FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
TAKEOFF MINIMUMS AND OBSTACLE DEPARTURE PROCEDURES (ODP)
TITLE 14 CFR PART 97.37

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated.
Ceilings are in feet above airport elevation. Distances are in nautical miles. Visibilities are in statute miles or feet RVR unless otherwise indicated.

AIRPORT ID	CITY	STATE	AMDT NO	ACTUAL EFFECTIVE DATE
NUQ	MOUNTAIN VIEW	CA	3	

TAKEOFF MINIMUMS:

RWY 14L, 14R: STANDARD WITH MINIMUM CLIMB OF 550 FT/NM TO 4000.
RWY 32L: STANDARD WITH MINIMUM CLIMB OF 248 FT/NM TO 4700.
RWY 32R: STANDARD WITH MINIMUM CLIMB OF 247 FT/NM TO 4700.

TEXTUAL DEPARTURE PROCEDURES:

RWY 14L: CLIMBING RIGHT TURN DIRECT OSI VOR/DME AT OR ABOVE MEA FOR DIRECTION OF FLIGHT BEFORE PROCEEDING ON COURSE.
RWY 14R: CLIMBING RIGHT TURN DIRECT OSI VOR/DME AT OR ABOVE MEA FOR DIRECTION OF FLIGHT BEFORE PROCEEDING ON COURSE.
RWY 32L: CLIMB ON HEADING 321.72 TO 700 THEN CLIMBING RIGHT TURN HEADING 140.00 TO 4700 BEFORE PROCEEDING ON COURSE.
RWY 32R: CLIMB ON HEADING 321.72 TO 700 THEN CLIMBING RIGHT TURN HEADING 140.00 TO 4700 BEFORE PROCEEDING ON COURSE.

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

RWY 14L: TERRAIN 34 FT FROM DER, 338 FT RIGHT OF CENTERLINE, 34 FT MSL.
SIGN 102 FT FROM DER, 320 FT RIGHT OF CENTERLINE, 3 FT AGL/36 FT MSL.
VEHICLE ON ROAD 702 FT FROM DER, 686 FT RIGHT OF CENTERLINE, 54 FT MSL.
VEHICLES ON ROAD, RAILROAD BEGINNING 737 FT FROM DER, 499 FT RIGHT OF CENTERLINE, UP TO 55 FT MSL.
VEHICLES ON ROAD, RAILROAD BEGINNING 899 FT FROM DER, 502 FT RIGHT OF CENTERLINE, UP TO 56 FT MSL.
VEHICLES ON ROAD, POLE, RAILROAD BEGINNING 914 FT FROM DER, 398 FT RIGHT OF CENTERLINE, UP TO 57 FT MSL.
TREES, RAILROAD, VEHICLES ON ROAD BEGINNING 1007 FT FROM DER, 233 FT RIGHT OF CENTERLINE, UP TO 31 FT AGL/70 FT MSL.
TREES BEGINNING 1193 FT FROM DER, 426 FT RIGHT OF CENTERLINE, UP TO 31 FT AGL/71 FT MSL.
TREES BEGINNING 1331 FT FROM DER, 155 FT RIGHT OF CENTERLINE, UP TO 53 FT AGL/93 FT MSL.
TREE 1675 FT FROM DER, 81 FT LEFT OF CENTERLINE, 36 FT AGL/74 FT MSL.
TREE 2052 FT FROM DER, 1015 FT RIGHT OF CENTERLINE, 115 FT MSL.
TREES BEGINNING 2062 FT FROM DER, 635 FT RIGHT OF CENTERLINE, UP TO 72 FT AGL/116 FT MSL.
TREES BEGINNING 2288 FT FROM DER, 180 FT LEFT OF CENTERLINE, UP TO 112 FT MSL.
TREES BEGINNING 2671 FT FROM DER, 67 FT RIGHT OF CENTERLINE, UP TO 88 FT AGL/136 FT MSL.
TREES BEGINNING 2945 FT FROM DER, 214 FT RIGHT OF CENTERLINE, UP TO 137 FT MSL.
TREES BEGINNING 3212 FT FROM DER, 225 FT LEFT OF CENTERLINE, UP TO 132 FT MSL.
TREES BEGINNING 3506 FT FROM DER, 306 FT LEFT OF CENTERLINE, UP TO 87 FT AGL/134 FT MSL.
TREES BEGINNING 3539 FT FROM DER, 104 FT LEFT OF CENTERLINE, UP TO 132 FT AGL/170 FT MSL.
TREE 3632 FT FROM DER, 274 FT RIGHT OF CENTERLINE, 90 FT AGL/139 FT MSL.
TREE 3639 FT FROM DER, 1036 FT RIGHT OF CENTERLINE, 96 FT AGL/151 FT MSL.
TREES BEGINNING 3642 FT FROM DER, 219 FT RIGHT OF CENTERLINE, UP TO 98 FT AGL/152 FT MSL.
TREES BEGINNING 3752 FT FROM DER, 461 FT RIGHT OF CENTERLINE, UP TO 112 FT AGL/164 FT MSL.
TREES BEGINNING 4050 FT FROM DER, 56 FT RIGHT OF CENTERLINE, UP TO 116 FT AGL/169 FT MSL.
TREES BEGINNING 4121 FT FROM DER, 94 FT LEFT OF CENTERLINE, UP TO 128 FT AGL/175 FT MSL.

RWY 14R: POLE 5 FT FROM DER, 77 FT RIGHT OF CENTERLINE, 1 FT AGL/37 FT MSL.
POLE 6 FT FROM DER, 77 FT LEFT OF CENTERLINE, 1 FT AGL/37 FT MSL.
FENCE 190 FT FROM DER, 488 FT RIGHT OF CENTERLINE, 8 FT AGL/45 FT MSL.
VEHICLE ON ROAD 209 FT FROM DER, 521 FT RIGHT OF CENTERLINE, 53 FT MSL.
VEHICLES ON ROAD BEGINNING 265 FT FROM DER, 361 FT RIGHT OF CENTERLINE, UP TO 55 FT MSL.
VEHICLE ON ROAD 395 FT FROM DER, 357 FT RIGHT OF CENTERLINE, 56 FT MSL.
TREES BEGINNING 398 FT FROM DER, 497 FT RIGHT OF CENTERLINE, UP TO 27 FT AGL/67 FT MSL.
TREES, VEHICLES ON ROAD, RAILROAD BEGINNING 419 FT FROM DER, 166 FT RIGHT OF CENTERLINE, UP TO 94 FT MSL.
TREES, VEHICLES ON ROAD, RAILROAD BEGINNING 556 FT FROM DER, 2 FT RIGHT OF CENTERLINE, UP TO 80 FT AGL/119 FT MSL.
VEHICLES ON ROAD BEGINNING 648 FT FROM DER, 25 FT LEFT OF CENTERLINE, UP TO 54 FT MSL.
TREES, VEHICLES ON ROAD, RAILROAD BEGINNING 662 FT FROM DER, 12 FT RIGHT OF CENTERLINE, UP TO 83 FT AGL/123 FT MSL.
RAILROAD 788 FT FROM DER, 122 FT LEFT OF CENTERLINE, 56 FT MSL.
RAILROAD 958 FT FROM DER, 342 FT LEFT OF CENTERLINE, 60 FT MSL.
TREE 1029 FT FROM DER, 33 FT LEFT OF CENTERLINE, 24 FT AGL/63 FT MSL.
TREES BEGINNING 1074 FT FROM DER, 20 FT LEFT OF CENTERLINE, UP TO 27 FT AGL/67 FT MSL.
TREES BEGINNING 1137 FT FROM DER, 198 FT LEFT OF CENTERLINE, UP TO 29 FT AGL/68 FT MSL.
TREES BEGINNING 1271 FT FROM DER, 282 FT LEFT OF CENTERLINE, UP TO 35 FT AGL/72 FT MSL.
TREES BEGINNING 1674 FT FROM DER, 831 FT RIGHT OF CENTERLINE, UP TO 134 FT MSL.
TREES BEGINNING 1711 FT FROM DER, 10 FT RIGHT OF CENTERLINE, UP TO 94 FT AGL/138 FT MSL.
TREE 1917 FT FROM DER, 243 FT LEFT OF CENTERLINE, 43 FT AGL/84 FT MSL.
TREE 2558 FT FROM DER, 809 FT LEFT OF CENTERLINE, 101 FT MSL.
TREES BEGINNING 2559 FT FROM DER, 557 FT LEFT OF CENTERLINE, UP TO 68 FT AGL/110 FT MSL.
TREES BEGINNING 2632 FT FROM DER, 448 FT LEFT OF CENTERLINE, UP TO 69 FT AGL/112 FT MSL.
TREE 2966 FT FROM DER, 363 FT LEFT OF CENTERLINE, 67 FT AGL/113 FT MSL.
TREE 2993 FT FROM DER, 202 FT LEFT OF CENTERLINE, 69 FT AGL/116 FT MSL.

QUALITY 23 CHECKED

TREES BEGINNING 3021 FT FROM DER, 27 FT LEFT OF CENTERLINE, UP TO 72 FT AGL/119 FT MSL.
TREES BEGINNING 3285 FT FROM DER, 48 FT LEFT OF CENTERLINE, UP TO 79 FT AGL/128 FT MSL.
TREES BEGINNING 3325 FT FROM DER, 138 FT LEFT OF CENTERLINE, UP TO 84 FT AGL/133 FT MSL.
TREES BEGINNING 3383 FT FROM DER, 233 FT LEFT OF CENTERLINE, UP TO 87 FT AGL/134 FT MSL.
TREE 3509 FT FROM DER, 349 FT LEFT OF CENTERLINE, 90 FT AGL/139 FT MSL.
TREE 3516 FT FROM DER, 411 FT RIGHT OF CENTERLINE, 96 FT AGL/151 FT MSL.
TREES BEGINNING 3519 FT FROM DER, 288 FT RIGHT OF CENTERLINE, UP TO 98 FT AGL/152 FT MSL.
TREES BEGINNING 3530 FT FROM DER, 379 FT LEFT OF CENTERLINE, UP TO 92 FT AGL/140 FT MSL.
TREES BEGINNING 3629 FT FROM DER, 10 FT RIGHT OF CENTERLINE, UP TO 112 FT AGL/164 FT MSL.
TREES BEGINNING 3734 FT FROM DER, 729 FT LEFT OF CENTERLINE, UP TO 112 FT AGL/158 FT MSL.
TREES BEGINNING 3870 FT FROM DER, 88 FT LEFT OF CENTERLINE, UP TO 113 FT AGL/159 FT MSL.
TREE 3927 FT FROM DER, 108 FT LEFT OF CENTERLINE, 116 FT AGL/169 FT MSL.
TREES BEGINNING 3998 FT FROM DER, 300 FT LEFT OF CENTERLINE, UP TO 128 FT AGL/175 FT MSL.

RWY 32L: POLE 1 FT FROM DER, 76 FT LEFT OF CENTERLINE, 1 FT AGL/5 FT MSL.
POLE 1 FT FROM DER, 76 FT RIGHT OF CENTERLINE, 1 FT AGL/5 FT MSL.
SIGN 132 FT FROM DER, 446 FT RIGHT OF CENTERLINE, 5 FT AGL/8 FT MSL.
NAVAID 449 FT FROM DER, 315 FT RIGHT OF CENTERLINE, 19 FT AGL/21 FT MSL.

RWY 32R: POLE 1 FT FROM DER, 77 FT RIGHT OF CENTERLINE, 1 FT AGL/7 FT MSL.
VEHICLES ON ROAD, TREE, FENCE BEGINNING 5 FT FROM DER, 92 FT LEFT OF CENTERLINE, UP TO 19 FT MSL.
VEHICLE ON ROAD 108 FT FROM DER, 414 FT RIGHT OF CENTERLINE, 18 FT MSL.
VEHICLES ON ROAD, FENCE BEGINNING 109 FT FROM DER, 158 FT RIGHT OF CENTERLINE, UP TO 19 FT MSL.
VEHICLES ON ROAD BEGINNING 208 FT FROM DER, 306 FT RIGHT OF CENTERLINE, UP TO 20 FT MSL.

CONTROLLING OBSTACLES:

RWY 14L: 3002 FT MSL AAO 371909.00N/1220848.00W.
RWY 14R: 3002 FT MSL AAO 371909.00N/1220848.00W.
RWY 32L: 3691 FT MSL AAO 370951.00N/1215509.00W.
RWY 32R: 2228 FT MSL AAO 372839.00N/1215212.00W (CLIMB GRADIENT), 3691 FT MSL AAO 370951.00N/1215509.00W (CLIMB GRADIENT TERMINATION ALTITUDE).

OBSTACLES MANDATING ODP ROUTE DEVELOPMENT: RWY 14L, 14R: 3532 FT MSL AAO 371324.66N/1220535.43W, RWY 32L, 32R: 3002 FT MSL AAO 371909.00N/1220848.00W.

REMARKS:

100 FT VEGETATION HEIGHT USED. - PER FPT CHECKLIST.
NORCAL TRACON OPTS-OUT OF VCOA. - WAIVER ON FILE.
RWY 14 L/R TAKEOFF MINIMUM CG MORE THAN 500 FT/NM - WAIVER ON FILE.

FLIGHT INSPECTED BY		OFFICE	DATE	
JAMES L REINEBOLD	*Digitally signed by* ***ROBERT G HAMILTON*** Sep 24, 2025	AJF	09/19/2025	
DEVELOPED BY		**OFFICE**	**DATE**	
LEO PALMER	*Digitally signed by* ***LEO PALMER*** Aug 05, 2025	AJV-A432	07/18/2025	
APPROVED BY		**OFFICE**	**DATE**	**TITLE**
CASIMIR L. TABAKA	*Digitally signed by* ***ROBERT G HAMILTON*** Sep 24, 2025	AJV-A432	12/18/2025	MANAGER

REQUIRED EFFECTIVE DATE:

ROUTINE

COORDINATED WITH:

A4A ☐ **ALPA** ☒ **AOPA** ☒ **APA** ☐ **HAI** ☐ **NBAA** ☒

OTHER: ZOA, NORCAL APP CON, NUQ ATCT, AMGR

QUALITY 23 CHECKED

CHANGES - REASONS:

- TAKEOFF MINIMUMS: RWY'S 32L/R CHANGED FROM "STANDARD WITH A MINIMUM CLIMB OF 285 FT PER NM TO 3500 OR 1700-2 1/2 FOR CLIMB IN VISUAL CONDITIONS" TO RWY 32L: STANDARD WITH MINIMUM CLIMB OF 248 FT/NM TO 4700, RWY 32R: STANDARD WITH MINIMUM CLIMB OF 247 FT/NM TO 4700. - NEW DP ROUTE - PER ATC/FPT CHECKLIST.
- RWY 14L/R TEXTUAL DEPARTURE PROCEDURES: CHANGED FROM "RWY 14L, 14R - CLIMBING RIGHT TURN DIRECT OSI VORTAC, THENCE ... "OR FOR CLIMB IN VISUAL CONDITIONS CROSS MOFFETT FEDERAL AIRFIELD AT OR ABOVE 1600 THEN ON OSI R-066 TO OSI VORTAC, THENCE ..." "WHEN EXECUTING VCOA, NOTIFY ATC PRIOR TO DEPARTURE ." TO "RWY 14L/R: CLIMBING RIGHT TURN DIRECT OSI VOR/DME AT OR ABOVE MEA FOR DIRECTION OF FLIGHT BEFORE PROCEEDING ON COURSE. - IAW 8260.46 DOCUMENTATION STANDARDS.
- RWY 32L/R TEXTUAL DEPARTURE PROCEDURES: CHANGED FROM RWY 32R, 32L - CLIMB HEADING 321 .72 TO 700, THEN CLIMBING LEFT TURN HEADING 230 UNTIL RECEIVING OSI VORTAC, THEN DIRECT OSI VORTAC. THENCE. .. OR FOR CLIMB IN VISUAL CONDITIONS CROSS MOFFETT FEDERAL AIRFIELD AT OR ABOVE 1600 THEN ON OSI R-066 TO OSI VORTAC, THENCE ... WHEN EXECUTING VCOA. NOTIFY ATC PRIOR TO DEPARTURE." TO "RWY 32L: CLIMB ON HEADING 321.72 TO 700 THEN CLIMBING RIGHT TURN HEADING 140.00 TO 4700 BEFORE PROCEEDING ON COURSE." AND "RWY 32R: CLIMB ON HEADING 321.72 TO 700 THEN CLIMBING RIGHT TURN HEADING 140.00 TO 4700 BEFORE PROCEEDING ON COURSE.". - NEW SINGLE SECTOR ROUTE PER ATC. VCOA REMOVED WITH NCT 'OPT-OUT" APPROVAL LETTER.
- RWY 32 L/R, 14L/R CONTROLLING OBSTACLES UPDATED. - TARGETS EVAL USING MITRE 3DEP, IAW 8260.46 DOCUMENTATION STANDARDS.
- RWY 32L/R, 14 L/R TAKEOFF NOTES UPDATED FOR THOSE HIGHER AND CLOSER THAN THOSE PUBLISHED. - TARGETS DERIVED ICA EVAL.