

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

| ACT | PROCEDURE IDENT | INDEX | REV DATE | EFF DATE |
|-----|-----------------|-------|----------|----------|
|-----|-----------------|-------|----------|----------|

**No revision activity since Disc 22-2010**

## **TERMINAL CHART NOTAMs**

**No Chart NOTAMs for Airport UKOO**

**General Info**

Odesa, UKR

N 46° 25.6' E 30° 40.7' Mag Var: 4.7°E

Elevation: 172'

Public, IFR, Control Tower, Customs

Fuel: 115-145, Jet A-1

Repairs: Minor Airframe, Minor Engine

Time Zone Info: GMT+2:00 uses DST

**Runway Info**

Runway 16-34 9186' x 184' asphalt

Runway 16 (160.0°M) TDZE 172'

Lights: Edge, ALS

Runway 34 (340.0°M) TDZE 165'

Lights: Edge, ALS

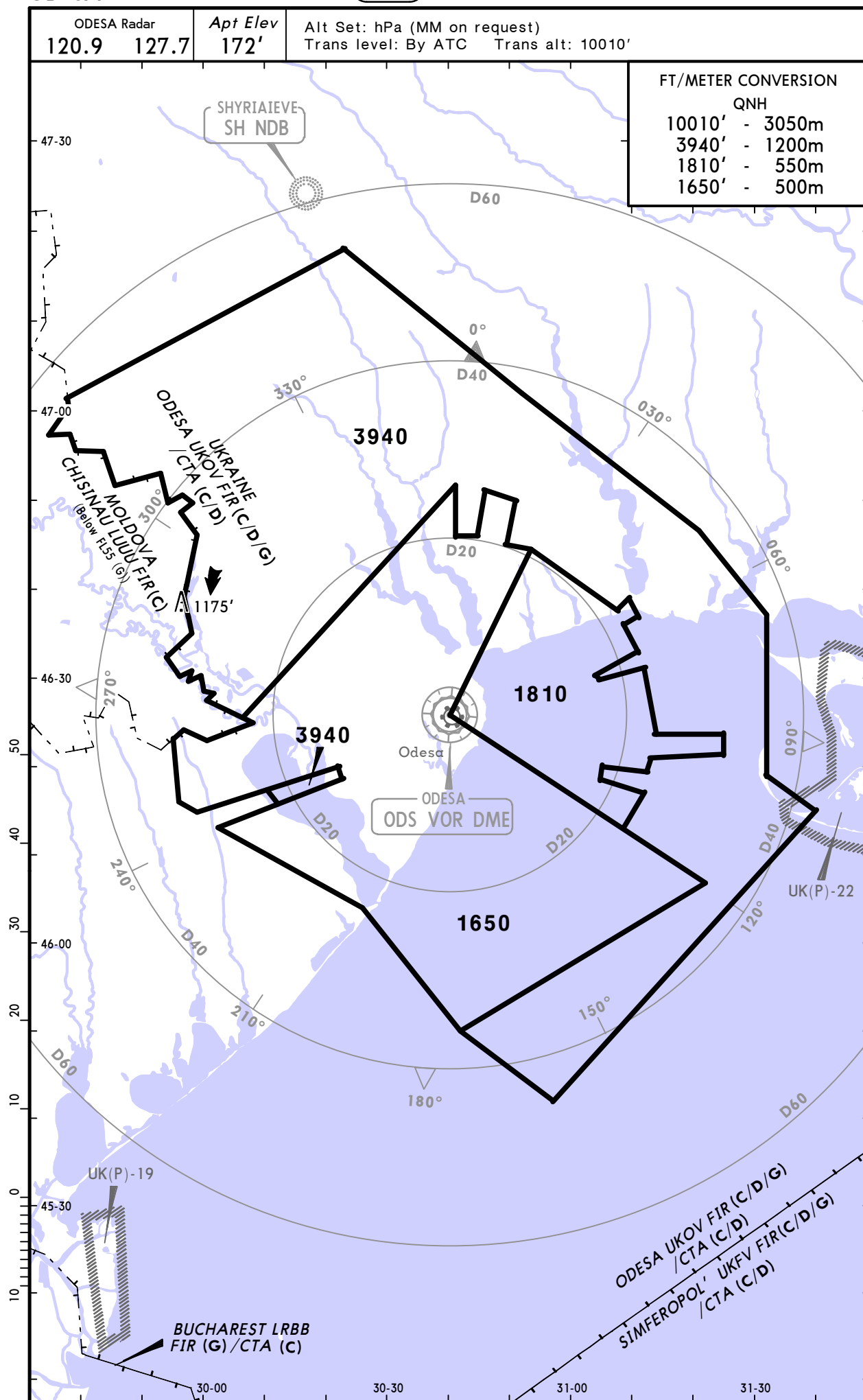
**Communications Info**ATIS **124.8**Odesa Tower **125.5**Odesa Ground Control **121.8**Odesa Radar Approach Control **127.7**Odesa Radar Approach Control **120.9****Notebook Info**

**UK00/ODS**  
**ODESA**

**JEPPESSEN**  
26 OCT 07 **(10-1R)**

**ODESA, UKRAINE**

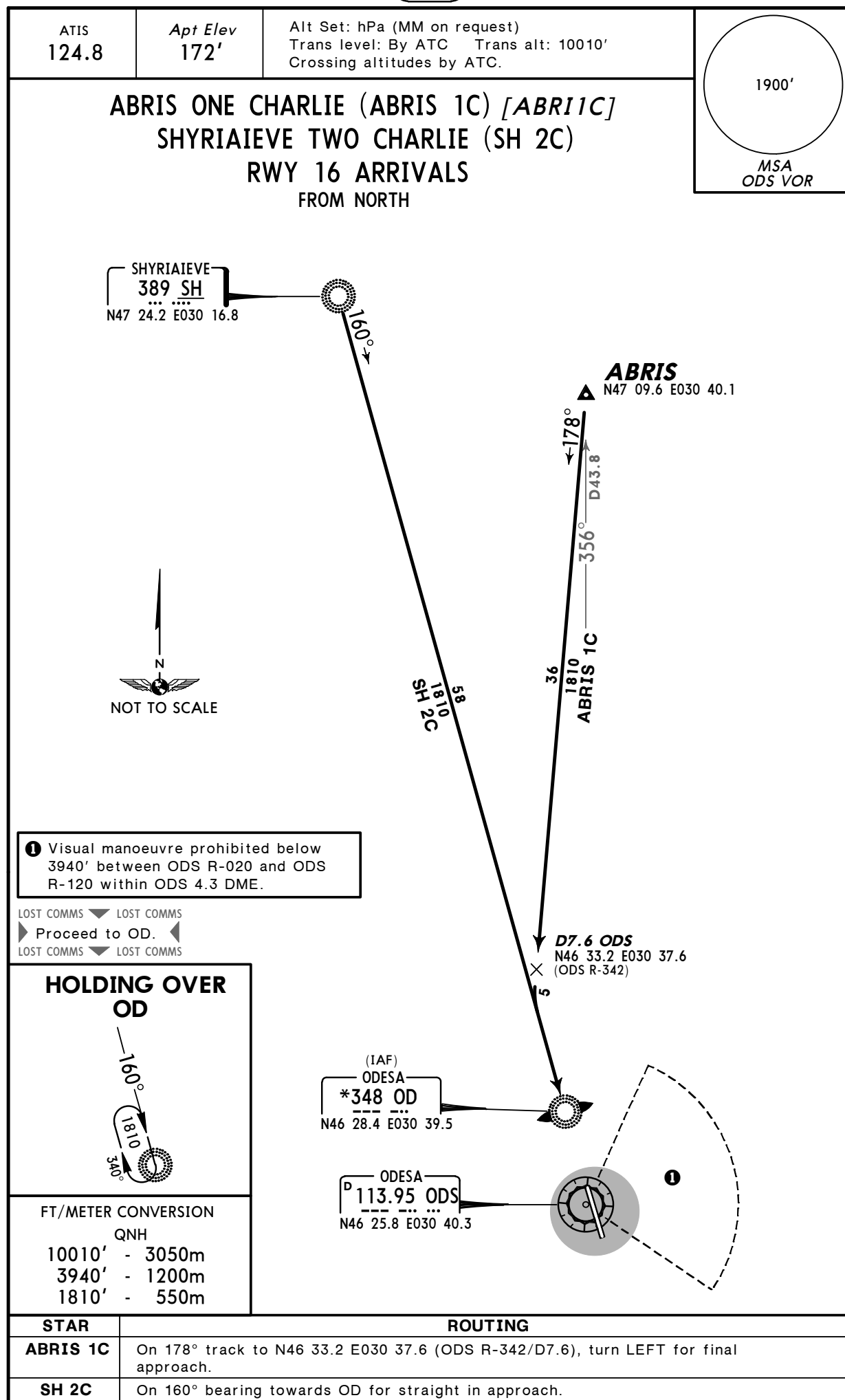
**RADAR MINIMUM ALTITUDES**



**UK00/ODS**  
**ODESA**

**JEPPESEN**  
 26 OCT 07 **10-2**

**ODESA, UKRAINE**  
**STAR**



**UK00/ODS**  
**ODESA**

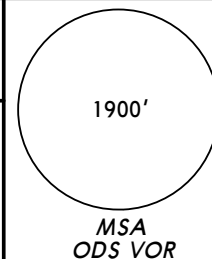
**JEPPESEN**  
 26 OCT 07 **(10-2A)**

**ODESA, UKRAINE**  
**STAR**

ATIS  
 124.8

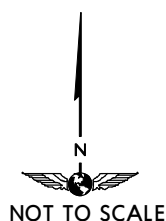
Apt Elev  
 172'

Alt Set: hPa (MM on request)  
 Trans level: By ATC Trans alt: 10010'  
 Crossing altitudes by ATC.



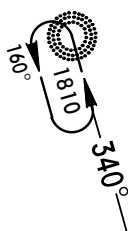
**ABRIS ONE DELTA (ABRIS 1D) [ABR11D)**  
**SHYRIAIEVE TWO DELTA (SH 2D)**  
**RWY 34 ARRIVALS**  
**FROM NORTH**

SHYRIAIEVE  
 389 SH  
 N47 24.2 E030 16.8

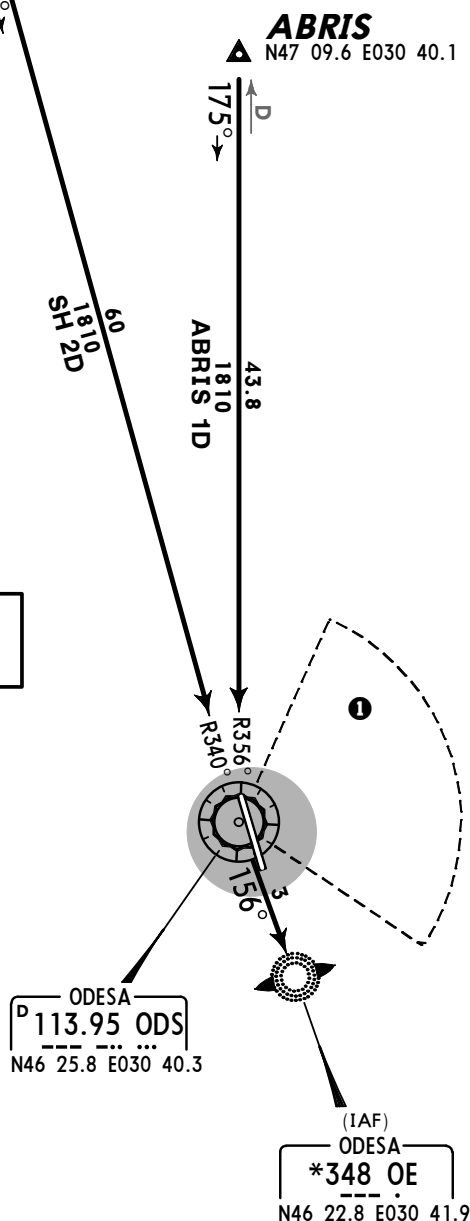


① Visual manoeuvre prohibited below 3940' between ODS R-020 and ODS R-120 within ODS 4.3 DME.

**HOLDING OVER OE**



| FT/METER CONVERSION |         |
|---------------------|---------|
| QNH                 |         |
| 10010'              | - 3050m |
| 3940'               | - 1200m |
| 1810'               | - 550m  |



**STAR**

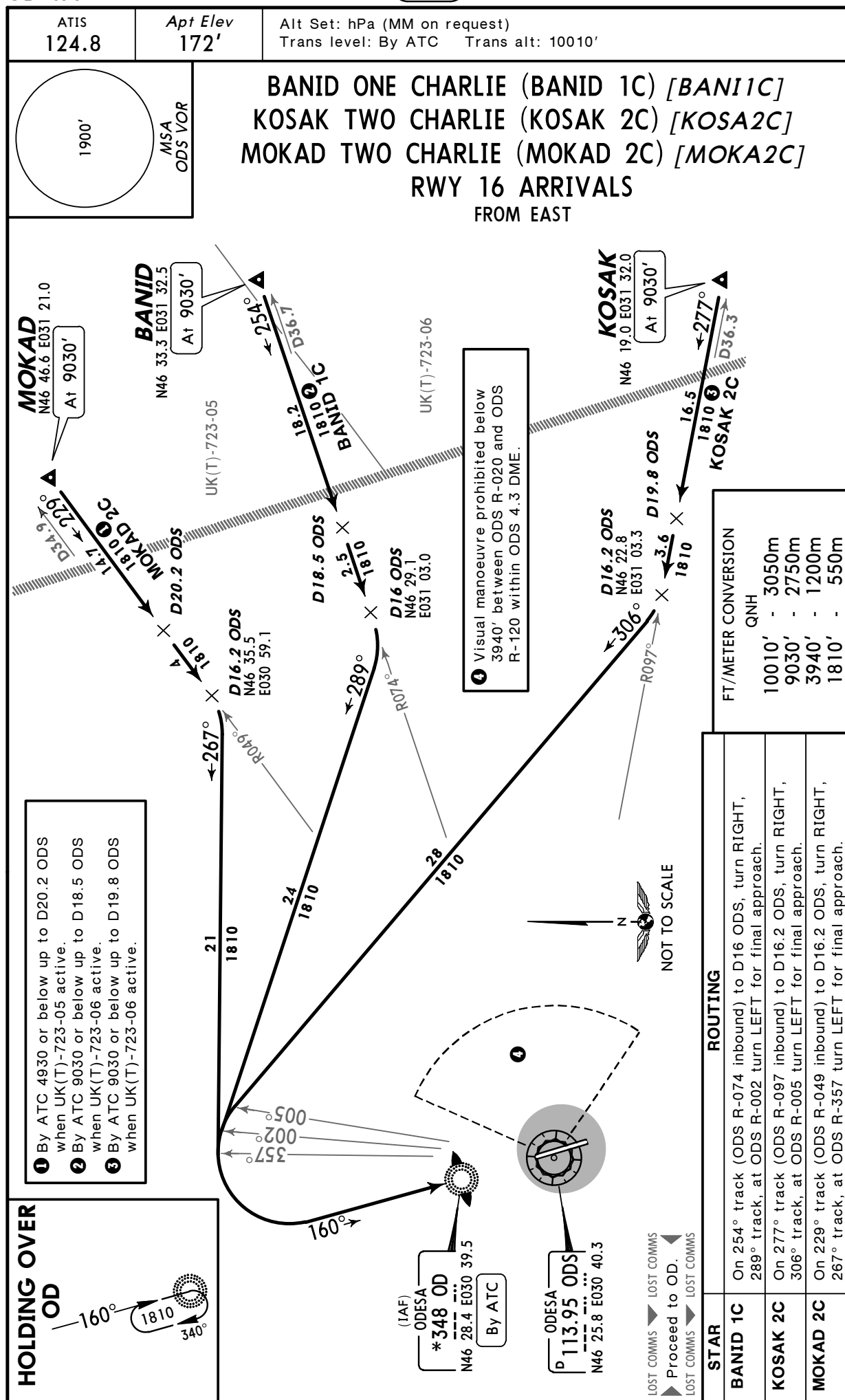
**ROUTING**

|                 |                                                                         |
|-----------------|-------------------------------------------------------------------------|
| <b>ABRIS 1D</b> | On 175° track (ODS R-356 inbound) to ODS, turn LEFT, ODS R-156 to OE.   |
| <b>SH 2D</b>    | On 160° bearing (ODS R-340 inbound) to ODS, turn LEFT, ODS R-156 to OE. |

UK00/ODS  
ODESA

JEPPesen  
26 OCT 07 (10-2B)

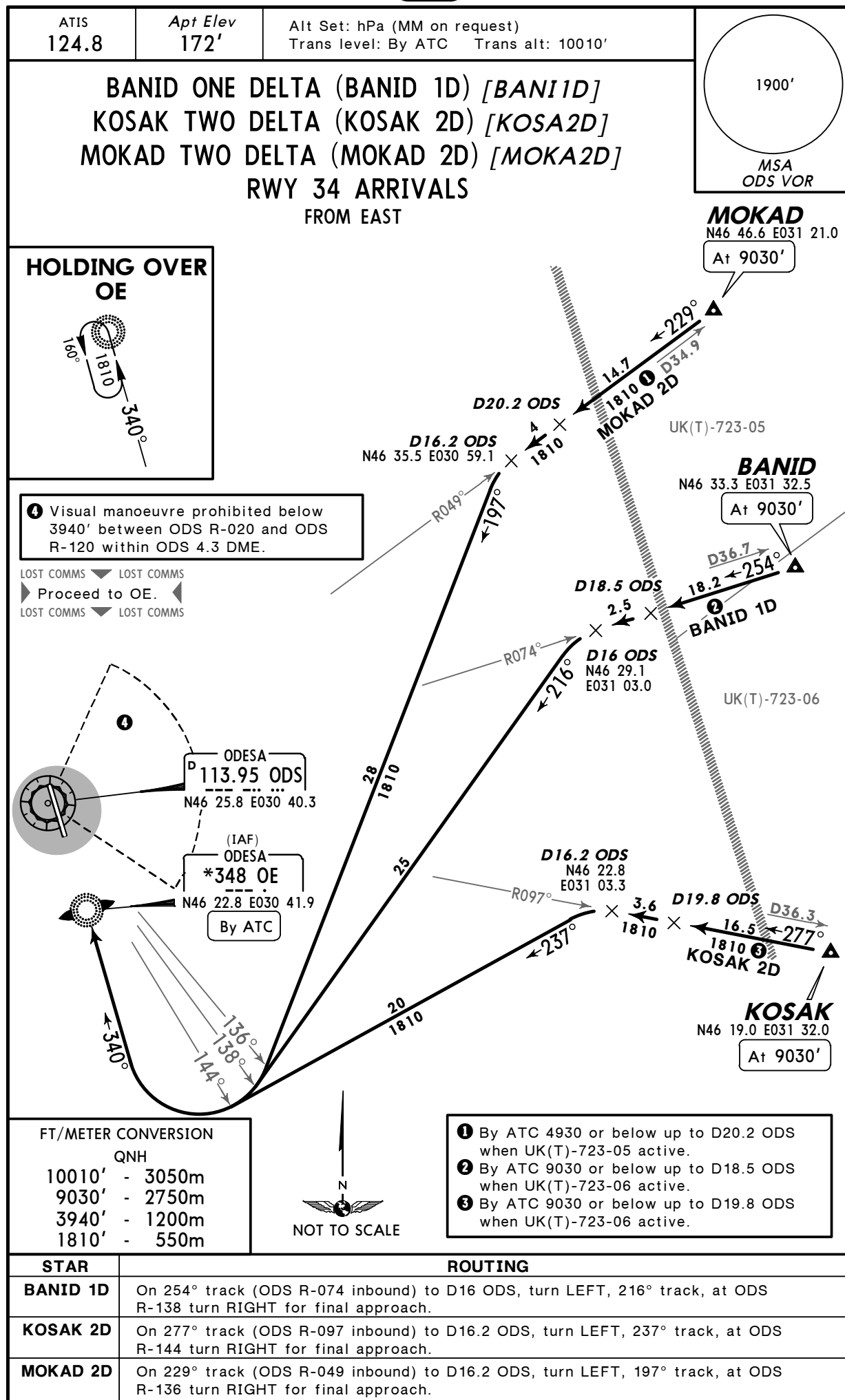
ODESA, UKRAINE  
STAR



**UK00/ODS**  
**ODESA**

**JEPPESSEN**  
 26 OCT 07 **(10-2C)**

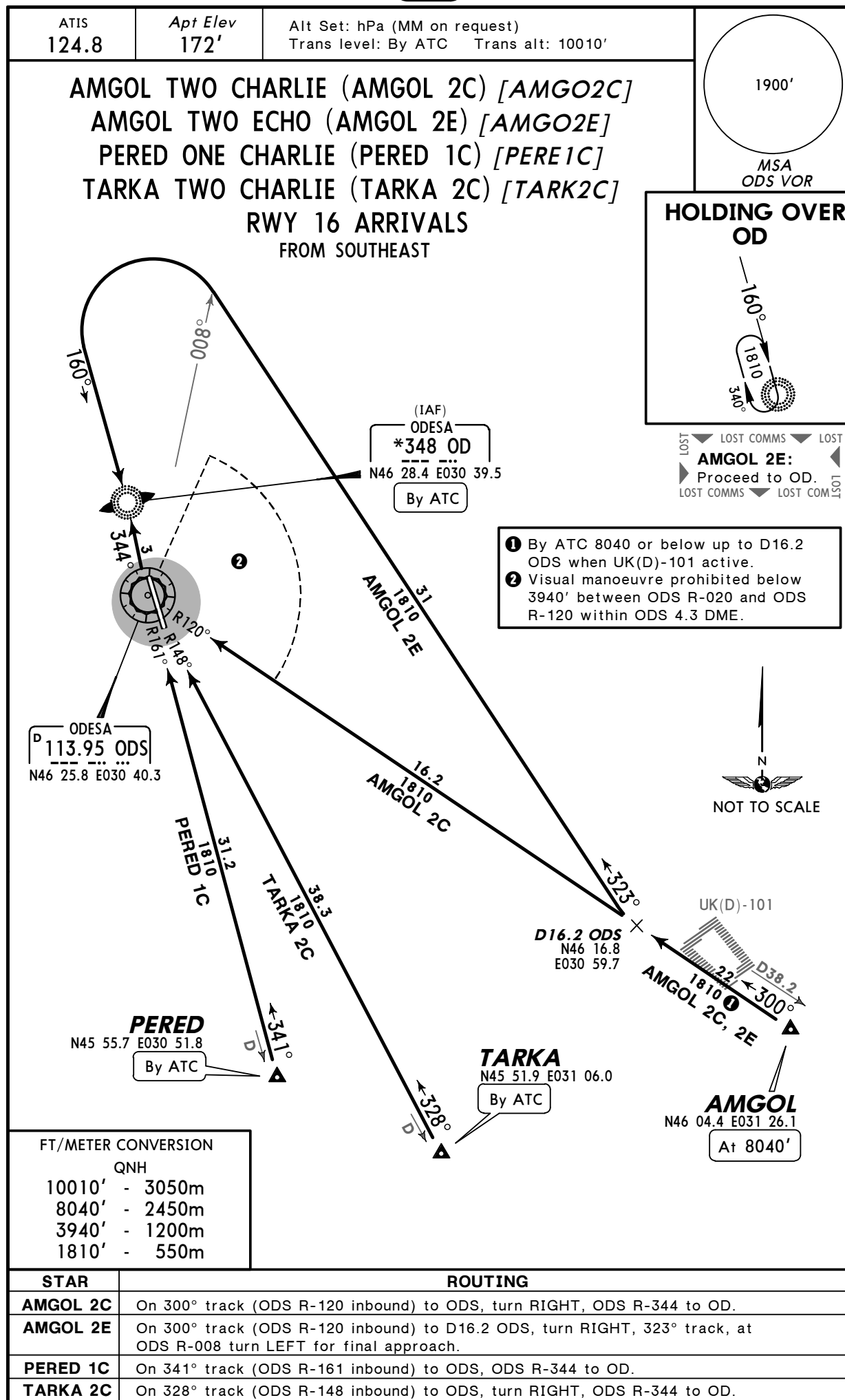
**ODESA, UKRAINE**  
**STAR**



**UK00/ODS**  
**ODESA**

**JEPPESSEN**  
 26 OCT 07 **(10-2D)**

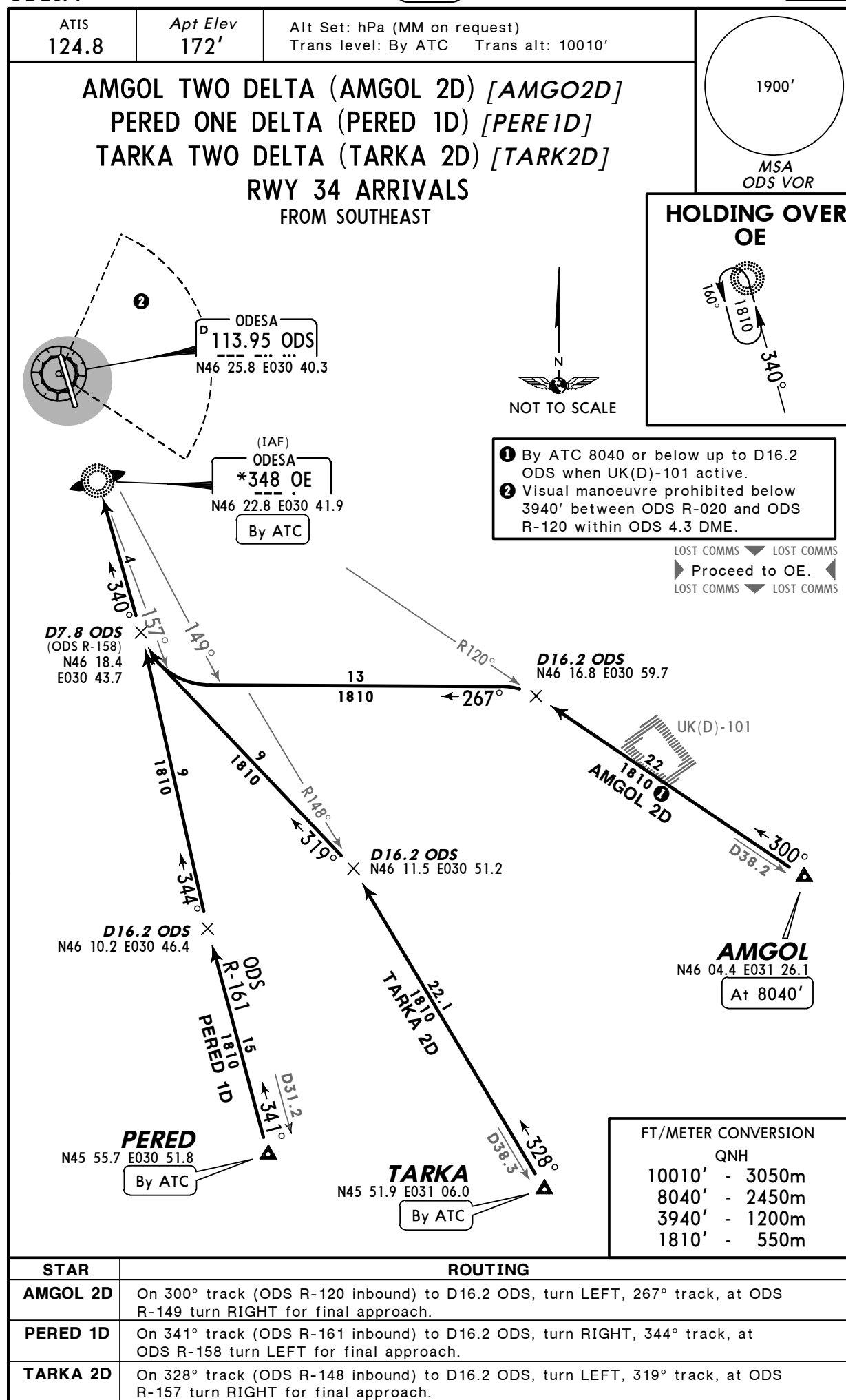
**ODESA, UKRAINE**  
**STAR**



**UK00/ODS**  
**ODESA**

**JEPPESSEN**  
26 OCT 07 **10-2E**

**ODESA, UKRAINE**  
**STAR**



**UK00/ODS**  
**ODESA**

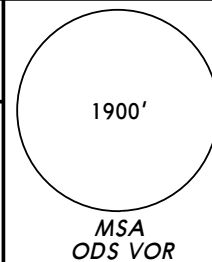
**JEPPESSEN**  
26 OCT 07 **10-2F**

**ODESA, UKRAINE**  
**STAR**

ATIS  
**124.8**

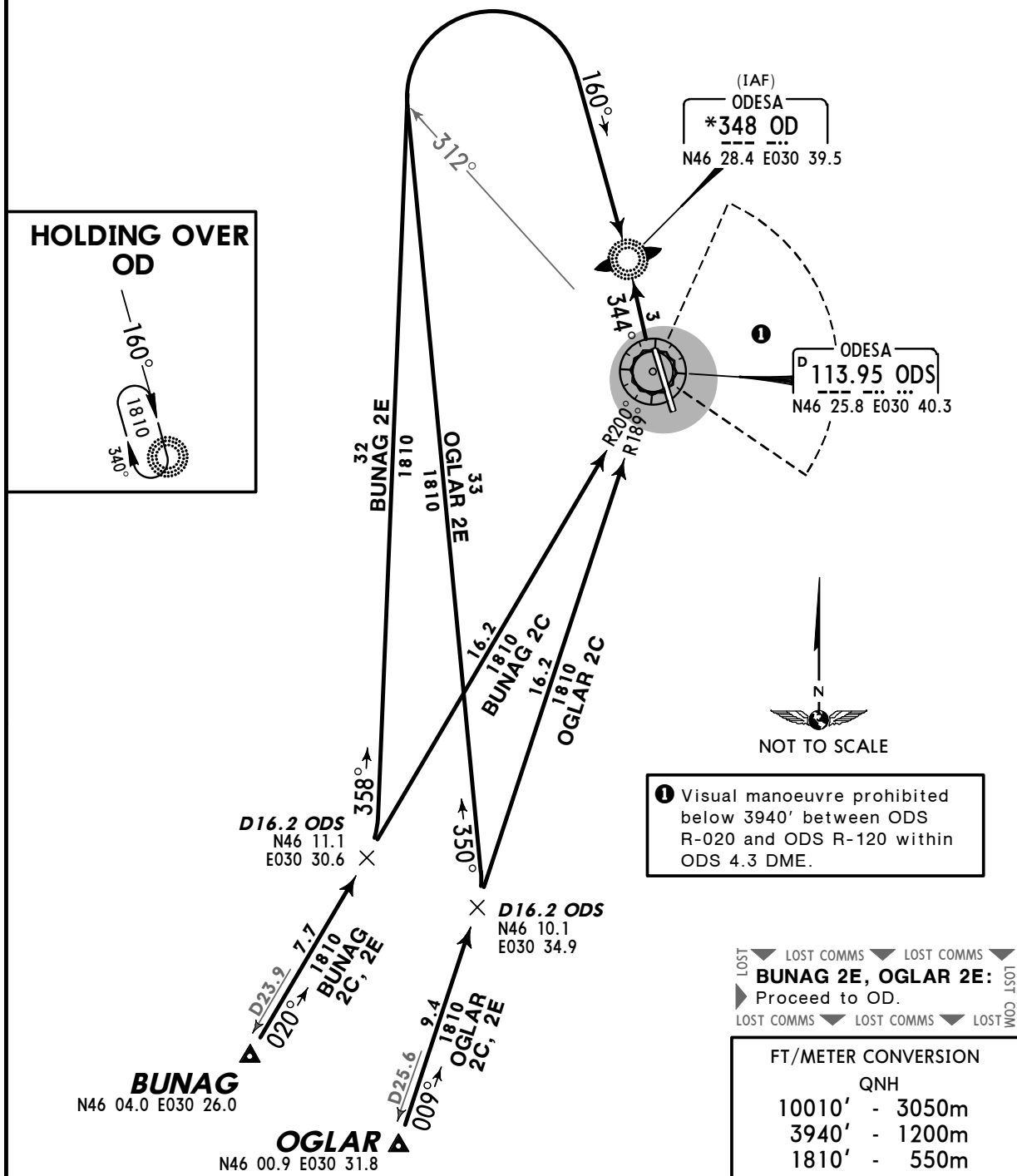
Apt Elev  
**172'**

Alt Set: hPa (MM on request)  
Trans level: By ATC    Trans alt: 10010'  
Crossing altitudes by ATC.



**BUNAG TWO CHARLIE (BUNAG 2C) [BUNA2C]**  
**BUNAG TWO ECHO (BUNAG 2E) [BUNA2E]**  
**OGLAR TWO CHARLIE (OGLAR 2C) [OGLA2C]**  
**OGLAR TWO ECHO (OGLAR 2E) [OGLA2E]**  
**RWY 16 ARRIVALS**  
**FROM SOUTHWEST**

**HOLDING OVER**



**①** Visual manoeuvre prohibited below 3940' between ODS R-020 and ODS R-120 within 4.3 DME.

LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼  
**BUNAG 2E, OGLAR 2E:**  
Proceed to OD.  
LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼

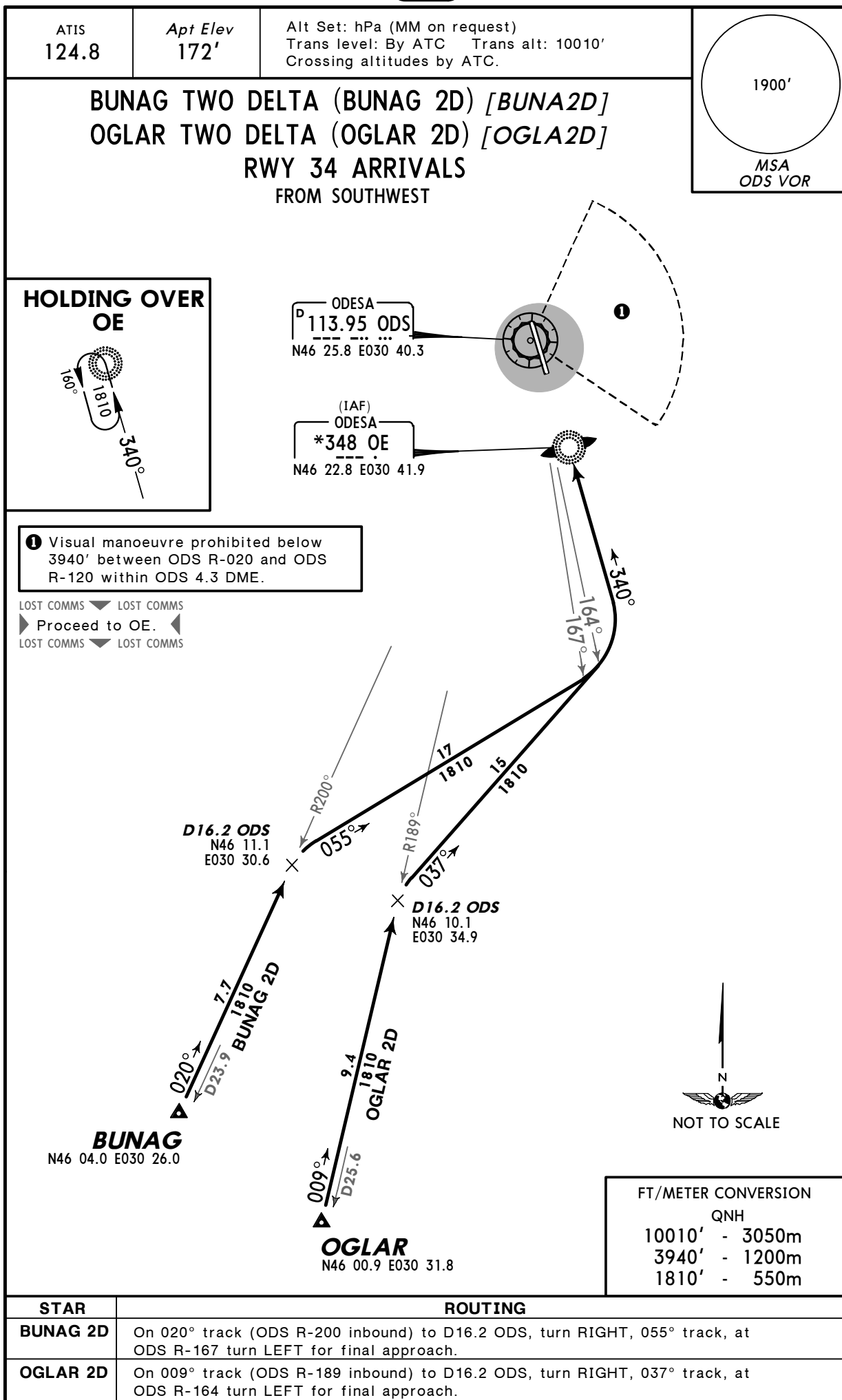
| FT/METER CONVERSION |         |
|---------------------|---------|
| QNH                 |         |
| 10010'              | - 3050m |
| 3940'               | - 1200m |
| 1810'               | - 550m  |

| STAR            | ROUTING                                                                                                            |
|-----------------|--------------------------------------------------------------------------------------------------------------------|
| <b>BUNAG 2C</b> | On 020° track (ODS R-200 inbound) to ODS, turn LEFT, ODS R-344 to OD.                                              |
| <b>BUNAG 2E</b> | On 020° track (ODS R-200 inbound) to D16.2 ODS, turn LEFT, 358° track, at ODS R-312 turn RIGHT for final approach. |
| <b>OGLAR 2C</b> | On 009° track (ODS R-189 inbound) to ODS, turn LEFT, ODS R-344 to OD.                                              |
| <b>OGLAR 2E</b> | On 009° track (ODS R-189 inbound) to D16.2 ODS, turn LEFT, 350° track, at ODS R-312 turn RIGHT for final approach. |

**UK00/ODS**  
**ODESA**

**JEPPESEN**  
 26 OCT 07 **(10-2G)**

**ODESA, UKRAINE**  
**STAR**

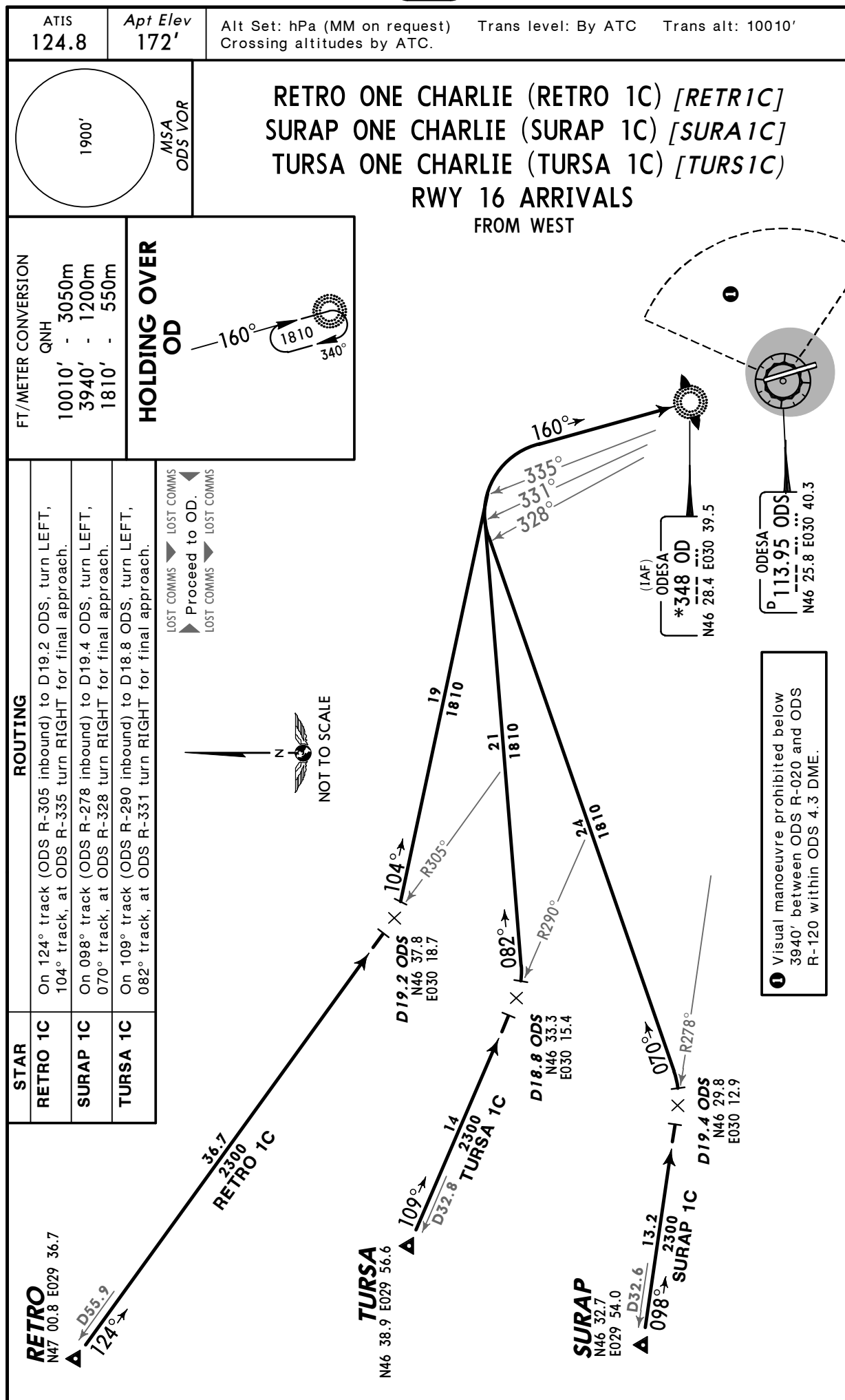


| STAR            | ROUTING                                                                                                            |
|-----------------|--------------------------------------------------------------------------------------------------------------------|
| <b>BUNAG 2D</b> | On 020° track (ODS R-200 inbound) to D16.2 ODS, turn RIGHT, 055° track, at ODS R-167 turn LEFT for final approach. |
| <b>OGLAR 2D</b> | On 009° track (ODS R-189 inbound) to D16.2 ODS, turn RIGHT, 037° track, at ODS R-164 turn LEFT for final approach. |

**UK00/ODS**  
**ODESA**

**JEPPesen**  
26 OCT 07 **(10-2H)**

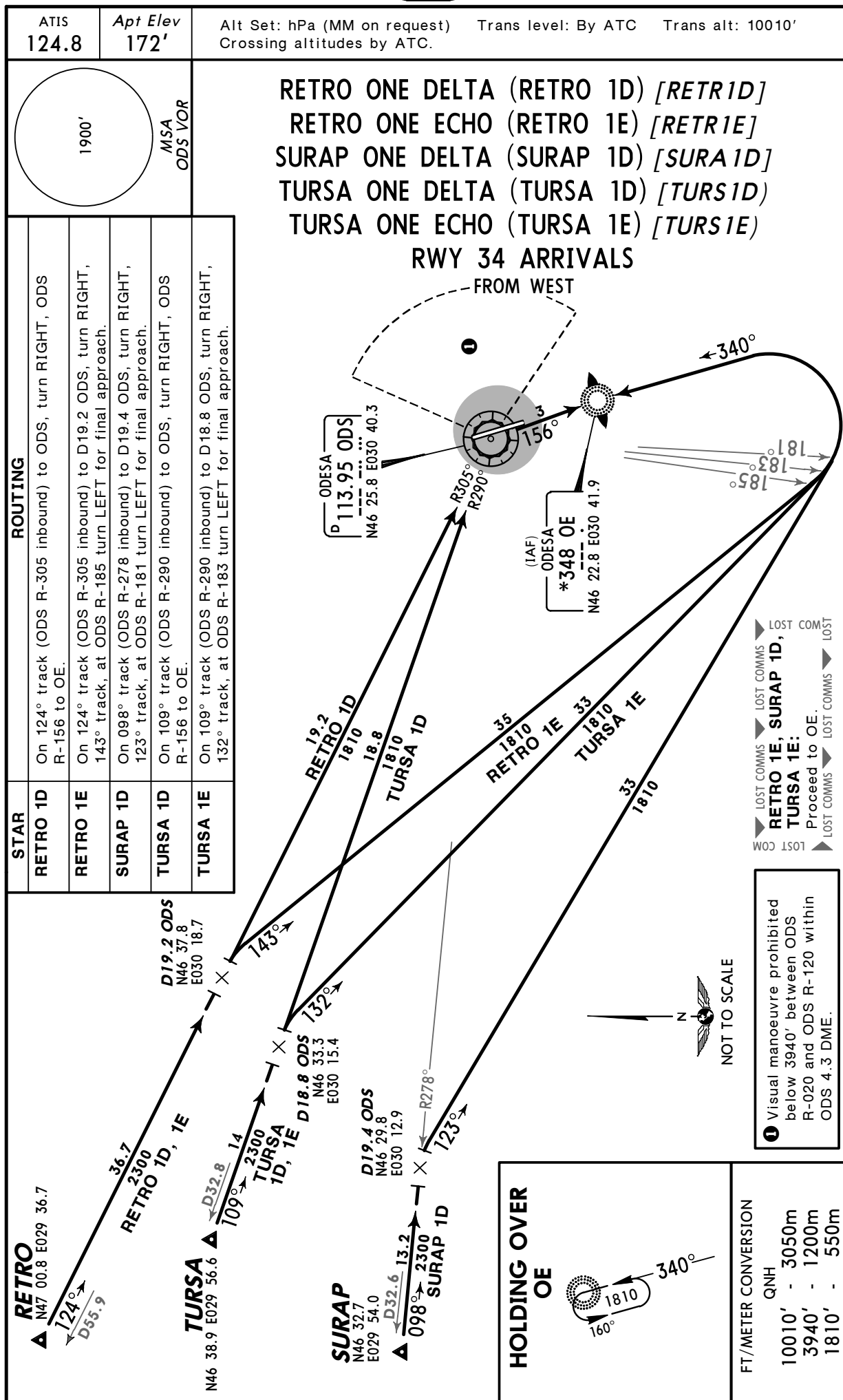
**ODESA, UKRAINE**  
**STAR**



**UK00/ODS**  
**ODESA**

**JEPPESSEN**  
 26 OCT 07 **(10-2J)**

**ODESA, UKRAINE**  
**STAR**



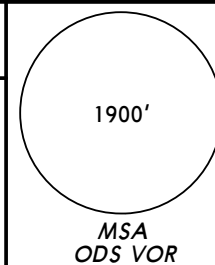
**UK00/ODS**  
**ODESA**

**JEPPESSEN**  
26 OCT 07 **10-3**

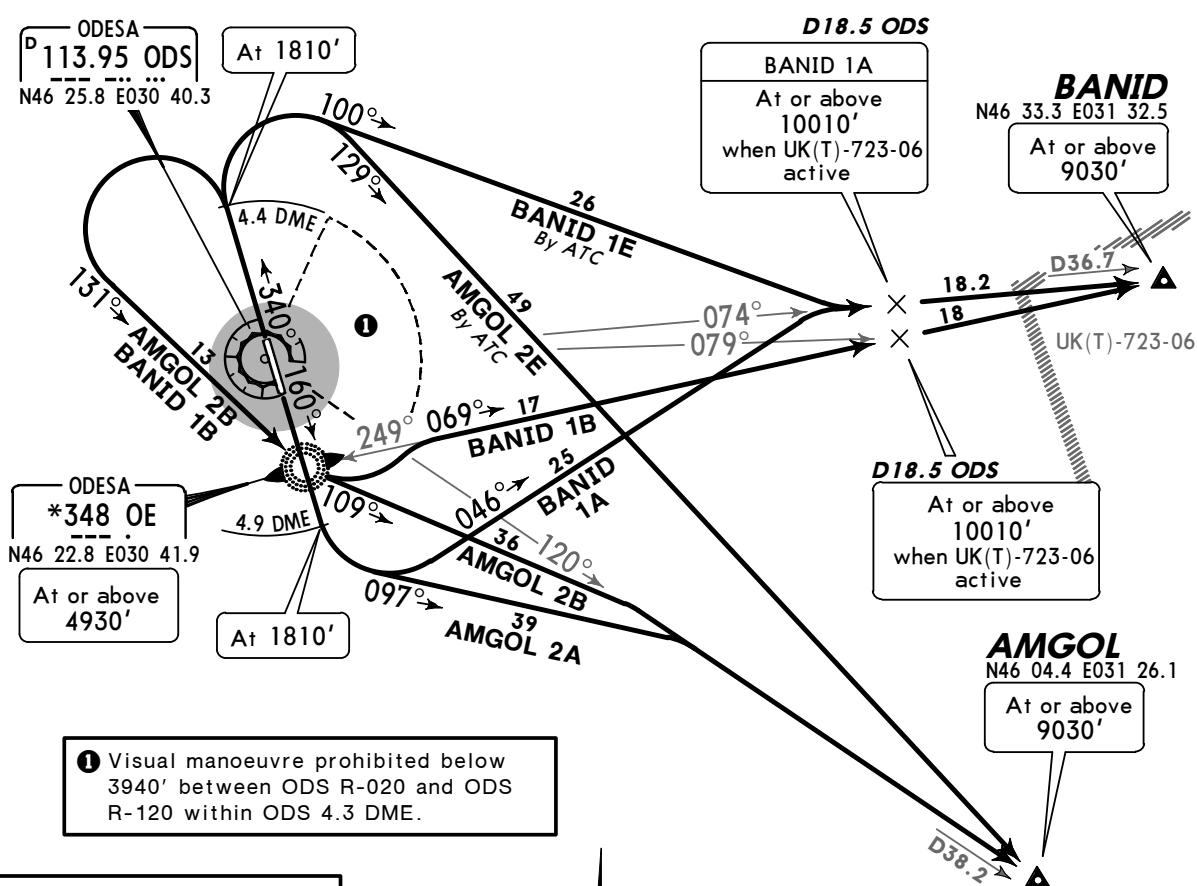
**ODESA, UKRAINE**  
**SID**

Apt Elev  
**172'**

Trans level: By ATC    Trans alt: 10010'



**AMGOL TWO ALFA (AMGOL 2A) [AMGO2A]**  
**AMGOL TWO BRAVO (AMGOL 2B) [AMGO2B]**  
**AMGOL TWO ECHO (AMGOL 2E) [AMGO2E]**  
**BANID ONE ALFA (BANID 1A) [BANI1A]**  
**BANID ONE BRAVO (BANID 1B) [BANI1B]**  
**BANID ONE ECHO (BANID 1E) [BANI1E]**  
**RWYS 16, 34 DEPARTURES**



**FT/METER CONVERSION**

|        | QNH     |
|--------|---------|
| 1810'  | - 550m  |
| 3940'  | - 1200m |
| 4930'  | - 1500m |
| 9030'  | - 2750m |
| 10010' | - 3050m |

NOT TO SCALE

| SID                       | RWY       | ROUTING                                                                                                                           |
|---------------------------|-----------|-----------------------------------------------------------------------------------------------------------------------------------|
| <b>AMGOL 2A</b>           | <b>16</b> | Climb on 160° track to ODS 4.9 DME, turn LEFT, 097° track, intercept ODS R-120 to AMGOL.                                          |
| <b>AMGOL 2B</b>           | <b>34</b> | Climb on 340° track to ODS 4.4 DME, turn LEFT, intercept 131° bearing to OE, turn LEFT, 109° track, intercept ODS R-120 to AMGOL. |
| <b>AMGOL 2E</b><br>By ATC |           | Climb on 340° track to ODS 4.4 DME, turn RIGHT, 129° track to AMGOL.                                                              |
| <b>BANID 1A</b>           | <b>16</b> | Climb on 160° track to ODS 4.9 DME, turn LEFT, 046° track, intercept ODS R-074 to BANID.                                          |
| <b>BANID 1B</b>           | <b>34</b> | Climb on 340° track to ODS 4.4 DME, turn LEFT, intercept 131° bearing to OE, turn LEFT, intercept 069° bearing from OE to BANID.  |
| <b>BANID 1E</b><br>By ATC |           | Climb on 340° track to ODS 4.4 DME, turn RIGHT, 100° track, intercept ODS R-074 to BANID.                                         |

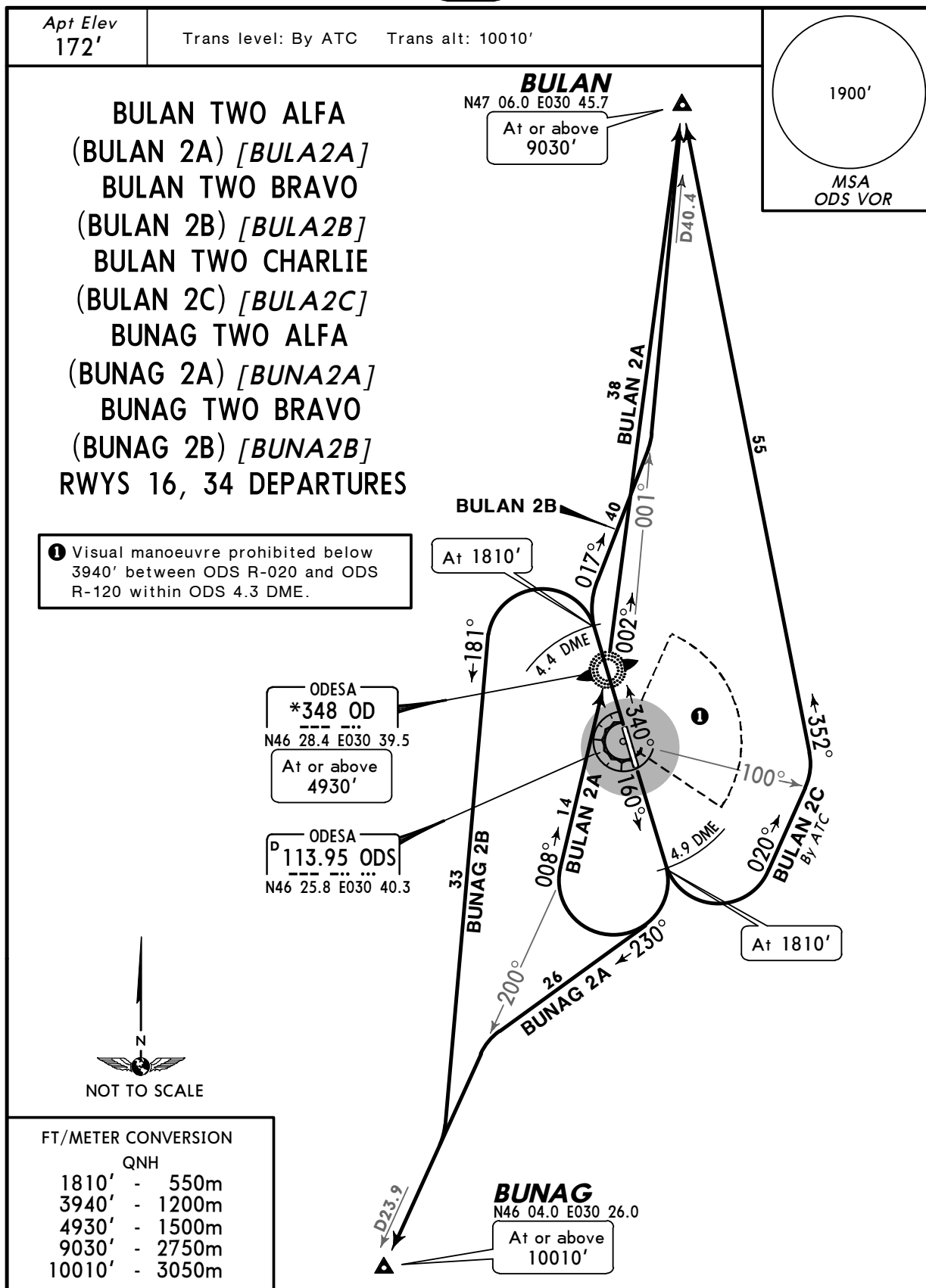
CHANGES: Altitude conversion.

© JEPPESSEN SANDERSON, INC., 2004, 2007. ALL RIGHTS RESERVED.

**UK00/ODS**  
**ODESA**

**JEPPESSEN**  
26 OCT 07 **(10-3A)**

**ODESA, UKRAINE**  
**SID**



| SID                | RWY | ROUTING                                                                                                         |
|--------------------|-----|-----------------------------------------------------------------------------------------------------------------|
| BULAN 2A           | 16  | Climb on 160° track to ODS 4.9 DME, turn RIGHT, intercept 008° bearing to OD, turn LEFT, 002° bearing to BULAN. |
| BULAN 2B           | 34  | Climb on 340° track to ODS 4.4 DME, turn RIGHT, 017° track, intercept ODS R-001 to BULAN.                       |
| BULAN 2C<br>By ATC | 16  | Climb on 160° track to ODS 4.9 DME, turn LEFT, 020° track, at ODS R-100 turn LEFT, 352° track to BULAN.         |
| BUNAG 2A           |     | Climb on 160° track to ODS 4.9 DME, turn RIGHT, 230° track, intercept ODS R-200 to BUNAG.                       |
| BUNAG 2B           | 34  | Climb on 340° track to ODS 4.4 DME, turn LEFT, 181° track, intercept ODS R-200 to BUNAG.                        |

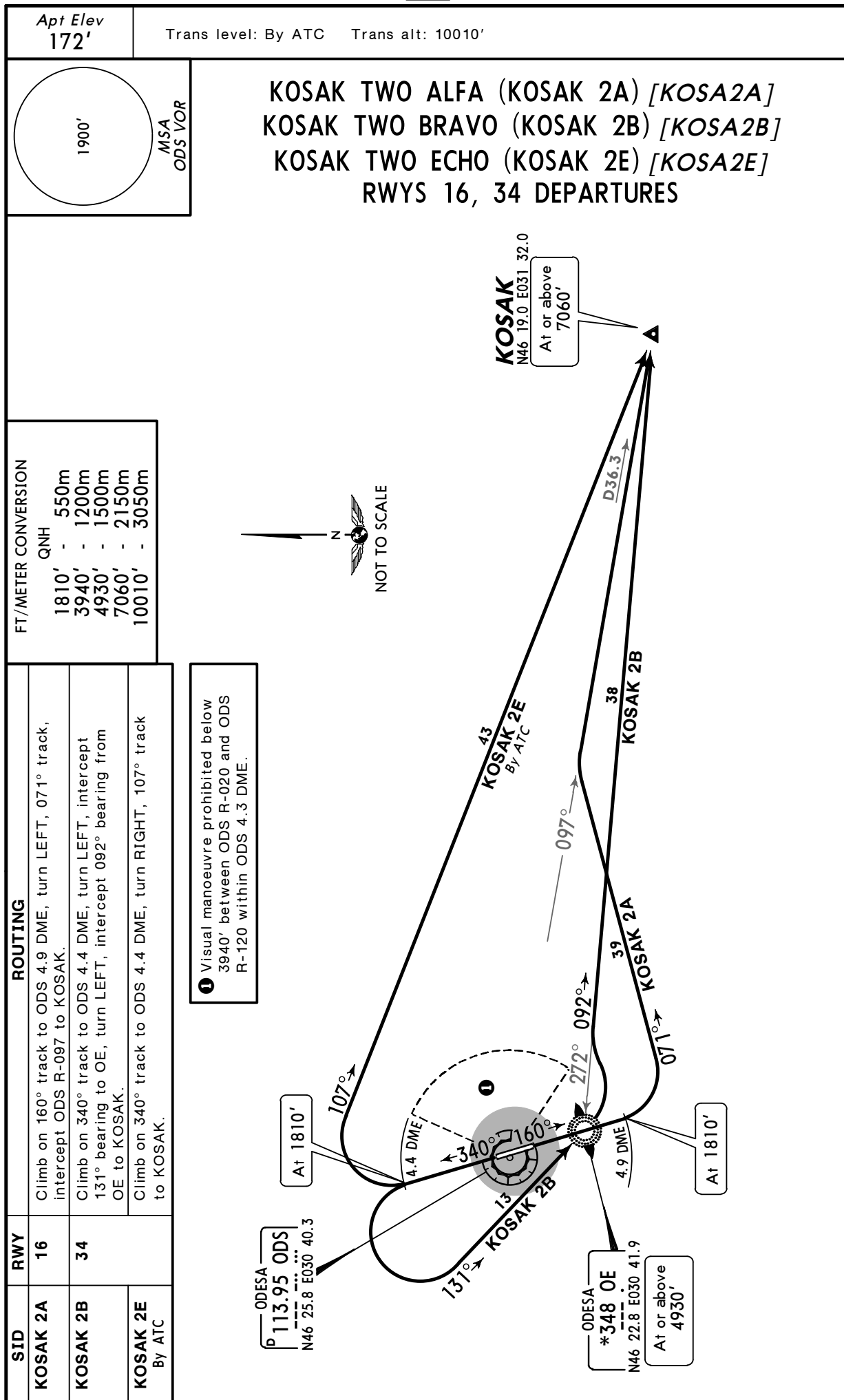
**UK00/ODS**  
**ODESA**

**JEPPESEN**

26 OCT 07 **(10-3B)**

**ODESA, UKRAINE**

**SID**



UK00/ODS  
ODESA



**JEPPESEN**

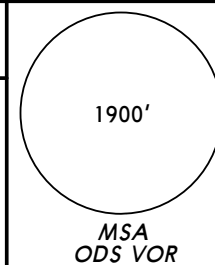
26 OCT 07 (10-3C)

## ODESA, UKRAINE

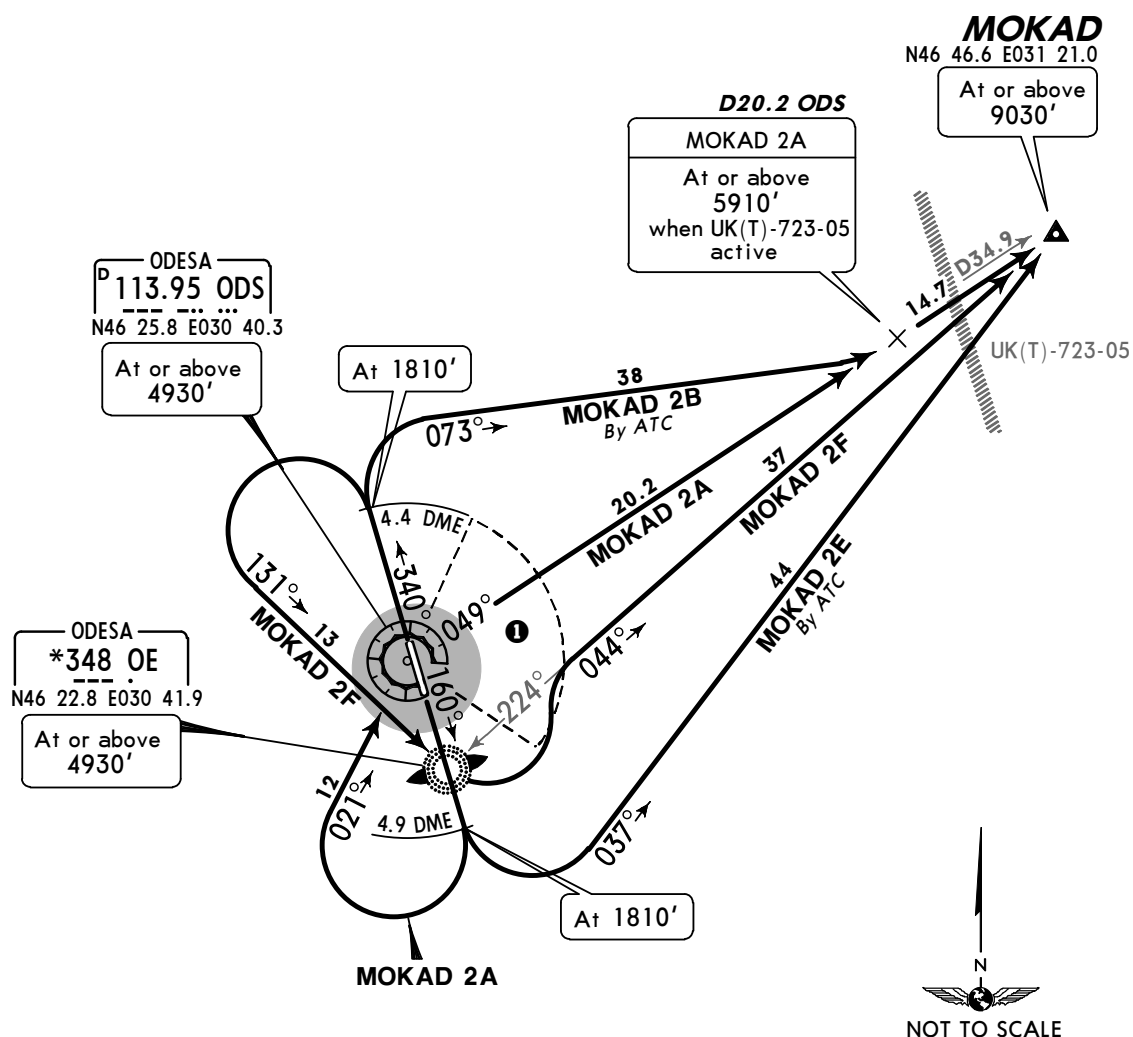
**SID**

*Apt Elev*  
172'

Trans level: By ATC      Trans alt: 10010'



MOKAD TWO ALFA (MOKAD 2A) [MOKA2A]  
MOKAD TWO BRAVO (MOKAD 2B) [MOKA2B]  
MOKAD TWO ECHO (MOKAD 2E) [MOKA2E]  
MOKAD TWO FOXTROT (MOKAD 2F) [MOKA2F]  
RWYS 16, 34 DEPARTURES



**1** Visual manoeuvre prohibited below 3940' between ODS R-020 and ODS R-120 within ODS 4.3 DME.

## FT/METER CONVERSION

QNH

|        |   |       |
|--------|---|-------|
| 1810'  | - | 550m  |
| 3940'  | - | 1200m |
| 4930'  | - | 1500m |
| 5910'  | - | 1800m |
| 9030'  | - | 2750m |
| 10010' | - | 3050m |

| SID                       | RWY       | ROUTING                                                                                                                          |
|---------------------------|-----------|----------------------------------------------------------------------------------------------------------------------------------|
| <b>MOKAD 2A</b>           | <b>16</b> | Climb on 160° track to ODS 4.9 DME, turn RIGHT, 021° track to ODS, turn RIGHT, ODS R-049 to MOKAD.                               |
| <b>MOKAD 2B</b><br>By ATC | <b>34</b> | Climb on 340° track to ODS 4.4 DME, turn RIGHT, 073° track, intercept ODS R-049 to MOKAD.                                        |
| <b>MOKAD 2E</b><br>By ATC | <b>16</b> | Climb on 160° track to ODS 4.9 DME, turn LEFT, 037° track to MOKAD.                                                              |
| <b>MOKAD 2F</b>           | <b>34</b> | Climb on 340° track to ODS 4.4 DME, turn LEFT, intercept 131° bearing to OE, turn LEFT, intercept 044° bearing from OE to MOKAD. |

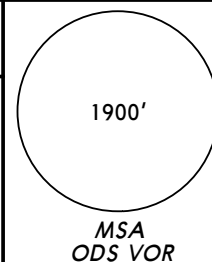
**UK00/ODS**  
**ODESA**

**JEPPESEN**  
 26 OCT 07 **(10-3D)**

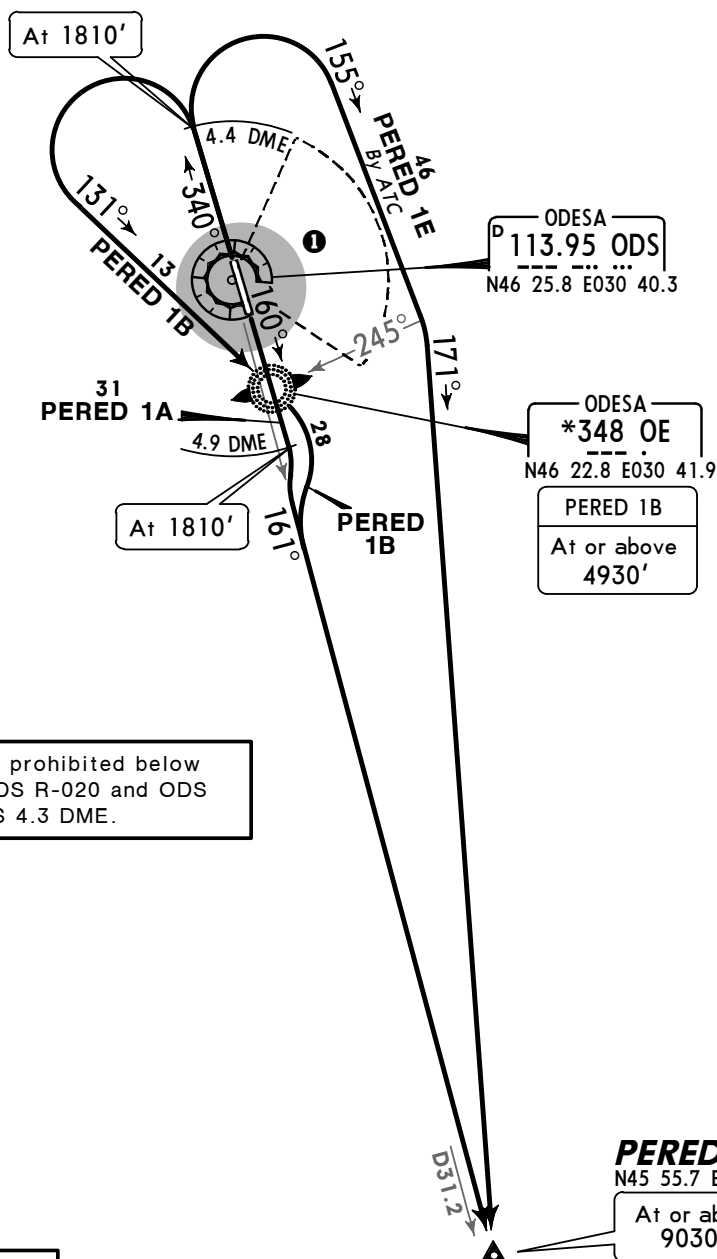
**ODESA, UKRAINE**  
**SID**

Apt Elev  
 172'

Trans level: By ATC Trans alt: 10010'



**PERED ONE ALFA (PERED 1A) [PERE1A]  
 PERED ONE BRAVO (PERED 1B) [PERE1B]  
 PERED ONE ECHO (PERED 1E) [PERE1E]  
 RWYS 16, 34 DEPARTURES**



**1** Visual manoeuvre prohibited below 3940' between ODS R-020 and ODS R-120 within ODS 4.3 DME.



NOT TO SCALE

**FT/METER CONVERSION**

| QNH    |         |
|--------|---------|
| 1810'  | - 550m  |
| 3940'  | - 1200m |
| 4930'  | - 1500m |
| 9030'  | - 2750m |
| 10010' | - 3050m |

| SID                       | RWY       | ROUTING                                                                                                            |
|---------------------------|-----------|--------------------------------------------------------------------------------------------------------------------|
| <b>PERED 1A</b>           | <b>16</b> | Climb on 160° track to ODS 4.9 DME, turn RIGHT, intercept ODS R-161 to PERED.                                      |
| <b>PERED 1B</b>           | <b>34</b> | Climb on 340° track to ODS 4.4 DME, turn LEFT, intercept ODS R-161 to PERED.                                       |
| <b>PERED 1E</b><br>By ATC |           | Climb on 340° track to ODS 4.4 DME, turn RIGHT, 155° track, at 245° bearing to OE turn RIGHT, 171° track to PERED. |

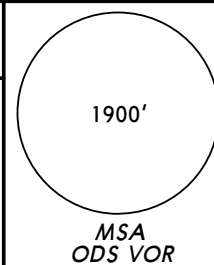
**UK00/ODS**  
**ODESA**

**JEPPESEN**  
 26 OCT 07 **10-3E**

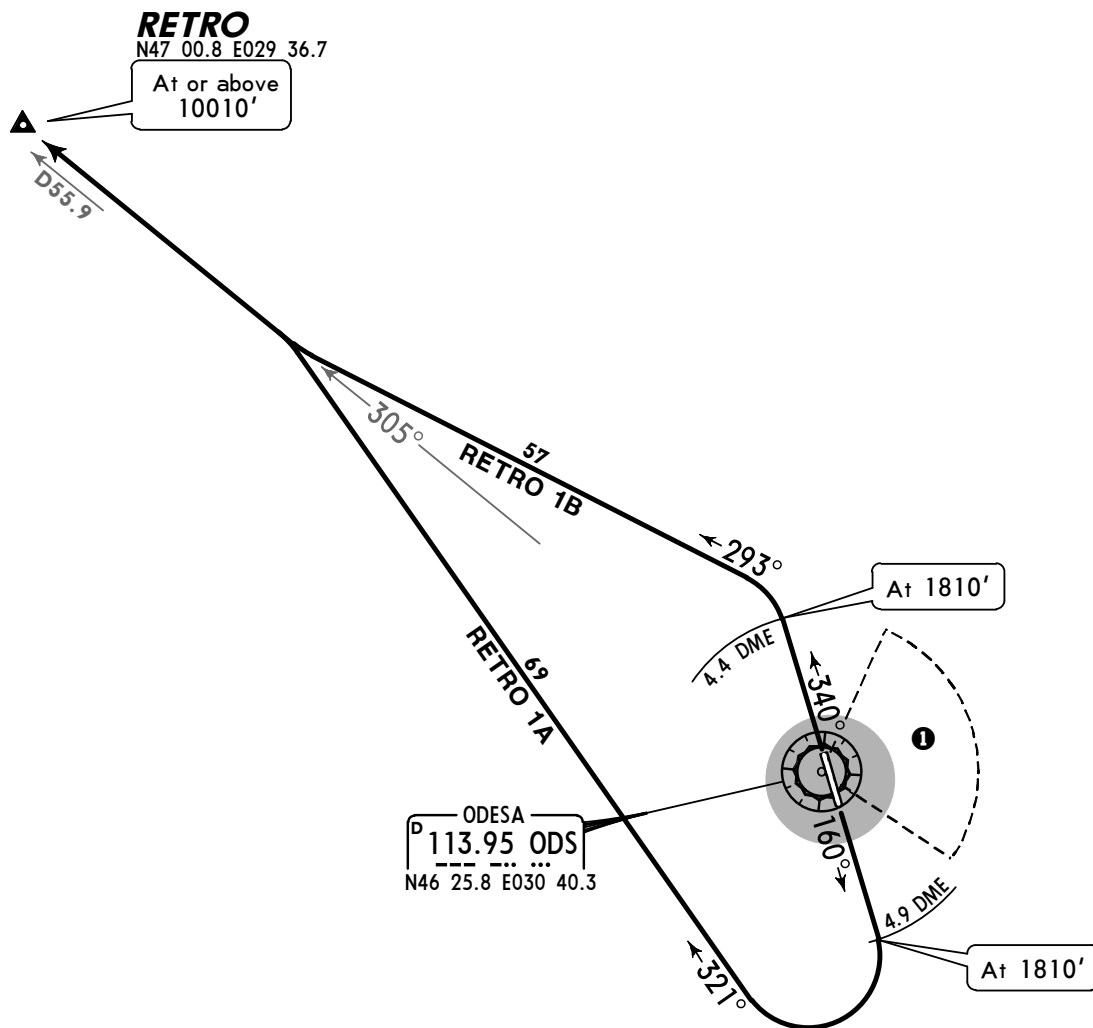
**ODESA, UKRAINE**  
**SID**

Apt Elev  
 172'

Trans level: By ATC Trans alt: 10010'



**RETRO ONE ALFA (RETRO 1A) [RETR1A]**  
**RETRO ONE BRAVO (RETRO 1B) [RETR1B]**  
**RWYS 16, 34 DEPARTURES**  
 BY ATC



① Visual manoeuvre prohibited below  
 3940' between ODS R-020 and ODS  
 R-120 within ODS 4.3 DME.

**FT/METER CONVERSION**  
 QNH  
 1810' - 550m  
 3940' - 1200m  
 10010' - 3050m

| SID             | RWY       | ROUTING                                                                                   |
|-----------------|-----------|-------------------------------------------------------------------------------------------|
| <b>RETRO 1A</b> | <b>16</b> | Climb on 160° track to ODS 4.9 DME, turn RIGHT, 321° track, intercept ODS R-305 to RETRO. |
| <b>RETRO 1B</b> | <b>34</b> | Climb on 340° track to ODS 4.4 DME, turn LEFT, 293° track, intercept ODS R-305 to RETRO.  |

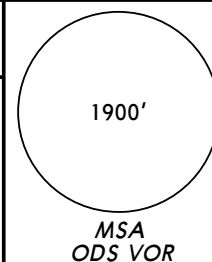
**UK00/ODS**  
**ODESA**

**JEPPESEN**  
26 OCT 07 **(10-3F)**

**ODESA, UKRAINE**  
**SID**

Apt Elev  
**172'**

Trans level: By ATC    Trans alt: 10010'



**SHYRIAIEVE TWO ALFA (SH 2A)**  
**SHYRIAIEVE TWO BRAVO (SH 2B)**  
**SHYRIAIEVE TWO ECHO (SH 2E)**  
**SURAP ONE ALFA (SURAP 1A) [SURA1A]**  
**SURAP ONE BRAVO (SURAP 1B) [SURA1B]**  
**RWYS 16, 34 DEPARTURES**

**SHYRIAIEVE**  
**389 SH**  
... ..  
N47 24.2 E030 16.8  
At or above  
10010'

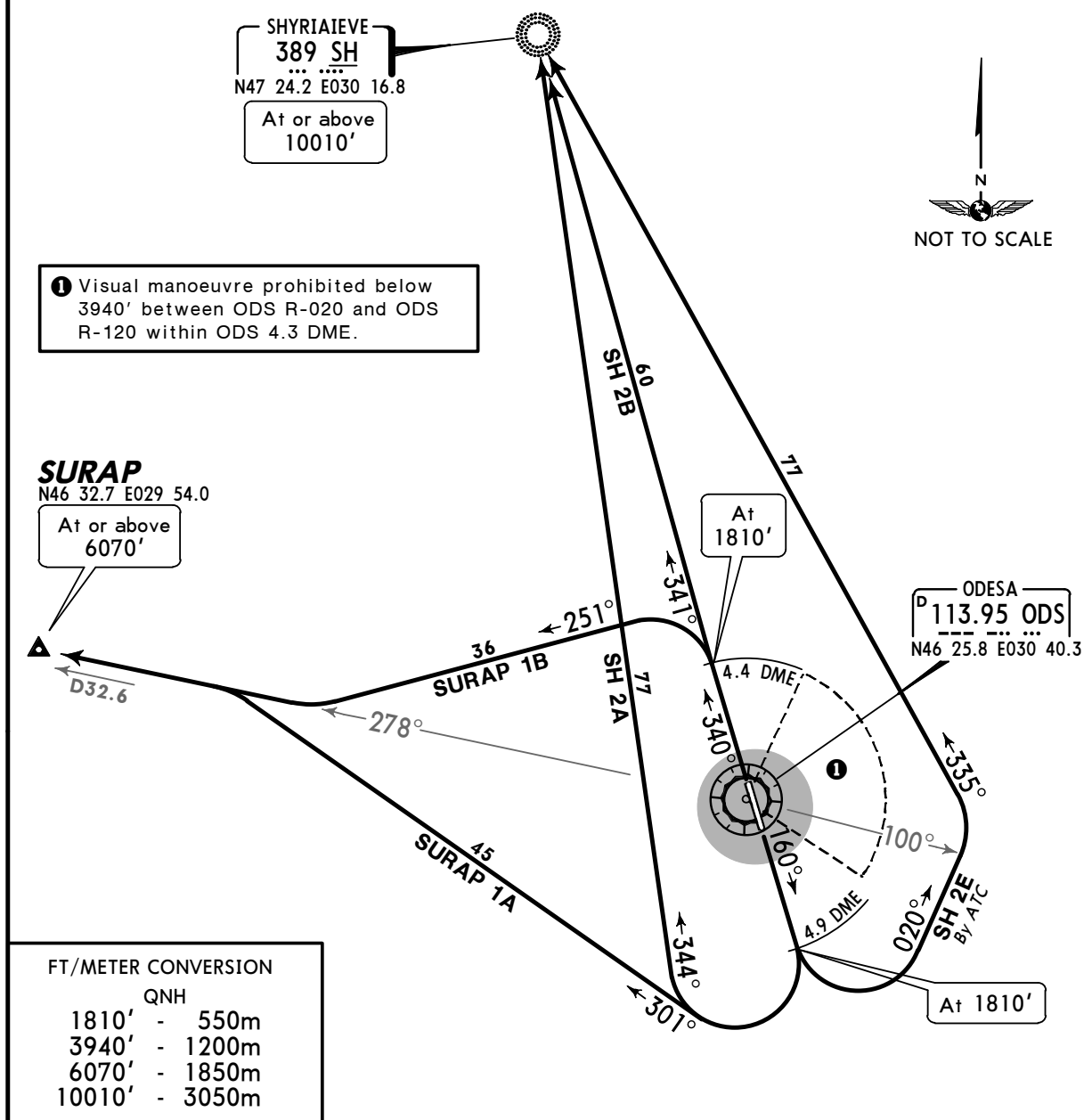
**1** Visual manoeuvre prohibited below  
3940' between ODS R-020 and ODS  
R-120 within ODS 4.3 DME.



**SURAP**  
N46 32.7 E029 54.0  
At or above  
6070'

**ODESA**  
**P 113.95 ODS**  
N46 25.8 E030 40.3

**FT/METER CONVERSION**  
QNH  
1810' - 550m  
3940' - 1200m  
6070' - 1850m  
10010' - 3050m



| SID             | RWY | ROUTING                                                                                                          |
|-----------------|-----|------------------------------------------------------------------------------------------------------------------|
| SH 2A           | 16  | Climb on 160° track to ODS 4.9 DME, turn RIGHT, intercept 344° bearing to SH.                                    |
| SH 2B           | 34  | Climb on 340° track to ODS 4.4 DME, turn RIGHT, intercept 341° bearing to SH.                                    |
| SH 2E<br>By ATC | 16  | Climb on 160° track to ODS 4.9 DME, turn LEFT, 020° track, at ODS R-100 turn LEFT, intercept 335° bearing to SH. |
| SURAP 1A        |     | Climb on 160° track to ODS 4.9 DME, turn RIGHT, 301° track, intercept ODS R-278 to SURAP.                        |
| SURAP 1B        | 34  | Climb on 340° track to ODS 4.4 DME, turn LEFT, 251° track, intercept ODS R-278 to SURAP.                         |

UK00/ODS  
ODESA



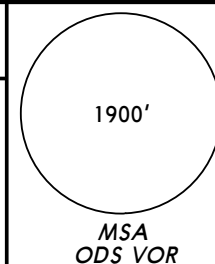
26 OCT 07 (10-3G)

## ODESA, UKRAINE

SID

*Apt Elev*  
172'

Trans level: By ATC      Trans alt: 10010'

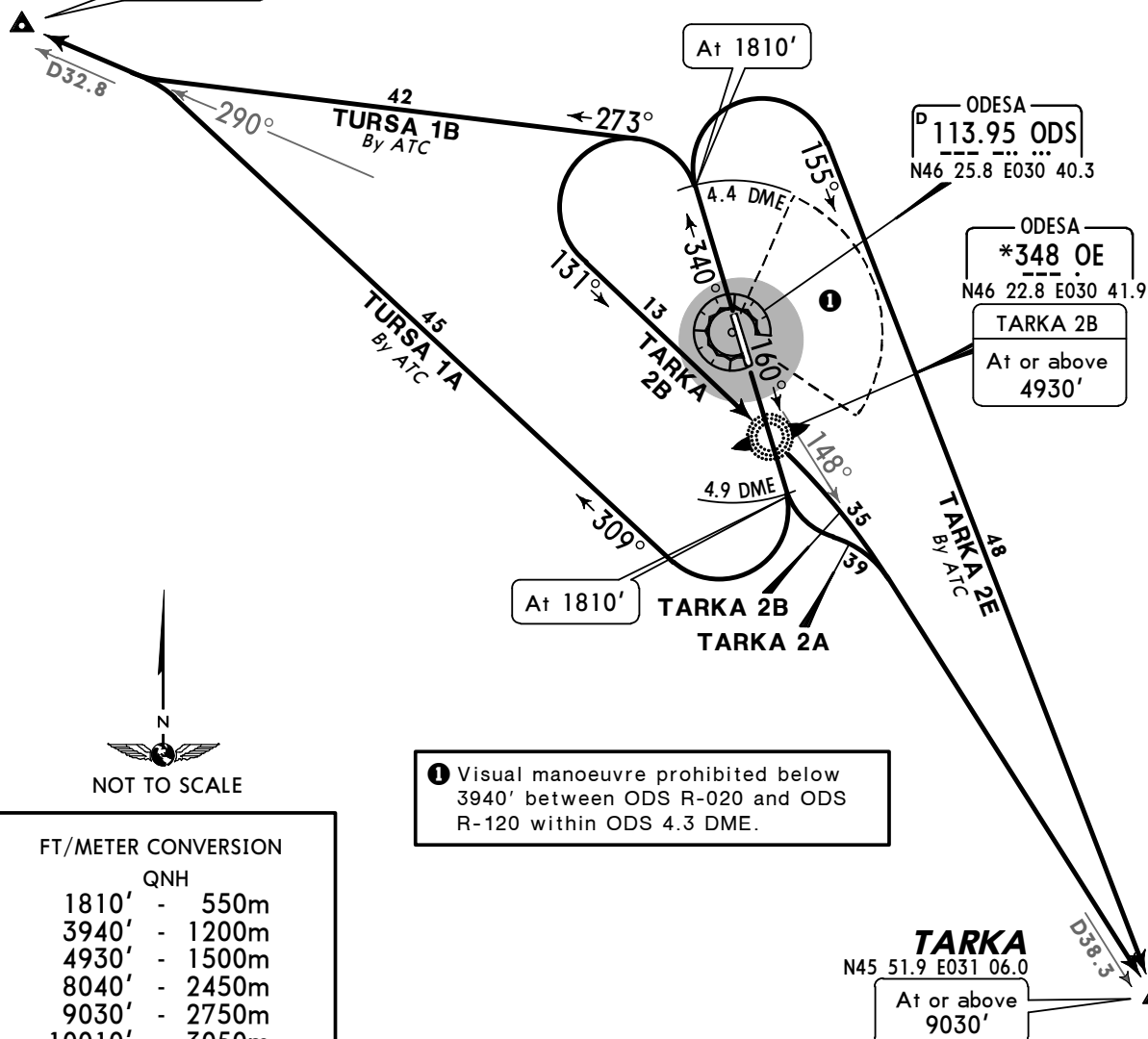


TARKA TWO ALFA (TARKA 2A) [TARK2A]  
TARKA TWO BRAVO (TARKA 2B) [TARK2B]  
TARKA TWO ECHO (TARKA 2E) [TARK2E]  
TURSA ONE ALFA (TURSA 1A) [TURS1A]  
TURSA ONE BRAVO (TURSA 1B) [TURS1B]  
RWYS 16, 34 DEPARTURES

**TURSA**

N46 38.9 E029 56.6

At or above  
8040'



NOT TO SCALE

## FT/METER CONVERSION

QNH

|        |   |       |
|--------|---|-------|
| 1810'  | - | 550m  |
| 3940'  | - | 1200m |
| 4930'  | - | 1500m |
| 8040'  | - | 2450m |
| 9030'  | - | 2750m |
| 10010' | - | 3050m |

**1** Visual manoeuvre prohibited below 3940' between ODS R-020 and ODS R-120 within ODS 4.3 DME.

| SID                       | RWY       | ROUTING                                                                                                    |
|---------------------------|-----------|------------------------------------------------------------------------------------------------------------|
| <b>TARKA 2A</b>           | <b>16</b> | Climb on 160° track to ODS 4.9 DME, turn LEFT, intercept ODS R-148 to TARKA.                               |
| <b>TARKA 2B</b>           | <b>34</b> | Climb on 340° track to ODS 4.4 DME, turn LEFT, intercept 131° bearing to OE, intercept ODS R-148 to TARKA. |
| <b>TARKA 2E</b><br>By ATC |           | Climb on 340° track to ODS 4.4 DME, turn RIGHT, 155° track to TARKA.                                       |
| <b>TURSA 1A</b><br>By ATC | <b>16</b> | Climb on 160° track to ODS 4.9 DME, turn RIGHT, 309° track, intercept ODS R-290 to TURSA.                  |
| <b>TURSA 1B</b><br>By ATC | <b>34</b> | Climb on 340° track to ODS 4.4 DME, turn LEFT, 273° track, intercept ODS R-290 to TURSA.                   |

**CHANGES:** Altitude conversion.

© JEPPESEN SANDERSON, INC., 2004, 2007. ALL RIGHTS RESERVED.

**UK00/ODS**

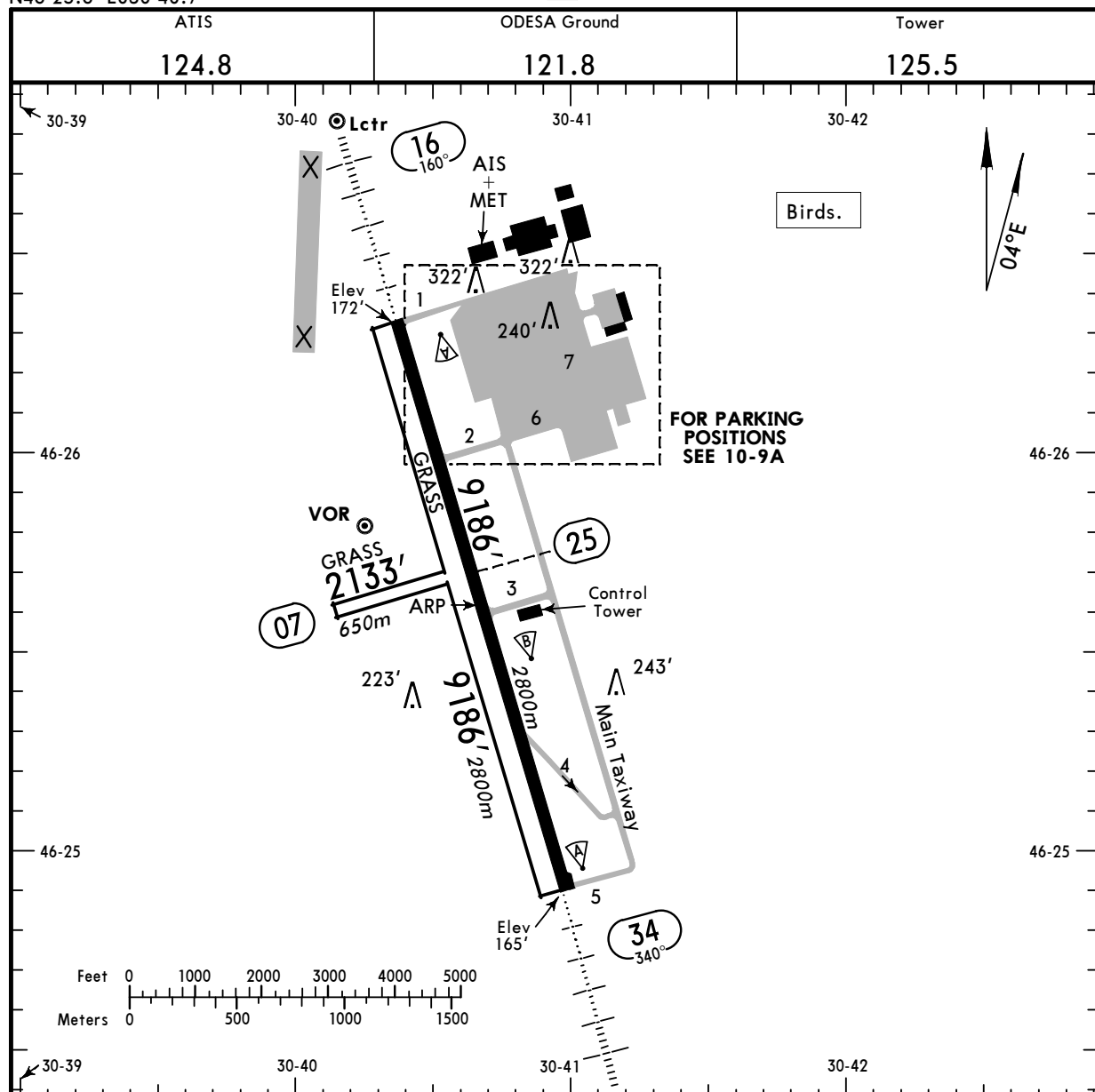
Apt Elev **172'**  
N46 25.6 E030 40.7

**JEPPESEN**

13 JUN 08 **(10-9)**

**ODESA, UKRAINE**

**ODESA**



**ADDITIONAL RUNWAY INFORMATION**

|     |    |                       | USABLE LENGTHS |             |              | WIDTH        |
|-----|----|-----------------------|----------------|-------------|--------------|--------------|
|     |    |                       | LANDING BEYOND |             | TAKE-OFF     |              |
| RWY |    |                       | Threshold      | Glide Slope |              |              |
| 07  | 25 |                       |                |             |              | 197'<br>60m  |
| 16  | 34 | HIRL (50m) HIALS PAPI | RVR            | 8235' 2510m | 8760' 2670m① | 184'<br>56m  |
| 16  | 34 | Grass runway          |                |             |              | 328'<br>100m |
|     |    |                       |                |             |              |              |

① First 427'/130m unusable for take-off.

**JAR-OPS**

**TAKE-OFF ①**

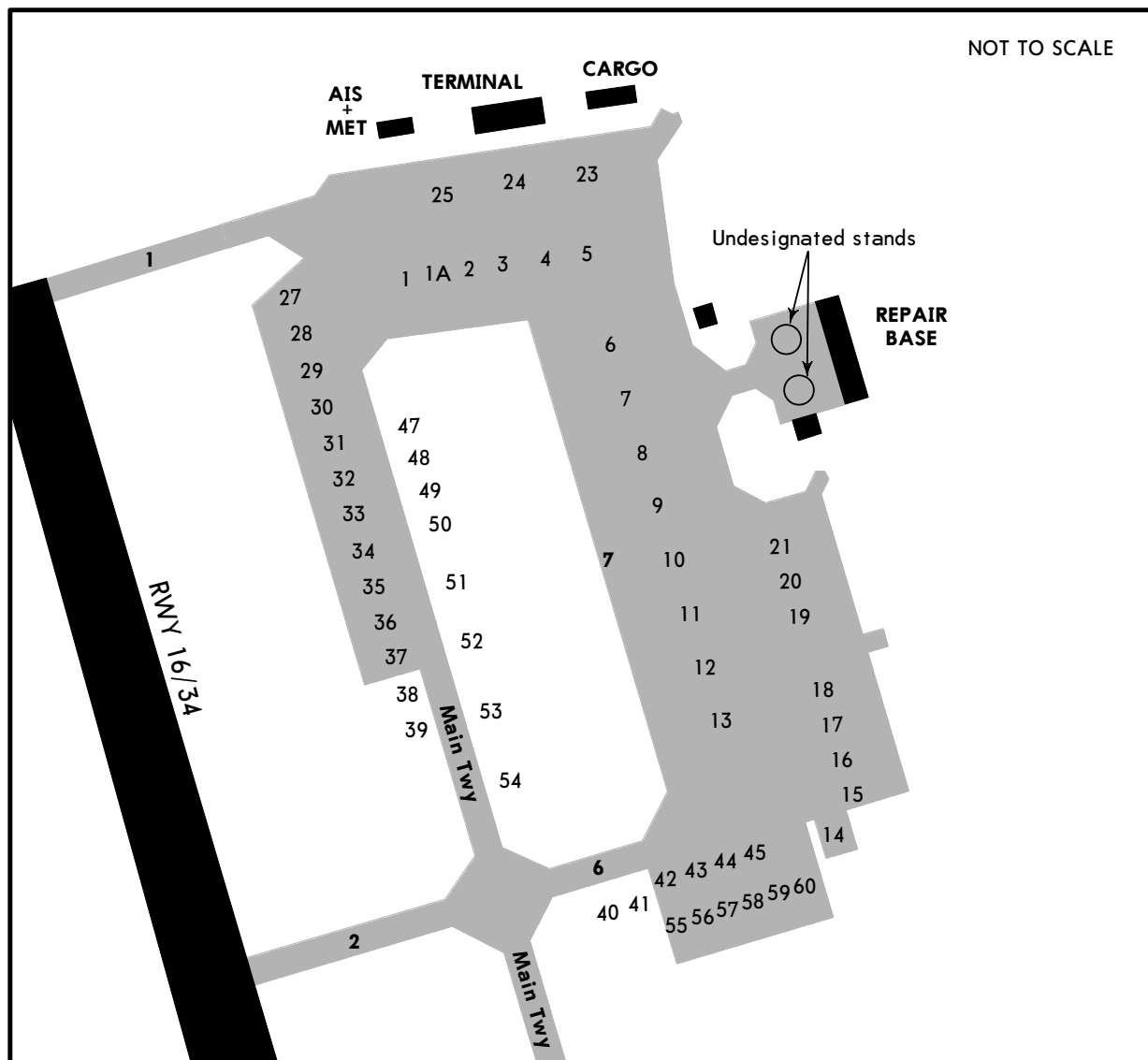
|   | All Rwys                 |                          |                   |
|---|--------------------------|--------------------------|-------------------|
|   | LVP must be in force     |                          |                   |
|   | RCLM (DAY only)<br>or RL | RCLM (DAY only)<br>or RL | NIL<br>(DAY only) |
| A |                          |                          |                   |
| B | 250m                     | 400m                     | 500m              |
| C |                          |                          |                   |
| D | 300m                     |                          |                   |

① Operators applying U.S. Ops Specs: CL required below 300m.

UK00/ODS

**JEPPESEN**  
13 JUN 08 (10-9A)

**ODESA, UKRAINE**  
ODESA



Taxiing is strictly along centerline with inner engines power.

Stand 14 available for engine run-up.

Stands 38, 39 and 50 thru 54 available for helicopters.

UK00/ODS


**JEPPESEN**  
2 APR 10 **10-9S**
**Standard**  
**ODESA, UKRAINE**  
**ODESA**

| STRAIGHT-IN RWY |                | A                  | B                  | C                  | D                  |
|-----------------|----------------|--------------------|--------------------|--------------------|--------------------|
| <b>16</b>       | ILS            | <b>372'</b> (200') | <b>372'</b> (200') | <b>372'</b> (200') | <b>372'</b> (200') |
|                 | <i>FULL</i>    | <b>R550m</b>       | <b>R550m</b>       | <b>R550m</b>       | <b>R550m</b>       |
|                 | <i>Limited</i> | R750m              | R750m              | R750m              | R750m              |
|                 | <i>ALS out</i> | R1200m             | R1200m             | R1200m             | R1200m             |
|                 | NDB ❶          | <b>680'</b> (508') | <b>680'</b> (508') | <b>680'</b> (508') | <b>680'</b> (508') |
|                 | <i>ALS out</i> | <b>R1500m</b>      | <b>R1500m</b>      | <b>R1600m</b>      | <b>R1600m</b>      |
| <b>34</b>       | ILS            | <b>365'</b> (200') | <b>365'</b> (200') | <b>365'</b> (200') | <b>365'</b> (200') |
|                 | <i>FULL</i>    | <b>R550m</b>       | <b>R550m</b>       | <b>R550m</b>       | <b>R550m</b>       |
|                 | <i>Limited</i> | R750m              | R750m              | R750m              | R750m              |
|                 | <i>ALS out</i> | R1200m             | R1200m             | R1200m             | R1200m             |
|                 | NDB ❶          | <b>630'</b> (465') | <b>630'</b> (465') | <b>630'</b> (465') | <b>630'</b> (465') |
|                 | <i>ALS out</i> | <b>R1500m</b>      | <b>R1500m</b>      | <b>R1500m</b>      | <b>R1500m</b>      |
|                 |                | R1500m             | R1500m             | C2200m             | C2200m             |

❶ Continuous Descent Final Approach.

| CIRCLE-TO-LAND ❷       | 100 KT             | 135 KT             | 180 KT              | 205 KT              |
|------------------------|--------------------|--------------------|---------------------|---------------------|
| After apch to rwy 16   | <b>920'</b> (748') | <b>920'</b> (748') | <b>1020'</b> (848') | <b>1020'</b> (848') |
| After apch to rwy 34 ❸ | <b>920'</b> (755') | <b>920'</b> (755') | <b>1020'</b> (855') | <b>1020'</b> (855') |
|                        | V1500m             | V1600m             | V2400m              | V3600m              |

❷ Prohibited in sector between R-020 &amp; R-120 ODS.

❸ Circling height based on rwy 34 thresh elev of 165'.

**TAKE-OFF RWY 07, 16, 25, 34**

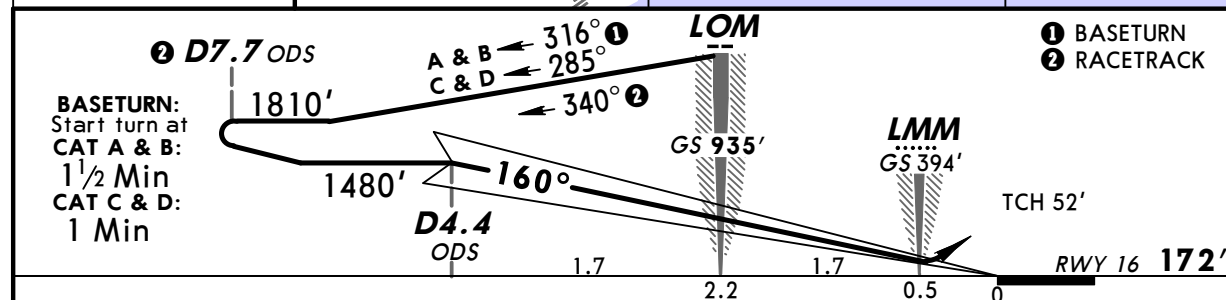
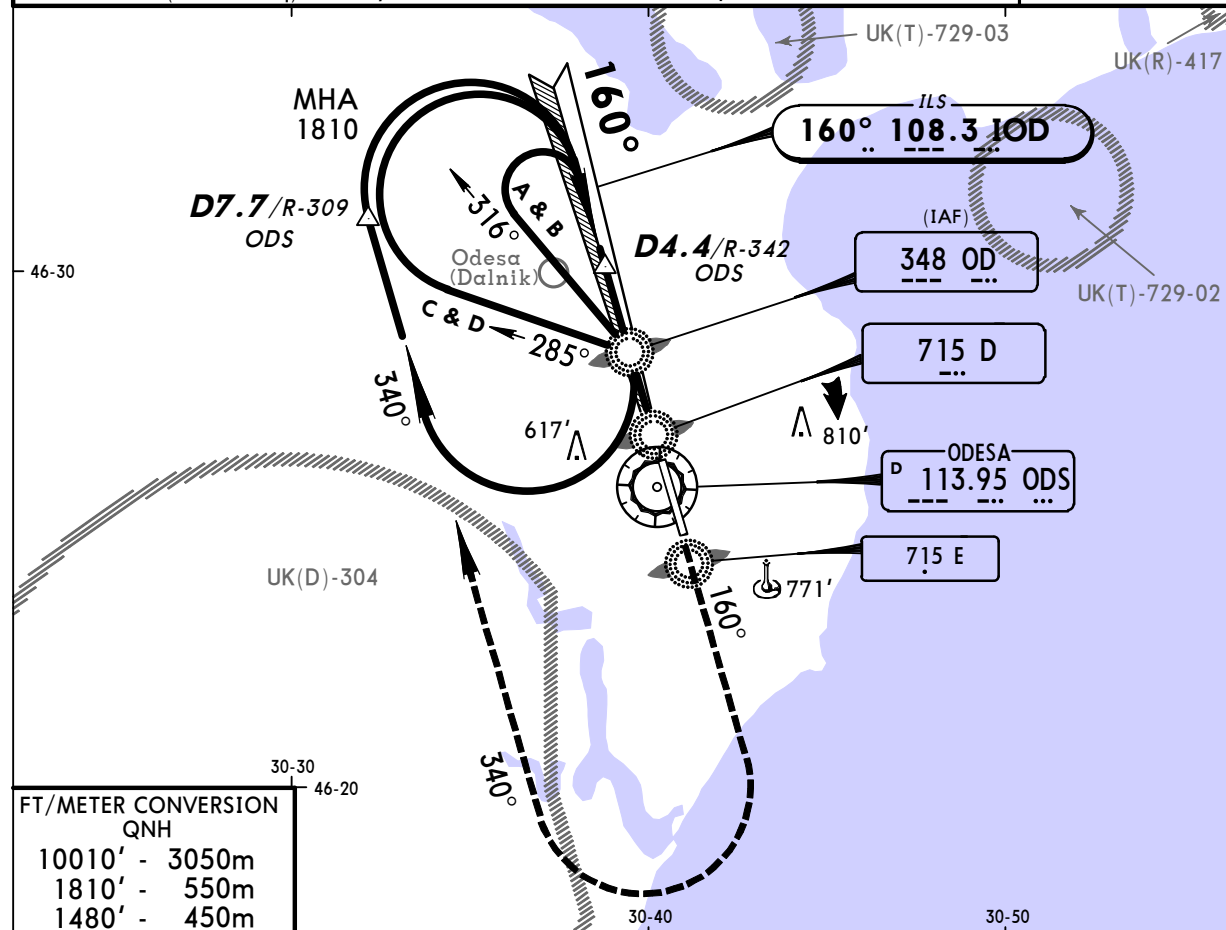
| LVP must be in Force |                          |                          |                   |
|----------------------|--------------------------|--------------------------|-------------------|
|                      | RCLM (DAY only)<br>or RL | RCLM (DAY only)<br>or RL | NIL<br>(DAY only) |
| A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

UK00/ODS  
ODESA

**JEPPESEN**  
12 FEB 10 (11-1)

ODESA, UKRAINE  
ILS Rwy 16

|                                                                                               |                   |                   |              |                     |      |                                                                                     |  |
|-----------------------------------------------------------------------------------------------|-------------------|-------------------|--------------|---------------------|------|-------------------------------------------------------------------------------------|--|
| ATIS                                                                                          |                   | ODESA Radar (APP) |              | ODESA Tower         |      | Ground                                                                              |  |
| 124.8                                                                                         |                   | 120.9 127.7       |              | 125.5               |      | 121.8                                                                               |  |
| LOC<br>IOD                                                                                    | Final<br>Apch Crs | GS<br>LOM         | ILS<br>DA(H) | Apt Elev            | 172' |  |  |
| 108.3                                                                                         | 160°              | 935' (763')       | 372' (200')  | RWY                 | 172' |                                                                                     |  |
| <b>MISSED APCH:</b> Climb on 160° to 1810', then turn RIGHT on 340°, then according to chart. |                   |                   |              |                     |      |                                                                                     |  |
| Alt Set: hPa (MM on req)                                                                      |                   | Rwy Elev: 6 hPa   |              | Trans level: By ATC |      | Trans alt: 10010'                                                                   |  |
| MSA ODS VOR                                                                                   |                   |                   |              |                     |      |                                                                                     |  |



|               |     |     |     |     |     |     |  |  |
|---------------|-----|-----|-----|-----|-----|-----|--|--|
| Gnd speed-Kts | 70  | 90  | 100 | 120 | 140 | 160 |  |  |
| Gs 3.00°      | 377 | 485 | 539 | 647 | 755 | 862 |  |  |
|               |     |     |     |     |     |     |  |  |
|               |     |     |     |     |     |     |  |  |

| JAR-OPS                  |          | STRAIGHT-IN LANDING RWY 16 |          |     | CIRCLE-TO-LAND                          |        |       |
|--------------------------|----------|----------------------------|----------|-----|-----------------------------------------|--------|-------|
| ILS                      |          | LOC (GS out)               |          |     | Prohibited in sector R-020 to R-120 ODS |        |       |
| DA(H) <b>372'</b> (200') |          |                            |          |     |                                         |        |       |
| FULL                     |          | ALS out                    |          |     | Max Kts.                                | MDA(H) | VIS   |
| A                        | RVR 550m | RVR 1000m                  | NOT AUTH | 100 | 920'                                    | (748') | 1500m |
| B                        |          |                            |          | 135 | 920'                                    | (748') | 1600m |
| C                        |          |                            |          | 180 | 1020'                                   | (848') | 2400m |
| D                        |          |                            |          | 205 | 1020'                                   | (848') | 3600m |

**CHANGES:** Circling minimums.

© JEPPESEN, 2004, 2010. ALL RIGHTS RESERVED.

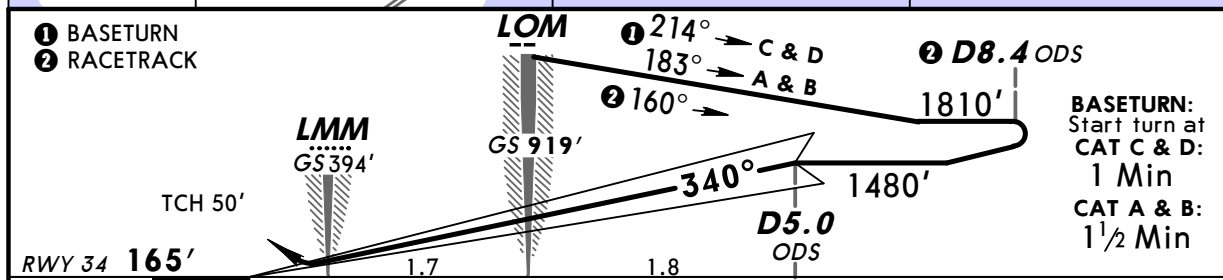
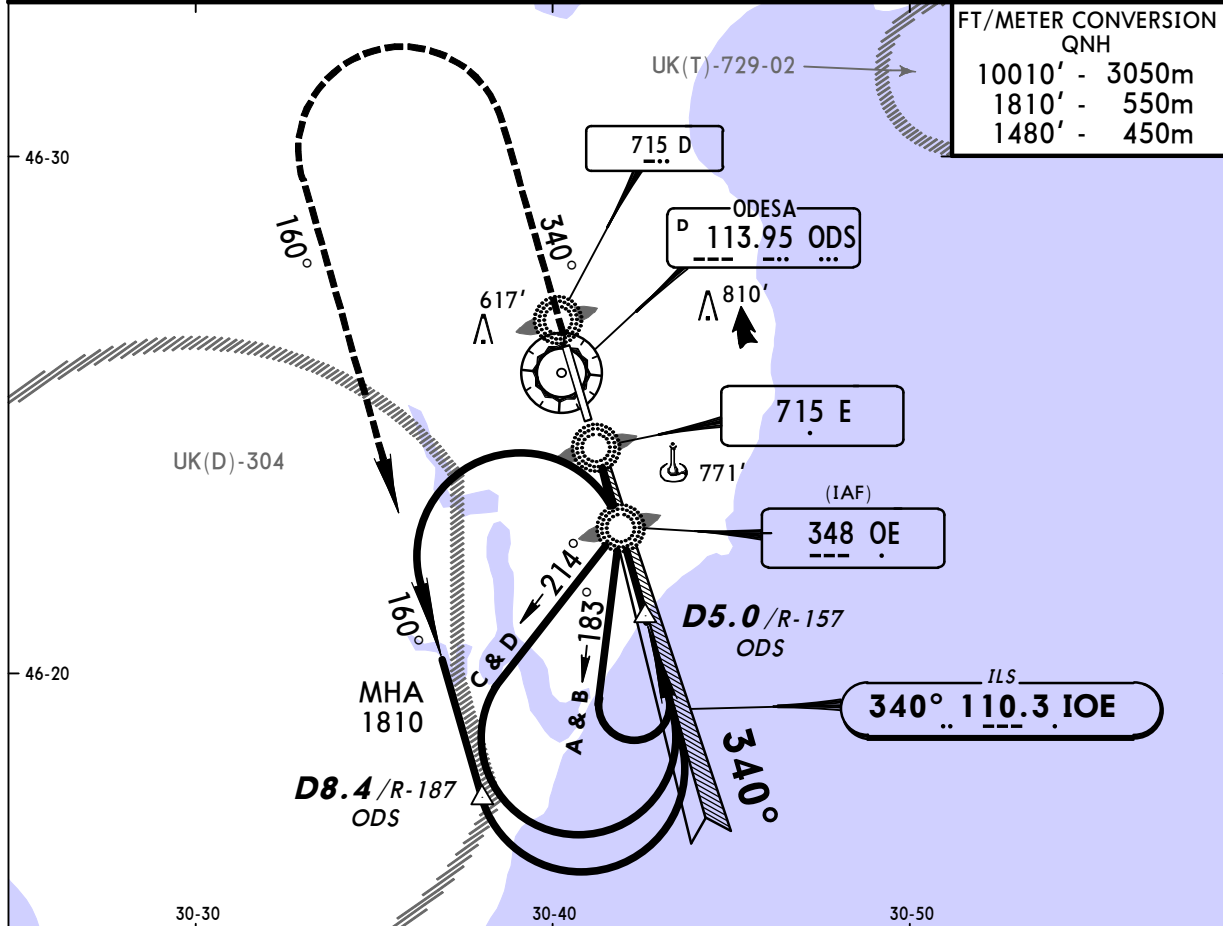
**UK00/ODS**  
**ODESA**

**JEPPesen**  
12 FEB 10 (11-2)

**ODESA, UKRAINE**  
**ILS Rwy 34**

BRIEFING STRIP™

|                                                                                               |                           |                                       |                             |                           |                                        |
|-----------------------------------------------------------------------------------------------|---------------------------|---------------------------------------|-----------------------------|---------------------------|----------------------------------------|
| ATIS<br>124.8                                                                                 |                           | ODESA Radar (APP)<br>120.9      127.7 |                             | ODESA Tower<br>125.5      | Ground<br>121.8                        |
| LOC<br>IOE<br>110.3                                                                           | Final<br>Apch Crs<br>340° | GS<br>LOM<br>919' (754')              | ILS<br>DA(H)<br>365' (200') | Apt Elev 172'<br>RWY 165' | <div><div></div><div>1900'</div></div> |
| MISSED APCH: Climb on 340° to 1810', then turn LEFT on 160°, then according to chart.         |                           |                                       |                             |                           |                                        |
| Alt Set: hPa (MM on req)      Rwy Elev: 6 hPa      Trans level: By ATC      Trans alt: 10010' |                           |                                       |                             |                           |                                        |
| MSA ODS VOR                                                                                   |                           |                                       |                             |                           |                                        |



| Gnd speed-Kts | 70  | 90  | 100 | 120 | 140 | 160 | <div style="display: flex; align-items: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">HIALS PAPI</div> <div style="margin-left: 10px;">           1810' on 340°         </div> </div> |
|---------------|-----|-----|-----|-----|-----|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| GS 3.00°      | 377 | 485 | 539 | 647 | 755 | 862 |                                                                                                                                                                                                                      |
|               |     |     |     |     |     |     |                                                                                                                                                                                                                      |

| JAR-OPS |          |           | STRAIGHT-IN LANDING RWY 34 |  | CIRCLE-TO-LAND <sup>1</sup>             |                    |
|---------|----------|-----------|----------------------------|--|-----------------------------------------|--------------------|
| ILS     |          | LOC       | DA(H) <b>365' (200')</b>   |  | Prohibited in sector R-020 to R-120 ODS |                    |
| FULL    |          | ALS out   | GS out                     |  | Max Kts                                 | MDA(H) VIS         |
| A       | RVR 550m | RVR 1000m | NOT AUTH                   |  | 100                                     | 920' (755') 1500m  |
| B       |          |           |                            |  | 135                                     | 920' (755') 1600m  |
| C       |          |           |                            |  | 180                                     | 1020' (855') 2400m |
| D       |          |           |                            |  | 205                                     | 1020' (855') 3600m |

<sup>1</sup> Circling height based on rwy 34 thresh elev of 165'.

CHANGES: Circling minimums.

© JEPPESEN, 2004, 2010. ALL RIGHTS RESERVED.

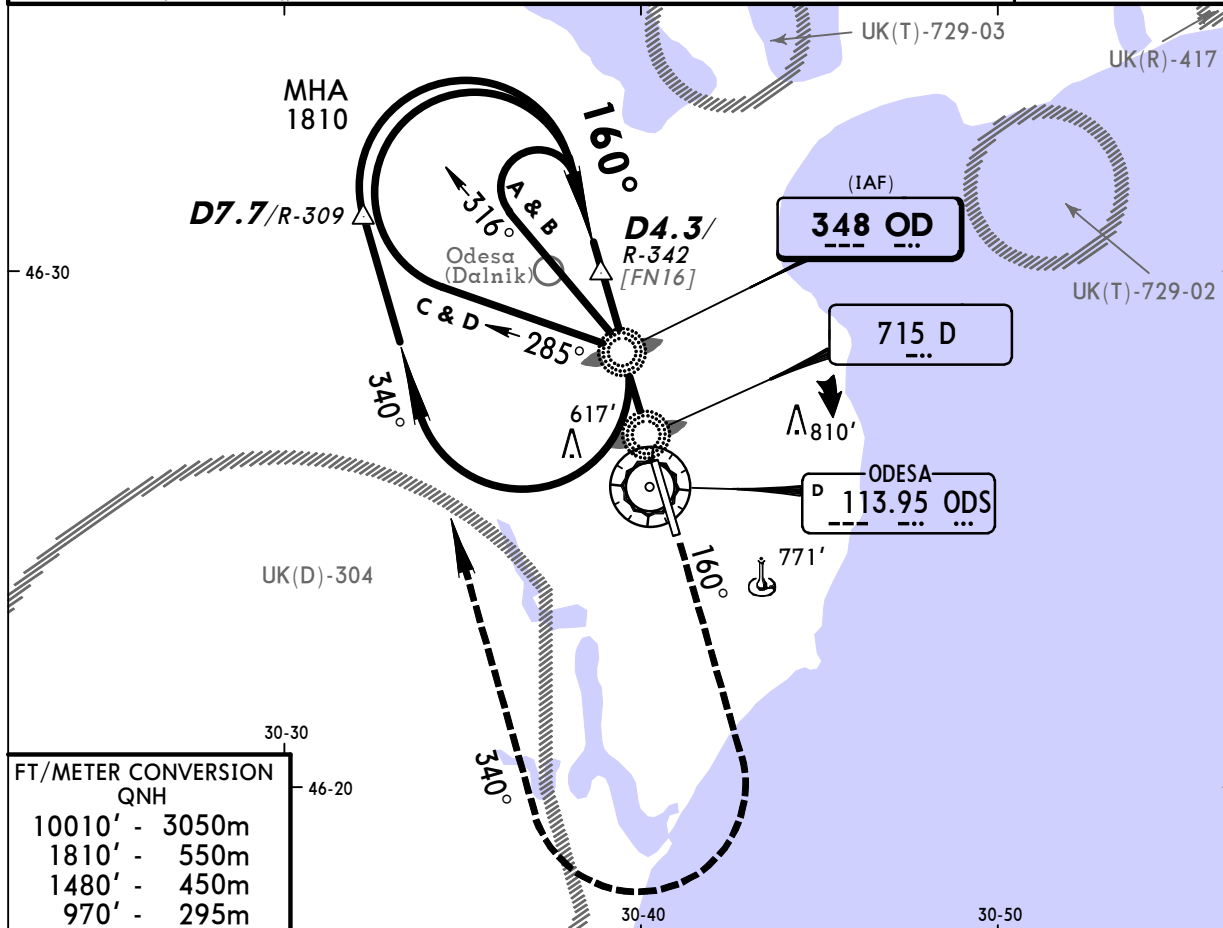
**UK00/ODS**  
**ODESA**

**JEPPESEN**  
12 FEB 10 **(16-1)**

**ODESA, UKRAINE**  
**NDB Rwy 16**

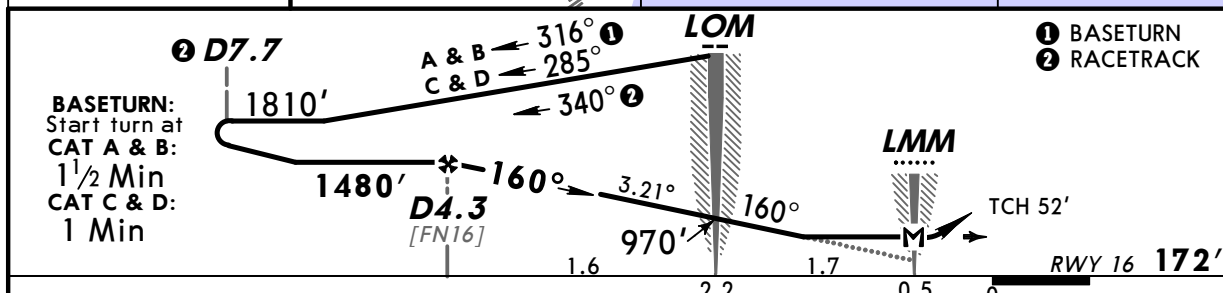
BRIEFING STRIP

| ATIS                                                                                          |                           | ODESA Approach                       |                       | ODESA Precision           | ODESA Tower                             | Ground |
|-----------------------------------------------------------------------------------------------|---------------------------|--------------------------------------|-----------------------|---------------------------|-----------------------------------------|--------|
| 124.8                                                                                         |                           | 120.9                                | 127.7                 | 125.5                     | 125.5                                   | 121.8  |
| NDB<br>OD<br>348                                                                              | Final<br>Apch Crs<br>160° | Minimum Alt<br>D4.3<br>1480' (1308') | MDA(H)<br>680' (508') | Apt Elev 172'<br>RWY 172' | <div>1900'</div> <div>MSA ODS VOR</div> |        |
| MISSED APCH: Climb on 160° to 1810', then turn RIGHT on 340°, then according to chart.        |                           |                                      |                       |                           |                                         |        |
| Alt Set: hPa (MM on req)      Rwy Elev: 6 hPa      Trans level: By ATC      Trans alt: 10010' |                           |                                      |                       |                           |                                         |        |



**FT/METER CONVERSION**  
QNH

|        |   |       |
|--------|---|-------|
| 10010' | - | 3050m |
| 1810'  | - | 550m  |
| 1480'  | - | 450m  |
| 970'   | - | 295m  |



| Gnd speed-Kts       | 70  | 90  | 100 | 120 | 140 | 160 | <div style="display: flex; align-items: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">HIALS PAPI</div> <div style="margin-left: 10px;">             1810' on 160°           </div> </div> |
|---------------------|-----|-----|-----|-----|-----|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Descent angle 3.21° | 398 | 511 | 568 | 682 | 795 | 909 |                                                                                                                                                                                                                          |
| MAP at LMM          |     |     |     |     |     |     |                                                                                                                                                                                                                          |

| JAR-OPS |           |  | STRAIGHT-IN LANDING RWY 16 |  |     | CIRCLE-TO-LAND                         |             |       |
|---------|-----------|--|----------------------------|--|-----|----------------------------------------|-------------|-------|
|         |           |  | MDA(H) <b>680' (508')</b>  |  |     | Prohibited in sector<br>R-020 to R-120 |             |       |
|         |           |  | ALS out                    |  |     | Max<br>Kts                             | MDA(H)      | VIS   |
| A       | RVR 1000m |  | RVR 1500m                  |  |     | 100                                    | 920' (748') | 1500m |
| B       | RVR 1200m |  |                            |  |     | 135                                    | 920' (748') | 1600m |
| C       |           |  | RVR 2000m                  |  | 180 | 1020' (848')                           | 2400m       |       |
| D       | RVR 1600m |  |                            |  | 205 | 1020' (848')                           | 3600m       |       |
|         |           |  |                            |  |     |                                        |             |       |

PANS OPS

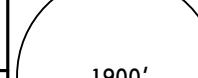
CHANGES: Minimums.

© JEPPESEN, 2004, 2010. ALL RIGHTS RESERVED.

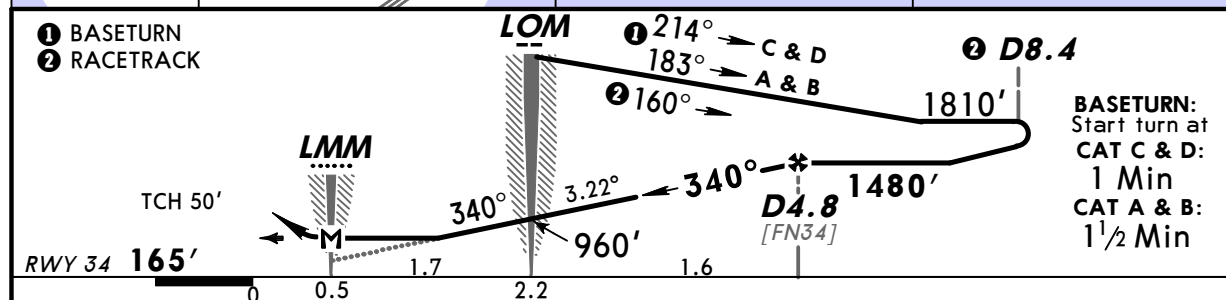
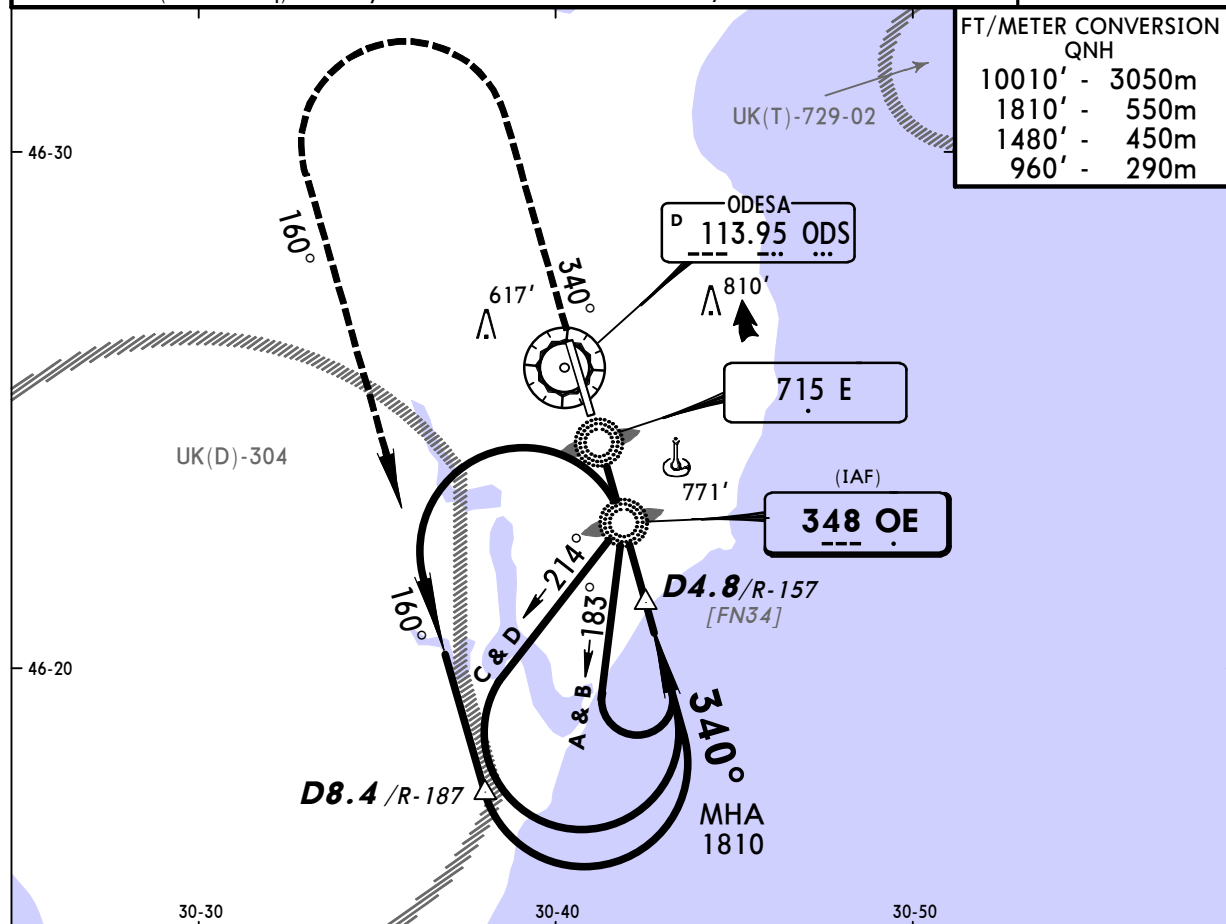
UK00/ODS  
ODESA

**JEPPESEN**  
12 FEB 10 (16-2)

ODESA, UKRAINE  
NDB Rwy 34

|                                                                                              |                                  |                                                    |                              |                                         |                                                                                     |
|----------------------------------------------------------------------------------------------|----------------------------------|----------------------------------------------------|------------------------------|-----------------------------------------|-------------------------------------------------------------------------------------|
| ATIS                                                                                         | ODESA Approach                   |                                                    | ODESA Precision              | ODESA Tower                             | Ground                                                                              |
| 124.8                                                                                        | 120.9                            | 127.7                                              | 125.5                        | 125.5                                   | 121.8                                                                               |
| NDB<br>OE<br><b>348</b>                                                                      | Final<br>Apch Crs<br><b>340°</b> | Minimum Alt<br><b>D4.8</b><br><b>1480'</b> (1315') | MDA(H)<br><b>630'</b> (465') | Apt Elev <b>172'</b><br>RWY <b>165'</b> |  |
| <b>MISSED APCH:</b> Climb on 340° to 1810', then turn LEFT on 160°, then according to chart. |                                  |                                                    |                              |                                         |                                                                                     |
| Alt Set: hPa (MM on req)    Rwy Elev: 6 hPa    Trans level: By ATC    Trans alt: 10010'      |                                  |                                                    |                              |                                         |                                                                                     |
|                                                                                              |                                  |                                                    |                              |                                         | <b>MSA ODS VOR</b>                                                                  |

| FT/METER CONVERSION |         |
|---------------------|---------|
| QNH                 |         |
| 10010'              | - 3050m |
| 1810'               | - 550m  |
| 1480'               | - 450m  |
| 960'                | - 290m  |



|                            |     |     |     |     |     |     |  |
|----------------------------|-----|-----|-----|-----|-----|-----|--|
| <i>Gnd speed-Kts</i>       | 70  | 90  | 100 | 120 | 140 | 160 |  |
| <i>Descent angle 3.22°</i> | 399 | 513 | 570 | 684 | 798 | 912 |  |
| <i>MAP at LMM</i>          |     |     |     |     |     |     |  |
|                            |     |     |     |     |     |     |  |

| JAR-OPS |           |  | STRAIGHT-IN LANDING RWY 34 |  | CIRCLE-TO-LAND 1                       |              |       |
|---------|-----------|--|----------------------------|--|----------------------------------------|--------------|-------|
|         |           |  | MDA(H) <b>630'</b> (465')  |  | Prohibited in sector<br>R-020 to R-120 |              |       |
|         |           |  | ALS out                    |  | Max<br>Kts                             | MDA(H)       | VIS   |
| A       | RVR 1000m |  | RVR 1500m                  |  | 100                                    | 920' (755')  | 1500m |
| B       | RVR 1200m |  |                            |  | 135                                    | 920' (755')  | 1600m |
| C       |           |  | RVR 2000m                  |  | 180                                    | 1020' (855') | 2400m |
| D       | RVR 1600m |  |                            |  | 205                                    | 1020' (855') | 3600m |

**1** Circling height based on rwy 34 thresh elev of 165'.

**CHANGES:** Minimums.

© JEPPESEN, 2004, 2010. ALL RIGHTS RESERVED.