

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 ID</u> KSFO	<u>PROCEDURE NAME</u> RNAV (GPS) Z RWY 19R	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>CITY</u> SAN FRANCISCO	<u>STATE</u> CA		
<u>AIRPORT ELEVATION</u> 13	<u>TDZE</u> 11	<u>SUPERSEDED</u>	<u>ORIGINAL/AMENDMENT</u> NONE	<u>DATED</u>	<u>MAG VAR</u> 14E	<u>EPOCH YEAR</u> 2015
<u>FACILITY</u> RNAV	<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

<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>
UPEND	IAF	HITOD		TF	FB	1.00	194.59	11.45	4000
HITOD	IF	ESUME	PFAF	TF	FB	1.00	193.91	7.93	2800
ESUME	PFAF	RW19R	MAP	TF	FO	0.30	193.86	8.18	
RW19R	MAP	600 MSL		CA			193.86		600
600 MSL		THHEO		DF	FO	1.00			3000

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA

MISSED APPROACH INSTRUCTIONS:

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 SEE RNAV (GPS) Y RWY 19R.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF

(IAF)

2. PROFILE STARTS AT HITOD

3. FAC: 193.86

PFAF: ESUME

DIST PFAF TO MAP: 8.18

DIST PFAF TO THLD: 8.18

4. MIN ALT: HITOD 4000, ESUME 2800

5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

306 HAT: 0.75

GS ANT:

6. MIN GP INCPT: 2800

GP ALT AT PFAF : ESUME

OM:

MM:

IM:

7. GP ANGLE: 3.15

34:1: IS CLEAR

20:1: IS CLEAR

TCH: 55.0

8. MSA FROM: RW19R 5000

PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED. SIMULTANEOUS OPERATIONS REQUIRE USE OF VERTICAL GUIDANCE; MAINTAIN LAST ASSIGNED ALTITUDE UNTIL ESTABLISHED ON GLIDEPATH.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW 4°C OR ABOVE 54°C.
CHART NOTE: SIMULTANEOUS APPROACH NA BELOW 12C (52F).

ADDITIONAL FLIGHT DATA:

HOLD SE, LT, 322.66 INBOUND.
WAAS CHANNEL # 57945
REFERENCE PATH ID: W19D
LTP HAE: -29.8 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD

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*	317	4500	306	317	4500	306	317	4500	306	317	4500	306			
LNAV/VNAV DA*	328	4500	317	328	4500	317	328	4500	317	328	4500	317			

CHANGES - REASONS



AIRPORT ID
KSFO

PROCEDURE NAME
RNAV (GPS) Z RWY 19R

ORIGINAL/AMENDMENT
ORIG

CITY
SAN FRANCISCO

STATE
CA

COORDINATED WITH:

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

Digitally signed by

FLIGHT CHECKED BY
BRANDON C EASTIN

ERIC N SUSKI

Aug 15, 2023

Digitally signed by

DEVELOPED BY
FRANK JACKSON JR

FRANK JACKSON

Apr 14, 2023

APPROVED BY
JOHNNIE BAKER

Digitally signed by

ERIC N SUSKI

Apr 19, 2023

OFFICE

FPO

DATE

08/09/2023

OFFICE

AJV-A431

DATE

04/10/2023

OFFICE

AJV-A430

DATE

TITLE
MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KSFO
RUNWAY	RW19R
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	Z
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W19D
LTP/FTP LATITUDE	373735.3325N
LTP/FTP LONGITUDE	1222214.1935W
LTP/FTP ELLIPSOIDAL HEIGHT	-00298
FPAP LATITUDE	373616.4260N
FPAP LONGITUDE	1222306.4990W
THRESHOLD CROSSING HEIGHT (TCH)	00055.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.15
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0416
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	3224DBF6

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K2
LTP ORTHOMETRIC HEIGHT	+00028
FPAP ORTHOMETRIC HEIGHT	+00028