

FEDERAL AVIATION ADMINISTRATION
 FLIGHT STANDARDS SERVICE
 STANDARD TERMINAL ARRIVAL (STAR)

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated. Distances are in nautical miles (NM). Graphic depictions attached.

Arrival Name	Number	STAR Computer Code	Superseded Number	Dated	Effective Date
SERFR (RNAV)	FOUR	SERFR.SERFR4	THREE	03/29/2018	05DEC2019

TRANSITION ROUTES:

Transition Name	Transition Computer Codes	From FIX/NAVAID	To FIX/NAVAID	Mag Course	Distance	MEA	MOCA	MAA	Crossing Altitudes / Fixes
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ARRIVAL ROUTE DESCRIPTION:

FROM SERFR ON TRACK 313.71/30.32 TO CROSS NRRLI AT OR ABOVE FL200 AND AT 280 KIAS, THEN ON TRACK 313.49/17.48 TO CROSS WWAVS BETWEEN 15000 AND FL190 AND AT 280 KIAS, THEN ON TRACK 333.37/12.85 TO CROSS EPICK BETWEEN 10000 AND 15000 AND AT 280 KIAS, THEN ON TRACK 328.66/20.34 TO CROSS FOLET AT OR ABOVE 8000 AND AT 240 KIAS, THEN ON TRACK 328.54/6.29 TO CROSS EDDYY AT 6000 AND AT 240 KIAS. EXPECT ASSIGNED INSTRUMENT APPROACH (RWY28L/R).

PROCEDURAL DATA NOTES:

NOTE: RADAR REQUIRED

NOTE: RNAV 1

NOTE: DME/DME/IRU OR GPS REQUIRED

NOTE: EXPECT TO RECEIVE "DESCEND VIA" CLEARANCE FROM OAKLAND CENTER. NORTHERN CALIFORNIA TRACON WILL ASSIGN LANDING RUNWAY.

FIXES AND/OR HOLDING PATTERNS:

CHART HOLDING AT EPICK: SE, LT, 333.37 INBOUND, 10 NM LEGS.

CHART HOLDING AT NRRLI: SE, LT, 313.71 INBOUND, 10 NM LEGS.

CHART HOLDING AT SERFR: SE, LT, 313.71 INBOUND, 10 NM LEGS.

CHART HOLDING AT WWAVS: SE, LT, 313.49 INBOUND, 10 NM LEGS.

CHART STOKD

CHART MAKRS

COMMUNICATIONS:

ATIS, OAKLAND CENTER, NORCAL APP CON, SFO ATCT, GND CON

AIRPORTS SERVED:

SAN FRANCISCO INTL (KSFO), SAN FRANCISCO, CA

LOST COMMUNICATIONS PROCEDURE:



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SERFR (RNAV)	FOUR	SERFR.SERFR4	THREE	03/29/2018	05DEC2019

REMARKS:

AMENDMENT DOES NOT SATISFY PERIODIC REVIEW REQUIREMENTS

ADDITIONAL FLIGHT DATA:

DME/DME ASSESSMENT: SAT (RNP 2.0)
 REFERENCE MAGNETIC VARIATION = KSFO 14E/2015
 CHART AT EDDYY TERMINUS: KSFO LDG RWY 28L/R.

FLIGHT INSPECTED BY:

FLIGHT INSPECTION REVIEW NOT REQUIRED - PROCESSED IAW AIRCRAFT OPERATIONS GROUP
 (AJW-333) MEMO, OCT 3, 2018

Name

Organization

Date

Digitally signed by

JACOB POWERS

Oct 29, 2019

Digitally signed by

Signature

JACOB POWERS

Oct 29, 2019

Digitally signed by

Signature

JACOB POWERS

Oct 29, 2019

Signature

DEVELOPED BY:

JOSEPH L. ZEDER

Name

AJV-A442

Organization

07/17/2019

Date

APPROVED BY:

PATRICK MULQUEEN, MANAGER

Name

AJV-A440

Organization

Date

CHANGES:

1. CHANGE NARWL TO FOLET.
2. ADDED TERMINUS RWY DATA AT EDDYY IN ADDITIONAL FLIGHT DATA.

REASONS:

1. ATC REQUEST TO ELIMINATE CONFUSION WITH SIMILAR SOUNDING WAYPOINT NRRLI.
2. IAW 8260.19H, 4-5-1.b(8)(b).

10/29/2019: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 7/24/2019.

1. WWAVS CROSSING ALTITUDE TYPO CORRECTED FROM FL1900 TO FL190.



FEDERAL AVIATION ADMINISTRATION
 FLIGHT STANDARDS SERVICE
 STAR (DATA RECORD)

Arrival Name SERFR (RNAV)	Number FOUR	STAR Computer Code SERFR.SERFR4	Superseded Number THREE	Dated 03/29/2018	Effective Date 05DEC2019
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FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
Common Route									
SERFR	360405.90N / 1212152.79W	Y		IF					SERFR.SERFR4
NRRLI	362944.16N / 1214157.84W	Y	FB	TF	327.71	30.32	AT/ABOVE FL200	AT 280K	
WWAVS	364429.51N / 1215339.24W	Y	FB	TF	327.49	17.48	15000BFL190	AT 280K	
EPICK	365702.96N / 1215709.62W	Y	FB	TF	347.37	12.85	10000B15000	AT 280K	
FOLET	371629.21N / 1220445.46W	Y	FB	TF	342.66	20.34	AT/ABOVE 8000	AT 240K	
EDDYY	372229.65N / 1220707.50W	Y	FB	TF	342.54	06.29	AT 6000	AT 240K	

