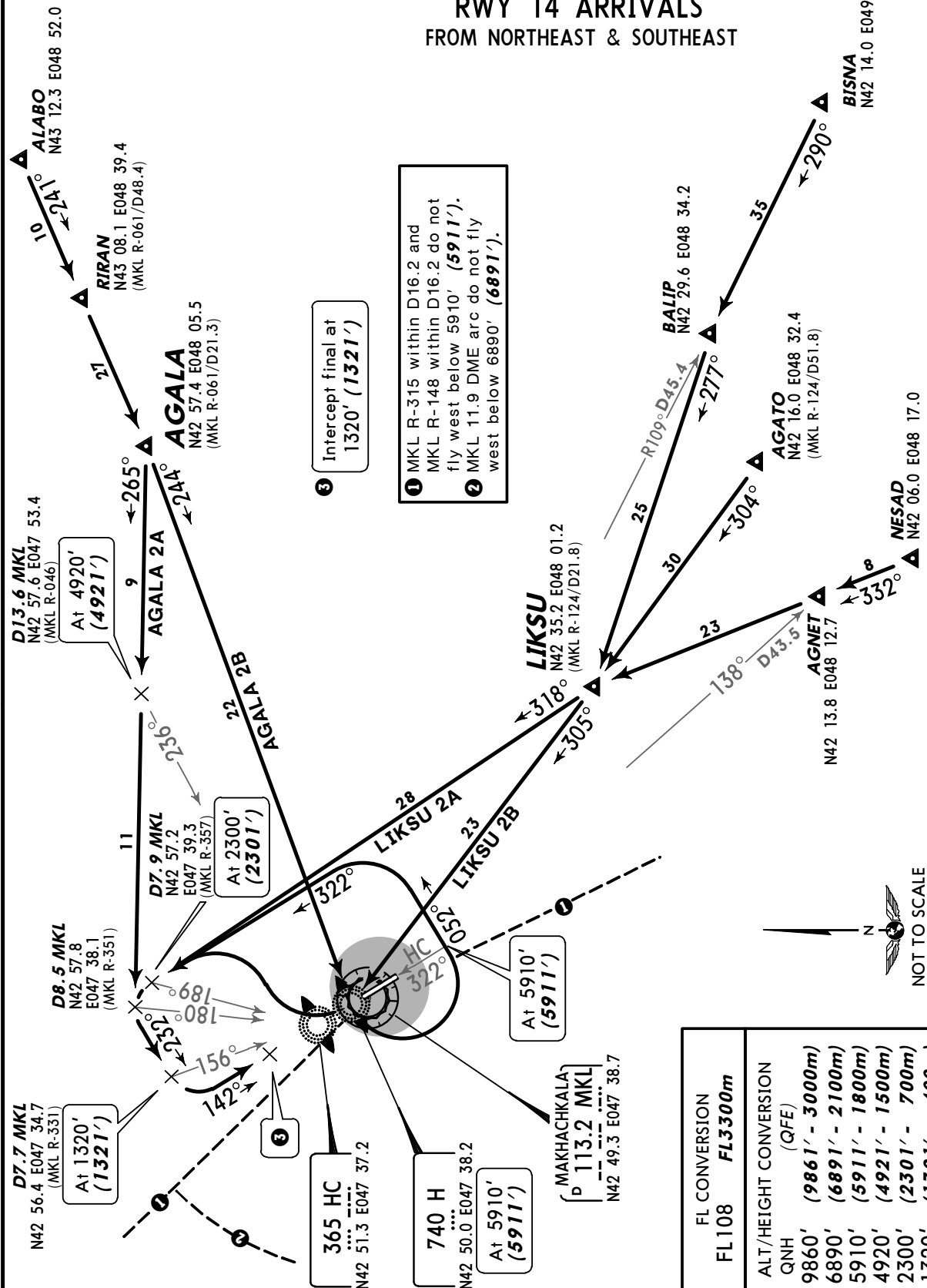
*Apt Elev*  
15'

Alt Set: MM (hPa on request) QNH on request  
Trans level: FL108 Trans alt: 9860' (**9861'**)  
Crossings at airway exit points by ATC.

**(QFE)**



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



**NOT TO SCALE**

| FL CONVERSION         |                 |
|-----------------------|-----------------|
| FL108                 | FL3300m         |
| ALT/HEIGHT CONVERSION | (QFE)           |
| QNH                   |                 |
| 9860'                 | (9861' - 3000m) |
| 6890'                 | (6891' - 2100m) |
| 5910'                 | (5911' - 1800m) |
| 4920'                 | (4921' - 1500m) |
| 2300'                 | (2301' - 700m)  |
| 1320'                 | (1321' - 400m)  |

**URML/MCX**  
**UYTASH**

11 SEP 09

**(10-2A)**

**MAKHACHKALA, RUSSIA**

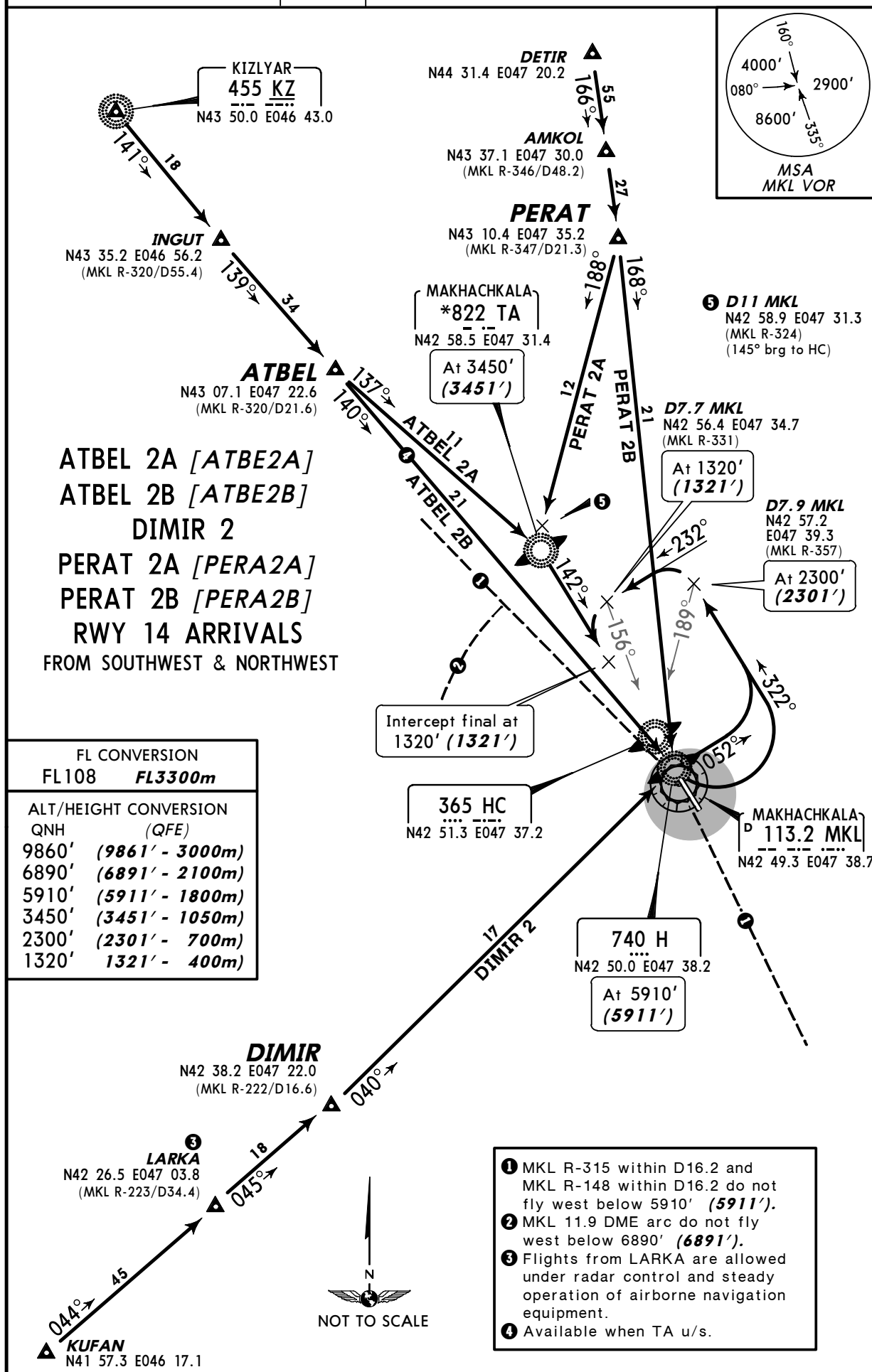
**STAR**

ATIS  
**125.47** (Russian 124.8)

Apt Elev  
**15'**

Alt Set: MM (hPa on request) QNH on request  
Trans level: FL108 Trans alt: 9860' (**9861'**)  
Crossings at airway exit points by ATC.

(QFE)



URML/MCX  
UYTASH

11 SEP 09

10-2B

## MAKHACHKALA, RUSSIA

**STAR**

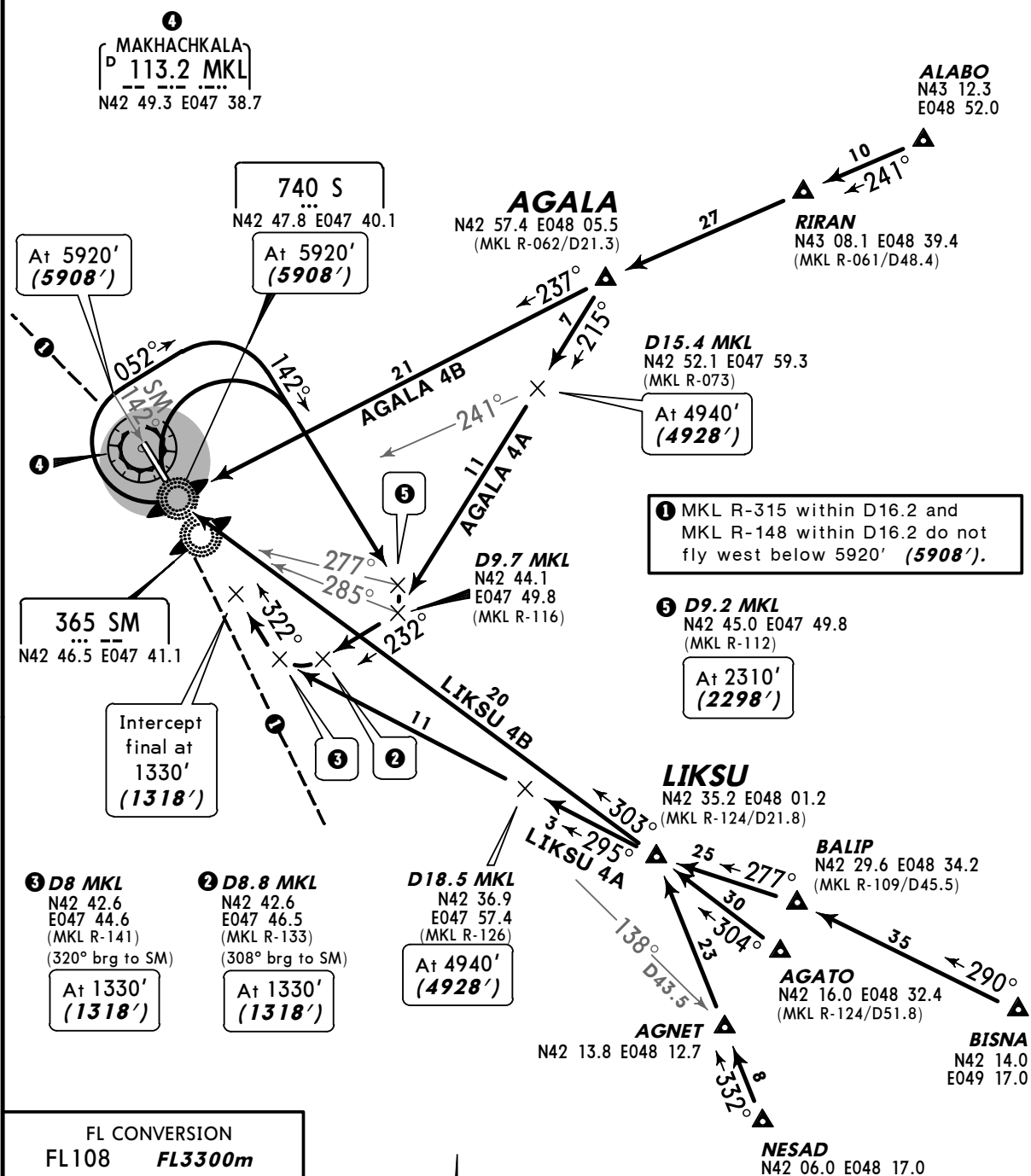
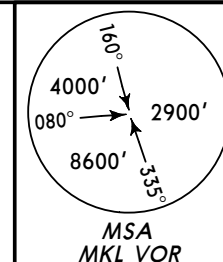
125.47 (Russian 124.8) ATIS

*Apt Elev*  
15'

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

**(QFE)**

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



|                       |                 |
|-----------------------|-----------------|
| FL CONVERSION         |                 |
| FL108                 | <b>FL3300m</b>  |
| ALT/HEIGHT CONVERSION |                 |
| QNH                   | (QFE)           |
| 9860'                 | (9848' - 3000m) |
| 5920'                 | (5908' - 1800m) |
| 4940'                 | (4928' - 1500m) |
| 2310'                 | (2298' - 700m)  |
| 1330'                 | (1318' - 400m)  |



**URML/MCX**  
**UYTASH**

11 SEP 09

**10-2C**

**MAKHACHKALA, RUSSIA**

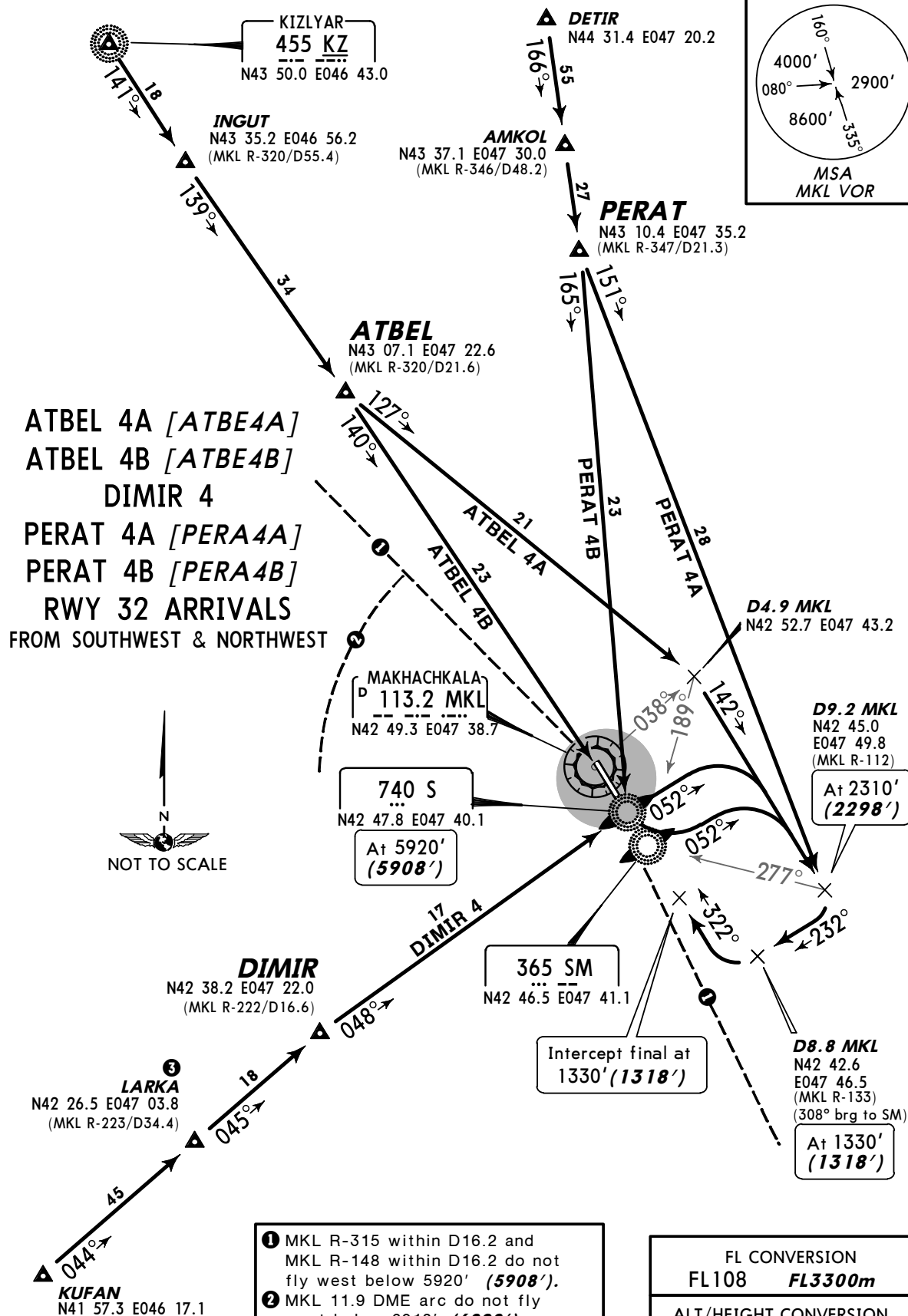
**STAR**

ATIS  
**125.47** (Russian 124.8)

Apt Elev  
**15'**

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

(QFE)



- 1 MKL R-315 within D16.2 and MKL R-148 within D16.2 do not fly west below 5920' (**5908'**).
- 2 MKL 11.9 DME arc 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 **FL3300m**

| ALT/HEIGHT CONVERSION | (QFE)                   |
|-----------------------|-------------------------|
| 9860'                 | ( <b>9848'</b> - 3000m) |
| 6910'                 | ( <b>6898'</b> - 2100m) |
| 5920'                 | ( <b>5908'</b> - 1800m) |
| 2310'                 | ( <b>2298'</b> - 700m)  |
| 1330'                 | ( <b>1318'</b> - 400m)  |

URML/MCX  
UYTASH

## MAKHACHKALA, RUSSIA

24 APR 09

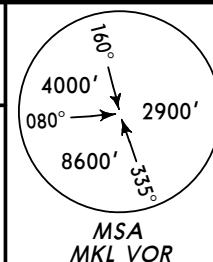
10-3

**Eff 7 May**

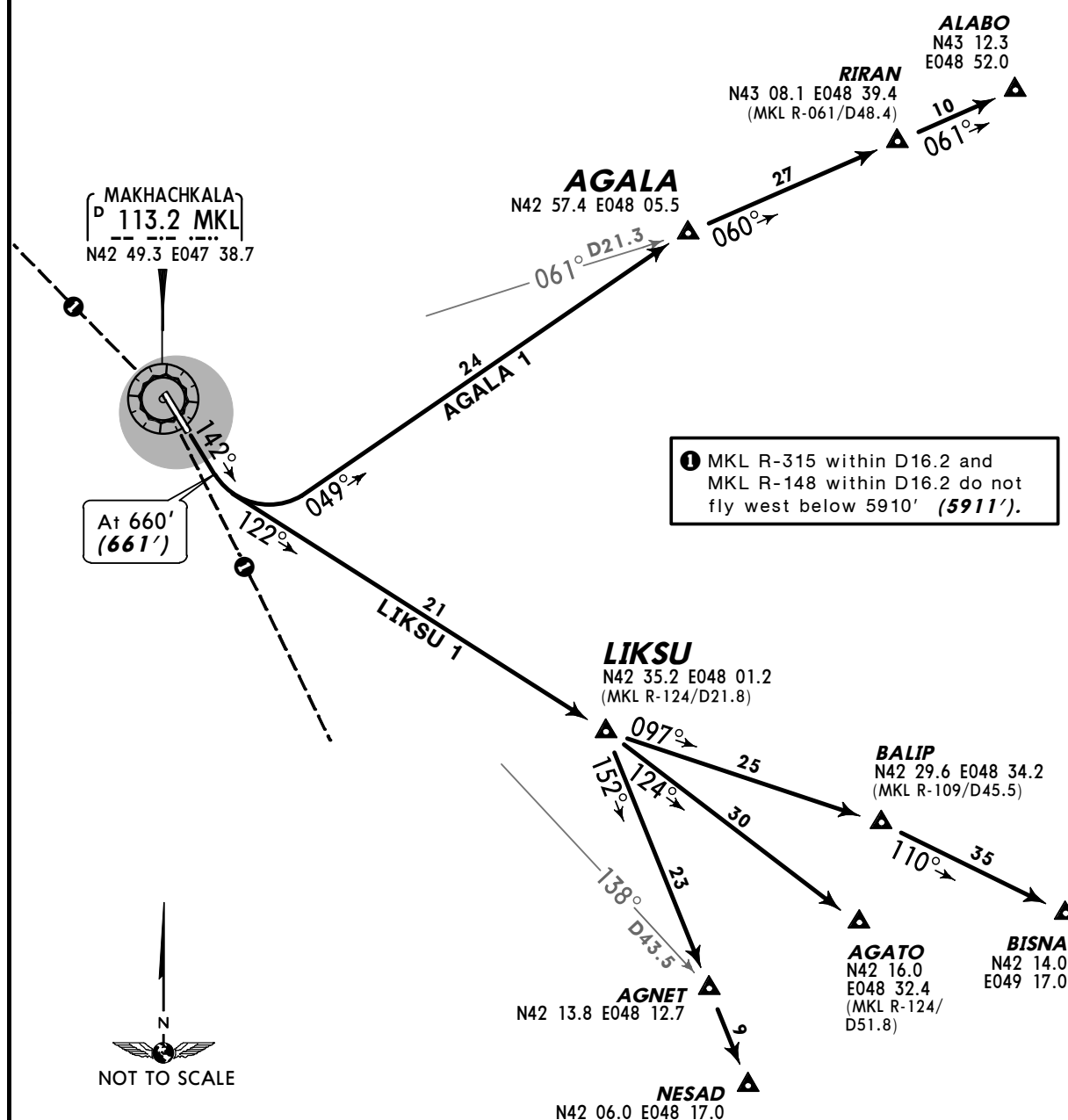
SID

*Apt Elev*  
15'

QNH on request **(QFE)**  
Trans level: FL108 Trans alt: 9860' **(9861')**  
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)   |
| 5910' | (5911' - 1800m) |
| 9860' | (9861' - 3000m) |

FL CONVERSION  
FL108 ***FL3300m***

**URML/MCX**  
**UYTASH**

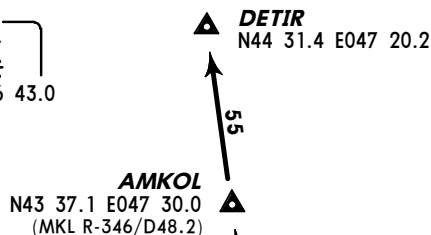
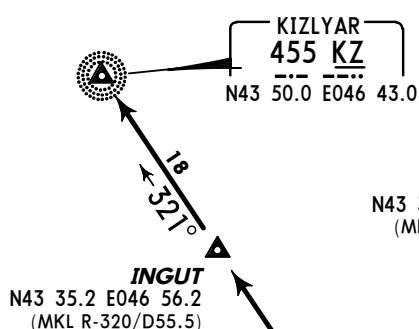
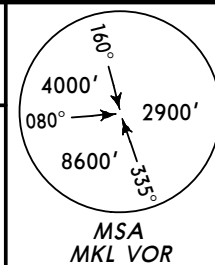
**JEPPESSEN**  
24 APR 09 **(10-3A)** **Eff 7 May**

**MAKHACHKALA, RUSSIA**

**SID**

Apt Elev  
**15'**

QNH on request **(QFE)**  
Trans level: FL108 Trans alt: 9860' **(9861')**  
Crossings at airway entry points by ATC.



**ATBEL 1**  
**DIMIR 1**  
**PERAT 1**  
**RWY 14 DEPARTURES**  
**TO SOUTHWEST & NORTHWEST**

| ALT/HEIGHT CONVERSION |                 |
|-----------------------|-----------------|
| QNH                   | (QFE)           |
| 660'                  | (661' - 200m)   |
| 1970'                 | (1971' - 600m)  |
| 5910'                 | (5911' - 1800m) |
| 6890'                 | (6891' - 2100m) |
| 8860'                 | (8861' - 2700m) |
| 9860'                 | (9861' - 3000m) |

FL CONVERSION  
FL108 **FL3300m**

**365 HC**  
N42 51.3 E047 37.2

**740 H**  
N42 50.0 E047 38.2  
At or above  
**8860' (8861')**

**DIMIR**  
N42 38.2 E047 22.0  
(MKL R-222/D16.6)

**LARKA**  
N42 26.5 E047 03.8  
(MKL R-223/D34.4)

**KUFAN**  
N41 57.3 E046 17.1

**D7.9 MKL**  
N42 57.2 E047 39.3  
(MKL R-357)

**D4.6 MKL**  
N42 52.4 E047 43.4

**MAKHACHKALA**  
**113.2 MKL**  
N42 49.3 E047 38.7

**ATBEL 1**  
**PERAT 1**  
Turn at  
**660' (661')**

At 1970'  
**(1971')**

- 1 MKL R-315 within D16.2 and MKL R-148 within D16.2 do not fly west below 5910' **(5911')**.
- 2 MKL 11.9 DME arc do not fly west below 6890' **(6891')**.
- 3 Flights to DIMIR are allowed under radar control and steady operation of airborne navigation equipment.

**DIMIR 1**

This SID requires a minimum climb gradient of 255' per NM (4.2%) up to H.

| Gnd speed-KT | 75  | 100 | 150 | 200 | 250  | 300  |
|--------------|-----|-----|-----|-----|------|------|
| 255' per NM  | 319 | 425 | 638 | 851 | 1063 | 1276 |

NOT TO SCALE

**URML/MCX**  
**UYTASH**

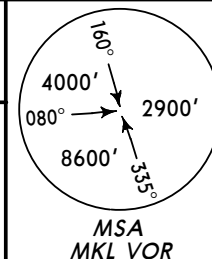
**JEPPESSEN**  
24 APR 09 **(10-3B)** **Eff 7 May**

**MAKHACHKALA, RUSSIA**

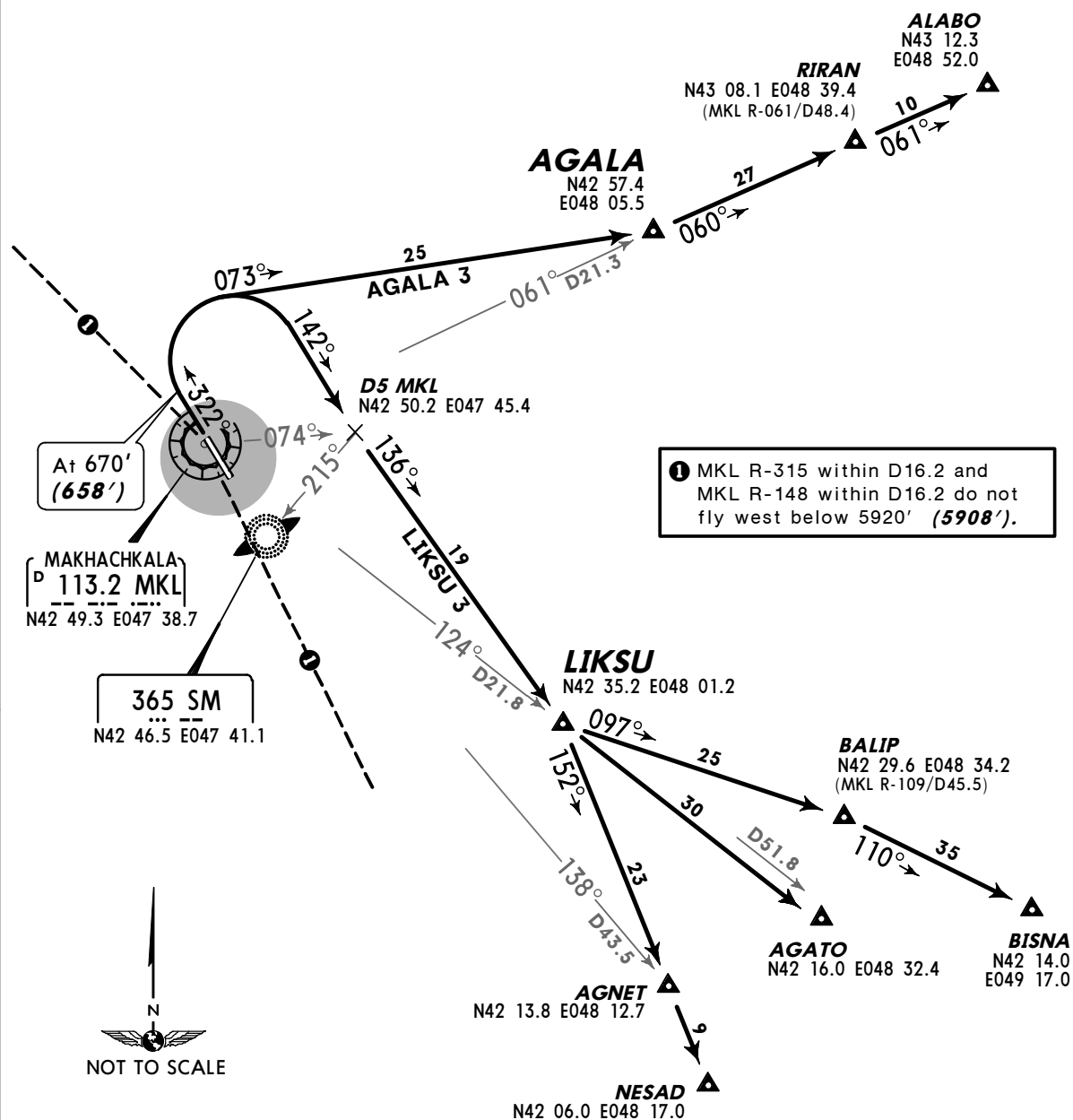
**SID**

Apt Elev  
**15'**

QNH on request **(QFE)**  
Trans level: FL108 Trans alt: 9860' **(9848')**  
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)   |
| 5920'                 | (5908' - 1800m) |
| 9860'                 | (9848' - 3000m) |

| FL CONVERSION |                |
|---------------|----------------|
| FL108         | <b>FL3300m</b> |

**URML/MCX**  
**UYTASH**

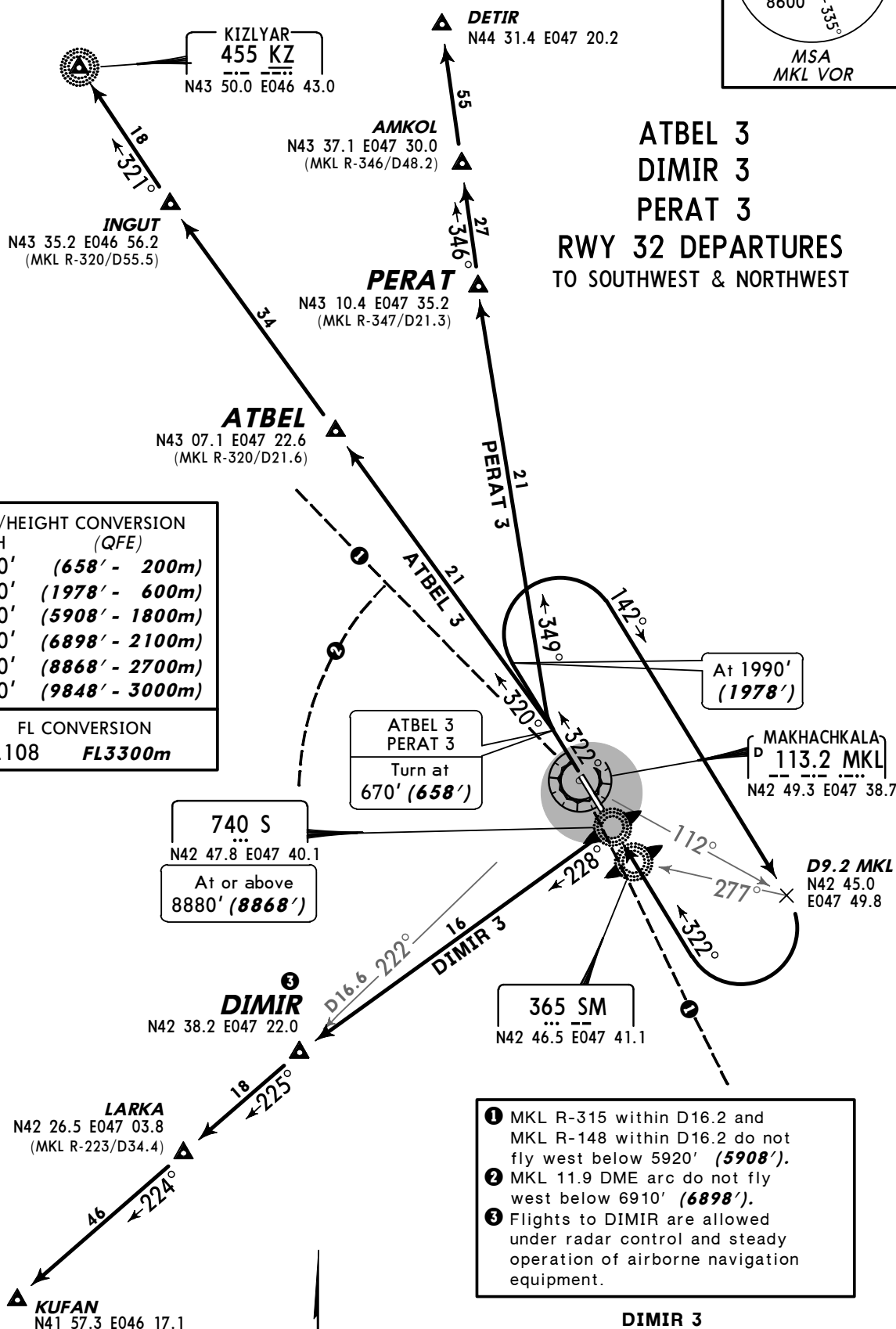
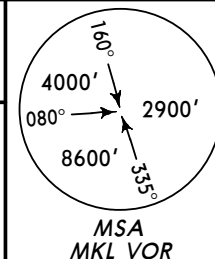
**JEPPesen**  
24 APR 09 **10-3C** **Eff 7 May**

**MAKHACHKALA, RUSSIA**

**SID**

Apt Elev  
**15'**

QNH on request **(QFE)**  
Trans level: FL108 Trans alt: 9860' **(9848')**  
Crossings at airway entry points by ATC.



NOT TO SCALE

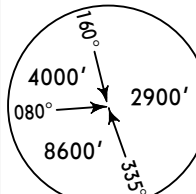


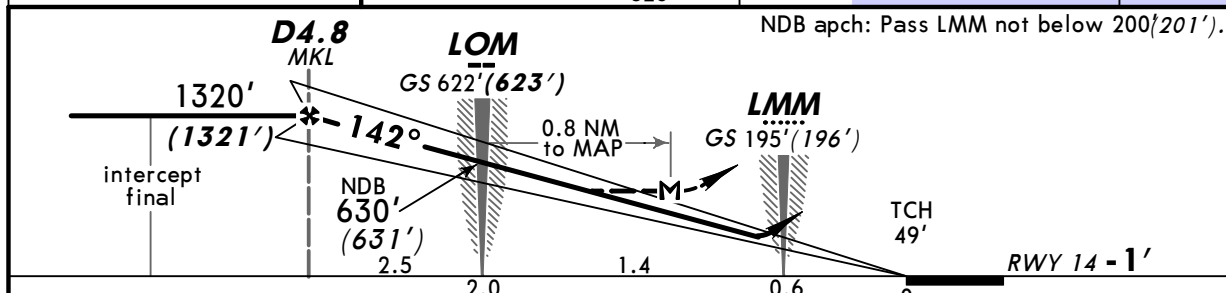
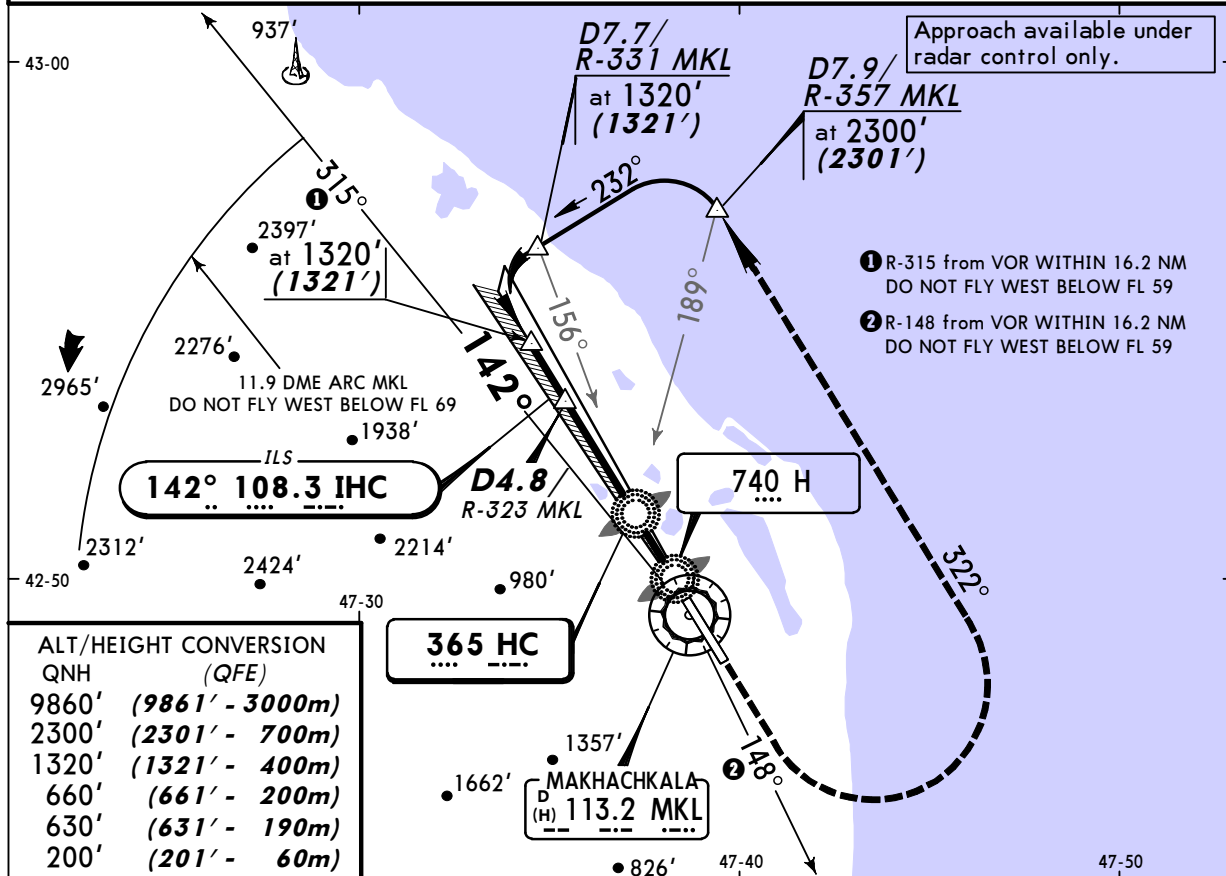
**URML/MCX**  
**UYTASH**

**JEPPesen**  
11 SEP 09 **(11-1)**

**MAKHACHKALA, RUSSIA**  
**ILS or 2 NDB RWY 14**

BRIEFING STRIP

| ATIS                                                                                                                    |                           | MAKHACHKALA Approach (R)                 |                                       | MAKHACHKALA Krug (SRE)                               |                                                                                     | MAKHACHKALA Start (TWR) |                          |  |
|-------------------------------------------------------------------------------------------------------------------------|---------------------------|------------------------------------------|---------------------------------------|------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------|--------------------------|--|
| 125.47 (Russian 124.8)                                                                                                  |                           | 119.7                                    |                                       | 121.3                                                |                                                                                     | 121.3                   |                          |  |
| LOC<br>IHC<br>108.3                                                                                                     | Final<br>Apch Crs<br>142° | GS<br>LOM<br>622' (623')                 | ILS<br>DA(H)<br>Refer to<br>Minimums  | Apt Elev 15'<br><br>RWY -1'<br><br>(BELOW SEA LEVEL) |  |                         |                          |  |
| NDB<br>HC<br>365                                                                                                        |                           | Minimum Alt<br>D4.8 MKL<br>1320' (1321') | NDB<br>MDA(H)<br>Refer to<br>Minimums |                                                      |                                                                                     |                         |                          |  |
| MISSED APCH: Climb on 142° to 660' (661'), then turn LEFT onto 322° climbing to 2300' (2301'), then according to chart. |                           |                                          |                                       |                                                      |                                                                                     |                         | MSA MKL VOR              |  |
| 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               | 1200m   |                            | NOT AUTHORIZED | 2200m            |  |
| B               |         |                            |                |                  |  |
| C               |         |                            |                |                  |  |
| D               |         |                            |                |                  |  |

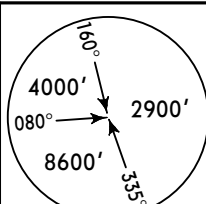
PANS OPS

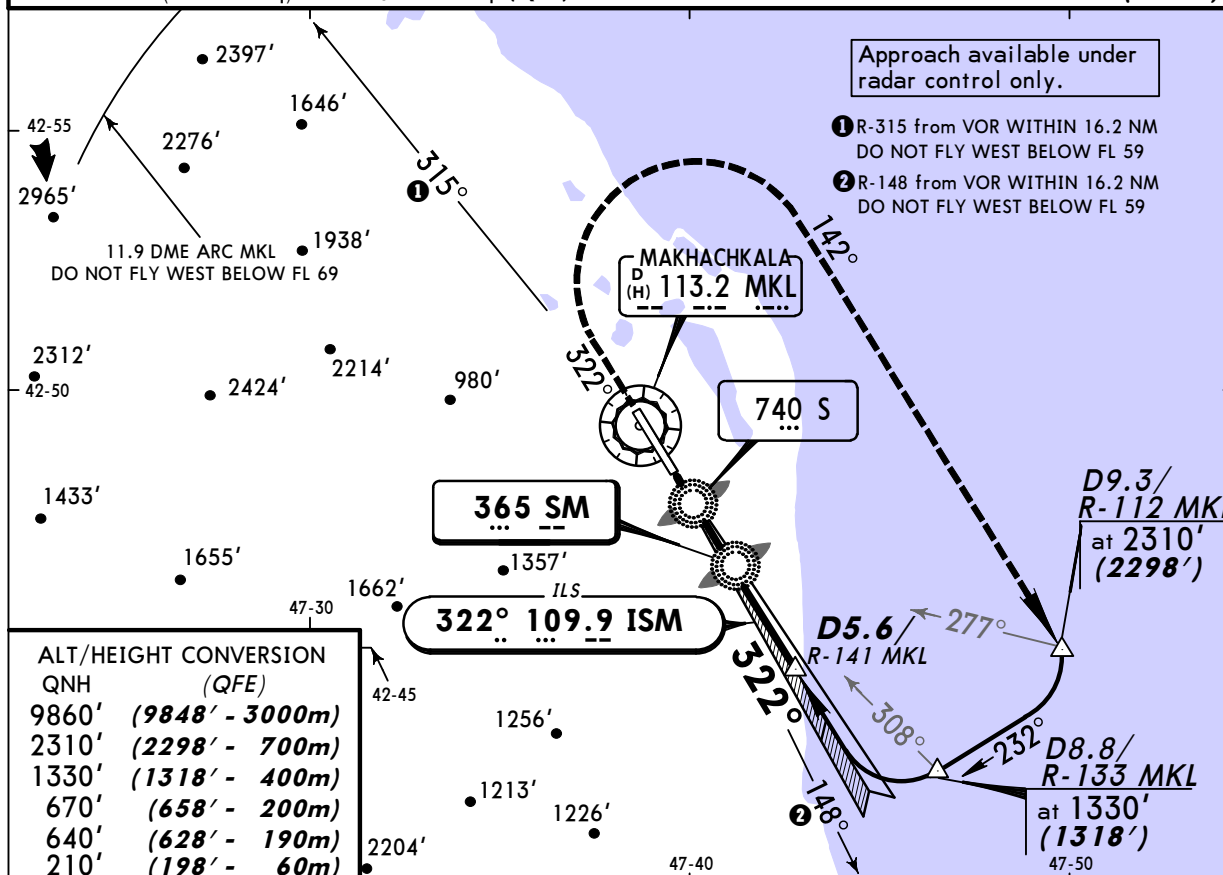
**URML/MCX**  
**UYTASH**

**JEPPesen**  
11 SEP 09 **(11-2)**

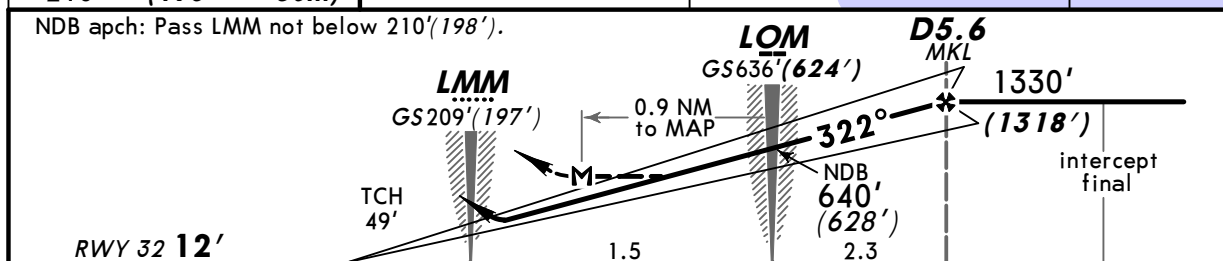
**MAKHACHKALA, RUSSIA**  
**ILS or 2 NDB Rwy 32**

BRIEFING STRIP

| ATIS                                                                                                                     |                           | MAKHACHKALA Approach (R)                 |                                       | MAKHACHKALA Krug (SRE)      |                                                                                     | MAKHACHKALA Start (TWR)  |  |
|--------------------------------------------------------------------------------------------------------------------------|---------------------------|------------------------------------------|---------------------------------------|-----------------------------|-------------------------------------------------------------------------------------|--------------------------|--|
| 125.47 (Russian 124.8)                                                                                                   |                           | 119.7                                    |                                       | 121.3                       |                                                                                     | 121.3                    |  |
| LOC<br>ISM<br>109.9                                                                                                      | Final<br>Apch Crs<br>322° | GS<br>LOM<br>636' (624')                 | ILS<br>DA(H)<br>Refer to<br>Minimums  | Apt Elev 15'<br><br>RWY 12' |  |                          |  |
| NDB<br>SM<br>365                                                                                                         |                           | Minimum Alt<br>D5.6 MKL<br>1330' (1318') | NDB<br>MDA(H)<br>Refer to<br>Minimums |                             |                                                                                     |                          |  |
| MISSED APCH: Climb on 322° to 670' (658'), then turn RIGHT onto 142° climbing to 2310' (2298'), then according to chart. |                           |                                          |                                       |                             |                                                                                     | MSA MKL VOR              |  |
| Alt Set: MM (hPa on req)                                                                                                 |                           | QNH on req (QFE)                         |                                       | Trans level: FL 108         |                                                                                     | Trans alt: 9860' (9848') |  |



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



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

| 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

CHANGES: ATIS frequency.

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