

FEDERAL AVIATION ADMINISTRATION  
FLIGHT STANDARDS SERVICE  
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE  
TITLE 14 CFR PART 97.33

Bearings, headings, courses, tracks 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 feet RVR.

<u>AIRPORT</u> PRINCETON MUNI	<u>AIRPORT ID</u> KPNM	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 33	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>CITY</u> PRINCETON	<u>STATE</u> MN
<u>AIRPORT ELEVATION</u> 980	<u>TDZE</u> 980	<u>SUPERSEDED</u> RNAV (GPS) RWY 33	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>DATED</u> 03/29/2018	<u>MAG VAR</u> 3E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 8 NOVEMBER 2018	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 1995

**TERMINAL ROUTES** THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 18-21.


FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
KEYEN	IAF	ZAPIN	NOPT	TF	FB	1.00	062.39	5.06	3100
UDILE	IAF	ZAPIN	NOPT	TF	FB	1.00	242.55	5.27	3100
ZAPIN	IF/IAF	ZODOG		TF	FB	1.00	332.47	6.07	2600
ZODOG	FAF	RW33	MAP	TF	FO	0.30	334.91	4.89	
RW33	MAP	1380 MSL		CA			334.91		
1380 MSL		ZAPIN		DF	FO	1.00			3100

**MISSED APPROACH**

**MAP:**

LNAV: RW33

**MISSED APPROACH INSTRUCTIONS:**

CLIMBING RIGHT TURN TO 3100 DIRECT ZAPIN AND HOLD. 

**ALTERNATE MISSED APPROACH INSTRUCTIONS:**

**PROFILE:**


- PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
- HOLD SE ZAPIN, RT, 332.47 INBOUND, 3100 FT. IN LIEU OF PT (IAF), MAX 6000.
- FAC: 334.91 FAF: ZODOG DIST FAF TO MAP: 4.89 DIST FAF TO THLD: 4.89
- MIN ALT: ZAPIN 3100, ZODOG 2600
- DIST TO THLD FROM OM: MM: IM: 150 HAT: GS ANT:
- MIN GP INCPT: GP ALT AT FAF : OM: MM: IM:
- GP ANGLE: 34:1: IS NOT CLEAR 20:1: IS CLEAR TCH:
- MSA FROM: RW33 3500



PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

CHART NOTE: RWY 33 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.  
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT KEYEN ON T330 NORTHWEST BOUND.   
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT UDILE ON V218 NORTHBOUND.

ADDITIONAL FLIGHT DATA:

ZODOG TO RW33: 3.04/41.  
CHART VDP AT 1.44 NM TO RW33  
FAS OBST: 1220 AAO 452932N/0933340W.  
1244 AAO 452824N/0933424W.

MINIMUMS:

TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT

ALTERNATE: NA ☐ STANDARD

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LNAV MDA	1500	1	520	1500	1	520	1500	1 3/8	520		NA				
CIRCLING	1640	1	660	1640	1	660	1640	1 3/4	660		NA				

CHANGES - REASONS

- 1. ADDED PBN REQUIREMENTS NOTE: RNP APCH - EQUIPMENT REQUIREMENTS NOTE APPLIED PER 8260.58A, CHANGE 1 AND 8260.19H, PARA 8-6-8B(1)
- 2. DELETED NOTE: "DME/DME RNP-0.3 NA" - IAW 8260.19H, PARA 1-1-5F(14), REMOVED THE REQUIREMENT FOR THIS NOTE.
- 3. ADDED "20:1 CLEAR" TO LINE 7 - NEW CRITERIA REQUIRES THE STATUS OF BOTH THE 20:1 AND 34:1 SURFACES BE SHOWN.
- 4. CHANGED LNAV MDA/HAT FROM "1560/580" TO "1500/520" - LOWERED MINIMA BACK TO ORIGINAL LEVELS USING NEW CONTROLLING OBSTACLE FOUND DURING CHART STUDY.
- 5. CHANGED VDP LOCATION FROM "1.67 NM" TO "1.44 NM" - LOWERING MDA MOVED VDP IN CLOSER TO MAP.
- 6. CHANGED LNAV CAT C VISIBILITY FROM "1 5/8" TO "1 3/8" - LOWER MINIMA CHANGED VISIBILITY MINIMA.
- 7. ADDED MAX HOLDING ALTITUDE OF 6000 TO IF/IAF/MISSED APPROACH FIX ZAPIN - NEW REPORTS FORMAT ADDS MAX HOLDING ALTITUDES.

- 8/28/18: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 8/16/18.
- 1. CHANGED PLANVIEW ARRIVAL NOTE FROM "PROCEDURE NA FOR ARRIVALS AT KEYEN ON V510-T330 NORTHWEST BOUND" TO "PROCEDURE NA FOR ARRIVALS AT KEYEN ON T330 NORTHWEST BOUND".
  - 2. CHANGED MISSED APPROACH INSTRUCTIONS FROM "CLIMBING RIGHT TURN 3100 DIRECT ZAPIN AND HOLD" TO "CLIMBING RIGHT TURN TO 3100 DIRECT ZAPIN AND HOLD".



COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZMP, PNM FSS, STATE AERO

FLIGHT CHECKED BY

PAUL ROBERT ARMSTRONG

DEVELOPED BY

JAMES LAFFERTY

APPROVED BY

PATRICK MULQUEEN

Digitally signed by  
DAVID TEFFETELLER  
Sep 13, 2018  
  
Digitally signed by  
DAVID TEFFETELLER  
Sep 13, 2018  
  
Digitally signed by  
DAVID TEFFETELLER  
Sep 13, 2018

OFFICE

FIOG

OFFICE

AJV-5433

OFFICE

AJV-5430

DATE

08/08/2018

DATE

06/01/2018

DATE

TITLE

MANAGER

