

FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

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</u> SAN FRANCISCO INTL	<u>AIRPORT ID</u> KSFO	<u>PROCEDURE NAME</u> RNAV (GPS) Z RWY 28R	<u>ORIGINAL/AMENDMENT</u> 7	<u>CITY</u> SAN FRANCISCO	<u>STATE</u> CA
<u>AIRPORT ELEVATION</u> 13	<u>TDZE</u> 13	<u>SUPERSEDED</u> RNAV (GPS) Z RWY 28R	<u>ORIGINAL/AMENDMENT</u> 6	<u>DATED</u> 03/29/2018	<u>MAG VAR</u> 14E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 13 SEPTEMBER 2018	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2015

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	IAF	CEPIN		TF	FB	1.00	283.98	4.15	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	IF	AXMUL		TF	FB	1.00	283.94	4.55	1800
AXMUL	FAF	RW28R	MAP	TF	FO	0.30	283.88	5.44	
RW28R	MAP	213 MSL		CA			283.88		
213 MSL		VIKYU		DF	FO	1.00			3200

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW28R

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3200 DIRECT VIKYU AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3200.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF	(IAF)
2.	PROFILE STARTS AT CEPIN				
3. FAC:	283.88	FAF: AXMUL	DIST FAF TO MAP: 5.44	DIST FAF TO THLD: 5.44	
4. MIN ALT:	CEPIN 3000, AXMUL 1800				
5. DIST TO THLD FROM OM:	MM:	IM:	150 HAT:	200 HAT: 0.46	GS ANT:
6. MIN GP INCPT:	1800	GP ALT AT FAF : AXMUL 1800	OM:	MM:	IM:
7. GP ANGLE:	3.00	34:1: IS CLEAR	20:1: IS CLEAR	TCH: 54.8	
8. MSA FROM:	RW28R 5000				

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: CIRCLING NA TO RWYS 10L, 10R, 19L, AND 19R.
CHART NOTE: CIRCLING RWY 1L, 1R NA AT NIGHT.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW 3C OR ABOVE 54C.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
FOR INOPERATIVE ALS, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO 1 3/4 SM, INCREASE LNAV CAT C/D VISIBILITY TO 2 SM.
CHART SPEED ICON IN PLANVIEW AT EDDYY: MAX 240 KIAS.

ADDITIONAL FLIGHT DATA:

CHART MANDATORY 6000 AT EDDYY.
CHART CIRCLING ICON.
CHART MANDATORY 7000 AT ARCHI.
CHART VDP AT 2.12 NM TO RW28R*
*LNAV ONLY
WAAS CHANNEL #48803
REFERENCE PATH ID: W28A
CHART FAS OBST: 320 T-L TWR 373511N/1221450W.
HOLD E, RT, 283.67 INBOUND
LTP HAE: -29 M

MINIMUMS:

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

ALTERNATE: NA ☐ 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
LPV DA	213	1800	200	213	1800	200	213	1800	200	213	1800	200			
LNAV/VNAV DA	642	1 3/8	629	642	1 3/8	629	642	1 3/8	629	642	1 3/8	629			
LNAV MDA	760	2400	747	760	4000	747	760	1 3/4	747	760	1 3/4	747			
CIRCLING	760	1	747	960	1 1/4	947	1560	3	1547		NA				



CHANGES - REASONS

- 1. CHANGED MANDATORY ALTITUDE AT ARCHI FROM 8000 TO 7000. - ATC REQUEST.
- 2. DELETED MAXIMUM SPEED 230 ICON AT ARCHI. - ATC REQUEST.
- 3. DESIGNATED SIDBY AN IAF. - ATC REQUEST.
- 4. REPLACED DME/DME RNP-0.3 NA NOTE WITH EQUIPMENT REQUIREMENT NOTE: RNP APCH. - FAAO 8260.19H PARAGRAPH 8-6-8.
- 5. REMOVED DEGREES F FROM BARO-VNAV TEMPERATURE NOTE. - FAAO 8260.19H PARAGRAPH 8-8.
- 6. ADDED CLIMB-IN-HOLD TO MISSED APPROACH. - NOMINAL AIRCRAFT ALTITUDE IS NOT AT MISSED APPROACH ALTITUDE AT END OF MISSED APPROACH.
- 7. RAISED MISSED APPROACH HOLDING ALTITUDE FROM 3000 TO 3200 FT. - CLIMB IN HOLD PATTERN BRINGS IN HIGHER CONTROLLING OBSTACLE, 2146 MSL AAO, 373139.00N/1222536.00W.
- 8. LOWERED MSA FROM 5100 TO 5000 FT. - NEW CONTROLLING OBSTACLE 06-000583, 3902 MSL TOWER.

07/02/18: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 05/10/18.

- 1. MISSED APPROACH ALTITUDE CHANGED FROM 3000 TO 3200 IN TERMINAL ROUTES.

PDF EDITS:

- 1. DELETE ARCHI 7000, EDDYY 6000 FROM LINE 4 OF PROFILE VIEW.
- 2. REMOVE PENETRATING OBSTACLE FROM LPV MISSED ON 8260-9.
- 3. ADD ** TO THRESHOLD NOTE AND COORDINATES IN 8260-9, PART D AIRSPACE.
- 4. REMOVE 213 FROM ALTITUDE COLUMN IN TERMINAL ROUTES.



COORDINATED WITH:

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

FLIGHT CHECKED BY
DANIEL C FAVORITE

Digitally signed by
DONALD H LANIER
Aug 07, 2018

OFFICE
FICO

DATE
8/2/18

DEVELOPED BY
LIAM DONAHUE

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Jul 02, 2018

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DATE
05/10/2018

APPROVED BY
PATRICK MULQUEEN

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TITLE
MANAGER



