US Department of Transportation
Federal Aviation Administration

STAR - Standard Terminal Arrival

1. Bearings, headings, courses and radials are listed to the nearest hundredth (e.g. 360.00)
2. Distances are in nautical miles to nearest hundredth (e.g. 00.00)
3. Altitudes are minimum altitudes unless otherwise indicated

(1) Transition Routes (Graphic Depiction Only)

(a) Transition Name	(b) Transition Computer Codes	(c) From RNAV WP/ FIX/NAVAID	(d) To RNAV WP/ FIX/NAVAID	(e) Magnetic Course/ Distance	(f) MEA	(g) MOCA	(h) MAA	(i) Crossing Altitudes / Fixes
AVENAL	AVE.PXN3	AVE VORTAC	PXN VORTAC	312.98 & 312.50 / 74.89 (AVE R-313 & PXN R-133)	8,000			
GORMAN	GMN.PXN3	GMN VORTAC SRENA INT	SRENA INT PXN VORTAC	305.29 / 132.91 (GMN R-305) 304.28 / 14.99 (PXN R-124)	FL240 FL180			

(2) Arrival Route Description: ...From over PXN VORTAC via PXN R-301 to SUNOL INT (MEA 6500). Expect radar vectors to the final approach course.

(3) Procedural Data Notes:

CHART: **VERTICAL NAVIGATION PLANNING INFORMATION**

at SRENA INT: TURBOJETS expect clearance to cross at FL270.

at PXN VORTAC: TURBOJETS expect clearance to cross at FL240.

at BORED INT: TURBOJETS: Expect clearance to cross at 10,000'; Cross at 250KIAS. Turbo-prop/prop: Expect Clearance to cross at 8,000'.

CHART: DME Required.

CHART: RADAR Required.

(4) Fixes and/or Holding Patterns: SUNOL INT, BUSHY INT, KARNN INT, BORED INT. **Chart NAVAIDS**: OAK VORTAC, CZQ VORTAC, ECA VOR/DME, MOD VOR/DME, SJC VOR/DME.

QUALITY CHECKED

(5) Communications:

Oakland ARTCC, Northern California TRACON, Metropolitan Oakland INTL ATIS, Hayward Executive ATIS

(6) Arrival Name	(7) Number	(8) STAR Computer Code	(9) Superseded Nr.	(10) Dated	(11) Effective Date
PANOCHE	THREE	**PXN.PXN3**	TWO	9 NOV 1995	

FAA Form 7100-4 (7/02)

(12) Airports Served			
Airport Name	Metropolitan Oakland INTL	**City/State**	Oakland, California
Airport Name	Hayward Executive	**City/State**	Hayward, California
Airport Name		**City/State**	
Airport Name		**City/State**	
Airport Name		**City/State**	
Airport Name		**City/State**	

(13) Lost Communications Procedure:

(14) Remarks:

(15) Additional Flight Data:

CHART COP: AVE VORTAC 45 / PXN VORTAC 30
CHART: V107 AVE-PXN
CHART: V301 PXN-SUNOL

(6) Arrival Name	(7) Number	(8) STAR Computer Code	(9) Superseded Nr.	(10) Dated	(11) Effective Date
PANOCHE	THREE	**PXN.PXN3**	TWO	9 NOV 1995	

(16) Continuation:

(17) Changes:

1. Added SRENA Intersection
2. Added Turbojet Vertical Navigation Planning Information at SRENA Intersection.
3. Added Turbojet Vertical Navigation Planning Information at PXN VORTAC.
4. Added CZQ VORTAC.
5. Updated distance between KARNN and BORED.

(18) Reasons for Changes:

1. /2. /3. ATC Requested. Fix provides lateral separation from the Lemoore Special Use Airspace (SUA).
4. ATC Requested in order to establish SRENA Intersection. 5. IAW 8260.19D Para 480b.

03/09/2011. THIS IS A CORRECTED COPY OF THE FORM SIGNED ON 3/4/2011.
1. CHANGES ECA VORTAC TO ECA VOR/DME IN BLOCK 4.

QUALITY CHECKED

	Name *(Typed and Signed)*, Title and Organization	DATE
Developed By	John F. Fisher, Support Manager, Domestic Airspace & Procedures, Oakland ARTCC	3-17-11
Approved **NFPO**	DEZ SILAGYI, AJV-354 MANAGER	3-17-11
Reg. ATD	**Clark Desing, Manager, System Support, Western Service Area**	3-17-11

(6) Arrival Name	(7) Number	(8) STAR Computer Code	(9) Superseded Nr.	(10) Dated	(11) Effective Date
PANOCHE	THREE	**PXN.PXN3**	TWO	9 NOV 1995	

(19) Graphic Depiction:

See Attached.

(6) Arrival Name	(7) Number	(8) STAR Computer Code	(9) Superseded Nr.	(10) Dated	(11) Effective Date
PANOCHE	**THREE**	**PXN.PXN3**	TWO	9 NOV 1995	

US Department of Transportation
Federal Aviation Administration

STAR (Data Record)

ARINC PACKET - 424-18 - STAR

```
                1         2         3         4         5         6         7         8         9         0         1         2         3
NAVAID  12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAD        AVE   K2011710VTHW N35384907W119584300    N35384907W119584300E0160007102     NARAVENAL
        SUSAD        GMN   K2011610VTL  N34481452W118514085    N34481452W118514085E0160049201     NARGORMAN
        SUSAD        PXN   K2011260VTL  N36425562W120464325    N36425562W120464325E0160020601     NARPANOCHE

                1         2         3         4         5         6         7         8         9         0         1         2         3
WP      12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAEAENRT   BORED K20    R   L N37183416W121274806                    E0140     NAR          BORED
        SUSAEAENRT   BUSHY K20    R   L N37232902W121333204                    E0140     NAR          BUSHY
        SUSAEAENRT   KARNN K20    R   L N37090379W121164522                    E0139     NAR          KARNN
        SUSAEAENRT   SRENA K20    R   B N36312321W120344824                    E0136     NAR          SRENA
        SUSAEAENRT   SUNOL K20    C   L N37361991W121483701                    E0141     NAR          SUNOL

                1         2         3         4         5         6         7         8         9         0         1         2         3
AIRPORT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KOAKK2AOAK     0     100YHN37431660W122131460E016000009         1800018000C    MNAR    METROPOLITAN OAKLAND INTL

                1         2         3         4         5         6         7         8         9         0         1         2         3
SEGMENT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KOAKK2EPXN3  1AVE   010AVE  K2D 0V      IF                                    18000
        SUSAP KOAKK2EPXN3  1AVE   020PXN  K2D 0VE     TF                  31300749
        SUSAP KOAKK2EPXN3  1GMN   010GMN  K2D 0V      IF                                    18000
        SUSAP KOAKK2EPXN3  1GMN   020SRENAK2EA0E     TF                  30531329
        SUSAP KOAKK2EPXN3  1GMN   030PXN  K2D 0VE     TF                  30430150
        SUSAP KOAKK2EPXN3  2ALL   010PXN  K2D 0V      IF                                    18000
        SUSAP KOAKK2EPXN3  2ALL   020KARNNK2EA0E     TF                  3010
        SUSAP KOAKK2EPXN3  2ALL   030BOREDK2EA0E     TF                  3010
        SUSAP KOAKK2EPXN3  2ALL   040BUSHYK2EA0E     TF                  3010
        SUSAP KOAKK2EPXN3  2ALL   050SUNOLK2EA0EE    TF                  3010

                1         2         3         4         5         6         7         8         9         0         1         2         3
RUNWAY  12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KOAKK2GRW09L   0054540962 N37434967W122131980+0000    -00308000060000055150R
        SUSAP KOAKK2GRW09R   0062130962 N37434335W122133325+0000    -00300000080000046150R
```

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
PANOCHE	THREE	PXN.PXN3	TWO	9 NOV 1995	

FAA Form 7100-3 (9/02)

```
SUSAP KOAKK2GRW11    0100001140 N37430891W122142665+0000    -00301000080000051150IIAAZ1
SUSAP KOAKK2GRW15    0033721484 N37442501W122132209+0100    -0032000002000050075D
SUSAP KOAKK2GRW27L   0062132762 N37432018W122122163+0000    -0030000008000055150R
SUSAP KOAKK2GRW27R   0054542762 N37432932W122121693+0000    -00307000060000057150IIOAK1
SUSAP KOAKK2GRW29    0100002940 N37420537W122125132+0000    -00299000090000055150IIINB3
SUSAP KOAKK2GRW33    0033723284 N37435290W122131083-0100    -0031200004000050075D
```

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
PANOCHE	THREE	PXN.PXN3	TWO	9 NOV 1995	

US Department of Transportation
Federal Aviation Administration

STAR (Data Record)

ARINC SUMMARY - 424-18 - STAR

ROUTES	TRANSITION	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
	AVE	AVE	010		IF		FB					
	AVE	PXN	020		TF		FB		313.0()	074.9		
	GMN	GMN	010		IF		FB					
	GMN	SRENA	020		TF		FB		305.3()	132.9		
	GMN	PXN	030		TF		FB		304.3()	015.0		
	ALL	PXN	010		IF		FB					
	ALL	KARNN	020		TF		FB		301.0()			
	ALL	BORED	030		TF		FB		301.0()			
	ALL	BUSHY	040		TF		FB		301.0()			
	ALL	SUNOL	050		TF		FB		301.0()			

POINT DATA	WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS
	AVE	N353849.07	W1195843.00	N3538.818	W11958.717
	GMN	N344814.52	W1185140.85	N3448.242	W11851.681
	PXN	N364255.62	W1204643.25	N3642.927	W12046.721
	BORED	N371834.16	W1212748.06	N3718.569	W12127.801
	BUSHY	N372329.02	W1213332.04	N3723.484	W12133.534
	KARNN	N370903.79	W1211645.22	N3709.063	W12116.754
	SRENA	N363123.21	W1203448.24	N3631.387	W12034.804
	SUNOL	N373619.91	W1214837.01	N3736.332	W12148.617
	RW09L	N374349.67	W1221319.80	N3743.828	W12213.330
	RW09R	N374343.35	W1221333.25	N3743.723	W12213.554
	RW11	N374308.91	W1221426.65	N3743.149	W12214.444
	RW15	N374425.01	W1221322.09	N3744.417	W12213.368
	RW27L	N374320.18	W1221221.63	N3743.336	W12212.361
	RW27R	N374329.32	W1221216.93	N3743.489	W12212.282
	RW29	N374205.37	W1221251.32	N3742.090	W12212.855
	RW33	N374352.90	W1221310.83	N3743.882	W12213.181

RUNWAY DATA	RWY	THRESHOLD ELEVATION	TCH
	RW09L	00006	55
	RW09R	00008	46
	RW11	00008	51
	RW15	00002	50
	RW27L	00008	55

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
PANOCHE	THREE	PXN.PXN3	TWO	9 NOV 1995	

FAA Form 7100-3 (9/02)

RW27R	00006	57
RW29	00009	55
RW33	00004	50

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
PANOCHE	THREE	PXN.PXN3	TWO	9 NOV 1995	

US Department of Transportation
Federal Aviation Administration

STAR (Data Record)

ARINC PACKET - 424-18 - STAR

```
                 1         2         3         4         5         6         7         8         9         0         1         2         3
NAVAID  12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAD        AVE   K2011710VTHW N35384907W119584300    N35384907W119584300E0160007102     NARAVENAL
        SUSAD        GMN   K2011610VTL  N34481452W118514085    N34481452W118514085E0160049201     NARGORMAN
        SUSAD        PXN   K2011260VTL  N36425562W120464325    N36425562W120464325E0160020601     NARPANOCHE

                 1         2         3         4         5         6         7         8         9         0         1         2         3
WP      12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAEAENRT   BORED K20    R   L N37183416W121274806                    E0140     NAR           BORED
        SUSAEAENRT   BUSHY K20    R   L N37232902W121333204                    E0140     NAR           BUSHY
        SUSAEAENRT   KARNN K20    R   L N37090379W121164522                    E0139     NAR           KARNN
        SUSAEAENRT   SRENA K20    R   B N36312321W120344824                    E0136     NAR           SRENA
        SUSAEAENRT   SUNOL K20    C   L N37361991W121483701                    E0141     NAR           SUNOL

                 1         2         3         4         5         6         7         8         9         0         1         2         3
AIRPORT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KHWDK2AHWD     0     056YHN37393210W122071830E015000052        1800018000C    MNAR    HAYWARD EXECUTIVE

                 1         2         3         4         5         6         7         8         9         0         1         2         3
SEGMENT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KHWDK2EPXN3  1AVE   010AVE  K2D 0V      IF                                    18000
        SUSAP KHWDK2EPXN3  1AVE   020PXN  K2D 0VE     TF                  31300749
        SUSAP KHWDK2EPXN3  1GMN   010GMN  K2D 0V      IF                                    18000
        SUSAP KHWDK2EPXN3  1GMN   020SRENAK2EA0E     TF                  30531329
        SUSAP KHWDK2EPXN3  1GMN   030PXN  K2D 0VE     TF                  30430150
        SUSAP KHWDK2EPXN3  2ALL   010PXN  K2D 0V      IF                                    18000
        SUSAP KHWDK2EPXN3  2ALL   020KARNNK2EA0E     TF                  3010
        SUSAP KHWDK2EPXN3  2ALL   030BOREDK2EA0E     TF                  3010
        SUSAP KHWDK2EPXN3  2ALL   040BUSHYK2EA0E     TF                  3010
        SUSAP KHWDK2EPXN3  2ALL   050SUNOLK2EA0EE    TF                  3010

                 1         2         3         4         5         6         7         8         9         0         1         2         3
RUNWAY  12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KHWDK2GRW10L   0031071049 N37394491W122073814+0300    -00240000280000029075V
        SUSAP KHWDK2GRW10R   0056941049 N37393935W122073845+0400    -00236000290816251 50V
```

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
PANOCHE	THREE	PXN.PXN3	TWO	9 NOV 1995	

FAA Form 7100-3 (9/02)

```
SUSAP KHWDK2GRW28L   0056942849 N37391866W122065313-0400    -0017200050067635150RIHWD0
SUSAP KHWDK2GRW28R   0031072849 N37392962W122070463-0300    -0021200037000050075D
```

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
PANOCHE	THREE	PXN.PXN3	TWO	9 NOV 1995	

US Department of Transportation
Federal Aviation Administration

STAR (Data Record)

ARINC SUMMARY - 424-18 - STAR

ROUTES	TRANSITION	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
	AVE	AVE	010		IF		FB					
	AVE	PXN	020		TF		FB		313.0()	074.9		
	GMN	GMN	010		IF		FB					
	GMN	SRENA	020		TF		FB		305.3()	132.9		
	GMN	PXN	030		TF		FB		304.3()	015.0		
	ALL	PXN	010		IF		FB					
	ALL	KARNN	020		TF		FB		301.0()			
	ALL	BORED	030		TF		FB		301.0()			
	ALL	BUSHY	040		TF		FB		301.0()			
	ALL	SUNOL	050		TF		FB		301.0()			

POINT DATA	WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS
	AVE	N353849.07	W1195843.00	N3538.818	W11958.717
	GMN	N344814.52	W1185140.85	N3448.242	W11851.681
	PXN	N364255.62	W1204643.25	N3642.927	W12046.721
	BORED	N371834.16	W1212748.06	N3718.569	W12127.801
	BUSHY	N372329.02	W1213332.04	N3723.484	W12133.534
	KARNN	N370903.79	W1211645.22	N3709.063	W12116.754
	SRENA	N363123.21	W1203448.24	N3631.387	W12034.804
	SUNOL	N373619.91	W1214837.01	N3736.332	W12148.617
	RW10L	N373944.91	W1220738.14	N3739.749	W12207.636
	RW10R	N373939.35	W1220738.45	N3739.656	W12207.641
	RW28L	N373918.66	W1220653.13	N3739.311	W12206.886
	RW28R	N373929.62	W1220704.63	N3739.494	W12207.077

RUNWAY DATA	RWY	THRESHOLD ELEVATION	TCH
	RW10L	00028	29
	RW10R	00029	25
	RW28L	00050	35
	RW28R	00037	50

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
PANOCHE	THREE	PXN.PXN3	TWO	9 NOV 1995	

FAA Form 7100-3 (9/02)

RADIO FIX AND HOLDING DATA RECORD

NAME: AVENAL VORTAC **STATE:** CA **COUNTRY:** US

LATITUDE/LONGITUDE: 353849.07N/1195843.00W **TYPE:**

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	AVENAL	AVE	VORTAC	H							45000

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	LEG LENGTH DME	HOLDING ALTITUDES MIN	HOLDING ALTITUDES MAX	TEMPLATES MIN	TEMPLATES MAX
1	NW	AVE	VORTAC	310.00	130.00	R	1 1/2		18000	33000	16	24
2	SE	AVE	VORTAC	129.33	309.33	L	1-1 1/2		8000	17500	8	16

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
2	230	AAO	352500.00N/1195548.00W	3780	4E

PRECIPITOUS TERRAIN ADDITIONS:

PAT	SPEED	ADDITION
2	230	120

REASON FOR NONSTANDARD HOLDING:
PAT 2 DEPARTURE ROUTE AVOIDANCE

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERNS.

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED: PAT 2 120' ADJUSTMENT.
PATTERN 1 CHARTED ON ENROUTE H-4 PER ATC REQUEST.
PATTERN 2 REQUESTED BY ATC.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	MARIC			KBFL	BAKERSFIELD	CA (US)
DP	MEADOWS			KBFL	BAKERSFIELD	CA (US)
DP	VAN NUYS			KBUR	BURBANK	CA (US)
DP	FRESNO			KFAT	FRESNO	CA (US)
DP	CASTA (RNAV)			KLAX	LOS ANGELES	CA (US)
DP	GORMAN			KLAX	LOS ANGELES	CA (US)
DP	MONTEREY			KMRY	MONTEREY	CA (US)
DP	MUNSO			KMRY	MONTEREY	CA (US)
DP	SECA			KMRY	MONTEREY	CA (US)
DP	TORO			KMRY	MONTEREY	CA (US)
DP	SOUTHLAND			KNUQ	MOUNTAIN VIEW	CA (US)
DP	SKYLINE			KOAK	OAKLAND	CA (US)
DP	ONTARIO			KONT	ONTARIO	CA (US)
DP	POMONA			KONT	ONTARIO	CA (US)
DP	CHALONE			KSNS	SALINAS	CA (US)
DP	SALINAS			KSNS	SALINAS	CA (US)
DP	PORTE			KSFO	SAN FRANCISCO	CA (US)
DP	MOONY			KSJC	SAN JOSE	CA (US)
DP	SAN JOSE			KSJC	SAN JOSE	CA (US)
DP	SANTA BARBARA			KSBA	SANTA BARBARA	CA (US)
DP	CANOGA			KVNY	VAN NUYS	CA (US)
EN ROUTE	J1					(US)
EN ROUTE	J189					(US)
EN ROUTE	J6					(US)
EN ROUTE	Q7					(US)
EN ROUTE	V137					(US)
EN ROUTE	V248					(US)
EN ROUTE	V107					CA (US)
IAP	ILS OR LOC/DME RWY 30R			KBFL	BAKERSFIELD	CA (US)
IAP	ILS OR LOC/DME RWY 30			KVIS	VISALIA	CA (US)
STAR	FERNANDO			KBUR	BURBANK	CA (US)
STAR	PANOCHE			KHWD	HAYWARD	CA (US)
STAR	MOORPARK			KLAX	LOS ANGELES	CA (US)
STAR	SADDE			KLAX	LOS ANGELES	CA (US)
STAR	COMMO			KOAK	OAKLAND	CA (US)
STAR	MARVN			KOAK	OAKLAND	CA (US)
STAR	PANOCHE			KOAK	OAKLAND	CA (US)
STAR	JAWWS			KSJC	SAN JOSE	CA (US)
STAR	ROBIE			KSJC	SAN JOSE	CA (US)

REQUIRED CHARTING: DP, STAR, CONTROLLER, EN ROUTE LOW, EN ROUTE HIGH

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 10 **DATE OF REVISION:** 08/19/2010

REASON FOR REVISION:
ADMIN REVISION, FAC 1 IN HISTORY STATUS.
UPDATED FIX USE.

DEVELOPED BY:	**DATE:** 08/19/2010	**OFFICE:** AVN-130	**NAME:** ADOLFO URRUTIA (AMANDA ROBBINS)
NFPO APPROVAL:	**DATE:**	**OFFICE:** AVN-130	**NAME:** DEZ SILAGYI
	SIGNATURE:		

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZLA
ATC FACILITY: SOCAL APP CON
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: BORED **STATE:** CA **COUNTRY:** US

LATITUDE/LONGITUDE: 371834.16N/1212748.06W **TYPE:** INT, DME

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	PANOCHE	PXN	VORTAC	L	301.46	317.46	48.47	48.47		6500	17500
2	MANTECA	ECA	VOR/DME	H	187.00	204.00		34.36		6500	17500

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
PXN	VORTAC	R-301	49	6500	31000

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V301	1, 2				(US)
STAR	PANOCHE	1, 2		KHWD	HAYWARD	CA (US)
STAR	PANOCHE	1, 2		KOAK	OAKLAND	CA (US)

REQUIRED CHARTING: STAR, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 3 **DATE OF REVISION:** 05/05/2011

REASON FOR REVISION:
ADMIN REVISION, FAC1 & FAC2 IN HISTORY STATUS.
ADDED DIST FOR FAC1 & FAC2.
UPDATED FORMAT.
UPDATED FIX USE.
ADDED ESV FOR PXN UNDER ESVS.
REMOVED NOTE: "FAC1 ESV ON FILE PXN R-301 FOR 73NM TO FL 310".
REMOVED DME FROM FAC2.

02/24/2011. THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 08/19/2010.
1. CHANGES FAC 2 ECA VORTAC TO ECA VOR/DME, PER NFDD 2010, 157-1.
2. REMOVES FAC 1 AND 2 HISTORY STATUS REASON FOR REVISION.

DEVELOPED BY: **DATE:** 08/19/2010 **OFFICE:** AVN-130 **NAME:** ADOLFO URRUTIA (AMANDA ROBBINS)

APPROVED BY: **DATE:** **OFFICE:** AVN-130 **NAME:** DEZ SILAGYI

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZOA
ATC FACILITY: NORCAL APP CON.
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: BUSHY **STATE:** CA **COUNTRY:** US

LATITUDE/LONGITUDE: 372329.02N/1213332.04W **TYPE:** INT, DME

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	PANOCHE	PXN	VORTAC	L	301.46	317.46	55.18	55.18		6500	17500
2	MANTECA	ECA	VOR/DME	H	198.00	215.00		32.31		6500	17500

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
PXN	VORTAC	R-301	56	6500	31000

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V301	1, 2				(US)
IAP	RNAV (RNP) Z RWY 29			KOAK	OAKLAND	CA (US)
STAR	PANOCHE	1, 2		KHWD	HAYWARD	CA (US)
STAR	PANOCHE	1, 2		KOAK	OAKLAND	CA (US)

REQUIRED CHARTING: DP, STAR, IAP, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 6 **DATE OF REVISION:** 05/05/2011

REASON FOR REVISION:
ADMIN REVISION, FAC1 & FAC2 IN HISTORY STATUS.
FIX USE UPDATED.

02/24/2011. THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 08/19/2010.
1. CHANGES FAC 2 FROM ECA VORTAC TO ECA VOR/DME, PER NFDD 2010, 157-1.
2. REMOVES FAC 1 AND 2 HISTORY STATUS REASON FOR REVISION.

DEVELOPED BY: **DATE:** 08/19/2010 **OFFICE:** AVN-130 **NAME:** ADOLFO URRUTIA (AMANDA ROBBINS)

APPROVED BY: **DATE:** **OFFICE:** AVN-130 **NAME:** DEZ SILAGYI

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZOA
ATC FACILITY: NORCAL APP CON
OTHER: BAY APP CON

RADIO FIX AND HOLDING DATA RECORD

NAME: CLOVIS VORTAC **STATE:** CA **COUNTRY:** US

LATITUDE/LONGITUDE: 365303.56N/1194854.48W **TYPE:**

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	CLOVIS	CZQ	VORTAC	H							45000

FIX RESTRICTIONS:
MCA V230 4000 NORTHEAST BOUND
MCA V165 4000 NORTHBOUND

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	LEG LENGTH DME	HOLDING ALTITUDES MIN	HOLDING ALTITUDES MAX	TEMPLATES MIN	TEMPLATES MAX
1	NW	CZQ	VORTAC	306.84	126.84	R	1-1 1/2		2000	17500	5	16
2	SE	CZQ	VORTAC	142.21	322.21	L	1-1 1/2		2200	17500	6	16
3	NW		WP	307.00	127.00	R		4	2000	6000	4	6

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	230	AAO	365639.00N/1194624.00W	660	4E
2	230	AAO	365642.00N/1194621.00W	663	4E
2	310	AAO	365909.00N/1194542.00W	1129	4E
3	200	AAO	365624.00N/1194633.00W	637	4E

REASON FOR NONSTANDARD HOLDING:
PAT 2 TERRAIN

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERNS.

PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
2	TAKE-OFF MINIMUMS	KFAT	FRESNO	CA (US)

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED: PAT 1-3 NO ADJUSTMENT.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	MEADOWS			KBFL	BAKERSFIELD	CA (US)
DP	COALDALE OBSTACLE DEPARTURE			KFAT	FRESNO	CA (US)
DP	FRESNO			KFAT	FRESNO	CA (US)
DP	JANIS			KFAT	FRESNO	CA (US)
DP	TAKE-OFF MINIMUMS		2	KFAT	FRESNO	CA (US)
DP	LEMOORE			KNLC	LEMOORE	CA (US)
DP	TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURE			KMAE	MADERA	CA (US)
DP	SKYLINE			KOAK	OAKLAND	CA (US)
DP	PORTE			KSFO	SAN FRANCISCO	CA (US)
EN ROUTE	J110					(US)
EN ROUTE	J65					(US)
EN ROUTE	V165					(US)
EN ROUTE	V23					(US)
EN ROUTE	V230					(US)
EN ROUTE	V585					(US)
IAP	HI-ILS OR LOC/DME RWY 29R		1	KFAT	FRESNO	CA (US)
IAP	HI-LOC/DME RWY 11L			KFAT	FRESNO	CA (US)
IAP	HI-VOR/DME OR TACAN RWY 11L			KFAT	FRESNO	CA (US)
IAP	HI-VOR/DME OR TACAN RWY 29R		1	KFAT	FRESNO	CA (US)
IAP	ILS OR LOC/DME RWY 29R			KFAT	FRESNO	CA (US)
IAP	ILS RWY 29R (CAT II)			KFAT	FRESNO	CA (US)
IAP	ILS RWY 29R (CAT III)			KFAT	FRESNO	CA (US)
IAP	LOC RWY 11L		1	KFAT	FRESNO	CA (US)
IAP	RNAV (GPS) RWY 29L		3	KFAT	FRESNO	CA (US)
IAP	RNAV (GPS) RWY 29R		3	KFAT	FRESNO	CA (US)
IAP	VOR/DME OR TACAN RWY 11L			KFAT	FRESNO	CA (US)
IAP	VOR/DME OR TACAN RWY 29R		1	KFAT	FRESNO	CA (US)
IAP	NDB OR GPS-B			KFCH	FRESNO	CA (US)
IAP	VOR/DME OR GPS-C			KFCH	FRESNO	CA (US)

QUALITY VERIFIED

IAP	RNAV (GPS) A		KHJO	HANFORD	CA (US)
IAP	HI-TACAN RWY 14L		KNLC	LEMOORE	CA (US)
IAP	HI-TACAN RWY 14R		KNLC	LEMOORE	CA (US)
IAP	HI-TACAN RWY 32L		KNLC	LEMOORE	CA (US)
IAP	TACAN RWY 14L		KNLC	LEMOORE	CA (US)
IAP	TACAN RWY 14R		KNLC	LEMOORE	CA (US)
IAP	TACAN RWY 32L		KNLC	LEMOORE	CA (US)
IAP	RNAV (GPS) RWY 12	3	KMAE	MADERA	CA (US)
IAP	RNAV (GPS) RWY 30		KMAE	MADERA	CA (US)
IAP	VOR RWY 30		KMAE	MADERA	CA (US)
IAP	ILS OR LOC RWY 30		KMCE	MERCED	CA (US)
IAP	VOR RWY 30		KMCE	MERCED	CA (US)
IAP	ILS OR LOC/DME RWY 31		KMER	MERCED	CA (US)
IAP	VOR/DME RWY 31		KMER	MERCED	CA (US)
IAP	ILS OR LOC/DME RWY 28R		KMOD	MODESTO	CA (US)
IAP	RNAV (GPS) RWY 28R		KMOD	MODESTO	CA (US)
IAP	VOR/DME RWY 28R		KMOD	MODESTO	CA (US)
IAP	VOR/DME RWY 13	1	KTLR	TULARE	CA (US)
IAP	ILS OR LOC/DME RWY 30		KVIS	VISALIA	CA (US)
IAP	VOR RWY 12		KVIS	VISALIA	CA (US)
STAR	TRAVIS AFB: OAKEY		KSUU	FAIRFIELD	CA (US)
STAR	ALTTA		KFAT	FRESNO	CA (US)
STAR	GIVEN		KFAT	FRESNO	CA (US)
STAR	PANOCHE		KHWD	HAYWARD	CA (US)
STAR	PANOCHE		KOAK	OAKLAND	CA (US)
STAR	WRAPS		KSMF	SACRAMENTO	CA (US)
STAR	LOCKE		KSFO	SAN FRANCISCO	CA (US)
STAR	MODESTO		KSFO	SAN FRANCISCO	CA (US)
STAR	EL NIDO		KSJC	SAN JOSE	CA (US)
STAR	JAWWS		KSJC	SAN JOSE	CA (US)
STAR	ROBIE		KSJC	SAN JOSE	CA (US)

REQUIRED CHARTING: DP, STAR, MILITARY IAP, IAP, CONTROLLER, EN ROUTE LOW, EN ROUTE HIGH

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 17 **DATE OF REVISION:** 08/19/2010

REASON FOR REVISION:
ADMIN REVISION, FAC1 IN HISTORY STATUS.
UPDATED FIX USE.
ADDED RESTRICTION NOTE: HOLDING LIMITED TO ESTABLISHED PATTERNS.

DEVELOPED BY: **DATE:** 08/19/2010 **OFFICE:** AVN-130 **NAME:** ADOLFO URRUTIA (AMANDA ROBBINS)

NFPO APPROVAL: **DATE:** **OFFICE:** AVN-130 **NAME:** DEZ SILAGYI

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZOA
ATC FACILITY: KFAT APP CON, NORCAL APP CON
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: GORMAN VORTAC **STATE:** CA **COUNTRY:** US

LATITUDE/LONGITUDE: 344814.52N/1185140.85W **TYPE:**

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	GORMAN	GMN	VORTAC	L							17500

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
UPN	230	AAO	344839.50N/1190831.90W	9040	6A

PRECIPITOUS TERRAIN ADDITIONS:

PAT	SPEED	ADDITION
UPN	230	375

HOLDING RESTRICTIONS:
UNPLANNED HOLDING NA ON R-182 CW R-313.

REMARKS:
UNPLANNED HOLDING AUTHORIZED AT OR ABOVE 11000 FT.
PRECIPITIOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	MARIC			KBFL	BAKERSFIELD	CA (US)
DP	MEADOW			KBFL	BAKERSFIELD	CA (US)
DP	VAN NUYS			KBUR	BURBANK	CA (US)
DP	CASTA (RNAV)			KLAX	LOS ANGELES	CA (US)
DP	CHATY			KLAX	LOS ANGELES	CA (US)
DP	GORMAN			KLAX	LOS ANGELES	CA (US)
DP	ONTARIO			KONT	ONTARIO	CA (US)
DP	POMONA			KONT	ONTARIO	CA (US)
DP	CHANNEL			KSNA	SANTA ANA	CA (US)
DP	IRVINE			KSNA	SANTA ANA	CA (US)
DP	SANTA BARBARA			KSBA	SANTA BARBARA	CA (US)
DP	PEEER (RNAV)			KSMO	SANTA MONICA	CA (US)
DP	CANOGA			KVNY	VAN NUYS	CA (US)
EN ROUTE	V137					(US)
EN ROUTE	V23					(US)
EN ROUTE	V299					(US)
IAP	ILS OR LOC/DME RWY 30R			KBFL	BAKERSFIELD	CA (US)
IAP	VOR/DME RWY 30R			KBFL	BAKERSFIELD	CA (US)
IAP	VOR/DME OR GPS-B			KVNY	VAN NUYS	CA (US)
STAR	ARVIN			KBFL	BAKERSFIELD	CA (US)
STAR	FODRR			KCRQ	CARLSBAD	CA (US)
STAR	PANOCHE			KHWD	HAYWARD	CA (US)
STAR	KIMMO			KLAX	LOS ANGELES	CA (US)
STAR	COMMO			KOAK	OAKLAND	CA (US)
STAR	MARVN			KOAK	OAKLAND	CA (US)
STAR	PANOCHE			KOAK	OAKLAND	CA (US)
STAR	ZIGGY			KONT	ONTARIO	CA (US)

REQUIRED CHARTING: DP, STAR, MILITARY IAP, IAP, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 10 **DATE OF REVISION:** 08/19/2010

REASON FOR REVISION:
ADMIN UPDATE, FAC1 IN HISTORY STATUS. UPDATE FIX USE.

DEVELOPED BY: **DATE:** 08/19/2010 **OFFICE:** AVN-130 **NAME:** ADOLFO URRUTIA (AMANDA ROBBINS)

NFPO APPROVAL: **DATE:** **OFFICE:** AVN-130 **NAME:** DEZ SILAGYI

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZLA
ATC FACILITY: SOCAL APP CON
OTHER: BFL APP CON, BFL ATCT

QUALITY CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: KARNN **STATE:** CA **COUNTRY:** US

LATITUDE/LONGITUDE: 370903.79N/1211645.22W **TYPE:** INT, DME

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	PANOCHE	PXN	VORTAC	L	301.46	317.46	35.51	35.51		6500	17500
2	MODESTO	MOD	VOR/DME	H	191.39	208.39	32.42	32.42		5000	17500

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

REMARKS:
NAD 83

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V111	1, 2				(US)
EN ROUTE	V301	1, 2				(US)
STAR	PANOCHE	1, 2		KHWD	HAYWARD	CA (US)
STAR	PANOCHE	1, 2		KOAK	OAKLAND	CA (US)

REQUIRED CHARTING: STAR, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 7 **DATE OF REVISION:** 08/19/2010

REASON FOR REVISION:
SWITCHED FAC1 AND FAC2.
RAISED FAC1 MRA FROM 5000 TO 6500.
ADMIN REVISION, FAC1 & FAC2 IN HISTORY STATUS.
UPDATED FIX USE FORMAT.
ADDED FAC1 & FAC2 DIST.

DEVELOPED BY: **DATE:** 08/19/2010 **OFFICE:** AVN-130 **NAME:** ADOLFO URRUTIA (AMANDA ROBBINS)

NFPO APPROVAL: **DATE:** **OFFICE:** AVN-130 **NAME:** DEZ SILAGYI

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZOA
ATC FACILITY: NORCAL APP CON
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: MANTECA VOR/DME **STATE:** CA **COUNTRY:** US

LATITUDE/LONGITUDE: 375000.97N/1211016.95W **TYPE:**

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	MANTECA	ECA	VOR/DME	H							45000

HOLDING: **HOLDING TYPE OF ACTION:** MODIFY

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	LEG LENGTH DME	HOLDING ALTITUDES MIN	HOLDING ALTITUDES MAX	TEMPLATES MIN	TEMPLATES MAX
1	SE	ECA	VOR/DME	124.40	304.40	L	1-1 1/2		1600	17500	4	16
2	SE		WP	124.40	304.40	L		4	3000	17500	5	17
3	NE	ECA	VOR/DME	040.00	220.00	R	1		3000	6000	4	5

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (06-002381)	374345.74N/1210740.78W	559	3C
1	310	TOWER (06-002381)	374345.74N/1210740.78W	559	3C
2	200	TOWER (06-002381)	374345.74N/1210740.78W	559	3C
3	200	TOWER (06-000727)	375355.00N/1210637.00W	328	5D

REASON FOR NONSTANDARD HOLDING:
PAT 1 AT REQUEST
PAT 2 HIGH TERRAIN

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERNS.

PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
1	TAKE-OFF MINS	KTCY	TRACY	CA (US)

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETE.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	TAKE-OFF MINS			KC83	BYRON	CA (US)
DP	BUCHANAN			KCCR	CONCORD	CA (US)
DP	KANAN			KCCR	CONCORD	CA (US)
DP	FRESNO			KFAT	FRESNO	CA (US)
DP	BYRON			KLVK	LIVERMORE	CA (US)
DP	LIVERMORE			KLVK	LIVERMORE	CA (US)
DP	SOUTHLAND			KNUQ	MOUNTAIN VIEW	CA (US)
DP	MARINA			KOAK	OAKLAND	CA (US)
DP	NIMITZ			KOAK	OAKLAND	CA (US)
DP	OAKLAND			KOAK	OAKLAND	CA (US)
DP	SALAD			KOAK	OAKLAND	CA (US)
DP	SACRO			KMCC	SACRAMENTO	CA (US)
DP	DUDES			KSMF	SACRAMENTO	CA (US)
DP	FROGO			KSMF	SACRAMENTO	CA (US)
DP	DUMBARTON			KSFO	SAN FRANCISCO	CA (US)
DP	SAN FRANCISCO			KSFO	SAN FRANCISCO	CA (US)
DP	SHORELINE			KSFO	SAN FRANCISCO	CA (US)
DP	ALTAM			KSJC	SAN JOSE	CA (US)
DP	SUNOL			KSJC	SAN JOSE	CA (US)
DP	TAKE-OFF MINS			KTCY	TRACY	CA (US)
EN ROUTE	J58					(US)
EN ROUTE	J80					(US)
EN ROUTE	J94					(US)
EN ROUTE	V109					(US)
EN ROUTE	V113					(US)
EN ROUTE	V195					(US)
EN ROUTE	V244					(US)
EN ROUTE	V585					(US)
IAP	VOR RWY 19R			KCCR	CONCORD	CA (US)
IAP	VOR OR GPS-A			KHWD	HAYWARD	CA (US)
IAP	VOR/DME OR GPS-B			KHWD	HAYWARD	CA (US)
IAP	ILS OR LOC/DME RWY 25R			KLVK	LIVERMORE	CA (US)
IAP	RNAV (GPS)-B			K1O3	LODI	CA (US)
IAP	VOR-A			K1O3	LODI	CA (US)
IAP	ILS OR LOC/DME RWY 28R			KMOD	MODESTO	CA (US)
IAP	RNAV (GPS) RWY 10			KO27	OAKDALE	CA (US)
IAP	RNAV (GPS) RWY 28		2	KO27	OAKDALE	CA (US)
IAP	VOR-A			KO27	OAKDALE	CA (US)

IAP	ILS RWY 29		KOAK	OAKLAND	CA (US)
IAP	ILS RWY 29 (CAT II)		KOAK	OAKLAND	CA (US)
IAP	ILS RWY 29 (CAT III)		KOAK	OAKLAND	CA (US)
IAP	ILS OR LOC RWY 29R		KSCK	STOCKTON	CA (US)
IAP	RNAV (GPS) RWY 11L		KSCK	STOCKTON	CA (US)
IAP	RNAV (GPS) RWY 29R		KSCK	STOCKTON	CA (US)
IAP	VOR RWY 29R	1	KSCK	STOCKTON	CA (US)
IAP	RNAV (GPS) RWY 12	2	KTCY	TRACY	CA (US)
IAP	RNAV (GPS) RWY 26	2	KTCY	TRACY	CA (US)
IAP	RNAV (GPS) RWY 30		KTCY	TRACY	CA (US)
IAP	VOR/DME RWY 26	1	KTCY	TRACY	CA (US)
STAR	OAKEY		KSUU	FAIRFIELD	CA (US)
STAR	MADWIN		KHWD	HAYWARD	CA (US)
STAR	PANOCHE		KHWD	HAYWARD	CA (US)
STAR	COMMO		KOAK	OAKLAND	CA (US)
STAR	MADWIN		KOAK	OAKLAND	CA (US)
STAR	MANTECA		KOAK	OAKLAND	CA (US)
STAR	MARVN		KOAK	OAKLAND	CA (US)
STAR	PANOCHE		KOAK	OAKLAND	CA (US)
STAR	WRAPS		KSMF	SACRAMENTO	CA (US)
STAR	LOCKE		KSFO	SAN FRANCISCO	CA (US)
STAR	MODESTO		KSFO	SAN FRANCISCO	CA (US)
STAR	RISTI		KSFO	SAN FRANCISCO	CA (US)

REQUIRED CHARTING: DP, STAR, MILITARY IAP, IAP, CONTROLLER, EN ROUTE LOW, EN ROUTE HIGH

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 16 **DATE OF REVISION:** 06/30/2011

REASON FOR REVISION:
UPDATED OBS 06-002381 ELEVATION FROM 566 TO 559.
ADMIN UPDATE, FAC 1 IN HISTORY STATUS.
UPDATED FIX USE.
UPDATED PAT 1 MAX TEMPLATE FROM 20 TO 16.
UPDATED PAT 3 LEG LENGTH TIME FROM 1-1 1/2 TO 1.
REMOVED LOW COMPULSORY REPORTING POINT, PER AIR TRAFFIC REQUEST.

2/7/2011 THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 8/10/2010.
UPDATED ALL INSTANCES OF ECA FROM VORTAC TO VOR/DME, TACAN DECOMISSIONED EFFECTIVE 18 NOV 2010 (NFDD 157-1).
UPDATED NAME OF FORM FROM MANTECA VORTAC, TO MANTECA VOR/DME.

DEVELOPED BY: **DATE:** 08/10/2010 **OFFICE:** AVN-130 **NAME:** ADOLFO URRUTIA (AMANDA ROBBINS)

APPROVED BY: **DATE:** **OFFICE:** AVN-130 **NAME:** DEZ SILAGYI

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZOA
ATC FACILITY: NORCAL APP CON
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: MODESTO VOR/DME **STATE:** CA **COUNTRY:** US

LATITUDE/LONGITUDE: 373738.55N/1205728.32W **TYPE:**

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	MODESTO	MOD	VOR/DME	H							45000

HOLDING: **HOLDING TYPE OF ACTION:** MODIFY

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	LEG LENGTH DME	HOLDING ALTITUDES MIN	HOLDING ALTITUDES MAX	TEMPLATES MIN	TEMPLATES MAX
1	E	MOD	VOR/DME	104.59	284.59	L	1-1 1/2		1800	45000	4	29
2	NE	MOD	VOR/DME	063.57	243.57	L	1 1/2		16000	45000	15	29

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (06-001588)	373446.00N/1205054.00W	540	5D
2	265	AAO	374606.00N/1203857.00W	706	4E

REASON FOR NONSTANDARD HOLDING:
PAT 2 ATC REQUEST
PAT 1 ATC REQUEST

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERNS.

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETE.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	TAKEOFF MINIMUMS			KMCE	MERCED	CA (US)
DP	SOUTHLAND			KNUQ	MOUNTAIN VIEW	CA (US)
DP	TAKEOFF MINIMUMS			KTCY	TRACY	CA (US)
EN ROUTE	V111					CA (US)
IAP	GPS RWY 12			KMCE	MERCED	CA (US)
IAP	LOC BC RWY 12			KMCE	MERCED	CA (US)
IAP	ILS OR LOC RWY 31		1	KMER	MERCED	CA (US)
IAP	ILS OR LOC/DME RWY 28R		1	KMOD	MODESTO	CA (US)
IAP	VOR/DME RWY 28R		1	KMOD	MODESTO	CA (US)
IAP	RNAV (GPS) RWY 10			KO27	OAKDALE	CA (US)
IAP	RNAV (GPS) RWY 28			KO27	OAKDALE	CA (US)
IAP	VOR-A			KO27	OAKDALE	CA (US)
IAP	ILS OR LOC RWY 29R			KSCK	STOCKTON	CA (US)
IAP	NDB RWY 29R			KSCK	STOCKTON	CA (US)
IAP	VOR RWY 29R			KSCK	STOCKTON	CA (US)
IAP	NDB RWY 12			KTCY	TRACY	CA (US)
IAP	VOR/DME RWY 26		1	KTCY	TRACY	CA (US)
STAR	MADWIN			KHWD	HAYWARD	CA (US)
STAR	MARVN			KHWD	HAYWARD	CA (US)
STAR	PANOCHE			KHWD	HAYWARD	CA (US)
STAR	COMMO			KOAK	OAKLAND	CA (US)
STAR	MADWIN			KOAK	OAKLAND	CA (US)
STAR	MANTECA			KOAK	OAKLAND	CA (US)
STAR	MARVN			KOAK	OAKLAND	CA (US)
STAR	PANOCHE			KOAK	OAKLAND	CA (US)
STAR	WRAPS			KSMF	SACRAMENTO	CA (US)
STAR	LOCKE		2	KSFO	SAN FRANCISCO	CA (US)
STAR	MODESTO		2	KSFO	SAN FRANCISCO	CA (US)
STAR	RISTI			KSFO	SAN FRANCISCO	CA (US)
STAR	CAPITOL			KSJC	SAN JOSE	CA (US)

REQUIRED CHARTING: DP, STAR, MILITARY IAP, IAP, CONTROLLER, EN ROUTE LOW, EN ROUTE HIGH

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 12 **DATE OF REVISION:** 08/04/2010

REASON FOR REVISION:
UPDATED FIX USE.
ADMIN REVISION, FAC1 IN HISTORY STATUS.
UPDATED HOLDING OBSTACLE.

QUALITY CHECKED

DEVELOPED BY:	**DATE:** 08/04/2010	**OFFICE:** AVN-130	**NAME:** ADOLFO URRUTIA (AMANDA ROBBINS)
NFPO APPROVAL:	**DATE:**	**OFFICE:** AVN-130	**NAME:** DEZ SILAGYI
	SIGNATURE:		

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZOA
ATC FACILITY: NORCAL APP CON.
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: OAKLAND VORTAC **STATE:** CA **COUNTRY:** US

LATITUDE/LONGITUDE: 374333.31N/1221324.92W **TYPE:**

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	OAKLAND	OAK	VORTAC	H							45000

HOLDING: **HOLDING TYPE OF ACTION:** MODIFY

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	LEG LENGTH DME	HOLDING ALTITUDES MIN	HOLDING ALTITUDES MAX	TEMPLATES MIN	TEMPLATES MAX
1	NW	OAK	VORTAC	300.00	120.00	R	1	-	2000	4000	4	4
2	NW		WP	300.00	120.00	R		4	2000	4000	4	5

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
UPN	200	AAO	374857.00N/1220348.00W	2225	4E
1	200	AAO	374906.00N/1221036.00W	1821	4E
2	200	AAO	374906.00N/1221036.00W	1821	4E

HOLDING RESTRICTIONS:
UNPLANNED HOLDING AUTHORIZED AT OR ABOVE 5000
PRIOR COORDINATION REQUIRED WITH ZOA WHEN HOLDING ABOVE FL370 DUE TO W513 AND W285 A & B
HOLDING LIMITED TO ESTABLISHED PATTERNS BELOW 5000 FEET

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED: PATTERNS 1 AND 2 NO ADJUSTMENT.
(PAT 1) CONTROLLING OBSTACLE LOCATED 11133 FT. INTO SECONDARY.
(PAT 2) CONTROLLING OBSTACLE LOCATED 10425 FT. INTO SECONDARY.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	BUCHANAN			KCCR	CONCORD	CA (US)
DP	KANAN			KCCR	CONCORD	CA (US)
DP	TAKEOFF MINIMUMS			KHWD	HAYWARD	CA (US)
DP	BYRON			KLVK	LIVERMORE	CA (US)
DP	LIVERMORE			KLVK	LIVERMORE	CA (US)
DP	TAKEOFF MINIMUMS			KLVK	LIVERMORE	CA (US)
DP	SOUTHLAND			KNUQ	MOUNTAIN VIEW	CA (US)
DP	LIZRD			KAPC	NAPA	CA (US)
DP	COAST			KOAK	OAKLAND	CA (US)
DP	MARINA			KOAK	OAKLAND	CA (US)
DP	NIMITZ			KOAK	OAKLAND	CA (US)
DP	NUEVO			KOAK	OAKLAND	CA (US)
DP	OAKLAND			KOAK	OAKLAND	CA (US)
DP	SALAD			KOAK	OAKLAND	CA (US)
DP	SCAGGS ISLAND			KOAK	OAKLAND	CA (US)
DP	SILENT			KOAK	OAKLAND	CA (US)
DP	SKYLINE			KOAK	OAKLAND	CA (US)
DP	DUMBARTON			KSFO	SAN FRANCISCO	CA (US)
DP	GAP			KSFO	SAN FRANCISCO	CA (US)
DP	OFFSHORE			KSFO	SAN FRANCISCO	CA (US)
DP	PORTE			KSFO	SAN FRANCISCO	CA (US)
DP	SAN FRANCISCO			KSFO	SAN FRANCISCO	CA (US)
DP	SHORELINE			KSFO	SAN FRANCISCO	CA (US)
DP	ALTAM			KSJC	SAN JOSE	CA (US)
DP	MOONY			KSJC	SAN JOSE	CA (US)
DP	SAN JOSE			KSJC	SAN JOSE	CA (US)
DP	SUNOL			KSJC	SAN JOSE	CA (US)
DP	TAKE OFF MINIMUMS			KSJC	SAN JOSE	CA (US)
EN ROUTE	J1					(US)
EN ROUTE	J110					(US)
EN ROUTE	J3					(US)
EN ROUTE	J32					(US)
EN ROUTE	J58					(US)
EN ROUTE	J80					(US)
EN ROUTE	J84					(US)
EN ROUTE	J94					(US)
EN ROUTE	V107					(US)
EN ROUTE	V109					(US)
EN ROUTE	V195					(US)
EN ROUTE	V244					(US)
EN ROUTE	V28					(US)
EN ROUTE	V301					(US)
EN ROUTE	V392					(US)
EN ROUTE	V6					(US)
IAP	VOR RWY 19R			KCCR	CONCORD	CA (US)

QUALITY CHECKED

IAP	LOC/DME RWY 28L	1	KHWD	HAYWARD	CA (US)
IAP	RNAV (GPS) Y RWY 28L	2	KHWD	HAYWARD	CA (US)
IAP	RNAV (GPS) Z RWY 28L	2	KHWD	HAYWARD	CA (US)
IAP	VOR OR GPS-A	1	KHWD	HAYWARD	CA (US)
IAP	VOR/DME OR GPS-B	1	KHWD	HAYWARD	CA (US)
IAP	ILS OR LOC RWY 11		KOAK	OAKLAND	CA (US)
IAP	ILS OR LOC RWY 29		KOAK	OAKLAND	CA (US)
IAP	ILS OR LOC/DME RWY 27R		KOAK	OAKLAND	CA (US)
IAP	ILS RWY 29 (CAT II/III)		KOAK	OAKLAND	CA (US)
IAP	VOR RWY 9R		KOAK	OAKLAND	CA (US)
IAP	VOR/DME RWY 27L		KOAK	OAKLAND	CA (US)
IAP	ILS OR LOC RWY 19L		KSFO	SAN FRANCISCO	CA (US)
IAP	ILS OR LOC RWY 28L		KSFO	SAN FRANCISCO	CA (US)
IAP	ILS OR LOC RWY 28R		KSFO	SAN FRANCISCO	CA (US)
IAP	ILS PRM RWY 28L		KSFO	SAN FRANCISCO	CA (US)
IAP	ILS RWY 28R (CAT II/III)		KSFO	SAN FRANCISCO	CA (US)
IAP	LDA PRM RWY 28R		KSFO	SAN FRANCISCO	CA (US)
IAP	LDA/DME RWY 28R		KSFO	SAN FRANCISCO	CA (US)
IAP	QUIET BRIDGE VISUAL RWYS 28L/R		KSFO	SAN FRANCISCO	CA (US)
IAP	RNAV (GPS) Z RWY 28R		KSFO	SAN FRANCISCO	CA (US)
IAP	TIPP TOE VISUAL RWY 28L		KSFO	SAN FRANCISCO	CA (US)
IAP	VOR RWY 19L		KSFO	SAN FRANCISCO	CA (US)
IAP	VOR-B		KSFO	SAN FRANCISCO	CA (US)
IAP	ILS OR LOC/DME RWY 30L		KSJC	SAN JOSE	CA (US)
IAP	RANV (RNP) Z RWY 12L		KSJC	SAN JOSE	CA (US)
IAP	RNAV (GPS) RWY 12L		KSJC	SAN JOSE	CA (US)
IAP	RNAV (GPS) Y RWY 12R		KSJC	SAN JOSE	CA (US)
IAP	RNAV (RNP) Z RWY 12R		KSJC	SAN JOSE	CA (US)
STAR	MADWIN		KHWD	HAYWARD	CA (US)
STAR	PANOCHE		KHWD	HAYWARD	CA (US)
STAR	COMMO		KOAK	OAKLAND	CA (US)
STAR	HADLEY		KOAK	OAKLAND	CA (US)
STAR	MADWIN		KOAK	OAKLAND	CA (US)
STAR	MANTECA		KOAK	OAKLAND	CA (US)
STAR	MARVN		KOAK	OAKLAND	CA (US)
STAR	PANOCHE		KOAK	OAKLAND	CA (US)
STAR	BIG SUR		KSFO	SAN FRANCISCO	CA (US)
STAR	HADLEY		KSFO	SAN FRANCISCO	CA (US)
STAR	LOCKE		KSFO	SAN FRANCISCO	CA (US)
STAR	MODESTO		KSFO	SAN FRANCISCO	CA (US)
STAR	POINT REYES		KSFO	SAN FRANCISCO	CA (US)
STAR	RISTI		KSFO	SAN FRANCISCO	CA (US)
STAR	JAWWS		KSJC	SAN JOSE	CA (US)

REQUIRED CHARTING: DP, STAR, MILITARY IAP, IAP, AREA, CONTROLLER, EN ROUTE LOW, EN ROUTE HIGH

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 12 **DATE OF REVISION:** 08/09/2010

REASON FOR REVISION:
ADMIN UPDATE, FAC 1 UPDATED TO PENDING DATA.
UPDATED FIX USE.
UPDATED PAT 2 MIN TEMPLATE FROM 5 TO 4.

DEVELOPED BY: **DATE:** 08/09/2010 **OFFICE:** AVN-130 **NAME:** ADOLFO URRUTIA (AMANDA ROBBINS)

NFPO APPROVAL: **DATE:** **OFFICE:** AVN-130 **NAME:** DEZ SILAGYI

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZOA
ATC FACILITY: NORCAL APP CON
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: PANOCHE VORTAC **STATE:** CA **COUNTRY:** US

LATITUDE/LONGITUDE: 364255.62N/1204643.25W **TYPE:**

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	PANOCHE	PXN	VORTAC	L							24000

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
PXN	VORTAC	R-124	11	20000	24000

FIX RESTRICTIONS:
MCA V-107-113 5500 SOUTHEAST BOUND

HOLDING: **HOLDING TYPE OF ACTION:** MODIFY

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	LEG LENGTH DME	HOLDING ALTITUDES MIN	HOLDING ALTITUDES MAX	TEMPLATES MIN	TEMPLATES MAX
1	SW	PXN	VORTAC	229.00	049.00	R	1-1 1/2		5100	17500	5	16
2	SE		WP	154.88	334.88	R		7	6500	17500	9	17
3	NW	PXN	VORTAC	304.00	124.00	R	1 1/2		18000	24000	16	19

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
UPN	230	AAO	362724.00N/1204915.00W	4357	4E
1	200	AAO	364110.60N/1205553.90W	3863	6A
2	230	AAO	363230.00N/1204845.00W	3304	4E
2	310	AAO	362208.10N/1203830.10W	5441	6A
3	265	AAO	363530.00N/1210136.00W	4193	4E

PRECIPITOUS TERRAIN ADDITIONS:

PAT	SPEED	ADDITION
UPN	230	182
1	200	154
2	230	121
2	310	254
3	265	207

HOLDING RESTRICTIONS:
UNPLANNED HOLDING AUTHORIZED AT OR ABOVE 9000.
HOLDING LIMITED TO ESTABLISHED PATTERNS BELOW 9000.

PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
2	RNAV (GPS) RWY 14	KLSN	LOS BANOS	CA (US)

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	MEADOWS			KBFL	BAKERSFIELD	CA (US)
DP	TAKEOFF MINIMUMS			KF34	FIREBAUGH	CA (US)
DP	FRESNO			KFAT	FRESNO	CA (US)
DP	LEMOORE			KNLC	LEMOORE	CA (US)
DP	REEVES			KNLC	LEMOORE	CA (US)
DP	MONTEREY			KMRY	MONTEREY	CA (US)
DP	MUNSO			KMRY	MONTEREY	CA (US)
DP	SECA			KMRY	MONTEREY	CA (US)
DP	TORO			KMRY	MONTEREY	CA (US)
DP	SOUTHLAND			KNUQ	MOUNTAIN VIEW	CA (US)
DP	SKYLINE			KOAK	OAKLAND	CA (US)
DP	CHALONE			KSNS	SALINAS	CA (US)
DP	PORTE			KSFO	SAN FRANCISCO	CA (US)
DP	MOONY			KSJC	SAN JOSE	CA (US)
DP	SAN JOSE			KSJC	SAN JOSE	CA (US)
EN ROUTE	V107					(US)
EN ROUTE	V109					(US)
EN ROUTE	V113					(US)
EN ROUTE	V230					(US)
EN ROUTE	V301					(US)
EN ROUTE	V585					(US)
EN ROUTE	V87					(US)
IAP	VOR/DME OR GPS-A		1	KF34	FIREBAUGH	CA (US)

QUALITY CHECKED

IAP	HI-VOR/DME OR TACAN RWY 11L		KFAT	FRESNO	CA (US)
IAP	LOC RWY 11L		KFAT	FRESNO	CA (US)
IAP	TACAN RWY 14L		KNLC	LEMOORE	CA (US)
IAP	TACAN RWY 14R		KNLC	LEMOORE	CA (US)
IAP	RNAV (GPS) RWY 14	2	KLSN	LOS BANOS	CA (US)
IAP	RNAV (GPS) RWY 32		KLSN	LOS BANOS	CA (US)
IAP	VOR/DME RWY 14		KLSN	LOS BANOS	CA (US)
IAP	VOR/DME RWY 32		KLSN	LOS BANOS	CA (US)
IAP	ILS OR LOC RWY 30		KMCE	MERCED	CA (US)
IAP	RNAV (GPS) RWY 30		KMCE	MERCED	CA (US)
IAP	VOR RWY 30		KMCE	MERCED	CA (US)
IAP	RNAV (GPS) RWY 31		KMER	MERCED	CA (US)
IAP	ILS OR LOC/DME RWY 28R		KMOD	MODESTO	CA (US)
IAP	RNAV (GPS) RWY 28R		KMOD	MODESTO	CA (US)
IAP	VOR/DME RWY 28R		KMOD	MODESTO	CA (US)
STAR	MADWIN		KHWD	HAYWARD	CA (US)
STAR	PANOCHE		KHWD	HAYWARD	CA (US)
STAR	COMMO		KOAK	OAKLAND	CA (US)
STAR	MADWIN		KOAK	OAKLAND	CA (US)
STAR	MARVN		KOAK	OAKLAND	CA (US)
STAR	PANOCHE		KOAK	OAKLAND	CA (US)
STAR	EL NIDO		KSJC	SAN JOSE	CA (US)
STAR	JAWWS		KSJC	SAN JOSE	CA (US)

REQUIRED CHARTING: DP, STAR, MILITARY IAP, MILITARY DP, IAP, CONTROLLER, EN ROUTE LOW, EN ROUTE HIGH

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 15 **DATE OF REVISION:** 08/10/2010

REASON FOR REVISION:
ADMIN REVISION, FAC1 IN HISTORY STATUS.
UPDATED UNPLANNED HOLDING PRECIPITOUS TERRAIN ADDITION FROM 157 TO 182.
ADDED PRECIPITOUS TERRAIN ADDITION TO PAT2, 310 SPEED.
ADDED CONTROLLING OBSTACLE AND PRECIPITOUS TERRAIN ADDITION TO PAT3.
UPDATED ESV MIN ALTITUDE TO 20000, PER FLIGHT CHECK ON 03/26/2010.
FIX USE UPDATED.
UPDATED MAA FROM 20000 TO 24000.
UPDATED PAT 3 MIN TEMPLATE FROM 19 TO 16.

DEVELOPED BY: **DATE:** 08/10/2010 **OFFICE:** AVN-130 **NAME:** ADOLFO URRUTIA (AMANDA ROBBINS)

NFPO APPROVAL: **DATE:** **OFFICE:** AVN-130 **NAME:** DEZ SILAGYI

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZOA
ATC FACILITY: NORCAL APP CON
OTHER: NASA

RADIO FIX AND HOLDING DATA RECORD

NAME: SRENA **STATE:** CA **COUNTRY:** US

LATITUDE/LONGITUDE: 363123.21N/1203448.24W **TYPE:** INT, DME

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** ESTABLISH

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	PANOCHE	PXN	VORTAC	L	124.17	140.17	14.99	14.99		24000	27000
2	CLOVIS	CZQ	VORTAC	H	224.84	239.84	42.78	42.78		24000	27000

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
PXN	VORTAC	R-124	15	20000	27000

REMARKS:
FAC1 AND FAC2 INTERSECTION TO ESTABLISH COORDINATES.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
STAR	PANOCHE	1, 2		KHWD	HAYWARD	CA (US)
STAR	PANOCHE	1, 2		KOAK	OAKLAND	CA (US)

REQUIRED CHARTING: STAR, CONTROLLER, EN ROUTE LOW, EN ROUTE HIGH

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 08/19/2010

REASON FOR REVISION:
ESTABLISH FIX PER AIR TRAFFIC REQUEST.

DEVELOPED BY: **DATE:** 08/19/2010 **OFFICE:** AVN-130 **NAME:** ADOLFO URRUTIA (AMANDA ROBBINS)

NFPO APPROVAL: **DATE:** **OFFICE:** AVN-130 **NAME:** DEZ SILAGYI

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZOA
ATC FACILITY: NORCAL APP CON
OTHER:

QUALITY CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: SUNOL **STATE:** CA **COUNTRY:** US

LATITUDE/LONGITUDE: 373619.91N/1214837.01W **TYPE:** WP, INT, DME

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	OAKLAND	OAK	VORTAC	H	093.00	110.00	20.97	20.97		4000	17500
2	MANTECA	ECA	VOR/DME	H	229.00	246.00	33.35	33.35		5200	17500
3	SAN JOSE	SJC	VOR/DME	L	008.85	024.85	15.25	15.25		5000	17500
4	PANOCHE	PXN	VORTAC	L	301.46	317.46	72.75	72.75		6500	17500
5	SACRAMENTO	SAC	VORTAC	H	176.80	193.80	51.71	51.71		5000	17500
6	SAUSALITO	SAU	VORTAC	L	096.60	113.60	37.07	37.07		5000	17500
7	SCAGGS ISLAND	SGD	VORTAC	L	124.97	141.97	43.56	43.56		6000	10000

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
PXN	VORTAC	R-301	73	6500	17500
SAC	VORTAC	R-177	52	5000	17500
SGD	VORTAC	R-125	44	6000	10000

FIX RESTRICTIONS:
MCA V301 6500 SOUTHEAST BOUND

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	LEG LENGTH DME	HOLDING ALTITUDES MIN	HOLDING ALTITUDES MAX	TEMPLATES MIN	TEMPLATES MAX
1	NW	SGD	VORTAC	124.97	124.97	R	1		6000	10000	7	11

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	AAO	373200.00N/1214433.00W	3380	4E

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERN.

REMARKS:
PRECIPITOUS TERRAIN EVALUATED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	BYRON	2		KLVK	LIVERMORE	CA (US)
DP	SUNOL	3		KSJC	SAN JOSE	CA (US)
EN ROUTE	T263					(US)
EN ROUTE	V195	2				(US)
EN ROUTE	V301	1				(US)
EN ROUTE	V334	3				(US)
IAP	LOC/DME RWY 28L	3		KHWD	HAYWARD	CA (US)
IAP	RNAV (GPS) Y RWY 28L			KHWD	HAYWARD	CA (US)
IAP	RNAV (GPS) Z RWY 28L			KHWD	HAYWARD	CA (US)
IAP	VOR OR GPS-A	2		KHWD	HAYWARD	CA (US)
IAP	VOR/DME OR GPS-B	2		KHWD	HAYWARD	CA (US)
IAP	ILS OR LOC RWY 29	2, 5		KOAK	OAKLAND	CA (US)
IAP	ILS OR LOC/DME RWY 27R	1		KOAK	OAKLAND	CA (US)
IAP	ILS RWY 29 (CAT II)	2, 5		KOAK	OAKLAND	CA (US)
IAP	ILS RWY 29 (CAT III)	2, 5		KOAK	OAKLAND	CA (US)
IAP	RNAV (GPS) Y RWY 27L			KOAK	OAKLAND	CA (US)
IAP	RNAV (RNP) Z RWY 27L			KOAK	OAKLAND	CA (US)
IAP	RNAV (RNP) Z RWY 27R			KOAK	OAKLAND	CA (US)
IAP	RNAV (RNP) Z RWY 29			KOAK	OAKLAND	CA (US)
IAP	VOR/DME RWY 27L	1		KOAK	OAKLAND	CA (US)
IAP	LDA PRM RWY 28R (SIMULTANEOUS CLOSE PARALLEL) - ALT MISSED APPROACH		1	KSFO	SAN FRANCISCO	CA (US)
IAP	RNAV (GPS) Z RWY 28R			KSFO	SAN FRANCISCO	CA (US)
STAR	MADWIN	1, 2, 3, 4		KOAK	OAKLAND	CA (US)
STAR	MARVN	2		KOAK	OAKLAND	CA (US)
STAR	PANOCHE	1, 2, 3, 4		KOAK	OAKLAND	CA (US)

REQUIRED CHARTING: DP, STAR, IAP, AREA, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 20 **DATE OF REVISION:** 06/30/2011

REASON FOR REVISION:
ADMIN UPDATE, FAC1,2,3,4,5 IN HISTORY STATUS.
UPDATED FIX USE.

2/7/2011 THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 08/11/2010.
UPDATED ALL INSTANCES OF ECA FROM VORTAC TO VOR/DME, TACAN DECOMISSIONED EFFECTIVE 18 NOV 2010 (NFDD 157-1).

DEVELOPED BY:	**DATE:** 08/11/2010	**OFFICE:** AVN-130	**NAME:** ADOLFO URRUTIA (AMANDA ROBBINS)
APPROVED BY:	**DATE:**	**OFFICE:** AVN-130	**NAME:** DEZ SILAGYI
	SIGNATURE:		

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZOA
ATC FACILITY: NORCAL APP CON, SFO
OTHER:

INFO ONLY

RADIO FIX AND HOLDING DATA RECORD

NAME: SAN JOSE VOR/DME **STATE:** CA **COUNTRY:** US

LATITUDE/LONGITUDE: 372228.96N/1215640.80W **TYPE:**

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** NO CHANGE

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	SAN JOSE	SJC	VOR/DME	L							18000

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	LEG LENGTH DME	HOLDING ALTITUDES MIN	HOLDING ALTITUDES MAX	TEMPLATES MIN	TEMPLATES MAX
1	E	SJC	VOR/DME	106.00	286.00	L	1		3000	14000	4	10
2	E		WP	106.00	286.00	L		4	3000	14000	5	11

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	200' AAO	372033.00N/1214430.00W	2494	4E
2	200	200' AAO	372021.00N/1214418.00W	2536	4E

PRECIPITOUS TERRAIN ADDITIONS:

PAT	SPEED	ADDITION
1	200	86
2	200	114

REASON FOR NONSTANDARD HOLDING:
PAT 1 AIR TRAFFIC

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERN.
PATTERN 1 CONTROLLING OBSTACLE LOCATED 11791' INTO SECONDARY.
PATTERN 2 CONTROLLING OBSTACLE LOCATED 9555' INTO SECONDARY.

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	TAKE OFF MINIMUMS			KCVH	HOLLISTER	CA (US)
DP	BYRON			KLVK	LIVERMORE	CA (US)
DP	MONTEREY			KMRY	MONTEREY	CA (US)
DP	MUNSO			KMRY	MONTEREY	CA (US)
DP	SECA			KMRY	MONTEREY	CA (US)
DP	TORO			KMRY	MONTEREY	CA (US)
DP	NUEVO			KOAK	OAKLAND	CA (US)
DP	TAKE OFF MINIMUMS			KPAO	PALO ALTO	CA (US)
DP	CHALONE			KSNS	SALINAS	CA (US)
DP	SALINAS			KSNS	SALINAS	CA (US)
DP	TAKE OFF MINIMUMS			KSQL	SAN CARLOS	CA (US)
DP	EUGEN			KSFO	SAN FRANCISCO	CA (US)
DP	ALTAM			KSJC	SAN JOSE	CA (US)
DP	DANVILLE			KSJC	SAN JOSE	CA (US)
DP	LOUPE			KSJC	SAN JOSE	CA (US)
DP	MOONY			KSJC	SAN JOSE	CA (US)
DP	SAN JOSE			KSJC	SAN JOSE	CA (US)
DP	SUNOL			KSJC	SAN JOSE	CA (US)
DP	TAKE OFF MINIMUMS			KE16	SAN MARTIN	CA (US)
EN ROUTE	T259					(US)
EN ROUTE	V334					(US)
EN ROUTE	V485					(US)
IAP	LOC/DME RWY 28L			KHWD	HAYWARD	CA (US)
IAP	RNAV (GPS) Y RWY 28L			KHWD	HAYWARD	CA (US)
IAP	RNAV (GPS) Z RWY 28L			KHWD	HAYWARD	CA (US)
IAP	VOR OR GPS-A			KHWD	HAYWARD	CA (US)
IAP	VOR/DME OR GPS-B			KHWD	HAYWARD	CA (US)
IAP	ILS OR LOC/DME RWY 27R			KOAK	OAKLAND	CA (US)
IAP	VOR RWY 9R			KOAK	OAKLAND	CA (US)
IAP	GPS RWY 31		2	KPAO	PALO ALTO	CA (US)
IAP	VOR/DME RWY 31		1	KPAO	PALO ALTO	CA (US)
IAP	ILS OR LOC RWY 28L		1	KSFO	SAN FRANCISCO	CA (US)
IAP	ILS PRM RWY 28L (SIM CLOSE PARALLEL)		1	KSFO	SAN FRANCISCO	CA (US)
IAP	FAIRGROUNDS VISUAL RWY 30L			KSJC	SAN JOSE	CA (US)
IAP	FAIRGROUNDS VISUAL RWY 30R			KSJC	SAN JOSE	CA (US)

INFO ONLY

IAP	ILS OR LOC RWY 12R	KSJC	SAN JOSE	CA (US)
IAP	ILS OR LOC/DME RWY 30L	KSJC	SAN JOSE	CA (US)
IAP	RNAV (GPS) RWY 11	KSJC	SAN JOSE	CA (US)
IAP	RNAV (GPS) RWY 12L	KSJC	SAN JOSE	CA (US)
IAP	RNAV (GPS) Y RWY 12R	KSJC	SAN JOSE	CA (US)
IAP	VOR RWY 12R	KSJC	SAN JOSE	CA (US)
IAP	VOR/DME RWY 30L	KSJC	SAN JOSE	CA (US)
IAP	VOR/DME RWY 30R	KSJC	SAN JOSE	CA (US)
STAR	MADWIN	KHWD	HAYWARD	CA (US)
STAR	PANOCHE	KHWD	HAYWARD	CA (US)
STAR	MADWIN	KOAK	OAKLAND	CA (US)
STAR	MARVN	KOAK	OAKLAND	CA (US)
STAR	PANOCHE	KOAK	OAKLAND	CA (US)
STAR	GOLDEN GATE	KSFO	SAN FRANCISCO	CA (US)
STAR	HADLY	KSFO	SAN FRANCISCO	CA (US)
STAR	CAPITOL	KSJC	SAN JOSE	CA (US)
STAR	EL NIDO	KSJC	SAN JOSE	CA (US)
STAR	JAWWS	KSJC	SAN JOSE	CA (US)
STAR	ROBIE	KSJC	SAN JOSE	CA (US)

REQUIRED CHARTING: DP, STAR, IAP, AREA, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 10 **DATE OF REVISION:** 05/27/2009

REASON FOR REVISION:
SEPARATED 200K AND 230K HOLDING.
UPDATED HOLDING PATTERN CONTROLLING OBSTACLES.
ADDED REMARK INDICATING LOCATION OF HOLDING OBSTACLE INTO SECONDARY.
UPDATED FIX USE.

DEVELOPED BY: **DATE:** 05/27/2009 **OFFICE:** AVN-101 **NAME:** EUGENE NEWTON (LYNN PACETTI)

NFPO APPROVAL: **DATE:** 08/11/2009 **OFFICE:** AVN-130 **NAME:** RICK WEBB

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: LAX
ARTCC: ZLA
ATC FACILITY:
OTHER: NORCAL TRACON