

INSTRUMENT APPROACH PROCEDURE CHARTS

A IFR ALTERNATE AIRPORT MINIMUMS

Pilots must review the IFR Alternate Minimums Notes to determine alternate airport suitability.

ANA designation on the approach chart means that pilots may not use that approach as an alternate due to unmonitored facility, absence of weather reporting service, or lack of adequate navigation coverage. Approaches with the **A**NA designation are not listed in this section. **A** designation on the approach chart indicates that the approach procedure has non-standard minimums (for aircraft other than helicopters) or restrictions (for all users) for its use as an alternate.

Alternate Minima (ref: 14 CFR 91.169)

	Precision Approach	Non-Precision Approach
Standard	600-2	800-2
A Non-Standard or restrictions	As indicated below	As indicated below
Helicopters	For the selected approach: Ceiling: 200' above published ceiling Visibility: the greater of 1 SM visibility or the published visibility	
US Military (USA/USN/USAF)	See Service Regulations	

Note: For alternate airport flight planning purposes, precision approach operations include: ILS, PAR, and GLS, and Non-Precision approach operations include: NDB, VOR, LOC, TACAN, LDA, SDF, ASR, RNAV (GPS) and RNAV (RNP).

NAME ALTERNATE MINIMUMS

ALTURAS, CA

ALTURAS
MUNI (AAT).....**RNAV (GPS) Rwy 31**
Category B, 900-2.

ARCATA/EUREKA, CA

CALIFORNIA REDWOOD COAST-HUMBOLDT
COUNTY (ACV).....**RNAV (GPS) Rwy 1¹**
RNAV (GPS) Rwy 32²

¹Categories A, B, 900-2; Category C, 900-2½;
Category D, 900-2¾.
²Category D, 800-2¼.

ATWATER, CA

CASTLE (MER).....**ILS or LOC Rwy 31**
NA when local weather not available.
NA when control tower closed.

AUBURN, CA

AUBURN MUNI (AUN).....**RNAV (GPS) Rwy 7**
Category B, 900-2.

BISHOP, CA

BISHOP (BIH).....**LDA Rwy 17¹**
RNAV (GPS) Y Rwy 12²
RNAV (GPS) Z Rwy 12³

¹Categories A, B, 2300-2; Categories C, D, 2300-3.
²Categories A, B 2500-2; Category C, 2500-3.
³Categories A, B, 2300-2; Category C, 2300-3.

NAME ALTERNATE MINIMUMS

BYRON, CA

BYRON (C83).....**RNAV (GPS) Rwy 30**
Category D, 800-2½.

CHICO, CA

CHICO RGNL (CIC).....**ILS or LOC Rwy 13L**
RNAV (GPS) Rwy 13L
NA when local weather not available.

CONCORD, CA

BUCHANAN
FLD (CCR).....**LDA Rwy 19R¹²**
RNAV (GPS) Rwy 19R³
VOR Rwy 19R³

¹NA when control tower closed.
²Category C, 1000-2¾; Category D, 1300-3.
³Categories A, B, 1000-2; Category C, 1000-3; Category D, 1300-3.

COLUMBIA, CA

COLUMBIA (O22).....**RNAV (GPS) Rwy 35**
NA when local weather not available.
Categories A, B, 1100-2; Category C, 1100-3.

23 FEB 2023 to 23 MAR 2023

23 FEB 2023 to 23 MAR 2023

NAME ALTERNATE MINIMUMS

CRESCENT CITY, CA

JACK MC NAMARA
FLD (CEC).....RNAV (GPS) Rwy 12
RNAV (GPS) Rwy 36
VOR Rwy 12
VOR/DME Rwy 12
VOR/DME Rwy 36

NA when local weather not available.

FRESNO, CA

FRESNO CHANDLER
EXEC (FCH).....RNAV (GPS) Rwy 12
NA when local weather not available.

FRESNO YOSEMITE

INTL (FAT).....ILS Y or LOC Y Rwy 29R¹
LOC Y Rwy 11L²
TACAN Rwy 11L³
TACAN Rwy 29R²

¹LOC, Category E, 900-2¼.

²Category E, 900-2¼.

³Category E, 900-2.

GRASS VALLEY, CA

NEVADA
COUNTY (GOO).....RNAV (GPS) Rwy 7
NA when local weather not available.
Category D, 800-2¼.

HAYWARD, CA

HAYWARD EXEC (HWD).....LOC/DME Rwy 28L
RNAV (GPS) Rwy 28L

NA when local weather not available.

NA when control tower closed.

Category D, 900-2¼.

HOLLISTER, CA

HOLLISTER
MUNI (CVH).....RNAV (GPS) Rwy 31
NA when local weather not available.
Category C, 800-2½.

LINCOLN, CA

LINCOLN RGNL/KARL
HARDER FLD (LHM).....RNAV (GPS) Rwy 15
RNAV (GPS) Rwy 33

NA when local weather not available.

LITTLE RIVER, CA

LITTLE RIVER (LLR).....RNAV (GPS) Rwy 29
Category D, 900-2¼.

NAME ALTERNATE MINIMUMS

LIVERMORE, CA

LIVERMORE MUNI (LVK).....ILS Rwy 25R¹²
LOC Rwy 25R³⁴
RNAV (GPS) Rwy 25R⁵

¹NA when local weather not available.

²NA when control tower closed.

³NA when tower closed.

⁴Categories A, B, 1600-2; Categories C, D, 1600-3.

⁵Category D, 1400-3.

MAMMOTH LAKES, CA

MAMMOTH
YOSEMITE (MMH).....RNAV (GPS) Rwy 27
Categories A, B, 1300-2; Category C, 1300-3.

MADERA, CA

MADERA MUNI (MAE).....RNAV (GPS) Rwy 12
RNAV (GPS) Rwy 30

NA when local weather not available.

MARYSVILLE, CA

YUBA COUNTY (MYV).....RNAV (GPS) Rwy 14
RNAV (GPS) Rwy 32

NA when local weather not available.

MODESTO, CA

MODESTO CITY-COUNTY-HARRY SHAM
FLD (MOD).....ILS or LOC Rwy 28R¹²
RNAV (GPS) Rwy 28R³

¹NA when control tower closed.

²LOC, Category D, 800-2¼.

³Category D, 800-2¼.

MONTEREY, CA

MONTEREY
RGNL (MRY).....ILS or LOC Rwy 10R¹²
LOC Rwy 28L¹³
RNAV (GPS) Rwy 10R⁴
RNAV (GPS) Y Rwy 28L⁵
RNAV (RNP) Z Rwy 28L⁶

¹NA when control tower closed.

²LOC, Category C, 1100-3; Category D, NA.

³Categories A, B, 1700-2, Categories C, D, 1700-3.

⁴Category C, 1100-3; Category D, NA.

⁵Categories A, B, 900-2, Category C, 1100-3.

⁶Categories A, B, C, 1000-3.

23 FEB 2023 to 23 MAR 2023

23 FEB 2023 to 23 MAR 2023

NAME ALTERNATE MINIMUMS

MOUNTAIN VIEW, CA

MOFFET FEDERAL
AIRFIELD (NUQ).....**ILS or LOC Rwy 32R**¹²
LOC Rwy 14L¹³⁶
RNAV (GPS) Rwy 14L⁴
RNAV (GPS) Rwy 14R⁴
RNAV (GPS) Rwy 32L⁴
RNAV (GPS) Rwy 32R³⁶
TACAN Rwy 32L¹⁵
TACAN Rwy 32R¹⁵

¹NA when tower closed.²LOC, Category D, 800-2½; Category E, 1000-3.³Category D, 800-2½.⁴Category D, 800-2½.⁵Category D, 800-2½; Category E, 1000-3.⁶NA when local weather not available.**NAPA, CA**

NAPA
COUNTY (APC).....**ILS or LOC Z Rwy 1L**¹²
RNAV (GPS) Rwy 6³
RNAV (GPS) Y Rwy 1L⁴
VOR Rwy 6⁵

NA when local weather not available.

¹NA when control tower closed.²LOC, Categories C, D, 1300-3.³Categories A, B, 1400-2;

Categories C, D, 1400-3.

⁴Categories A, B, C, D, 1300-5.⁵Categories A, B, 1100-2; Categories C, D, 1300-3.**NOVATO, CA**

GNOSS FLD (DVO).....**RNAV (GPS) Rwy 13**
 NA when local weather not available.
 Categories A, B, 1100-2.

OAKLAND, CA

METRO OAKLAND
INTL (OAK).....**ILS or LOC Rwy 12**¹
ILS or LOC Rwy 30¹
ILS or LOC/DME Rwy 28R¹
RNAV (GPS) Rwy 10L²
RNAV (GPS) Rwy 10R²
RNAV (GPS) Y Rwy 12²
RNAV (GPS) Y Rwy 28L²
RNAV (GPS) Y Rwy 28R²
RNAV (GPS) Y Rwy 30²
VOR Rwy 10R²

¹ILS, Category C, 700-2; Category D, 1400-3;

LOC, Category D, 1400-3.

²Category D, 1400-3.**PALO ALTO, CA**

PALO ALTO (PAO).....**RNAV (GPS) Rwy 31**
 NA when control tower closed.

PETALUMA, CA

PETALUMA MUNI (O69).....**RNAV (GPS) Rwy 29**
 NA when local weather not available.
 Category B, 900-2.

NAME ALTERNATE MINIMUMS

PLACERVILLE, CA

PLACERVILLE (PVF).....**RNAV (GPS) Rwy 5**
 NA when local weather not available.
 Category B, 900-2.

RED BLUFF, CA

RED BLUFF
MUNI (RBL).....**RNAV (GPS) Rwy 15**¹
RNAV (GPS) Rwy 33
VOR Rwy 33
VOR/DME Rwy 15¹

NA when local weather not available.

¹Category D, 800-2½.**REDDING, CA**

REDDING
MUNI (RDD).....**ILS or LOC Rwy 34**¹²
LOC BC Rwy 16¹³
RNAV (GPS) Rwy 16³
RNAV (GPS) Rwy 34³
VOR Rwy 34⁴

NA when local weather not available.

¹NA when control tower closed.²LOC, Category D, 900-2¾; Category E, 900-3.³Category D, 900-2¾.⁴Categories A, B, 1200-2; Categories C, D, 1200-3.**SACRAMENTO, CA**

SACRAMENTO
EXE (SAC).....**ILS or LOC Rwy 2**¹²
RNAV (GPS) Rwy 2³
VOR Rwy 2³

NA when local weather not available.

¹NA when control tower closed.²LOC, Category D, 800-2½.³Category D, 800-2½.**SACRAMENTO**

INTL (SMF).....**ILS or LOC Rwy 17L**¹
RNAV (GPS) Y Rwy 17L²
RNAV (GPS) Y Rwy 35R²

¹LOC, Category D, 900-2¾.²Category D, 900-2¾.**SACRAMENTO**

MATHER (MHR).....**ILS or LOC Rwy 22L**¹²
RNAV (GPS) Rwy 4R³
RNAV (GPS) Rwy 22L³⁴
RNAV (GPS) Rwy 22R³⁴

¹NA when control tower closed.²LOC, Category E, 800-2½.³Category D, 800-2½.⁴NA when local weather not available.

NAME ALTERNATE MINIMUMS

SALINAS, CA

SALINAS MUNI (SNS).....**ILS Rwy 31¹**
LOC Rwy 31¹²
RNAV (GPS) Rwy 8³
RNAV (GPS) Rwy 13⁴
RNAV (GPS) Y Rwy 31²
RNAV (GPS) Z Rwy 31²
VOR Rwy 13⁵

NA when local weather not available.

¹NA when control tower closed.

²Category D, 1600-3.

³Category D, 1500-3.

⁴Category D, 1300-3.

⁵Category D, 900-2½.

SAN ANDREAS, CA

CALAVERAS CO-MAURY RASMUSSEN
FIELD (CPU).....**RNAV (GPS) Rwy 31**
Category C, 1100-3.

SAN CARLOS, CA

SAN CARLOS (SQL).....**RNAV (GPS) Y Rwy 30¹**
RNAV (GPS) Z Rwy 30²

NA when local weather not available.

¹Categories A, B, 1300-2.

²Categories A, B, 900-2.

SAN FRANCISCO, CA

SAN FRANCISCO
INTL (SFO).....**ILS or LOC Rwy 19L¹**
ILS or LOC Rwy 28L¹
ILS or LOC Rwy 28R⁷
RNAV (GPS) Rwy 10L³
RNAV (GPS) Rwy 28L⁴
RNAV (GPS) Y Rwy 10R³
RNAV (GPS) Z Rwy 28R⁵
RNAV (RNP) Z Rwy 10R⁶

¹LOC, Categories A, B, 1800-2; Categories C, D, 1800-3.

²ILS, Categories A, B, C, D, 800-2½;
LOC, Category A, 900-2; Category B, 1000-2;
Category C, 1600-3, Category D, 900-2½.

³Categories A, B, 1200-2; Categories C, D, 1200-3.

⁴Categories A, B, 1100-2; Category C, 1600-3;
Category D, 1100-2½.

⁵Category B, 1000-2; Category C, 1600-3.

⁶Categories A, B, C, D, 1100-4.

⁷LOC, Category B, 1000-2; Category C, 1600-3.

SAN JOSE, CA

NORMAN Y MINETA SAN JOSE
INTL (SJC).....**ILS or LOC Rwy 12R**
ILS or LOC Rwy 30L

NA when control tower closed.

SAN MARTIN, CA

SAN MARTIN (E16).....**RNAV (GPS) Rwy 32**
NA when local weather not available.
Categories A, B, 1100-2.

NAME ALTERNATE

SANTA ROSA, CA

CHARLES M SCHULZ-SONOMA
COUNTY (STS).....**ILS or LOC Rwy 32¹²³**
RNAV (GPS) Rwy 2⁴
RNAV (GPS) Rwy 14⁴
RNAV (GPS) Rwy 32¹⁴

¹NA when local weather not available.

²NA when control tower closed.

³LOC, Category C, 1000-3; Category D, 1300-3.

⁴Category C, 1000-3; Category D, 1300-3.

STOCKTON, CA

STOCKTON
METRO (SCK).....**ILS or LOC Rwy 29R**
NA when control tower closed.

SUSANVILLE, CA

SUSANVILLE
MUNI (SVE).....**RNAV (GPS) Rwy 29**
Categories A, B, 1700-2; Category C, 1700-3;
Category D, 2000-3.
NA when local weather not available.

TRUCKEE, CA

TRUCKEE-TAHOE
(TRK).....**RNAV (GPS)-A¹**
RNAV (GPS) Rwy 11²
RNAV (GPS) Rwy 20³

NA when local weather not available.

¹Categories A, B, 1600-2; Category C, 1800-3.

²Categories A, B, 1900-2; Category C, 1900-3.

³Category A, 1300-2; Category B, 1400-2;
Category C, 1800-3.

UKIAH, CA

UKIAH MUNI (UKI).....**LOC Rwy 15¹**
RNAV (GPS)-B²
RNAV (GPS) Rwy 15¹
VOR-A³

¹Categories A, B, 1700-2; Category C, 1700-3;
Category D, 2200-3.

²Categories A, B, 1500-2; Category C, 1600-3;
Category D, 2200-3.

³Categories A, B, 2800-2; Categories C, D, 2800-3.

VACAVILLE, CA

NUT TREE (VCB).....**RNAV (GPS) Rwy 20¹²**
VOR-A³

¹NA when local weather not available.

²Category C, 900-2½; Category D, 1400-3.

³Categories A, B, 900-2; Category C, 900-2½;
Category D, 1300-3.

VISALIA, CA

VISALIA
MUNI (VIS).....**RNAV (GPS) Rwy 12**
RNAV (GPS) Rwy 30
NA when local weather not available.

23 FEB 2023 to 23 MAR 2023

23 FEB 2023 to 23 MAR 2023



23054

NAME	ALTERNATE MINIMUMS	NAME	ALTERNATE
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WATSONVILLE, CA

WATSONVILLE

MUNI (WVI).....	RNAV (GPS) Rwy 2 ¹
	VOR-A ²³

¹Category D, 1000-3.

²NA when local weather not available.

³Categories A, B, 1200-2; Categories C, D, 1200-3.

23 FEB 2023 to 23 MAR 2023

23 FEB 2023 to 23 MAR 2023



23054

M5