

**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> OAK	<u>PROCEDURE NAME</u> RNAV (GPS) Y RWY 28R	<u>ORIGINAL/AMENDMENT</u> 4	<u>CITY</u> OAKLAND	<u>STATE</u> CA
<u>AIRPORT ELEVATION</u> 9	<u>TDZE</u> 7	<u>SUPERSEDED</u> RNAV (GPS) Y RWY 28R	<u>ORIGINAL/AMENDMENT</u> 3A	<u>DATED</u> 12/07/2017
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 12 JUNE 2025	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>MAG VAR</u> 14E
				<u>EPOCH YEAR</u> 2015
				<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>
BBUBB	IAF	NAGVY		TF	FB	1.00	230.50	4.88	4200
FFIST	IAF	NAGVY		TF	FB	1.00	261.95	11.69	4200
MYSHN	IAF	CYMBL		TF	FB	1.00	291.71	4.04	5300
CYMBL		NAGVY		TF	FB	1.00	299.06	5.69	4200
NAGVY		SKYLN		TF	FB	1.00	278.36	1.55	3800
SKYLN		GROVE		TF	FB	1.00	278.34	1.55	3400
GROVE	IF	URZAF		TF	FB	1.00	278.32	2.31	2700
URZAF		NIXDE		TF	FB	1.00	278.29	2.01	2100
NIXDE		CUVSA		TF	FB	1.00	278.30	2.15	1500
CUVSA	FAF	JAPSO/2.89 NM TO RW28R		TF	FB	0.30	278.23	1.63	
JAPSO/2.89 NM TO RW28R		RW28R	MAP	TF	FO	0.30	278.23	2.89	
RW28R	MAP	207 MSL		CA		1.00	278.23		
207 MSL		ZERMO		DF	FB	1.00			
ZERMO		REBAS		TF	FO	1.00	335.32	10.44	3000

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW28R

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT ZERMO AND ON TRACK 335.32 TO REBAS AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1.	PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF	(IAF)									
2.	PROFILE STARTS AT NAGVY														
3.	FAC:	278.23	FAF:	CUVSA	DIST FAF TO MAP:	4.53	DIST FAF TO THLD:	4.53							
4.	MIN ALT:	NAGVY 4200, SKYLN 3800, GROVE 3400, URZAF 2700, NIXDE 2100, CUVSA 1500, JAPSO/2.89 NM TO RW28R 980													
5.	DIST TO THLD FROM OM:		MM:		IM:		150 HAT:		200 HAT:	0.47	GS ANT:				
6.	MIN GP INCPT:	1500	GP ALT AT PFAF:	CUVSA 1500			OM:				MM:			IM:	
7.	GP ANGLE:	3.00	34:1:	IS CLEAR	20:1:	IS CLEAR	TCH:	52.8							
8.	MSA FROM:	RW28R 5100													

PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART NOTE: * RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW 2°C OR ABOVE 54°C.
CHART SPEED ICON IN PLANVIEW AT BBUBB: MAX 200 KIAS.
CHART SPEED ICON IN PLANVIEW AT FFIST: MAX 200 KIAS.
CHART SPEED ICON IN PLANVIEW AT GROVE: MAX 200 KIAS.
CHART NOTE: FOR INOPERATIVE ALS, LNAV/VNAV ALL CATS INCREASE VISIBILITY TO RVR 5500.

ADDITIONAL FLIGHT DATA:

HOLD S, RT, 343.64 INBOUND.
CHART FAS OBST: 170 TREE (06-105530) 374251N/1220842W.
CHART VDP AT 1.20 NM TO RW28R.
WAAS CHANNEL # 42535
REFERENCE PATH ID: W28B
CHART AT OR ABOVE 6000 AT BBUBB.
CHART AT OR BELOW 9000 AND AT OR ABOVE 7000 AT FFIST.
CHART AT OR ABOVE 6200 AT MYSHN.
CHART AT OR ABOVE 5300 AT CYMBL.
CHART CIRCLING ICON.
LTP HAE: -30.7 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT D 1400-3

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*	207	2400	200	207	2400	200	207	2400	200	207	2400	200			
LNAV/VNAV DA	387	3500	380	387	3500	380	387	3500	380	387	3500	380			
LNAV MDA	440	2400	433	440	2400	433	440	4000	433	440	4000	433			
CIRCLING	560	1	551	560	1	551	660	1 3/4	651	1400	3	1391			



CHANGES - REASONS

1. AIRPORT NAME CHANGED FROM METROPOLITAN OAKLAND INTL TO SAN FRANCISCO BAY OAKLAND INTL - NAME CHANGED PER AIRNAV UPDATE.
2. TERMINAL ROUTES: BBUBB TO NAGVY DISTANCE CHANGED FROM "4.87 NM" TO "4.88 NM" - FIX NAGVY RELOCATED TO BE COINCIDENT WITH LOCALIZER.
3. TERMINAL ROUTES: ADDED INITIAL STEPDOWN NAGVY TO SKYLN - PER ATC REQUEST.
4. TERMINAL ROUTES: ADDED INITIAL STEPDOWN SKYLN TO GROVE - PER ATC REQUEST.
5. TERMINAL ROUTES: ADDED INITIAL FFIST TO NAGVY - PER ATC REQUEST.
6. TERMINAL ROUTES: ADDED INITIAL MYSHN TO CYMBL - PER ATC REQUEST.
7. TERMINAL ROUTES: INITIAL CYMBL TO NAGVY COURSE CHANGED FROM "299.10" TO "299.06" - FIX NAGVY RELOCATED TO BE COINCIDENT WITH LOCALIZER.
8. TERMINAL ROUTES: INTERMEDIATE FIX CHANGED FROM NAGVY TO GROVE - ATC REQUEST.
9. TERMINAL ROUTES: INTERMEDIATE GROVE TO URZAF COURSE CHANGED FROM "278.31" TO "278.32" - FIX GROVE AND URZAF RELOCATED TO BE COINCIDENT WITH LOCALIZER.
10. TERMINAL ROUTES: INTERMEDIATE GROVE TO URZAF DISTANCE CHANGED FROM "2.31 NM" TO "2.32 NM" - FIX GROVE AND URZAF RELOCATED TO BE COINCIDENT WITH LOCALIZER.
11. TERMINAL ROUTES: INTERMEDIATE STEPDOWN URZAF TO NIXDE COURSE CHANGED FROM "278.28" TO "278.29" - FIX NIXDE AND FIX URZAF RELOCATED TO BE COINCIDENT WITH LOCALIZER.
12. TERMINAL ROUTES: INTERMEDIATE STEPDOWN NIXDE TO CUVSA COURSE CHANGED FROM "278.26" TO "278.30" - FIX NIXDE RELOCATED TO BE COINCIDENT WITH LOCALIZER, PFAF CUVSA TARGETS 7.4.1 CALCULATED FROM GPA/TCH.
13. TERMINAL ROUTES: ALL INTERMEDIATE SEGMENTS RNP VALUES CHANGED FROM "0.5" TO "1.0" – IAW FAAO 8260.58C, TABLE 1-2-1.
14. TERMINAL ROUTES: FINAL SEGMENTS CHANGED FROM "CUVSA TO JAPSO/2.90 NM TO RW28R" AND "JAPSO/2.90 NM TO RW28R" TO "CUVSA TO JAPSO/2.89 NM TO RW28R" AND "JAPSO/2.89 NM TO RW28R" - LTP MOVED.
15. PROFILE LINE 2: CHANGED NAGVY TO GROVE - ATC REQUEST.
16. PROFILE LINE 4 CHANGED FROM "NAGVY 4200, GROVE 3400, URZAF 2700, NIXDE 2100, CUVSA 1500, JAPSO/2.90 NM TO RW28R 980*" TO "NAGVY 4200, SKYLN 3800, GROVE 3400, URZAF 2700, NIXDE 2100, CUVSA 1500, JAPSO/2.89 NM TO RW28R 980" - IAW 8260.19J 8-6-7.
17. PROFILE LINE 5: ADDED "200 HAT: 0.47" AND REMOVED FROM ADDITIONAL FLIGHT DATA - IAW 8260.19J PARA 8-6-7.E.3.
18. PROFILE LINE 7: ADDED "20:1 IS CLEAR" - IAW FAAO 8260.19J, PARA 8-6-7 AND NEW SURVEY.
19. DELETED "CHART NOTE: DME/DME RNP-0.3 NA" AND ADDED TO PBN REQUIREMENTS NOTE: "RNP APCH - GPS" - IAW FAAO 8260.19J, PARA 8-6-8.
20. CHANGED CHART NOTE: FROM "FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW 1C (34F) OR ABOVE 54C (130F)." TO "FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW 2C OR ABOVE 54C." - IAW FAAO 8260.19J, PARA 8-6-10 AND NEW TEMPERATURE STUDY.
21. CHANGED CHART NOTE: FROM "RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA, PER AFS REQUIREMENT." TO "RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA." - IAW FAAO 8260.19J PARA 8-6-12.K.
22. ADDED "CHART NOTE: FOR INOPERATIVE ALS, LNAV/VNAV ALL CATS INCREASE VISIBILITY TO RVR 5500." - IAW FAAO 8260.3F.
23. ADDITIONAL FLIGHT DATA: DELETED "CHART MANDATORY 5300 AT CYMBL" - NO LONGER REQUIRED.
24. ADDITIONAL FLIGHT DATA: DELETED "CHART MANDATORY 5000 AT BBUBB" - NO LONGER REQUIRED.
25. ADDITIONAL FLIGHT DATA: DELETED "840 AAO 374259.14N/1220645.06W" - 7:1 AAOS ARE NO LONGER PUBLISHED IN ADDITIONAL FLIGHT DATA.
26. ADDITIONAL FLIGHT DATA: DELETED "LNAV ONLY" - NO LONGER REQUIRED.
27. ADDITIONAL FLIGHT DATA: CHANGED FROM "CHART FAS OBST: 168 ANT 374225N/1220952W" TO "CHART FAS OBST: 170 TREE (06-105530) 374251N/1220842W" – NEW SURVEY, HIGHER CONTROLLING OBSTACLE, NO CHANGE TO LNAV MDA/HAT.
28. NOTE: ADDED "CHART SPEED ICON IN PLANVIEW AT BBUBB: MAX 200 KIAS" - PER ATC REQUEST.
29. NOTE: ADDED "CHART SPEED ICON IN PLANVIEW AT FFIST: MAX 200 KIAS" - PER ATC REQUEST.
30. NOTE: ADDED "CHART SPEED ICON IN PLANVIEW AT GROVE: MAX 200 KIAS" - PER ATC REQUEST.
31. ADDITIONAL FLIGHT DATA: ADDED "CHART AT OR ABOVE 6000 AT BBUBB" - PER ATC REQUEST.
32. ADDITIONAL FLIGHT: DATA ADDED "CHART AT OR BELOW 9000 AND AT OR ABOVE 7000 AT FFIST" - PER ATC REQUEST.
33. ADDITIONAL FLIGHT DATA: ADDED "CHART AT OR ABOVE 5300 AT CYMBL" - PER ATC REQUEST.
34. ADDITIONAL FLIGHT DATA: ADDED "CHART AT OR ABOVE 6200 AT MYSHN" - PER ATC REQUEST.
35. MINIMUMS: CHANGED FROM "LPV DA*" TO "LPV DA*" - DOUBLE ASTERISK NOT REQUIRED.
36. MINIMUMS: LNAV/VNAV VISIBILITY ALL CATS CHANGED FROM "RVR 4000" TO "RVR 3500" - IAW FAAO 8260.3F VISIBILITY TABLES.
37. CRC REMAINDER CHANGED FROM F40D4C6C TO 9F5D3597 - LTP/FTP LAT/LONG CHANGED FROM 374329.3245N/1221216.9325W TO 374329.3320N/1221216.9510W AND FPAP CHANGED FROM 374402.9875N/1221400.9405W TO 374402.9890N/1221400.9620W.

04/28/2025: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 04/24/2025.
PROFILE LINE 2: CHANGED GROVE TO NAGVY.

5/5/2025: THIS IS A CORRECTED COPY OF THE FOR APPROED ON 4/25/2025

MOVED NOTE CHART NOTE: FOR INOPERATIVE ALS, LNAV/VNAV ALL CATS INCREASE VISIBILITY TO RVR 5500 FROM ADDITIONAL FLIGHT DATA AND
PLACED IN NOTES SECTION.

QUALITY
31
CHECKED

COORDINATED WITH:

A4A

X

ALPA

X

AOPA

X

APA

X

HAI

NBAA

X

OTHER:

NORCAL APP CON, OAK ATCT, AMGR.

FLIGHT CHECKED BY

WENDI S GIMA

Digitally signed by

CASIMIR L TABAKA

Apr 24, 2025

OFFICE

AJF

DATE

04/22/2025

DEVELOPED BY

WILLIAM HANBY

Digitally signed by

CASIMIR L TABAKA

Apr 24, 2025

OFFICE

AJV-A432

DATE

01/30/2025

APPROVED BY

CASIMIR L. TABAKA

Digitally signed by

CASIMIR L TABAKA

Apr 24, 2025

OFFICE

AJV-A432

DATE

05/08/2025

TITLE

MANAGER

FAS DATA BLOCK INFORMATION

DATA FIELD

OPERATION TYPE
SBAS SERVICE PROVIDER IDENTIFIER
AIRPORT IDENTIFIER
RUNWAY
APPROACH PERFORMANCE DESIGNATOR
ROUTE INDICATOR
REFERENCE PATH DATA SELECTOR
REFERENCE PATH IDENTIFIER (APPROACH ID)
LTP/FTP LATITUDE
LTP/FTP LONGITUDE
LTP/FTP ELLIPSOIDAL HEIGHT
FPAP LATITUDE
FPAP LONGITUDE
THRESHOLD CROSSING HEIGHT (TCH)
TCH UNITS SELECTOR (METERS OR FEET USED)
GLIDEPATH ANGLE (GPA)
COURSE WIDTH AT THRESHOLD
LENGTH OFFSET
HORIZONTAL ALERT LIMIT (HAL)
VERTICAL ALERT LIMIT (VAL)

DATA

0
0
KOAK
RW28R
0
Y
0
W28B
374329.3320N
1221216.9510W
-00307
374402.9890N
1221400.9620W
00052.8
F
03.00
106.75
1088
40.0
35.0

CRC REMAINDER

9F5D3597

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE
LTP ORTHOMETRIC HEIGHT
FPAP ORTHOMETRIC HEIGHT

K2
+00018
+00018

