US DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

# RNAV - STANDARD
# INSTRUMENT APPROACH PROCEDURE
# TITLE 14 CFR PART 97.33

Bearings, headings, courses, 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 in feet RVR.

## TERMINAL ROUTES

| FROM | TO | COURSE AND DISTANCE | ALTITUDE |
|---|---|---|---|
| BOLDR (IAF) | RAMND (FB) | 335.06 / 16.03 | 4700 |
| RAMND | ROKME (FB) | 338.89 / 4.78 | 4000 |
| FAITH (IAF) | ROKME (FB) | 281.23 / 14.51 | 4000 |
| ROKME (IF) | DUYET (FB) | 280.95 / 6.91 | 1800 |
| DUYET (FAF) | RW28L (MAP) (FO) | 280.87 / 5.43 | |
| RW28L (MAP) | 269 MSL | 280.87 | |
| 269 MSL | JABGO (FB) | | |
| JABGO | OLYMM (FO) | 279.75 / 8.46 | 4000 |

## MISSED APPROACH

LPV: DA
LNAV/VNAV: DA
LNAV: RW28L

CLIMB TO 4000 DIRECT JABGO AND ON TRACK 279.75 TO OLYMM AND HOLD, CONTINUE CLIMB-IN-HOLD TO 4000.

1. PT ____ SIDE OF COURSE ____ OUTBOUND ____ FT WITHIN ____ MILES OF ____ (IAF)
2. PROFILE STARTS AT ROKME
3. FAC: 280.87 FAF: DUYET DIST FAF TO MAP: 5.43 THLD: 5.43
4. MIN. ALT: ROKME 4000, DUYET 1800
5. DIST TO THLD FROM OM: ____ MM: ____ IM: ____ 150 HAT: ____ 100 HAT: ____ GS ANT: ____
6. MIN GS INCPT: 1800 GS ALT AT: DUYET 1800 OM: ____ MM: ____ IM: ____
7. GS ANGLE: 3.00 TCH: 57.1 34:1 IS CLEAR
8. MSA FROM: RW28L 5000

**ADDITIONAL FLIGHT DATA:**
HOLD E, RT, 280.00 INBOUND.
CHART FAS OBST: 312 T-L TWR 373457N/1221506W
DISTANCE TO THLD FROM 256 HATH: 0.62 NM.
CHART VDP AT 1.86 MILES TO RW28L*
*LNAV ONLY.
WAAS CHANNEL # 53415
REFERENCE PATH ID: W28B
LTP HAE: -28.7 M

MAG VAR: 17E EPOCH YEAR: 1975

## MINIMUMS

TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT ALTERNATE: N A STANDARD @

| CATEGORY =====> | A | | | B | | | C | | | D | | | E | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | DH/MDA | VIS | HAT/HAA | DH/MDA | VIS | HAT/HAA | DH/MDA | VIS | HAT/HAA | DH/MDA | VIS | HAT/HAA | DH/MDA | VIS | HAT/HAA |
| LPV DA | 269 | 2400 | 256 | 269 | 2400 | 256 | 269 | 2400 | 256 | 269 | 2400 | 256 | | | |
| LNAV/VNAV DA | 589 | 1 1/2 | 576 | 589 | 1 1/2 | 576 | 589 | 1 1/2 | 576 | 589 | 1 1/2 | 576 | | | |
| LNAV MDA | 680 | 2400 | 667 | 680 | 2400 | 667 | 680 | 1 1/2 | 667 | 680 | 1 1/2 | 667 | | | |
| CIRCLING | 740 | 1 | 727 | 900 | 1 1/4 | 887 | 1040 | 3 | 1027 | 1140 | 3 | 1127 | | | |

NOTES:
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15C (5F) OR ABOVE 54C (130F).
CHART NOTE: DME/DME RNP-0.3 NA.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT.

@ CAT B 900-2, CAT C 1100-3, CAT D 1200-3

| CITY AND STATE | ELEVATION: 13 THRE: 13 | FACILITY IDENTIFIER: | PROCEDURE NO./AMDT NO./EFFECTIVE DATE: | SUP: |
|---|---|---|---|---|
| SAN FRANCISCO, CA | AIRPORT NAME: SAN FRANCISCO INTL | RNAV | RNAV (GPS) RWY 28L, AMDT 2<br>20 SEPTEMBER 2012 | AMDT: 1<br>DATED 10/22/2009 |

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## FAS DATA BLOCK INFORMATION

| DATA FIELD | DATA |
|---|---|
| OPERATION TYPE | 0 |
| SBAS SERVICE PROVIDER IDENTIFIER | 0 |
| AIRPORT IDENTIFIER | KSFO |
| RUNWAY | RW28L |
| APPROACH PERFORMANCE DESIGNATOR | 0 |
| ROUTE INDICATOR | |
| REFERENCE PATH DATA SELECTOR | 0 |
| REFERENCE PATH IDENTIFIER (APPROACH ID) | W28B |
| LTP/FTP LATITUDE | 373642.1595N |
| LTP/FTP LONGITUDE | 1222130.0560W |
| LTP/FTP ELLIPSOIDAL HEIGHT | -00287 |
| FPAP LATITUDE | 373734.6400N |
| FPAP LONGITUDE | 1222335.1900W |
| THRESHOLD CROSSING HEIGHT (TCH) | 00057.1 |
| TCH UNITS SELECTOR (METERS OR FEET USED) | F |
| GLIDEPATH ANGLE (GPA) | 03.00 |
| COURSE WIDTH AT THRESHOLD | 106.75 |
| LENGTH OFFSET | 0000 |
| HORIZONTAL ALERT LIMIT (HAL) | 40.0 |
| VERTICAL ALERT LIMIT (VAL) | 50.0 |
| CRC REMAINDER | 018CF059 |

## ADDITIONAL PATH POINT RECORD INFORMATION

| | |
|---|---|
| ICAO CODE | K2 |
| LTP ORTHOMETRIC HEIGHT | +00039 |
| FPAP ORTHOMETRIC HEIGHT | +00039 |

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ARINC PACKET - 424-18 - RNAV (GPS)

```
                1         2         3         4         5         6         7         8         9         0         1         2         3
WP      123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAEAENRT   BOLDR K20    C     N37101519W122043420                      E0139     NAR           BOLDR
        SUSAEAENRT   DUYET K20    C     N37340974W122152738                      E0140     NAR           DUYET
        SUSAEAENRT   FAITH K20    C     N37240438W121514284                      E0139     NAR           FAITH
        SUSAEAENRT   JABGO K20    W     N37400972W122294561                      E0140     NAR           JABGO
        SUSAEAENRT   OLYMM K20    C     N37435805W122391683                      E0141     NAR           OLYMM
        SUSAEAENRT   RAMND K20    W     N37260920W122072103                      E0139     NAR           RAMND
        SUSAEAENRT   ROKME K20    C     N37305550W122074687                      E0139     NAR           ROKME

                1         2         3         4         5         6         7         8         9         0         1         2         3
AIRPORT 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KSFOK2ASFO     0     118YHN37370830W122222960E017000013         1800018000C    MNAR    SAN FRANCISCO INTL

                1         2         3         4         5         6         7         8         9         0         1         2         3
SEGMENT 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KSFOK2FR28L  ABOLDR 010BOLDRK2EA0E  A    IF                                          18000                A JS
        SUSAP KSFOK2FR28L  ABOLDR 020RAMNDK2EA0E    010TF                     33510160    + 04700                         A JS
        SUSAP KSFOK2FR28L  ABOLDR 030ROKMEK2EA0EE B 010TF                     33890048    + 04000                         A JS
        SUSAP KSFOK2FR28L  AFAITH 010FAITHK2EA0E  A    IF                                          18000                A JS
        SUSAP KSFOK2FR28L  AFAITH 020ROKMEK2EA0EE B 010TF                     28120145    + 04000                         A JS
        SUSAP KSFOK2FR28L  R      010ROKMEK2EA0E  I    IF                                  + 04000     18000                A JS
        SUSAP KSFOK2FR28L  R      020DUYETK2EA1E  F 051TF                     28100069    + 01800                 RW28L K2PGA JS
        SUSAP KSFOK2FR28L  R      020DUYETK2EA2WALPV       ALNAV/VNAV ALNAV                                                JS
        SUSAP KSFOK2FR28L  R      030RW28LK2PG0GY M 031TF                     28090054      00070            -300          A JS
        SUSAP KSFOK2FR28L  R      040         0  M     CA                     2809        + 00269                         A JS
        SUSAP KSFOK2FR28L  R      050JABGOK2EA0E       DF                                                                  A JS
        SUSAP KSFOK2FR28L  R      060OLYMMK2EA0EY   010TF                     2798        + 04000                         A JS
        SUSAP KSFOK2FR28L  R      070OLYMMK2EA0EE  R   HM                     28000040    + 04000                         A JS

                1         2         3         4         5         6         7         8         9         0         1         2         3
RUNWAY  123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KSFOK2GRW28L   0113812808 N37364216W122213006+0000    -0028700013000057200I

                1         2         3         4         5         6         7         8         9         0         1         2         3
PP      123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KSFOK2PR28L  RW28L001 0000W28B0N3736421595W12221300560-002870300N3737346400W122233519001067500000000571F400500018CF059
        SUSAP KSFOK2PR28L  RW28L002E      +00039+00039LPV       53415
```

QUALITY CHECKED

| CITY AND STATE | ELEVATION: 13 THRE: 13 | FACILITY IDENTIFIER: | PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE: | SUP: |
|---|---|---|---|---|
| SAN FRANCISCO, CA | AIRPORT NAME: SAN FRANCISCO INTL | RNAV | RNAV (GPS) RWY 28L, AMDT 2<br>20 SEPTEMBER 2012 | AMDT: 1 |
| | | | | DATED: 10/22/2009 |

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```
                 1         2         3         4         5         6         7         8         9         0         1         2         3
MSA     123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        --------------------------------------------------------------------------------------------------------------------------------
        SUSAP KSFOK2SRW28LK2PG                0   18018005025                                                                       M
```

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**U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION**

# RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE

FLIGHT STANDARDS SERVICES - **FAR PART 97.33**

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ARINC SUMMARY - 424-18 - RNAV (GPS)

| ROUTES | TRANSITION | FIX | SEQ | USE | PATH | TURN | FO/FB | RNP | MAG(TRUE) | DISTANCE | ALTITUDE | SPEED |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | BOLDR | BOLDR | 010 | IAF | IF | | FB | | | | | |
| | BOLDR | RAMND | 020 | | TF | | FB | 1.0 | 335.1(352.1T) | 016.0 | AA 04700 | |
| | BOLDR | ROKME | 030 | | TF | | FB | 1.0 | 338.9(355.9T) | 004.8 | AA 04000 | |
| | FAITH | FAITH | 010 | IAF | IF | | FB | | | | | |
| | FAITH | ROKME | 020 | | TF | | FB | 1.0 | 281.2(298.2T) | 014.5 | AA 04000 | |
| | | ROKME | 010 | FACF | IF | | FB | | | | AA 04000 | |
| | | DUYET | 020 | FAF | TF | | FB | 0.5 | 281.0(298.0T) | 006.9 | AA 01800 | |
| | | RW28L | 030 | MAP | TF | | FO | 0.3 | 280.9(297.9T) | 005.4 | AT 00070 | |

| MISSED APPROACH | FIX | SEQ | USE | PATH | TURN | FO/FB | RNP | MAG(TRUE) | DISTANCE | ALTITUDE | SPEED |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 040 | | CA | | FB | | 280.9(297.9T) | | AA 00269 | |
| | JABGO | 050 | | DF | | FB | | | | | |
| | OLYMM | 060 | | TF | | FO | 1.0 | 279.8(296.8T) | | AA 04000 | |
| | OLYMM | 070 | | HM | R | FO | | 280.0(297.0T) | 004.0 | AA 04000 | |

| POINT DATA | WAYPOINT | LAT IN SECS | LONG IN SECS | LAT IN MINS | LONG IN MINS |
|---|---|---|---|---|---|
| | BOLDR | N371015.19 | W1220434.20 | N3710.253 | W12204.570 |
| | DUYET | N373409.74 | W1221527.38 | N3734.162 | W12215.456 |
| | FAITH | N372404.38 | W1215142.84 | N3724.073 | W12151.714 |
| | JABGO | N374009.72 | W1222945.61 | N3740.162 | W12229.760 |
| | OLYMM | N374358.05 | W1223916.83 | N3743.968 | W12239.281 |
| | RAMND | N372609.20 | W1220721.03 | N3726.153 | W12207.351 |
| | ROKME | N373055.50 | W1220746.87 | N3730.925 | W12207.781 |
| | RW28L | N373642.16 | W1222130.06 | N3736.703 | W12221.501 |

| RUNWAY DATA | RWY | THRESHOLD ELEVATION | TCH |
|---|---|---|---|
| | RW28L | 00013 | 57 |

QUALITY 1 CHECKED

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