

# RADIO FIX AND HOLDING DATA RECORD

NAME: LIMBO STATE: CA COUNTRY: US ICAO REGION CODE: K2  
 LATITUDE/LONGITUDE: 334534.43N/1182700.73W TYPE: WP, INT, DME

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	MRA	MAA
1	LOS ANGELES	LAX	VORTAC	H	170.00	185.00	10.44	10.44	3000	17500
2	SEAL BEACH	SLI	VORTAC	L	251.00	266.00	19.83	19.83	3000	17500
3	SANTA MONICA	SMO	VOR/DME	L	163.76	178.76	15.02	15.02	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	DME	HOLDING ALTITUDES MIN	MAX	TEMPLATES MIN	MAX
1	W	SLI	VORTAC	251.00	071.00	R	1		3000	6000	5	6
2	S	SMO	VOR/DME	163.76	343.76	L	1		3000	6000	4	5
3	W	WP	WP	251.00	071.00	R		4	3000	6000	5	13

## CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	AAO	334637.94N/1182259.53W	1416	2A
2	200	AAO	334633.00N/1182303.00W	1401	4E
3	200	AAO	334630.29N/1182301.61W	1459	2C
3	310	AAO	334445.00N/1182012.00W	1670	4E

## REASON FOR NONSTANDARD HOLDING:

PAT 2 SOCAL ATC REQUEST

## HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERNS.

## PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
1	RNAV (GPS) RWY 25	KHHR	HAWTHORNE	CA (US)

## REMARKS:

LOS ANGELES (FAC 1) AND SEAL BEACH (FAC 2) USED TO ESTABLISH FIX COORDINATES.  
 PRECIPITOUS TERRAIN EVALUATION COMPLETED.

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	TAKE-OFF MINIMUMS	1, 2		KHHR	HAWTHORNE	CA (US)
DP	TAKE-OFF MINIMUMS	1, 2		KTOA	TORRANCE	CA (US)
EN ROUTE	V64	1, 2, 3				(US)
EN ROUTE	V8	1, 2, 3				(US)
IAP	LOC RWY 25	1, 2	1	KHHR	HAWTHORNE	CA (US)
IAP	LOC RWY 25 (ALT MISS)	3	2	KHHR	HAWTHORNE	CA (US)
IAP	RNAV (GPS) RWY 25	1, 2	1	KHHR	HAWTHORNE	CA (US)
IAP	RNAV (GPS) RWY 7	2		KHHR	HAWTHORNE	CA (US)
IAP	VOR RWY 25	1, 2	1	KHHR	HAWTHORNE	CA (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 12 DATE OF REVISION: 11/03/2022

## REASON FOR REVISION:

1. CONTROLLING OBSTRUCTIONS: CHANGED PATTERN 3 200 AAO LAT/LONG/ELEVATION/ACCURACY CODE FROM "334637.94N/1182259.53W 1416 2A" TO "334630.29N/1182301.61W 1459 2C".  
 2. FIX USE: ADDED IAP RNAV (GPS) RWY 7 KHHR CA.

INITIATED BY: DATE: ORGANIZATION: NAME:  
 OFFICE OF PRIMARY RESPONSIBILITY: AJV-A432 NAME: APRIL SARMENTO  
 APPROVED BY: DATE: 11/03/2022 OFFICE: AJV-A430 NAME: CASIMIR TABAKA  
 SIGNATURE:

# RADIO FIX AND HOLDING DATA RECORD

NAME: SEAL BEACH VORTAC STATE: CA COUNTRY: US ICAO REGION CODE: K2  
 LATITUDE/LONGITUDE: 334659.88N/1180317.13W 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	SEAL BEACH	SLI	VORTAC	L						17500

HOLDING: HOLDING TYPE OF ACTION: NO CHANGE

## 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	NE	SLI	VORTAC	058.00	238.00	L	1	2600 17500	4 16
2	SE	SLI	VORTAC	120.00	300.00	L	1	1500 17500	4 16
3	S	SLI	VORTAC	171.00	351.00	L	1	1800 17500	4 16
4	NE		WP	058.00	238.00	L		2600 12000	5 10
5	SE		WP	122.00	302.00	L		2600 14000	5 11
6	SE		WP	120.00	300.00	L		4000 14000	5 11
7	SE	SLI	VORTAC	123.35	303.35	L		1400 1400	4 4
8	S		WP	171.00	351.00	L		4000 6000	4 5

## CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	BLDG (06-000442)	334652.00N/1175336.00W	475	1D
2	200	TOWER (06-002478)	334725.60N/1180855.10W	337	2C
3	200	TOWER (06-002478)	334725.60N/1180855.10W	337	2C
3	310	TOWER (06-020156)	335246.90N/1180050.10W	744	1A
4	200	BLDG (06-000442)	334652.00N/1175336.00W	475	1D
5	200	AAO	334745.00N/1180924.00E	437	4E
6	200	AAO	334745.00N/1180924.00E	437	4E
7	175	TOWER (06-002478)	334725.60N/1180855.10W	337	2C
8	200	TOWER (06-002478)	334725.60N/1180855.10W	337	2C
8	310	TOWER (06-020156)	335246.90N/1180050.10W	744	1A

## REASON FOR NONSTANDARD HOLDING:

PAT 1 ATC REQUEST  
 PAT 2 ATC REQUEST  
 PAT 3 ATC REQUEST  
 PAT 4 ATC REQUEST  
 PAT 5 ATC REQUEST  
 PAT 6 ATC REQUEST  
 PAT 7 ATC REQUEST  
 PAT 8 ATC REQUEST

## HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERNS.

## PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
3	TAKEOFF MINIMUMS	KFUL	FULLERTON	CA (US)
3	TAKEOFF MINIMUMS	KSNA	SANTA ANA	CA (US)
8	RNAV (GPS) RWY 7	KHHR	HAWTHORNE	CA (US)

## REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.  
 ASSIGNED FACILITY MAG VAR: 15E (1975).

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	ELMOO			KBUR	BURBANK	CA (US)
DP	CWARD (RNAV)			KCRQ	CARLSBAD	CA (US)
DP	ANAHEIM			KFUL	FULLERTON	CA (US)
DP	TAKEOFF MINIMUMS		3	KFUL	FULLERTON	CA (US)
DP	ANAHEIM			KLGB	LONG BEACH	CA (US)
DP	TAKEOFF MINIMUMS			KLGB	LONG BEACH	CA (US)
DP	TAKEOFF MINIMUMS			KSLI	LOS ALAMITOS	CA (US)
DP	CATALINA			KLAX	LOS ANGELES	CA (US)
DP	LAXX			KLAX	LOS ANGELES	CA (US)
DP	SEAL BEACH			KLAX	LOS ANGELES	CA (US)
DP	SEBBY			KLAX	LOS ANGELES	CA (US)
DP	TAKEOFF MINIMUMS			KLAX	LOS ANGELES	CA (US)
DP	NIKKL	1		KONT	ONTARIO	CA (US)
DP	DOYLE			KNTD	POINT MUGU	CA (US)
DP	CWARD (RNAV)			KRNM	RAMONA	CA (US)
DP	CWARD (RNAV)			KMYF	SAN DIEGO	CA (US)
DP	CWARD (RNAV)			KSAN	SAN DIEGO	CA (US)
DP	ECHHO (RNAV)			KSAN	SAN DIEGO	CA (US)

DP	FALCC		KSAN	SAN DIEGO	CA (US)
DP	PEBLE		KSAN	SAN DIEGO	CA (US)
DP	CWARD (RNAV)		KSDM	SAN DIEGO	CA (US)
DP	CWARD (RNAV)		KSEE	SAN DIEGO/EL CAJON	CA (US)
DP	ANAHEIM		KSNA	SANTA ANA	CA (US)
DP	CHANNEL		KSNA	SANTA ANA	CA (US)
DP	IRVINE		KSNA	SANTA ANA	CA (US)
DP	MUSEL		KSNA	SANTA ANA	CA (US)
DP	TAKEOFF MINIMUMS	3	KSNA	SANTA ANA	CA (US)
DP	ADAMM		KVNY	VAN NUYS	CA (US)
EN ROUTE	J134				(US)
EN ROUTE	J169				(US)
EN ROUTE	J78				(US)
EN ROUTE	T245				(US)
EN ROUTE	T247				(US)
EN ROUTE	T249				(US)
EN ROUTE	V165				(US)
EN ROUTE	V21				(US)
EN ROUTE	V23				(US)
EN ROUTE	V283				(US)
EN ROUTE	V372				(US)
EN ROUTE	V394				(US)
EN ROUTE	V459				(US)
EN ROUTE	V597				(US)
EN ROUTE	V64				(US)
EN ROUTE	V8				(US)
IAP	VOR-A		KEMT	EL MONTE	CA (US)
IAP	LOC/DME RWY 24	2	KFUL	FULLERTON	CA (US)
IAP	RNAV (GPS) RWY 24	4	KFUL	FULLERTON	CA (US)
IAP	VOR-A	1	KFUL	FULLERTON	CA (US)
IAP	LOC RWY 25		KHHR	HAWTHORNE	CA (US)
IAP	RNAV (GPS) RWY 25		KHHR	HAWTHORNE	CA (US)
IAP	RNAV (GPS) RWY 7	8	KHHR	HAWTHORNE	CA (US)
IAP	VOR RWY 25		KHHR	HAWTHORNE	CA (US)
IAP	ILS RWY 26L		KPOC	LA VERNE	CA (US)
IAP	LOC RWY 26L		KPOC	LA VERNE	CA (US)
IAP	VOR OR GPS-A		KPOC	LA VERNE	CA (US)
IAP	ARSENAL VISUAL RWY 30		KLGB	LONG BEACH	CA (US)
IAP	ILS OR LOC RWY 30		KLGB	LONG BEACH	CA (US)
IAP	VOR OR TACAN RWY 30	2	KLGB	LONG BEACH	CA (US)
IAP	VOR OR TACAN RWY 22L		KSLL	LOS ALAMITOS	CA (US)
IAP	ILS OR LOC RWY 25L		KLAX	LOS ANGELES	CA (US)
IAP	ILS OR LOC RWY 25R		KLAX	LOS ANGELES	CA (US)
IAP	ILS OR LOC RWY 6L		KLAX	LOS ANGELES	CA (US)
IAP	ILS OR LOC RWY 6R		KLAX	LOS ANGELES	CA (US)
IAP	ILS OR LOC RWY 7L		KLAX	LOS ANGELES	CA (US)
IAP	ILS OR LOC RWY 7R		KLAX	LOS ANGELES	CA (US)
IAP	ILS RWY 25L (CAT II & III)		KLAX	LOS ANGELES	CA (US)
IAP	ILS OR LOC RWY 9		KRAL	RIVERSIDE	CA (US)
IAP	ILS OR LOC RWY 20R	2	KSNA	SANTA ANA	CA (US)
IAP	ILS RWY 20R (SA CAT I)	2	KSNA	SANTA ANA	CA (US)
IAP	LDA RWY 20R	2	KSNA	SANTA ANA	CA (US)
IAP	LOC BC RWY 2L	2	KSNA	SANTA ANA	CA (US)
IAP	RNAV (GPS) Y RWY 2L	5	KSNA	SANTA ANA	CA (US)
IAP	RNAV (RNP) Z RWY 2L	5	KSNA	SANTA ANA	CA (US)
IAP	ILS OR LOC RWY 29R		KTOA	TORRANCE	CA (US)
IAP	RNAV (GPS) RWY 29R		KTOA	TORRANCE	CA (US)
IAP	VOR RWY 11L		KTOA	TORRANCE	CA (US)
SPECIAL DP	SUXYO (RNAV)		KFUL	FULLERTON	CA (US)
SPECIAL DP	KUTEY (RNAV)		50CA	LONG BEACH	CA (US)
SPECIAL DP	AZPAD (RNAV)		14CA	NEWPORT BEACH	CA (US)
SPECIAL IAP	COPTER RNAV (GPS) 16		3CN4	ANAHEIM	CA (US)
SPECIAL IAP	COPTER RNAV (GPS) 25		50CA	LONG BEACH	CA (US)
SPECIAL IAP	COPTER RNAV (GPS) 17		14CA	NEWPORT BEACH	CA (US)
SPECIAL IAP	COPTER RNAV (GPS) 19		4CA5	ORANGE	CA (US)
STAR	FERNANDO		KBUR	BURBANK	CA (US)
STAR	EMMLN	1	KFUL	FULLERTON	CA (US)
STAR	KAYOH		KFUL	FULLERTON	CA (US)
STAR	BAUBB (RNAV)	6	KLGB	LONG BEACH	CA (US)
STAR	DSNEE (RNAV)	6	KLGB	LONG BEACH	CA (US)
STAR	EMMLN	1	KLGB	LONG BEACH	CA (US)
STAR	KAYOH		KLGB	LONG BEACH	CA (US)
STAR	PCIFC (RNAV)	6	KLGB	LONG BEACH	CA (US)
STAR	ROOBY (RNAV)	6	KLGB	LONG BEACH	CA (US)
STAR	TANDY		KLGB	LONG BEACH	CA (US)
STAR	EMMLN	1	KSLL	LOS ALAMITOS	CA (US)
STAR	KAYOH		KSLL	LOS ALAMITOS	CA (US)
STAR	BASET		KLAX	LOS ANGELES	CA (US)
STAR	DIRBY (RNAV)		KLAX	LOS ANGELES	CA (US)
STAR	GOATZ (RNAV)		KLAX	LOS ANGELES	CA (US)
STAR	KIMMO		KLAX	LOS ANGELES	CA (US)
STAR	LEENA		KLAX	LOS ANGELES	CA (US)
STAR	OCEAN		KLAX	LOS ANGELES	CA (US)
STAR	OLAAA (RNAV)		KLAX	LOS ANGELES	CA (US)
STAR	VISTA		KLAX	LOS ANGELES	CA (US)
STAR	DSNEE (RNAV)	6	KSNA	SANTA ANA	CA (US)
STAR	EMMLN	1	KSNA	SANTA ANA	CA (US)
STAR	KAYOH		KSNA	SANTA ANA	CA (US)
STAR	ROOBY (RNAV)	6	KSNA	SANTA ANA	CA (US)
STAR	TANDY		KSNA	SANTA ANA	CA (US)

STAR	FERNANDO	KSMO	SANTA MONICA	CA (US)
STAR	KIMMO	KSMO	SANTA MONICA	CA (US)
STAR	KAYOH	KTOA	TORRANCE	CA (US)
STAR	FERNANDO	KVNY	VAN NUYS	CA (US)

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

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 34

**DATE OF REVISION:** 09/08/2022

**REASON FOR REVISION:**

1. ADDED EMMLN STAR TO FIX USE FOR KLGB, KFUL, KSLI, KSNA AND ADDED FAC 1 TO DP NIKKL AT KONT.
2. CHANGED KSNA LDA/DME RWY 20R TO KSNA LDA RWY 20R.

08/25/22: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 02/23/22.

1. HOLDING PATTERNS: ADDED PATTERN 8 AND ASSOCIATED CLIMB-IN-HOLD AND OBSTRUCTIONS
2. CONTROLLING OBSTRUCTIONS: PAT 3 310 CHANGED LAT/LONG, ELEVATION AND ACCURACY CODE FROM "335246.80N/1180049.66W 750 4D" TO "335246.90N/1180050.10W 744 1A"
3. REASON FOR NONSTANDARD HOLDING: REMOVED "ED" FROM ATC REQUESTED
4. FIX USE: ADDED IAP RNAV (GPS) RWY 7 PAT 8 AT KHRH CA

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

**OFFICE OF PRIMARY RESPONSIBILITY:**                      AJV-A411                      **NAME:** SYLVAN DRAKES

**APPROVED BY:**                      **DATE:** 09/08/2022                      **OFFICE:** AJV-A410                      **NAME:** JULIE MORGAN

**SIGNATURE:**