

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 ID</u> KVCB	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 20	<u>ORIGINAL/AMENDMENT</u> 1B	<u>CITY</u> VACAVILLE	<u>STATE</u> CA		
<u>AIRPORT ELEVATION</u> 117	<u>TDZE</u> 117	<u>SUPERSEDED</u> RNAV (GPS) RWY 20	<u>ORIGINAL/AMENDMENT</u> 1A	<u>DATED</u> 02/01/2018	<u>MAG VAR</u> 13E	<u>EPOCH YEAR</u> 2020
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 12 AUGUST 2021	<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>
BESSA		IPENE		TF	FO	1.00	089.52	15.29	4700
SAC VORTAC	IAF	IPENE	NOPT	TF	FB	1.00	279.29	14.14	2000
IPENE	IF/IAF	NUFKY		TF	FB	1.00	200.82	5.91	1700
NUFKY	FAF	RW20	MAP	TF	FO	0.30	200.77	4.86	
RW20	MAP	580 MSL		CA			200.77		580
580 MSL		IPENE		DF	FO	1.00			2100

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW20

MISSED APPROACH INSTRUCTIONS:

(DO NOT EXCEED 220 KIAS UNTIL IPENE) CLIMB TO 580 THEN CLIMBING LEFT TURN TO 2100 DIRECT IPENE AND HOLD.
 **MISSED APPROACH REQUIRES MINIMUM CLIMB OF 229 FEET PER NM TO 1300.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF

(IAF)

2. HOLD N IPENE, RT, 200.82 INBOUND, 2000 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 200.77FAF: NUFKYDIST FAF TO MAP: 4.86DIST FAF TO THLD: 4.86

4. MIN ALT: IPENE 2000, NUFKY 1700

5. DIST TO THLD FROM OM:MM:IM:150 HAT:250 HAT: 0.67GS ANT:

6. MIN GP INCPT: 1700GP ALT AT FAF : NUFKY 1700OM:MM:IM:

7. GP ANGLE: 3.0034:1: IS CLEAR20:1: IS CLEARTCH: 40.0

8. MSA FROM: RW20 4300

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: CIRCLING NA W OF RWY 2-20.
CHART NOTE: CIRCLING RWY 2 NA AT NIGHT.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -3°C OR ABOVE 54°C.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT SAC VORTAC ON AIRWAY RADIALS 195 CW 329.

ADDITIONAL FLIGHT DATA:

CHART KSUU IN PLANVIEW.
FAS OBST: 309 AAO 382604N/1215548W.
CHART A-682.
CHART VDP AT 1.46 NM TO RW20*
*LNAV ONLY.
WAAS CHANNEL # 53740
REFERENCE PATH ID: W20A
CHART CIRCLING ICON.
LTP HAE: 2.4 M



MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT C 900-2 1/2, CAT D 1400-3, NA WHEN LOCAL WEATHER NOT AVAILABLE.

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**	367	3/4	250	367	3/4	250	367	3/4	250	367	3/4	250			
LPV DA	384	7/8	267	384	7/8	267	384	7/8	267	384	7/8	267			
LNAV/VNAV DA	614	1 3/8	497	614	1 3/8	497	614	1 3/8	497	614	1 3/8	497			
LNAV MDA	720	1	603	720	1	603	720	1 3/4	603	720	1 3/4	603			
CIRCLING	720	1	603	720	1	603	960	2 1/2	843	1480	3	1363			

CHANGES - REASONS

1. CHANGED MISSED APPROACH INSTRUCTIONS FROM: "CLIMB TO 520 THEN CLIMBING LEFT TURN TO 2100 DIRECT IPENE AND HOLD. # MISSED APPROACH REQUIRES MINIMUM CLIMB OF 229 FEET PER NM TO 1300." TO "(DO NOT EXCEED 220 KIAS UNTIL IPENE) CLIMB TO 580 THEN CLIMBING LEFT TURN TO 2100 DIRECT IPENE AND HOLD. # MISSED APPROACH REQUIRES MINIMUM CLIMB OF 229 FEET PER NM TO 1300. - ADDED A SPEED RESTRICTION.
2. REMOVED NOTE "DME/DME RNP-0.3 NA" AND REPLACED WITH PBN REQUIREMENTS NOTE "RNP APCH" - IAW NEW DOCUMENTATION POLICY .19H 8-6-8.
3. REMOVED FAHRENHEIT FROM BARO-VNAV NOTE - FAHRENHEIT NO LONGER USED IAW .19H.
4. UPDATED AVERAGE COLD TEMP VALUE FROM -5C TO -3C - UTILIZED UPDATED 5-YEAR WEATHER AVERAGE.
5. CIRCLING CAT D MINIMUMS CHANGED FROM MDA 1360/HAA 1243 TO MDA 1480/HAA 1363 - NEW CONTROLLING OBSTACLE FOR CAT D.
6. VDP UPDATED FROM "1.48" TO "1.46" - IAW FORMULA 2-6.5 VDP DISTANCE.
7. CHANGED ALTERNATE MINIMUMS FROM STANDARD @CAT C 900-2 1/2, CAT D 1300-3 TO STANDARD @CAT C 900-2 1/2, CAT D 1400-3 - NA WHEN LOCAL WEATHER NOT AVAILABLE - CAT D CIRCLING MINIMUMS CHANGED TO MDA 1480/HAT 1363.
8. LNAV/VNAV ALL CATS VISIBILITY CHANGED FROM 1 3/4 SM TO 1 3/8 SM - NEW VISIBILITY CHECK CALCULATION.
9. CHANGED "DISTANCE TO THLD FROM 250 HAT: 0.68NM" TO "DISTANCE TO THLD 250 HAT: 0.67" - UPDATED TARGETS BUILD EVALUATION.
10. REMOVED ALL SECONDARY ALTIMETER NOTES - MOVED TO -9 AS CONTINGENCY NOTE.
11. LPV DA ** ALL CATS VISIBILITY CHANGED FROM 7/8 SM TO 3/4 SM - NEW VISIBILITY CHECK CALCULATION.

COORDINATED WITH:**A4A** ☐ **ALPA** ☒ **AOPA** ☒ **APA** ☐ **HAI** ☐ **NBAA** ☒ **OTHER:** ZOA, NORCAL, KSUU APCH, AMGR**FLIGHT CHECKED BY** *Digitally signed by*

GARY J VEER

LONNIE EVERHART

Jun 09, 2021

*Digitally signed by***LONNIE EVERHART**

Jun 09, 2021

OFFICE

FICO

DATE

05/28/2021

DEVELOPED BY

WARDELL HENNING (LORRI DOWNEY)

OFFICE

AJV-A432

DATE

04/21/2020

APPROVED BY

GEORGE DAVIS

*Digitally signed by***LONNIE EVERHART**

Jun 09, 2021

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	KVCB
RUNWAY	RW20
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W20A
LTP/FTP LATITUDE	382300.9630N
LTP/FTP LONGITUDE	1215723.9355W
LTP/FTP ELLIPSOIDAL HEIGHT	+00024
FPAP LATITUDE	382146.7840N
FPAP LONGITUDE	1215826.8480W
THRESHOLD CROSSING HEIGHT (TCH)	00040.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1320
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	E0F49A60

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K2
LTP ORTHOMETRIC HEIGHT	+00340
FPAP ORTHOMETRIC HEIGHT	+00340

