

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

No revision activity since Disc 10-2011

TERMINAL CHART NOTAMs

No Chart NOTAMs for Airport UMMS

General Info

Minsk, BLR

N 53° 52.9' E 28° 01.8' Mag Var: 5.7°E

Elevation: 670'

Public, IFR, Control Tower, Customs, Landing Fee,

Jet Starting Unit available

Fuel: Jet A-1

Repairs: Minor Airframe, Minor Engine

Time Zone Info: GMT+2:00 uses DST

Runway Info

Runway 13-31 11946' x 197' concrete

Runway 13 (132.0°M) TDZE 640'

Lights: Edge, ALS, Centerline

Runway 31 (312.0°M) TDZE 670'

Lights: Edge, ALS, Centerline, TDZ

Communications Info

ATIS **135.85** Non-English

ATIS **128.85**

Minsk-2 Tower **118.3**

Minsk-2 Ground Control **129.95**

Minsk Approach Control **125.9**

Minsk Radar **125.25**

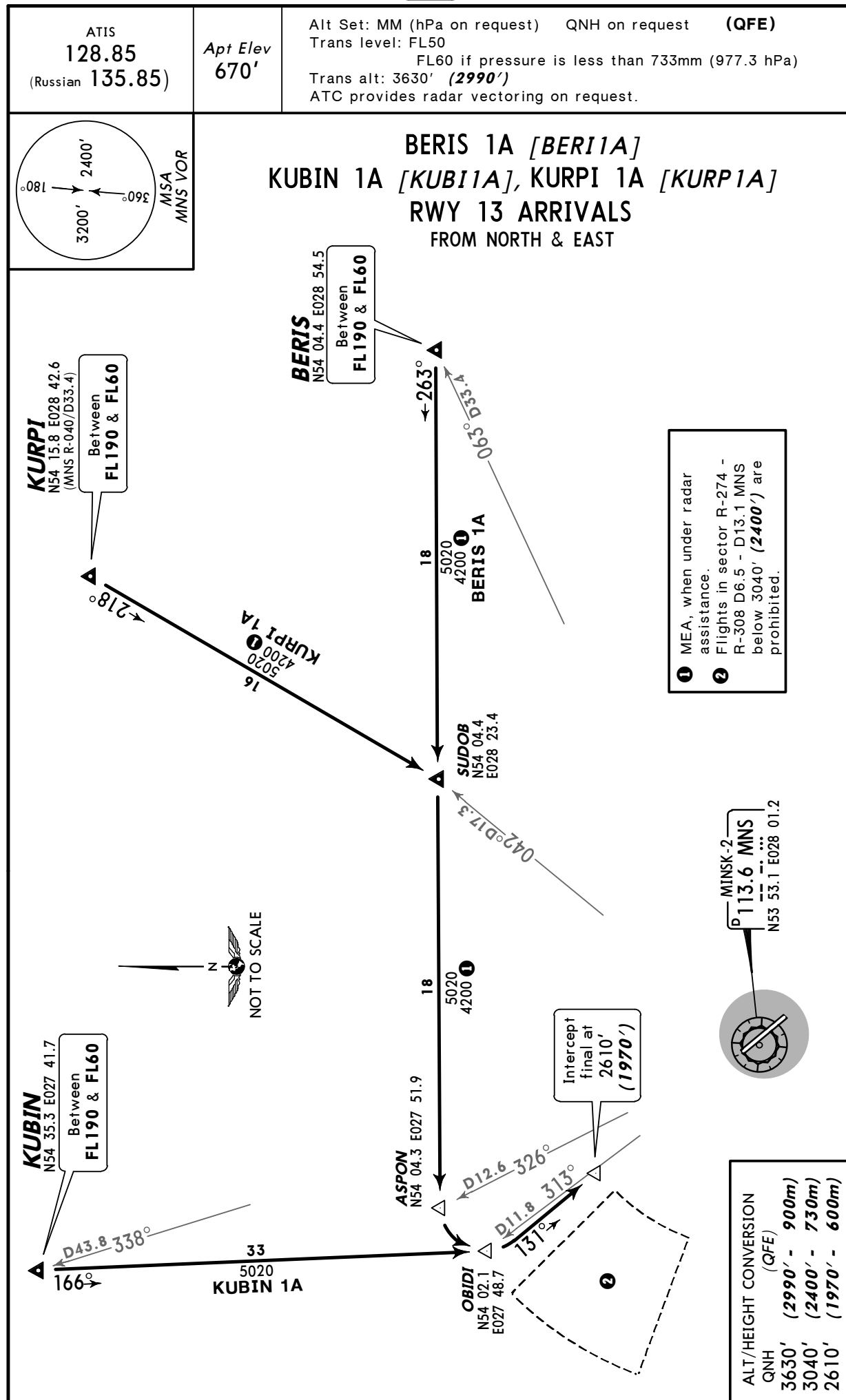
Notebook Info

UMMS/MSQ
MINSK-2

JEPPESSEN
12 NOV 10 **10-2** **Eff 18 Nov**

MINSK, BELARUS

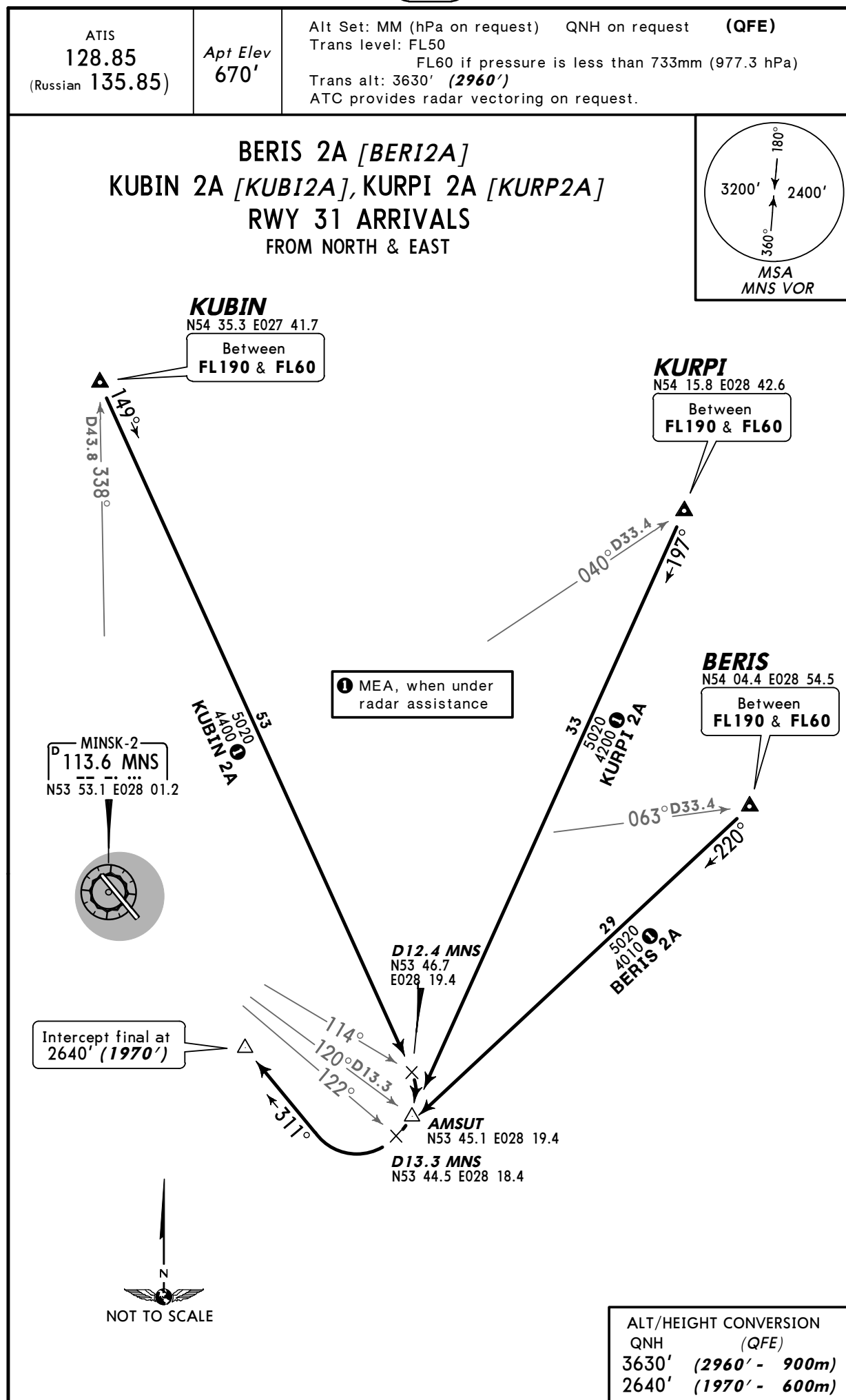
STAR



UMMS/MSQ
MINSK-2

JEPPESEN
12 NOV 10 **10-2A** **Eff 18 Nov**

MINSK, BELARUS
STAR



UMMS/MSQ
MINSK-2

JEPPESEN
12 NOV 10 (10-2B) Eff 18 Nov

MINSK, BELARUS

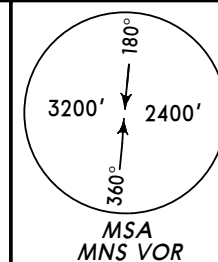
STAR

ATIS
128.85
(Russian 135.85)

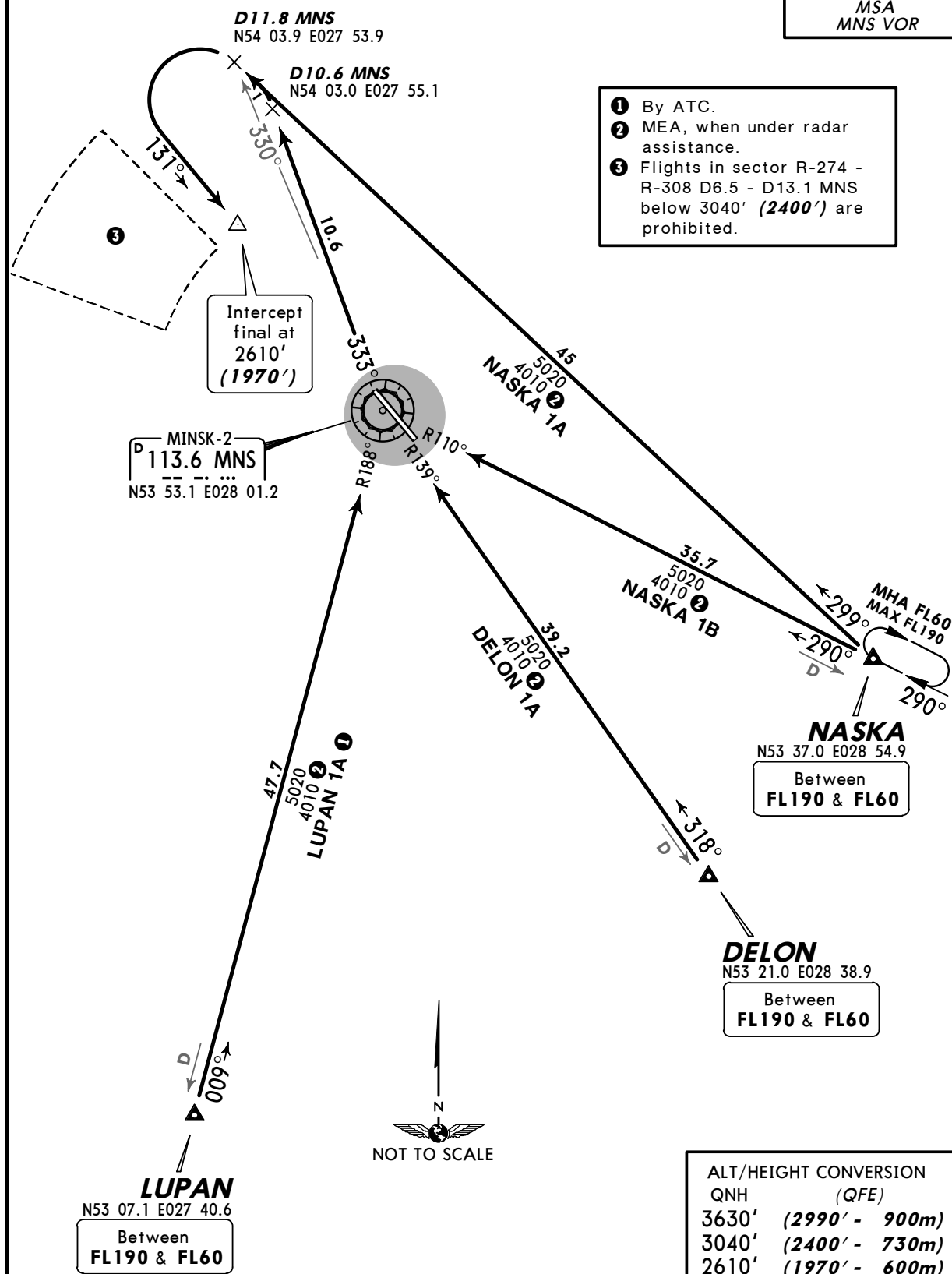
Apt Elev
670'

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: 3630' **(2990')**
ATC provides radar vectoring on request.

DELO 1A [DELO1A], LUPA 1A [LUPA1A] ①
NASKA 1A [NASK1A], NASKA 1B [NASK1B]
RWY 13 ARRIVALS
FROM SOUTH



- ① By ATC.
- ② MEA, when under radar assistance.
- ③ Flights in sector R-274 - R-308 D6.5 - D13.1 MNS below 3040' (**2400'**) are prohibited.



UMMS/MSQ
MINSK-2

JEPPESSEN
12 NOV 10 **10-2C** **Eff 18 Nov**

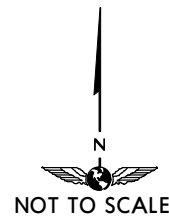
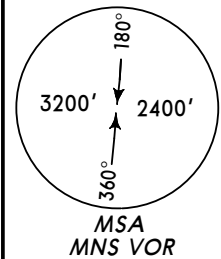
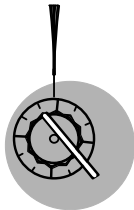
MINSK, BELARUS
STAR

ATIS
128.85
(Russian **135.85**)

Apt Elev
670'

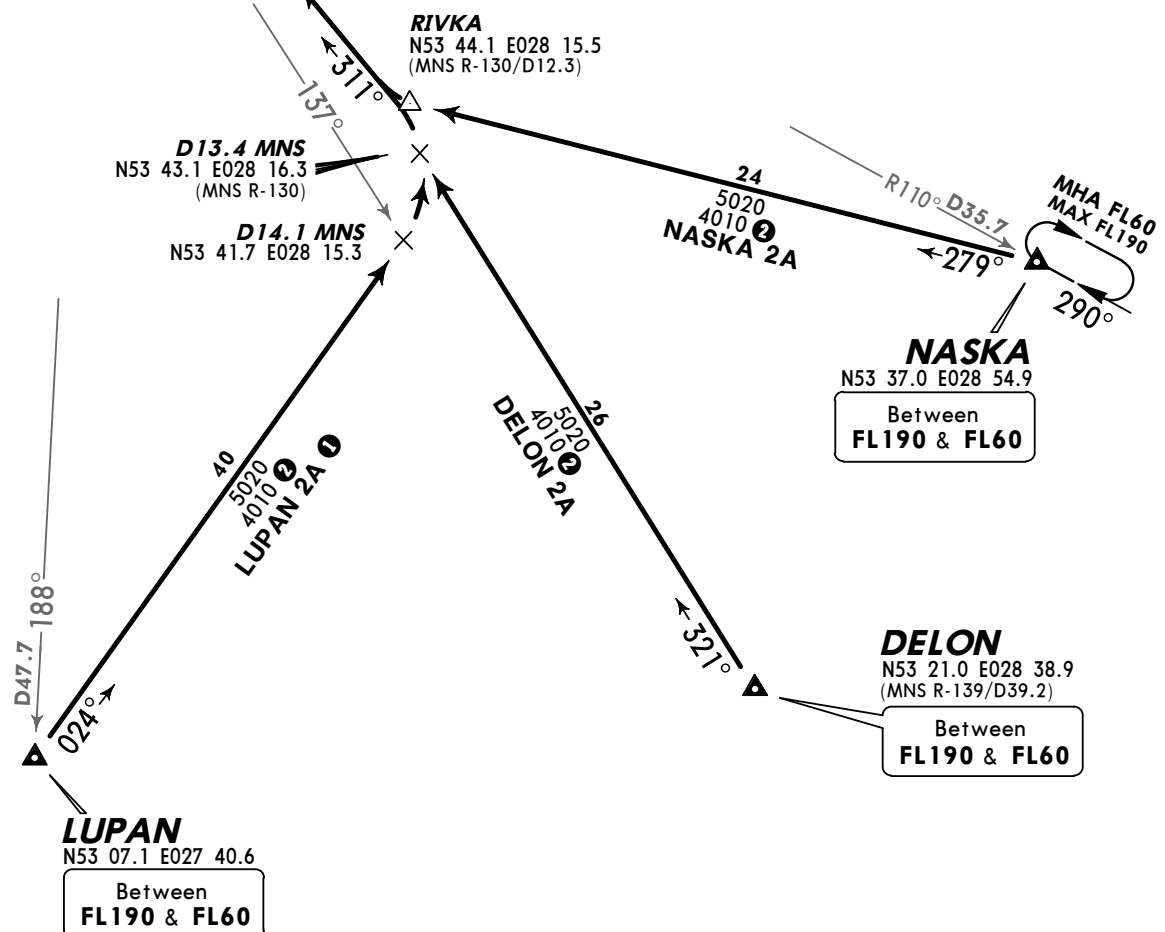
Alt Set: MM (hPa on request) QNH on request **(QFE)**
Trans level: FL50
FL60 if pressure is less than 733mm (977.3 hPa)
Trans alt: 3630' **(2960')**
ATC provides radar vectoring on request.

MINSK-2
D 113.6 MNS
N53 53.1 E028 01.2



- ① By ATC.
- ② MEA, when under radar assistance.

Intercept final at
2640' (1970')

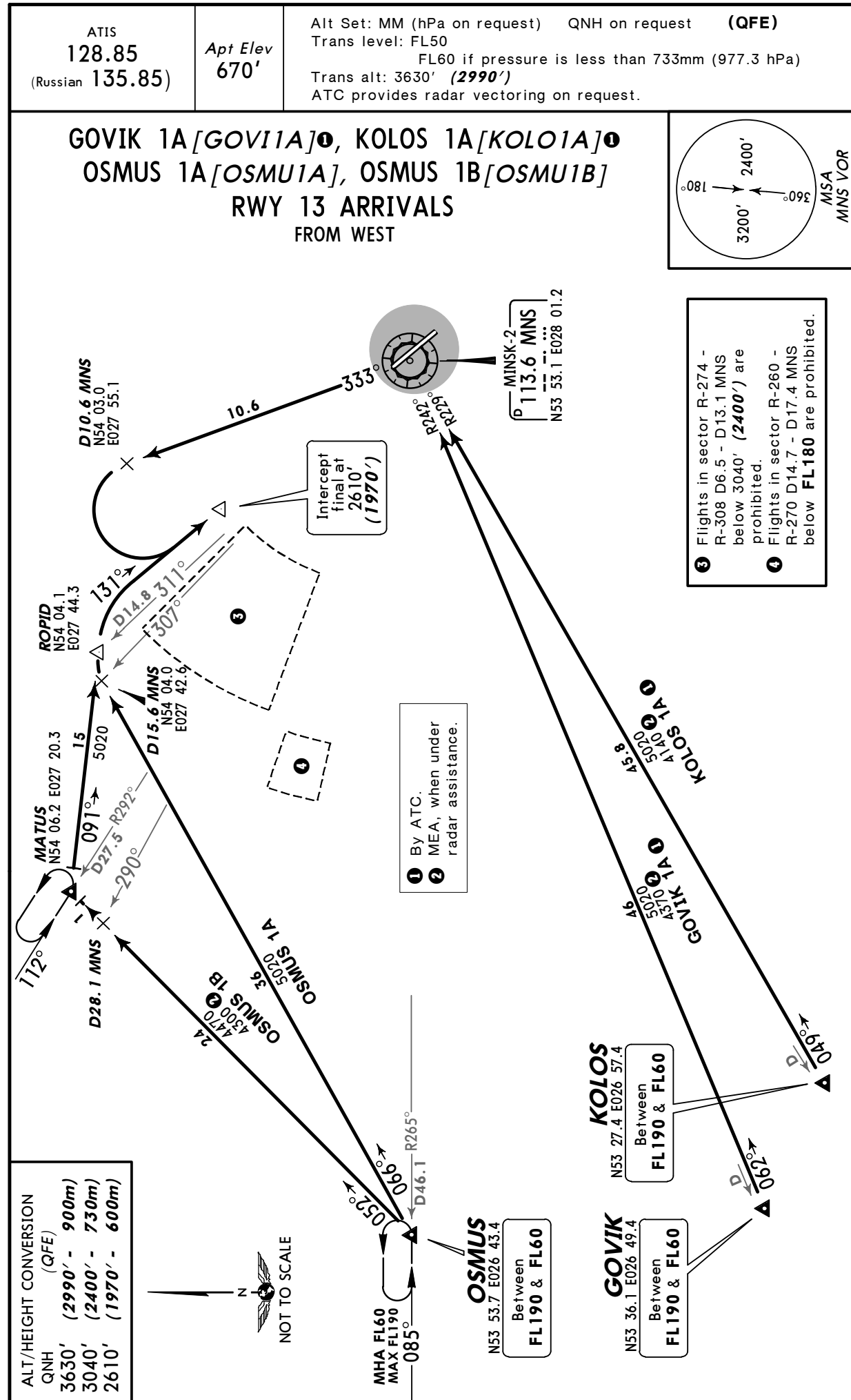


ALT/HEIGHT CONVERSION	
QNH	(QFE)
3630'	(2960' - 900m)
2640'	(1970' - 600m)

UMMS/MSQ
MINSK-2

JEPPESSEN
12 NOV 10 **10-2D** **Eff 18 Nov**

MINSK, BELARUS
STAR



UMMS/MSQ
MINSK-2

12 NOV 10

JEPPESEN**Eff 18 Nov**

MINSK, BELARUS

STAR

ATIS 128.85 (Russian 135.85)	Apt Elev 670'	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: 3630' (2960') ATC provides radar vectoring on request.
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GOVIK 2A[GOVI2A]①, KOLOS 2A[KOLO2A]①
 OSMUS 2A[OSMU2A], OSMUS 2B[OSMU2B]
 OSMUS 2C[OSMU2C]
 RWY 31 ARRIVALS
 FROM WEST

ALT/HEIGHT CONVERSION
 QNH (QFE)
 3630' (2960' - 900m)
 3070' (2400' - 730m)
 2640' (1970' - 600m)

GOVIK
 N53 36.1 E026 49.4
 Between
 FL190 & FL60

KOLOS
 N53 27.4 E026 57.4
 Between
 FL190 & FL60

OSMU
 N53 53.7 E026 43.4
 Between
 FL190 & FL60

OSMU 2A
 30 5020
 095°

OSMU 2B
 39 5020
 067°

OSMU 2C
 4300 ②
 4470
 0352°

MATUS
 N54 06.2 E027 20.3
 112°

D28.1 MNS
 N54 04.1 E027 44.9
 091°

D15.6 MNS
 N54 03.9 E027 42.2
 290°

D14.6 MNS
 N54 04.1 E027 44.9
 123°

D11.6 MNS
 N53 47.4 E028 18.5
 113°

D14.4 MNS
 N53 40.9 E028 14.1
 311°

SMILO
 N53 40.8 E028 12.8
 140°

GOVIK 2A ①
 5020 4010 ②
 48°

KOLOS 2A ①
 5020 4010 ②
 48°

GOVIK 2A ①
 5020 4010 ②
 48°

KOLOS 2A ①
 5020 4010 ②
 48°

***635 GH**
 N53 50.6 E028 05.3
 241°

Intercept final at 2640' (1970')

③ Flights in sector R-274 - R-308 D6.5 - D13.1 MNS below 3070' (2400') are prohibited.

④ Flights in sector R-260 - R-270 D14.7 - D17.4 MNS below FL180 are prohibited.

① By ATC.
② MEA, when under radar assistance.

MSA
 MNS VOR
 3200' 2400' 180° 360°

NOT TO SCALE

Compass Rose: N (North arrow pointing towards top-left)

UMMS/MSQ
MINSK-2

JEPPESEN
12 NOV 10 **10-3** **Eff 18 Nov**

MINSK, BELARUS
SID

Apt Elev
670'

QNH on request **(QFE)**

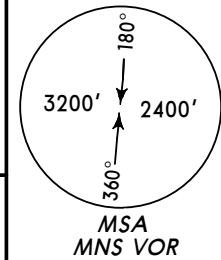
Trans level: FL50

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

Trans alt: 3630' **(2990')**

1. ATC provides radar vectoring on request.

2. Initial turn MAX 225 KT.



BERIS 3A [BERI3A], KUBIN 3A [KUBI3A]
LENOK 3A [LENO3A], PENAL 3A [PENA3A]
RWY 13 DEPARTURES
TO NORTH & EAST

LENOK

N54 33.1 E027 26.5

Between
FL60 & FL190

KUBIN

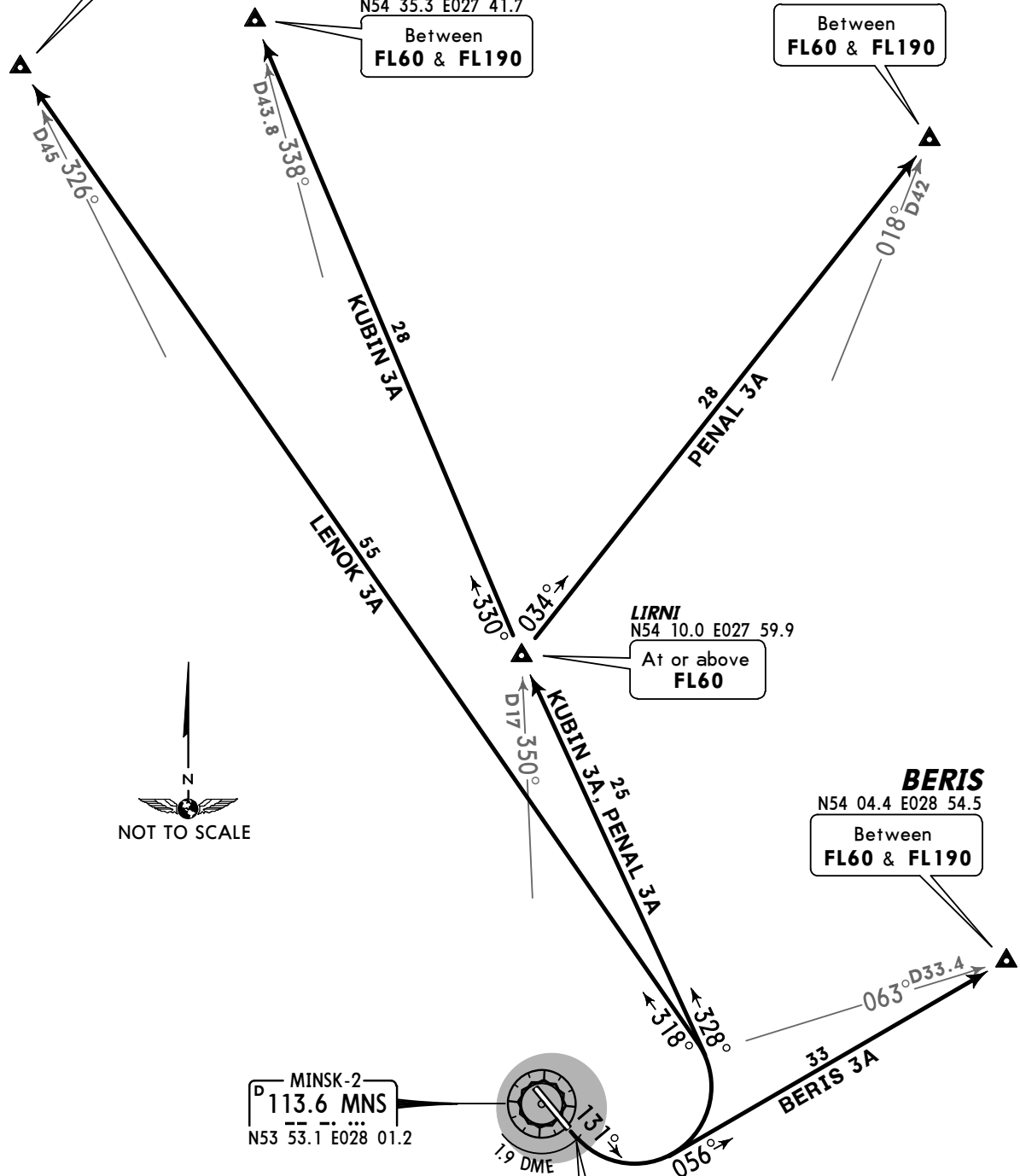
N54 35.3 E027 41.7

Between
FL60 & FL190

PENAL

N54 31.1 E028 31.3

Between
FL60 & FL190



ALT/HEIGHT CONVERSION	
QNH	(QFE)
1300'	(660' - 200m)
3630'	(2990' - 900m)

UMMS/MSQ
MINSK-2

JEPPesen
12 NOV 10 **(10-3A)** **Eff 18 Nov**

MINSK, BELARUS
SID

Apt Elev
670'

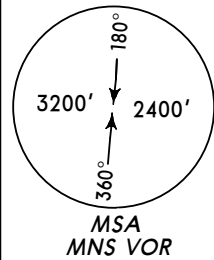
QNH on request **(QFE)**

Trans level: FL50

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

Trans alt: 3630' **(2960')**

1. ATC provides radar vectoring on request.
2. Initial turn MAX 225 KT.



BERIS 4A [BERI4A], KUBIN 4A [KUBI4A]
LENOK 4A [LENO4A], PENAL 4A [PENA4A]
RWY 31 DEPARTURES
TO NORTH & EAST

LENOK

N54 33.1 E027 26.5
(MNS R-326/D45)

Between
FL60 & FL190

KUBIN

N54 35.3 E027 41.7
(MNS R-338/D43.8)

Between
FL60 & FL190

PENAL

N54 31.1 E028 31.3

Between
FL60 & FL190

LIRNI

N54 10.0 E027 59.9

At or above
FL60

BERIS

N54 04.4 E028 54.5

Between
FL60 & FL190



ALT/HEIGHT CONVERSION	
QNH	(QFE)
1330'	(660' - 200m)
3630'	(2960' - 900m)

MINSK-2
113.6 MNS
N53 53.1 E028 01.2

UMMS/MSQ
MINSK-2

JEPPESEN
12 NOV 10 **(10-3B)** **Eff 18 Nov**

MINSK, BELARUS
SID

Apt Elev
670'

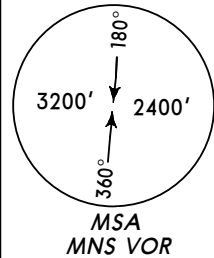
QNH on request **(QFE)**

Trans level: FL50

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

Trans alt: 3630' **(2990')**

1. ATC provides radar vectoring on request.
2. Initial turn MAX 225 KT.



DELON 3A [DELO3A]
LUPAN 3A [LUPA3A] ●, NASKA 3A [NASK3A]
RWY 13 DEPARTURES
TO SOUTHEAST & SOUTH

MINSK-2
113.6 MNS
N53 53.1 E028 01.2

① By ATC.

DELON 3A
LUPAN 3A
Turn **RIGHT**
at or above
1300' **(660')**

NASKA 3A
Turn **LEFT**
at or above
1300' **(660')**
but not before
MNS 1.9 DME

NASKA
N53 37.0 E028 54.9
(MNS R-110/D35.7)

Between
FL60 & FL190

34
NASKA 3A

37
DELON 3A

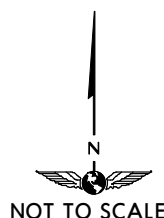
DELON
N53 21.0 E028 38.9
(MNS R-139/D39.2)

Between
FL60 & FL190

LUPAN
N53 07.1 E027 40.6

Between
FL60 & FL190

47
LUPAN 3A ●



ALT/HEIGHT CONVERSION

QNH	(QFE)
1300'	(660' - 200m)
3630'	(2990' - 900m)

UMMS/MSQ
MINSK-2

JEPPESSEN
12 NOV 10 **(10-3C)** **Eff 18 Nov**

MINSK, BELARUS
SID

Apt Elev
670'

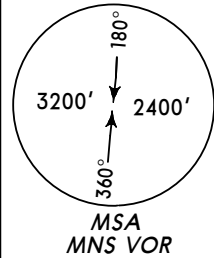
QNH on request **(QFE)**

Trans level: FL50

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

Trans alt: 3630' **(2960')**

1. ATC provides radar vectoring on request.
2. Initial turn MAX 225 KT.



DELON 4A [DELO4A]
LUPAN 4A [LUPA4A] ①
NASKA 4A [NASK4A]
RWY 31 DEPARTURES
TO SOUTHEAST & SOUTH

① By ATC.

② Flights in sector R-274 - R-308 D6.5 - D13.1 MNS below 3070' **(2400')** are prohibited.

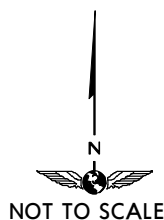
At or above
1330' (660')
but not before
MNS 1.2 DME

MINSK-2
113.6 MNS
N53 53.1 E028 01.2

NASKA
N53 37.0 E028 54.9
Between
FL60 & FL190

DELON
N53 21.0 E028 38.9
Between
FL60 & FL190

LUPAN
N53 07.1 E027 40.6
Between
FL60 & FL190

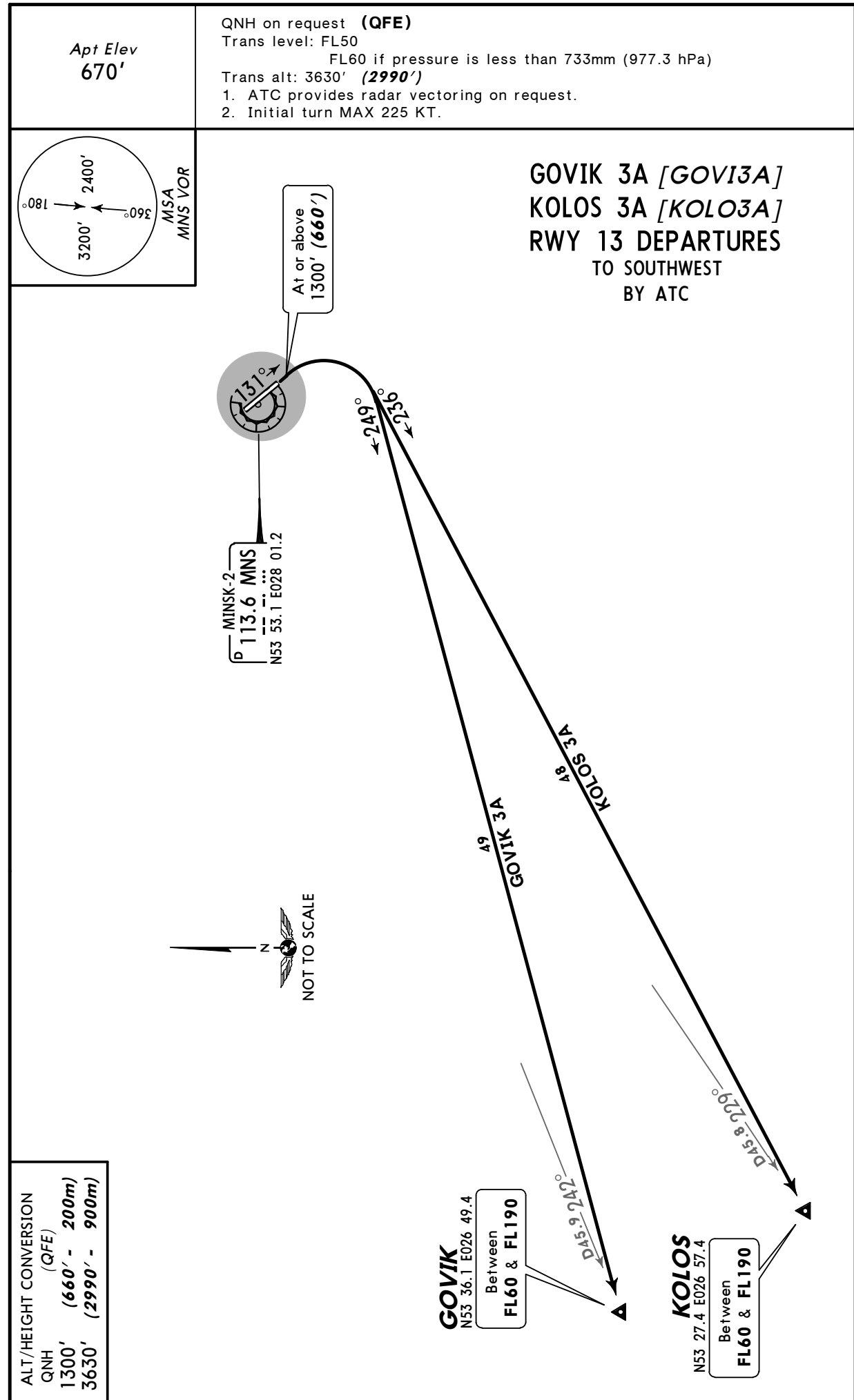


ALT/HEIGHT CONVERSION	
QNH	(QFE)
1330'	(660' - 200m)
3070'	(2400' - 730m)
3630'	(2960' - 900m)

UMMS/MSQ
MINSK-2

JEPPESSEN
12 NOV 10 **(10-3D)** **Eff 18 Nov**

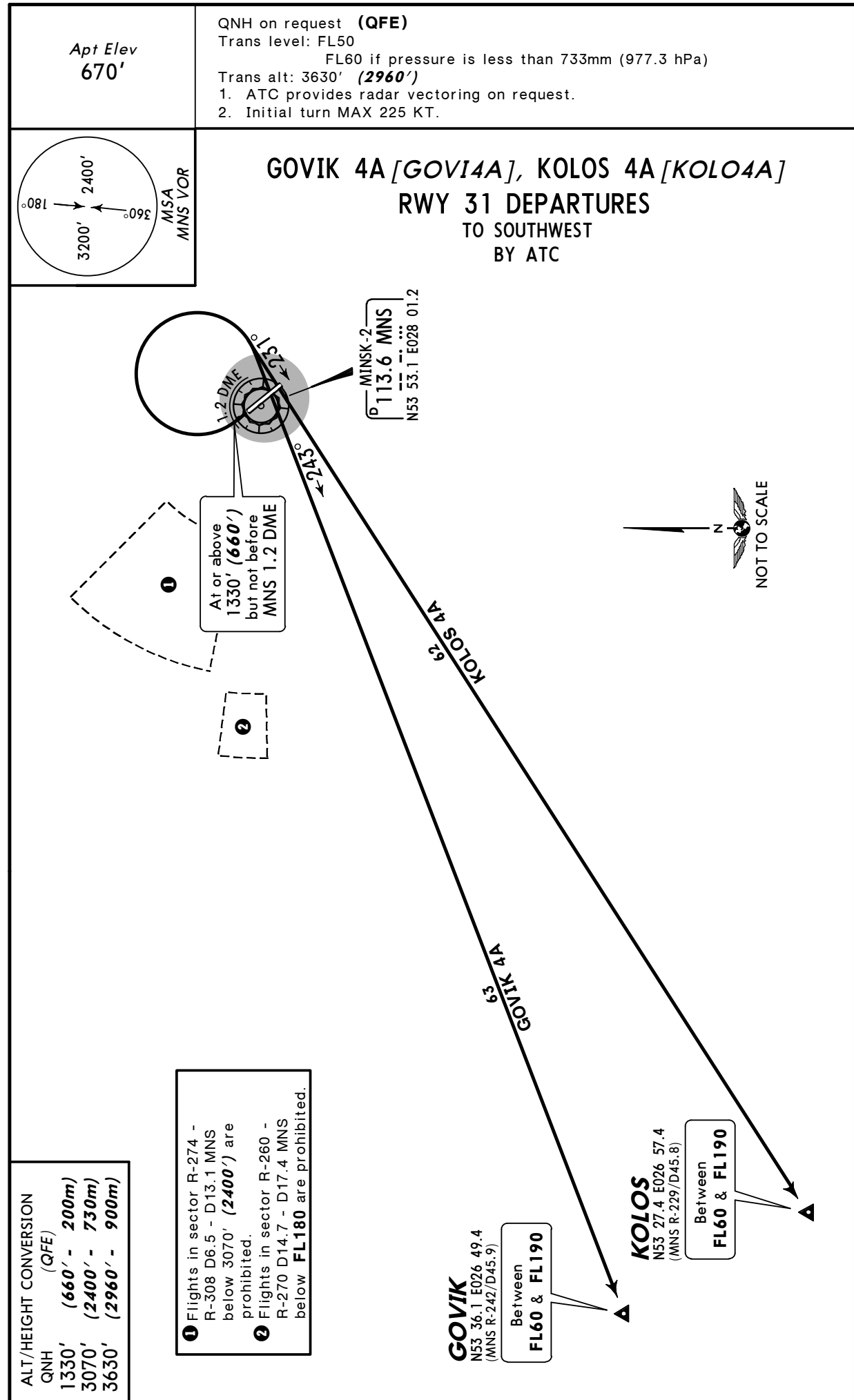
MINSK, BELARUS
SID



UMMS/MSQ
MINSK-2

JEPPESEN
12 NOV 10 **10-3E** **Eff 18 Nov**

MINSK, BELARUS
SID



UMMS/MSQ
MINSK-2

12 NOV 10

10-3F

Eff 18 Nov

MINSK, BELARUS

SID

Apt Elev
670'

QNH on request **(QFE)**

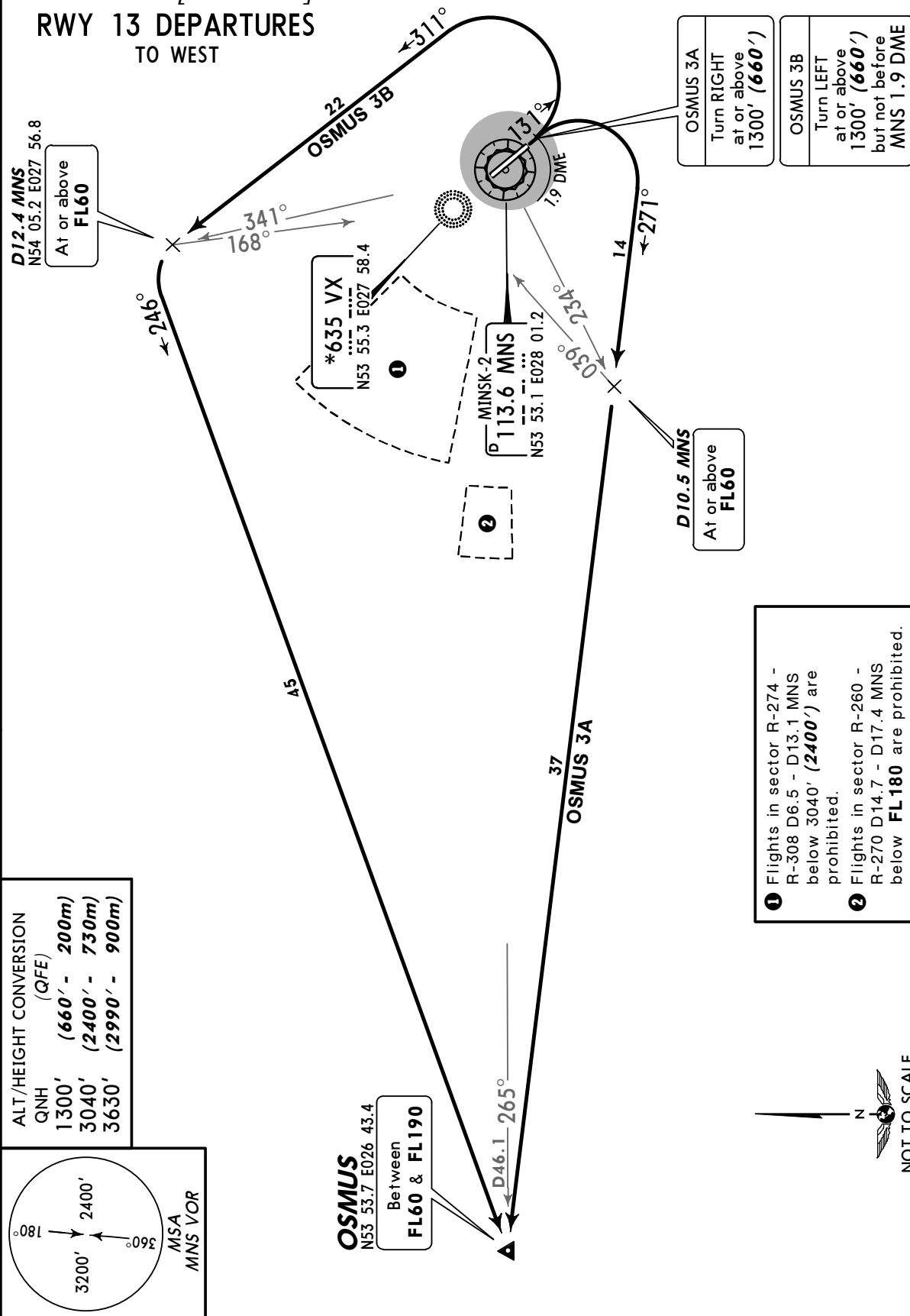
Trans level: FL50

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

Trans alt: 3630' (**2990'**)

1. ATC provides radar vectoring on request.
2. Initial turn MAX 225 KT.

OSMUS 3A [OSMU3A]
OSMUS 3B [OSMU3B]
RWY 13 DEPARTURES
TO WEST



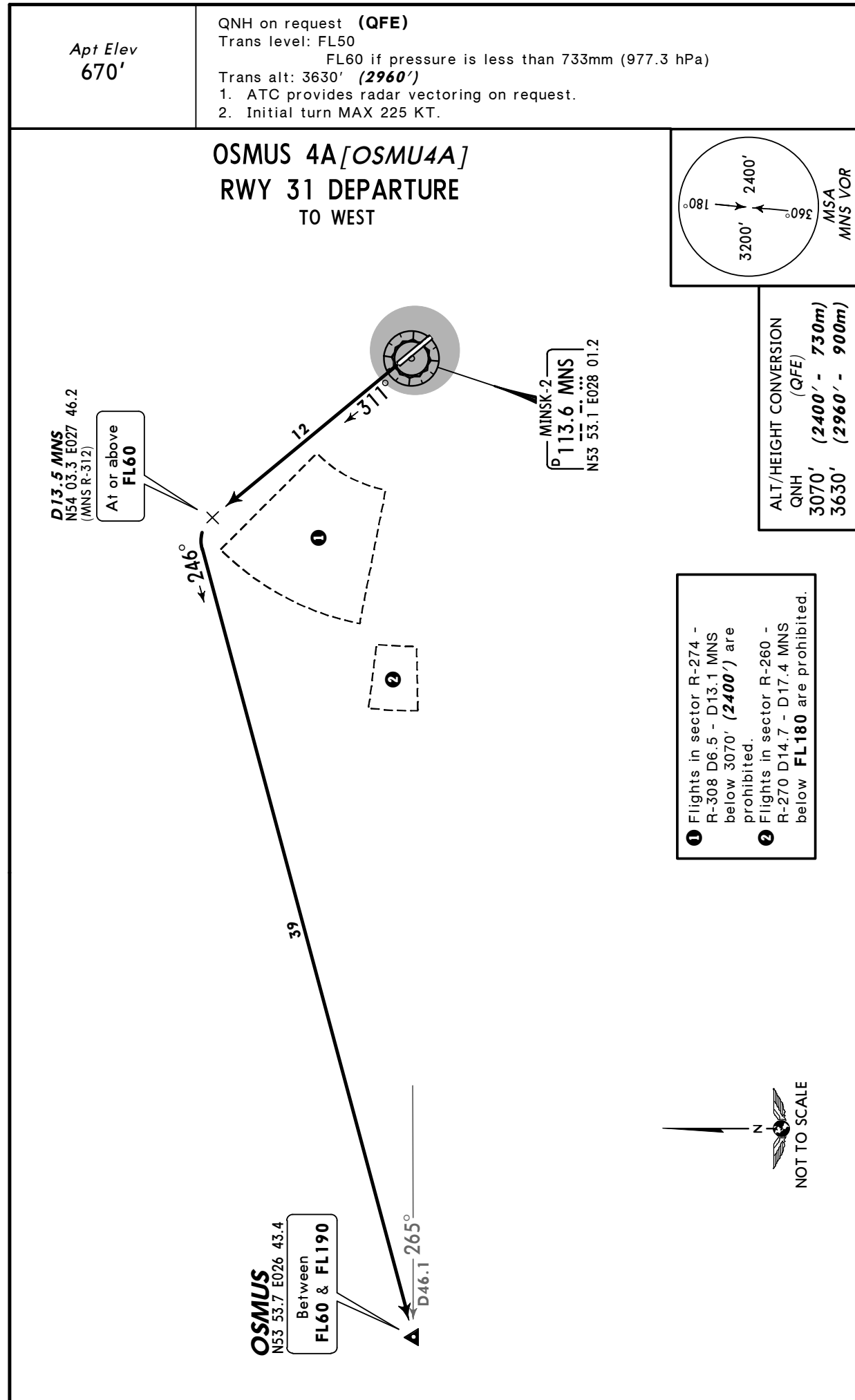
NOT TO SCALE

UMMS/MSQ
MINSK-2

JEPPESSEN
12 NOV 10 **(10-3G)** **Eff 18 Nov**

MINSK, BELARUS

SID



UMMS/MSQ

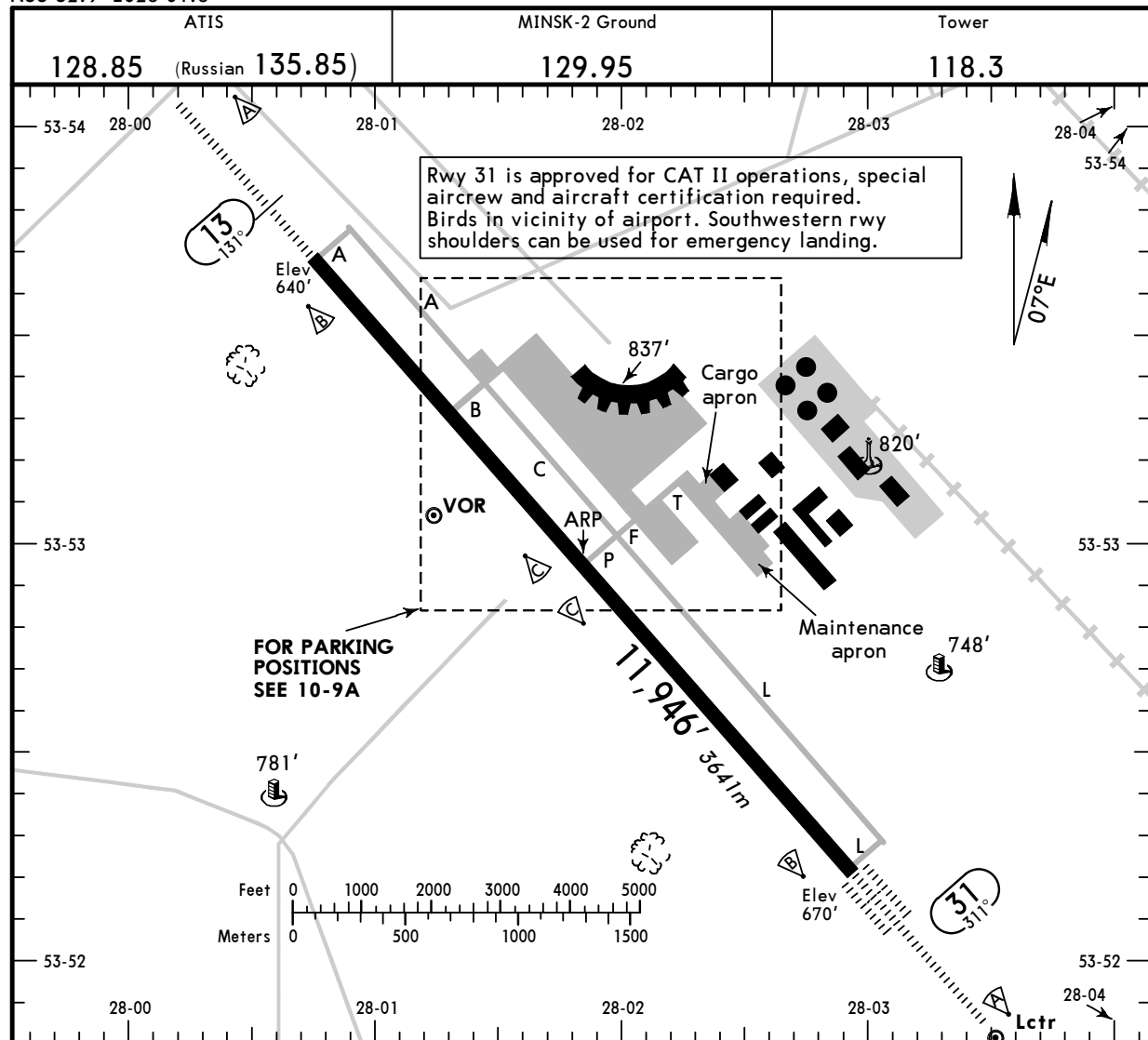
Apt Elev **670'**
N53 52.9 E028 01.8

JEPPESSEN

12 NOV 10 **(10-9)** Eff 18 Nov

MINSK, BELARUS

MINSK-2



ADDITIONAL RUNWAY INFORMATION

RWY		USABLE LENGTHS		TAKE-OFF	WIDTH
		Threshold	Landing Beyond		
13	HIRL (60m) CL (15m) HIALS PAPI-L ① RVR		10,974' 3345m		197'
31	HIRL (60m) CL (15m) HIALS-II TDZ PAPI-L ① RVR		10,852' 3308m		60m

① angle 3.0°.

TAKE-OFF

AIR CARRIER (JAA)
All Rws

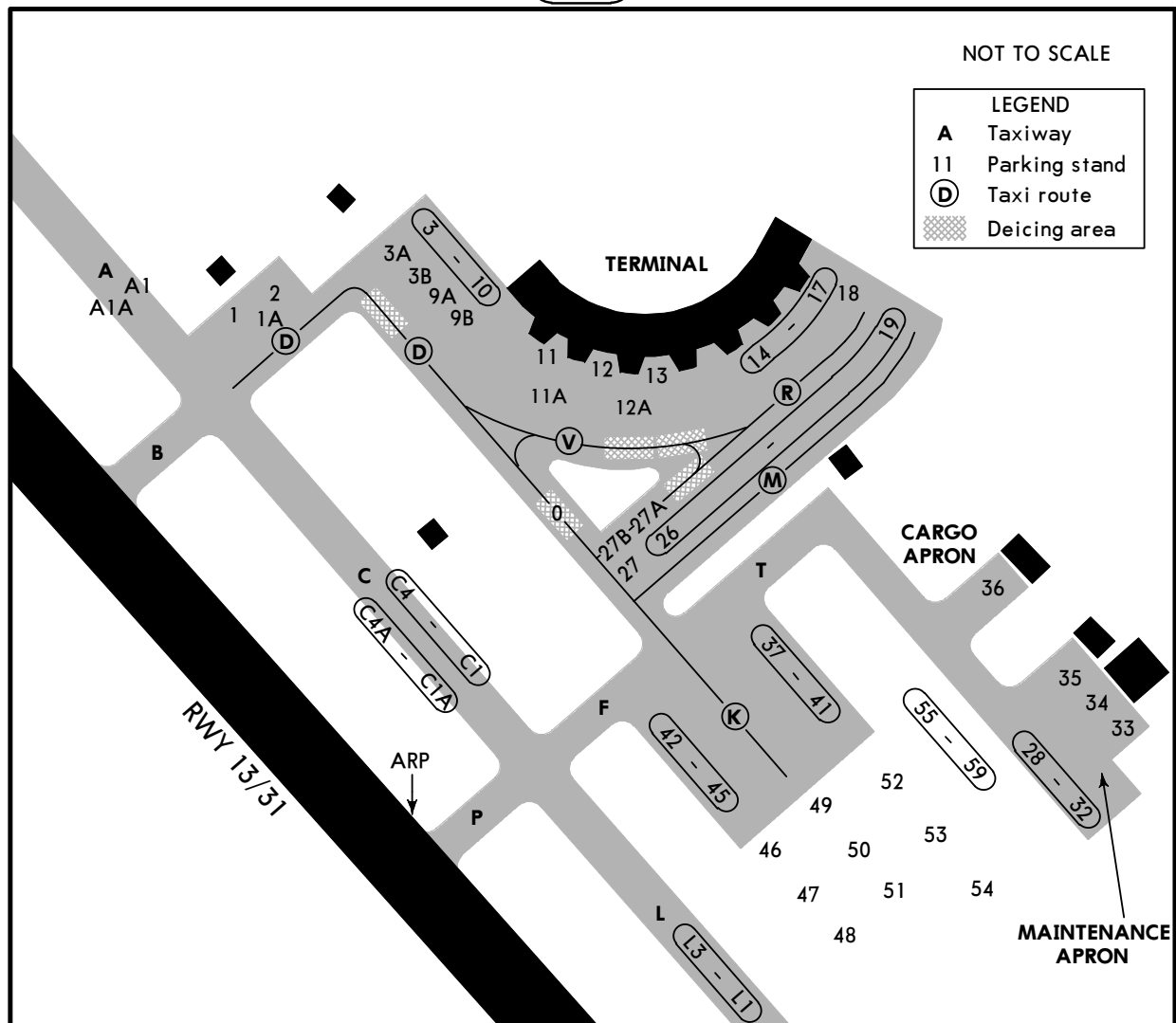
LVP must be in force

	RL & CL	RCLM (DAY only) or RL	RCLM (DAY only) or RL
A			
B	200m (150m)	250m	400m
C			
D	250m (200m)	300m	

UMMS/MSQ

JEPPESEN
12 NOV 10 (10-9A) Eff 18 Nov

MINSK, BELARUS
MINSK-2



Taxiing and towing are prohibited without controller's clearance.

INS COORDINATES

STAND No.	COORDINATES	STAND No.	COORDINATES
1, 2	N53 53.4 E028 01.5	25	N53 53.3 E028 02.1
3	N53 53.5 E028 01.7	26	N53 53.2 E028 02.1
3A, 3B	N53 53.5 E028 01.6	27	N53 53.2 E028 02.0
4, 5	N53 53.5 E028 01.7	36	N53 53.0 E028 02.6
6	N53 53.4 E028 01.7	37 thru 39	N53 53.1 E028 02.2
7 thru 9	N53 53.4 E028 01.8	40	N53 53.0 E028 02.2
10	N53 53.4 E028 01.9	41	N53 53.0 E028 02.3
11 thru 12A	N53 53.3 E028 01.9	42	N53 53.1 E028 02.1
13, 14	N53 53.3 E028 02.0	43 thru 45	N53 53.0 E028 02.2
15	N53 53.3 E028 02.1		
16	N53 53.4 E028 02.1		
17, 18	N53 53.4 E028 02.2		
19	N53 53.4 E028 02.3		
20	N53 53.3 E028 02.3		
21 thru 24	N53 53.3 E028 02.2		

CHANGES: Parking stands.

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UMMS/MSQ


JEPPESEN
 12 NOV 10 **10-9S** Eff 18 Nov

Standard
MINSK, BELARUS
MINSK-2

STRAIGHT-IN RWY		A	B	C	D
13	ILS	840' (200')	840' (200')	840' (200')	840' (200')
	<i>FULL</i>	R550m	R550m	R550m	R550m
	<i>Limited</i>	R750m	R750m	R750m	R750m
	<i>ALS out</i>	R1200m	R1200m	R1200m	R1200m
	LOC	NOT AUTH	NOT AUTH	NOT AUTH	NOT AUTH
	VOR ❶	1300' (660')	1300' (660')	1630' (990')	1630' (990')
31	<i>ALS out</i>	R1500m	R1500m	C2400m	C2400m
	NDB ❶	990' (350')	990' (350')	990' (350')	990' (350')
	<i>ALS out</i>	R1500m	R1500m	R1600m	R1600m
	CAT 2 ILS	770' (100')	770' (100')	770' (100')	770' (100')
		RA97' R350m	RA97' R350m	RA97' R350m	RA97' R350m
	ILS	870' (200')	870' (200')	870' (200')	870' (200')
	<i>FULL</i>	R550m	R550m	R550m	R550m
	<i>Limited</i>	R750m	R750m	R750m	R750m
	<i>ALS out</i>	R1200m	R1200m	R1200m	R1200m
	LOC	NOT AUTH	NOT AUTH	NOT AUTH	NOT AUTH
	VOR ❶	1330' (660')	1330' (660')	1660' (990')	1660' (990')
	<i>ALS out</i>	R1500m	R1500m	C2400m	C2400m
	NDB ❶	1010' (340')	1010' (340')	1010' (340')	1010' (340')
	<i>ALS out</i>	R1500m	R1500m	R1500m	R1500m

❶ Continuous Descent Final Approach

CIRCLE-TO-LAND ❷	100 KT	135 KT	180 KT	205 KT
	1530' (860')	1530' (860')	1530' (860') ❸	1530' (860') ❸
	ceil1020' V3000m	ceil1020' V3000m	ceil1190' V3000m	ceil1190' V4000m

❷ NIGHT not authorized.

❸ wide bodied acft: 1660'(990'), ceil 1320'-V5000m.

TAKE-OFF RWY 13, 31

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

UMMS/MSQ


JEPPESEN
 12 NOV 10 **10-9X** Eff 18 Nov

JAA MINIMUMS
MINSK, BELARUS
 MINSK-2

STRAIGHT-IN RWY		A	B	C	D
13	ILS	840' (200')	840' (200')	840' (200')	840' (200')
		R550m	R550m	R550m	R550m
	<i>ALS out</i>	R1000m	R1000m	R1000m	R1000m
	LOC	NOT AUTHORIZED			
	VOR	1300' (660')	1300' (660')	1630' (990')	1630' (990')
		R1200m	R1400m	R1400m	R1800m
	<i>ALS out</i>	R1500m	R1500m	R2000m	R2000m
	NDB	990' (350')	990' (350')	990' (350')	990' (350')
		R900m	R1000m	R1000m	R1400m
	<i>ALS out</i>	R1500m	R1500m	R1800m	R2000m
31	CAT 2 ILS	770' (100')	770' (100')	770' (100')	770' (100')
		RA97' - R350m	RA97' - R350m	RA97' - R350m	RA97' - R350m
	ILS	870' (200')	870' (200')	870' (200')	870' (200')
		R550m	R550m	R550m	R550m
	<i>ALS out</i>	R1000m	R1000m	R1000m	R1000m
	LOC	NOT AUTHORIZED			
	VOR	1330' (660')	1330' (660')	1660' (990')	1660' (990')
		R1200m	R1400m	R1400m	R1800m
	<i>ALS out</i>	R1500m	R1500m	R2000m	R2000m
	NDB	1010' (340')	1010' (340')	1010' (340')	1010' (340')
		R900m	R1000m	R1000m	R1400m
	<i>ALS out</i>	R1500m	R1500m	R1800m	R2000m

CIRCLE-TO-LAND	100 KT	135 KT	180 KT	205 KT
NIGHT not authorized	1530' (860')	1530' (860')	1530' (860') ❶	1530' (860') ❶
	CEIL1020'-V3000m	CEIL1020'-V3000m	CEIL1190'-V3000m	CEIL1190'-V4000m

❶ Wide bodied acft: **1660'**(990'), ceil 1320'-V5000m.**TAKE-OFF RWY 13, 31**

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

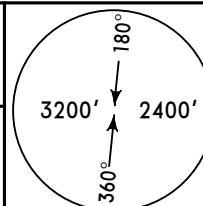
UMMS/MSQ
MINSK-2

JEPPESEN
12 NOV 10 **(11-1)** Eff 18 Nov

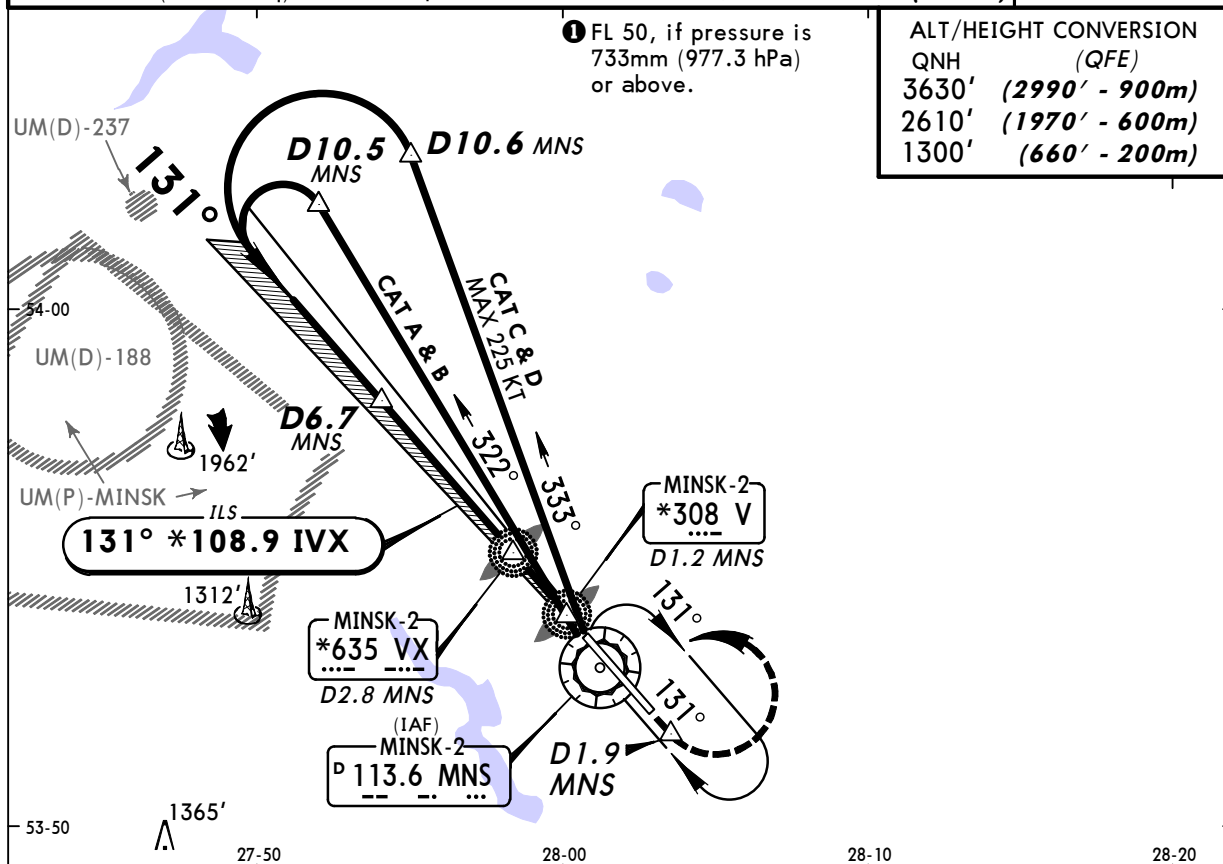
MINSK, BELARUS
ILS-Alpha Rwy 13

BRIEFING STRIP

ATIS 128.85 (Russian 135.85)	MINSK Approach (Radar/R)	*MINSK Radar	MINSK-2 Tower	Ground
	125.9	125.25	118.3	129.95
LOC IVX *108.9	Final Apch Crs 131°	GS LOM 1378' (738')	ILS DA(H) 840' (200')	Apt Elev 670' RWY 640'
MISSED APCH: Climb on 131° to 1300' (660') or above. Not before D1.9 MNS turn LEFT (MAX 225 KT) to VOR climbing to 2610' (1970') , then as directed.				
Alt Set: MM (hPa on req) QNH on req (QFE) Trans level: FL 60 1 Trans alt: 3630' (2990')				

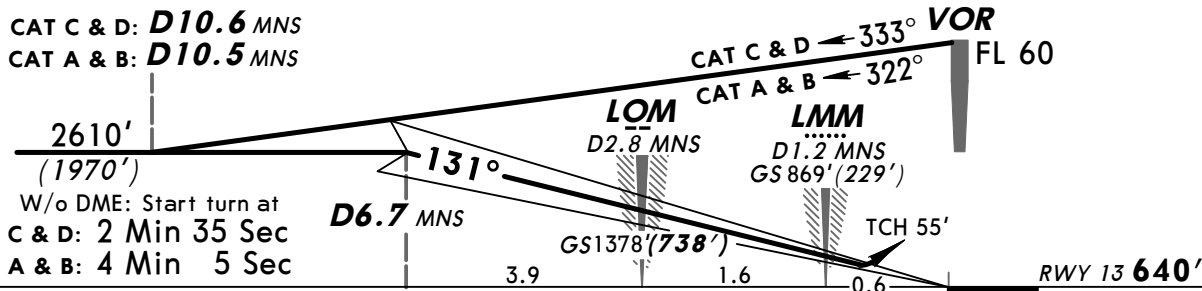


MSA
MNS VOR



ALT/HEIGHT CONVERSION	
QNH	(QFE)
3630'	(2990' - 900m)
2610'	(1970' - 600m)
1300'	(660' - 200m)

CAT C & D: **D10.6 MNS**
CAT A & B: **D10.5 MNS**



W/o DME: Start turn at
C & D: 2 Min 35 Sec
A & B: 4 Min 5 Sec

Gnd speed-Kts	70	90	100	120	140	160		HIALS	1300' (660') or above on 131°
ILS GS 3.00°	377	484	538	646	753	861		PAPI	

STRAIGHT-IN LANDING RWY 13			CEILING REQUIRED		CIRCLE-TO-LAND	
ILS		LOC (GS out)	NIGHT not authorized			
DA(H) 840' (200')						
FULL	ALS out		Max Kts	MDA(H)	CEIL-VIS	
A			100	1530' (860')	1020' - 3000m	
B			135	1530' (860')	1190' - 3000m	
C	RVR 720m VIS 800m	1200m	180	1530' (860')	1190' - 4000m	
D			205	1530' (860')	1190' - 4000m	

1 Wide bodied acft: MDA(H) 1660' (990'), CEIL-VIS 1320' - 5.0 km.

CHANGES: Rwy elev. Bearings.

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PANS OPS

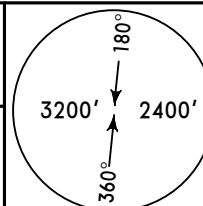
UMMS/MSQ
MINSK-2

JEPPESEN
12 NOV 10 **(11-2)** Eff 18 Nov

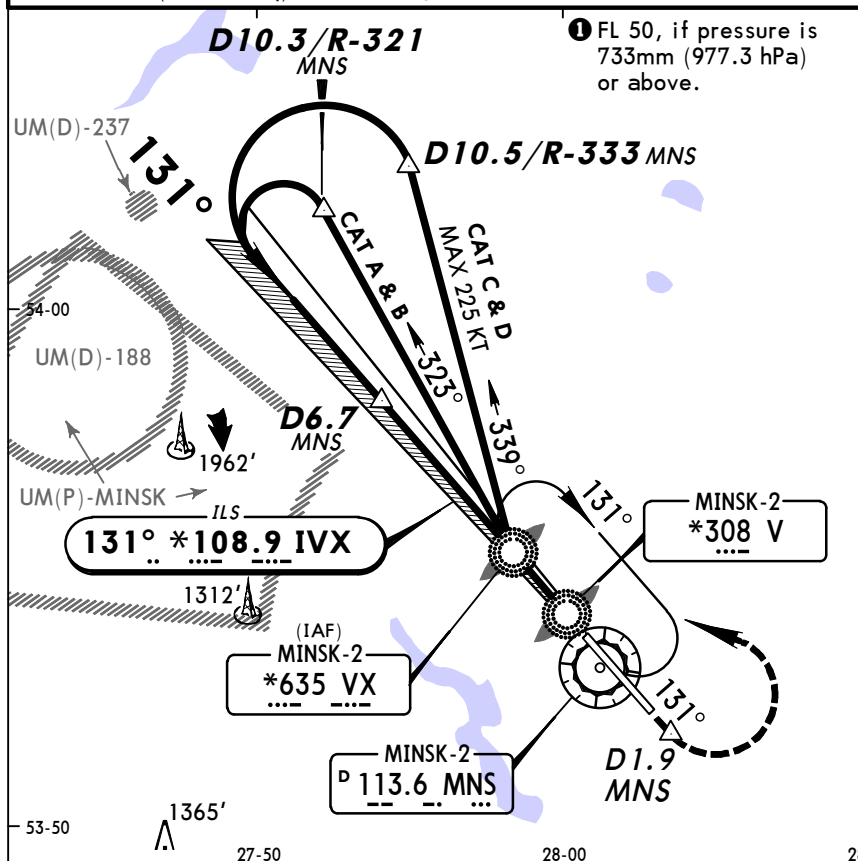
MINSK, BELARUS
ILS-Bravo Rwy 13

BRIEFING STRIP

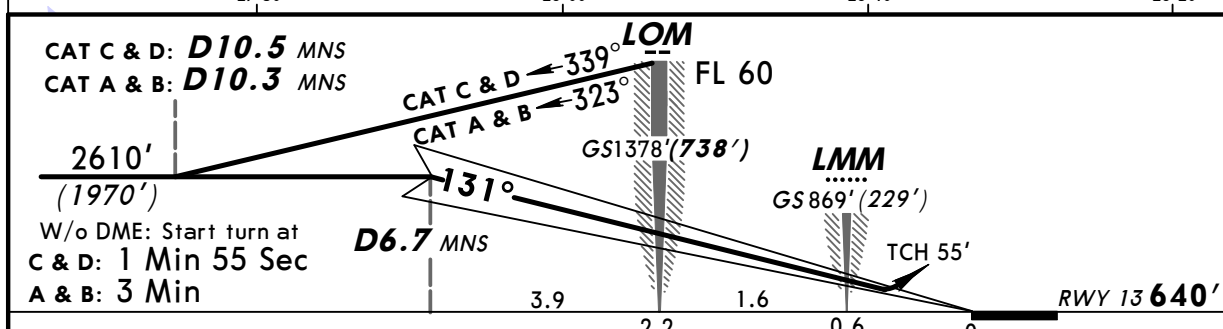
ATIS 128.85 (Russian 135.85)	MINSK Approach (Radar/R) 125.9	*MINSK Radar 125.25	MINSK-2 Tower 118.3	Ground 129.95
LOC IVX *108.9	Final Apch Crs 131°	GS LOM 1378' (738')	ILS DA(H) 840' (200')	Apt Elev 670' RWY 640'
MISSED APCH: Climb on 131° to 1300' (660') or above. Not before D1.9 MNS turn LEFT (MAX 225 KT) to VX NDB climbing to 2610' (1970') , then as directed.				
Alt Set: MM (hPa on req) QNH on req (QFE) Trans level: FL 60 1 Trans alt: 3630' (2990')				



MSA
MNS VOR



QNH	(QFE)
3630'	(2990' - 900m)
2610'	(1970' - 600m)
1300'	(660' - 200m)



Gnd speed-Kts	70	90	100	120	140	160
ILS GS 3.00°	377	484	538	646	753	861

2.2

0.8

0

HIALS

PAPI

1300'

(660')

or above

on

131°

STRAIGHT-IN LANDING RWY 13			CEILING REQUIRED		CIRCLE-TO-LAND	
ILS			LOC (GS out)		NIGHT not authorized	
DA(H) 840' (200')						
FULL			ALS out			
A					Max Kts	
B					100	
C					135	
D					180	
					205	

1 Wide bodied acft: MDA(H) 1660' (990'), CEIL-VIS 1320' - 5.0 km.

CHANGES: Rwy elev. Bearings.

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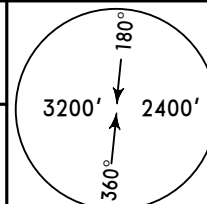
UMMS/MSQ
MINSK-2

JEPPESEN
12 NOV 10 **(11-3)** Eff 18 Nov

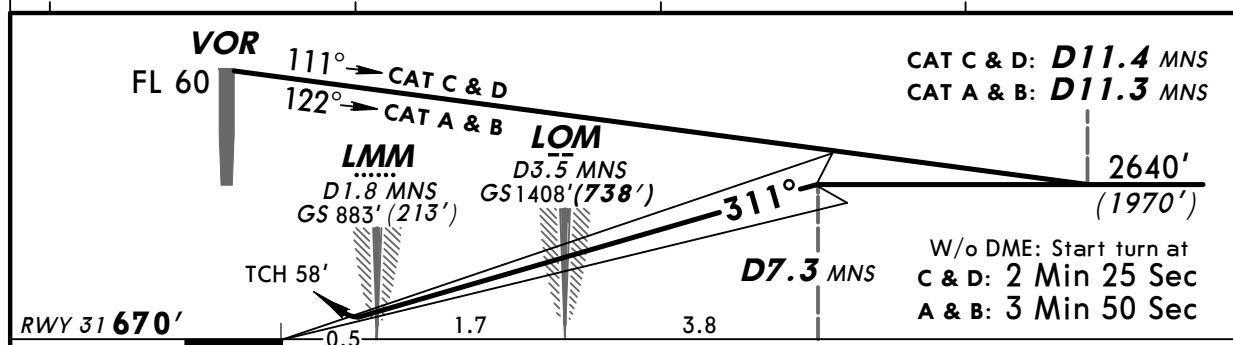
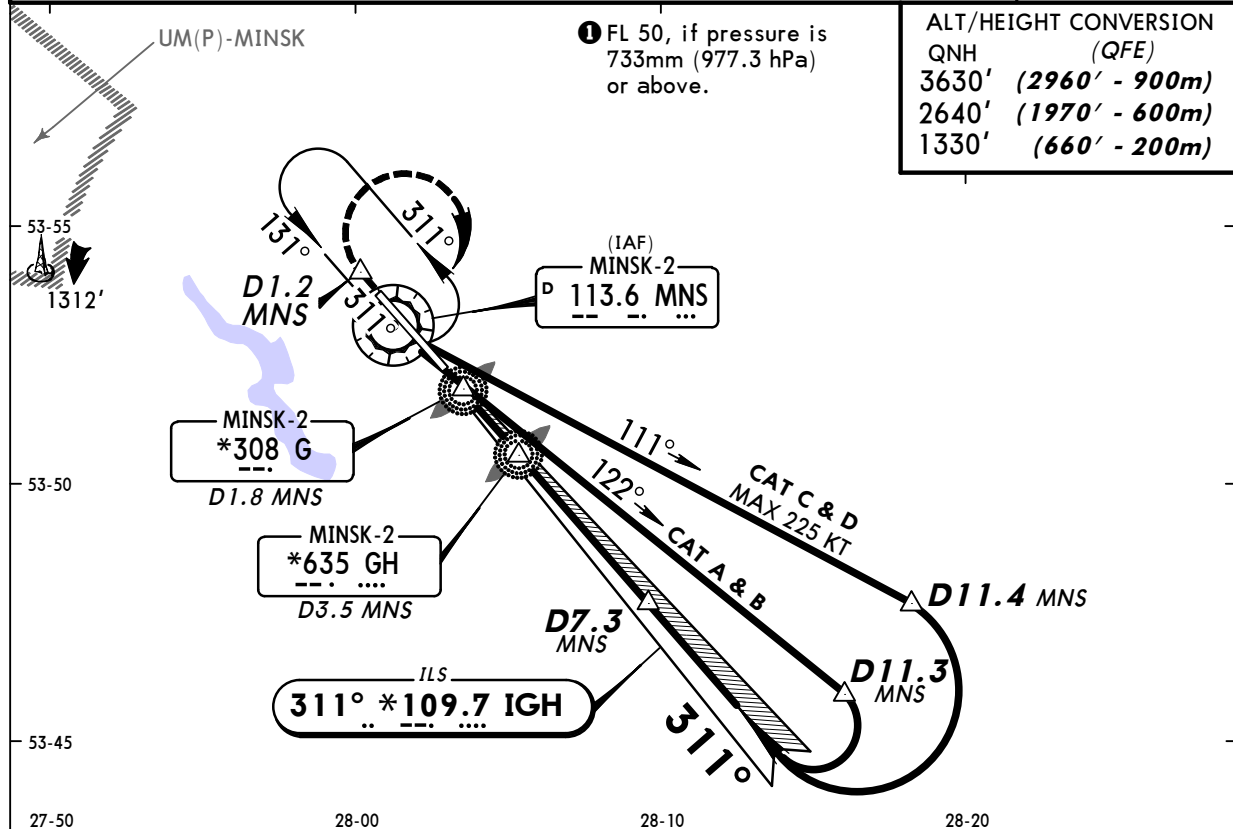
MINSK, BELARUS
ILS-Charlie Rwy 31

BRIEFING STRIP

ATIS 128.85 (Russian 135.85)	MINSK Approach (Radar/R)	*MINSK Radar	MINSK-2 Tower	Ground
	125.9	125.25	118.3	129.95
LOC IGH *109.7	Final Apch Crs 311°	GS LOM 1408' (738')	ILS DA(H) 870' (200')	Apt Elev 670' RWY 670'
MISSED APCH: Climb on 311° to 1330' (660') or above. Not before D1.2 MNS turn RIGHT (MAX 225 KT) to VOR climbing to 2640' (1970') , then as directed.				
Alt Set: MM (hPa on req) QNH on req (QFE) Trans level: FL 60 ① Trans alt: 3630' (2960')				



MSA
MNS VOR



Gnd speed-Kts	70	90	100	120	140	160
ILS GS 3.00°	377	484	538	646	753	861

STRAIGHT-IN LANDING RWY 31				CEILING REQUIRED		CIRCLE-TO-LAND	
ILS				NIGHT not authorized			
DA(H) 870' (200')							
	FULL	TDZ or CL out	ALS out	Max Kts	MDA(H)	CEIL-VIS	
A				100	1530' (860')	1020' - 3000m	
B				135			
C	RVR 550m VIS 800m	RVR 720m VIS 800m	1200m	180	1530' (860') ①	1190' - 3000m	
D				205	1530' (860') ①	1190' - 4000m	

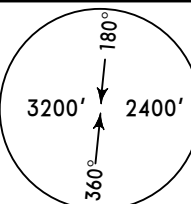
① Wide bodied acft: MDA(H) 1660' (990'), CEIL-VIS 1320' - 5.0 km.
CHANGES: Bearings. © JEPPESEN, 1998, 2010. ALL RIGHTS RESERVED.

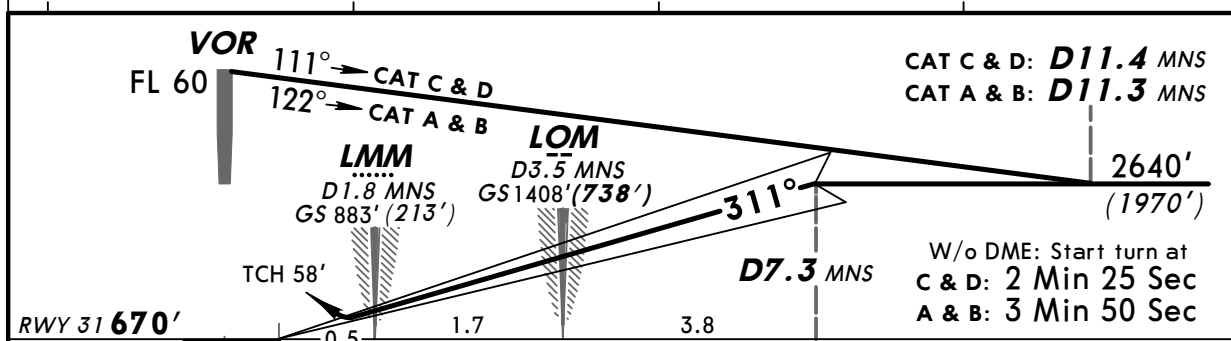
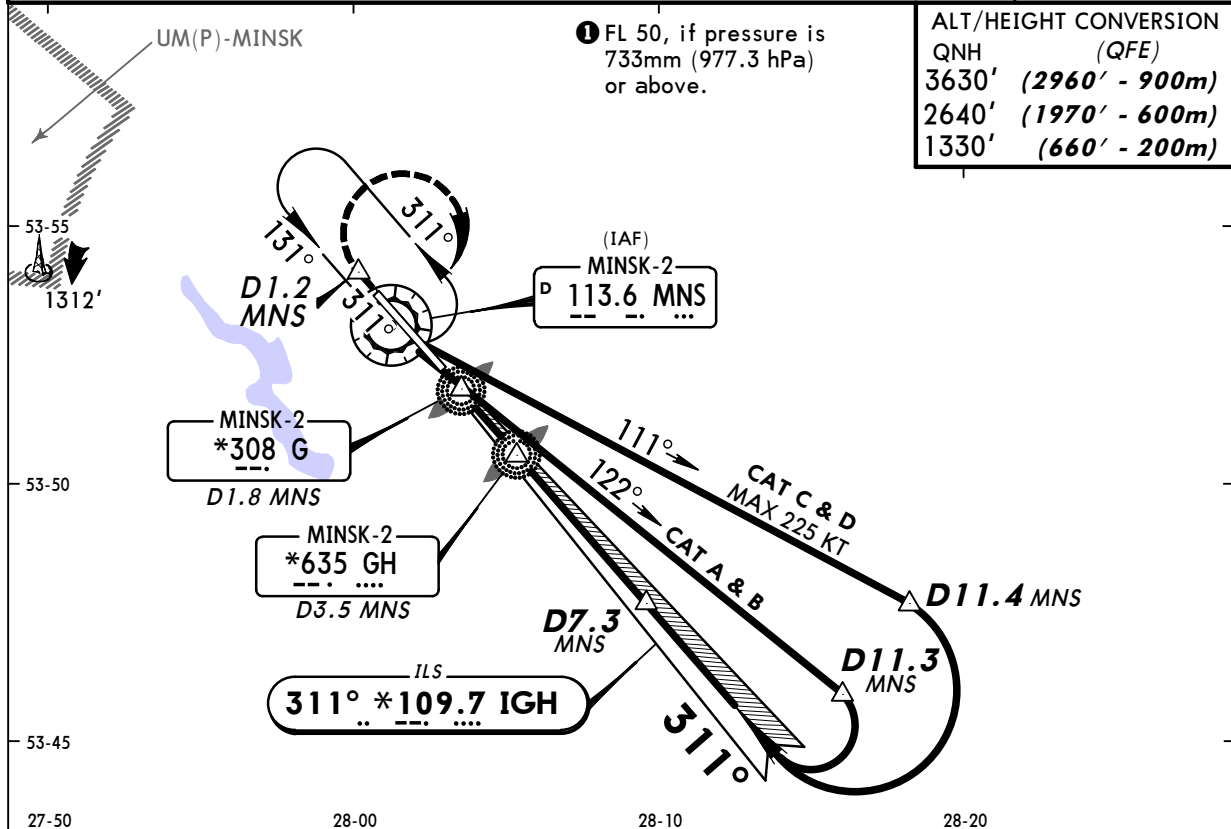
UMMS/MSQ
MINSK-2

JEPPESEN
12 NOV 10
Eff 18 Nov **11-3A**

MINSK, BELARUS
CAT II ILS-Charlie Rwy 31

BRIEFING STRIP

ATIS 128.85 (Russian 135.85)	MINSK Approach (Radar/R)	*MINSK Radar	MINSK-2 Tower	Ground
	125.9	125.25	118.3	129.95
LOC IGH *109.7	Final Apch Crs 311°	GS LOM 1408' (738')	CAT II ILS RA 97' DA(H) 770' (100')	Apt Elev 670' RWY 670'
MISSED APCH: Climb on 311° to 1330' (660') or above. Not before D1.2 MNS turn RIGHT (MAX 225 KT) to VOR climbing to 2640' (1970') , then as directed.				
Alt Set: MM (hPa on req) QNH on req (QFE) Trans level: FL 60 1 Trans alt: 3630' (2960') Special Aircrew & Acft Certification Required.				MSA MNS VOR



Gnd speed-Kts	70	90	100	120	140	160
GS	3.00°	377	484	538	646	753

STRAIGHT-IN LANDING RWY 31
CAT II ILS
ABCD
RA 97'
DA(H) **770' (100')**

RVR 350m

PANS OPS

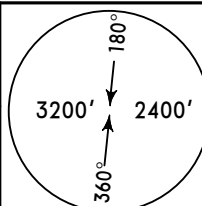
UMMS/MSQ
MINSK-2

JEPPESEN
12 NOV 10 **(11-4)** **Eff 18 Nov**

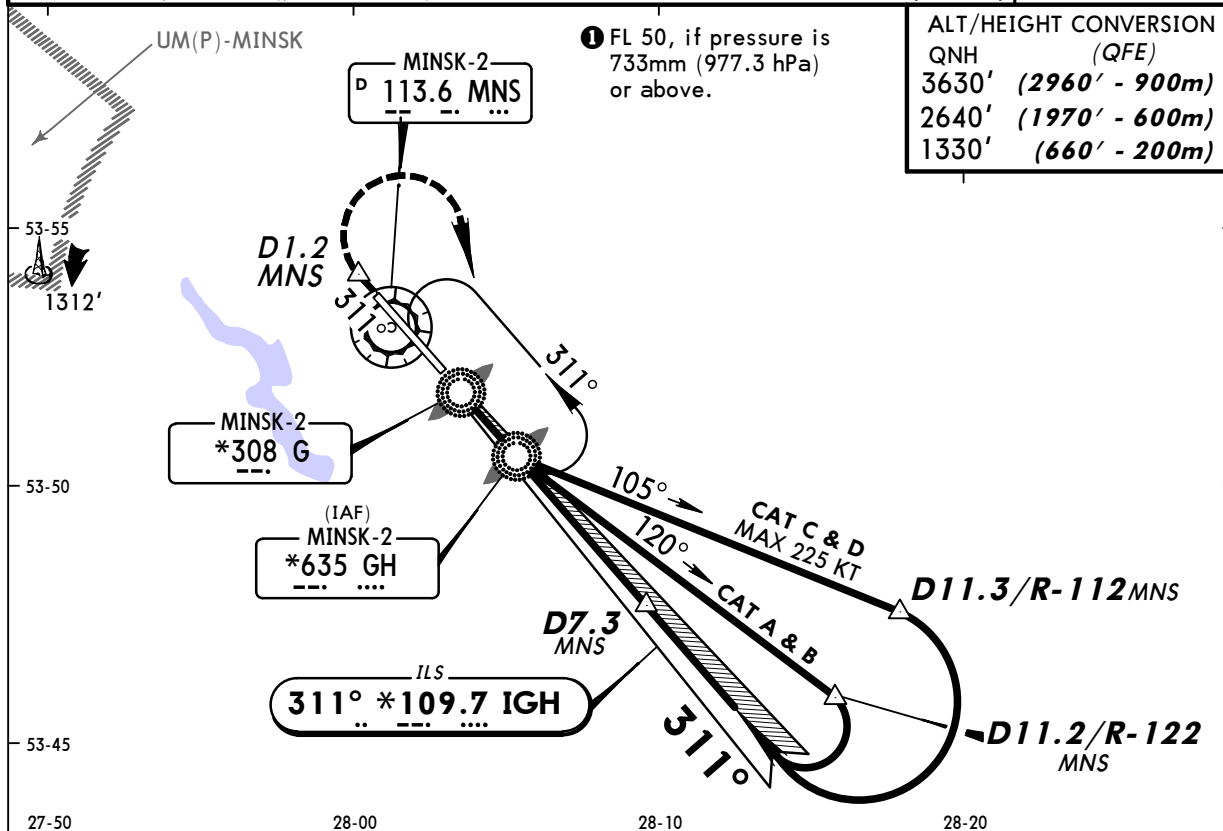
MINSK, BELARUS
ILS-Delta Rwy 31

BRIEFING STRIP

ATIS 128.85 (Russian 135.85)	MINSK Approach (Radar/R) 125.9	*MINSK Radar 125.25	MINSK-2 Tower 118.3	Ground 129.95
LOC IGH *109.7	Final Apch Crs 311°	GS LOM 1408' (738')	ILS DA(H) 870' (200')	Apt Elev 670' RWY 670'
MISSED APCH: Climb on 311° to 1330' (660') or above. Not before D1.2 MNS turn RIGHT (MAX 225 KT) to GH NDB climbing to 2640' (1970') , then as directed.				
Alt Set: MM (hPa on req) QNH on req (QFE) Trans level: FL 60 1 Trans alt: 3630' (2960')				

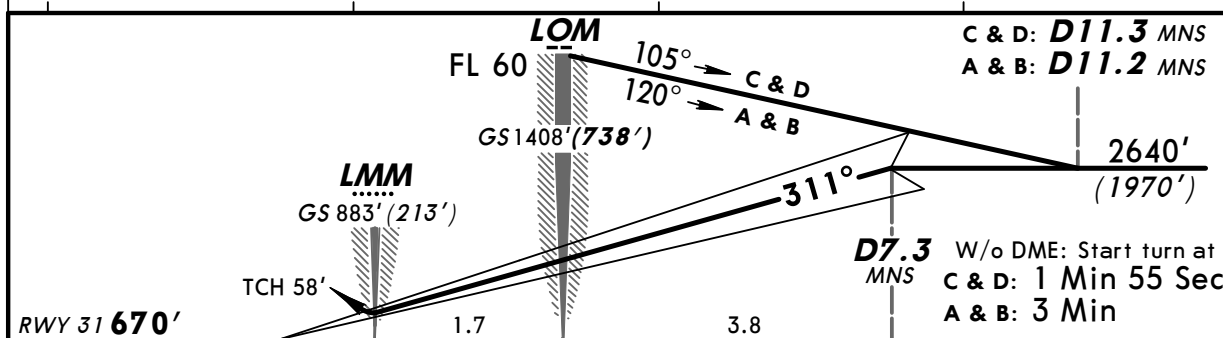


MSA
MNS VOR

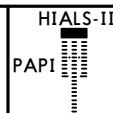


ALT/HEIGHT CONVERSION	QNH	(QFE)
3630'	(2960' - 900m)	
2640'	(1970' - 600m)	
1330'	(660' - 200m)	

1 FL 50, if pressure is 733mm (977.3 hPa) or above.



Gnd speed-Kts	70	90	100	120	140	160
ILS GS	3.00°	377	484	538	646	753



PANS OPS

STRAIGHT-IN LANDING RWY 31				CEILING REQUIRED		CIRCLE-TO-LAND		
ILS DA(H) 870'(200')			LOC (GS out)		NIGHT not authorized			
FULL		TDZ or CL out	ALS out		Max Kts	MDA(H)	CEIL-VIS	
A	RVR 550m VIS 800m	RVR 720m VIS 800m	1200m	NOT AUTHORIZED	100	1530'(860')	1020'- 3000m	
B					135			
C					180	1530'(860') I	1190'- 3000m	
D					205	1530'(860') I	1190'- 4000m	
I Wide bodied acft: MDA(H) 1660'(990'), CEIL-VIS 1320'- 5.0 km.								

1 Wide bodied acft: MDA(H) 1660' (990'), CEIL-VIS 1320' - 5.0 km.

CHANGES: Bearings.

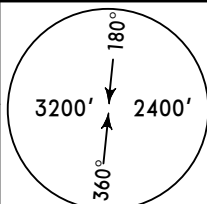
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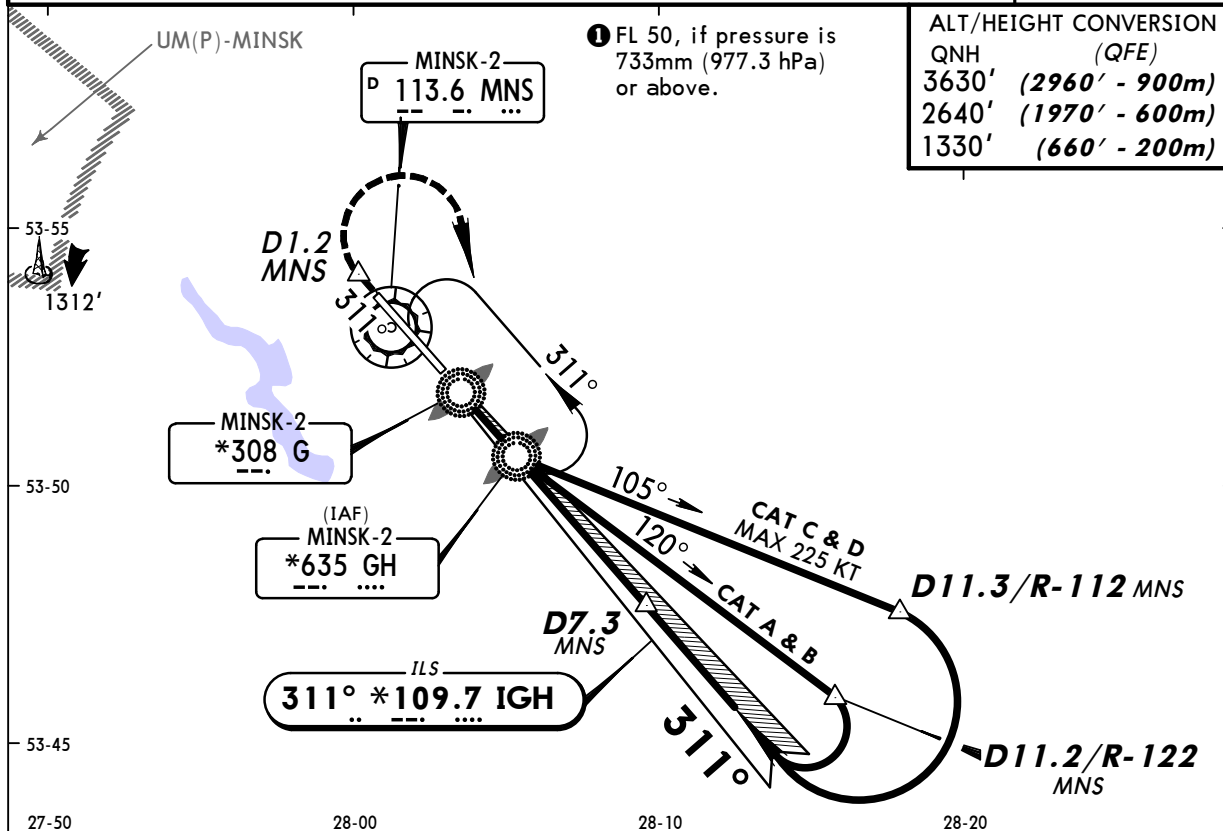
UMMS/MSQ
MINSK-2

JEPPESEN
12 NOV 10
Eff 18 Nov **11-4A**

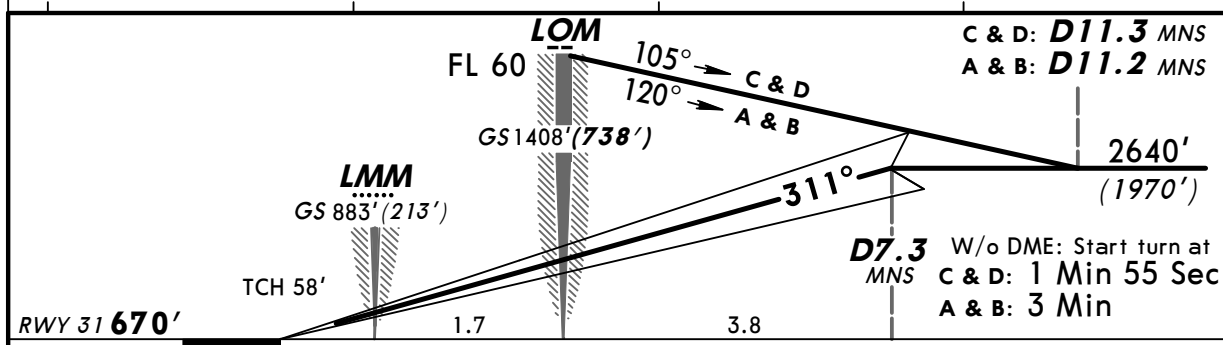
MINSK, BELARUS
CAT II ILS-Delta Rwy 31

BRIEFING STRIP

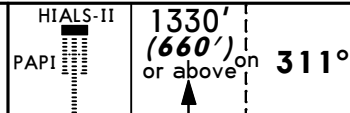
ATIS 128.85 (Russian 135.85)	MINSK Approach (Radar/R)	*MINSK Radar	MINSK-2 Tower	Ground
	125.9	125.25	118.3	129.95
LOC IGH *109.7	Final Apch Crs 311°	GS LOM 1408' (738')	CAT II ILS RA 97' DA(H) 770' (100')	Apt Elev 670' RWY 670'
MISSED APCH: Climb on 311° to 1330' (660') or above. Not before D1.2 MNS turn RIGHT (MAX 225 KT) to GH NDB climbing to 2640' (1970') , then as directed.				
Alt Set: MM (hPa on req) QNH on req (QFE) Trans level: FL 60 1 Trans alt: 3630' (2960') Special Aircrew & Acft Certification Required.				MSA MNS VOR



ALT/HEIGHT CONVERSION	QNH	(QFE)
3630'	(2960' - 900m)	
2640'	(1970' - 600m)	
1330'	(660' - 200m)	



Gnd speed-Kts	70	90	100	120	140	160
GS	3.00°	377	484	538	646	753



STRAIGHT-IN LANDING RWY 31
CAT II ILS
ABCD
RA 97'
DA(H) **770' (100')**

RVR 350m

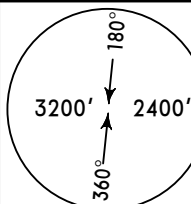
PANS OPS

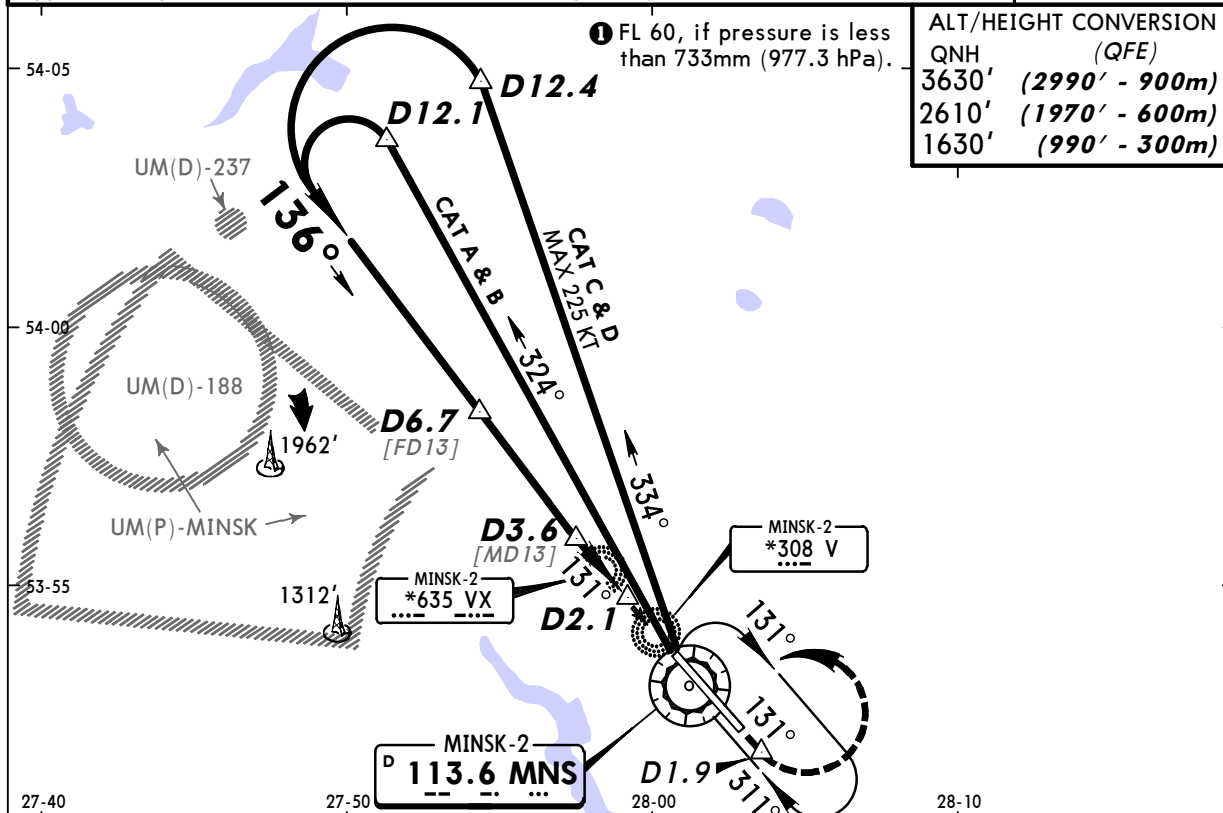
UMMS/MSQ
MINSK-2

JEPPesen
12 NOV 10 **(13-1)** **Eff 18 Nov**

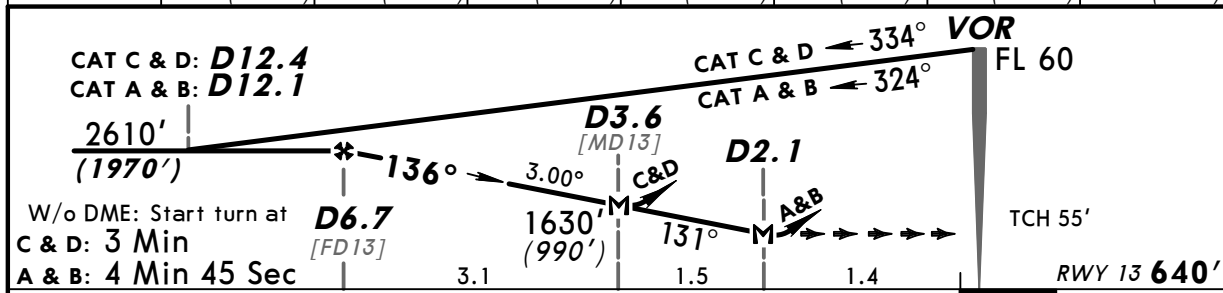
MINSK, BELARUS
VOR DME Rwy 13

BRIEFING STRIP

ATIS 128.85 (Russian 135.85)	MINSK Approach (Radar/R)	*MINSK Radar	MINSK-2 Tower	Ground
	125.9	125.25	118.3	129.95
VOR MNS 113.6	Final Apch Crs 136°	Minimum Alt D6.7 2610' (1970')	MDA(H) Refer to Minimums Apt Elev 670' RWY 640'	
MISSED APCH: Climb on 131° to 2610' (1970') not above. Not before D1.9 after crossing rwy, turn LEFT (MAX 225 KT) to VOR, then as directed.				
Alt Set: MM (hPa on req) QNH on req (QFE) Trans level: FL 50 ① Trans alt: 3630' (2990')				MSA MNS VOR
Approach slope descent shall be commenced after passing D6.7.				



MNS DME	6.6	6.1	5.6	5.0	4.5	3.9	3.4
ALTITUDE	2600' (1960')	2420' (1780')	2250' (1610')	2070' (1430')	1910' (1270)	1730' (1090')	1560' (920')



Gnd speed-Kts	70	90	100	120	140	160
Descent Angle 3.00°	372	478	531	637	743	849
CAT C & D: MAP at D3.6	CAT A & B: MAP at D2.1					

HIALS

PAPI

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STRAIGHT-IN LANDING RWY 13			CEILING REQUIRED		CIRCLE-TO-LAND	
MDA(H) AB: 1300' (660') CD: 1630' (990')			NIGHT not authorized			
ALS out			Max Kts	MDA(H)	CEIL-VIS	
A	1800m		100	1530' (860')	1020' - 3000m	
B			135			
C	4000m		180	1530' (860') ①	1190' - 4800m	
D			205			

① Wide bodied acft: MDA(H) 1660' (990'), CEIL-VIS 1320' - 5.0 km.

CHANGES: Note. Rwy elev. Bearings.

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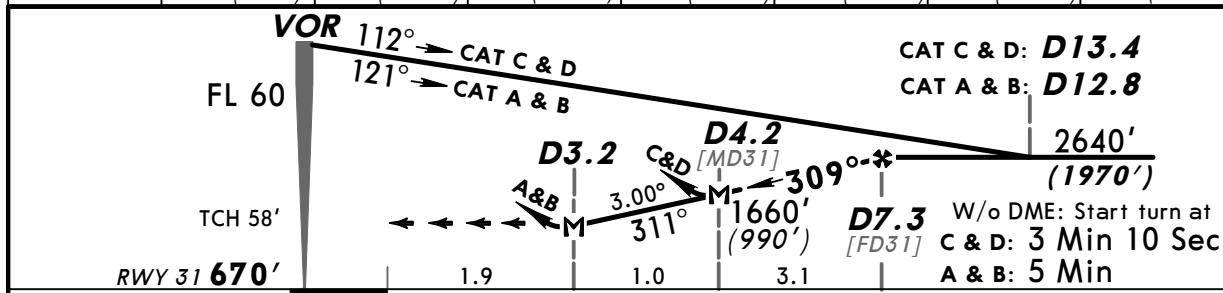
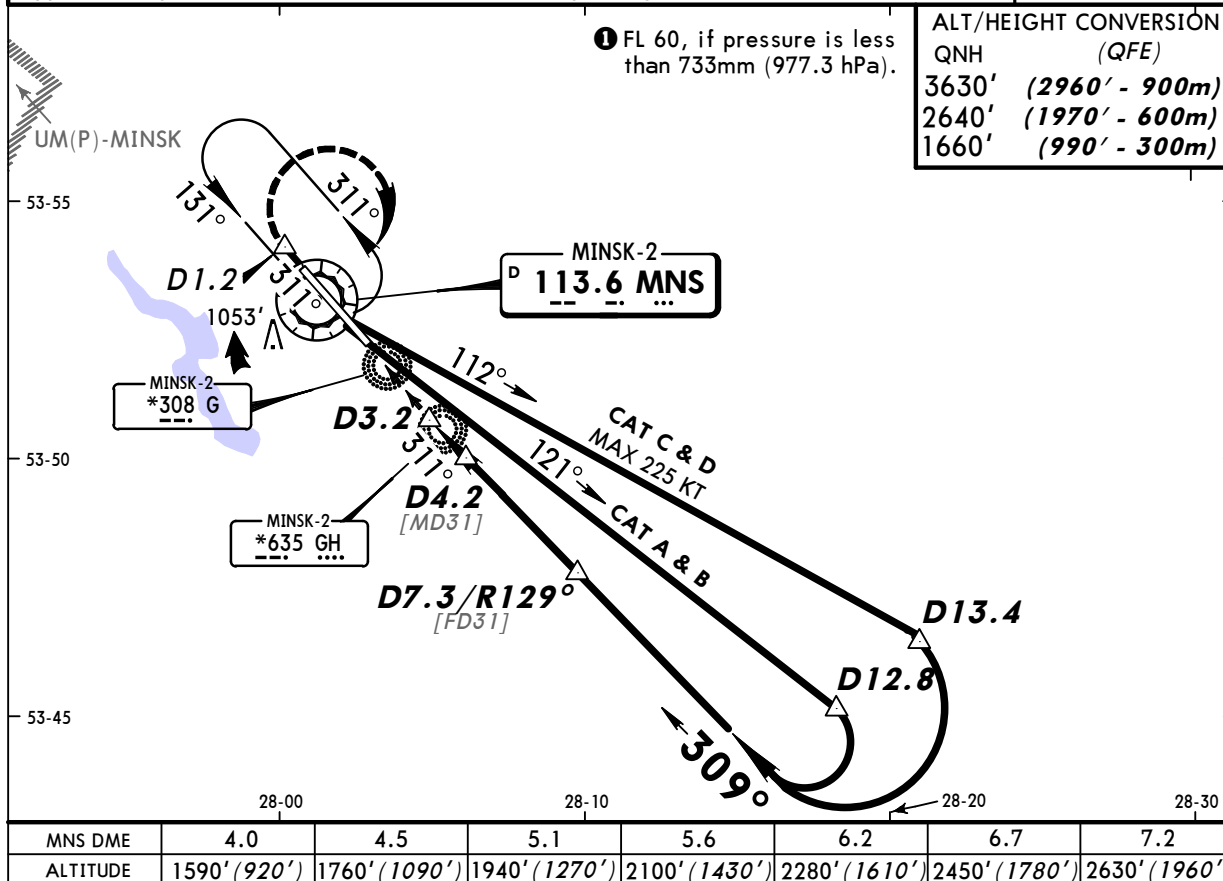
UMMS/MSQ
MINSK-2

JEPPesen
12 NOV 10 **(13-2)** **Eff 18 Nov**

MINSK, BELARUS
VOR DME Rwy 31

BRIEFING STRIP

ATIS 128.85 (Russian 135.85)	MINSK Approach (Radar/R)	*MINSK Radar	MINSK-2 Tower	Ground
	125.9	125.25	118.3	129.95
VOR MNS 113.6	Final Apch Crs 309°	Minimum Alt D7.3 2640' (1970')	MDA(H) Refer to Minimums	Apt Elev 670' RWY 670'
MISSED APCH: Climb on 311° to 2640' (1970') not above. Not before D1.2 after crossing rwy, turn RIGHT (MAX 225 KT) to VOR, then as directed.				
Alt Set: MM (hPa on req) QNH on req (QFE) Trans level: FL 50 1 Trans alt: 3630' (2960') Approach slope descent shall be commenced after passing D7.3 .				
				MSA MNS VOR



CAT C & D: MAP at D4.2	CAT A & B: MAP at D3.2
------------------------	------------------------

STRAIGHT-IN LANDING RWY 31			CEILING REQUIRED		CIRCLE-TO-LAND	
MDA(H) AB: 1330' (660') CD: 1660' (990')			NIGHT not authorized			
ALS out			Max Kts	MDA(H)	CEIL-VIS	
A 2400m			100	1530' (860')	1020' - 3200m	
B 4000m			135			
C 4800m			180	1530' (860') 1	1190' - 4800m	
D			205			

1 Wide bodied acft: MDA(H) 1660' (990'), CEIL-VIS 1320' - 5.0 km.

CHANGES: Note. Bearings.

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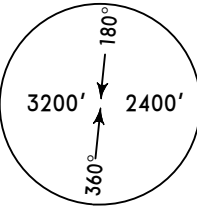
UMMS/MSQ
MINSK-2

JEPPesen
12 NOV 10 **(16-1)** **Eff 18 Nov**

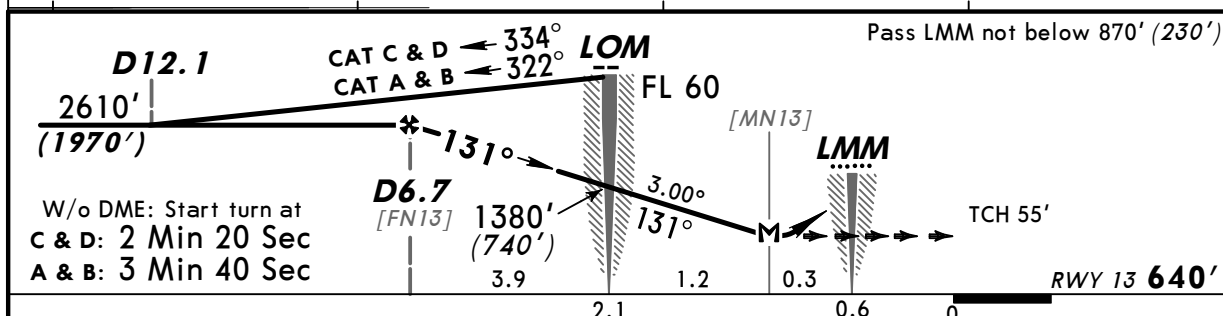
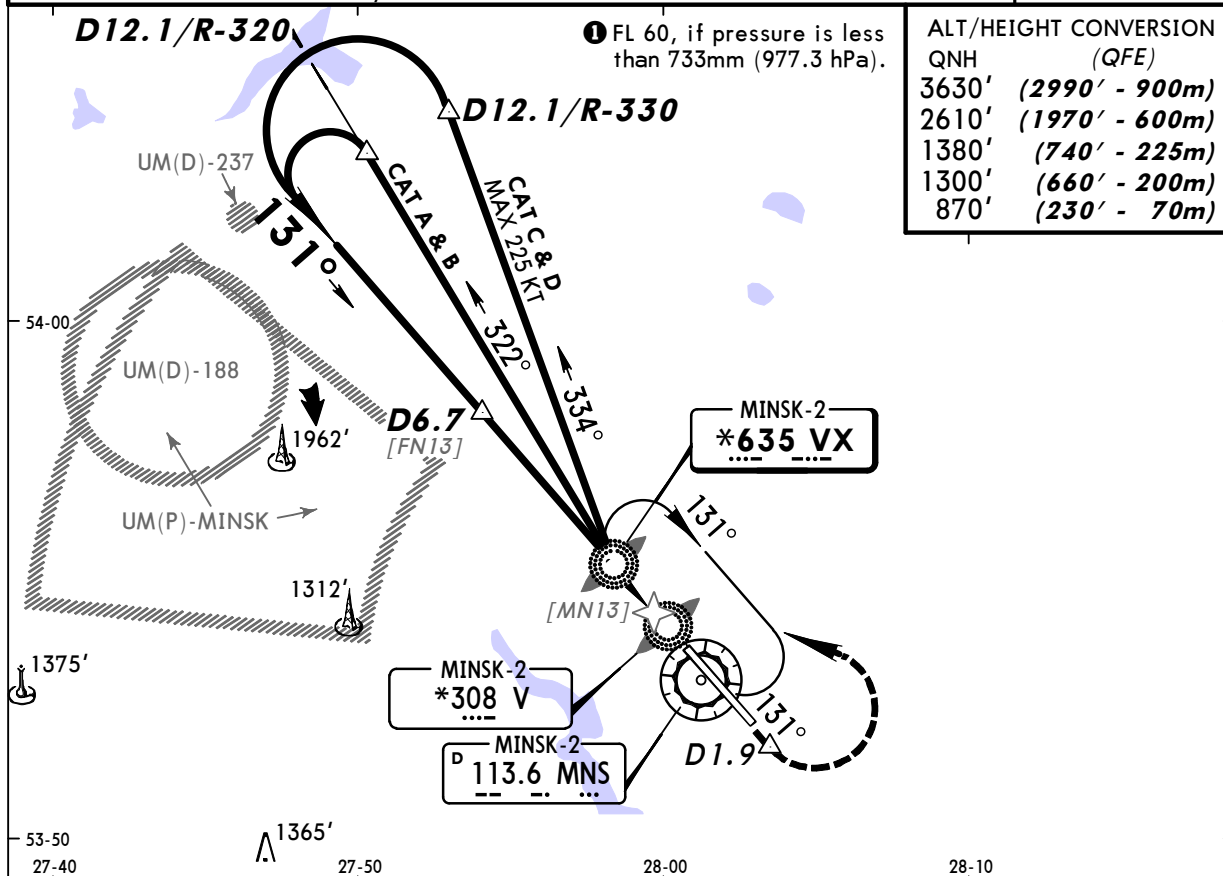
MINSK, BELARUS
2 NDB Rwy 13

BRIEFING STRIP

ATIS 128.85 (Russian 135.85)	MINSK Approach (Radar/R)	*MINSK Radar	MINSK-2 Tower	Ground
	125.9	125.25	118.3	129.95
NDB VX *635	Final Apch Crs 131°	Minimum Alt D6.7 2610' (1970')	MDA(H) 990' (350')	Apt Elev 670' RWY 640'
MISSED APCH: Climb on 131° to 1300' (660') or above. Not before D1.9 turn LEFT (MAX 225 KT) to VX NDB climbing to 2610' (1970'), then as directed.				
Alt Set: MM (hPa on req) QNH on req (QFE) Trans level: FL 50 1 Trans alt: 3630 (2990') 1. Approach slope descent shall be commenced after passing D6.7. 2. Actf w/o VOR DME descend by ATC.				



MSA
MNS VOR



MDA(H) 990' (350')	ALS out	Max Kts	MDA(H)	CEIL-VIS
A		100	1530' (860')	1020' - 3000m
B	1200m	135	1530' (860') 1	1190' - 3000m
C	RVR 1500m VIS 1600m	180	1530' (860') 1	1190' - 4000m
D	RVR 1500m VIS 1600m	205	1530' (860') 1	1190' - 4000m

STRAIGHT-IN LANDING RWY 13			CEILING REQUIRED		CIRCLE-TO-LAND	
NIGHT not authorized						
MDA(H) 990' (350')						
ALS out						
A						
B	1200m	RVR 1500m VIS 1600m				
C						
D	RVR 1500m VIS 1600m	2000m				

1 Wide bodied acft: MDA(H) 1660' (990'), CEIL-VIS 1320' - 5.0 km.

CHANGES: Note. Rwy elev. Bearings.

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UMMS/MSQ
MINSK-2

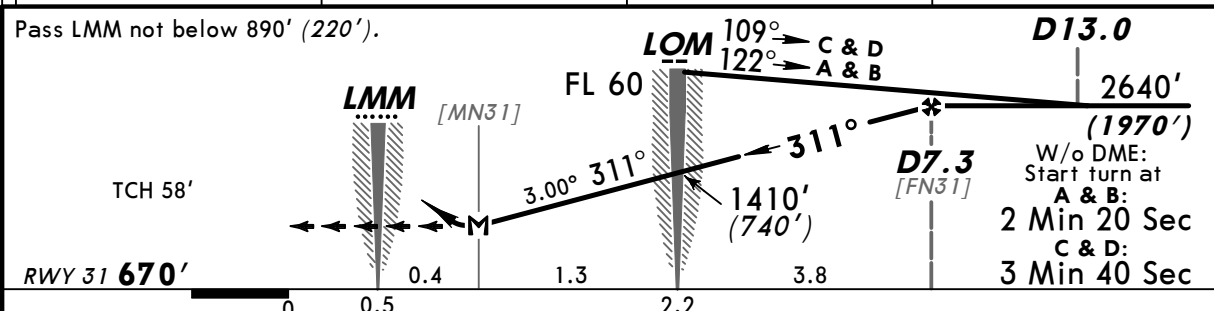
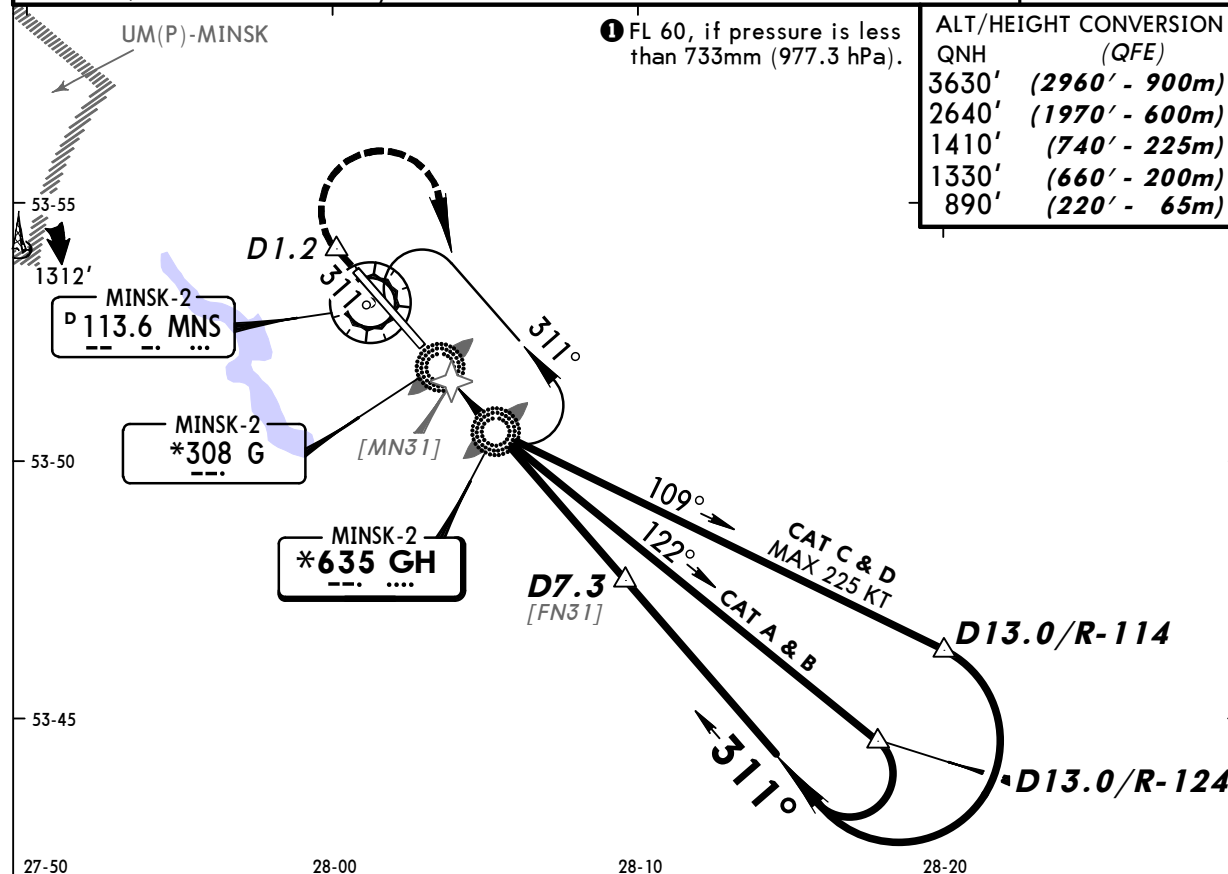
JEPPESSEN
12 NOV 10 (16-2) Eff 18 Nov

MINSK, BELARUS
2 NDB Rwy 31

ATIS 128.85 (Russian 135.85)	MINSK Approach (Radar/R) 125.9	*MINSK Radar 125.25	MINSK-2 Tower 118.3	Ground 129.95
NDB GH *635	<i>Final</i> <i>Apch Crs</i> 311°	<i>Minimum Alt</i> D7.3 2640' (1970')	<i>MDA(H)</i> 1010' (340')	<i>Apt Elev</i> 670' <i>RWY</i> 670'
MISSD APCH: Climb on 311° to 1330' (660') or above. Not before D1.2 turn RIGHT (MAX 225 KT) to GH NDB climbing to 2640' (1970'), then as directed.				
Alt Set: MM (hPa on req) QNH on req (QFE) Trans level: FL 50 ① Trans alt: 3630 (2960') 1. Approach slope descent shall be commenced after passing D7.3. 2. Act w/o VOR DME descend by ATC.				

MSA
MNS VOR

ALT/HEIGHT CONVERSION	
QNH	(QFE)
3630'	(2960' - 900m)
2640'	(1970' - 600m)
1410'	(740' - 225m)
1330'	(660' - 200m)
890'	(220' - 65m)



<i>Gnd speed-Kts</i>		70	90	100	120	140	160
<i>Descent Angle</i>	3.00°	372	478	531	637	743	849
<i>DZ.3 to MAP</i>	5.1	4:22	3:24	3:04	2:33	2:11	1:55

STRAIGHT-IN LANDING RWY 31

		$MDA_{(H)} 1010' (340')$	
		ALS out	
A	1200m	RVR 1500m VIS 1600m	
B			
C			
D	RVR 1500m VIS 1600m		

CEILING REQUIRED

CIRCLE-TO-LAND

NIGHT not authorized	
Max Kts	$MDA(H)$ $CEIL-VIS$
100	1530' (860') 1020' - 3000m
135	
180	1530' (860') I 1190' - 3000m
205	1530' (860') I 1190' - 4000m

1 Wide bodied acft: MDA(H) 1660' (990'), CEIL-VIS 1320' - 5.0 km.

CHANGES: Note. Bearings.

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