

**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><b>AIRPORT ID</b></u> KTUS	<u><b>PROCEDURE NAME</b></u> RNAV (GPS) RWY 22	<u><b>ORIGINAL/AMENDMENT</b></u> ORIG-E	<u><b>CITY</b></u> TUCSON	<u><b>STATE</b></u> AZ		
<u><b>AIRPORT ELEVATION</b></u> 2643	<u><b>TDZE</b></u> 2572	<u><b>SUPERSEDED</b></u> RNAV (GPS) RWY 21	<u><b>ORIGINAL/AMENDMENT</b></u> ORIG-D	<u><b>DATED</b></u> 07/15/2021	<u><b>MAG VAR</b></u> 9E	<u><b>EPOCH YEAR</b></u> 2025
<u><b>FACILITY</b></u> RNAV	<u><b>COORDINATES OF FACILITIES</b></u>	<u><b>ACTUAL EFFECTIVE DATE</b></u> 30 NOVEMBER 2023	<u><b>REQUIRED EFFECTIVE DATE</b></u> ROUTINE	<u><b>CANCEL/SUSPEND</b></u>		

**TERMINAL ROUTES**

<u><b>FROM</b></u>	<u><b>FIX TYPE</b></u>	<u><b>TO</b></u>	<u><b>FIX TYPE</b></u>	<u><b>LEG TYPE</b></u>	<u><b>FO/FB</b></u>	<u><b>RNP</b></u>	<u><b>COURSE</b></u>	<u><b>DISTANCE</b></u>	<u><b>ALTITUDE</b></u>
ALMON/TFD 36.67 DME		SASME		TF	FB	1.00	078.52	25.87	7600
MAVVA/TUS 27.00 DME		SASME		TF	FB	1.00	074.18	18.07	7600
SASME	IAF	ARERE		TF	FB	1.00	126.03	7.20	7600
ARERE		GALKE		TF	FB	1.00	126.09	2.90	6300
GALKE		OPRAE		TF	FB	1.00	126.11	2.90	5000
RYN NDB		OBISE		TF	FB	1.00	100.48	23.64	8500
OBISE		RANAE		TF	FB	1.00	019.82	7.57	8500
RANAE	IAF	AVOME		TF	FB	1.00	306.21	5.00	7500
AVOME		OPRAE		TF	FB	1.00	306.13	6.00	5000
OPRAE	IF	HEVIN		TF	FB	1.00	216.13	5.02	4200
HEVIN	FAF	RW22	MAP	TF	FO	0.30	216.10	4.88	
RW22	MAP	WADSO		TF	FO	1.00	216.06	1.00	
WADSO		LIKLE		TF	FO	1.00	206.00	7.00	
LIKLE		RYN NDB		DF	FO	1.00			6000





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

**ALTERNATE:** NA ☐ STANDARD - CAT D 1100-3

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
LNAV/VNAV DA	3145	2	573	3145	2	573	3145	2	573	3145	2	573			
LNAV MDA	3160	1	588	3160	1	588	3160	1 3/4	588	3160	1 3/4	588			
CIRCLING	3160	1	517	3220	1	577	3220	1 3/4	577	3660	3	1017			

**CHANGES - REASONS**

1. CHANGED PROCEDURE NAME FROM RNAV (GPS) RWY 21 TO RWY 22 - RWY RENUMBERED DUE TO MAGVAR CHANGE.
2. ALL COURSES UPDATED 3 DEGREES - MAG VAR UPDATE FROM 12E TO 9 E 2025.
3. UPDATED NOTE FROM FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -20°C OR ABOVE 54°C. TO FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -2°C OR ABOVE 54°C.- NEW 5 YEAR TEMP.
4. UPDATED MISSED INSTRUCTIONS FROM CLIMB TO 6000 ON COURSE 213.06 TO WADSO AND TRACK 203.00 TO LIKLE AND RIGHT TURN DIRECT RYN NDB AND HOLD, TO "CLIMB TO 6000 ON TRACK 216.06 TO WADSO AND TRACK 206.00 TO LIKLE AND RIGHT TURN DIRECT RYN NDB AND HOLD - REQUIRED FOR CODING, NO CHANGE IN GROUND TRACK, TRACKS UPDATED FOR MAG VAR.
5. REMOVED \* FROM VDP AND "\*\*LNAV ONLY" IN ADDITIONAL FLIGHT DATA
6. UPDATED PBN REQUIREMENTS NOTE FROM RNP APCH TO RNP APCH-GPS - UPDATED NAVSPEC REQUIREMENTS.
7. CORRECTED PROCEDURE NA NOTE FROM ....ARRIVAL AT OBISE ON V66-T310 SOUTHEAST BOUND TO ....ARRIVAL AT OBISE ON V66-T310 NORTHWEST BOUND - MAGVAR UP DATE ON THE COURSE FROM OBISE.
8. UPDATED HELICOPTER VISIBILITY NOTE AND VDP TO REFLECT RWY 22 - RWY NUMBERING UPDATED.
9. RAISED LNAV AND CIRCLING CAT C VISIBILITY FROM 1 1/2 TO 1 3/4 - UPDATED TO NEW VISIBILITY TABLE.

**COORDINATED WITH:**

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

**FLIGHT CHECKED BY**

PROCESSED IAW TECHNICAL SUPPORT GROUP (AJF-17) MEMO DATED 07/07/2021 GUIDANCE FOR PROCEDURAL CHANGES REQUIRING FLIGHT INSPECTION/VALIDATION

*Digitally signed by*  
**OFFICE** **CASIMIR L TABAKA** **DATE**  
Sep 22, 2023

**DEVELOPED BY**

JOSEPH L. ZEDER

*Digitally signed by*  
**CASIMIR L TABAKA**  
Sep 20, 2023

**OFFICE** **DATE**  
AJV-A432 08/03/2023

**APPROVED BY**

CASIMIR TABAKA

*Digitally signed by*  
**CASIMIR L TABAKA**  
Sep 20, 2023

**OFFICE** **DATE** **TITLE**  
AJV-A432  
MANAGER

