

<b>ILS - STANDARD</b> <b>INSTRUMENT APPROACH PROCEDURE</b> <b>TITLE 14 CFR PART 97.29</b>				Bearings, headings, courses, 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 in feet RVR.											
<b>US DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION</b>															
<b>TERMINAL ROUTES</b>				<b>MISSED APPROACH</b>											
FROM	TO	COURSE AND DISTANCE	ALTITUDE	<b>ILS: DA</b> <b>LOC: 5.44 NM AFTER AXMUL INT/I-GWQ 7.43 DME OR AT I-GWQ 1.99 DME</b>  <b>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.</b>  <b>ALTERNATE MA (DO NOT CHART): CLIMB TO 2600 ON HEADING (SEE FORM 8260-10)</b>  <b>ADDITIONAL FLIGHT DATA:</b> <b>HOLD E, RT, 281.08 INBOUND.</b> <b>CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD NE SAU VOR/DME, RT, 215.21 INBOUND.</b> <b>FAS OBST: 224 AAO 373413N/1221613W.</b> <b>CHART VDP AT 3.24 DME*</b> <b>DISTANCE VDP TO THLD 1.25 NM.</b> <b>*LOC ONLY.</b> <b>CHART IN PLANVIEW: SAU VOR/DME.</b> <b>CHART CIRCLING ICON.</b> <b>CHART 317 T-L TWR 373456N/1221506W</b> <b>CHART MANDATORY 6000 AT EDDYY.</b> <b>CHART MANDATORY 8000 AT ARCHI.</b>											
ARCHI (IAF)	ZILED (TF) (FB) (RNP 1.00)	260.22 / 3.96	6000												
ZILED	GIRRR (TF) (FB) (RNP 1.00)	260.16 / 3.30	5000												
GIRRR	DUMBA (TF) (FB) (RNP 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												
EDDYY (IAF) (SEE FORM 8260-10)	SIDBY (TF) (FB) (RNP 1.00)	330.71 / 4.71	4000												
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT CEPIN 3. FAC: <u>283.82</u> FAF: <u>AXMUL INT/I-GWQ 7.43 DME</u> DIST FAF TO MAP: <u>5.44</u> THLD: <u>5.44</u> 4. MIN. ALT: <u>CEPIN 3000, AXMUL 1800</u> 5. DIST TO THLD FROM OM: _____ - _____ MM: _____ - _____ IM: <u>846</u> 150 HAT: <u>1818</u> 100 HAT: <u>864</u> GS ANT: <u>1065</u> 6. MIN GS INCPT: <u>1800</u> GS ALT AT: <u>AXMUL 1800</u> OM: _____ - _____ MM: _____ - _____ IM: <u>128</u> 7. GS ANGLE: <u>3.00</u> TCH: <u>54.8</u> 8. MSA FROM: <u>SFO VOR/DME 050-180 4500, 180-300 3500, 300-050 5100</u>				MAG VAR: <u>14E</u> EPOCH YEAR: <u>2015</u>											
<b>MINIMUMS</b>															
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT				ALTERNATE: N A		ILS: STANDARD		LOC: STANDARD @							
CATEGORY =====>	A		B		C		D		E						
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/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				
NOTES: <b>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.</b> <b>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.</b> <b>(CONTINUED ON PAGE 2)</b>															
CITY AND STATE		ELEVATION: 13		TDZE: 28R 13		FACILITY IDENTIFIER:		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:			
SAN FRANCISCO, CA		AIRPORT NAME:		TDZE: 28L 13		I-GWQ		ILS OR LOC RWY 28R, AMDT 14; ILS RWY 28R (SA CAT I), ILS RWY 28R (CAT II), ILS RWY 28R (CAT III)				AMDT: 13B			
		SAN FRANCISCO INTL						29 MARCH 2018				DATED 10/13/2016			

## US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

ILS - STANDARD  
INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.29

Bearings, headings, courses, 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 in feet RVR.

## TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
SIDBY	CEPIN (TF) (FB) (RNP 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 INSTRUCTIONS, (CONT.):

283 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.

## NOTES, (CONT.):

CAT III ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 28R: CAT III 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.

SA CAT I CHART NOTE: REQUIRES SPECIFIC OPSPEC, MSPEC, OR LOA APPROVAL AND USE OF HUD TO DH.

CHART PLANVIEW NOTE: RNAV 1-GPS OR RADAR REQUIRED FOR PROCEDURE ENTRY.

CHART PROFILE NOTE: USE I-GWQ DME WHEN ON THE LOCALIZER COURSE.

CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).

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.

CHART NOTE: LOC PROCEDURE NA DURING SIMULTANEOUS OPERATIONS.

CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED. SIMULTANEOUS OPERATIONS REQUIRE USE OF VERTICAL GUIDANCE; MAINTAIN LAST ASSIGNED ALTITUDE UNTIL ESTABLISHED ON GLIDESLOPE.

CHART SPEED ICON IN PLANVIEW AT ARCHI: MAX 230 KIAS.

QUALITY  
25  
CHECKED

CITY AND STATE

SAN FRANCISCO, CA

ELEVATION: 13

AIRPORT NAME:

SAN FRANCISCO INTL

TDZE: 28R 13  
TDZE: 28L 13FACILITY  
IDENTIFIER:  
I-GWQ

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

ILS OR LOC RWY 28R, AMDT 14; ILS RWY 28R (SA CAT I),  
ILS RWY 28R (CAT II), ILS RWY 28R (CAT III)

29 MARCH 2018

SUP:

AMDT: 13B

DATED: 10/13/2016