

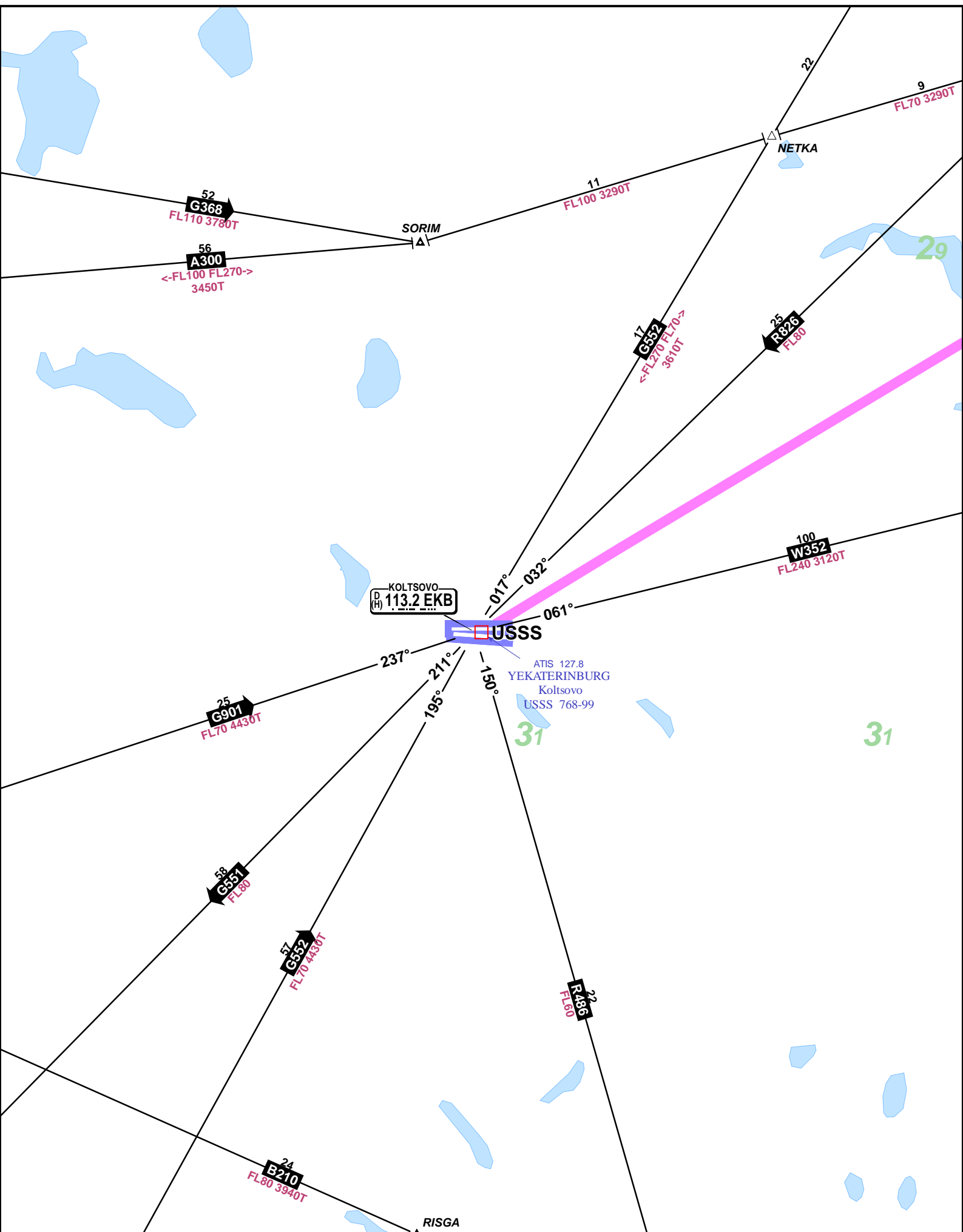
DEPARTURE (USSS -> UNNT): USSS (Koltsovo)

NavData Cycle 2014-10 Expired: Friday, 17 October 2014.

Scale: 1:250000 (1 inch = 3.43 naut mi). Printed on 20 Oct 2014

JEPPESEN

JeppView 3.6.2.0



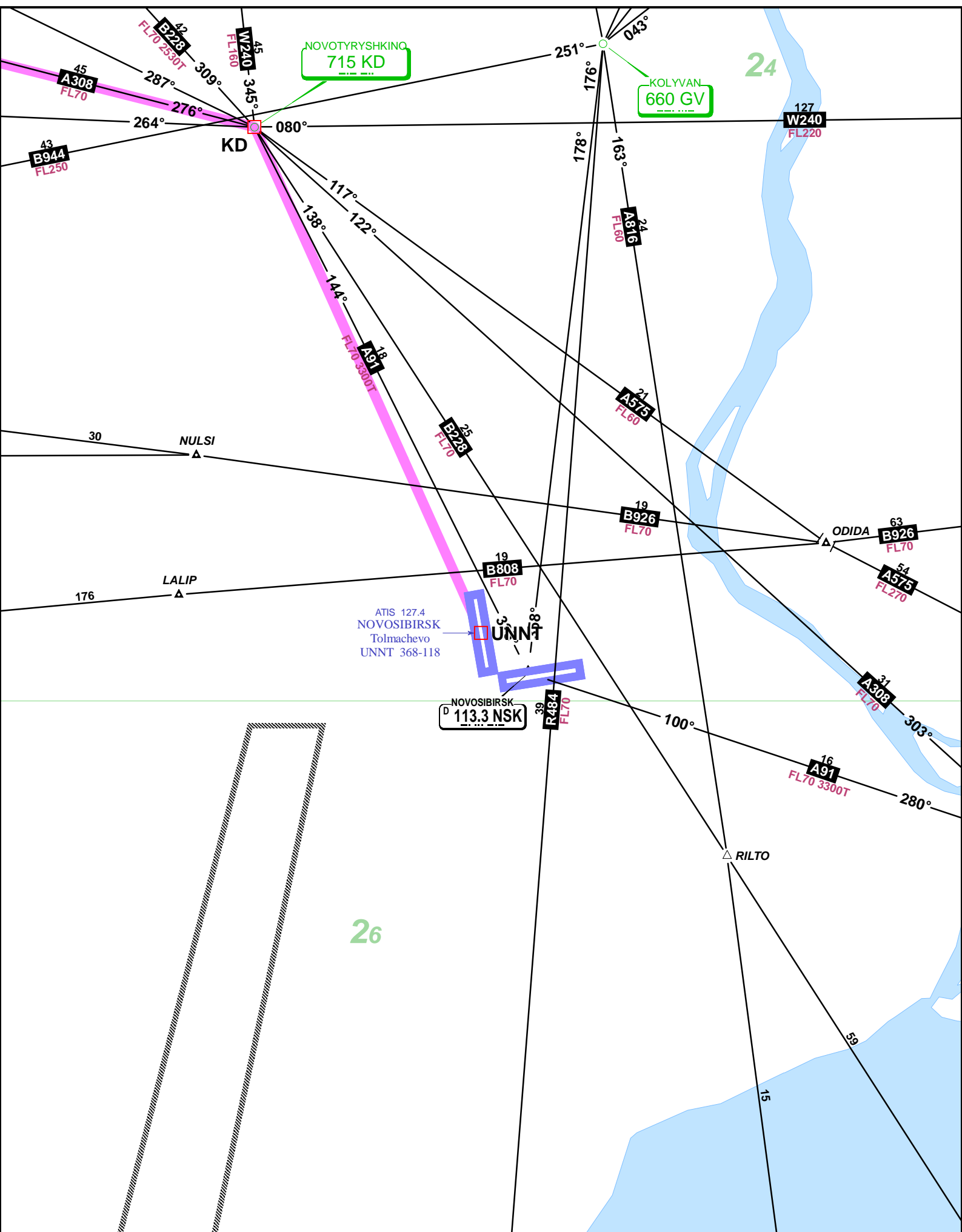
DESTINATION (USSS -> UNNT): UNNT (Tolmachevo)

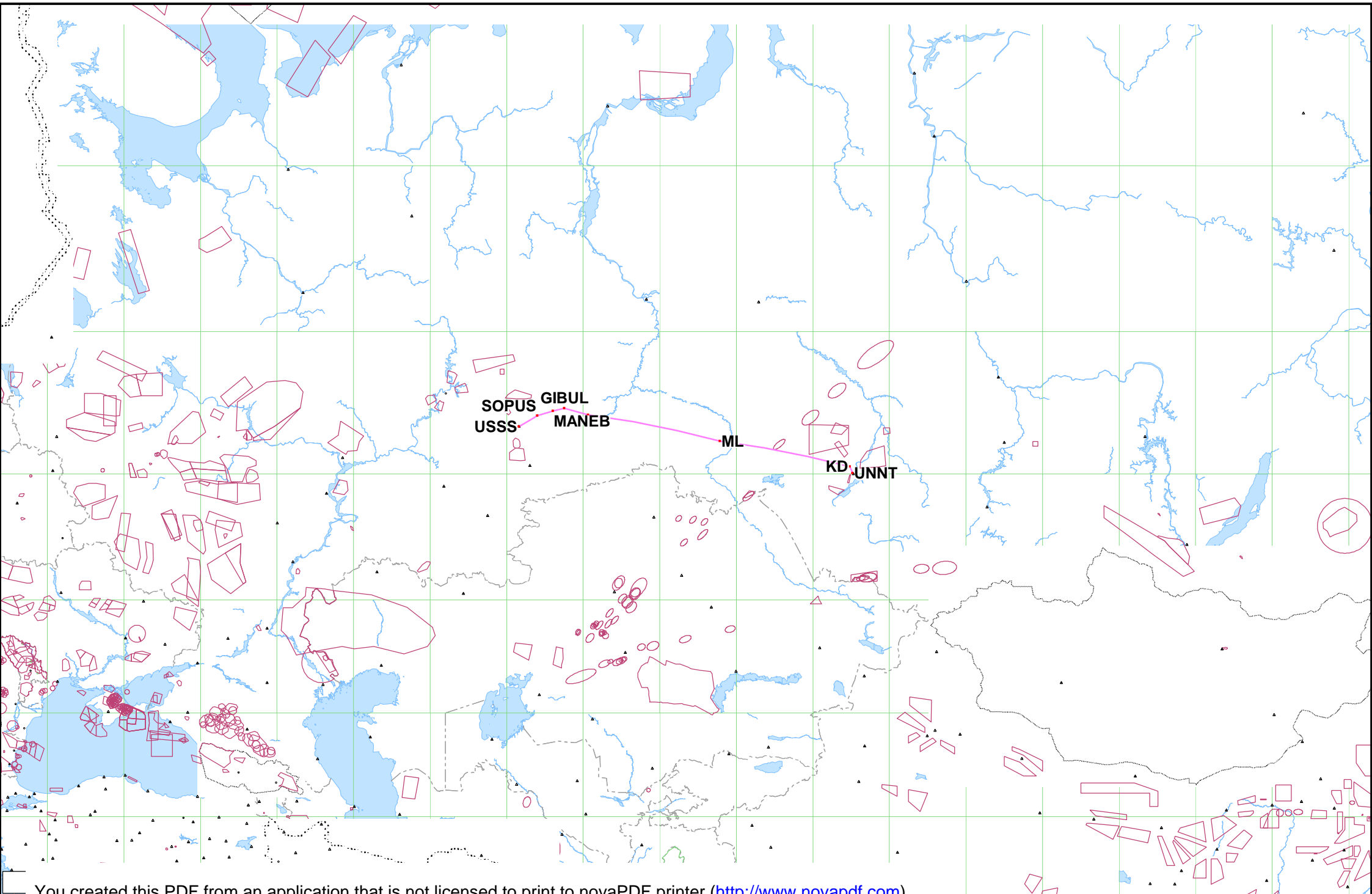
NavData Cycle 2014-10 Expired: Friday, 17 October 2014.

Scale: 1:250000 (1 inch = 3.43 naut mi). Printed on 20 Oct 2014

JEPPESEN

JeppView 3.6.2.0



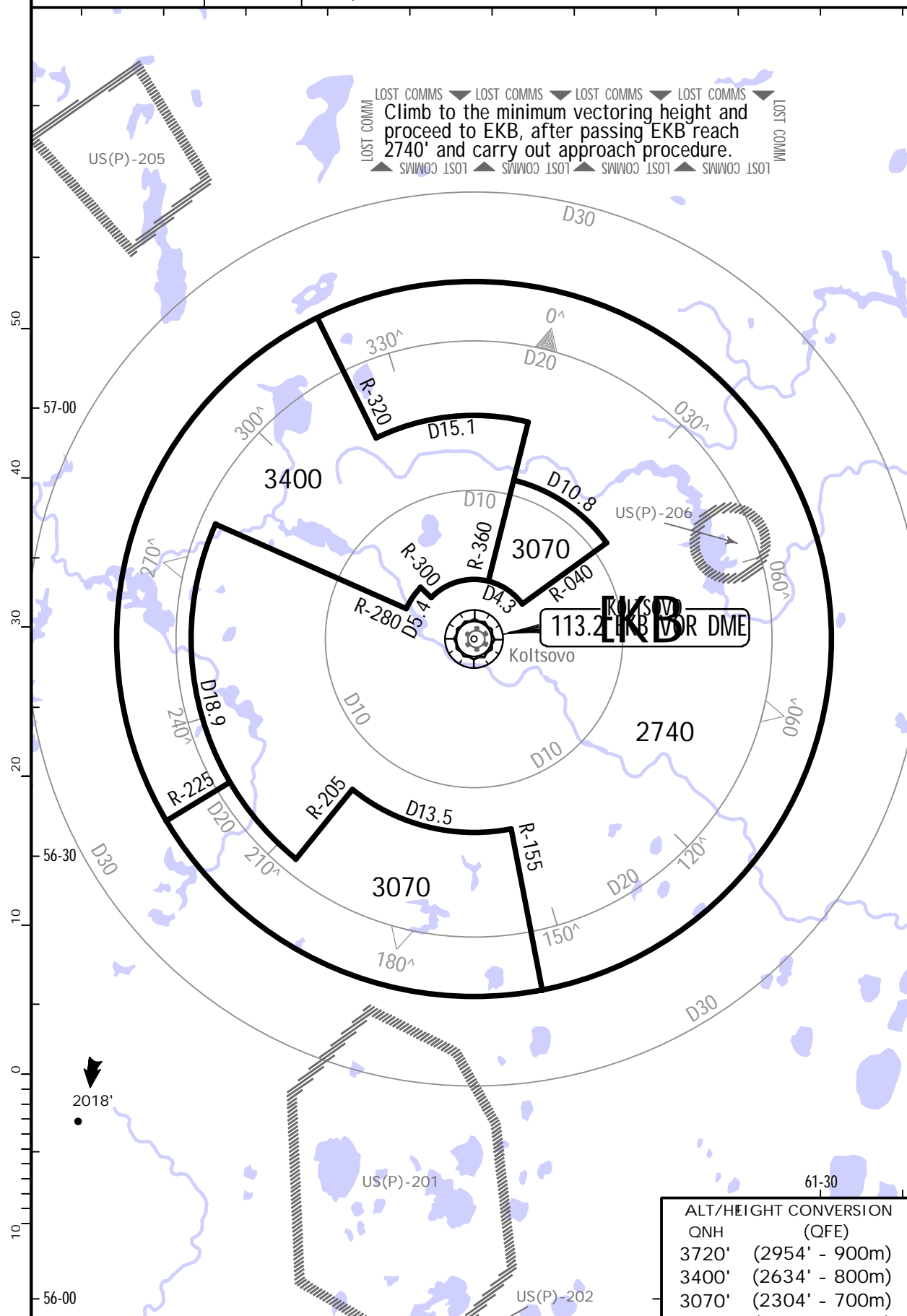


USSS/SVX
KOLTSOVO

JEPPESEN
4 JUL 14 (10-1R)

YEKATERINBURG, RUSSIA
 .RADAR.MINIMUM.ALTITUDES.

| | | |
|----------------------------------|------------------|---|
| KOLTSOVO Radar 118.7 124.0 | Apt Elev 766' | Alt Set: MM (HPA on request) QNH on request (QFE) Trans level: FL50 FL60 if pressure is less than 733mm (977.3 hPa) Trans alt: 3720' (2954') The published minimum altitudes integrate a correction for low temperatures. |
|----------------------------------|------------------|---|



USSS/SVX
KOLTSOVO

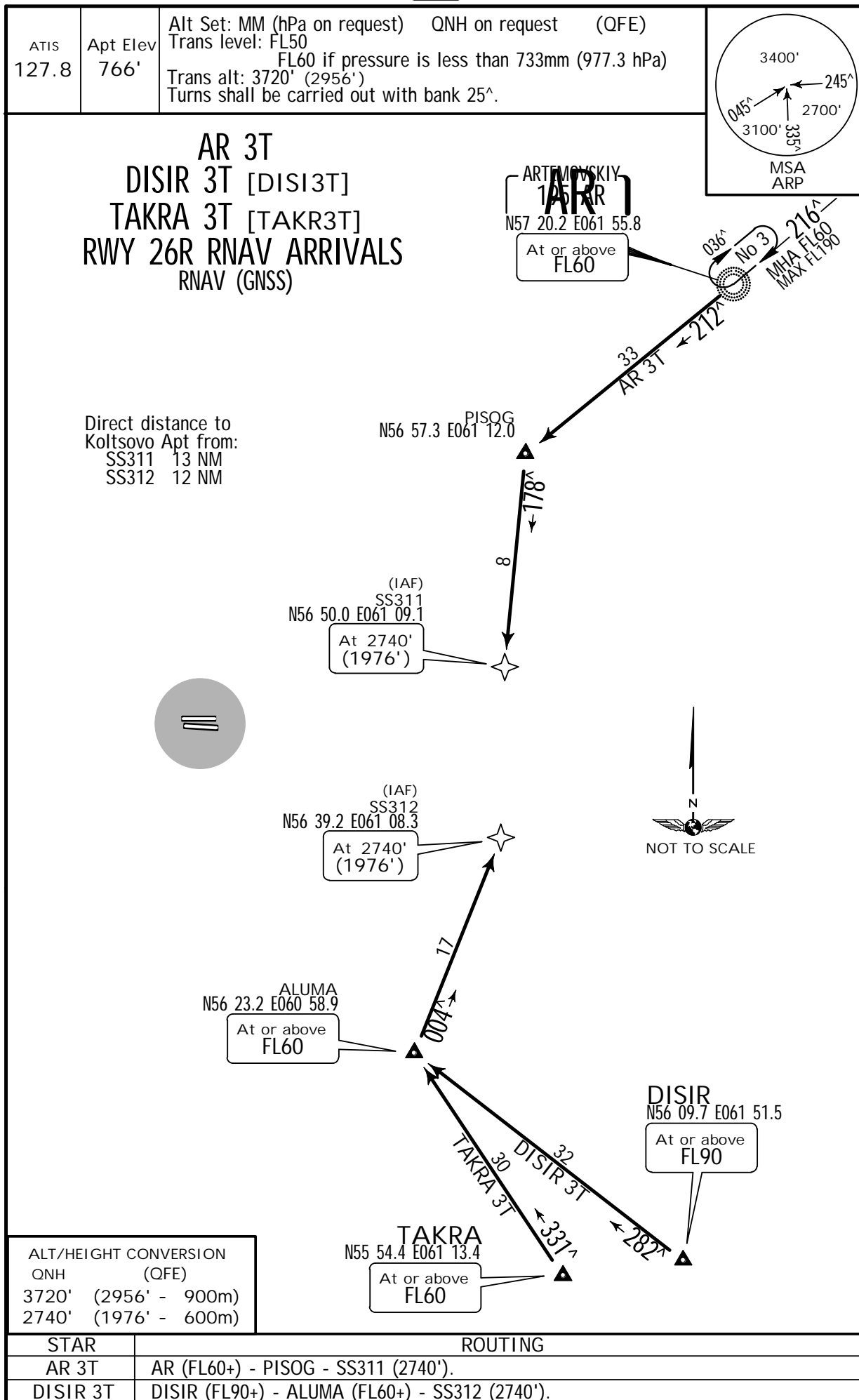
11 JAN 13

10-2



JEPPESEN

YEKATERINBURG, RUSSIA
.RNAV.STAR.



USSS/SVX
KOLTSOVO

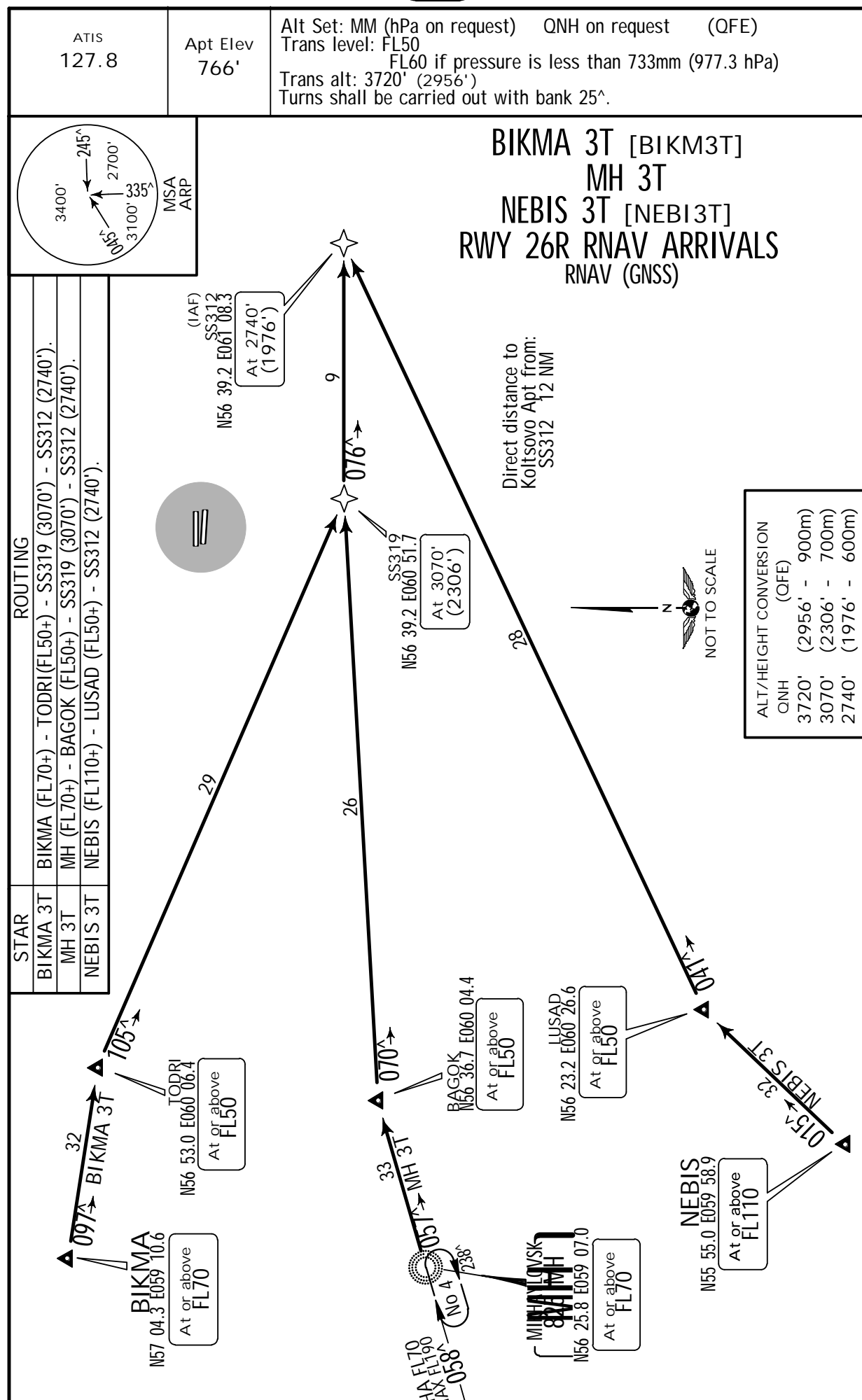
11 JAN 13

10-2A



JEPPESSEN

YEKATERINBURG, RUSSIA
.RNAV.STAR.



USSS/SVX
KOLTSOVO

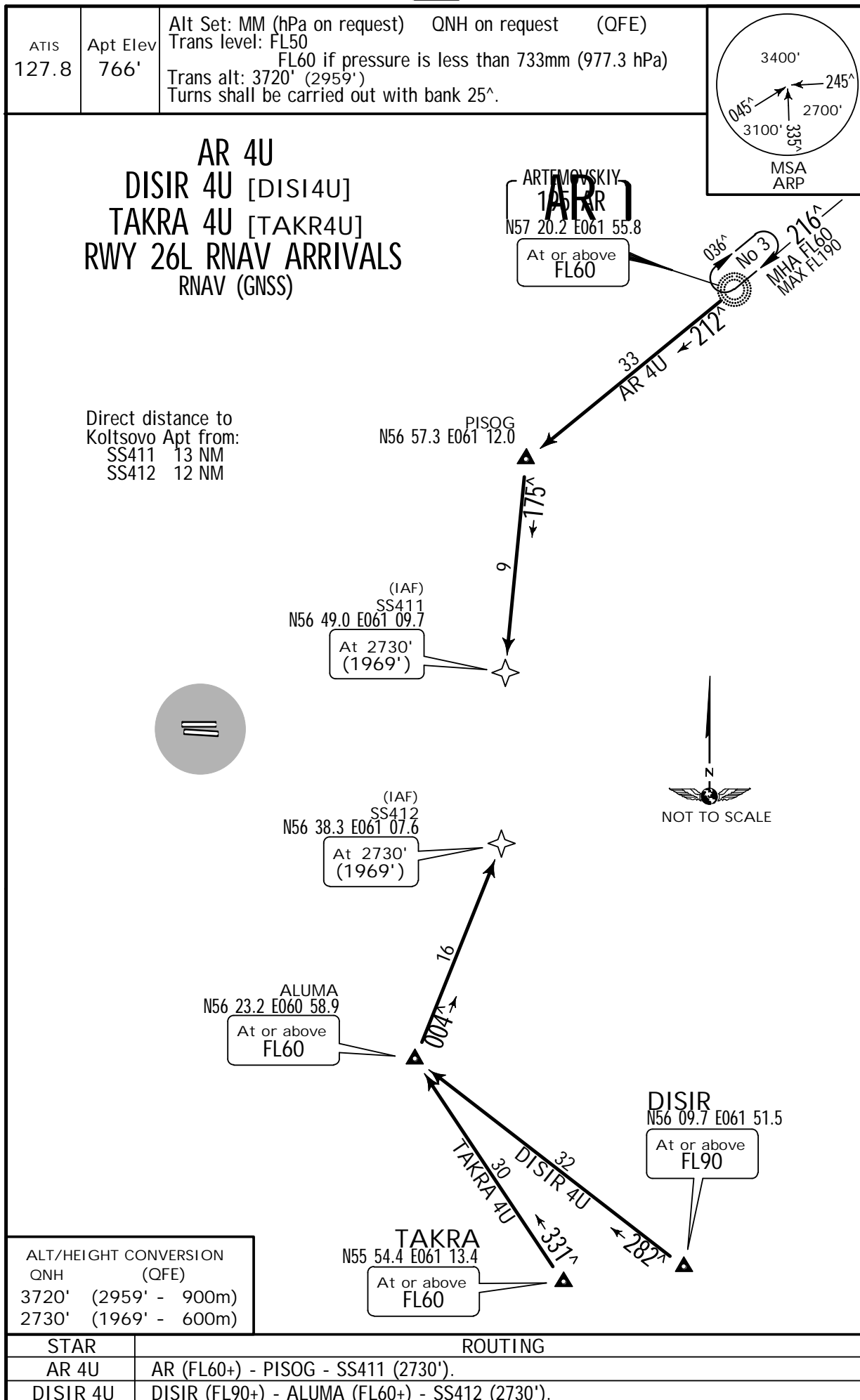
11 JAN 13

10-2B



JEPPESEN

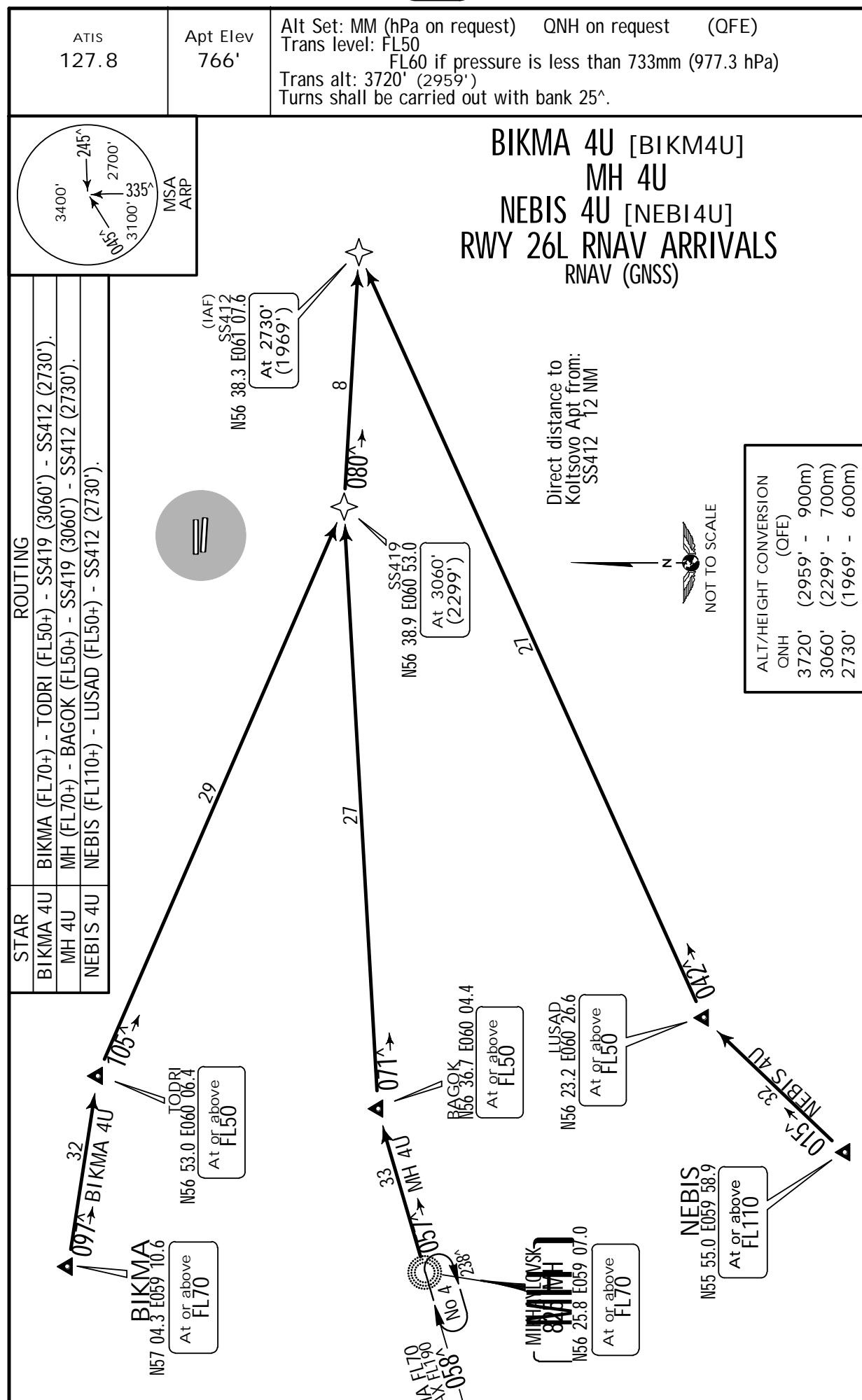
YEKATERINBURG, RUSSIA
.RNAV.STAR.



USSS/SVX
 KOLTSOVO

11 JAN 13 10-2C

YEKATERINBURG, RUSSIA
 .RNAV.STAR.

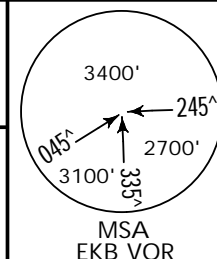


USSS/SVX
KOLTSOVO

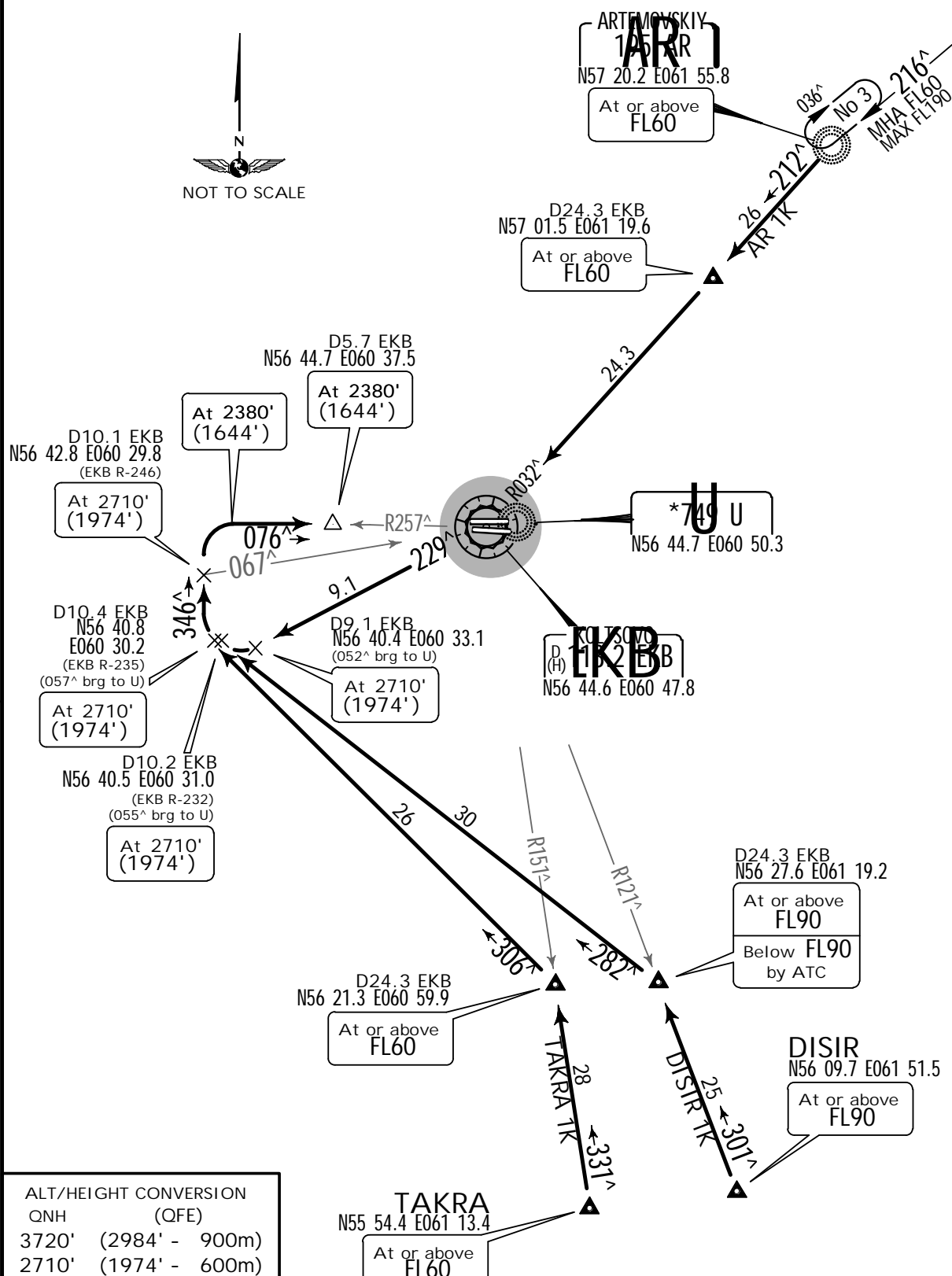
JEPPESEN
18 MAY 12 (10-2D) .Eff.31.May.

YEKATERINBURG, RUSSIA
.STAR.

| | | |
|---------------|------------------|---|
| ATIS 127.8 | Apt Elev 766' | Alt Set: MM (hPa on request) QNH on request (QFE) Trans level: FL50 FL60 if pressure is less than 733mm (977.3 hPa) Trans alt: 3720' (2984') |
|---------------|------------------|---|



AR 1K, DISIR 1K [DISI1K]
TAKRA 1K [TAKR1K]
RWY 08L ARRIVALS



USSS/SVX
KOLTSOVO

JEPPESEN YEKA
18 MAY 12 (10-2E) .Eff.31.May.

YEKATERINBURG, RUSSIA
31.May. .STAR.

ATIS
127.8

Apt Elev
766'

Alt Set: MM (hPa on request) QNH on request (QFE)
Trans level: FL50
FL60 if pressure is less than 733mm (977.3 hPa)
Trans alt: 3720' (2984')

BIKMA 1K [BIKM1K], MH 1K
NEBIS 1K [NEBI1K]
RWY 08L ARRIVALS

3400'
2700'
3100'
335'
245°
MSA
EKB VOR

ALT/HEIGHT CONVERSION
(QFE)

| QNH | (QFE) |
|------|----------------|
| 720' | (2984' - 900m) |
| 710' | (1974' - 600m) |
| 380' | (1644' - 500m) |

USSS/SVX
KOLTSOVO

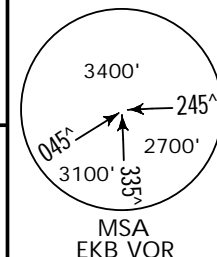
JEPPESEN
18 MAY 12 10-2F .Eff.31.May.

YEKATERINBURG, RUSSIA
.STAR.

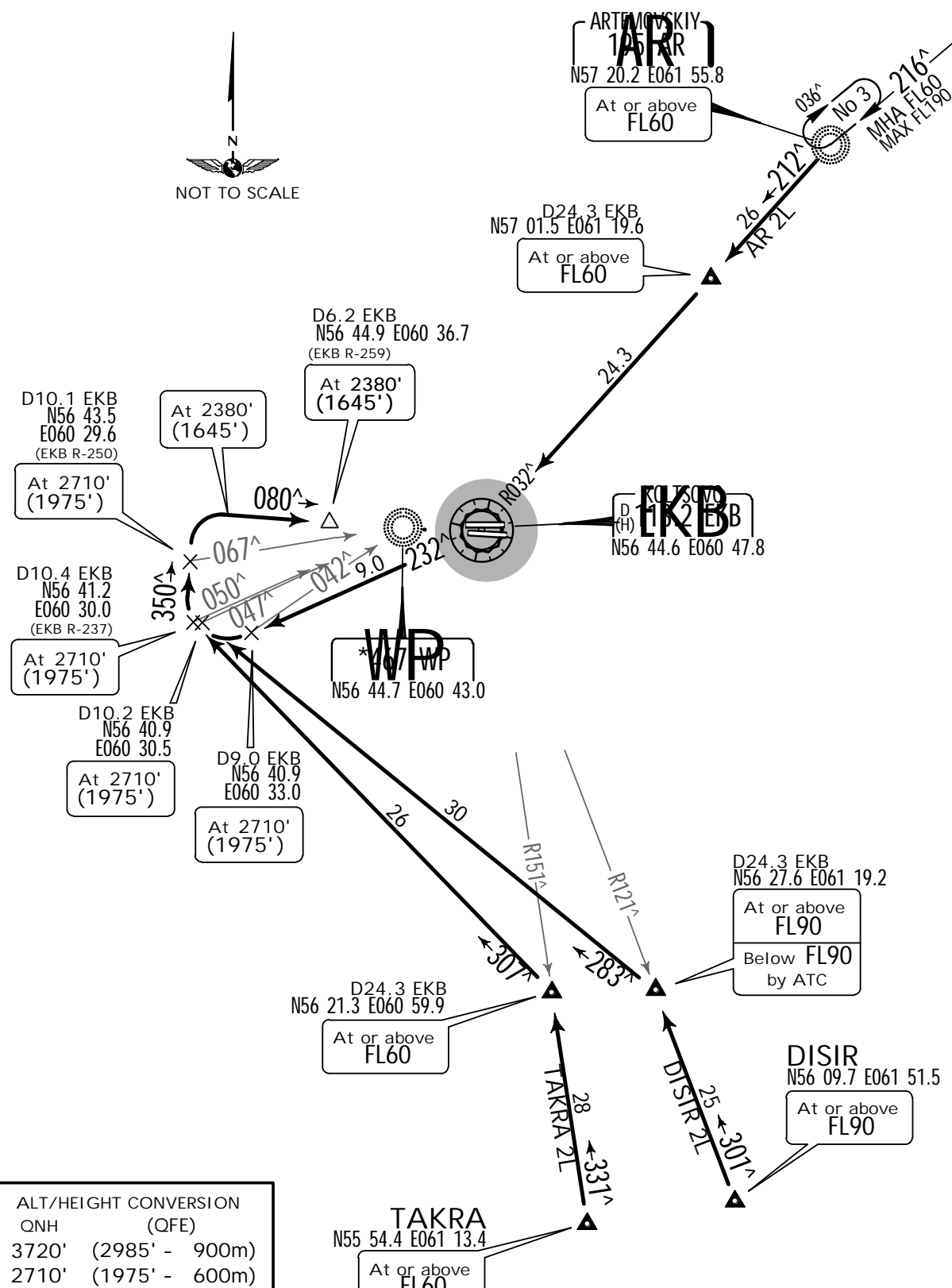
ATIS
127.8

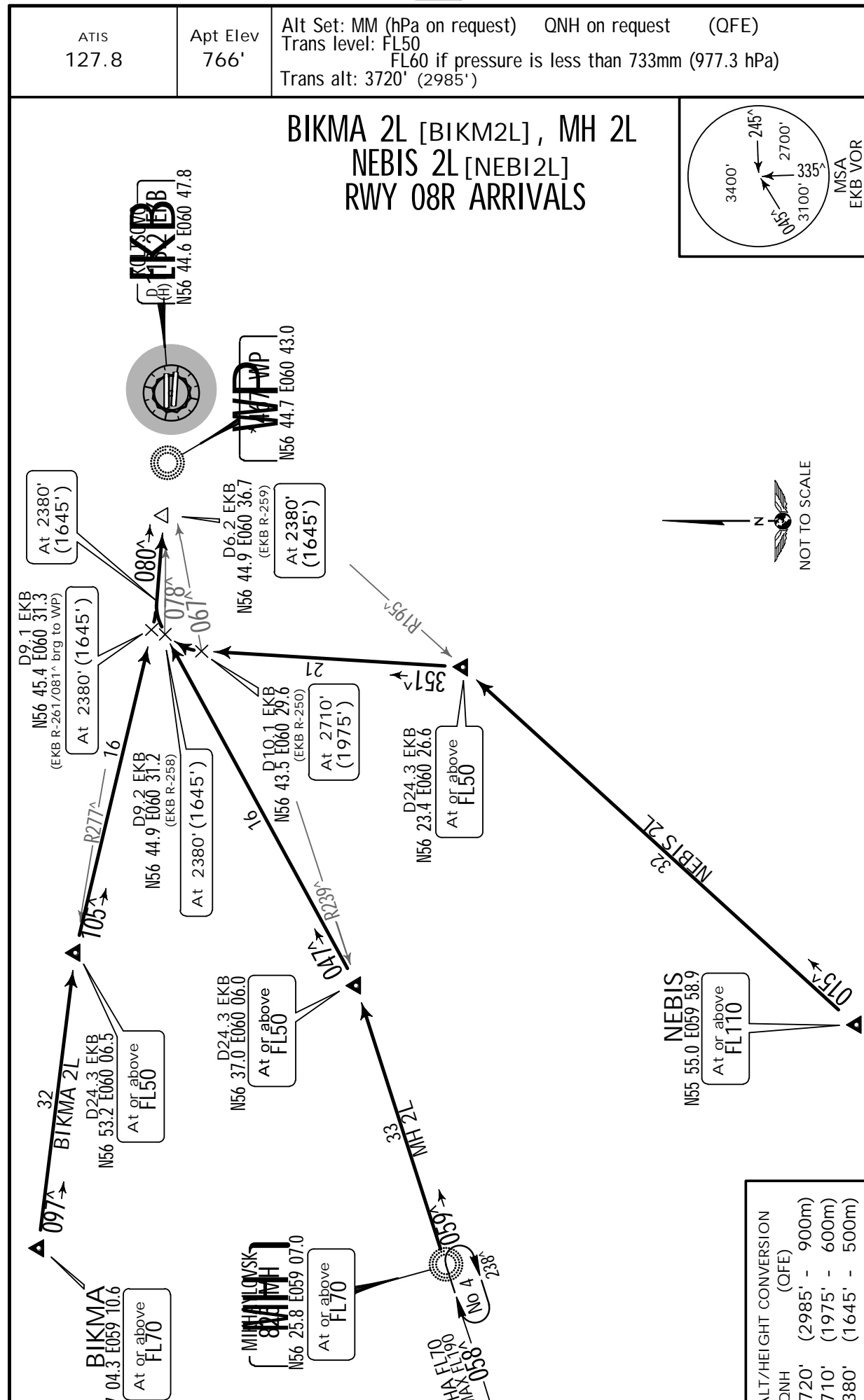
Apt Elev
766'

Alt Set: MM (hPa on request) QNH on request (QFE)
Trans level: FL50
FL60 if pressure is less than 733mm (977.3 hPa)
Trans alt: 3720' (2985')



AR 2L, DISIR 2L [DISI2L]
TAKRA 2L [TAKR2L]
RWY 08R ARRIVALS



USSS/SVX
KOLTSOVOJEPPESEN
18 MAY 12 (10-2G) .Eff.31.May.YEKATERINBURG, RUSSIA
.STAR.

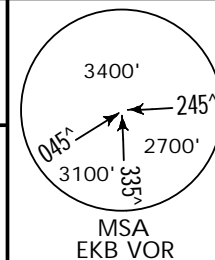
USSS/SVX
KOLTSOVO

YEKATERINBURG, RUSSIA

18 MAY 12 (10-2H) .Eff.31.May.

.STAR.

| | | |
|---------------|------------------|---|
| ATIS 127.8 | Apt Elev 766' | Alt Set: MM (hPa on request) QNH on request (QFE) Trans level: FL50 FL60 if pressure is less than 733mm (977.3 hPa) Trans alt: 3720' (2956') |
|---------------|------------------|---|



AR 3M
DISIR 3M [DISI3M]
DISIR 3P [DISI3P] 1
TAKRA 3M [TAKR3M]
RWY 26R ARRIVALS

1 By ATC.

ARTEMOVSKIY
195 AR
N57 20.2 E061 55.8
At or above
EL60

D24.3 EKB
N57 01.5 E061 19.6

At or above
FL60

N56 57.4 E061 11.8

D5.6 EKB
N56 44.7 E060 57.9
(EKB R-075)
At 2410'
(1646')

At 2410'
(1646')

D9.8 EKB
N56 46.1 E061 05.5
(EKB R-067)

At 2740'
(1976')

D9.4 EKB
N56 43.8 E061 04.9
(EKB R-081)

At 2410'
(1646')

D9.8 EKB
N56 43.0 E061 05.3
(EKB R-085)

At 2740'
(1976')

D10.2 EKB
N56 41.4 E061 05.3
(EKB R-094)

At 2740'
(1976')

D22.1 EKB
N56 23.3 E060 58.8

At or above
FL60

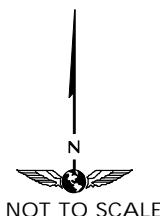
N56 21.3 E060 59.9
At or above
FL60

D24.3 EKB
N56 27.6 E061 19.2
At or above
EI 60

DISIR
N56 09.7 E061 51.5
At or above
FL60

TAKRA
N55 54.4 E061 13.4
At or above
FL60

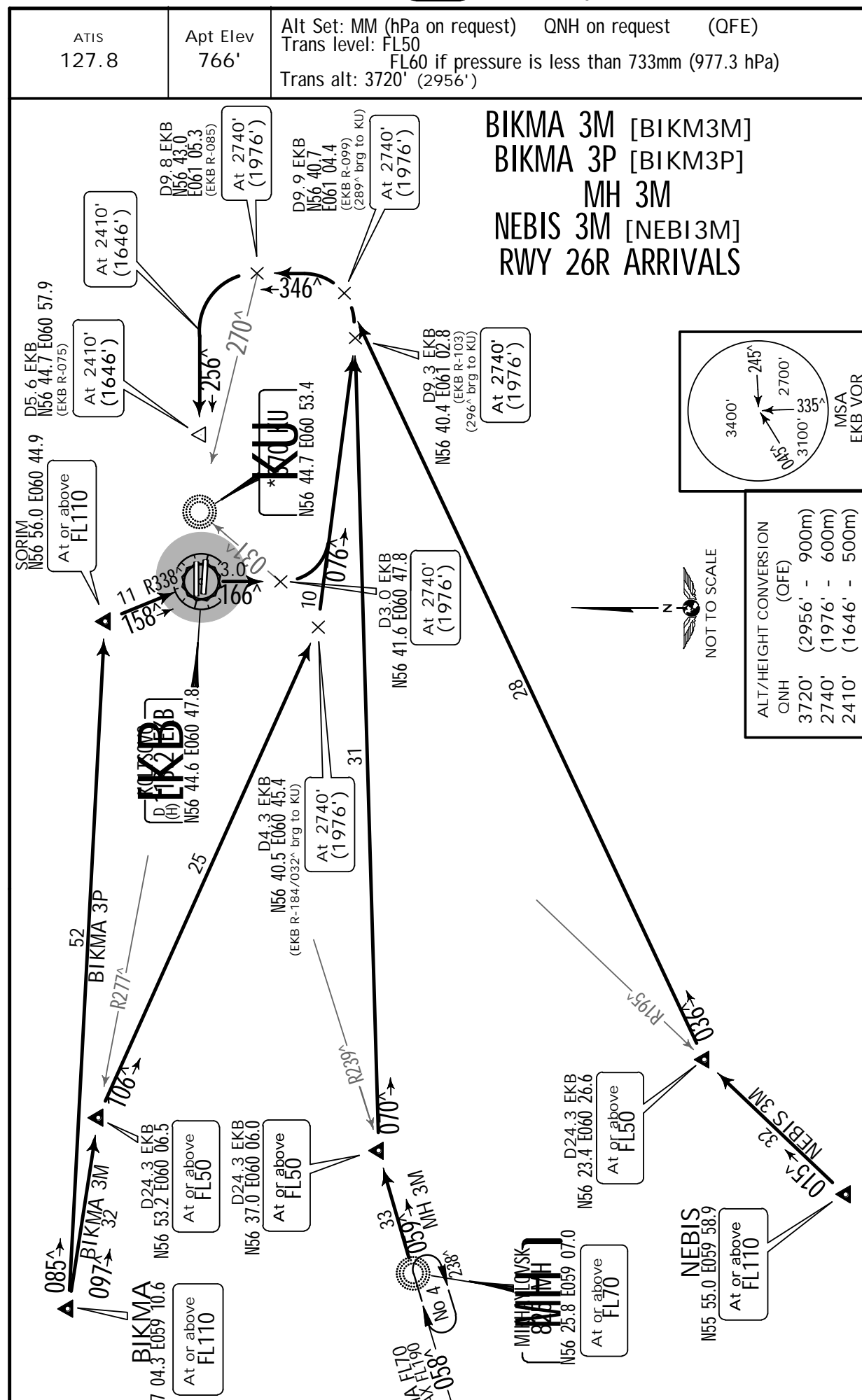
| ALT/HEIGHT CONVERSION | |
|-----------------------|----------------|
| QNH | (QFE) |
| 3720' | (2956' - 900m) |
| 2740' | (1976' - 600m) |



USSS/SVX
KOLTSOVO

JEPPESSEN
18 MAY 12 10-2J .Eff.31.May.

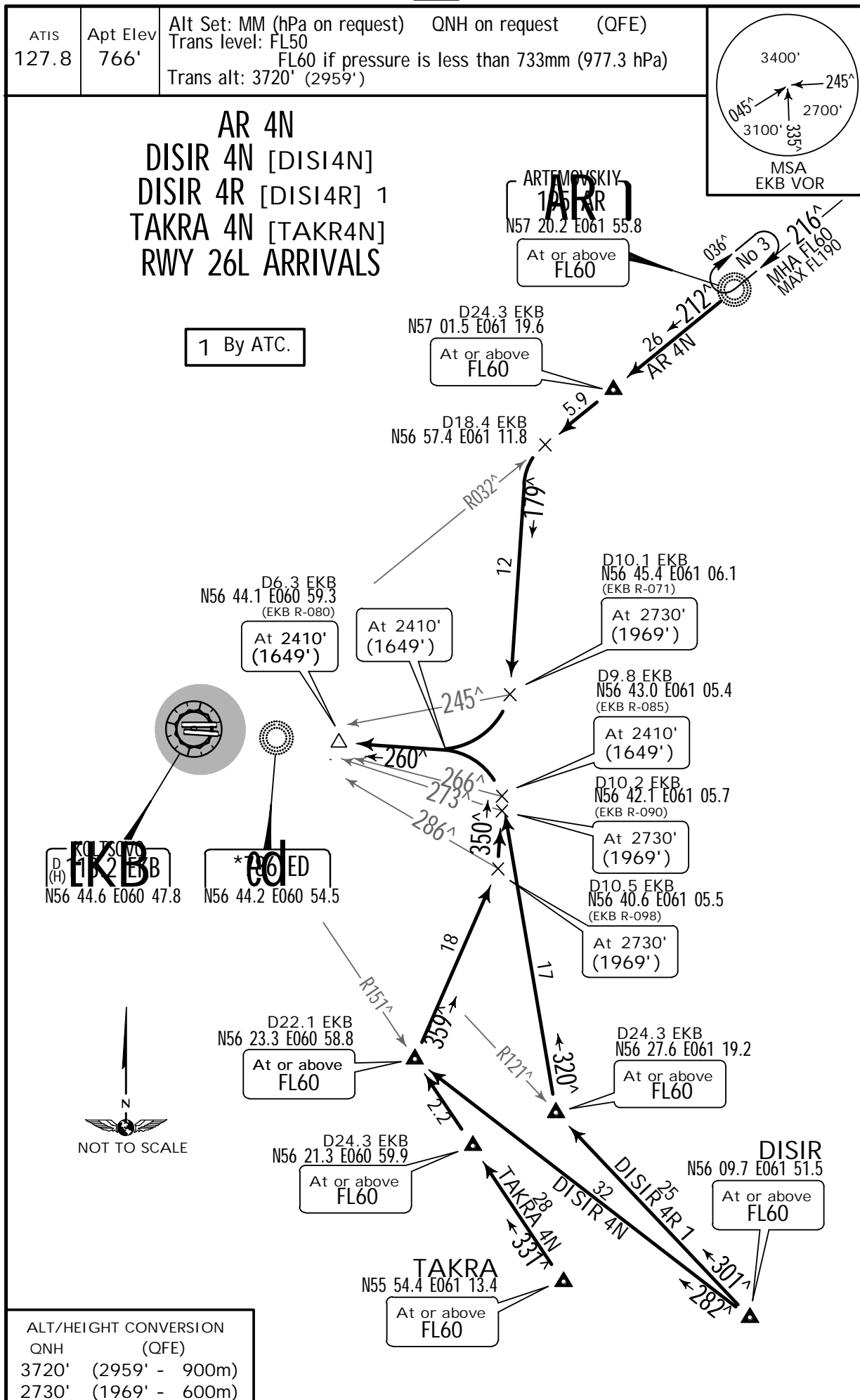
YEKATERINBURG, RUSSIA
.STAR.



USSS/SVX
KOLTSOVO

JEPPesen
18 MAY 12 (10-2K) .Eff.31.May.

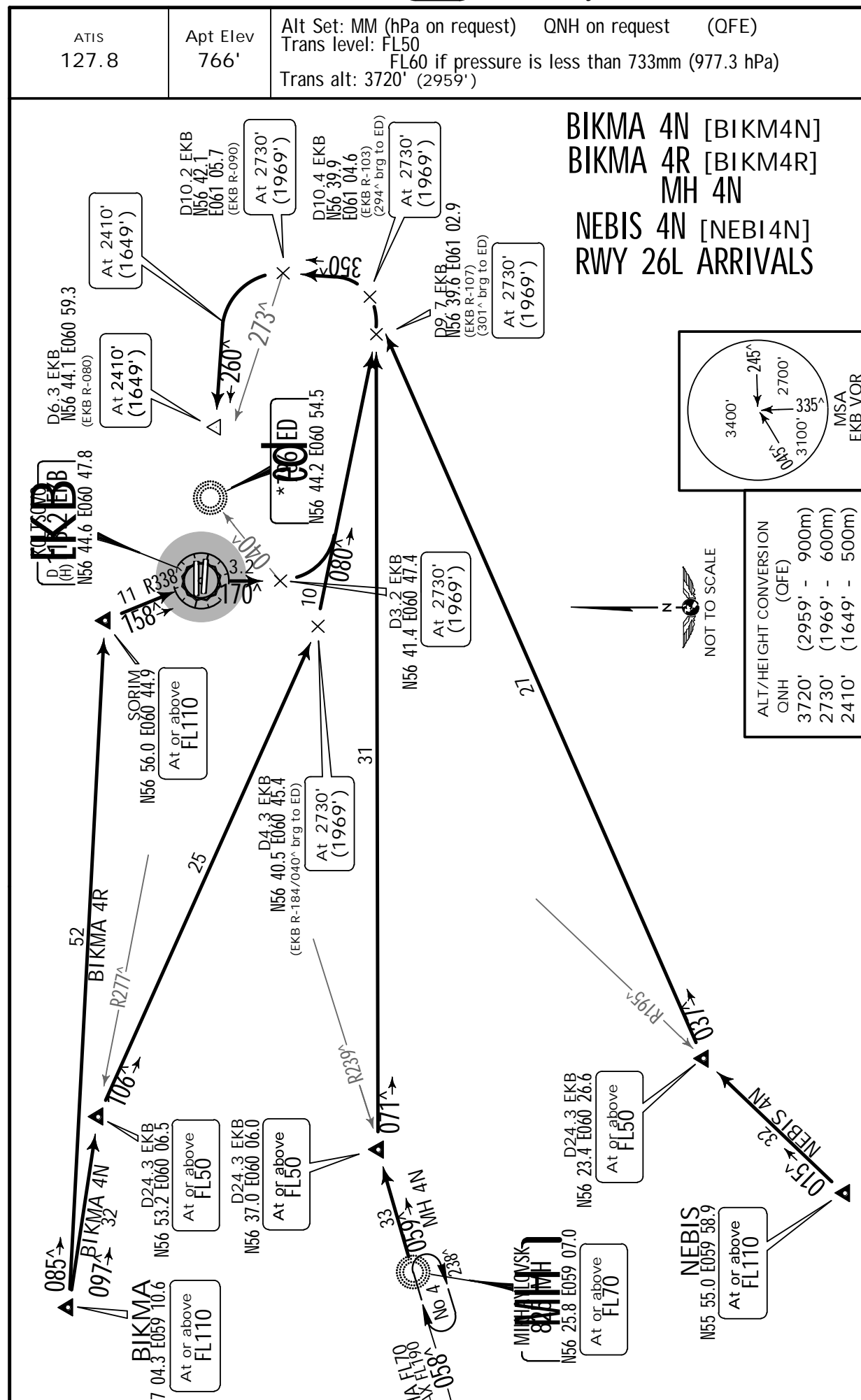
YEKATERINBURG, RUSSIA
.STAR.



USSS/SVX
KOLTSOVO

JEPPESSEN
18 MAY 12 10-2L .Eff.31.May.

YEKATERINBURG, RUSSIA
.STAR.



USSS/SVX
KOLTSOVO

19 JUL 13

10-3

Eff. 25 Jul.

YEKATERINBURG, RUSSIA

.SID.

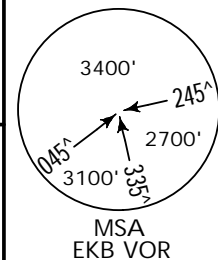
Apt Elev
766'

QNH on request (QFE)

Trans level: FL50

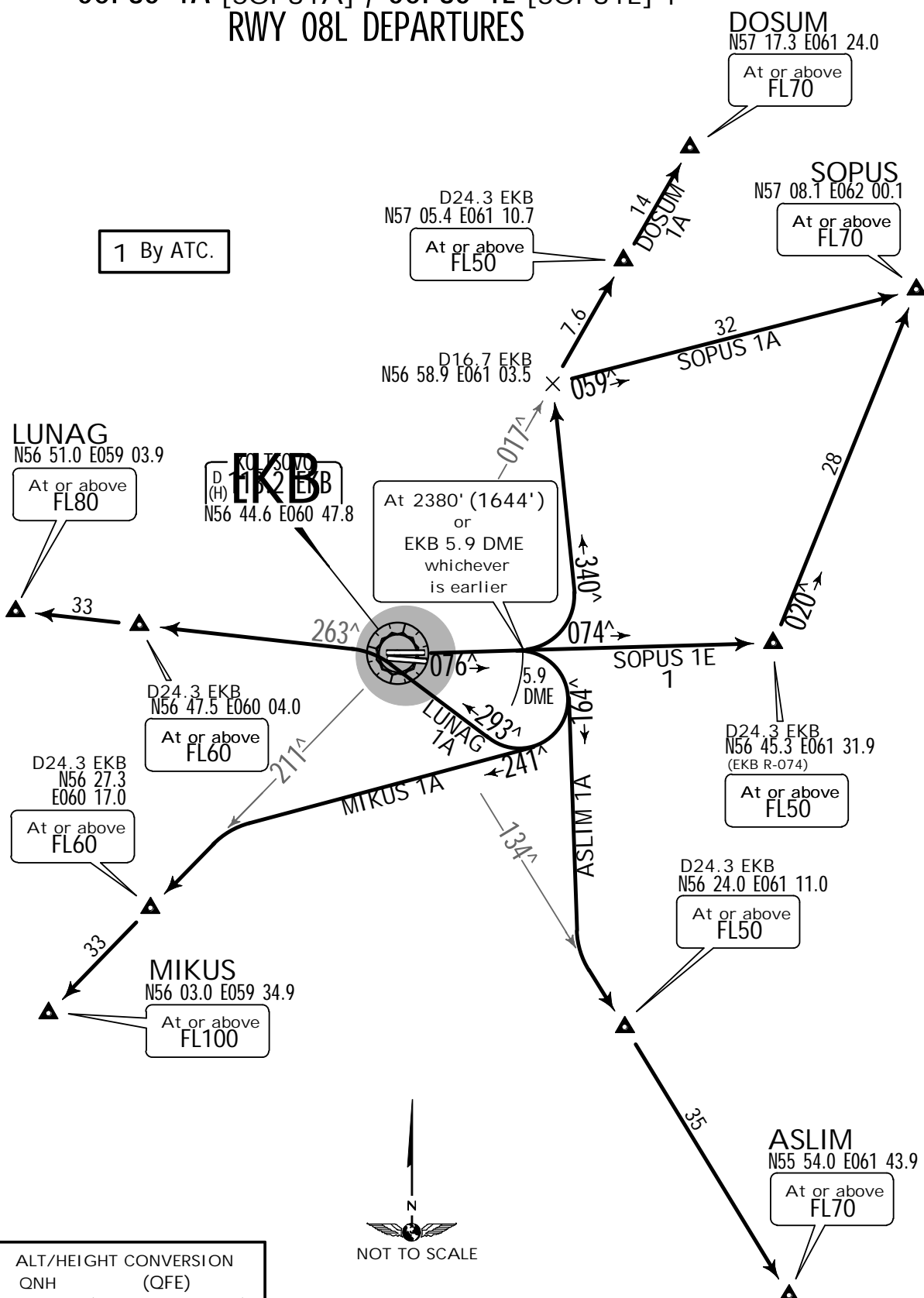
FL60 if pressure is less than 733mm (977.3 hPa)

Trans alt: 3720' (2984')



ASLIM 1A [ASLI1A] , DOSUM 1A [DOSU1A]
LUNAG 1A [LUNA1A] , MIKUS 1A [MIKU1A]
SOPUS 1A [SOPU1A] , SOPUS 1E [SOPU1E] 1
RWY 08L DEPARTURES

1 By ATC.



ALT/HEIGHT CONVERSION
QNH (QFE)
2380' (1644' - 500m)

USSS/SVX
KOLTSOVO

19 JUL 13

(10-3A)

Eff. 25 Jul.

YEKATERINBURG, RUSSIA

.SID.

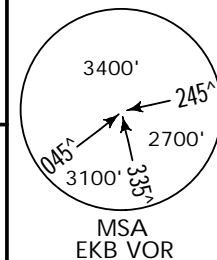
Apt Elev
766'

QNH on request (QFE)

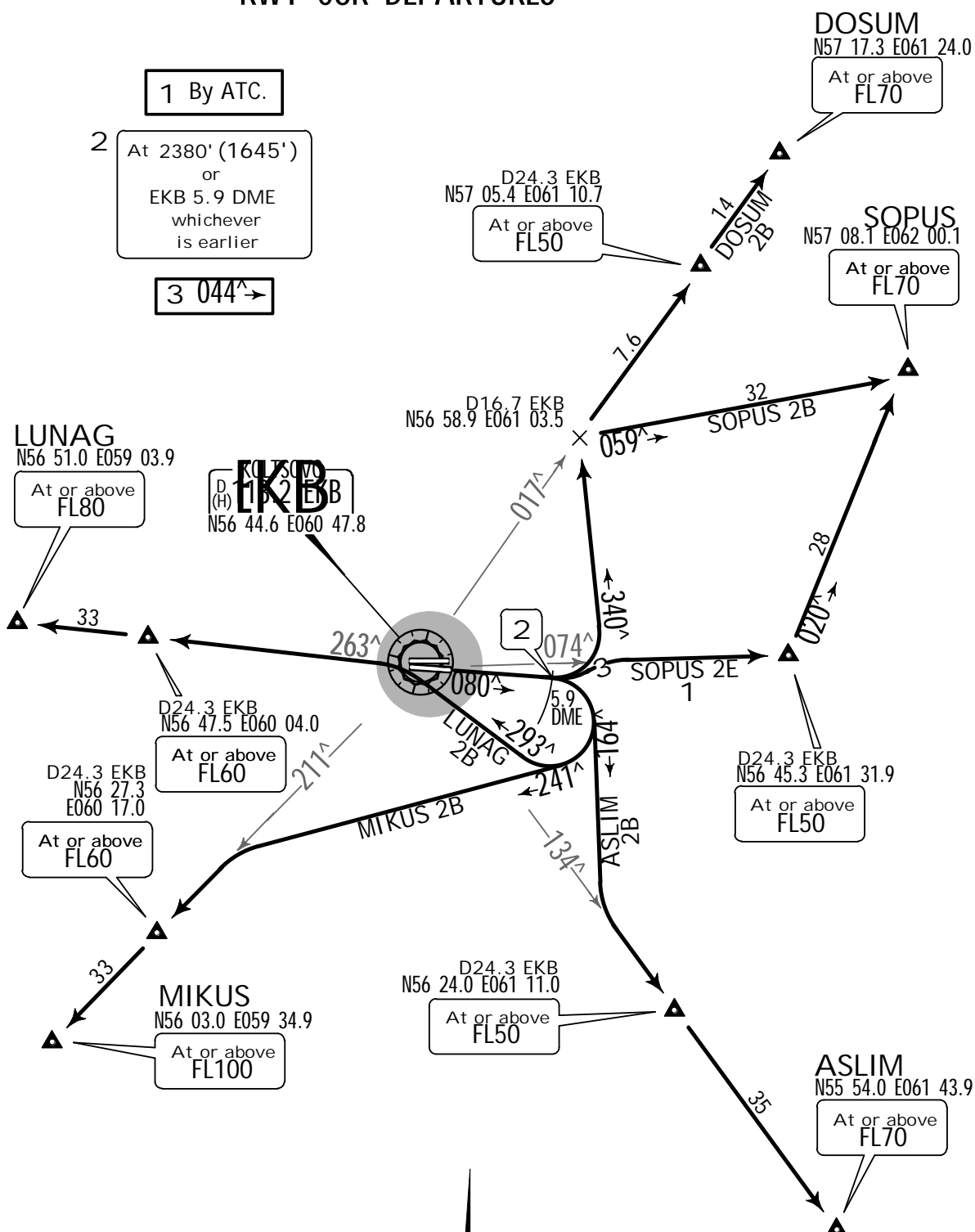
Trans level: FL50

FL60 if pressure is less than 733mm (977.3 hPa)

Trans alt: 3720' (2985')



ASLIM 2B [ASLI2B] , DOSUM 2B [DOSU2B]
LUNAG 2B [LUNA2B] , MIKUS 2B [MIKU2B]
SOPUS 2B [SOPU2B] , SOPUS 2E [SOPU2E] 1
RWY 08R DEPARTURES



ALT/HEIGHT CONVERSION
QNH (QFE)
2380' (1645' - 500m)



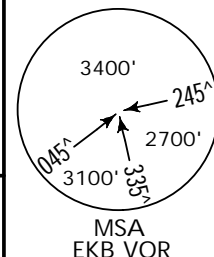
USSS/SVX
KOLTSOVO

JEPPESSEN
19 JUL 13 (10-3B) .Eff.25.Jul.

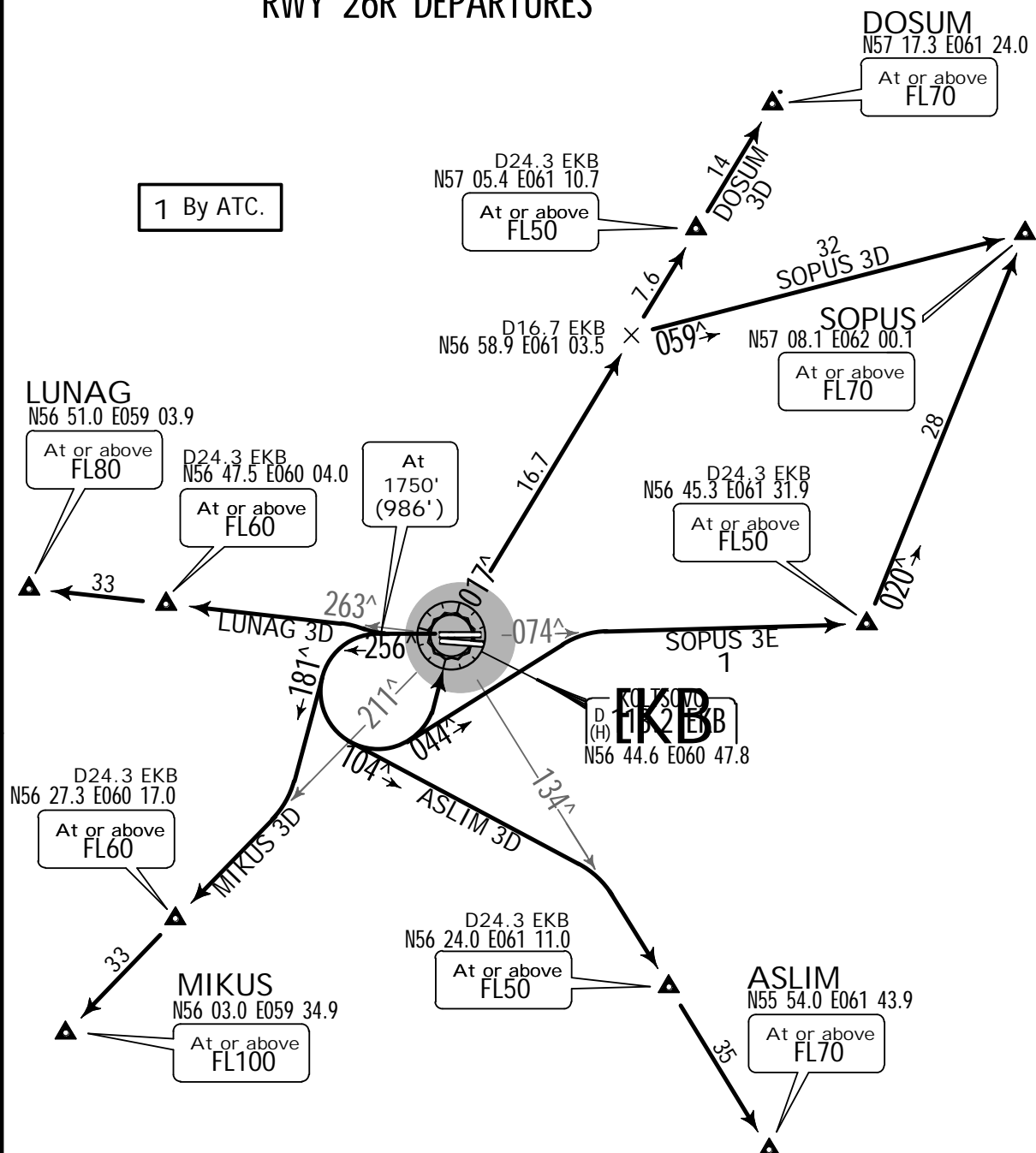
YEKATERINBURG, RUSSIA
.SID.

Apt Elev
766'

QNH on request (QFE)
Trans level: FL50
FL60 if pressure is less than 733mm (977.3 hPa)
Trans alt: 3720' (2956')
Take off should be executed with noise abatement procedures
according to Flight Operation Manual.



ASLIM 3D [ASLI3D] , DOSUM 3D [DOSU3D]
LUNAG 3D [LUNA3D] , MIKUS 3D [MIKU3D]
SOPUS 3D [SOPU3D] , SOPUS 3E [SOPU3E] 1
RWY 26R DEPARTURES



ALT/HEIGHT CONVERSION
QNH (QFE)
1750' (986' - 300m)



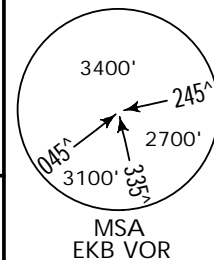
USSS/SVX
KOLTSOVO

JEPPesen
19 JUL 13 (10-3C) .Eff.25.Jul.

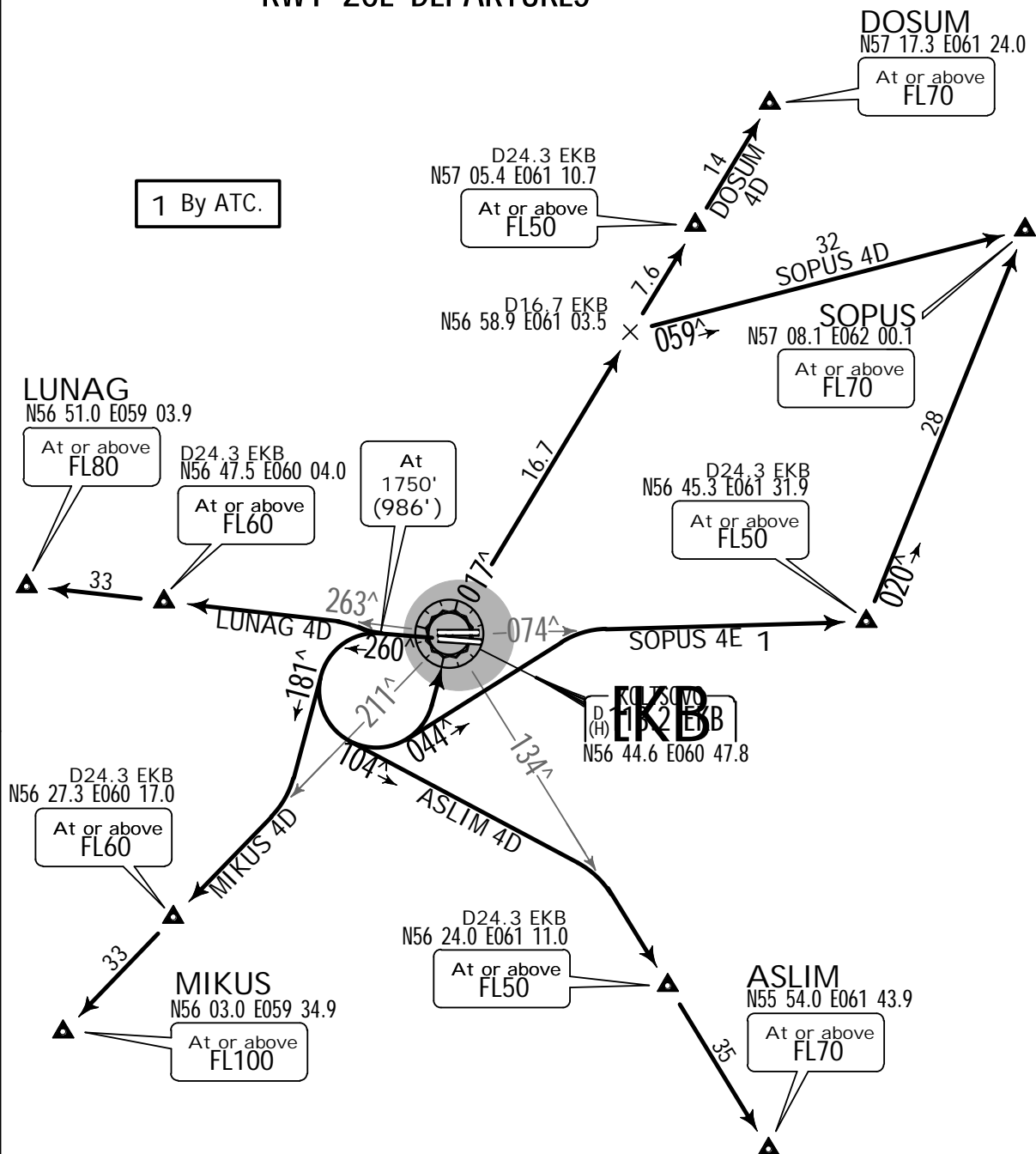
YEKATERINBURG, RUSSIA
.SID.

Apt Elev
766'

QNH on request (QFE)
Trans level: FL50
FL60 if pressure is less than 733mm (977.3 hPa)
Trans alt: 3720' (2956')
Take off should be executed with noise abatement procedures
according to Flight Operation Manual.



ASLIM 4D [ASLI4D] , DOSUM 4D [DOSU4D]
LUNAG 4D [LUNA4D] , MIKUS 4D [MIKU4D]
SOPUS 4D [SOPU4D] , SOPUS 4E [SOPU4E] 1
RWY 26L DEPARTURES



ALT/HEIGHT CONVERSION
QNH (QFE)
1750' (986' - 300m)



USSS/SVX

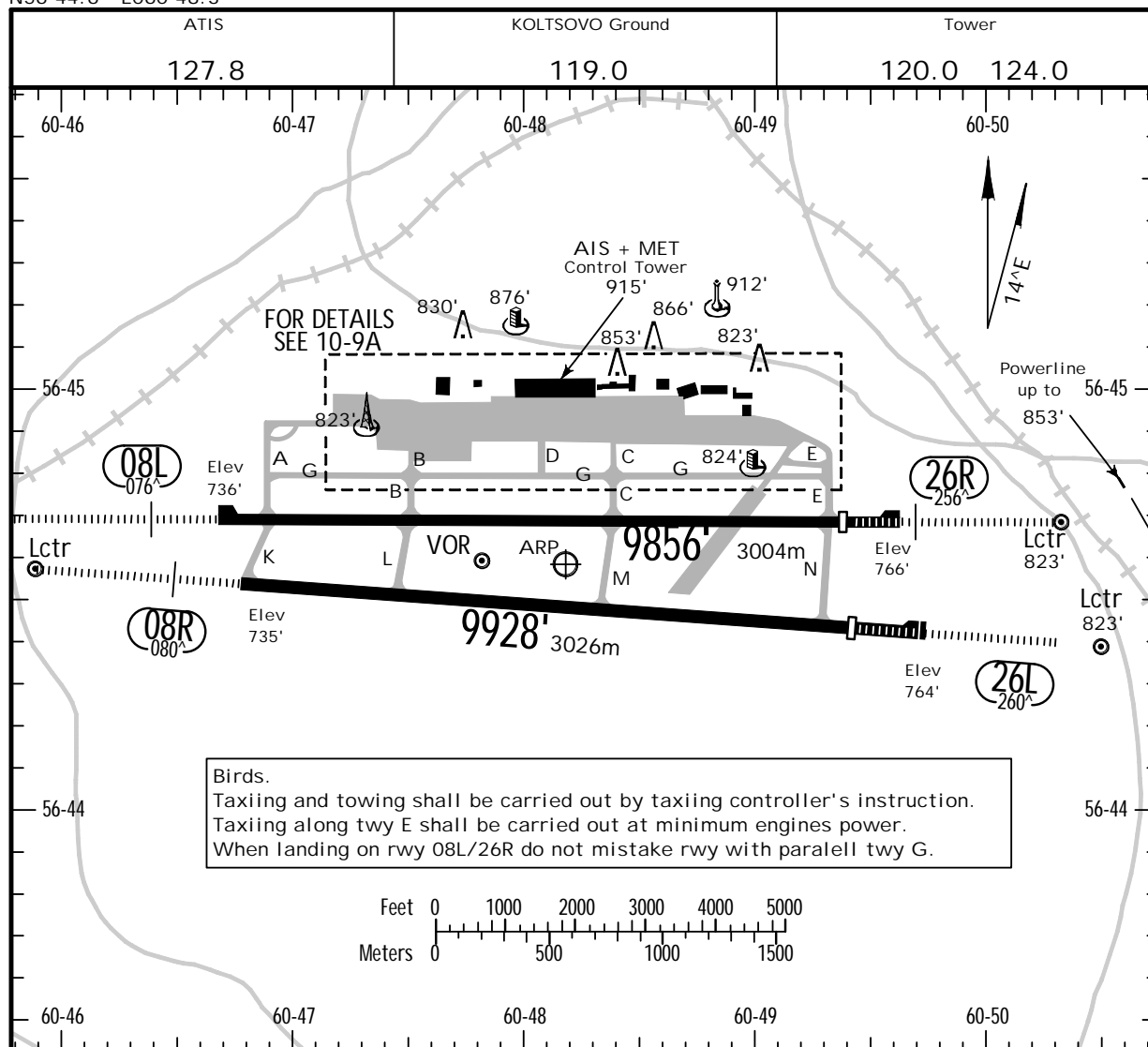
Apt Elev 768
N56 44.6 E060 48.3

JEPPESEN

YEKATERINBURG, RUSSIA

5 SEP 14 (10-9) .Eff.18.Sep.

KOLTSOVO



ADDITIONAL RUNWAY INFORMATION

| | | | | | USABLE LENGTHS | | TAKE-OFF | WIDTH |
|-----|------------|-------|----------------|---|----------------|-------------|----------|----------|
| | | | | | LANDING BEYOND | | | |
| RWY | | | | | Threshold | Glide Slope | | |
| 08L | HIRL (57m) | HIALS | PAPI-L (3.00°) | 1 | | 8823' 2689m | 2 | 148' 45m |
| 26R | HIRL (57m) | HIALS | PAPI-L (3.17°) | 1 | 9036' 2754m | 8003' 2439m | | |
| 08R | HIRL (60m) | HIALS | PAPI-L (2.67°) | 1 | 9682' 2951m | 8710' 2655m | 2 | 174' 53m |
| 26L | HIRL (60m) | HIALS | PAPI-L (2.83°) | 1 | 8862' 2701m | 7829' 2386m | | |
| | | | | | | | | |

1 Use by B747 acft prohibited.

2 TAKE-OFF RUN AVAILABLE

RWY 08L:

From rwy head 9856' (3004m)
 twy A int 9154' (2790m)
 twy B int 7073' (2156m)

RWY 26R:

From rwy head 9856' (3004m)
 twy E int 8835' (2693m)
 twy C int 5709' (1740m)

RWY 08R:

From rwy head 9682' (2951m)
 twy L int 7434' (2266m)

RWY 26L:

From rwy head 9928' (3026m)
 twy N int 8419' (2566m)
 twy M int 5197' (1584m)

TAKE-OFF

AIR CARRIER (JAA)

All Rwys

LVP must be in force

RCLM (DAY only)
or RLRCLM (DAY only)
or RLA
B
C

250m

400m

USSS/SVX



JEPPESEN

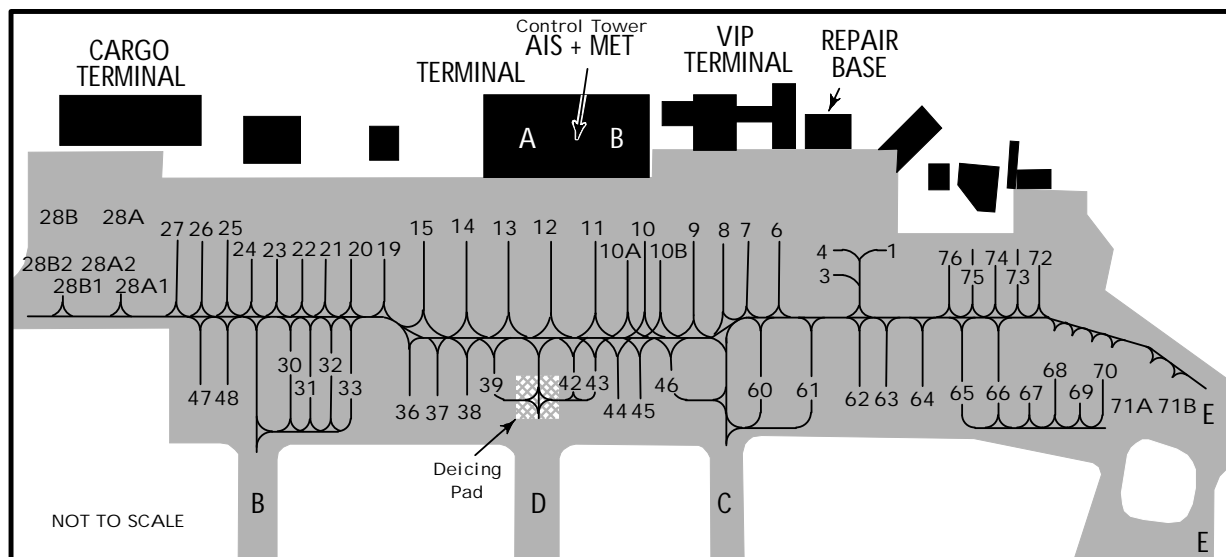
5 SEP 14

(10-9A)

.Eff.18.Sep.

YEKATERINBURG, RUSSIA

KOLTSOVO



Stands 28A, 28B, 36 thru 39, 42 thru 46 and 72 thru 76 available for helicopters.

INS COORDINATES

| STAND No. | COORDINATES | | ELEV | STAND No. | COORDINATES | | ELEV |
|-----------|-------------|-----------|------|------------|-------------|-----------|------|
| 6 | N56 45.0 | E060 48.5 | 757 | 23 | N56 45.0 | E060 47.6 | 748 |
| 7 | N56 45.0 | E060 48.4 | 755 | 24 | N56 45.0 | E060 47.5 | 749 |
| 8 | N56 45.0 | E060 48.4 | 754 | 25 | N56 45.0 | E060 47.5 | 748 |
| 9 | N56 45.0 | E060 48.3 | 754 | 26 | N56 45.0 | E060 47.4 | 748 |
| 10 | N56 45.0 | E060 48.2 | 753 | 27 | N56 45.0 | E060 47.4 | 747 |
| 10A | N56 45.0 | E060 48.2 | 752 | 28A | N56 45.0 | E060 47.3 | 748 |
| 10B | N56 45.0 | E060 48.2 | 753 | 28B | N56 45.0 | E060 47.2 | 747 |
| 11 | N56 45.0 | E060 48.1 | 752 | 36 thru 38 | N56 44.9 | E060 47.9 | 747 |
| 12 | N56 45.0 | E060 48.1 | 751 | 39 | N56 44.9 | E060 48.0 | 748 |
| 13 | N56 45.0 | E060 48.0 | 751 | 42 | N56 44.9 | E060 48.1 | 749 |
| 14 | N56 45.0 | E060 48.0 | 750 | 43 | N56 44.9 | E060 48.2 | 750 |
| 15 | N56 45.0 | E060 47.9 | 750 | 44, 45 | N56 44.9 | E060 48.2 | 751 |
| 19 | N56 45.0 | E060 47.8 | 750 | 46 | N56 44.9 | E060 48.3 | 752 |
| 20 | N56 45.0 | E060 47.8 | 749 | | | | |
| 21, 22 | N56 45.0 | E060 47.7 | 749 | | | | |

LOW VISIBILITY PROCEDURES (LVP)

Low visibility procedures shall come into force when rwy visibility values are less than 800m and/or cloud ceiling is 60m. The implementation of LVP will be broadcasted by ATIS:
"Low visibility procedures in progress".

1. Arrival

During LVP LOC and GP signals will be protected from interference when acft is on final approach segment.

ILS critical areas must be cleared of other acft and vehicles.

After landing in low visibility conditions the flight crew must report to TWR controller about landing, vacation of rwy and ILS critical area and also of any other airfield segments by the instructions (request) of the controller.

2. Departure

Before departure in low visibility conditions the flight crew must report to TWR controller about vacation/occupation of rwy and ILS critical area and also of any other airfield segments by the instructions (request) of the controller.

USSS/SVX


JEPPESEN
 7 DEC 12
 .Eff.13.Dec. 10-9S

 Standard.
YEKATERINBURG, RUSSIA
 KOLTSOVO

| STRAIGHT-IN RWY | | A | B | C | D |
|-----------------|-------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| 08L | ILS | 936' (200') | 936' (200') | 936' (200') | 936' (200') |
| | FULL | R550m | R550m | R550m | R550m |
| | Limited | R750m | R750m | R750m | R750m |
| | ALS out | R1200m | R1200m | R1200m | R1200m |
| | LOC | NOT AUTH | NOT AUTH | NOT AUTH | NOT AUTH |
| | NDB 1 with FAF | 1470' (734') C2700m | 1470' (734') C2700m | 1470' (734') C2700m | 1470' (734') C2700m |
| | ALS out | C3400m | C3400m | C3400m | C3400m |
| | NDB w/o FAF | 1830' (1094') C4300m | 1830' (1094') C4300m | 1830' (1094') C4500m | 1830' (1094') C4500m |
| 08R | ILS | 935' (200') | 935' (200') | 935' (200') | 935' (200') |
| | FULL | R550m | R550m | R550m | R550m |
| | Limited | R750m | R750m | R750m | R750m |
| | ALS out | R1200m | R1200m | R1200m | R1200m |
| | LOC | NOT AUTH | NOT AUTH | NOT AUTH | NOT AUTH |
| | NDB 1 with FAF | 1070' (335') R800m | 1070' (335') R800m | 1070' (335') R800m | 1070' (335') R800m |
| | ALS out | R1500m | R1500m | R1500m | R1500m |
| | NDB w/o FAF | 1710' (975') C4000m | 1710' (975') C4000m | 1710' (975') C4200m | 1710' (975') C4200m |
| 26L | ILS | 961' (200') | 961' (200') | 961' (200') | 961' (200') |
| | FULL | R550m | R550m | R550m | R550m |
| | Limited | R750m | R750m | R750m | R750m |
| | ALS out | R1200m | R1200m | R1200m | R1200m |
| | LOC | NOT AUTH | NOT AUTH | NOT AUTH | NOT AUTH |
| | RNAV 1 | 1260' (499') R1500m | 1260' (499') R1500m | 1260' (499') R1500m | 1260' (499') R1500m |
| | ALS out | R1500m | R1500m | C2300m | C2300m |
| | NDB 1 | 1240' (479') R1500m | 1240' (479') R1500m | 1240' (479') R1500m | 1240' (479') R1500m |
| 26R | ILS | 964' (200') | 964' (200') | 964' (200') | 964' (200') |
| | FULL | R550m | R550m | R550m | R550m |
| | Limited | R750m | R750m | R750m | R750m |
| | ALS out | R1200m | R1200m | R1200m | R1200m |
| | LOC | NOT AUTH | NOT AUTH | NOT AUTH | NOT AUTH |
| | RNAV 1 | 1260' (496') R1500m | 1260' (496') R1500m | 1260' (496') R1500m | 1260' (496') R1500m |
| | ALS out | R1500m | R1500m | C2300m | C2300m |
| | NDB 1 | 1220' (456') R1400m | 1220' (456') R1400m | 1220' (456') R1400m | 1220' (456') R1400m |
| | ALS out | R1500m | R1500m | C2100m | C2100m |

1 Continuous Descent Final Approach

USSS/SVX



YEKATERINBURG, RUSSIA
KOLTSOVO
Standard.

TAKE-OFF RWY 08L/R, 26L/R

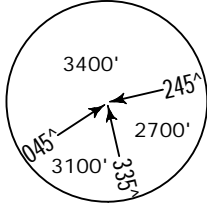
| LVP must be in Force | | | |
|----------------------|--------------------------|--------------------------|-------------------|
| | RCLM (DAY only) or RL | RCLM (DAY only) or RL | NIL (DAY only) |
| A | 250m | 400m | 500m |
| B | | | |
| C | | | |
| D | 300m | | |

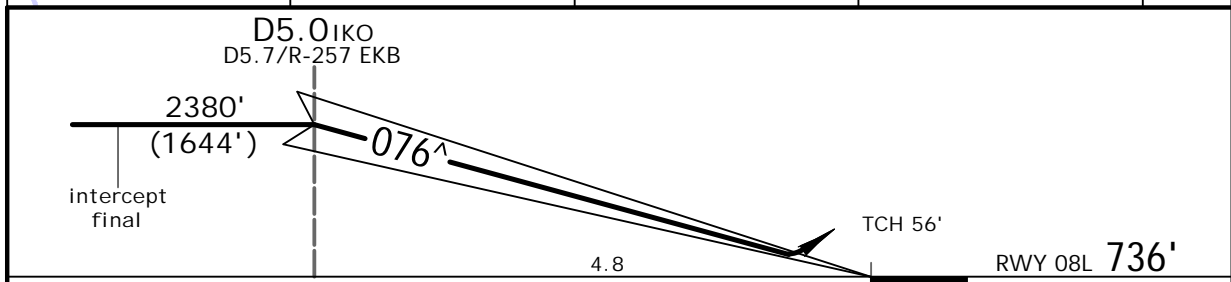
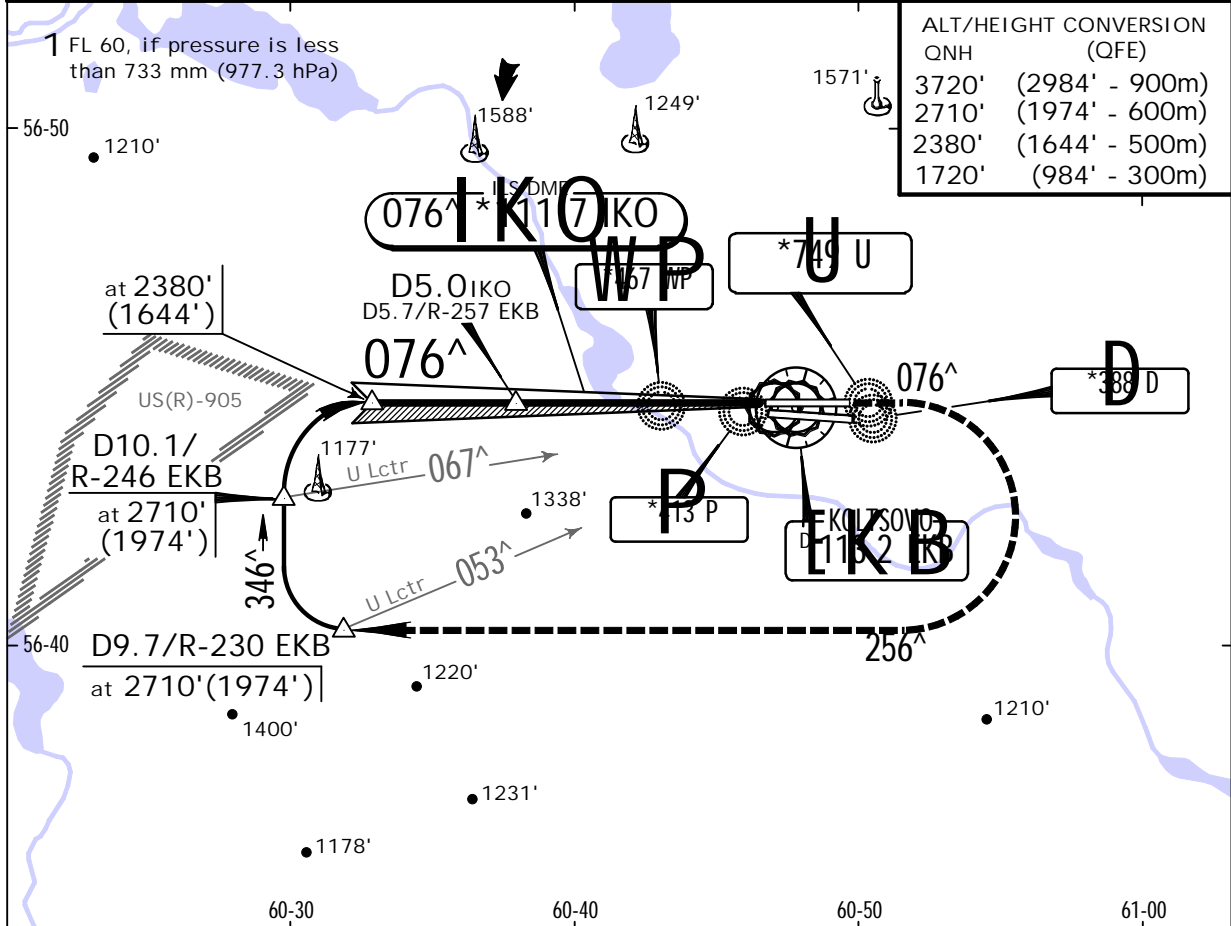
USSS/SVX
KOLTSOVO

JEPPESEN
18 MAY 12 (11-1) .Eff.31.May.

YEKATERINBURG, RUSSIA
ILS DME Rwy 08L

BRIEFING STRIP™

| | | | | |
|---|----------------------------------|-------------------------------|-------------------------------|--|
| ATIS 127.8 | KOLTSOVO Approach 125.9 124.0 | KOLTSOVO Radar 118.7 124.0 | KOLTSOVO Tower 120.0 124.0 | Ground 119.0 |
| LOC IKO *111.7 | Final Apch Crs 076^ | GS No Alt published | ILS DA(H) 936'(200') | Apt Elev 766' RWY 736' |
| MISSED APCH: Climb on 076^ to 1720'(984'), then turn RIGHT onto 256^ climbing to 2710'(1974'), then according to chart. | | | |  <p>MSA EKB VOR</p> |
| Alt Set: MM (hPa on req) | | QNH on req (QFE) | | Trans level: FL 50 1 |
| | | | | Trans alt: 3720' (2984') |



| | | | | | | | | | | | |
|---------------|-------|-----|-----|-----|-----|-----|-------|-----------------|------|------|------------------|
| Gnd speed-Kts | 70 | 90 | 100 | 120 | 140 | 160 | HIALS | 1720' (984') | 076^ | 256^ | 2710' (1974') |
| GS | 3.00^ | 377 | 484 | 538 | 646 | 753 | 861 | PAPI | ↑ | RT | ↑ |

| | | | |
|-----------------------------|---------|--------------|----------------|
| STRAIGHT-IN LANDING RWY 08L | | LOC (GS out) | |
| ILS | | | |
| DA(H) 936'(200') | | | |
| FULL | ALS out | | |
| A | | | |
| B | | | |
| C | 800m | 1200m | NOT AUTHORIZED |
| D | | | |

NS OPS

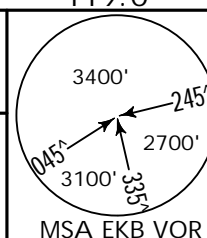
USSS/SVX
KOLTSOVO

18 MAY 12 (11-2) .Eff.31.May.

YEKATERINBURG, RUSSIA
.May. ILS Rwy 08R

| | | | | | | | | | |
|----------------------|---------------------------|----------------------------------|----------------------------|-------------------------------|---------------------------|-------------------------------|--|-----------------|--|
| ATIS 127.8 | | KOLTSOVO Approach 125.9 124.0 | | KOLTSOVO Radar 118.7 124.0 | | KOLTSOVO Tower 120.0 124.0 | | Ground 119.0 | |
| LOC IEL *109.9 | Final Apch Crs 080^ | GS LOM 1375'(640') | ILS DA(H) 935'(200') | | Apt Elev 766' RWY 735' | | | | |

MISSED APCH: Climb on 080^ to 1720'(985'), then turn RIGHT onto 260^ climbing to 2710'(1975'), then according to chart.



MSA EKB VOR

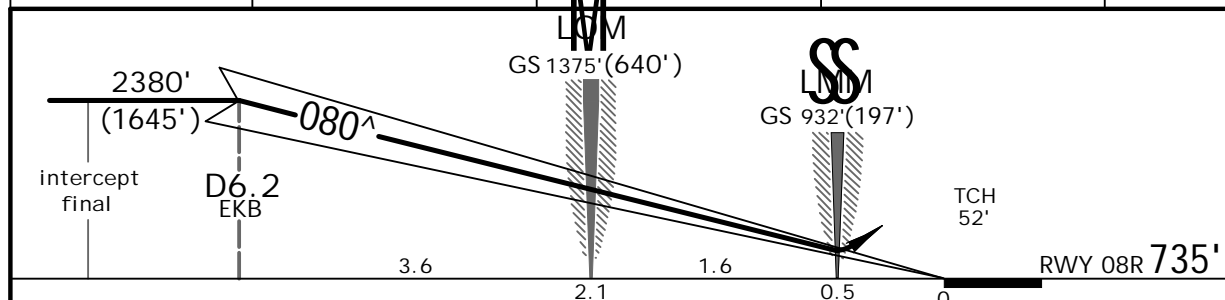
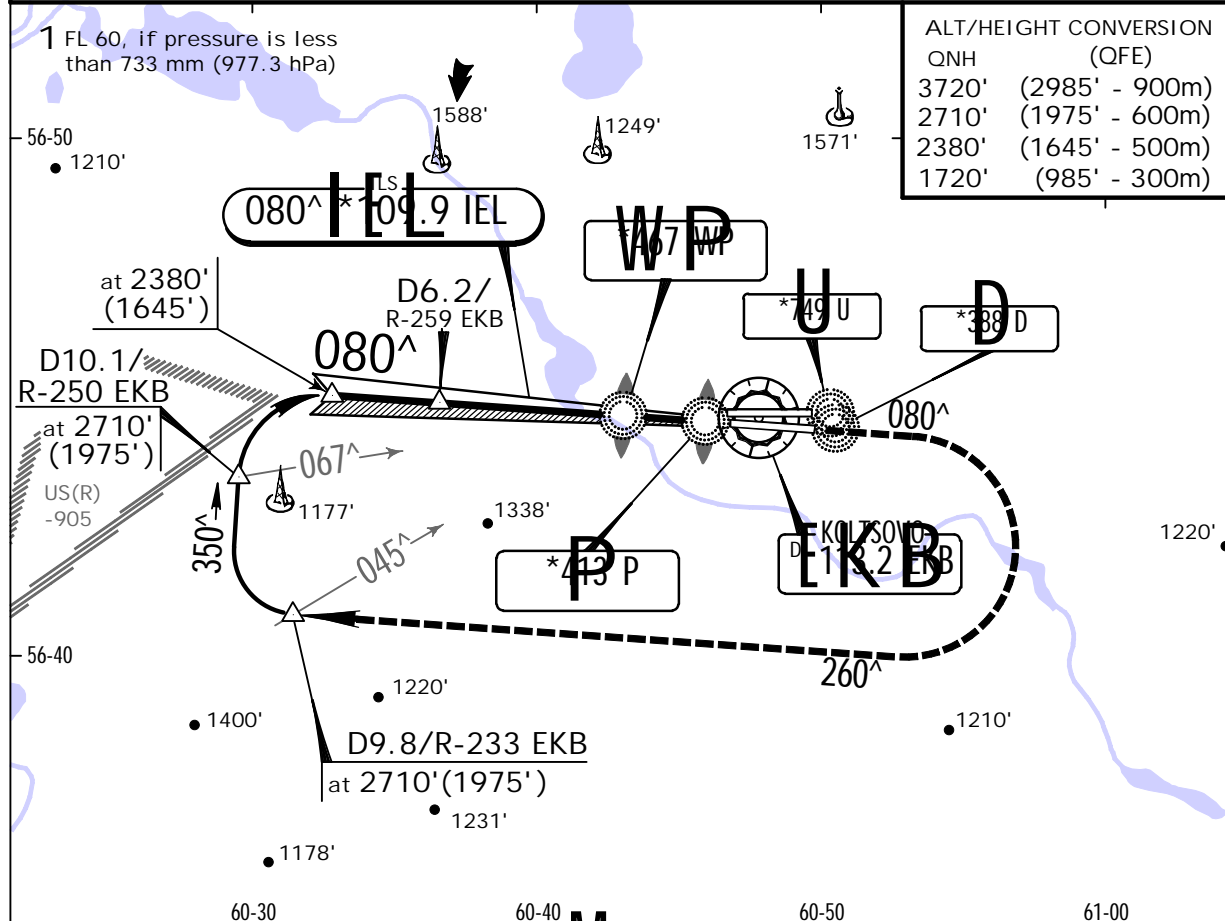
Alt Set: MM (hPa on req)



QNH on req (QFE)

Trans level: FL 50 1

Trans alt: 3720' (2985')

1 FL 60, if pressure is less than 733 mm (977.3 hPa)



| | | | | | | | | | | | |
|----------------------|-----|-----|-----|-----|-----|-----|---|---|------------------|------------------|------------------|
| Gnd speed-Kts | 70 | 90 | 100 | 120 | 140 | 160 |  | 1720' (985') _{on} | 080 [^] | 260 [^] | 2710' (1975') |
| GS 2.67 [^] | 336 | 432 | 480 | 576 | 671 | 767 | |  | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

STRAIGHT-IN LANDING RWY 08R

ILS

LOC (GS out)

DA(H)

| | |
|------|---------|
| FULL | ALS out |
|------|---------|

ALS out

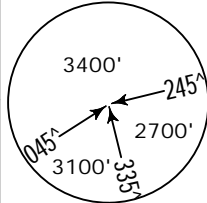
| | | | | | |
|---|------|-------|----------------|--|--|
| A | 800m | 1200m | NOT AUTHORIZED | | |
| B | | | | | |
| C | | | | | |
| D | | | | | |

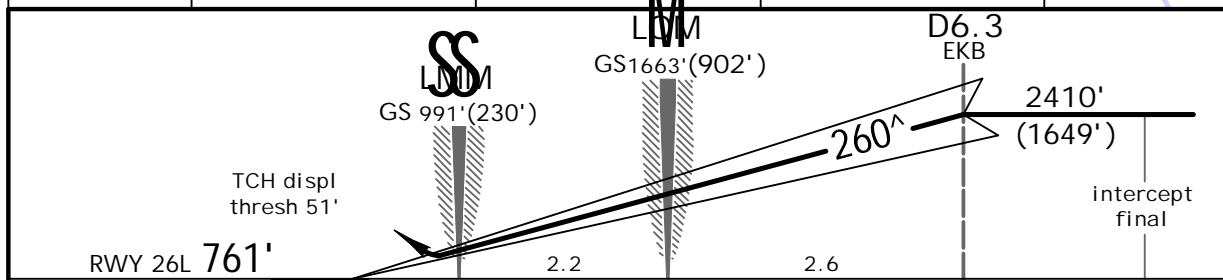
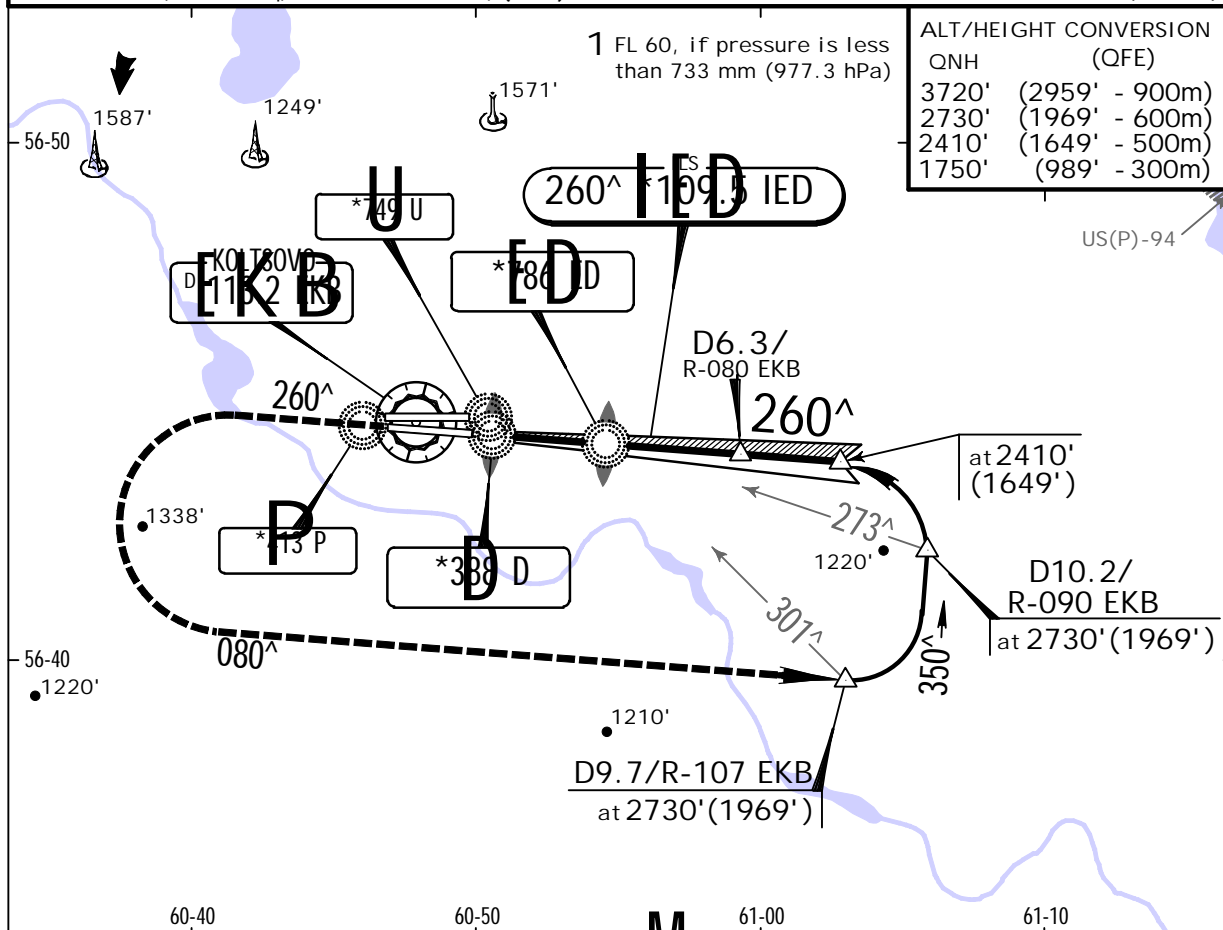
USSS/SVX
KOLTSOVO

JEPPESSEN
4 NOV 11 (11-3) .Eff.17.Nov.

YEKATERINBURG, RUSSIA
ILS Rwy 26L

BRIEFING STRIP

| | | | | |
|--|----------------------------------|-------------------------------|-------------------------------|--|
| ATIS 127.8 | KOLTSOVO Approach 125.9 124.0 | KOLTSOVO Radar 118.7 124.0 | KOLTSOVO Tower 120.0 124.0 | Ground 119.0 |
| LOC IED *109.5 | Final Apch Crs 260^ | GS LOM 1663' (902') | ILS DA(H) 961' (200') | Apt Elev 766' RWY 761' |
| MISSED APCH: Climb on 260^ to 1750' (989'), then turn LEFT onto 080^ climbing to 2730' (1969'), then according to chart. | | | |  <p>MSA EKB VOR</p> |
| Alt Set: MM (hPa on req) | | QNH on req (QFE) | | Trans level: FL 50 1 |
| | | | | Trans alt: 3720' (2959') |



| | | | | | | | | | | |
|---------------|-------|-----|-----|-----|-----|-----|-------|----------------------|---------|---------------|
| Gnd speed-Kts | 70 | 90 | 100 | 120 | 140 | 160 | HIALS | 1750' (989') on 260^ | 080^ LT | 2730' (1969') |
| GS | 2.83^ | 356 | 457 | 508 | 610 | 711 | 813 | | | |

| | | | |
|-----------------------------|------|--------------|----------------|
| STRAIGHT-IN LANDING RWY 26L | | LOC (GS out) | |
| ILS | | | |
| DA(H) 961' (200') | | | |
| FULL | | ALS out | |
| A | | | |
| B | | | |
| C | 800m | 1200m | NOT AUTHORIZED |
| D | | | |

NS OPS

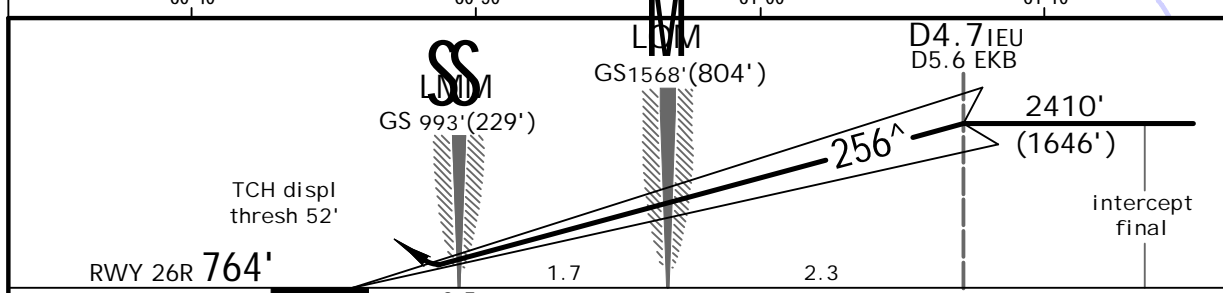
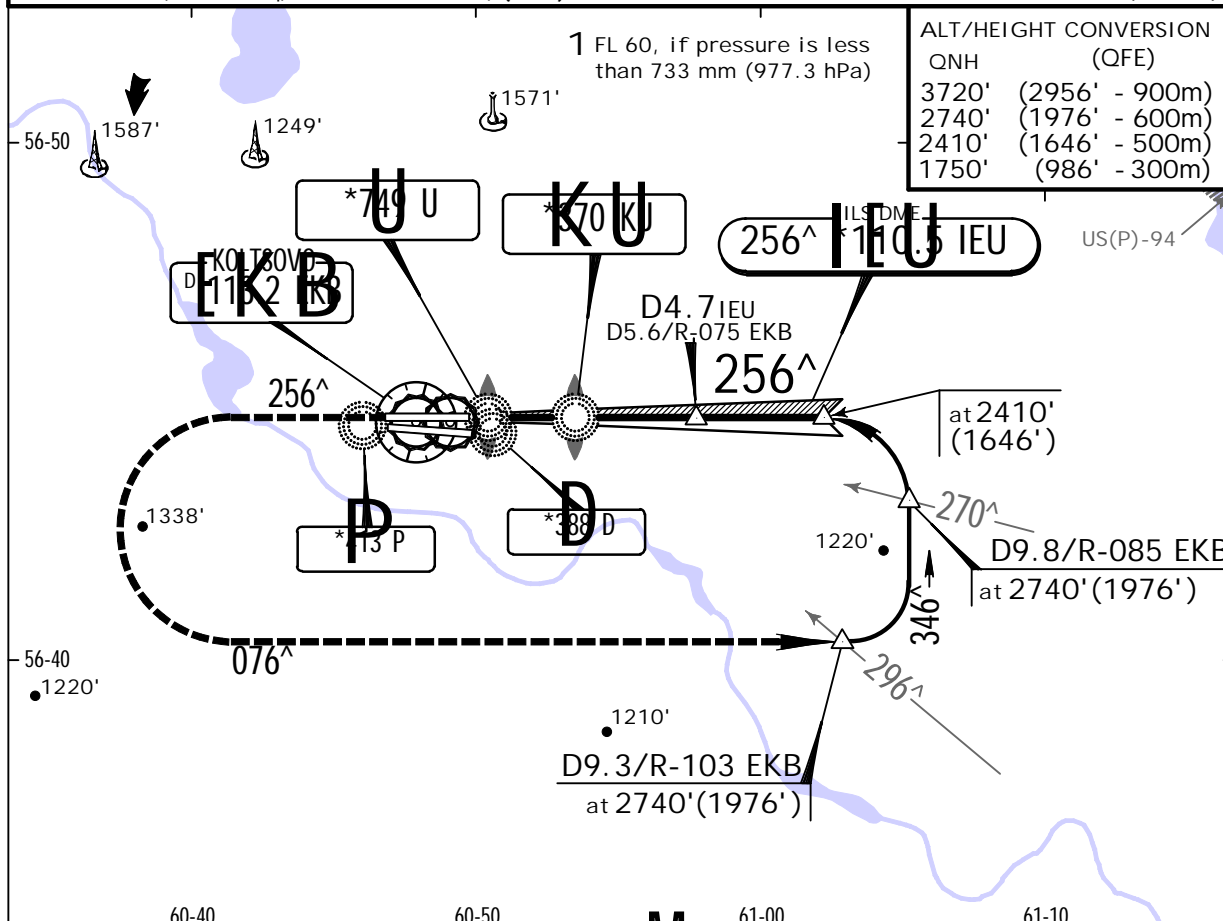
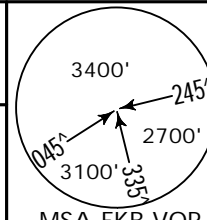
USSS/SVX
KOLTSOVO

JEPPESSEN
4 NOV 11 (11-4) .Eff.17.Nov.

YEKATERINBURG, RUSSIA
ILS DME Rwy 26R

BRIEFING STRIP

| | | | | |
|--|----------------------------------|-------------------------------|-------------------------------|---------------------------|
| ATIS 127.8 | KOLTSOVO Approach 125.9 124.0 | KOLTSOVO Radar 118.7 124.0 | KOLTSOVO Tower 120.0 124.0 | Ground 119.0 |
| LOC IEU *110.5 | Final Apch Crs 256^ | GS LOM 1568' (804') | ILS DA(H) 964' (200') | Apt Elev 766' RWY 764' |
| MISSED APCH: Climb on 256^ to 1750' (986'), then turn LEFT onto 076^ climbing to 2740' (1976'), then according to chart. | | | | MSA EKB VOR |
| Alt Set: MM (hPa on req) | | QNH on req (QFE) | | Trans level: FL 50 1 |
| | | | | Trans alt: 3720' (2956') |



| | | | | | | | | | | |
|---------------|-------|-----|-----|-----|-----|-----|-------|----------------------|---------|---------------|
| Gnd speed-Kts | 70 | 90 | 100 | 120 | 140 | 160 | HIALS | 1750' (986') on 256^ | 076^ LT | 2740' (1976') |
| GS | 3.17^ | 398 | 511 | 568 | 682 | 796 | 909 | | | |

| | | | |
|-----------------------------|---------|--------------|----------------|
| STRAIGHT-IN LANDING RWY 26R | | LOC (GS out) | |
| ILS | | | |
| DA(H) 964' (200') | | | |
| FULL | ALS out | | |
| A | | | |
| B | | | |
| C | 800m | 1200m | NOT AUTHORIZED |
| D | | | |

NS OPS

USSS/SVX
KOLTSOVO

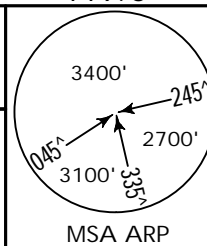
4 NOV 11
Eff. 17. Nov.

(12-1)

YEKATERINBURG, RUSSIA
RNAV (GNSS) Rwy 26L

| | | | | | | | | | |
|-------|---|--------------------------------------|--|-----------------------|--|---|--|--------|--|
| ATIS | | KOLTSOVO Approach | | KOLTSOVO Radar | | KOLTSOVO Tower | | Ground | |
| 127.8 | | 125.9 124.0 | | 118.7 124.0 | | 120.0 124.0 | | 119.0 | |
| RNAV | Final Apch Crs 260[^] | Minimum Alt SS414 2410'(1649') | | MDA(H) 1260'(499') | | Apt Elev 766' RWY 761' | | | |

MISSED APCH: Climb STRAIGHT AHEAD on track 260° to SS416, then turn LEFT climbing to 2730' (1969'), then proceed via SS419 to SS412, then according to chart or as directed.



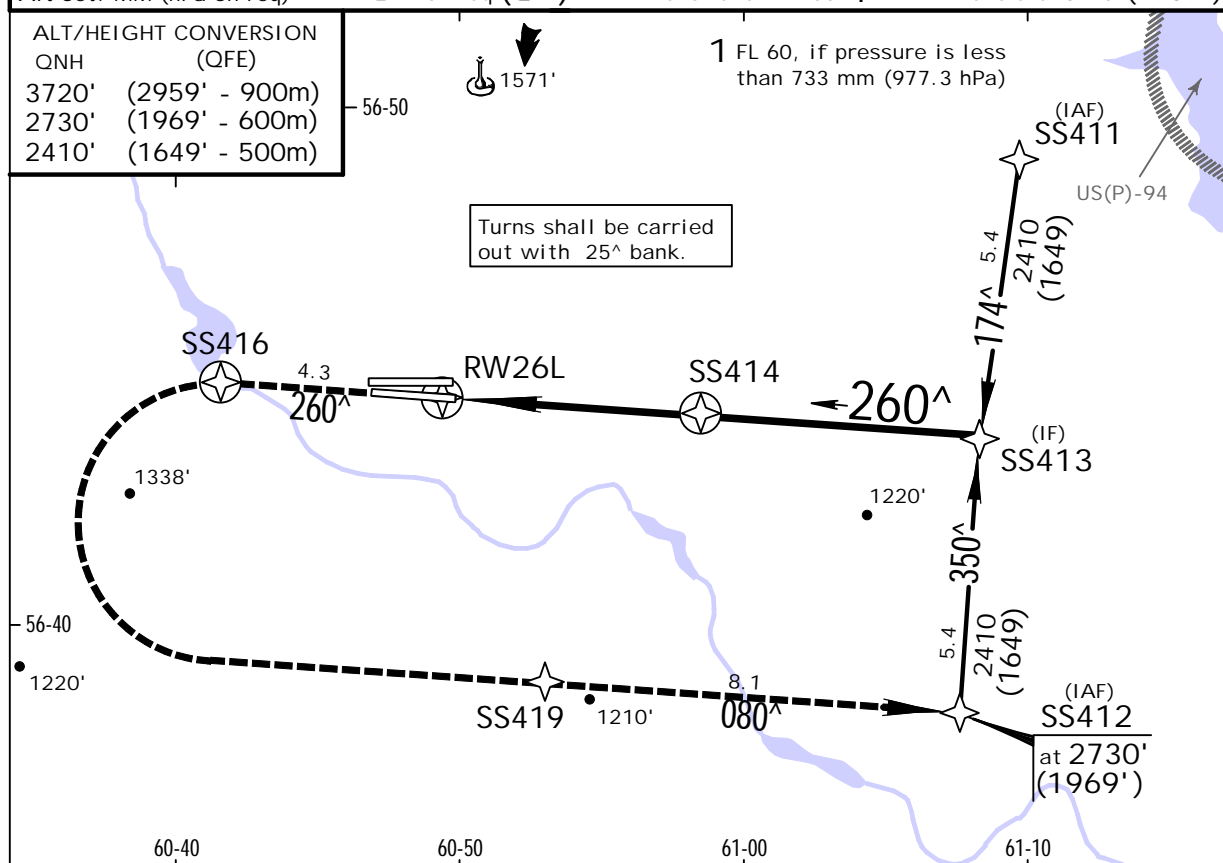
Alt Set: MM (hPa on req) QNH on req (QFE) Trans level: FL 50 1 Trans alt: 3720' (2959')

| ALT/HEIGHT CONVERSION | |
|-----------------------|----------------|
| QNH | (QFE) |
| 3720' | (2959' - 900m) |
| 2730' | (1969' - 600m) |
| 2410' | (1649' - 500m) |

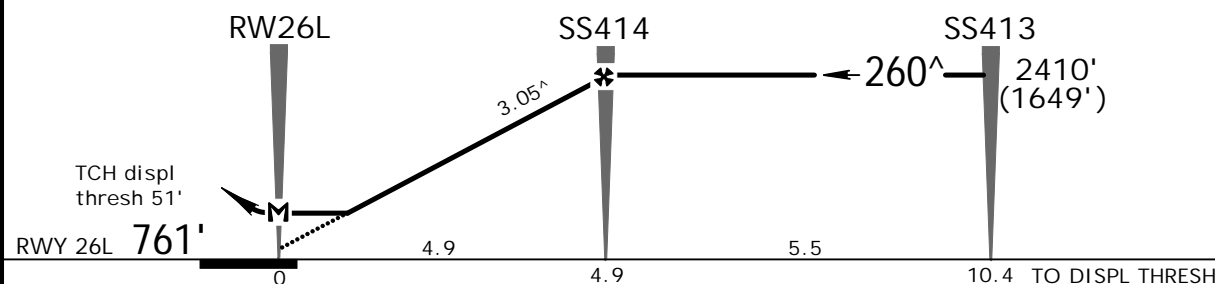
1571'

1 FL 60, if pressure is less than 733 mm (977.3 hPa)

Turns shall be carried
out with 25^ bank.



| | | | | | | |
|----------------|--------------|--------------|--------------|---------------|---------------|---------------|
| DIST to RW26L | 1.6 | 2.2 | 2.7 | 3.2 | 3.8 | 4.3 |
| ALTITUDE (HAT) | 1340' (579') | 1500' (739') | 1670' (909') | 1850' (1089') | 2010' (1249') | 2190' (1429') |



| | | | | | | |
|---------------------|-----|-----|-----|-----|-----|-----|
| Gnd speed-Kts | 70 | 90 | 100 | 120 | 140 | 160 |
| Descent angle 3.05^ | 378 | 486 | 540 | 648 | 755 | 863 |
| | | | | | | |
| MAP at RW26L | | | | | | |

SS416_{on} 260[^]

STRAIGHT-IN LANDING RWY 26L

MDA(H) 1260' (499')

ALS out

| | | |
|---|-------|-------|
| A | 800m | 1600m |
| B | | |
| C | 1200m | 2000m |
| | | |

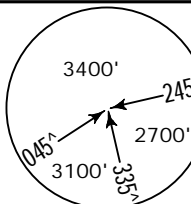
VS OPS

USSS/SVX
KOLTSOVO

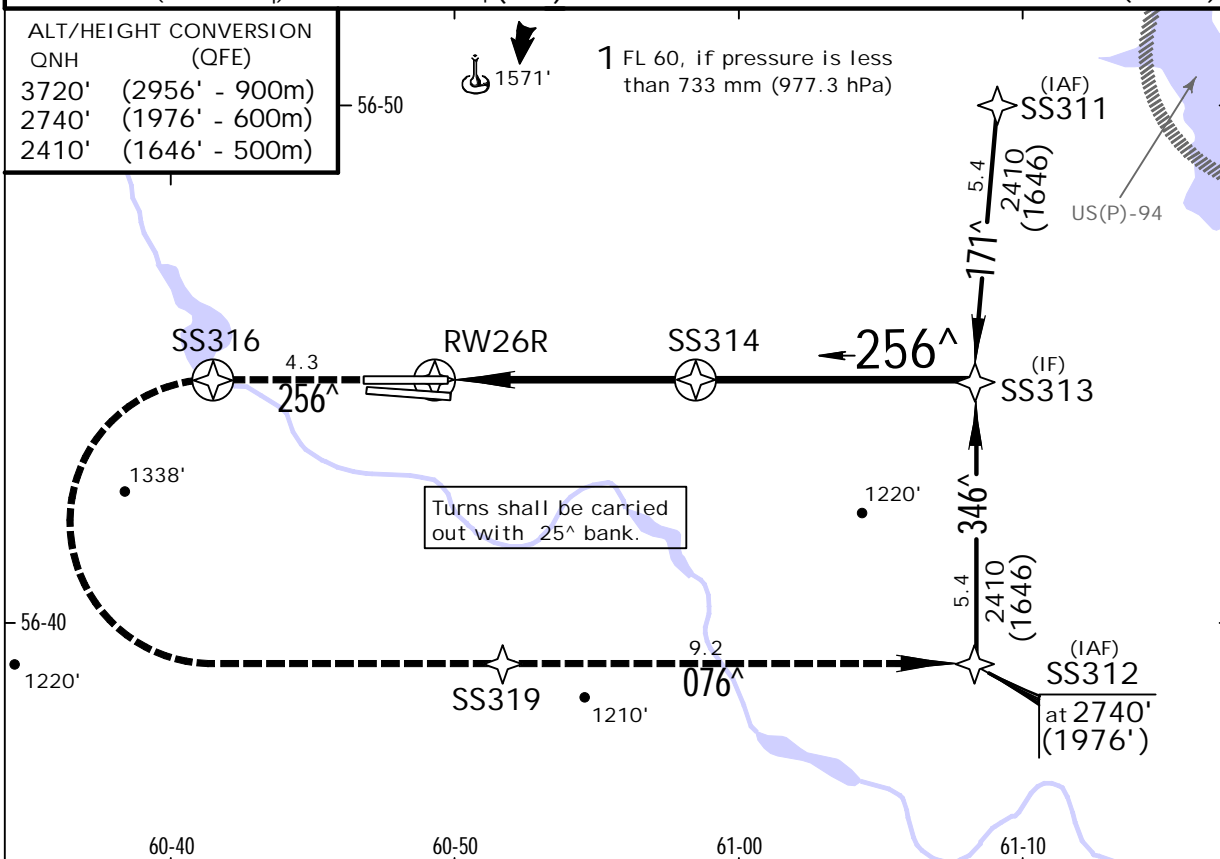
JEPPesen
4 NOV 11
Eff. 17 Nov. (12-2)

YEKATERINBURG, RUSSIA
RNAV (GNSS) Rwy 26R

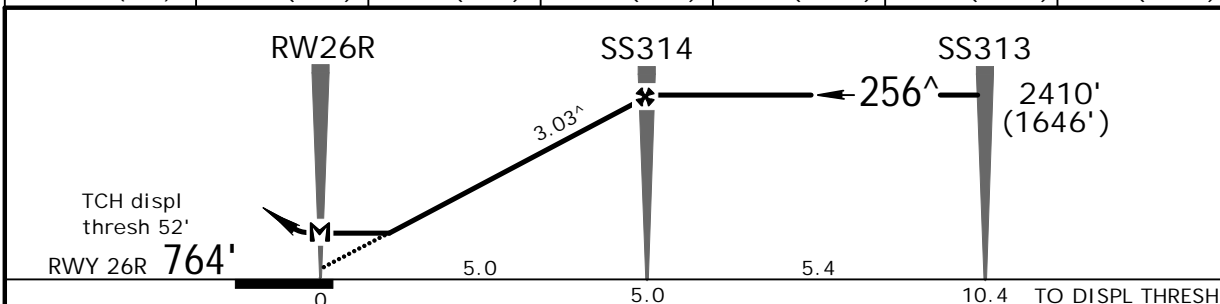
BRIEFING STRIP™

| | | | | | | | |
|--|---------------------------------------|--------------------------------------|-----------------------|------------------|----------------|-------|--|
| ATIS | KOLTSOVO Approach | | KOLTSOVO Radar | | KOLTSOVO Tower | | Ground |
| 127.8 | 125.9 | 124.0 | 118.7 | 124.0 | 120.0 | 124.0 | 119.0 |
| RNAV | Final Apch Crs 256 [^] | Minimum Alt SS314 2410'(1646') | MDA(H) 1260'(496') | Apt Elev 766' | RWY 764' | | |
| MISSED APCH: Climb STRAIGHT AHEAD on track 256 [^] to SS316, then turn LEFT climbing to 2740' (1976'), then proceed via SS319 to SS312, then according to chart or as directed. | | | | | | |  <p>MSA ARP</p> |

Alt Set: MM (hPa on req) QNH on req (QFE) Trans level: FL 50 1 Trans alt: 3720' (2956')



| | | | | | | |
|----------------|--------------|--------------|--------------|---------------|---------------|---------------|
| DIST to RW26R | 1.6 | 2.2 | 2.7 | 3.2 | 3.8 | 4.3 |
| ALTITUDE (HAT) | 1340' (576') | 1510' (746') | 1670' (906') | 1850' (1086') | 2010' (1246') | 2200' (1436') |



| | | | | | | |
|---------------------------------|-----|-----|-----|-----|-----|-----|
| Gnd speed-Kts | 70 | 90 | 100 | 120 | 140 | 160 |
| Descent angle 3.03 [^] | 375 | 482 | 536 | 643 | 750 | 858 |
| MAP at RW26R | | | | | | |

| | |
|-----------------------------|-------|
| STRAIGHT-IN LANDING RWY 26R | |
| MDA(H) 1260' (496') | |
| ALS out | |
| A | 800m |
| B | 1600m |
| C | 2000m |

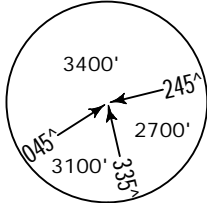
NS OPS

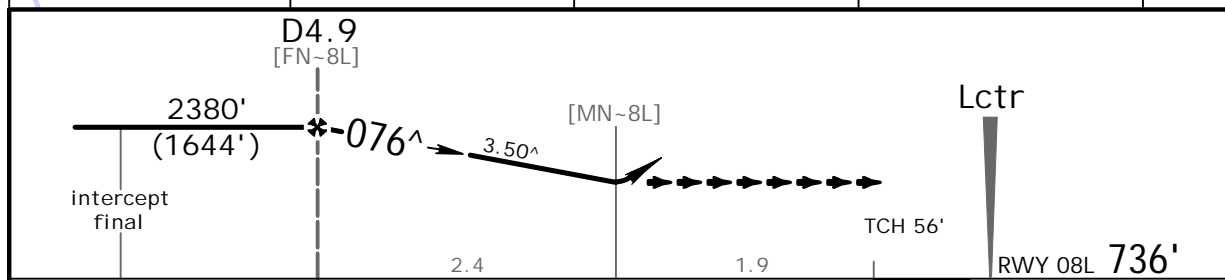
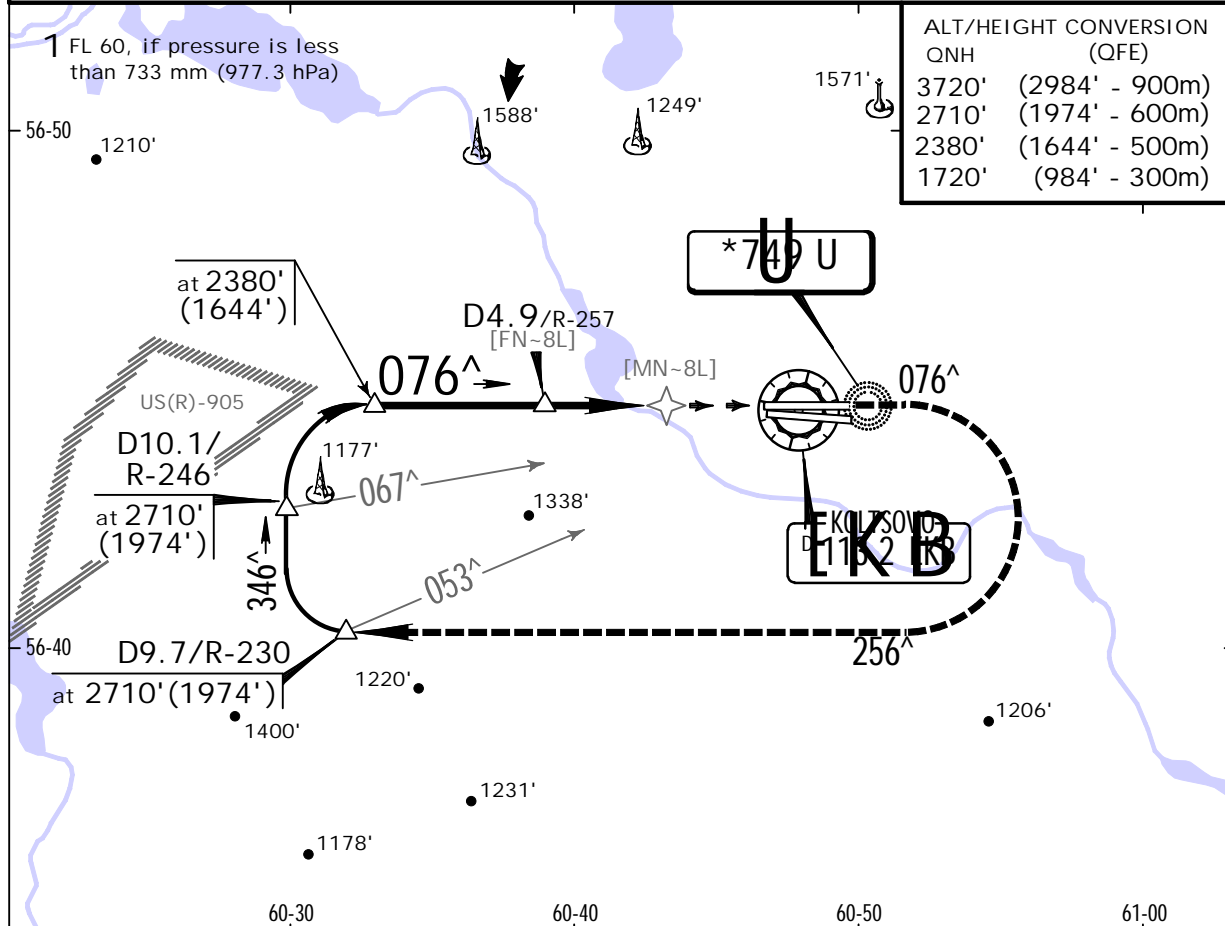
USSS/SVX
KOLTSOVO

JEPPesen
7 DEC 12 (16-1) .Eff.13.Dec.

YEKATERINBURG, RUSSIA
NDB Rwy 08L

BRIEFING STRIP

| | | | | |
|---|----------------------------------|-------------------------------------|--|---|
| ATIS 127.8 | KOLTSOVO Approach 125.9 124.0 | KOLTSOVO Radar 118.7 124.0 | KOLTSOVO Tower 120.0 124.0 | Ground 119.0 |
| Lctr U *749 | Final Apch Crs 076^ | Minimum Alt D4.9 2380'(1644') | MDA(H) (CONDITIONAL) 1470'(734') | Apt Elev 766' RWY 736' |
| MISSED APCH: Climb on 076^ to 1720'(984'), then turn RIGHT onto 256^ climbing to 2710'(1974'), then according to chart. | | | |  |
| Alt Set: MM (hPa on req) QNH on req (QFE) Trans level: FL 50 1 | | | | Trans alt: 3720' (2984') |



| | | | | | | | | | | | |
|---------------|-------|-----|-----|-----|-----|-----|-------|-----------------|------|------|------------------|
| Gnd speed-Kts | 70 | 90 | 100 | 120 | 140 | 160 | HIALS | 1720' (984') | 076^ | 256^ | 2710' (1974') |
| Descent Angle | 3.50^ | 434 | 557 | 619 | 743 | 867 | PAPI | ↑ | on | RT | ↑ |

| STRAIGHT-IN LANDING RWY 08L | | | |
|-----------------------------|---------|---------------------|---------|
| with FAF | | w/o FAF | |
| MDA(H) 1470'(734') | | MDA(H) 1830'(1094') | |
| | ALS out | | ALS out |
| A | | | |
| B | | | |
| C | 3200m | 3200m | 3200m |
| D | 3600m | 4400m | 4800m |

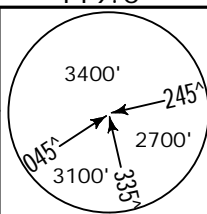
NS OPS

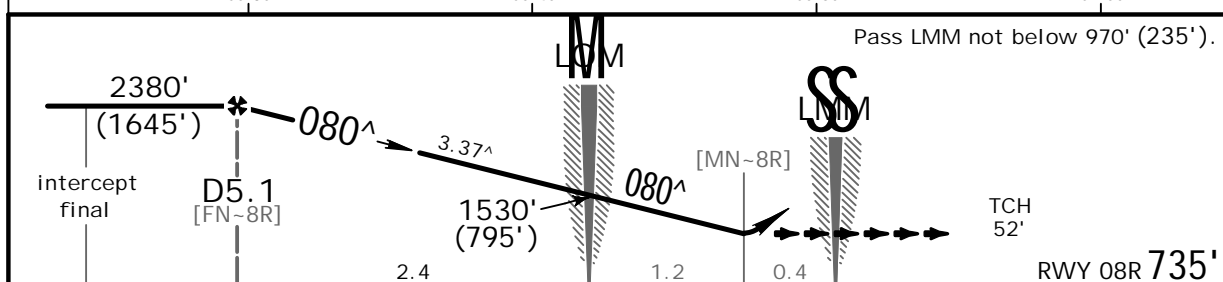
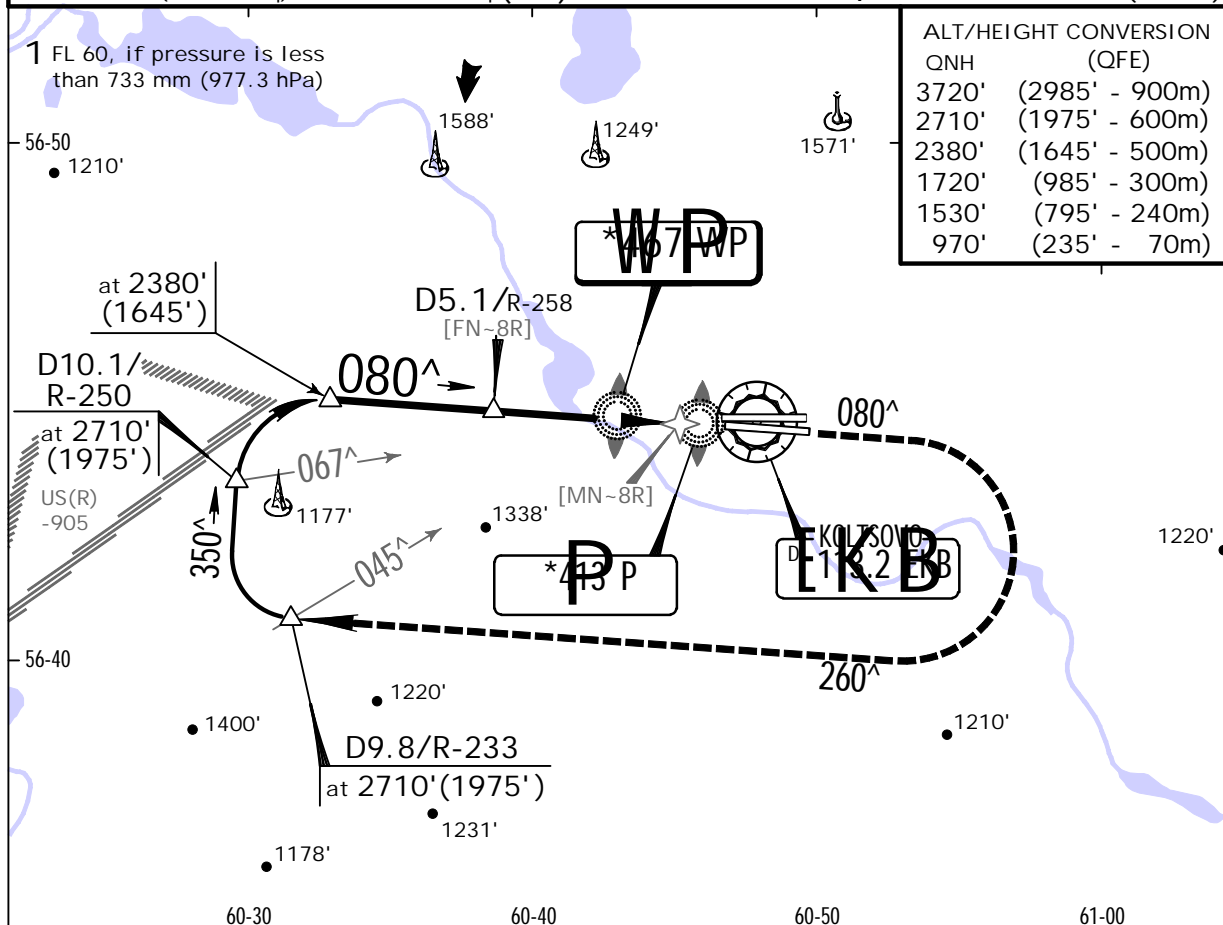
USSS/SVX
KOLTSOVO

JEPPESSEN
7 DEC 12 (16-2) .Eff.13.Dec.

YEKATERINBURG, RUSSIA
2 NDB Rwy 08R

BRIEFING STRIP™

| | | | | |
|---|----------------------------------|-------------------------------------|--|--|
| ATIS 127.8 | KOLTSOVO Approach 125.9 124.0 | KOLTSOVO Radar 118.7 124.0 | KOLTSOVO Tower 120.0 124.0 | Ground 119.0 |
| NDB WP *467 | Final Apch Crs 080^ | Minimum Alt D5.1 2380'(1645') | MDA(H) (CONDITIONAL) 1070'(335') | Apt Elev 766' RWY 735' |
| MISSED APCH: Climb on 080^ to 1720'(985'), then turn RIGHT onto 260^ climbing to 2710'(1975'), then according to chart. | | | |  <p>MSA EKB VOR</p> |
| Alt Set: MM (hPa on req) | | QNH on req (QFE) | | Trans level: FL 50 1 |
| | | | | Trans alt: 3720' (2985') |



| | | | | | | | | | | |
|---------------------|-----|-----|-----|-----|-----|-----|-------|----------------------|------|---------------|
| Gnd speed-Kts | 70 | 90 | 100 | 120 | 140 | 160 | HIALS | 1720' (985') on 080^ | 260^ | 2710' (1975') |
| Descent Angle 3.37^ | 417 | 537 | 596 | 716 | 835 | 954 | PAPI | ↑ | RT | ↑ |

| STRAIGHT-IN LANDING RWY 08R | | | |
|-----------------------------|---------|--------------------|---------|
| with FAF | | w/o FAF | |
| MDA(H) 1070'(335') | | MDA(H) 1710'(975') | |
| | ALS out | | ALS out |
| A | | 1200m | 2000m |
| B | 1200m | 1600m | 2400m |
| C | | 4000m | |
| D | 1600m | 4400m | 4800m |

NS OPS

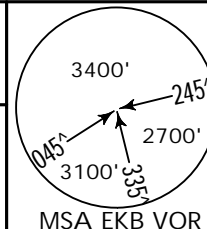
USSS/SVX
KOLTSOVO

JEPPESEN
4 NOV 11 (16-3) .Eff.17.Nov.

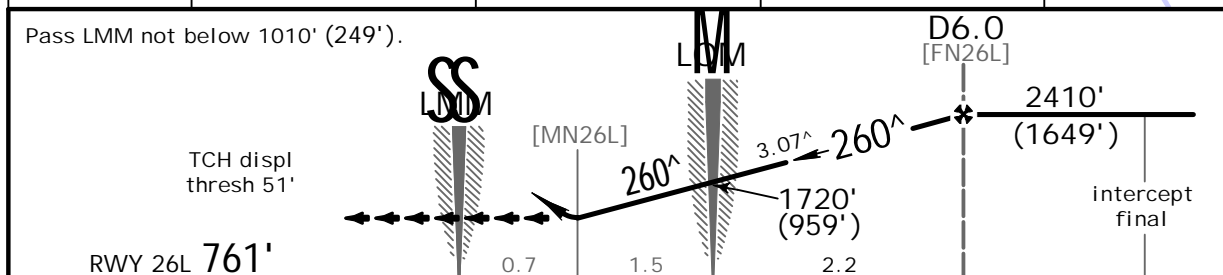
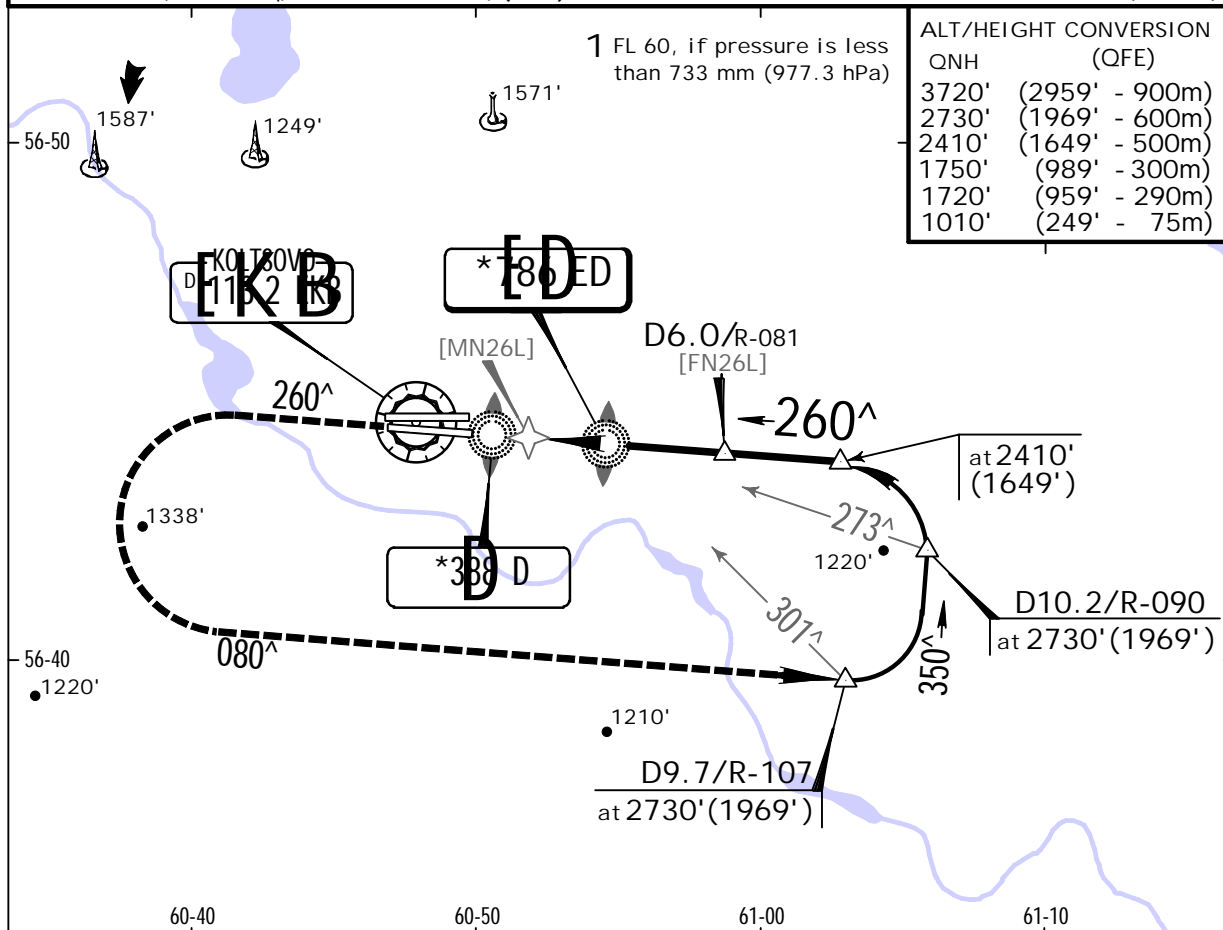
YEKATERINBURG, RUSSIA
2 NDB Rwy 26L

BRIEFING STRIP

| | | | | |
|--|----------------------------------|--------------------------------------|-------------------------------|---------------------------|
| ATIS 127.8 | KOLTSOVO Approach 125.9 124.0 | KOLTSOVO Radar 118.7 124.0 | KOLTSOVO Tower 120.0 124.0 | Ground 119.0 |
| NDB ED *786 | Final Apch Crs 260^ | Minimum Alt D6.0 2410' (1649') | MDA(H) 1240' (479') | Apt Elev 766' RWY 761' |
| MISSED APCH: Climb on 260^ to 1750' (989'), then turn LEFT onto 080^ climbing to 2730' (1969'), then according to chart. | | | | |
| Alt Set: MM (hPa on req) QNH on req (QFE) Trans level: FL 50 1 Trans alt: 3720' (2959') | | | | |



MSA EKB VOR



| | | | | | | | | | |
|--------------|----|------|------|---------------|--|------------------------|--|--|--|
| 0 | | | | | | TO DISPLACED THRESHOLD | | | |
| 1750' (989') | on | 260^ | 080^ | 2730' (1969') | | | | | |
| | | | LT | | | | | | |

| | | | | | | | | | |
|-----------------------------|-------|--|--|--|--|--|--|--|--|
| STRAIGHT-IN LANDING RWY 26L | | | | | | | | | |
| MDA(H) 1240' (479') | | | | | | | | | |
| ALS out | | | | | | | | | |
| A | | | | | | | | | |
| B | 1600m | | | | | | | | |
| C | | | | | | | | | |
| D | 2000m | | | | | | | | |

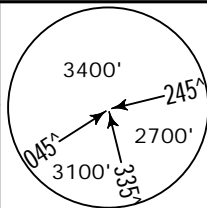
NS OPS

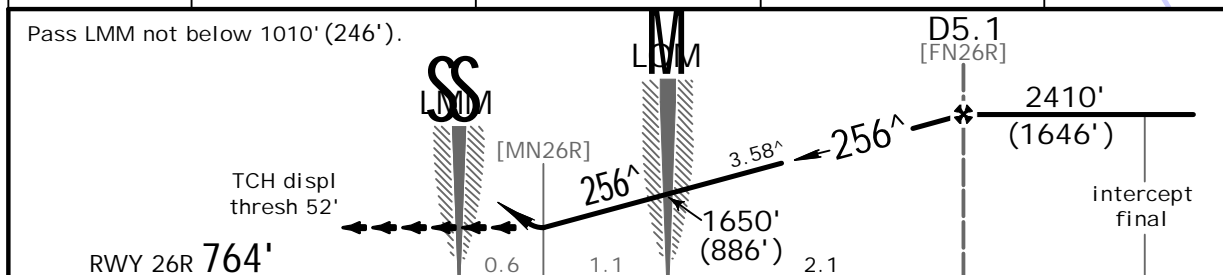
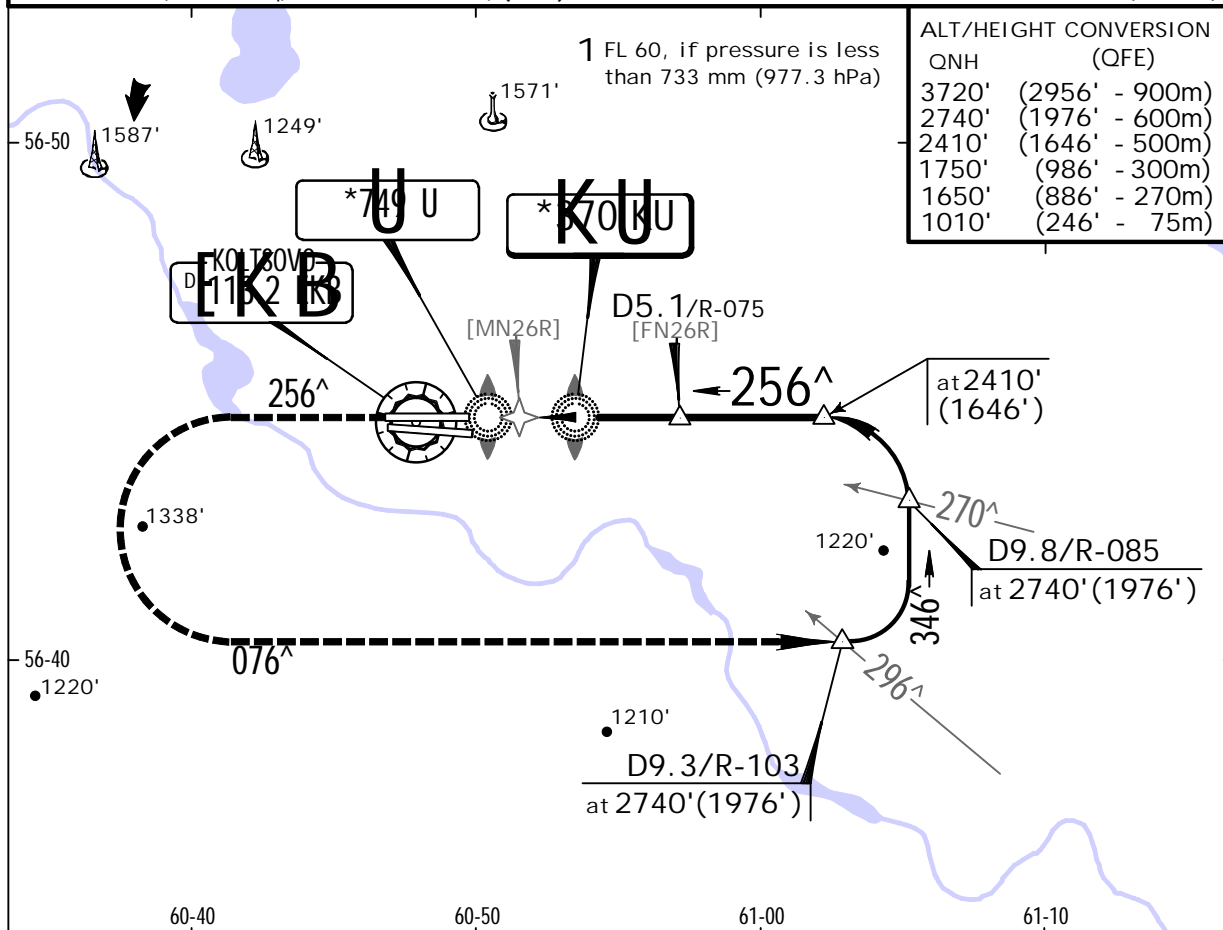
USSS/SVX
KOLTSOVO

JEPPesen
04 NOV 11 (16-4) .Eff.17.NOV.

YEKATERINBURG, RUSSIA
2 NDB Rwy 26R

BRIEFING STRIP™

| | | | | |
|--|----------------------------------|-------------------------------------|-------------------------------|---|
| ATIS 127.8 | KOLTSOVO Approach 125.9 124.0 | KOLTSOVO Radar 118.7 124.0 | KOLTSOVO Tower 120.0 124.0 | Ground 119.0 |
| NDB KU *370 | Final Apch Crs 256^ | Minimum Alt D5.1 2410'(1646') | MDA(H) 1220' (456') | Apt Elev 766' RWY 764' |
| MISSED APCH: Climb on 256^ to 1750' (986'), then turn LEFT onto 076^ climbing to 2740' (1976'), then according to chart. | | | |  |
| Alt Set: MM (hPa on req) QNH on req (QFE) Trans level: FL 50 1 Trans alt: 3720' (2956') | | | | |



| | | | | | | | | | | |
|---------------|-------|-----|-----|-----|-----|-----|-------|----------------------|---------|---------------|
| Gnd speed-Kts | 70 | 90 | 100 | 120 | 140 | 160 | HIALS | 1750' (986') on 256^ | 076^ LT | 2740' (1976') |
| Descent angle | 3.58^ | 444 | 570 | 634 | 760 | 887 | 1014 | | | |

| | | | |
|-----------------------------|-------|---------|--|
| STRAIGHT-IN LANDING RWY 26R | | ALS out | |
| MDA(H) 1220' (456') | | | |
| A | | | |
| B | 1300m | 2100m | |
| C | | | |
| D | 2000m | 2400m | |

NS OPS

UNNT/OVB
TOLMACHEVO

22 NOV 13

10-2

JEPPESSEN

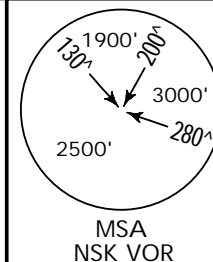
NOVOSIBIRSK, RUSSIA
.STAR.

ATIS
131.3 (Russian 127.4)

Apt Elev
368'

Alt Set: MM (hPa on request) QNH on request (QFE)
Trans level: FL60 Trans alt: 4640' (4276')

GV 07D, KD 07D, KG 07D
RWY 07 ARRIVALS



Do not overfly central part
of city below 4310' (3946').

KENGA
N56 19.2 E080 42.1

126° 43'

KEGAV
N55 47.6 E081 35.1

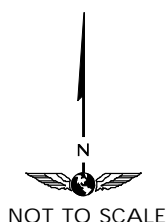
141° 53'

NOVOTYRSKINO
N55 16.9 E082 24.3

107° 287°

KOLYVAY
N55 19.3 E082 42.2

209° 21'



D10.6 NSK
N55 02.0 E082 20.0
(NSK R-268)

At 3650'
(3286')

D10.5 NSK
N55 02.5 E082 20.4
(NSK R-271)

At 3650'
(3286')

D10.5 NSK
N55 01.2 E082 20.2
(NSK R-262)

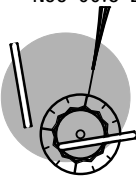
At 3650'
(3286')

D8.8 NSK
N54 59.8 E082 23.2
(NSK R-255)

At 2670'
(2306')

Intercept
final at
2010'
(1646')

NOVOSIBIRSK
N55 00.8 E082 38.4



RO
N55 00.3 E082 33.8

| ALT/HEIGHT CONVERSION | |
|-----------------------|-----------------|
| QNH | (QFE) |
| 4640' | (4276' - 1300m) |
| 4310' | (3946' - 1200m) |
| 3650' | (3286' - 1000m) |
| 2670' | (2306' - 700m) |

UNNT/OVB
TOLMACHEVO

22 NOV 13

JEPPESEN

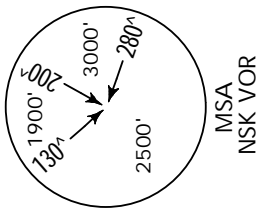
(10-2A)

NOVOSIBIRSK, RUSSIA
.STAR.

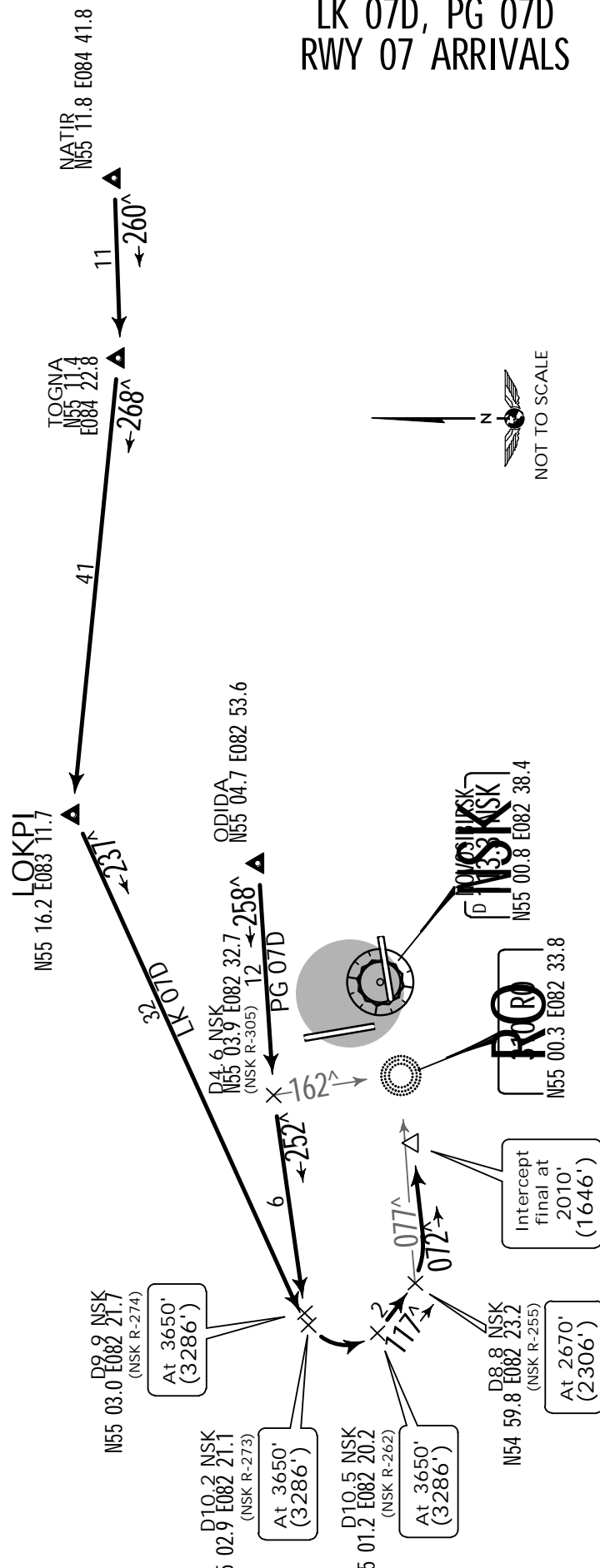
ATIS
131.3 (Russian 127.4)

Apt Elev
368'

Alt Set: MM (hPa on request) QNH on request (QFE)
Trans level: FL60 Trans alt: 4640' (4276')



LK 07D, PG 07D RWY 07 ARRIVALS



Do not overfly central part of city below 4310' (3946').

| QNH | ALT/HEIGHT CONVERSION (QFE) |
|------|-----------------------------|
| 640' | (4276' - 1300m) |
| 310' | (3946' - 1200m) |
| 650' | (3286' - 1000m) |
| 670' | (2306' - 700m) |
| 010' | (1646' - 500m) |

UNNT/OVB
TOLMACHEVO

13 DEC 13

JEPPESEN

10-2B

NOVOSIBIRSK, RUSSIA
 .STAR.

.STAR

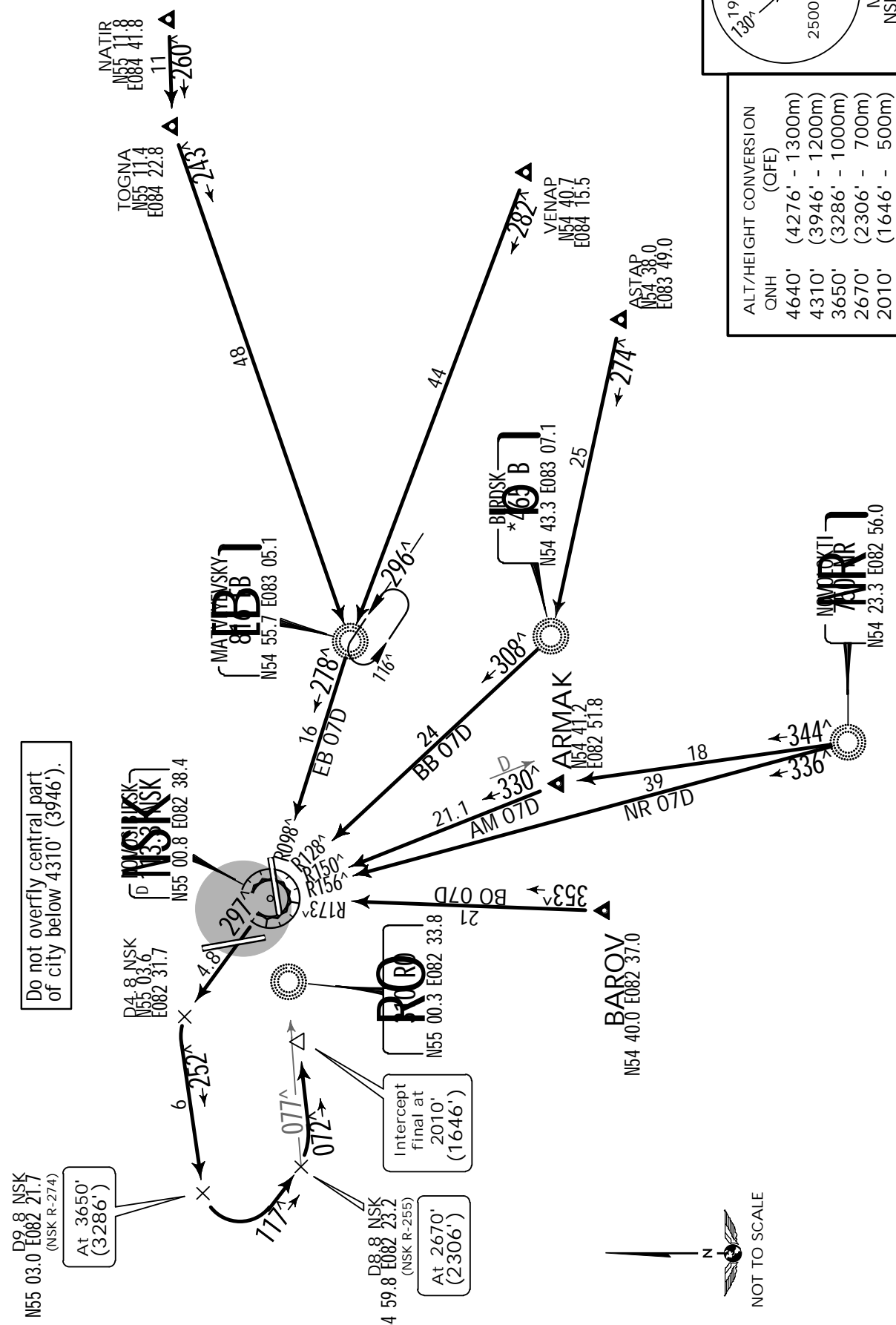
ATIS
131.3 (Russian 127.4)

Apt Elev
368'

Alt Set: MM (hPa on request) QNH on request (QFE)
Trans level: FL60 Trans alt: 4640' (4276')

(QFE)

AM 07D, BB 07D, BO 07D, EB 07D, NR 07D
RWY 07 ARRIVALS



UNNT/OVB
TOLMACHEVO

13 DEC 13

JEPPESEN

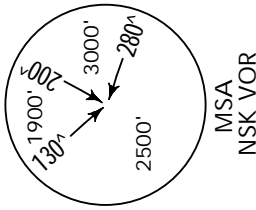
(10-2C)

NOVOSIBIRSK, RUSSIA
.STAR.

ATIS
131.3 (Russian 127.4)

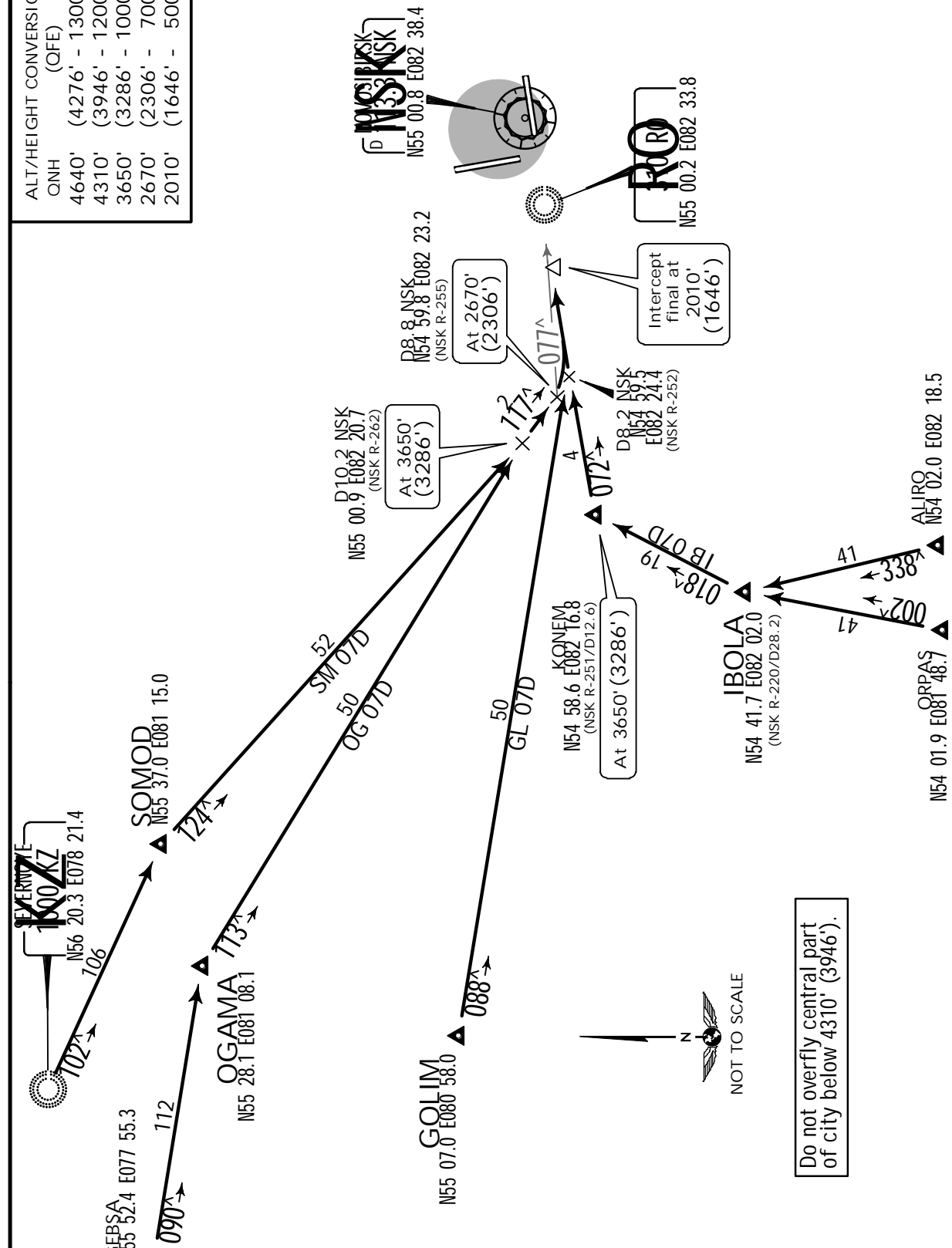
Apt Elev
368'

Alt Set: MM (hPa on request) QNH on request (QFE)
Trans level: FL60 Trans alt: 4640' (4276')



GL 07D, IB 07D, OG 07D, SM 07D
RWY 07 ARRIVALS

| ALT/HEIGHT CONVERSION (QFE) |
|--------------------------------|
| QNH |
| 4640' (4276' - 1300m) |
| 4310' (3946' - 1200m) |
| 3650' (3286' - 1000m) |
| 2670' (2306' - 700m) |
| 2010' (1646' - 500m) |



Do not overfly central part of city below 4310' (3946').

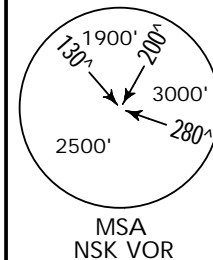
UNNT/OVB
 TOLMACHEVO

JEPPESEN
 22 NOV 13 10-2D

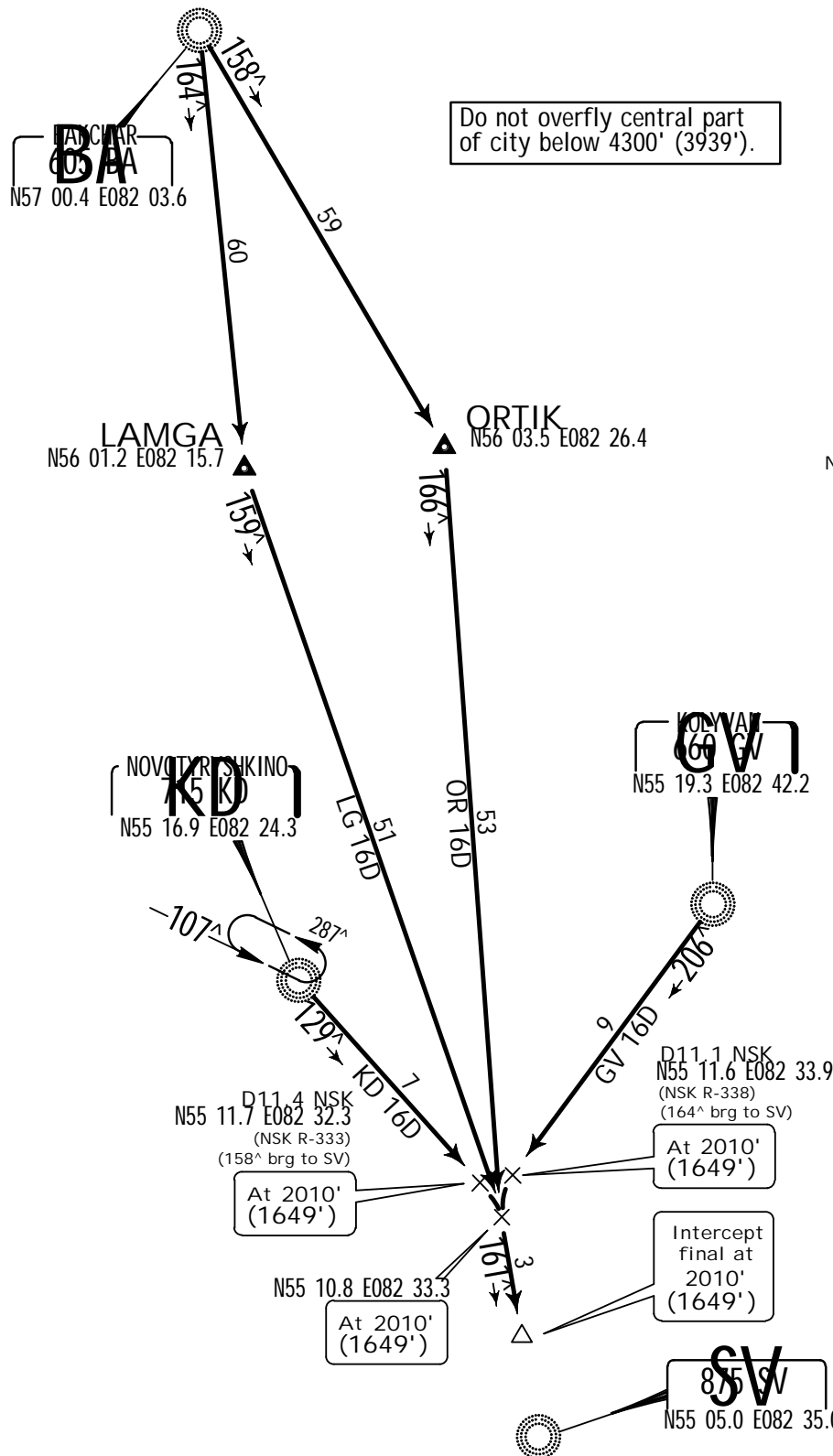
NOVOSIBIRSK, RUSSIA
 .STAR.

| | | | | |
|-------------------------------|------------------|---|--|-------|
| ATIS 131.3 (Russian 127.4) | Apt Elev 368' | Alt Set: MM (hPa on request) Trans level: FL60 | QNH on request Trans alt: 4640' (4279') | (QFE) |
|-------------------------------|------------------|---|--|-------|

GV 16D, KD 16D, LG 16D, OR 16D RWY 16 ARRIVALS

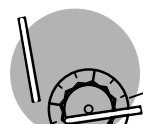


Do not overfly central part
 of city below 4300' (3939').



ALT/HEIGHT CONVERSION

| QNH | (QFE) |
|-------|-----------------|
| 4640' | (4279' - 1300m) |
| 4300' | (3939' - 1200m) |



NSK
 N55 00.8 E082 38.4

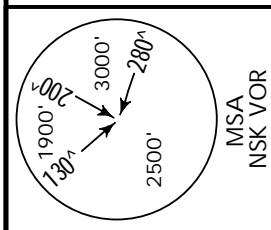
UNNT/OVB
 TOLMACHEVO

22 NOV 13

10-2E

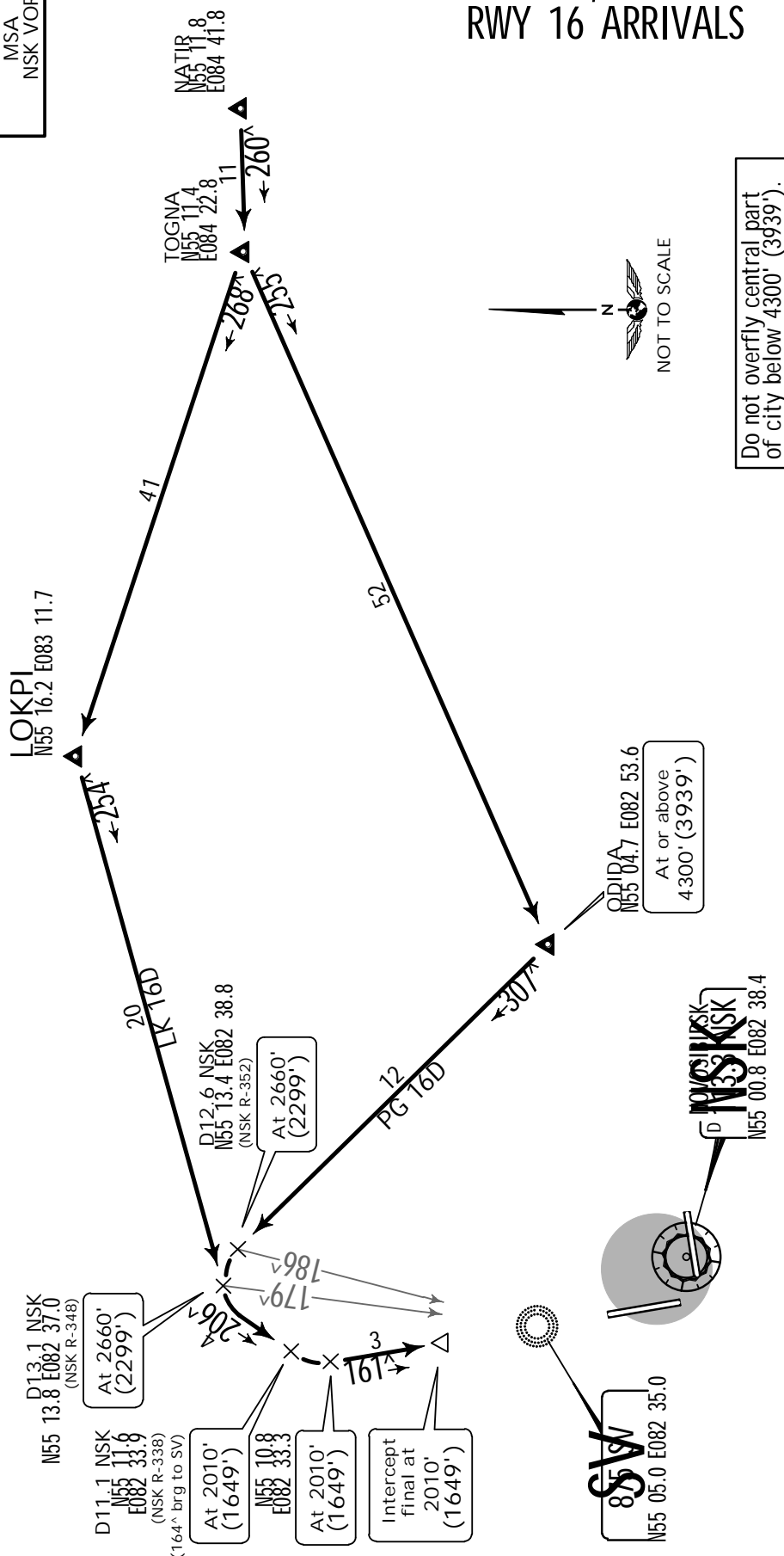
NOVOSIBIRSK, RUSSIA
 .STAR.

| | | |
|-------------------------------|------------------|---|
| ATIS 131.3 (Russian 127.4) | Apt Elev 368' | Alt Set: MM (hPa on request) QNH on request (QFE) Trans level: FL60 Trans alt: 4640' (4279') |
|-------------------------------|------------------|---|



LK 16D, PG 16D
 RWY 16 ARRIVALS

| ALT/HEIGHT CONVERSION (QFE) |
|--------------------------------|
| QNH (4279' - 1300m) |
| 4300' (3939' - 1200m) |
| 2660' (2299' - 700m) |
| 2010' (1649' - 500m) |



UNNT/OVB
TOLMACHEVO

13 DEC 13

JEPPESEN

10-2F

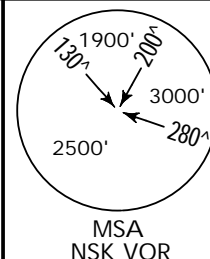
NOVOSIBIRSK, RUSSIA
...STAR.

ATIS
131.3 (Russian 127.4)

Apt Elev
368'

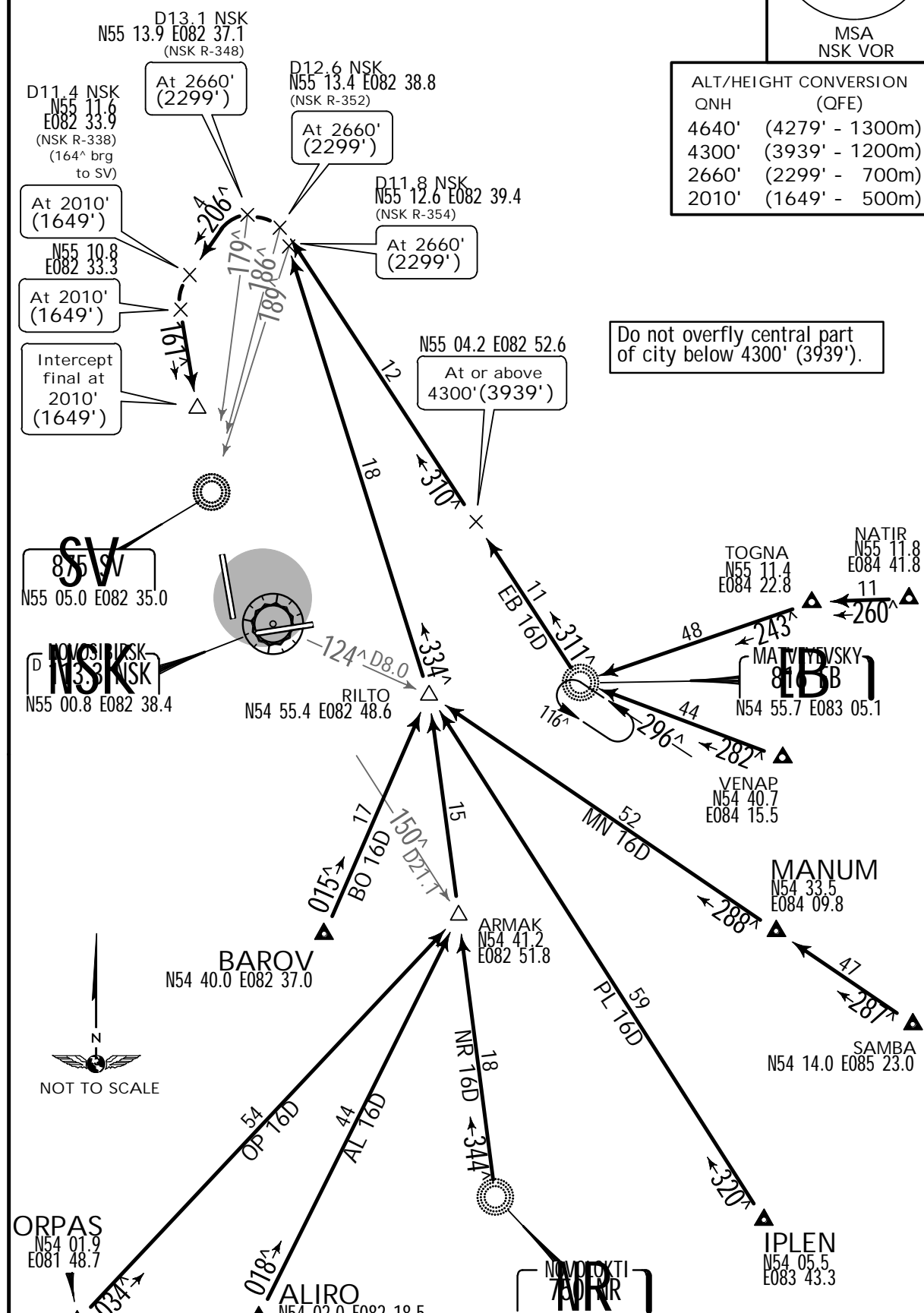
Alt Set: MM (hPa on request) QNH on request (QFE)
Trans level: FL60 Trans alt: 4640' (4279')

AL 16D, BO 16D, EB 16D, MN 16D
NR 16D, OP 16D, PL 16D
RWY 16 ARRIVALS



ALT/HEIGHT CONVERSION
QNH (QFE)

| | |
|-------|-----------------|
| 4640' | (4279' - 1300m) |
| 4300' | (3939' - 1200m) |
| 2660' | (2299' - 700m) |
| 2010' | (1649' - 500m) |



UNNT/OVB
TOLMACHEVO

13 DEC 13

JEPPESEN

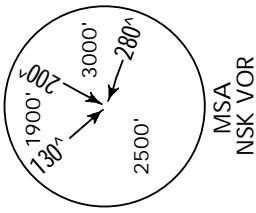
(10-2G)

NOVOSIBIRSK, RUSSIA
.STAR.

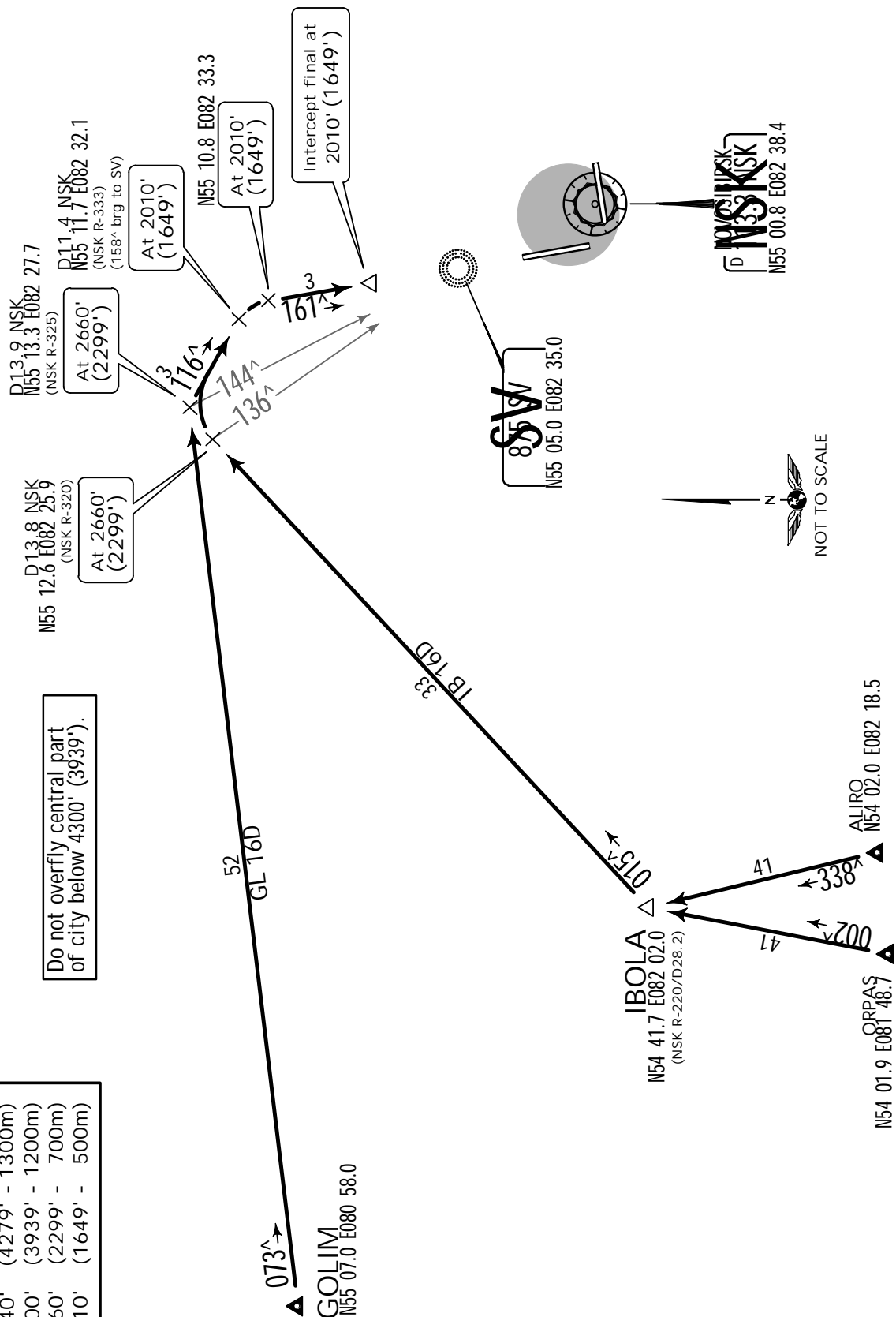
ATIS
131.3 (Russian 127.4)

Apt Elev
368'

Alt Set: MM (hPa on request) QNH on request (QFE)
Trans level: FL60 Trans alt: 4640' (4279')



GL 16D, IB 16D RWY 16 ARRIVALS



| DLT/HEIGHT CONVERSION (QFE) |
|--------------------------------|
| DNH (4279' - 1300m) |
| 540' (3939' - 1200m) |
| 300' (2299' - 700m) |
| 660' (1649' - 500m) |
| 010' |

UNNT/OVB
 TOLMACHEVO

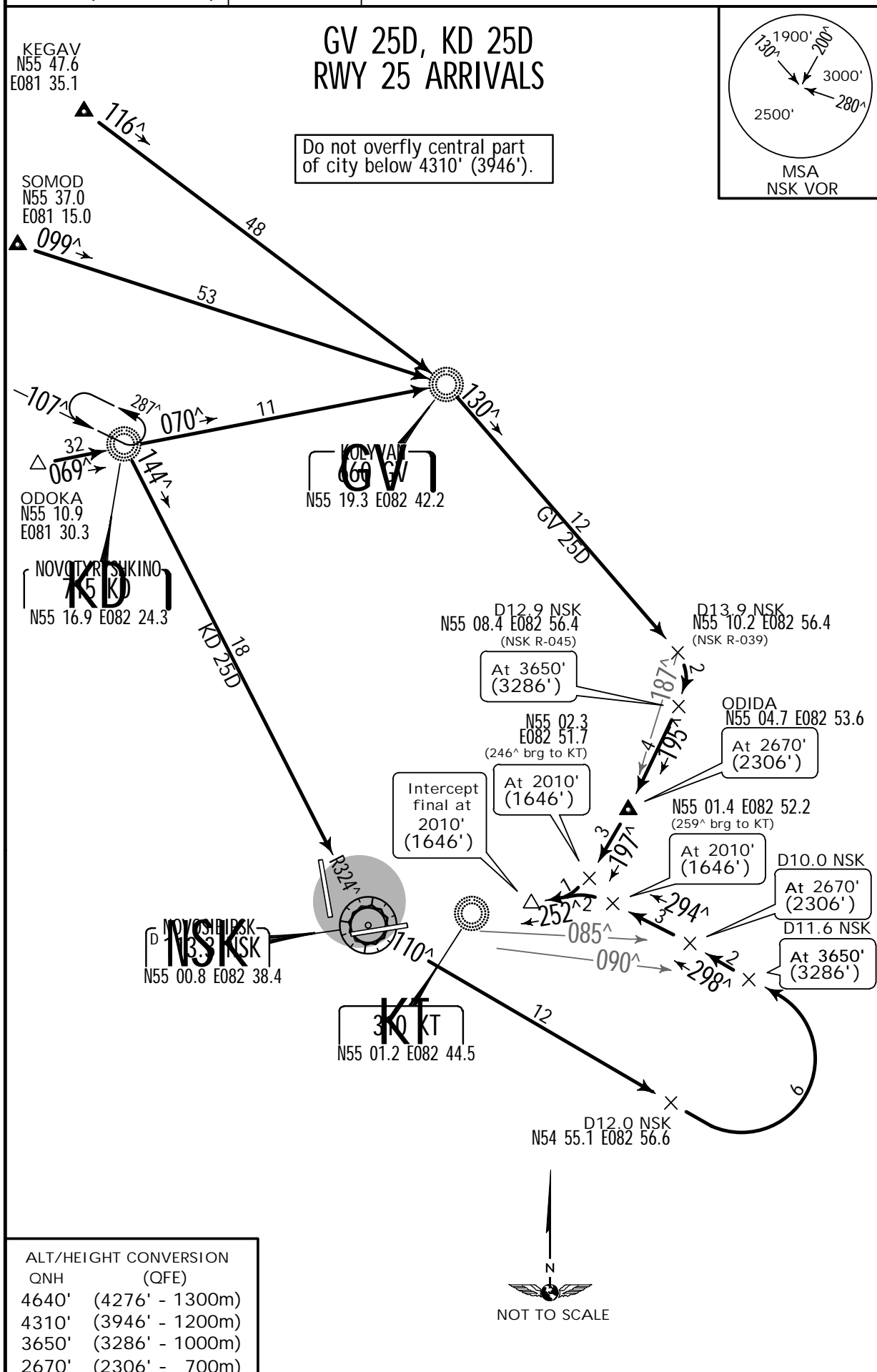
13 DEC 13

(10-2H)

JEPPESEN

NOVOSIBIRSK, RUSSIA
 .STAR.

| | | | | |
|-------------------------------|------------------|---|--|-------|
| ATIS 131.3 (Russian 127.4) | Apt Elev 368' | Alt Set: MM (hPa on request) Trans level: FL60 | QNH on request Trans alt: 4640' (4276') | (QFE) |
|-------------------------------|------------------|---|--|-------|



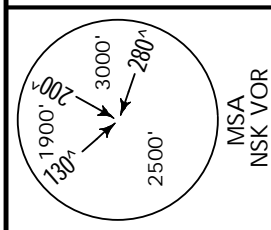
UNNT/OVB
TOLMACHEVO

13 DEC 13

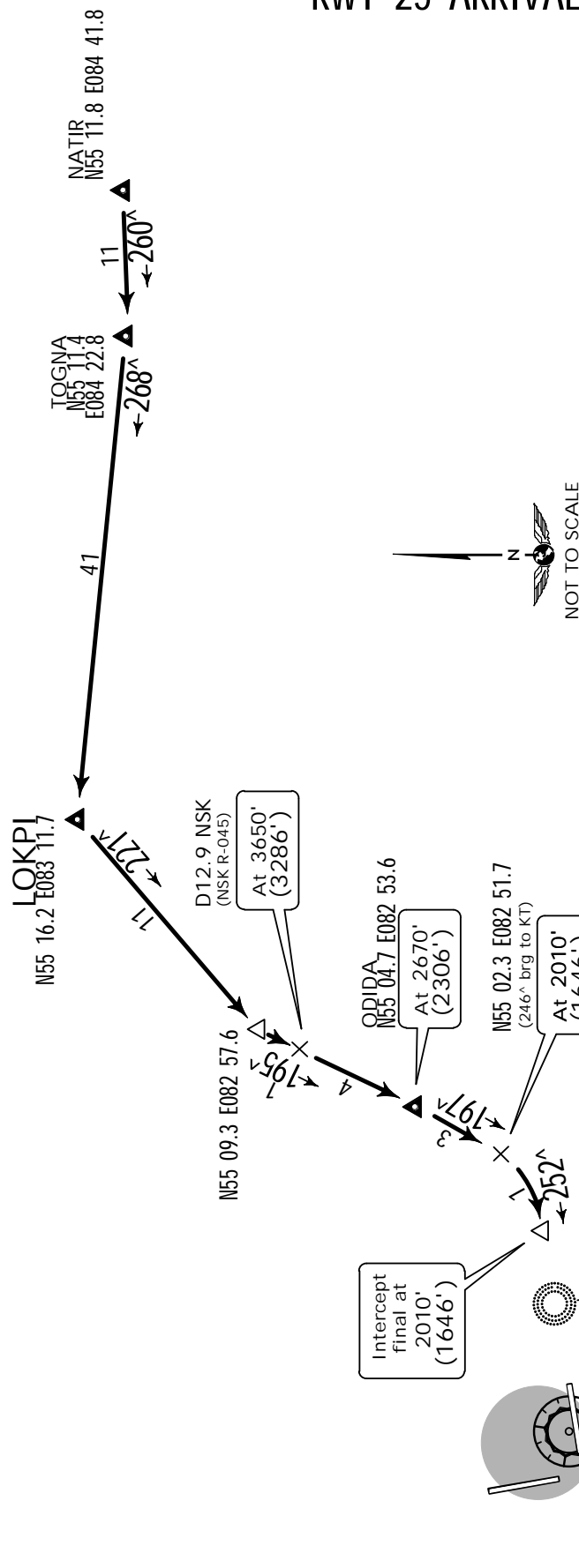
JEPPESEN
10-2J

NOVOSIBIRSK, RUSSIA
.STAR.

| | | |
|-------------------------------|------------------|---|
| ATIS 131.3 (Russian 127.4) | Apt Elev 368' | Alt Set: MM (hPa on request) QNH on request (QFE) Trans level: FL60 Trans alt: 4640' (4276') |
|-------------------------------|------------------|---|



LK 25D RWY 25 ARRIVAL



| ALT/HEIGHT CONVERSION | (QFE) |
|-----------------------|-----------------|
| QNH | (4276' - 1300m) |
| 640' | (3946' - 1200m) |
| 310' | (3286' - 1000m) |
| 650' | (2306' - 700m) |
| 010' | (1646' - 500m) |

Intercept final at 2010' (1646')

Do not overfly central part of city below 4310' (3946').

NOVOSIBIRSK
NSK
N55 00.8 E082 38.4

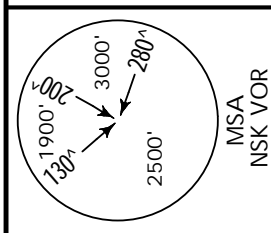
UNNT/OVB
 TOLMACHEVO

13 DEC 13

10-2K

NOVOSIBIRSK, RUSSIA
 .STAR.

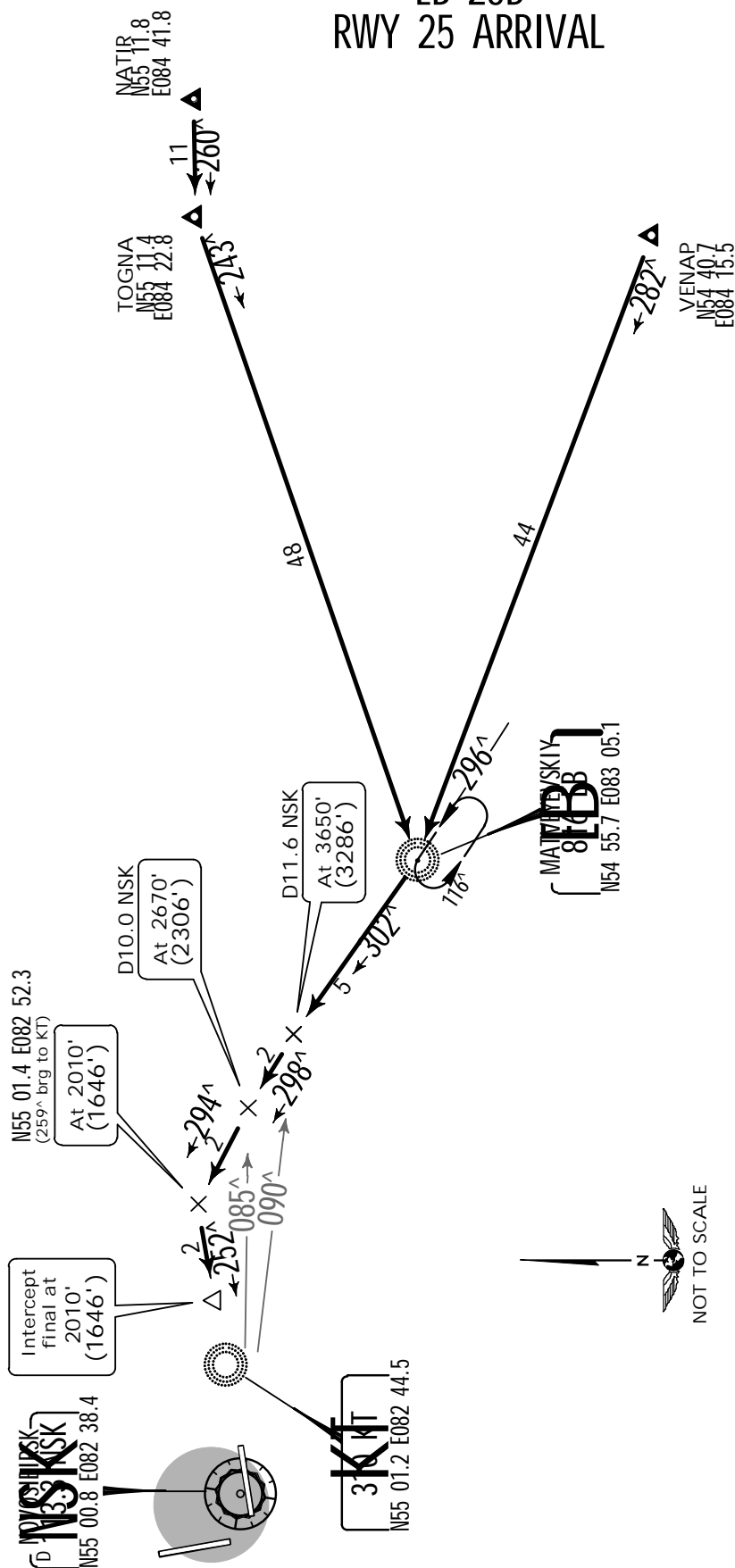
| | | |
|-------------------------------|------------------|---|
| ATIS 131.3 (Russian 127.4) | Apt Elev 367' | Alt Set: MM (hPa on request) QNH on request (QFE) Trans level: FL60 Trans alt: 4640' (4276') |
|-------------------------------|------------------|---|



EB 25D
 RWY 25 ARRIVAL

Do not overfly central part
 of city below 4310' (3946').

| ALT/HEIGHT CONVERSION | (QFE) |
|-----------------------|-----------------|
| QNH | |
| 640' | (4276' - 1300m) |
| 310' | (3946' - 1200m) |
| 650' | (3286' - 1000m) |
| 670' | (2306' - 700m) |
| 010' | (1646' - 500m) |



UNNT/OVB
 TOLMACHEVO

13 DEC 13

10-2L

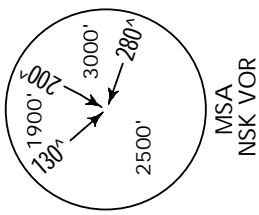
JEPPESEN

NOVOSIBIRSK, RUSSIA
 .STAR.

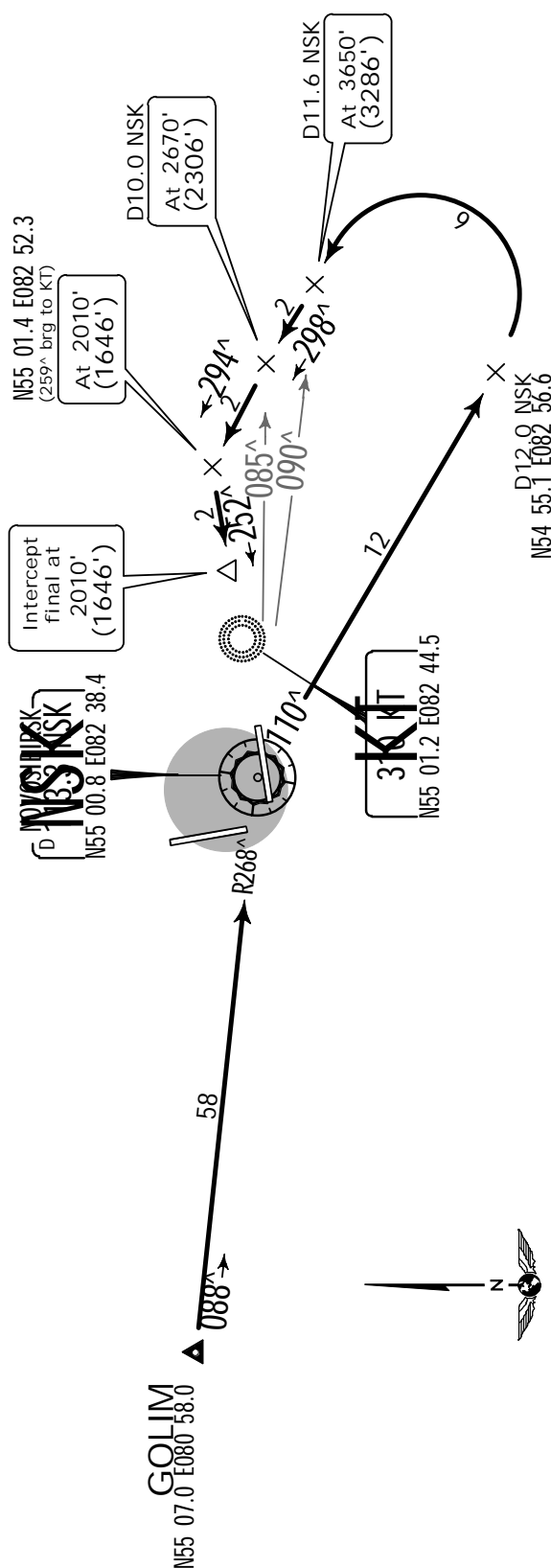
ATIS
 131.3 (Russian 127.4)

Apt Elev
 367'

Alt Set: MM (hPa on request) QNH on request (QFE)
 Trans level: FL60 Trans alt: 4640' (4276')

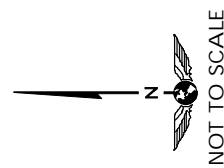


GL 25D
 RWY 25 ARRIVAL



| ALT/HEIGHT CONVERSION | (QFE) |
|-----------------------|-----------------|
| QNH | (4276' - 1300m) |
| 640' | (3946' - 1200m) |
| 310' | (3286' - 1000m) |
| 650' | (2306' - 700m) |
| 010' | (1646' - 500m) |

Do not overfly central part
 of city below 4310' (3946').



UNNT/OVB
TOLMACHEVO

22 NOV 13

JEPPESEN

10-2M

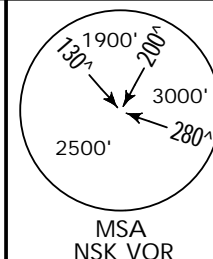
NOVOSIBIRSK, RUSSIA
.STAR.

ATIS
131.3 (Russian 127.4)

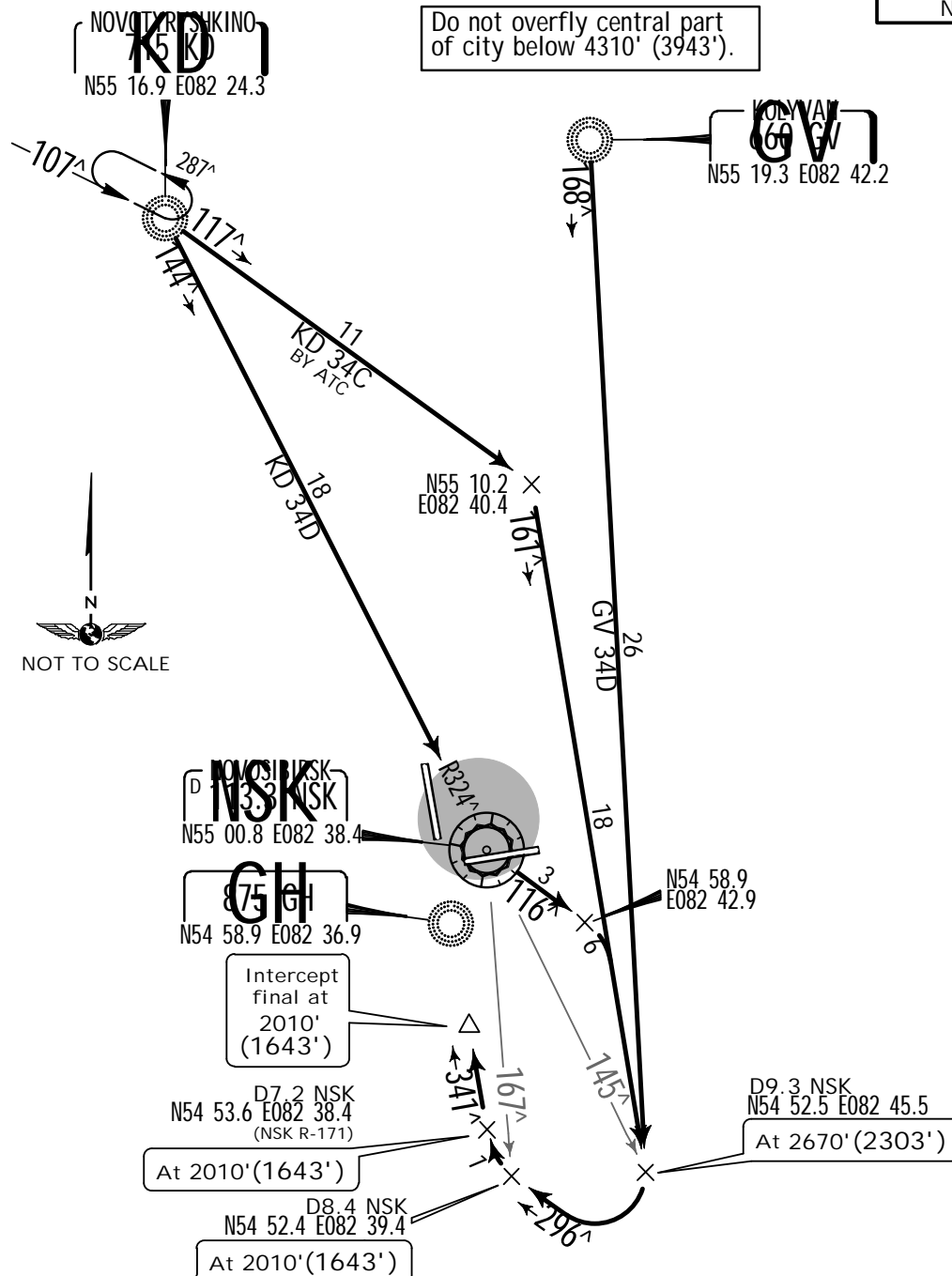
Apt Elev
368'

Alt Set: MM (hPa on request) QNH on request (QFE)
Trans level: FL60 Trans alt: 4640' (4273')

GV 34D, KD 34C, KD 34D RWY 34 ARRIVALS



Do not overfly central part
of city below 4310' (3943').



ALT/HEIGHT CONVERSION
(QNE) (QFE)

| | |
|-------|-----------------|
| 4640' | (4273' - 1300m) |
| 4310' | (3943' - 1200m) |
| 2670' | (2303' - 700m) |

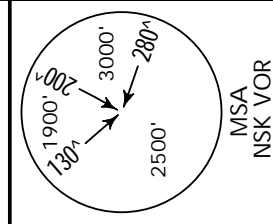
UNNT/OVB
TOLMACHEVO

22 NOV 13 10-2N
JEPPesen

NOVOSIBIRSK, RUSSIA
.STAR.

| | | |
|-------------------------------|------------------|---|
| ATIS 131.3 (Russian 127.4) | Apt Elev 368' | Alt Set: MM (hPa on request) QNH on request (QFE) Trans level: FL60 Trans alt: 4640' (4273') |
|-------------------------------|------------------|---|

PG 34D RWY 34 ARRIVAL



NATIR
N55 11.8 E084 41.8

11
260°

TOGNA
N55 11.4 E084 22.8

41
268°

LOKPI
N55 16.2 E083 11.7

76
272°

ODIDA
N55 04.7 E082 53.6
At or above
4310' (3943')

NSK
N55 00.8 E082 38.4

D6.9 NSK
At or above
4310' (3943')

D9.8 NSK
N54 51.9 E082 45.5
(316° brg to GH)
At 2670' (2303')

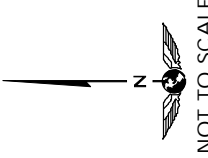
GH
N54 58.9 E082 36.9

Intercept
final at
2010' (1643')

D7.2 NSK
N54 53.6 E082 38.4
(NSK R-171)
At 2010' (1643')

D8.4 NSK
N54 52.4 E082 39.4
(338° brg to GH)
At 2010' (1643')

| ALT/HEIGHT CONVERSION | |
|-----------------------|-----------------|
| QNH | (QFE) |
| 4640' | (4273' - 1300m) |
| 4310' | (3943' - 1200m) |
| 2670' | (2303' - 700m) |
| 2010' | (1643' - 500m) |



Do not overfly central part
of city below 4310' (3943').

UNNT/OVB
TOLMACHEVO

13 DEC 13

JEPPESEN

NOVOSIBIRSK, RUSSIA
STAR.

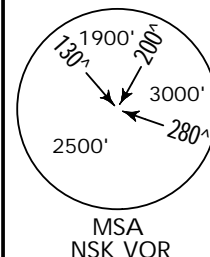
| |
|-----------------------|
| ATIS |
| 131.3 (Russian 127.4) |

Apt Elev
368'

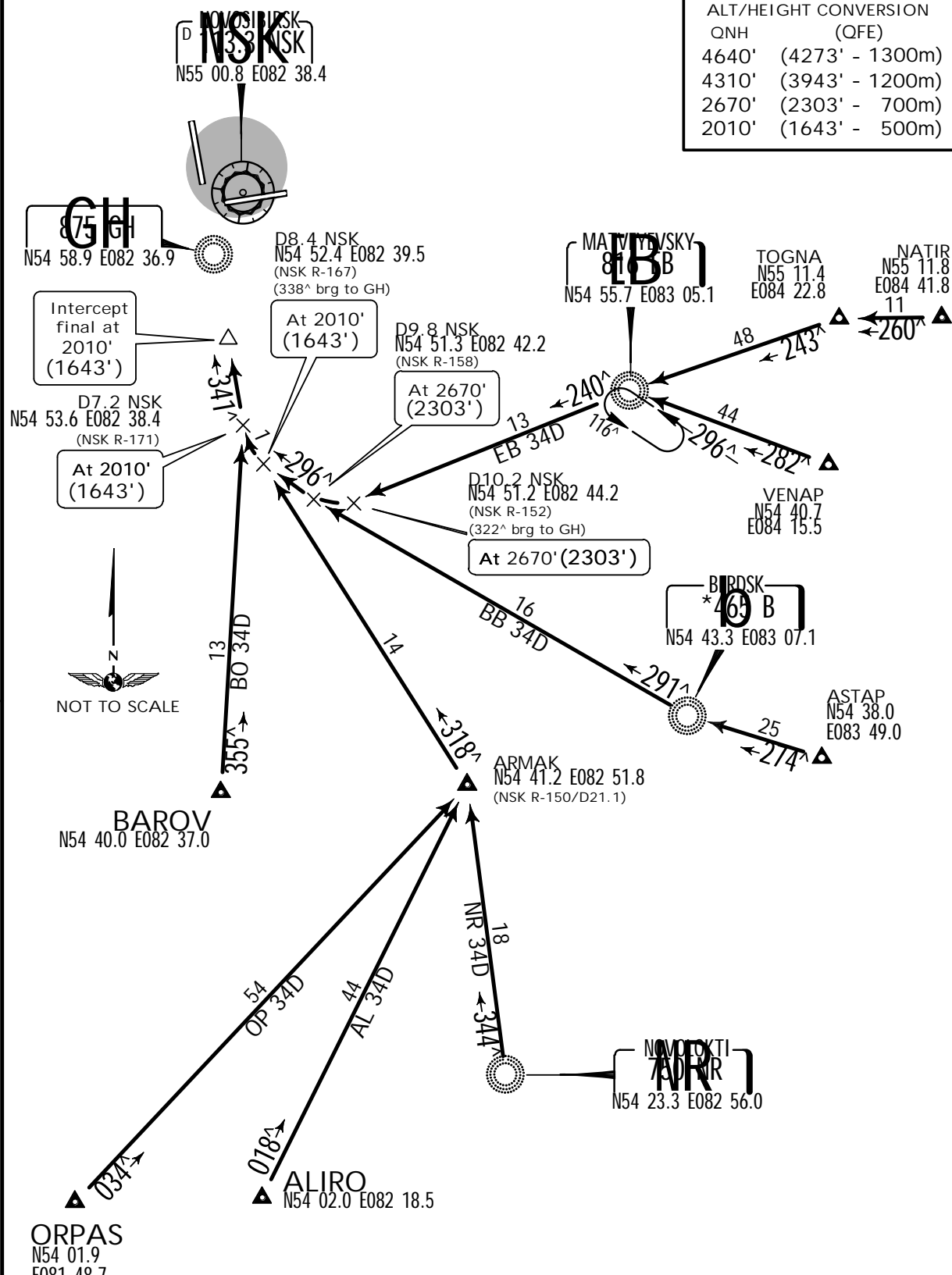
Alt Set: MM (hPa on request) QNH on request (QFE)
Trans level: FL60 Trans alt: 4640' (4273')

AL 34D, BB 34D, BO 34D
EB 34D, NR 34D, OP 34D
RWY 34 ARRIVALS

Do not overfly central part
of city below 4310' (3943').



| ALT/HEIGHT CONVERSION | |
|-----------------------|-----------------|
| QNH | (QFE) |
| 4640' | (4273' - 1300m) |
| 4310' | (3943' - 1200m) |
| 2670' | (2303' - 700m) |
| 2010' | (1643' - 500m) |



UNNT/OVB
TOLMACHEVO

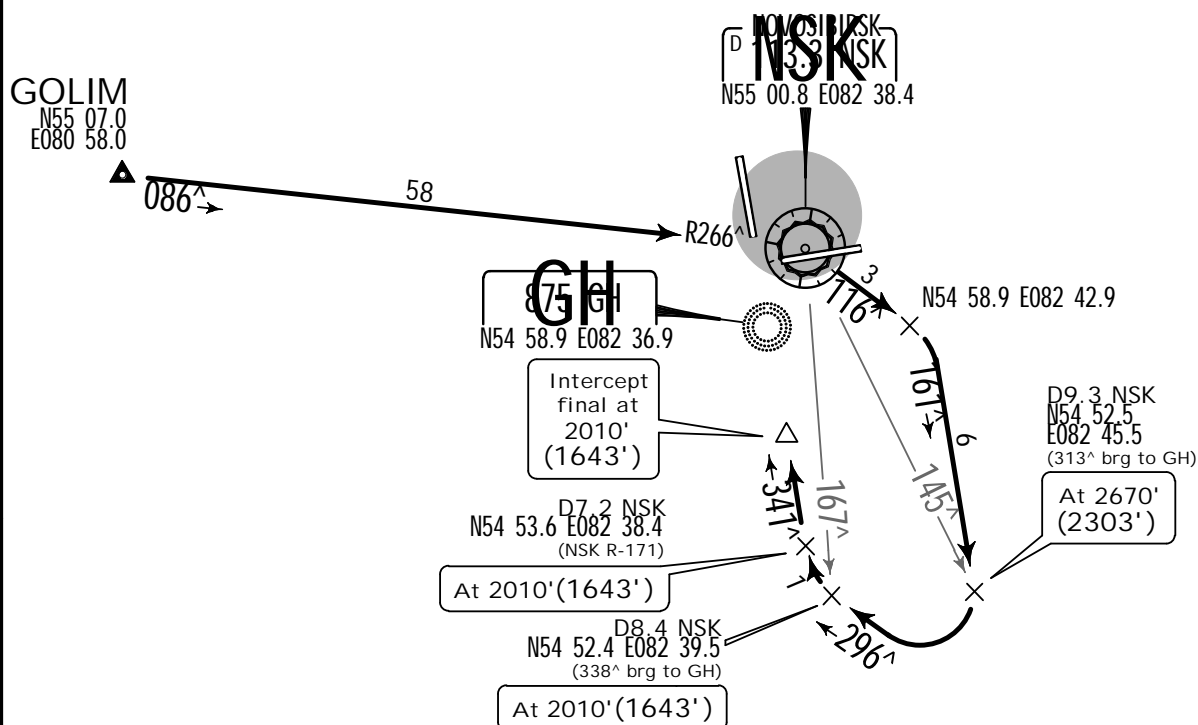
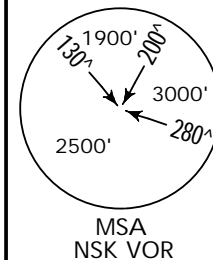
13 DEC 13 **JEPPESEN**
(10-2Q)

NOVOSIBIRSK, RUSSIA
.STAR.

| | | | | |
|-------------------------------|------------------|---|--|-------|
| ATIS 131.3 (Russian 127.4) | Apt Elev 368' | Alt Set: MM (hPa on request) Trans level: FL60 | QNH on request Trans alt: 4640' (4273') | (QFE) |
|-------------------------------|------------------|---|--|-------|

GL 34D
RWY 34 ARRIVAL

Do not overfly central part
of city below 4310' (3943').



ALT/HEIGHT CONVERSION
QNH (QFE)
4640' (4273' - 1300m)
4310' (3943' - 1200m)
2670' (2303' - 700m)

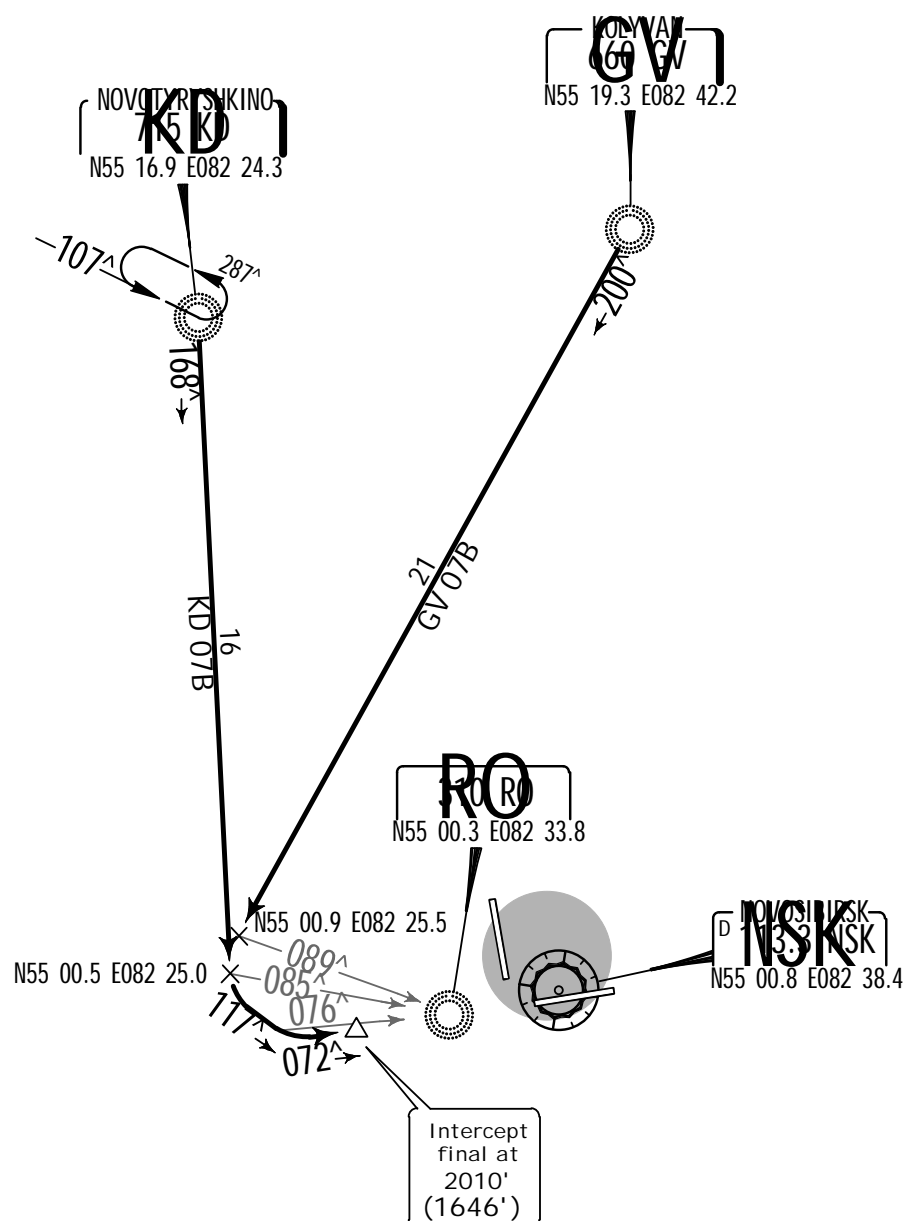
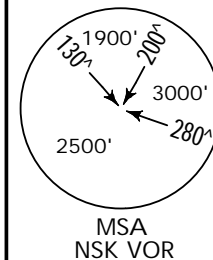
UNNT/OVB
TOLMACHEVO

JEPPESEN
22 NOV 13 10-2S

NOVOSIBIRSK, RUSSIA
.STAR.

| | | | | |
|-------------------------------|------------------|---|--|-------|
| ATIS 131.3 (Russian 127.4) | Apt Elev 368' | Alt Set: MM (hPa on request) Trans level: FL60 | QNH on request Trans alt: 4640' (4276') | (QFE) |
|-------------------------------|------------------|---|--|-------|

GV 07B, KD 07B
RWY 07 ARRIVALS
CAT A & B



ALT/HEIGHT CONVERSION
QNH (QFE)
4640' (4276' - 1300m)

UNNT/OVB
TOLMACHEVO

22 NOV 13

JEPPESEN

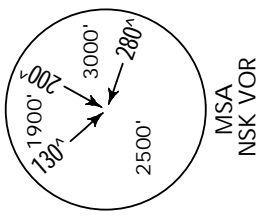
(10-2T)

NOVOSIBIRSK, RUSSIA
.STAR.

ATIS
131.3 (Russian 127.4)

Apt Elev
368'

Alt Set: MM (hPa on request) QNH on request (QFE)
Trans level: FL60 Trans alt: 4640' (4276')



MSA
NSK VOR

LK 07B, PG 07B
RWY 07 ARRIVALS

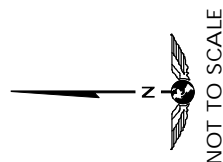
CAT A & B

ALT/HEIGHT CONVERSION
QNH (QFE)
4640' (4276' - 1300m)
2010' (1646' - 500m)

LOKPI
N55 16.2 E083 11.7
N55 11.8 E084 41.8
N55 11.4 E084 22.8
N55 11.8 E084 41.8
N55 11.8 E084 41.8

ODIDA
N55 04.7 E082 53.6

PG 07B
N55 00.8 E082 38.4



NOT TO SCALE

N55 01.8 E082 33.3
N55 01.1 E082 26.2
N55 01.8 E082 33.3
N55 00.3 E082 33.8
Intercept final at 2010' (1646')

UNNT/OVB
TOLMACHEVO

13 DEC 13

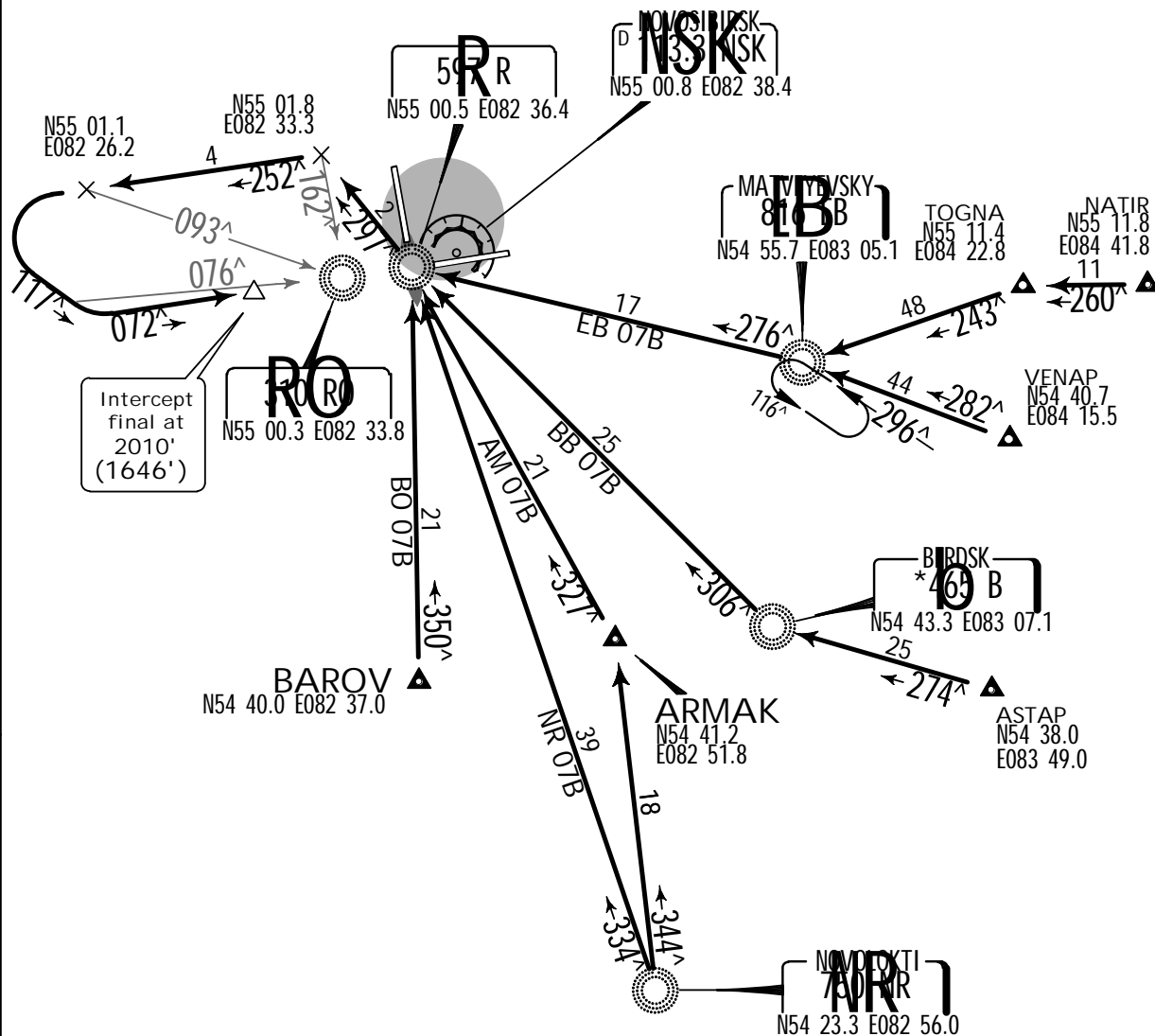
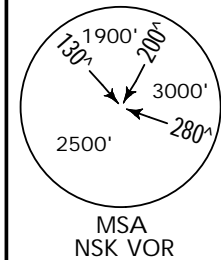
JEPPESEN
$$(10-2U)$$

NOVOSIBIRSK, RUSSIA
.STAR.

| | | |
|-------------------------------|------------------|---|
| ATIS 131.3 (Russian 127.4) | Apt Elev 368' | Alt Set: MM (hPa on request) QNH on request (QFE) Trans level: FL60 Trans alt: 4640' (4275') |
|-------------------------------|------------------|---|

AM 07B, BB 07B, BO 07B, EB 07B, NR 07B
RWY 07 ARRIVALS

CAT A & B



ALT/HEIGHT CONVERSION
QNH (QFE)
4640' (4276' - 1300m)

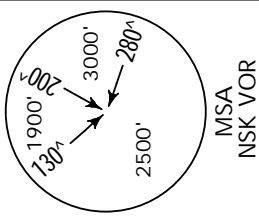
NOT TO SCALE

UNNT/OVB
TOLMACHEVO

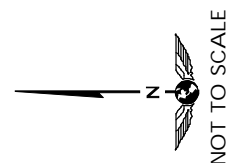
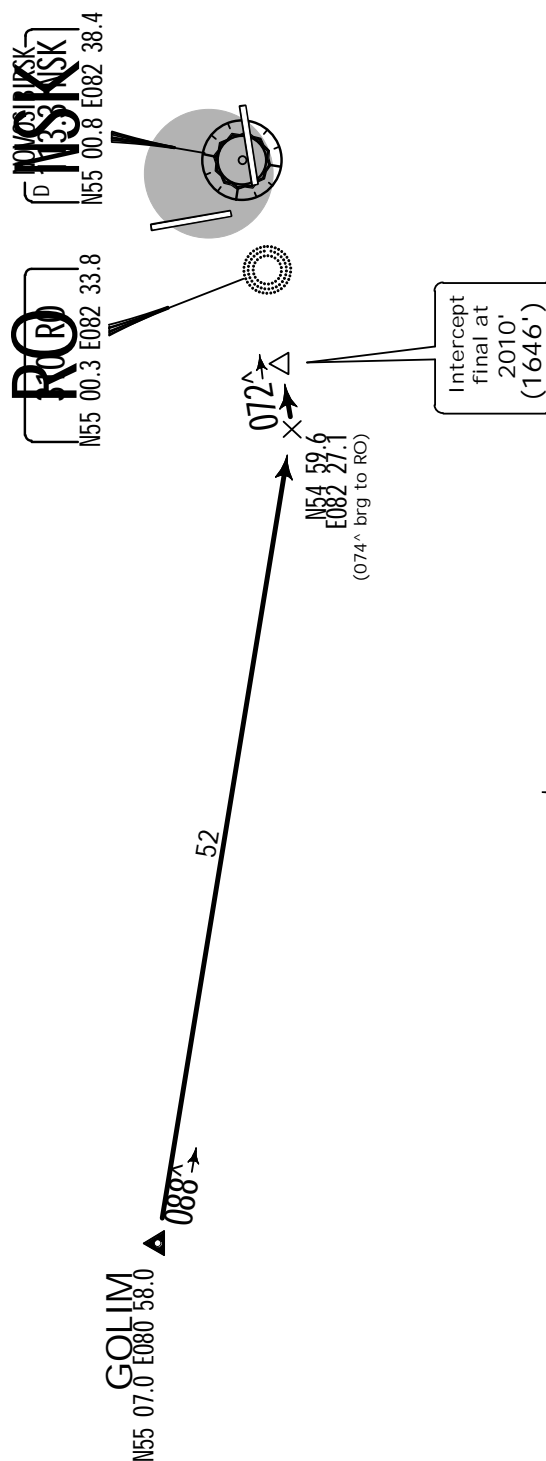
JEPPESEN
13 DEC 13 (10-2V)

NOVOSIBIRSK, RUSSIA
.STAR.

| | | |
|-------------------------------|------------------|---|
| ATIS 131.3 (Russian 127.4) | Apt Elev 368' | Alt Set: MM (hPa on request) QNH on request (QFE) Trans level: FL60 Trans alt: 4640' (4276') |
|-------------------------------|------------------|---|



GL 07B
RWY 07 ARRIVAL
CAT A & B



ALT/HEIGHT CONVERSION
QNH (QFE)
640' (4276' - 1300m)
010' (1646' - 500m)

UNNT/OVB
TOLMACHEVO

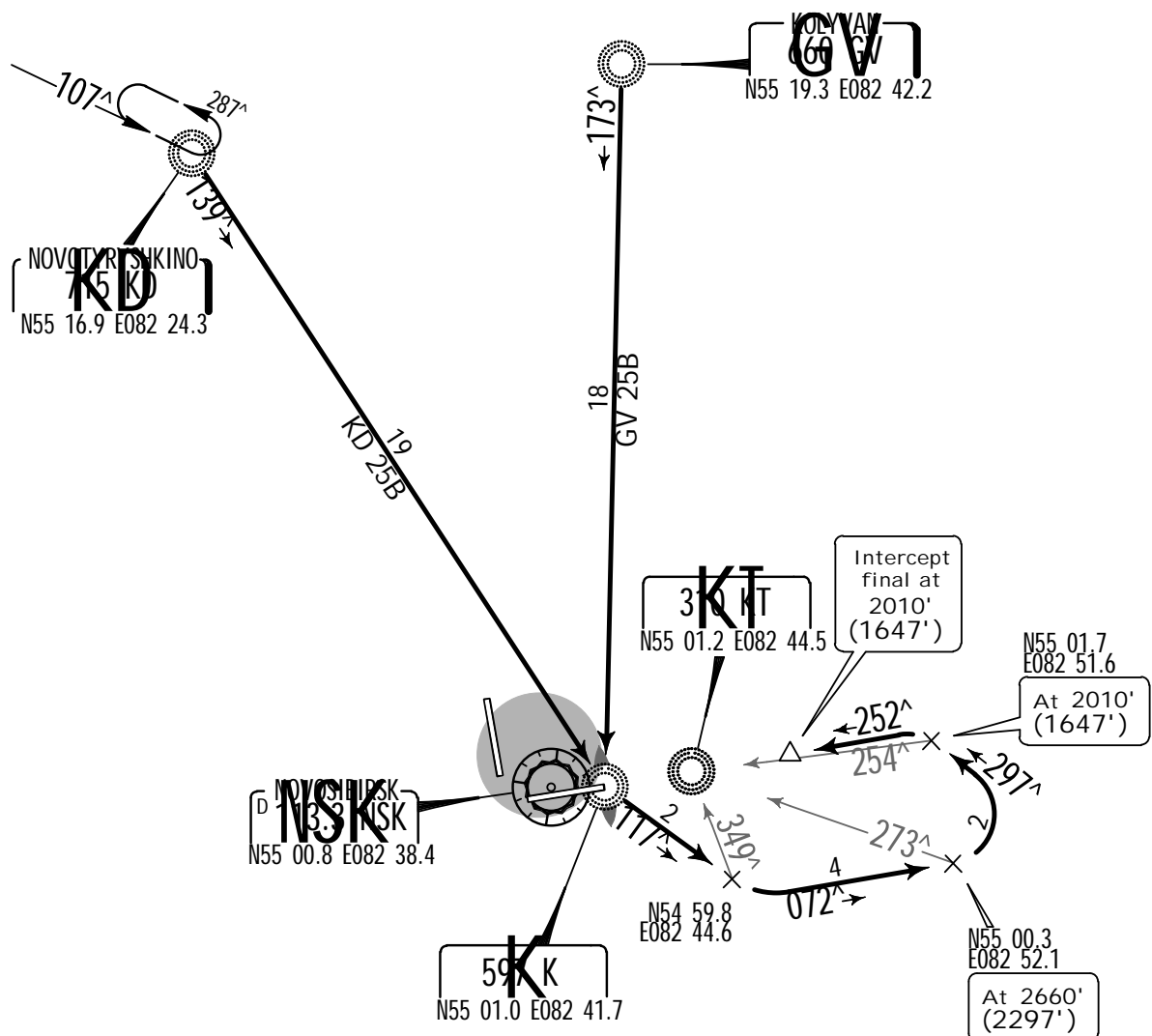
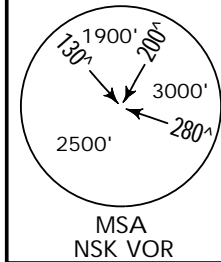
JEPPESEN
19 JUL 13 (10-2W) .Eff.25.Jul.

NOVOSIBIRSK, RUSSIA
.STAR.

| | | |
|-------------------------------|------------------|---|
| ATIS 131.3 (Russian 127.4) | Apt Elev 368' | Alt Set: MM (hPa on request) QNH on request (QFE) Trans level: FL60 Trans alt: 4640' (4277') |
|-------------------------------|------------------|---|

GV 25B, KD 25B
RWY 25 ARRIVALS
CAT A & B

Do not overfly central part
of city below 4300' (3937').



ALT/HEIGHT CONVERSION
QNH (QFE)
4640' (4277' - 1300m)
4300' (3937' - 1200m)
2660' (2297' - 700m)

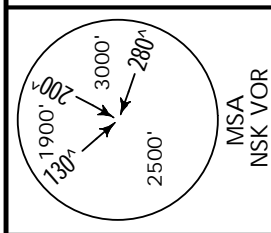


UNNT/OVB
TOLMACHEVO

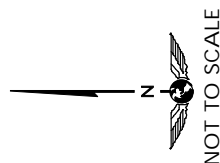
19 JUL 13 10-2X .Eff.25.Jul.

NOVOSIBIRSK, RUSSIA
.STAR.

| | | |
|-------------------------------|------------------|---|
| ATIS 131.3 (Russian 127.4) | Apt Elev 368' | Alt Set: MM (hPa on request) QNH on request (QFE) Trans level: FL60 Trans alt: 4640' (4277') |
|-------------------------------|------------------|---|

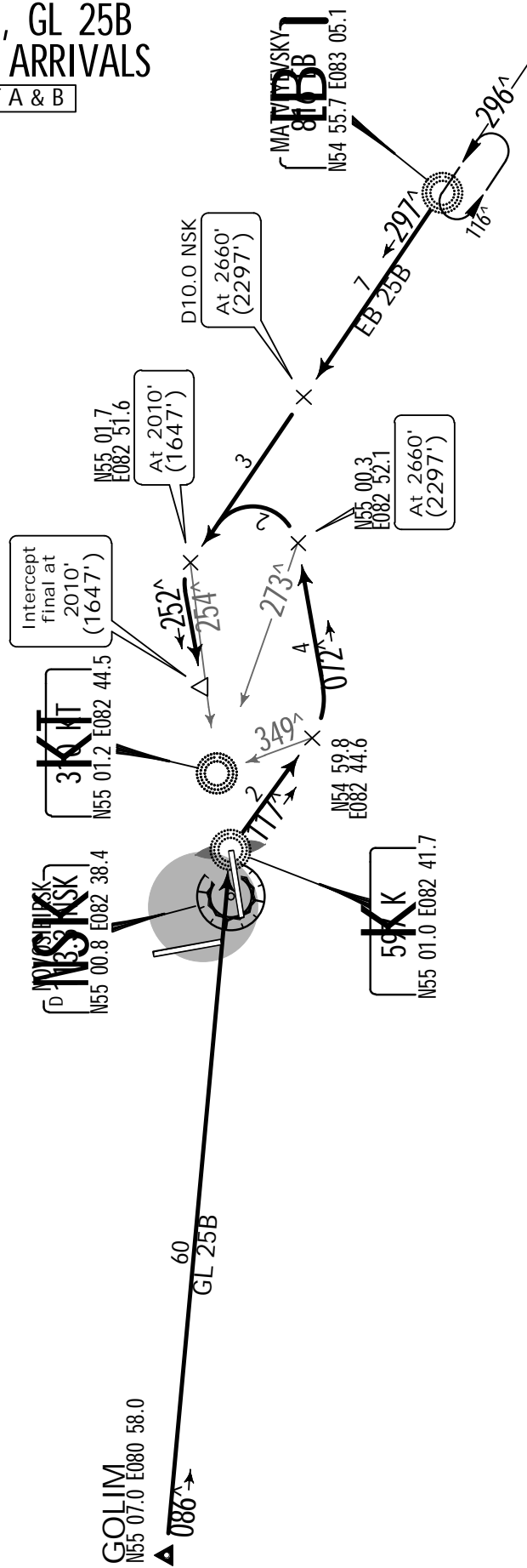


EB 25B, GL 25B
RWY 25 ARRIVALS
CAT A & B



Do not overfly central part
of city below 4300' (3937').

| ALT/HEIGHT CONVERSION QNH (QFE) |
|------------------------------------|
| 640' (4277' - 1300m) |
| 300' (3937' - 1200m) |
| 660' (2297' - 700m) |
| 010' (1647' - 500m) |



UNNT/OVB
TOLMACHEVO

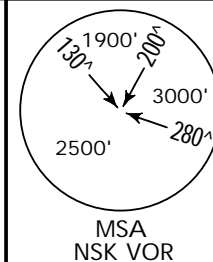
JEPPESEN
22 NOV 13 (10-2X1)

NOVOSIBIRSK, RUSSIA
.STAR.

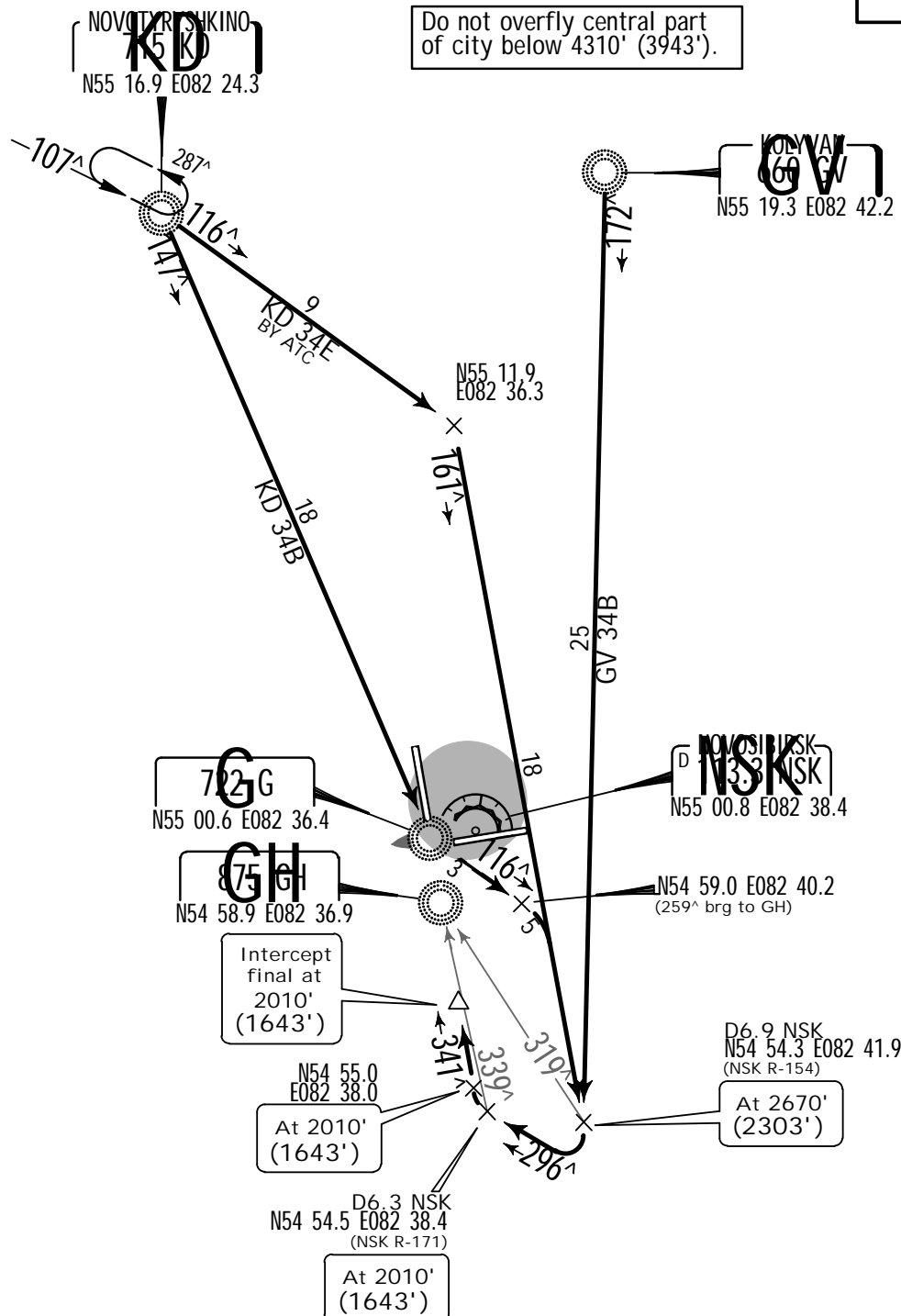
| | | |
|-------------------------------|------------------|---|
| ATIS 131.3 (Russian 127.4) | Apt Elev 368' | Alt Set: MM (hPa on request) QNH on request (QFE) Trans level: FL60 Trans alt: 4640' (4273') |
|-------------------------------|------------------|---|

GV 34B, KD 34B, KD 34E RWY 34 ARRIVALS

CAT A & B



Do not overfly central part
of city below 4310' (3943').



ALT/HEIGHT CONVERSION
(QNE) (QFE)

| | |
|-------|-----------------|
| 4640' | (4273' - 1300m) |
| 4310' | (3943' - 1200m) |
| 2670' | (2303' - 700m) |



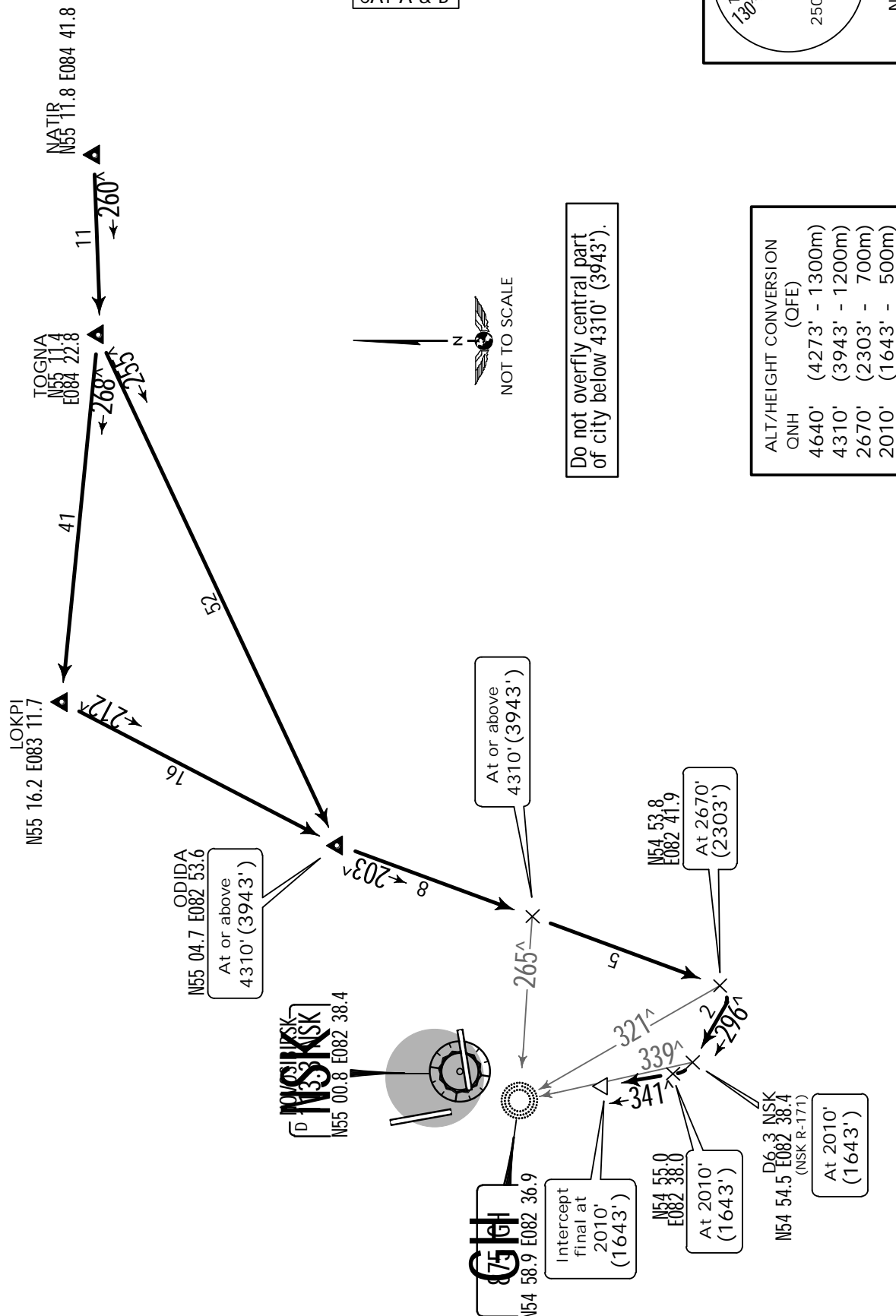
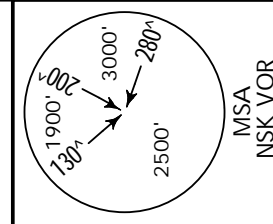
UNNT/OVB
TOLMACHEVO

22 NOV 13 10-2X2
JEPPESSEN

NOVOSIBIRSK, RUSSIA
.STAR.

| | | |
|-------------------------------|------------------|---|
| ATIS 131.3 (Russian 127.4) | Apt Elev 368' | Alt Set: MM (hPa on request) QNH on request (QFE) Trans level: FL60 Trans alt: 4640' (4273') |
|-------------------------------|------------------|---|

PG 34B
RWY 34 ARRIVAL
CAT A & B



UNNT/OVB
TOLMACHEVO

JEPPESEN
13 DEC 13 10-2X3

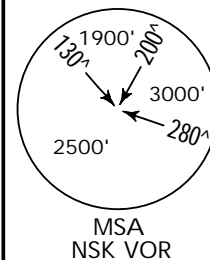
NOVOSIBIRSK, RUSSIA
.STAR.

| | | |
|-------------------------------|------------------|---|
| ATIS 131.3 (Russian 127.4) | Apt Elev 368' | Alt Set: MM (hPa on request) ONH on request (QFE) Trans level: FL60 Trans alt: 4640' (4273') |
|-------------------------------|------------------|---|

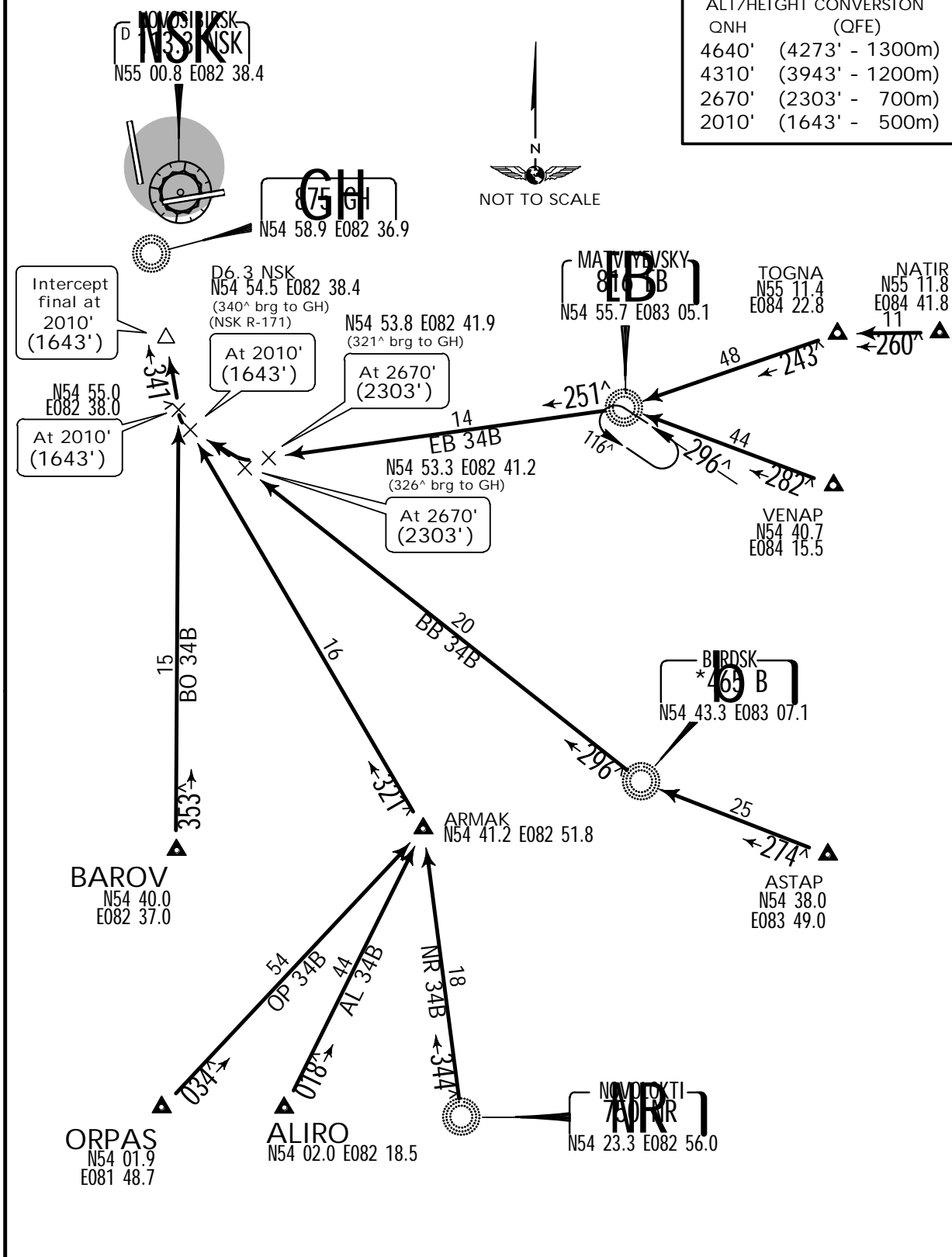
AL 34B, BB 34B, BO 34B, EB 34B, NR 34B, OP 34B
RWY 34 ARRIVALS

CAT A & B

Do not overfly central part
of city below 4310' (3943').



| ALT/HEIGHT CONVERSION | |
|-----------------------|-----------------|
| QNH | (QFE) |
| 4640' | (4273' - 1300m) |
| 4310' | (3943' - 1200m) |
| 2670' | (2303' - 700m) |
| 2010' | (1643' - 500m) |



UNNT/OVB
 TOLMACHEVO

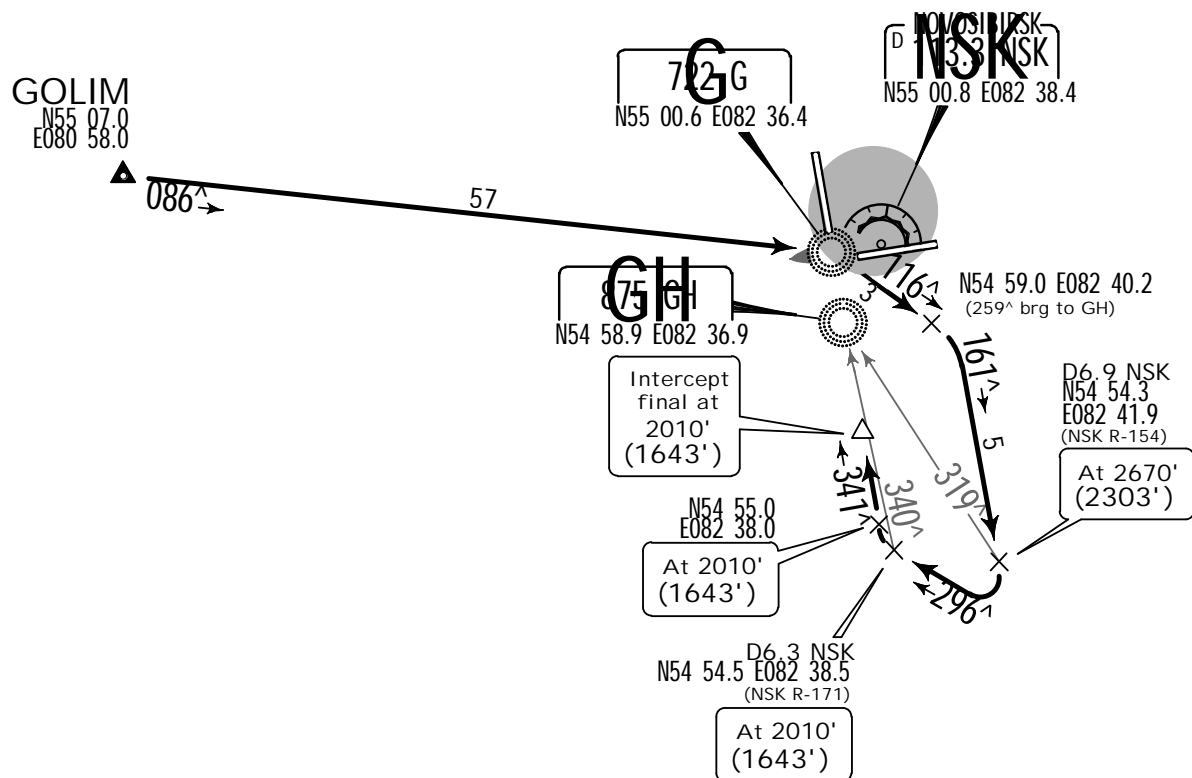
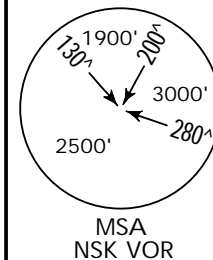
JEPPESEN
 13 DEC 13 (10-2X4)

NOVOSIBIRSK, RUSSIA
 .STAR.

| | | | | |
|-------------------------------|------------------|---|--|-------|
| ATIS 131.3 (Russian 127.4) | Apt Elev 368' | Alt Set: MM (hPa on request) Trans level: FL60 | QNH on request Trans alt: 4640' (4273') | (QFE) |
|-------------------------------|------------------|---|--|-------|

GL 34B
 RWY 34 ARRIVAL
 CAT A & B

Do not overfly central part
 of city below 4310' (3943').



ALT/HEIGHT CONVERSION
 QNH (QFE)
 4640' (4273' - 1300m)
 4310' (3943' - 1200m)
 2670' (2303' - 700m)

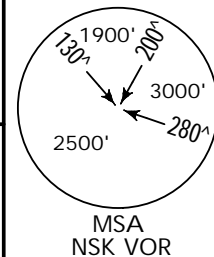
UNNT/OVB
TOLMACHEVO

JEPPESEN
25 MAY 12 (10-3) .Eff.31.May.

NOVOSIBIRSK, RUSSIA
.SID.

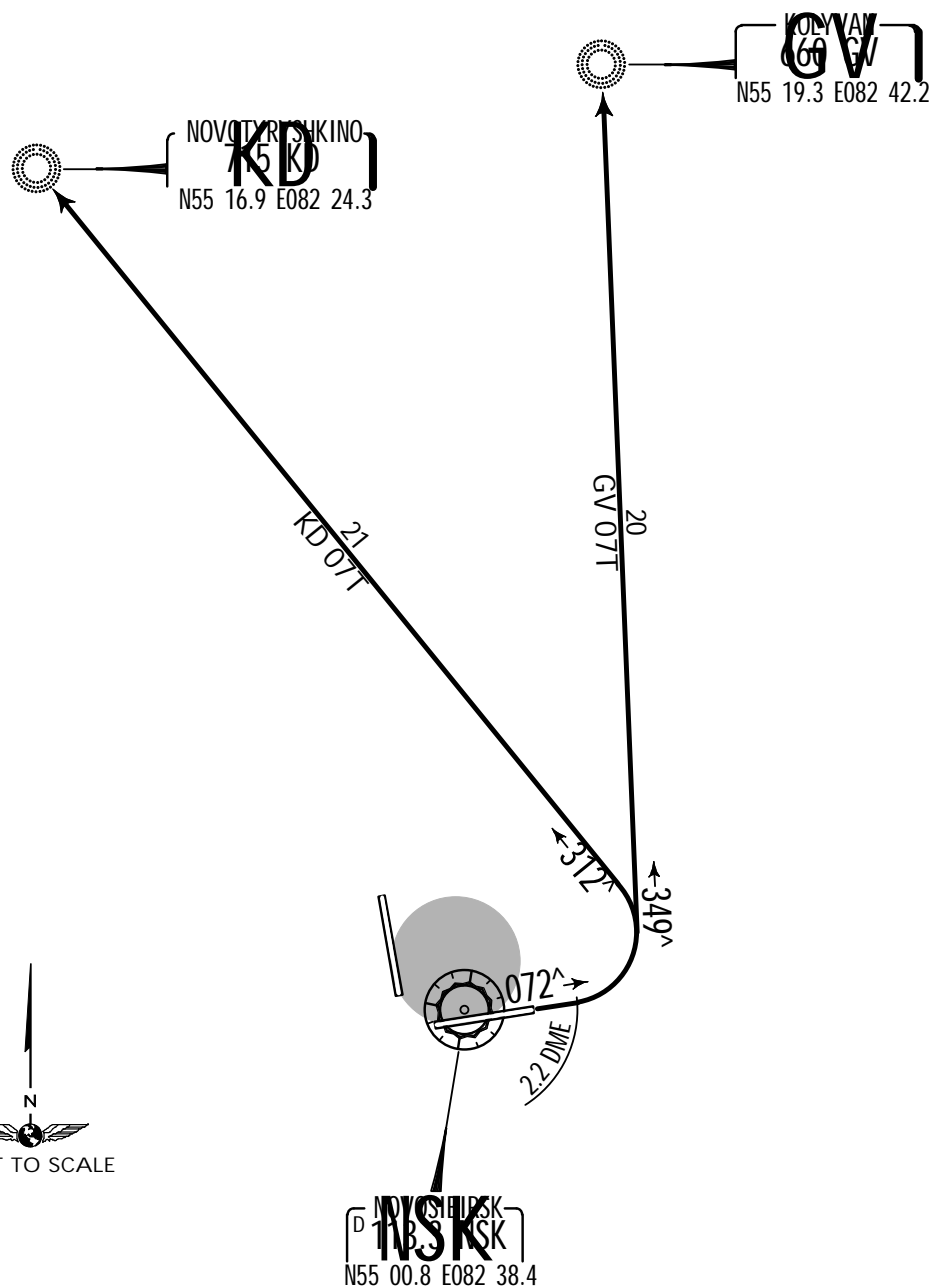
Apt Elev
368'

QNH on request (QFE)
Trans level: FL60 Trans alt: 4640' (4275')
Take-off shall be carried out with noise abatement
procedures according to Flight Operation Manual.



GV 07T, KD 07T RWY 07 DEPARTURES

Do not overfly central part
of city below 4310' (3945').



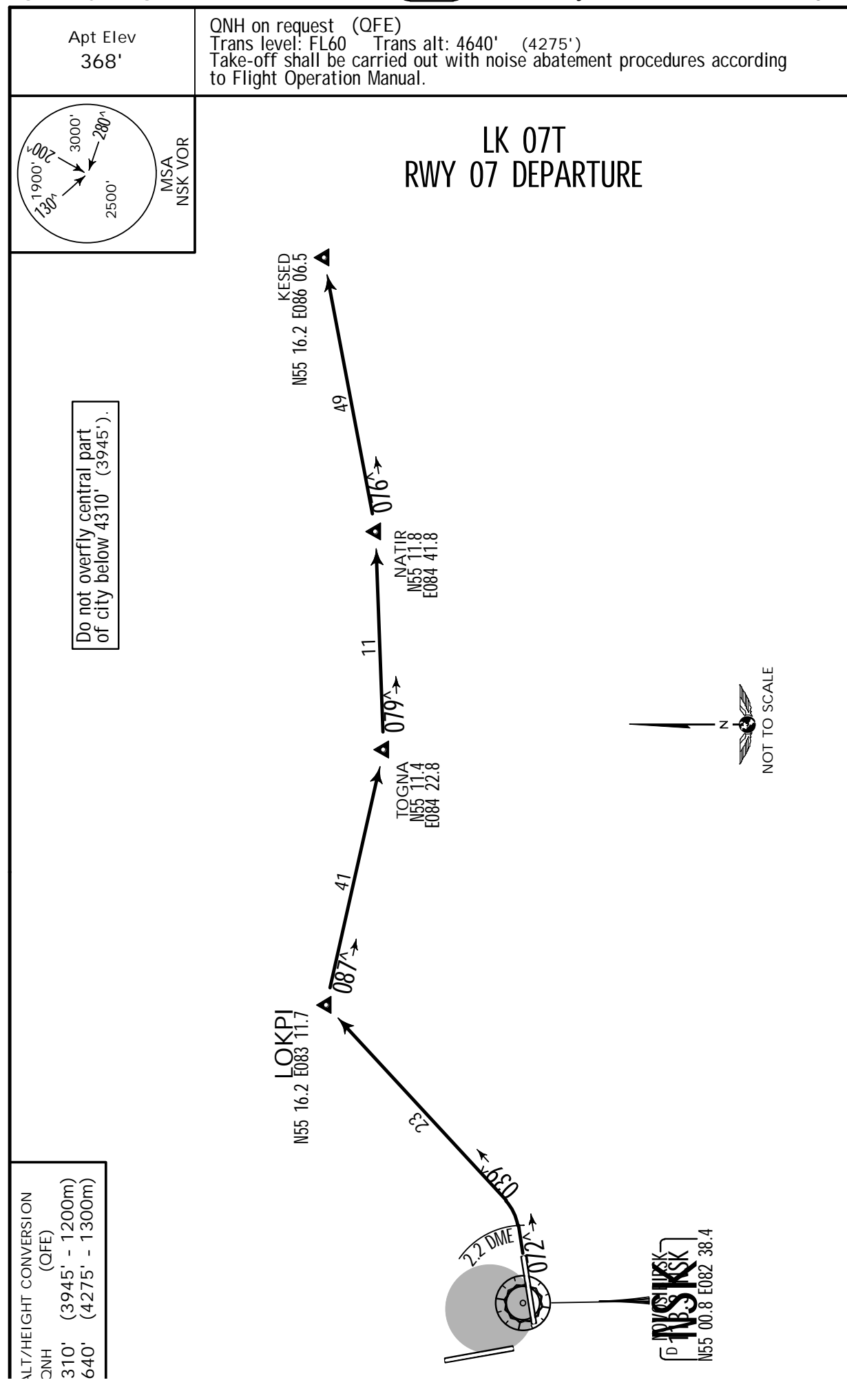
NOT TO SCALE

ALT/HEIGHT CONVERSION
QNH (QFE)
4310' (3945' - 1200m)

UNNT/OVB
TOLMACHEVO

JEPPESEN
25 MAY 12 (10-3A) .Eff.31.May.

NOVOSIBIRSK, RUSSIA
.SID.

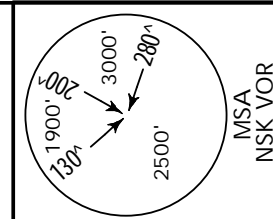
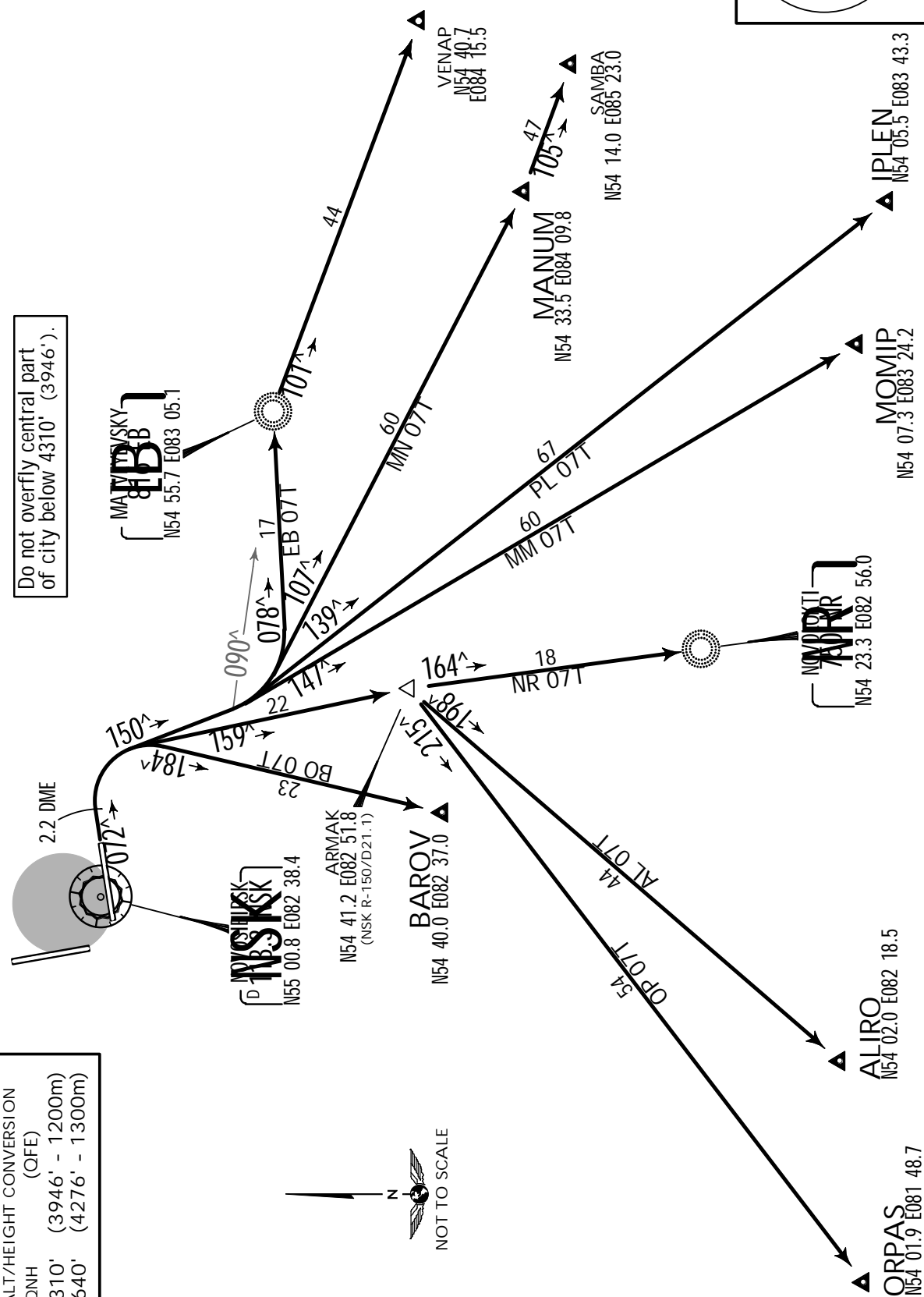


UNNT/OVB
TOLMACHEVO

13 DEC 13

10-3B

JEPPESEN

NOVOSIBIRSK, RUSSIA
.SID.Apt Elev
368'QNH on request (QFE)
Trans level: FL60 Trans alt: 4640' (4276')
Take-off shall be carried out with noise abatement procedures according to Flight Operation Manual.AL 07T, BO 07T, EB 07T, MM 07T, MN 07T
NR 07T, OP 07T, PL 07T
RWY 07 DEPARTURESDo not overfly central part
of city below 4310' (3946').

ALT/HEIGHT CONVERSION

QNH (QFE)

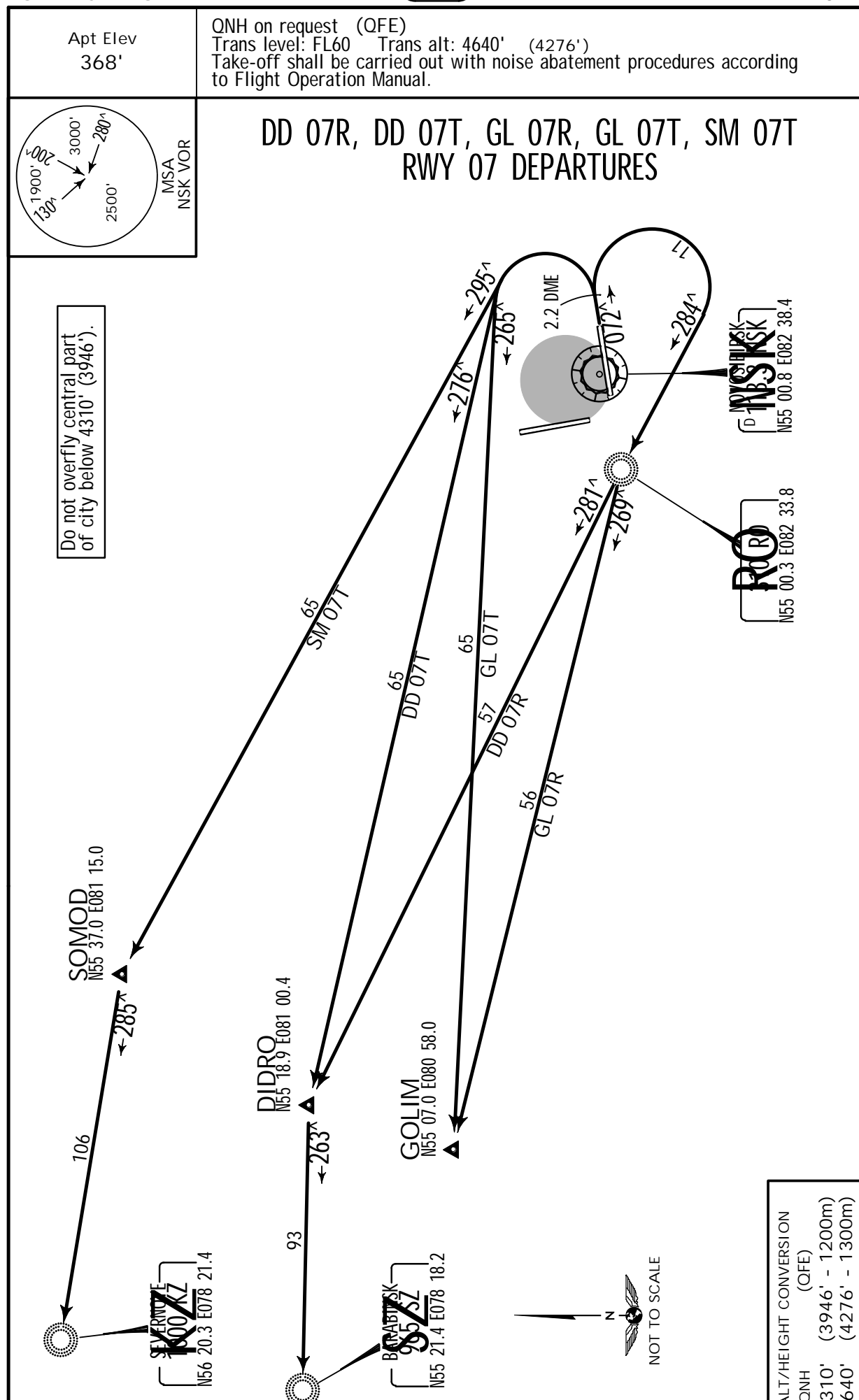
310' (3946' - 1200m)

640' (4276' - 1300m)

UNNT/OVB
TOLMACHEVO

JEPPESEN
13 DEC 13 10-3C

NOVOSIBIRSK, RUSSIA
.SID.



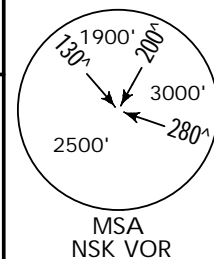
UNNT/OVB
TOLMACHEVO

25 MAY 12 **10-3D** .Eff.31.May.

NOVOSIBIRSK, RUSSIA
.SID.

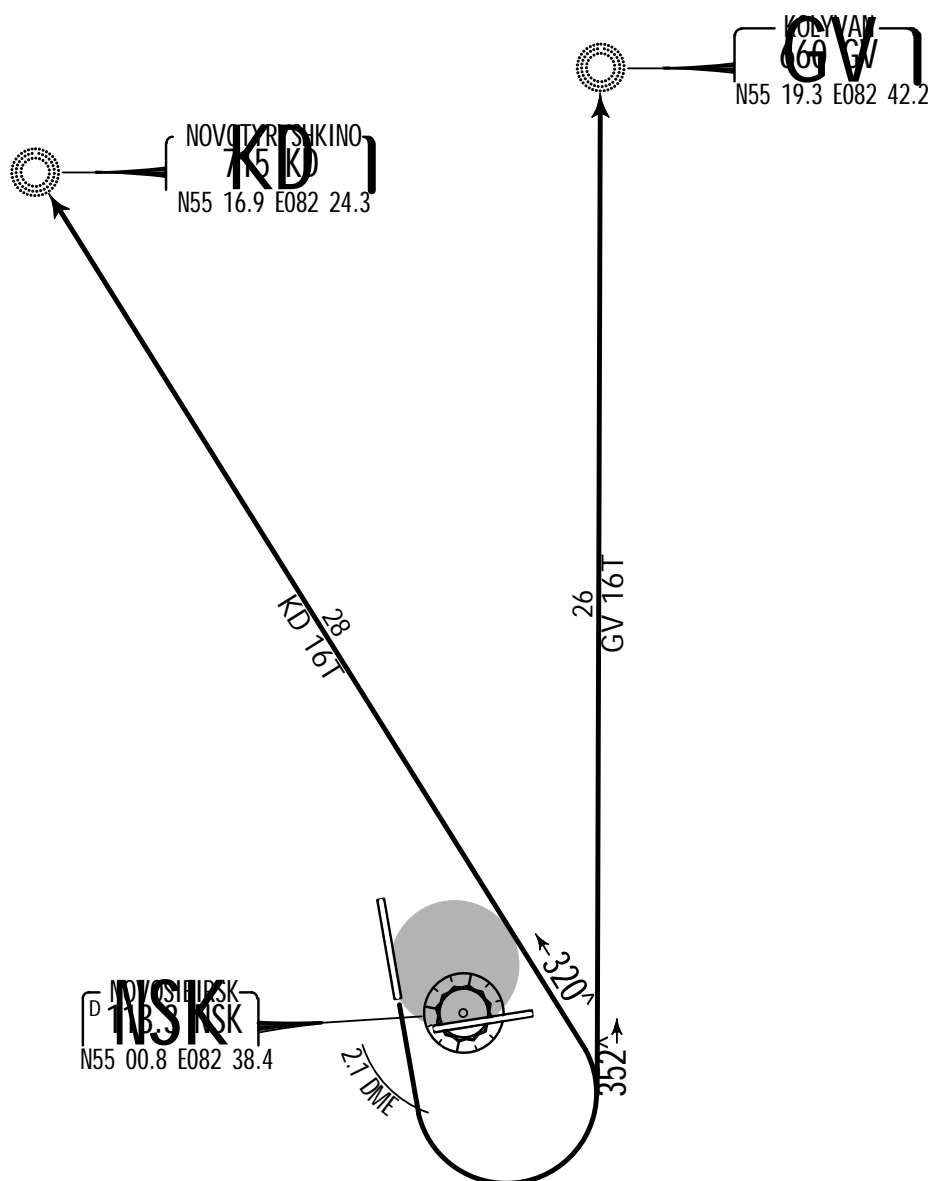
Apt Elev
368'

QNH on request (QFE)
Trans level: FL60 Trans alt: 4640' (4278')



GV 16T, KD 16T
RWY 16 DEPARTURES

Do not overfly central part
of city below 4300' (3938').

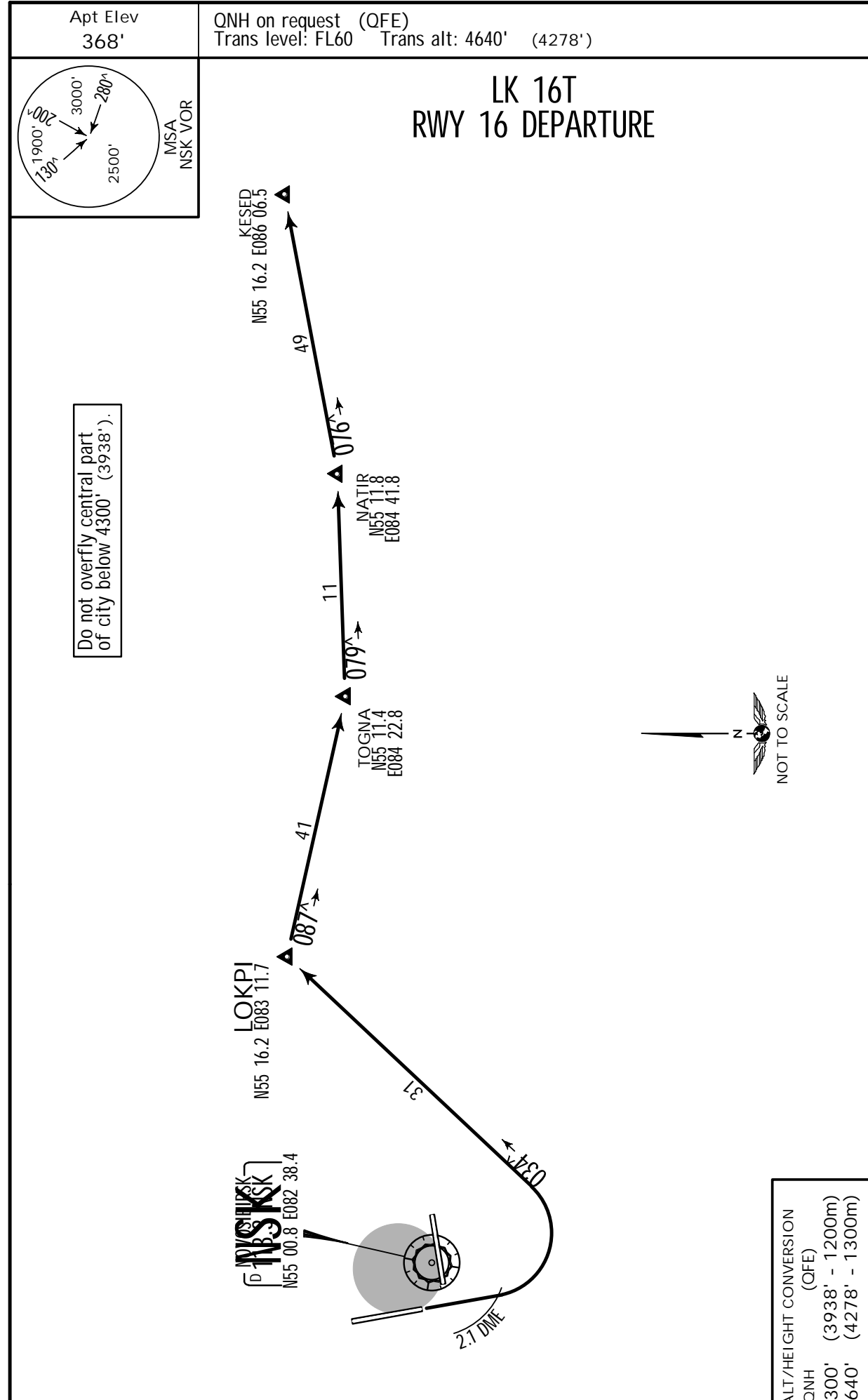


ALT/HEIGHT CONVERSION
QNH (QFE)
4300' (3938' - 1200m)

UNNT/OVB
TOLMACHEVO

JEPPESEN
25 MAY 12 (10-3E) .Eff.31.May.

NOVOSIBIRSK, RUSSIA
.SID.



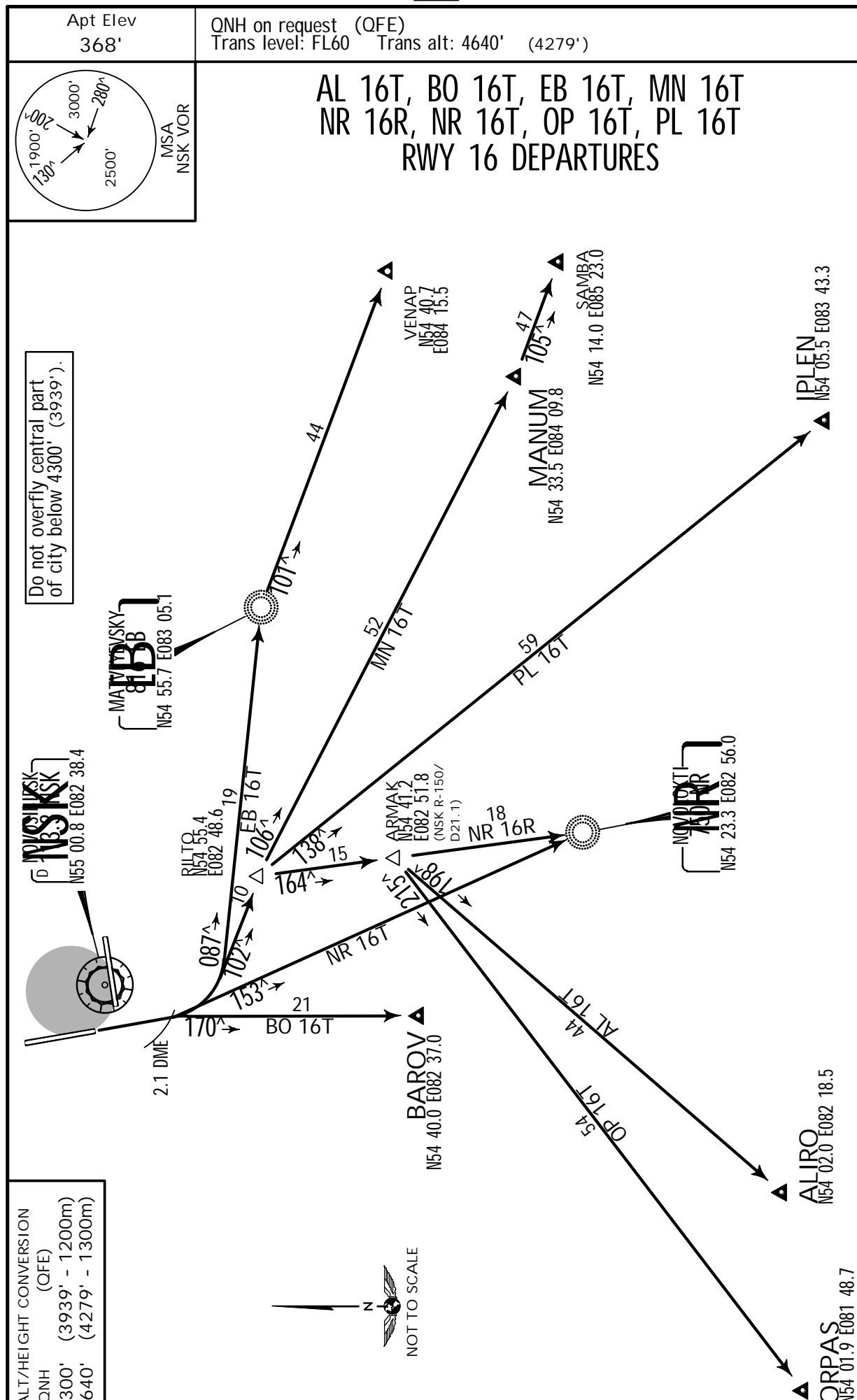
UNNT/OVB
TOLMACHEVO

13 DEC 13

JEPPESEN

(10-3F)

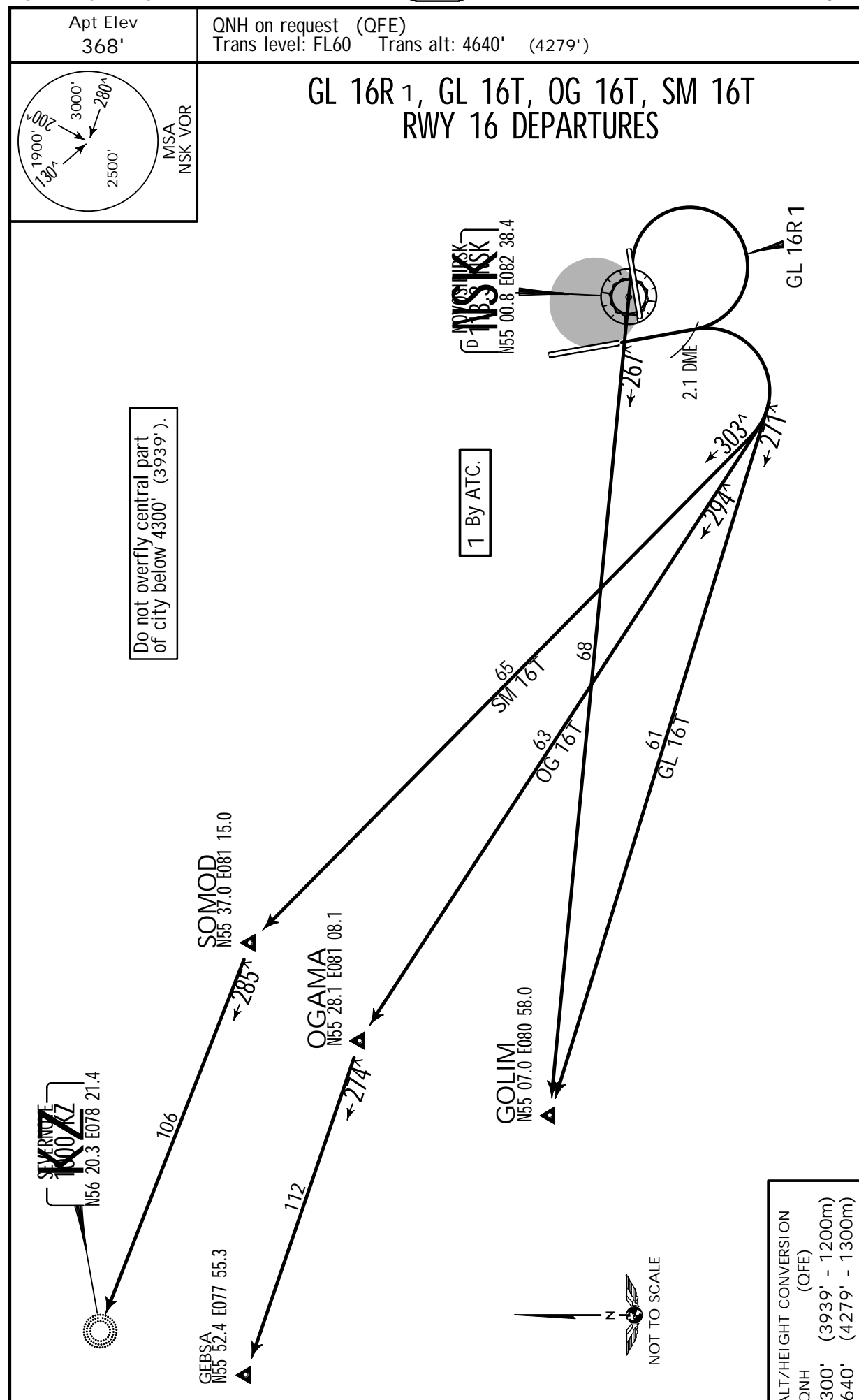
NOVOSIBIRSK, RUSSIA
.SID.



UNNT/OVB
TOLMACHEVO

13 DEC 13 **JEPPESEN**
(10-3G)

NOVOSIBIRSK, RUSSIA
.SID.



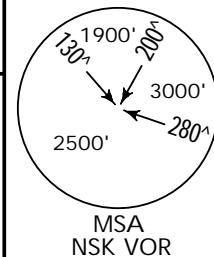
UNNT/OVB
TOLMACHEVO

JEPPESEN
22 NOV 13 (10-3H)

NOVOSIBIRSK, RUSSIA
.SID.

Apt Elev
368'

QNH on request (QFE)
Trans level: FL60 Trans alt: 4640' (4276')



GV 25T, KD 25T, KG 25T
RWY 25 DEPARTURES

Do not overfly central part
of city below 4300' (3936').

KENGA
N56 19.2 E080 42.1

43
307°

KEGAV
N55 47.6 E081 35.1

NOVOTYRSKINO
N55 16.9 E082 24.3

KOLVA
N55 19.3 E082 42.2

KG 25T
60

KD 25T
19

GV 25T
22



NOVOSIBIRSK
N55 00.8 E082 38.4

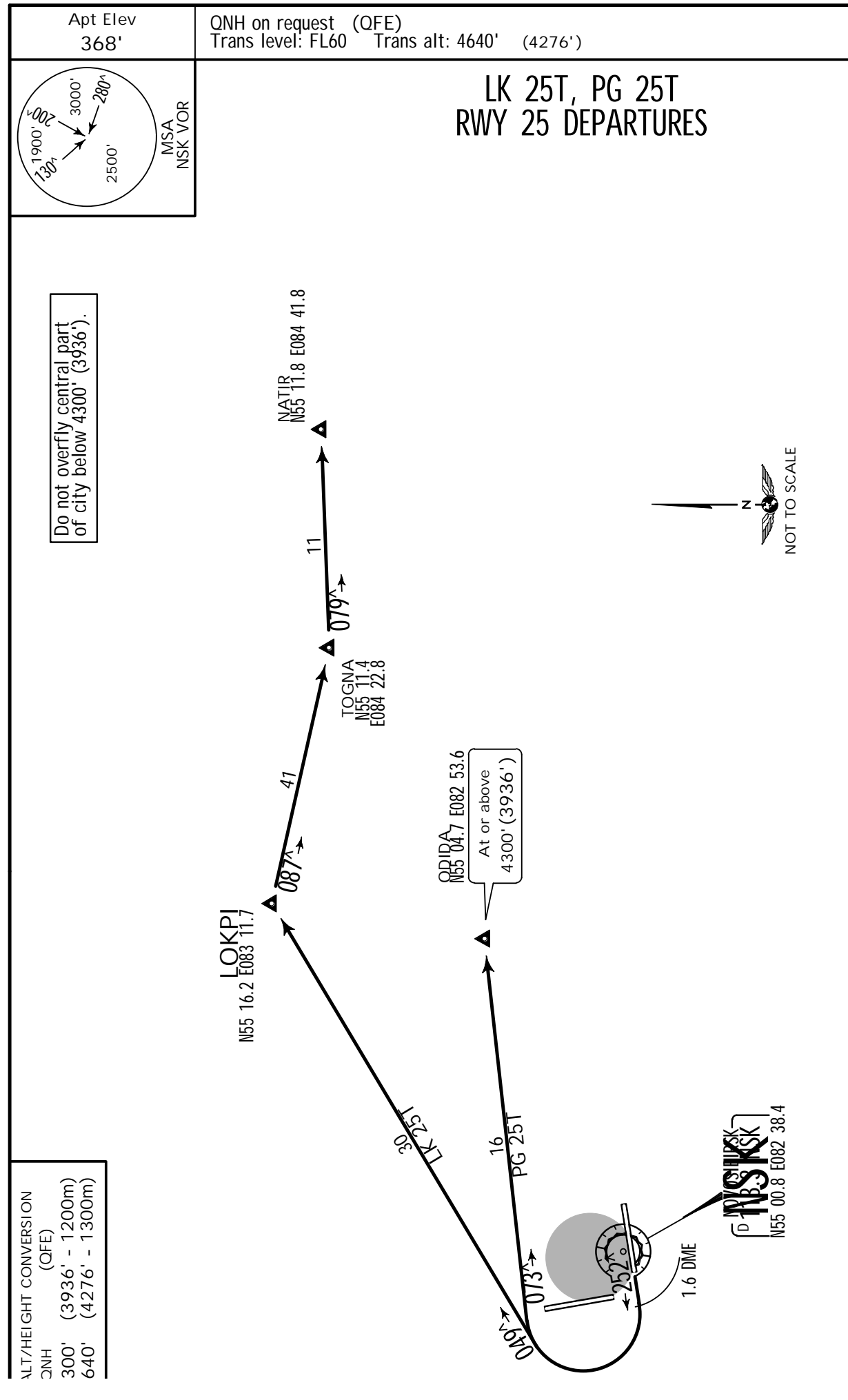
1.6 DME

ALT/HEIGHT CONVERSION
QNH (QFE)
4300' (3936' - 1200m)

UNNT/OVB
TOLMACHEVO

22 NOV 13 **JEPPESEN**
10-3J

NOVOSIBIRSK, RUSSIA
.SID.



UNNT/OVB
 TOLMACHEVO

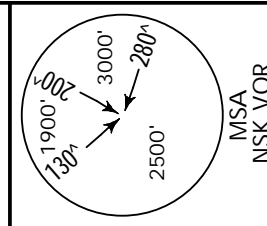
JEPPESEN
 13 DEC 13 10-3K

NOVOSIBIRSK, RUSSIA
 .SID.

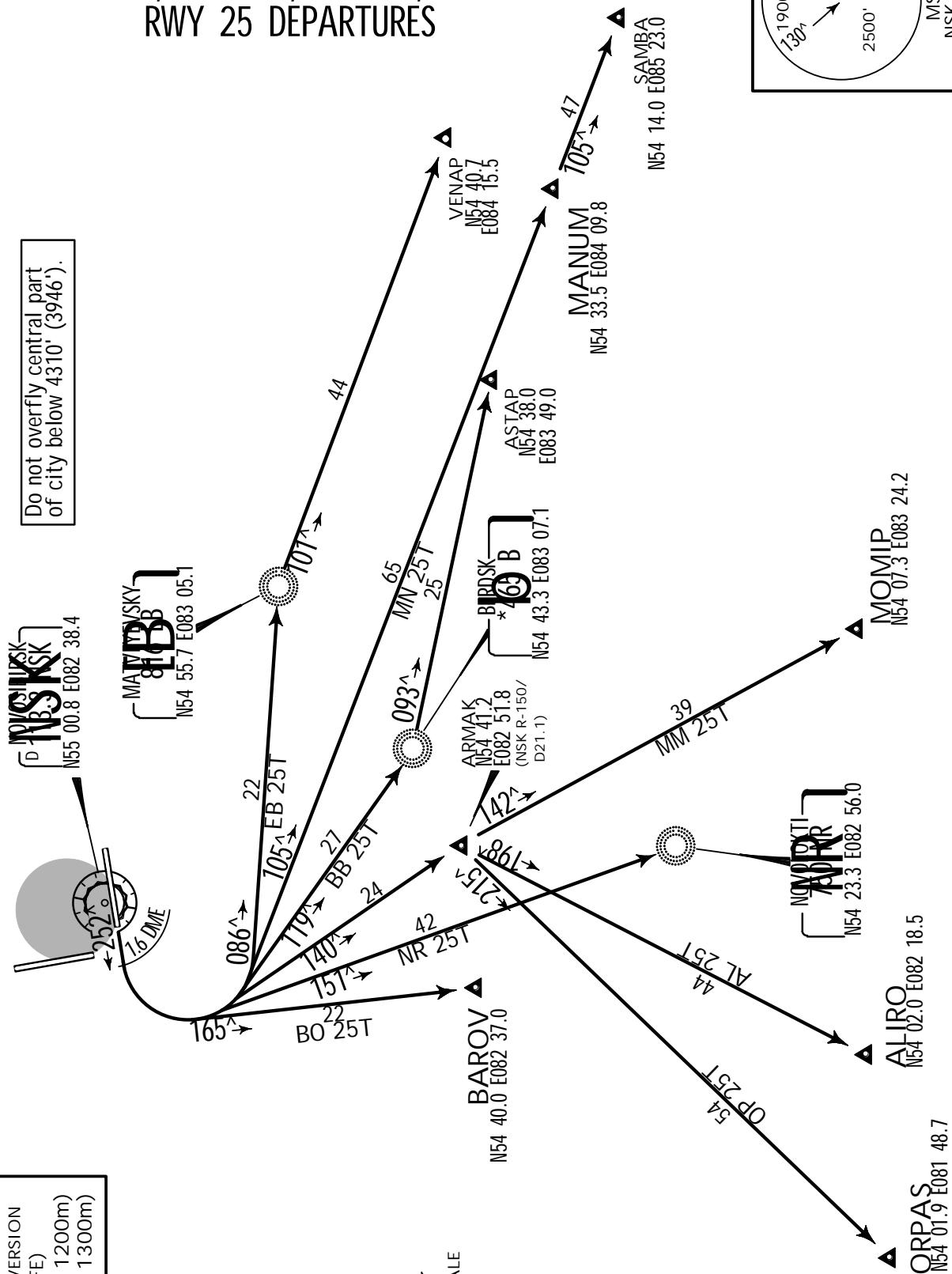
Apt Elev
 368'

QNH on request (QFE)
 Trans level: FL60 Trans alt: 4640' (4276')

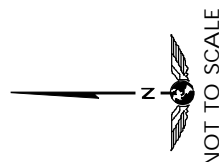
AL 25T, BB 25T, BO 25T, EB 25T
 MM 25T, MN 25T, NR 25T, OP 25T
 RWY 25 DEPARTURES



Do not overfly central part
 of city below 4310' (3946').



ALT/HEIGHT CONVERSION
 QNH (QFE)
 310' (3946' - 1200m)
 640' (4276' - 1300m)



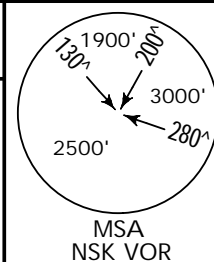
UNNT/OVB
TOLMACHEVO

JEPPESEN
13 DEC 13 (10-3L)

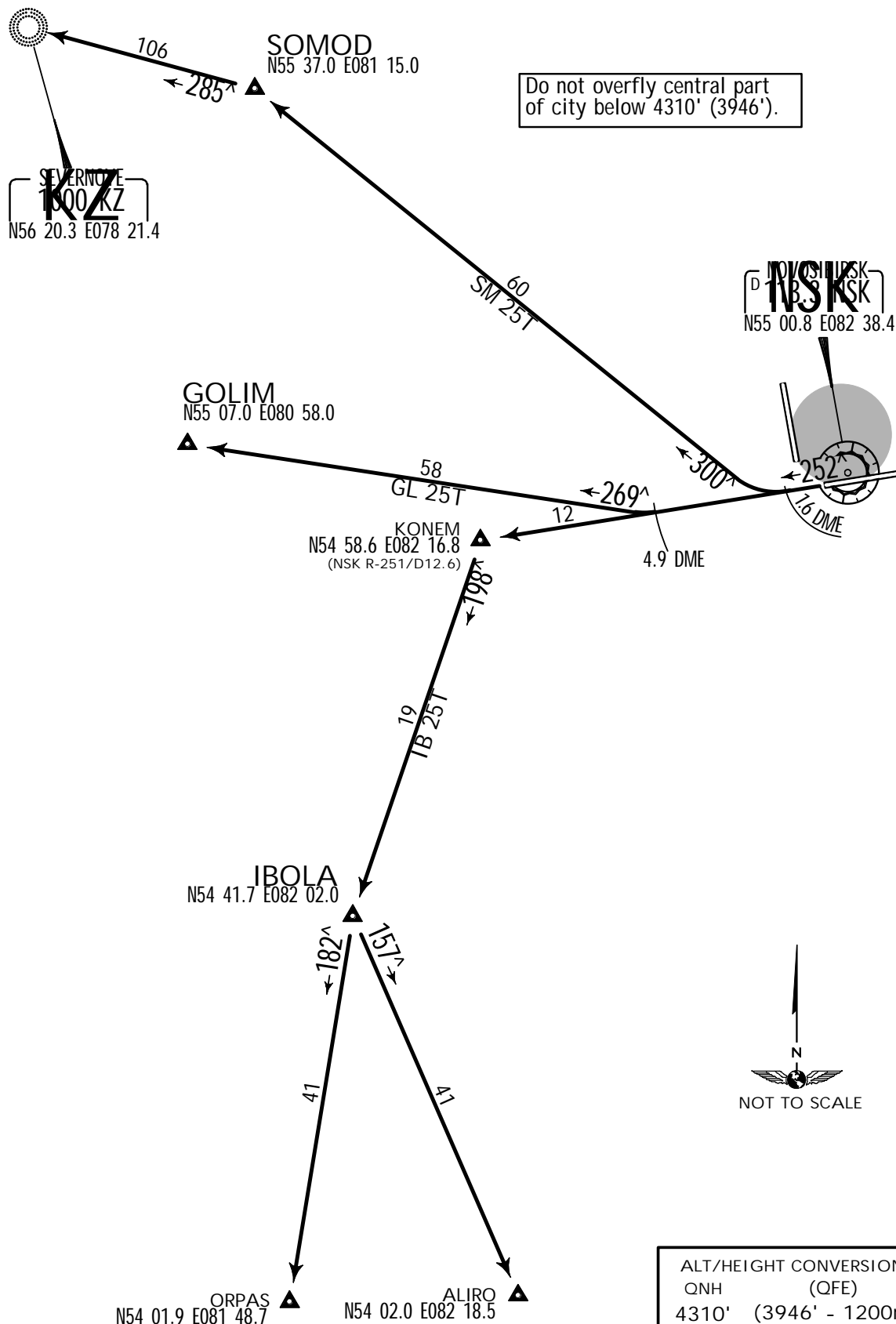
NOVOSIBIRSK, RUSSIA
.SID.

Apt Elev
368'

QNH on request (QFE)
Trans level: FL60 Trans alt: 4640' (4276')



GL 25T, IB 25T, SM 25T
RWY 25 DEPARTURES



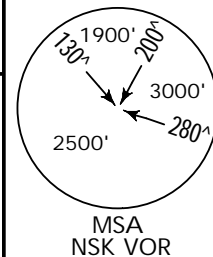
UNNT/OVB
TOLMACHEVO

25 MAY 12 **JEPPESEN** (10-3M) .Eff.31.May.

NOVOSIBIRSK, RUSSIA
.SID.

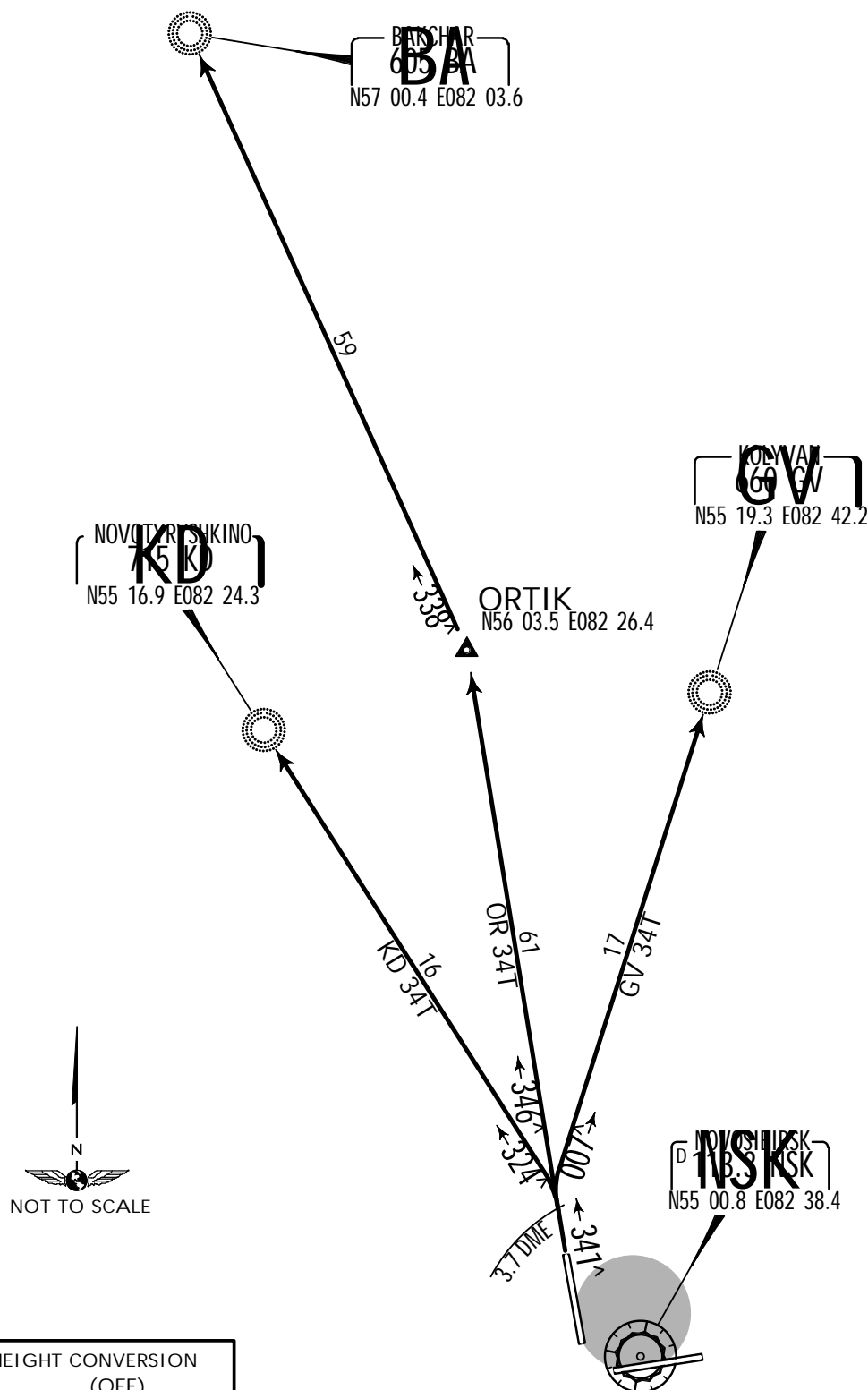
Apt Elev
368'

QNH on request (QFE)
Trans level: FL60 Trans alt: 4640' (4272')



GV 34T, KD 34T, OR 34T
RWY 34 DEPARTURES

Do not overfly central part
of city below 4310' (3942').

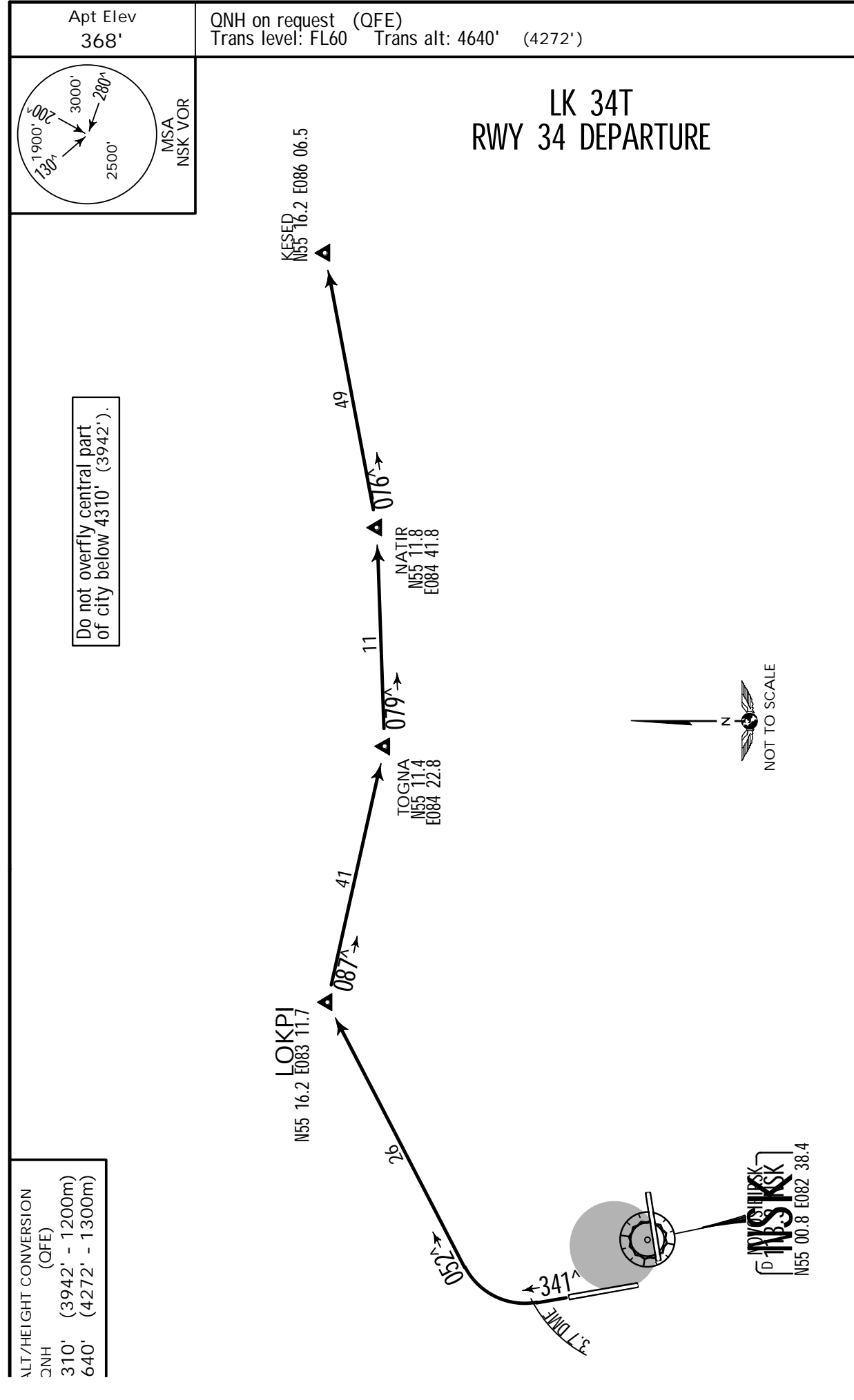


ALT/HEIGHT CONVERSION
QNH (QFE)
4310' (3942' - 1200m)

UNNT/OVB
TOLMACHEVO

25 MAY 12 **JEPPESEN** 10-3N .Eff.31.May.

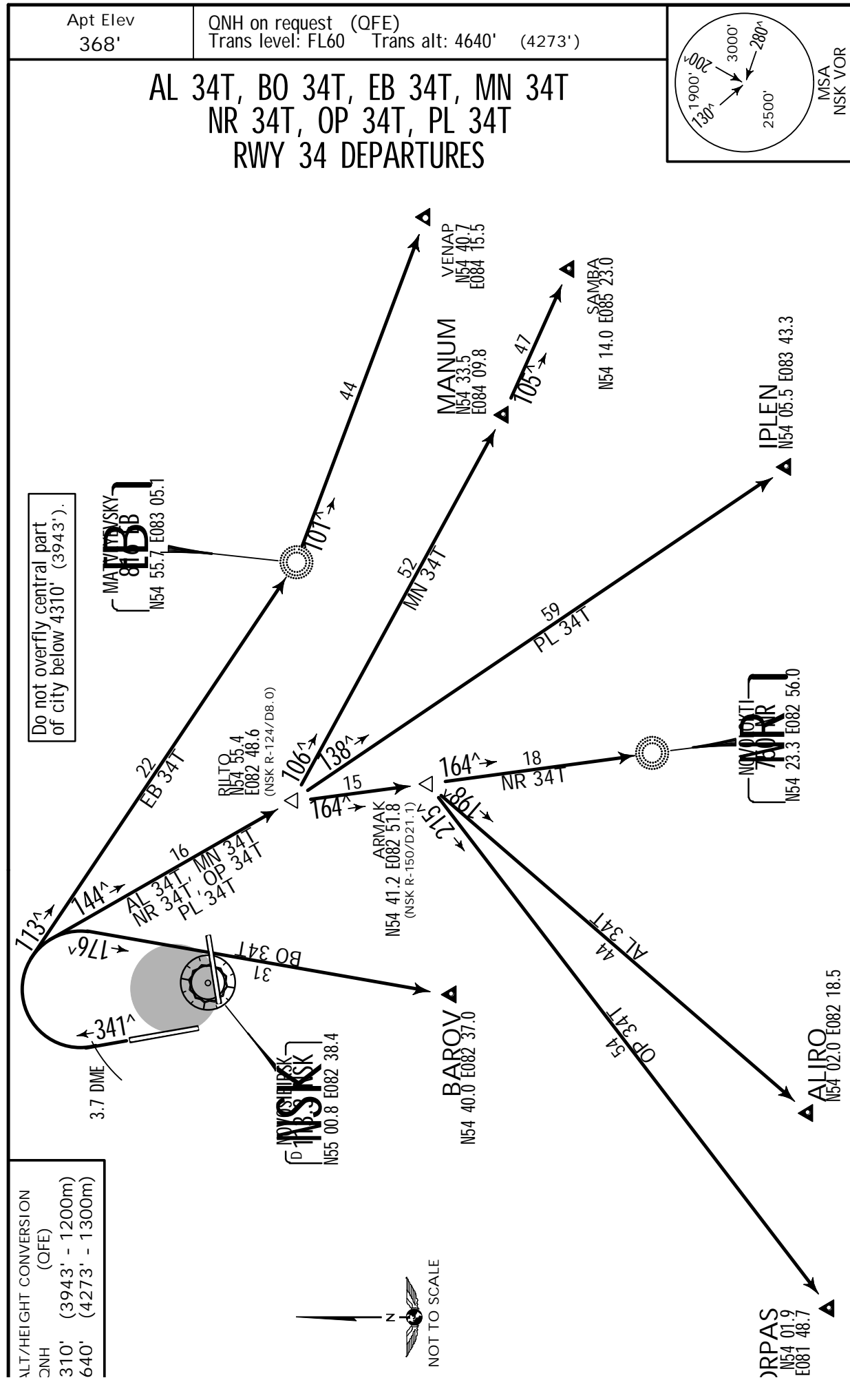
NOVOSIBIRSK, RUSSIA
.SID.



UNNT/OVB
TOLMACHEVO

JEPPESEN
13 DEC 13 10-3P

NOVOSIBIRSK, RUSSIA
.SID.



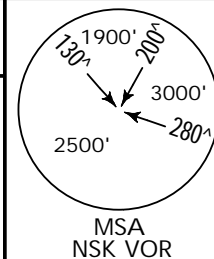
UNNT/OVB
TOLMACHEVO

JEPPESEN
13 DEC 13 (10-3Q)

NOVOSIBIRSK, RUSSIA
.SID.

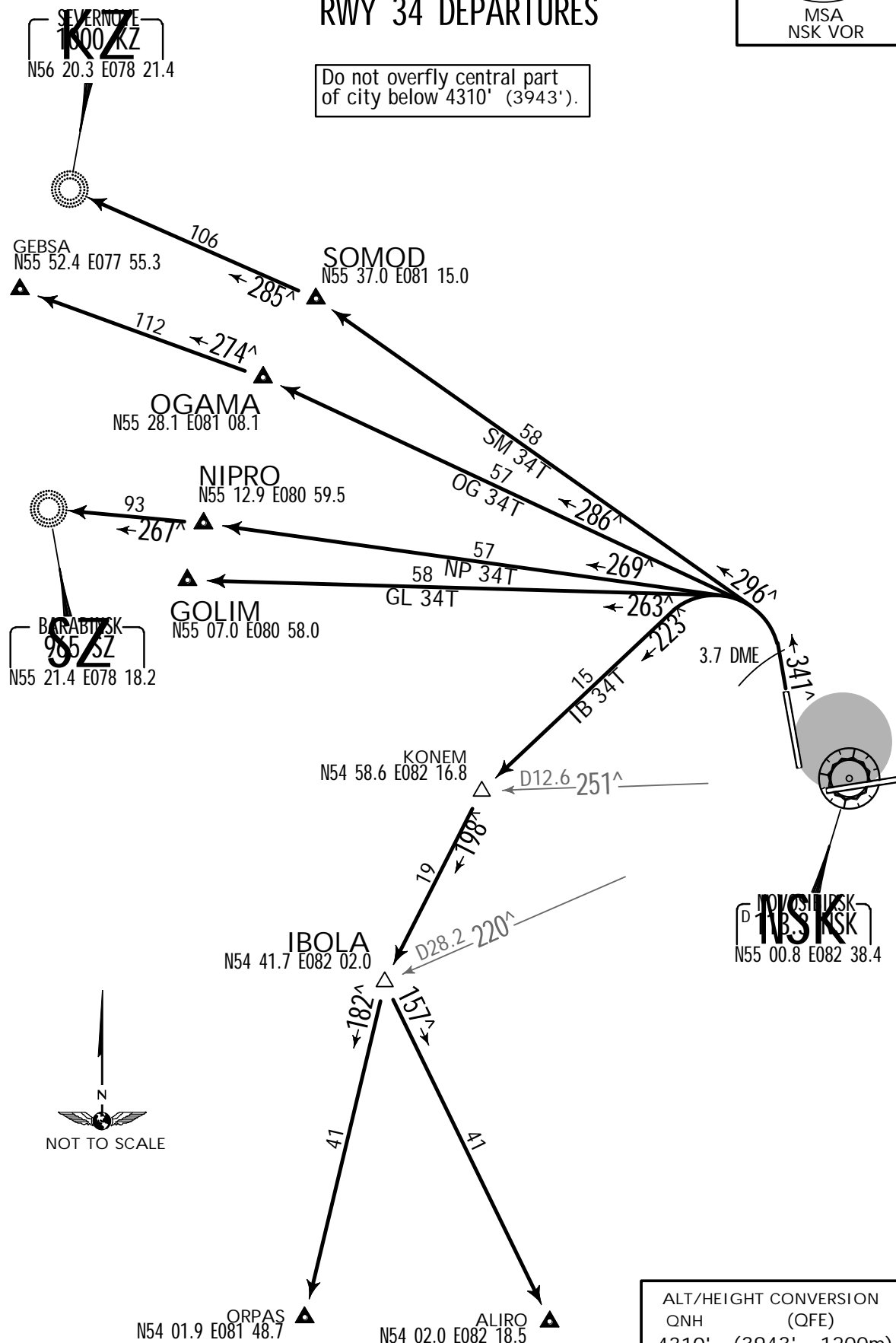
Apt Elev
368'

QNH on request (QFE)
Trans level: FL60 Trans alt: 4640' (4273')



GL 34T, IB 34T, NP 34T
OG 34T, SM 34T
RWY 34 DEPARTURES

Do not overfly central part
of city below 4310' (3943').



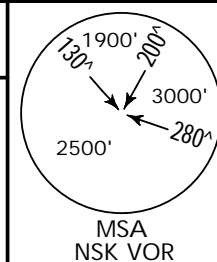
UNNT/OVB
TOLMACHEVO

JEPPESEN
13 DEC 13 (10-3S)

NOVOSIBIRSK, RUSSIA
.SID.

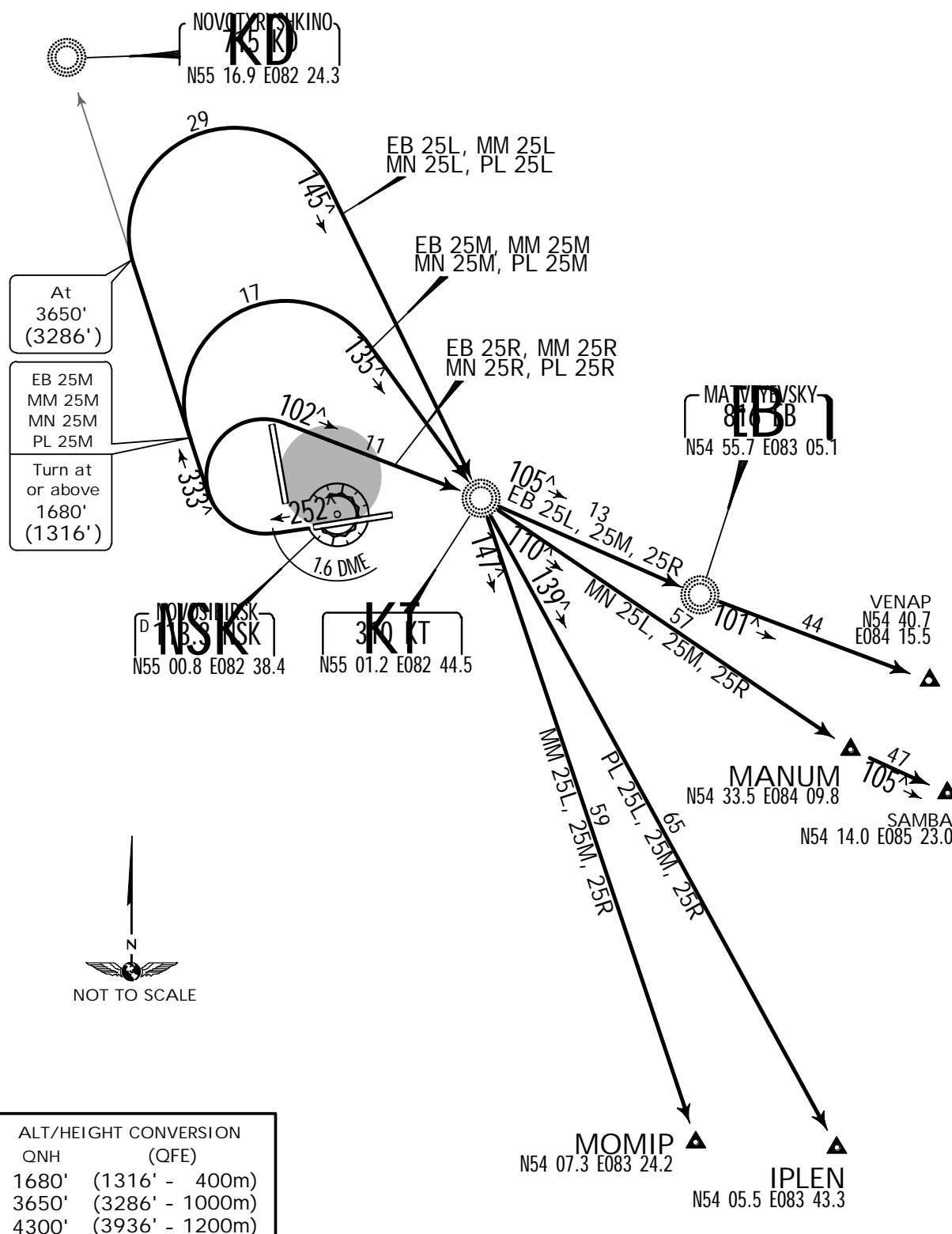
Apt Elev
368'

QNH on request (QFE)
Trans level: FL60 Trans alt: 4640' (4276')



EB 25L, EB 25M, EB 25R
MM 25L, MM 25M, MM 25R
MN 25L, MN 25M, MN 25R
PL 25L, PL 25M, PL 25R
RWY 25 DEPARTURES
BY ATC

Do not overfly central part
of city below 4300' (3936').



| ALT/HEIGHT CONVERSION | |
|-----------------------|-----------------|
| QNH | (QFE) |
| 1680' | (1316' - 400m) |
| 3650' | (3286' - 1000m) |
| 4300' | (3936' - 1200m) |

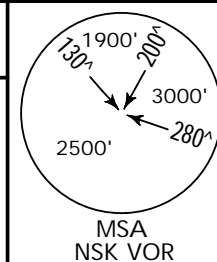
UNNT/OVB
TOLMACHEVO

JEPPESEN
13 DEC 13 10-3T

NOVOSIBIRSK, RUSSIA
.SID.

Apt Elev
368'

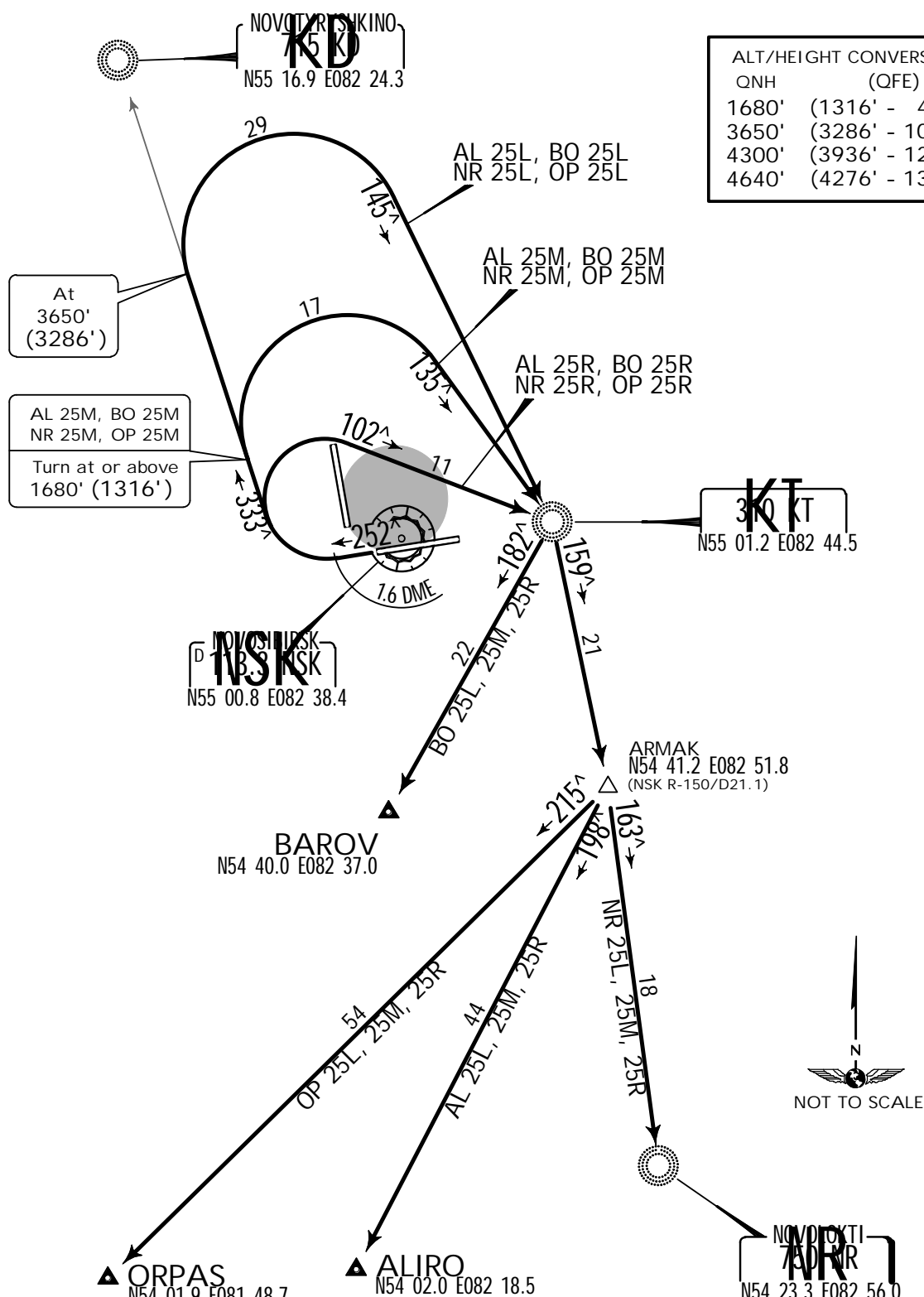
QNH on request (QFE)
Trans level: FL60 Trans alt: 4640' (4276')



AL 25L, AL 25M, AL 25R
BO 25L, BO 25M, BO 25R
NR 25L, NR 25M, NR 25R
OP 25L, OP 25M, OP 25R
RWY 25 DEPARTURES
BY ATC

Do not overfly central part
of city below 4300' (3936').

| QNH | (QFE) |
|-------|-----------------|
| 1680' | (1316' - 400m) |
| 3650' | (3286' - 1000m) |
| 4300' | (3936' - 1200m) |
| 4640' | (4276' - 1300m) |



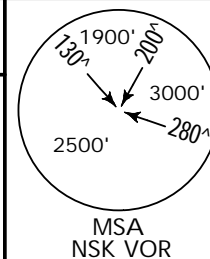
UNNT/OVB
TOLMACHEVO

JEPPESEN
4 NOV 11 (10-3U) .Eff.17.Nov.

NOVOSIBIRSK, RUSSIA
.SID.

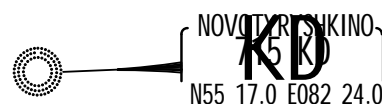
Apt Elev
368'

QNH on request (QFE)
Trans level: FL60 Trans alt: 4640' (4277')



GL 25R
RWY 25 DEPARTURE
BY ATC

Do not overfly central part
of city below 4300' (3937').

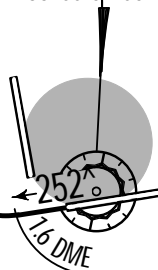


GOLIM
N55 07.0 E080 58.0

60 ← 263^

At or above
1680' (1317')

NOVOSIBIRSK
N55 00.8 E082 38.4



ALT/HEIGHT CONVERSION
QNH (QFE)
1680' (1317' - 400m)
4300' (3937' - 1200m)

UNNT/OVB
TOLMACHEVOJEPPESEN
9 JUL 04 10-4NOVOSIBIRSK, RUSSIA
.NOISE.

NOISE ABATEMENT PROCEDURES

GENERAL

Noise abatement procedures shall be executed by crews of all aircraft.
Overflying the central part of the city at or below 4310' (3945' - 1200m)
is prohibited.

ARRIVALS

Runway 07 is noise preferential and shall be used for approach to the
greatest extent possible.

Restrictions

Restrictions for cross-wind and tail-wind components are as in accordance
with the Airplane Flight Manual for the specified aircraft type. It is allowed
to land on runway when friction coefficient is 0.3 or more.

Straight-in approach is allowed on landing heading 072^ when transition level
has been reached before a distance of 16.2 NM or more.

DEPARTURES

The noise abatement procedures stated below shall not be executed at the
expense of reduction of flight safety or in case of engine failure during
take-off.

Restrictions

Restrictions on maximum cross-wind and tail-wind components are as in
accordance with the Airplane Flight Manual for the specified aircraft type.
It is allowed to take-off from dry and wet runway when friction coefficient
is 0.3 or more.

Runway 07 special take-off procedure

During take-off the initial turn shall be carried out at 1.1 NM from departure
threshold.

UNNT/OVP

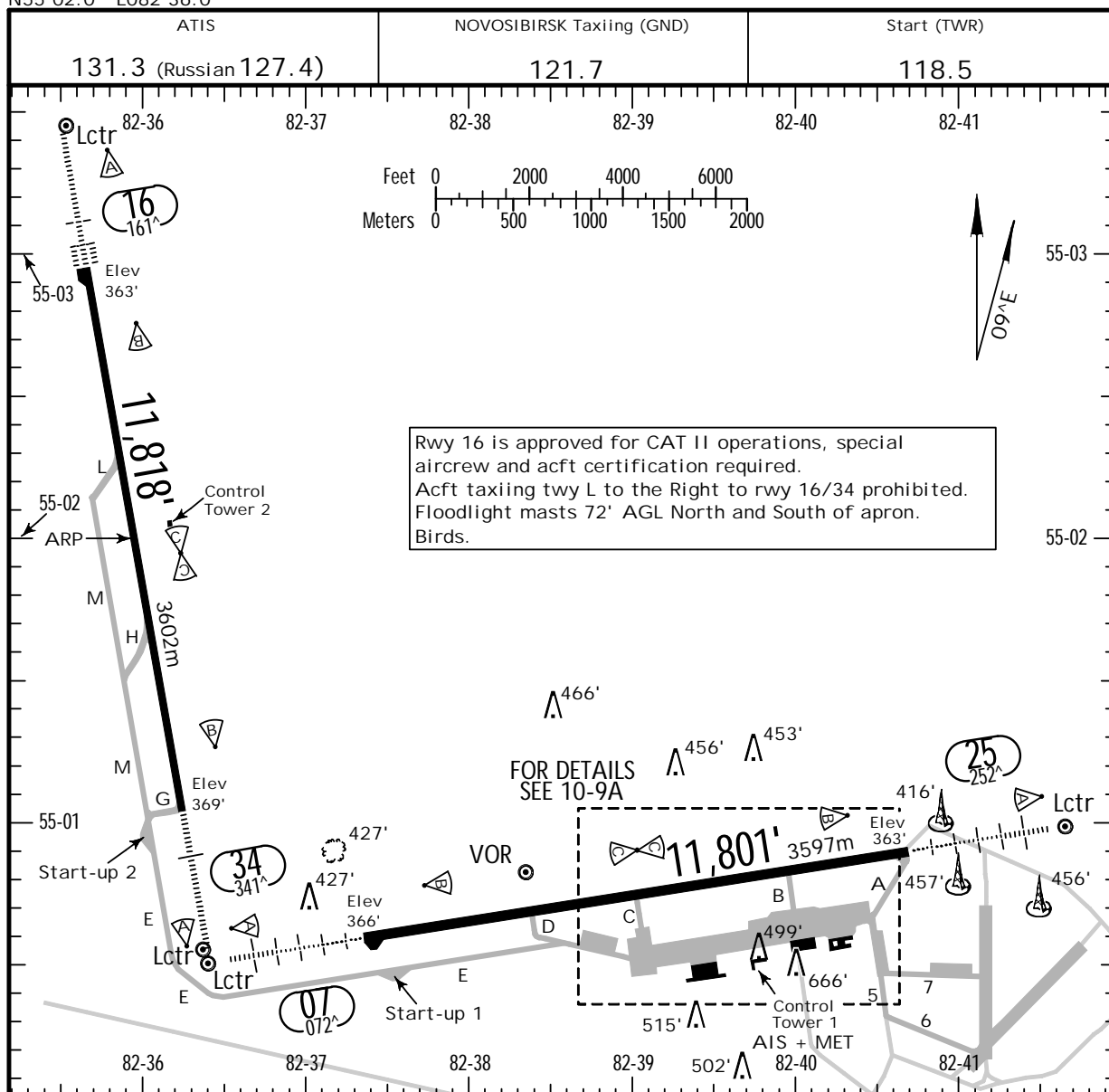
Apt Elev 368
N55 02.0 E082 36.0

JEPPESEN

5 SEP 14 (10-9)

NOVOSIBIRSK, RUSSIA

TOLMACHEVO



ADDITIONAL RUNWAY INFORMATION

| RWY | | USABLE LENGTHS | | TAKE-OFF | WIDTH |
|-----|----|--|----------------|----------|----------|
| | | Threshold | Landing Beyond | | |
| 07 | 25 | HIRL (60m) HIALS PAPI-L (angle 3.0°) RVR | 10,768' 3282m | 1 | 197' 60m |

1 TAKE-OFF RUN AVAILABLE

RWY 07:

From rwy head 11,801' (3597m)
twy D int 7864' (2397m)
twy C int 5902' (1799m)

RWY 25:

From rwy head 11,801' (3597m)
twy B int 9012' (2747m)
twy C int 5899' (1798m)

| | | | | |
|----|--|---------------|---|----------|
| 16 | HIRL(60m) CL(15m) HIALS-II TDZ PAPI-L (3.0°) RVR | 10,846' 3306m | 2 | 148' 45m |
| 34 | HIRL(60m) CL(15m) HIALS PAPI-L (3.0°) RVR | | | |

2 TAKE-OFF RUN AVAILABLE

RWY 34:

From rwy head 11,818' (3602m)
twy H int 7546' (2300m)

TAKE-OFF

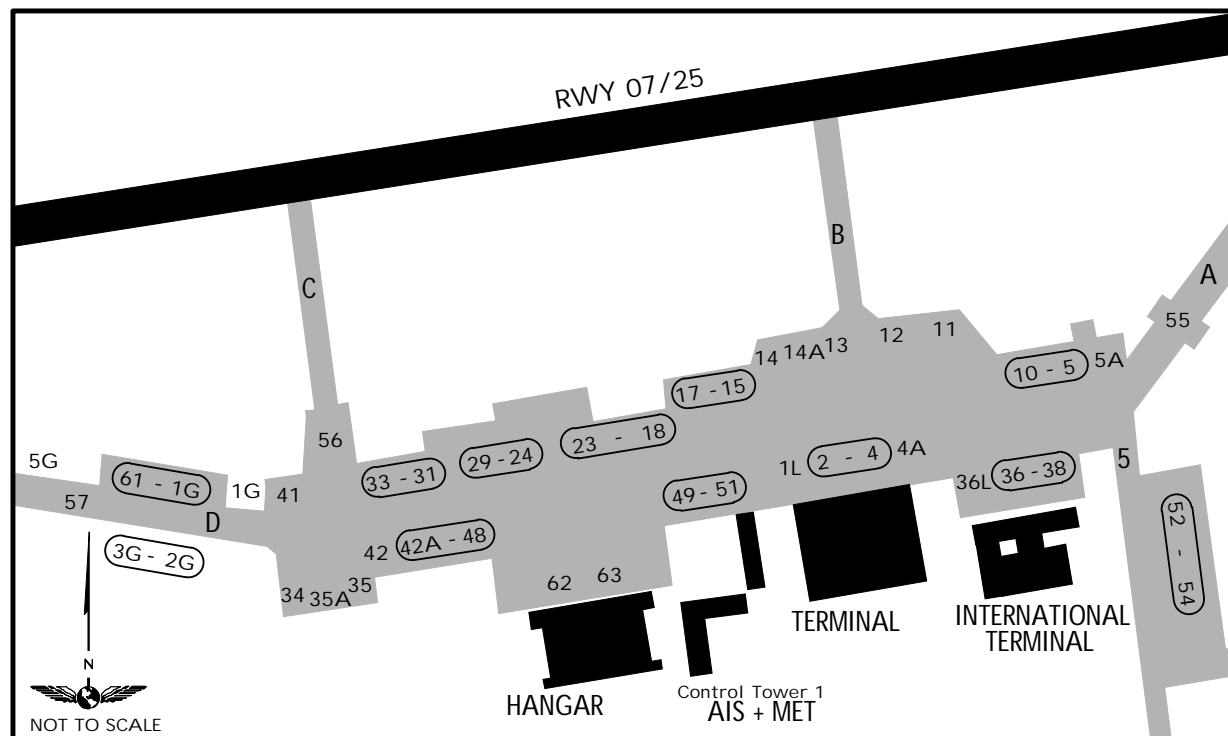
| | Rwys 16/34 | AIR CARRIER (JAA) | All Rwys |
|---|----------------------|-----------------------|-----------------------|
| | LVP must be in force | LVP must be in force | RCLM (DAY only) or RL |
| A | RL & CL | RCLM (DAY only) or RL | |
| B | 200m (150m) | 250m | 400m |
| C | | | |

UNNT/OVB

5 SEP 14 **JEPPESEN**
(10-9A)

NOVOSIBIRSK, RUSSIA

TOLMACHEVO



INS COORDINATES

| STAND No. | COORDINATES | STAND No. | COORDINATES |
|------------|--------------------|-----------|--------------------|
| 2 | N55 00.6 E082 40.0 | 37 | N55 00.6 E082 40.3 |
| 3 | N55 00.6 E082 40.1 | 55 | N55 00.7 E082 40.5 |
| 5 | N55 00.7 E082 40.4 | 56 | N55 00.6 E082 39.1 |
| 10 | N55 00.7 E082 40.2 | 57, 61 | N55 00.6 E082 38.7 |
| 11 | N55 00.7 E082 40.1 | | |
| 12 | N55 00.7 E082 40.0 | | |
| 13 | N55 00.7 E082 39.9 | | |
| 14 | N55 00.6 E082 39.9 | | |
| 15 thru 17 | N55 00.6 E082 39.8 | | |
| 36 | N55 00.6 E082 40.2 | | |

UNNT/OVB

Standard.
NOVOSIBIRSK, RUSSIA
TOLMACHEVO

| STRAIGHT-IN RWY | | A | B | C | D |
|-----------------|-------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| 07 | ILS | 565' (200') | 565' (200') | 565' (200') | 565' (200') |
| | FULL | R550m | R550m | R550m | R550m |
| | Limited | R750m | R750m | R750m | R750m |
| | ALS out | R1200m | R1200m | R1200m | R1200m |
| | LOC | NOT AUTH | NOT AUTH | NOT AUTH | NOT AUTH |
| | NDB 1 with FAF | 710' (345') R900m | 710' (345') R900m | 710' (345') R900m | 710' (345') R900m |
| | ALS out | R1500m | R1500m | R1600m | R1600m |
| 16 | NDB 1 w/o FAF | 1110' (745') C2700m | 1110' (745') C2700m | 1110' (745') C2700m | 1110' (745') C2700m |
| | ALS out | C3500m | C3500m | C3500m | C3500m |
| | CAT 2 ILS | 462' (100') RA104' R350m | 462' (100') RA104' R350m | 462' (100') RA104' R350m | 462' (100') RA104' R350m |
| | ILS | 562' (200') | 562' (200') | 562' (200') | 562' (200') |
| | FULL | R550m | R550m | R550m | R550m |
| | Limited | R750m | R750m | R750m | R750m |
| | ALS out | R1200m | R1200m | R1200m | R1200m |
| 25 | LOC | NOT AUTH | NOT AUTH | NOT AUTH | NOT AUTH |
| | NDB 1 with FAF | 680' (318') R750m | 680' (318') R750m | 680' (318') R750m | 680' (318') R750m |
| | ALS out | R1400m | R1400m | R1400m | R1400m |
| | NDB 1 w/o FAF | 720' (358') R1000m | 720' (358') R1000m | 720' (358') R1200m | 720' (358') R1200m |
| | ALS out | R1600m | R1600m | R1600m | R1600m |
| | ILS | 563' (200') | 563' (200') | 563' (200') | 563' (200') |
| | FULL | R550m | R550m | R550m | R550m |
| 34 | Limited | R750m | R750m | R750m | R750m |
| | ALS out | R1200m | R1200m | R1200m | R1200m |
| | LOC | NOT AUTH | NOT AUTH | NOT AUTH | NOT AUTH |
| | NDB 1 with FAF | 720' (357') R900m | 720' (357') R900m | 720' (357') R900m | 720' (357') R900m |
| | ALS out | R1500m | R1500m | R1600m | R1600m |
| | NDB 1 w/o FAF | 1320' (957') C3800m | 1320' (957') C3800m | 1320' (957') C3800m | 1320' (957') C3800m |
| | ALS out | C4500m | C4500m | C4500m | C4500m |
| 34 | ILS | 568' (200') | 568' (200') | 568' (200') | 568' (200') |
| | FULL | R550m | R550m | R550m | R550m |
| | Limited | R750m | R750m | R750m | R750m |
| | ALS out | R1200m | R1200m | R1200m | R1200m |
| | LOC | NOT AUTH | NOT AUTH | NOT AUTH | NOT AUTH |
| | NDB 1 with FAF | 700' (332') R800m | 700' (332') R800m | 700' (332') R800m | 700' (332') R800m |
| | ALS out | R1500m | R1500m | R1500m | R1500m |
| 34 | NDB 1 w/o FAF | 1010' (642') C2300m | 1010' (642') C2300m | 1010' (642') C2300m | 1010' (642') C2300m |
| | ALS out | C3000m | C3000m | C3000m | C3000m |
| | | | | | |

1 Continuous Descent Final Approach.

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 .Standard.
NOVOSIBIRSK, RUSSIA
 TOLMACHEVO

| CIRCLE-TO-LAND 1 | A | B | C | D |
|------------------|-------------------------------------|-------------------------------------|-------------------------------------|--|
| to rwy 07/25 2 | 760' (396') ceiling 200m- V2500m | 860' (496') ceiling 200m- V2500m | 960' (596') ceiling 280m- V3000m | 1060' (696') 5 ceiling 310m- V4000m |
| to rwy 16 3 | 760' (399') | 860' (499') | 960' (599') | 1060' (699') 6 |
| to rwy 34 4 | 770' (403') ceiling 200m- V2500m | 860' (493') ceiling 200m- V2500m | 960' (593') ceiling 280m- V3000m | 1060' (693') 7 ceiling 310m- V4000m |

1 FOR RUSSIAN USERS ONLY.

2 Circling height based on rwy 07/25 thresh elev of 364'.

3 Circling height based on rwy 06 thresh elev of 361'.

4 Circling height based on rwy 34 thresh elev of 367'.

5 Widebodied acft: MDA(H) 1350' (986') CEIL 400 VIS 5000m.

6 Widebodied acft: MDA(H) 1350' (989') CEIL 400 VIS 5000m.

7 Widebodied acft: MDA(H) 1360' (993') CEIL 400 VIS 5000m.

TAKE-OFF RWY 07, 16, 25, 34

| LVP must be in force | | | | | |
|---|---------------------------|---------|--------------------------|--------------------------|-------------------|
| Approved Operators HIRL, CL & mult. RVR req | RL, CL & mult. RVR req | RL & CL | RCLM (DAY only) or RL | RCLM (DAY only) or RL | NIL (DAY only) |
| A | | | | | |
| B | 125m | 150m | 200m | 250m | 400m |
| C | | | | | |
| D | 150m | 200m | 250m | 300m | 500m |

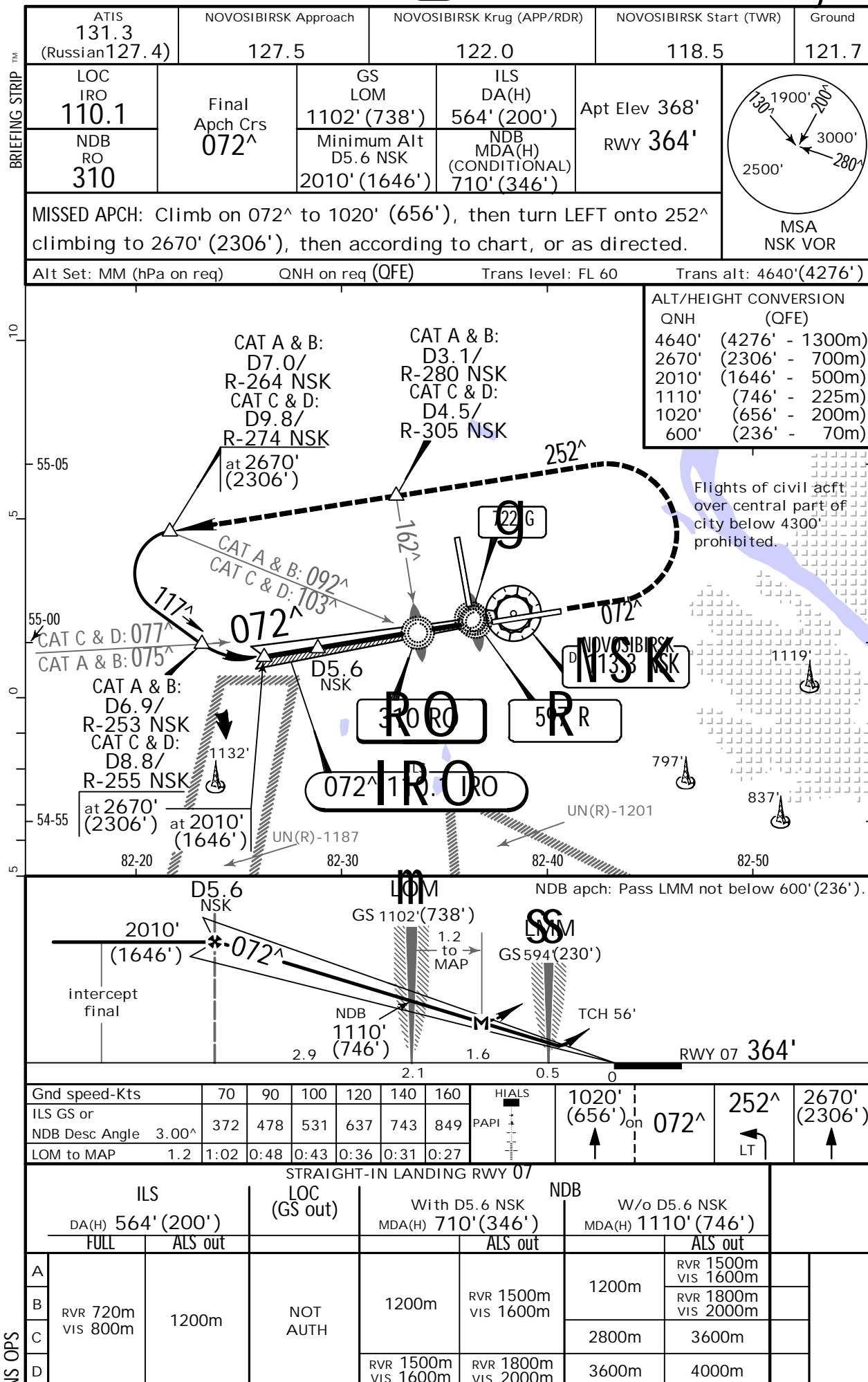
UNNT/OVB
TOLMACHEVO

21 MAR 14

(11-1)

JEPPESSEN

NOVOSIBIRSK, RUSSIA
ILS or 2 NDB Rwy 07



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TOLMACHEVO

21 MAR 14

(11-2)

EN NOVO SIBIRSK, RUSSIA
ILS DME or 2 NDB Rwy 16

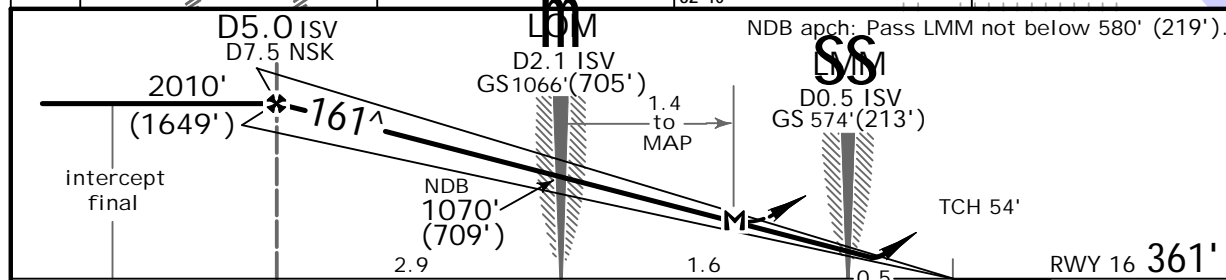
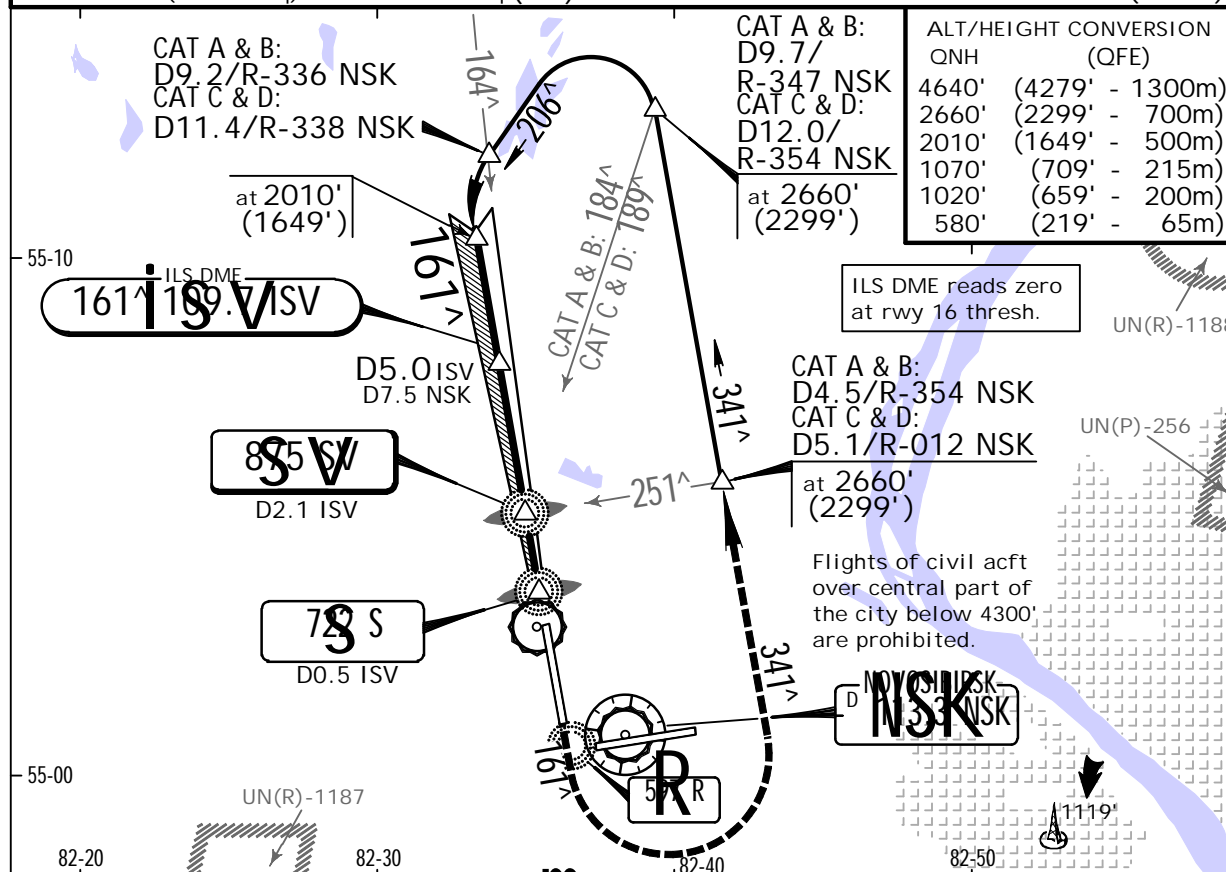
| | | | | | | | | | |
|---|--|---|--|---|--|--|--|------------------------|--|
| ATIS 131.3 (Russian 127.4) | | NOVOSIBIRSK Approach 127.5 | | NOVOSIBIRSK Krug (APP/RDR) 122.0 | | NOVOSIBIRSK Start (TWR) 118.5 | | Ground 121.7 | |
| LOC ISV 109.7 | | Final Apch Crs 161[^] | | GS LOM 1066' (705') | | ILS DA(H) 561' (200') | | Apt Elev 368' | |
| NDB SV 875 | | | | Minimum Alt D5.0 ISV 2010' (1649') | | NDB MDA(H) (CONDITIONAL) 680' (319') | | RWY 361' | |

Diagram showing a 3000' radius with various bearing and distance markers: 1900', 200', 3000', 280', 2500', 130'.

MISSED APCH: Climb on 161° to 1020' (659'), then turn LEFT onto 341° climbing to 2660' (2299'), then according to chart or as directed.

MSA NSK VOR

| | | | |
|--------------------------|------------------|--------------------|--------------------------|
| Alt Set: MM (hPa on reg) | QNH on reg (QFE) | Trans level: FL 60 | Trans alt: 4640' (4279') |
|--------------------------|------------------|--------------------|--------------------------|



| | | | | | | | | | | | |
|-----------------------------------|------|------|------|------|------|------|--|--|--|--|--|
| Gnd speed-Kts | 70 | 90 | 100 | 120 | 140 | 160 | | | | | |
| ILS GS or NDB Desc Angle 3.00^ | 372 | 478 | 531 | 637 | 743 | 849 | | | | | |
| LOM to MAP 1.4 | 1:12 | 0:56 | 0:50 | 0:42 | 0:36 | 0:31 | | | | | |

| STRAIGHT-IN LANDING RWY 16 | | | | | | | | | |
|----------------------------|----------------------|----------------------|-------------------------------|-----------------|------------------------------|------------------------|------------------------|------------------------|--|
| ILS | | | | LOC (GS out) | NDB | | | | |
| DA(H) 561'(200') | | | With FAF MDA(H) 680'(319') | | W/o FAF MDA(H) 720'(359') | | | | |
| FULL | TDZ or CL out | ALS out | ALS out | | ALS out | | | | |
| A | RVR 550m VIS 800m | RVR 720m VIS 800m | 1200m | NOT AUTH | 1200m | RVR 1500m VIS 1600m | 1200m | RVR 1500m VIS 1600m | |
| B | | | | | | | | | |
| C | | | | | | | | | |
| D | | | | | RVR 1500m VIS 1600m | | RVR 1500m VIS 1600m | RVR 1800m VIS 2000m | |

UNNT/OVB
TOLMACHEVO

JEPPESSEN
21 MAR 14 11-2A

NOVOSIBIRSK, RUSSIA
CAT II ILS DME Rwy 16

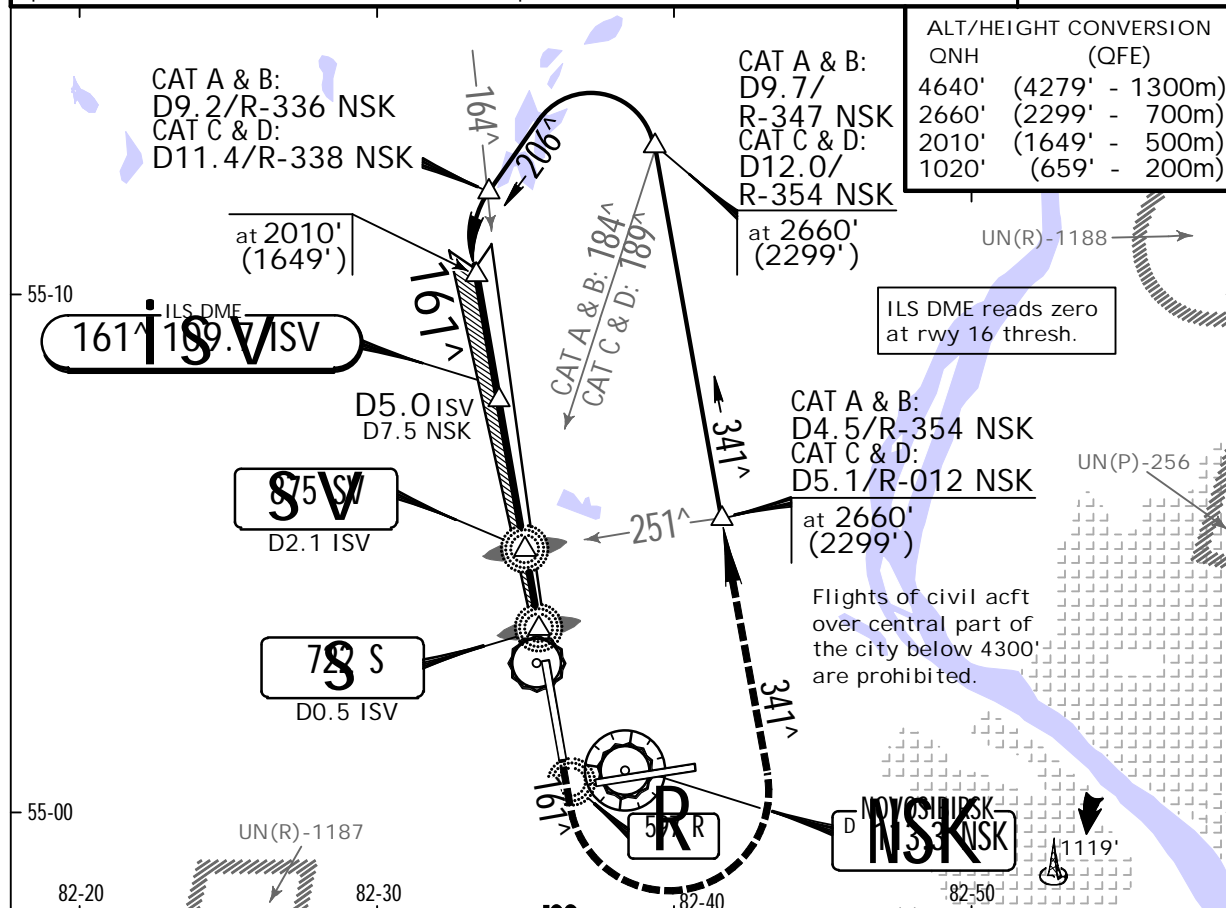
BRIEFING STRIP

| ATIS | NOVOSIBIRSK Approach | NOVOSIBIRSK Krug (APP/RDR) | NOVOSIBIRSK Start (TWR) | Ground |
|--------------------------|----------------------|----------------------------|-------------------------|----------|
| 131.3 (Russian 127.4) | 127.5 | 122.0 | 118.5 | 121.7 |
| LOC | Final | GS | CAT II ILS | Apt Elev |
| ISV | Apch Crs | LOM | RA 104' | 368' |
| 109.7 | 161^ | 1066' (705') | DA(H) 461' (100') | RWY 361' |

MISSED APCH: Climb on 161^ to 1020' (659'), then turn LEFT onto 341^ climbing to 2660' (2299'), then according to chart or as directed.

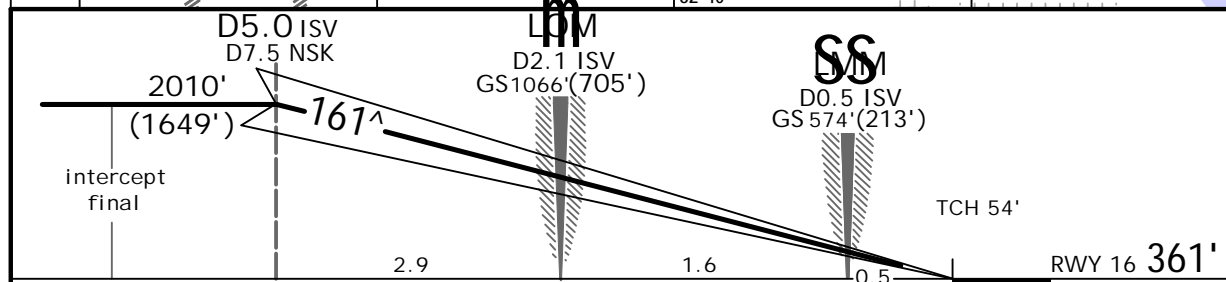
Alt Set: MM (hPa on req) QNH on req (QFE) Trans level: FL 60 Trans alt: 4640' (4279')
Special Aircrew & Aircraft Certification Required.

MSA NSK VOR



ALT/HEIGHT CONVERSION

| QNH | (QFE) |
|-------|-----------------|
| 4640' | (4279' - 1300m) |
| 2660' | (2299' - 700m) |
| 2010' | (1649' - 500m) |
| 1020' | (659' - 200m) |



| Gnd speed-Kts | 70 | 90 | 100 | 120 | 140 | 160 | HIALS-II | 1020' (659') | 161^ | 341^ | 2660' (2299') |
|---------------|-------|-----|-----|-----|-----|-----|----------|--------------|---------|------|---------------|
| GS | 3.00^ | 372 | 478 | 531 | 637 | 743 | 849 | ↑ | on 161^ | LT | ↑ |

STRAIGHT-IN LANDING RWY 16
CAT II ILS

RA 104'
DA(H) 461' (100')

NS OPS

RVR 300m

UNNT/OVB
TOLMACHEVO

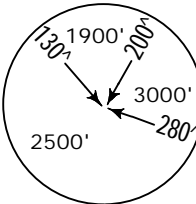
21 MAR 14

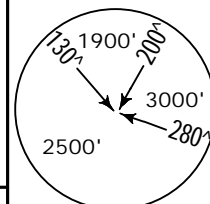
(11-3)

JEPPESSEN

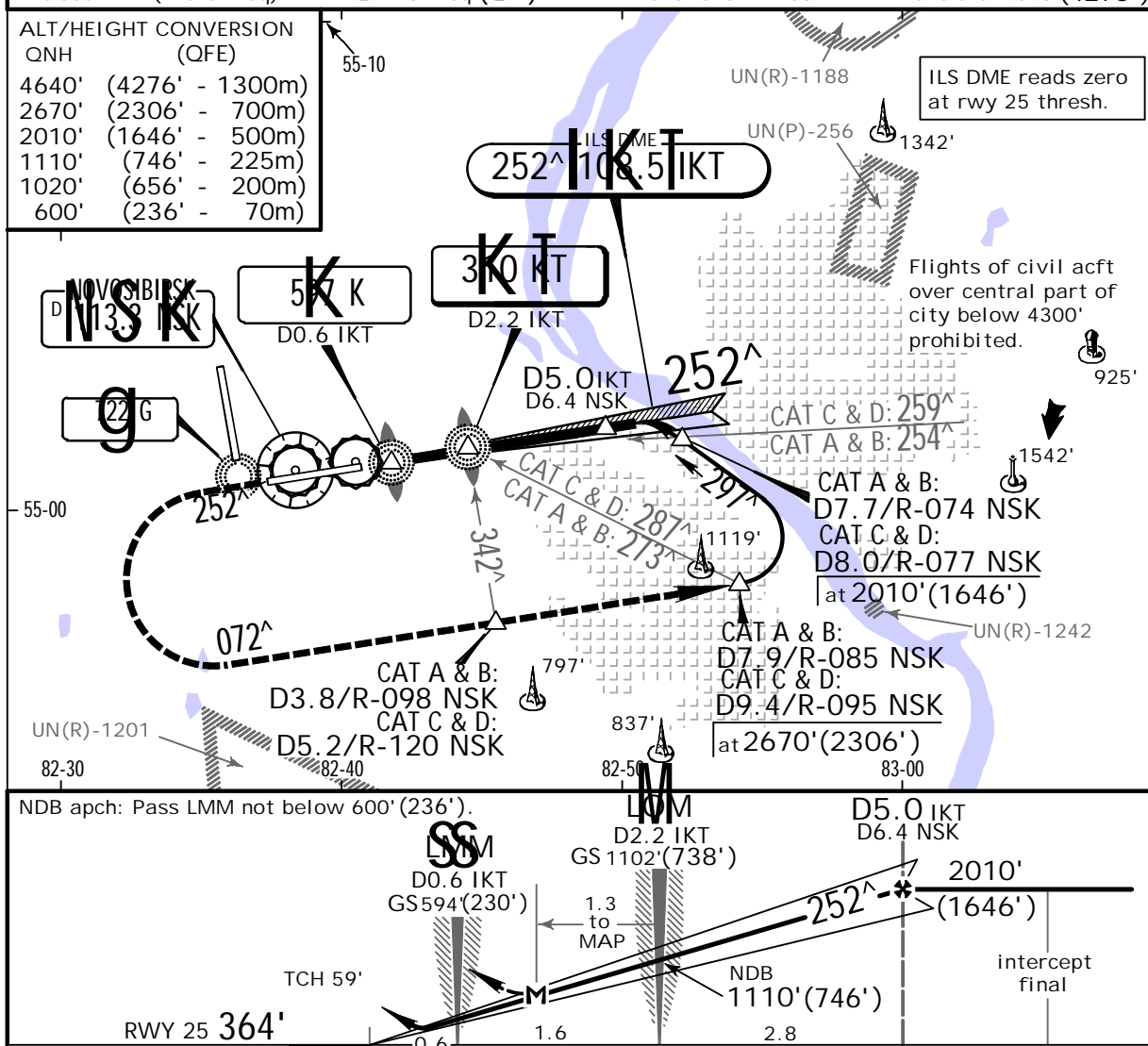
NOVOSIBIRSK, RUSSIA
ILS DME or 2 NDB Rwy 25

BRIEFING STRIP

| | | | | | | | | | |
|--|--|-------------------------------|--|--|--|---|--|---|--|
| ATIS 131.3 (Russian 127.4) | | NOVOSIBIRSK Approach 127.5 | | NOVOSIBIRSK Krug (APP/RDR) 122.0 | | NOVOSIBIRSK Start (TWR) 118.5 | | Ground 121.7 | |
| LOC IKT 108.5 | | Final Apch Crs 252^ | | GS LOM 1102' (738') | | ILS DA(H) 564' (200') | | Apt Elev 368' RWY 364' | |
| NDB KT 310 | | | | Minimum Alt D5.0 IKT 2010' (1646') | | NDB MDA(H) (CONDITIONAL) 720' (356') | | | |
| MISSED APCH: Climb on 252^ to 1020' (656'), then turn LEFT onto 072^ climbing to 2670' (2306'), then according to chart. | | | | | | | |  MSA NSK VOR | |
| Alt Set: MM (hPa on req) QNH on req (QFE) Trans level: FL 60 Trans alt: 4640' (4276') | | | | | | | | | |



| ALT/HEIGHT CONVERSION | |
|-----------------------|-------|
| QNH | (QFE) |
| 4640' (4276' - 1300m) | |
| 2670' (2306' - 700m) | |
| 2010' (1646' - 500m) | |
| 1110' (746' - 225m) | |
| 1020' (656' - 200m) | |
| 600' (236' - 70m) | |



| Gnd speed-Kts | 70 | 90 | 100 | 120 | 140 | 160 | HIALS | 1020' (656') on 252° | 072° LT | 2670' (2306') |
|--------------------------------|-----|------|------|------|------|------|-------|----------------------|---------|---------------|
| ILS GS or NDB Desc Angle 3.00° | 372 | 478 | 531 | 637 | 743 | 849 | PAPI | | | |
| LOM to MAP | 1.3 | 1:07 | 0:52 | 0:47 | 0:39 | 0:33 | | | | |

| STRAIGHT-IN LANDING RWY 25 | | | | NDB | | | |
|----------------------------|----------------------|--------------|-----------------------------|---------------------------------|---------|-------|-------|
| ILS | | LOC (GS out) | With FAF MDA(H) 720' (356') | W/o FAF MDA(H) 1320' (956') | | RVR | VIS |
| DA(H) 564' (200') | ALS out | | | ALS out | ALS out | | |
| FULL | | | | | | | |
| A | | | | | | 1200m | 1800m |
| B | | | | | | 1500m | 2000m |
| C | RVR 720m VIS 800m | 1200m | NOT AUTH | 1200m RVR 1500m VIS 1600m | | 1500m | 2400m |
| D | | | | RVR 1500m VIS 1600m | | 4400m | 4800m |

VS OPS


UNNT/OVB
TOLMACHEVO

21 MAR 14

(11-4)

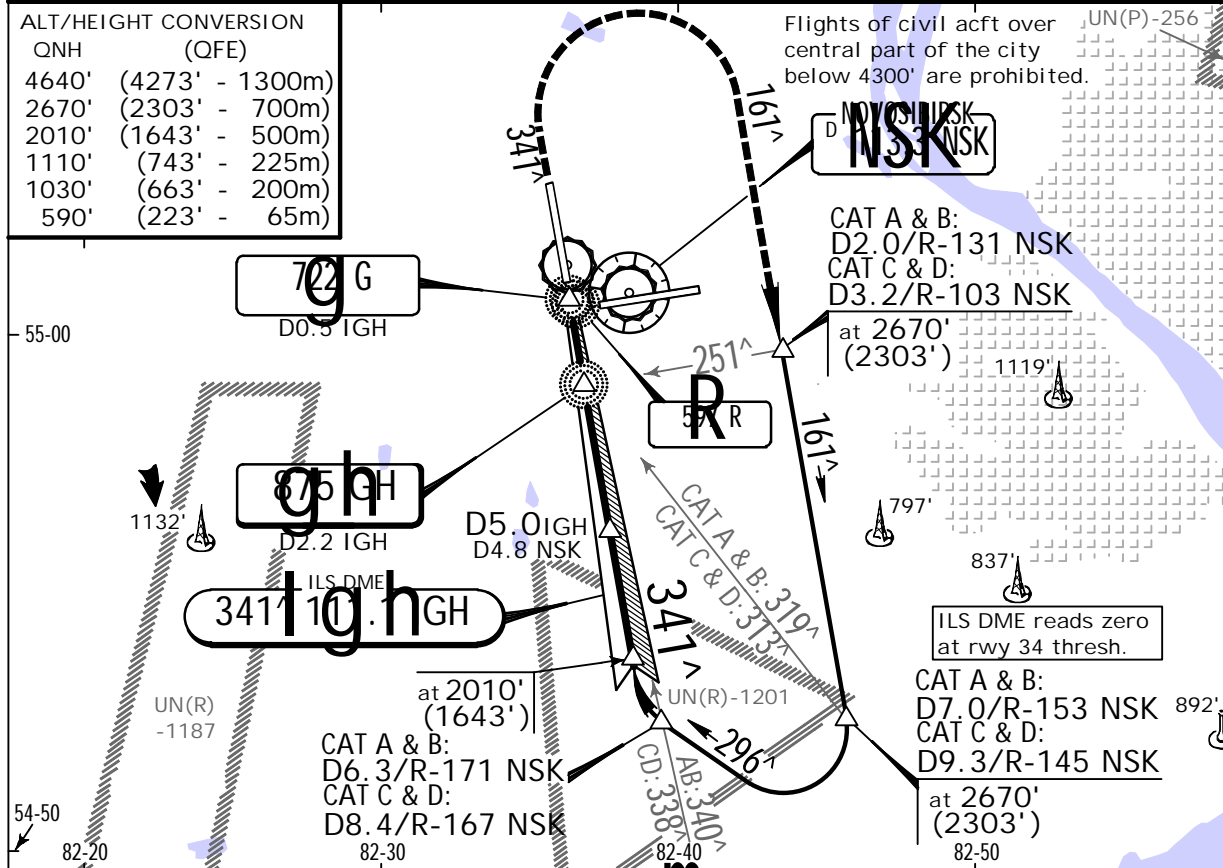
NOVOSIBIRSK, RUSSIA
ILS DME or 2 NDB Rwy 34

BRIEFING STRIP

| | | | | | | | | | |
|---|--|-------------------------------|--|--|--|---|--|---------------------------|--|
| ATIS 131.3 (Russian 127.4) | | NOVOSIBIRSK Approach 127.5 | | NOVOSIBIRSK Krug (APP/RDR) 122.0 | | NOVOSIBIRSK Start (TWR) 118.5 | | Ground 121.7 | |
| LOC IGH 111.1 | | Final Apch Crs 341^ | | GS LOM 1106' (739') | | ILS DA(H) 567' (200') | | Apt Elev 368' RWY 367' | |
| NDB GH 875 | | | | Minimum Alt D5.0 IGH 2010' (1643') | | NDB MDA(H) (CONDITIONAL) 700' (333') | | | |
| MISSED APCH: Climb on 341^ to 1030' (663'), then turn RIGHT onto 161^ climbing to 2670' (2303'), then according to chart. | | | | | | | | | |
| <div></div> <div>MSA NSK VOR</div> | | | | | | | | | |

Alt Set: MM (hPa on req) QNH on req (QFE) Trans Level: FL 60 Trans alt: 4640' (4273')

| ALT/HEIGHT CONVERSION | QNH | (QFE) |
|-----------------------|-----------------|-------|
| 4640' | (4273' - 1300m) | |
| 2670' | (2303' - 700m) | |
| 2010' | (1643' - 500m) | |
| 1110' | (743' - 225m) | |
| 1030' | (663' - 200m) | |
| 590' | (223' - 65m) | |



| Gnd speed-Kts | 70 | 90 | 100 | 120 | 140 | 160 | HIALS | 1030' (663') | 161 [^] | 2670' (2303') |
|--|------|------|------|------|------|------|-------|---------------------|------------------|---------------|
| ILS GS or NDB Desc Angle 3.00 [^] | 372 | 478 | 531 | 637 | 743 | 849 | PAPI | on 341 [^] | RT | |
| LOM to MAP 1.4 | 1:12 | 0:56 | 0:50 | 0:42 | 0:36 | 0:31 | | | | |

| STRAIGHT-IN LANDING RWY 34 | | | | NDB | | | |
|----------------------------|-------------------|--------------|-----------------------------|-----------------------------|---------------------|---------------------|---------------------|
| ILS | | LOC (GS out) | With FAF MDA(H) 700' (333') | W/o FAF MDA(H) 1010' (643') | | RVR | VIS |
| DA(H) 567' (200') | ALS out | | | ALS out | ALS out | | |
| FULL | ALS out | | | | | | |
| A | | | | | | | |
| B | RVR 720m VIS 800m | 1200m | NOT AUTH | 1200m | RVR 1500m VIS 1600m | 1200m | RVR 1500m VIS 1600m |
| C | | | | | | RVR 1800m VIS 2000m | 2800m |
| D | | | | RVR 1500m VIS 1600m | | 2800m | 3200m |

NS OPS

UNNT/OVB
TOLMACHEVO

JEPPESEN
25 JUL 14 (19-10)

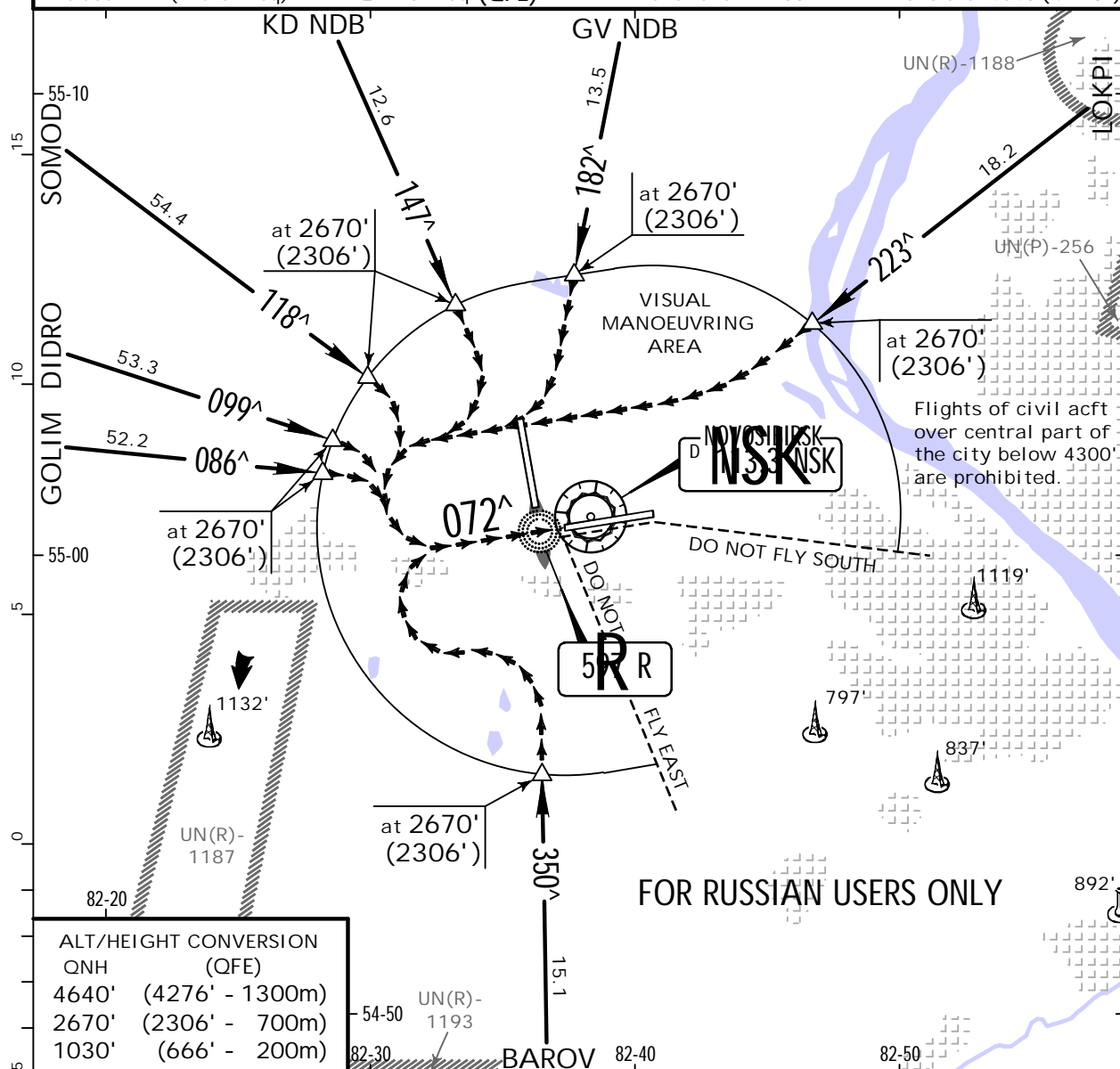
NOVOSIBIRSK, RUSSIA
Circling Rwy 07

| | | | | | | | | | |
|---|--|---|--|----------------------------|--|--------------------------------|--|---------------------------|--|
| ATIS 131.3 (Russian 127.4) | | NOVOSIBIRSK Approach | | NOVOSIBIRSK Krug (APP/RDR) | | NOVOSIBIRSK Start (TWR) | | Ground | |
| | | 127.5 | | 122.0 | | 118.5 | | 121.7 | |
| VISUAL | | Final Apch Crs 072[^] | | No FAF | | MDA(H) Refer to Minimums | | Apt Elev 368' RWY 364' | |
| | | | | | | | | | |

MISSED APCH: Climb to 1030' (666'), turn LEFT onto 252^ climbing to 2670' (2306'), then according to chart, or as directed.

MSA NSK VOR

Alt Set: MM (hPa on reg) QNH on reg (QFE) Trans level: FL 60 Trans alt: 4640'(4276')

[illegible]

LANDING RWY 07 1

.CEILING REQUIRED.

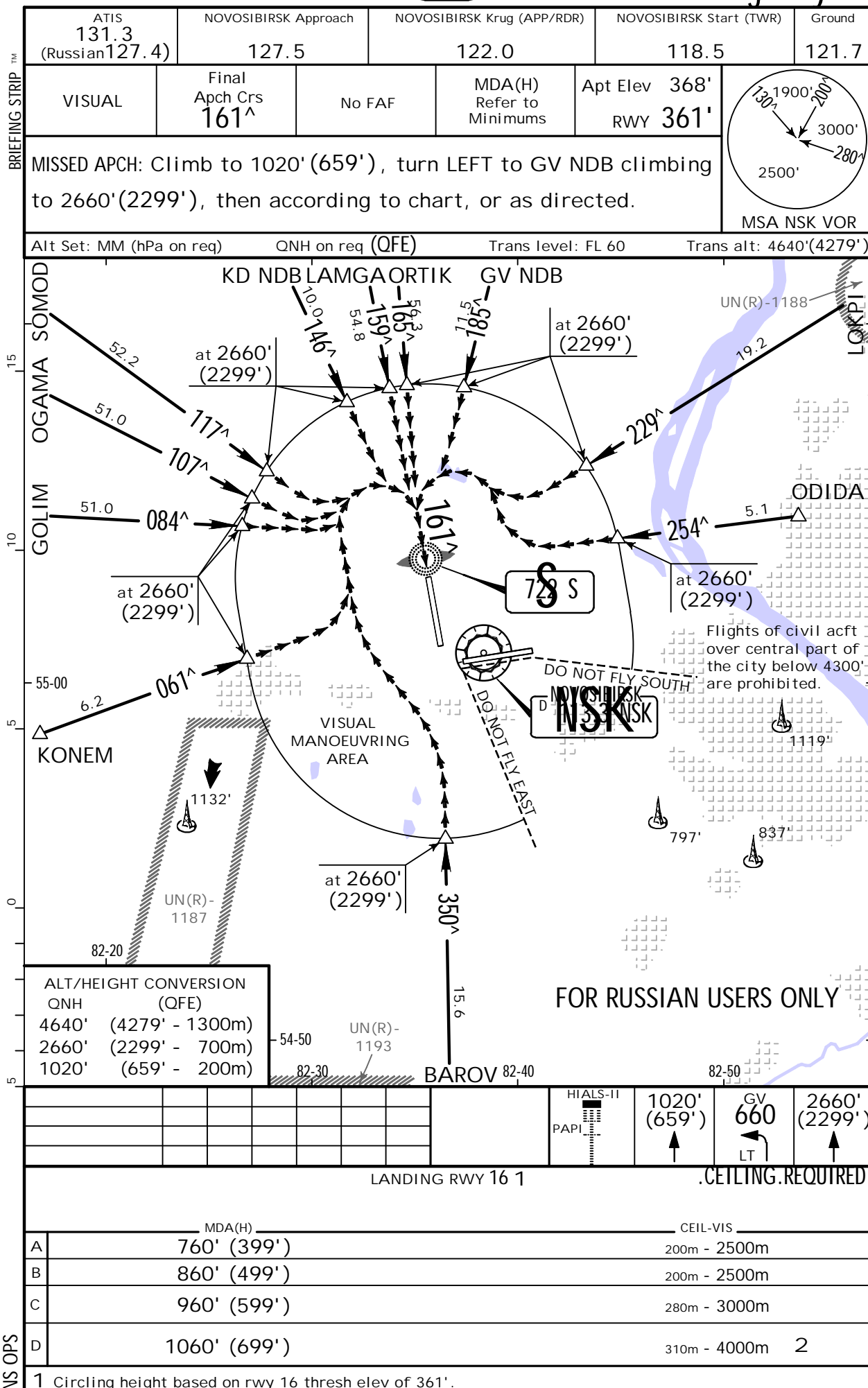
| | MDA(H) | CEIL-VIS |
|---|--------------|----------------|
| A | 760' (396') | 200m - 2500m |
| B | 860' (496') | 200m - 2500m |
| C | 960' (596') | 280m - 3000m |
| D | 1060' (696') | 310m - 4000m 2 |

1 Circling height based on rwy 07 thresh elev of 364'.

UNNT/OVB
TOLMACHEVO

JEPPESSEN
25 JUL 14 19-11

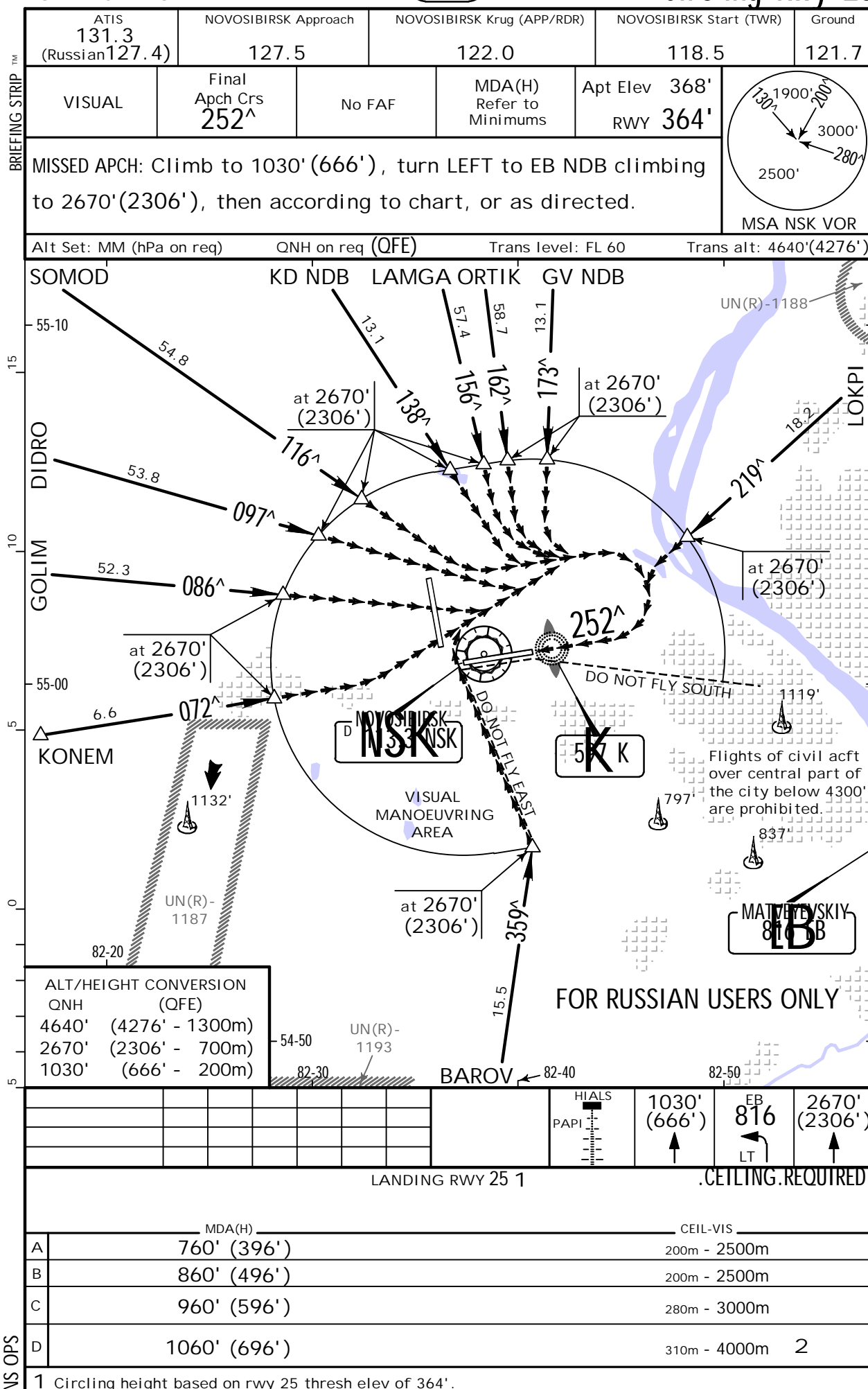
NOVOSIBIRSK, RUSSIA
Circling Rwy 16



UNNT/OVB
TOLMACHEVO

JEPPESSEN
25 JUL 14 19-12

NOVOSIBIRSK, RUSSIA
Circling Rwy 25



UNNT/OVB
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JEPPESEN
25 JUL 14 (19-13)

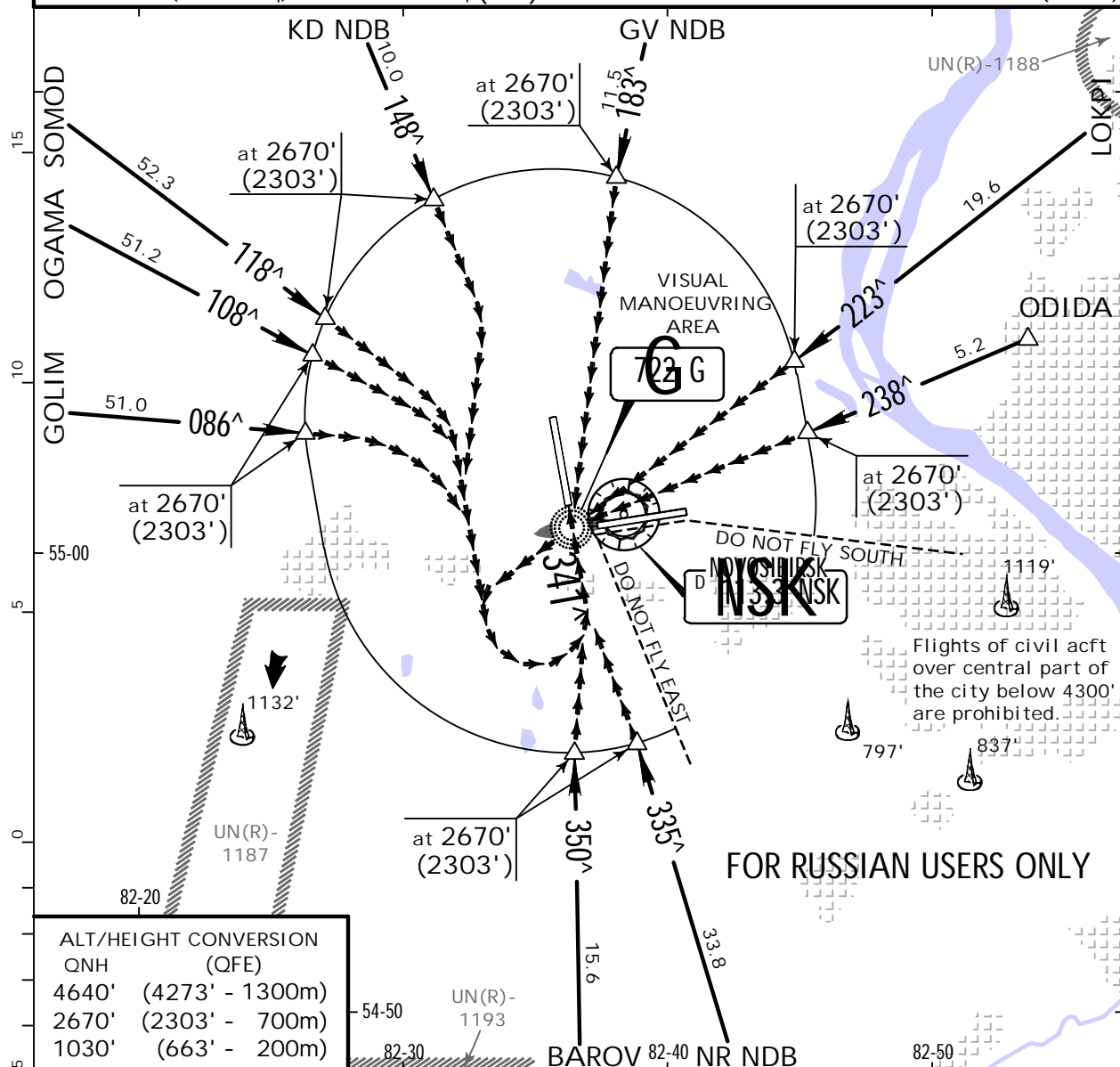
NOVOSIBIRSK, RUSSIA
Circling Rwy 34

| | | | | | | | | | |
|---|--|---|--|--|--|---|--|---|--|
| ATIS 131.3 (Russian 127.4) | | NOVOSIBIRSK Approach 127.5 | | NOVOSIBIRSK Krug (APP/RDR) 122.0 | | NOVOSIBIRSK Start (TWR) 118.5 | | Ground 121.7 | |
| VISUAL | | Final Apch Crs 341[^] | | No FAF | | MDA(H) Refer to Minimums | | Apt Elev 368' RWY 367' | |

MISSED APCH: Climb to 1030' (663'), turn RIGHT to GV NDB climbing to 2670' (2303'), then according to chart, or as directed.

MSA NSK VOR

Alt Set: MM (hPa on reg) QNH on reg (QFE) Trans level: FL 60 Trans alt: 4640'(4273')



| | | | | | |
|--|--|-------|-----------------|-----------|------------------|
| | | HIALS | 1030' (663') | GV 660 | 2670' (2303') |
| | | PAPI | ↑ | RT → | ↑ |

LANDING RWY 34 1

.CEILING.REQUIRED.

| | MDA(H) | CEIL-VIS | |
|---|--------------|--------------|---|
| A | 770' (403') | 200m - 2500m | |
| B | 860' (493') | 200m - 2500m | |
| C | 960' (593') | 280m - 3000m | |
| D | 1060' (693') | 310m - 4000m | 2 |

VS OPS

1 Circling height based on rwy 34 thresh elev of 367'.