U.S. DEPARTMENT of TRANSPORTATION – FEDERAL AVIATION ADMINISTRATION

GRAPHIC DEPARTURE PROCEDURE (DP)

Bearings, headings, courses, tracks, and radials are magnetic. Elevation and altitudes are in feet MSL. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles. Visibilities are in statue miles or feet RVR unless otherwise indicated. Graphic depictions attached.

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
MERLOT	ONE	MER1.SGD	NONE		

TYPE: SID

DP ROUTE DESCRIPTION:

TAKEOFF RWY 06: CLIMBING RIGHT TURN ON ASSIGNED HEADING BETWEEN 130 CW 242; THENCE....
TAKEOFF RWY 18L, 18R: CLIMB HEADING 186 (OR ATC ASSIGNED HEADING 130 CW 270); THENCE....
TAKEOFF RWY 24: CLIMB HEADING 241.75 (OR ATC ASSIGNED HEADING 130 CW 270); THENCE....
TAKEOFF RWY 36L, 36R: CLIMB HEADING 006 (OR CLIMBING LEFT TURN ON ATC ASSIGNED HEADING 186 CW 006); THENCE....
....EXPECT VECTORS TO JOIN ASSIGNED ROUTE. MAINTAIN ASSIGNED ALTITUDE; EXPECT FILED ALTITUDE/FLIGHT LEVEL TEN MINUTES AFTER DEPARTURE.

TRANSITION ROUTES (GRAPHIC DEPICTION ONLY):

Transition Name	Transition Computer Codes	From FIX/NAVAID	To FIX/NAVAID	Course	Distance	MEA	MOCA	Crossing Altitudes/Fixes

PROCEDURAL DATA NOTES/TAKEOFF MINIMUMS:

TAKEOFF MINIMUMS: RWY 06, STANDARD WITH MINIMUM CLIMB OF 430 FT PER NM TO 1600. RWY 18L, STANDARD WITH MINIMUM CLIMB OF 320 FT PER NM TO 1500. RWY 18R, STANDARD WITH MINIMUM CLIMB OF 330 FT PER NM TO 1600. RWY 24, STANDARD WITH MINIMUM CLIMB OF 250 FT PER NM TO 1300. RWY 36L, STANDARD WITH MINIMUM CLIMB OF 420 FT PER NM TO 2900. RWY 36R, STANDARD WITH MINIMUM CLIMB OF 460 FT PER NM TO 3000.
CHART NOTE: RADAR REQUIRED

TAKEOFF OBSTACLES NOTES:

NOTE: RWY 06, LIGHT SUPPORT STRUCTURE 2 FT FROM DER, LEFT AND RIGHT OF CENTERLINE, 2 FT AGL/37 FT MSL. ELECTRICAL LIGHT POLES BEGINNING 89 FT FROM DER, LEFT AND RIGHT OF CENTERLINE, UP TO 35 FT AGL/78 FT MSL. BUILDINGS BEGINNING 664 FT FROM DER, 659 FT RIGHT OF CENTERLINE, UP TO 50 FT AGL/84 FT MSL. TRAIN 1058 FT FROM DER, LEFT AND RIGHT OF CENTERLINE, 23 FT AGL/67 FT MSL. TREES BEGINNING 1288 FT FROM DER, 738 FT LEFT OF CENTERLINE, UP TO 40 FT AGL/187 FT MSL. TREES BEGINNING 2082 FT FROM DER, 141 FT RIGHT OF CENTERLINE, UP TO 40 FT AGL/130 FT MSL.
NOTE: RWY 18L, NAVAID 1281 FT FROM DER, 814 FT LEFT OF CENTERLINE, 30 FT AGL/49 FT MSL.
NOTE: RWY 18R, TERRAIN 9 FT FROM DER, 96 FT LEFT OF CENTERLINE, 17 FT MSL. LIGHT SUPPORT STRUCTURE 9 FT FROM DER, 45 FT RIGHT OF CENTERLINE, 2 FT AGL/15 FT MSL. VEHICLES ON ROADWAY 349 FT FROM DER, LEFT AND RIGHT OF CENTERLINE, UP TO 15 FT AGL/34 FT MSL. TREE 3157 FT FROM DER, 764 FT LEFT OF CENTERLINE, 40 FT AGL/101 FT MSL.
NOTE: RWY 24, VEHICLES ON ROADWAY 56 FT FROM DER, LEFT AND RIGHT OF CENTERLINE, UP TO 15 FT AGL/26 FT MSL. TERRAIN 59 FT FROM DER, 123 FT LEFT OF CENTERLINE, 17 FT MSL. TREES BEGINNING 1458 FT FROM DER, 795 FT LEFT OF CENTERLINE, UP TO 40 FT AGL/69 FT MSL.
NOTE: RWY 36L, TERRAIN BEGINNING 1 FT FROM DER, 490 FT LEFT OF CENTERLINE, UP TO 36 FT MSL. VEHICLES ON ROADWAY 105 FT FROM DER, LEFT AND RIGHT OF CENTERLINE, UP TO 15 FT AGL/45 FT MSL. TRAIN 558 FT FROM DER, LEFT AND RIGHT OF CENTERLINE, 23 FT AGL/44 FT MSL.
NOTE: RWY 36R, ELECTRICAL LIGHT POLES BEGINNING 262 FT FROM DER, 519 FT LEFT OF CENTERLINE, UP TO 35 FT AGL/59 FT MSL. WIND SOCK 628 FT FROM DER, 282 FT LEFT OF CENTERLINE, 10 FT AGL/49 FT MSL. VEHICLES ON ROADWAY 640 FT FROM DER, LEFT AND RIGHT OF CENTERLINE, UP TO 15 AGL/39 FT MSL. TREE 813 FT FROM DER, 673 FT RIGHT OF CENTERLINE, 40 FT AGL/70 FT MSL.

CONTROLLING OBSTACLES:

RWY 06, 18R: 1199 FT MSL AAO 381036.75N/1221243.84W.
RWY 18L: 1119 FT MSL AAO 381026.81N/1221249.50W.
RWY 24: 1099 FT MSL AAO 381027.00N/1221251.48W.
RWY 36L: 1198 FT MSL AAO 381623.90N/1221354.83W, 2139 FT AAO 381918.45N/1221109.47W.

QUALITY CHECKED

GRAPHIC DEPARTURE PROCEDURE (DP)

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DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
MERLOT	ONE	MER1.SGD	NONE		

RWY 36R: 1329 FT MSL AAO 381610.00N/1221347.00W, 2262 FT AAO 381915.49N/1221105.89W.
OBSTACLES MANDATING ODP ROUTE DEVELOPMENT: ALL RWYS - 2458 FT MSL AAO 381821.00N/ 1221015.00W.

LOST COMMUNICATIONS PROCEDURES:

IF NOT IN CONTACT WITH OAKLAND CENTER AFTER REACHING 4000, PROCEED TO THE SGD VORTAC AND HOLD.

ADDITIONAL FLIGHT DATA:

CHART LOST COMMUNICATIONS HOLDING AT SGD VORTAC, HOLD N, LT, 167.00 INBOUND.

AIRPORTS SERVED:

NAPA COUNTY, NAPA, CA

COMMUNICATIONS:

ATIS, GND, CLEARANCE DELIVERY, KAPC TOWER(CTAF), ZOA

FIXES AND/OR NAVAIDS:

STS VOR/DME, ENI VORTAC, ILA VORTAC, SAC VORTAC, OAK VORTAC, PYE VORTAC, LIN VORTAC, ECA VORTAC, SAU VORTAC, RBL VORTAC, CCR VOR/DME.

QUALITY CHECKED

U.S. DEPARTMENT of TRANSPORTATION – FEDERAL AVIATION ADMINISTRATION

GRAPHIC DEPARTURE PROCEDURE (DP)

Bearings, headings, courses, tracks, and radials are magnetic. Elevation and altitudes are in feet MSL. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles. Visibilities are in statue miles or feet RVR unless otherwise indicated. Graphic depictions attached.

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
MERLOT	ONE	MER1.SGD	NONE		

REMARKS:

FLIGHT INSPECTED BY:

THOMAS MOLOKIE — SAC FIFO — 03/02/2012

REQUIRED EFFECTIVE DATE:

ROUTINE

DEVELOPED BY:

ADOLFO URRUTIA (ALLAN WILL) — AJV-354 — 08/15/2011

APPROVED BY:

DEZ SILAGYI — AJV-354

COORDINATED WITH:

ALPA, AOPA, NBAA, ZOA, NORCAL APP CON, KAPA ATCT, ARPT MGR

CHANGES:

REASONS:

03/06/12: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 08/15/11.
1. DEPARTURE ROUTE DESCRIPTION CHANGED "EXPECT FILED ALTITUDE/FLIGHT LEVEL FIVE MINUTES AFTER DEPARTURE" TO READ "EXPECT FILED ALTITUDE/FLIGHT LEVEL 10 MINUTES AFTER DEPARTURE."

QUALITY CHECKED 1

RADIO FIX AND HOLDING DATA RECORD

NAME: SCAGGS ISLAND VORTAC **STATE:** CA **COUNTRY:** US

LATITUDE/LONGITUDE: 381045.70N/1222223.35W **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	SCAGGS ISLAND	SGD	VORTAC	L							17500

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	N	SGD	VORTAC	347.00	167.00	L	1		4000	10000	4	9
2	E	SGD	VORTAC	095.93	275.93	L	1		3000	10000	4	9
3	N		WP	360.00	180.00	R		4	3000	10000	5	10

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	AAO	381930.00N/1222321.00W	1500	4E
2	200	AAO	380851.00N/1221209.00W	1267	4E
3	200	AAO	381957.00N/1222445.00W	1861	4E

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

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERNS.

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

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	LIZRD			KAPC	NAPA	CA (US)
DP	MERLOT		1	KAPC	NAPA	CA (US)
DP	NAPAA			KAPC	NAPA	CA (US)
DP	TAKEOFF MINIMUMS			KAPC	NAPA	CA (US)
DP	TAKEOFF MINIMUMS			KDVO	NOVATO	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	SCAGGS ISLAND			KOAK	OAKLAND	CA (US)
DP	SILENT			KOAK	OAKLAND	CA (US)
DP	TAKEOFF MINIMUMS			KO69	PETALUMA	CA (US)
DP	GAP			KSFO	SAN FRANCISCO	CA (US)
DP	QUIET			KSFO	SAN FRANCISCO	CA (US)
DP	REBAS (PROP)			KSFO	SAN FRANCISCO	CA (US)
DP	FREES			KSTS	SANTA ROSA	CA (US)
DP	SANTA ROSA			KSTS	SANTA ROSA	CA (US)
EN ROUTE	T263					(US)
EN ROUTE	V108					(US)
EN ROUTE	V87					CA (US)
IAP	ILS OR LOC RWY 21R			KSUU	FAIRFIELD	CA (US)
IAP	ILS OR LOC RWY 3L			KSUU	FAIRFIELD	CA (US)
IAP	ILS OR LOC RWY 36L			KAPC	NAPA	CA (US)
IAP	VOR RWY 06			KAPC	NAPA	CA (US)
IAP	GPS RWY 13		3	KDVO	NOVATO	CA (US)
IAP	ILS OR LOC/DME RWY 27R			KOAK	OAKLAND	CA (US)
IAP	RNAV (GPS) RWY 29			KO69	PETALUMA	CA (US)
IAP	VOR RWY 29		2	KO69	PETALUMA	CA (US)
IAP	ILS OR LOC RWY 19L			KSFO	SAN FRANCISCO	CA (US)
IAP	ILS OR LOC RWY 32		1	KSTS	SANTA ROSA	CA (US)
IAP	RNAV (GPS) RWY 32			KSTS	SANTA ROSA	CA (US)
IAP	VOR RWY 32			KSTS	SANTA ROSA	CA (US)
STAR	OAKEY			KSUU	FAIRFIELD	CA (US)
STAR	SEATO			KSUU	FAIRFIELD	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	GOLDEN GATE			KSFO	SAN FRANCISCO	CA (US)
STAR	LOCKE			KSFO	SAN FRANCISCO	CA (US)
STAR	MODESTO			KSFO	SAN FRANCISCO	CA (US)

QUALITY CHECKED

STAR POINT REYES KSFO SAN FRANCISCO CA (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 18 **DATE OF REVISION:** 02/09/2012

REASON FOR REVISION:
ADMIN REVISION, FAC1 IN HISTORY STATUS.
UPDATED PAT1 CONTROLLING OBSTACLE FROM 1464' TO 1500'.
UPDATED FIX USE.

DEVELOPED BY: **DATE:** 07/29/2011 **OFFICE:** AJV-354 **NAME:** ADOLFO URRUTIA (ALLAN WILL)

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

SIGNATURE:

DISTRIBUTION: **NFDC**
FPO: WST
ARTCC: ZOA
ATC FACILITY: NORCAL APP CON, KAPC ATCT
OTHER:

QUALITY CHECKED

RADIO FIX AND HOLDING DATA RECORD

INFO ONLY

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

LATITUDE/LONGITUDE: 380428.52N/1210013.89W **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	FEET	MRA	MAA
1	LINDEN	LIN	VORTAC	H							45000

FIX RESTRICTIONS:
MCA V28-113 4000 NORTHEAST BOUND

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

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	DME	HOLDING ALTITUDES MIN	MAX	TEMPLATES MIN	MAX
1	S	LIN	VORTAC	180.00	360.00	R	1		5000	10000	5	9
2	E	LIN	VORTAC	104.47	284.47	L	1		2000	8000	4	8
3	E		WP	105.47	285.47	L		4	2000	8000	4	9
4	SE	LIN	VORTAC	146.00	326.00	R	1		2900	8000	4	14

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
UPN	200	AAO	380242.00N/1204700.00W	1667	4E
1	200	AAO	380742.00N/1205706.00W	647	4E
1	230	AAO	380754.00N/1205330.00W	748	4E
2	200	AAO	380245.00N/1205036.00W	702	4E
2	230	AAO	380045.00N/1204536.00W	1703	4E
3	200	AAO	380245.00N/1205036.00W	702	4E
3	230	AAO	380045.00N/1204536.00W	1703	4E
4	200	AAO	380818.00N/1205706.00W	647	4E
4	310	AAO	380045.00N/1204536.00W	1703	4E

REASON FOR NONSTANDARD HOLDING:
PAT 2 ATC REQUEST
PAT 3 ATC REQUEST

HOLDING RESTRICTIONS:
UNPLANNED HOLDING AUTHORIZED AT OR ABOVE 5000.

PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
4	TAKEOFF MINIMUMS	K1O3	LODI	CA (US)

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED: ALL PATTERNS AND UNPLANNED HOLDING NO ADJUSTMENTS.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	FICHU (RNAV)			KO22	COLUMBIA	CA (US)
DP	KANAN			KCCR	CONCORD	CA (US)
DP	TAKEOFF MINIMUMS			KE45	GROVELAND	CA (US)
DP	TAKEOFF MINIMUMS			KJAQ	JACKSON	CA (US)
DP	TAKEOFF MINIMUMS		4	K1O3	LODI	CA (US)
DP	MERLOT			KAPC	NAPA	CA (US)
DP	TAKEOFF MINIMUMS			KO27	OAKDALE	CA (US)
DP	MARINA			KOAK	OAKLAND	CA (US)
DP	OAKLAND			KOAK	OAKLAND	CA (US)
DP	SILENT			KOAK	OAKLAND	CA (US)
DP	KATSO			KMCC	SACRAMENTO	CA (US)
DP	SACRO			KMCC	SACRAMENTO	CA (US)
DP	DUDES			KSMF	SACRAMENTO	CA (US)
DP	TAKEOFF MINIMUMS			KCPU	SAN ANDREAS	CA (US)
DP	DUMBARTON			KSFO	SAN FRANCISCO	CA (US)
DP	QUIET			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	DANVILLE			KSJC	SAN JOSE	CA (US)
DP	LOUPE			KSJC	SAN JOSE	CA (US)
DP	RICHY			KTVL	SOUTH LAKE TAHOE	CA (US)
DP	SHOLE			KTVL	SOUTH LAKE TAHOE	CA (US)
EN ROUTE	J189					(US)
EN ROUTE	J67					(US)
EN ROUTE	J84					(US)
EN ROUTE	Q128					(US)
EN ROUTE	Q130					(US)

QUALITY CHECKED

EN ROUTE	V108				(US)
EN ROUTE	V113				(US)
EN ROUTE	V28				(US)
EN ROUTE	V338				(US)
EN ROUTE	V459				(US)
EN ROUTE	V23				CA (US)
IAP	VOR/DME RWY 1		KJAQ	JACKSON	CA (US)
IAP	RNAV (GPS) - B	3	K1O3	LODI	CA (US)
IAP	VOR-A	2	K1O3	LODI	CA (US)
IAP	ILS OR LOC/DME RWY 28R	1	KMOD	MODESTO	CA (US)
IAP	VOR -A		KO27	OAKDALE	CA (US)
IAP	ILS RWY 16		KMCC	SACRAMENTO	CA (US)
IAP	VOR/DME RWY 16		KMCC	SACRAMENTO	CA (US)
IAP	VOR/DME RWY 34		KMCC	SACRAMENTO	CA (US)
IAP	ILS OR LOC RWY 22L		KMHR	SACRAMENTO	CA (US)
IAP	VOR RWY 04R		KMHR	SACRAMENTO	CA (US)
IAP	VOR/DME RWY 22L		KMHR	SACRAMENTO	CA (US)
IAP	GPS RWY 31		KCPU	SAN ANDREAS	CA (US)
IAP	ILS OR LOC RWY 29R		KSCK	STOCKTON	CA (US)
IAP	VOR RWY 29R		KSCK	STOCKTON	CA (US)
STAR	OAKEY		KSUU	FAIRFIELD	CA (US)
STAR	SQUAW VALLEY		KSUU	FAIRFIELD	CA (US)
STAR	MADWIN		KHWD	HAYWARD	CA (US)
STAR	MADWIN		KOAK	OAKLAND	CA (US)
STAR	MANTECA		KOAK	OAKLAND	CA (US)
STAR	FLUNK		KSMF	SACRAMENTO	CA (US)
STAR	WRAPS		KSMF	SACRAMENTO	CA (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 11 **DATE OF REVISION:** 06/30/2011

REASON FOR REVISION:
UPDATED FIX USE.
UPDATED PAT2, PAT3, PAT4 200KIAS CONTROLLING OBSTACLE.

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

APPROVED BY: **DATE:** 05/18/2011 **OFFICE:** AVN-130 **NAME:** DEZ SILAGYI

SIGNATURE:

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

QUALITY CHECKED

INFO ONL

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	ILS OR LOC RWY 29R	KSCK	STOCKTON	CA (US)
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	MERLOT			KAPC	NAPA	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)

QUALITY CHECKED

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:** 05/18/2011 **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: MENDOCINO VORTAC **STATE:** CA **COUNTRY:** US

INFO ONL

LATITUDE/LONGITUDE: 390311.60N/1231627.10W **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	FAC FEET	MRA	MAA
1	MENDOCINO	ENI	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	S	ENI	VORTAC	202.14	022.14	R	1		6000	14000	5	10
2	N	ENI	VORTAC	343.21	163.21	R	1 1/2		15000	45000	15	29
3	NW	ENI	VORTAC	333.00	153.00	R	1-1 1/2		11000	17500	9	16
4	S		WP	202.00	022.00	R		5	6000	14000	6	11

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	AAO	385657.00N/1231339.00W	3389	4E
1	310	AAO	390230.00N/1230400.00W	3645	4E
2	265	AAO	390814.00N/1231838.10W	3611	4E
3	230	AAO	390814.00N/1231838.10W	3611	4E
4	200	AAO	385651.60N/1231249.00W	3553	4E

PRECIPITOUS TERRAIN ADDITIONS:

PAT	SPEED	ADDITION
1	200	205
2	265	197
3	230	193
4	200	202

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERNS

PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
1	VOR-A	KUKI	UKIAH	CA (US)

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	LAKEPORT (RNAV)			K1O2	LAKEPORT	CA (US)
DP	TAKE-OFF MINIMUMS			K1O2	LAKEPORT	CA (US)
DP	LITTLE RIVER (RNAV) (OBSTACLE)			KLLR	LITTLE RIVER	CA (US)
DP	MERLOT			KAPC	NAPA	CA (US)
DP	OAKLAND DEPARTURE			KOAK	OAKLAND	CA (US)
DP	SILENT DEPARTURE			KOAK	OAKLAND	CA (US)
DP	GAP DEPARTURE			KSFO	SAN FRANCISCO	CA (US)
DP	MOLEN DEPARTURE			KSFO	SAN FRANCISCO	CA (US)
DP	QUIET DEPARTURE			KSFO	SAN FRANCISCO	CA (US)
DP	REBAS DEPARTURE			KSFO	SAN FRANCISCO	CA (US)
DP	FREES DEPARTURE			KSTS	SANTA ROSA	CA (US)
DP	TAKE-OFF MINIMUMS			KUKI	UKIAH	CA (US)
DP	MENDOCINO DEPARTURE			KO28	WILLITS	CA (US)
EN ROUTE	J143					(US)
EN ROUTE	V199					(US)
EN ROUTE	V200					(US)
EN ROUTE	V27					(US)
EN ROUTE	V494					(US)
EN ROUTE	V607					(US)
IAP	RNAV (GPS) -A			K1O2	LAKEPORT	CA (US)
IAP	RNAV (GPS) RWY 29			KLLR	LITTLE RIVER	CA (US)
IAP	ILS OR LOC RWY 32			KSTS	SANTA ROSA	CA (US)
IAP	LOC RWY 15			KUKI	UKIAH	CA (US)
IAP	VOR-A		1	KUKI	UKIAH	CA (US)
IAP	RNAV (GPS) RWY 16		4	KO28	WILLITS	CA (US)
IAP	RNAV (GPS) RWY 34		4	KO28	WILLITS	CA (US)
STAR	TRAVIS AFB - SEATO ARRIVAL		3	KSUU	FAIRFIELD	CA (US)
STAR	GOLDEN GATE ARRIVAL		2	KSFO	SAN FRANCISCO	CA (US)
STAR	POINT REYES ARRIVAL			KSFO	SAN FRANCISCO	CA (US)
STAR	STINS ARRIVAL		2	KSFO	SAN FRANCISCO	CA (US)
STAR	BRINY ARRIVAL			KSJC	SAN JOSE	CA (US)
STAR	GOLDEN GATE		2	KSJC	SAN JOSE	CA (US)

QUALITY CHECKED

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

COMPULSORY REPORTING POINT: LOW

RECORD REVISION NUMBER: 7 **DATE OF REVISION:** 06/03/2010

REASON FOR REVISION:
REMOVED DME FROM TYPE

DEVELOPED BY:	**DATE:** 08/13/2009	**OFFICE:** AVN-130	**NAME:** ANDREW FIELDS
APPROVED BY:	**DATE:** 02/19/2010	**OFFICE:** AVN-130	**NAME:** RICK WEBB
	SIGNATURE:		

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZOA, ZSE
ATC FACILITY:
OTHER:

QUALITY CHECKED

INFO ONLY

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	MERLOT			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)

QUALITY CHECKED

IAP	VOR RWY 19R		KCCR	CONCORD	CA (US)
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-B	1	KHWD	HAYWARD	CA (US)
IAP	ILS OR LOC/DME RWY 25R		KLVK	LIVERMORE	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)		KOAK	OAKLAND	CA (US)
IAP	ILS RWY 29 (CAT 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)		KSFO	SAN FRANCISCO	CA (US)
IAP	ILS RWY 28R (CAT 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:** 06/30/2011

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)

APPROVED BY: **DATE:** 05/18/2011 **OFFICE:** AVN-130 **NAME:** DEZ SILAGYI

SIGNATURE:

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

INFO ONLY

RADIO FIX AND HOLDING DATA RECORD

NAME: POINT REYES VORTAC **STATE:** CA **COUNTRY:** US

LATITUDE/LONGITUDE: 380447.12N/1225204.18W **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	POINT REYES	PYE	VORTAC	H							45000
2	OAKLAND	OAK	VORTAC	H	287.93	304.93	37.22	37.22		5000	17500
3	SANTA ROSA	STS	VOR/DME	L	170.04	186.04	25.82	25.82		3000	17500

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	PYE	VORTAC	324.98	144.98	R	1-1 1/2	-	7000	45000	8	29

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	230	AAO	380224.00N/1224924.00W	1670	4E

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERN.

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED.
FAC 2&3 ARE BACKUP FACILITIES.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	GONGS			KCIC	CHICO	CA (US)
DP	BUCHANAN			KCCR	CONCORD	CA (US)
DP	KANAN			KCCR	CONCORD	CA (US)
DP	LIZRD			KAPC	NAPA	CA (US)
DP	MERLOT			KAPC	NAPA	CA (US)
DP	COAST			KOAK	OAKLAND	CA (US)
DP	NIMITZ			KOAK	OAKLAND	CA (US)
DP	NUEVO			KOAK	OAKLAND	CA (US)
DP	OAKLAND			KOAK	OAKLAND	CA (US)
DP	SKYLINE			KOAK	OAKLAND	CA (US)
DP	EUGEN			KSFO	SAN FRANCISCO	CA (US)
DP	MOLEN			KSFO	SAN FRANCISCO	CA (US)
DP	OFFSHORE			KSFO	SAN FRANCISCO	CA (US)
DP	PORTE			KSFO	SAN FRANCISCO	CA (US)
DP	FREES			KSTS	SANTA ROSA	CA (US)
EN ROUTE	J143					(US)
EN ROUTE	J501					(US)
EN ROUTE	J88					(US)
EN ROUTE	Q1					(US)
EN ROUTE	Q3					(US)
EN ROUTE	T257					(US)
EN ROUTE	V107					(US)
EN ROUTE	V25					(US)
EN ROUTE	V27					(US)
EN ROUTE	V301					(US)
IAP	LOC RWY 36L			KAPC	NAPA	CA (US)
IAP	RNAV (GPS) RWY 6			KAPC	NAPA	CA (US)
IAP	VOR RWY 6			KAPC	NAPA	CA (US)
IAP	ILS OR LOC RWY 11			KOAK	OAKLAND	CA (US)
IAP	GPS RWY 29			KO69	PETALUMA	CA (US)
IAP	VOR RWY 29			KO69	PETALUMA	CA (US)
IAP	ILS OR LOC RWY 32			KSTS	SANTA ROSA	CA (US)
IAP	RNAV (GPS) RWY 32			KSTS	SANTA ROSA	CA (US)
IAP	VOR RWY 32			KSTS	SANTA ROSA	CA (US)
IAP	VOR/DME RWY 14			KSTS	SANTA ROSA	CA (US)
STAR	LEENA			KLAX	LOS ANGELES	CA (US)
STAR	HADLY			KOAK	OAKLAND	CA (US)
STAR	GOLDEN GATE		1	KSFO	SAN FRANCISCO	CA (US)
STAR	HADLY			KSFO	SAN FRANCISCO	CA (US)
STAR	POINT REYES			KSFO	SAN FRANCISCO	CA (US)
STAR	STINS		1	KSFO	SAN FRANCISCO	CA (US)
STAR	BRINY		1	KSJC	SAN JOSE	CA (US)
STAR	GOLDEN GATE		1	KSJC	SAN JOSE	CA (US)

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

QUALITY CHECKED

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 12 **DATE OF REVISION:** 06/30/2011

REASON FOR REVISION:
UPDATED PAT1 CRS INBOUND FROM 144.73M TO 144.98M.
UPDATED PAT1 MIN ALT FROM 11000 TO 7000, AND MIN PAT FROM 9 TO 8.
UPDATED FIX USE.
ADDED REMARK FAC 2&3 ARE BACKUP FACILITIES.

DEVELOPED BY:	**DATE:** 08/23/2010	**OFFICE:** AVN-130	**NAME:** ADOLFO URRUTIA (AMANDA ROBBINS)
APPROVED BY:	**DATE:** 04/07/2011	**OFFICE:** AVN-130	**NAME:** DEZ SILAGYI
	SIGNATURE:		

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

INFO ONLY

RADIO FIX AND HOLDING DATA RECORD

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

LATITUDE/LONGITUDE: 382637.17N/1213305.84W **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	SACRAMENTO	SAC	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	SW	SAC	VORTAC	224.56	044.56	R	1-1 1/2		2000	45000	4	29
2	S	SAC	VORTAC	196.01	016.01	R	1-1 1/2		1400	45000	4	29
3	SW		WP	228.99	048.99	R		4	2000	14000	4	11

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	AAO	382112.00N/1213939.00W	305	4E
2	200	AAO	382000.00N/1213418.00W	355	4E
3	200	AAO	382112.00N/1213939.00W	305	4E

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERNS.

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	GONGS			KCIC	CHICO	CA (US)
DP	BUCHANAN			KCCR	CONCORD	CA (US)
DP	KANAN			KCCR	CONCORD	CA (US)
DP	TAKE-OFF MINS			KGOO	GRASS VALLEY	CA (US)
DP	BYRON			KLVK	LIVERMORE	CA (US)
DP	LIVERMORE			KLVK	LIVERMORE	CA (US)
DP	MERLOT			KAPC	NAPA	CA (US)
DP	OZIEE (RNAV)			KAPC	NAPA	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	SILENT			KOAK	OAKLAND	CA (US)
DP	TAKE-OFF MINS			KO88	RIO VISTA	CA (US)
DP	KATSO			KMCC	SACRAMENTO	CA (US)
DP	SACRO			KMCC	SACRAMENTO	CA (US)
DP	TAKE-OFF MINS			KMHR	SACRAMENTO	CA (US)
DP	DUDES			KSMF	SACRAMENTO	CA (US)
DP	FROGO			KSMF	SACRAMENTO	CA (US)
DP	DUMBARTON			KSFO	SAN FRANCISCO	CA (US)
DP	QUIET			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	DANVILLE			KSJC	SAN JOSE	CA (US)
DP	LOUPE			KSJC	SAN JOSE	CA (US)
DP	SUNOL			KSJC	SAN JOSE	CA (US)
DP	SOKOY			KVCB	VACAVILLE	CA (US)
DP	TAKE-OFF MINS			KO41	WOODLAND	CA (US)
EN ROUTE	J126					(US)
EN ROUTE	J32					(US)
EN ROUTE	J65					(US)
EN ROUTE	Q120					(US)
EN ROUTE	T259					(US)
EN ROUTE	V150					(US)
EN ROUTE	V23					(US)
EN ROUTE	V334					(US)
EN ROUTE	V392					(US)
EN ROUTE	V494					(US)
EN ROUTE	V585					(US)
EN ROUTE	V6					(US)
IAP	VOR RWY 19R			KCCR	CONCORD	CA (US)
IAP	RNAV (GPS) RWY 17			KEDU	DAVIS	CA (US)
IAP	VOR OR GPS-A			KGOO	GRASS VALLEY	CA (US)
IAP	ILS OR LOC RWY 15			KLHM	LINCOLN	CA (US)
IAP	ILS RWY 25R			KLVK	LIVERMORE	CA (US)
IAP	ILS OR LOC RWY 14			KMYV	MARYSVILLE	CA (US)
IAP	VOR RWY 32			KMYV	MARYSVILLE	CA (US)

QUALITY CHECKED

IAP	VOR/DME-A	2	KO88	RIO VISTA	CA (US)
IAP	ILS RWY 16		KMCC	SACRAMENTO	CA (US)
IAP	VOR/DME RWY 16		KMCC	SACRAMENTO	CA (US)
IAP	VOR/DME RWY 34		KMCC	SACRAMENTO	CA (US)
IAP	ILS OR LOC/DME RWY 22L		KMHR	SACRAMENTO	CA (US)
IAP	RNAV (GPS) RWY 22L	3	KMHR	SACRAMENTO	CA (US)
IAP	RNAV (GPS) RWY 4R		KMHR	SACRAMENTO	CA (US)
IAP	VOR RWY 4R	1	KMHR	SACRAMENTO	CA (US)
IAP	VOR/DME RWY 22L		KMHR	SACRAMENTO	CA (US)
IAP	ILS OR LOC RWY 2	2	KSAC	SACRAMENTO	CA (US)
IAP	VOR RWY 2	2	KSAC	SACRAMENTO	CA (US)
IAP	ILS OR LOC RWY 34L		KSMF	SACRAMENTO	CA (US)
IAP	ILS OR LOC RWY 16L		KSMF	SACRAMENTO	CA (US)
IAP	ILS OR LOC RWY 16R		KSMF	SACRAMENTO	CA (US)
IAP	ILS RWY 16R (CAT II, III)		KSMF	SACRAMENTO	CA (US)
IAP	RNAV (GPS) RWY 16L		KSMF	SACRAMENTO	CA (US)
IAP	RNAV (GPS) RWY 16R		KSMF	SACRAMENTO	CA (US)
IAP	RNAV (GPS) RWY 34L		KSMF	SACRAMENTO	CA (US)
IAP	RNAV (GPS) RWY 34R		KSMF	SACRAMENTO	CA (US)
IAP	RISTI		KSFO	SAN FRANCISCO	CA (US)
IAP	RNAV (GPS) Y RWY 20		KVCB	VACAVILLE	CA (US)
IAP	RNAV (GPS) Z RWY 20		KVCB	VACAVILLE	CA (US)
IAP	VOR/DME-A		KVCB	VACAVILLE	CA (US)
IAP	VOR/DME-A		KO41	WOODLAND	CA (US)
STAR	OAKEY		KSUU	FAIRFIELD	CA (US)
STAR	SQUAW VALLEY		KSUU	FAIRFIELD	CA (US)
STAR	CONCORD		KSMF	SACRAMENTO	CA (US)
STAR	FLUNK		KSMF	SACRAMENTO	CA (US)
STAR	TUDOR		KSMF	SACRAMENTO	CA (US)
STAR	WRAPS		KSMF	SACRAMENTO	CA (US)
STAR	POINT REYES		KSFO	SAN FRANCISCO	CA (US)
STAR	RISTI		KSFO	SAN FRANCISCO	CA (US)
STAR	CAPITOL		KSJC	SAN JOSE	CA (US)
STAR	SIERRA		KRNO	RENO	NV (US)
STAR	TARVR		KRNO	RENO	NV (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 17 **DATE OF REVISION:** 08/25/2011

REASON FOR REVISION:
UPDATED FIX USE.
REMOVED REMARK KMHR MAG VAR: 17E/1980.
UPDATED REQUIRED CHARTING.

DEVELOPED BY: **DATE:** 03/16/2011 **OFFICE:** AJV-354 **NAME:** ADOLFO URRUTIA (AISHAT NAUZO)

APPROVED BY: **DATE:** 06/13/2011 **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

SIGNATURE:

DISTRIBUTION: **NFDC**
FPO: WST
ARTCC: ZOA
ATC FACILITY:
OTHER:

INFO ONLY

RADIO FIX AND HOLDING DATA RECORD

NAME: SANTA ROSA VOR/DME **STATE:** CA **COUNTRY:** US

LATITUDE/LONGITUDE: 383029.44N/1224837.67W **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	SANTA ROSA	STS	VOR/DME	L							17500

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	STS	VOR/DME	320.00	140.00	R	1-1 1/2		4700	17000	6	16

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	AAO	383400.00N/1225706.00W	1700	4E
1	310	AAO	384551.00N/1225045.00W	3658	4E

PRECIPITOUS TERRAIN ADDITIONS:

PAT	SPEED	ADDITION
1	310	134

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERNS.

PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
1	TAKEOFF MINIMUMS	KO60	CLOVERDALE	CA (US)

REMARKS:
PAT 1 FOR ATC USE
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	TAKEOFF MINIMUMS		1	KO60	CLOVERDALE	CA (US)
DP	LIZRD			KAPC	NAPA	CA (US)
DP	MERLOT			KAPC	NAPA	CA (US)
DP	FREES			KSTS	SANTA ROSA	CA (US)
DP	SANTA ROSA			KSTS	SANTA ROSA	CA (US)
DP	TAKEOFF MINIMUMS			KSTS	SANTA ROSA	CA (US)
EN ROUTE	V108					(US)
EN ROUTE	V301					(US)
EN ROUTE	V494					(US)
IAP	RNAV (GPS) RWY 32			KO60	CLOVERDALE	CA (US)
IAP	RNAV (GPS) RWY 6			KAPC	NAPA	CA (US)
IAP	VOR RWY 6			KAPC	NAPA	CA (US)
IAP	GPS RWY 13			KDVO	NOVATO	CA (US)
IAP	ILS OR LOC RWY 32			KSTS	SANTA ROSA	CA (US)
IAP	RNAV (GPS) RWY 14			KSTS	SANTA ROSA	CA (US)
IAP	VOR RWY 32			KSTS	SANTA ROSA	CA (US)
IAP	VOR/DME RWY 14			KSTS	SANTA ROSA	CA (US)
STAR	POINT REYES			KSFO	SAN FRANCISCO	CA (US)
STAR	STINS			KSFO	SAN FRANCISCO	CA (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 5 **DATE OF REVISION:** 10/20/2011

REASON FOR REVISION:
UPDATED FIX USE.
ADDED C-I-H PATTERN.
ADDED PRECIPITOUS TERRAIN ADDITION.
ADDED PROCEDURES REQUIRING C-I-H INFORMATION.
RAISED MIN HOLDING ALT FROM 3000 TO 4700.
CHANGED MIN HOLDING TEMPLATE FROM 4 TO 6.

DEVELOPED BY: **DATE:** 06/27/2011 **OFFICE:** AJV-354 **NAME:** ADOLFO URRUTIA (THERON CYRUS)

QUALITY CHECKED

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

SIGNATURE:

DISTRIBUTION: **NFDC**
FPO: WST
ARTCC: ZOA
ATC FACILITY: STS ATCT
OTHER:

QUALITY CHECKED

INFO ONLY

RADIO FIX AND HOLDING DATA RECORD

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

LATITUDE/LONGITUDE: 390416.12N/1220138.09W **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	WILLIAMS	ILA	VORTAC	L							17500

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	S		WP	163.00	343.00	R		4	4000	14000	5	10

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
UPN	200	AAO	385839.00N/1221248.00W	1424	4E
1	200	AAO	385648.00N/1220518.00W	561	4E

HOLDING RESTRICTIONS:
UNPLANNED HOLDING AUTHORIZED AT OR ABOVE 3000

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	GONGS			KCIC	CHICO	CA (US)
DP	TEXTUAL DP			KO08	COLUSA	CA (US)
DP	TEXTUAL DP			KEDU	DAVIS	CA (US)
DP	TEXTUAL DP			KDWA	DAVIS WOODLAND WINTERS	CA (US)
DP	TEALL			KSUU	FAIRFIELD	CA (US)
DP	TEXTUAL DP			KMYV	MARYSVILLE	CA (US)
DP	MERLOT			KAPC	NAPA	CA (US)
DP	OAKLAND			KOAK	OAKLAND	CA (US)
DP	REBAS (PROP)			KSFO	SAN FRANCISCO	CA (US)
DP	FREES			KSTS	SANTA ROSA	CA (US)
DP	SOKOY			KVCB	VACAVILLE	CA (US)
DP	TEXTUAL DP			KO41	WOODLAND	CA (US)
EN ROUTE	Q138					(US)
EN ROUTE	V195					(US)
EN ROUTE	V200					CA (US)
EN ROUTE	V301					CA (US)
IAP	VOR/DME RWY 31R			KCIC	CHICO	CA (US)
IAP	GPS RWY 13		1	KO08	COLUSA	CA (US)
IAP	VOR-A			KO08	COLUSA	CA (US)
IAP	RNAV (GPS) RWY 17			KEDU	DAVIS	CA (US)
IAP	RNAV (GPS) RWY 16			KDWA	DAVIS WOODLAND WINTERS	CA (US)
IAP	ILS OR LOC RWY 15			KLHM	LINCOLN	CA (US)
IAP	ILS OR LOC RWY 14			KMYV	MARYSVILLE	CA (US)
IAP	VOR RWY 32			KMYV	MARYSVILLE	CA (US)
IAP	ILS RWY 16			KMCC	SACRAMENTO	CA (US)
IAP	VOR/DME RWY 16			KMCC	SACRAMENTO	CA (US)
IAP	ILS OR LOC RWY 16L			KSMF	SACRAMENTO	CA (US)
IAP	ILS OR LOC RWY 16R			KSMF	SACRAMENTO	CA (US)
IAP	ILS OR LOC RWY 34L			KSMF	SACRAMENTO	CA (US)
IAP	ILS RWY 16R (CAT II)			KSMF	SACRAMENTO	CA (US)
IAP	ILS RWY 16R (CAT III)			KSMF	SACRAMENTO	CA (US)
IAP	RNAV (GPS) RWY 34			KWLW	WILLOWS	CA (US)
IAP	VOR/DME RWY 34			KWLW	WILLOWS	CA (US)
STAR	SEATO			KSUU	FAIRFIELD	CA (US)
STAR	SQUAW VALLEY			KSUU	FAIRFIELD	CA (US)
STAR	RAIDR (RNAV)			KOAK	OAKLAND	CA (US)
STAR	TUDOR			KSMF	SACRAMENTO	CA (US)
STAR	GOLDEN GATE			KSFO	SAN FRANCISCO	CA (US)
STAR	STINS			KSFO	SAN FRANCISCO	CA (US)
STAR	BRINY			KSJC	SAN JOSE	CA (US)
STAR	GOLDEN GATE			KSJC	SAN JOSE	CA (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 14 **DATE OF REVISION:** 12/15/2011

QUALITY CHECKED

REASON FOR REVISION:
UPDATED UNPLANNED HOLDING OBSTRUCTION FROM 1293 TO 1424.
REMOVED HOLDING LIMITED TO ESTABLISHED PATTERNS REMARK.
UPDATED FIX USE.
UPDATED PAT 1/UPN HOLDING OBSTRUCTIONS.

DEVELOPED BY:	**DATE:** 05/12/2011	**OFFICE:** AJV-354	**NAME:** ADOLFO URRUTIA (PHILLIP BRANDENBURG)
APPROVED BY:	**DATE:**	**OFFICE:** AJV-354	**NAME:** DEZ SILAGYI
	SIGNATURE:		

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

QUALITY CHECKED