

**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> TUCSON INTL	<u>AIRPORT ID</u> KTUS	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 11R	<u>ORIGINAL/AMENDMENT</u> ORIG-C	<u>CITY</u> TUCSON	<u>STATE</u> AZ
<u>AIRPORT ELEVATION</u> 2643	<u>TDZE</u> 2605	<u>SUPERSEDED</u> RNAV (GPS) RWY 11R	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>DATED</u> 07/31/2008	<u>MAG VAR</u> 12E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 30 JANUARY 2020	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 1995

**TERMINAL ROUTES**

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
TUS VORTAC		LOBSE		TF	FO	1.00	302.67	17.61	7000
RYN NDB		LOBSE		TF	FO	1.00	348.11	9.76	7000
ALMON		MAVVA		TF	FB	1.00	085.58	7.98	6500
MAVVA	IAF	LOBSE	NOPT	TF	FB	1.00	100.95	9.83	6000
LOBSE	IF/IAF	OXILE		TF	FB	1.00	122.92	5.00	5700
OXILE		ZIRUS		TF	FB	1.00	122.95	2.40	5100
ZIRUS		ELAXE		TF	FB	1.00	122.97	2.00	4600
ELAXE	FAF	RW11R	MAP	TF	FO	0.30	122.99	6.05	
RW11R	MAP	2965 MSL		CA					
2965 MSL		RUVIE		DF	FB	1.00			
RUVIE		RYN NDB		TF	FO	1.00	272.17	13.49	6000

**MISSED APPROACH**

**MAP:**

LNAV/VNAV: DA  
LNAV: RW11R

**MISSED APPROACH INSTRUCTIONS:**

CLIMB TO 6000 DIRECT RUVIE AND ON TRACK 272.17 TO RYN NDB AND HOLD.

**ALTERNATE MISSED APPROACH INSTRUCTIONS:**



PROFILE:

1. PT      SIDE OF COURSE      OUTBOUND      FT WITHIN      MILES OF (IAF)
2. HOLD NW LOBSE, RT, 122.92 INBOUND, 6000 FT. IN LIEU OF PT (IAF), MAX 14000.
3. FAC: 122.99      FAF: ELAXE      DIST FAF TO MAP: 6.05      DIST FAF TO THLD: 6.05
4. MIN ALT:    LOBSE 6000, OXILE 5700, ZIRUS 5100, ELAXE 4600
5. DIST TO THLD FROM OM:      MM:      IM:      150 HAT:      360 HAT: 1.05      GS ANT:      MM:      IM:
6. MIN GP INCPT: 4600      GP ALT AT FAF : ELAXE 4600      OM:
7. GP ANGLE: 3.00      34:1: IS CLEAR      20:1: IS CLEAR      TCH: 55.0
8. MSA FROM: RW11R 10700

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -20°C OR ABOVE 54°C.  
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT TUS VORTAC ON R-308 SOUTHEAST BOUND.  
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).

ADDITIONAL FLIGHT DATA:

CHART 3308 RADIO FAC 321246/1110022  
CHART VDP AT 1.78 NM TO RW11R\*  
\*LNAV ONLY  
CHART FAS OBST: 2943 TREE 321006N/1110123W.  
HOLD W, RT, 090.00 INBOUND

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/VNAV DA	2965	1 1/4	360	2965	1 1/4	360	2965	1 1/4	360	2965	1 1/4	360			
LNAV MDA	3200	1	595	3200	1	595	3200	1 1/2	595	3200	1 3/4	595			
CIRCLING	3200	1	557	3220	1	577	3220	1 1/2	577	3220	2	577			



**CHANGES - REASONS**

- 1. ADDED VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). - VGSI TCH CHANGED FROM 31.7 FEET TO 44.9 FEET.
- 2. DELETED CHART NOTE: DME/DME RNP-0.3 NA. - 8260.19H CHAPTER 8-6-8, B2.
- 3. ADDED EQUIPMENT REQUIREMENTS NOTE: RNP APCH. - 8260.19H CHAPTER 8-6-8, B2.
- 4. UPDATED BARO-VNAV NOTE FROM FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -20C (-4F) OR ABOVE 43C (111 F) TO CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -20°C OR ABOVE 54°C. - 8260.19H, 8-6-9S AND TARGETS CALCULATION.
- 5. ADDED 20:1 IS CLEAR IN PROFILE SECTION. - 8260.19H, CHAPTER 8-6-7, G3.
- 6. DELETED ADDITIONAL FLIGHT DATA NOTE: 20:1 OBST. 2609 ROD OL GS 320715/1105648. - 20:1 SURFACE IS CLEAR, NEW OBSTACLE EVALUATION.
- 7. CHANGES FROM P-NOTAMS FOR ORIG-A AND ORIG-B INCORPORATED INTO FORM - REQUIRED IAW 8260.19H PARA 8-3-4C(3).
- 8. CHANGED FIX SELECTION FROM TUS VORTAC TO LOBSE IN TERMINAL ROUTES FROM FB TO FO. - 8260.19H, 8-6-4A, 6B.
- 9. CHANGED FIX SELECTION FROM RYN NDB TO LOBSE IN TERMINAL ROUTES FROM FB TO FO. - 8260.19H, 8-6-4A, 6B.
- 10. CHANGED MISSED APPROACH INSTRUCTIONS FROM CLIMB TO 6000 VIA 123 COURSE TO RUVIE THEN CLIMBING RIGHT TURN DIRECT RYAN NDB AND HOLD TO CLIMB TO 6000 DIRECT TO RUVIE AND ON TRACK 272.17 TO RYN NDB AND HOLD. - 8260.19H, 8-6-6D.
- 11. ADDED MAX HOLDING 14000 AT LOBSE, DISTANCE FAF TO MAP 6.05, GP ALT AT ELAXE 4600 AND DIST TO THLD FROM 360 HAT 1.05 TO PROFILE SECTION. 8260.19H, 8-6-7.
- 12. DELETED ADDITIONAL FLIGHT DATA NOTE CHART DIST TO THLD FROM 335 HAT: .94NM. - UPDATED NOTE TO DIST FROM THLD TO 360 HAT 1.05 NM. AND ADDED TO PROFILE SECTION.
- 13. ADDED CHART VDP AT 1.78 NM TO RW11R\* TO ADDITIONAL FLIGHT DATA. - NO 20:1 PENETRATIONS FOUND IN EVALUATION.
- 14. ADDED CHART FAS OBST: 2943 TREE 321006N/1110123W. - REMOVED FAS OBST: 2943 TREE 321006N/1110123W PER 8260.19H, 8-6-10C.
- 15. ADDED CA LEG AND UPDATED LEG TYPE. - CURRENT CODING FORMAT.

**COORDINATED WITH:**

**A4A** ☒    **ALPA** ☒    **AOPA** ☒    **APA** ☒    **HAI** ☐    **NBAA** ☒    **OTHER:** ZAB, TUS ATCT, AZ AERO, AMGR, NGB/A306 (ANG)

**FLIGHT CHECKED BY**

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:  
FLIGHT INSPECTION REVIEW NOT REQUIRED

**OFFICE**

*Digitally signed by*    **DATE**

**WARDELL HENNING**

Dec 20, 2019

**DEVELOPED BY**

WARDELL HENNING (THOR CORNELL)

*Digitally signed by*

**WARDELL HENNING**

Dec 20, 2019

**OFFICE**

AJV-A432

**DATE**

08/23/2019

**APPROVED BY**

LONNIE EVERHART

*Digitally signed by*

**WARDELL HENNING**

Dec 20, 2019

**OFFICE**

AJV-A430

**DATE**

**TITLE**  
MANAGER

