

**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> MOFFETT FEDERAL AFLD	<u>AIRPORT ID</u> KNUQ	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 32L	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> MOUNTAIN VIEW	<u>STATE</u> CA
<u>AIRPORT ELEVATION</u> 37	<u>TDZE</u> 36	<u>SUPERSEDED</u> RNAV (GPS) RWY 32L	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>DATED</u> 11/08/2018	<u>MAG VAR</u> 16E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 20 JUNE 2019	<u>REQUIRED EFFECTIVE DATE</u> 06/20/2019	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 1980

**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>
HOSNU	IAF	CEVGI		TF	FB	1.00	321.85	3.63	5000
CEVGI	IF	WUMAG		TF	FB	1.00	321.62	3.50	4500
WUMAG		HOTLU		TF	FB	1.00	321.49	1.89	3600
HOTLU		FEGUM		TF	FB	1.00	321.49	3.79	2500
FEGUM	FAF	PUROE/1.29 NM TO JIRAP		TF	FB	0.30	321.75	4.72	
PUROE/1.29 NM TO JIRAP		JIRAP	MAP	TF	FO	0.30	321.75	1.29	
JIRAP	MAP	337 MSL		CA			321.75		
337 MSL		PEYIC		DF	FO	1.00			3200

**MISSED APPROACH**

**MAP:**

LPV: DA  
LNAV/VNAV: DA  
LNAV: JIRAP

**MISSED APPROACH INSTRUCTIONS:**

CLIMB TO 3200 DIRECT PEYIC AND HOLD.

**ALTERNATE MISSED APPROACH INSTRUCTIONS:**



**PROFILE:**

1. **PT**      **SIDE OF COURSE**                      **OUTBOUND**                      **FT WITHIN**                      **MILES OF (IAF)**
2. PROFILE STARTS AT HOSNU
3. **FAC:** 321.75      **FAF:** FEGUM                      **DIST FAF TO MAP:** 6.00                      **DIST FAF TO THLD:** 6.48
4. **MIN ALT:** HOSNU 5500, CEVGI 5000, WUMAG 4500, HOTLU 3600, FEGUM 2500, PUROE/1.29 NM TO JIRAP 740\*
5. **DIST TO THLD FROM OM:**                      **MM:**                      **IM:**                      **150 HAT:**                      **301 HAT:** 0.66                      **GS ANT:**
6. **MIN GP INCPT:** 2500                      **GP ALT AT FAF :** FEGUM 2500                      **OM:**                      **MM:**                      **IM:**
7. **GP ANGLE:** 3.50                      **34:1:** IS NOT CLEAR                      **20:1:** IS CLEAR                      **TCH:** 55.0
8. **MSA FROM:** RW32L 5600

**PBN REQUIREMENTS NOTE:**

RNP APCH.

**NOTES:**

CHART NOTE: RWY 32L HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.  
 CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW 0°C OR ABOVE 47°C.  
 \*LNAV ONLY

**ADDITIONAL FLIGHT DATA:**

CHART CIRCLING ICON.  
 WAAS CHANNEL #50242  
 REFERENCE PATH ID: W32A  
 CHART FAS OBST: 217 TREE 372238N/1220222W.  
 CHART: 249 POLE 371818N/1215933W, 242 TANK 372243N/1220137W.  
 HOLD NW, RT, 141.63 INBOUND  
 LTP HAE: -21.5 M

**MINIMUMS:**

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

**ALTERNATE:** NA  STANDARD - CAT D 800-2 1/4

CATEGORY:	A			B			C			D			E		
	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA									
LPV DA	337	7/8	301	337	7/8	301	337	7/8	301	337	7/8	301			
LNAV/VNAV DA	421	1 1/8	385	421	1 1/8	385	421	1 1/8	385	421	1 1/8	385			
LNAV MDA	480	1	444	480	1	444	480	1 3/8	444	480	1 3/8	444			
CIRCLING	540	1	503	600	1	563	620	1 1/2	583	780	2 1/4	743			



**CHANGES - REASONS**

1. REMOVED NOTE: PROCEDURE NA AT NIGHT - 20:1 PENETRATION REMOVED.
2. SEGMENT LENGTH HOSNU-CEVGI CHANGED FROM 3.48 TO 3.63 NM - FIX CEVGI RELOCATED TO ACCOUNT FOR ATC VECTORING; PER TARGETS, PREVIOUS SEGMENTS WERE TOO SHORT IAW 8260.58A PARA 1-3-1(C).
3. SEGMENT CEVGI-WUMAG COURSE CHANGED FROM 321.64 TO 321.62; DISTANCE CHANGED FROM 2.05 NM TO 3.50 NM - FIXES RELOCATED TO ACCOUNT FOR ATC VECTORING - PER TARGETS, PREVIOUS SEGMENTS WERE TOO SHORT IAW 8260.58A PARA 1-3-1(C).
4. SEGMENT WUMAG-HOTLU COURSE CHANGED FROM 321.63 TO 321.49; DISTANCE CHANGED FROM 2.84 TO 1.89 NM - FIXES RELOCATED TO ACCOUNT FOR ATC VECTORING - PER TARGETS, PREVIOUS SEGMENTS WERE TOO SHORT IAW 8260.58A PARA 1-3-1(C).
5. SEGMENT HOTLU-FEGUM COURSE CHANGED FROM 321.29 TO 321.49; DISTANCE CHANGED FROM 3.45 TO 3.79 NM - FIX RELOCATED TO ACCOUNT FOR ATC VECTORING - PER TARGETS, PREVIOUS SEGMENTS WERE TOO SHORT IAW 8260.58A PARA 1-3-1(C).
6. SEGMENT FEGUM-DA CHANGED FROM 6.48 NM TO 6.01 NM - TARGETS VALUE.
7. DISTANCE FEGUM (FAF) TO PUROE (SDF) CHANGED FROM 4.74 TO 4.72 - DUE TO RELOCATION OF SDF.
8. DISTANCE FROM PUROE (SDF) TO JIRAP (MAP) CHANGED FROM 1.27 TO 1.29 NM - TARGETS DERIVED LOCATION.
9. LNAV/VNAV DA/HAT CHANGED FROM 468/432 TO 421/385 - NEW LNAV/VNAV CONTROLLING OBSTACLE.
10. CHANGED FROM: "HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NA" TO: "RWY 32L HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED" - 20:1 PENETRATIONS REMOVED.
11. LPV VISIBILITY CHANGED FROM 1 TO 7/8 ALL CATS - PER 8260.3D VISIBILITY TABLE.
12. LNAV/VNAV VISIBILITY CHANGED FROM 1-1/4 TO 1-1/8 - PER 8260.3D VISIBILITY TABLE.
13. CRC REMAINDER CHANGED FROM 898B989B TO 61310927 - FPAP LATITUDE/LONGITUDE CHANGED FROM 372544.5435N/1220325.1655W TO 372544.5430N/1220325.1670W.

**COORDINATED WITH:**

**A4A**  **ALPA**  **AOPA**  **APA**  **HAI**  **NBAA**  **OTHER:** APRT MGR, ZOA, NORCAL APP CON, NUQ ATCT.

**FLIGHT CHECKED BY**

PENDING

**OFFICE**

**DATE**

**DEVELOPED BY**

*Digitally signed by*  
**MIKE MELSSEN**  
Mar 26, 2019

**OFFICE**

AJV-A432

**DATE**

01/03/2019

**APPROVED BY**

PATRICK MULQUEEN

*Digitally signed by*  
**WARDELL HENNING**  
Mar 28, 2019

**OFFICE**

A43

**DATE**

**TITLE**  
MANAGER



**FAS DATA BLOCK INFORMATION**

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KNUQ
RUNWAY	RW32L
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W32A
LTP/FTP LATITUDE	372421.9975N
LTP/FTP LONGITUDE	1220242.7570W
LTP/FTP ELLIPSOIDAL HEIGHT	-00215
FPAP LATITUDE	372544.5430N
FPAP LONGITUDE	1220325.1670W
THRESHOLD CROSSING HEIGHT (TCH)	00055.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.50
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0456
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	61310927

**ADDITIONAL PATH POINT RECORD INFORMATION**

ICAO CODE	K2
LTP ORTHOMETRIC HEIGHT	+00111
FPAP ORTHOMETRIC HEIGHT	+00111

