

FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
VOR STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.23

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.

If an instrument approach procedure of the above type is conducted at the below named airport, it shall be conducted in accordance with a charted instrument approach procedure predicted on the specifications contained herein, unless an approach is conducted in accordance with a different procedure for such airport authorized by the Administrator. Minimum altitudes shall correspond with those established for enroute operations in the particular area or as set forth below.

<u>AIRPORT</u> MODESTO CITY-CO-HARRY SHAM FLD	<u>AIRPORT ID</u> KMOD	<u>PROCEDURE NAME</u> VOR RWY 28R	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>CITY</u> MODESTO	<u>STATE</u> CA
<u>AIRPORT ELEVATION</u> 99	<u>TDZE</u> 91	<u>SUPERSEDED</u> VOR/DME RWY 28R	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>DATED</u> 07/31/2008	<u>MAG VAR</u> 17E
<u>FACILITY</u> MOD	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 1965

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>
MOD VOR/DME		WOWAR/MOD 5.88 DME					106.55	5.88	2000
PXN VORTAC		HYP VOR/DME					014.96	35.26	4300
CZQ VORTAC		HYP VOR/DME					290.73	34.54	3000
HYP VOR/DME	IAF	YECGU/MOD 17.60 DME	NOPT				305.87	18.97	3000
YECGU/MOD 17.60 DME	IF	WOWAR/MOD 5.88 DME					286.55	11.72 (MOD R-107)	1800

MISSED APPROACH

MAP:

ZIMEM/MOD VOR/DME 0.80 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 900 THEN CLIMBING RIGHT TURN TO 2000 DIRECT MOD VOR/DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

- 1. PT** **SIDE OF COURSE** **OUTBOUND** **FT WITHIN** **MILES OF** (IAF)
- 2.** HOLD E WOWAR, LT, 286.55 INBOUND, 1800 FT. IN LIEU OF PT (FAF/IAF), MAX 6000.
- 3. FAC:** 286.55 **FAF:** WOWAR/MOD 5.88 DME **DIST FAF TO MAP:** **DIST FAF TO THLD:** 5.08
- 4. MIN ALT:** WOWAR/MOD 5.88 DME 1800
- 8. MSA FROM:** MOD VOR/DME 350-080 3500, 080-170 2300, 170-260 5100, 260-350 2900

EQUIPMENT REQUIREMENTS NOTES:

DME REQUIRED.

NOTES:

CHART NOTE: FOR INOPERATIVE ALS INCREASE S-28R CAT C/D VISIBILITY TO 1 1/8 SM.



ADDITIONAL FLIGHT DATA:

CHART VDP 1.86 NM FROM MOD VOR/DME
VDP DISTANCE TO THLD 1.05 NM
WOWAR TO RW28R: 3.09/53.
CHART FAS OBST: 222 TRANSMISSION_LINE 373631N/1205611W.
CHART 542 TOWER 373446N/1205054W.
FAC 271 FT L OF RWY C/L EXTENDED 3000 FT FROM THLD.
HOLD E, LT, 284.59 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD

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-28R	480	1/2	389	480	1/2	389	480	3/4	389	480	3/4	389			
CIRCLING	540	1	441	560	1	461	600	1 1/2	501	660	2	561			

CHANGES - REASONS

1. CHANGED PROCEDURE ID FROM VOR/DME RWY 28R TO VOR RWY 28R. - ID CHANGED IAW 8260.19H PARA 8-3-7B(7).
2. ADDED DME REQUIRED. - EQUIPMENT REQUIREMENT NOTE IAW 8260.19H PARA 8-3-4B(6).
3. UPDATED NOTE "FOR INOPERATIVE MALSR INCREASE S-28R CAT D VISIBILITY TO 1 1/4" TO " FOR INOPERATIVE ALS INCREASE S-28R CAT C/D VISIBILITY TO 1 1/8. - LIGHTING UPDATED IAW 8260.19H CHAP 8 PARA 8-6-11O(3)D AND UTILIZED 1/8 VALUE.
4. AIRPORT ELEVATION UPDATED FROM 97 TO 99. - UPDATED PER AIRNAV 2.0.
5. TDZE UPDATED FROM 88 TO 91. - UPDATED PER AIRNAV 2.0.
6. S-28R HAT ALL CATS UPDATED FROM 392 TO 389. - TDZE DATA UPDATED PER AIRNAV 2.0.
7. CIRCLING CAT A HAA UPDATED FROM 443 TO 441, CAT B HAA FROM 463 TO 461, CAT D HAA FROM 563 TO 561. - AIRPORT ELEVATION UPDATED PER AIRNAV 2.0.
8. CIRCLING CAT C MDA/HAA UPDATED FROM 560/463 TO 600/501. - CONTROLLING OBSTRUCTION CHANGED FROM 231 FT MSL TANK (KMOD0061) 373803.00N/1205935.00W TO A 281 FT MSL TOWER (06-050642) 373802.56N/1205954.13W.
9. ADDED VDP DISTANCE TO THLD. - ADDED IAW 8260.19H PARA 8-6-10N.
10. ADDED IF FIX NAME YECGU. - ADDED IAW 8260.19H PARA 2-10-4A(2).
11. ADDED MAP FIX NAME ZIMEM. - ADDED IAW 8260.19H PARA 2-10-4A(2).

COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZOA, NORCAL APP CON, MOD ATCT, AMGR

FLIGHT CHECKED BY

OFFICE

DATE

DEVELOPED BY

NICHOLAS K. JACKSON

Digitally signed by

NICHOLAS JACKSON

Sep 12, 2018

OFFICE

AJV-5431

DATE

08/01/2018

APPROVED BY

PATRICK MULQUEEN

OFFICE

AJV-5430

DATE

TITLE

MANAGER



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

AIRPORT	AIRPORT ID	PROCEDURE NAME	AMDT NO.	CITY	STATE	AIRPORT ELEVATION	FACILITY
MODESTO CITY-CO-HARRY SHAM FLD	KMOD	VOR RWY 28R	ORIG-B	MODESTO	CA	99	MOD

PART A: OBSTRUCTION DATA SEGMENTS

FEEDER

FROM
MOD VOR/DME

TO
WOWAR/MOD 5.88 DME

RNP	DISTANCE	PAT	MAP	HAT	HMAS
	5.88				

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
1.TOWER (06-039151)	373919.20N/1205455.00W	336	500	50	5D	1000				AT664	2000
2.TERRAIN	373806.00N/1205448.00W	171 (200)								AS1500	1700

COMPUTATIONS

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

SEGMENT
REMARKS:

FEEDER

FROM
PXN VORTAC

TO
HYP VOR/DME

RNP	DISTANCE	PAT	MAP	HAT	HMAS
	35.26				

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
3.AAO	364333.00N/1204554.00W	2225	164	98	4E	2000					4300
4.TERRAIN	364333.00N/1204554.00W	2025 (2000)								AS1500	3500

COMPUTATIONS

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

SEGMENT
REMARKS:



MOD

REMARKS:

HOLD-IN-LIEU OF PT

FROM

WOWAR

TO

P-4

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u>				
		P-4									
<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>
12.TOWER (06-001588)	373446.00N/1205054.00W	542	500	50	5D	1000					1600
13.TERRAIN	373354.00N/1204227.00W	253 (300)								AS1500	1800

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

SEGMENT
REMARKS:

MISSED APPROACH

FROM

ZIMEM/0.80 DME FIX

TO

MOD VOR/DME

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u>				
							230				
<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				2000
14.TOWER (06-002334)	373859.43N/1210127.31W	504	20	3	1A	1000					1600
2.TERRAIN	373806.00N/1205448.00W	171 (200)								AS1500	1700

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

SEGMENT
REMARKS:



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											
15.TOWER (06-003229)	373627.90N/1205730.30W	1.30	441	228	20	3	1A	300			540
CATEGORY B											
16.TOWER (06-135666)	373802.76N/1205934.97W	1.50	461	233	50	20	2C	300		HAA	560
CATEGORY C											
17.TOWER (06-050642)	373802.56N/1205954.13W	1.70	501	281	50	20	2C	300			600
CATEGORY D											
18.BUILDING (06-050633)	373829.69N/1210010.26W	2.30	561	311	20	3	1A	300		HAA	660

CIRCLING REMARKS:

MSA

CENTER	RADIUS
MOD VOR/DME	25

SECTOR	OBSTRUCTION	COORDINATES	BEARING	DISTANCE	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
350-080	AAO	380242.00N/1203942.00W	012	28.7	2438	164	98	4E	1000			3500
080-170	AAO	371136.00N/1210542.00W	177	26.8	1234	164	98	4E	1000			2300
170-260	AAO	371924.00N/1212433.00W	213	28.2	4016	164	98	4E	1000			5100
260-350	AAO	374000.00N/1213330.00W	258	28.7	1841	164	98	4E	1000			2900

MSA REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:

PART B: SUPPLEMENTAL DATA
COMMUNICATIONS WITH
ZOA ARTCC, MOD TOWER, NORCAL APP CON



<u>WX SERVICE</u>	<u>LOCATION</u>	<u>HRS OPERATION</u>	<u>ALTIMETER SOURCE</u>	<u>DISTANCE</u>	<u>SERVICE-A</u>	<u>ADJUSTMENTS</u>
ASOS	KMOD	24	KMOD	0	Y	0
<u>BACK-UP WX SERVICE</u>	<u>LOCATION</u>	<u>HRS OPERATION</u>	<u>ALTIMETER SOURCE</u>	<u>DISTANCE</u>	<u>SERVICE-A</u>	<u>ADJUSTMENTS</u>
ASOS	KSCK	24	KSCK	21	Y	58

WX REMARKS:
RASS PRESSURE PATTERNS THE SAME
KMOD 99.2, KSCK 33.2
RA = 57.55.

<u>PRIMARY NAVAID</u>	<u>MONITOR POINT</u>	<u>HRS OPERATION</u>	<u>CAT</u>
MOD VOR/DME	POCC	24	1

<u>APPROACH AND RUNWAY LIGHTING SYSTEM</u>	<u>RUNWAY MARKINGS</u>	<u>RUNWAY VISUAL RANGE</u>
RW10R - MIRL, PAPI-2L	BSC-G	
RW28L - MIRL, PAPI-2L	BSC-G	
RW10L - HIRL (PCL), REIL (PCL), VASI-4L	PIR-G	
RW28R - MALSR (PCL), HIRL (PCL)	PIR-G	

<u>GLIDESLOPE ANGLE</u>	<u>ELEV RWY THRESHOLD</u>	<u>TCH</u>	<u>ELEV GS ANTENNA</u>	<u>DISTANCE FROM RWY</u>	<u>VGSI ANGLE</u>	<u>TCH</u>
-------------------------	---------------------------	------------	------------------------	--------------------------	-------------------	------------

FINAL APPROACH COURSE AIMING

RUNWAY THRESHOLD	<input type="checkbox"/>	3000	FT FROM THRESHOLD	DISPLACED THRESHOLD DISTANCE
ON CENTERLINE	<input type="checkbox"/>	271	FT FROM CENTERLINE	

CRITICAL TEMPERATURES

<u>CRITICAL LOW</u>	<u>CRITICAL HIGH</u>	<u>ACT</u>	<u>APT ISA</u>
---------------------	----------------------	------------	----------------

CRITICAL TEMPERATURE REMARKS:

"VISUAL PORTION OF FINAL" PENETRATIONS

HELICOPTER 'VISUAL PORTION OF FINAL' PENETRATIONS

and/or
5280-FT "PROCEED VFR" SEGMENT LEVEL SURFACE AREA PENETRATIONS

PART C: GENERAL REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.
ORDER 8260.3 CHAPTER 2 APPLIED TO 542 TOWER (06-001588) 373446.00N/1205054.00W.
WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE STOCKTON ALTIMETER SETTING INCREASE ALL MDA 60 FEET.



<u>AIRPORT</u>	<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>
MODESTO CITY-CO-HARRY SHAM FLD	KMOD	VOR RWY 28R	ORIG-B	MODESTO	CA	99	MOD

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	2.84
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	2.28
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	303.55
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	129
DISTANCE FROM	THLD	TO 1500FT POINT	4.74
WIDTH OF	FINAL	SEGMENT AT 1500FT POINT	2.47
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1500FT POINT	303.55
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1500FT POINT	129

THRESHOLD
COORDINATES
(IF STR-IN)373714.32N/1205635.62W

ARP COORDINATES373733.00N/1205715.90W

RUNWAY APCH END
AND DIST FURTHEST
FROM ARP

RUNWAY 28R DISTANCE 0.62 NM

FAF
COORDINATES373423.03N/1205118.22W

FIX NAME
COORDINATES

REMARKS
NO ADDITIONAL AIRSPACE REQUIRED.



<u>AIRPORT</u>	<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>
MODESTO CITY-CO-HARRY SHAM FLD	KMOD	VOR RWY 28R	ORIG-B	MODESTO	CA	99	MOD

PART E: PREPARED BY

<u>NAME</u>	<u>OFFICE</u>	<u>DATE</u>	<u>TITLE</u>
NICHOLAS K. JACKSON	AJV-5431	08/01/2018	AERONAUTICAL INFORMATION SPECIALIST

