DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 10L: Climb heading 104° to 520, then direct ORYAN, then on track 102° to SAHEY, then on track 101° to cross CITY at or above 5000. Thence . . .

TAKEOFF RUNWAY 10R: Climb heading 104° to 520, then direct URRSA, then on track 101° to SAHEY, then on track 101° to cross CITY at or above 5000. Thence . . .

TAKEOFF RUNWAYS 19L/19R: Climb heading 194° to 520, then left turn direct to cross CITY at or above 5000. Thence . . .

. . . on (transition). Maintain FL190. Expect filed altitude 10 minutes after departure.

DEDHD TRANSITION (CITY3.DEDHD)
GRTFL TRANSITION (CITY3.GRTFL)
MOGEE TRANSITION (CITY3.MOGEE)
ORRCA TRANSITION (CITY3.ORRCA)
SYRAH TRANSITION (CITY3.SYRAH)
TIPRE TRANSITION (CITY3.TIPRE)

NOTE: Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 1L/R: Climb on SFO R-350 (or as assigned) for vectors to assigned route/fix. Thence . . . .

TAKEOFF RUNWAYS 10L/R and 19L/R: Turn left and climb on the SFO R-090 and OSI R-028 to OSI VOR/DME; expect vector to assigned route/fix after OSI VOR/DME. Thence . . . .

TAKEOFF RUNWAYS 28L/R: Climb on the SFO VOR/DME R-281 to NORMM INT/ SFO VOR/DME 13 DME; expect vector to assigned route/fix after NORMM INT. Thence . . . .

. . . .expect further clearance to filed altitude 10 minutes after departure.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF MINIMUMS
- Rwys 28L/R: Standard with a minimum climb of 500' per NM to 820.

TAKEOFF RUNWAYS 28L/R: Climb heading 284° to 820, then direct GNNRR. Thence... altitude 10 minutes after departure.

NOTE: GPN required.

NOTE: RNAV.

NOTE: RNAV.

NOTE: Chart not to scale.

SAN FRANCISCO, CALIFORNIA (SFO)

GNNRR TWO DEPARTURE (RNAV)

GNNRR TWO DEPARTURE (SFO)
NOTE: RADAR required.

NOTE: DME required.

NOTE: Rapidly rising terrain to 2000' immediately south of airport.

**TAKEOFF MINIMUMS**

Rwys 10L/R: Standard.
Rwys 19L/R: Standard with minimum climb of 575' per NM to 2000.
Rwys 28L/R: Standard with minimum climb of 351' per NM to 1300.

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAYS 10L/R:** Climbing left turn to intercept SFO R-090 to cross SIPLY 7 DME FIX at or above 2500, then climbing right turn to 5000 on heading 233° to intercept and proceed on PYE R-144 to STINS INT/SFO 22 DME, then on SFO VOR/DME R-287 to MOLEN INT/SFO 41 DME. Thence . . .  

**TAKEOFF RUNWAYS 19L/R:** Climbing left turn to heading 053° to intercept SFO R-090 to cross SIPLY 7 DME FIX at or above 2500, then climbing right turn to 5000 heading 233° to intercept and proceed on PYE R-144 to STINS INT/SFO VOR/DME 22 DME, then on SFO VOR/DME R-287 to MOLEN INT/SFO 41 DME. Thence . . .  

**TAKEOFF RUNWAYS 28 L/R:** Climb on SFO VOR/DME R-281 to cross WESLA INT/SFO VOR/DME 6 DME at or above 1800 then turn right to intercept SFO R-287 to MOLEN INT/SFO 41 DME. Thence . . .  

. . . (transition). Expect clearance to filed altitude 10 minutes after departure.

**MENDOCINO TRANSITION (MOLEN8.ENI):** From over MOLEN INT on ENI R-156 to ENI VORTAC.

**NOTE:** Chart not to scale.
NIITE THREE DEPARTURE (RNAV)

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF MINIMUMS**
- Rwys 1L/R: Standard with a minimum climb of 500' per NM to 520.
- Rwy 28L: Standard with minimum climb of 535' per NM to 2100.
- Rwy 28R: Standard with minimum climb of 560' per NM to 2100.

**TAKEOFF RUNWAYS 1L/R:** Climb heading 014° to 520, then right turn direct MDBAY, then on track 323° to HUSSH, then on track 324° to NIITE. Thence. . . .

**TAKEOFF RUNWAYS 28L/R:** Climb heading 284° to 520 and at or below 220K, then right turn direct GALOO, then on track 325° to NIITE. Thence. . . .

. . . . on (transition). Maintain FL190, expect filed altitude 10 minutes after departure.

**DEDHD TRANSITION (NIITE3.DEDHD)**

**GOBBS TRANSITION (NIITE3.GOBBS)**

**GRTFL TRANSITION (NIITE3.GRTFL)**

**MOGEE TRANSITION (NIITE3.MOGEE)**

**ORRCA TRANSITION (NIITE3.ORRCA)**

**SYRAH TRANSITION (NIITE3.SYRAH)**

**TIPRE TRANSITION (NIITE3.TIPRE)**

**NOTE:** Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 1L/R: Climbing left turn heading 333° to intercept SFO VOR/DME R-350 to cross SEPDY INT/SFO VOR/DME 4 DME at or above 1600. Thence . . . .

TAKEOFF RUNWAYS 28L/R: Climb on SFO VOR/DME R-281 to cross SENZY INT/SFO VOR/DME 6 DME at or above 2500. Thence . . . .

. . . . climbing left turn heading 203° to intercept PYE R-151 to cross SEGUL INT/PYE 68 DME at or above 16000, then on PYE R-151 to cross CYPRS INT/PYE 101 DME at or above FL220. Then on MQO R-295 to MCKEY INT/MQO 21 DME, then on assigned (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

FELLOWS TRANSITION (OFFSH2.FLW): From over MCKEY INT on MQO R-295 to MQO VORTAC, then on MQO R-086 and FLW R-266 to FLW VOR/DME.

GAVIOTA TRANSITION (OFFSH2.GVO): From over MCKEY INT on MQO R-295 to MQO VORTAC, then on MQO R-126 and GVO R-307 to GVO VORTAC.

SAN MARCUS TRANSITION (OFFSH2.RZS): From over MCKEY INT on MQO R-295 to MQO VORTAC, then on MQO R-116 and RZS R-299 to RZS VORTAC.

SANTA CATALINA TRANSITION (OFFSH2.SXC): From over MCKEY INT on BSR R-131 to DAISY INT then on SXC R-287 to SXC VORTAC.
**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAY 10L:** Climb heading 104° to 520, then direct ORYAN, then on track 102° to SAHEY, thence . . . .

**TAKEOFF RUNWAY 10R:** Climb heading 104° to 520, then direct URRSA, then on track 101° to SAHEY, thence . . . .

**TAKEOFF RUNWAYS 19L/R:** Climb heading 194° to 520, then left turn direct to SAHEY, thence . . . .

. . . . on (transition). Maintain FL190, expect filed altitude 10 minutes after departure.

**CISCO TRANSITION (SAHEY3.CISCO)**
**EBAYE TRANSITION (SAHEY3.EBAYE)**
**LOSHN TRANSITION (SAHEY3.PSBN)**
**NTELL TRANSITION (SAHEY3.NTELL)**

**NOTE:** Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 1L/R: Climbing right turn heading 033° or ATC assigned heading to cross SFO 6 DME at or above 3000 for RADAR vectors to assigned route/fix. Expect further clearance to filed altitude 10 minutes after departure.

TAKEOFF RUNWAYS 28L/R: Climb on SFO VOR/DME R-281 to NORMM INT/SFO 13 DME; then expect RADAR vectors to assigned route/fix. Expect further clearance to filed altitude 10 minutes after departure.

LOST COMMUNICATIONS:
If not in contact with departure control after reaching 3000, continue climb to filed altitude and proceed direct to assigned route/fix.
TOP ALTITUDE: 3000

NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: Chart not to scale.

TAKEOFF MINIMUMS
Rwys 28L/R: Standard with a minimum climb of 500' per NM to 1300.

DEPARTURE ROUTE DESCRIPTION
TAKEOFF RUNWAYS 28L/R: Climb heading 284° to 520, then direct KYNNG, then on depicted route to SNTNA. Thence . . .

. . . . . . . (transition). Maintain 3000. Expect filed altitude 10 minutes after departure.

DEDHD TRANSITION (SNTNA2.DEDHD)
GRTFL TRANSITION (SNTNA2.GRTFL)
MOGEE TRANSITION (SNTNA2.MOGEE)
ORRCA TRANSITION (SNTNA2.ORRCA)
SYRAH TRANSITION (SNTNA2.SYRAH)
TIPRE TRANSITION (SNTNA2.TIPRE)
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 1L/R: Climb heading 014° to 520 and at or below 210K, then climbing left turn direct SSTIK, then climbing left turn direct PORTE at or below 10000. Thence . . .

. . . on (transition). Maintain FL190, expect filed altitude 10 minutes after departure.

CISKO TRANSITION (SSTIK4.CISKO)
EBAYE TRANSITION (SSTIK4.EBAYE)
LOSHN TRANSITION (SSTIK4.LOSHN)
NTELL TRANSITION (SSTIK4.NTELL)
YYUNG TRANSITION (SSTIK4.YYUNG)

TAKEOFF MINIMUMS
Rwys 10L/R, 19L/R, 28L/R: NA-ATC.
Rwys 1L/R: Standard with minimum climb of 500’ per NM to 1600.

NOTE: GPS required.
NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: Do not exceed 210K until leaving 520 feet.

NOTE: Chart not to scale.
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 1L, 1R: Climb heading 014° to 520, then right turn direct TYDYE, cross TYDYE at or above 3000, then on track 043° to TRUKN. Thence. . . .

TAKEOFF RUNWAYS 28L, 28R: Climb heading 284° to 520 and at or below 210K, then right turn direct TRUKN. Thence. . . .

. . . .on (transition). Maintain FL190. Expect filed altitude 10 minutes after departure.

DEDHD TRANSITION (TRUKN2.DEDHD)

GRTFL TRANSITION (TRUKN2.GRTFL)

MOGEE TRANSITION (TRUKN2.MOGEE)

ORRCA TRANSITION (TRUKN2.ORRCA)

SYRAH TRANSITION (TRUKN2.SYRAH)

TIPRE TRANSITION (TRUKN2.TIPRE)

NOTE: Chart not to scale.
WESLA FOUR DEPARTURE (RNAV)

**DEPARTURE ROUTE DESCRIPTION**

**TAKEOFF RUNWAYS 28L/R:** Climb heading 284° to 520, then direct WESLA at or above 2000 at or below 230K, then left turn direct PORTE, thence . . . .

. . . . on (transition) maintain 3000, expect filed altitude 10 minutes after departure.

**CISKO TRANSITION (WESLA4.CISKO)**

**EBAYE TRANSITION (WESLA4.EBAYE)**

**LOSHN TRANSITION (WESLA4.LOSHN)**

**NTELL TRANSITION (WESLA4.NTELL)**

**YYUNG TRANSITION (WESLA4.YYUNG)**

**NOTE:** Chart not to scale.

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**TOP ALTITUDE:** 3000

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**NOTE:** DME/DME/IRU or GPS required.

**NOTE:** RNAV 1.

**NOTE:** RADAR required for non-GPS equipped aircraft.

**NOTE:** Do not exceed 210K until leaving 520 feet.