

U.S. Department of Transportation
Federal Aviation Administration

RNAV - STANDARD
INSTRUMENT APPROACH PROCEDURE
FAR PART 97.33

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, 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 foot RVR.

TERMINAL ROUTES				MISSED APPROACH
FROM	TO	COURSE AND DISTANCE	ALTITUDE	
KUMBA WP	JAKEB WP (TF) (FB)	335.61/22.00	5800	LNAV: ASIYO WP
MOMAR WP	OCURO WP (TF) (FB)	169.41/16.41	4000	
JAKEB WP (IAF)	SEDYO WP (TF) (FB)	355.50/8.00	3800	CLIMBING LEFT TURN TO 4000 DIRECT OCURO WP AND HOLD.
OCURO WP (IAF)	SEDYO WP (TF) (FB)	262.60/8.00	3800	
SEDYO WP	HAKUR/2.50 NM TO COMTU WP (TF) (FB)	267.56/2.50	3100	ADDITIONAL FLIGHT DATA: HOLD E, RT, 257.00 INBOUND FAS OBST: 1419 TREE 331535/1161340 COMTU WP TO RW25: 3.46/42
HAKUR	COMTU WP (TF) (FB)	267.56/2.50	2400	
ASIYO WP (MAP)	OCURO WP (DF) (FO)		4000	

- PT NA SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
- PROFILE STARTS AT SEDYO WP
- FAC: 249.90 FAF: COMTU WP DIST FAF TO MAP: - THLD: 5.00
- MIN. ALT: SEDYO WP 3800, HAKUR/2.50 NM TO COMTU WP 3100, COMTU WP 2400.
- DIST TO THLD FROM OM: MM: IM: 150 HAT: 100 HAT: GS ANT:
- MIN GS INCPT: GS ALT AT: OM: MM: IM:
- GS ANGLE: TCH: 34:1 IS CLEAR
- MSA FROM: ASIYO WP 10000

*CHART VDP AT 3.64 NM TO RW25
CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT.
CHART: R-2510A,B
CHART: 2719 TREE 331823/1160732

FINAL SEGMENT (TF)
MAG VAR: 13E EPOCH YEAR: 2000

MINIMUMS

TAKEOFF:		STANDARD	X	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
LNAV MDA		1720	1 1/4	1200	1720	1 1/2	1200	1720	3	1200	1720	3	1200			
CIRCLING		1720	1 1/4	1200	1720	1 1/2	1200	1720	3	1200	1720	3	1200			

NOTES: GPS OR RNP-0.3 REQUIRED. DME/DME RNP-0.3 NA
CIRCLING NA SOUTH OF RWY 7-25

* VDP NA WITH IMPERIAL COUNTY ALTIMETER SETTING

IF LOCAL ALTIMETER SETTING NOT RECEIVED, USE IMPERIAL COUNTY ALTIMETER SETTING AND INCREASE ALL MDA'S 580 FEET

CITY AND STATE	ELEVATION: 520 TDZE: 520	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
BORREGO SPRINGS, CA	AIRPORT NAME: BORREGO VALLEY	RNAV	MAY 15 2003 RNAV (GPS) RWY 25, ORIG	AMDT: NONE
				DATE

RNAV - STANDARD
INSTRUMENT APPROACH PROCEDURE
FAR PART 97.33

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TERMINAL ROUTES				MISSED APPROACH
FROM	T O	COURSE AND DISTANCE	ALTITUDE	
KUMBA WP	JAKEB WP (TF) (FB)	335.61/22.00	5800	LNAV: ASIYO WP CLIMBING LEFT TURN TO 4000 DIRECT OCURO WP AND HOLD.
MOMAR WP	OCURO WP (TF) (FB)	169.41/16.41	4000	
JAKEB WP (IAF)	SEDYO WP (TF) (FB)	355.50/8.00	3800	ADDITIONAL FLIGHT DATA: HOLD E, RT, 257.00 INBOUND FAS OBST: 1419 TREE 331535/1161340 COMTU WP TO RW25: 3.46/42
OCURO WP (IAF)	SEDYO WP (TF) (FB)	262.60/8.00	3800	
SEDYO WP	HAKUR/2.50 NM TO COMTU WP (TF) (FB)	267.56/2.50	3100	
HAKUR	COMTU WP (TF) (FB)	267.56/2.50	2400	
ASIYO WP (MAP)	OCURO WP (DF) (FO)		4000	

1. PT NA SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
2. PROFILE STARTS AT SEDYO WP
3. FAC: 249.90 FAF: COMTU WP DIST FAF TO MAP: - THLD: 5.00
4. MIN. ALT: SEDYO WP 3800, HAKUR/2.50 NM TO COMTU WP 3100, COMTU WP 2400.
5. DIST TO THLD FROM OM: MM: IM: 150 HAT: 100 HAT: GS ANT:
6. MIN GS INCPT: GS ALT AT: OM: MM: IM:
7. GS ANGLE: TCH: 34:1 IS CLEAR
8. MSA FROM: ASIYO WP 10000

*CHART VDP AT 3.64 NM TO RW25
CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT.
CHART: R-2510A,B
CHART: 2719 TREE 331823/1160732
FINAL SEGMENT (TF)
MAG VAR: 13E EPOCH YEAR: 2000

MINIMUMS

TAKEOFF:	STANDARD	X	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
LNAV MDA	1720	1 1/4	1200	1720	1 1/2	1200	1720	3	1200	1720	3	1200			
CIRCLING	1720	1 1/4	1200	1720	1 1/2	1200	1720	3	1200	1720	3	1200			


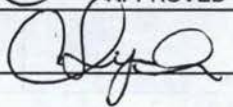
NOTES: GPS OR RNP-0.3 REQUIRED. DME/DME RNP-0.3 NA

CIRCLING NA SOUTH OF RWY 7-25

* VDP NA WITH IMPERIAL COUNTY ALTIMETER SETTING

IF LOCAL ALTIMETER SETTING NOT RECEIVED, USE IMPERIAL COUNTY ALTIMETER SETTING AND INCREASE ALL MDA'S 580 FEET

CITY AND STATE	ELEVATION: 520 TDZE: 520	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
BORREGO SPRINGS, CA	AIRPORT NAME: BORREGO VALLEY	RNAV	RNAV (GPS) RWY 25, ORIG	AMDT: NONE
				DATE

ALL AFFECTED PROCEDURES REVIEWED? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		COORDINATES OF FACILITIES		REQUIRED EFFECTIVE DATE ROUTINE	
COORDINATED WITH: ATA <input checked="" type="checkbox"/> AAT <input type="checkbox"/> ALPA <input type="checkbox"/> APA <input type="checkbox"/> AOPA <input checked="" type="checkbox"/> NBAA <input checked="" type="checkbox"/> OTHER (specify) <input checked="" type="checkbox"/> <u>ZLA, LAX FPO, AIRPORT MANAGER</u>					
FLIGHT CHECKED BY					
NAME: Alan Kroeger				FIFO AVN	DATE: 12/3/02
DEVELOPED BY					
NAME: DANNY E. HAMILTON (McCULLOUGH) 				FIFO AVN-140	DATE: DEC 19 2002
APPROVED BY					
NAME: CAREN L. SYCH  MANAGER				FIFO AVN-140	DATE: DEC 19 2002
CHANGES: ORIGINAL					
REASONS: REQUESTED BY LAX FPO					

STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD

PART - A OBSTRUCTION DATA

1. APP SEGMENT	FROM	TO	OBSTRUCTION	COORDINATES	ELEV. MSL	ROC	ALT. ADJUSTMENTS	MIN. ALT.
FEEDER	KUMBA	JAKEB	1. 200' AAO	330248/1161036	3793 (4E)	2000		5793/5800
			2. TERRAIN		3593		AS 1500	5093/5100
FEEDER	MOMAR	OCURO	3. 200' AAO	332321/1160442	1798 (4E)	2000*	DG 1197 SA -995	4000/4000
			4. TERRAIN	333242/1155242	437		AS 1500	1937/1900
INITIAL	JAKEB	SEDYO	5. 200' AAO	330657/1161315	2084 (4E)	1000	DG 716	3800/3800
			6. TERRAIN		1884		AS 1500	3384/3400
INITIAL	OCURO	SEDYO	7. 200' AAO	331659/1160614	979 (4E)	1000	DG 1821	3800/3800
			8. TERRAIN		779		AS 1500	2279/2300
INTERMEDIATE	SEDYO	HAKUR/2.50 NM TO	9. 200' AAO	331823/1160732	2719 (2C)	500**	RA 139 DG 234 SA -492	3100/3100
		COMTU	10. TERRAIN	331724/1160754	959		AS 1500	2459/2500
INTERMEDIATE SDF	HAKUR	COMTU	11. 200' AAO	331550/1161240	1439 (2C)	500	DG 461	2400/2400
			12. TERRAIN		1239		AS 1000	2239/2200
FINAL	COMTU	ASIYO	13. 100' TREE	331535/1161340	1419 (2C)	250	PR 35	1704/1720
					1419 (2C)	250	RA 565 PR 35	2269/2300 #
2. PROCEDURE TURN	NA							
3. MISSED APPROACH	MAP: ASIYO	OCURO				ASC		4000
	ELEV: 1435							
4. CIRCLING AREA	DISTANCE	H T. A B V. A R P T.						
CATEGORY A	1.3 NM	REQUIRED	350	1200/1780	14. TOWER (05-0521)	331548/1161949	666 (4D)	300
CATEGORY B	1.5 NM		450	1200/1780	15. POWERLINE	331545/1162118	760 (2C)	300
CATEGORY C	1.7 NM		450	1200/1780	16. 100' TREE	331624/1161703	819 (2C)	300
CATEGORY D	2.3 NM		550	1200/1780	17. 100' TREE	331619/1161620	979 (2C)	300
CATEGORY E	4.5 NM		550					
5. MINIMUM SAFE ALTITUDES	PRIMARY NAVAID: ASIYO							
SECTOR	OBSTRUCTION	BRG / DIST	ELEVATION	M S A	SECTOR	OBSTRUCTION	BRG / DIST	ELEVATION (MSL)
360-360	200' AAO	324/17.0	8916	10000				
CITY AND STATE	AIRPORT & ELEVATION		520	FACILITY		PROCEDURE AND AMENDMENT NO:		REGION
BORREGO SPRINGS, CA	BORREGO VALLEY			RNAV		RNAV (GPS) RWY 25, ORIGINAL		AWP

NOTES / EXPLANATIONS FROM OPPOSITE SIDE OF FORM:

AIRSPACE: SEE TERMINAL AIRSPACE DATA REQUIREMENTS SHEET

DESCENT ANGLE COMTU TO RW25: 3.46/42

FAC OFFSET 6 DEGREES FROM EXTENDED CENTERLINE AND MAP IS LOCATED 1NM PRIOR TO THRESHOLD TO PROTECT BORREGO SCHOOL FROM MISSED APPROACH.

* OBSTACLE IN SECONDARY AREA

12152.23 - 105.21 / 12152.23 X 500 = 4.32 + 1000 = 1004.32
ROC = 1005.00 FT.

**OBSTACLE IN SECONDARY AREA

6076.12 - 5982.85 / 6076.12 X 500 = 7.67 ROC = 8.00ft

DESCENT GRADIENTS

FINAL: 367.60

INTERMEDIATE:

SEDYO TO HAKUR: 280.00

HAKUR TO COMTU: 280.00

INITIAL:

OCURO TO SEDYO: 25.00

JAKEB TO SEDYO 250.00

PRECIPITOUS TERRAIN ADJUSTMENT OF 35 FEET BASED IN LAX FPO RECOMMENDATION FOR 600 FEET OVERALL MINIMA ADJUSTMENTS FROM RASS AND PRECIPITOUS TERRAIN.

RASS BASED ON DISSIMILAR PRESSURE PATTERN

DISTANCE BETWEEN AIRPORT AND ALTIMETER SOURCE 45.26 NM

HIGH TERRAIN 3094 FEET

LOW TERRAIN -193 FEET

INTERMEDIATE RASS 565 X .60 = 339 - 200 = 139

MDA BASED IN INCREASE OF 580 FT FOR REMOTE NOTE

PART B - SUPPLEMENTAL DATA

1. COMMUNICATIONS WITH :		2. WEATHER SERVICE		3. ALTIMETER SETTING	
ZLA		N W S		SOURCE: KL08/KIPL	
SAN FSS		F A A		DISTANCE: 0/45.26	
		A / C		HOURS REMOTE OPERATION: 24	
SATISFACTORY ON:		LOCATION: ON AIRPORT		ADJUSTMENT: 0/565	
<input checked="" type="checkbox"/> V H F <input checked="" type="checkbox"/> U H F <input type="checkbox"/> H F		HRS OPTN: 24			
4. MONITOR STATUS	PRIMARY			SECONDARY	
	NAVAID:			NAVAID:	
	MONITOR POINT:			MONITOR POINT:	
	HRS	CAT 1		HRS	CAT 1
	OPTN:	CAT 3		OPTN:	CAT 3
5. AIRSPACE	FLOOR OF CONTROLLED AIRSPACE UNDER FAC			CONTROL AREA	
	CONTROL ZONE:			HOURS OPTN	X
6. APPROACH & RUNWAY LIGHTING	ALS			REIL	
	(S) SALS			TDZ	
	MAL S			C/LINE	
	HIRL			OTHER (Specify)	
	X MIRL7,25 (PCL)			PAPI-2L 7,25 (PCL)	
7. RUNWAY MARKINGS BSC-G 7,25			8. RUNWAY VISUAL RANGE		
ALL WEATHER			APPROACH		
INSTRUMENT			ROLL OUT		
9. GLIDE SLOPE	G S ANGLE:			ELEV RWY THRESHOLD:	
	DISTANCE FROM RWY:			ELEV GS ANTENNA:	
			THRESHOLD CROSSING HEIGHT:		
10. FINAL APPROACH		RUNWAY THRESHOLD 6076.12		F T. FROM THRESHOLD	
COURSE AIMING	X	ON CENTERLINE		F T. FROM CENTERLINE	
11. WAIVERS OF STANDARDS		NUMBER OF WAIVERS ON FILE		DATES OF APPROVAL	
		NONE			

PART C - REMARKS: CIRCLING NOT AUTHORIZED SOUTH OF RWY 7/25 DUE TO THE PROXIMITY OF BORREGO SCHOOL SW OF AIRPORT
IF LOCAL ALTIMETER NOT RECEIVED, USE IMPERIAL COUNTY ALTIMETER SETTING AND INCREASE ALL MDA'S 580 FEET
FLOOR OF CONTROLLED AIRSPACE /TRANSITION AREA ESTABLISHED IN CONJUNCTION WITH AIRSPACE DOCKET #96AWP04.
CHART VDP AT 3.64 NM TO RWY 25
VDP NA WITH IMPERIAL COUNTY ALTIMETER SETTING.
ASOS ON SERVICE-A

PART D - PREPARED BY:
DANNY E. HAMILTON (McCULLOUGH)

DATE:
08/29/2001

TITLE:
AERONAUTICAL INFORMATION SPECIALIST

OFFICE:
AVN-140

GPS RNAV

STANDARD INSTRUMENT APPROACH PROCEDURE

FLIGHT STANDARDS SERVICE - FAR PART 97. 33

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TERMINAL ROUTES						MISSED APPROACH									
FROM		TO		COURSE AND DISTANCE	ALTITUDE	MAP:									
						ADDITIONAL FLIGHT DATA:									
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF)															
2. _____															
3. FAC _____ FAF _____ DIST FAF TO MAP _____ THLD _____															
4. MIN. ALT _____															
8. MSA FROM: _____						MAG VAR: _____				EPOCH YEAR: _____					
MINIMUMS															
TAKEOFF:		STANDARD		SEE FAA FORM 8260-15A FOR THIS AIRPORT				ALTERNATE: N A							
CATEGORY →	A			B			C			D			E		
	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA
NOTES:															
MAY 15 2003															
PROCEDURE CANCELED EFFECTIVE: _____															
CITY AND STATE		ELEVATION: 520 TDZE: 520		FACILITY IDENTIFIER:		PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:				SUP					
BORRERO SPRINGS		BORRERO VALLEY		GPS		GPS RWY 25, ORIGINAL, 12/03/1998				AMDT NONE					
										DATE					