Flight Procedure Tracking Form	Action: FLIGHT CHECK	Task Type: IAP	Date Open: 02/08/2013	Task #: 2012102228987901020	Request #: 20121022289879
Procedure: RNAV (GPS) X RWY 28 R ORIG		Airport ID: KSFO	Airport: SAN FRANCISCO INTL		Reimbursable #:
City: SAN FRANCISCO	ST: CA	GPS #:		Estimated Chart Date: 06/27/2013	FICO #:
Fac ID:	Fac. Type: LNAV	Specialist: CHARLES SCHNEIDER			

Procedure Review

	Rec'd	Rel'd	Full Name	Comments
Lead:	11/19/2012	03/06/2013	CASIMIR TABAKA	
QA:	03/06/2013	03/06/2013	CASIMIR TABAKA	
Liaison:	03/06/2013		Spurlin	

P1

Procedure Comments: ENROUTE-NON

Remark Type: INFORMATION

pts 1 of 2

SAN FRANCISCO, CA SAN FRANCISCO INTL (KSFO) RNAV (GPS) X RWY 28R, ORIG (LNAV) ENROUTE-NO FC: 4.30.13 PUB: 6.27.13

ATTACHED FORMS: ESV REPORTS; 8260-3; 8260-10; 8260-9; 8260-2(S): ANETE-INT, REV 3; CFFKC, ORIG; DARNE-INT, REV 1; FATUS-INT, REV 1; GOBEC-INT, REV 1; HEGOT-INT, REV 1; MIUKE-INT, REV 3; OAKLAND (OAK) VTAC, REV 14; WASOP-INT, REV 1.

CONTACT: PETE GETZ/LONNIE EVERHART-AVN-130 LEADS, 405.954.2079/ 405.954.4576.

RNAV (GPS) X RWY 28R
SAN FRANCISCO INTL (SFO)

APP CRS	Rwy ldg	11570
278°	THRE	13
	Apt Elev	13

NA

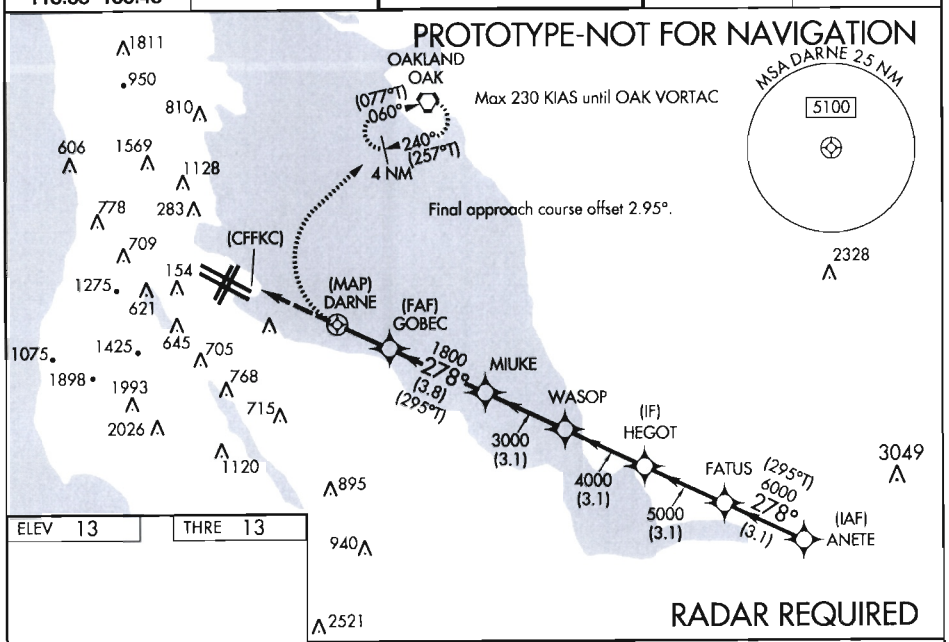
Runway 28L and 28R separated by 750 feet centerline to centerline. DME/DME RNP-0.3 NA. When executing a missed approach or go-around, unless otherwise instructed by ATC, initially turn right to 030° utilizing heading mode. Inoperative table does not apply. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 2°C (36°F) or above 54°C (130°F). RNAV course 1183 feet right of Rwy 28R threshold.

*If a go-around executed after passing DARNE, go-around requires a minimum climb of 380 feet per NM to 1800.

ALSF-2

MISSED APPROACH: Climbing right turn to 3000 on heading 030° then direct OAK VORTAC and hold.

ATIS	NORCAL APP CON	SAN FRANCISCO TOWER	GND CON	CLNC DEL
113.7 115.8 118.85 135.45	134.5 338.2	120.5 269.1	121.8	118.2

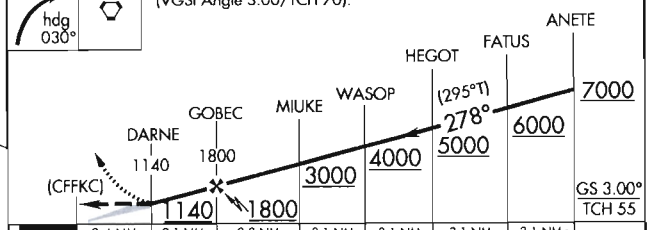


ELEV 13 THRE 13

RADAR REQUIRED

3000 hdg 030° OAK

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 70).



278° to (CFFKC)

CATEGORY	A	B	C	D
LNAV/VNAV DA*	1140-4 1127 (1200-4)			
LNAV MDA*	1140-4 1127 (1200-4)			

TDZ/CL Rwys 19L and 28R
REIL Rwys 1L, 1R, and 10L
HIRL all Rwys

ESV Details

Originating Office :	Airspace Docket Number :	Request Type : Establish	
Facility Data			
Chart Name : LDA/DME RWY 28R(KSFO)	City : SAN FRANCISCO	Ident : FNP	State : CA
Type/Class : LOC	Frequency : M110.75	Reference No.: 13016428	

Expanded Service Volume Data: (Requesting Officer)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude
FAA 000593-008	98	0	17	50	60

Requirement: FIX HEGOT LDA SFO R28R

Signature: Schneider charles	Routing Symbol: AJV-354	Date: 01/30/2013

Expanded Service Volume Data: (FMO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 000593-008	98	0	17	50	60	APPROVE

Requirement/Remarks: FIX HEGOT LDA SFO R28RAPPROVED. PEND. FLIGHT CHK/INSPECT @ THE REQ. DIST. AND MIN ALT.

Signature: HEPSEN JOHN	Routing Symbol:	Date: 01/31/2013

Expanded Service Volume Data: (Super FMO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 000593-008	98	0	17	50	60	APPROVE

Requirement/Remarks: FIX HEGOT LDA SFO R28RAPPROVED. PEND. FLIGHT CHK/INSPECT @ THE REQ. DIST. AND MIN ALT.

Signature: Hughes Dennis	Routing Symbol:	Date: 02/01/2013

Expanded Service Volume Data: (FIFO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 000593-008	98	0				

Requirement/Remarks:

Signature:	Routing Symbol:	Date:

ESV Details

Originating Office :	Airspace Docket Number :	Request Type : Establish	
Facility Data			
Chart Name : LDA/DME RWY 28R(KSFO)	City : SAN FRANCISCO	Ident : FNP	State : CA
Type/Class : LOC	Frequency : M110.75	Reference No.: 13016429	

Expanded Service Volume Data: (Requesting Officer)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude
FAA 000593-009	98	0	20	60	70

Requirement: FIX FATUS SFO LDA R28R

Signature: Schneider charles	Routing Symbol: AJV-354	Date: 01/30/2013

Expanded Service Volume Data: (FMO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 000593-009	98	0	20	60	70	APPROVE

Requirement/Remarks: FIX FATUS SFO LDA R28RAPPROVED. PEND. FLIGHT CHK/INSPECT @ THE REQ. DIST. AND MIN ALT.

Signature: HEPSEN JOHN	Routing Symbol:	Date: 01/31/2013

Expanded Service Volume Data: (Super FMO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 000593-009	98	0	20	60	70	APPROVE

Requirement/Remarks: FIX FATUS SFO LDA R28RAPPROVED. PEND. FLIGHT CHK/INSPECT @ THE REQ. DIST. AND MIN ALT.

Signature: Hughes Dennis	Routing Symbol:	Date: 02/01/2013

Expanded Service Volume Data: (FIFO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 000593-009	98	0				

Requirement/Remarks:

Signature:	Routing Symbol:	Date:

ESV Details

Originating Office :	Airspace Docket Number :	Request Type : Establish	
Facility Data			
Chart Name : LDA/DME RWY 28R(KSFO)	City : SAN FRANCISCO	Ident : FNP	State : CA
Type/Class : LOC	Frequency : M110.75	Reference No.: 13016430	

Expanded Service Volume Data: (Requesting Officer)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude
FAA 000593-010	98	0	23	70	90

Requirement: FIX ANETE SFO LDA R28R

Signature: Schneider charles	Routing Symbol: AJV-354	Date: 01/30/2013

Expanded Service Volume Data: (FMO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 000593-010	98	0	23	70	90	APPROVE

Requirement/Remarks: FIX ANETE SFO LDA R28RAPPROVED. PEND. FLIGHT CHK/INSPECT @ THE REQ. DIST. AND MIN ALT.

Signature: HEPSEN JOHN	Routing Symbol:	Date: 01/31/2013

Expanded Service Volume Data: (Super FMO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 000593-010	98	0	23	70	90	APPROVE

Requirement/Remarks: FIX ANETE SFO LDA R28RAPPROVED. PEND. FLIGHT CHK/INSPECT @ THE REQ. DIST. AND MIN ALT.

Signature: Hughes Dennis	Routing Symbol:	Date: 02/01/2013

Expanded Service Volume Data: (FIFO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 000593-010	98	0				

Requirement/Remarks:

Signature:	Routing Symbol:	Date:

ESV Details

Originating Office :	Airspace Docket Number :	Request Type : Establish	
Facility Data			
Chart Name : LDA/DME RWY 28R(KSFO)	City : SAN FRANCISCO	Ident : FNP	State : CA
Type/Class : DME	Frequency : M1131	Reference No.: 13016431	

Expanded Service Volume Data: (Requesting Officer)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude
FAA 000595-007	98	0	20	60	70

Requirement: FIX FATUS SFO LDA R28R

Signature: Schneider charles	Routing Symbol: AJV-354	Date: 01/30/2013

Expanded Service Volume Data: (FMO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 000595-007	98	0	20	60	70	APPROVE

Requirement/Remarks: FIX FATUS SFO LDA R28RAPPROVED. PEND. FLIGHT CHK/INSPECT @ THE REQ. DIST. AND MIN ALT.

Signature: HEPSEN JOHN	Routing Symbol:	Date: 01/31/2013

Expanded Service Volume Data: (Super FMO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 000595-007	98	0	20	60	70	APPROVE

Requirement/Remarks: FIX FATUS SFO LDA R28RAPPROVED. PEND. FLIGHT CHK/INSPECT @ THE REQ. DIST. AND MIN ALT.

Signature: Hughes Dennis	Routing Symbol:	Date: 02/01/2013

Expanded Service Volume Data: (FIFO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 000595-007	98	0				

Requirement/Remarks:

Signature:	Routing Symbol:	Date:

ESV Details

Originating Office :	Airspace Docket Number :	Request Type : Establish	
Facility Data			
Chart Name : LDA/DME RWY 28R(KSFO)	City : SAN FRANCISCO	Ident : FNP	State : CA
Type/Class : DME	Frequency : M1131	Reference No.: 13016432	

Expanded Service Volume Data: (Requesting Officer)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude
FAA 000595-008	98	0	23	70	90

Requirement: FIX ANETE SFO LDA R28R

Signature: Schneider charles	Routing Symbol: AJV-354	Date: 01/30/2013

Expanded Service Volume Data: (FMO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 000595-008	98	0	23	70	90	APPROVE

Requirement/Remarks: FIX ANETE SFO LDA R28RAPPROVED. PEND. FLIGHT CHK/INSPECT @ THE REQ. DIST. AND MIN ALT.

Signature: HEPSEN JOHN	Routing Symbol:	Date: 01/31/2013

Expanded Service Volume Data: (Super FMO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 000595-008	98	0	23	70	90	APPROVE

Requirement/Remarks: FIX ANETE SFO LDA R28RAPPROVED. PEND. FLIGHT CHK/INSPECT @ THE REQ. DIST. AND MIN ALT.

Signature: Hughes Dennis	Routing Symbol:	Date: 02/01/2013

Expanded Service Volume Data: (FIFO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 000595-008	98	0				

Requirement/Remarks:

Signature:	Routing Symbol:	Date:

US DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

RNAV - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

TERMINAL ROUTES

FROM	TO	COURSE AND DISTANCE	ALTITUDE
ANETE (IAF)	FATUS (FB)	278.06 / 3.14	6000
FATUS	HEGOT (FB)	278.03 / 3.14	5000
HEGOT (IF)	WASOP (FB)	277.99 / 3.14	4000
WASOP	MIUKE (FB)	277.95 / 3.14	3000
MIUKE	GOBEC (FB)	277.92 / 3.77	1800
GOBEC (FAF)	DARNE (FO)	277.87 / 2.07	
DARNE	(CFFKC) (FO)	277.87 / 3.37	
(SEE FORM 8260-10)			

MISSED APPROACH

LNAV/VNAV: DA
LNAV: DARNE

CLIMBING RIGHT TURN TO 3000 ON HEADING 030 THEN DIRECT OAK VORTAC AND HOLD.

ADDITIONAL FLIGHT DATA:
HOLD SW, RT, 060.00 INBOUND.
CHART FAS OBST: 320 T-L TWR 373511N/1221450W
DISTANCE TO THLD FROM 1127 HATH: 3.37 NM.
CHART MISSED APPROACH AND MSA AT/FROM DARNE
CHART PLANVIEW NOTE: FINAL APPROACH COURSE OFFSET 2.95 DEGREES

1. PT ____ SIDE OF COURSE ____ OUTBOUND ____ FT WITHIN ____ MILES OF ____ (IAF)
2. PROFILE STARTS AT ANETE
3. FAC: 277.87 FAF: GOBEC DIST FAF TO MAP: 5.44 THLD: 5.44
4. MIN. ALT: ANETE 7000, FATUS 6000, HEGOT 5000, WASOP 4000, MIUKE 3000, GOBEC 1800, DARNE 1140
5. DIST TO THLD FROM OM: ____ MM: ____ IM: ____ 150 HAT: ____ 100 HAT: ____ GS ANT: ____
6. MIN GS INCPT: 1800 GS ALT AT: GOBEC 1800, DARNE 1140 OM: ____ MM: ____ IM: ____
7. GS ANGLE: 3.00 TCH: 55.2 34:1 IS CLEAR
8. MSA FROM: DARNE 5100

MAG VAR: 17E EPOCH YEAR: 1975

MINIMUMS

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

CATEGORY =====>	A			B			C			D			E		
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA
LNAV/VNAV DA #	1140	4	1127	1140	4	1127	1140	4	1127	1140	4	1127			
LNAV MDA #	1140	4	1127	1140	4	1127	1140	4	1127	1140	4	1127			

NOTES:
CHART NOTE: RUNWAY 28L AND 28R SEPARATED BY 750 FEET CENTERLINE TO CENTERLINE.
CHART NOTE: DME/DME RNP-0.3 NA.
CHART PLANVIEW NOTE: RADAR REQUIRED.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT.
(SEE FORM 8260-10)

QUALITY 4 CHECKED

CITY AND STATE	ELEVATION: 13 THRE: 13 AIRPORT NAME:	FACILITY IDENTIFIER:	PROCEDURE NO./AMDT NO./EFFECTIVE DATE:	SUP:
SAN FRANCISCO, CA	SAN FRANCISCO INTL	RNAV	RNAV (GPS) X RWY 28R, ORIG	AMDT: NONE
				DATED

ALL AFFECTED PROCEDURES REVIEWED?	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE
[ ] YES [X] NO		**ROUTINE**

COORDINATED WITH:

ATA	AAT	ALPA	APA	AOPA	NBAA	OTHER (specify)
[X]	[ ]	[X]	[X]	[X]	[X]	[X] **ZOA, NORCAL APP CON, SFO ATCT, AMGR**

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME: **CHARLIE SCHNEIDER**	FIFO **AJV-354**	DATE: **02/08/2013**
APPROVED BY		
NAME: **DEBORAH COPELAND** **MANAGER**	FIFO **AJV-354**	DATE:

CHANGES:

1. ORIGINAL PROCEDURE

REASONS:

1. FTP REQUEST

QUALITY A CHECKED

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above aiport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
(CFFKC)	3000 MSL (VA)	030.00	3000
3000 MSL	OAK VORTAC (FO)		3000

NOTES, (CONT.):
CHART NOTE: WHEN EXECUTING A MISSED APPROACH OR GO AROUND, UNLESS OTHERWISE INSTRUCTED BY ATC, INITIALLY TURN RIGHT TO 030 DEGREES UTILIZING HEADING MODE.
CHART NOTE: #IF A GO AROUND EXECUTED AFTER PASSING DARNE, GO AROUND REQUIRES A MINIMUM CLIMB OF 380 FEET PER NM TO 1800.
CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW 2C (36F) OR ABOVE 54C (130 F)
CHART PLANVIEW NOTE AT OAKLAND VORTAC: MAX 230 KIAS UNTIL OAK VORTAC
CHART NOTE: RNAV COURSE 1183 FT RIGHT OF RWY 28R THRESHOLD

QUALITY 4 CHECKED

CITY AND STATE	ELEVATION: 13 THRE: 13	FACILITY IDENTIFIER:	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:	SUP:
SAN FRANCISCO, CA	AIRPORT NAME: SAN FRANCISCO INTL	RNAV	RNAV (GPS) X RWY 28R, ORIG	AMDT: NONE
				DATED:

ALL AFFECTED PROCEDURES REVIEWED?	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE
☐ YES ☐ NO		

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER (specify) ☐ _____

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	FIFO	DATE:
APPROVED BY		
NAME:	FIFO	DATE:

CHANGES:

REASONS:

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE

FLIGHT STANDARDS SERVICES - **FAR PART 97.33**

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

ARINC PACKET - 424-18 - RNAV (GPS)

```
                 1         2         3         4         5         6         7         8         9         0         1         2         3
NAVAID  123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAD        OAK   K2011680VTHA N37433332W122132491    N37433332W122132491E0170000132     NAROAKLAND

                 1         2         3         4         5         6         7         8         9         0         1         2         3
WP      123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAEAENRT   ANETE K20    C     N37274946W121563391                     E0138     NAR           ANETE
        SUSAEAENRT   CFFKC K20    W     N37370071W122212283                     E0139     NAR           CNF(CFFKC)
        SUSAEAENRT   DARNE K20    C     N37353579W122173213                     E0139     NAR           DARNE
        SUSAEAENRT   FATUS K20    C     N37290929W122000829                     E0139     NAR           FATUS
        SUSAEAENRT   GOBEC K20    C     N37344344W122151018                     E0139     NAR           GOBEC
        SUSAEAENRT   HEGOT K20    C     N37302902W122034280                     E0139     NAR           HEGOT
        SUSAEAENRT   MIUKE K20    C     N37330816W122105225                     E0139     NAR           MIUKE
        SUSAEAENRT   WASOP K20    C     N37314864W122071746                     E0139     NAR           WASOP

                 1         2         3         4         5         6         7         8         9         0         1         2         3
AIRPORT 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KSFOK2ASFO     0     115YHN37370878W122223085E017000013         1800018000C    MNAR    SAN FRANCISCO INTL

                 1         2         3         4         5         6         7         8         9         0         1         2         3
SEGMENT 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KSFOK2FR28RX AANETE 010ANETEK2EA0E  A    IF                                  + 07000     18000                A JS
        SUSAP KSFOK2FR28RX AANETE 020FATUSK2EA0E    010TF                      27810031    + 06000                          A JS
        SUSAP KSFOK2FR28RX AANETE 030HEGOTK2EA0EE B 010TF                      27800031    + 05000                          A JS
        SUSAP KSFOK2FR28RX R      010HEGOTK2EA0E  I    IF                                  + 05000     18000                A JS
        SUSAP KSFOK2FR28RX R      011WASOPK2EA0E S  051TF                      27800031    + 04000                          A JS
        SUSAP KSFOK2FR28RX R      012MIUKEK2EA0E S  051TF                      27800031    + 03000                          A JS
        SUSAP KSFOK2FR28RX R      020GOBECK2EA1E  F 051TF                      27790038    + 01800                 DARNE K2EAA JS
        SUSAP KSFOK2FR28RX R      020GOBECK2EA2WN         ALNAV/VNAV ALNAV                                                      JS
        SUSAP KSFOK2FR28RX R      021DARNEK2EA0EYS  031TF                      27790021    V 0114001140        -300          A JS
        SUSAP KSFOK2FR28RX R      030CFFKCK2EA0EY M 031TF                      27790034      00068             -300          A JS
        SUSAP KSFOK2FR28RX R      040         0  M R   VA                      0300        + 03000                          A JS
        SUSAP KSFOK2FR28RX R      050OAK  K2D 0VY      DF                                  + 03000          230             A-JS
        SUSAP KSFOK2FR28RX R      060OAK  K2D 0VE  R   HM                      06000040    + 03000                          A JS

                 1         2         3         4         5         6         7         8         9         0         1         2         3
RUNWAY  123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KSFOK2GRW28R   0115702808 N37365010W122212900-0100    -0028700013000055200I
```

QUALITY CHECKED A

CITY AND STATE	ELEVATION: 13 THRE: 13	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
SAN FRANCISCO, CA	AIRPORT NAME: **SAN FRANCISCO INTL**	**RNAV**	**RNAV (GPS) X RWY 28R, ORIG**	AMDT: **NONE**
				DATED:

ALL AFFECTED PROCEDURES REVIEWED?	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE
☐ YES ☐ NO		

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER (specify) ☐ _____

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	NFPG	DATE:
APPROVED BY		
NAME:	NFPG	DATE:

CHANGES:

REASONS:

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

```
                 1         2         3         4         5         6         7         8         9         0         1         2         3
MSA     123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KSFOK2SDARNEK2EA                0   18018005125                                                                          M
```

QUALITY CHECKED

CITY AND STATE	ELEVATION: 13 THRE: 13	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
SAN FRANCISCO, CA	AIRPORT NAME: SAN FRANCISCO INTL	RNAV	RNAV (GPS) X RWY 28R, ORIG	AMDT: NONE
				DATED:

ALL AFFECTED PROCEDURES REVIEWED?	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE
☐ YES ☐ NO		

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER (specify) ☐ _____

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	NFPG	DATE:
APPROVED BY		
NAME:	NFPG	DATE:

CHANGES:

REASONS:

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE

FLIGHT STANDARDS SERVICES - **FAR PART 97.33**

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

ARINC SUMMARY - 424-18 - RNAV (GPS)

ROUTES	TRANSITION	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
	ANETE	ANETE	010	IAF	IF		FB				AA 07000	
	ANETE	FATUS	020		TF		FB	1.0	278.1(295.1T)	003.1	AA 06000	
	ANETE	HEGOT	030		TF		FB	1.0	278.0(295.0T)	003.1	AA 05000	
		HEGOT	010	FACF	IF		FB				AA 05000	
		WASOP	011	SDF	TF		FB	0.5	278.0(295.0T)	003.1	AA 04000	
		MIUKE	012	SDF	TF		FB	0.5	278.0(295.0T)	003.1	AA 03000	
		GOBEC	020	FAF	TF		FB	0.5	277.9(294.9T)	003.8	AA 01800	
		DARNE	021	SDF	TF		FO	0.3	277.9(294.9T)	002.1	AA 01140 GS 01140	
		CFFKC	030	MAP	TF		FO	0.3	277.9(294.9T)	003.4	AT 00068	

MISSED APPROACH	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
		040		VA	R	FB		030.0(047.0T)		AA 03000	
	OAK	050		DF		FO				AA 03000	AB 230
	OAK	060		HM	R	FO		060.0(077.0T)	004.0	AA 03000	

POINT DATA	WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS
	OAK	N374333.32	W1221324.91	N3743.555	W12213.415
	ANETE	N372749.46	W1215633.91	N3727.824	W12156.565
	CFFKC	N373700.71	W1222122.83	N3737.012	W12221.381
	DARNE	N373535.79	W1221732.13	N3735.597	W12217.536
	FATUS	N372909.29	W1220008.29	N3729.155	W12200.138
	GOBEC	N373443.44	W1221510.18	N3734.724	W12215.170
	HEGOT	N373029.02	W1220342.80	N3730.484	W12203.713
	MIUKE	N373308.16	W1221052.25	N3733.136	W12210.871
	WASOP	N373148.64	W1220717.46	N3731.811	W12207.291
	RW28R	N373650.10	W1222129.00	N3736.835	W12221.483

RUNWAY DATA	RWY	THRESHOLD ELEVATION	TCH
	RW28R	00013	55

QUALITY CHECKED

CITY AND STATE	ELEVATION: 13 THRE: 13	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
SAN FRANCISCO, CA	AIRPORT NAME: SAN FRANCISCO INTL	RNAV	RNAV (GPS) X RWY 28R, ORIG	AMDT: NONE
				DATED:

ALL AFFECTED PROCEDURES REVIEWED?	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE
☐ YES ☐ NO		

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER (specify) ☐ _____

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	NFPG	DATE:
APPROVED BY		
NAME:	NFPG	DATE:

CHANGES:

REASONS:

STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD

PART - A OBSTRUCTION DATA

1. APP SEGMENT	FROM	TO	OBSTRUCTION	COORDINATES	ELEV. MSL	ROC	ALT. ADJUSTMENTS	MIN. ALT.
INITIAL	ANETE	FATUS	1. AAO	372912.00N/1215427.00W	643 (4E)	1000	DG4357	6000
			2. TERRAIN	372939.00N/1215533.00W	105 (100)		AS1500	1600
INITIAL: STEPDOWN	FATUS	HEGOT	3. AAO	373142.00N/1220406.00W	250 (4E)	1000	DG3750	5000
			4. TERRAIN	373130.00N/1220033.00W	30 (0)		AS1500	1500
INTERMEDIATE	HEGOT	WASOP	5. AAO	373218.00N/1220433.00W	450 (4E)	500	AC98 DG2952	4000
			6. TERRAIN	373318.00N/1220539.00W	250 (300)		AS1500	1800
INTERMEDIATE: STEPDOWN	WASOP	MIUKE	7. AAO	373303.00N/1220539.00W	450 (4E)	500	AC98 DG1952	3000
			8. TERRAIN	373336.00N/1220615.00W	37 (0)		AS1500	1500
INTERMEDIATE: STEPDOWN	MIUKE	GOBEC	9. TOWER (06-000075)	373250.00N/1221402.00W	560 (1D)	500	DG740	1800
			10. TERRAIN	373527.00N/1221433.00W	14 (0)		AS1500	1500
FINAL: LNAV/VNAV	GOBEC	DARNE				ASC		1140
FINAL: LNAV/VNAV STEPDOWN	DARNE	(CFFKC)				ASC		1140/1127
FINAL: LNAV	GOBEC	DARNE	13. T-L TWR (06-000774)	373510.80N/1221449.80W	320 (5D)	250	AC50 AT520	1140
2. PROCEDURE TURN	NA							
3. MISSED APPROACH MAP:	DA / (CFFKC)	OAK VORTAC				ASC		3000
			11. AAO	374041.52N/1222520.98W	1399 (4E)	1000		2400
ELEV:	979/1040		12. TERRAIN	374041.52N/1222520.98W	1199 (1200)		AS1500	2700

4. CIRCLING AREA	DISTANCE	HT. ABV. ARPT. REQUIRED	HT. ABV. ARPT. ACTUAL
CATEGORY A	1.3 NM	350	
CATEGORY B	1.5 NM	450	
CATEGORY C	1.7 NM	450	
CATEGORY D	2.3 NM	550	
CATEGORY E	4.5 NM	550	

5. MINIMUM SAFE ALTITUDES — PRIMARY NAVAID: DARNE

SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A	SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A
360-360	AAO	036/ 26.3	4049 (4E)	5100					

QUALITY

CITY AND STATE	ELEVATION: 13 AIRPORT NAME:	FACILITY	PROCEDURE AND AMENDMENT NO:	REGION
SAN FRANCISCO, CA	SAN FRANCISCO INTL	RNAV	RNAV (GPS) X RWY 28R, ORIG	AWP

PART B - SUPPLEMENTAL DATA

1. COMMUNICATIONS WITH:	2. WEATHER SERVICE		3. ALTIMETER SETTING
NORCAL APP CON ZOA ARTCC SFO TOWER	N W S F A A A / C	OTHER: ASOS	SOURCE: KSFO DISTANCE: 0 HOURS REMOTE OPERATION: 0
SATISFACTORY ON: X VHF X UHF HF	LOCATION: KSFO		ADJUSTMENT: 0

4. MONITOR STATUS	PRIMARY NAVAID:	
	MONITOR POINT:	
	HRS OPTN: CAT 1	
	HRS OPTN: CAT 3	
5. APPROACH & RUNWAY LIGHTING	X	ALSF-2 28R
		(S) SALS
	X	MALSR 28L MALSF 19L
	X	HIRL 01R, 19L, 01L, 10L, 10R, 19R, 28R, 28L
		MIRL
	X	REIL 01R, 01L, 10L
	X	TDZ 19L, 28R
	X	C/L 01R, 19L, 01L, 10L, 10R, 19R, 28R, 28L
	X	OTHER (SPECIFY) PAPI-4L 19L, 10L, 10R, 19R, 28R, 28L
6. RUNWAY MARKINGS	BASIC	
	ALL WEATHER	PIR-G 01R, 19L, 10L, 10R, 28R, 28L
	INSTRUMENT	NPI-G 01L, 19R
7. RUNWAY VISUAL RANGE	APPROACH	01R, 19L, 01L, 10L, 10R, 19R, 28R, 28L
	MIDFIELD	01R, 19L, 01L, 10L, 10R, 19R, 28R, 28L
	ROLL OUT	01R, 19L, 01L, 10L, 10R, 19R, 28R, 28L
8. GLIDE PATH	GP ANGLE: 3.00	ELEV RWY THRESHOLD: 12.7
	DISTANCE FROM RWY:	ELEV GP ANTENNA:
		THRESHOLD CROSSING HEIGHT: 55.2
9. FINAL APPROACH COURSE AIMING	X	RUNWAY THRESHOLD — FT. FROM THRESHOLD
		ON CENTERLINE — FT. FROM CENTERLINE

10. WAIVERS: NONE

PART D - PREPARED BY: CHARLIE SCHNEIDER	DATE: 02/08/2013
TITLE: AERONAUTICAL INFORMATION SPECIALIST	OFFICE: AJV-354

PART C - REMARKS:

VDP NOT ESTABLISHED - VDP WITHIN 0.5 NM FROM MAP.

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

SEE ATTACHED AIRSPACE LETTER.

BACKUP ALTIMETER SOURCE NOT UTILIZED. KSFO HAS REDUNDANT REPORTING WEATHER SOURCES

KSFO ASOS ON SERVICE A: 24 HRS

VGSI DATA: 3.00/68.1

IPDS MISSED APPROACH 25 DEGREES OF BANK USED, 230KT AIRSPEED UNTIL OAKLAND VORTAC, COORDINATED WITH SFO NORCAL APP CON

BARO-VNAV NA BELOW 2 (36F) OR ABOVE 54C (130F)
ACT 2
DELTA ISA LOW -12.97
DESCENT RATE: STANDARD TEMP 954 HIGH TEMP 1114
TEMPERATURE LIMITS, DELTA ISA LOW, AND DESCENT VALUES DERIVED FROM AFS-400 CALCULATOR

AVERAGE COLD TEMPERATURE BASED ON 5-YEAR HISTORY (2007-2011)

DA OF 1140 SET BY AFS-420

LNAV/VNAV SLOPE: 21.71

VKTW: 99% WINDS OBTAINED FROM HISTORICAL WIND DATA (MITRE)
ALT. IN FEET 99%
0-500 22.2
500-1000 28.6
1000-1500 32.8
1500-2000 34.2
2000-2500 34.8
2500-3000 35.8
3000-3500 36.7
3500-4000 38.7
4000-4500 38.9
4500-5000 38.9
5000-5500 39.8
5500-6000 39.4

VEGETATION 165 FT, SHIPS OUTSIDE OF 3 NM 150FT, SHIPPING CHANNEL LOCATED
OUTSIDE OF 3NM FROM SHORE PER FPT, PER ATC AND FPT, BOAT HEIGHTS
WITHIN 3NM ARE SMALL ENOUGH TO HAVE NO IMPACT ON PROCEDURE

PROCEDURE CONSTRUCTED USING PSEUDO RWY:
PSEUDO THLD: 373700.71N/1222122.83W
PSEUDO STOP END: 373715.23N/1222202.32W
PSEUDO TRUE BEARING: 294.81T/280.81M

BALKED LANDING AT (CFFKC) BASED ON A 200 FT ILS HAT PER 8260.49. 1399FT AAO PENETRATES BALKED LANDING 40:1 SURFACE. BALKED LANDING CLIMB GRADIENT CALCULATED PER 8260.58 CALCULATOR 5-9.

WRITTEN COMMUNICATION FROM SFO TRACON CONFIRMS NO VECTORS TO INTERCEPT ANY FIXES AT GREATER THAN 30 DEGREES.
CONT.

QUALITY CHECKED

STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD

PART - A OBSTRUCTION DATA

1. APP SEGMENT	FROM	TO	OBSTRUCTION	COORDINATES	ELEV. MSL	ROC	ALT. ADJUSTMENTS	MIN. ALT.
FINAL: LNAV STEPDOWN	DARNE	(CFFKC)				ASC		1140

3. MISSED APPROACH									
	MAP:								
	ELEV:								

4. CIRCLING AREA	DISTANCE	HT. ABV. ARPT.								
CATEGORY A	1.3 NM	REQUIRED	350	ACTUAL						
CATEGORY B	1.5 NM		450							
CATEGORY C	1.7 NM		450							
CATEGORY D	2.3 NM		550							
CATEGORY E	4.5 NM		550							

5. MINIMUM SAFE ALTITUDES

PRIMARY NAVAID:

SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A	SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A

QUALITY CHECKED

CITY AND STATE	ELEVATION: 13	FACILITY	PROCEDURE AND AMENDMENT NO:	REGION
SAN FRANCISCO, CA	AIRPORT NAME: SAN FRANCISCO INTL	RNAV	RNAV (GPS) X RWY 28R, ORIG	AWP

PART B - SUPPLEMENTAL DATA

1. COMMUNICATIONS WITH:	2. WEATHER SERVICE		3. ALTIMETER SETTING
SATISFACTORY ON:	N W S	OTHER:	SOURCE:
	F A A		DISTANCE:
	A / C		HOURS REMOTE OPERATION:
V H F / U H F / H F	LOCATION:		ADJUSTMENT:

4. MONITOR STATUS	PRIMARY NAVAID:	
	MONITOR POINT:	
	HRS OPTN: CAT 1	
	HRS OPTN: CAT 3	
5. APPROACH & RUNWAY LIGHTING		**ALS**
		(S) SALS
		MALS
		HIRL
		MIRL
		REIL
		TDZ
		C/LINE
		OTHER (SPECIFY)
6. RUNWAY MARKINGS	BASIC	
	ALL WEATHER	
	INSTRUMENT	
7. RUNWAY VISUAL RANGE	APPROACH	
	MIDFIELD	
	ROLL OUT	
8. GLIDE PATH	GP ANGLE:	ELEV RWY THRESHOLD:
	DISTANCE FROM RWY:	ELEV GP ANTENNA:
		THRESHOLD CROSSING HEIGHT:
9. FINAL APPROACH COURSE AIMING	RUNWAY THRESHOLD	FT. FROM THRESHOLD
	ON CENTERLINE	FT. FROM CENTERLINE

10. WAIVERS:

PART D - PREPARED BY:	DATE:
TITLE:	OFFICE:

PART C - REMARKS:

CONTINUED.

ALL NON STANDARD NOTES ON THIS PROCEDURE WERE APPROVED BY AFS AND DIRECTED TO BE PUBLISHED ON THIS PROCEDURE

MSA EVALUATED AT BOTH DARNE AND CFFKC - SAME CONTROLLING OBSTACLE

MISSED APPROACH EVALUATED AT DARNE - ALL SURFACES CLEAR

RADIO FIX AND HOLDING DATA RECORD

NAME: ANETE **STATE:** CA **COUNTRY:** US

LATITUDE/LONGITUDE: 372749.46N/1215633.91W **TYPE:** WP, 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	SAN FRANCISCO	I-FNP	LOC/DME		097.81	114.81	22.39	22.40		7000	9000

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
I-FNP	LOC/DME	R-098	23	7000	9000

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

REMARKS:
8260.54A PFAF L-V FORMULA USED TO ESTABLISH FIX COORDINATES WHERE GLIDEPATH INTERCEPTS FIX ALTITUDE
I-FNP DME COORDINATES: 373714.92N/1222206.85W

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	LDA PRM RWY 28R (SIM CLOSE PAR)	1		KSFO	SAN FRANCISCO	CA (US)
IAP	LDA/DME RWY 28R	1		KSFO	SAN FRANCISCO	CA (US)
IAP	RNAV (GPS) PRM X RWY 28R			KSFO	SAN FRANCISCO	CA (US)
IAP	RNAV (GPS) X RWY 28R			KSFO	SAN FRANCISCO	CA (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 3 **DATE OF REVISION:** 06/27/2013

REASON FOR REVISION:
FIX MOVED 6902.16 FT, COORDINATES REVISED
FIX USE UPDATED
ADDED DIST FROM FAC TO FAC1
UPDATED FAC1 DME DIST FROM 21.26 TO 22.39.
ADDED REMARK: 8260.54A PFAF L-V FORMULA USED TO ESTABLISH FIX COORDINATES WHERE GLIDEPATH INTERCEPTS FIX ALTITUDE
ADDED WP TO FIX TYPE

DEVELOPED BY: **DATE:** 01/30/2013 **OFFICE:** AJV-354 **NAME:** CHARLES SCHNEIDER

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEBORAH COPELAND

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZOA
ATC FACILITY: NORCAL/SFO
OTHER:

QUALITY 4 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: CFFKC **STATE:** CA **COUNTRY:** US

LATITUDE/LONGITUDE: 373700.71N/1222122.83W **TYPE:** CNF

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

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (GPS) PRM X RWY 28R			KSFO	SAN FRANCISCO	CA (US)
IAP	RNAV (GPS) X RWY 28R			KSFO	SAN FRANCISCO	CA (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 06/27/2013

DEVELOPED BY: **DATE:** 01/29/2013 **OFFICE:** AJV-354 **NAME:** CHARLES SCHNEIDER

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEBORAH COPELAND

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZOA
ATC FACILITY: NORCAL/SFO
OTHER:

QUALITY CHECKED 4

RADIO FIX AND HOLDING DATA RECORD

NAME: DARNE **STATE:** CA **COUNTRY:** US

LATITUDE/LONGITUDE: 373535.79N/1221732.13W **TYPE:** WP, 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	SAN FRANCISCO	I-FNP	LOC/DME		097.81	114.81	4.00	4.00		1040	4500

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

REMARKS:
8260.54A PFAF L-V FORMULA USED TO ESTABLISH FIX COORDINATES WHERE GLIDEPATH INTERCEPTS FIX ALTITUDE
I-FNP DME COORDINATES: 373714.92N/1222206.85W

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	LDA PRM RWY 28R (SIM CLOSE PAR)	1		KSFO	SAN FRANCISCO	CA (US)
IAP	LDA/DME RWY 28R	1		KSFO	SAN FRANCISCO	CA (US)
IAP	RNAV (GPS) PRM X RWY 28R			KSFO	SAN FRANCISCO	CA (US)
IAP	RNAV (GPS) X RWY 28R			KSFO	SAN FRANCISCO	CA (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 06/27/2013

REASON FOR REVISION:
FIX MOVED 174.76 FT NW.
UPDATED FIX USE
ADDED WP TO FIX TYPE
UPDATED DME DISTANCE FROM 4.03 TO 4.00 AND ADDED DIST FROM FAC
ADDED REMARK: 8260.54A PFAF L-V FORMULA USED TO ESTABLISH FIX COORDINATES WHERE GLIDEPATH INTERCEPTS FIX ALTITUDE

DEVELOPED BY: **DATE:** 01/29/2013 **OFFICE:** AJV-354 **NAME:** CHARLES SCHNEIDER

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEBORAH COPELAND

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZOA
ATC FACILITY: NORCAL/SFO
OTHER:

QUALITY 4 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: FATUS **STATE:** CA **COUNTRY:** US

LATITUDE/LONGITUDE: 372909.29N/1220008.29W **TYPE:** WP, 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	SAN FRANCISCO	I-FNP	LOC/DME		097.81	114.81	19.25	19.26		6000	7000

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
I-FNP	LOC/DME	R-098	20	6000	7000

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

REMARKS:
8260.54A PFAF L-V FORMULA USED TO ESTABLISH FIX COORDINATES WHERE GLIDEPATH INTERCEPTS FIX ALTITUDE
I-FNP DME COORDINATES: 373714.92N/1222206.85W

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	LDA PRM RWY 28R (SIM CLOSE PAR)	1		KSFO	SAN FRANCISCO	CA (US)
IAP	LDA/DME RWY 28R	1		KSFO	SAN FRANCISCO	CA (US)
IAP	RNAV (GPS) PRM X RWY 28R			KSFO	SAN FRANCISCO	CA (US)
IAP	RNAV (GPS) X RWY 28R			KSFO	SAN FRANCISCO	CA (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 06/27/2013

REASON FOR REVISION:
FIX MOVED 5066.06 FT, COORDINATES REVISED
FIX USE UPDATED
ADDED DIST FROM FAC IN NM TO FAC1.
UPDATED FAC1 DME FROM 18.42 TO 19.25
ADDED REMARK: 8260.54A PFAF L-V FORMULA USED TO ESTABLISH FIX COORDINATES WHERE GLIDEPATH INTERCEPTS FIX ALTITUDE
ADDED WP TO FIX TYPE

DEVELOPED BY: **DATE:** 01/30/2013 **OFFICE:** AJV-354 **NAME:** CHARLES SCHNEIDER

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEBORAH COPELAND

SIGNATURE:

DISTRIBUTION: **NFDC**
FPO: WST
ARTCC: ZOA
ATC FACILITY: NORCAL/SFO
OTHER:

QUALITY 4 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: GOBEC **STATE:** CA **COUNTRY:** US

LATITUDE/LONGITUDE: 373443.44N/1221510.18W **TYPE:** WP, 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	SAN FRANCISCO	I-FNP	LOC/DME		097.81	114.81	6.07		33050	1800	4500

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

REMARKS:
8260.54A PFAF L-V FORMULA USED TO ESTABLISH FIX COORDINATES WHERE GLIDEPATH INTERCEPTS FIX ALTITUDE
I-FNP DME COORDINATES: 373714.92N/1222206.85W

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	LDA PRM RWY 28R (SIM CLOSE PAR)	1		KSFO	SAN FRANCISCO	CA (US)
IAP	LDA/DME RWY 28R	1		KSFO	SAN FRANCISCO	CA (US)
IAP	RNAV (GPS) PRM X RWY 28R			KSFO	SAN FRANCISCO	CA (US)
IAP	RNAV (GPS) X RWY 28R			KSFO	SAN FRANCISCO	CA (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 06/27/2013

REASON FOR REVISION:
FIX MOVED 23.25 FT, COORDINATES REVISED
FIX USE UPDATED.
ADDED WP TO FIX TYPE
ADDED DIST FROM FAC, TO FAC1.
UDPATE FAC1 DME FROM 6.03 TO 6.07.
ADDED REMARK: 8260.54A PFAF L-V FORMULA USED TO ESTABLISH FIX COORDINATES WHERE GLIDEPATH INTERCEPTS FIX ALTITUDE

DEVELOPED BY: **DATE:** 01/30/2013 **OFFICE:** AJV-354 **NAME:** CHARLES SCHNEIDER

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEBORAH COPELAND

SIGNATURE:

DISTRIBUTION: **NFDC**
FPO: WST
ARTCC: ZOA
ATC FACILITY: NORCAL/SFO
OTHER:

QUALITY CHECKED 4

RADIO FIX AND HOLDING DATA RECORD

NAME: HEGOT **STATE:** CA **COUNTRY:** US

LATITUDE/LONGITUDE: 373029.02N/1220342.80W **TYPE:** WP, 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	SAN FRANCISCO	I-FNP	LOC/DME		097.81	114.81	16.12	16.12		5000	6000

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
I-FNP	LOC/DME	R-098	17	5000	6000

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

REMARKS:
8260.54A PFAF L-V FORMULA USED TO ESTABLISH FIX COORDINATES WHERE GLIDEPATH INTERCEPTS FIX ALTITUDE
I-FNP DME COORDINATES: 373714.92N/1222206.85W

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	LDA PRM RWY 28R (SIM CLOSE PAR)	1		KSFO	SAN FRANCISCO	CA (US)
IAP	LDA/DME RWY 28R	1		KSFO	SAN FRANCISCO	CA (US)
IAP	RNAV (GPS) PRM X RWY 28R			KSFO	SAN FRANCISCO	CA (US)
IAP	RNAV (GPS) X RWY 28R			KSFO	SAN FRANCISCO	CA (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 06/27/2013

REASON FOR REVISION:
FIX MOVED 3478.49 FT, COORDINATES REVISED
UDPATED FIX USE
ADDED FAC1 DIST FROM FAC
UPDATED FAC1 DME FROM 15.54 TO 16.12
ADDED REMARK: 8260.54A PFAF L-V FORMULA USED TO ESTABLISH FIX COORDINATES WHERE GLIDEPATH INTERCEPTS FIX ALTITUDE
ADDED WP TO FIX TYPE

DEVELOPED BY: **DATE:** 01/30/2013 **OFFICE:** AJV-354 **NAME:** CHARLES SCHNEIDER

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEBORAH COPELAND

SIGNATURE:

DISTRIBUTION: **NFDC**
FPO: WST
ARTCC: ZOA
ATC FACILITY: NORCAL/SFO
OTHER:

QUALITY 4 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: MIUKE **STATE:** CA **COUNTRY:** US

LATITUDE/LONGITUDE: 373308.16N/1221052.25W **TYPE:** WP, 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	SAN FRANCISCO	I-FNP	LOC/DME		097.81	114.81	9.84	9.84		3000	4500

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

REMARKS:
8260.54A PFAF L-V FORMULA USED TO ESTABLISH FIX COORDINATES WHERE GLIDEPATH INTERCEPTS FIX ALTITUDE
I-FNP DME COORDINATES: 373714.92N/1222206.85W

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	LDA PRM RWY 28R (SIM CLOSE PAR)	1		KSFO	SAN FRANCISCO	CA (US)
IAP	LDA/DME RWY 28R	1		KSFO	SAN FRANCISCO	CA (US)
IAP	RNAV (GPS) PRM X RWY 28R			KSFO	SAN FRANCISCO	CA (US)
IAP	RNAV (GPS) X RWY 28R			KSFO	SAN FRANCISCO	CA (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 3 **DATE OF REVISION:** 06/27/2013

REASON FOR REVISION:
FIX MOVED 1109.07 FT, COORDINATES REVISED
ADDED DIST FROM FAC IN NM TO FAC1
UPDATED FAC1 DME FROM 9.65 TO 9.84
UPDATED FIX USE.
8260.54A PFAF L-V FORMULA USED TO ESTABLISH FIX COORDINATES WHERE GLIDEPATH INTERCEPTS FIX ALTITUDE
ADDED WP TO FIX TYPE

DEVELOPED BY: **DATE:** 01/30/2013 **OFFICE:** AJV-354 **NAME:** CHARLES SCHNEIDER

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEBORAH COPELAND

SIGNATURE:

DISTRIBUTION: **NFDC**
FPO: WST
ARTCC: ZOA
ATC FACILITY: NORCAL/SFO
OTHER:

QUALITY 4 CHECKED

RADIO FIX AND HOLDING DATA RECORD

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

LATITUDE/LONGITUDE: 374333.32N/1221324.91W **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	302.00	122.00	R		4	2000	4000	4	5
3	SW		WP	240.00	060.00	R		4	3000	5000	5	6

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
3	200	AAO	374041.52N/1222520.98W	1399	2C

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.
(PAT 1 AND 2) CONTROLLING OBSTACLE LOCATED 11586.67 FT. INTO SECONDARY.
PAT 2 MAG COURSE BASED ON KHWD 15E MAGVAR.

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)
DP	CHARLIE			KSTS	SANTA ROSA	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)

QUALITY CHECKED 4

EN ROUTE	V301				(US)
EN ROUTE	V392				(US)
EN ROUTE	V6				(US)
IAP	VOR RWY 19R		KCCR	CONCORD	CA (US)
IAP	LOC/DME RWY 28L	1	KHWD	HAYWARD	CA (US)
IAP	RNAV (GPS) RWY 28L	2	KHWD	HAYWARD	CA (US)
IAP	VOR/DME-A	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)		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	LOC/DME RWY 28R		KSFO	SAN FRANCISCO	CA (US)
IAP	QUIET BRIDGE VISUAL RWYS 28L/R		KSFO	SAN FRANCISCO	CA (US)
IAP	RNAV (GPS) PRM X RWY 28R	3	KSFO	SAN FRANCISCO	CA (US)
IAP	RNAV (GPS) X RWY 28R	3	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) Y 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: 14 **DATE OF REVISION:** 06/27/2013

REASON FOR REVISION:
UPDATED FIX USE
ADDED HOLDING PATTERN 3

DEVELOPED BY: **DATE:** 02/12/2013 **OFFICE:** AJV-354 **NAME:** CHARLES SCHNEIDER

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEBORAH COPELAND

SIGNATURE:

DISTRIBUTION: **NFDC**
FPO: WST
ARTCC: ZOA
ATC FACILITY: NORCAL/SFO
OTHER: OAK ATCT

QUALITY CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: WASOP **STATE:** CA **COUNTRY:** US

LATITUDE/LONGITUDE: 373148.64N/1220717.46W **TYPE:** WP, 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	SAN FRANCISCO	I-FNP	LOC/DME		097.81	114.81	12.98	12.98		4000	4500

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

REMARKS:
8260.54A PFAF L-V FORMULA USED TO ESTABLISH FIX COORDINATES WHERE GLIDEPATH INTERCEPTS FIX ALTITUDE
I-FNP DME COORDINATES: 373714.92N/1222206.85W

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	LDA PRM RWY 28R (SIM CLOSE PAR)	1		KSFO	SAN FRANCISCO	CA (US)
IAP	LDA/DME RWY 28R	1		KSFO	SAN FRANCISCO	CA (US)
IAP	RNAV (GPS) PRM X RWY 28R			KSFO	SAN FRANCISCO	CA (US)
IAP	RNAV (GPS) X RWY 28R			KSFO	SAN FRANCISCO	CA (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 06/27/2013

REASON FOR REVISION:
FIX MOVED 2155.65 FT, COORDINATES REVISED
UPDATED FAC1 DME FROM 12.62 TO 12.98
ADDED DIST FROM FAC1
8260.54A PFAF L-V FORMULA USED TO ESTABLISH FIX COORDINATES WHERE GLIDEPATH INTERCEPTS FIX ALTITUDE
ADDED WP TO FIX TYPE

DEVELOPED BY: **DATE:** 01/30/2013 **OFFICE:** AJV-354 **NAME:** CHARLES SCHNEIDER

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEBORAH COPELAND

SIGNATURE:

DISTRIBUTION: **NFDC**
FPO: WST
ARTCC: ZOA
ATC FACILITY: NORCAL/SFO
OTHER:

QUALITY 4 CHECKED

TERMINAL AIRSPACE DATA REQUIREMENTS

CITY: **SAN FRANCISCO** STATE: **CA**

AIRPORT NAME: **SAN FRANCISCO INTL** ID: **KSFO**

PROCEDURE: **RNAV (GPS) X RWY 28R** AMDT: **ORIG**

DOCKET # :
(96-AXX-X/Required/Not Required)

ALL DIST TO 1/100 NM; ELEV TO NEAREST FT; COORD TO 1/100 SEC; DEG TO 1/100 DG.

1. Distance from **THLD*** to 1000' point **2.93**
   (Enter THLD, FAF, ARP, FACILITY, as appropriate)
2. Width of **FINAL** segment at 1000' point **1.20**
   (Enter appropriate segment , final, intermediate, etc.)
3. True Course of **FINAL** segment containing 1000' point **294.87**
4. High Terrain in **FINAL** segment containing 1000' point **24**
5. Distance from **THLD*** to 1500' point **4.84**
   (If 1500' point in PT maneuvering area or holding pattern note in remarks)
6. Width of **FINAL** segment at 1500' point **1.57**
7. True Course of **FINAL** segment containing 1500' point **294.87**
8. High Terrain in **FINAL** segment containing 1500' point **24**
9. Threshold Coordinates (if straight-in) ... _____ / _____
10. ARP Coordinates ..... **373708.78N / 1222230.85W**
11. Runway Approach End and distance furthest from ARP.....RWY **10L**
    Distance **1.04** NM
12. FAF Coordinates ..... **373443.44N / 1221510.18W**
    (Click to Select)

REMARKS: Approach/Drawing attached. *THLD: LOCATED AT FTP (CFFKC)
373700.71N/1222122.83W