

US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION		RNAV - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33		Bearings, headings, courses, 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 in feet RVR.											
TERMINAL ROUTES				MISSED APPROACH											
FROM	TO	COURSE AND DISTANCE	ALTITUDE	LP: ZOMAP LNAV: ZOMAP CLIMB TO 6700 DIRECT TUPBO AND ON TRACK 283.90 TO ALMON AND HOLD, CONTINUE CLIMB-IN-HOLD 6700. ADDITIONAL FLIGHT DATA: HOLD W, LT, 111.00 INBOUND. CHART FAS OBST: 2089 TREE 322441N/1111228W FAS OBST: 2299 AAO 322706N/1111009W 3459 AAO 322944N/1110802W WAAS CHANNEL # 56325 REFERENCE PATH ID: W21A FIMTU TO RW21: 3.35/40. FAC CROSSES RWY C/L EXTENDED 3001 FROM THLD. LTP HAE: 587.5 M											
ALMON	PICLI (FB)	350.85 / 16.77	6600												
PICLI (IAF)	NABPI (FB)	080.56 / 17.28	4900												
NABPI (IF)	FIMTU (FB)	170.74 / 8.73	4400												
FIMTU (FAF)	DUYED/2.52 NM TO ZOMAP (FB)	198.64 / 3.57													
DUYED/2.52 NM TO ZOMAP	ZOMAP (MAP) (FO)	198.62 / 2.52													
ZOMAP (MAP)	2340 MSL	198.62													
(SEE FORM 8260-10)															
1. PT <u> </u> SIDE OF COURSE <u> </u> OUTBOUND <u> </u> FT WITHIN <u> </u> MILES OF <u> </u> (IAF) 2. PROFILE STARTS AT NABPI 3. FAC: 198.64 FAF: FIMTU DIST FAF TO MAP: 6.09 THLD: 6.57 4. MIN. ALT: NABPI 4900, FIMTU 4400, DUYED/2.52 NM TO ZOMAP 3120 5. DIST TO THLD FROM OM: <u> </u> MM: <u> </u> IM: <u> </u> 150 HAT: <u> </u> 100 HAT: <u> </u> GS ANT: <u> </u> 6. MIN GS INCPT: <u> </u> GS ALT AT: <u> </u> OM: <u> </u> MM: <u> </u> IM: <u> </u> 7. GS ANGLE: <u> </u> TCH: 34:1 IS NOT CLEAR 8. MSA FROM: ZOMAP 10400															
				MAG VAR: 12E EPOCH YEAR: 2000											
MINIMUMS															
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT			ALTERNATE: N A X												
CATEGORY ==>	A			B			C			D			E		
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA
LP MDA	2340	1	315	2340	1	315	2340	1	315		NA				
LNAV MDA	2640	1	615	2640	1	615	2640	1 3/4	615		NA				
CIRCLING	2640	1	609	2640	1	609	2640	1 3/4	609		NA				
NOTES: CHART NOTE: DME/DME RNP-0.3 NA. CHART NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA. CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT ALMON ON V66 EASTBOUND AND V105 SOUTHEAST BOUND. (SEE FORM 8260-10)															
CITY AND STATE TUCSON, AZ		ELEVATION: 2031 THRE: 2025 AIRPORT NAME: MARANA RGNL		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 21, AMDT 1 25 AUG 2011				SUP: AMDT: ORIG-A DATED 11/23/2006					

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RNAV - STANDARD
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TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
2340 MSL	TUPBO (FB)		
TUPBO	ALMON (FO)	283.90 / 11.62	6700

NOTES, (CONT.):

CHART NOTE: WHEN VGS1 INOP, STRAIGHT-IN/CIRCLING RWY 21 PROCEDURE NA AT NIGHT.

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE RYAN FIELD ALTIMETER SETTING AND INCREASE ALL MDA 100 FEET, INCREASE LP CAT C VISIBILITY TO 1 1/8 MILE, INCREASE LNAV AND CIRCLING CAT C VISIBILITY TO 2 MILES.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT PICLI ON V16 NORTHWEST BOUND.

CITY AND STATE
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FAS DATA BLOCK INFORMATIONDATA FIELDDATA

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KAVQ
RUNWAY	RW21
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W21A
LTP/FTP LATITUDE	322435.5000N
LTP/FTP LONGITUDE	1111242.2700W
LTP/FTP ELLIPSOIDAL HEIGHT	+05875
FPAP LATITUDE	322318.6800N
FPAP LONGITUDE	1111335.9000W
THRESHOLD CROSSING HEIGHT (TCH)	00040.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.35
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0000
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	0.0

CRC REMAINDER

56CA6FC1

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K2
LTP ORTHOMETRIC HEIGHT	+06171
FPAP ORTHOMETRIC HEIGHT	+06171

QUALITY
CHECKED

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[illegible][illegible]

SEGMENT	1	2	3	4	5	6	7	8	9	0	1	2	3
SUSAP KAVQK2FR21	AALMON	010ALMONK2EA0E	IF						18000			A JS	
SUSAP KAVQK2FR21	AALMON	020PICL1K2EA0E	A 020TF			35090168		+ 06600				A JS	
SUSAP KAVQK2FR21	AALMON	030NABP1K2EA0EE	B 010TF			08060173		+ 04900				A JS	
SUSAP KAVQK2FR21	R	010NABPIK2EA0E	I IF					+ 04900	18000			A JS	
SUSAP KAVQK2FR21	R	020FIMTUK2EA1E	F 051TF			17070087		+ 04400			ZOMAP K2EAA	JS	
SUSAP KAVQK2FR21	R	020FIMTUK2EA2WALP		N		ALNAV						JS	
SUSAP KAVQK2FR21	R	021DUYEDK2EA0E	S 031TF			19860036		V 0312003131		-335		A JS	
SUSAP KAVQK2FR21	R	030ZOMAPK2EA0EY	M 031TF			19860025		02241		-335		A JS	
SUSAP KAVQK2FR21	R	040	0 M CA			1986		+ 02340				A JS	
SUSAP KAVQK2FR21	R	050TUPBOK2EA0E	DF									A JS	
SUSAP KAVQK2FR21	R	060ALMONK2EA0EY	010TF			2839		+ 06700				A JS	
SUSAP KAVQK2FR21	R	070ALMONK2EA0EE	L HM			11100060		+ 06700				A JS	

[illegible]

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	1	2	3	4	5	6	7	8	9	0	1	2	3
PP	1234567890123456789012345678901234567890123456789012345678901234567890123456789012												

	SUSAP KAVQK2PR21	RW21 001	0000W21A0N3224355000W11112422700+058750335N3223186800W11113359000106750000000400F40000056CA6FC1										
	SUSAP KAVQK2PR21	RW21 002E	+06171+06171LP	56325									

	1	2	3	4	5	6	7	8	9	0	1	2	3
MSA	1234567890123456789012345678901234567890123456789012345678901234567890123456789012												

	SUSAP KAVQK2SZOMAPK2EA	0	18018010425									M	

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