

**FEDERAL AVIATION ADMINISTRATION  
FLIGHT STANDARDS SERVICE  
ILS STANDARD INSTRUMENT APPROACH PROCEDURE  
TITLE 14 CFR PART 97.29**

Bearings, headings, courses, tracks 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 feet RVR.

<u>AIRPORT ID</u> KSFO	<u>PROCEDURE NAME</u> ILS OR LOC RWY 19L	<u>ORIGINAL/AMENDMENT</u> 23	<u>CITY</u> SAN FRANCISCO	<u>STATE</u> CA		
<u>AIRPORT ELEVATION</u> 13	<u>TDZE</u> 19L 11 19R 11	<u>SUPERSEDED</u> ILS OR LOC RWY 19L	<u>ORIGINAL/AMENDMENT</u> 22A	<u>DATED</u> 06/20/2019	<u>MAG VAR</u> 14E	<u>EPOCH YEAR</u> 2015
<u>FACILITY</u> I-SIA	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 30 NOVEMBER 2023	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

**TERMINAL ROUTES** THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 23-23.

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
CCR VOR/DME		UPEND INT/I-SIA 28.97 DME					235.51	2.58	5000
UPEND INT/28.97 DME	IAF	BERKS INT/17.36 DME					193.81	11.61 (I-SIA)	5000
BERKS INT/17.36 DME	IF	SHAKE INT/10.12 DME					193.81	7.24 (I-SIA)	2800

**MISSED APPROACH**

**MAP:**

ILS: DA  
LOC: 8.59 NM AFTER SHAKE INT OR AT 1.53 DME  
RW19R

**MISSED APPROACH INSTRUCTIONS:**

CLIMB TO 1100 THEN CLIMBING LEFT TURN TO 4000 DIRECT TO PRTLA AND HOLD.  
\*MISSED APPROACH REQUIRES MINIMUM CLIMB OF 357 FEET PER NM TO 2000.

**ALTERNATE MISSED APPROACH INSTRUCTIONS:**

**PROFILE:**

1. PT      SIDE OF COURSE      OUTBOUND      FT WITHIN      MILES OF      (IAF)
2. PROFILE STARTS AT BERKS
3. FAF: 193.81      FAF: SHAKE INT/10.12 DME      DIST FAF TO MAP: 8.59      DIST FAF TO THLD: 8.59
4. MIN ALT:    BERKS INT/17.36 DME 5000, SHAKE INT/10.12 DME 2800, ROGGE INT/7.03 DME 1800
5. DIST TO THLD FROM FAF: 8.59      MM:      IM:      150 HAT:      GS ANT: 1043
6. MIN GS INCPT: 2800      GS ALT AT PFAF: SHAKE INT/10.12 DME 2800      OM:      MM:      IM:
7. GS ANGLE: 3.00      34:1:      20:1:      TCH: 55.0
8. MSA FROM:    SFO VOR/DME 050-180 4500, 180-300 3500, 300-050 5000



**PBN REQUIREMENTS NOTE:**

RNP APCH - GPS.

**NOTES:**

CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY TO S-LOC RWY 19L OR SIDESTEP RWY 19R.  
 CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).  
 CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED. SIMULTANEOUS OPERATIONS REQUIRE USE OF VERTICAL GUIDANCE; MAINTAIN LAST ASSIGNED ALTITUDE UNTIL ESTABLISHED ON THE GLIDESLOPE.  
 CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-ILS RWY 19L\* ALL CATS VISIBILITY TO RVR 4500, S-ILS RWY 19L ALL CATS VISIBILITY TO 2 1/2 SM.  
 CHART NOTE: SIDESTEP NA UNTIL PASSING ROGGE INT.  
 CHART SPEED ICON IN PLANVIEW AT BERKS: MAX 210 KIAS.

**ADDITIONAL FLIGHT DATA:**

HOLD NW, RT, 138.00 INBOUND.  
 FAS OBST: 150 SHIP 374028N/1222020W.  
 CHART VDP AT 4.02 DME.  
 DISTANCE VDP TO THLD 2.49 NM.

**MINIMUMS:**

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

**ALTERNATE:** NA  ILS: CAT A, B, C, D 800-2; LOC: CAT A, B 1800-2, CAT C, D 1800-3

<u>CATEGORY:</u>	A			B			C			D			E		
<u>FINAL TYPE</u>	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
S-ILS 19L *	300	4000	289	300	4000	289	300	4000	289	300	4000	289			
S-ILS 19L	774	2	763	774	2	763	774	2	763	774	2	763			
S-LOC 19L	1800	1 1/4	1789	1800	1 1/2	1789	1800	3	1789	1800	3	1789			
ROGGE FIX MINIMUMS (DUAL VOR RECEIVERS OR DME REQUIRED)															
S-LOC 19L	880	4000	869	880	5500	869	880	2 1/2	869	880	2 1/2	869			
SIDESTEP 19R	880	2	869	880	2	869	880	3	869	880	3	869			



**CHANGES - REASONS**

1. PRIMARY MISSED APPROACH CHANGED FROM "CLIMB TO 520 THEN CLIMBING LEFT TURN TO 4000 ON SFO VOR/DME R-101 TO DUMBA INT/SFO 14.96 DME AND HOLD." TO "CLIMB TO 980 THEN CLIMBING LEFT TURN TO 4000 ON SFO VOR/DME R-135 TO PRTLA INT/SFO 15.75 DME AND HOLD." - PER ATC TO DECONFLICT WITH DEPARTURES OFF RUNWAYS 10L/R
2. ADDED S-ILS 19L MINIMUMS WITH CLIMB GRADIENT AND CLIMB GRADIENT TERMINATION ALTITUDE. - NEW MISSED APPROACH AND HIGH TERRAIN SOUTH OF AIRPORT.
3. S-ILS 19L DA/HAT INCREASED FROM "300/289" TO "774/763" AND VISIBILITY FROM "RVR 4000" TO "2 SM" ALL CATS - INCREASED DUE TO ZONE 2 MISSED APPROACH PENETRATION
4. UPDATED S-LOC 19L/SIDESTEP 19R ROGGE FIX MINIMUMS MDA/HAT INCREASED FROM "400/389" TO "960/949" ALL CATS - INCREASED DUE TO ZONE 2 MISSED APPROACH PENETRATION.
5. S-LOC 19L ROGGE FIX MINIMUMS CATS A/B VISIBILITY INCREASED FROM "RVR 4000" TO "RVR 5500" CAT C/D VISIBILITIES INCREASED FROM "RVR 4500" TO "2 1/2 SM" - UPDATED PER 8260.3 TABLE 3-3-1 AND OBSTACLE STUDY.
6. UPDATED SIDESTEP 19R ROGGE FIX MINIMUMS VISIBILITY FROM "RVR 5500" TO "2 SM" CATS A AND B. CAT C VISIBILITY INCREASED FROM "1 1/2 SM" TO "3 SM" AND CAT D VISIBILITY INCREASED FROM "2 SM" TO "3 SM" - UPDATED PER 8260.3 TABLE 3-3-1.
7. ADDED SPEED RESTRICTION OF 210 KIAS AT BERKS. - ADDED PER FPT REQUEST FOR ALWAYS STAR TERMINUS.
8. REMOVED \*LOC ONLY FROM ADDITIONAL FLIGHT DATA - IAW 8260.19I PARA 8-6-10 M.
9. CHANGED CHART NOTE FROM "INOPERATIVE TABLE DOES NOT APPLY TO SIDESTEP 19R OR S-LOC 19L CATS C/D" TO "INOPERATIVE TABLE DOES NOT APPLY TO S-LOC RWY 19L OR SIDESTEP RWY 19R" - IAW 8260.3 PARA 3-3-2 E.
10. UPDATED ADDITIONAL FLIGHT DATA HOLDING FROM "HOLD W, LT, 101.00 INBOUND" TO "HOLD NW, RT, 135.00 INBOUND" - NEW MISSED APPROACH HOLDING AT PRTLA FIX.
11. UPDATED ALTERNATE MINIMUMS FROM "ILS: STANDARD" TO "ILS: CAT A, B, C, D 800-2" - UPDATED APPROACH MINIMUMS.
12. UPDATED VDP FROM "CHART VDP AT 2.53 DME DISTANCE VDP TO THLD 1.00 NM" TO "CHART VDP AT 4.27 DME. DISTANCE VDP TO THLD 2.74 NM - MDA UPDATED.
13. UPDATED INOPERATIVE ALS NOTE FROM "FOR INOPERATIVE ALS, INCREASE S-ILS 19L ALL CATS VISIBILITY TO RVR 4500" TO "FOR INOPERATIVE ALS, INCREASE S-ILS 19L\* ALL CATS VISIBILITY TO RVR 4500 AND INCREASE S-ILS 19L ALL CATS VISIBILITY TO 2 1/2 SM" - ADDED ADDITIONAL LINE OF MINIMUM WITH CLIMB GRADIENT AND VISIBILITY INCREASE TO S-ILS 19L MINIMUMS.
14. ALTERNATE MISSED APPROACH CLIMB TO ALTITUDE CHANGED FROM "CLIMB TO 520" TO "CLIMB TO 980" - IAW 8260.3 PARA 2-8-1 AND DUE TO THE INCREASE TO MINIMUMS.
15. ADDED TO ALTERNATE MISSED APPROACH \*MISSED APPROACH REQUIRES MINIMUM CLIMB OF 322 FEET PER NM TO 2800 - HIGH TERRAIN AND OBSTACLES SOUTH OF AIRPORT.
16. MSA SECTOR 300-050 ALTITUDE CHANGED FROM "5100" TO "5000" - NEW CONTROLLING OBSTACLE.

07/26/2023: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 04/10/2023.

1. CHANGED MISSED APPROACH INSTRUCTIONS FROM "CLIMB TO 980 THEN CLIMBING LEFT TURN TO 4000 ON SFO VOR/DME R-135 TO PRTLA INT/SFO 15.75 DME AND HOLD. \*MISSED APPROACH REQUIRES MINIMUM CLIMB OF 322 FEET PER NM TO 2800" TO "CLIMB TO 1100 THEN CLIMBING LEFT TURN TO 4000 DIRECT TO PRTLA AND HOLD. \*MISSED APPROACH REQUIRES MINIMUM CLIMB OF 357 FEET PER NM TO 2000" - NEW NAVAID RESTRICTIONS RESULTING IN A GPS MISSED APPROACH.
2. DELETED ALTERNATE MISSED APPROACH INSTRUCTION.
3. ADDED CHART NOTE: RNP APCH - GPS.
4. CHANGED CHART NOTE FROM "FOR INOPERATIVE ALS, INCREASE S-ILS 19L\* ALL CATS VISIBILITY TO RVR 4500 AND INCREASE S-ILS 19L ALL CATS VISIBILITY TO 2 1/2 SM" TO " FOR INOPERATIVE ALS, INCREASE S-ILS RWY 19L\* ALL CATS VISIBILITY TO RVR 4500, S-ILS RWY 19L ALL CATS VISIBILITY TO 2 1/2 SM".
5. CHANGED HOLDING AT PRTLA FROM "HOLD NW, RT, 135.00 INBOUND" TO "HOLD NW, RT, 138.00 INBOUND".
6. DELETED CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD E SJC VOR/DME, LT, 286.00 INBOUND.
7. UPDATED VDP FROM "CHART VDP AT 4.27 DME. DISTANCE VDP TO THLD 2.74 NM" TO "CHART VDP AT 4.02 DME. DISTANCE VDP TO THLD 2.49 NM".
8. CHANGED S-LOC RWY 19L (ROGGE FIX MINIMUMS) FROM "MDA/HAT 960/949 ALL CATS AND VISIBILITY CATS A/B RVR 5500 AND CATS C/D VISIBILITY 2 1/2" TO "MDA/HAT 880/869 ALL CATS, VISIBILITY CAT A RVR 4000, CAT B RVR 5500 AND CATS C/D 2 1/2 SM".
9. CHANGED SIDESTEP RWY 19R (ROGGE FIX MINIMUMS) FROM "MDA/HAT 960/949 ALL CATS" TO "MDA/HAT 880/869 ALL CATS".

10/17/2023: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 08/31/2023.  
ADDED ASTERISK (\*) TO S-ILS 19L MINIMUMS.

*Digitally signed by*  
**ERIC N SUSKI**  
Oct 19, 2023

**COORDINATED WITH:**

**A4A**  **ALPA**  **AOPA**  **APA**  **HAL**  **NBAA**

**OTHER:** ZOA, NORCAL APP CON, SFO ATCT, CITY & COUNTY OF SAN FRANCISCO

*Digitally signed by*

**DAVID TEFFETELLER**  
Aug 31, 2023

**OFFICE**  
FIOG

**DATE**  
08/29/2023

**FLIGHT CHECKED BY**  
BRANDON C. EASTON

**DEVELOPED BY**  
FRANK JACKSON JR

*Digitally signed by*  
**DAVID TEFFETELLER**  
Aug 31, 2023

**OFFICE**  
AJV-A431

**DATE**  
04/06/2023

**APPROVED BY**  
JOHNNIE BAKER

*Digitally signed by*  
**DAVID TEFFETELLER**

**OFFICE**  
AJV-A430

**DATE**

**TITLE**  
MANAGER

