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.

MHR RNAV (GPS) RWY 4R 3 SACRAMENTO

 AIRPORT ELEVATION
 TDZE
 SUPERSEDED
 ORIGINAL/AMENDMENT
 DATED
 MAG VAR
 EPOCH YEAR

 98
 81
 RNAV (GPS) RWY 4R
 2
 07/11/2024
 13E
 2020

ORIGINAL/AMENDMENT

CITY

FACILITY COORDINATES OF FACILITIES ACTUAL EFFECTIVE DATE REQUIRED EFFECTIVE DATE CANCEL/SUSPEND

RNAV 31 OCTOBER 2024 10/31/2024

TERMINAL ROUTES

AIRPORT ID

FROM	FIX TYPE	<u>TO</u>	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
PIVSE		SAC VORTAC		TF	FB	1.00	080.99	7.00	3000
GALTS		LOGYE		TF	FO	1.00	306.19	13.85	2000
SAC VORTAC	IAF	LOGYE	NOPT	TF	FB	1.00	075.34	3.12	2000
LOGYE	IF/IAF	ZISES		TF	FB	1.00	040.59	6.06	1400
ZISES	FAF	RW04R	MAP	TF	FO	0.30	040.66	4.00	
RW04R	MAP	331 MSL		CA			040.66		
331 MSL		STNGR		DF	FO	1.00			3300

MISSED APPROACH

MAP:

LPV: DA LNAV/VNAV: DA

LNAV: RW04R

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3300 DIRECT STNGR AND HOLD. *MISSED APPROACH REQUIRES MINIMUM CLIMB OF 210 FEET PER NM TO 2500.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)

2. HOLD SW LOGYE, RT, 040.59 INBOUND, 2000 FT. IN LIEU OF PT (IAF), MAX 4000.

4. MIN ALT: LOGYE 2000, ZISES 1400

5. DIST TO THLD FROM OM: MM: IM: 150 HAT: 250 HAT: 0.64 GS ANT:

6. MIN GP INCPT: 1400 GP ALT AT PFAF: ZISES 1400 OM: MM: IM:

7. GP ANGLE: 3.00 34:1: IS CLEAR 20:1: IS CLEAR TCH: 50.7

8. MSA FROM: RW04R 3900

PROCEDURE NAME

STATE

CA

 AIRPORT ID
 PROCEDURE NAME
 ORIGINAL/AMENDMENT
 CITY
 STATE

 MHR
 RNAV (GPS) RWY 4R
 3
 SACRAMENTO
 CA

PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART NOTE: CIRCLING NA NORTHWEST OF RWY 4R-22L.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15°C OR ABOVE 54°C.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON SAC VORTAC AIRWAY RADIALS 021 CW 113.
CHART SPEED ICON IN PLANVIEW AT SAC: MAX 210 KIAS.

ADDITIONAL FLIGHT DATA:

HOLD NE, RT, 220.86 INBOUND. FAS OBST: 263 AAO 383036N/1212212W. CHART VDP AT 1.23 NM TO RW04R. WAAS CHANNEL # 45601 REFERENCE PATH ID: W04A CHART CIRCLING ICON. LTP HAE: -6.9 M

MINIMUMS:

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

ALTERNATE: NA STANDARD - NA WHEN LOCAL WEATHER NOT AVAILABLE.

CATEGORY:	A			В			С			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	<u>VIS</u>	HAT/HAA									
LPV DA*	331	4000	250	331	4000	250	331	4000	250	331	4000	250			
LNAV/VNAV DA*	365	4500	284	365	4500	284	365	4500	284	365	4500	284			
LNAV MDA*	520	5500	439	520	5500	439	520	1 1/4	439	520	1 1/4	439			
LNAV MDA	540	5500	459	560	5500	479	580	1 3/8	499	580	1 3/8	499			
CIRCLING	560	1	462	580	1	482	600	1 1/2	502	740	2	642			

AIRPORT ID PROCEDURE NAME ORIGINAL/AMENDMENT CITY STATE MHR RNAV (GPS) RWY 4R **SACRAMENTO** CA 3

CHANGES - REASONS

TDZE CHANGED FROM 88 TO 81 – RUNWAY CONSTRUCTION COMPLETE.

- TERMINAL ROUTES- INTERMEDIATE LEG FROM LOGYE TO ZISES COURSE CHANGED FROM 040.60 TO 040.59 PFAF RELOCATED FOR NEW THLD AND VGSI.
- 3. TERMINAL ROUTES- INTERMEDIATE LEG FROM LOGYE TO ZISES DISTANCE CHANGED FROM 6.82 TO 6.06 PFAF RELOCATED FOR NEW THLD AND VGSI.
- 4. TERMINAL ROUTES- FINAL LEG FROM ZISES TO RW04R DISTANCE CHANGED FROM 3.95 TO 4.00 PFAF RELOCATED FOR NEW THLD AND VGSI.
- 5. TERMINAL ROUTES- CA AND DF LEG ALTITUDE CHANGED FROM 338 MSL TO 331 MSL. LPV DA DECREASED DUE TO TDZE CHANGE.
- 6. MISSED APPROACH INSTRUCTIONS: CHANGED FROM "CLIMB TO 3300 DIRECT STNGR AND HOLD. *MISSED APPROACH REQUIRES MINIMUM CLIMB OF 220 FEET PER NM TO 2500." TO "CLIMB TO 3300 DIRECT STNGR AND HOLD. *MISSED APPROACH REQUIRES MINIMUM CLIMB OF 210 FEET PER NM TO 2500." – CLIMB GRADIENT REQUIREMENT REDUCED BY NEW DISTANCE FROM MAP TO STNGR. REF 8260.19J, 8-6-6F.
- 7. CHART PROFILE LINE 2: INBOUND COURSE CHANGES FROM 040.60 TO 040.59 AND (IF/IAF) CHANGED TO (IAF) REALIGNED TO NEW THRESHOLD COORDINATES IAW 8260.19J.
- 8. CHART PROFILE LINE 3: DIST FAF TO MAP CHANGED FROM 3.95 TO 4.00. PFAF RELOCATED FOR NEW THLD AND VGSI.
- 9. CHART PROFILE LINE 3: DIST FAF TO THLD CHANGED FROM 3.95 TO 4.00. PFAF RELOCATED FOR NEW THLD AND VGSI.
- 10. CHART PROFILE LINE 5: HAT 250 CHANGED FROM 0.61 TO 0.64. CHANGE OF TCH.
- 11. CHART PROFILE LINE 7: TCH CHANGED FROM 59.9 TO 50.7. COINCIDENCE WITH VGSI.
- 12. CHART PROFILE LINE 8: MSA FROM RW04R CHANGED FROM 4000 TO 3900. NEW CONTROLLING OBSTACLE.
- 13. ADDITIONAL FLIGHT DATA: FAS OBST CHANGED FROM "CHART FAS OBST: 201 ANTENNA (06-098813) 383145N/1212130W." TO "FAS OBST: 263 AAO 383036N/1212212W.". OBSTACLE DATA UPDATED. REF. 8260.19J, 8-6-11C.
- 14. ADDITIONAL FLIGHT DATA: REMOVED " 302 AAO 383136N/1212227W.". NEW OBSTACLE EVALUATION FROM CHANGE IN PFAF DISTANCE. REF. 8260.19J, 8-6-11E.
- 15. ADDITIONAL FLIGHT DATA: CHANGED "CHART VDP AT 1.12 NM TO RW04R." TO "CHART VDP AT 1.23 NM TO RW04R." RAISE IN STRAIGHT IN MDA INCREASED VDP DISTANCE, REF.
- 16. ADDITIONAL FLIGHT DATA: LTP HAE CHANGED FROM -5.1M TO -6.9M LTP LOCATION MOVED.
- 17. MINIMUMS: LPV DA* ALL CATS DA CHANGED FROM 338 TO 331, ALL CATS VIS CHANGED FROM 3/4 TO RVR 4000. TDZE CHANGED AND TDZ SENSORS ADDED. REF 8260.3E, 3-1-2B. 18. MINIMUMS: LNAV/VNAV* ALL CATS DA CHANGED FROM 351 TO 365, ALL CATS VIS CHANGED FROM 7/8 TO RVR 4500, ALL CATS HAT CHANGED FROM 263 TO 284 – NEW CONTROLLING OBSTACLE, TDZE CHANGED, AND TDZ SENSORS ADDED. REF 8260.3E, 3-1-2B.
- 19. MINIMUMS: LNAV* ALL CATS MDA CHANGED FROM CATS A/B/C MDA 460, CAT D MDA 480 TO MDA 520. NEW CONTROLLING OBSTACLE. REF. 8260.3, 3-2-1G.
- 20. MINIMUMS: LNAV* CATS A/B VIS CHANGED FROM 1 TO RVR 5500, CAT C VIS CHANGED FROM 1 TO 1 1/4, CAT D VIS CHANGED FROM 1 1/8 TO 1 1/4. HAT INCREASED. 8260.3, 3-3
- 21. MINIMUMS: LNAV* ALL CATS HAT CHANGED FROM CATS A/B/C HAT 372 , CAT D HAT 392 TO HAT 439 NEW CONTROLLING OBSTACLE. 8260.3E, 3-2-1C.
- 22. MINIMUMS: LNAV CAT A MDA CHANGED FROM 700 TO 540, VIS CHANGED FROM 1 TO RVR 5500, HAT CHANGED FROM 612 TO 459.- LOWER MDA ALLOWED BY GREATER DISTANCE FOR STANDARD CLIMB TO THE CLEARANCE LIMIT. REF. 8260.3E, 2-8-5
- 23. MINIMUMS: LNAV CAT B MDA CHANGED FROM 700 TO 560, VIS CHANGED FROM 1 TO RVR 5500, HAT CHANGED FROM 612 TO 479.- LOWER MDA ALLOWED BY GREATER DISTANCE FOR STANDARD CLIMB TO THE CLEARANCE LIMIT. REF. 8260.3E, 2-8-5
- 24. MINIMUMS: LNAV CAT C MDA CHANGED FROM 720 TO 580, VIS CHANGED FROM 1 3/4 TO 1 3/8, HAT CHANGED FROM 632 TO 499.- LOWER MDA ALLOWED BY GREATER DISTANCE FOR
- STANDARD CLIMB TO THE CLEARANCE LIMIT. REF. 8260.3E, 2-8-5 25. MINIMUMS: LNAV CAT D MDA CHANGED FROM 740 TO 580, VIS CHANGED FROM 1 7/8 TO 1 3/8, HAT CHANGED FROM 652 TO 499.- LOWER MDA ALLOWED BY GREATER DISTANCE FOR STANDARD CLIMB TO THE CLEARANCE LIMIT. REF. 8260.3E, 2-8-5
- 26. MINIMUMS: CIRCLING CAT A MDA CHANGED FROM 700 TO 560, HAA CHANGED FROM 602 TO 462- SI MINIMUMS LOWERED. REF 8260.3E, 3-2-1H.
- 27. MINIMUMS: CIRCLING CAT B MDA CHANGED FROM 700 TO 580, HAA CHANGED FROM 602 TO 482 SI MINIMUMS LOWERED. REF 8260.3É, 3-2-1H
- 28. MINIMUMS: CIRCLING CAT C MDA CHANGED FROM 720 TO 600, HAA CHANGED FROM 622 TO 502, VIS CHANGED FROM 1 3/4 TO 1 1/2 SI MINIMUMS LOWERED. REF 8260.3E, 3-2-1H.
- 29. FAS DATA BLOCK: LTP/FTP LATITUDE CHANGED FROM "383306.1390N" TO "383240.9730N" NEW THLD. REF. 8260.19J, APP.K 30. FAS DATA BLOCK: LTP/FTP LONGITUDE CHANGED FROM "1211805.0275W" TO "1211848.6570W" NEW THLD. REF. 8260.19J, APP.K 31. FAS DATA BLOCK: LTP/FTP ELLIPSOID HEIGHT CHANGED FROM "-00051" TO "-00069" NEW THLD. REF. 8260.19J, APP.K

- 31. FAS DATA BLOCK: LTP/FTP ELLIPSOID HEIGHT CHANGED FROM "-00051" TO "-00069" NEW THLD. REF. 8260.19J, APP.K
 32. FAS DATA BLOCK: FPAP LATITUDE CHANGED FROM "383358.9250N" TO "383347.0935N" FLIGHT PATH ALIGNMENT CHANGED. REF. 8260.19J, APP.K
 33. FAS DATA BLOCK: FPAP LONGITUDE CHANGED FROM "1211633.4665W" TO "1211653.9950W" FLIGHT PATH ALIGNMENT CHANGED. REF. 8260.19J, APP.K
 34. FAS DATA BLOCK: TCH CHANGED FROM "00059.9" TO "00050.7" VGSI COINCIDENCE. REF. 8260.19J, APP.K
 35. FAS DATA BLOCK: LENGTH OFFSET CHANGED FROM "0616" TO "0000" FPAP LOCATION CHANGED. REF. 8260.19J, APP.K
 36. FAS DATA BLOCK: CRC REMAINDER CHANGED FROM "2ACF9CDE" TO "F541CC77" MULTIPLE CHANGES TO FAS DATA BLOCK INPUT. REF. 8260.19J, APP.K
 37. ADDITIONAL PATH POINT RECORD INFORMATION: EPAP OPTHOMETRIC HEIGHT CHANGED FROM "+00262" TO TRANSPORTED FROM "+00262" TO "+00262" TO "+00262" TO TRANSPORTED FROM "+00262" TO TRANSPORTED FROM "+00262" TO "+00262" TO TRANSPORTED FROM THE PROPERTY OF THE PROPERTY
- 38. ADDITIONAL PATH POINT RECORD INFORMATION: FPAP ORTHOMETRIC HEIGHT CHANGED FROM "+00253" TO "+00236". LTP MOVED. REF. 8260.19J. APP.K

09/11/2024:THISISANUPDATEDCOPYOFTHEFORMDEVELOPEDON07/11/2024.

1. CHANGED REQUIRED EFFECTIVE DATE FROM ROUTINE TO 10/31/2024. -HARD DATED

AIRPORT ID PROCEDURE NAME ORIGINAL/AMENDMENT CITY STATE MHR RNAV (GPS) RWY 4R 3 **SACRAMENTO** CA **COORDINATED WITH:** ALPA X APA X AOPA X NBAA χ A4A HAI OTHER: ZOA, NORCAL APP CON, MHR ATCT, APT MGR Digitally signed by **OFFICE** DATE **FLIGHT CHECKED BY** FPO CASIMIR L TABAKA **PENDING** Sep 11, 2024 Digitally signed by **OFFICE** DATE DEVELOPED BY **DUSTIN W HARDISON DUSTIN HARDISON** AJV-A422 07/11/2024 Sep 11, 2024 Digitally signed by **APPROVED BY OFFICE** DATE TITLE CASIMIR L TABAKA RAKE MCGRAW AJV-A422 10/31/2024 MANAGER Sep 11, 2024 **FAS DATA BLOCK INFORMATION DATA FIELD** DATA **OPERATION TYPE** 0 SBAS SERVICE PROVIDER IDENTIFIER 0 AIRPORT IDENTIFIER KMHR **RUNWAY** RW04R APPROACH PERFORMANCE DESIGNATOR 0 **ROUTE INDICATOR** REFERENCE PATH DATA SELECTOR 0 REFERENCE PATH IDENTIFIER (APPROACH ID) W04A LTP/FTP LATITUDE 383240.9730N LTP/FTP LONGITUDE 1211848.6570W LTP/FTP ELLIPSOIDAL HEIGHT -00069 FPAP LATITUDE 383347.0935N **FPAP LONGITUDE** 1211653.9950W THRESHOLD CROSSING HEIGHT (TCH) 00050.7 TCH UNITS SELECTOR (METERS OR FEET USED) F **GLIDEPATH ANGLE (GPA)** 03.00 **COURSE WIDTH AT THRESHOLD** 106.75 LENGTH OFFSET 0000 HORIZONTAL ALERT LIMIT (HAL) 40.0 **VERTICAL ALERT LIMIT (VAL)** 50.0 **CRC REMAINDER** F541CC77 ADDITIONAL PATH POINT RECORD INFORMATION K2 **ICAO CODE** LTP ORTHOMETRIC HEIGHT +00236 **FPAP ORTHOMETRIC HEIGHT** +00236