

<b>RNAV - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33</b>				Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.											
<b>US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION</b>															
<b>TERMINAL ROUTES</b>				<b>MISSED APPROACH</b>											
FROM	TO	COURSE AND DISTANCE	ALTITUDE	LPV: DA LNAV/VNAV: DA LNAV: RW18  CLIMB TO 3400 DIRECT HEVBA AND HOLD.  ADDITIONAL FLIGHT DATA: HOLD S, RT, 000.66 INBOUND. CHART FAS OBST: 1883 TWR 435936N/0961840W DISTANCE TO THLD FROM 250 HATH: 0.66 NM. CHART VDP AT 1.31 MILES TO RW18* *LNAV ONLY. WAAS CHANNEL # 40431 REFERENCE PATH ID: W18A LTP HAE: 503.1 M											
ASTOE	TIBUC (FB)	158.42 / 12.00	3800												
FSD VORTAC	SAKNE (FO)	030.70 / 38.85	3800												
GHENT (IAF)	SAKNE (NOPT) (FB)	226.06 / 25.71	3800												
TIBUC (IAF)	SAKNE (NOPT) (FB)	111.64 / 12.71	3800												
SAKNE (IF/IAF)	RAYOV (FB)	180.68 / 6.00	3700												
RAYOV (FAF)	ZOVOB/1.90 NM TO RW18 (FB)	180.68 / 4.14													
(SEE FORM 8260-10)															
1. PT <u>      </u> SIDE OF COURSE <u>      </u> OUTBOUND <u>      </u> FT WITHIN <u>      </u> MILES OF <u>      </u> (IAF)				MAG VAR: 3E                      EPOCH YEAR: 2015											
2. HOLD N SAKNE, RT, 180.68 INBOUND, 3800 FT. IN LIEU OF PT (IAF)															
3. FAC: 180.68    FAF: RAYOV                      DIST FAF TO MAP: 6.04    THLD: 6.04															
4. MIN. ALT: SAKNE 3800, RAYOV 3700, ZOVOB/1.90 NM TO RW18 2380*															
5. DIST TO THLD FROM OM: <u>      </u> MM: <u>      </u> IM: <u>      </u> 150 HAT: <u>      </u> 100 HAT: <u>      </u> GS ANT: <u>      </u>															
6. MIN GS INCPT: 3700    GS ALT AT: RAYOV 3700                      OM: <u>      </u> MM: <u>      </u> IM: <u>      </u>															
7. GS ANGLE: 3.00    TCH: 40.0    34:1 IS NOT CLEAR															
8. MSA FROM: RW18 2900															
<b>MINIMUMS</b>															
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT				ALTERNATE: N A		STANDARD @									
CATEGORY =====>	A			B			C			D			E		
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA
LPV DA	1986	7/8	250	1986	7/8	250	1986	7/8	250		NA				
LNAV/VNAV DA	2033	1	297	2033	1	297	2033	1	297		NA				
LNAV MDA	2180	1	444	2180	1	444	2180	1 3/8	444		NA				
CIRCLING	2200	1	463	2200	1	463	2280	1 1/2	543		NA				
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW 18C (0F) OR ABOVE 54C (130F).                      @ NA WHEN LOCAL WEATHER NOT AVAILABLE. CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS ON FSD VORTAC AIRWAY RADIALS 319 CW 110. CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT. (SEE FORM 8260-10)															
CITY AND STATE				ELEVATION: 1737    THRE: 1736		FACILITY IDENTIFIER:		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:			
PIPESTONE, MN				AIRPORT NAME:		RNAV		RNAV (GPS) RWY 18, AMDT 1				AMDT:                      ORIG			
				PIPESTONE MUNI				2 MAY 2013				DATED    02/14/2008			



US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION  
**RNAV - STANDARD**  
**INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.33**

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**TERMINAL ROUTES, (CONT.):**

FROM	TO	COURSE AND DISTANCE	ALTITUDE
ZOV0B/1.90 NM TO RW18	RW18 (MAP) (FO)	180.68 / 1.90	
RW18 (MAP)	1986 MSL	180.68	
1986 MSL	HEVBA (FO)		3400

**NOTES, (CONT.):**

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE SLAYTON ALTIMETER SETTING AND INCREASE ALL DA 68 FT AND ALL MDA 80 FT; INCREASE LPV ALL CATS, LNAV/VNAV ALL CATS, AND CIRCLING CAT C VISIBILITY 1/4 MILE; INCREASE LNAV CAT C VISIBILITY 1/8 MILE.  
 CHART NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.  
 CHART NOTE: BARO-VNAV AND VDP NA WITH SLAYTON ALTIMETER SETTING.  
 CHART NOTE: CIRCLING TO RWY 27 NA AT NIGHT



CITY AND STATE PIESTONE, MN	ELEVATION: 1737	THRE: 1736	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 18, AMDT 1 2 MAY 2013	SUP:
	AIRPORT NAME: PIESTONE MUNI				AMDT: ORIG
					DATED: 02/14/2008

**RNAV STANDARD INSTRUMENT APPROACH PROCEDURE  
FLIGHT STANDARDS SERVICE - FAR PART 97.33**

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**FAS DATA BLOCK INFORMATION****DATA FIELD****DATA**

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KPQN
RUNWAY	RW18
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	0
REFERENCE PATH DATA SELECTOR	W18A
REFERENCE PATH IDENTIFIER (APPROACH ID)	435912.8550N
LTP/FTP LATITUDE	0961758.4865W
LTP/FTP LONGITUDE	+05031
LTP/FTP ELLIPSOIDAL HEIGHT	435743.9400N
FPAP LATITUDE	0961806.3900W
FPAP LONGITUDE	00040.0
THRESHOLD CROSSING HEIGHT (TCH)	F
TCH UNITS SELECTOR (METERS OR FEET USED)	03.00
GLIDEPATH ANGLE (GPA)	106.75
COURSE WIDTH AT THRESHOLD	1440
LENGTH OFFSET	40.0
HORIZONTAL ALERT LIMIT (HAL)	50.0
VERTICAL ALERT LIMIT (VAL)	

**CRC REMAINDER**

B901B375

**ADDITIONAL PATH POINT RECORD INFORMATION**

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+05291
FPAP ORTHOMETRIC HEIGHT	+05291

QUALITY  
CHECKED

CITY AND STATE PIESTONE, MN	ELEVATION: 1737      THRE: 1736 AIRPORT NAME:  PIESTONE MUNI	FACILITY IDENTIFIER:  RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 18, AMDT 1 2 MAY 2013	SUP:
				AMDT:      ORIG
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[illegible][illegible][illegible]

SEGMENT	1	2	3	4	5	6	7	8	9	0	1	2	3
SUSAP KPQNK3FR18	AASTOE	010ASTOEK3EA0E	IF							18000		A JS	
SUSAP KPQNK3FR18	AASTOE	020TIBUCK3EA0E	A 020TF			15840120	+	03800				A JS	
SUSAP KPQNK3FR18	AASTOE	030SAKNEK3EA0EE	B 010TF			11160127	+	03800				A JS	
SUSAP KPQNK3FR18	AFSD	010FSD K3D 0V	IF							18000		A JS	
SUSAP KPQNK3FR18	AFSD	020SAKNEK3EA0EY	020TF			03070389	+	03800				A JS	
SUSAP KPQNK3FR18	AFSD	030SAKNEK3EA0EE	AR HF			18070040	+	03800				A JS	
SUSAP KPQNK3FR18	AGHENT	010GHENTK3EA0E	A IF							18000		A JS	
SUSAP KPQNK3FR18	AGHENT	020SAKNEK3EA0EE	B 010TF			22610257	+	03800				A JS	
SUSAP KPQNK3FR18	R	010SAKNEK3EA0E	I IF				+	03800		18000		A JS	
SUSAP KPQNK3FR18	R	020RAYOVK3EA1E	F 051TF			18070060	+	03700			RW18 K3PGA	JS	
SUSAP KPQNK3FR18	R	020RAYOVK3EA2WALPV		ALNAV/VNAV	ALNAV							JS	
SUSAP KPQNK3FR18	R	021ZOVCK3EA0E	S 031TF			18070041	V	0238002381		-300		A JS	
SUSAP KPQNK3FR18	R	030RW18 K3PGOGY	M 031TF			18070019		01776		-300		A JS	
SUSAP KPQNK3FR18	R	040	0 M CA			1807	+	01986				A JS	
SUSAP KPQNK3FR18	R	050HEVBAK3EA0EY	DF				+	03400				A JS	
SUSAP KPQNK3FR18	R	060HEVBAK3EA0EE	R HM			00070040	+	03400				A JS	

[illegible]

CITY AND STATE <b>PIPESTONE, MN</b>	ELEVATION: <b>1737</b> THRE: <b>1736</b>	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE: <b>RNAV (GPS) RWY 18, AMDT 1</b> <b>2 MAY 2013</b>	SUP:
	AIRPORT NAME: <b>PIPESTONE MUNI</b>	<b>RNAV</b>		AMDT: <b>ORIG</b>
				DATED: <b>02/14/2008</b>

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**U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION**  
**RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE**  
**FLIGHT STANDARDS SERVICES - FAR PART 97.33**

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ARINC SUMMARY - 424-18 - RNAV (GPS)

ROUTES	TRANSITION	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG (TRUE)	DISTANCE	ALTITUDE	SPEED
	ASTOE	ASTOE	010		IF		FB					
	ASTOE	TIBUC	020	IAF	TF		FB	2.0	158.4 (161.4T)	012.0	AA 03800	
	ASTOE	SAKNE	030		TF		FB	1.0	111.6 (114.6T)	012.7	AA 03800	
	FSD	FSD	010		IF		FB					
	FSD	SAKNE	020		TF		FO	2.0	030.7 (033.7T)	038.9	AA 03800	
	FSD	SAKNE	030	IAF	HF	R	FO		180.7 (183.7T)	004.0	AA 03800	
	GHENT	GHENT	010	IAF	IF		FB					
	GHENT	SAKNE	020		TF		FB	1.0	226.1 (229.1T)	025.7	AA 03800	
		SAKNE	010	FACF	IF		FB				AA 03800	
		RAYOV	020	FAF	TF		FB	0.5	180.7 (183.7T)	006.0	AA 03700	
		ZOVOB	021	SDF	TF		FB	0.3	180.7 (183.7T)	004.1	AA 02380	GS 02381
		RW18	030	MAP	TF		FO	0.3	180.7 (183.7T)	001.9	AT 01776	

MISSED APPROACH	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG (TRUE)	DISTANCE	ALTITUDE	SPEED
		040		CA		FB		180.7 (183.7T)		AA 01986	
	HEVBA	050		DF		FO				AA 03400	
	HEVBA	060		HM	R	FO		000.7 (003.7T)	004.0	AA 03400	

POINT DATA	WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS
	FSD	N433858.17	W0964652.05	N4338.970	W09646.868
	ASTOE	N442755.47	W0963816.95	N4427.925	W09638.283
	GHENT	N442807.95	W0954954.48	N4428.133	W09549.908
	HEVBA	N434731.71	W0961900.59	N4347.529	W09619.010
	RAYOV	N440514.61	W0961726.30	N4405.244	W09617.438
	SAKNE	N441113.81	W0961654.22	N4411.230	W09616.904
	TIBUC	N441632.87	W0963257.63	N4416.548	W09632.961
	ZOVOB	N440106.63	W0961748.38	N4401.111	W09617.806
	RW18	N435912.86	W0961758.49	N4359.214	W09617.975

RUNWAY DATA	RWY	THRESHOLD ELEVATION	TCH
	RW18	01736	40



CITY AND STATE <b>PIPESTONE, MN</b>	ELEVATION: <b>1737</b>	THRE: <b>1736</b>	FACILITY IDENTIFIER: <b>RNAV</b>	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE: <b>RNAV (GPS) RWY 18, AMDT 1</b> <b>2 MAY 2013</b>	SUP:
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