

UUDL/IAR
TUNOSHNA

JEPPESEN
2 JAN 09 10-2 Eff 15 Jan

YAROSLAVL, RUSSIA

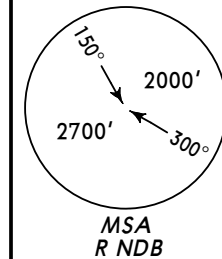
STAR

*ATIS
127.35

Apt Elev
305'

Alt Set: MM (hPa on request) QNH on request (QFE)
Trans level: FL39
FL49 if pressure is less than 751 mm (1001.3 hPa)
FL59 if pressure is 724 mm (965.3 hPa) or less
Trans alt: 2610' (2324')

BADAK 2, NODRI 2, OKAMI 2, POGET 2, VAREG 2 RWY 05 ARRIVALS

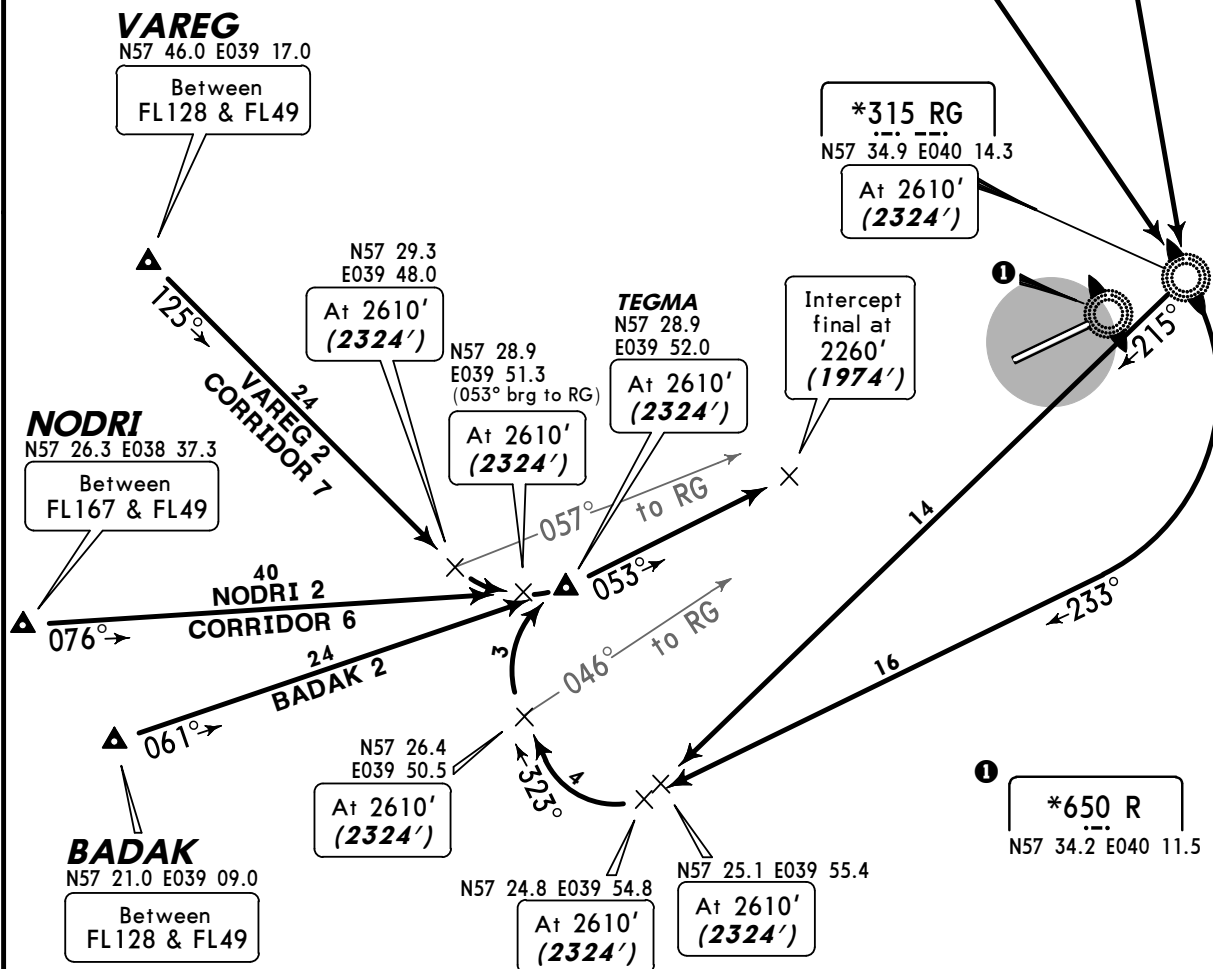


POGET
N58 18.6 E039 35.3
Between
FL167 & FL69

OKAMI
N58 12.0 E040 05.4
Between
FL157 & FL59

FL CONVERSION	
FL167	FL5100m
FL157	FL4800m
FL128	FL3900m
FL69	FL2100m
FL59	FL1800m
FL49	FL1500m
FL39	FL1200m

ALT/HEIGHT CONVERSION	
QNH	(QFE)
2610'	(2324' - 700m)
2260'	(1974' - 600m)



**UUDL/IAR
TUNOSHNA**

JEPPESEN
2 JAN 09 **10-2A** **Eff 15 Jan**

YAROSLAVL, RUSSIA

STAR[illegible]

UUDL/IAR
TUNOSHNA

JEPPESEN
27 MAR 09 10-3 Eff 9 Apr

YAROSLAVL, RUSSIA
SID

Apt Elev
305'

QNH on request (QFE)

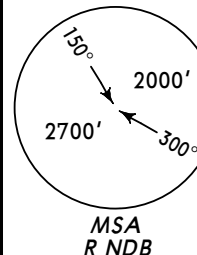
Trans level: FL39

FL49 if pressure is less than 751 mm (1001.3 hPa)

FL59 if pressure is 724 mm (965.3 hPa) or less

Trans alt: 2610' (2324')

Flights over the city of Yaroslavl below FL98 are prohibited.



BADAK 1, NODRI 1, OKAMI 1, POGET 1, VAREG 1 RWY 05 DEPARTURES

POGET

N58 18.6 E039 35.3

At or above
FL59

OKAMI

N58 12.0 E040 05.4

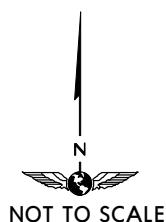
At or above
FL49

ALT/HEIGHT CONVERSION

QNH	(QFE)
1280'	(994' - 300m)
2610'	(2324' - 700m)

FL CONVERSION

FL39	FL1200m
FL49	FL1500m
FL59	FL1800m
FL98	FL3000m



VAREG

N57 46.0 E039 17.0

At or above
FL59

NODRI

N57 26.3 E038 37.3

At or above
FL59

TEGMA

N57 28.9 E039 52.0

At or above
2610' (2324')

*315 RG

N57 34.9 E040 14.3

At 1280'
(994')

BADAK

N57 21.0 E039 09.0

At or above
FL59

*650 R

N57 34.2 E040 11.6

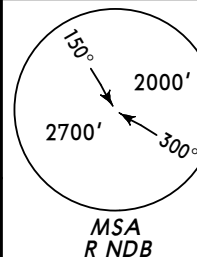
UUDL/IAR
 TUNOSHNA

JEPPESEN
 27 MAR 09 (10-3A) Eff 9 Apr

YAROSLAVL, RUSSIA
 SID

Apt Elev
 305'

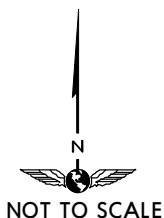
QNH on request (QFE)
 Trans level: FL39
 FL49 if pressure is less than 751 mm (1001.3 hPa)
 FL59 if pressure is 724 mm (965.3 hPa) or less
 Trans alt: 2610' (2309')
 Flights over the city of Yaroslavl below FL98 are prohibited.



BADAK 3, NODRI 3, OKAMI 3, POGET 3, VAREG 3 RWY 23 DEPARTURES

ALT/HEIGHT CONVERSION
 QNH (QFE)
 1290' (989' - 300m)
 2610' (2309' - 700m)

FL CONVERSION
 FL39 FL1200m
 FL49 FL1500m
 FL59 FL1800m
 FL98 FL3000m



POGET
 N58 18.6 E039 35.3
 At or above
 FL59

OKAMI
 N58 12.0 E040 05.4
 At or above
 FL49

***650 R**
 N57 34.2 E040 11.6

VAREG
 N57 46.0 E039 17.0
 At or above
 FL59

NODRI
 N57 26.3 E038 37.3
 At or above
 FL59

TEGMA
 N57 28.9 E039 52.0
 At or above
 2610' (2309')

***315 RG**
 N57 34.9 E040 14.3

OKAMI 3
 POGET 3
 Turn at
 1290' (989')

BADAK
 N57 21.0 E039 09.0
 At or above
 FL59

BADAK 3, NODRI 3, VAREG 3

These SIDs require a minimum climb gradient of 237' per NM (3.9%) up to TEGMA.

Gnd speed-KT	75	100	150	200	250	300
237' per NM	296	395	592	790	987	1185

If unable to comply inform ATC.

UUDL/IAR
Apt Elev **305'**
N57 33.6 E040 09.4



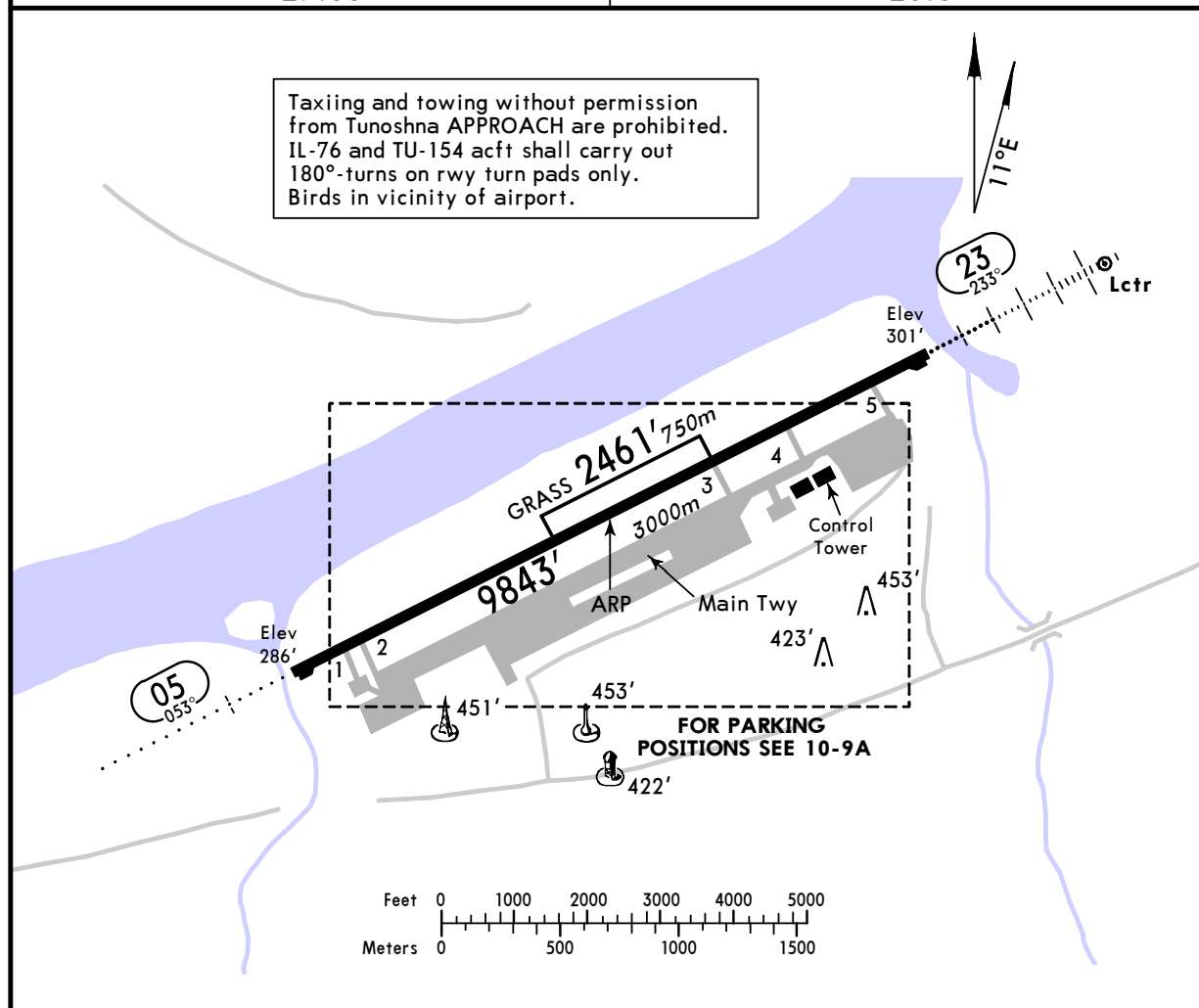
2 JAN 09

10-9

Eff 15 Jan

YAROSLAVL, RUSSIA
TUNOSHNA

*ATIS	*TUNOSHNA Approach (GND/TWR)
127.35	120.3



ADDITIONAL RUNWAY INFORMATION

RWY		USABLE LENGTHS		TAKE-OFF	WIDTH
		Threshold	Glide Slope		
05	RL (60m) ALS PAPI-L (angle 3.0°) RVR				144'
23	RL (60m) HIALS PAPI-L (angle 3.0°) RVR		8859' 2700m		44m
05 ① 23	Grass runway				328' 100m

❶ Available in winter only.

TAKE-OFF

AIR CARRIER (JAA)

All Rwys

LVP must be in force

RCLM (DAY only)
or RL

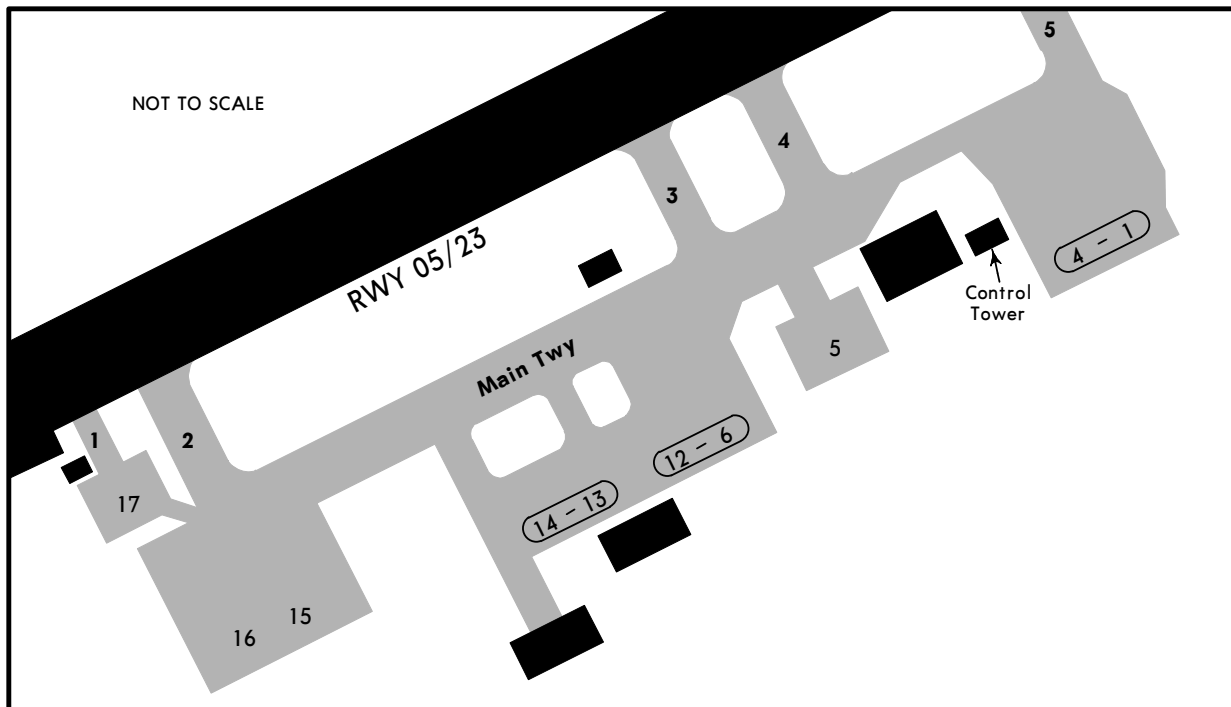
RCLM (DAY only)
or RL

A		
B	250m	400m
C		
D	300m	

UUDL/IAR

JEPPESEN
2 JAN 09 (10-9A) Eff 15 Jan

YAROSLAVL, RUSSIA
TUNOSHNA



Main Twy from Twy 4 to stands 1 thru 4 is not available.
Stands 6 thru 12 available for helicopters.
Stand 17 available as quarantine stand.

UUDL/IAR

 **JEPPESEN**
2 JAN 09 **(10-9X)** Eff 15 Jan

JAA MINIMUMS
YAROSLAVL, RUSSIA
ТУНОШНА

STRAIGHT-IN RWY		A	B	C	D
05	NDB	1110' (824')	1110' (824')	1110' (824')	1110' (824')
		R1500m	R1500m	R2000m	R2000m
23	ILS	501' (200')	501' (200')	501' (200')	501' (200')
		R550m	R550m	R550m	R550m
	ALS out	R1000m	R1000m	R1000m	R1000m
	LOC	NOT AUTHORIZED			
	2 NDB	630' (329')	630' (329')	630' (329')	630' (329')
		R900m	R1000m	R1000m	R1400m
	ALS out	R1500m	R1500m	R1800m	R2000m
RG LOM or R LMM		1060' (759')	1060' (759')	1060' (759')	1060' (759')
		R1200m	R1400m	R1400m	R1800m
	ALS out	R1500m	R1500m	R2000m	R2000m

TAKE-OFF RWY 05, 23

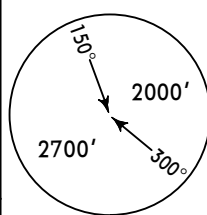
LVP must be in Force			
RCLM (DAY only) or RL		RCLM (DAY only) or RL	NIL (DAY only)
A	250m	400m	500m
B			
C			
D	300m		

UUDL/IAR
TUNOSHNA

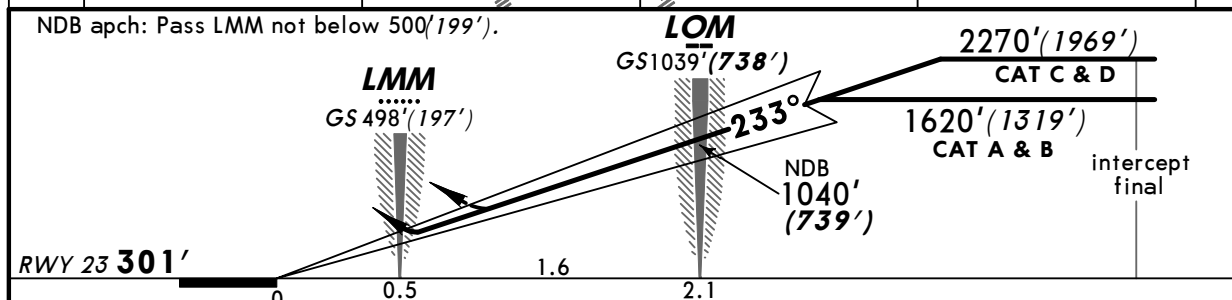
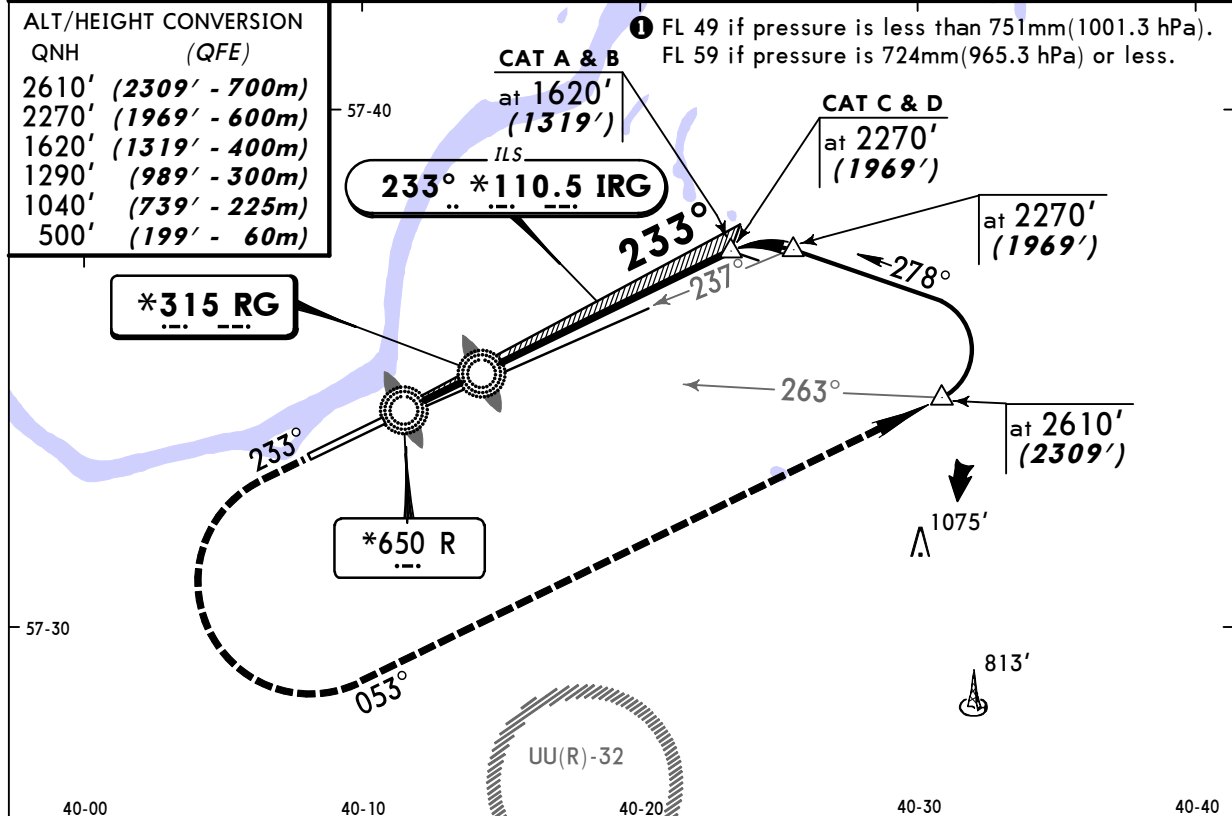
JEPPESSEN
2 JAN 09 **11-1** Eff 15 Jan

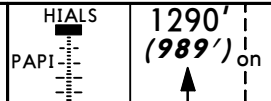
YAROSLAVL, RUSSIA
ILS or 2 NDB Rwy 23

BRIEFING STRIP

*ATIS 127.35		*TUNOSHNA Approach (APP/SRE/TWR) 120.3		*Ground 120.3	
LOC IRG *110.5	Final Apch Crs 233°	GS LOM 1039' (738')	ILS DA(H) 501' (200')	Apt Elev 305' RWY 301'	
NDB RG *315		Minimum Alt LOM 1040' (739')	2 NDB MDA(H) 630' (329')		
MISSED APCH: Climb on 233° to 1290' (989'), then turn LEFT onto 053°, then according to chart. Start turn at least 5.4 NM from threshold rwy 23.					
Alt Set: MM (hPa on req)		QNH on req (QFE)		Trans level: FL 39 1	
				Trans alt: 2610' (2309')	

ALT/HEIGHT CONVERSION	
QNH	(QFE)
2610'	(2309' - 700m)
2270'	(1969' - 600m)
1620'	(1319' - 400m)
1290'	(989' - 300m)
1040'	(739' - 225m)
500'	(199' - 60m)



Gnd speed-Kts	70	90	100	120	140	160	
ILS GS 3.00° or NDB Descent Gradient 5.2%	377	484	538	646	753	861	

STRAIGHT-IN LANDING RWY 23							
ILS DA(H) 501' (200')		LOC (GS out)		2 NDB MDA(H) 630' (329')		RG LOM or R LMM MDA(H) 1060' (759')	
FULL	ALS out				ALS out		ALS out
A							
B	RVR 720m VIS 800m	1200m		1200m	RVR 1500m VIS 1600m	3200m	
C		NOT AUTHORIZED				3200m	3600m
D				RVR 1500m VIS 1600m		3600m	4000m

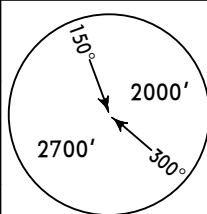
PANS OPS

UUDL/IAR
TUNOSHNA

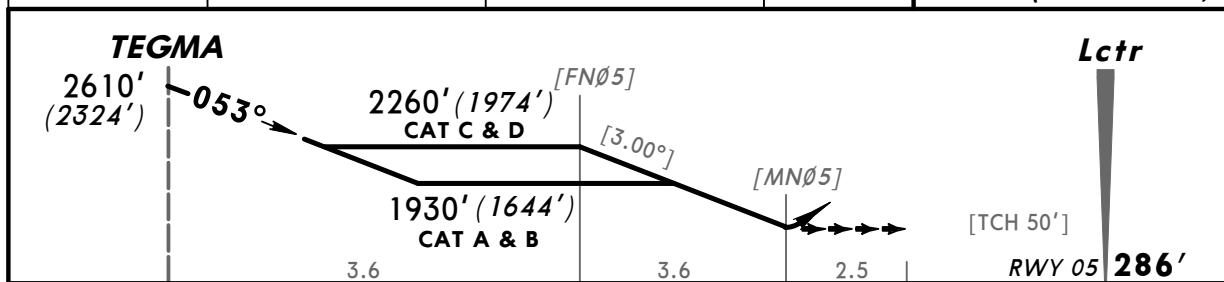
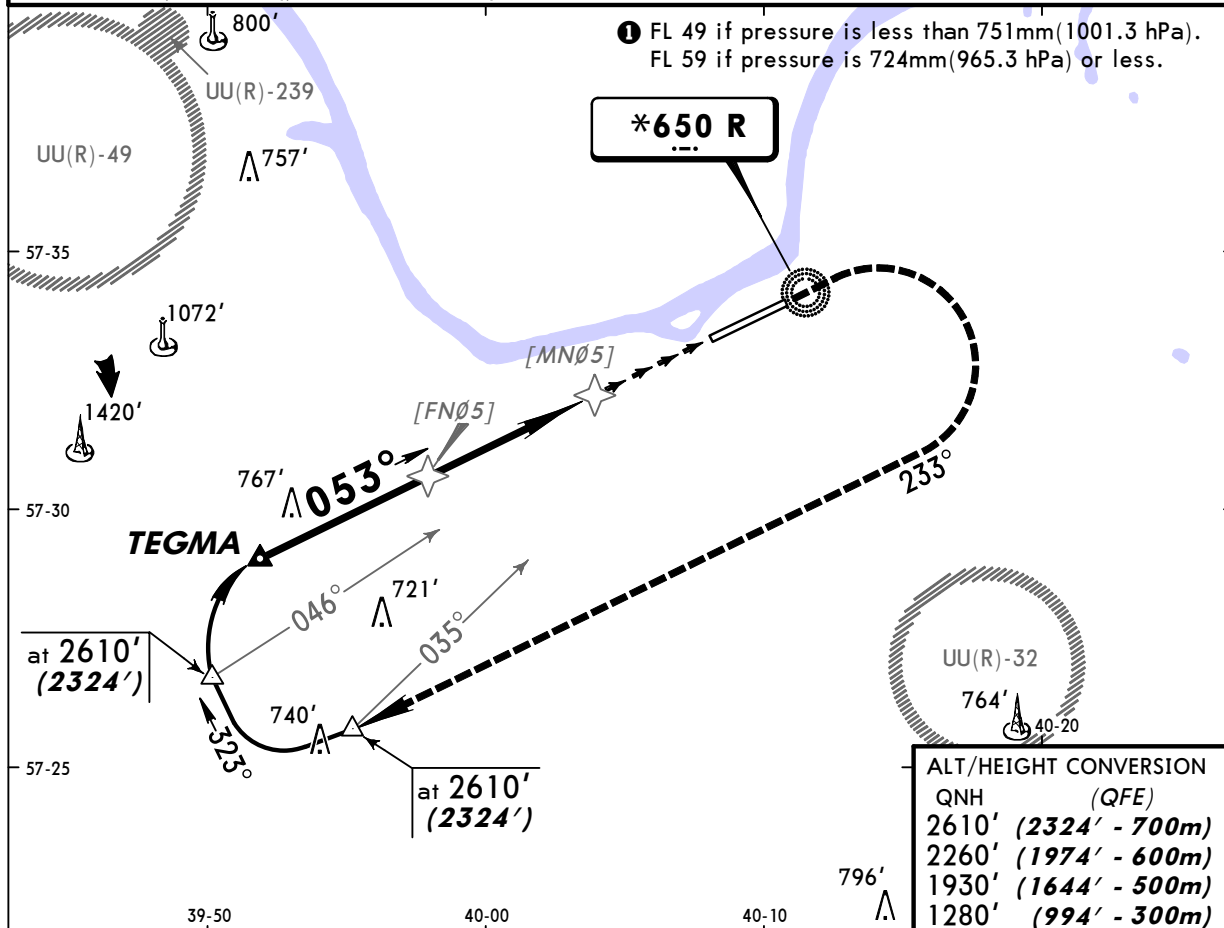
JEPPESEN
2 JAN 09 **16-1** Eff 15 Jan

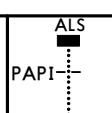
YAROSLAVL, RUSSIA
NDB Rwy 05

BRIEFING STRIP

*ATIS 127.35		*TUNOSHNA Approach (APP/SRE/TWR) 120.3		*Ground 120.3		 MSA R Lctr
Lctr R *650	Final Apch Crs 053°	Minimum Alt No FAF	MDA(H) 1110' (824')	Apt Elev 305' RWY 286'		
MISSED APCH: Climb on 053° to 1280' (994'), then turn RIGHT onto 233°, then according to chart.						

Alt Set: MM (hPa on req) QNH on req (QFE) Trans level: FL 39 **1** Trans alt: 2610' (**2324'**)



Gnd speed-Kts	70	90	100	120	140	160	 ALS PAPI	1280' (994') on 053°
Descent gradient 5.24% or	372	478	531	637	743	849		
Descent angle [3.00°]								

STRAIGHT-IN LANDING RWY 05			
MDA(H) 1110' (824')		ALS out	
A	3200m		
B			
C	4000m		
D	4400m		

PANS OPS