

**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
LOC/DME STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.25**

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> HWD	<u>PROCEDURE NAME</u> LOC RWY 28L	<u>ORIGINAL/AMENDMENT</u> 3E	<u>CITY</u> HAYWARD	<u>STATE</u> CA
<u>AIRPORT ELEVATION</u> 52	<u>TDZE</u> 50	<u>SUPERSEDED</u> LOC/DME RWY 28L	<u>ORIGINAL/AMENDMENT</u> 3D	<u>DATED</u> 05/20/2021
<u>FACILITY</u> I-HWD	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>MAG VAR</u> 15E
				<u>EPOCH YEAR</u> 2005
				<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>
SJC VOR/DME	IAF	BRIEN INT/I-HWD 15.41 DME					008.78	9.80	4300
BRIEN INT/I-HWD 15.41 DME	IF	JIBAN INT/I-HWD 12.74 DME					287.86 (I-HWD)	2.67	3700
JIBAN INT/I-HWD 12.74 DME		FERNE/I-HWD 7.41 DME					287.86 (I-HWD)	5.33	2500

MISSED APPROACH

MAP:

I-HWD 0.86 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2100 DIRECT OAK VOR/DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

- PT** **SIDE OF COURSE** **OUTBOUND** **FT WITHIN** **MILES OF** (IAF)
- PROFILE STARTS AT BRIEN INT/I-HWD 15.41 DME
- FAC:** 287.86 **FAF:** FERNE/I-HWD 7.41 DME **DIST FAF TO MAP:** **DIST FAF TO THLD:** 6.56
- MIN ALT:** BRIEN INT/I-HWD 15.41 DME 4300, JIBAN INT/I-HWD 12.74 DME 3700, FERNE/I-HWD 7.41 DME 2500, RISHE/I-HWD 4.84 DME 1560
- MSA FROM:** OAK VOR/DME 170-350 3800, 350-170 5100



EQUIPMENT REQUIREMENTS NOTES:

DME REQUIRED.

NOTES:

CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: RWY 28L HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: CIRCLING RWY 10L, 28R NA AT NIGHT.
CHART NOTE: CIRCLING NA N OF RWY 10L-28R.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE OAK ALTIMETER SETTING AND INCREASE ALL MDAS 40 FEET AND CIRCLING VISIBILITY CAT D 1/4 SM.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT SJC VOR/DME ON V334 SOUTHBOUND.

ADDITIONAL FLIGHT DATA:

HOLD NW, RT, 120.00 INBOUND.
FAS OBST: 239 AAO 373748N/1220254W.
CHART VDP AT 1.83 DME.
DISTANCE VDP TO THLD 0.97 NM.
CHART PLANVIEW NOTE: LOC OFFSET 3.00 DEGREES.
FERNE TO RW28L: 3.44/55.

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT D 900-2 3/4, NA WHEN LOCAL WEATHER NOT AVAILABLE., NA WHEN CONTROL TOWER CLOSED.

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
S-28L	500	1	450	500	1	450	500	1 3/8	450	500	1 3/8	450			
CIRCLING	540	1	488	540	1	488	540	1 1/2	488	920	2 3/4	868			

CHANGES - REASONS

- INCORPORATED CHANGES FROM P-NOTAM FOR AMDT 3C AND 3D INTO FORM – IAW 8260.19J PARA 8-3-4.C.(3).
- PROCEDURE NAME: UPDATED FROM “LOC/DME RWY 28L” TO “LOC RWY 28L”– IAW CURRENT DOCUMENTATION STANDARDS AND 8260.19J, 8-3-4.B.(7).
- EQUIPMENT REQUIREMENT NOTES: ADDED “DME REQUIRED.” – DUE TO PROCEDURE NAME CHANGE AND IAW IAW 8260.19J, 8-6-9.A.
- CHART NOTE: ADDED “CIRCLING RWY 10L, 28R NA AT NIGHT.” – PER NOTAM FDC 3/0501, NEW TARGETS IDENTIFIED 20:1 OBSTACLES AND IAW 8260.19J, 8-6-12.O.(2)(G).
- CHART NOTE: CHANGED FROM “WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE OAKLAND ALTIMETER SETTING: INCREASE ALL MDA 20 FEET AND CIRCLING CAT D VISIBILITY 1/4 SM.” TO “WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE OAK ALTIMETER SETTING AND INCREASE ALL MDAS 40 FEET AND CIRCLING VISIBILITY CAT D 1/4 SM.” – UPDATED REMOTE ALTIMETER ADJUSTMENT AND IAW 8260.19J, 8-6-10.F.(4).
- CHART PLANVIEW NOTE: CHANGED FROM “PROCEDURE NA FOR ARRIVALS AT SJC VOR/DME ON V334 AND T259.” TO “PROCEDURE NA FOR ARRIVALS AT SJC VOR/DME ON V334 SOUTHBOUND.” – SJC IS NOT ON THE T259 AND IAW 8260.19J, TABLE 8-6-1.
- ADDITIONAL FLIGHT DATA: REMOVED “679 AAO 373722.34N/1220144.58W” AND NOTE PLACED IN PART C: GENERAL REMARKS – IAW 8260.19J, 8-6-11.E.(2) AND IMPLEMENTATION OF FAA ORDER 8260.19J, DATED JUNE 1, 2023.
- ADDITIONAL FLIGHT DATA: ADDED “CHART VDP AT 1.83 DME.” AND “DISTANCE VDP TO THLD 0.97 NM.” – NO 20:1 PENETRATIONS.



COORDINATED WITH:

A4A

ALPA

X

AOPA

X

APA

HAI

NBAA

X

OTHER:

ZOA, HWD ATCT, OAK ATCT, NORCAL APP CON, AMGR.

FLIGHT CHECKED BY

PROCESSED IAW TECHNICAL SUPPORT GROUP (AJF-17) MEMO DATED 07/07/2021 GUIDANCE FOR PROCEDURAL CHANGES REQUIRING FLIGHT INSPECTION/VALIDATION

OFFICE

DATE

Digitally signed by

CASIMIR L TABAKA

Jan 07, 2025

DEVELOPED BY

JOSEPH L. ZEDER (CHRISTOPHER D. WILKINSON)

Digitally signed by

CASIMIR L TABAKA

Jan 07, 2025

OFFICE

AJV-A432

DATE

08/16/2024

APPROVED BY

JOSEPH L. ZEDER

Digitally signed by

CASIMIR L TABAKA

Jan 07, 2025

OFFICE

AJV-A432

DATE

TITLE

MANAGER



**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD**

<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>AMDT NO.</u>	<u>CITY</u>	<u>STATE</u>	<u>AIRPORT ELEVATION</u>	<u>FACILITY</u>
HWD	LOC RWY 28L	3E	HAYWARD	CA	52	I-HWD

PART A: OBSTRUCTION DATA SEGMENTS

INITIAL

FROM SJC VOR/DME **TO** BRIEN INT/I-HWD 15.41 DME

<u>RNP</u>	<u>DISTANCE</u> 9.80	<u>PAT</u>	<u>MAP</u>		<u>HAT</u>				<u>HMAS</u>		
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
TWR (06-002266)	372956.77N/1215219.84W	3049	250	50	4D	1000				PR161	4300
TERRAIN	372956.00N/1215220.00W	2650 (2700)								AS1500	4200

COMPUTATIONS

ALT KIAS KTAS HAA VKTW TR BA DTA COURSE CHANGE DVEB VEB OCS RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

INTERMEDIATE

FROM BRIEN INT/I-HWD 15.41 DME **TO** JIBAN INT/I-HWD 12.74 DME

<u>RNP</u>	<u>DISTANCE</u> 2.67	<u>PAT</u>	<u>MAP</u>			<u>HAT</u>			<u>HMAS</u>		
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
TWR (06-002266)	372956.77N/1215219.84W	3049	250	50	4D	500				PR140	3700
TERRAIN	373015.00N/1215227.00W	2396 (2400)								AS1000	3400

COMPUTATIONS

ALT KIAS KTAS HAA VKTW TR BA DTA COURSE CHANGE DVEB VEB OCS RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



INTERMEDIATE: STEPDOWN

FROM

JIBAN INT/I-HWD 12.74 DME

TO

FERNE/I-HWD 7.41 DME

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>		<u>HAT</u>	<u>HMAS</u>					
	5.33										
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
AAO	373605.21N/1215815.15W	1552	50	20	2C	500				AT448	2500
TERRAIN	373605.21N/1215815.15W	1352 (1400)								AS1000	2400

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

FINAL

FROM

FERNE/I-HWD 7.41 DME

TO

RISHE/I-HWD 4.84 DME

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>		<u>HAT</u>	<u>HMAS</u>					
	2.57										
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
AAO	373624.89N/1215844.68W	1439	50	20	2C	250				RA20 SA-190 XL28	1560

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



FINAL: STEPDOWN

FROM

RISHE/I-HWD 4.84 DME

TO

I-HWD 0.86 DME

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>				<u>HAT</u>	<u>HMAS</u>			
	3.98		I-HWD 0.86 DME				450				
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
AAO	373748.49N/1220254.12W	239	50	20	2C	250					500

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

MISSED APPROACH

FROM

I-HWD 0.86 DME

TO

OAK VOR/DME

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>				<u>HAT</u>	<u>HMAS</u> 250			
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
							ASC				2100
ATCT (06-021928)	374310.09N/1221318.81W	259	50	20	2C	1000					1300
TERRAIN	374003.00N/1220712.00W	46 (0)								AS1500	1500

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



AIRPORT ID
HWD

PROCEDURE NAME
LOC RWY 28L

AMDT NO.
3E

CITY
HAYWARD

STATE
CA

AIRPORT ELEVATION
52

FACILITY
I-HWD

CIRCLING

☐ ALL CATS

☒ CAT A

☒ CAT B

☒ CAT C

☒ CAT D

☐ CAT E

☐ NOT AUTHORIZED

OBSTRUCTION	COORDINATES	RADIUS	HAA	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
CATEGORY A											
TWR (06-002024)	373903.79N/1220903.34W	1.30	488	229	20	3	1A	300			540
CATEGORY B											
TOWER (06-000090)	373756.00N/1220753.00W	1.81	488	237	20	10	1B	300			540
CATEGORY C											
TOWER (06-000090)	373756.00N/1220753.00W	2.84	488	237	20	10	1B	300			540
CATEGORY D											
AAO	373809.94N/1220229.11W	3.70	868	620	50	20	2C	300			920

CIRCLING REMARKS:

MSA

CENTER
OAK VOR/DME

RADIUS
25

SECTOR	OBSTRUCTION	COORDINATES	BEARING	DISTANCE	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
170-350	AAO	375545.00N/1223445.00W	289	20.8	2760	50	20	2C	1000			3800
350-170	AAO	375339.30N/1215550.15W	040	17.2	4049	50	20	2C	1000			5100

MSA REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:



PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH

HWD TOWER, NORCAL APP CON

WX SERVICE	LOCATION	HRS OPERATION	ALTIMETER SOURCE	DISTANCE	WMSCR	ADJUSTMENTS
ASOS	HWD	24	HWD	0.03	Y	0
BACK-UP WX SERVICE	LOCATION	HRS OPERATION	ALTIMETER SOURCE	DISTANCE	WMSCR	ADJUSTMENTS
ASOS	OAK	24	OAK	6.02	Y	22

WX REMARKS:

RASS PRESSURE PATTERNS THE SAME.
HWD 52, OAK 5
RA=21.3

PRIMARY NAVAID	MONITOR POINT	HRS OPERATION	CAT
I-HWD	ATCT	TOWER OPEN	1
		TOWER CLOSED	3

APPROACH AND RUNWAY LIGHTING SYSTEM	RUNWAY MARKINGS	RUNWAY VISUAL RANGE
RW10L - MIRL (PCL), PAPI-4L	NPI-G	
RW28R - MIRL (PCL), PAPI-4L	NPI-G	
RW10R - REIL, MIRL (PCL), VASI-4R	PIR-G	
RW28L - REIL, MIRL (PCL), VASI-4L	PIR-G	

GLIDESLOPE ANGLE	ELEV RWY THRESHOLD	TCH	ELEV GS ANTENNA	DISTANCE FROM RWY	VGSI ANGLE	TCH
					4.00	35.0

FINAL APPROACH COURSE AIMING

RUNWAY THRESHOLD	X	FT FROM THRESHOLD	DISPLACED THRESHOLD DISTANCE	676
ON CENTERLINE	X	FT FROM CENTERLINE		

CRITICAL TEMPERATURES

CRITICAL LOW	CRITICAL HIGH	ACT	APT ISA
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CRITICAL TEMPERATURE REMARKS:

"VISUAL PORTION OF FINAL" PENETRATIONS

FINAL TYPE	CIRCLING RWY 10L:
20:1	
81 TREE (06-306195) 373949.69N/1220742.42W (36)	67 TREE (06-305670) 373949.34N/1220742.61W (22.22)
84 TREE (06-305763) 373951.98N/1220748.57W (11.79)	66 TREE (06-305980) 373950.75N/1220745.58W (7.32)
105 TREE (06-306348) 373953.41N/1220755.48W (5.1)	95 TREE (06-305781) 373952.13N/1220753.83W (4.08)



<u>AIRPORT ID</u>		<u>PROCEDURE NAME</u>	<u>AMDT NO.</u>	<u>CITY</u>	<u>STATE</u>	<u>AIRPORT ELEVATION</u>	<u>FACILITY</u>
HWD		LOC RWY 28L	3E	HAYWARD	CA	52	I-HWD
42 FENCE (06-306315) 373948.76N/1220741.23W (3.5)				78 TREE (06-306116) 373952.60N/1220748.84W (3.29)			
113 TREE (06-040856) 373953.18N/1220758.53W (3.04)				97 TREE (06-305983) 373951.78N/1220754.99W (2.91)			
94 TREE (06-305704) 373951.68N/1220754.75W (1)				99 TREE (06-305989) 373953.41N/1220755.01W (0.74)			
93 TREE (06-306040) 373952.00N/1220754.50W (0.07)							
FINAL TYPE	CIRCLING RWY 28R:						
20:1							
115 TREE (06-306309) 373923.83N/1220648.91W (18.5)				103 TREE (06-306326) 373923.18N/1220648.50W (3.44)			
98 TREE (06-306238) 373924.18N/1220648.79W (1.97)				66 BUILDING (06-305899) 373926.77N/1220655.88W (1.21)			
59 BUILDING (06-025142) 373927.53N/1220657.17W (0.62)							
<u>PENETRATIONS REMARKS:</u>							

HELICOPTER 'VISUAL PORTION OF FINAL' PENETRATIONS

and/or

5280-FT "PROCEED VFR" SEGMENT LEVEL SURFACE AREA PENETRATIONS

PENETRATIONS REMARKS:

PART C: GENERAL REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

CIRCLING NA N OF RWY 10L-28R NOTE RETAINED PER PREVIOUS PROCEDURE; FPT CONCURRENCE.

AVERAGE VEGETATION HEIGHT 60 FEET PER PREVIOUS PROCEDURE; FPT CONCURRENCE.

ALTERNATE MISSED APPROACH NOT AVAILABLE DUE TO ATC REQUEST.

ORDER 8260.3 CHAPTER 2 APPLIED TO 679 AAO 373722.34N/1220144.58W.

ORDER 8260.3, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED.



PART D: AIRSPACE

DOCKET #

ALL DISTANCES TO 1/100NM; ELEVATION TO NEAREST 100 FEET; COORDINATES TO 1/100 SECOND; DEG TO 1/100 DEGREE

DISTANCE FROM	THLD	TO 1000FT POINT	3.89
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	1.06
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	302.86
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	700
DISTANCE FROM	THLD	TO 1500FT POINT	13.76
WIDTH OF	INTERMEDIATE	SEGMENT AT 1500FT POINT	7.39
TRUE COURSE OF	INTERMEDIATE	SEGMENT CONTAINING 1500FT POINT	302.86
HIGH TERRAIN IN	INTERMEDIATE	SEGMENT CONTAINING 1500FT POINT	2400

THRESHOLD COORDINATES (IF STR-IN)	373918.67N/1220653.14W
ARP COORDINATES	373932.15N/1220718.26W
RUNWAY APCH END AND DIST FURTHEST FROM ARP	RUNWAY 28L DISTANCE 0.51 NM
FAF COORDINATES	373544.75N/1215957.47W
FIX NAME COORDINATES	

REMARKS

NO ADDITIONAL AIRSPACE REQUIRED.
THLD DISPLACED 676FT, ACTUAL COORDINATES: 373915.35N/1220645.85W

PART E: PREPARED BY

NAME	OFFICE	DATE	TITLE
JOSEPH L. ZEDER (CHRISTOPHER D. WILKINSON)	AJV-A432	08/16/2024	AERONAUTICAL INFORMATION SPECIALIST

