

**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) Z RWY 29R	<u>ORIGINAL/AMENDMENT</u> 2E	<u>CITY</u> TUCSON	<u>STATE</u> AZ	
<u>AIRPORT ELEVATION</u> 2643	<u>TDZE</u> 2643	<u>SUPERSEDED</u> RNAV (GPS) Z RWY 29R	<u>ORIGINAL/AMENDMENT</u> 2D	<u>DATED</u> 06/20/2019	<u>MAG VAR</u> 12E	<u>EPOCH YEAR</u> 1995
<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>		

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>
DINGO		UGETE		TF	FB	1.00	127.10	32.00	7300
UGETE		EVERE		TF	FB	1.00	127.31	12.46	7000
TUS VORTAC		EVERE		TF	FB	1.00	185.34	10.17	7000
EVERE		WAXES		TF	FB	1.00	123.01	6.00	6000
WAXES	IAF	KECED		TF	FB	1.00	033.06	5.00	5900
KECED		ATOGE		TF	FB	1.00	033.09	4.00	5300
JOKIM	IAF	VEDTU		TF	FB	1.00	243.23	11.68	7800
VEDTU		ATOGE		TF	FB	1.00	243.11	11.00	5300
ATOGE	IF	SAXIE		TF	FB	1.00	303.12	6.03	4400
SAXIE	FAF	RW29R	MAP	TF	FO	0.30	303.08	5.27	
RW29R	MAP	2929 MSL		CA			303.08		
2929 MSL		WEDGI		DF	FB	1.00			
WEDGI		PIMMA		TF	FO	1.00	309.12	16.44	6800



MISSED APPROACH

MAP:
LPV: DA
LNAV/VNAV: DA
LNAV: RW29R

MISSED APPROACH INSTRUCTIONS:
CLIMB TO 6800 DIRECT WEDGI AND TRACK 309.12 TO PIMMA AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
2. PROFILE STARTS AT ATOGE
3. FAC: 303.08 FAF: SAXIE DIST FAF TO MAP: 5.27 DIST FAF TO THLD: 5.27
4. MIN ALT: ATOGE 5300, SAXIE 4400
5. DIST TO THLD FROM OM: MM: IM: 150 HAT: 286 HAT: 0.73 GS ANT:
6. MIN GP INCPT: 4400 GP ALT AT FAF : SAXIE 4400 OM: MM: IM:
7. GP ANGLE: 3.00 34:1: IS CLEAR 20:1: IS CLEAR TCH: 53.0
8. MSA FROM: RW29R 10700

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -3°C OR ABOVE 52°C.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON TUS VORTAC AIRWAY RADIALS 163 CW 176.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).

ADDITIONAL FLIGHT DATA:

CHART VDP AT 1.88 NM TO RW29R*
*LNAV ONLY
WAAS CHANNEL #82203
REFERENCE PATH ID: W29A
FAS OBST: 3050 AAO 320324N/1105029W.
HOLD SE, RT, 307.93 INBOUND
LTP HAE: 776.1 M



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

ALTERNATE: NA ☐ STANDARD - CAT E 1200-3

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
LPV DA	2929	1	286	2929	1	286	2929	1	286	2929	1	286	2929	1	286
LNAV/VNAV DA	3106	1 1/2	463	3106	1 1/2	463	3106	1 1/2	463	3106	1 1/2	463	3106	1 3/4	463
LNAV MDA	3300	1	657	3300	1	657	3300	1 7/8	657	3300	2	657	3300	2 1/4	657
CIRCLING	3300	1	657	3300	1	657	3300	1 7/8	657	3300	2	657	3800	3	1157

CHANGES - REASONS

1. ADDED CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). - VGSI TCH CHANGED FROM 55.1 FEET TO 81 FEET, 8260.19H, 8-6-9M.
2. ADDED CHART PROFILE NOTE PROCEDURE NA FOR ARRIVAL ON TUS VORTAC AIRWAY RADIALS 163 CW 176. - TURN EXCEEDS 90 DEGREES.

COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZAB, TUS APPCON/ATCT, APT MGR, NGB/A306 (ANG)

FLIGHT CHECKED BY

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

DEVELOPED BY

WARDELL HENNING (THOR CORNELL)

APPROVED BY

LONNIE EVERHART

Digitally signed by
WARDELL HENNING
Dec 20, 2019

OFFICE

Digitally signed by DATE

WARDELL HENNING

Dec 20, 2019

OFFICE

AJV-A432

DATE

09/06/2019

OFFICE

AJV-A430

DATE

TITLE
MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KTUS
RUNWAY	RW29R
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	Z
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W29A
LTP/FTP LATITUDE	320607.1650N
LTP/FTP LONGITUDE	1105522.1455W
LTP/FTP ELLIPSOIDAL HEIGHT	+07761
FPAP LATITUDE	320724.1285N
FPAP LONGITUDE	1105652.4850W
THRESHOLD CROSSING HEIGHT (TCH)	00053.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0000
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
 CRC REMAINDER	 1ED2511B

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K2
LTP ORTHOMETRIC HEIGHT	+08056
FPAP ORTHOMETRIC HEIGHT	+08056

