

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** APODE

**STATE:** CA

**COUNTRY:** US

**ICAO REGION CODE:** K2

**LATITUDE/LONGITUDE:** 373926.51N/1222717.04W

**TYPE:** WP

**AIRSPACE DOCKET:**

**FIX TYPE OF ACTION:** ESTABLISH

**HOLDING:**

**HOLDING TYPE OF ACTION:**

**FIX USE:**

**USE TYPE**  
IAP

**USE TITLE**  
RNAV (GPS) RWY 10L

**FAC**

**PAT**

**AIRPORT IDENT**  
KSFO

**CITY**  
SAN FRANCISCO

**STATE**  
CA (US)

**REQUIRED CHARTING:** IAP

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** ORIG

**DATE OF REVISION:** 07/11/2024

**INITIATED BY:**

**DATE:**

**ORGANIZATION:**

**NAME:**

**OFFICE OF PRIMARY RESPONSIBILITY:**

AJV-A432

**NAME:** APRIL SARMENTO

**APPROVED BY:**

**DATE:** 12/27/2023

**OFFICE:** AJV-A432

**NAME:** CASIMIR TABAKA

**SIGNATURE:**

QUALITY  
34  
CHECKED

# RADIO FIX AND HOLDING DATA RECORD

NAME: DUMBA STATE: CA COUNTRY: US ICAO REGION CODE: K2

LATITUDE/LONGITUDE: 373012.66N/1220546.13W 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	FEET	MRA	MAA
1	SAN FRANCISCO	I-GWQ	LOC/DME		103.80	117.80	16.13	16.15		3000	4500
2	WOODSIDE	OSI	VOR/DME	VL	036.00	053.00		11.07		3000	17500
3	OAKLAND	OAK	VOR/DME	VH	138.46	155.46		14.65		3000	17500
4	SAN FRANCISCO	SFO	VOR/DME	VL	100.59	117.59	14.96	14.96		3000	17500

HOLDING: HOLDING TYPE OF ACTION: MODIFY

**PATTERNS:**

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH DME	HOLDING ALTITUDES MIN	MAX	TEMPLATES MIN	MAX
1	E		WP	103.98	283.98	L	4	3000	10000	5	10

**CONTROLLING OBSTRUCTIONS:**

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	AAO	372918.00N/1215254.00W	2156	4B

**PRECIPITOUS TERRAIN ADDITIONS:**

PAT	SPEED	ADDITION
1	200	100

**REASON FOR NONSTANDARD HOLDING:**

PAT 1 ATC REQUEST

**HOLDING RESTRICTIONS:**

HOLDING LIMITED TO ESTABLISHED PATTERN.

**REMARKS:**

SAN FRANCISCO (FAC 1) USED TO ESTABLISH FIX COORDINATES.  
 PRECIPITOUS TERRAIN EVALUATION COMPLETED.  
 GWQ DME LOCATION: 373748.20N/1222340.61W.  
 THE RNAV VISUAL RWY 1R AT KSFO IS A SPECIAL PROCEDURE USED BY VIRGIN AMERICA.  
 HOLDING PATTERN CONTROLLING OBSTACLE LOCATED IN THE SECONDARY AREA SA-998 APPLIED.

**FIX USE:**

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	GLS RWY 28R			KSFO	SAN FRANCISCO	CA (US)
IAP	ILS OR LOC RWY 28R	1, 2, 3, 4		KSFO	SAN FRANCISCO	CA (US)
IAP	ILS RWY 28R (CAT II/III)	1, 2, 3, 4		KSFO	SAN FRANCISCO	CA (US)
IAP	ILS RWY 28R (SA CAT I)	1, 2, 3, 4		KSFO	SAN FRANCISCO	CA (US)
IAP	RNAV (GPS) RWY 10L		1	KSFO	SAN FRANCISCO	CA (US)
IAP	RNAV (GPS) RWY 10L		1	KSFO	SAN FRANCISCO	CA (US)
IAP	RNAV (GPS) Y RWY 10R		1	KSFO	SAN FRANCISCO	CA (US)
IAP	RNAV (GPS) Z RWY 28R			KSFO	SAN FRANCISCO	CA (US)
IAP	RNAV (RNP) Z RWY 10R		1	KSFO	SAN FRANCISCO	CA (US)
OTHER	RNAV VISUAL RWY 1R			KSFO	SAN FRANCISCO	CA (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 17 DATE OF REVISION: 07/11/2024

**REASON FOR REVISION:**

- FIX MAKE-UP FACILITIES: FAC 2 CLASS CHANGED FROM L TO VL
- FIX MAKE-UP FACILITIES: FAC 4 CHANGED FROM L TO VL  
 UPDATED HOLDING PATTERN CONTROLLING OBSTACLE FROM "200 AAO 373418.00N/1220618.00W 450 MSL (4E) TO "200 AAO 372918.00N/1215254.00W 2156 MSL (4B).
- REMARKS: ADDED PRECIPITOUS TERRAIN ADDITION 100 FEET.
- REMARKS: ADDED "HOLDING PATTERN CONTROLLING OBSTACLE LOCATED IN THE SECONDARY AREA SA-998 APPLIED", AND REMOVED "NOTE: WHEN OSI VOR/DME OTS DME IS REQUIRED FOR HOLDING. OAK VOR/DME AND SFO VOR/DME DO NOT MEET 45 DEGREE DIVERGENCE"

INITIATED BY: DATE: ORGANIZATION: NAME:  
 OFFICE OF PRIMARY RESPONSIBILITY: AJV-A432 NAME: APRIL SARMENTO



**APPROVED BY:**

**DATE:** 11/03/2023

**OFFICE:** AJV-A432

**NAME:** CASIMIR TABAKA

**SIGNATURE:**



# RADIO FIX AND HOLDING DATA RECORD

**NAME:** ILUDY

**STATE:** CA

**COUNTRY:** US

**ICAO REGION CODE:** K2

**LATITUDE/LONGITUDE:** 374346.96N/1223628.84W

**TYPE:** WP

**AIRSPACE DOCKET:**

**FIX TYPE OF ACTION:** ESTABLISH

**HOLDING:**

**HOLDING TYPE OF ACTION:**

**FIX USE:**

**USE TYPE**  
IAP

**USE TITLE**  
RNAV (GPS) RWY 10L

**FAC**

**PAT**

**AIRPORT IDENT**  
KSFO

**CITY**  
SAN FRANCISCO

**STATE**  
CA (US)

**REQUIRED CHARTING:** IAP

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** ORIG

**DATE OF REVISION:** 07/11/2024

**INITIATED BY:**

**DATE:**

**ORGANIZATION:**

**NAME:**

**OFFICE OF PRIMARY RESPONSIBILITY:**

AJV-A432

**NAME:** APRIL SARMENTO

**APPROVED BY:**

**DATE:** 11/07/2023

**OFFICE:** AJV-A432

**NAME:** CASIMIR TABAKA

**SIGNATURE:**

QUALITY  
34  
CHECKED

# RADIO FIX AND HOLDING DATA RECORD

NAME: NORMM

STATE: CA

COUNTRY: US

ICAO REGION CODE: K2

LATITUDE/LONGITUDE: 374312.75N/1223647.42W

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	FAC FEET	MRA	MAA
1	SAN FRANCISCO	SFO	VOR/DME	VL	280.98	297.98	12.90	12.90		3000	17500
2	SAUSALITO	SAU	VOR/DME	VL	191.00	208.00		9.17		3000	17500

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

**REMARKS:**

SAN FRANCISCO (FAC 1) AND SAUSALITO (FAC 2) USED TO ESTABLISH FIX COORDINATES.

**FIX USE:**

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	GAP	1, 2		KSFO	SAN FRANCISCO	CA (US)
DP	SAN FRANCISCO	1, 2		KSFO	SAN FRANCISCO	CA (US)

REQUIRED CHARTING: DP, AREA

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 8

DATE OF REVISION: 07/11/2024

**REASON FOR REVISION:**

1. TYPE: REMOVED WAYPOINT
2. FIX MAKE-UP FACILITIES: FAC 1 AND FAC 2 CLASS CHANGED FROM L TO VL
3. FIX USE: REMOVED IAP RNAV (GPS) RWY 10L
4. REQUIRED CHARTING: REMOVED IAP

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A432

NAME: APRIL SARMENTO

APPROVED BY:

DATE: 11/02/2023

OFFICE: AJV-A432

NAME: CASIMIR TABAKA

SIGNATURE:

**CASIMIR L TABAKA**

Jan 25, 2024



# RADIO FIX AND HOLDING DATA RECORD

**NAME:** TUZCU **STATE:** CA **COUNTRY:** US **ICAO REGION CODE:** K2

**LATITUDE/LONGITUDE:** 373742.31N/1222337.02W **TYPE:** WP

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

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

<b>FIX USE:</b>	<b>USE TITLE</b>	<b>FAC</b>	<b>PAT</b>	<b>AIRPORT IDENT</b>	<b>CITY</b>	<b>STATE</b>
<b>USE TYPE</b>						
IAP	RNAV (GPS) RWY 10L			KSFO	SAN FRANCISCO	CA (US)

**REQUIRED CHARTING:** IAP

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** ORIG **DATE OF REVISION:** 07/11/2024

**INITIATED BY:** **DATE:** **ORGANIZATION:** **NAME:**

**OFFICE OF PRIMARY RESPONSIBILITY:** AJV-A432 **NAME:** APRIL SARMENTO

**APPROVED BY:** **DATE:** 11/07/2023 **OFFICE:** AJV-A432 **NAME:** CASIMIR TABAKA

**SIGNATURE:** *Digitally signed by*  
**CASIMIR L TABAKA**  
Jan 25, 2024



# RADIO FIX AND HOLDING DATA RECORD

**NAME:** XATTU **STATE:** CA **COUNTRY:** US **ICAO REGION CODE:** K2

**LATITUDE/LONGITUDE:** 374030.16N/1222931.64W **TYPE:** WP

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

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

<b>FIX USE:</b>	<b>USE TITLE</b>	<b>FAC</b>	<b>PAT</b>	<b>AIRPORT IDENT</b>	<b>CITY</b>	<b>STATE</b>
<b>USE TYPE</b> IAP	RNAV (GPS) RWY 10L			KSFO	SAN FRANCISCO	CA (US)

**REQUIRED CHARTING:** IAP

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 2 **DATE OF REVISION:** 07/11/2024

**REASON FOR REVISION:**

1. LATITUDE/LONGITUDE CHANGED FROM 374016.2800N/1222941.3800W TO 374030.1554N/1222931.6388W - FIX MOVED 0.26 NM NORTHEAST.
2. REMARKS: REMOVED "PFAF LOCATION DETERMINED USING 8260.54A FORMULA 2-16B."

<b>INITIATED BY:</b>	<b>DATE:</b>	<b>ORGANIZATION:</b>	<b>NAME:</b>
<b>OFFICE OF PRIMARY RESPONSIBILITY:</b>		AJV-A432	<b>NAME:</b> APRIL SARMENTO
<b>APPROVED BY:</b>	<b>DATE:</b> 11/01/2023	<b>OFFICE:</b> AJV-A432	<b>NAME:</b> CASIMIR TABAKA

**SIGNATURE:** *Digitally signed by*  
**CASIMIR L TABAKA**  
Jan 25, 2024

