

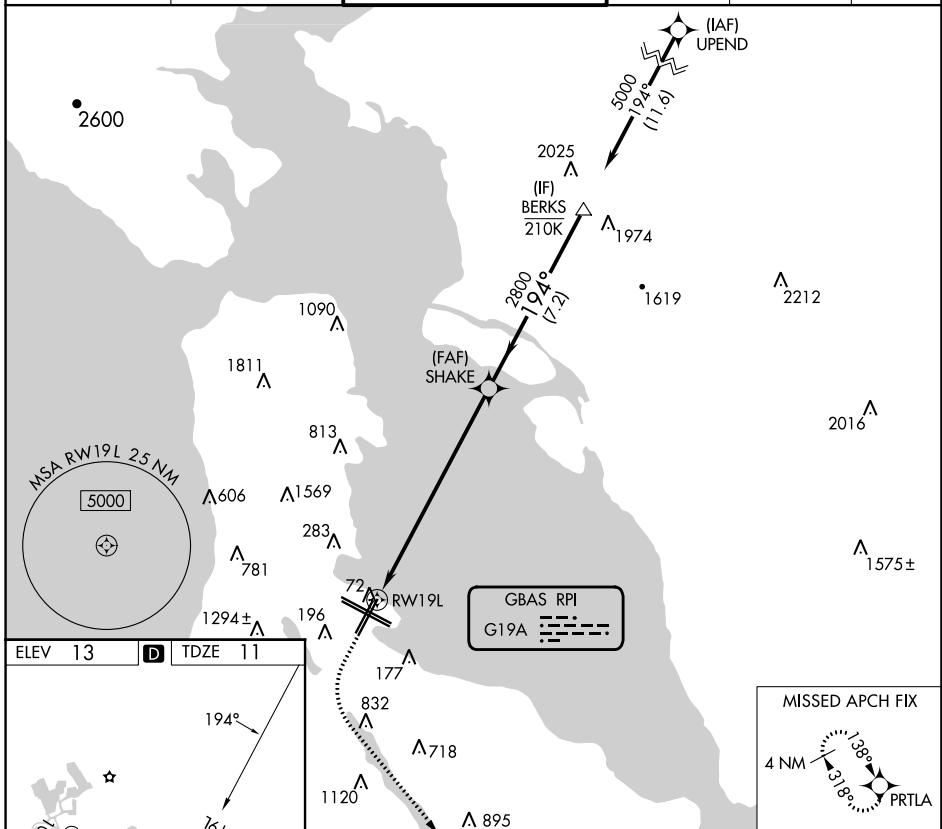
GBAS CH <b>21448</b> G19A	APP CRS <b>194°</b>	Rwy Idg TDZE Apt Elev	<b>8650</b> <b>11</b> <b>13</b>
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# GLS RWY 19L

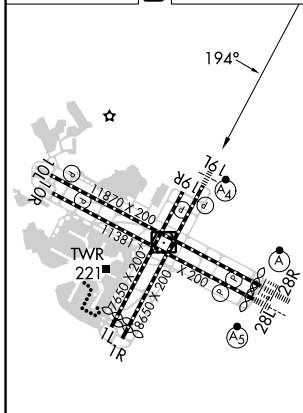
SAN FRANCISCO INTL (SFO)

RNP APCH-GPS.	MALSF	MISSED APPROACH: Climb to 920 then climbing left turn to 4000 direct PRTLA and hold. Missed approach requires minimum climb of 357 feet per NM to 2000.
<p>Autopilot coupled approach NA below 293 feet.</p> <p>For inop ALS, increase GLS visibility to RVR 4500.</p>		

D-ATIS <b>113.7 115.8</b> <b>118.85</b>	NORCAL APP CON <b>134.5 338.2</b>	SAN FRANCISCO TOWER <b>120.5 269.1</b>	GND CON <b>121.8</b>	CLNC DEL <b>118.2</b>	CPDLC
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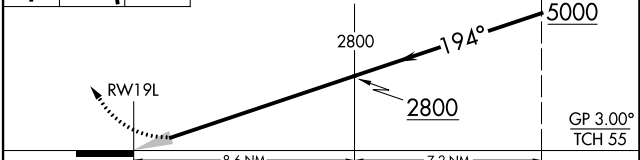


ELEV 13	<b>D</b>	TDZE 11
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TDZ/CL Rwy 19L and 28R  
REIL Rwy 1L, 1R and 10L  
HIRL all Rwy

920	4000	PRTLA	VGSI and GLS glidepath not coincident (VGSI Angle 3.00/TCH 71).	BERKS
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CATEGORY	A	B	C	D
GLS DA	293/40		282 (300-3/4)	

GBAS CH <b>21859</b> <b>G19B</b>	APP CRS <b>194°</b>	Rwy Idg TDZE Apt Elev	<b>7650</b> <b>11</b> <b>13</b>
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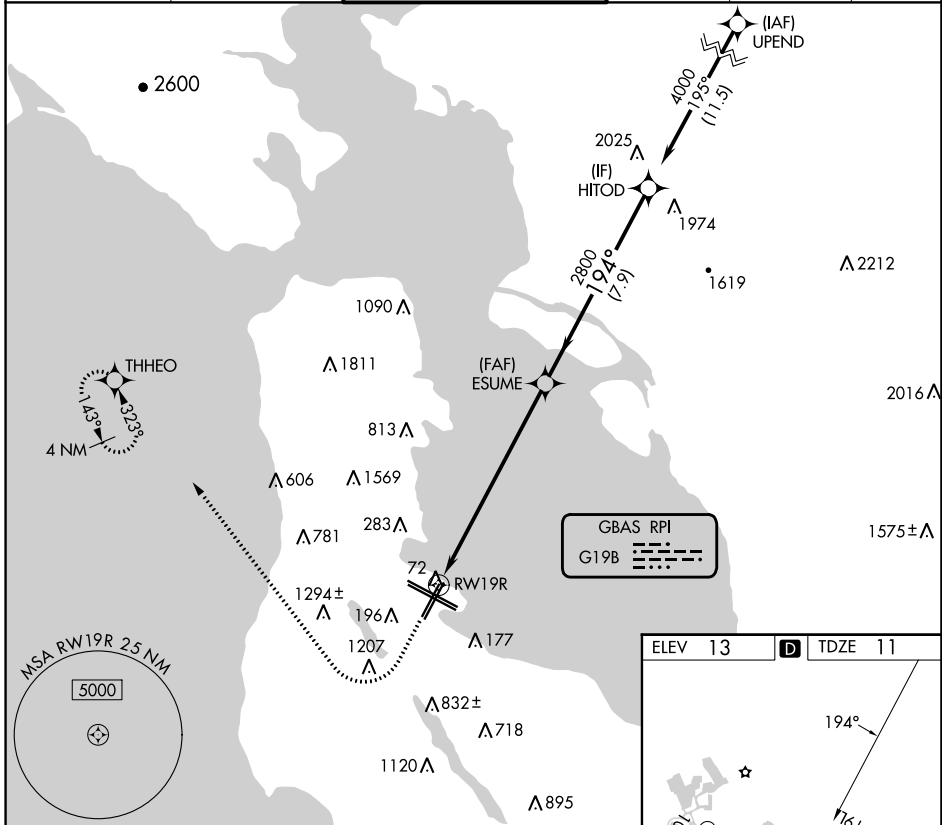
# GLS RWY 19R

SAN FRANCISCO INTL (SFO)

RNP APCH-GPS.	
<b>NA</b>	Autopilot coupled approach NA below 321 feet.

MISSED APPROACH: Climb to 600 then climbing right turn to 3000 direct THHEO and hold. Missed approach requires minimum climb of 395 feet per NM to 2100.

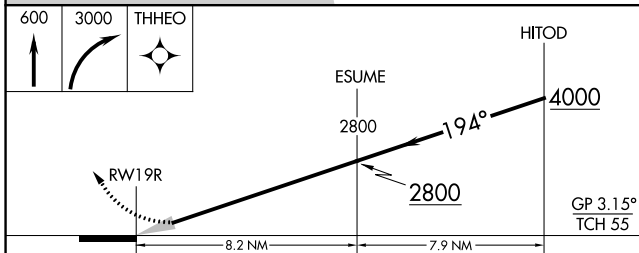
D-ATIS <b>113.7 115.8</b> <b>118.85</b>	NORCAL APP CON <b>134.5 338.2</b>	SAN FRANCISCO TOWER <b>120.5 269.1</b>	GND CON <b>121.8</b>	CLNC DEL <b>118.2</b>	CPDLC
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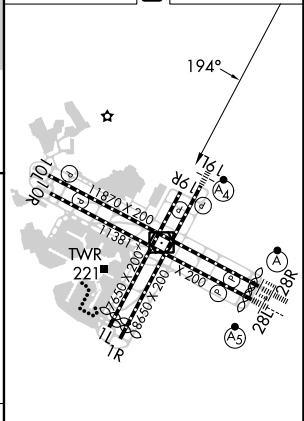
SW-2, 22 FEB 2024 to 21 MAR 2024

SW-2, 22 FEB 2024 to 21 MAR 2024

GBAS RPI  
G19B



ELEV 13	<b>D</b>	TDZE 11
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CATEGORY	A	B	C	D
GLS DA		321/45	310 (400-7/8)	

TDZ/CL Rwy 19L and 28R  
REIL Rwy 1L, 1R and 10L  
HIRL all Rwy

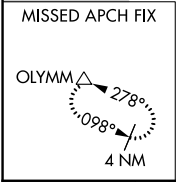
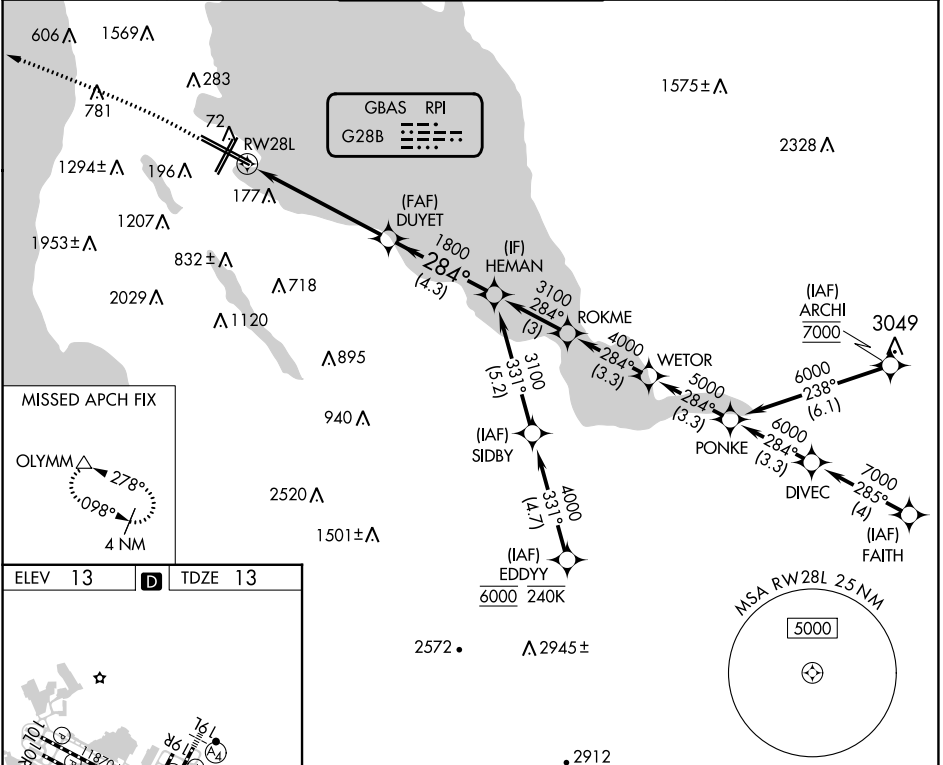
GBAS CH <b>21037</b> RNP <b>G28B</b>	APP CRS <b>284°</b>	Rwy Idg <b>10275</b> TDZE <b>13</b> Apt Elev <b>13</b>
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# GLS RWY 28L

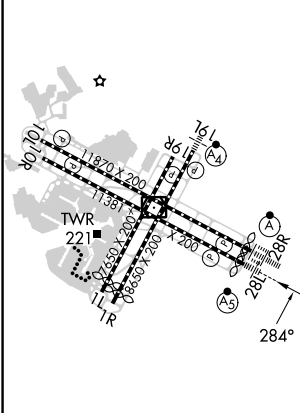
SAN FRANCISCO INTL (SFO)

RNP APCH-GPS.	MALSR 	MISSED APPROACH: Climb to 1020 then climbing left turn to 4000 direct OLYMM and hold. *Missed approach requires minimum climb of 330 feet per NM to 1600; if unable to meet climb gradient, see RNAV (GPS) Rwy 28L.
Simultaneous approach authorized. Simultaneous operations require use of vertical guidance; maintain last assigned altitude until established on glidepath. Use of FD or AP required during simultaneous operations. Autopilot coupled approach NA below 213. *RVR 1800 authorized with use of FD or AP or HUD to DA.		

D-ATIS <b>113.7 115.8</b> <b>118.85</b>	NORCAL APP CON <b>134.5 338.2</b>	SAN FRANCISCO TOWER <b>120.5 269.1</b>	GND CON <b>121.8</b>	CLNC DEL <b>118.2</b>	CPDLC
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ELEV 13	<b>D</b>	TDZE 13
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1020	4000	OLYMM	VGSI and GLS glidepath not coincident (VGSI Angle 2.85/TCH 67).	
HEMAN	DUYET			
3100	1800		GP 2.85° TCH 53	
	5.7 NM	4.3 NM		
CATEGORY	A	B	C	D
GLS DA*	213/24		200 (200-1/2)	

HIRL all Rwys  
 TDZ/CL Rwys 19L and 28R  
 REIL Rwys 1L, 1R and 10L

SW-2, 22 FEB 2024 to 21 MAR 2024

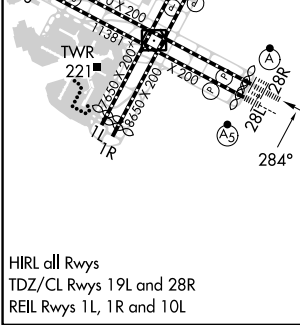
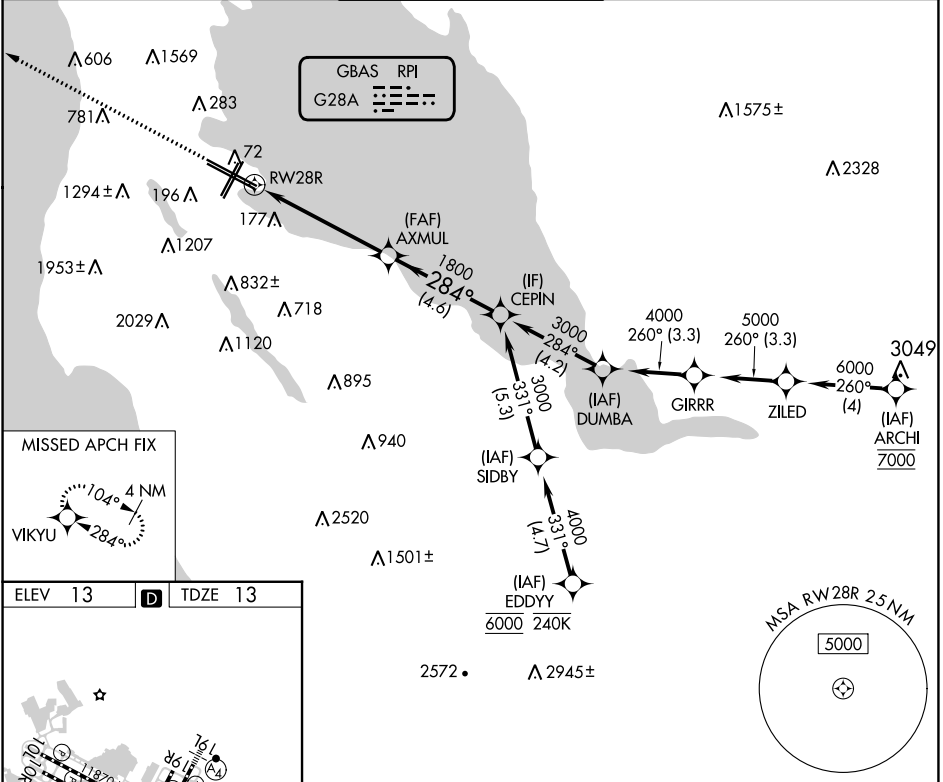
SW-2, 22 FEB 2024 to 21 MAR 2024

GBAS CH <b>20626</b> <b>G28A</b>	APP CRS <b>284°</b>	Rwy Idg <b>11236</b> TDZE <b>13</b> Apt Elev <b>13</b>
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# GLS RWY 28R

SAN FRANCISCO INTL (SFO)

RNP APCH-GPS.		ALSF-2 	MISSED APPROACH: Climb to 3200 direct VIKYU and hold. *Missed approach requires minimum climb of 350 feet per NM to 1900; if unable to meet climb gradient, see RNAV (GPS) Z RWY 28R.		
<p>Simultaneous approach authorized. Simultaneous operations require use of vertical guidance; maintain last assigned altitude until established on glidepath. Use of FD or AP required during simultaneous operations. Autopilot coupled approach NA below 213 feet.</p>					
D-ATIS <b>113.7 115.8</b> <b>118.85</b>	NORCAL APP CON <b>134.5 338.2</b>	SAN FRANCISCO TOWER <b>120.5 269.1</b>	GND CON <b>121.8</b>	CLNC DEL <b>118.2</b>	CPDLC



3200	VIKYU	VGSi and GLS glidepath not coincident (VGSi Angle 3.00/TCH 68).	CEPIN	
		AXMUL		
		1800	3000	
			GP 3.00° TCH 55	
		5.4 NM	4.6 NM	
CATEGORY	A	B	C	D
GLS DA*	213/18 200 (200-1/2)			

SW-2, 22 FEB 2024 to 21 MAR 2024

SW-2, 22 FEB 2024 to 21 MAR 2024

LOC/DME I-SFO <b>109.55</b> Chan <b>32(Y)</b>	APP CRS <b>284°</b>	Rwy Idg TDZE Apt Elev	<b>10275</b> <b>13</b> <b>13</b>
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# ILS RWY 28L (SA CAT II)

SAN FRANCISCO INTL (SFO)

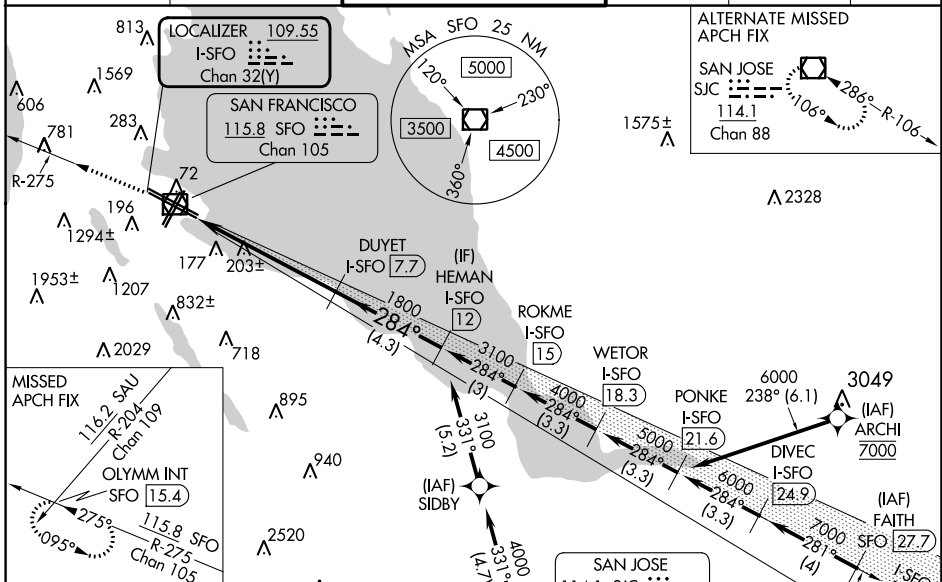
DME required. RNP APCH-GPS or RADAR required for procedure entry.

Requires specific OPSPEC, MSPEC, or LOA approval.

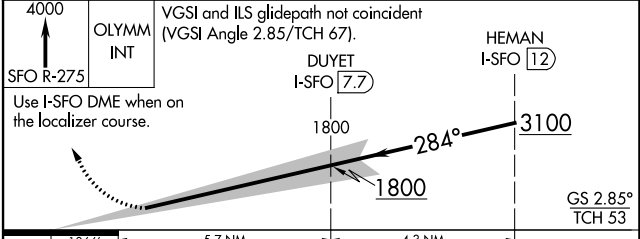
MALSR

MISSED APPROACH: Climb to 4000 on SFO VOR/DME R-275 to OLYMM INT/SFO 15.4 DME and hold, continue climb-in-hold to 4000.  
\*Misted approach requires minimum climb of 330 feet per NM to 1600.

D-ATIS <b>113.7 115.8 118.85</b>	NORCAL APP CON <b>134.5 338.2</b>	SAN FRANCISCO TOWER <b>120.5 269.1</b>	GND CON <b>121.8</b>	CLNC DEL <b>118.2</b>	CPDLC
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ELEV 13	D	TDZE 13
HIRL All Rwys		
TDZ/CL Rwys 19L and 28R		
REIL Rwys 1L, 1R and 10L		



CATEGORY	A	B	C	D
S-ILS 28L*	RA 113/12 100 DA 113			

**SA CAT II ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED**

SW-2, 22 FEB 2024 to 21 MAR 2024

SW-2, 22 FEB 2024 to 21 MAR 2024

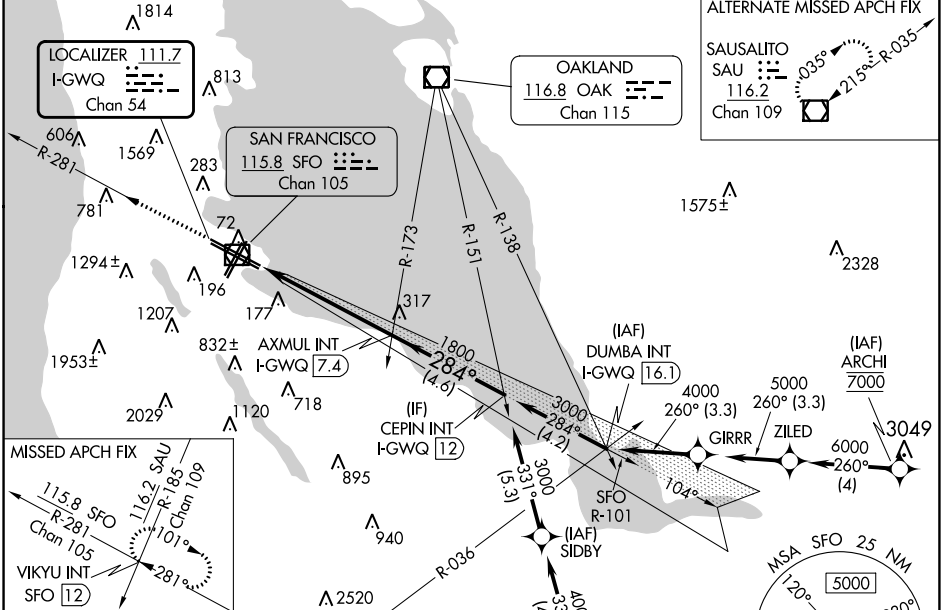
LOC/DME I-GWQ <b>111.7</b> Chan 54	APP CRS <b>284°</b>	Rwy Idg <b>11236</b> TDZE <b>13</b> Apt Elev <b>13</b>
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# ILS RWY 28R (CAT II & III)

SAN FRANCISCO INTL (SFO)

RNAV 1-GPS or RADAR required for procedure entry.	ALSF-2 	MISSED APPROACH: Climb to 3000 on SFO VOR/DME R-281 to VIKYU INT/SFO 12 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.
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D-ATIS <b>113.7 115.8</b> <b>118.85</b>	NORCAL APP CON <b>134.5 338.2</b>	SAN FRANCISCO TOWER <b>120.5 269.1</b>	GND CON <b>121.8</b>	CLNC DEL <b>118.2</b>	CPDLC
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ELEV 13	<b>D</b>	TDZE 13
HIRL all Rwys TDZ/CL Rwys 19L and 28R REIL Rwys 1L, 1R and 10L		



CEPIN INT I-GWQ 12	
AXMUL INT I-GWQ 7.4	
VIKYU INT	
SFO R-281	
GS 3.00° TCH 55	

CATEGORY	A	B	C	D
S-ILS 28R*	CAT II RA 113/12 100 DA 113			
S-ILS 28R*	CAT III RVR 06			

## CATEGORY II & III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

SW-2, 22 FEB 2024 to 21 MAR 2024

SW-2, 22 FEB 2024 to 21 MAR 2024

LOC/DME I-GWQ <b>111.7</b> Chan 54	APP CRS <b>284°</b>	Rwy Idg <b>11236</b> TDZE <b>13</b> Apt Elev <b>13</b>
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# ILS RWY 28R (SA CAT I)

## SAN FRANCISCO INTL (SFO)

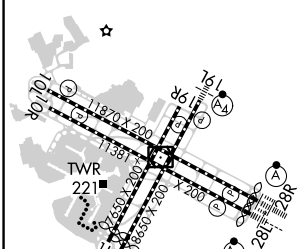
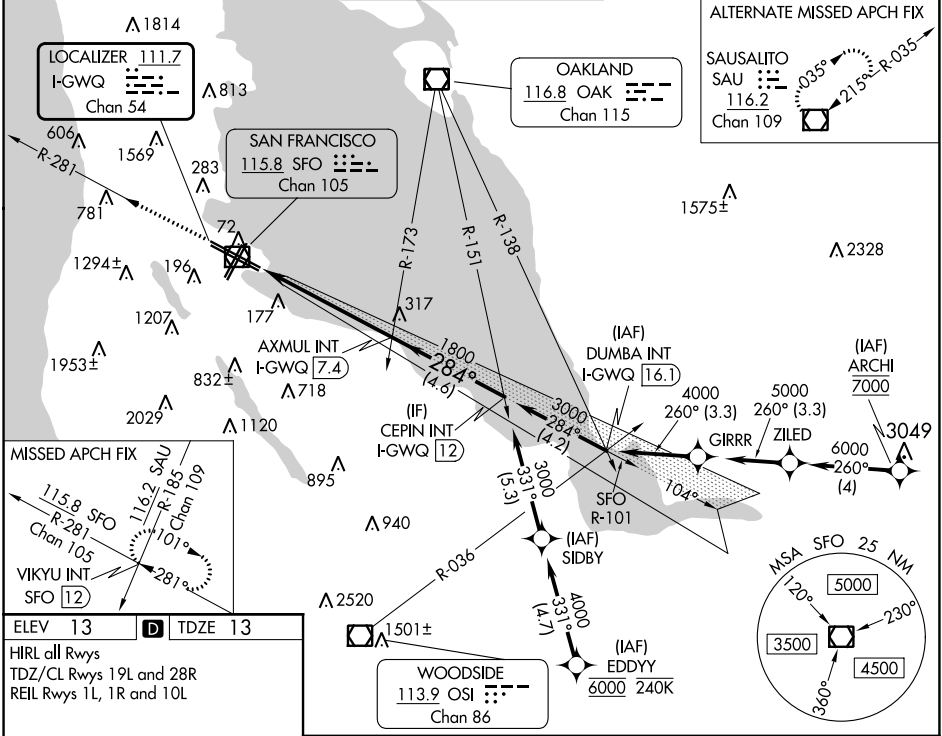
RNAV 1-GPS or RADAR required for procedure entry.

Requires specific OPSPEC, MSPEC, or LOA approval and use of HUD to DH.

ALSF-2

MISSED APPROACH: Climb to 3000 on SFO VOR/DME R-281 to VIKYU INT/SFO 12 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.

D-ATIS <b>113.7 115.8</b> <b>118.85</b>	NORCAL APP CON <b>134.5 338.2</b>	SAN FRANCISCO TOWER <b>120.5 269.1</b>	GND CON <b>121.8</b>	CLNC DEL <b>118.2</b>	CPDLC
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CATEGORY	A	B	C	D
S-ILS 28R*	RA 163/14 150 DA 163			

**SA CATEGORY I ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED**

SW-2, 22 FEB 2024 to 21 MAR 2024

SW-2, 22 FEB 2024 to 21 MAR 2024

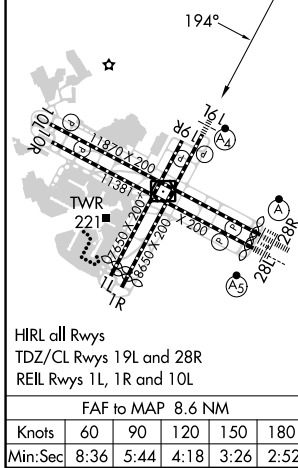
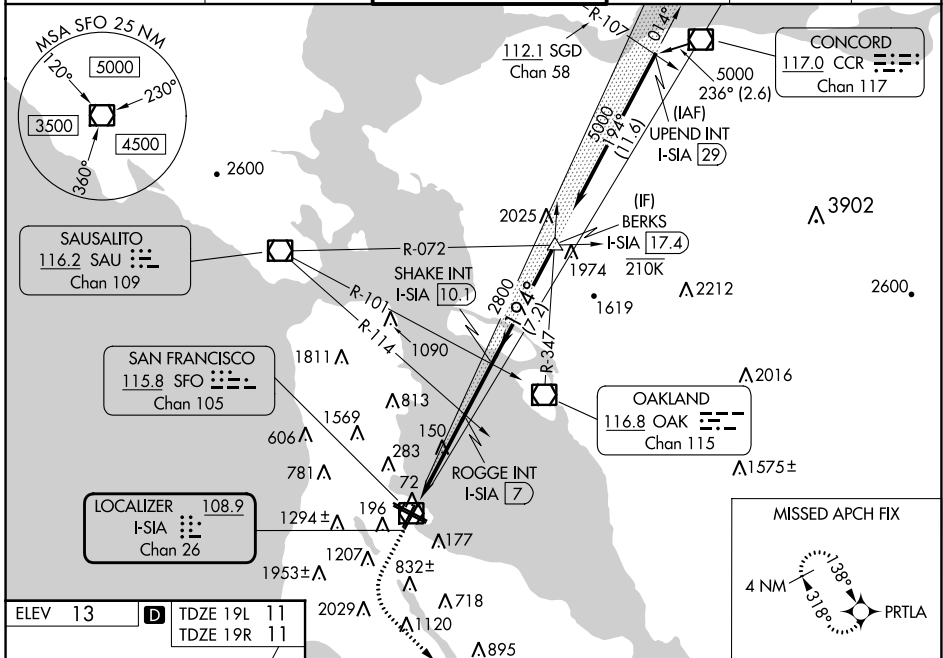
LOC/DME I-SIA <b>108.9</b> Chan <b>26</b>	APP CRS <b>194°</b>	Rwy Idg 19L 19R TDZE <b>11 11</b> Apt Elev <b>13 13</b>
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# ILS or LOC RWY 19L

SAN FRANCISCO INTL (SFO)

RNP APCH - GPS.	MALSf Rwy 19L	MISSED APPROACH: 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.
<p>⚠ Inop table does not apply to S-LOC Rwy 19L or Sidestep Rwy 19R. Simultaneous approach authorized. Simultaneous operations require use of vertical guidance; maintain last assigned altitude until established on the glide slope. For inop ALS, increase S-ILS Rwy 19L* all Cats visibility to RVR 4500, S-ILS Rwy 19L all Cats visibility to 2½ SM. Sidestep NA until passing ROGGE INT.</p>		

D-ATIS <b>113.7 115.8 118.85</b>	NORCAL APP CON <b>134.5 338.2</b>	SAN FRANCISCO TOWER <b>120.5 269.1</b>	GND CON <b>121.8</b>	CLNC DEL <b>118.2</b>	CPDLC
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ELEV 13	TDZE 19L 11	TDZE 19R 11		
<p>194°</p>				
<p>VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 71).</p>				
<p>1100</p> <p>4000</p> <p>PRTLA</p>	<p>ROGGE INT I-SIA [7]</p> <p>SHAKE INT I-SIA [10.1]</p>	<p>BERKS I-SIA [17.4]</p> <p>5000</p> <p>GS 3.00° TCH 55</p>		
<p>2.5 NM</p>	<p>3 NM</p>	<p>3.1 NM</p>		
<p>7.2 NM</p>				
CATEGORY	A	B	C	D
S-ILS 19L*	300/40		289 (300-¾)	
S-ILS 19L	774-2		763 (800-2)	
S-LOC 19L	1800-1¼ 1789 (1800-1¼)	1800-1½ 1789 (1800-1½)	1800-3 1789 (1800-3)	
ROGGE FIX MINIMUMS (DUAL VOR RECEIVERS OR DME REQUIRED)				
S-LOC 19L	880/40 869 (900-¾)	880/55 869 (900-1)	880-2½ 869 (900-2½)	
SIDESTEP 19R	880-2 869 (900-2)		880-3 869 (900-3)	



LOC/DME I-SFO	APP CRS	Rwy Idg	10275
109.55	284°	TDZE	13
Chan 32(Y)		Apt Elev	13

# ILS or LOC RWY 28L

SAN FRANCISCO INTL (SFO)

DME required. RNP APCH-GPS or RADAR required for procedure entry.

**⚠** Circling NA to Rwys 10L, 10R, 19L, and 19R. Circling to Rwy 1L and 1R NA at night. Simultaneous approach authorized. Simultaneous operations require use of vertical guidance; maintain last assigned altitude until established on glideslope. LOC procedure NA during simultaneous operations.

\*RVR 1800 authorized with use of FD or AP or HUD to DA.

†For inop ALS, increase S-ILS 28L all Cats visibility to 2½ SM.

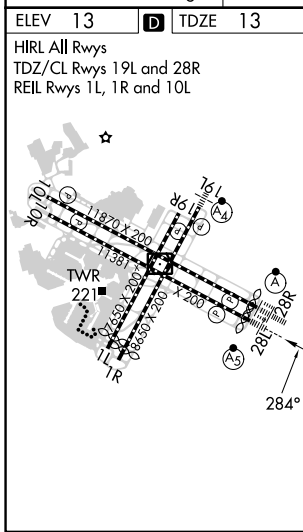
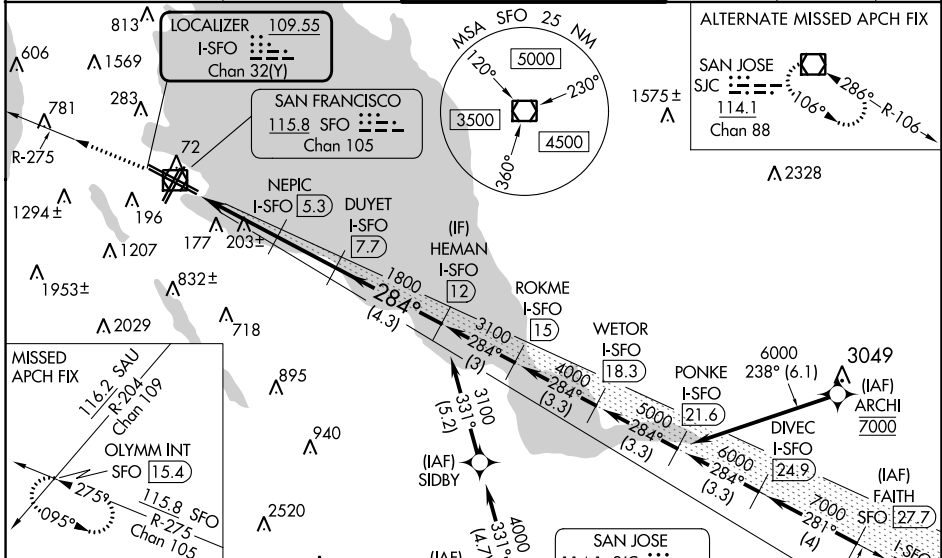
\*\*For inop ALS increase S-LOC 28L Cat C/D visibility to 2½ SM.

**MALSR**

**AS**

**MISSED APPROACH:** Climb to 4000 on SFO VOR/DME R-275 to OLYMM INT/SFO 15.4 DME and hold, continue climb-in-hold to 4000. #Missed approach requires minimum climb of 330 feet per NM to 1600.

D-ATIS	NORCAL APP CON	SAN FRANCISCO TOWER	GND CON	CLNC DEL	CPDLC
113.7 115.8 118.85	134.5 338.2	120.5 269.1	121.8	118.2	



ELEV 13 TDZE 13

HIRL All Rwys  
TDZ/CL Rwys 19L and 28R  
REIL Rwys 1L, 1R and 10L

VGSI and ILS glidepath not coincident (VGSI Angle 2.85/TCH 67).  
Use I-SFO DME when on the localizer course.

CATEGORY	A	B	C	D
S-ILS 28L#*	213/24		200 (200-½)	
S-ILS 28L†	789-1¾		776 (800-1¾)	
S-LOC 28L#	460/24 447 (500-½)		460/45 447 (500-¾)	
S-LOC 28L**	860/24 847 (900-½)		860-178 847 (900-178)	
<b>C</b> CIRCLING	860-1¼ 847 (900-1¼)		960-1¼ 1547 (1600-3)	

SW-2, 22 FEB 2024 to 21 MAR 2024

SW-2, 22 FEB 2024 to 21 MAR 2024

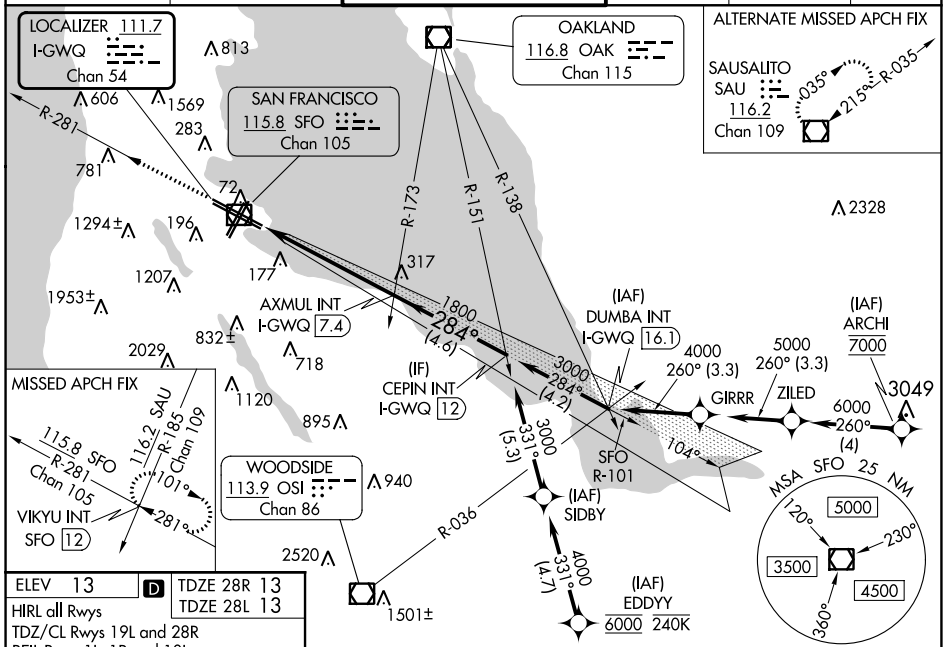
LOC/DME I-GWQ <b>111.7</b> Chan 54	APP CRS <b>284°</b>	Rwy Idg 28R 28L	11236 10275
		TDZE 13 13	
		Apt Elev 13 13	

# ILS or LOC RWY 28R

SAN FRANCISCO INTL (SFO)

RNAV 1-GPS or RADAR required for procedure entry.		ALSIF-2 Rwy 28R	MALSR Rwy 28L	MISSED APPROACH: Climb to 3000 on SFO VOR/DME R-281 to VIKYU INT/SFO 12 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.
<p><b>⚠</b> Circling NA to Rwys 10L, 10R, 19L, and 19R. Circling Rwy 1L, 1R NA at night. LOC procedure NA during simultaneous operations. For inop ALS increase S-LOC 28R* Cat C/D visibility to 1 3/8 SM. Simultaneous approach authorized. Simultaneous operations require use of vertical guidance; maintain last assigned altitude until established on glideslope.</p>				

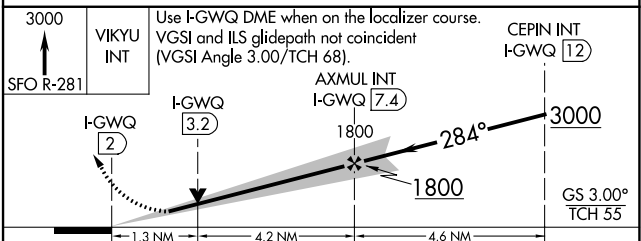
D-ATIS <b>113.7 115.8 118.85</b>	NORCAL APP CON <b>134.5 338.2</b>	SAN FRANCISCO TOWER <b>120.5 269.1</b>	GND CON <b>121.8</b>	CLNC DEL <b>118.2</b>	CPDLC
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ELEV 13	TDZE 28R 13
HIRL all Rwys	TDZE 28L 13
TDZ/CL Rwys 19L and 28R	
REIL Rwys 1L, 1R and 10L	

FAF to MAP 5.4 NM					
Knots	60	90	120	150	180
Min:Sec	5:24	3:36	2:42	2:10	1:48



CATEGORY	A	B	C	D
S-ILS 28R*	213/18 200 (200-1/2)			
S-LOC 28R*	480/24	467 (500-1/2)	480/50	467 (500-1)
SIDESTEP* 28L	480/55 467 (500-1)			480-1 1/2 467 (500-1 1/2)
CIRCLING	740-1	960-1 1/4	1560-3	NA
	727 (800-1)	947 (1000-1 1/4)	1547 (1600-3)	

SW-2, 22 FEB 2024 to 21 MAR 2024

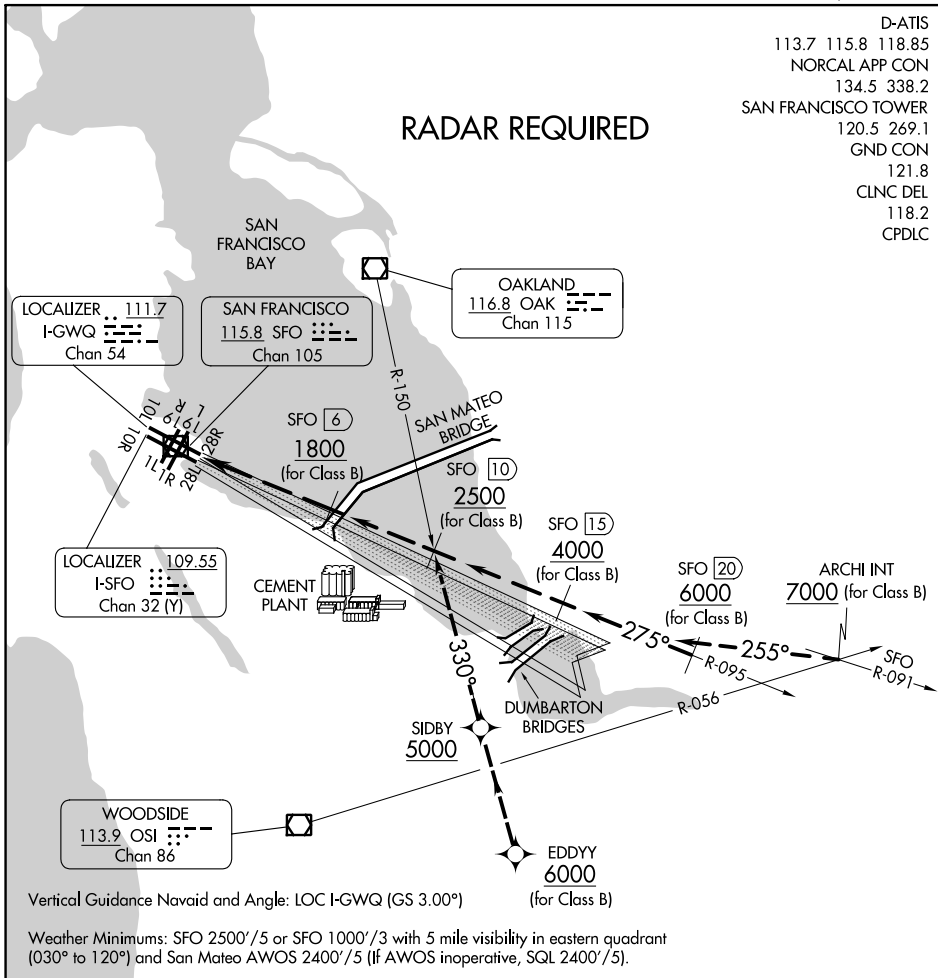
SW-2, 22 FEB 2024 to 21 MAR 2024

# QUIET BRIDGE VISUAL RWY 28L/R

SAN FRANCISCO INTL (SFO)  
SAN FRANCISCO, CALIFORNIA

D-ATIS  
113.7 115.8 118.85  
NORCAL APP CON  
134.5 338.2  
SAN FRANCISCO TOWER  
120.5 269.1  
GND CON  
121.8  
CLNC DEL  
118.2  
CPDLC

## RADAR REQUIRED



SW-2, 22 FEB 2024 to 21 MAR 2024

SW-2, 22 FEB 2024 to 21 MAR 2024

Vertical Guidance Navaid and Angle: LOC I-GWQ (GS 3.00°)

Weather Minimums: SFO 2500'/5 or SFO 1000'/3 with 5 mile visibility in eastern quadrant (030° to 120°) and San Mateo AWOS 2400'/5 (If AWOS inoperative, SQL 2400'/5).

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
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## QUIET BRIDGE VISUAL APPROACH RUNWAY 28L/R

NOTE: Closely spaced parallel visual approaches may be in progress to Runway 28L utilizing I-SFO. In the event of a go-around on Runway 28L, turn left heading 265° or on Runway 28R, heading 280°, climb and maintain 3000 or as directed by ATC.

# QUIET BRIDGE VISUAL RWY 28L/R

SAN FRANCISCO, CALIFORNIA  
SAN FRANCISCO INTL (SFO)

APP CRS <b>104°</b>	Rwy Idg <b>11193</b>
	TDZE <b>7</b>
	Apt Elev <b>13</b>

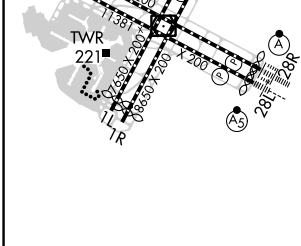
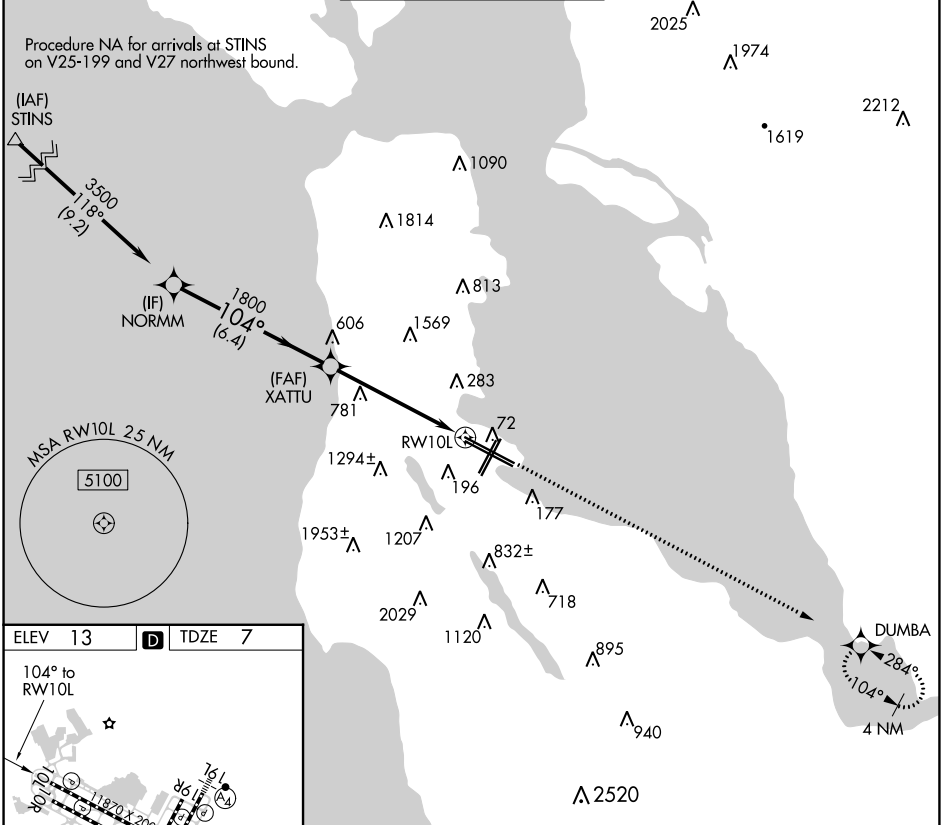
# RNAV (GPS) RWY 10L

SAN FRANCISCO INTL (SFO)

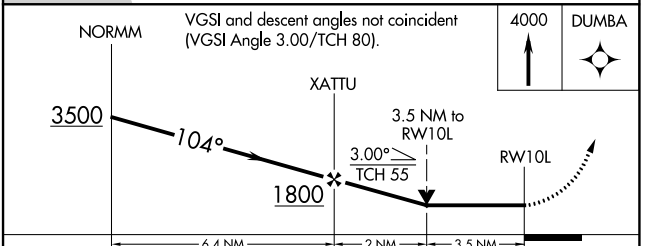
**▽** DME/DME RNP-0.3 NA.  
**△** Helicopter visibility reduction below RVR 4000 NA.

MISSED APPROACH: Climb to 4000 direct DUMBA and hold.

D-ATIS <b>113.7 115.8</b> <b>118.85</b>	NORCAL APP CON <b>134.5 338.2</b>	SAN FRANCISCO TOWER <b>120.5 269.1</b>	GND CON <b>121.8</b>	CLNC DEL <b>118.2</b>	CPDLC
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TDZ/CL Rwy 19L and 28R  
 REIL Rwy 1L, 1R, and 10L  
 HIRL all Rwy



CATEGORY	A	B	C	D
LNAV MDA	1200/60 1193 (1200-1¼)	1200-1½ 1193 (1200-1½)	1200-3	1193 (1200-3)

SW-2, 22 FEB 2024 to 21 MAR 2024

SW-2, 22 FEB 2024 to 21 MAR 2024

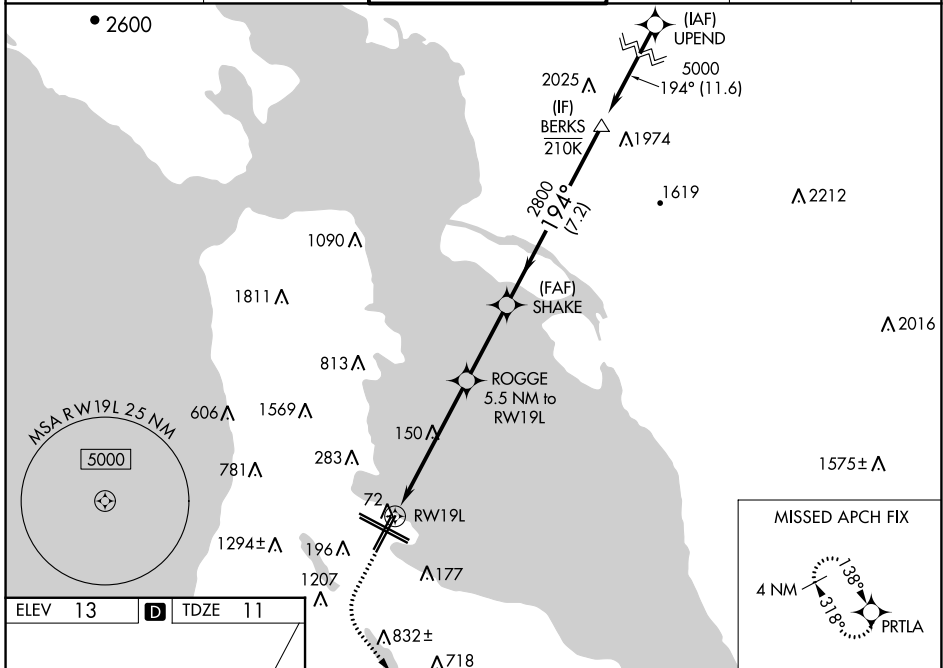
WAAS CH <b>58015</b> <b>W19A</b>	APP CRS <b>194°</b>	Rwy Idg <b>8650</b> TDZE <b>11</b> Apt Elev <b>13</b>
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# RNAV (GPS) RWY 19L

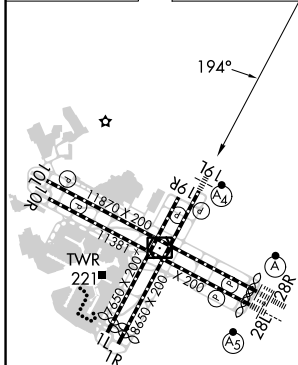
SAN FRANCISCO INTL (SFO)

RNP APCH - GPS.	<p><b>MAISF</b></p> <p>MISSED APPROACH: Climb to 1100 then climbing left turn to 4000 direct PRTLA and hold.</p> <p>*Missed approach requires minimum climb of 357 feet per NM to 2000.</p>
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D-ATIS <b>113.7 115.8 118.85</b>	NORCAL APP CON <b>134.5 338.2</b>	SAN FRANCISCO TOWER <b>120.5 269.1</b>	GND CON <b>121.8</b>	CLNC DEL <b>118.2</b>	CPDLC
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ELEV 13	<b>D</b>	TDZE 11
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1100	4000	PRTLA	<p>VGSI and RNAV glidepath not coincident (VGSI Angle 3.00°/TCH 71).</p>	BERKS
		<p>3.2 NM to RWY 19L</p>	<p>5.5 NM to RWY 19L</p>	<p>5000</p>
				<p>GP 3.00° TCH 55</p>

CATEGORY	A	B	C	D
LPV DA*		293/40	282 (300-¾)	
LPV DA		656-1½	645 (700-1½)	
LNAV/VNAV DA*		350/40	339 (400-¾)	
LNAV/VNAV DA		794-2	783 (800-2)	
LNAV MDA	1100/55 1089 (1100-1)	1100-1¼ 1089 (1100-1¼)	1100-2½	1089 (1100-2½)

TDZ/CL Rwy 19L and 28R  
REIL Rwy 1L, 1R and 10L  
HIRL all Rwy


WAAS CH <b>53415</b> <b>W28B</b>	APP CRS <b>284°</b>	Rwy Idg <b>10275</b> TDZE <b>13</b> Apt Elev <b>13</b>
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# RNAV (GPS) RWY 28L

SAN FRANCISCO INTL (SFO)

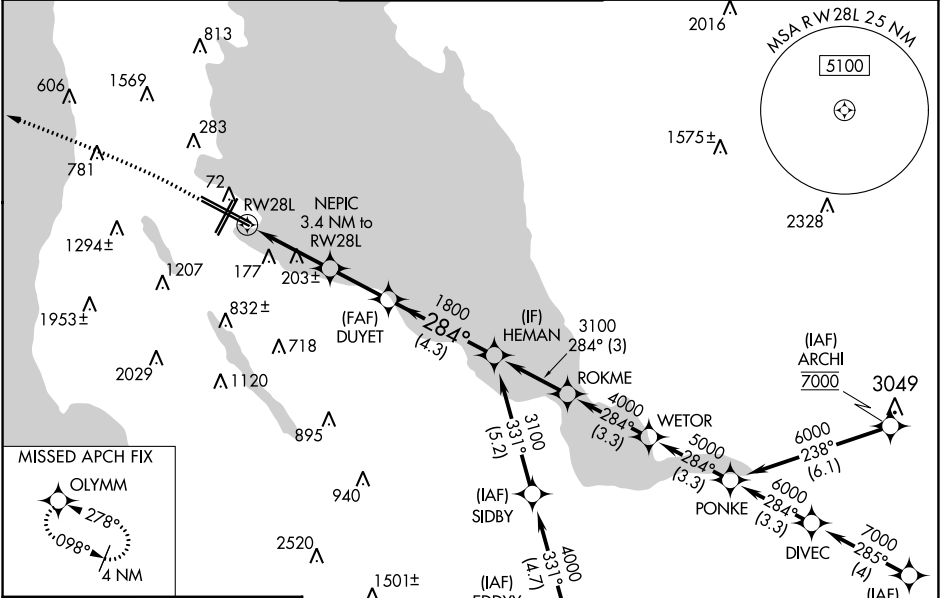
**RNP APCH.**

▼ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 3°C or above 54°C. For inop ALS, increase LPV † all Cats visibility to 2½ SM, increase LNAV/VNAV all Cats visibility to 2 SM. Circling NA to Rwy 10L, 10R, 19L, and 19R. Circling Rwy 1L, 1R NA at night.  
#RVR 1800 authorized with use of FD or AP or HUD to DA.

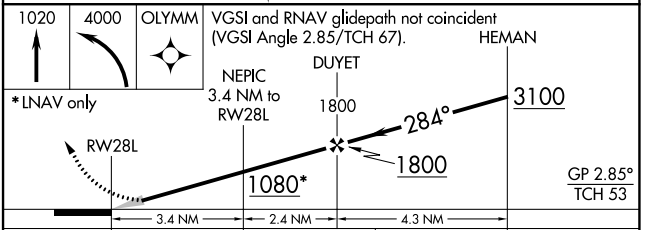
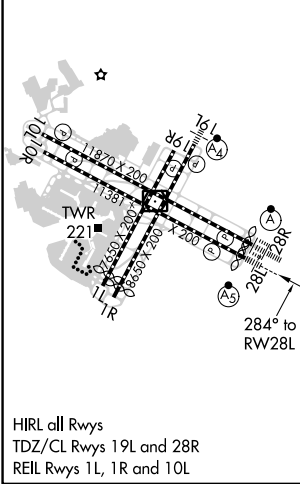
MALSR 

MISSED APPROACH: Climb to 1020 then climbing left turn to 4000 direct OLYMM and hold, continue climb-in-hold to 4000. #Missed approach requires minimum climb of 330 feet per NM to 1600.

D-ATIS <b>113.7 115.8</b> <b>118.85</b>	NORCAL APP CON <b>134.5 338.2</b>	SAN FRANCISCO TOWER <b>120.5 269.1</b>	GND CON <b>121.8</b>	CLNC DEL <b>118.2</b>	CPDLC
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ELEV 13	<b>D</b>	TDZE 13
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CATEGORY	A	B	C	D
LPV DA#		213/24	200 (200-½)	
LPV DA†		798-1¾	785 (800-1¾)	
LNAV/VNAV DA		770-1¾	757 (800-1¾)	
LNAV MDA	1020/40 1007 (1100-¾)	1020/55 1007 (1100-1)	1020-2½	1007 (1100-2½)
<b>C</b> CIRCLING	1020-1¼ 1007 (1100-1¼)	1020-1½ 1007 (1100-1½)	1560-3 1547 (1600-3)	NA

SW-2, 22 FEB 2024 to 21 MAR 2024

SW-2, 22 FEB 2024 to 21 MAR 2024

# RNAV (RNP) Y RWY 28R

SAN FRANCISCO INTL (SFO)

APP CRS	Rwy Idg	<b>11236</b>
<b>284°</b>	TDZE	<b>13</b>
	Apt Elev	<b>13</b>

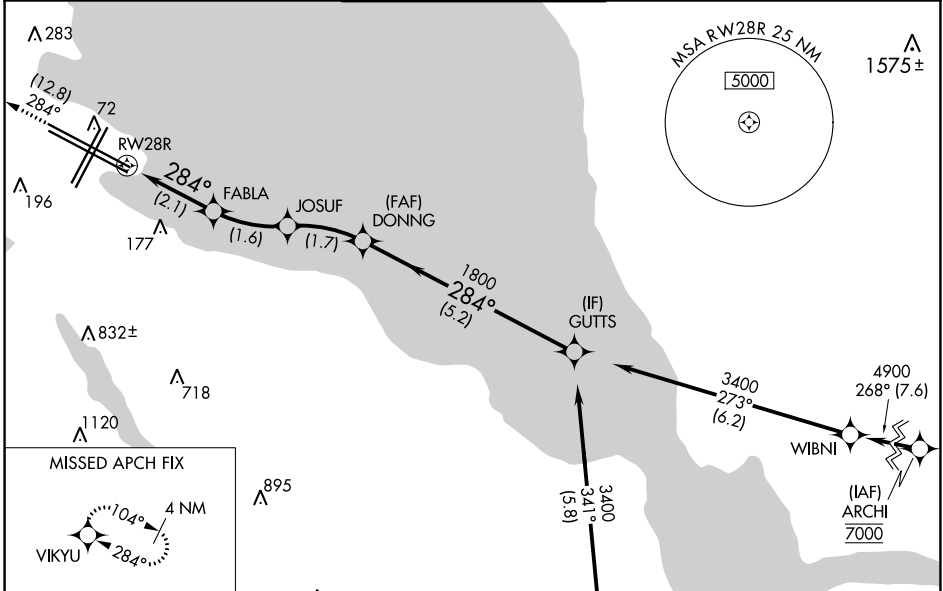
RNP AR APCH, RF required.

▼ For uncompensated Baro-VNAV systems, procedure NA below 3°C or above 54°C. For inop ALS, increase RNP 0.11 all Cats visibility to RVR 4000 and RNP 0.30 all Cats visibility to RVR 4500.

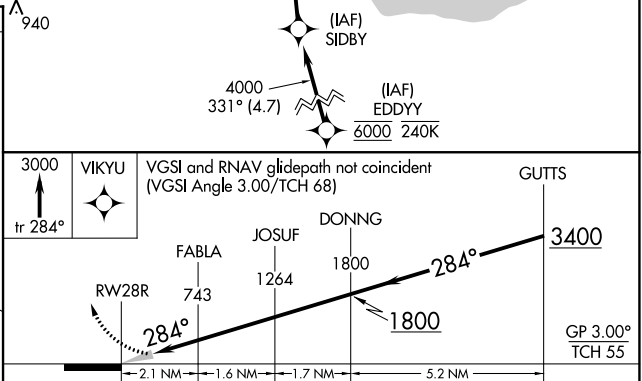
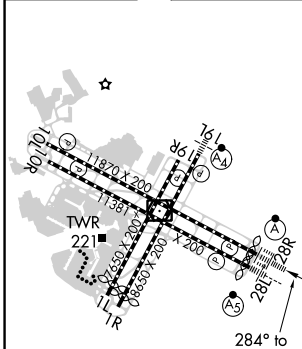
ALSF-2

MISSED APPROACH: Climb to 3000 on track 284° to VIKYU and hold.  
 \* Missed approach requires minimum climb of 250 feet per NM to 1600.  
 # Missed approach requires minimum climb of 350 feet per NM to 2100.

D-ATIS <b>113.7 115.8</b> <b>118.85</b>	NORCAL APP CON <b>134.5 338.2</b>	SAN FRANCISCO TOWER <b>120.5 269.1</b>	GND CON <b>121.8</b>	CLNC DEL <b>118.2</b>	CPDLC
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ELEV 13	<b>D</b>	TDZE 13
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CATEGORY	A	B	C	D
RNP 0.11 DA*		263/24	250 (300-½)	
RNP 0.30 DA#		326/24	313 (400-½)	

**AUTHORIZATION REQUIRED**

SW-2, 22 FEB 2024 to 21 MAR 2024

SW-2, 22 FEB 2024 to 21 MAR 2024

APP CRS <b>104°</b>	Rwy Idg <b>10704</b>
	TDZE <b>10</b>
	Apt Elev <b>13</b>

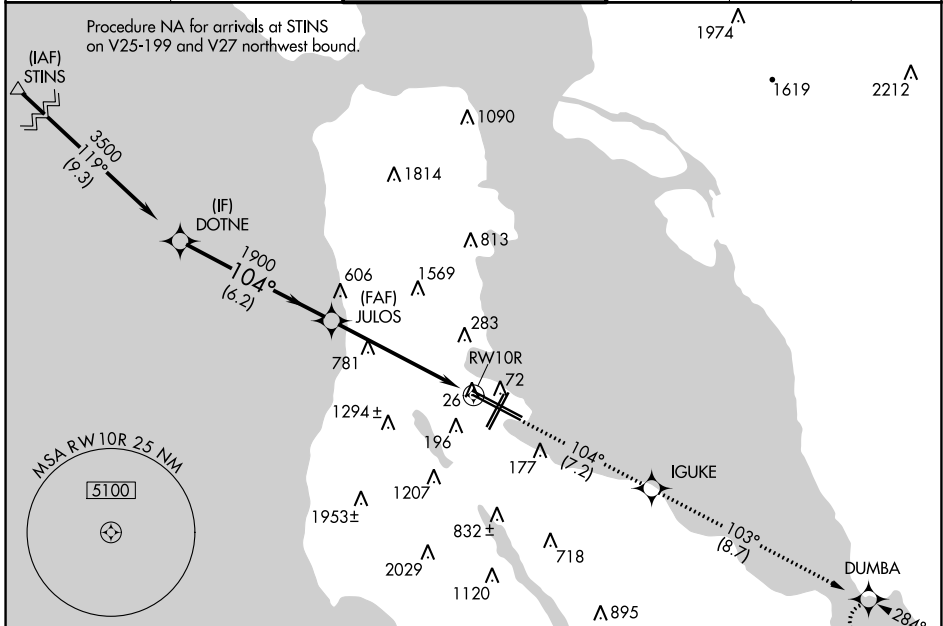
# RNAV (RNP) Z RWY 10R

SAN FRANCISCO INTL (SFO)

▼ For uncompensated Baro-VNAV systems, procedure NA below 2°C (36°F) or above 54°C (130°F). GPS required. When VGSI inop, procedure NA at night.

▲ MISSED APPROACH: Climb to 3600 on track 104° to IGUKE and on track 103° to DUMBA and hold.

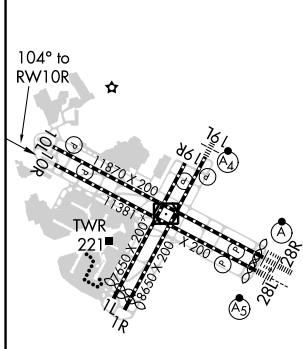
D-ATIS <b>113.7 115.8 118.85</b>	NORCAL APP CON <b>134.5 338.2</b>	SAN FRANCISCO TOWER <b>120.5 269.1</b>	GND CON <b>121.8</b>	CLNC DEL <b>118.2</b>	CPDLC
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SW-2, 22 FEB 2024 to 21 MAR 2024

SW-2, 22 FEB 2024 to 21 MAR 2024

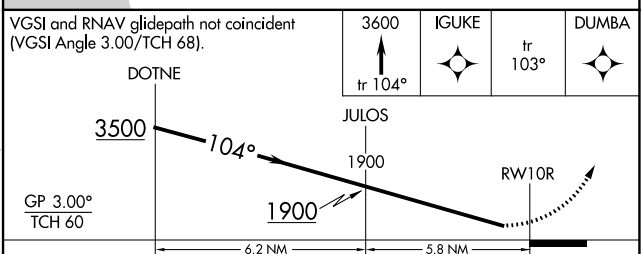
ELEV 13	<b>D</b>	TDZE 10
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TDZ/CL Rwy's 19L and 28R  
REIL Rwy's 1L, 1R and 10L  
HIRL all Rwy's

2520 A

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 68).



CATEGORY	A	B	C	D
RNP 0.20 DA		396-1¼	386 (400-1¼)	
RNP 0.30 DA		1108-4	1098 (1100-4)	

## AUTHORIZATION REQUIRED



APP CRS	Rwy Idg	<b>11236</b>
<b>281°</b>	TDZE	<b>13</b>
	Apt Elev	<b>13</b>

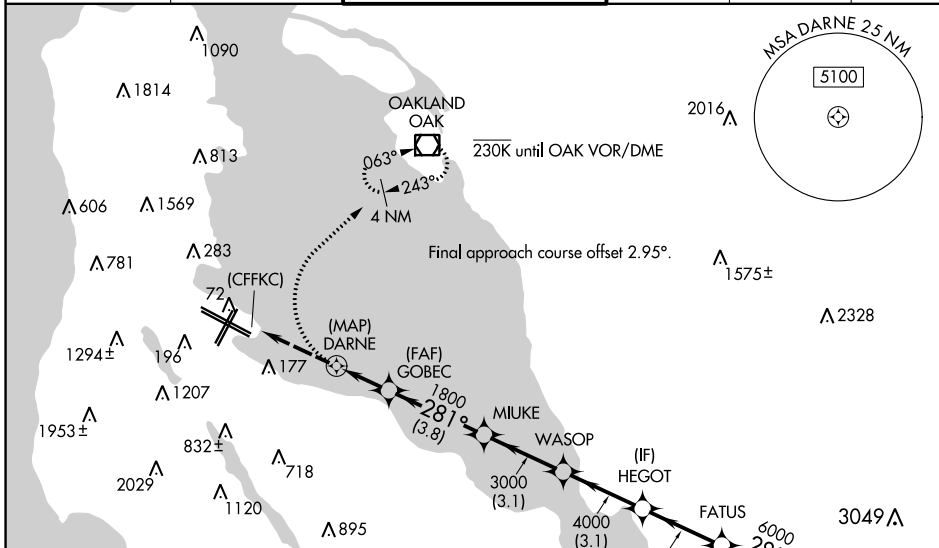
# RNAV (GPS) X RWY 28R

SAN FRANCISCO INTL (SFO)

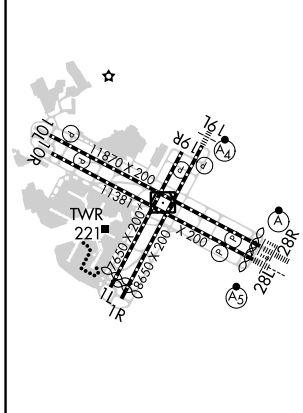
**NA** Runway 28L and 28R separated by 750 feet centerline to centerline. DME/DME RNP-0.3 NA. When executing a missed approach or go-around, unless otherwise instructed by ATC, initially turn right to 030° utilizing heading mode. Inoperative table does not apply. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 2°C (36°F) or above 54°C (130°F).  
 \*If a go-around executed after passing DARNE, go-around requires a minimum climb of 380 feet per NM to 1800.

**ALSF-2** MISSED APPROACH: Climbing right turn to 3000 on heading 030° then direct OAK VOR/DME and hold.

D-ATIS <b>113.7 115.8 118.85</b>	NORCAL APP CON <b>134.5 338.2</b>	SAN FRANCISCO TOWER <b>120.5 269.1</b>	GND CON <b>121.8</b>	CLNC DEL <b>118.2</b>	CPDLC
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ELEV 13	<b>D</b>	TDZE 13
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TDZ/CL Rwy 19L and 28R  
 REIL Rwy 1L, 1R, and 10L  
 HIRL all Rwy

3000 OAK		VGS1 and RNAV glidepath not coincident (VGS1 Angle 3.00/TCH 68).			
hdg 030°					
ANETE 7000					
FATUS 6000					
HEGOT 4000					
WASOP 3000					
MIUKE 3000					
GOBEC 1800					
DARNE 1140					
(CFFKC) 1140					
GP 3.00°		TCH 55			
CATEGORY		A	B	C	D
LNAV/VNAV DA*		1140-4 1127 (1200-4)			

SW-2, 22 FEB 2024 to 21 MAR 2024

SW-2, 22 FEB 2024 to 21 MAR 2024

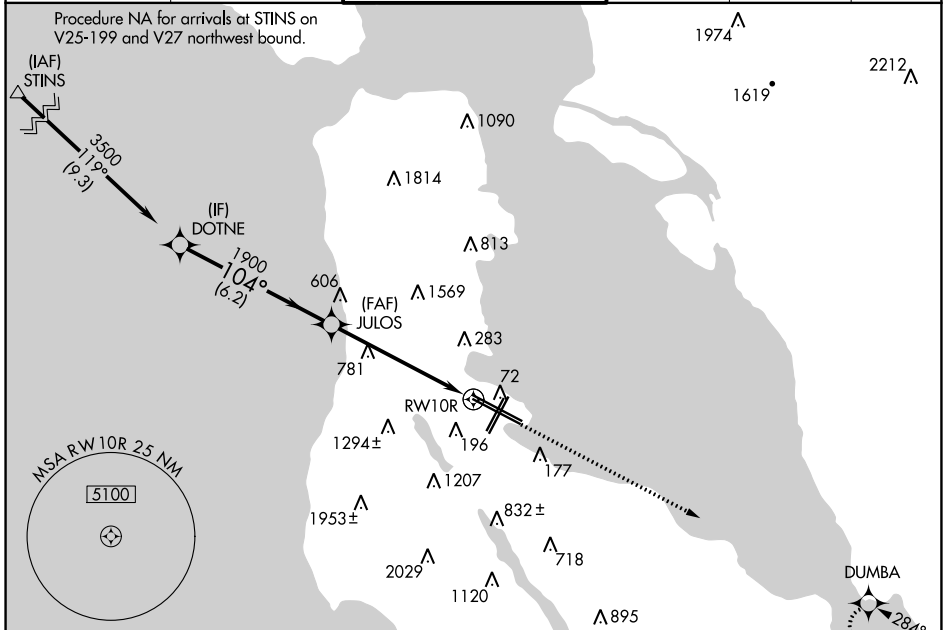
APP CRS	Rwy Idg	<b>10704</b>
<b>104°</b>	TDZE	<b>10</b>
	Apt Elev	<b>13</b>

# RNAV (GPS) Y RWY 10R

SAN FRANCISCO INTL (SFO)

<p><b>⚠</b> DME/DME RNP-0.3 NA. When VGSI inop, procedure NA at night. Helicopter visibility reduction below RVR 5000 NA.</p>	<p>MISSED APPROACH: Climb to 4000 direct DUMBA and hold.</p>
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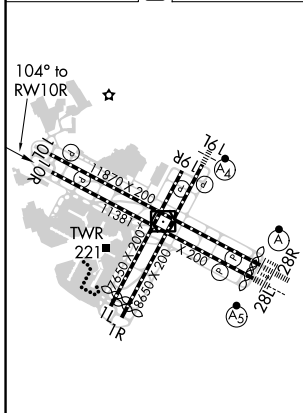
D-ATIS <b>113.7 115.8</b> <b>118.85</b>	NORCAL APP CON <b>134.5 338.2</b>	SAN FRANCISCO TOWER <b>120.5 269.1</b>	GND CON <b>121.8</b>	CLNC DEL <b>118.2</b>	CPDLC
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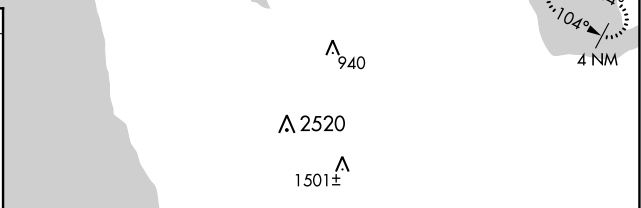
SW-2, 22 FEB 2024 to 21 MAR 2024

SW-2, 22 FEB 2024 to 21 MAR 2024

ELEV 13	<b>D</b>	TDZE 10
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TDZ/CL Rwy 19L and 28R  
REIL Rwy 1L, 1R and 10L  
HIRL all Rwy



CATEGORY	A	B	C	D
LNVA MDA	1200/60 1190 (1200-1/4)	1200-1/2 1190 (1200-1/2)	1200-3	1190 (1200-3)

WAAS CH <b>53533</b> <b>W19B</b>	APP CRS <b>194°</b>	Rwy Idg <b>7650</b> TDZE <b>11</b> Apt Elev <b>13</b>
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# RNAV (GPS) Y RWY 19R

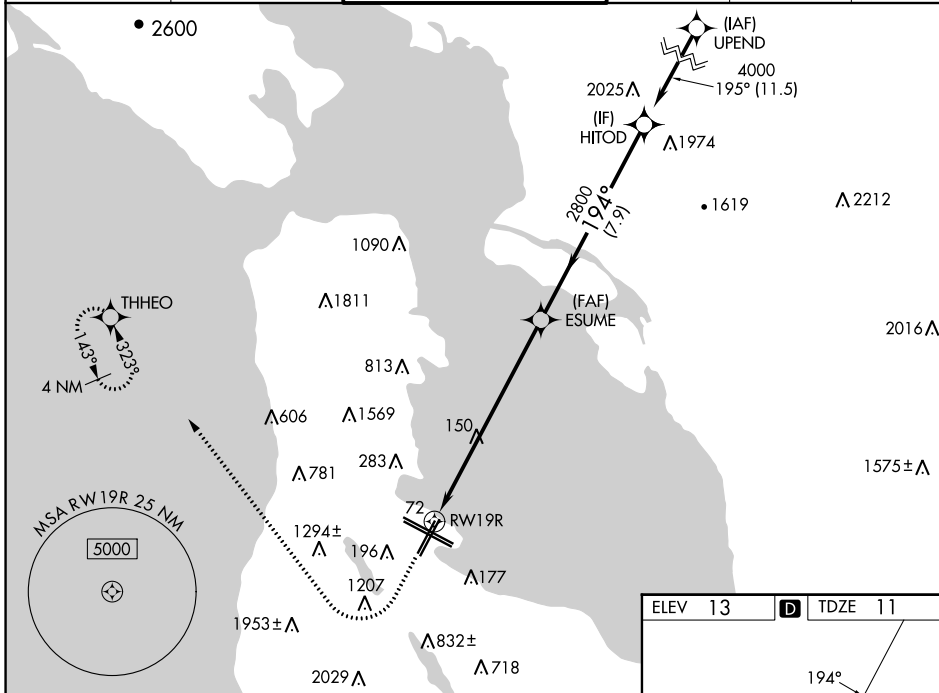
SAN FRANCISCO INTL (SFO)

RNP APCH-GPS.

⚠ LNAV procedure NA during simultaneous operations. Use of FD or AP required during simultaneous operations. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 4°C or above 54°C. Simultaneous approach authorized. Simultaneous operations require use of vertical guidance; maintain last assigned altitude until established on glidepath. Simultaneous approach NA below 12°C (52°F).

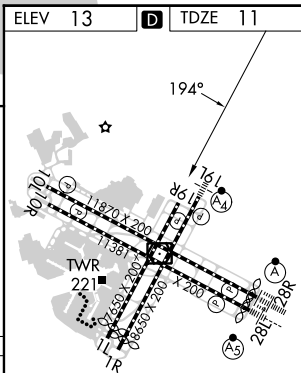
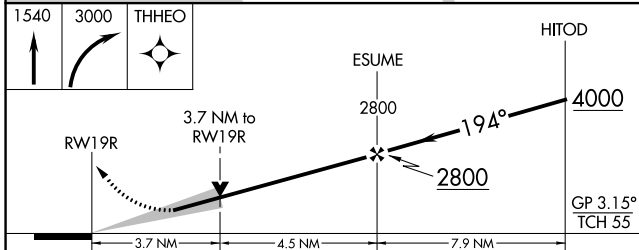
MISSED APPROACH: Climb to 1540 then climbing right turn to 3000 direct THHEO and hold.

D-ATIS <b>113.7 115.8</b> <b>118.85</b>	NORCAL APP CON <b>134.5 338.2</b>	SAN FRANCISCO TOWER <b>120.5 269.1</b>	GND CON <b>121.8</b>	CLNC DEL <b>118.2</b>	CPDLC
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SW-2, 22 FEB 2024 to 21 MAR 2024

SW-2, 22 FEB 2024 to 21 MAR 2024



CATEGORY	A	B	C	D
LPV DA	1005-4		994 (1000-4)	
LNAV/VNAV DA	878-2½		867 (900-2½)	
LNAV MDA	1320-1¼ 1309 (1400-1¼)	1320-1½ 1309 (1400-1½)	1320-3	1309 (1400-3)

TDZ/CL Rws 19L and 28R  
REIL Rws 1L, 1R and 10L  
HIRL all Rws

WAAS CH <b>57945</b> <b>W19D</b>	APP CRS <b>194°</b>	Rwy Idg TDZE Apt Elev	<b>7650</b> <b>11</b> <b>13</b>
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# RNAV (GPS) Z RWY 19R

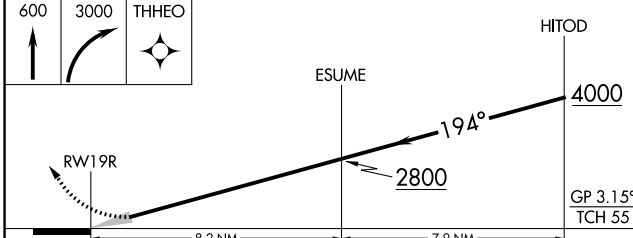
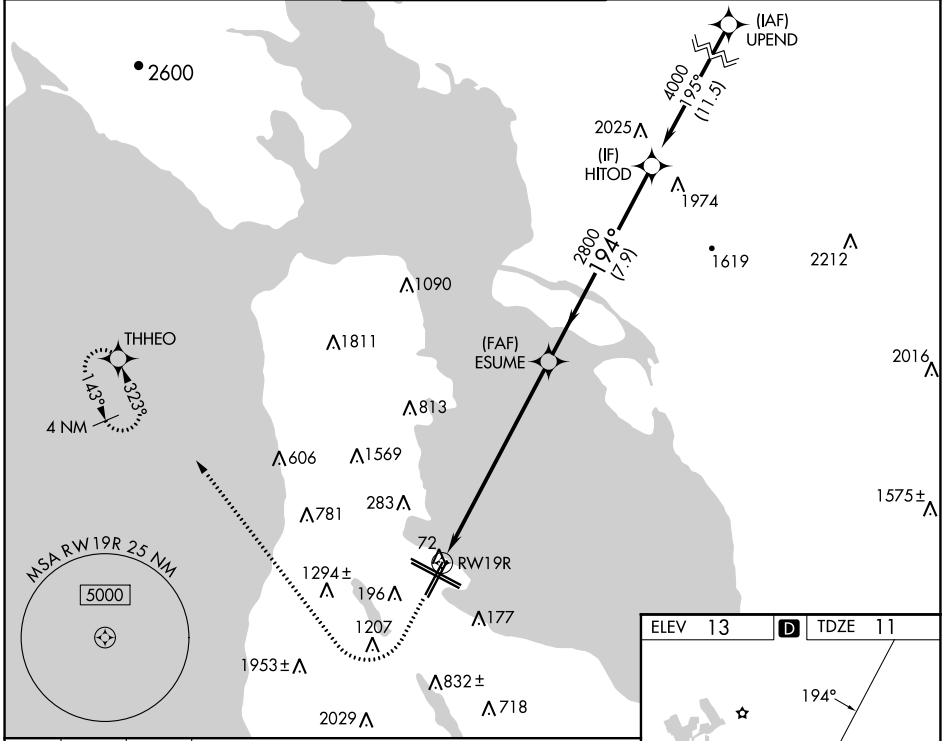
SAN FRANCISCO INTL (SFO)

RNP APCH - GPS.

Simultaneous approach authorized. Simultaneous operations require use of vertical guidance; maintain last assigned altitude until established on glidepath. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 4°C or above 54°C. Simultaneous approach NA below 12°C (52°F).

MISSED APPROACH: Climb to 600 then climbing right turn to 3000 direct THHEO and hold.  
 \*Missed approach requires minimum climb of 395 feet per NM to 2100; if unable to meet climb gradient, see RNAV (GPS) Y RWY 19R.

D-ATIS <b>113.7 115.8</b> <b>118.85</b>	NORCAL APP CON <b>134.5 338.2</b>	SAN FRANCISCO TOWER <b>120.5 269.1</b>	GND CON <b>121.8</b>	CLNC DEL <b>118.2</b>	CPDLC
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ELEV 13	D	TDZE 11
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TDZ/CL Rwys 19L and 28R  
 REIL Rwys 1L, 1R and 10L  
 HIRL all Rwys

CATEGORY	A	B	C	D
LPV DA*		317/45	306 (400-7/8)	
LNAV/VNAV DA*		328/45	317 (400-7/8)	

SW-2, 22 FEB 2024 to 21 MAR 2024

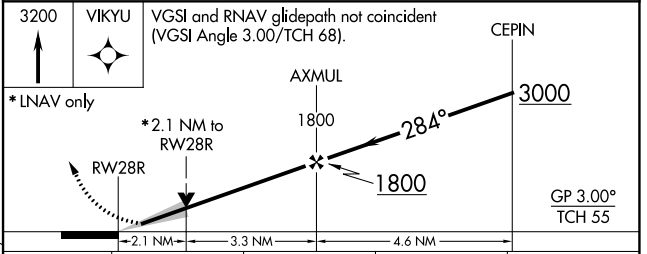
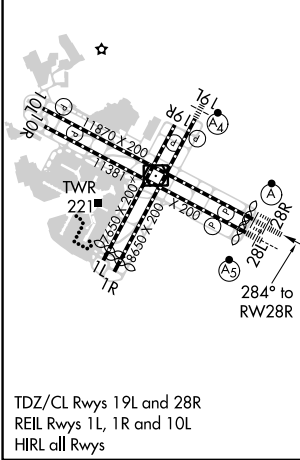
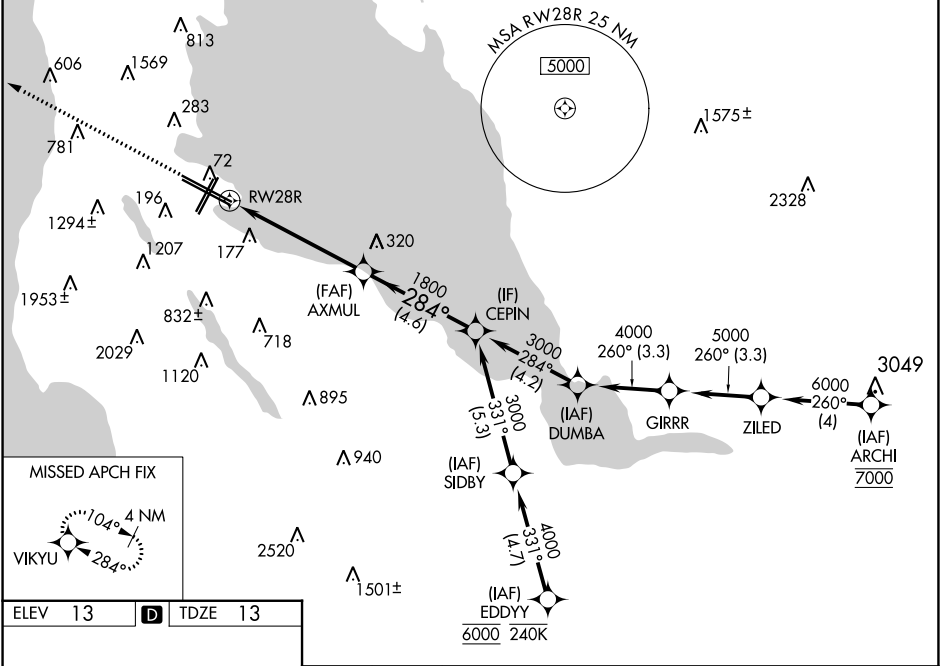
SW-2, 22 FEB 2024 to 21 MAR 2024

WAAS CH <b>48803</b> <b>W28A</b>	APP CRS <b>284°</b>	Rwy Idg TDZE Apt Elev	<b>11236</b> <b>13</b> <b>13</b>
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# RNAV (GPS) Z RWY 28R

SAN FRANCISCO INTL (SFO)

RNP APCH.		SAN FRANCISCO TOWER		GND CON	CLNC DEL	CPDLC	
<p><b>▼</b> Circling NA to Rwys 10L, 10R, 19L, and 19R. Circling Rwy 1L, 1R NA at night. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 3°C or above 54°C. For inop ALS, increase LNAV/VNAV all Cats visibility to 1½ SM, increase LNAV Cat C/D visibility to 2 SM.</p>		<p><b>113.7 115.8</b> <b>118.85</b></p>		<p><b>134.5 338.2</b></p>	<p><b>120.5 269.1</b></p>	<p><b>121.8</b></p>	<p><b>118.2</b></p>
<p><b>ALSF-2</b></p>		<p>MISSED APPROACH: Climb to 3200 direct VIKYU and hold, continue climb-in-hold to 3200.</p>					



CATEGORY	A	B	C	D
LPV DA		213/18	200 (200-½)	
LNAV/VNAV DA		642-1⅓	629 (700-1⅓)	
LNAV MDA	760/24 747 (800-½)	760/40 747 (800-¾)	760-1¾	747 (800-1¾)
<b>C</b> CIRCLING	760-1 747 (800-1)	960-1¼ 947 (1000-1¼)	1560-3 1547 (1600-3)	NA

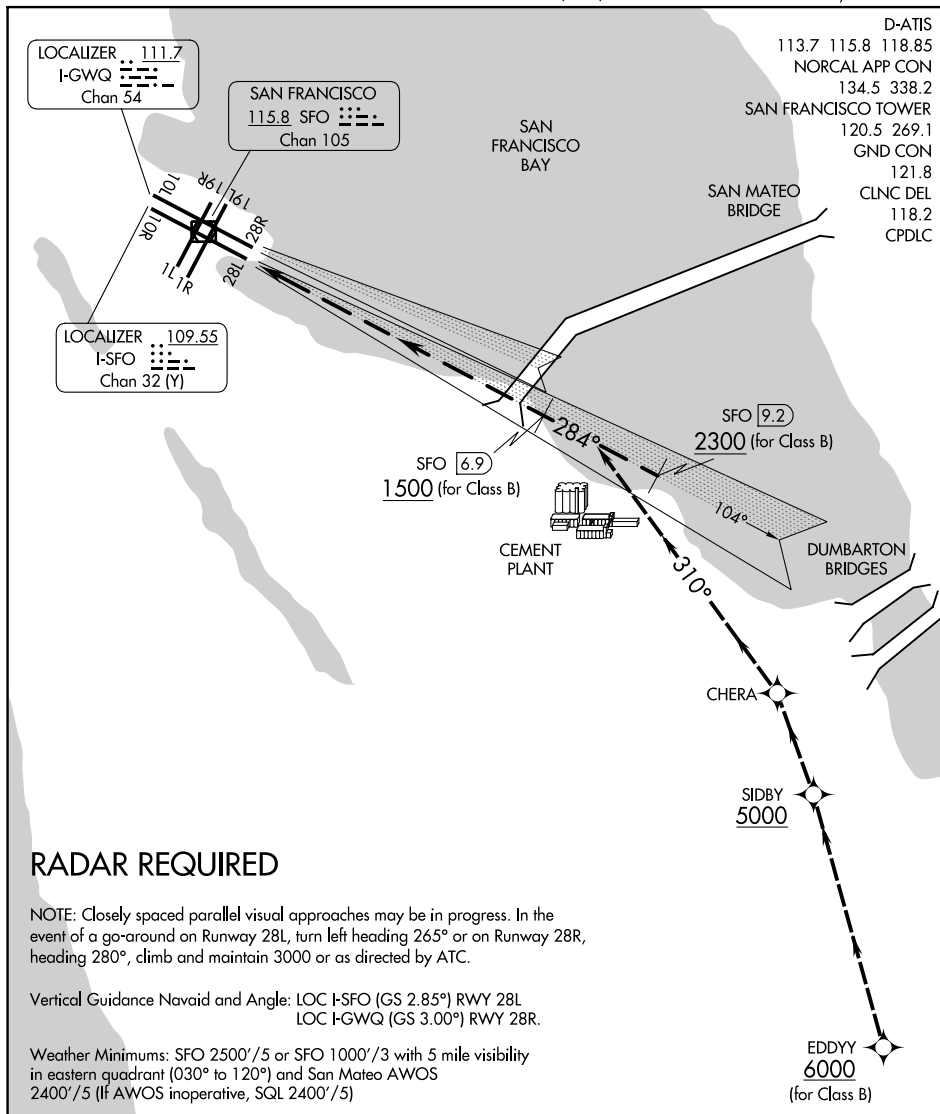
SW-2, 22 FEB 2024 to 21 MAR 2024

SW-2, 22 FEB 2024 to 21 MAR 2024

# TIPP TOE VISUAL RWY 28L/R

AL-375 (FAA)

SAN FRANCISCO INTL (SFO)  
SAN FRANCISCO, CALIFORNIA



SW-2, 22 FEB 2024 to 21 MAR 2024

SW-2, 22 FEB 2024 to 21 MAR 2024

## RADAR REQUIRED

NOTE: Closely spaced parallel visual approaches may be in progress. In the event of a go-around on Runway 28L, turn left heading 265° or on Runway 28R, heading 280°, climb and maintain 3000 or as directed by ATC.

Vertical Guidance Navaid and Angle: LOC I-SFO (GS 2.85°) RWY 28L  
LOC I-GWQ (GS 3.00°) RWY 28R.

Weather Minimums: SFO 2500'/5 or SFO 1000'/3 with 5 mile visibility in eastern quadrant (030° to 120°) and San Mateo AWOS 2400'/5 (If AWOS inoperative, SQL 2400'/5)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
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### TIPP TOE VISUAL APPROACH RUNWAY 28L/R

At/above 6000 at EDDYY, proceed to SIDBY at/above 5000, north turn at SIDBY to CHERA. Runway 28L, from CHERA 310° heading to intercept the I-SFO localizer. Runway 28R, from CHERA 310° heading to intercept the I-GWQ localizer. In the event of a go-around on Runway 28L, turn left on heading 265°. For a go-around on Runway 28R, heading 280°, climb and maintain 3000 or as directed by ATC.

# TIPP TOE VISUAL RWY 28L/R

Amdt 3 24MAR22

37°37'N-122°23'W

SAN FRANCISCO, CALIFORNIA  
SAN FRANCISCO INTL (SFO)