

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 28R ILS RWY 28R (SA CAT I), ILS RWY 28R (CAT II), ILS RWY 28R (CAT III)		<u>ORIGINAL/AMENDMENT</u> 15B	<u>CITY</u> SAN FRANCISCO	<u>STATE</u> CA		
<u>AIRPORT ELEVATION</u> 13	<u>TDZE</u> 28R 13 28L 13	<u>SUPERSEDED</u> ILS OR LOC RWY 28R ILS RWY 28R (SA CAT I), ILS RWY 28R (CAT II), ILS RWY 28R (CAT III)	<u>ORIGINAL/AMENDMENT</u> 15A	<u>DATED</u> 01/03/2019	<u>MAG VAR</u> 14E	<u>EPOCH YEAR</u> 2015	
<u>FACILITY</u> I-GWQ	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 19 MAY 2022	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>			

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
ARCHI	IAF	ZILED		TF	FB	1.00	260.22	3.96	6000
ZILED		GIRRR		TF	FB	1.00	260.16	3.30	5000
GIRRR		DUMBA		TF	FB	1.00	260.10	3.30	4000
DUMBA INT/I-GWQ 16.13 DME	IAF	CEPIN INT/I-GWQ 11.99 DME					283.82	4.15 (I-GWQ)	3000
EDDY	IAF	SIDBY		TF	FB	1.00	330.71	4.71	4000
SIDBY	IAF	CEPIN		TF	FB	1.00	331.28	5.28	3000
CEPIN INT/I-GWQ 11.99 DME	IF	AXMUL INT/I-GWQ 7.43 DME					283.82	4.55 (I-GWQ)	1800



MISSED APPROACH

MAP:
ILS: DA
LOC: 5.44 NM AFTER AXMUL INT/I-GWQ 7.43 DME OR AT I-GWQ 1.99 DME

MISSED APPROACH INSTRUCTIONS:
CLIMB TO 3000 ON SFO VOR/DME R-281 TO VIKYU INT/SFO 12.00 DME AND HOLD. #MISSED APPROACH REQUIRES MINIMUM CLIMB OF 350 FEET PER NM TO 1900; IF UNABLE TO MEET CLIMB GRADIENT, SEE ILS OR LOC RWY 28L.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):
CLIMB TO 2600 ON HEADING 284 THEN CLIMBING RIGHT TURN TO 4000 ON RADAR VECTORS TO SAU VOR/DME AND HOLD. #MISSED APPROACH REQUIRES MINIMUM CLIMB OF 350 FEET PER NM TO 1900; IF UNABLE TO MEET CLIMB GRADIENT, SEE ILS OR LOC RWY 28L.

PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF	(IAF)
2. PROFILE STARTS AT CEPIN					
3. FAC: 283.82		FAF: AXMUL INT/I-GWQ 7.43 DME	DIST FAF TO MAP: 5.44		DIST FAF TO THLD: 5.44
4. MIN ALT:	CEPIN INT/I-GWQ 11.99 DME 3000, AXMUL INT/I-GWQ 7.43 DME 1800				
5. DIST TO THLD FROM OM:	MM:	IM:	100 HAT: 864	150 HAT: 1818	GS ANT: 1065
6. MIN GS INCPT: 1800	GS ALT AT PFAF : AXMUL INT/I-GWQ 7.43 DME 1800		OM:	MM:	IM:
7. GP ANGLE: 3.00	34:1:	20:1:	TCH: 54.8		
8. MSA FROM:	SFO VOR/DME 050-180 4500, 180-300 3500, 300-050 5000				

EQUIPMENT REQUIREMENTS NOTES:

RNAV 1-GPS OR RADAR REQUIRED FOR PROCEDURE ENTRY.

NOTES:

SA CAT I ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; # S-ILS 28R: CAT A, B, C, D, RA 163, RVR 1400, HAT 150, DA 163 MSL.
CAT II ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; # S-ILS 28R: CAT A, B, C, D, RA 113, RVR 1200, HAT 100, DA 113 MSL.
CAT III ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; # S-ILS 28R: CAT A, B, C, D, RVR 600
CHART NOTE: CIRCLING NA TO RWYS 10L, 10R, 19L, AND 19R.
CHART NOTE: CIRCLING RWY 1L, 1R NA AT NIGHT.
CHART NOTE: LOC PROCEDURE NA DURING SIMULTANEOUS OPERATIONS.
SA CAT I CHART NOTE: REQUIRES SPECIFIC OPSPEC, MSPEC, OR LOA APPROVAL AND USE OF HUD TO DH.
CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART PROFILE NOTE: USE I-GWQ DME WHEN ON THE LOCALIZER COURSE.
CHART SPEED ICON IN PLANVIEW AT EDDYY: MAX 240 KIAS.
CHART NOTE: FOR INOPERATIVE ALS INCREASE S-LOC 28R# CAT C/D VISIBILITY TO 1 3/8 SM.
ILS OR LOC CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED.
ILS OR LOC CHART NOTE: SIMULTANEOUS OPERATIONS REQUIRE USE OF VERTICAL GUIDANCE; MAINTAIN LAST ASSIGNED ALTITUDE UNTIL ESTABLISHED ON GLIDESLOPE.



ADDITIONAL FLIGHT DATA:

CHART 317 T-L TWR 373456N/1221506W
CHART MANDATORY 7000 AT ARCHI.
CHART MANDATORY 6000 AT EDDYY.
HOLD E, RT, 281.08 INBOUND.
CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD NE SAU VOR/DME, RT, 215.21 INBOUND.
FAS OBST: 224 AAO 373413N/1221613W.
CHART VDP AT 3.24 DME
DISTANCE VDP TO THLD 1.25 NM.
CHART IN PLANVIEW: SAU VOR/DME.
CHART CIRCLING ICON.

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

ALTERNATE: NA ☐ ILS: STANDARD; LOC: STANDARD - CAT B 1000-2, CAT C 1600-3

CATEGORY:	A			B			C			D			E		
FINAL TYPE	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 28R#	213	1800	200	213	1800	200	213	1800	200	213	1800	200			
S-LOC 28R#	480	2400	467	480	2400	467	480	5000	467	480	5000	467			
SIDESTEP 28L#	480	5500	467	480	5500	467	480	5500	467	480	1 1/2	467			
CIRCLING	740	1	727	960	1 1/4	947	1560	3	1547		NA				

CHANGES - REASONS

1. PROFILE LINE 5: REMOVED DIST TO THLD FROM IM: 846 - INNER MARKER DECOMMISSIONED
2. PROFILE LINE 6: REMOVED ALTITUDE AT IM - INNER MARKER REMOVED
3. INCORPORATED P-NOTAM 8/8877 - IAW 8260.19I, PARA 8-3-4C(3)
4. ALTERNATE MINIMUMS: LOCALIZER - CHANGED FROM STANDARD TO "STANDARD, CAT B 1000-2, CAT C 1600-3" - NON-STANDARD MINS AND CAT D MINS HIGHER THAN FAF

COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZOA, NORCAL APP CON, SFO STCT, AMGR

FLIGHT CHECKED BY
PROCESSED IAW TECHNICAL SUPPORT GROUP (AJF-17) MEMO DATED 07/07/2021 GUIDANCE
FOR PROCEDURAL CHANGES REQUIRING FLIGHT INSPECTION/VALIDATION

OFFICE Digitally signed by
JON DENTON
Feb 16, 2022

DATE

DEVELOPED BY
TYLER MITCHELL

Digitally signed by
TYLER D MITCHELL

OFFICE
AJV-A432

DATE

APPROVED BY
LONNIE EVERHART

Feb 01, 2022

Digitally signed by
JON DENTON
Feb 16, 2022

OFFICE
AJV-A430

DATE

TITLE
MANAGER

