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Revision Letter For Cycle 04-2012

Change Notices

Notebook

General Information

Location: Bismarck ND USA
IATA Code: BIS
Lat/Long: N46° 46.4' W100° 44.7'
Elevation: 1661 ft

Airport Use: Public
Magnetic Variation: 6.5°E
Sectional Chart: Twin Cities

Fuel Types: 100 Octane (LL), Jet A
Oxygen Types: High Pressure, Low Pressure
Repair Types: Major Airframe, Major Engine
Customs: No
Airport Type: IFR
Landing Fee: No
Control Tower: Yes
Jet Start Unit: Yes
LLWS Alert: No
Beacon: Yes

Sunrise: 1327 Z
Sunset: 0025 Z,

Runway Information

Runway: 03
Length x Width: 6600 ft x 100 ft
Surface Type: asphalt
TDZ-Elev: 1661 ft
Lighting: Edge, REIL, Part time

Runway: 13
Length x Width: 8794 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 1655 ft
Lighting: Edge, ALS

Runway: 21
Length x Width: 6600 ft x 100 ft
Surface Type: asphalt
TDZ-Elev: 1661 ft
Lighting: Edge, REIL, Part time

Runway: 31
Length x Width: 8794 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 1645 ft
Lighting: Edge, ALS

Communication Information

ATIS 119.35

ASOS 119.35

Bismarck Tower 118.3 CTAF

Bismarck Ground Control 121.9

Bismarck Approach Control 126.3

Bismarck Departure Control 126.3

Bismarck Mun Unicom 122.95

Bismarck Radar 126.3

Army Guard Operations 134.1 Military

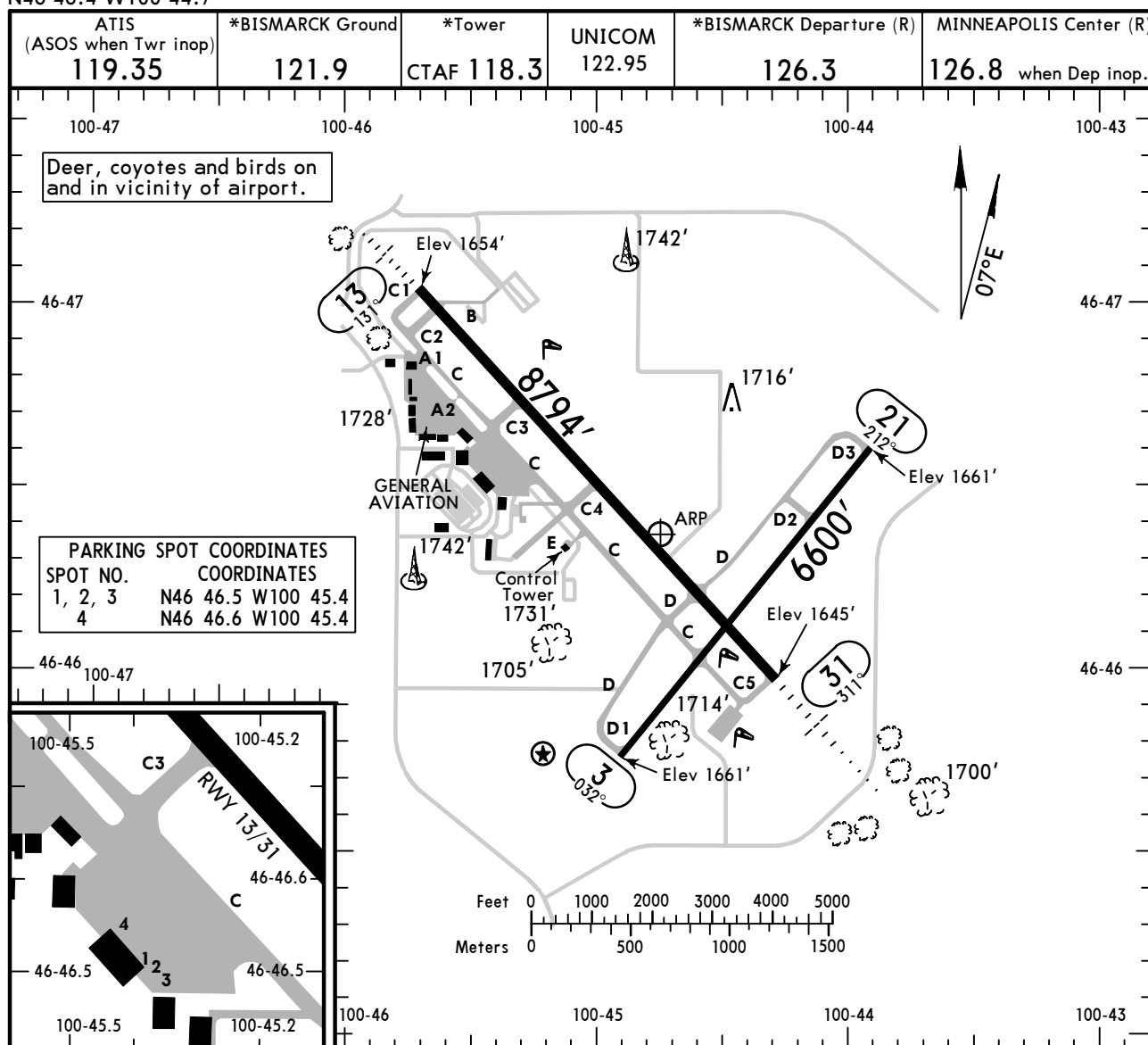
Grand Forks Flight Service Station 122.2 RCO

Minneapolis Center 126.8 Remote Communications Air-Ground

KBIS/BIS
Apt Elev **1661'**
N46 46.4 W100 44.7

JEPPESSEN
29 APR 11 **11-1** **Eff 5 May**

BISMARCK, N DAK
BISMARCK MUN



- ① Preset on medium intensity when Twr inop.
② Activate on 118.3 when Twr inop.

TAKE-OFF & OBSTACLE DEPARTURE PROCEDURE

All Rwys			
Adequate Vis Ref		STD	
1 & 2 Eng	RVR 16 or 1/4	RVR 50 or 1	
3 & 4 Eng		RVR 24 or 1/2	

OBSTACLE DP: Rwy 13, climb heading 131° to 2400' before turning right. Rwy 21, climb heading 212° to 3700' before turning left. Rwy 31, climb heading 311° to 2200' before turning right.

FOR FILING AS ALTERNATE

Authorized Only When Twr Operating

ILS Rwy 31		ILS Rwy 13 LOC Rwy 13	LOC Rwy 31 RADAR-1	RNAV (GPS) Rwy 3 RNAV (GPS) Rwy 13 RNAV (GPS) Rwy 21	RNAV (GPS) Rwy 31 VOR-A
A	700-2	800-2	800-2	800-2	
B					
C					
D		800-2 1/4			

CHANGES: Usable lengths, alternate minimums.

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A
M
E
N
D
8

KBIS/BIS BISMARCK MUN

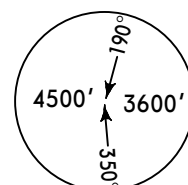
JEPPESSEN
29 APR 11 (11-1) Eff 5 May

BISMARCK, N DAK
ILS or LOC Rwy 13

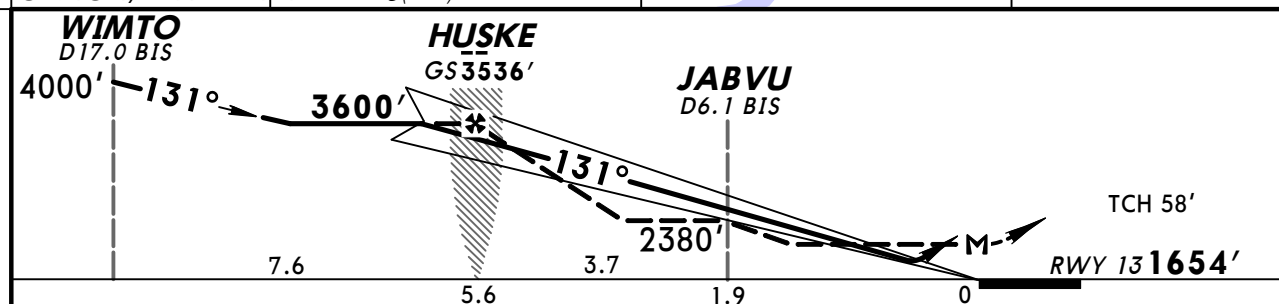
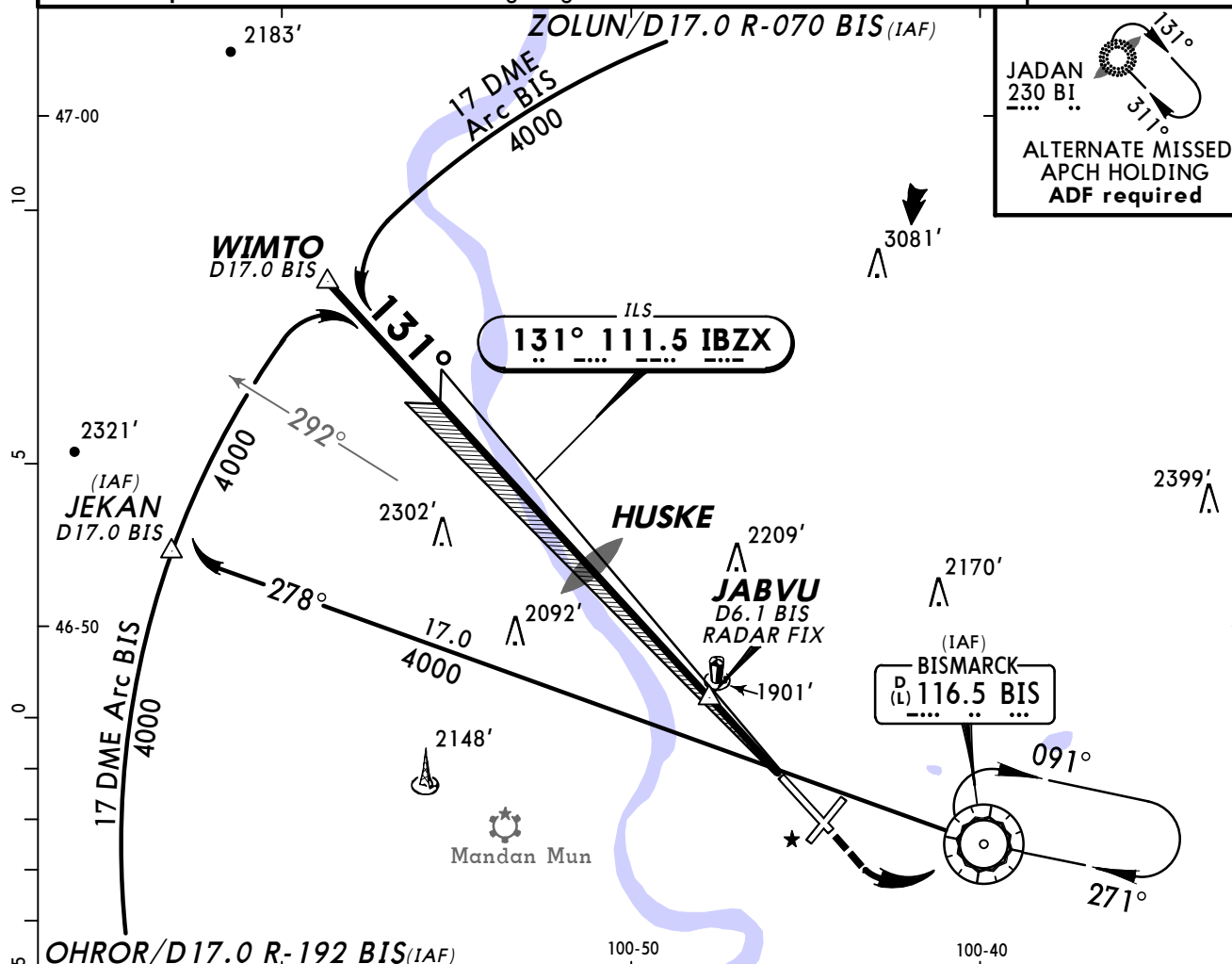
ATIS (ASOS when Twr inop) 119.35		*BISMARCK Approach (R) 126.3		MINNEAPOLIS Center (R) 126.8 when App inop.		*BISMARCK Tower CTAF 118.3		*Ground 121.9	
LOC IBZX 111.5		Final Apch Crs 131°		GS HUSKE 3536' (1882')		ILS DA(H) 1854' (200')		Apt Elev 1661' Rwy 13 1654'	
MISSED APCH: Climb to 2200' then climbing LEFT turn to 3600' direct BIS VOR and hold, continue climb-in-hold to 3600', or as directed by ATC.									
Alt Set: INCHES					Trans level: FL 180			Trans alt: 18000'	
1. DME required. 2. Pilot controlled lighting 118.3.									

061°
4500'
3600'
350°

MSA BIS VOR



MSA BIS VOR



Gnd speed-Kts	70	90	100	120	140	160					
GS	3.00°	372	478	531	637	743	849				
HUSKE to MAP	5.6	4:48	3:44	3:22	2:48	2:24	2:06				

STRAIGHT-IN LANDING RWY 13					CIRCLE-TO-LAND			
ILS		LOC (GS out)			With JABVU		Without JABVU	
DA(H) 1854' (200')		MDA(H) 2160' (506')	MDA(H) 2380' (726')		MDA(H)		MDA(H)	
FULL		With JABVU	Without JABVU					
ALS out		ALS out	ALS out					
A		1	1		Max Kts			
B					90			
C					120			
D					140			
					165			

CHANGES: Procedure.

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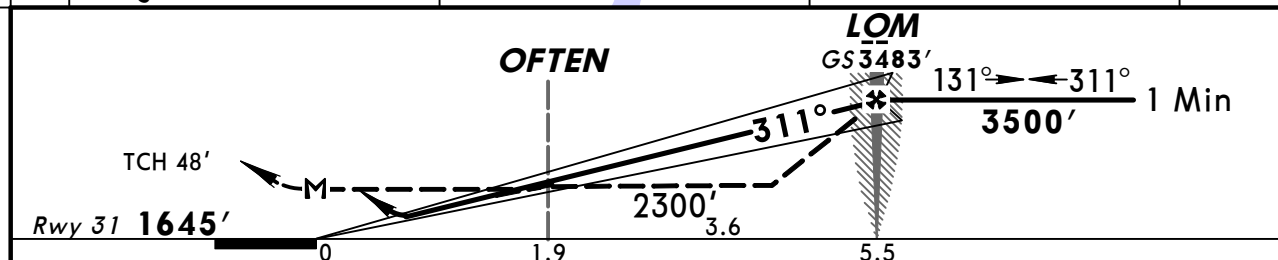
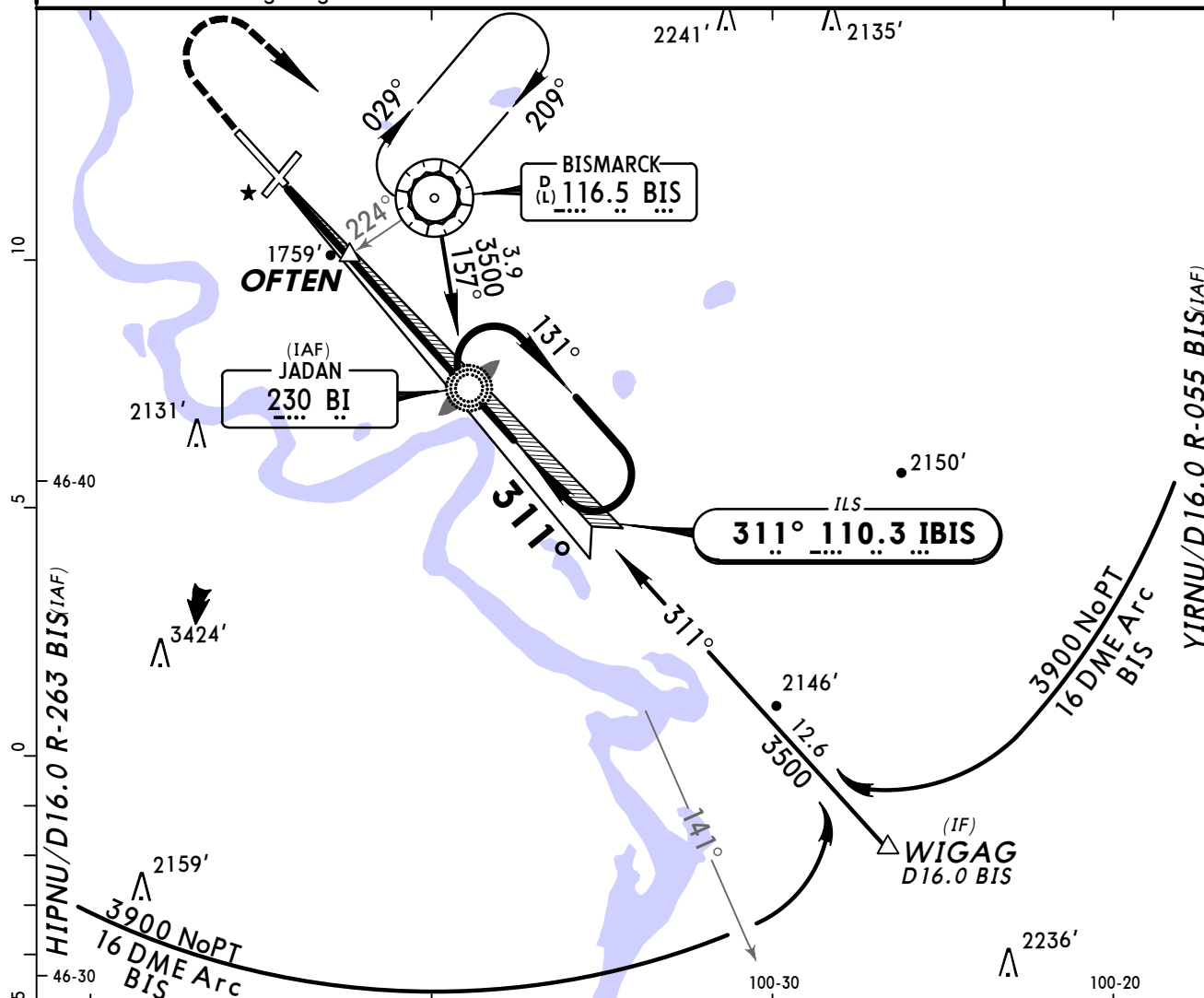
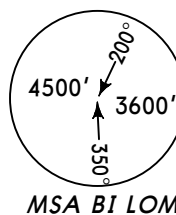
TERPS AMEND 3 5 MAY 2011

KBIS/BIS BISMARCK MUN

JEPPESSEN
17 FEB 12 (11-2)

BISMARCK, N DAK
ILS or LOC Rwy 31

ATIS (ASOS when Twr inop) 119.35	*BISMARCK Approach (R) 126.3	MINNEAPOLIS Center (R) 126.8 when App inop.	*BISMARCK Tower CTAF 118.3	*Ground 121.9
LOC IBIS 110.3	Final Apch Crs 311°	GS LOM 3483' (1838')	ILS DA(H) 1845' (200')	Apt Elev 1661' Rwy 31 1645'
MISSED APCH: Climb to 2800' then climbing RIGHT turn to 3600' direct BIS VOR and hold, or as directed by ATC.				
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. ILS Glideslope unusable for autopilot coupled approaches below 2680'. 2. Pilot controlled lighting 118.3.				



Gnd speed-Kts	70	90	100	120	140	160				
GS	3.00°	372	478	531	637	743	849			
JADAN to MAP	5.5	4:43	3:40	3:18	2:45	2:21	2:04			

TERPS STRAIGHT-IN LANDING RWY 31								CIRCLE-TO-LAND			
ILS				LOC (GS out)				2 With ODTN		Without ODTN	
DA(H) 1845' (200')				MDA(H) 2020' (375') 2300' (655')				MDA(H)		MDA(H)	
FULL				RAIL out							
ALS out				ALS out							
A	1			RVR 24	or 1/2	RVR 40	RVR 55	Max Kts	2240' (579') - 1		2300' (639') - 1
B	RVR 24			RVR 40	or 3/4	RVR 55	or 1	90			
C	RVR 40 or 3/4			RVR 35	or 5/8			120	2240' (579') - 1 1/2		2300' (639') - 1 7/8
D								140	2320' (659') - 2		2320' (659') - 2

1 RVR 18 with Flight Director or Autopilot or HUD to DA. 2 Dual VOR receivers required.

BRIEFING STRIP™

TERPS	STRAIGHT-IN LANDING RWY 3	CIRCLE-TO-LAND
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TERPS AMEND 2 5 MAY 2011

KBIS/BIS BISMARCK MUN

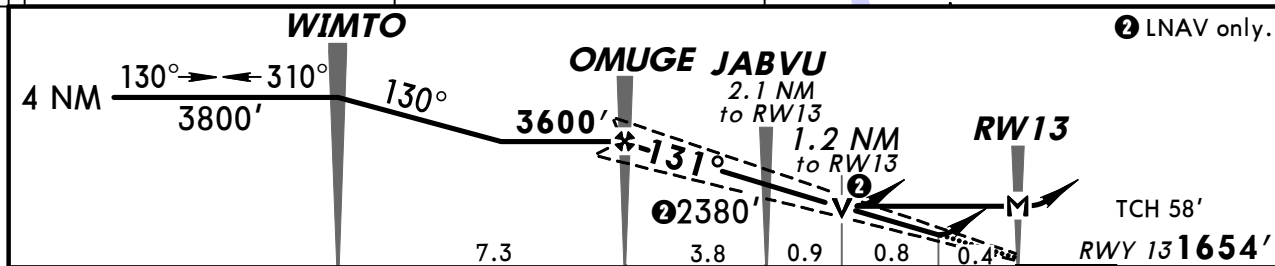
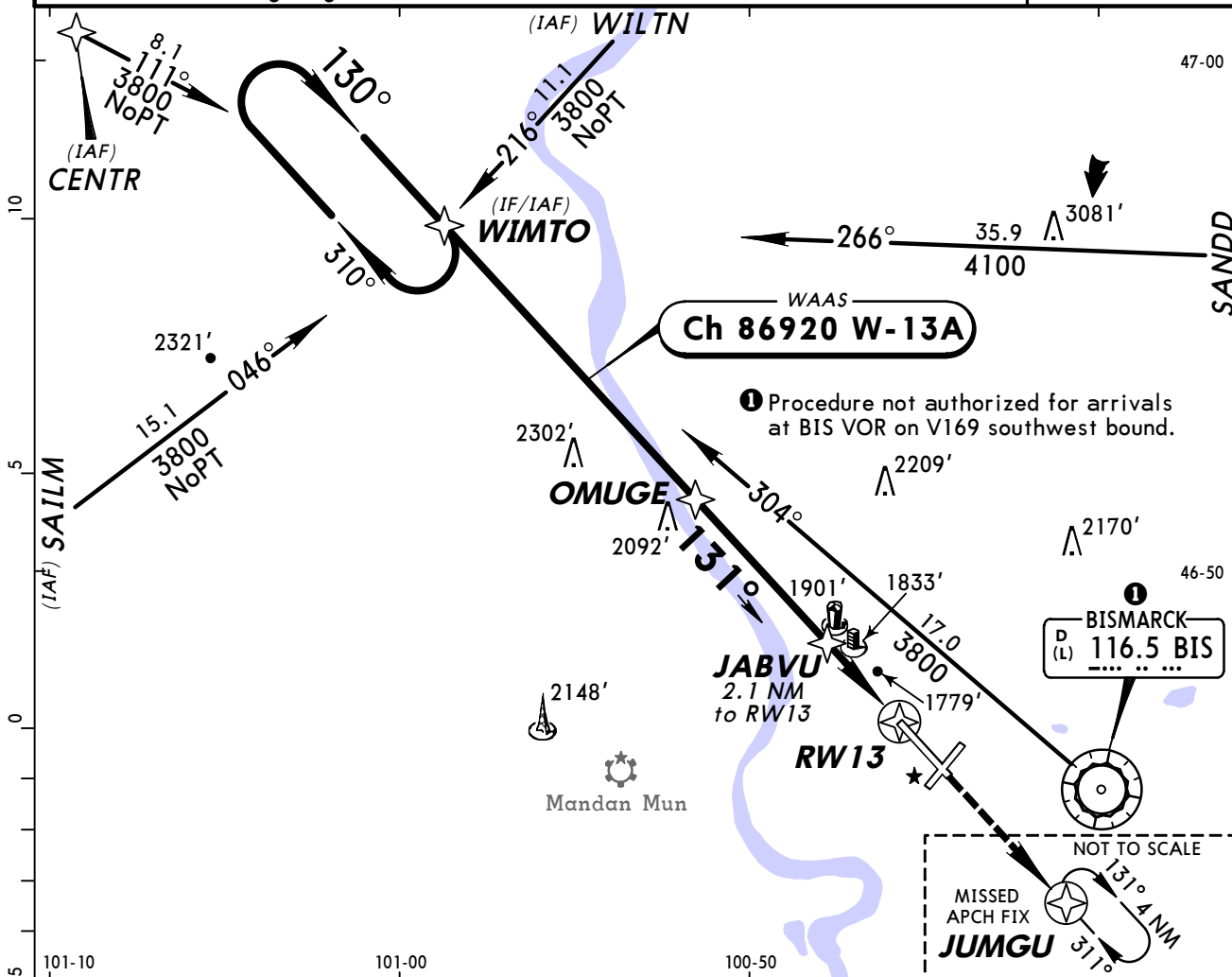
29 APR 11

(12-2)

Eff 5 May

BISMARCK, N DAK RNAV (GPS) Rwy 13

ATIS (ASOS when Twr inop) 119.35	*BISMARCK Approach (R) 126.3	MINNEAPOLIS Center (R) 126.8 when App inop.	*BISMARCK Tower CTAF 118.3	*Ground 121.9
WAAS Ch 86920 W-13A	Final Apch Crs 131°	Minimum Alt OMUGE 3600' (1946')	LPV DA(H) 1854' (200')	Apt Elev 1661' Rwy 13 1654'
MISSED APCH: Climb to 3700' direct JUMGU and hold.				
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. For uncompensated Baro-VNAV systems, LNAV/VNAV not authorized below -18°C (0°F) or above 33°C (91°F). 2. DME/DME RNP-0.30 not authorized. 3. Pilot controlled lighting 118.3.				
				4500' MSA RW13



Gnd speed-Kts	70	90	100	120	140	160		MALS	3700'		JUMGU
Glide Path Angle	3.00°	372	478	531	637	743	849	PAPI			
MAP at RW13											

STRAIGHT-IN LANDING RWY 13						CIRCLE-TO-LAND	
LPV		LNAV/VNAV		LNAV		Max Kts	MDA(H)
DA(H)	ALS out	DA(H)	ALS out	MDA(H)	ALS out		
1854' (200')		2082' (428')		2100' (446')		90	2240' (579')-1
						120	
						140	2240' (579')-1½
						165	2320' (659')-2

CHANGES: New procedure.

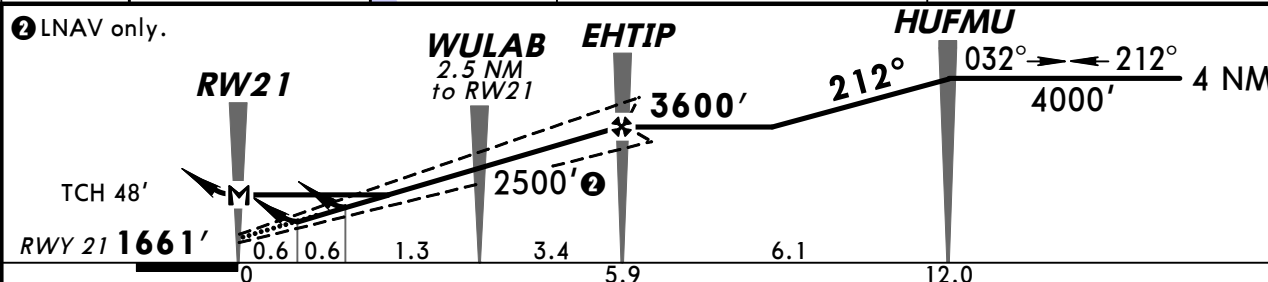
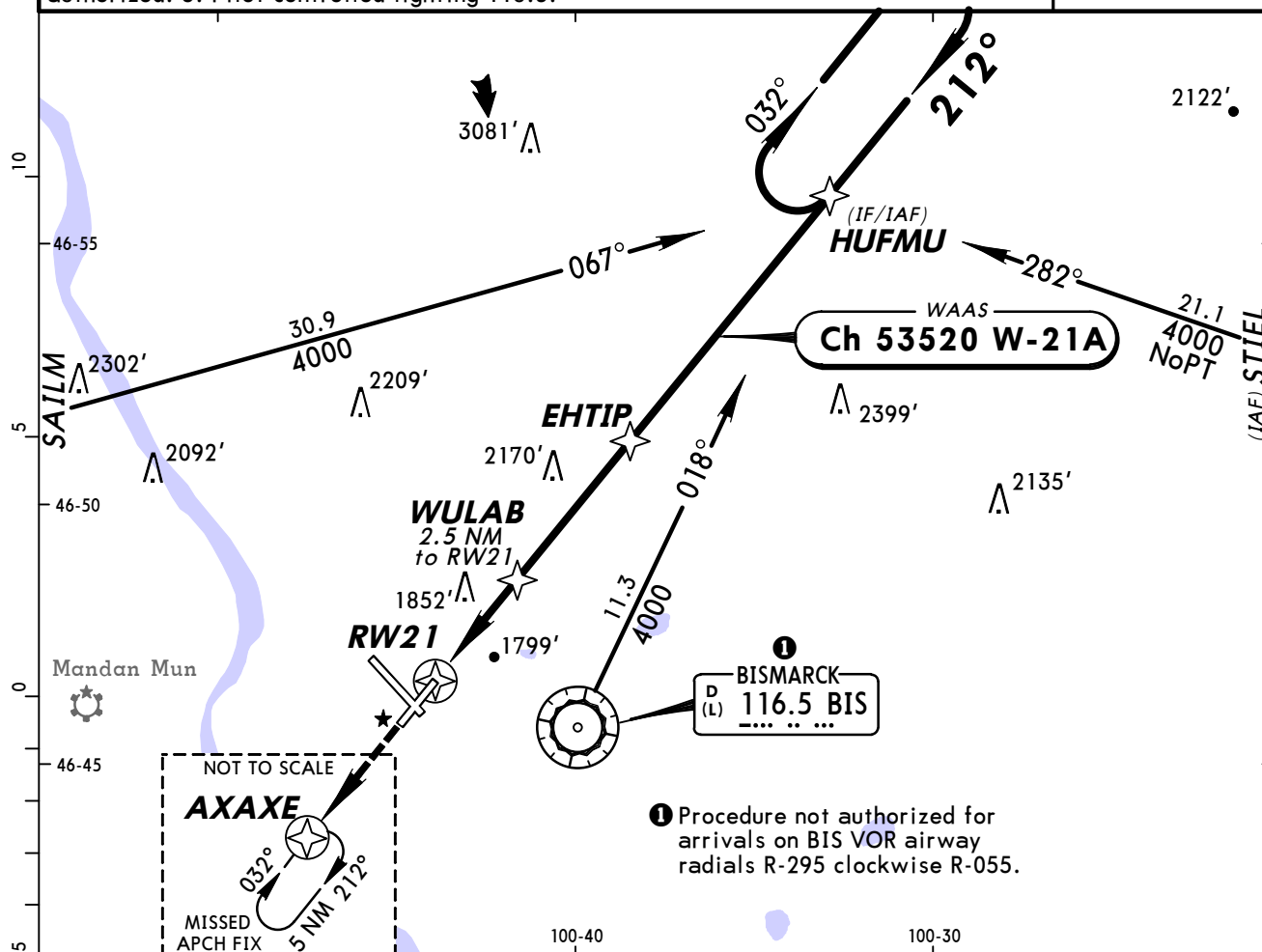
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KBIS/BIS BISMARCK MUN

JEPPESEN
29 APR 11 (12-3) Eff 5 May

BISMARCK, N DAK
RNAV (GPS) Rwy 21

ATIS (ASOS when Twr inop)	*BISMARCK Approach (R)	MINNEAPOLIS Center (R)	*BISMARCK Tower	*Ground
119.35	126.3	126.8 when App inop.	CTAF 118.3	121.9
WAAS Ch 53520 W-21A	Final Apch Crs 212°	Minimum Alt EHTIP 3600' (1939')	LPV DA(H) 1911' (250')	Apt Elev 1661' Rwy 21 1661'
MISSED APCH: Climb to 4500' direct AXAXE and hold. Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. For uncompensated Baro-VNAV systems, LNAV/VNAV not authorized below -18°C (0°F) or above 33°C (91°F). 2. When VGSI inop, procedure not authorized at night. 3. DME/DME RNP-0.30 not authorized. 4. Visibility reduction by helicopters not authorized. 5. Pilot controlled lighting 118.3.				
				4500' MSA RW21



Gnd speed-Kts	70	90	100	120	140	160		REIL	4500'	AXAXE
Glide Path Angle 3.00°	372	478	531	637	743	849		PAPI-L		
MAP at RW21										

1 STRAIGHT-IN LANDING RWY 21			1 CIRCLE-TO-LAND	
LPV DA(H) 1911' (250')	LNAV/VNAV DA(H) 2105' (444')	LNAV MDA(H) 2120' (459')	Max Kts	MDA(H)
A			90	2240' (579')-1
B		1	120	
C	1	1½	140	2240' (579')-1½
D		1¾	165	2320' (659')-2

1 Not authorized at night when VGSI inop.

CHANGES: Procedure.

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KBIS/BIS BISMARCK MUN

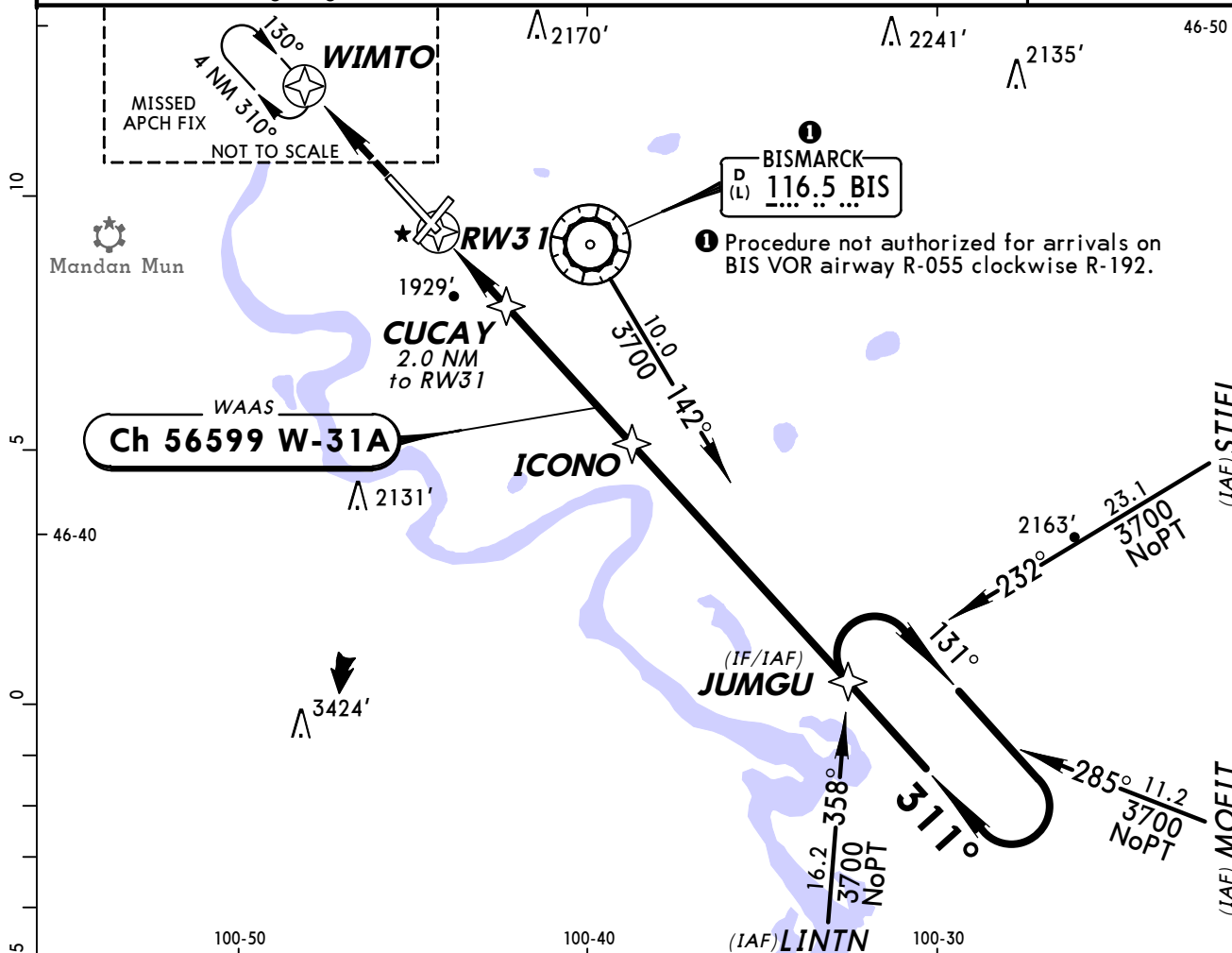
29 APR 11

(12-4)

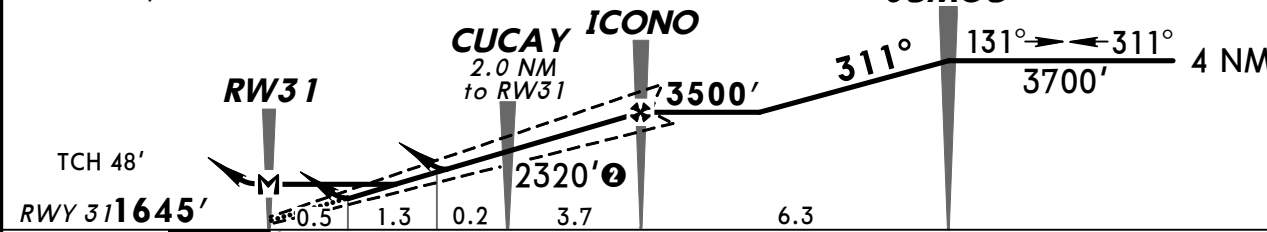
Eff 5 May

BISMARCK, N DAK RNAV (GPS) Rwy 31

ATIS (ASOS when Twr inop) 119.35	*BISMARCK Approach (R) 126.3	MINNEAPOLIS Center (R) 126.8 when App inop.	*BISMARCK Tower CTAF 118.3	*Ground 121.9
WAAS Ch 56599 W-31A	Final Apch Crs 311°	Minimum Alt ICONO 3500' (1855')	LPV DA(H) 1845' (200')	Apt Elev 1661' Rwy 31 1645'
MISSED APCH: Climb to 3800' direct WIMTO and hold.				
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. For uncompensated Baro-VNAV systems, LNAV/VNAV not authorized below -18°C (0°F) or above 33°C (91°F). 2. DME/DME RNP-0.30 not authorized. 3. Pilot controlled lighting 118.3.				
4500' MSA RW31				



② LNAV only.



Gnd speed-Kts	70	90	100	120	140	160		MALSR	3800'	→	WIMTO
Glide Path Angle	3.00°	372	478	531	637	743	849	PAPI	↑		
MAP at RW31											

STRAIGHT-IN LANDING RWY 31						CIRCLE-TO-LAND		
LPV DA(H) 1845' (200')			LNAV/VNAV DA(H) 2269' (624')			LNAV MDA(H) 2180' (535')		
RAIL out	ALS out		RAIL out	ALS out		RAIL out	ALS out	Max Kts
A						RVR 24	RVR 40	90
B	RVR 24	RVR 26	RVR 40			or 1/2	or 3/4	120
C	or 1/2	or 1/2	or 3/4	1 3/4		RVR 55	1 1/4	140
D						or 1	1 1/2	165
						MDA(H)		
						2240' (579')-1		
						2240' (579')-1 1/2		
						2320' (659')-2		

CHANGES: Procedure.

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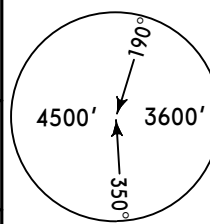
TERPS AMEND 1 5 MAY 2011

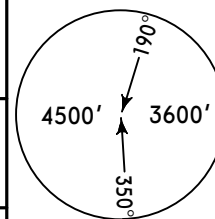
KBIS/BIS BISMARCK MUN

JEPPESSEN
29 APR 11 (13-1) Eff 5 May

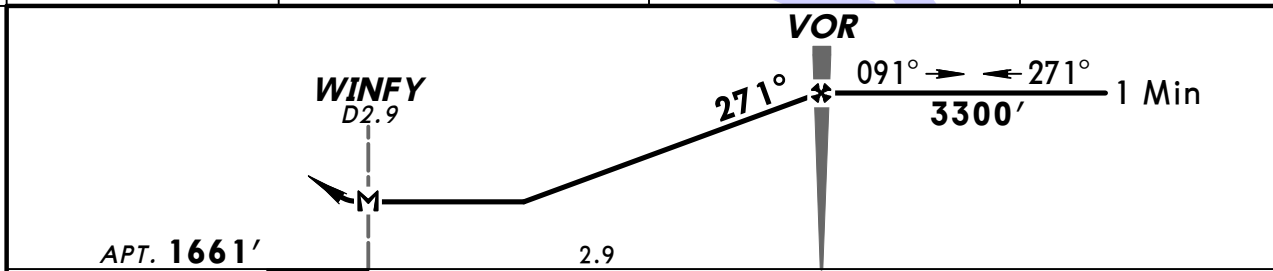
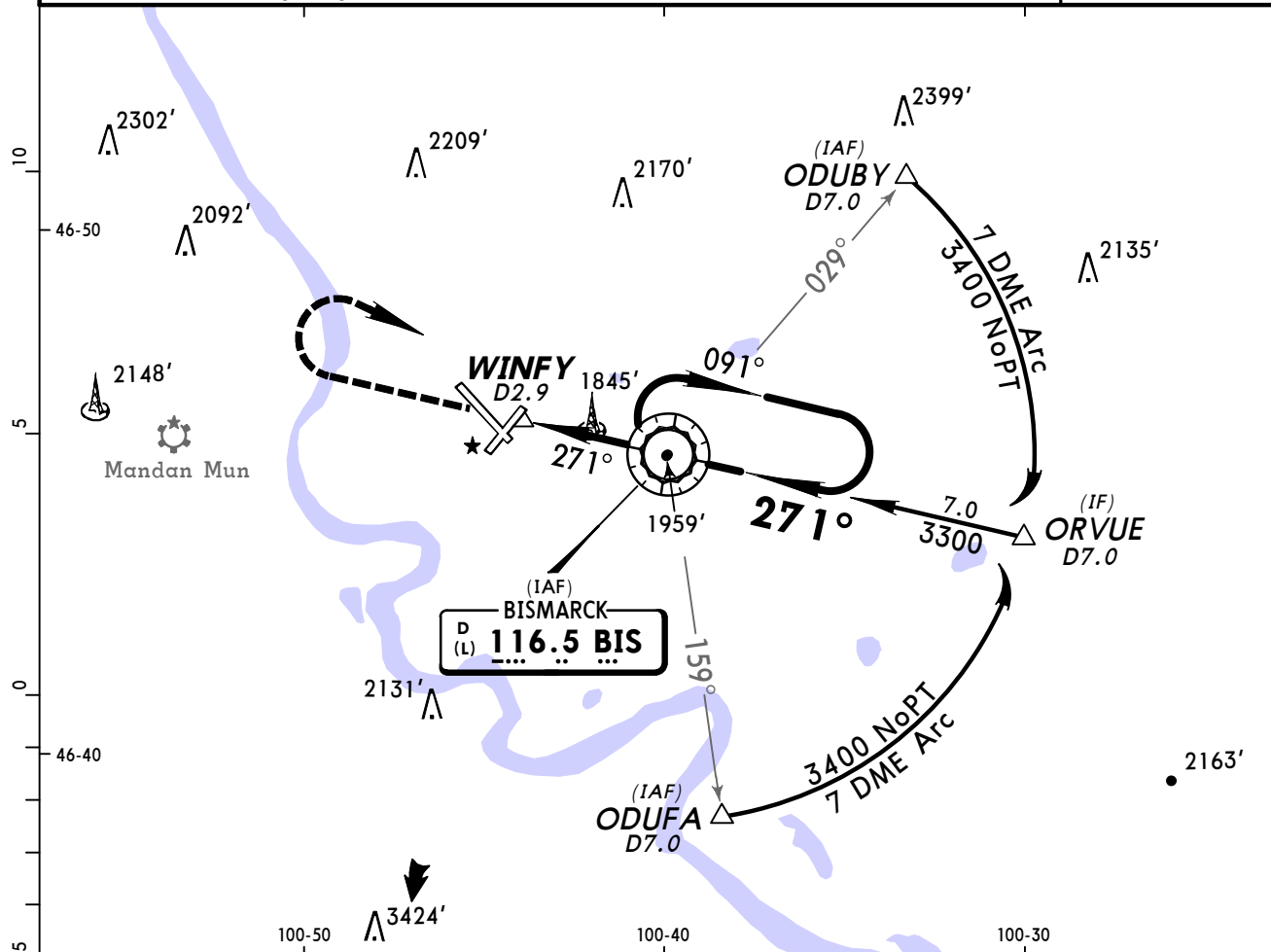
BISMARCK, N DAK
VOR-A

BRIEFING STRIP™

ATIS (ASOS when Twr inop)		*BISMARCK Approach (R)		MINNEAPOLIS Center (R)		*BISMARCK Tower		*Ground	
119.35		126.3		126.8 when App inop.		CTAF 118.3		121.9	
VOR BIS 116.5	Final Apch Crs 271°	Minimum Alt VOR 3300'(1639')	MDA(H) Refer to Minimums	Apt Elev 1661'					
MISSED APCH: Climb to 3000' then climbing RIGHT turn to 3500' direct BIS VOR and hold.									
Alt Set: INCHES		Trans level: FL 180			Trans alt: 18000'				
1. Pilot controlled lighting 118.3.									



MSA BIS VOR



Gnd speed-Kts	70	90	100	120	140	160
MAP at WINFY or VOR to MAP	2.9	2:29	1:56	1:44	1:27	1:05

Lighting - Refer to Airport Chart	3000' ↑	3500' RT	→ D →	BIS 116.5
-----------------------------------	---------	----------	-------	-----------

CIRCLE-TO-LAND	
Max Kts	MDA(H)
A 90	2240' (579') - 1
B 120	2240' (579') - 1½
C 140	2320' (659') - 2
D 165	

TERPS AMEND 21 5 MAY 2011

CHANGES: Notes, MAP, MSA.

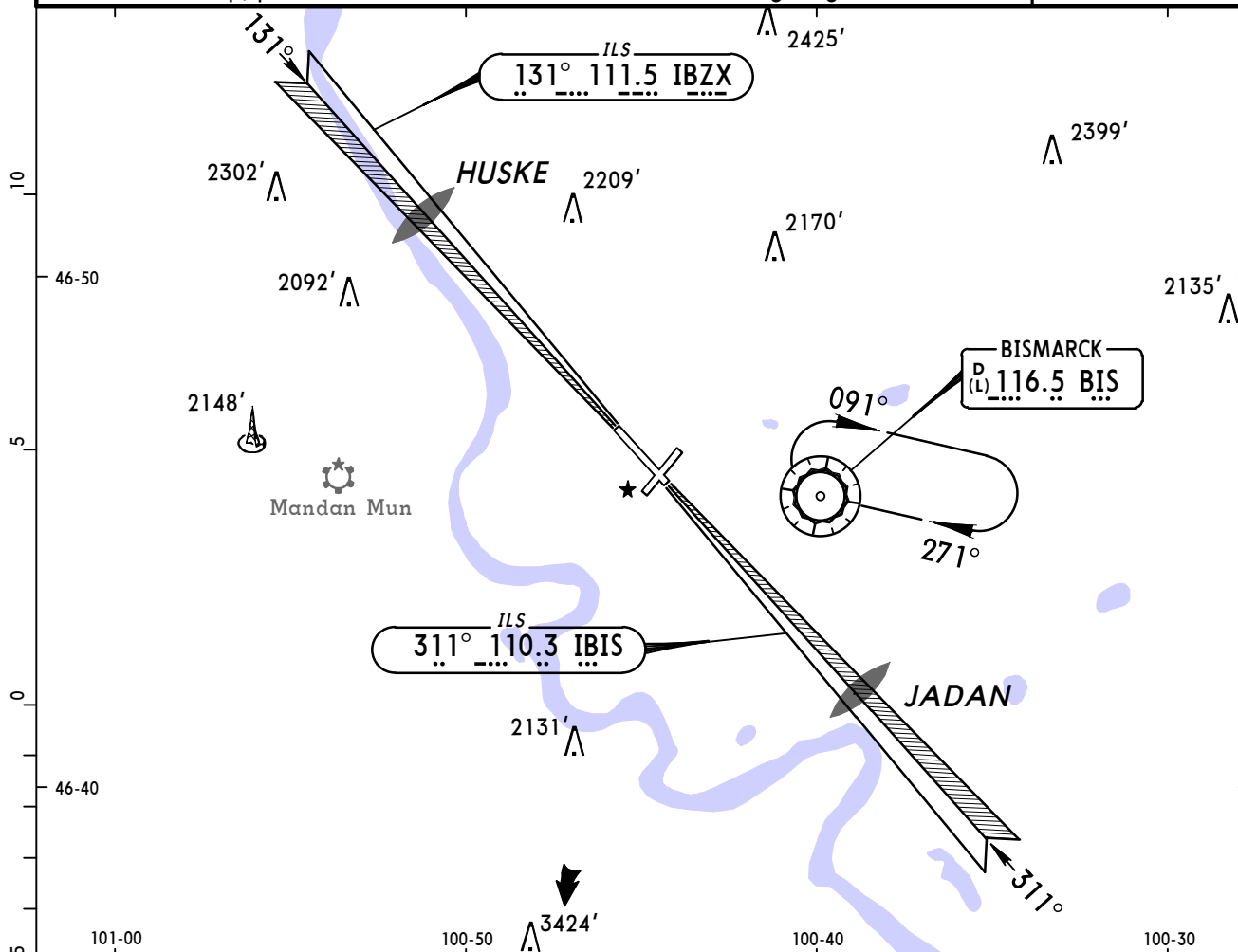
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KBIS/BIS
BISMARCK MUN

JEPPESSEN
29 APR 11
Eff 5 May (18-1)

BISMARCK, N DAK
RADAR-1 *ASR All Rwys

BRIEFING STRIP TM	ATIS (ASOS when Twr inop) 119.35		*BISMARCK Approach (R) 126.3		MINNEAPOLIS Center (R) 126.8 when App inop.		*BISMARCK Tower CTAF 118.3		*Ground 121.9		
	RADAR	<i>Final Apch Crs</i> By ATC	<i>Minimum Alt</i> No FAF	<i>MDA(H)</i> Refer to Minimums	<i>Apt Elev</i> 1661' <i>TDZE- See Below</i>		No MSA published				
	Missed Approach-See below										
	Alt Set: INCHES										



MISSED APPROACH:

Runway 3: Climb to 2500' then climbing RIGHT turn to 3400' direct BIS VOR and hold.
Runways 13 & 21: Climb to 2500' then climbing LEFT turn to 3400' direct BIS VOR and hold.
Runway 31: Climb to 2800' then climbing RIGHT turn to 3400' direct BIS VOR and hold.

RWY 3	RWY 13	RWY 21	RWY 31
TDZE 1661'	TDZE 1655'	TDZE 1661'	TDZE 1645'

ASR Rwys 3, 13, 21, 31: MAP at Rwy Thr

Lighting -
Refer to
Airport
Chart

STRAIGHT-IN LANDING						CIRCLE-TO-LAND	
ASR 3 MDA(H) 2120' (459')		ASR 13 MDA(H) 2100' (445')	ASR 21 MDA(H) 2120' (459')	ASR 31 MDA(H) 2100' (455')		Max Kts	MDA(H)
		ALS out		RAIL out	ALS out		
A	1	1	1	RVR 24 or 1/2	RVR 40 or 3/4	90	2180' (519') - 1
B					RVR 50 or 1	120	2200' (539') - 1
C	1 1/4	1 1/4	1 1/4	RVR 40 or 3/4	RVR 60 or 1 1/4	140	2220' (559') - 1 1/2
D	1 1/2	1 1/2	1 1/2	RVR 50 or 1	1 1/2	165	2280' (619') - 2

CHANGES: Approach course bearings, middle markers removed.

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TERPS AMEND 3B 26 AUG 2010

General Information

Location: Fargo ND USA
IATA Code: FAR
Lat/Long: N46° 55.2' W096° 48.9'
Elevation: 902 ft

Airport Use: Public
Magnetic Variation: 3.4 °E
Sectional Chart: Twin Cities

Fuel Types: 100 Octane (LL), Jet A, Jet B
Oxygen Types: High Pressure, Low Pressure, HP Bottle, LP Bottle
Repair Types: Major Airframe, Major Engine
Customs: ADCUS
Airport Type: IFR
Landing Fee: No
Control Tower: Yes
Jet Start Unit: Yes
LLWS Alert: No
Beacon: Yes

Sunrise: 1311 Z
Sunset: 0009 Z,

Runway Information

Runway: 09
Length x Width: 6300 ft x 100 ft
Surface Type: concrete
TDZ-Elev: 900 ft
Lighting: REIL

Runway: 13
Length x Width: 3801 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 902 ft
Lighting: Edge

Runway: 18
Length x Width: 9000 ft x 150 ft
Surface Type: concrete
TDZ-Elev: 900 ft
Lighting: Edge, ALS

Runway: 27
Length x Width: 6300 ft x 100 ft
Surface Type: concrete
TDZ-Elev: 898 ft
Lighting: REIL

Runway: 31
Length x Width: 3801 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 899 ft
Lighting: Edge

Runway: 36
Length x Width: 9000 ft x 150 ft
Surface Type: concrete
TDZ-Elev: 899 ft
Lighting: Edge, ALS

Communication Information

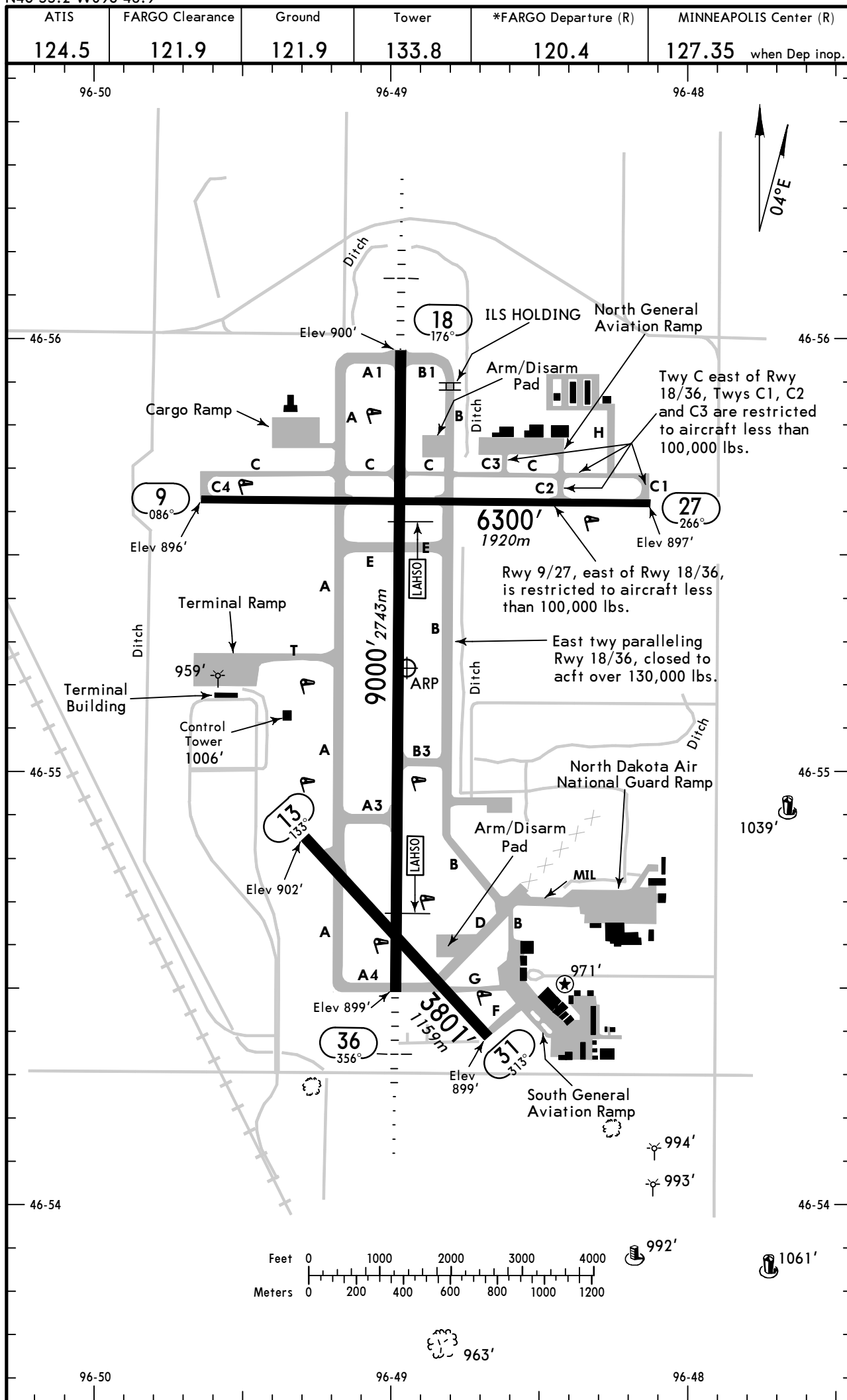
ATIS 124.5
ASOS 124.5
Fargo Tower 133.8
Fargo Ground Control 121.9
Fargo Clearance Delivery 121.9
Fargo Approach Control 125.125 Secondary
Fargo Approach Control 120.4
Fargo TRSA 125.125
Fargo TRSA 120.4
Fargo Departure Control 125.125 Secondary
Fargo Departure Control 120.4
Hector Intl Unicom 122.95
Fargo Radar 120.4
Minneapolis Center 127.35 Remote Communications Air-Ground

KFAR/FARApt Elev **902'**

N46 55.2 W096 48.9

9 DEC 11

(10-9)

JEPPESSEN**FARGO, N DAK****HECTOR INTL**

CHANGES: None.

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GENERAL

CAUTION: Be alert to runway crossing clearances.

Birds on and in the vicinity of airport.

Rwy 13-31:

Not available for air carrier operations with 10 or more passenger seats.

Taxiway operations not permitted except on portion between Rwy 18-36 and Twy D.

Rwy 18 right traffic.

ADDITIONAL RUNWAY INFORMATION

RWY			USABLE LENGTHS				WIDTH
			LANDING BEYOND Threshold	Glide Slope	LAHSO Distance	TAKE- OFF	
9	27	MIRL REIL PAPI-L (angle 3.0°) grooved					100' 30m
13	31	MIRL VASI-L					150' 46m
		MIRL					
18	36	HIRL MALSR PAPI-L (angle 3.0°) grooved RVR		8000' 2438m	Rwy 13/31 7900' 2408m		150' 46m
		HIRL MALSR PAPI-R (angle 3.0°) grooved RVR		7950' 2423m	Rwy 9/27 6600' 2012m		

TAKE-OFF

Rwys 18, 36				Rwys 9, 27			Rwys 13, 31
Both RVRs are required and controlling	Adequate Vis Ref	STD		Adequate Vis Ref	STD		
		3 & 4 Eng	1 & 2 Eng		3 & 4 Eng	1 & 2 Eng	
RCLM & HIRL							
TDZ RVR 10 Rollout RVR 10	RVR 16 or 1/4	RVR 24 or 1/2	RVR 50 or 1	1/4	1/2	1	NA

FOR FILING AS ALTERNATE

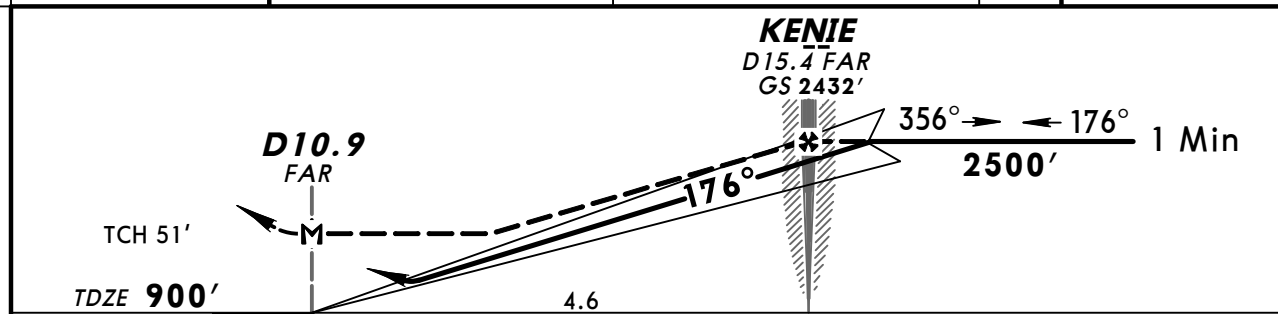
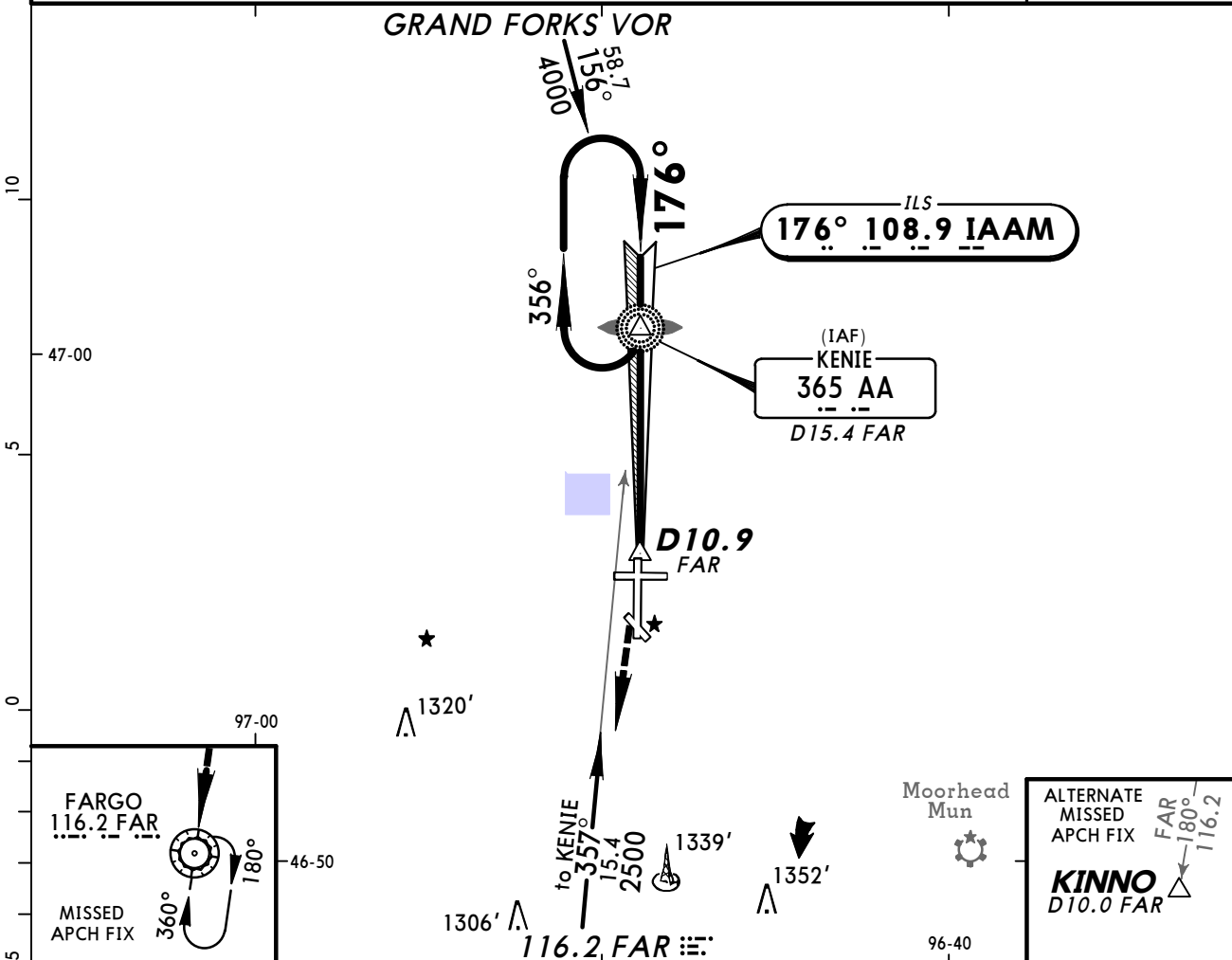
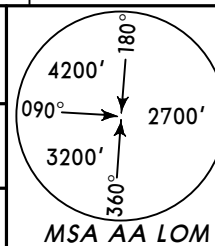
ILS Rwy 18 ILS Rwy 36		LOC Rwy 18 LOC Rwy 36 RNAV (GPS) Rwy 9 RNAV (GPS) Rwy 27 VOR DME Rwy 18	VOR Rwy 36	RNAV (GPS) Rwy 18 RNAV (GPS) Rwy 36
A	600-2	800-2	800-2	NA
B				
C				
D			800-2 1/4	

KFAR/FAR HECTOR INTL

29 APR 11 **11-1** Eff 5 May

FARGO, N DAK
ILS or LOC Rwy 18

ATIS (ASOS when Twr inop) 124.5	*FARGO Approach (R) 120.4	MINNEAPOLIS Center (R) 127.35 when App inop.	*FARGO Tower 133.8	*Ground 121.9
LOC IAAM 108.9	Final Apch Crs 176°	GS KENIE 2432' (1532')	ILS DA(H) 1100' (200')	Apt Elev 902' TDZE 900'
MISSED APCH: Climb to 2500' direct FAR VOR and hold.				
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'				
1. ADF or DME required. 2. VGSI and ILS glidepath not coincident.				



Gnd speed-Kts	70	90	100	120	140	160	MALSR	2500'	D	FAR
GS	3.00°	377	484	538	646	753	PAPI	↑		116.2
MAP at D10.9 FAR or KENIE to MAP	4.6	3:57	3:04	2:46	2:18	1:58				

STRAIGHT-IN LANDING RWY18					CIRCLE-TO-LAND	
ILS		LOC (GS out)			Max Kts	MDA(H)
DA(H) 1100' (200')		MDA(H) 1260' (360')				
FULL	RAIL or ALS out	RAIL out	ALS out			
A					90	1380'(478')-1
B					120	1380'(478')-1
C					140	1380'(478')-1 1/2
D					165	1500'(598')-2

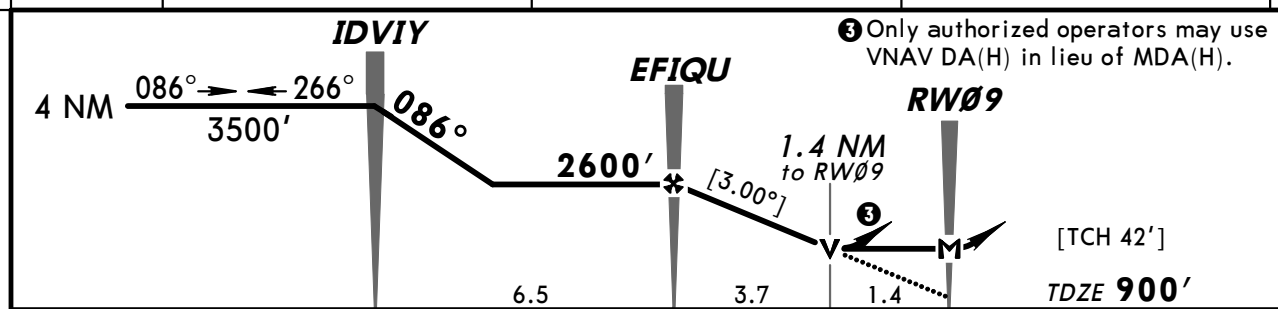
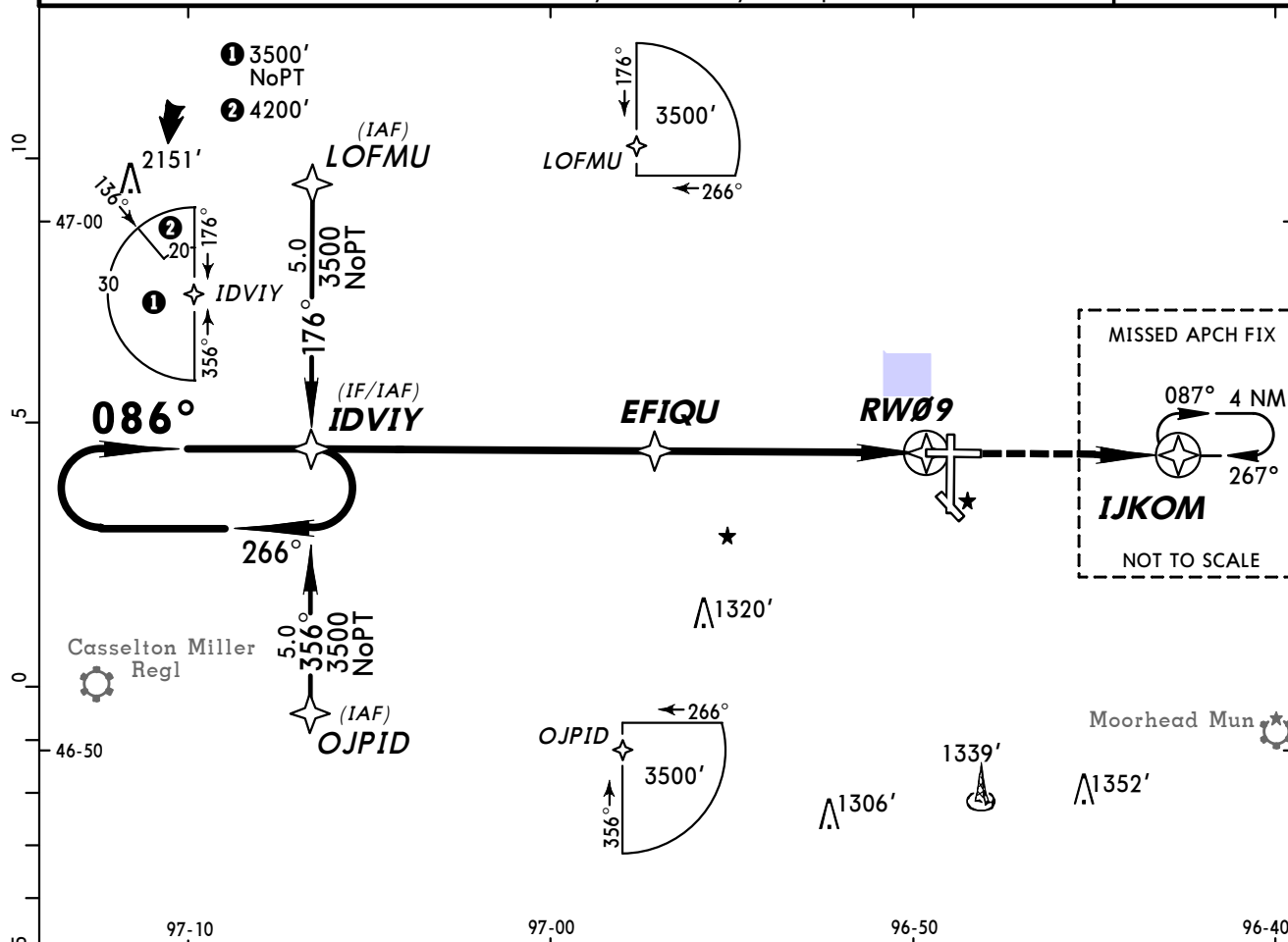
1 RVR 18 with Flight Director or Autopilot or HUD to DA.

CHANGES: None.

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BRIEFING STRIP™

ATIS (ASOS when Twr inop)		*FARGO Approach (R)		MINNEAPOLIS Center (R)		*FARGO Tower		*Ground	
124.5		120.4		127.35 when App inop.		133.8		121.9	
RNAV	Final Apch Crs 086°	Minimum Alt EFIQU 2600' (1700')	LNAV MDA(H) 1360' (460')	Apt Elev 902' TDZE 900'			TAA 30 NM IAF		
MISSED APCH: Climb to 3500' direct IJKOM and hold.									
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'									
1. DME/DME RNP-0.30 not authorized. 2. Visibility reduction by helicopters not authorized.									



Gnd speed-Kts	70	90	100	120	140	160	REIL PAPI-L	3500' ↑	→ IJKOM
Descent angle [3.00°]	372	478	531	637	743	849			
MAP at RWY9									

STRAIGHT-IN LANDING RWY9				CIRCLE-TO-LAND	
LNAV				Max Kts	MDA(H)
MDA(H) 1360' (460')				90	1380' (478') - 1
A 1				120	1380' (478') - 1 1/2
B 1 1/4				140	1380' (478') - 1 1/2
C 1 1/2				165	1500' (598') - 2

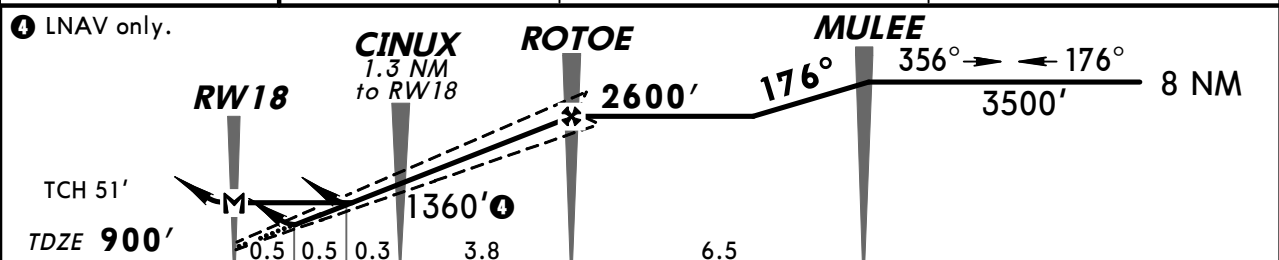
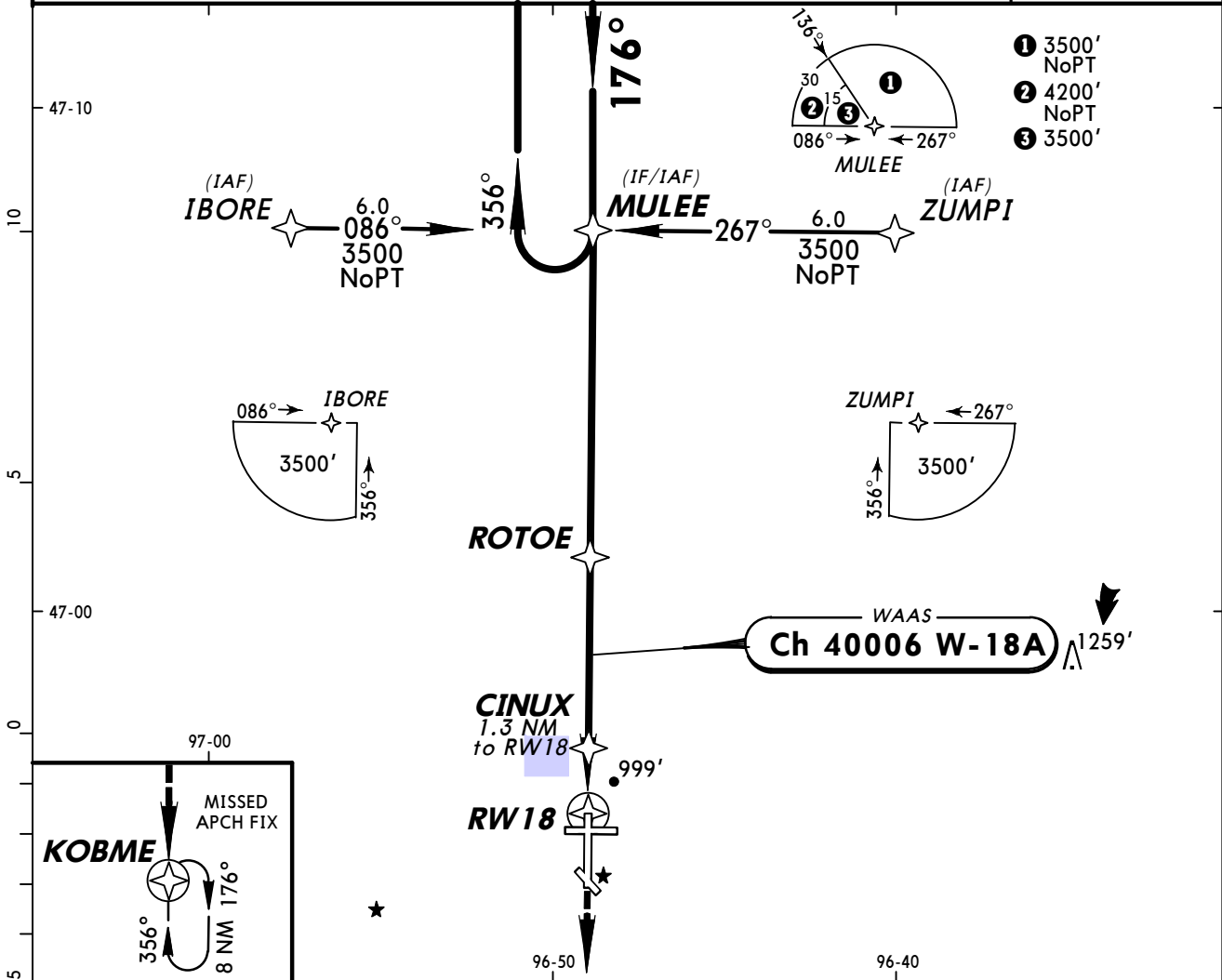
TERPS AMEND 0A 15 DEC 2011

KFAR/FAR HECTOR INTL

JEPPesen
9 DEC 11 (12-2)

FARGO, N DAK
RNAV (GPS) Rwy 18

ATIS (ASOS when Twr inop) 124.5	*FARGO Approach (R) 120.4	MINNEAPOLIS Center (R) 127.35 when App inop.	*FARGO Tower 133.8	*Ground 121.9
WAAS Ch 40006 W-18A	Final Apch Crs 176°	Minimum Alt ROTOE 2600' (1700')	LPV DA(H) 1100' (200')	Apt Elev 902' TDZE 900'
MISSED APCH: Climb to 3500' direct KOBME and hold.				
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'				
1. For uncompensated Baro-VNAV systems, LNAV/VNAV not authorized below -16°C (4°F) or above 47°C (116°F). 2. DME/DME RNP-0.30 not authorized. 3. VGSI and RNAV glidepath not coincident.				
				TAA 30 NM IAF



Gnd speed-Kts	70	90	100	120	140	160		MALS	3500'		KOBME
Glide Path Angle	3.00°	372	478	531	637	743	849	PAPI			
MAP at RW18											

STRAIGHT-IN LANDING RWY 18							CIRCLE-TO-LAND	
LPV	LNAV/VNAV			LNAV				
DA(H) 1100' (200')	DA(H) 1272' (372')			MDA(H) 1260' (360')				
RAIL or ALS out	RAIL or ALS out			RAIL out	ALS out			
A							Max Kts	MDA(H)
B							90	1380'(478')-1
C	RVR 24 or 1/2	RVR 40 or 3/4	RVR 40 or 3/4	RVR 60 or 1 1/4	RVR 24 or 1/2	RVR 40 or 3/4	120	1380'(478')-1 1/2
D					RVR 50 or 1	RVR 60 or 1 1/4	140	1500'(598')-2

CHANGES: Obstructions, high point.

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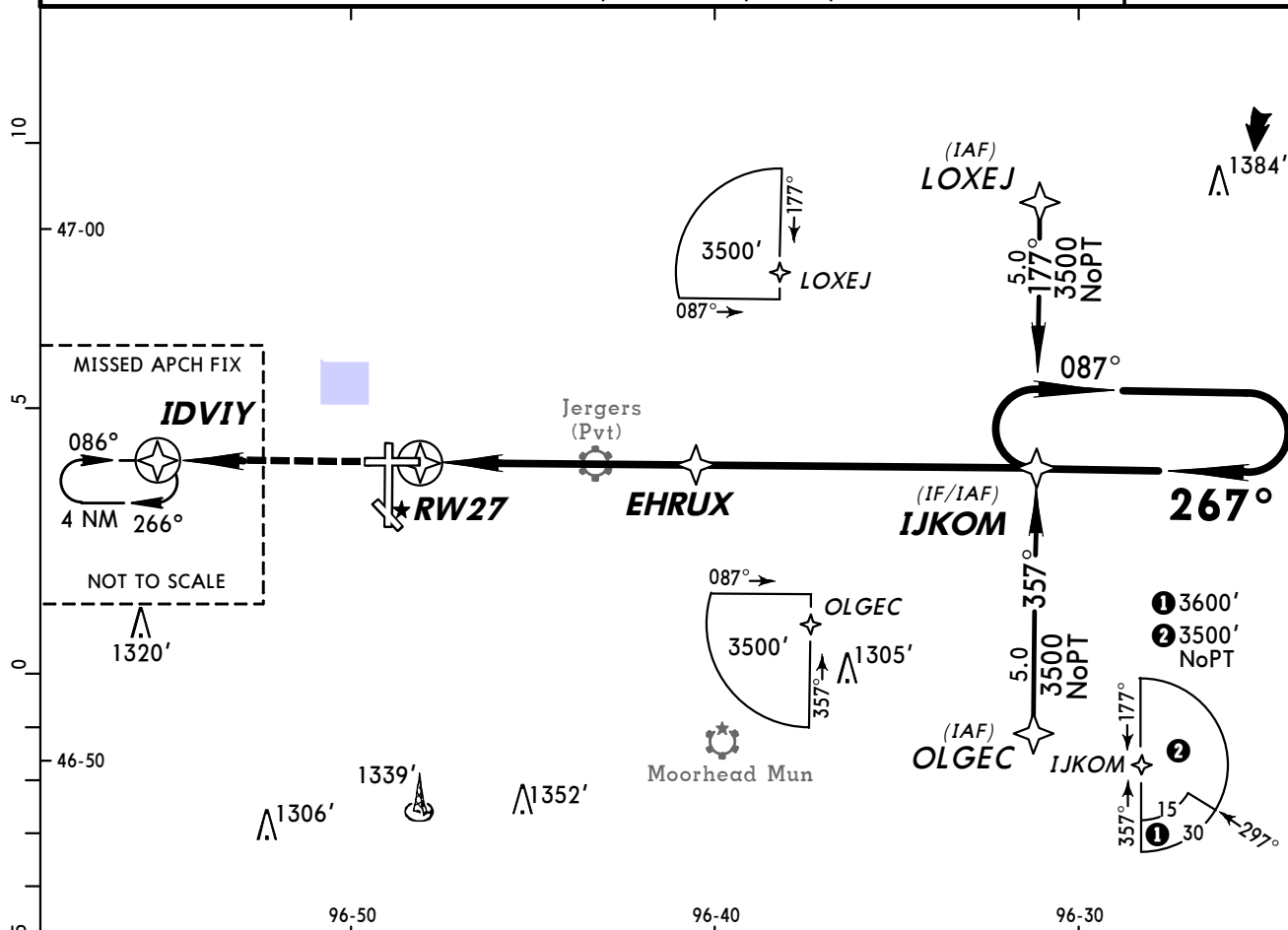
TERP'S AMEND 1 8 APR 2010

KFAR/FAR HECTOR INTL

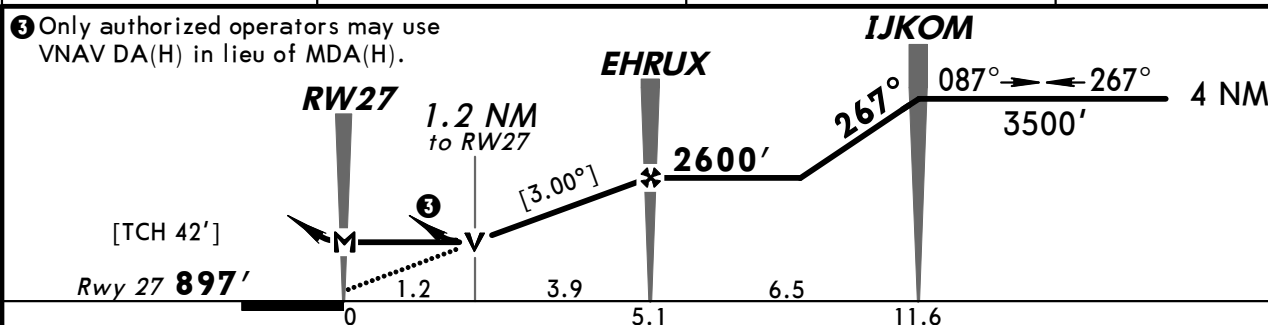
JEPPesen
9 DEC 11 (12-3)

FARGO, N DAK
RNAV (GPS) Rwy 27

ATIS (ASOS when Twr inop)	*FARGO Approach (R)	MINNEAPOLIS Center (R)	*FARGO Tower	*Ground
124.5	120.4	127.35 when App inop.	133.8	121.9
RNAV	Final Apch Crs 267°	Minimum Alt EHRUX 2600' (1703')	RNAV MDA(H) 1320' (423')	Apt Elev 902' Rwy 27 897'
MISSED APCH: Climb to 3500' direct IDVIY and hold.				
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'				
1. DME/DME RNP-0.30 not authorized. 2. Visibility reduction by helicopters not authorized.				



③ Only authorized operators may use VNAV DA(H) in lieu of MDA(H).



Gnd speed-Kts	70	90	100	120	140	160			
Descent angle [3.00°]	372	478	531	637	743	849			
MAP at RW27									

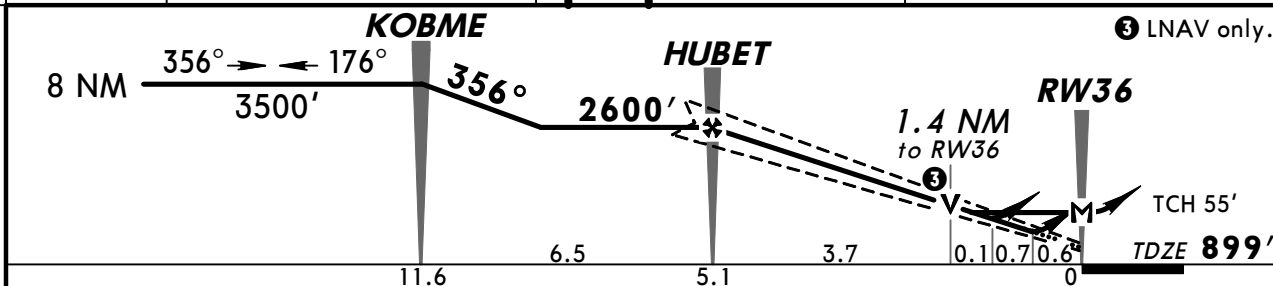
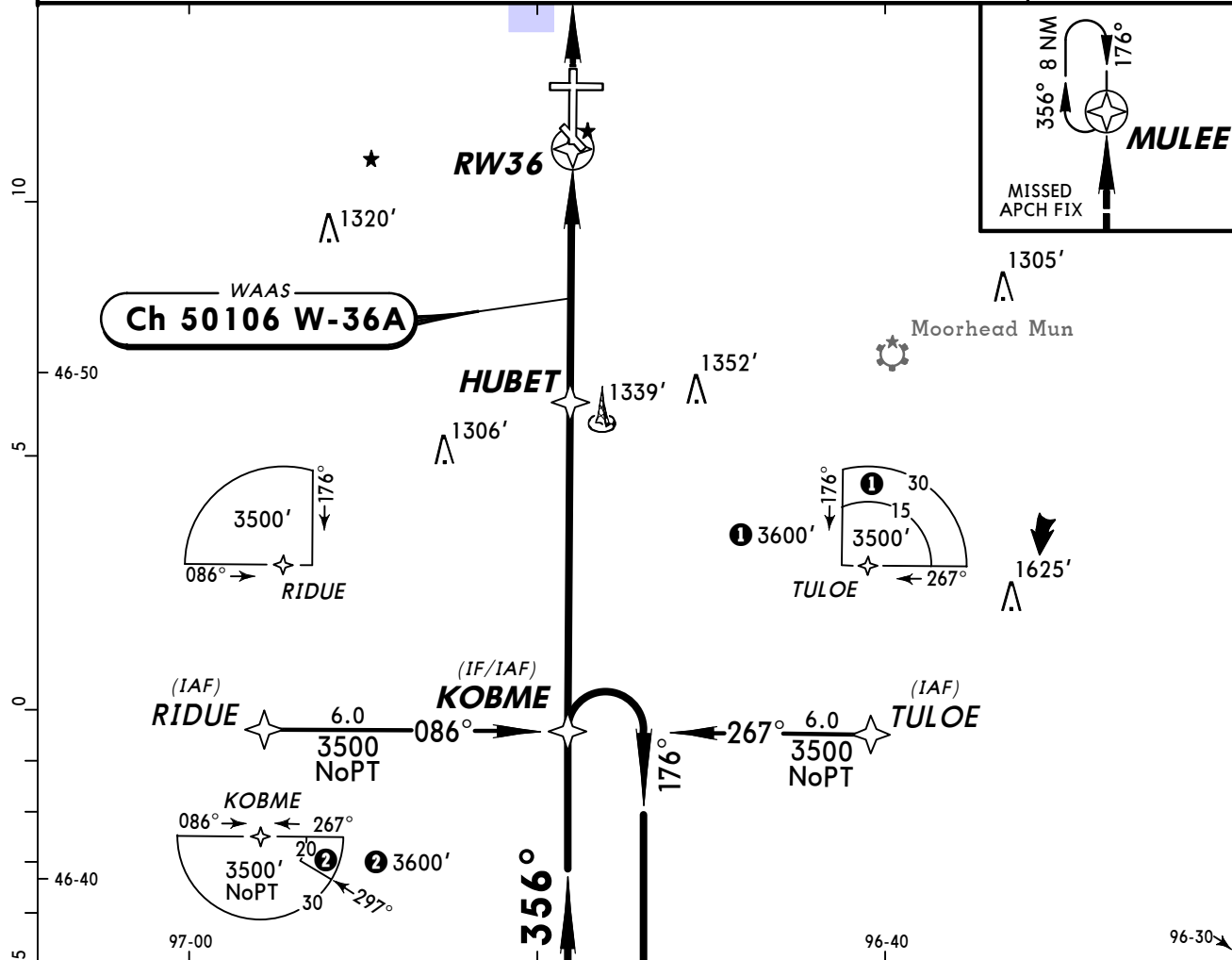
TERPS			STRAIGHT-IN LANDING RWY 27		CIRCLE-TO-LAND	
			RNAV			
			MDA(H) 1320' (423')			
A	1		Max Kts	MDA(H)		
B			90	1380' (478') - 1		
C			120			
D	1 1/4		140	1380' (478') - 1 1/2		
			165	1500' (598') - 2		

CHANGES: Notes, descent angle, TCH, minimums, threshold elevation.

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TERPS AMEND 0A 15 DEC 2011

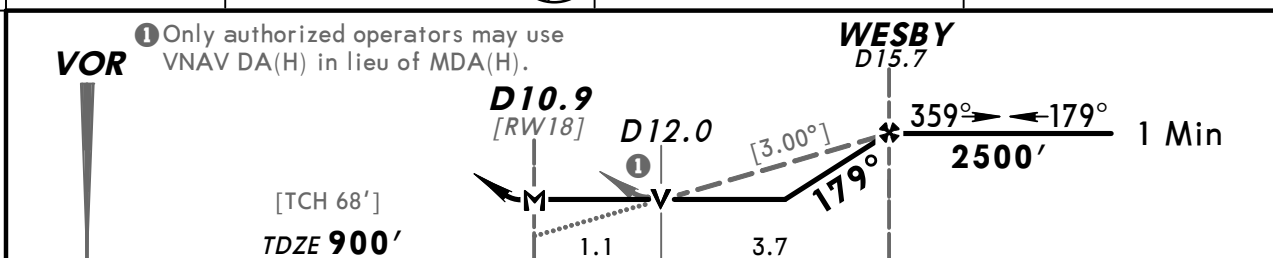
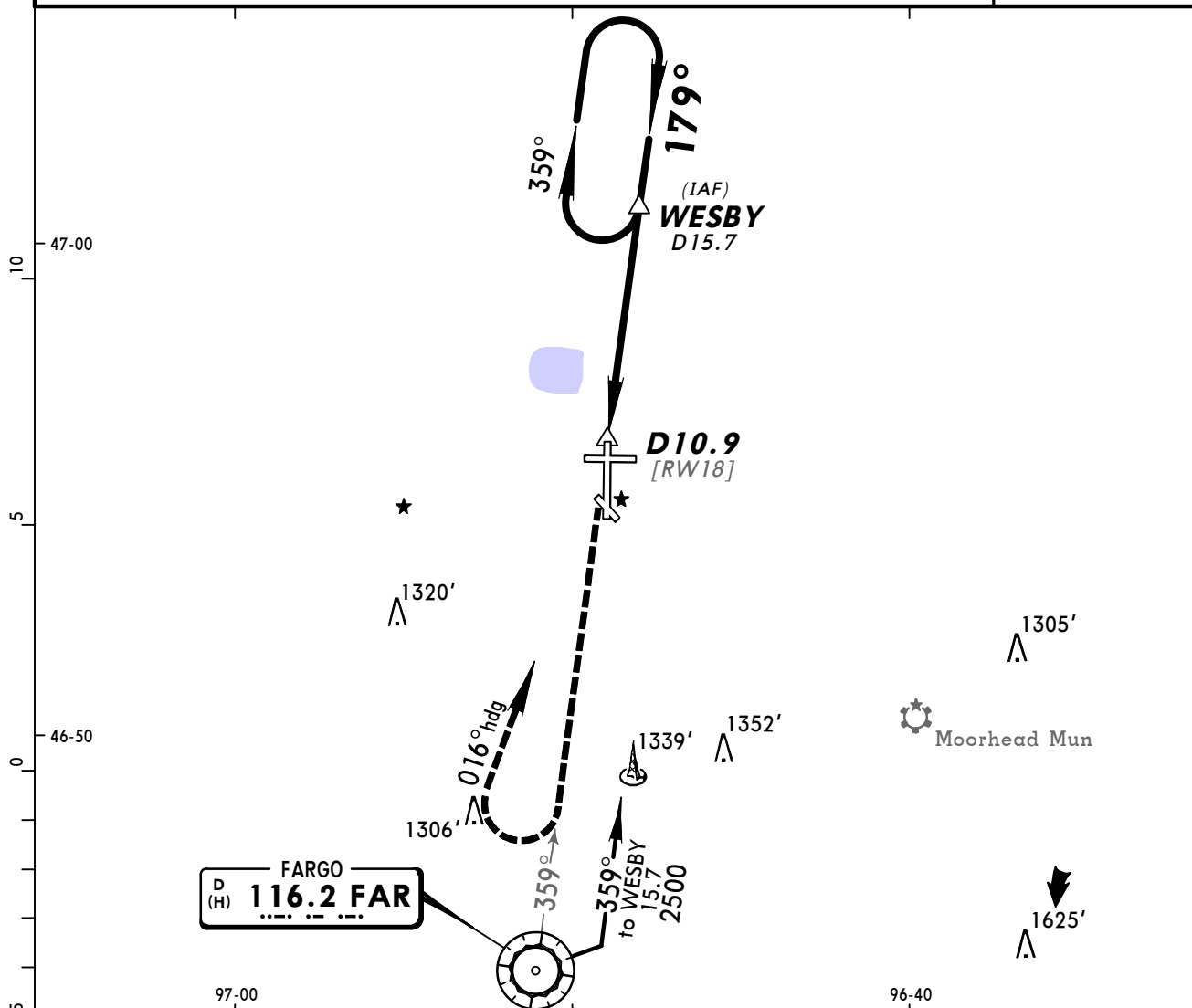
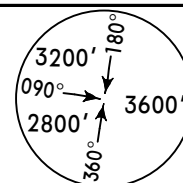
ATIS (ASOS when Twr inop) 124.5	*FARGO Approach (R) 120.4	MINNEAPOLIS Center (R) 127.35 when App inop.	*FARGO Tower 133.8	*Ground 121.9
WAAS Ch 50106 W-36A	Final Apch Crs 356°	Minimum Alt HUBET 2600' (1701')	LPV DA(H) 1150' (251')	Apt Elev 902' TDZE 899'
MISSED APCH: Climb to 3500' direct MULEE and hold. Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. Baro-VNAV not authorized below -16°C (4°F). 2. DME/DME RNP-0.30 not authorized. 3. WAAS VNAV outages may occur daily. WAAS VNAV NOTAM service is not provided. 4. VGSI and RNAV glidepath not coincident.				
TAA 30 NM IAF				



Gnd speed-Kts	70	90	100	120	140	160	MALS	3500'	PAPI	MULEE
Glide Path Angle 3.00°	372	478	531	637	743	849				
MAP at RW36										

STRAIGHT-IN LANDING RWY 36							CIRCLE-TO-LAND	
LPV DA(H) 1150' (251')		LNAV/VNAV DA(H) 1360' (461')		LNAV MDA(H) 1420' (521')			Max Kts.	MDA(H)
RAIL or ALS out		RAIL out ALS out		RAIL out ALS out			90	
A						RVR 24 or 1/2	120	1420' (518') - 1 1/2
B						RVR 40 or 3/4	140	
C	RVR 24 or 1/2	RVR 40 or 3/4	RVR 50 or 1	1 1/2		1 1/2	165	1500' (598') - 2
D						1 3/4		

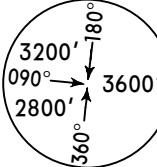
BRIEFING STRIP™	ATIS 124.5		*FARGO Approach (R) 120.4		MINNEAPOLIS Center (R) 127.35 when App inop.		FARGO Tower 133.8		Ground 121.9	
	VOR FAR 116.2		Final Apch Crs 179°		Minimum Alt WESBY 2500' (1600')		MDA(H) 1320' (420')		Apt Elev 902' TDZE 900'	
	MISSED APCH: Climb to 3500' then RIGHT turn via heading 016° and outbound FAR VOR R-359 to WESBY/D15.7 and hold.									
	Alt Set: INCHES		Trans level: FL 180				Trans alt: 18000'			
	MSA FAR VOR									

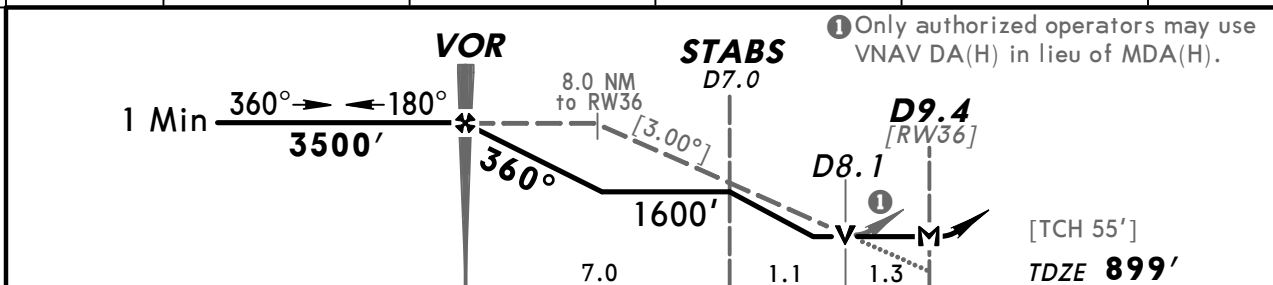
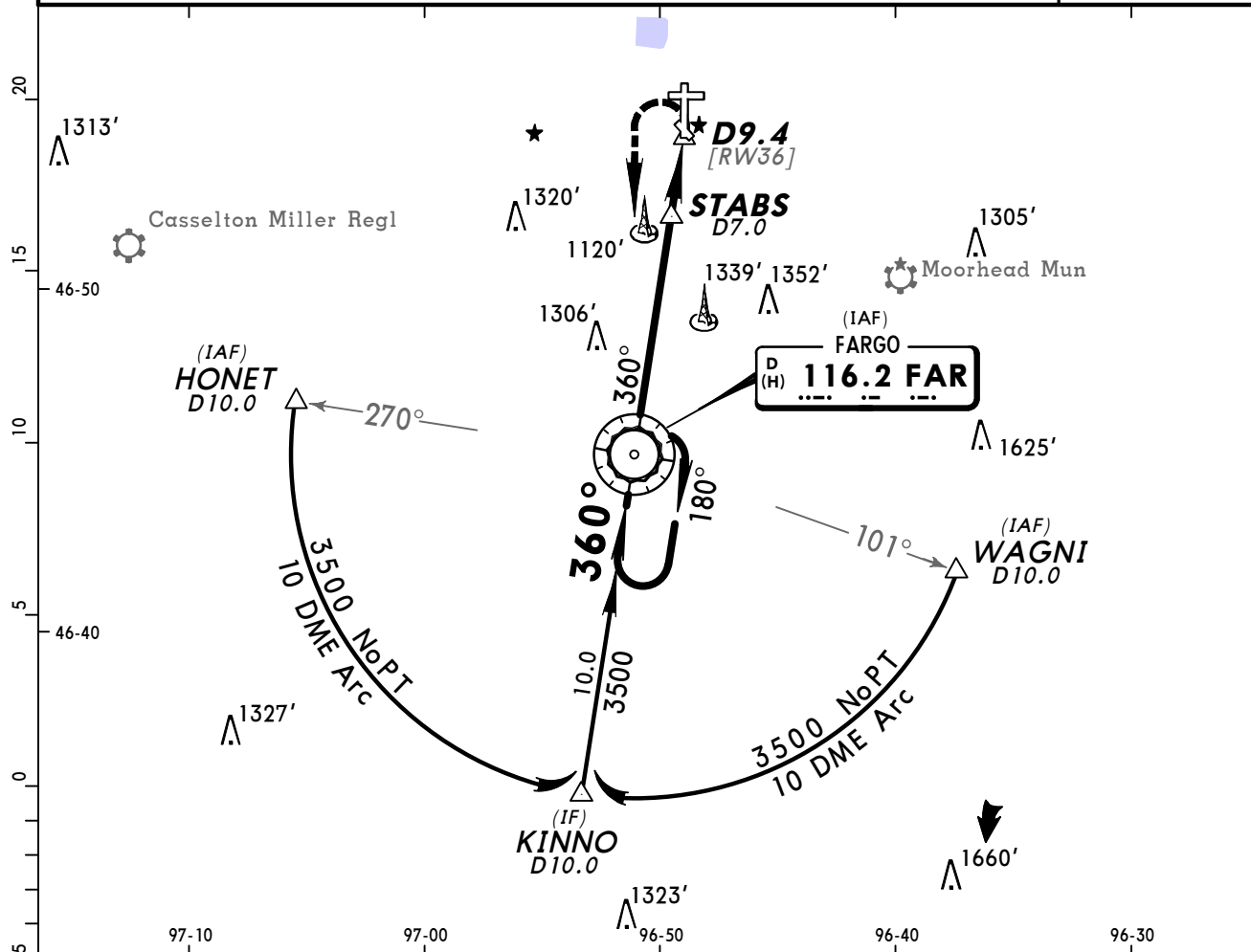
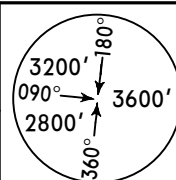


Gnd Speed-Kts	70	90	100	120	140	160		MALSR	3500'	RT	016° hdg
Descent angle [3.00°]	372	478	531	637	743	849		PAPI			
MAP at D10.9											

STRAIGHT-IN LANDING RWY 18				CIRCLE-TO-LAND			
MDA(H) 1320' (420')				MDA(H)			
		RAIL out	ALS out	Max Kts			
A	RVR 24 or 1/2	RVR 40 or 3/4	RVR 50 or 1	90	1380' (478')-1		
B				120			
C	RVR 40 or 3/4	RVR 60 or 1 1/4		140	1380' (478')-1 1/2		
D	RVR 50 or 1			165	1500' (598')-2		

BRIEFING STRIP™

ATIS 124.5		*FARGO Approach (R) 120.4		MINNEAPOLIS Center (R) 127.35 when App inop.		FARGO Tower 133.8		Ground 121.9	
VOR FAR 116.2		Final Apch Crs 360°		Minimum Alt VOR 3500' (2601')		MDA(H) (CONDITIONAL) 1380' (481')		Apt Elev 902' TDZE 899'	
MISSED APCH: Climbing LEFT turn to 3500' direct FAR VOR and hold.									
Alt Set: INCHES		Trans level: FL 180				Trans alt: 18000'		MSA FAR VOR	



Gnd speed-Kts	70	90	100	120	140	160	MALSR		3500'	→	FAR 116.2
Descent angle [3.00°]	372	478	531	637	743	849	PAPI		LT	→	
MAP at D9.4 or VOR to MAP	9.4	8:03	6:16	5:38	4:42	4:02	3:32				

STRAIGHT-IN LANDING RWY 36							CIRCLE-TO-LAND			
MDA(H) 1380' (481')				MDA(H) 1600' (701')						
With Stabs				Without Stabs						
		RAIL out	ALS out			RAIL out	ALS out	Max Kts.	With Stabs	Without Stabs
								MDA(H)	MDA(H)	
A	RVR 24	RVR 40	RVR 50	RVR 24	RVR 40	RVR 50	90	1380' (478') - 1	1600' (698') - 1	
B	or 1/2	or 3/4	or 1	or 1/2	or 3/4	or 1	120			
C	RVR 40 or 3/4	RVR 60 or 1 1/4		1 1/2	2		140	1380' (478') - 1 1/2	1600' (698') - 2	
D	RVR 50 or 1	1 1/2		1 3/4	2 1/4		165	1500' (598') - 2	1600' (698') - 2 1/4	

General Information

Location: Grand Forks ND USA
IATA Code: GFK
Lat/Long: N47° 56.8' W097° 10.4'
Elevation: 845 ft

Airport Use: Public
Magnetic Variation: 3.6°E
Sectional Chart: Twin Cities

Fuel Types: 100 Octane (LL), Jet A
Oxygen Types: HP Bottle
Repair Types: Major Airframe, Major Engine
Customs: ADCUS
Airport Type: IFR
Landing Fee: No
Control Tower: Yes
Jet Start Unit: Yes
LLWS Alert: No
Beacon: Yes

Sunrise: 1314 Z
Sunset: 0009 Z,

Runway Information

Runway: 09L
Length x Width: 4206 ft x 100 ft
Surface Type: concrete
TDZ-Elev: 843 ft
Lighting: Edge, Pilot controlled

Runway: 09R
Length x Width: 3300 ft x 60 ft
Surface Type: concrete
TDZ-Elev: 844 ft
Lighting: Edge

Runway: 17L
Length x Width: 3901 ft x 75 ft
Surface Type: concrete
TDZ-Elev: 843 ft
Lighting: Edge

Runway: 17R
Length x Width: 7351 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 843 ft
Lighting: Edge, REIL, Pilot controlled

Runway: 27L
Length x Width: 3300 ft x 60 ft
Surface Type: concrete
TDZ-Elev: 844 ft
Lighting: Edge

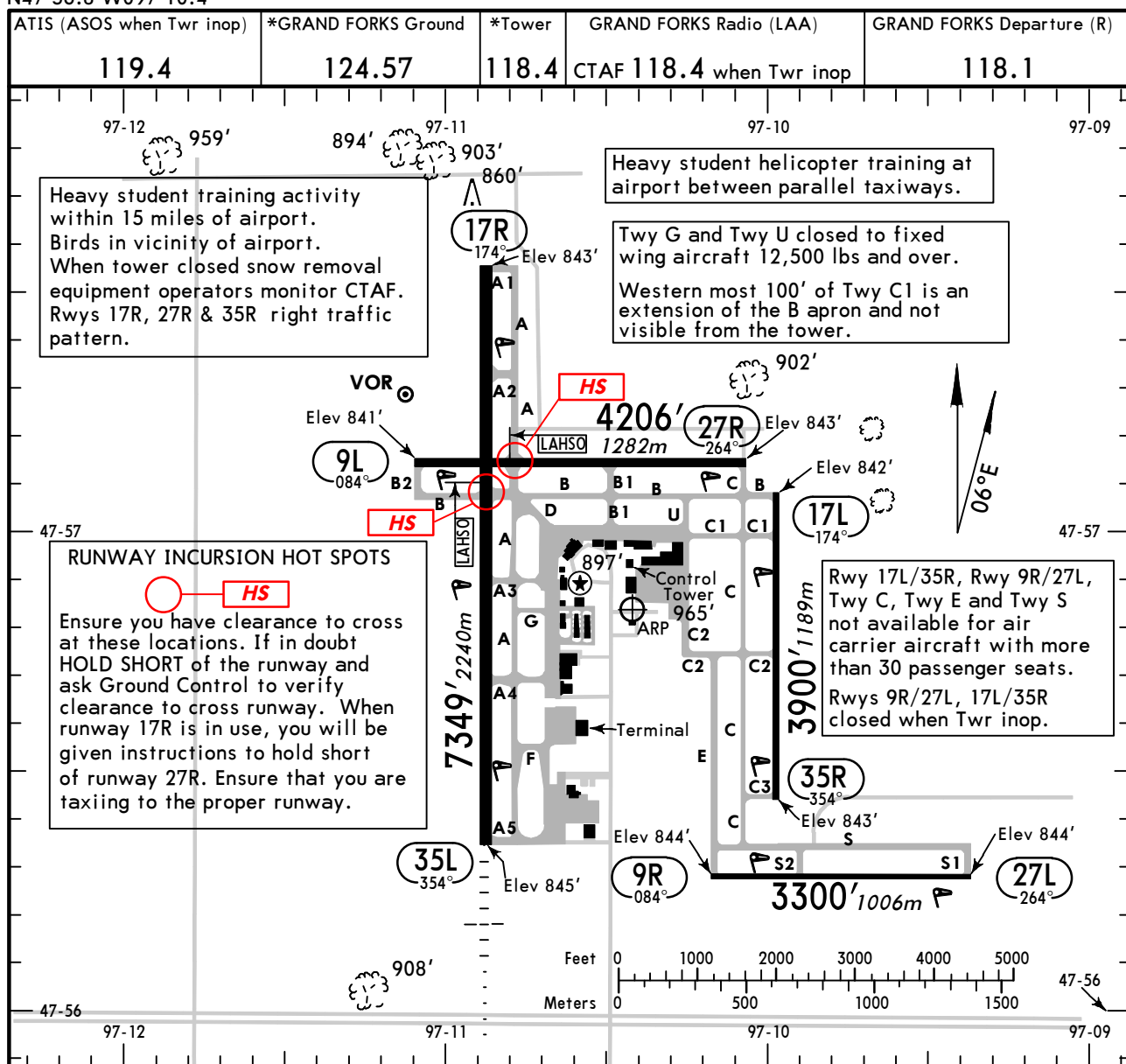
Runway: 27R
Length x Width: 4206 ft x 100 ft
Surface Type: concrete
TDZ-Elev: 843 ft
Lighting: Edge, REIL, Pilot controlled

Runway: 35L
Length x Width: 7351 ft x 150 ft
Surface Type: asphalt
TDZ-Elev: 845 ft
Lighting: Edge, ALS, Pilot controlled

Runway: 35R
Length x Width: 3901 ft x 75 ft
Surface Type: concrete
TDZ-Elev: 844 ft
Lighting: Edge

Communication Information

ATIS 119.4
ASOS 119.4
Grand Forks Tower 120.55 Secondary
Grand Forks Tower 118.4 CTAF PCL
Grand Forks Ground Control 124.575
Grand Forks Approach Control 118.1
Grand Forks Departure Control 118.1
Grand Forks Intl Unicom 122.95
Grand Forks Flight Service Station 122.6 RCO
Grand Forks Flight Service Station 122.2 RCO



ADDITIONAL RUNWAY INFORMATION

RWY		USABLE LENGTHS				TAKE-OFF	WIDTH
		LANDING BEYOND Threshold	Glide Slope	LAHSO Distance			
9L	① MIRL PAPI-L (angle 3.00°)						100' 30m
27R	① MIRL ② REIL VASI-L			17R/35L 3000' 914m			
9R	③ MIRL PAPI-L (angle 3.00°, TCH 21')						60' 18m
27L							
17R	① HIRL ② REIL PAPI-L (angle 3.00°)						150' 46m
35L	① HIRL ① MALSR PAPI-L (angle 2.76°)	6060' 1847m		9L/27R 4600' 1402m			
17L	③ MIRL PAPI-L (angle 3.0°, TCH 21')						75' 23m
35R	③ MIRL PAPI-L (angle 3.0°, TCH 22')						

- ① Activate on 118.4 when Twr inop.
- ② Activate on 118.4.
- ③ Preset on low intensity 1930-0200LT.
- ④ Grooved.

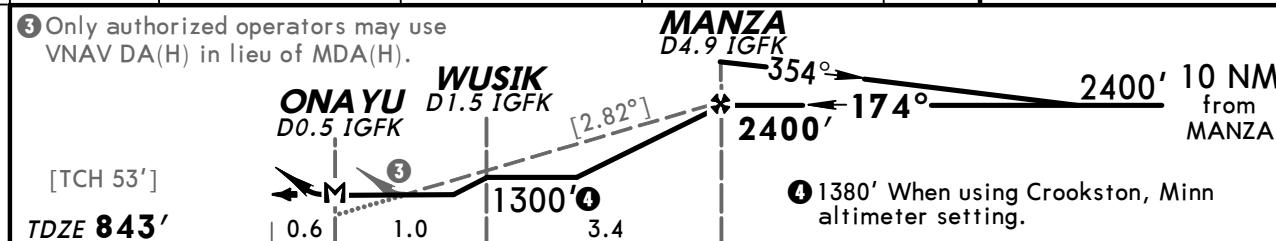
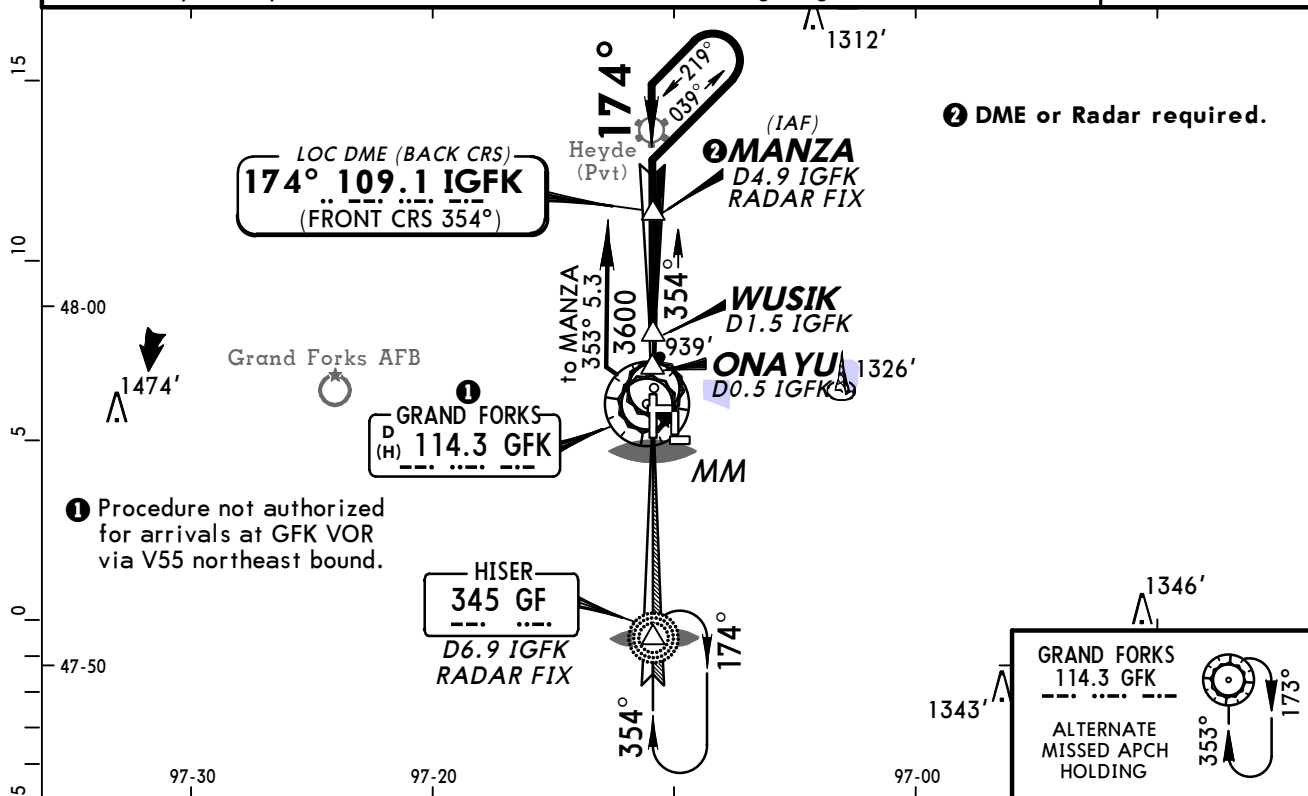
TAKE-OFF			FOR FILING AS ALTERNATE			
	All Rwy's		Authorized Only When Twr Operating		Authorized Only When Twr Operating and Local Weather Available	Authorized Only When Local Weather Available
	Adequate Vis Ref	STD	ILS Rwy 35L	LOC Rwy 35L	LOC (BC) Rwy 17R	Other
1 & 2 Eng	1/4	1	A	600-2	800-2	800-2
3 & 4 Eng		1/2	B			
			C			
			D			

KGFK/GFK GRAND FORKS INTL

JEPPesen
25 NOV 11 (11-1)

GRAND FORKS, N DAK
LOC (BACK CRS) Rwy 17R

ATIS (ASOS when Twr inop) 119.4	GRAND FORKS Approach (R) 118.1	*GRAND FORKS Tower 118.4	GRAND FORKS Radio (LAA) CTAF 118.4 (when Twr inop)	*Ground 124.57
LOC IGFK 109.1	Final Apch Crs 174° (Front Crs 354°)	Minimum Alt MANZA 2400' (1557')	MDA(H) (CONDITIONAL) 1200' (357')	Apt Elev 845' TDZE 843'
MISSED APCH: Climb to 2600' via IGFK LOC SOUTH CRS to HISER LOM/D6.9 IGFK/RADAR FIX and hold, or as directed by ATC. Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. DME or Radar or ADF required. 2. Use local altimeter setting; if not received, use Crookston, Minn altimeter setting. 3. Disregard glideslope indications. 4. Visibility reduction by helicopters not authorized. 5. Pilot controlled lighting 118.4.				
				 MSA GF LOM



Gnd speed-Kts	70	90	100	120	140	160				
Descent angle [2.82°]	349	449	499	599	698	798				
MAP at ONAYU or MANZA to MAP	4.4	3:46	2:56	2:38	2:12	1:53	1:39			
								REIL	2600'	IGFK 109.1
								PAPI-L	via	GF 345

STRAIGHT-IN LANDING RWY 17R				CIRCLE-TO-LAND			
With WUSIK		Without WUSIK		With WUSIK		Without WUSIK	
With Local Altimeter Setting				With Local Altimeter Setting			
MDA(H) 1200' (357')		MDA(H) 1300' (457')		Max Kts	MDA(H)	MDA(H)	
A	1	1	1 1/4	90	1280' (435') - 1	1300' (455') - 1	
B				120	1300' (455') - 1		
C				140	1300' (455') - 1 1/2	1300' (455') - 1 1/2	
D	1 1/4	1 1/2	165	1400' (555') - 2	1400' (555') - 2		
With Crookston, Minn Altimeter Setting				With Crookston, Minn Altimeter Setting			
MDA(H) 1280' (437')		MDA(H) 1380' (537')		Max Kts	MDA(H)	MDA(H)	
A	1	1	1 1/2	90	1360' (515') - 1	1380' (535') - 1	
B				120	1380' (535') - 1		
C				140	1380' (535') - 1 1/2	1380' (535') - 1 1/2	
D	1 1/2	1 3/4	165	1480' (635') - 2	1480' (635') - 2		

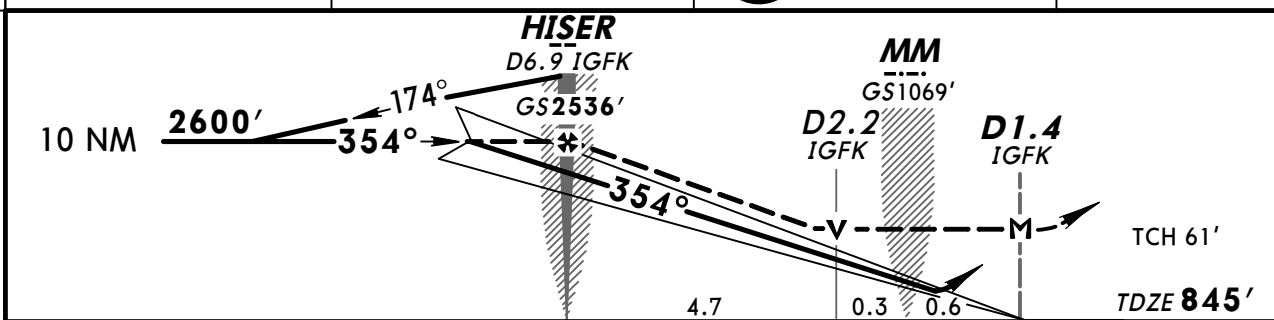
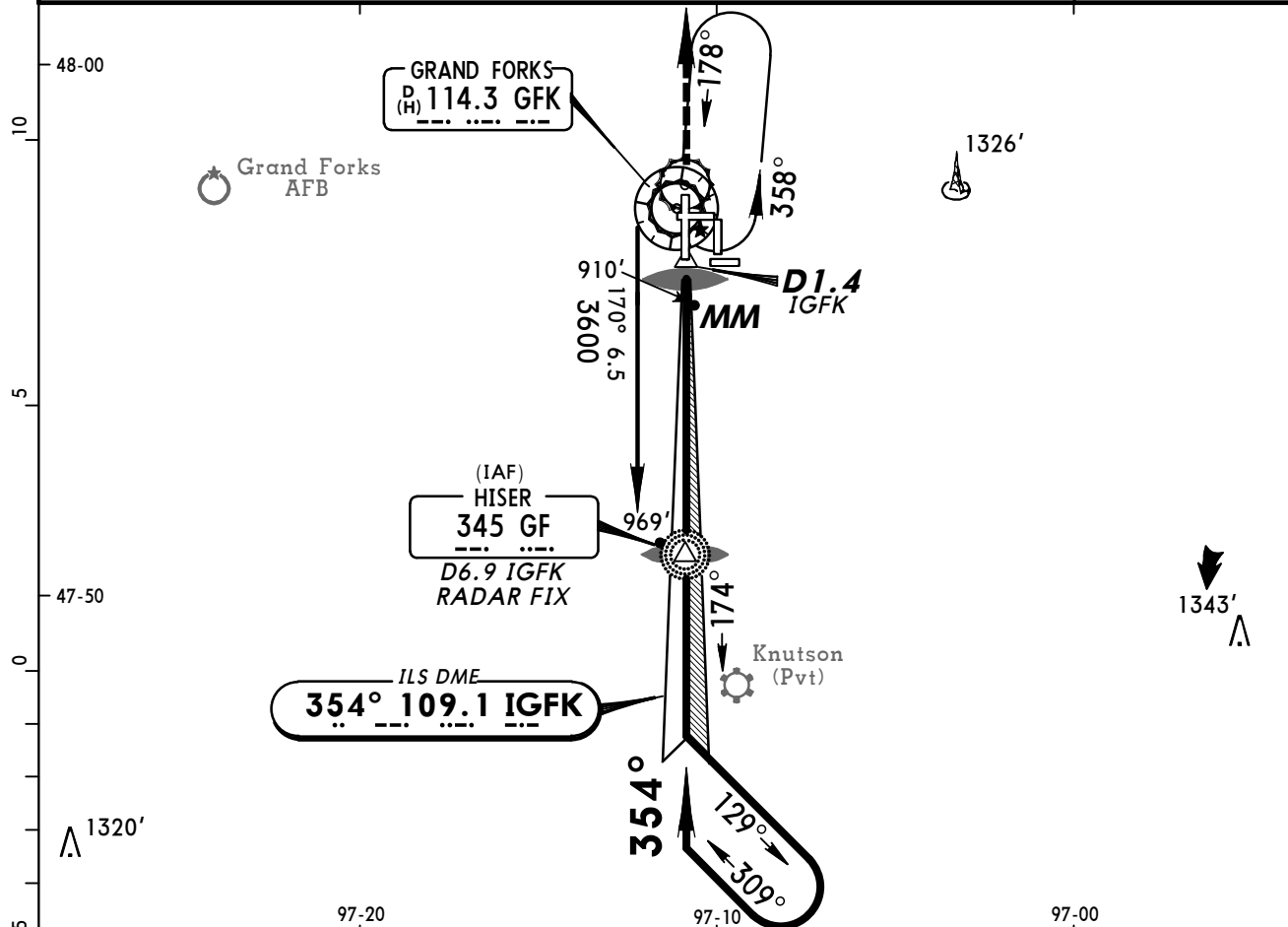
CHANGES: None.

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TERPS AMEND 13 3 JUN 2010

BRIEFING STRIP™

ATIS (ASOS when Twr inop) 119.4		GRAND FORKS Approach (R) 118.1		*GRAND FORKS Tower CTAF 118.4		*Ground 124.57	
LOC IGFK 109.1	Final Apch Crs 354°	GS HISER 2536' (1691')	ILS DA(H) (CONDITIONAL) 1045' (200')	Apt Elev 845' TDZE 845'			 MSA GF LOM
MISSED APCH: Climb to 3600' then RIGHT turn direct GFK VOR and hold.							
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. ADF, DME or Radar required. 2. Use local altimeter setting; if not received, use Crookston, Minn altimeter setting. 3. VDP not authorized with Crookston, Minn altimeter setting. 4. Pilot controlled lighting 118.4.							



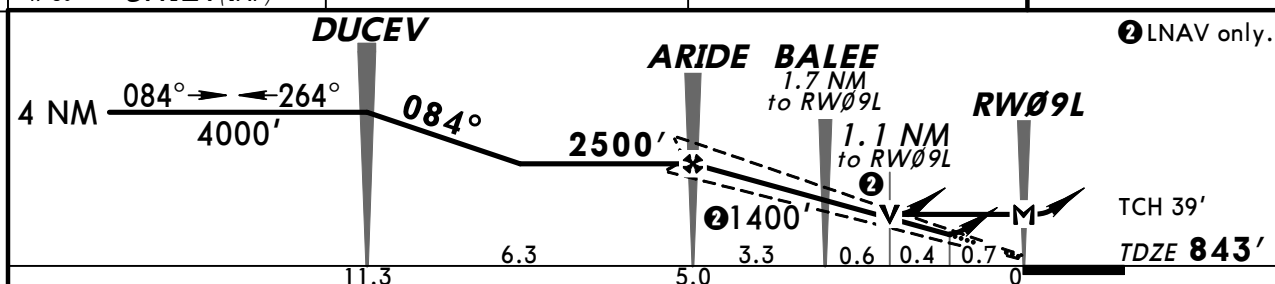
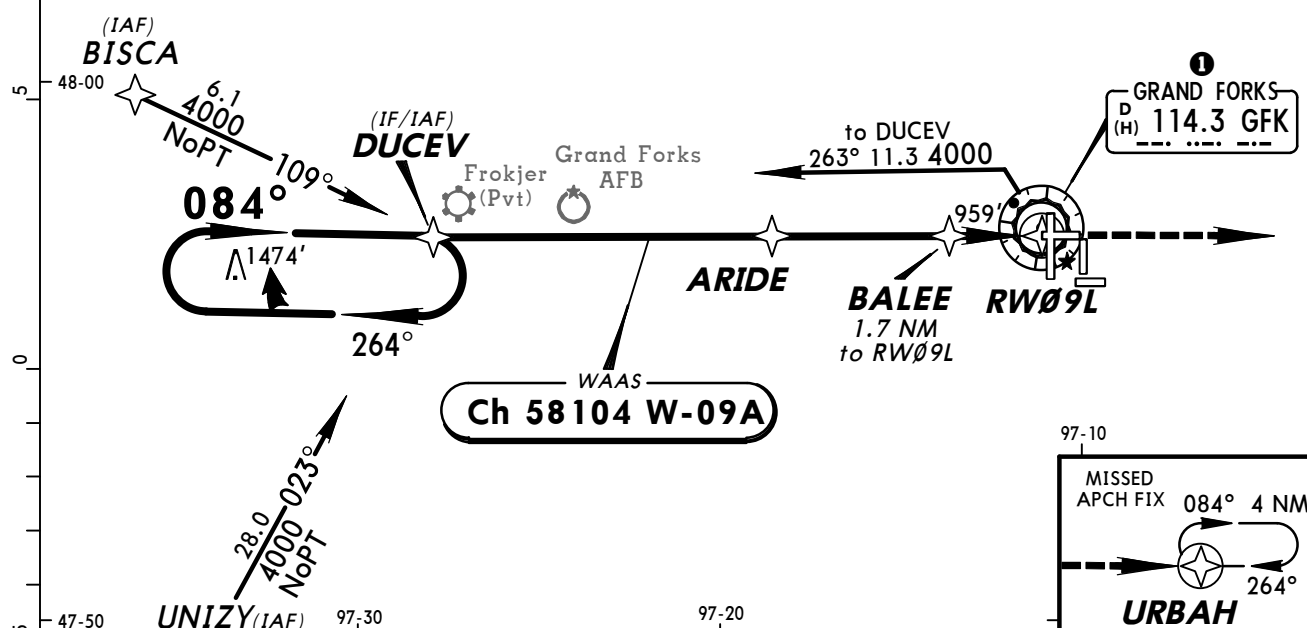
Gnd speed-Kts	70	90	100	120	140	160	MALSR		3600'	RT	D	GFK 114.3
GS	2.76°	347	446	496	595	694	PAPI		↑			
MAP at D1.4 IGFK or HISER to MAP	5.6	4:48	3:44	3:22	2:48	2:24						

STRAIGHT-IN LANDING RWY 35L							CIRCLE-TO-LAND		
ILS			LOC (GS out)				With Local Altimeter Setting		With Crookston, Minn Altimeter Setting
DA(H) 1045' (200')			DA(H) 1125' (280')		MDA(H) 1160' (315')		Max Kts		MDA(H)
With Local Altimeter Setting			With Crookston, Minn Altimeter Setting		With Local Altimeter Setting				MDA(H)
FULL	RAIL or ALS out		FULL	RAIL or ALS out	RAIL out	ALS out			
A							90	1280' (435') - 1	1360' (515') - 1
B					1/2	3/4	120	1300' (455') - 1	1380' (535') - 1
C	1/2	3/4	1/2	3/4			140	1300' (455') - 1 1/2	1380' (535') - 1 1/2
D					3/4	1	165	1400' (555') - 2	1480' (635') - 2

1 MDA(H) 1240' (395') with Crookston, Minn altimeter setting.

ATIS (ASOS when Twr inop)		GRAND FORKS Approach (R)		*GRAND FORKS Tower		*Ground	
119.4		118.1		CTAF 118.4		124.57	
WAAS Ch 58104 W-09A		<i>Final</i> <i>Apch Crs</i> 084°		<i>Minimum Alt</i> ARIDE 2500' (1657')		<i>LPV</i> <i>DA(H)</i> (CONDITIONAL) 1093' (250')	
				<i>Apt Elev</i> 845' <i>TDZE</i> 843'		3300' <i>MSA RW09L</i>	
MISSD APCH: Climb to 2800' direct URBAN and hold.							
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. Use local altimeter setting; if not received, use Crookston, Minn altimeter setting. 2. DME/DME RNP-0.30 not authorized. 3. For uncompensated Baro-VNAV systems, LNAV/VNAV not authorized below -16°C (4°F) or above 47°C (116°F). 4. Baro-VNAV and VDP not authorized when using Crookston, Minn altimeter setting. 5. Pilot controlled lighting 118.4.							

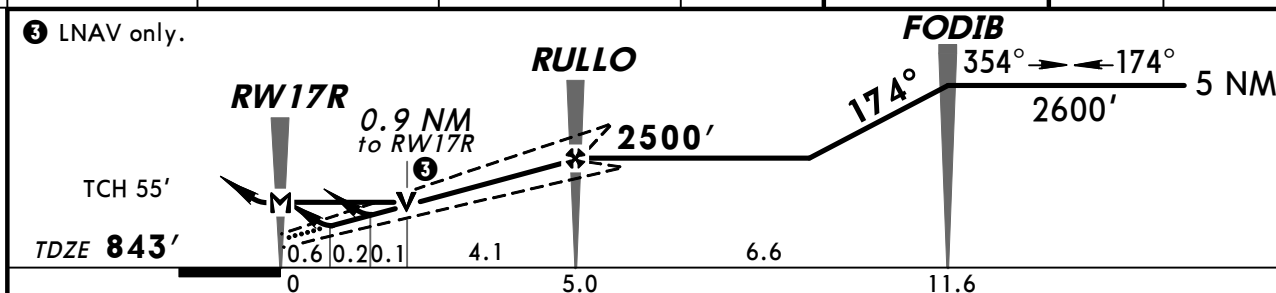
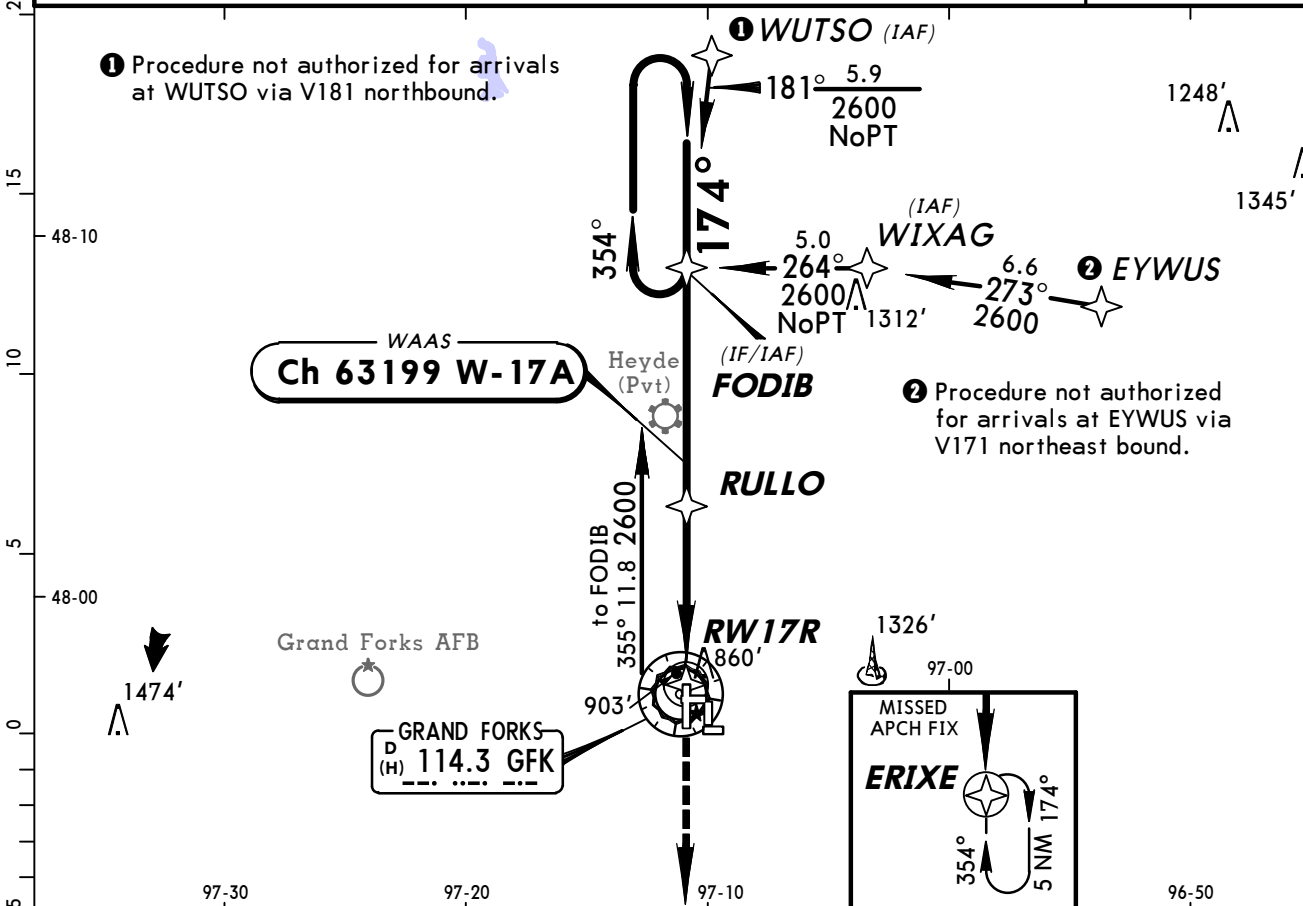
❶ Procedure not authorized for arrivals at GEK VOR via V55 northeast bound.



<i>Gnd speed-Kts</i>	70	90	100	120	140	160		PAPI-L	2800'	↑	D→	URBAH
<i>Glide Path Angle 3.00°</i>	372	478	531	637	743	849						
<i>MAP at RW09L</i>												

STRAIGHT-IN LANDING RWY 9L					CIRCLE-TO-LAND	
With Local Altimeter Setting					With Local Altimeter Setting	
LPV		LNAV/VNAV		LNAV		
DA(H) 1093'(250')		DA(H) 1238'(395')		MDA(H) 1220'(377')		
A	1	1½	1	Max Kts	MDA(H)	
B				90	1280'(435')-1	
C				120	1300'(455')-1	
D			140	1300'(455')-1½		
			1¼	165	1400'(555')-2	
With Crookston, Minn Altimeter Setting					With Crookston, Minn Altimeter Setting	
DA(H) 1155'(312')		DA(H) 1300'(457')		MDA(H) 1300'(457')		
A	1	1¾	1	Max Kts	MDA(H)	
B				90	1360'(515')-1	
C				120	1380'(535')-1	
D			140	1380'(535')-1½		
			1½	165	1480'(635')-2	

ATIS (ASOS when Twr inop) 119.4	GRAND FORKS Approach (R) 118.1	*GRAND FORKS Tower CTAF 118.4	*Ground 124.57
WAAS Ch 63199 W-17A	Final Apch Crs 174°	Minimum Alt RULLO 2500' (1657')	LPV DA(H) (CONDITIONAL) 1107' (264')
Apt Elev 845' TDZE 843'			
MISSED APCH: Climb to 2600' direct ERIXE and hold. Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. Use local altimeter setting; if not received, use Crookston, Minn altimeter setting. 2. DME/DME RNP-0.30 not authorized. 3. VDP not authorized with Crookston, Minn altimeter setting. 4. Baro-VNAV not authorized with Crookston, Minn altimeter setting. 5. Baro-VNAV not authorized below -16°C (5°F). 6. Pilot controlled lighting 118.4.			
3300' MSA RW17R			

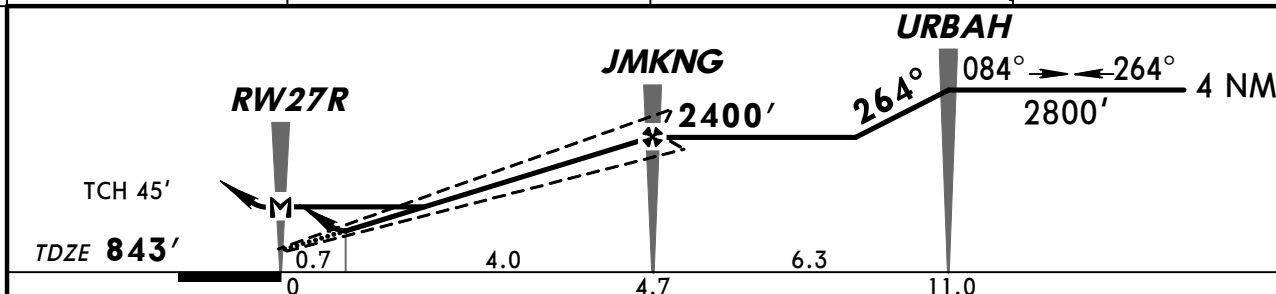
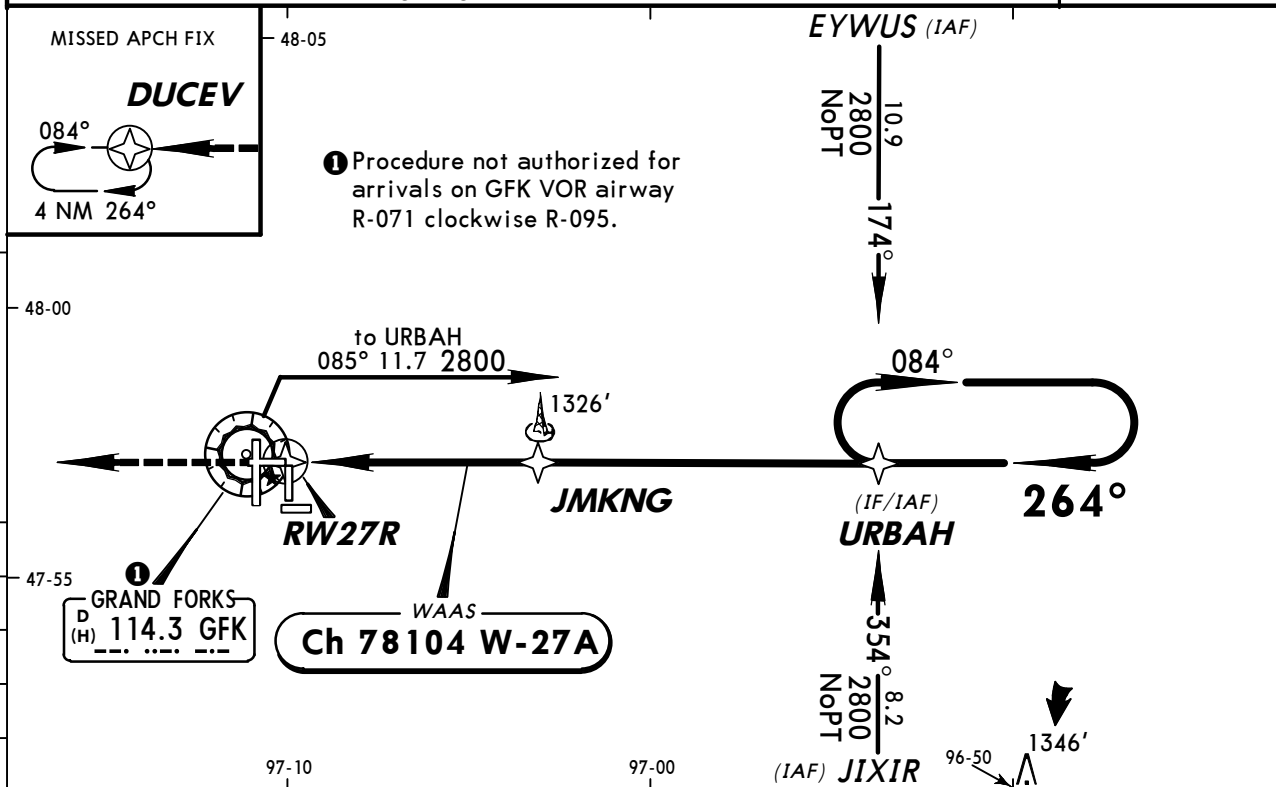


Gnd speed-Kts	70	90	100	120	140	160				
Glide Path Angle 3.00°	372	478	531	637	743	849				
MAP at RW17R										

STRAIGHT-IN LANDING RWY 17R			CIRCLE-TO-LAND	
1 LPV	2 LNAV/VNAV	3 LNAV	With Local Altimeter Setting	With Crookston, Minn Altimeter Setting
DA(H) 1107' (264')	DA(H) 1157' (314')	MDA(H) 1180' (337')	Max Kts	MDA(H)
			90	1280' (435')-1
			120	1300' (455')-1
			140	1300' (455')-1 1/2
			165	1400' (555')-2

- 1 DA(H) 1187' (344'), vis 1 1/4 with Crookston, Minn altimeter setting.
- 2 DA(H) 1237' (394'), vis 1 1/4 with Crookston, Minn altimeter setting.
- 3 MDA(H) 1260' (417'), and CAT C and D vis 1 1/4 with Crookston, Minn altimeter setting.

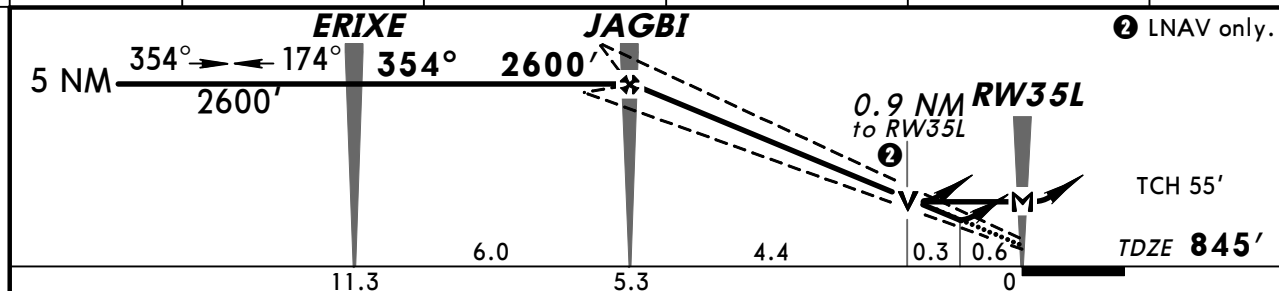
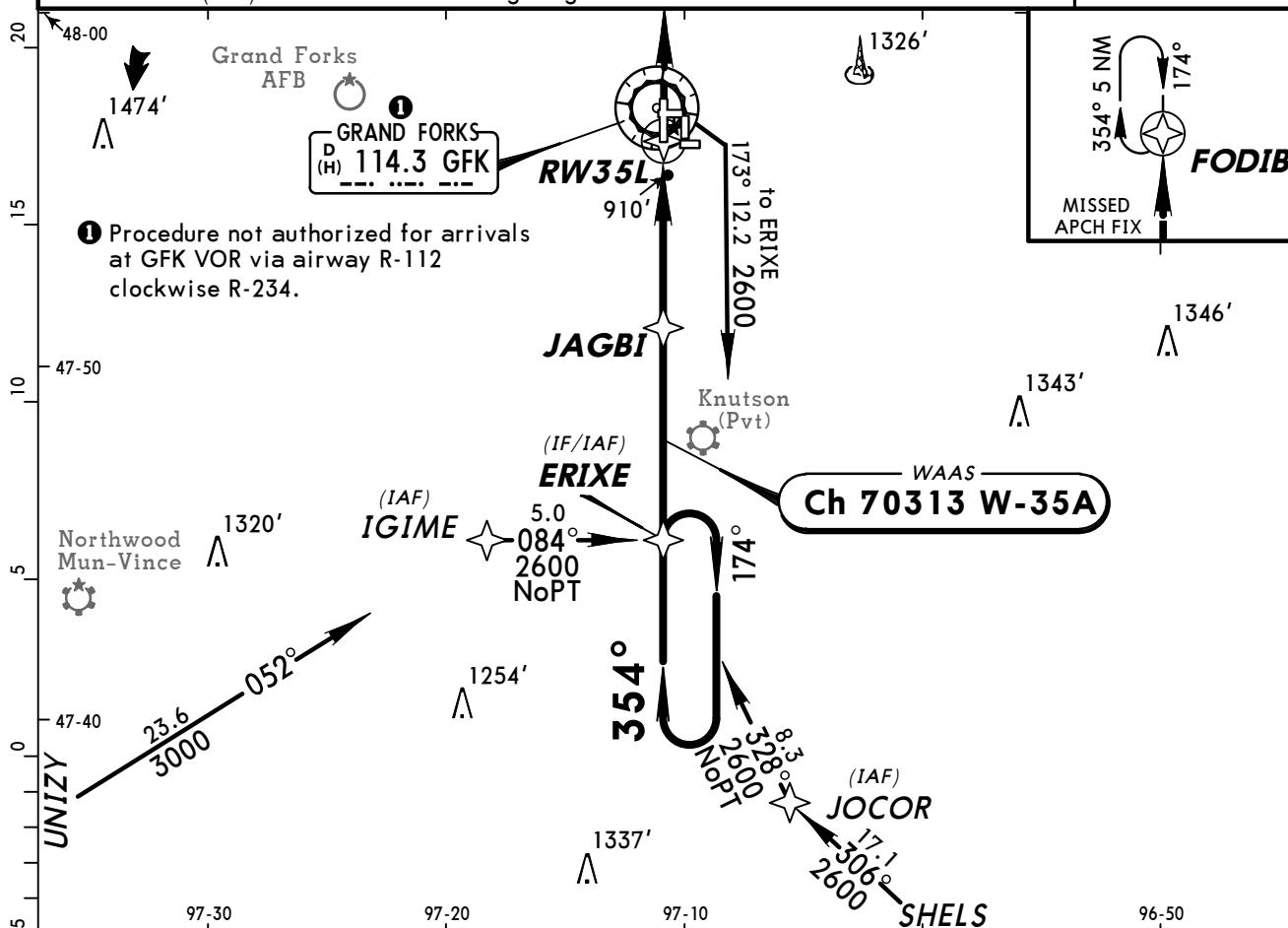
ATIS (ASOS when Twr inop) 119.4	GRAND FORKS Approach (R) 118.1	*GRAND FORKS Tower CTAF 118.4	*Ground 124.57
WAAS Ch 78104 W-27A	Final Apch Crs 264°	Minimum Alt JMKNG 2400' (1557')	LPV DA(H) (CONDITIONAL) 1093' (250') Apt Elev 845' TDZE 843'
MISSED APCH: Climb to 4000' direct DUCEV and hold, continue climb-in-hold to 4000'. Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. Use local altimeter setting; if not received, use Crookston, Minn altimeter setting. 2. DME/DME RNP-0.30 not authorized. 3. Visibility reduction by helicopters not authorized. 4. Pilot controlled lighting 118.4.			
			3300' MSA RW27R



Gnd speed-Kts	70	90	100	120	140	160		REIL	4000'	DUCEV
Glide Path Angle 3.00°	372	478	531	637	743	849		VASI-L		
MAP at RW27R										

STRAIGHT-IN LANDING RWY 27R					CIRCLE-TO-LAND		
With Local Altimeter Setting					With Local Altimeter Setting		
LPV DA(H) 1093' (250')			LNAV MDA(H) 1460' (617')		Max Kts	MDA(H)	
A	1		1		90	1460' (615') - 1	
B					120		
C			1 3/4		140	1460' (615') - 1 3/4	
D					2		
With Crookston, Minn Altimeter Setting							With Crookston, Minn Altimeter Setting
DA(H) 1155' (312')			MDA(H) 1540' (697')		Max Kts	MDA(H)	
A	1		1		90	1540' (695') - 1	
B					120		
C			2		140	1540' (695') - 2	
D					2 1/4		

ATIS (ASOS when Twr inop) 119.4		GRAND FORKS Approach (R) 118.1		*GRAND FORKS Tower CTAF 118.4		*Ground 124.57				
WAAS Ch 70313 W-35A		<i>Final</i> <i>Apch Crs</i> 354°		<i>Minimum Alt</i> <i>JAGBI</i> 2600' (1755')		<i>LPV</i> <i>DA(H)</i> (CONDITIONAL) 1095' (250')		<i>Apt Elev</i> 845' <i>TDZE</i> 845'		3300' MSA RW35L
MISSED APCH: Climb to 2600' direct FODIB and hold.										
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. Use local altimeter setting; if not received, use Crookston, Minn altimeter setting. 2. DME/DME RNP-0.30 not authorized. 3. VGSI and RNAV glidepath not coincident. 4. VDP not authorized with Crookston, Minn altimeter setting. 5. Baro-VNAV not authorized with Crookston, Minn altimeter setting. 6. Baro-VNAV not authorized below -16°C (4°F). 7. Pilot controlled lighting 118.4.										



Gnd speed-Kts	70	90	100	120	140	160	MALSR PAPI	2600'	D →	FODIB
Glide Path Angle 3.00°	372	478	531	637	743	849		↑		
MAP at RW35L										

STRAIGHT-IN LANDING RWY 35L								CIRCLE-TO-LAND			
1 LPV DA(H) 1095' (250')		2 LNAV/VNAV DA(H) 1174' (329')		3 LNAV MDA(H) 1180' (335')		Max Kts		With Local Altimeter Setting MDA(H)		With Crookston, Minn Altimeter Setting MDA(H)	
RAIL or ALS out		RAIL out ALS out		RAIL out ALS out							
A						90		1280' (435')-1		1360' (515')-1	
B		1/2	3/4	1	1/2	3/4	1	1300' (455')-1		1380' (535')-1	
C	1/2	1						1300' (455')-1 1/2		1380' (535')-1 1/2	
D		3/4	1					1400' (555')-2		1480' (635')-2	

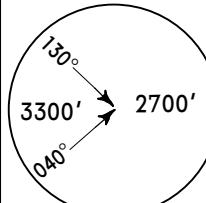
1 DA(H) 1175' (330') with Crookston, Minn altimeter setting.
2 DA(H) 1254' (409') with Crookston, Minn altimeter setting.
3 MDA(H) 1260' (415') with Crookston, Minn altimeter setting.

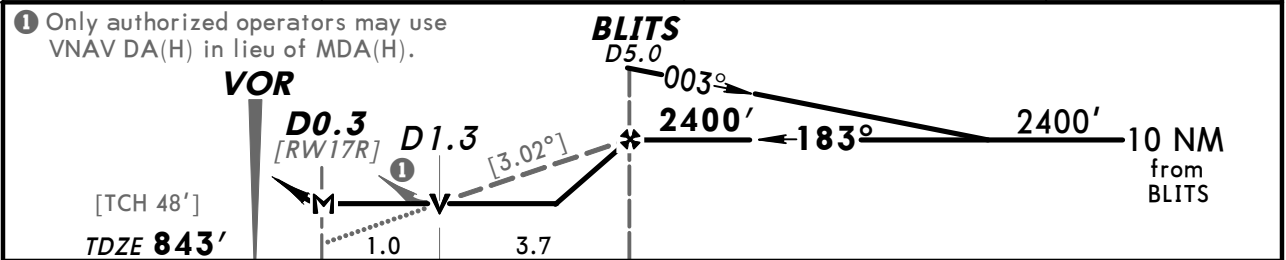
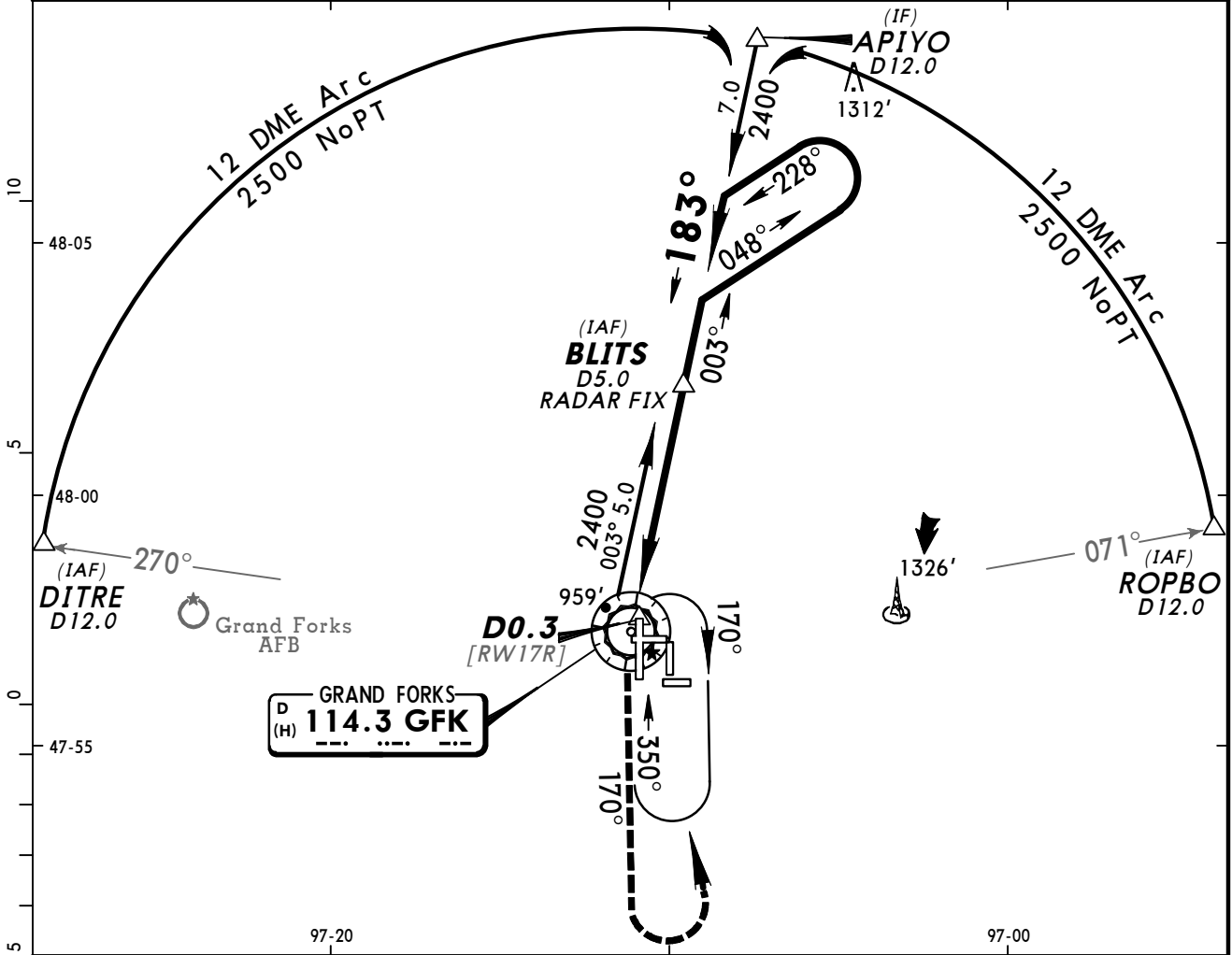
KGFK/GFK GRAND FORKS INTL

25 DEC 09 **(13-1)**

GRAND FORKS, N DAK
VOR Rwy 17R

BRIEFING STRIP TM

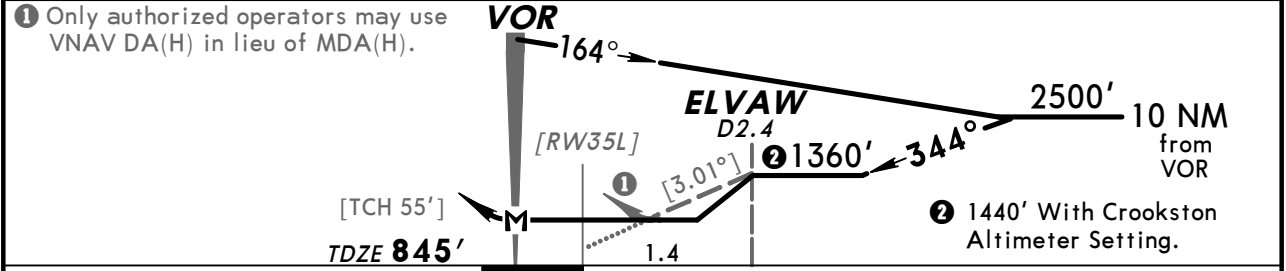
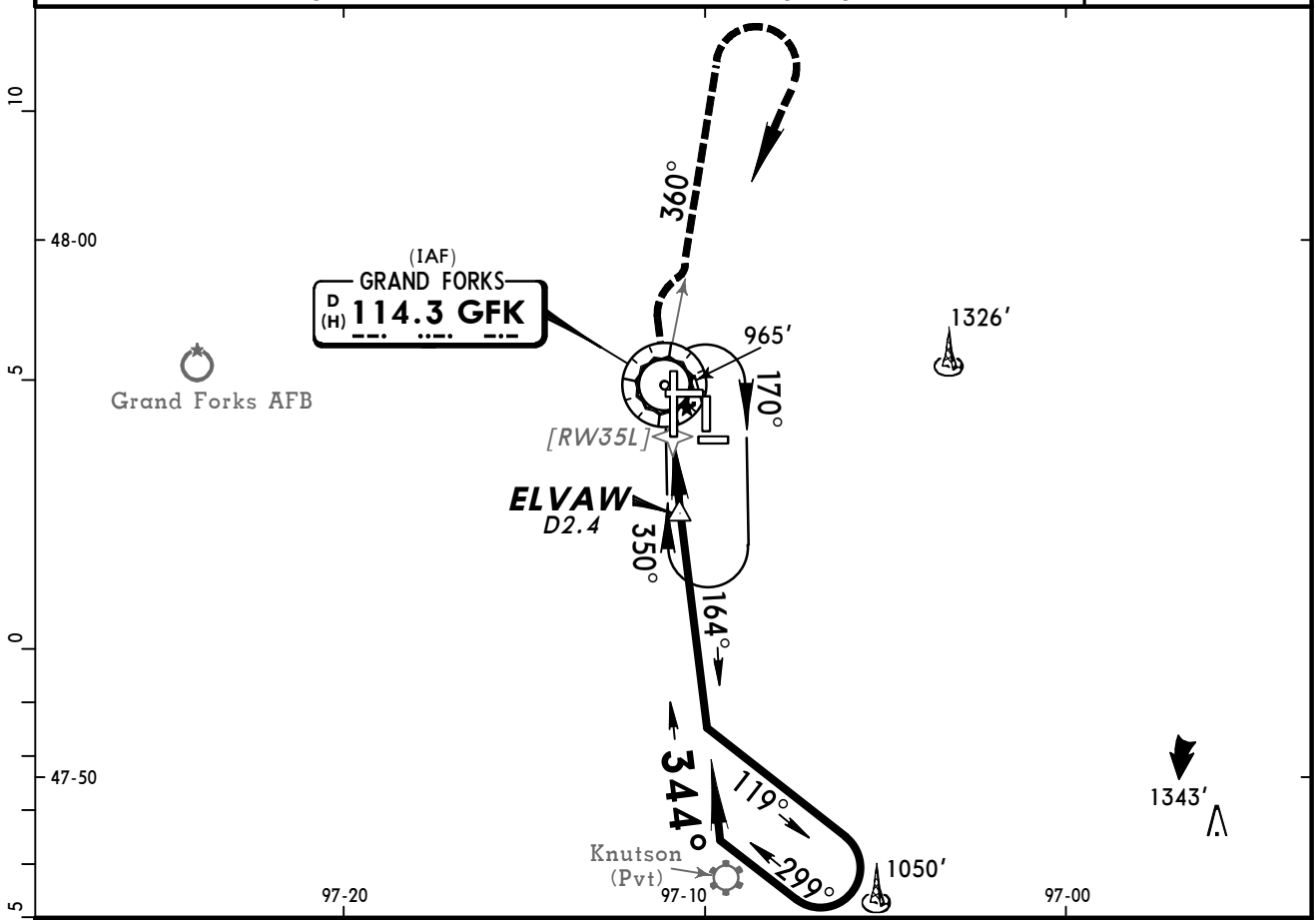
ATIS (ASOS when Twr inop) 119.4		GRAND FORKS Approach (R) 118.1		*GRAND FORKS Tower CTAF 118.4		*Ground 124.57				
VOR GFK 114.3		Final Apch Crs 183°		Minimum Alt BLITS 2400' (1557')		MDA(H) (CONDITIONAL) 1220' (377')		Apt Elev 845' TDZE 843'		
MISSED APCH: Climb to 3600' outbound via GFK VOR R-170 then LEFT turn direct GFK VOR and hold.										
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'										
1. Radar or DME required. 2. Use local altimeter setting; if not received, use Crookston, Minn altimeter setting. 3. VDP not authorized with Crookston, Minn altimeter setting. 4. VGSI and descent angles not coincident. 5. Pilot controlled lighting 118.4.										
MSA GFK VOR										



Gnd speed-Kts	70	90	100	120	140	160	REIL PAPI-L	3600' via GFK 114.3 R-170	LT	D	GFK 114.3
Descent angle [3.02°]	374	481	534	641	748	855					
MAP at D0.3 or BLITS to MAP	4.7	4:02	3:08	2:49	2:21	2:01					

STRAIGHT-IN LANDING RWY17R			CIRCLE-TO-LAND		
MDA(H) 1220' (377') With Local Altimeter Setting		MDA(H) 1300' (457') With Crookston, Minn Altimeter Setting	With Local Altimeter Setting	With Crookston, Minn Altimeter Setting	
TERPS	A	1	Max Kts	MDA(H)	MDA(H)
	B		90	1280' (435') - 1	1360' (515') - 1
	C		120	1300' (455') - 1	1380' (535') - 1
	D		140	1300' (455') - 1½	1380' (535') - 1½
			165	1400' (555') - 2	1480' (635') - 2

BRIEFING STRIP™	ATIS (ASOS when Twr inop) 119.4		GRAND FORKS Approach (R) 118.1		*GRAND FORKS Tower CTAF 118.4		*Ground 124.57		
	VOR GFK 114.3	Final Apch Crs 344°	No FAF		MDA(H) (CONDITIONAL) 1220' (375')	Apt Elev 845' TDZE 845'		 MSA GFK VOR	
	MISSED APCH: Climb to 1300' then climb to 3600' outbound via GFK VOR R-360 then RIGHT turn direct GFK VOR and hold.								
	Alt Set: INCHES								



Gnd speed-Kts	70	90	100	120	140	160	MALSR PAPI	1300'	3600'	GFK
Descent angle [3.01°]	373	479	532	639	745	852		↑	↑	via 114.3
MAP at VOR										R-360

STRAIGHT-IN LANDING RWY 35L							CIRCLE-TO-LAND			
With Elvaw				Without Elvaw			With Elvaw		Without Elvaw	
With Local Altimeter Setting							With Local Altimeter Setting			
MDA(H) 1220' (375')				MDA(H) 1360' (515')			Max Kts	MDA(H)		MDA(H)
							90	1280' (435') - 1		1360' (515') - 1
							120	1300' (455') - 1		
With Crookston, Minn Altimeter Setting							140	1300' (455') - 1½		1360' (515') - 1½
MDA(H) 1300' (455')				MDA(H) 1440' (595')			165	1400' (555') - 2		1400' (555') - 2
		RAIL out	ALS out			RAIL out	ALS out	With Crookston, Minn Altimeter Setting		
A	1½	¾	1	1½	¾	1	Max Kts	MDA(H)		MDA(H)
B							90	1360' (515') - 1		1440' (595') - 1
C				120	1380' (535') - 1					
				1	1½		140	1380' (535') - 1½		1440' (595') - 1½
D	1	1¼		1¼	1¾		165	1480' (635') - 2		1480' (635') - 2

General Information

Location: Williston ND USA
IATA Code: ISN
Lat/Long: N48° 10.7' W103° 38.5'
Elevation: 1982 ft

Airport Use: Public
Magnetic Variation: 8.7°E
Sectional Chart: Billings

Fuel Types: 100 Octane (LL), Jet A
Oxygen Types: High Pressure
Repair Types: Major Airframe, Major Engine
Customs: Yes
Airport Type: IFR
Landing Fee: No
Control Tower: No
Jet Start Unit: Yes
LLWS Alert: No
Beacon: Yes
Pattern Altitude: 800 ft AGL

Sunrise: 1340 Z
Sunset: 0035 Z,

Runway Information

Runway: 02
Length x Width: 3453 ft x 60 ft
Surface Type: asphalt
TDZ-Elev: 1920 ft
Lighting: Edge, REIL, Pilot controlled

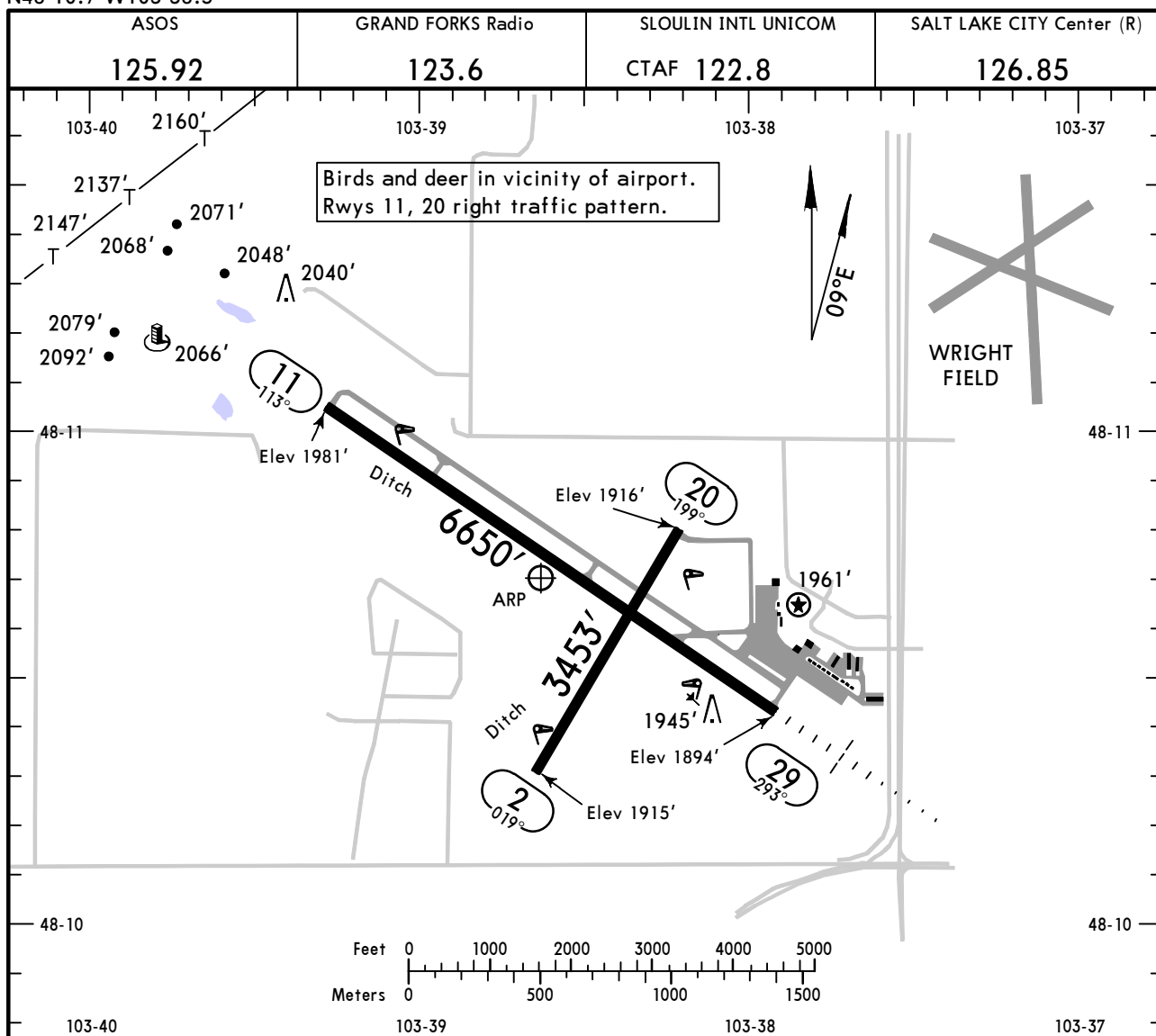
Runway: 11
Length x Width: 6650 ft x 100 ft
Surface Type: asphalt
TDZ-Elev: 1982 ft
Lighting: Edge, REIL, Pilot controlled

Runway: 20
Length x Width: 3453 ft x 60 ft
Surface Type: asphalt
TDZ-Elev: 1920 ft
Lighting: Edge, REIL, Pilot controlled

Runway: 29
Length x Width: 6650 ft x 100 ft
Surface Type: asphalt
TDZ-Elev: 1930 ft
Lighting: Edge, ALS, Pilot controlled

Communication Information

ASOS 125.925
Sloulin Intl Unicom 122.8 CTAF PCL
Grand Forks Flight Service Station 123.6 RCO
Salt Lake City Center 126.85 Remote Communications Air-Ground



ADDITIONAL RUNWAY INFORMATION

RWY		USABLE LENGTHS			
		Threshold	Landing Beyond Glide Slope	TAKE-OFF	WIDTH
2	① MIRL ① REIL ① PAPI-L (angle 4.0°)				60'
20	① MIRL REIL ① PAPI-L (angle 4.0°)				
11	③ MIRL ① REIL ① PAPI-L (angle 3.6°)				100'
29	③ MIRL ① MALSR ① PAPI-L (angle 3.0°)		5851'		

- ① Activate on 122.8.
- ② Porous friction course overlay.
- ③ Increase intensity on 122.8.

TAKE-OFF & OBSTACLE DEPARTURE PROCEDURE

	Rwys 2, 11, 20		Rwy 29		
	Adequate Vis Ref	STD	With Min climb of 359'/NM to 2200'		Other
			Adequate Vis Ref	STD	
1 & 2 Eng	1/4	1	1/4	1	400-2 1/4
3 & 4 Eng		1/2		1/2	

FOR FILING AS ALTERNATE

Authorized Only When
Local Weather Available

RNAV (GPS) Rwy 11
RNAV (GPS) Rwy 29
VOR Rwy 11
VOR DME Rwy 29

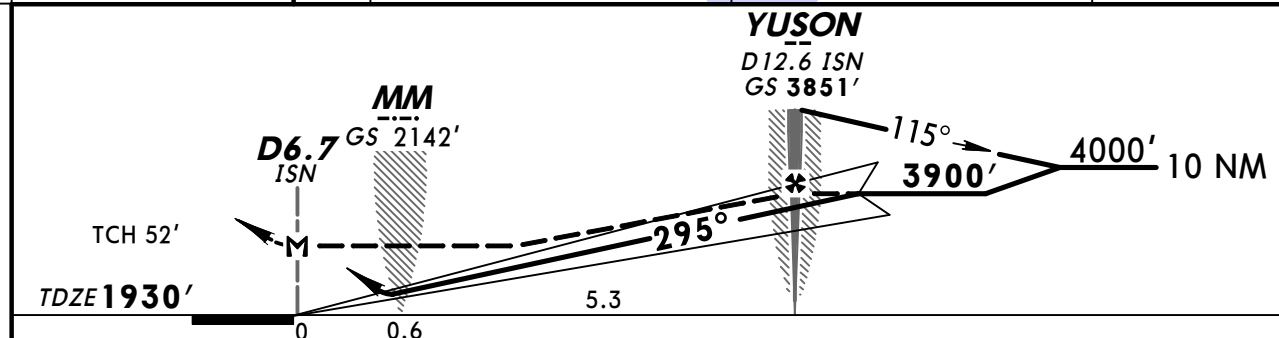
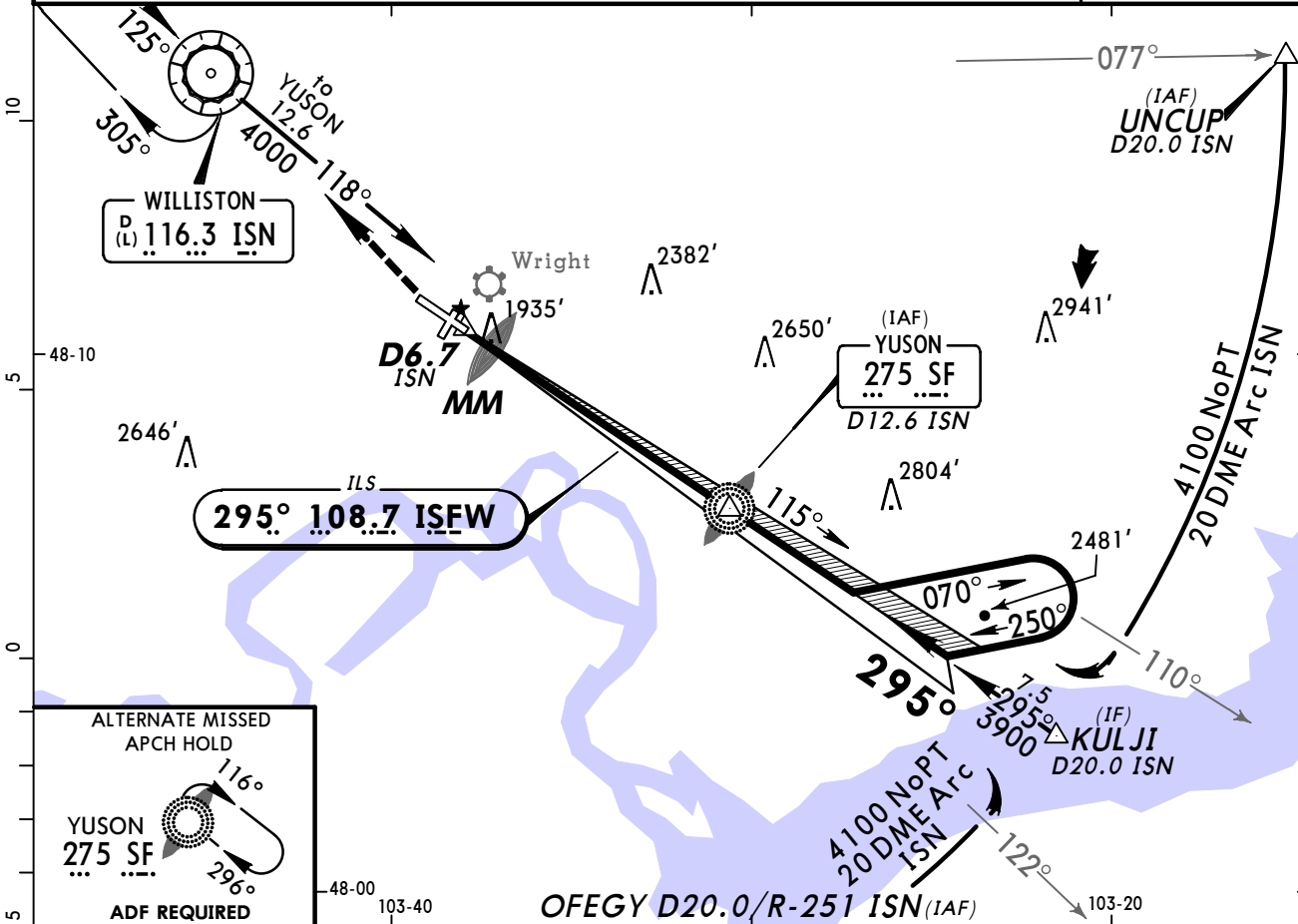
ILS or LOC
Rwy 29
NDB Rwy 29

A	800-2	NA
B		
C		
D		

OBSTACLE DP: Rwy 11, climb heading
115° to 2400' before turning left.

BRIEFING STRIP™

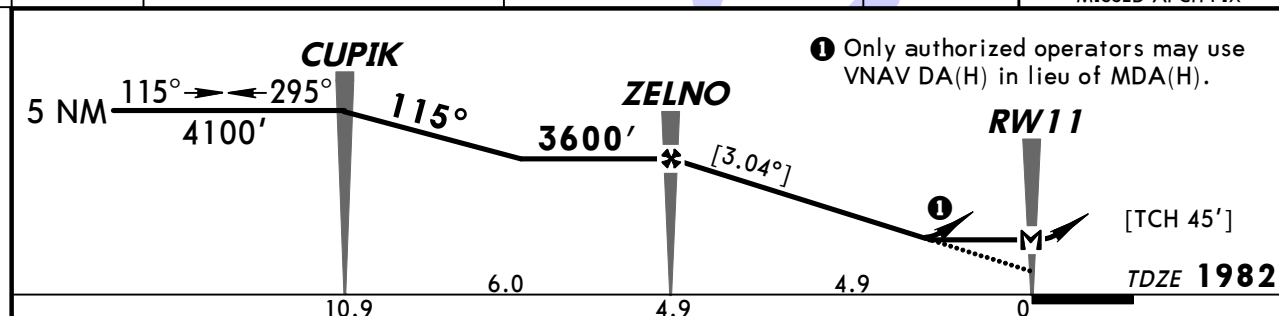
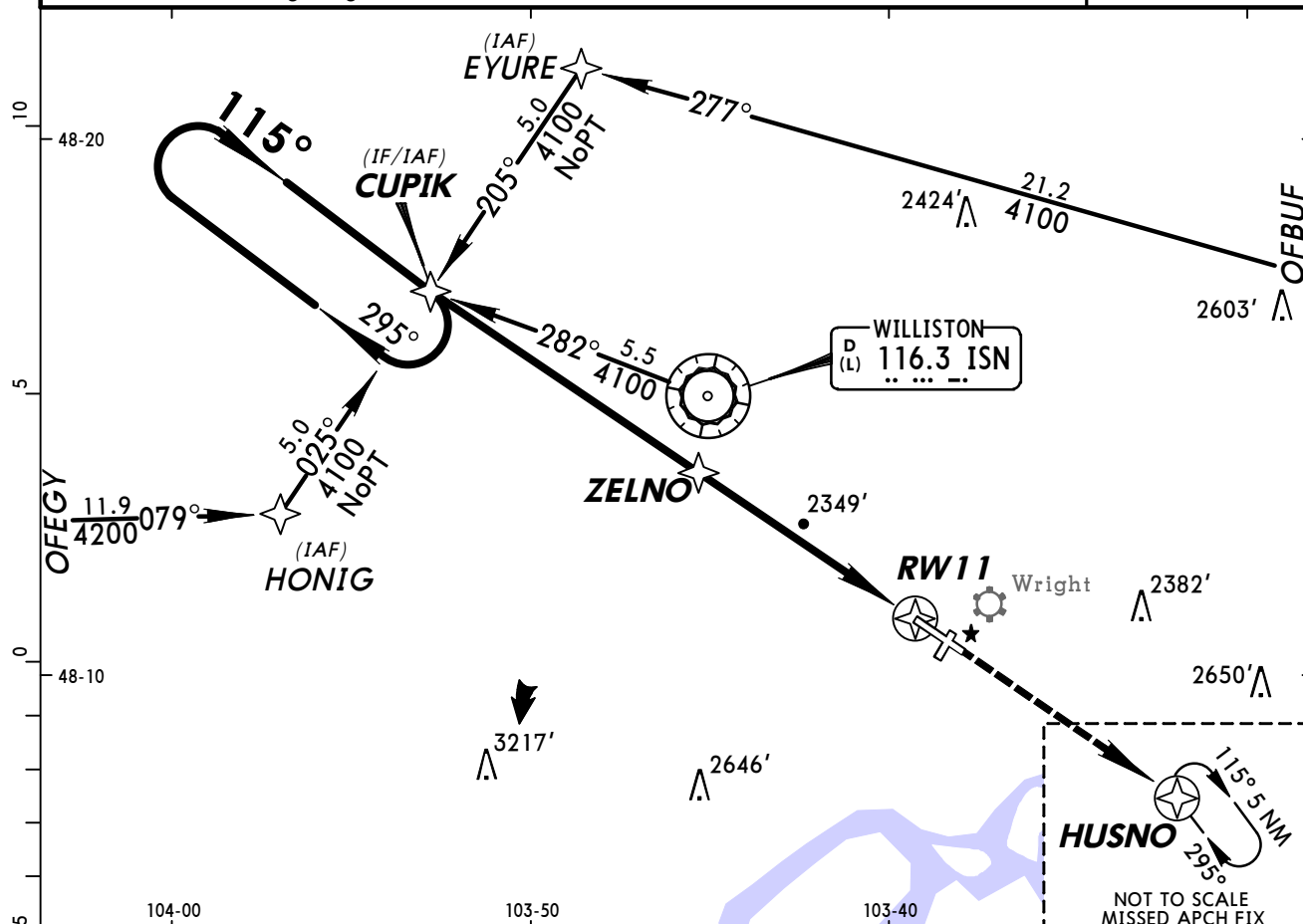
ASOS 125.92		SALT LAKE CITY Center (R) 126.85		GRAND FORKS Radio 123.6		SLOULIN INTL UNICOM CTAF 122.8	
LOC ISFW 108.7	Final Apch Crs 295°	GS YUSON 3851' (1921')	ILS DA(H) (CONDITIONAL) 2130' (200')	Apt Elev 1982' TDZE 1930'		4300' MSA SF LOM	
MISSED APCH: Climb to 2500' then climbing RIGHT turn to 4000' direct ISN VOR and hold.							
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. DME or ADF required. 2. Use local altimeter setting; if not received, use Sidney, Mont altimeter setting. 3. Pilot controlled lighting 122.8.							



Gnd speed-Kts	70	90	100	120	140	160	MALSR PAPI	2500'	4000'	↻	ISN 116.3
GS	3.00°	377	484	538	646	753		↑	↻ RT		
MAP at D6.7 ISN or YUSON to MAP 5.9	5:03	3:56	3:32	2:57	2:32	2:13					

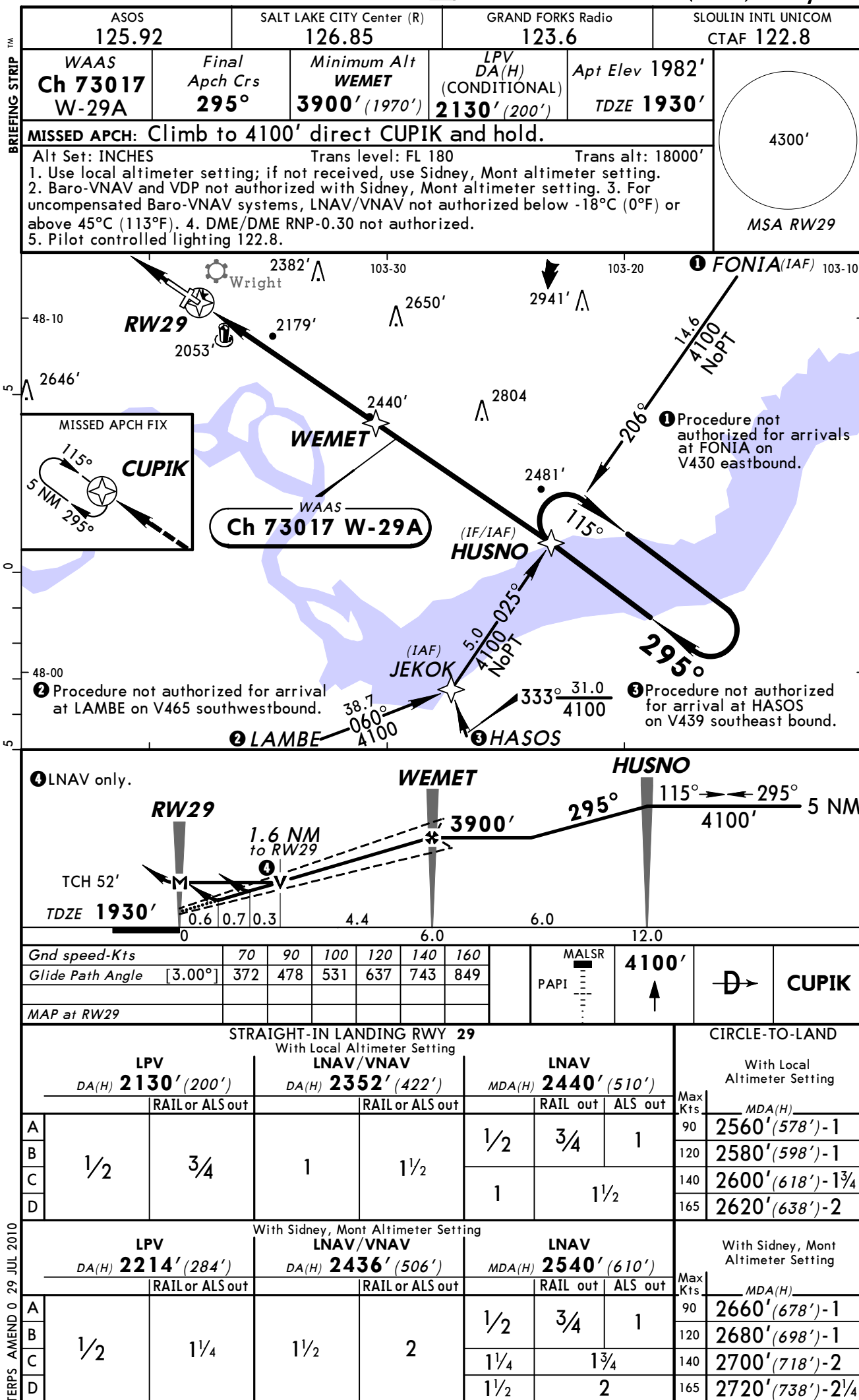
STRAIGHT-IN LANDING RWY 29									CIRCLE-TO-LAND		
ILS DA(H) 2130' (200')			LOC (GS out) MDA(H) 2420' (490')			MDA(H) 2520' (590')			With Local Altimeter Setting		With Sidney, Mont Altimeter Setting
With Local Altimeter Setting			With Local Altimeter Setting			With Sidney, Mont Altimeter Setting					
FULL	RAIL or ALS out		RAIL out	ALS out		RAIL out	ALS out		Max Kts	MDA(H)	MDA(H)
A			1/2	3/4	1	1/2	3/4	1	90	2560' (578')-1	2660' (678')-1
B	1/2	3/4							120	2580' (598')-1	2680' (698')-1
C			3/4	1 1/4	1	1 1/2			140	2600' (618')-1 3/4	2700' (718')-2
D			1	1 1/2	1 1/4	1 3/4			165	2620' (638')-2	2720' (738')-2 1/4

ASOS		SALT LAKE CITY Center (R)		GRAND FORKS Radio		SLOULIN INTL UNICOM	
125.92		126.85		123.6		CTAF 122.8	
RNAV	Final Apch Crs 115°	Minimum Alt ZELNO 3600' (1618')	LNAV MDA(H) (CONDITIONAL) 2600' (618')	Apt Elev 1982' TDZE 1982'		4300' MSA RW11	
MISSED APCH: Climb to 4100' direct HUSNO and hold.							
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. Use local altimeter setting; if not received, use Sidney, Mont altimeter setting. 2. DME/DME RNP 0.30 not authorized. 3. Visibility reduction by helicopters not authorized. 4. VGSI and descent angles not coincident. 5. Pilot controlled lighting 122.8.							

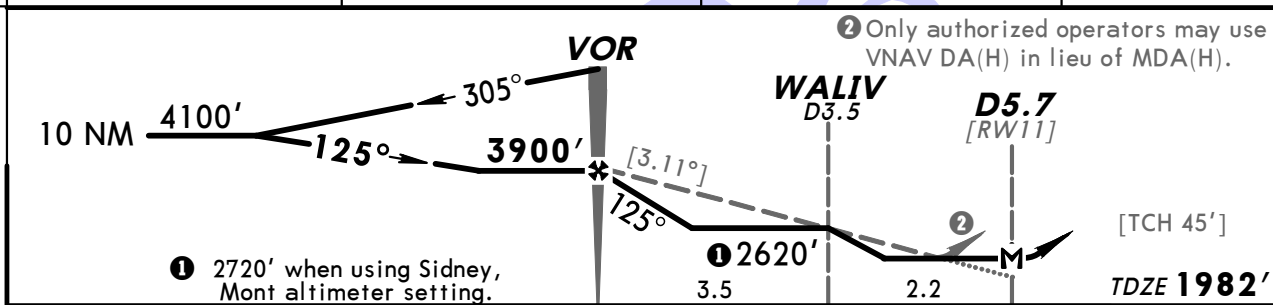
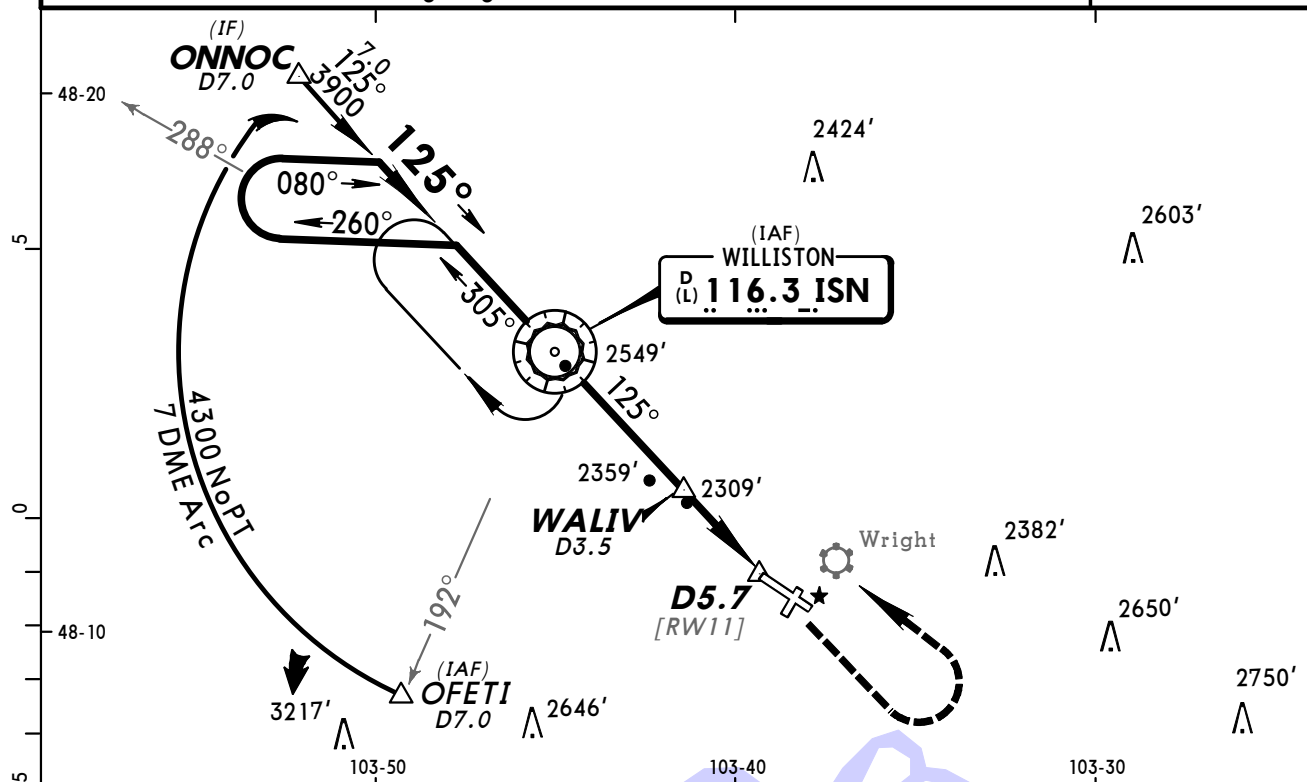


Gnd speed-Kts	70	90	100	120	140	160				
Descent angle [3.04°]	362	465	517	620	723	826				
MAP at RW11							REIL	4100'	HUSNO	
							PAPI-L	↑		

STRAIGHT-IN LANDING RWY 11				CIRCLE-TO-LAND			
LNNAV		LNNAV		With Local Altimeter Setting		With Sidney, Mont Altimeter Setting	
MDA(H) 2600' (618')		MDA(H) 2700' (718')		MDA(H)		MDA(H)	
With Local Altimeter Setting		With Sidney, Mont Altimeter Setting		Max Kts			
A	1	1		90	2600' (618') - 1	2700' (718') - 1	
B	1	1		120	2600' (618') - 1	2700' (718') - 1	
C	1 3/4	2		140	2600' (618') - 1 3/4	2700' (718') - 2	
D	2	2 1/4		165	2620' (638') - 2	2720' (738') - 2 1/4	



ASOS 125.92	SALT LAKE CITY Center (R) 126.85	GRAND FORKS Radio 123.6	SLOULIN INTL UNICOM CTAF 122.8
VOR ISN 116.3	Final Apch Crs 125°	Minimum Alt VOR 3900' (1918')	MDA(H) (CONDITIONAL) 2560' (578')
Apt Elev 1982' TDZE 1982'			
MISSED APCH: Climb to 3000', then climbing LEFT turn to 4000' direct ISN VOR and hold.			
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'			
1. Use local altimeter setting; if not received, use Sidney, Mont altimeter setting. 2. Visibility reduction by helicopters not authorized. 3. VGSI and descent angles not coincident. 4. Pilot controlled lighting 122.8.			
4300'			
MSA ISN VOR			

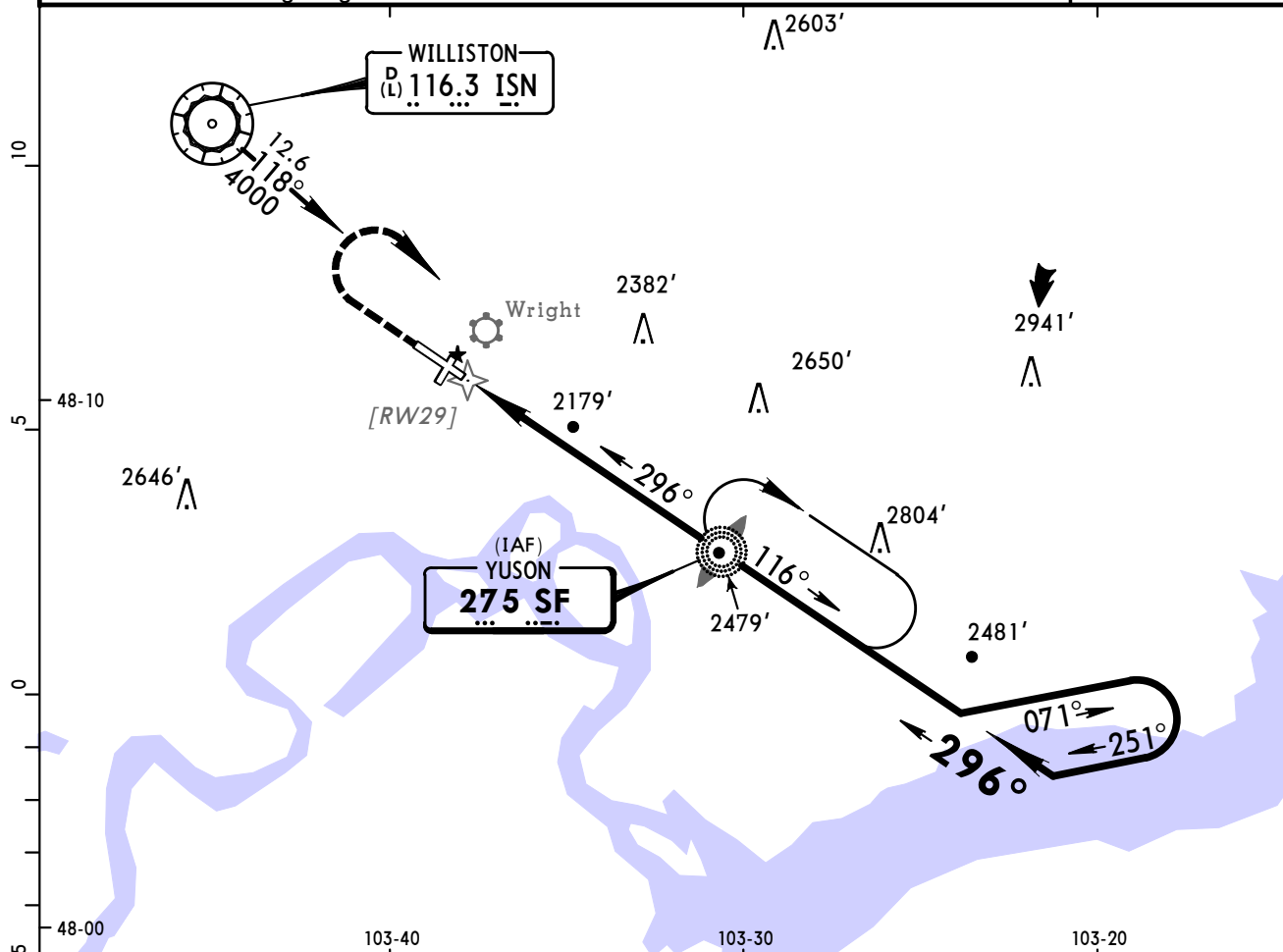


Gnd speed-Kts	70	90	100	120	140	160	REIL PAPI-L	3000'	4000'	ISN 116.3
Descent angle [3.11°]	385	495	550	660	770	880		↑	LT	
MAP at D5.7 or VOR to MAP	5.7	4:53	3:48	3:25	2:51	2:27				

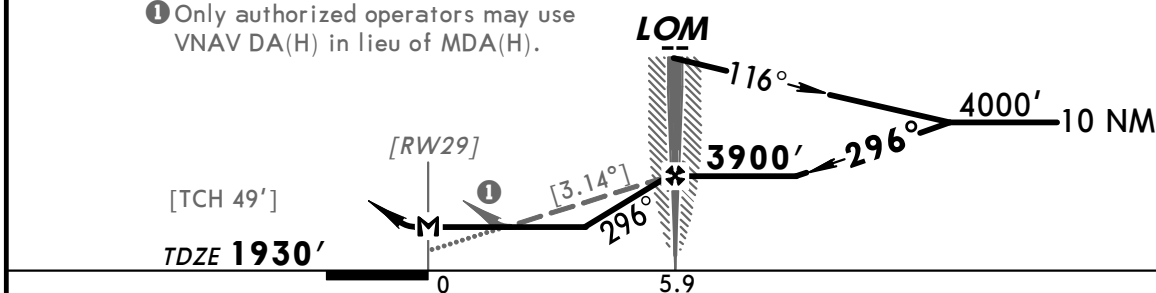
STRAIGHT-IN LANDING RWY 11				CIRCLE-TO-LAND			
With WALIV		Without WALIV		With WALIV		Without WALIV	
With Local Altimeter Setting		With Local Altimeter Setting		With Local Altimeter Setting		With Local Altimeter Setting	
MDA(H) 2560' (578')		MDA(H) 2620' (638')		MDA(H)		MDA(H)	
A	1	1		90	2560' (578')-1	2620' (638')-1	
B				120	2580' (598')-1		
C	1½	1¾		140	2600' (618')-1¾	2620' (638')-1¾	
D	1¾	2		165	2620' (638')-2	2620' (638')-2	
With Sidney, Mont Altimeter Setting		With Sidney, Mont Altimeter Setting		With Sidney, Mont Altimeter Setting		With Sidney, Mont Altimeter Setting	
MDA(H) 2660' (678')		MDA(H) 2720' (738')		MDA(H)		MDA(H)	
A	1	1		90	2660' (678')-1	2720' (738')-1	
B				120	2680' (698')-1		
C	2	2		140	2700' (718')-2	2720' (738')-2	
D	2¼	2¼		165	2720' (738')-2¼	2720' (738')-2¼	

BRIEFING STRIP™

ASOS 125.92		SALT LAKE CITY Center (R) 126.85		GRAND FORKS Radio 123.6		SLOULIN INTL UNICOM CTAF 122.8	
NDB SF 275	Final Apch Crs 296°	Minimum Alt LOM 3900' (1970')	MDA(H) (CONDITIONAL) 2480' (550')	Apt Elev 1982' TDZE 1930'		4300' MSA SF LOM	
MISSED APCH: Climb to 3000', then climbing RIGHT turn to 4000' direct YUSON LOM and hold.							
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. Use local altimeter setting; if not received, use Sidney, Mont altimeter setting. 2. Pilot controlled lighting 122.8.							



① Only authorized operators may use VNAV DA(H) in lieu of MDA(H).



Gnd speed-Kts	70	90	100	120	140	160	MALSR		3000'	4000'	→	SF 275
Descent angle [3.14°]	389	500	556	667	778	889	PAPI		↑	↻ RT	→	
LOM to MAP	5.9	5:03	3:56	3:32	2:57	2:32	2:13					

STRAIGHT-IN LANDING RWY 29						CIRCLE-TO-LAND			
MDA(H) 2480' (550')		MDA(H) 2580' (650')				With Local Altimeter Setting		With Sidney, Mont Altimeter Setting	
With Local Altimeter Setting		With Sidney, Mont Altimeter Setting				Max Kts			
RAIL out		ALS out		RAIL out					
A	3/4	1	3/4	1	90	2560' (578') - 1	2660' (678') - 1		
B					120	2580' (598') - 1	2680' (698') - 1		
C	1	1 1/2	1 1/4	1 3/4	140	2600' (618') - 1 3/4	2700' (718') - 2		
D	1 1/2	1 3/4	1 3/4	2	165	2620' (638') - 2	2720' (738') - 2 1/4		

General Information

Location: Jamestown ND USA
IATA Code: JMS
Lat/Long: N46° 55.8' W098° 40.7'
Elevation: 1500 ft

Airport Use: Public
Magnetic Variation: 4.9°E
Sectional Chart: Twin Cities

Fuel Types: 100 Octane (LL), Jet A
Oxygen Types: HP Bottle
Repair Types: Major Airframe, Major Engine
Customs: No
Airport Type: IFR
Landing Fee: No
Control Tower: No
Jet Start Unit: No
LLWS Alert: No
Beacon: Yes

Sunrise: 1319 Z
Sunset: 0016 Z,

Runway Information

Runway: 04
Length x Width: 5750 ft x 75 ft
Surface Type: asphalt
TDZ-Elev: 1496 ft
Lighting: Edge, REIL, Pilot controlled

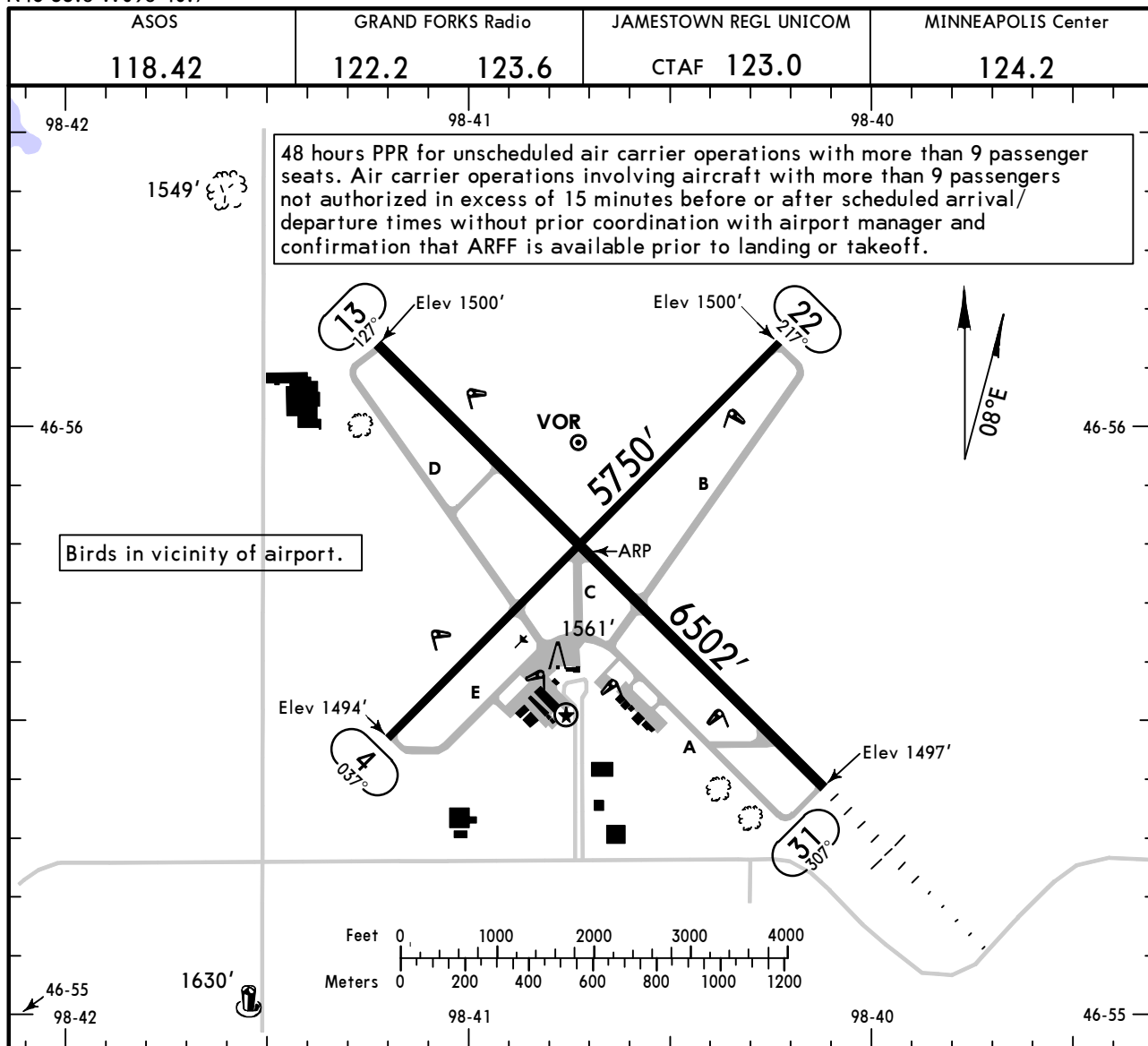
Runway: 13
Length x Width: 6502 ft x 100 ft
Surface Type: asphalt
TDZ-Elev: 1500 ft
Lighting: Edge, REIL, Pilot controlled

Runway: 22
Length x Width: 5750 ft x 75 ft
Surface Type: asphalt
TDZ-Elev: 1500 ft
Lighting: Edge, REIL, Pilot controlled

Runway: 31
Length x Width: 6502 ft x 100 ft
Surface Type: asphalt
TDZ-Elev: 1498 ft
Lighting: Edge, ALS, Pilot controlled

Communication Information

ASOS 118.425
Jamestown Regl Unicom 123.0 CTAF PCL
Grand Forks Flight Service Station 123.6 RCO
Grand Forks Flight Service Station 122.2 RCO
Minneapolis Center 124.2 Remote Communications Air-Ground



ADDITIONAL RUNWAY INFORMATION

RWY		USABLE LENGTHS			
		LANDING BEYOND		TAKE-OFF	WIDTH
		Threshold	Glide Slope		
4	22	① MIRL ① REIL ① PAPI-L (angle 3.0°)			75'
13	31	① HIRL ① REIL ① VASI-L			100'
		① HIRL ① MALSR ① PAPI-L (angle 3.0°)	5548'		

① Activate on 123.0.

② Grooved.

TAKE-OFF			FOR FILING AS ALTERNATE		
	All Rwys		VOR Rwy 13	Authorized Only When Local Weather Available RNAV (GPS) Rwy 4 RNAV (GPS) Rwy 13 RNAV (GPS) Rwy 22 RNAV (GPS) Rwy 31 VOR Rwy 31	Other
	Adequate Vis Ref	STD			
1 & 2 Eng	1/4	1	A B C D	800-2	800-2
3 & 4 Eng		1/2			
					NA

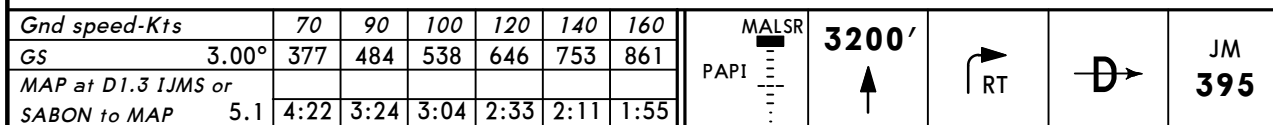
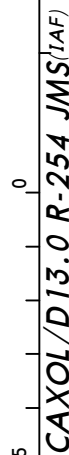
BRIEFING STRIP™



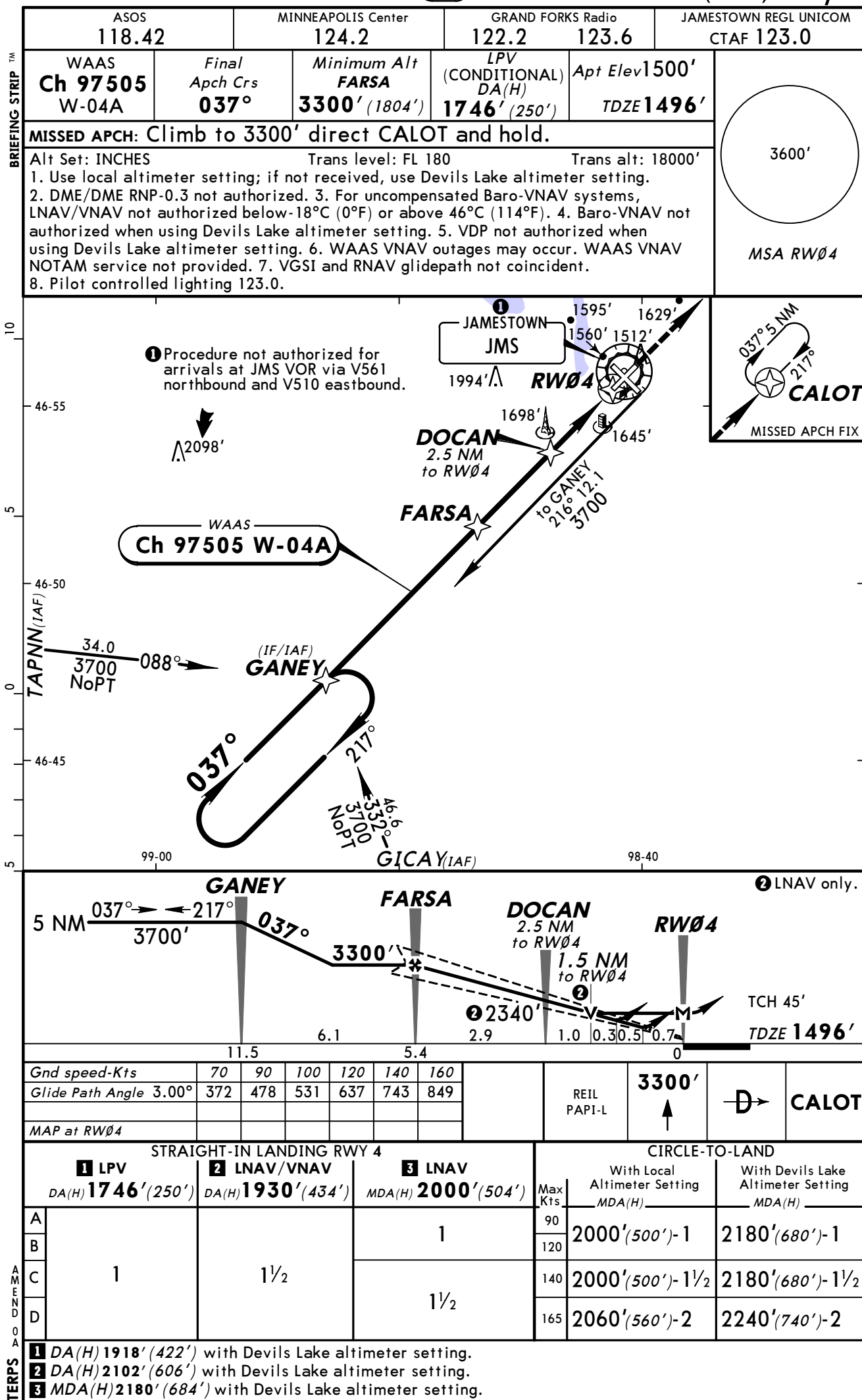
<i>Gnd Speed-Kts</i>	70	90	100	120	140	160
<i>Descent angle [2.95°]</i>	365	470	522	626	731	835
<i>MAP at D0.5 IJMS</i>						

TERPS
7D
AMEND

A diagram of a circle with a central angle of 360° . Two radii are drawn from the center to the circumference, labeled $3600'$ and $3000'$.



STRAIGHT-IN LANDING RWY31						CIRCLE-TO-LAND	
ILS <i>DA(H)</i> 1698' (200')			LOC (GS out) <i>MDA(H)</i> 1880' (382')			Max Kts	<i>MDA(H)</i> _____
FULL		RAIL or ALS out		RAIL out	ALS out		
A	1/2	3/4	1/2	3/4	1	90	1960'(460')-1
B						120	
C						140	
D			165	2060'(560')-2			



BRIEFING STRIP™



<i>Gnd speed-Kts</i>	70	90	100	120	140	160
<i>Glide Path Angle 3.00°</i>	372	478	531	637	743	849
<i>MAP at RW13</i>						

TERPS
AMEND
0

CHANGES: None.

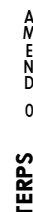
BRIEFING STRIP TM



**A
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ERPS

BRIEFING STRIP™

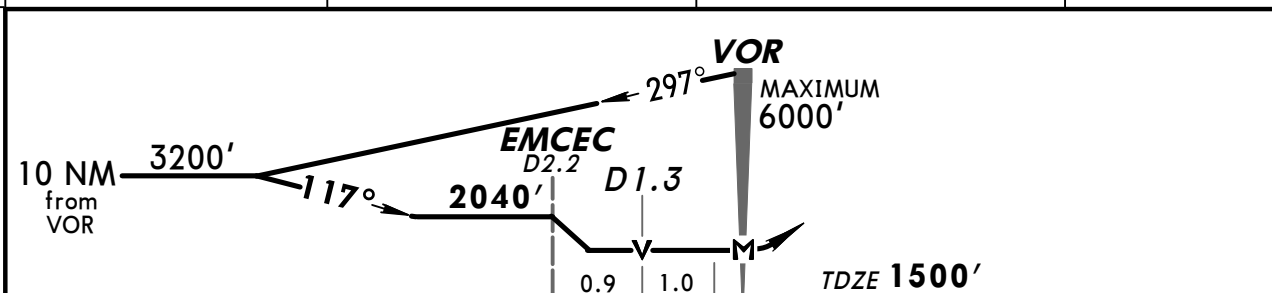
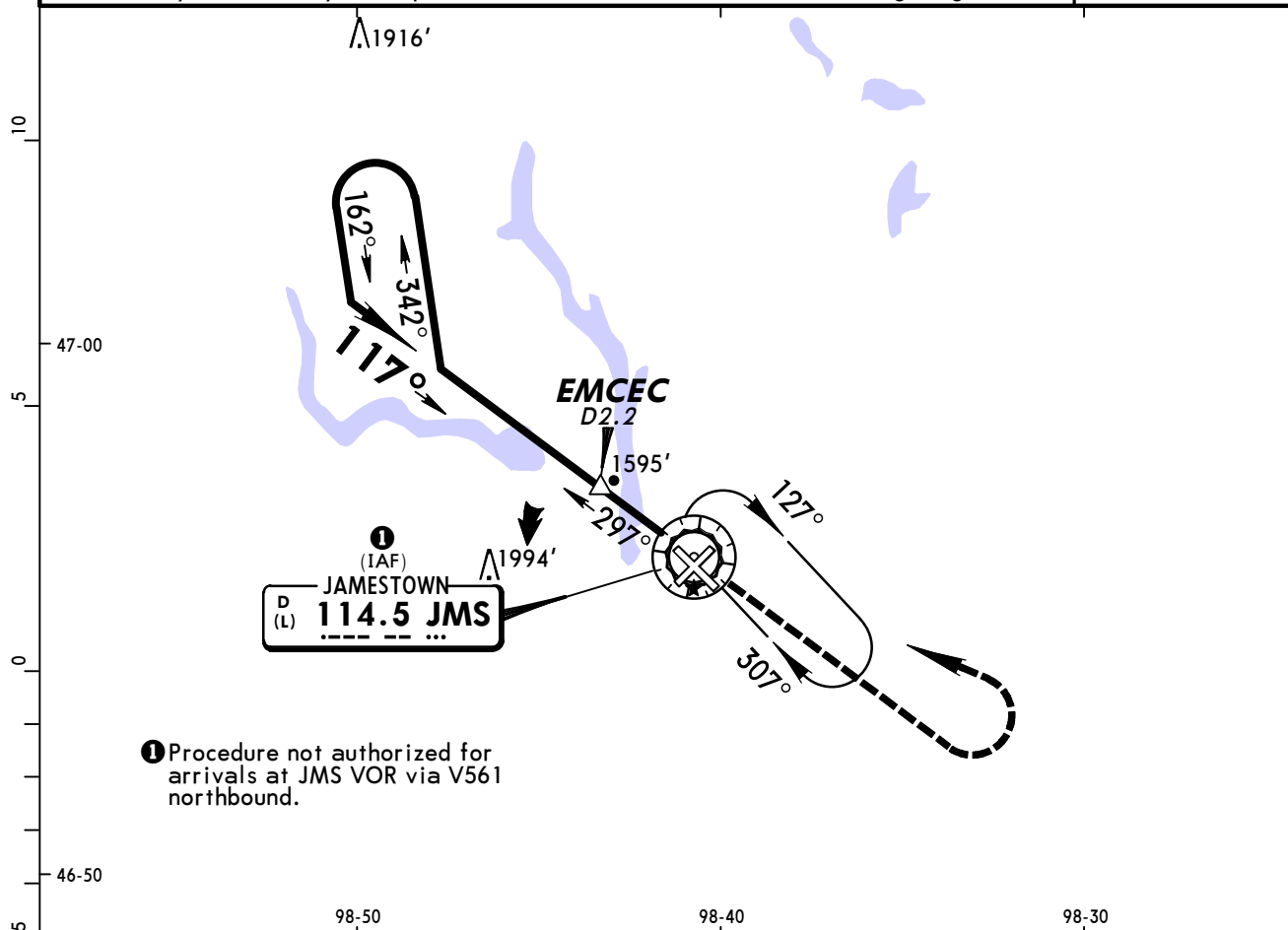


STRAIGHT-IN LANDING RWY 31 With Local Altimeter Setting								CIRCLE-TO-LAND With Local Altimeter Setting	
LPV DA(H) 1698' (200')		LNAV/VNAV DA(H) 1836' (338')		LNAV MDA(H) 1880' (382')				Max Kts	MDA(H)
RAIL or ALS out		RAIL or ALS out		RAIL out		ALS out		90	
A	1/2	3/4	3/4	1 1/4	1/2	3/4	1	120	1960' (460')-1
B								140	1960' (460')-1 1/2
C								165	2060' (560')-2
D									
With Devils Lake Altimeter Setting								With Devils Lake Altimeter Setting	
LPV DA(H) 1870' (372')		LNAV/VNAV DA(H) 2008' (510')		LNAV MDA(H) 2060' (562')				Max Kts	MDA(H)
RAIL or ALS out		RAIL or ALS out		RAIL out		ALS out		90	
A	3/4	1 1/4	1 1/4	1 3/4	1/2	3/4	1	120	2140' (640')-1
B								140	2140' (640')-1 3/4
C								165	2240' (740')-2 1/2
D									

TM

BRIEFING STRIP

ASOS 118.42		MINNEAPOLIS Center 124.2		GRAND FORKS Radio 122.2 123.6		JAMESTOWN REGL UNICOM CTAF 123.0
VOR JMS 114.5	Final Apch Crs 117°	Minimum Alt EMCEC 2040' (540')	MDA(H) (CONDITIONAL) 1860' (360')	Apt Elev 1500'	TDZE 1500'	3600' MSA JMS VOR
MISSED APCH: Climb to 3500' then LEFT turn direct JMS VOR and hold.						
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'						
1. Use local altimeter setting; if not received, procedure not authorized. 2. Visibility reduction by helicopters not authorized. 3. Pilot controlled lighting 123.0.						

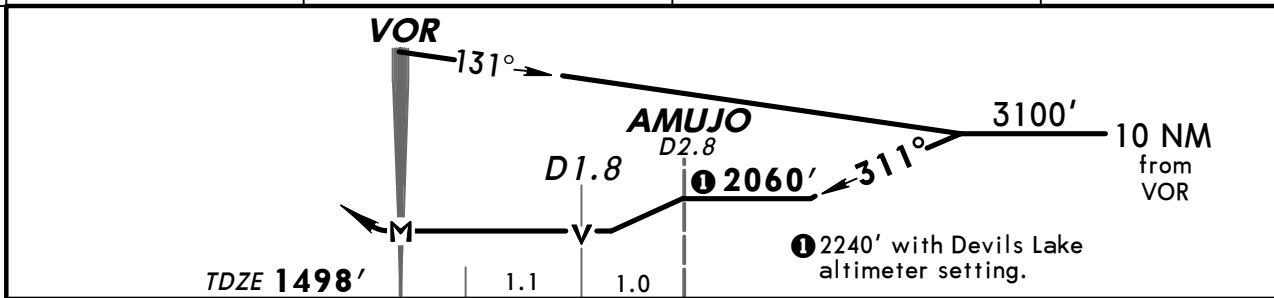
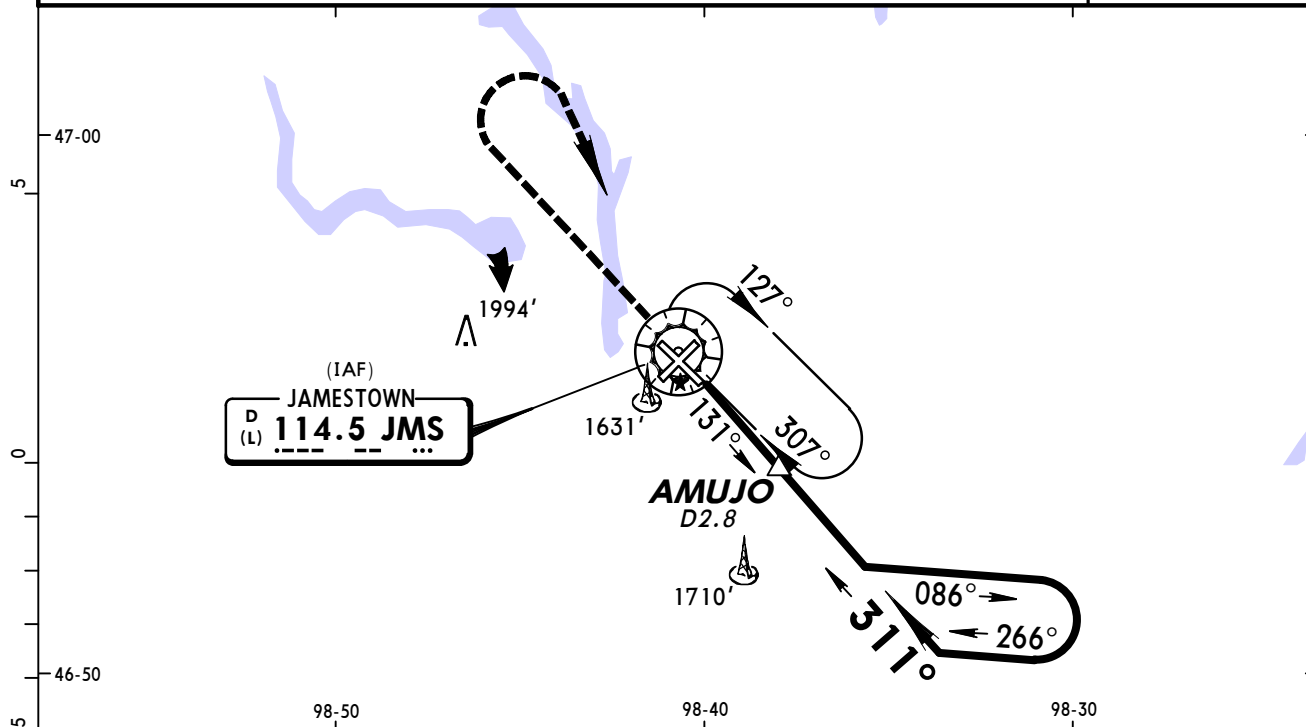


						REIL	3500'	LT	JMS 114.5
						VASI-L	↑	↩	↪
MAP at VOR									

STRAIGHT-IN LANDING RWY 13				CIRCLE-TO-LAND			
MDA(H) 1860' (360')		MDA(H) 2040' (540')		With EMCEC		Without EMCEC	
With EMCEC		Without EMCEC		Max Kts	MDA(H)	MDA(H)	
A	1	1	1 1/2	90	1960' (460') - 1	2040' (540') - 1	
				120			
				140	1960' (460') - 1 1/2	2040' (540') - 1 1/2	
				165	2060' (560') - 2	2060' (560') - 2	

BRIEFING STRIP

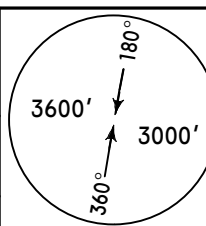
ASOS 118.42		MINNEAPOLIS Center 124.2		GRAND FORKS Radio 122.2 123.6		JAMESTOWN REGL UNICOM CTAF 123.0
VOR JMS 114.5	Final Apch Crs 311°	Minimum Alt (CONDITIONAL) AMUJO 2060' (562')	MDA(H) (CONDITIONAL) 1900' (402')	Apt Elev 1500' TDZE 1498'	3600' MSA JMS VOR	
MISSED APCH: Climb to 3100' then RIGHT turn direct JMS VOR and hold.						
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'						
1. Use local altimeter setting; if not received, use Devils Lake altimeter setting. 2. VDP not authorized with Devils Lake altimeter setting. 3. Pilot controlled lighting 123.0.						

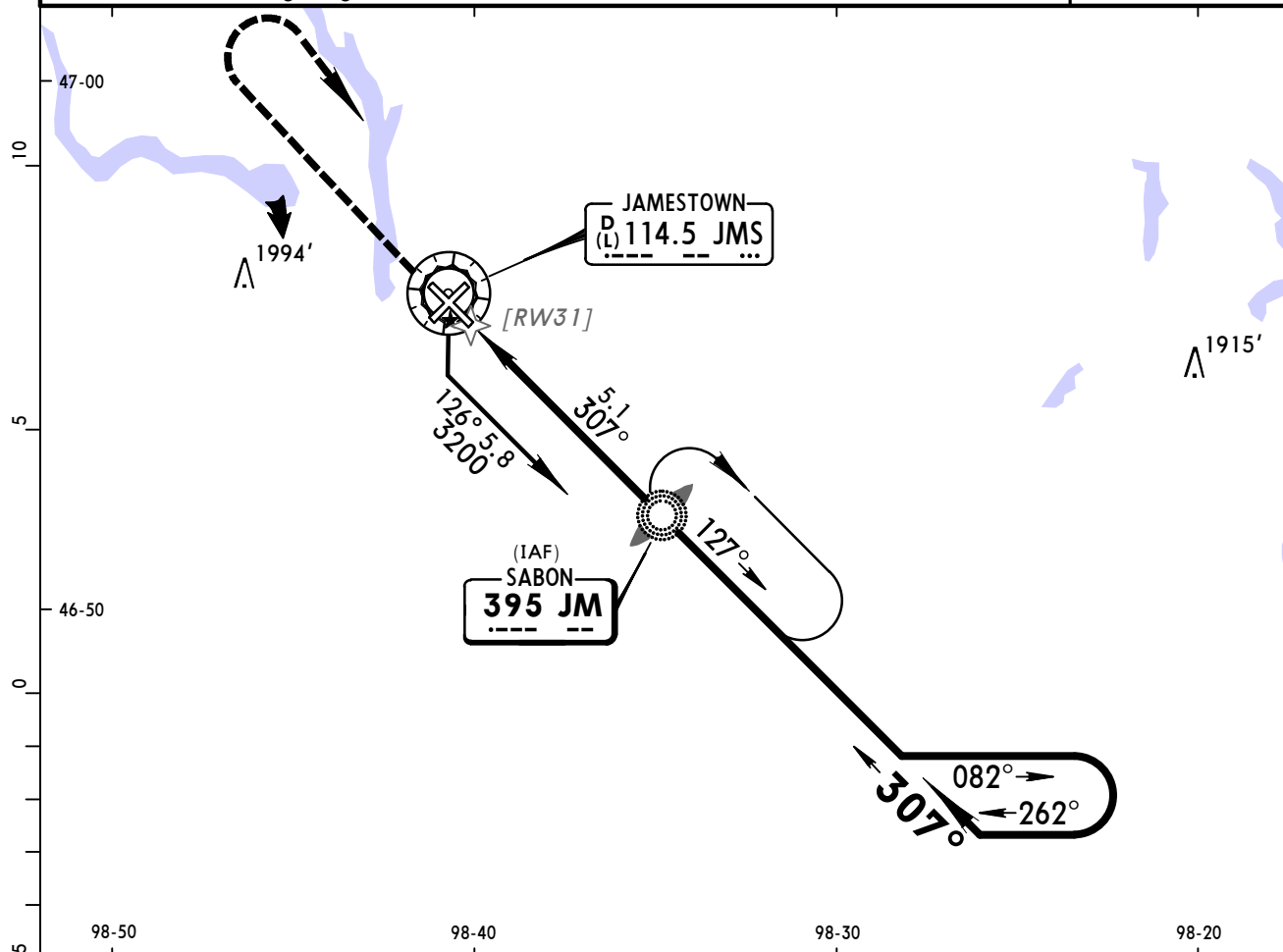


MAP at VOR				MALS R	3100'	RT	JMS 114.5
------------	--	--	--	--------	-------	----	-----------

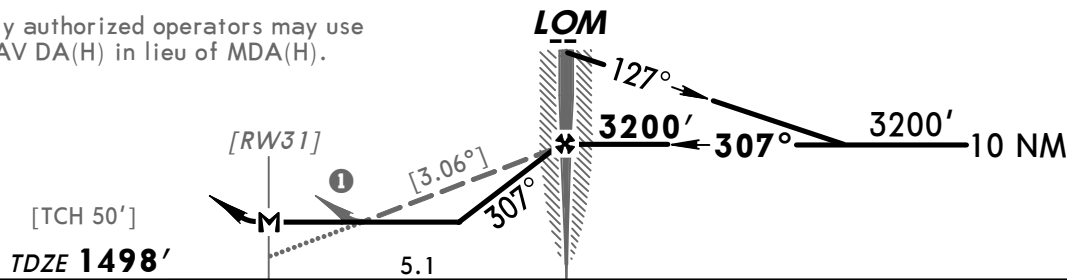
STRAIGHT-IN LANDING RWY 31							CIRCLE-TO-LAND			
With AMUJO				Without AMUJO			With AMUJO		Without AMUJO	
With Local Altimeter Setting							With Local Altimeter Setting			
MDA(H) 1900' (402')				MDA(H) 2060' (562')			MDA(H) _____			
		RAIL out	ALS out			RAIL out	ALS out	Max Kts	MDA(H) _____	
A	1/2	3/4	1	1/2	3/4	1		90	1960' (460')-1	2060' (560')-1
B								120		
C	3/4	1 1/4		1	1 1/2			140	1960' (460')-1 1/2	2060' (560')-1 1/2
D	1			1 1/4	1 3/4		165	2060' (560')-2	2060' (560')-2	
With Devils Lake Altimeter Setting							With Devils Lake Altimeter Setting			
MDA(H) 2080' (582')				MDA(H) 2240' (742')			MDA(H) _____			
		RAIL out	ALS out			RAIL out	ALS out	Max Kts	MDA(H) _____	
A	1/2	3/4	1	1/2	3/4	1		90	2140' (640')-1	2240' (740')-1
B				3/4	1 1/4		120			
C	1	1 1/2		1 3/4	2 1/4			140	2140' (640')-1 3/4	2240' (740')-2
D		1 3/4		2	2 1/2			165	2240' (740')-2 1/4	2240' (740')-2 1/2

BRIEFING STRIP™

ASOS 118.42		MINNEAPOLIS Center 124.2		GRAND FORKS Radio 122.2 123.6		JAMESTOWN REGL UNICOM CTAF 123.0
LOM JM 395	Final Apch Crs 307°	Minimum Alt LOM 3200' (1702')	MDA(H) 1940' (442')	Apt Elev 1500' TDZE 1498'		
MISSED APCH: Climb to 3200' then RIGHT turn direct JM LOM and hold.						
Alt Set: INCHES 1. Pilot controlled lighting 123.0.		Trans level: FL 180		Trans alt: 18000'		



① Only authorized operators may use VNAV DA(H) in lieu of MDA(H).



Gnd speed-Kts	70	90	100	120	140	160	MALSR PAPI	3200' ↑	RT	D→	JM 395
Descent angle [3.06°]	379	487	541	650	758	866					
LOM to MAP	5.1	4:22	3:24	3:04	2:33	2:11					

STRAIGHT-IN LANDING RWY 31

MDA(H) **1940'** (442')

CIRCLE-TO-LAND

PS 6 C A M E N D D			RAIL out	ALS out	Max Kts.	MDA(H)
	A	3/4		1	90	1960' (460') - 1
	B				120	
	C	3/4	1 1/4	140	1960' (460') - 1 1/2	
	D	1 1/4	1 1/2	165	2060' (560') - 2	

General Information

Location: Minot ND USA
IATA Code: MIB
Lat/Long: N48° 24.9' W101° 21.5'
Elevation: 1667 ft

Airport Use: Military
Magnetic Variation: 7.0°E
Sectional Chart: Billings

Fuel Types: Jet, Jet 4
Oxygen Types: Low Pressure
Repair Types: Major Engine
Customs: No
Airport Type: IFR
Landing Fee: No
Control Tower: Yes
Jet Start Unit: No
LLWS Alert: No
Beacon: Yes

Sunrise: 1331 Z
Sunset: 0025 Z,

Runway Information

Runway: 11
Length x Width: 13197 ft x 300 ft
Surface Type: concrete
TDZ-Elev: 1667 ft
Lighting: Edge, ALS
Stopway: 1000 ft

Runway: 29
Length x Width: 13197 ft x 300 ft
Surface Type: concrete
TDZ-Elev: 1638 ft
Lighting: Edge, ALS

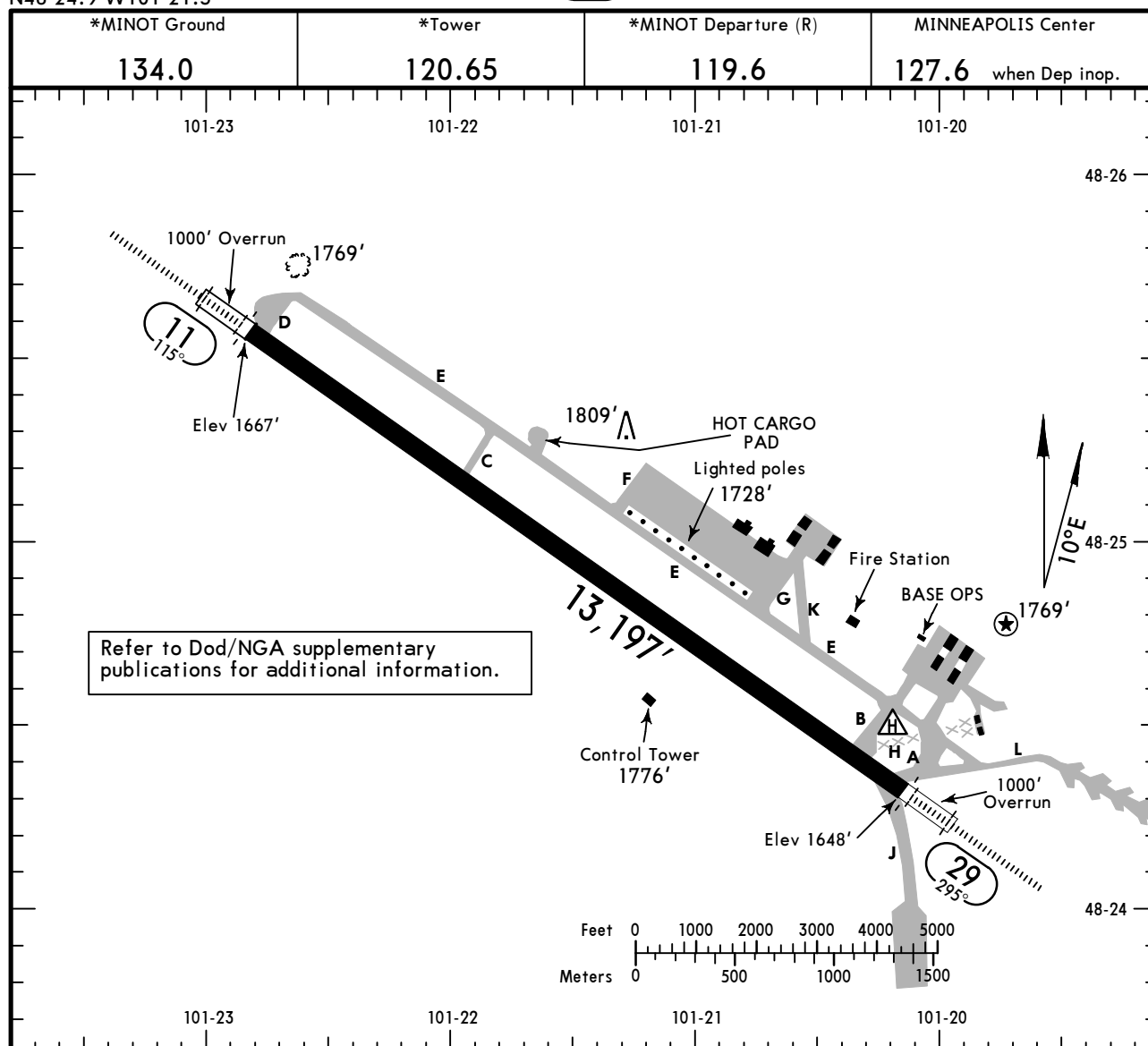
Communication Information

Minot Tower 120.65
Minot Ground Control 134.0
Minot Approach Control 119.6 Arrival Service
Minot Departure Control 119.6 Departure Service
Minot Radar 120.0
Minot Radar 119.6
Minneapolis Center 127.6 Remote Communications Air-Ground

KMIB/MIB
 Apt Elev **1667'**
 N48 24.9 W101 21.5

JEPPESEN
 3 FEB 12 **(31-1)** **Eff 9 Feb**

MINOT AFB
MINOT, N DAK



ADDITIONAL RUNWAY INFORMATION

RWY					USABLE LENGTHS		TAKE-OFF	WIDTH
					LANDING BEYOND			
					Threshold	Glide Slope		
11 29	HIRL ALSF-I PAPI-L (angle 2.5°)	grooved RVR						300'

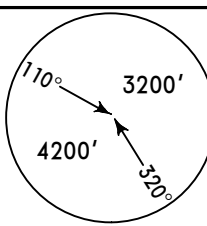
TAKE-OFF				FOR FILING AS ALTERNATE			
All Rwys							
Adequate Vis Ref		STD		Precision		Non-Precision	
1 & 2 Eng	RVR 16 or 1/4		RVR 50 or 1		A	600-2	800-2
3 & 4 Eng			RVR 24 or 1/2		B		
					C		
					D		

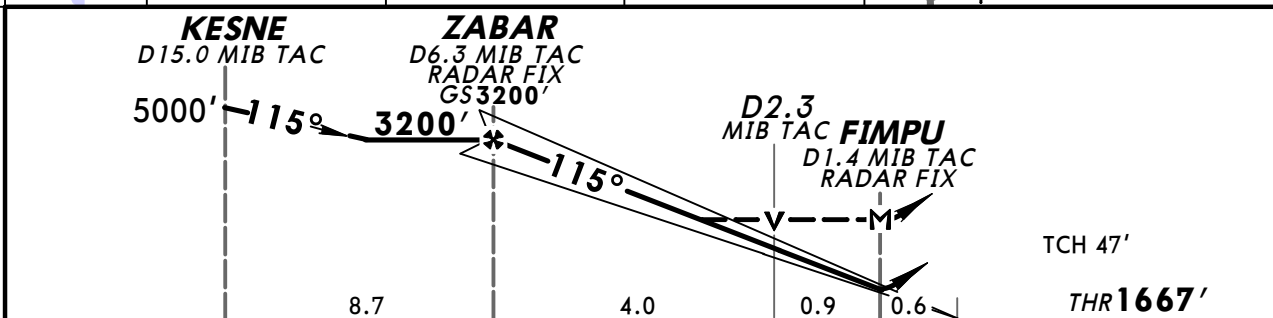
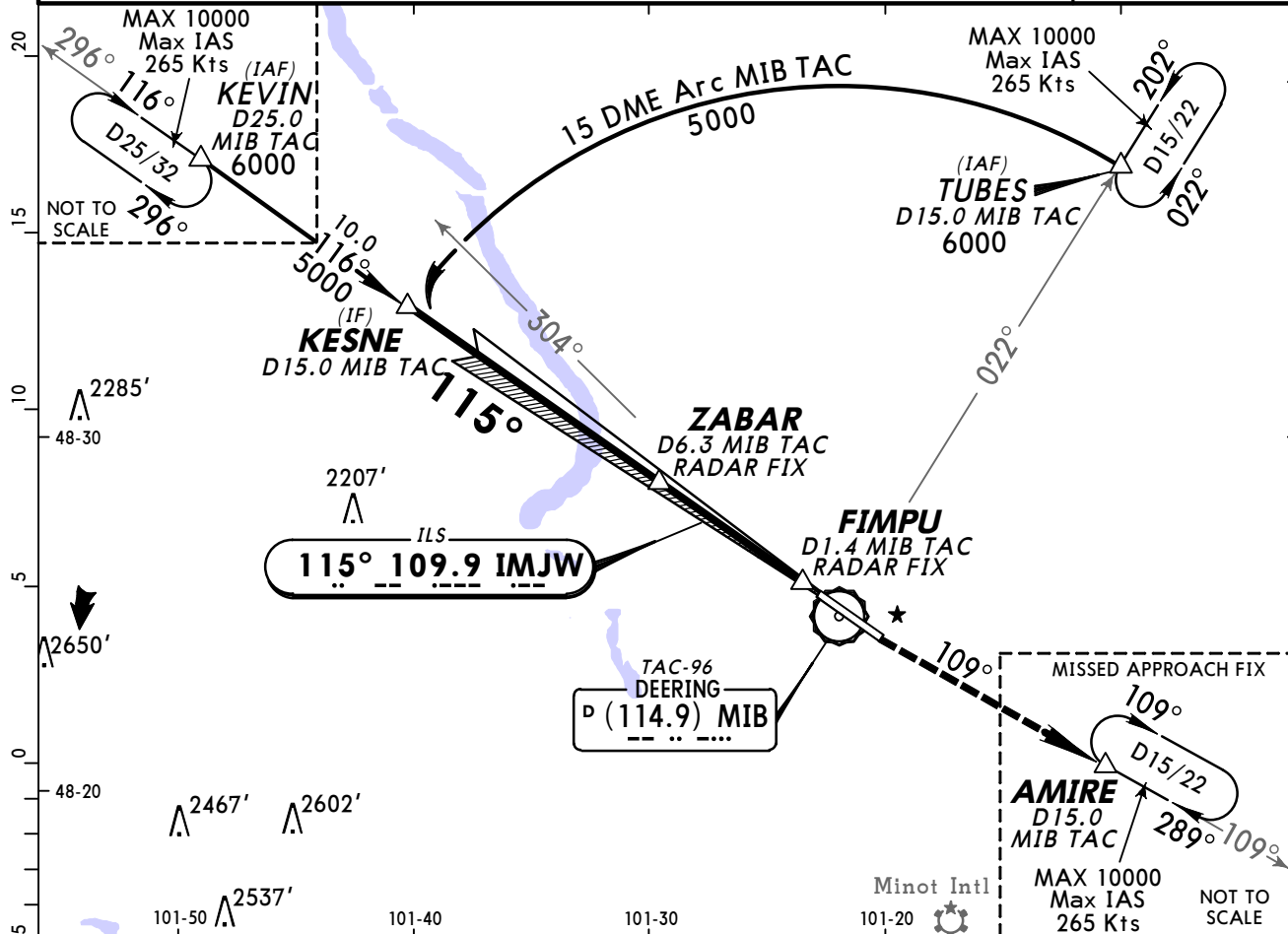
KMIB/MIB
MINOT, N DAK

3 FEB 12
Eff 9 Feb

31-1

TACAN Azimuth Required
MINOT AFB
ILS or LOC DME Rwy 11

*MINOT Approach (R) 119.6	MINNEAPOLIS Center 127.6 when App inop.	*MINOT Tower 120.65	*Ground 134.0
LOC IMJW 109.9	Final Apch Crs 115°	GS ZABAR 3200' (1533')	ILS DA(H) 1867' (200')
Apt Elev 1667' THR 1667'			
MISSED APCH: Climb to 5000' outbound via MIB TAC R-109 direct AMIRE and hold.			
Alt Set: INCHES		Trans level: FL 180	Trans alt: 18000'
1. Radar or DME required. 2. EMERG SAFE ALTITUDE 100 NM 4800'.			MSA MIB TAC

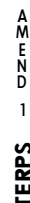


Gnd speed-Kts	70	90	100	120	140	160	ALSIF-1	5000'	MIB TAC-96 (114.9) R-109	AMIRE
GS	2.50°	310	398	442	531	619	PAPI	↑		
MAP at FIMPU										

STRAIGHT-IN LANDING RWY 11				CIRCLE-TO-LAND	
ILS		LOC (GS out)		Max Kts	MDA(H)
DA(H) 1867' (200')		MDA(H) 2100' (433')			
FULL	ALS out	FULL	ALS out		
A		RVR 24 or 1/2	RVR 55 or 1	90	2120' (453') -1
B				120	
C	RVR 24 or 1/2	RVR 40 or 3/4		140	2140' (473') -1 1/2
D		RVR 40 or 3/4	1 1/4	165	2220' (553') -2

CHANGES: Notes, TCH, minimums.

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BRIEFING STRIP™ TM

TERPS
AMEND
1

General Information

Location: Minot ND USA
IATA Code: MOT
Lat/Long: N48° 15.5' W101° 16.7'
Elevation: 1716 ft

Airport Use: Public
Magnetic Variation: 6.9°E
Sectional Chart: Billings

Fuel Types: 100 Octane (LL), Jet A
Oxygen Types: HP Bottle
Repair Types: Major Airframe, Major Engine
Customs: ADCUS
Airport Type: IFR
Landing Fee: Yes
Control Tower: Yes
Jet Start Unit: Yes
LLWS Alert: No
Beacon: Yes

Sunrise: 1331 Z
Sunset: 0025 Z,

Runway Information

Runway: 08
Length x Width: 6351 ft x 100 ft
Surface Type: asphalt
TDZ-Elev: 1712 ft
Lighting: Edge, REIL, Pilot controlled
Displaced Threshold: 393 ft

Runway: 13
Length x Width: 7700 ft x 150 ft
Surface Type: concrete
TDZ-Elev: 1702 ft
Lighting: Edge, REIL, Pilot controlled

Runway: 26
Length x Width: 6351 ft x 100 ft
Surface Type: asphalt
TDZ-Elev: 1682 ft
Lighting: Edge, REIL, Pilot controlled

Runway: 31
Length x Width: 7700 ft x 150 ft
Surface Type: concrete
TDZ-Elev: 1679 ft
Lighting: Edge, ALS, Pilot controlled

Communication Information

ASOS 118.725

Magic City Tower 118.2 CTAF PCL

Magic City Ground Control 121.9

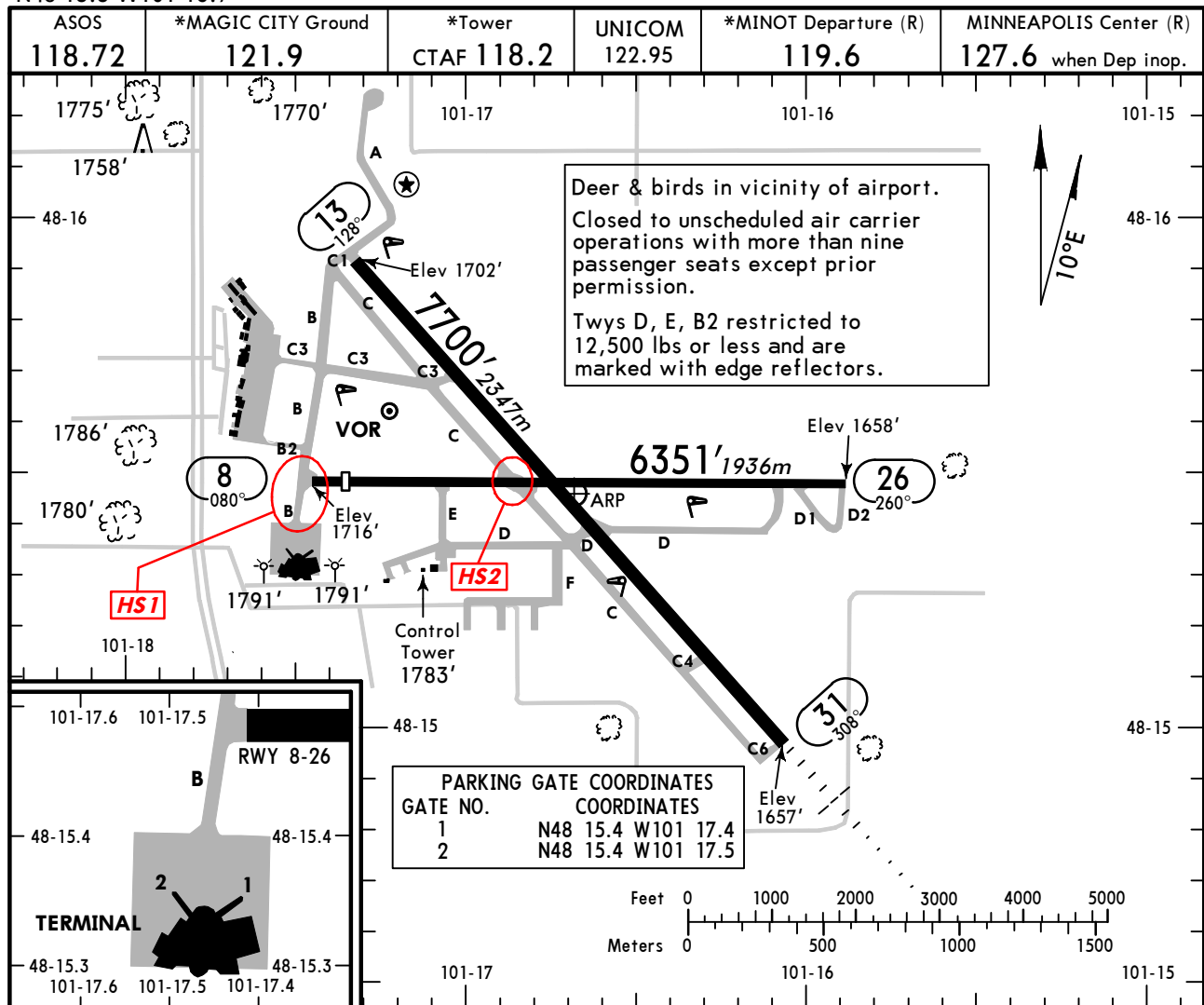
Minot Approach Control 119.6 Arrival Service

Minot Departure Control 119.6 Departure Service

Minot Intl Unicom 122.95

Grand Forks Flight Service Station 122.2 RCO

Minneapolis Center 127.6 Remote Communications Air-Ground



ADDITIONAL RUNWAY INFORMATION

RWY		USABLE LENGTHS		TAKE-OFF	WIDTH
		Threshold	Landing Beyond Glide Slope		
8	① HIRL ① REIL PAPI-L (angle 3.0°) grooved	5958' 1816m			100' 30m
13	① HIRL ① REIL PAPI-L grooved				150' 46m
31	① HIRL ① MALSR grooved RVR		6875' 2096m		

① Activate on 118.2 when Twr inop.

RUNWAY INCURSION HOT SPOTS

For information only, not to be construed as ATC instructions.

HS1 Taxiway B crosses the approach end of Runway 8. Holding positions are identified by red and white 8 APCH signs.

HS2 Taxiway C crosses Runway 8-26 at an angle. Pilots sometimes miss the holding position signs and markings for Runway 8-26.

TAKE-OFF & OBSTACLE DEPARTURE PROCEDURE

	Rwys 8, 13, 31		Rwy 26		Other
	Adequate Vis Ref	STD	With Min climb of 219'/NM to 2000'	Other	
1 & 2 Eng	RVR 16 or 1/4	RVR 50 or 1	1/4	1	300-1 1/2
3 & 4 Eng		RVR 24 or 1/2		1/2	

OBSTACLE DP: Rwy 13, climb via heading 128° to 2200' before turning right. Rwy 26, climb via heading 260° to 2300' before turning left.

FOR FILING AS ALTERNATE

Authorized When Local Weather Available & Twr Operating		Authorized When Local Weather Available		Other
ILS Rwy 31	LOC Rwy 31 LOC DME (BACK CRS) Rwy 13	RNAV (GPS) Rwy 8 RNAV (GPS) Rwy 13 RNAV (GPS) Rwy 26 RNAV (GPS) Rwy 31	VOR Rwy 26 VOR Rwy 8	
A B C D	600-2	800-2	900-2	1100-2
			900-2 1/2	1100-3
			900-2 3/4	
				800-2

KMOT/MOT

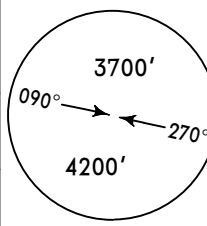
MINOT INTL

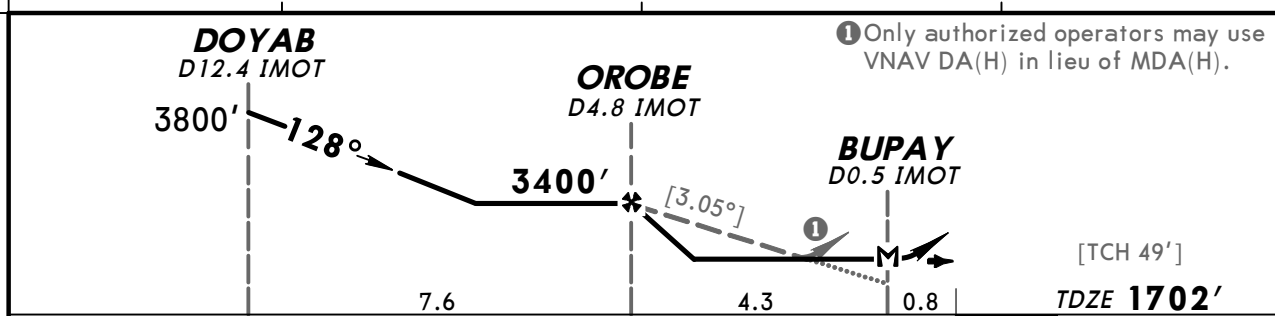
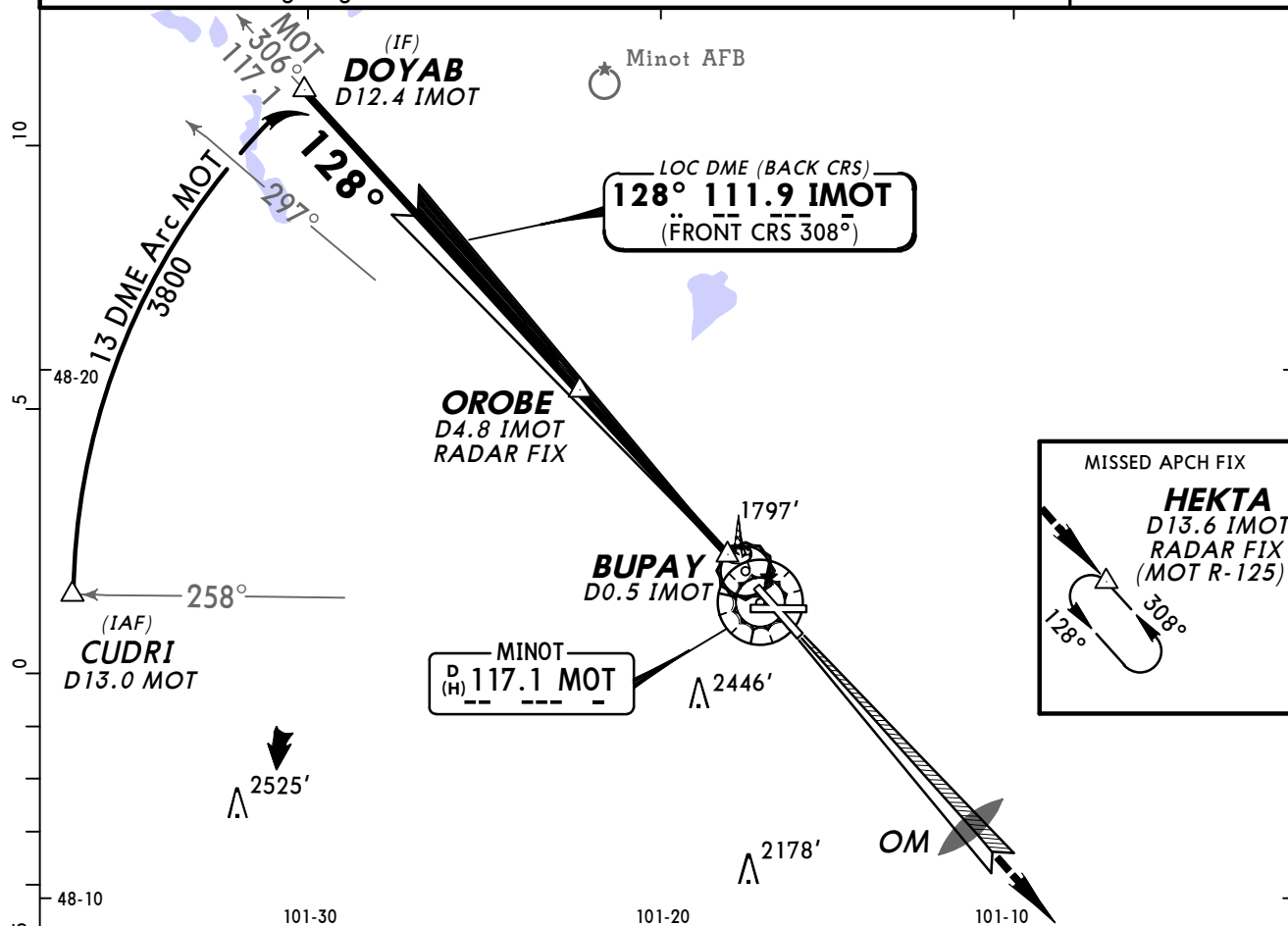
JEPPESSEN

8 JUL 11

(11-1)

MINOT, N DAK
LOC DME (BACK CRS) Rwy 13

ASOS 118.72	*MINOT Approach (R) 119.6	MINNEAPOLIS Center (R) 127.6 when App inop.	*MAGIC CITY Tower CTAF 118.2	*Ground 121.9
LOC IMOT 111.9	Final Apch Crs 128° (Front Crs 308°)	Minimum Alt OROB 3400' (1698')	MDA(H) (CONDITIONAL) 2060' (358')	Apt Elev 1716' TDZE 1702'
MISSED APCH: Climb to 3700' via IMOT LOC SOUTHEAST course to HEKTA/D13.6 IMOT/RADAR FIX and hold.				
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. Use local altimeter setting; if not received, use Minot AFB altimeter setting. 2. Use IMOT DME when on localizer course. 3. Disregard glideslope indications. 4. Pilot controlled lighting 118.2.				
				 MSA MOT VOR



Gnd speed-Kts	70	90	100	120	140	160			REIL PAPI-L	3700'	IMOT 111.9 SOUTHEAST CRS	HEKTA
Descent angle [3.05°]	378	486	540	648	755	863				↑		
MAP at BUPAY												

STRAIGHT-IN LANDING RWY 13				CIRCLE-TO-LAND			
MDA(H) 2060' (358')		MDA(H) 2100' (398')		With Local Altimeter Setting		With Minot AFB Altimeter Setting	
With Local Altimeter Setting		With Minot AFB Altimeter Setting		Max Kts	MDA(H)	MDA(H)	
				90	2200' (484') - 1	2240' (524') - 1	
				120	2280' (564') - 1½	2320' (604') - 1½	
				140	2280' (564') - 2	2320' (604') - 2	
				165	2280' (564') - 2	2320' (604') - 2	

CHANGES: None.

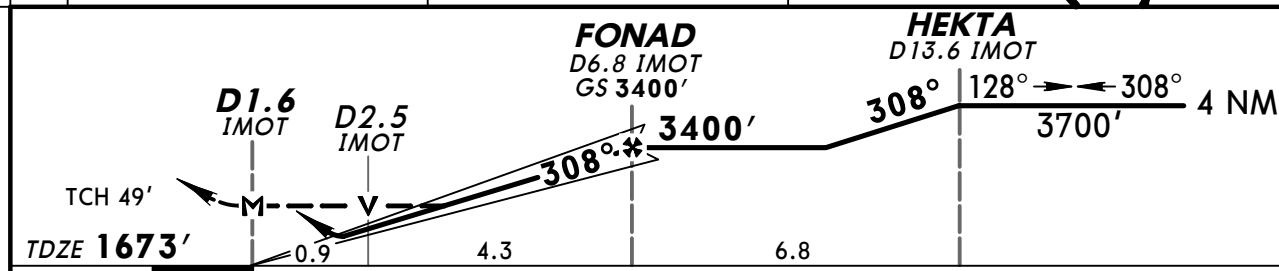
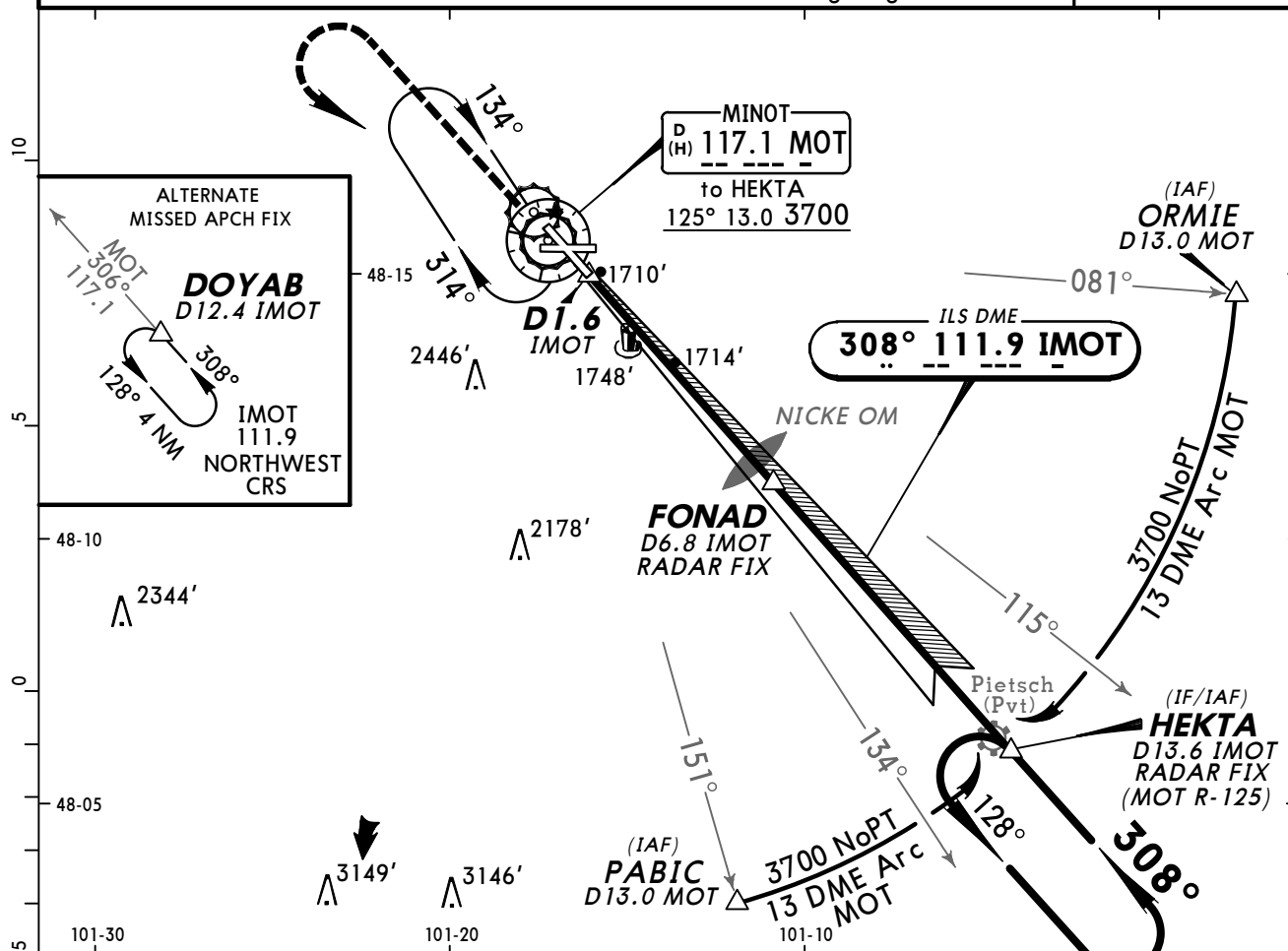
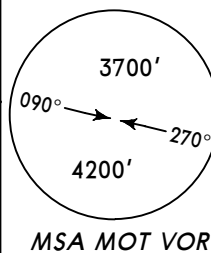
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KMOT/MOT MINOT INTL

JEPPESSEN
18 APR 08 (11-2)

MINOT, N DAK
ILS or LOC Rwy 31

ASOS 118.72	*MINOT Approach (R) 119.6	MINNEAPOLIS Center (R) 127.6 when App inop.	*MAGIC CITY Tower CTAF 118.2	*Ground 121.9
LOC IMOT 111.9	Final Apch Crs 308°	GS FONAD 3400' (1727')	ILS DA(H) (CONDITIONAL) 1873' (200')	Apt Elev 1716' TDZE 1673'
MISSED APCH: Climb to 3700' then turn LEFT direct MOT VOR and hold.				
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. DME or RADAR required. 2. Use local altimeter setting; if not received, use Minot AFB altimeter setting. 3. VDP not authorized with Minot AFB altimeter setting. 4. Use IMOT DME when on the localizer course. 5. Pilot controlled lighting 118.2.				

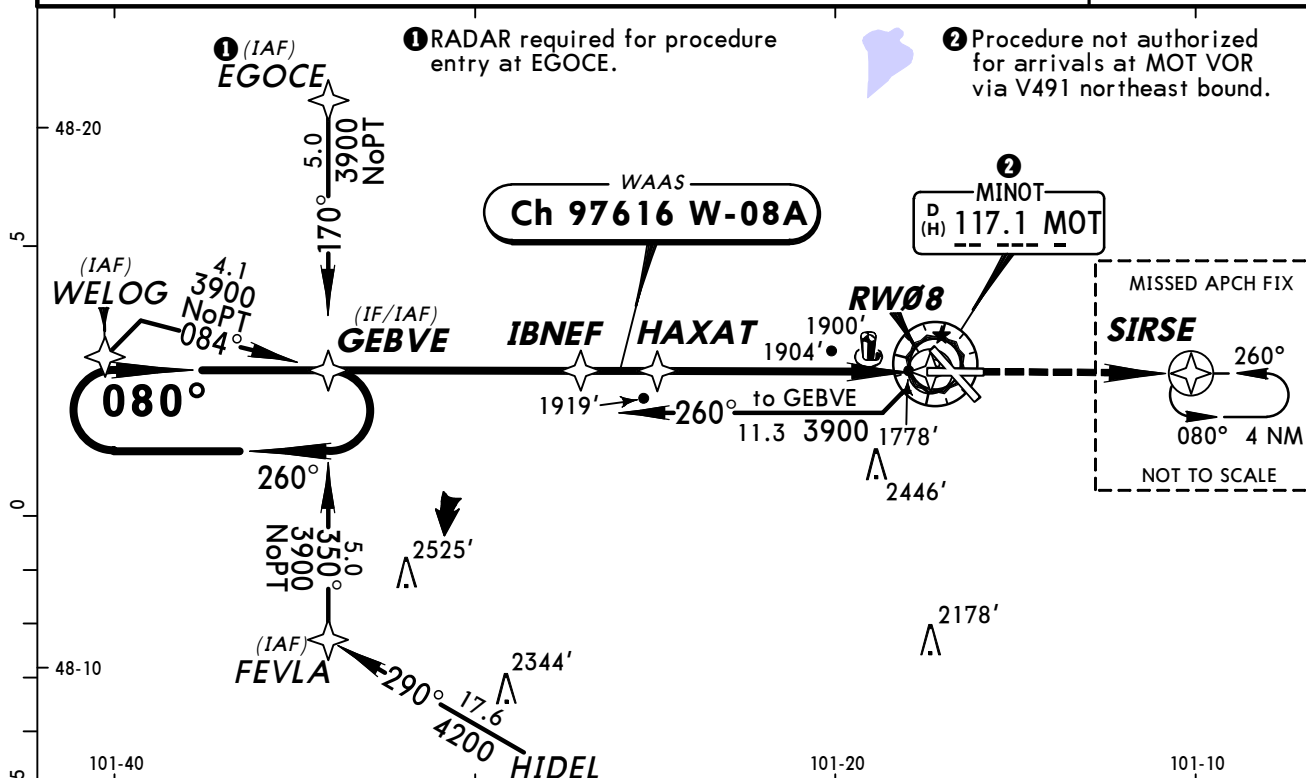


Gnd speed-Kts	70	90	100	120	140	160	MALSR	3700'	LT	MOT 117.1
GS	3.00°	377	484	538	646	753	861			
MAP at D1.6 IMOT or FONAD to MAP 5.2	4:27	3:28	3:07	2:36	2:14	1:57				

STRAIGHT-IN LANDING RWY31					CIRCLE-TO-LAND	
1 ILS		2 LOC (GS out)			With Local Altimeter Setting	With Minot AFB Altimeter Setting
3 DA(H) 1873' (200')		MDA(H) 1980' (307')			MDA(H)	MDA(H)
FULL	RAIL or ALS out	RAIL out	ALS out	Max Kts		
A				90	2200' (484') - 1	2240' (524') - 1
B				120		
C	RVR 24 or 1/2	RVR 40 or 3/4	RVR 24 or 1/2	140	2280' (564') - 1 1/2	2320' (604') - 1 1/2
D			RVR 40 or 3/4	165	2280' (564') - 2	2320' (604') - 2

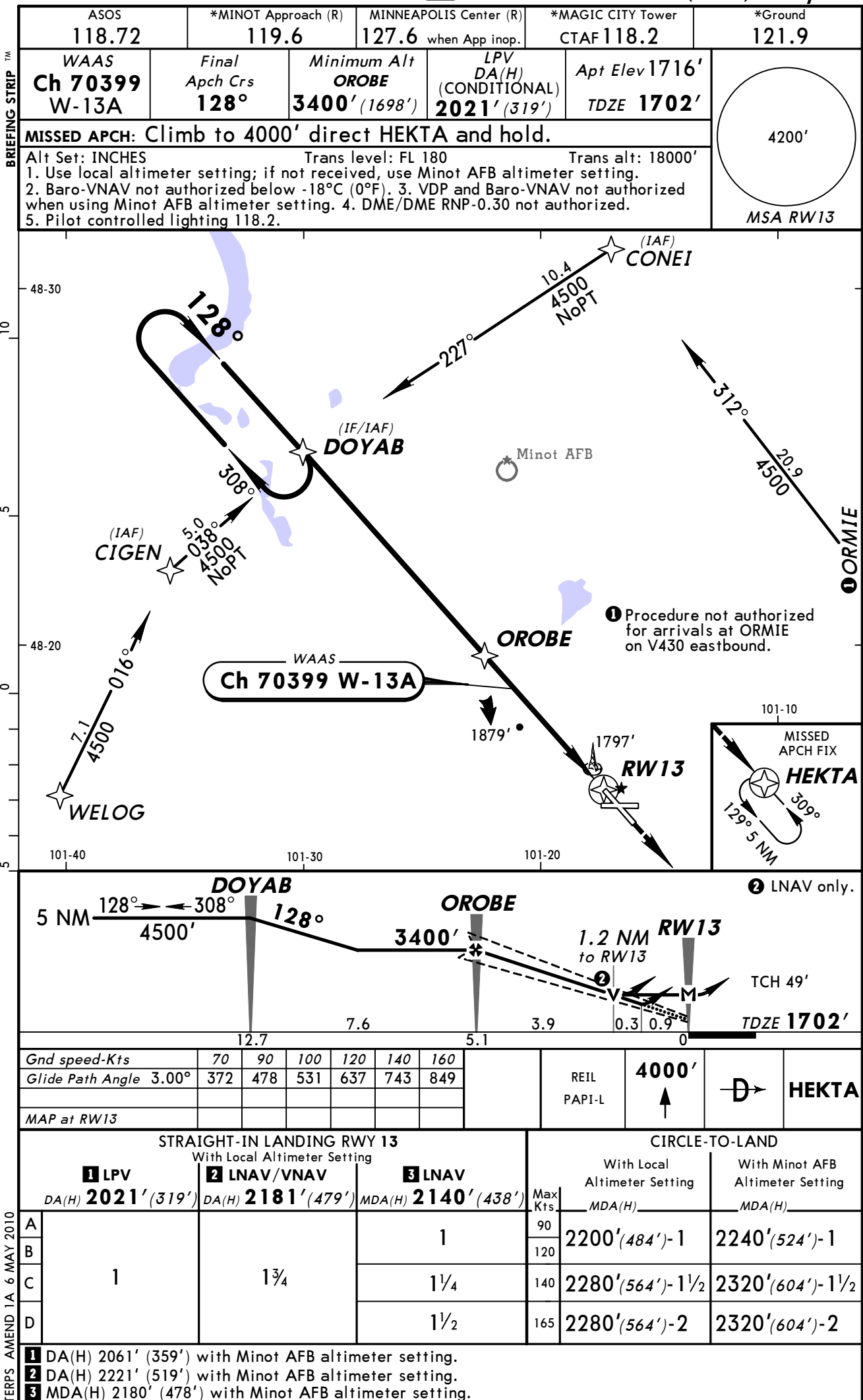
1 DA(H) 1913' (240') with Minot AFB altimeter setting. 2 MDA(H) 2020' (347') with Minot AFB altimeter setting. 3 RVR 18 with Flight Director or Autopilot or HUD to DA.

ASOS 118.72	*MINOT Approach (R) 119.6	MINNEAPOLIS Center (R) 127.6 when App inop.	*MAGIC CITY Tower CTAF 118.2	*Ground 121.9
WAAS Ch 97616 W-08A	Final Apch Crs 080°	Minimum Alt HAXAT 3400' (1688')	LPV DA(H) (CONDITIONAL) 1991' (279')	Apt Elev 1716' TDZE 1712'
MISSED APCH: Climb to 3600' direct SIRSE and hold.				
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'				
1. Use local altimeter setting; if not received, use Minot AFB altimeter setting. 2. For uncompensated Baro-VNAV systems, LNAV/VNAV not authorized below -18°C (0°F) or above 45°C (113°F). 3. DME/DME RNP-0.30 not authorized. 4. Visibility reduction by helicopters not authorized. 5. Baro-VNAV and VDP not authorized when using Minot AFB altimeter setting. 6. Pilot controlled lighting 118.2.				
4200'				
MSA RW08				



GEBVE		IBNEF	HAXAT	RW08	③ LNAV only.	
4 NM	080° → 260°	3900'	3600'	3400'	1.3 NM to RW08	TCH 49'
11.2	4.7	6.5	1.4	5.1	3.7	0.1 0.6 0.7
Gnd speed-Kts	70	90	100	120	140	160
Glide Path Angle	3.00°	372	478	531	637	743 849
MAP at RW08						
REIL		PAPI-L		3600'	→	SIRSE
				↑		

STRAIGHT-IN LANDING RWY 8				CIRCLE-TO-LAND	
With Local Altimeter Setting		With Local Altimeter Setting		With Local Altimeter Setting	
LPV DA(H) 1991' (279')	LNAV/VNAV DA(H) 2218' (506')	LNAV MDA(H) 2160' (448')	Max Kts	MDA(H)	
A		1	90	2200' (484') - 1	
B	1	1 3/4	120		
C		1 1/4	140	2280' (564') - 1 1/2	
D		1 1/2	165	2280' (564') - 2	
With Minot AFB Altimeter Setting		With Minot AFB Altimeter Setting		With Minot AFB Altimeter Setting	
LPV DA(H) 2021' (309')	LNAV/VNAV DA(H) 2248' (536')	LNAV MDA(H) 2200' (488')	Max Kts	MDA(H)	
A		1	90	2240' (524') - 1	
B	1	2	120		
C		1 1/4	140	2320' (604') - 1 3/4	
D		1 1/2	165	2320' (604') - 2	

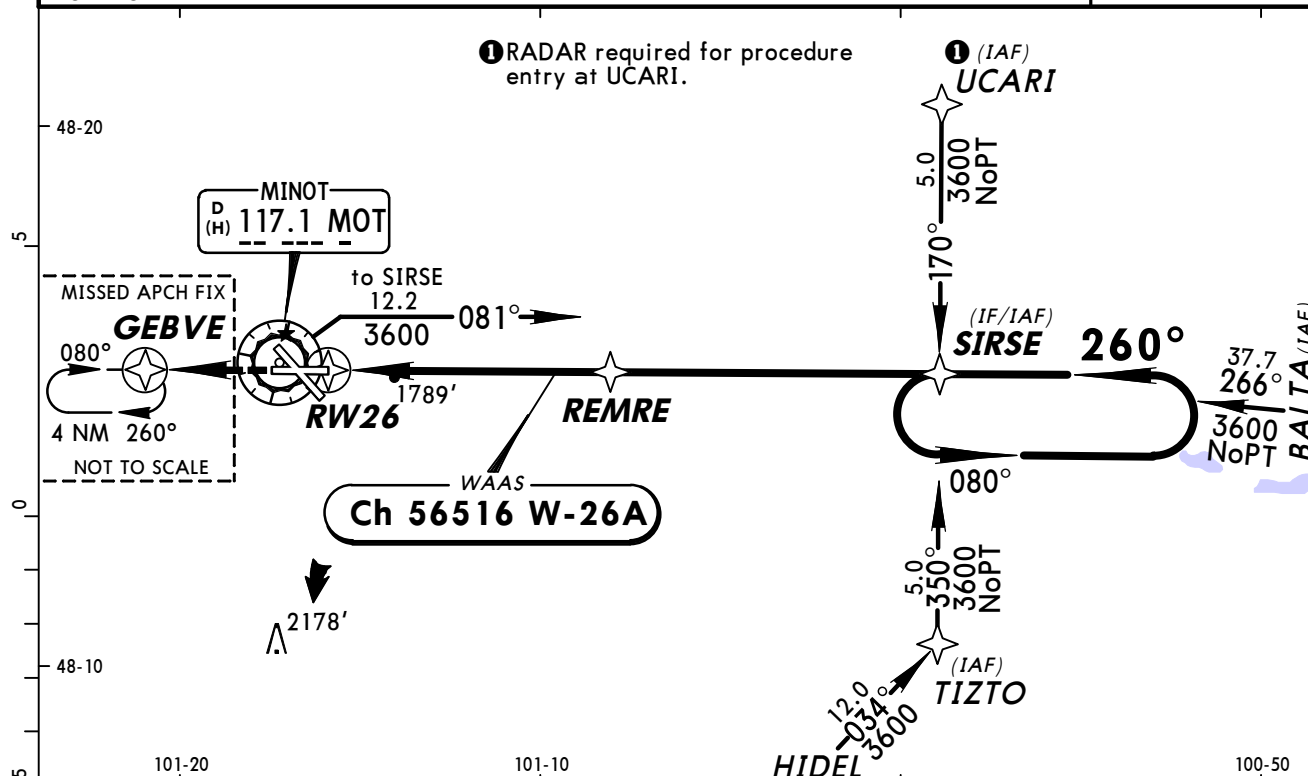


KMOT/MOT MINOT INTL

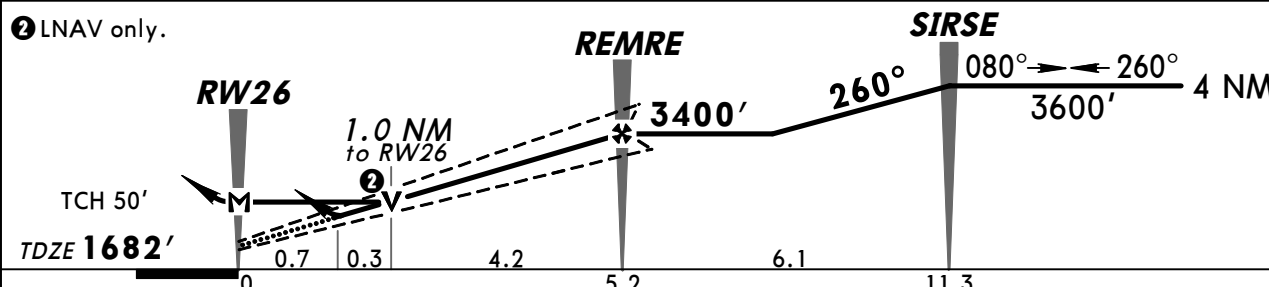
JEPPESSEN
1 APR 11 (12-3)

MINOT, N DAK
RNAV (GPS) Rwy 26

ASOS 118.72	*MINOT Approach (R) 119.6	MINNEAPOLIS Center (R) 127.6 when App inop.	*MAGIC CITY Tower CTAF 118.2	*Ground 121.9
WAAS Ch 56516 W-26A	Final Apch Crs 260°	Minimum Alt REMRE 3400' (1718')	LPV DA(H) (CONDITIONAL) 1932' (250')	Apt Elev 1716' TDZE 1682'
MISSED APCH: Climb to 3900' direct GEBVE and hold.				
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'				
1. Use local altimeter setting; if not received, use Minot AFB altimeter setting. 2. For uncompensated Baro-VNAV systems, LNAV/VNAV not authorized below -18°C (0°F) or above 45°C (113°F). 3. DME/DME RNP-0.30 not authorized. 4. Baro-VNAV and VDP not authorized when using Minot AFB altimeter setting. 5. Pilot controlled lighting 118.2.				
				4200' MSA RW26



② LNAV only.



Gnd speed-Kts	70	90	100	120	140	160		REIL	3900'		GEBVE
Glide Path Angle	3.00°	372	478	531	637	743	849	PAPI-L	↑		
MAP at RW26											

STRAIGHT-IN LANDING RWY 26

With Local Altimeter Setting

LPV DA(H) 1932' (250')	LNAV/VNAV DA(H) 1932' (250')	LNAV MDA(H) 2040' (358')	Max Kts	Circle-to-Land With Local Altimeter Setting MDA(H)
A			90	2200' (484') - 1
B	1	1	120	2280' (564') - 1 1/2
C			140	2280' (564') - 2
D		1 1/4	165	2280' (564') - 2

With Minot AFB Altimeter Setting

LPV DA(H) 1962' (280')	LNAV/VNAV DA(H) 1962' (280')	LNAV MDA(H) 2080' (398')	Max Kts	Circle-to-Land With Minot AFB Altimeter Setting MDA(H)
A			90	2240' (524') - 1
B	1	1	120	2320' (604') - 1 3/4
C			140	2320' (604') - 2
D		1 1/4	165	2320' (604') - 2

CHANGES: None.

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TERPS AMEND 0 11 FEB 2010

KMOT/MOT

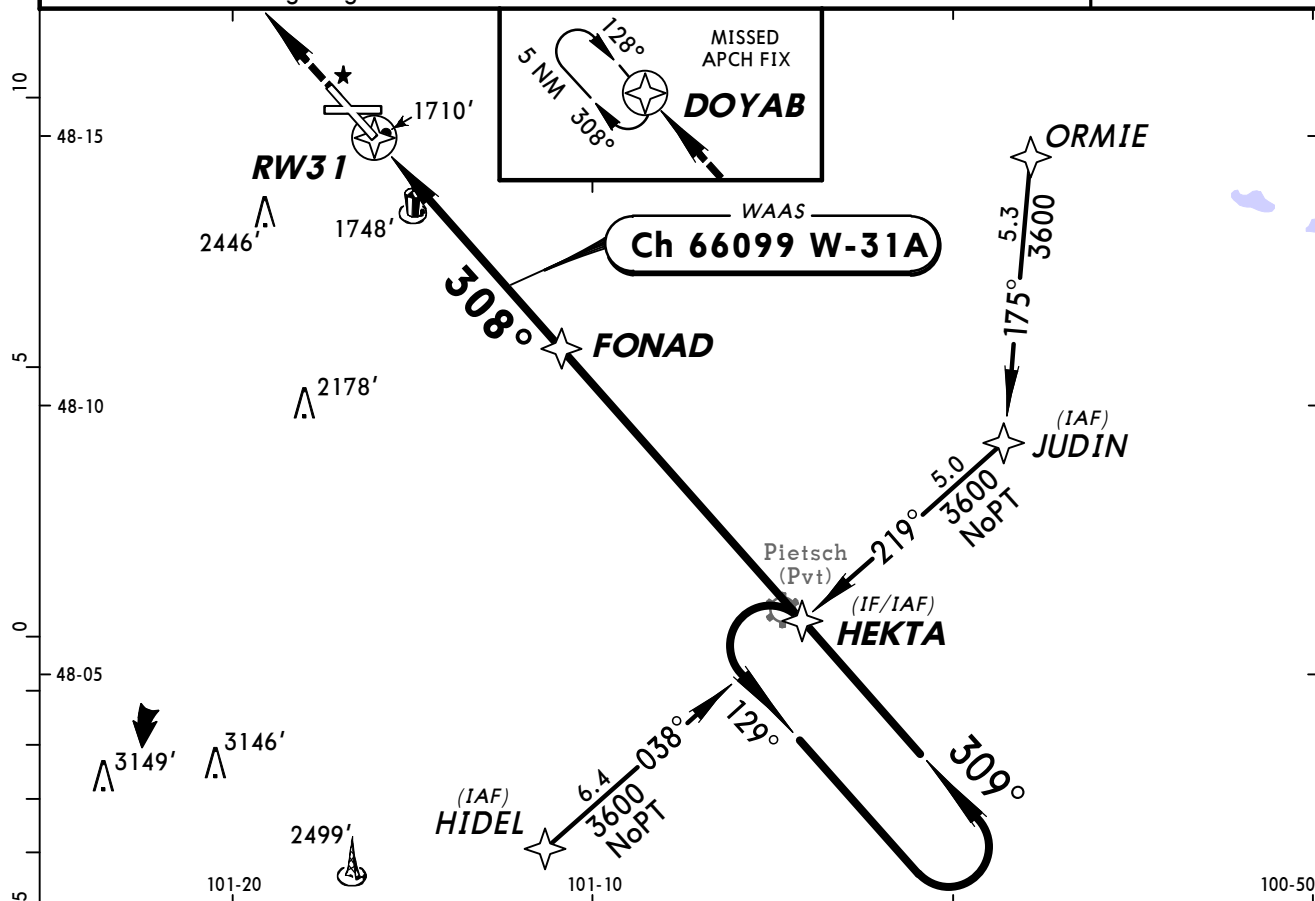
MINOT INTL

JEPPESEN

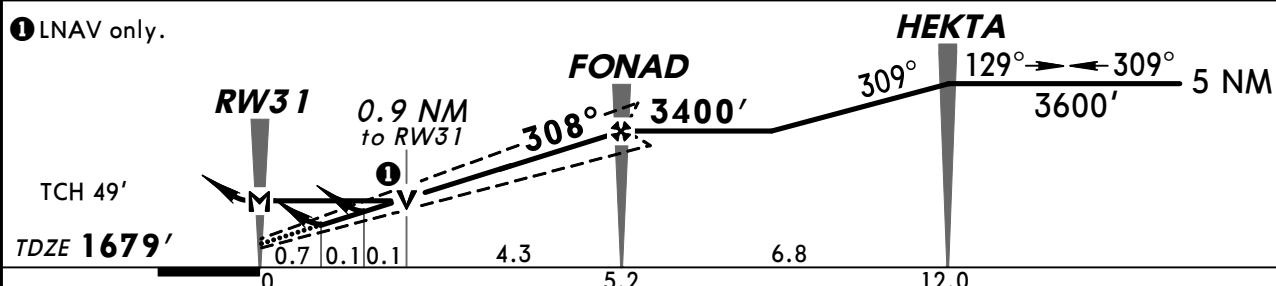
1 APR 11 (12-4)

MINOT, N DAK
RNAV (GPS) Rwy 31

ASOS 118.72	*MINOT Approach (R) 119.6	MINNEAPOLIS Center (R) 127.6 when App inop.	*MAGIC CITY Tower CTAF 118.2	*Ground 121.9
WAAS Ch 66099 W-31A	Final Apch Crs 308°	Minimum Alt FONAD 3400' (1721')	LPV DA(H) (CONDITIONAL) 1929' (250')	Apt Elev 1716' TDZE 1679'
MISSED APCH: Climb to 4500' direct DOYAB and hold.				
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'				
1. Use local altimeter setting; if not received, use Minot AFB altimeter setting. 2. Baro-VNAV not authorized below -18°C (0°F). 3. VDP and Baro-VNAV not authorized when using Minot AFB altimeter setting. 4. DME/DME RNP-0.30 not authorized. 5. Pilot controlled lighting 118.2.				
				4200' MSA RW31



① LNAV only.



Gnd speed-Kts	70	90	100	120	140	160			
Glide Path Angle 3.00°	372	478	531	637	743	849			
MAP at RW31									

STRAIGHT-IN LANDING RWY 31							CIRCLE-TO-LAND		
With Local Altimeter Setting							With Local Altimeter Setting		With Minot AFB Altimeter Setting
1 LPV	2 LNAV/VNAV	3 LNAV							
DA(H) 1929' (250')	DA(H) 1960' (281')	MDA(H) 2000' (321')							
RAIL or ALS out	RAIL out	ALS out	RAIL out	ALS out	RAIL out	ALS out			
A									
B									
C									
D									

① DA(H) 1969' (290') with Minot AFB altimeter setting.

② DA(H) 2000' (321') with Minot AFB altimeter setting.

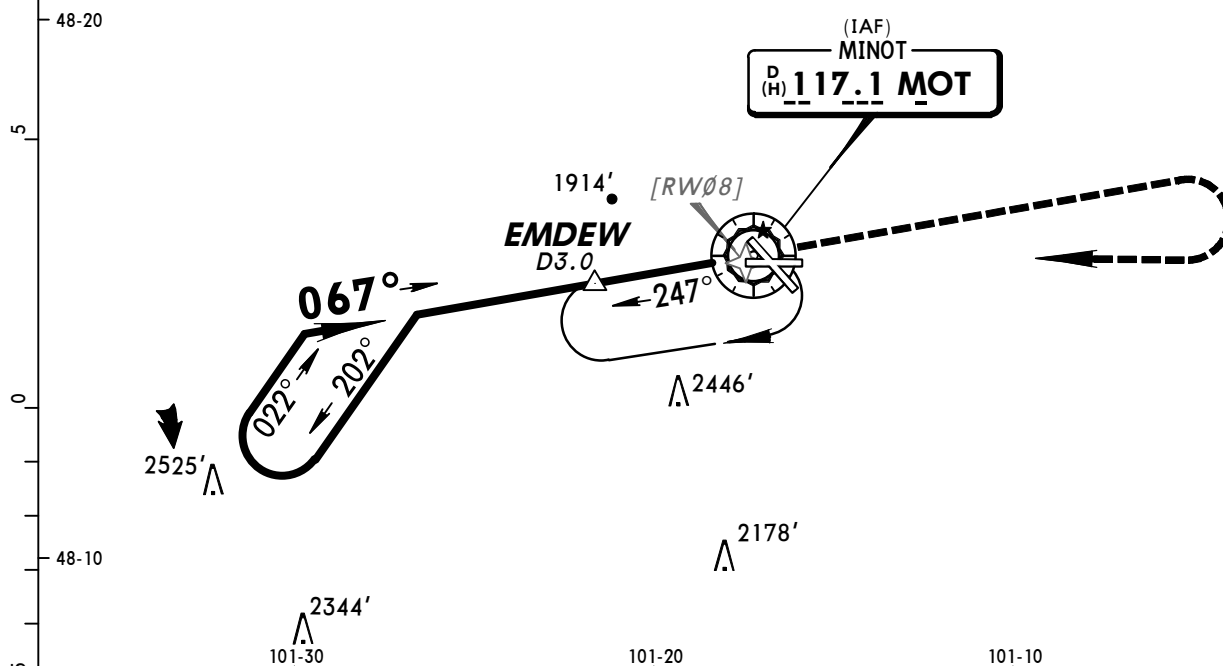
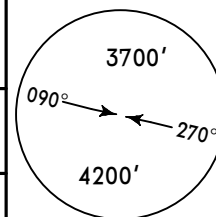
③ MDA(H) 2040' (361') with Minot AFB altimeter setting.

CHANGES: TDZE, minimums.

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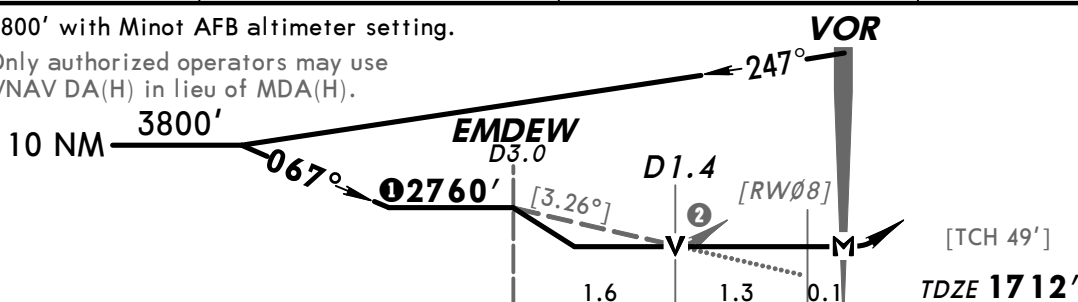
BRIEFING STRIP™

ASOS 118.72	*MINOT Approach (R) 119.6	MINNEAPOLIS Center (R) 127.6 when App inop.	*MAGIC CITY Tower CTAF 118.2	*Ground 121.9
VOR MOT 117.1	Final Apch Crs 067°	Minimum Alt EMDEW 2760' (1048')	MDA(H) (CONDITIONAL) 2180' (468')	Apt Elev 1716' TDZE 1712'
MISSED APCH: Climb to 3800' then RIGHT turn direct MOT VOR and hold.				
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. Use local altimeter setting; if not received, use Minot AFB altimeter setting. 2. VGSI and descent angles not coincident. 3. VDP not authorized with Minot AFB altimeter setting. 4. Pilot controlled lighting 118.2.				



① 2800' with Minot AFB altimeter setting.

② Only authorized operators may use VNAV DA(H) in lieu of MDA(H).



Gnd speed-Kts	70	90	100	120	140	160	REIL	3800'	RT	MOT
Descent angle [3.26°]	404	519	577	692	808	923	PAPI-L	↑	→	117.1
MAP at VOR										

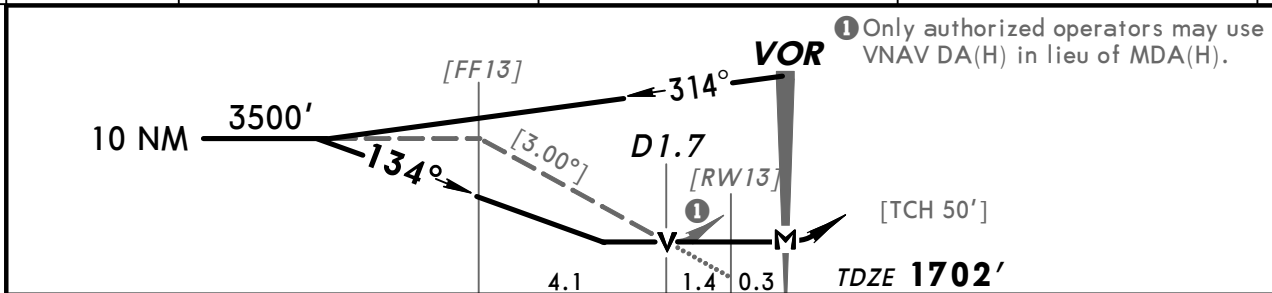
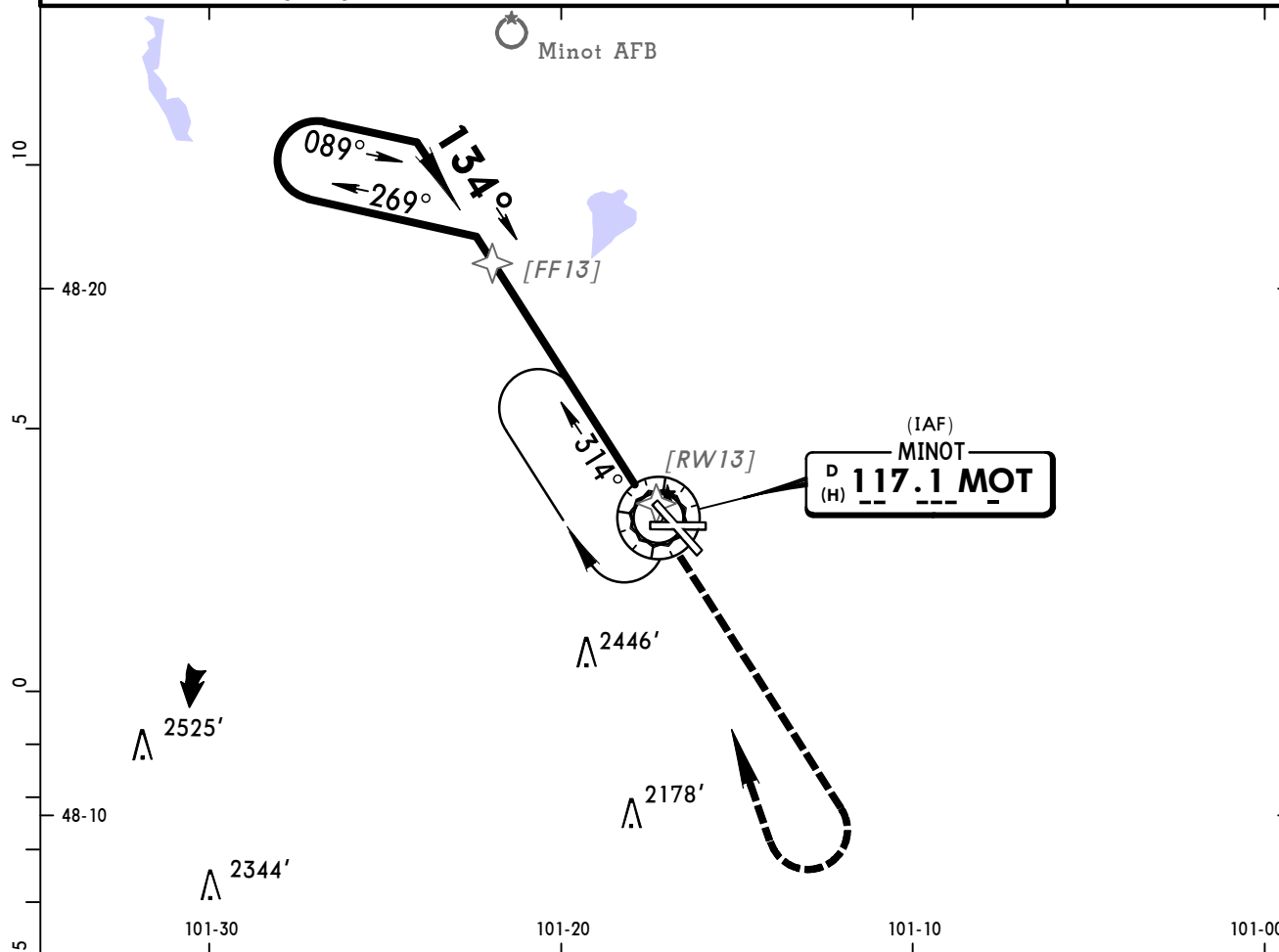
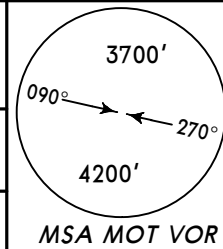
STRAIGHT-IN LANDING RWY 8				CIRCLE-TO-LAND			
With EMDEW		Without EMDEW		With EMDEW		Without EMDEW	
With Local Altimeter Setting				Max Kts	With Local Altimeter Setting		
MDA(H) 2180' (468')		MDA(H) 2760' (1048')			MDA(H) _____ MDA(H) _____		
A	1		1¼	90	2200' (484')-1	2760' (1044')-1½	
B			1½	120		2760' (1044')-1½	
C	1¼		3	140	2280' (564')-1½	2760' (1044')-3	
D	1½			165	2280' (564')-2		
With Minot AFB Altimeter Setting				Max Kts	With Minot AFB Altimeter Setting		
MDA(H) 2220' (508')		MDA(H) 2800' (1088')			MDA(H) _____ MDA(H) _____		
A	1		1¼	90	2240' (524')-1	2800' (1084')-1½	
B			1½	120		2800' (1084')-1½	
C	1½		3	140	2320' (604')-1¾	2800' (1084')-3	
D				165	2320' (604')-2		

KMOT/MOT MINOT INTL

JEPPESEN
5 FEB 10 (13-2) Eff 11 Feb

MINOT, N DAK
VOR Rwy 13

ASOS 118.72	*MINOT Approach (R) 119.6	MINNEAPOLIS Center (R) 127.6 when App inop.	*MAGIC CITY Tower CTAF 118.2	*Ground 121.9
VOR MOT 117.1	Final Apch Crs 134°	No FAF	MDA(H) 2200' (498')	Apt Elev 1716' TDZE 1702'
MISSED APCH: Climb to 3500' then RIGHT turn direct MOT VOR and hold.				
Alt Set: INCHES 1. Pilot controlled lighting 118.2.		Trans level: FL 180		Trans alt: 18000'



Gnd speed-Kts	70	90	100	120	140	160	REIL	3500'	RT	MOT
Descent angle [3.00°]	372	478	531	637	743	849	PAPI-L	↑	→	117.1
MAP at VOR										

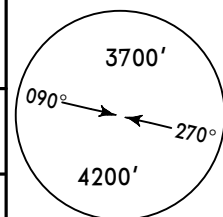
STRAIGHT-IN LANDING RWY 13				CIRCLE-TO-LAND			
MDA(H) 2200' (498')							
A	1			Max Kts	MDA(H)		
B				90	2200' (484') - 1		
C	1 1/4			120			
D	1 1/2			140	2280' (564') - 1 1/2		
				165	2280' (564') - 2		

CHANGES: None.

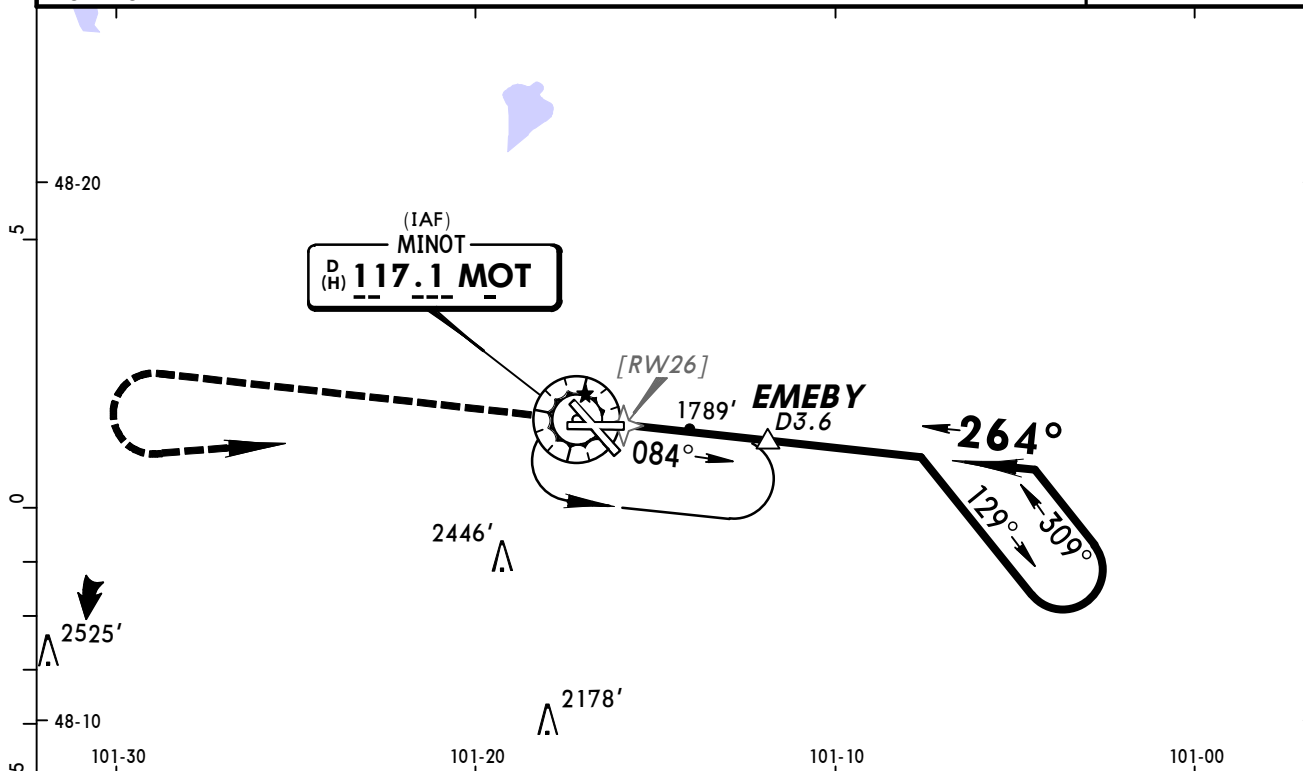
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BRIEFING STRIP

ASOS 118.72	*MINOT Approach (R) 119.6	MINNEAPOLIS Center (R) 127.6 when App inop.	*MAGIC CITY Tower CTAF 118.2	*Ground 121.9
VOR MOT 117.1	Final Apch Crs 264°	Minimum Alt EMEBY 2540' (858')	MDA(H) (CONDITIONAL) 2040' (358')	Apt Elev 1716' TDZE 1682'
MISSED APCH: Climb to 3600' then LEFT turn direct MOT VOR and hold.				
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. Use local altimeter setting; if not received, use Minot AFB altimeter setting. 2. VDP not authorized with Minot AFB altimeter setting. 3. Pilot controlled lighting 118.2.				

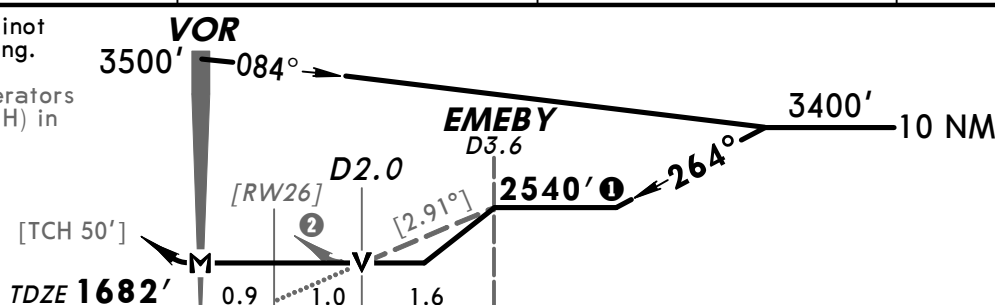


MSA MOT VOR



① 2580' when using Minot AFB altimeter setting.

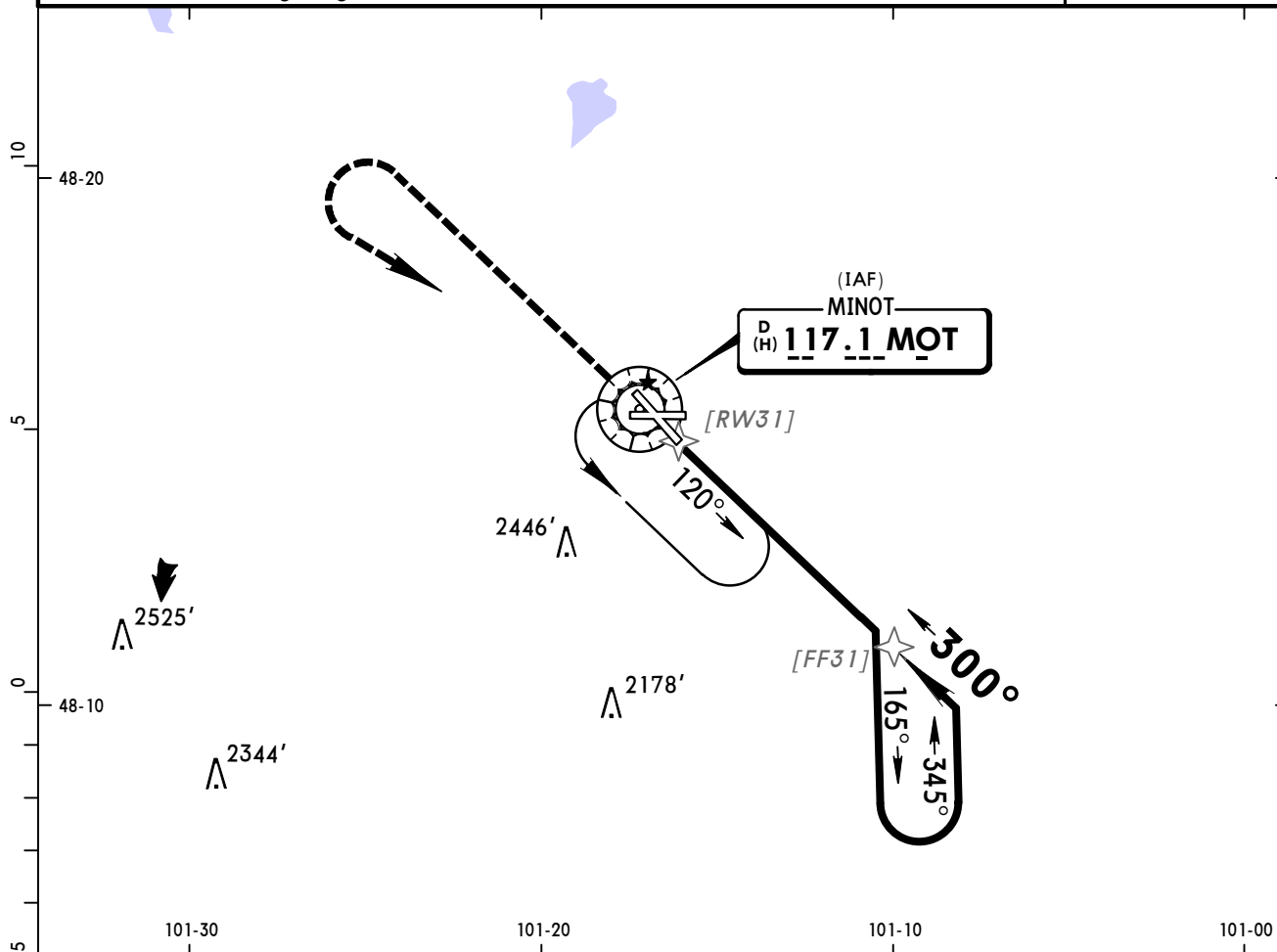
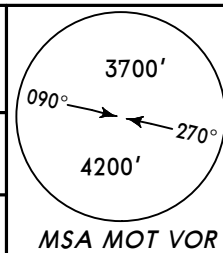
② Only authorized operators may use VNAV DA (H) in lieu of MDA (H).



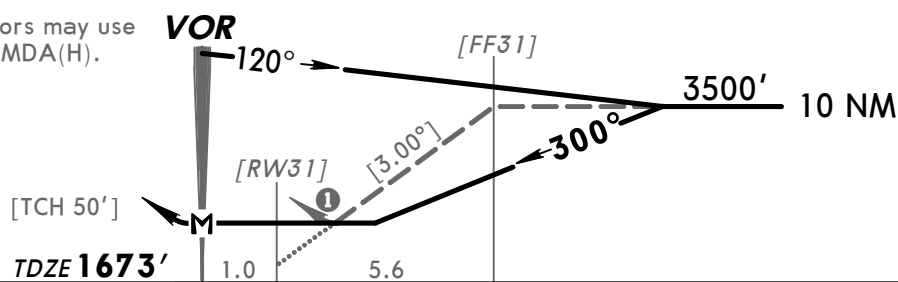
Gnd speed-Kts	70	90	100	120	140	160	REIL PAPI-L	3600' ↑	LT ↩	D →	MOT 117.1
Descent angle [2.91°]	360	463	515	618	721	824					
MAP at VOR											

STRAIGHT-IN LANDING RWY 26						CIRCLE-TO-LAND						
With EMEBY			Without EMEBY			With EMEBY			Without EMEBY			
With Local Altimeter Setting						With Local Altimeter Setting						
MDA(H) 2040' (358')			MDA(H) 2540' (858')			Max Kts	MDA(H) _____			MDA(H) _____		
A	1		1		90	2200' (484')-1		2540' (824')-1				
120					2540' (824')-1 1/4							
140												
C	1 1/4		2 1/2		140	2280' (564')-1 1/2		2540' (824')-2 1/2				
D					2 3/4							165
With Minot AFB Altimeter Setting							With Minot AFB Altimeter Setting					
MDA(H) 2080' (398')			MDA(H) 2580' (898')			Max Kts	MDA(H) _____			MDA(H) _____		
A	1		1 1/4		90	2240' (524')-1		2580' (864')-1 1/4				
120					2320' (604')-1 3/4							
140												2580' (864')-2 3/4
C	1 1/4		2 3/4		140	2320' (604')-2		2580' (864')-3				
D					3					165		

ASOS 118.72	*MINOT Approach (R) 119.6	MINNEAPOLIS Center (R) 127.6 when App inop.	*MAGIC CITY Tower CTAF 118.2	*Ground 121.9
VOR MOT 117.1	Final Apch Crs 300°	No FAF	MDA(H) 2200' (527')	Apt Elev 1716' TDZE 1673'
MISSED APCH: Climb to 3500' then LEFT turn direct MOT VOR and hold.				
Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. Pilot controlled lighting 118.2.				



① Only authorized operators may use VNAV DA(H) in lieu of MDA(H).



Gnd speed-Kts	70	90	100	120	140	160	MALS	3500'	LT	MOT 117.1
Descent angle [3.00°]	372	478	531	637	743	849				
MAP at VOR										

STRAIGHT-IN LANDING RWY 31				CIRCLE-TO-LAND	
MDA(H) 2200' (527')				MDA(H)	
	RAIL out	ALS out	Max Kts		
A	RVR 24 or 1/2	RVR 40 or 3/4	90	2200' (484') - 1	
B	RVR 50 or 1	1 1/2	120	2280' (564') - 1 1/2	
C	RVR 60 or 1 1/4	1 3/4	140	2280' (564') - 2	
D			165		

General Information

Location: Grand Forks ND USA
IATA Code: RDR
Lat/Long: N47° 57.7' W097° 24.0'
Elevation: 913 ft

Airport Use: Military
Magnetic Variation: 3.8°E
Sectional Chart: Twin Cities

Fuel Types: Jet, Jet 4
Repair Types: Major Airframe, Major Engine
Customs: No
Airport Type: IFR
Landing Fee: No
Control Tower: Yes
Jet Start Unit: Yes
LLWS Alert: No
Beacon: Yes

Sunrise: 1315 Z
Sunset: 0010 Z,

Runway Information

Runway: 17
Length x Width: 12351 ft x 150 ft
Surface Type: concrete
TDZ-Elev: 902 ft
Lighting: Edge, ALS, REIL
Stopway: 1000 ft

Runway: 35
Length x Width: 12351 ft x 150 ft
Surface Type: concrete
TDZ-Elev: 913 ft
Lighting: Edge, ALS, REIL
Stopway: 1000 ft

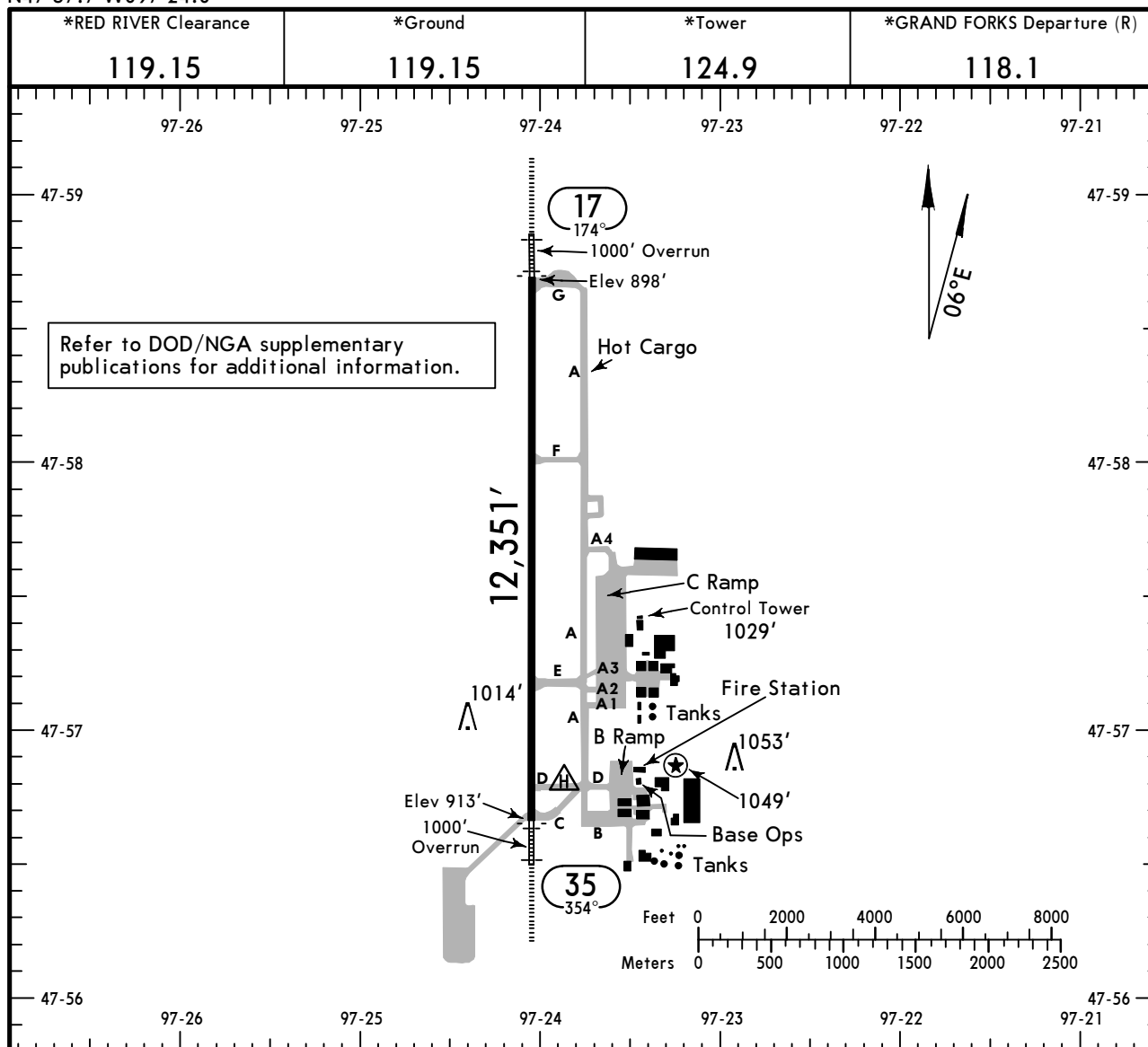
Communication Information

Red River Tower 124.9
Red River Ground Control 119.15
Grand Forks Clearance Delivery 119.15
Grand Forks Approach Control 118.1
Grand Forks Departure Control 118.1
Red River Radar 118.1

KRDR/RDR
 Apt Elev **913'**
 N47 57.7 W097 24.0

JEPPesen
 9 DEC 11 **(31-1)** **Eff 15 Dec**

GRAND FORKS AFB
GRAND FORKS, N DAK

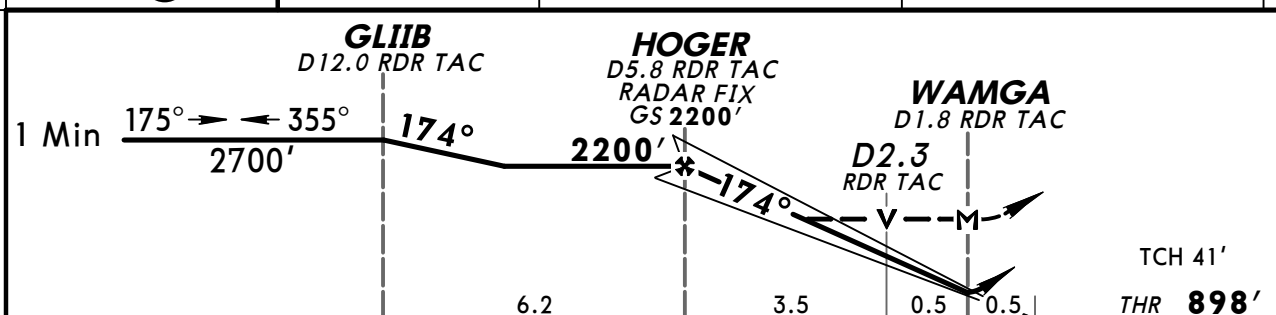
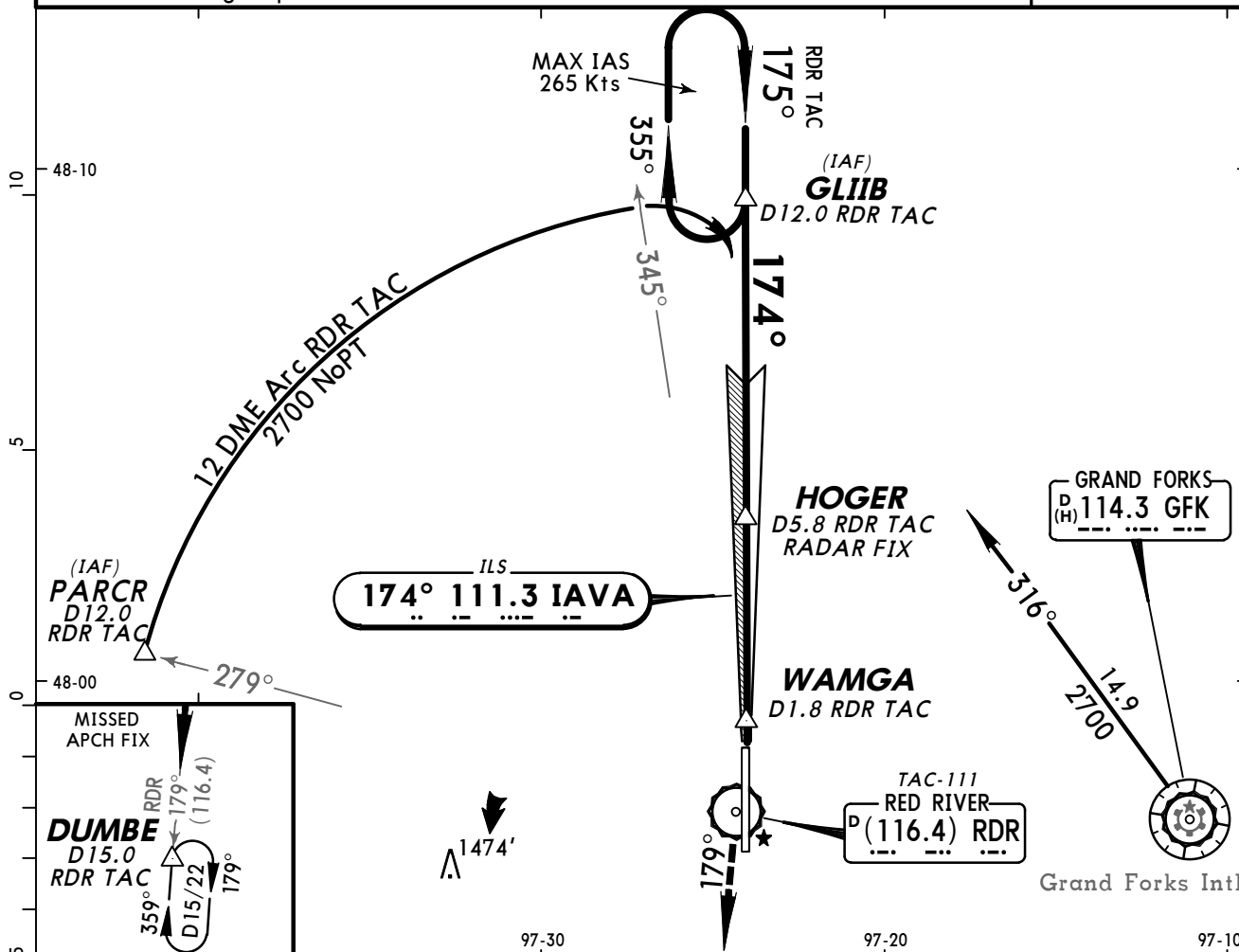


ADDITIONAL RUNWAY INFORMATION							
RWY					USABLE LENGTHS		WIDTH
					LANDING BEYOND	TAKE-OFF	
	HIRL	ALSF-I	PAPI-L	RVR	Threshold	Glide Slope	
17						11,281'	150'
35						11,076'	

- ① First/last 1100' of Rwy 17/35 is concrete. Middle 10,150' of rwy is asphalt.
 ② Non-standard - last 1000' (3 rows of white lights each side of centerline, instead of 1000' row bar).

TAKE-OFF				FOR FILING AS ALTERNATE		
All Rwys						
Adequate Vis Ref		STD		Precision	Non-Precision	
1 & 2 Eng	RVR 16 or 1/4	RVR 50 or 1		A	600-2	800-2
3 & 4 Eng		RVR 24 or 1/2		B		
				C		
				D		

*GRAND FORKS Approach (R) 118.1		*RED RIVER Tower 124.9		*Ground 119.15	
LOC IAVA 111.3	Final Apch Crs 174°	GS HOGER 2200' (1302')	ILS DA(H) 1102' (204')	Apt Elev 913' THR 898'	
MISSED APCH: Climb to 3000' outbound on RDR TAC R-179 to DUMBE and hold. Alt Set: INCHES Trans level: FL 180 Trans alt: 18000' 1. Radar or DME required. 2. SAFE ALTITUDE WITHIN 100 NM 4300'. 3. VGSI and ILS glidepath not coincident.					
					MSA RDR TAC



Gnd speed-Kts	70	90	100	120	140	160	ALSF-I		3000'		RDR TAC-111 (116.4) DUMBE	
GS	2.60°	327	421	467	561	654	PAPI		↑		R-179	
MAP at WAMGA or												
FAF to MAP	4.0	3:26	2:40	2:24	2:00	1:43	1:30					

STRAIGHT-IN LANDING RWY17				CIRCLE-TO-LAND			
ILS		LOC (GS out)		Not Authorized East of Rwy 17-35			
DA(H) 1102' (204')		MDA(H) 1240' (342')					
FULL		ALS out					
A				Max Kts	MDA(H)		
B			RVR 24 or 1/2	90	1340' (427') - 1		
C	RVR 24 or 1/2	RVR 40 or 3/4		120	1380' (467') - 1		
D			RVR 30 or 5/8	140	1380' (467') - 1 1/2		
				165	1480' (567') - 2		

BRIEFING STRIP

GRAND FORKS Approach (R)

118.1

LOC

IRDR

109.9

Final

Apch Crs

354°

GS

AGECU

2400' (1487')

ILS

DA(H)

1113' (200')

Apt Elev 913'

THR 913'

*RED RIVER Tower

124.9

Ground

119.15

MISSED APCH: Climb to 3000' outbound on RDR TAC R-353 to FRISK and hold.

Alt Set: INCHES

Trans level: FL 180

Trans alt: 18000'

1. Radar or DME required.

2. SAFE ALTITUDE WITHIN 100 NM 4300'.

3. VGSI and ILS glidepath not coincident.

4100'

180°

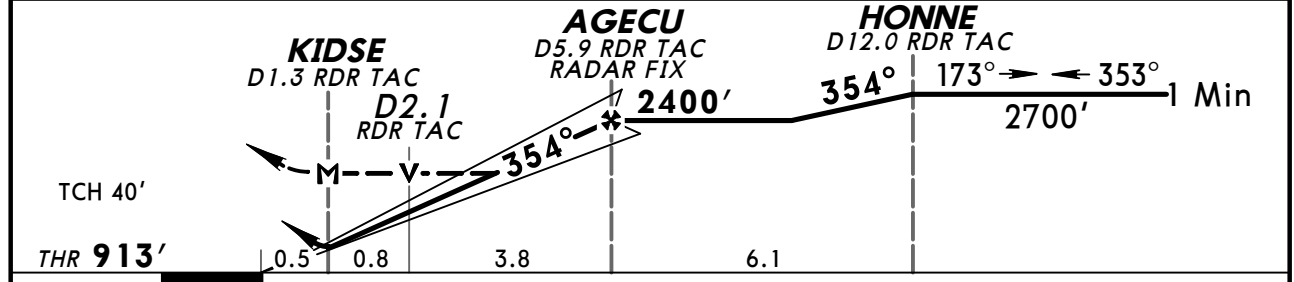
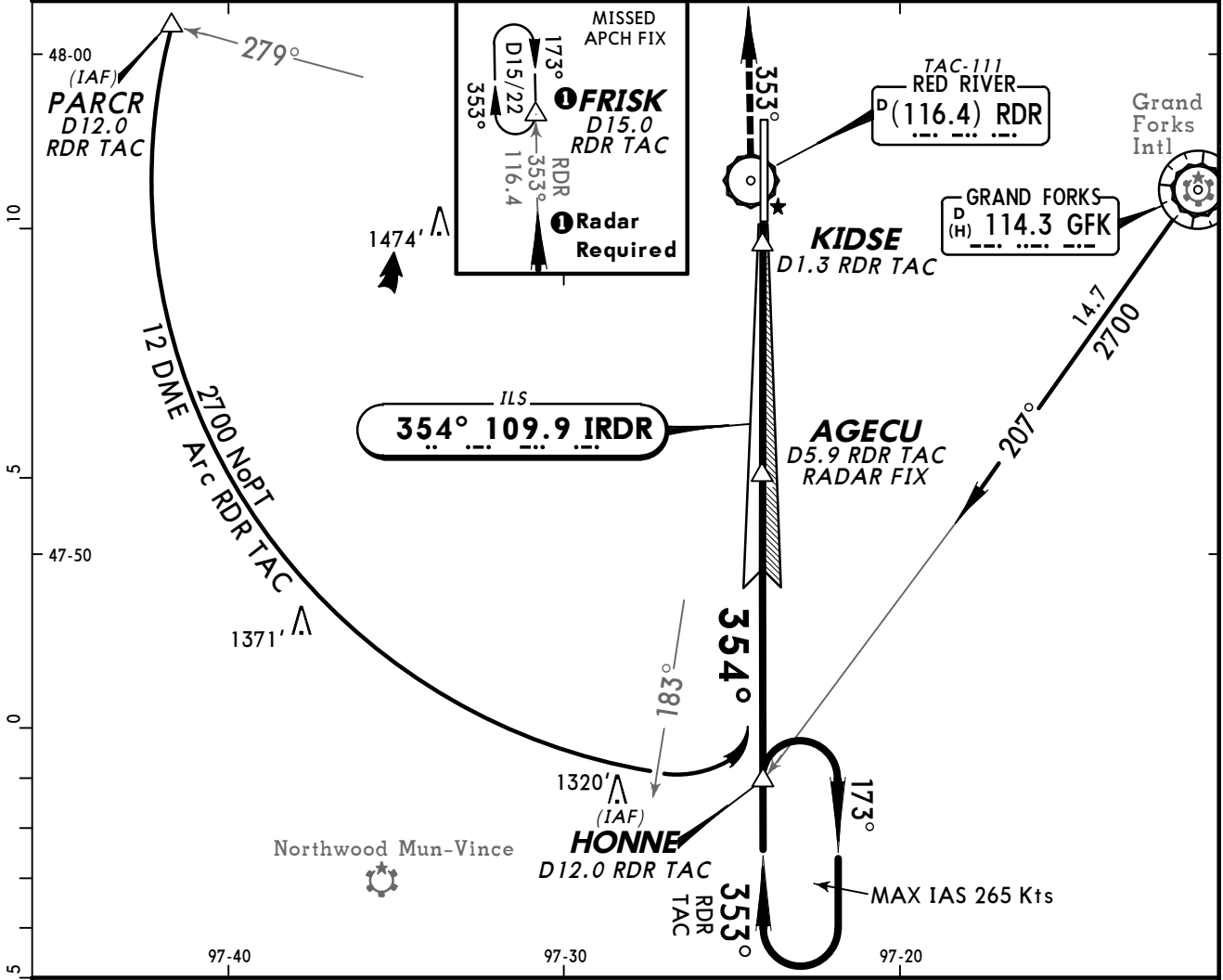
2500'

090°

3300'

360°

MSA RDR TAC



Gnd speed-Kts	70	90	100	120	140	160	ALSIF-I PAPI	3000' on RDR TAC-111 (116.4) R-353	FRISK
GS	2.60°	327	421	467	561	654			
MAP at KIDSE or FAF to MAP	4.6	3:57	3:04	2:46	2:18	1:58			

STRAIGHT-IN LANDING RWY35				CIRCLE-TO-LAND	
ILS		LOC (GS out)		Not Authorized East of Rwy 17-35	
DA(H) 1113' (200')		MDA(H) 1320' (407')			
FULL		ALS out		Max Kts	MDA(H)
TERPS A B C D	RVR 24 or 1/2	RVR 40 or 3/4	RVR 24 or 1/2	90	1340' (427') - 1
			RVR 55 or 1	120	1380' (467') - 1
			RVR 40 or 3/4	140	1380' (467') - 1 1/2
			RVR 60 or 1/8	165	1480' (567') - 2

Chart changes since cycle 03-2012

ADD = added chart, REV = revised chart, DEL = deleted chart.				
ACT	PROCEDURE IDENT	INDEX	REV DATE	EFF DATE
BISMARCK, ND (BISMARCK MUN - KBIS)				
REV	ILS OR LOC RWY 31	11-2	17 Feb 2012	
REV	RNAV (GPS) RWY 3	12-1	17 Feb 2012	
FARGO, ND (HECTOR INTL - KFAR)				
GRAND FORKS, ND (GRAND FORKS INTL - KGFK)				
WILLISTON, ND (SLOULIN INTL - KISN)				
JAMESTOWN, ND (JAMESTOWN REGL - KJMS)				
MINOT, ND (MINOT AFB - KMIB)				
MINOT, ND (MINOT INTL - KMOT)				
GRAND FORKS, ND (GRAND FORKS AFB - KRDR)				

TERMINAL CHART CHANGE NOTICES

No Chart Change Notices for Airport KBIS

No Chart Change Notices for Airport KFAR

No Chart Change Notices for Airport KGFK

No Chart Change Notices for Airport KISN

No Chart Change Notices for Airport KJMS

No Chart Change Notices for Airport KMIB

No Chart Change Notices for Airport KMOT

No Chart Change Notices for Airport KRDR