

**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (RNP) 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.

AIRPORT ID SDL	PROCEDURE NAME RNAV (RNP) RWY 21	ORIGINAL/AMENDMENT ORIG-B	CITY SCOTTSDALE	STATE AZ
AIRPORT ELEVATION 1510	TDZE 1507	SUPERSEDED RNAV (RNP) RWY 21	DATED 06/30/2011	MAG VAR 12E
FACILITY RNAV	COORDINATES OF FACILITIES	ACTUAL EFFECTIVE DATE 8 AUGUST 2024	REQUIRED EFFECTIVE DATE ROUTINE	EPOCH YEAR 1990
			CANCEL/SUSPEND	

TERMINAL ROUTES

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
SWIRL		IBOBE		TF	FB	2.00	182.37	8.50	9800
IBOBE		HAWAI		TF	FB	2.00	182.35	5.63	8200
BBALL		NAAVE		TF	FB	2.00	277.21	17.12	6000
NAAVE		FRMAN		TF	FB	1.30	310.82	14.76	5000
FRMAN	IAF	FURST		TF	FB	1.00	340.32	13.71	4000
FURST		CLAAS		TF	FB	1.00	333.51	11.60	4000
CLAAS		WLLMN		RF	FB	1.00	(3.84 NM RADIUS CW (CFSBQ))	9.28	4000
HAWAI	IAF	MREEN		TF	FB	1.00	182.33	3.00	6700
MREEN		LTCOL		TF	FB	1.00	182.32	4.00	6000
LTCOL		ONELE		TF	FB	1.00	144.41	4.66	4800
ONELE		WLLMN		TF	FB	0.65	144.44	3.10	4000
WLLMN	IF	* EEDGR		TF	FB	0.60	111.98	5.00	3300
EEDGR	PFAF	* DNAHO		RF	FB	0.16	(1.60 NM RADIUS CW (CFFZG))	2.79	
DNAHO		RW21	MAP	TF	FO	0.16	212.00	1.82	
RW21	MAP	LSLEE		TF	FB	1.00	211.99	5.70	
LSLEE		JRRRY		RF	FB	1.00	(4.08 NM RADIUS CW (CFLBK))	13.76	
JRRRY		AVENT		TF	FO	1.00	044.99	2.86	5000

MISSED APPROACH

MAP:
RNP: DA

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 5000 ON TRACK 212 TO LSLEE AND RIGHT TURN TO JRRRY AND ON TRACK 045 TO AVENT AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

- | | | | | | | | | |
|---|-----------------------|---|-----------------------|--------------------------|----------------------|---------------------------|--|------------|
| 1. PT | SIDE OF COURSE | OUTBOUND | FT WITHIN | MILES OF | (IAF) | | | |
| 2. PROFILE STARTS AT WLLMN | | | | | | | | |
| 3. FAC: * | | PFAF: EEDGR | | DIST PFAF TO MAP: | | DIST PFAF TO THLD: | | |
| 4. MIN ALT: WLLMN 4000, EEDGR 3300, DNAHO 2249 | | | | | | | | |
| 5. DIST TO THLD FROM PFAF: 4.62 | | MM: | IM: | 150 HAT: | 486 HAT: 1.14 | GS ANT: | | |
| 6. MIN GP INCPT: 3300 | | GP ALT AT PFAF: EEDGR 3300, DNAHO 2249 | | | OM: | MM: | | IM: |
| 7. GP ANGLE: 3.53 | | 34:1: IS NOT CLEAR | 20:1: IS CLEAR | TCH: 60.0 | | | | |
| 8. MSA FROM: RW21 8900 | | | | | | | | |

PBN REQUIREMENTS NOTE:

RNP AR APCH – GPS, RF, MIN RNP 0.60. AUTHORIZATION REQUIRED.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW 1°C OR ABOVE 54°C.
 CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
 CHART PLANVIEW NOTE AT SWIRL: (RNP 0.60).
 CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, PROCEDURE NA.
 CHART PLANVIEW NOTE AT BBALL: (RNP 0.60).

ADDITIONAL FLIGHT DATA:

HOLD NW, LT, 156.00 INBOUND.
 CHART FAS OBST: 1685 POLE (04-062154) 333847N/1115334W.
 CHART MANDATORY 6000 AT NAAVE.
 CHART MANDATORY 5000 AT FRMAN.
 CHART MANDATORY 4000 AT FURST.
 CHART MANDATORY 4000 AT CLAAS.

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												
AUTHORIZATION REQUIRED																
RNP 0.16 DA	1993	1 3/8	486	1993	1 3/8	486	1993	1 3/8	486			NA				



CHANGES - REASONS

1. DELETE RNP 0.10 DA LINE OF MINIMA – FAILURE TO MEET 50' HAT REDUCTION OR 1/4 SM VISIBILITY REDUCTION IAW 8260.58C, 4-1-1C.(2).(A).
2. INCREASE RNP 0.16 DA DA/HAT FROM 1987/477 TO 1993/486 – CLEAR THE T-NOTAM FOR 3/0909 FINAL/MISSED SECTION 1A AND 1B OEA PENETRATION.
3. INCREASE RNP 0.16 VISIBILITY FROM 1 1/2 TO 1 3/8 – CLEAR THE T-NOTAM FOR 3/0909 FINAL/MISSED SECTION 1A AND 1B OEA PENETRATION.
4. CHANGED UNCOMPENSATED BARO-VNAV NOTE FROM “FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW 1°C (31°F) OR ABOVE 44°C (112°F).” TO “FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW 1°C OR ABOVE 54°C.” – IAW FAAO 8260.19I, 8-6-9 (R).
5. DELETE NOTE: RF AND GPS REQUIRED – APPLIED NEW PBN REQUIREMENTS NOTE.
6. PBN REQUIREMENTS NOTE: RNP AR APCH – GPS. - IAW FAAO 8260.19I, 8-6-8 (B) (1).
7. CHANGED TDZE FROM 1510 TO 1507. - NEW SURVEY DATA.
8. CHANGE MISSED APPROACH INSTRUCTION FROM “CLIMB TO 5000 VIA TRACK 212 TO LSLEE AND VIA RIGHT TURN TO JRRRY AND VIA TRACK 045 TO AVENT AND HOLD.” TO “CLIMB TO 5000 ON TRACK 212 TO LSLEE AND THEN RIGHT TURN TO JRRRY AND ON TRACK 045 TO AVENT AND HOLD.” - NEW FORMAT CHANGING "VIA" TO NEW CONNECTOR VERBIAGE (AND/OR/THEN/ATC, ETC.).
9. DELETE NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA. – IAW FAAO 8260.19I, 8-6-11 (K)(3).
10. CHANGED MSA ELEVATION FROM 8800 TO 8900 - NEW CONTROLLING OBSTACLE.
11. CHANGE NOTE FROM "CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED PROCEDURE NA." TO "CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, PROCEDURE NA." - CORRECT FORMAT IAW FAAO 8260.19I, 8-6-9, (F)(4).
12. FAS OBSTACLE CHANGED FROM 1658 LIGHT POLE 333832N/1115325W TO 1685 POLE (04-062154) 333847N/1115334W - NEW EVALUATION.
13. CHART 20:1 IS CLEAR- IAW FAA ORDER 8260.19I, 8-6-7 (G)(3).
14. CHANGED DIST TO THLD FROM 438 HAT: 1.02 NM TO 486 HAT: 1.14 - NEW EVALUATION.
15. CHANGED CNF NAMING FORMAT FOR “IPXUJ, EQUUY AND XEXQI” TO “CFSBQ, CFFZG AND CFLBK” RESPECTIVELY – IAW FAA ORDER 8260.19I, 2-10-4 (A)(4).
16. INCORPORATED CHANGES FROM P-NOTAM FOR ORIG-A AND T-NOTAM 3/0909 - IAW FAAO 8260.19I, 8-3-4 C (3).
17. ADDED DNAHO 2249 TO MIN ALT IN PROFILE LINE 4 - NEW EVALUATION.

03/15/24: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 08/21/2023.

1. REPLACED PBN REQUIREMENTS NOTE: FROM "RNP AR APCH – GPS" TO "RNP AR APCH – GPS, RF, MIN RNP 0.60. AUTHORIZATION REQUIRED."
2. REPLACED LINE 3 (FAC): FROM "212.00" TO " * *".
3. CHANGED CONTROLLING OBSTACLE FOR THE MISSED APPROACH LEVEL SURFACE FROM: "2358 MSL TOWER (04-000442) 333547.00N/1120534.00W (3C)" TO 2776 MSL AAO 333251.00N/1120115.00W (2C). UPDATE ALSO MADE ON ACCOMPANYING S-FILE (100K AND 500K MAPS).
4. ADDED REMARK TO PART C: GENERAL REMARKS: FINAL SEGMENT DEFAULT RNP 0.30 VALUE NOT DEVELOPED (PER 8260.19I, 8-6-11 (I)(4) (NOTE 1) AND CURRENT WAIVER (CONTROL # 20150412-1038): ESTABLISHMENT OF RNP 0.30 LINE OF MINIMUMS WOULD RESULT IN AN IMPRACTICABLE DA. THE DA WOULD BE 3200 BASED ON FAAO 8260.19D PARA 274 (ORIGINAL REFERENCE), APPLIED ADVERSE ASSUMPTION OBSTACLE (AAO) OF 200' BEYOND 20,000' FROM THRESHOLD TO MOUNTAINS NORTHEAST OF THE AIRPORT. CURRENT FINAL APPROACH FIX ALTITUDE IS 3300 AND DA 1993 (RNP 0.16 DA).
5. ADDED "*" TO EEDGR AND DNAHO IN TERMINAL ROUTES TO COLUMN (PDF EDIT REQUIRED FOR EEDGR).
6. CHANGED FINAL ARC STEPDOWN RF SEGMENT COMPUTATIONS ALT TO 3300.
7. CHANGED FINAL STEPDOWN SEGMENT COMPUTATIONS VKTW TO 25.51.
8. ADDED COMMUNICATIONS WITH: PHX APP CON, SDL TOWER.

COORDINATED WITH:

A4A
 ALPA
 AOPA
 APA
 HAI
 NBAA
 OTHER: PHX APP CON, SDL TOWER, SDL APT MNGR

FLIGHT CHECKED BY

Digitally signed by
DAVID DANNER
 Jun 25, 2024

OFFICE

FPO

DATE

06/13/2024

DEVELOPED BY

Digitally signed by
ANDRE L MARSH
 Mar 22, 2024

OFFICE

AJV-A421

DATE

08/21/2023

APPROVED BY

Digitally signed by
DAVID DANNER
 Jun 25, 2024

OFFICE

AJV-A420

DATE

TITLE
 MANAGER

