

**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.

CITY, STATE	AIRPORT	EFFECTIVE DATE	AMDT NO
FRESNO, CA	FRESNO YOSEMITE INTL	10 OCTOBER 2019	9

TAKEOFF MINIMUMS:

RWY 11L, 11R, 29L, 29R: STANDARD WITH MINIMUM CLIMB OF 250 FT PER NM TO 5000 OR 5800 - 3 FOR VCOA

TEXTUAL DEPARTURE PROCEDURES:

RWY 11L, 11R: CLIMB HEADING 112.00 TO 2500, THEN CLIMBING LEFT TURN HEADING 040 TO INTERCEPT FRA VORTAC R-150 TO FRA VORTAC. CROSS FRA VORTAC AT OR ABOVE 6000, THENCE...

RWY 29L, 29R: CLIMB HEADING 292.00 TO 2500, THEN CLIMBING RIGHT TURN HEADING 350 TO INTERCEPT FRA VORTAC R-230. CROSS FRA VORTAC AT OR ABOVE 6000, THENCE...

...CONTINUE CLIMB IN FRA VORTAC HOLDING PATTERN (HOLD S, LEFT TURNS, 350.00 INBOUND) TO CROSS FRA VORTAC AT OR ABOVE MEA/MCA FOR ROUTE OF FLIGHT.

VISUAL CLIMB OVER AIRPORT:

ALL RUNWAYS: OBTAIN ATC APPROVAL FOR VCOA WHEN REQUESTING IFR CLEARANCE. CLIMB IN VISUAL CONDITIONS TO CROSS FRESNO YOSEMITE INTL AIRPORT AT OR ABOVE 6000, THEN ON FRA R-180 TO FRA VORTAC BEFORE PROCEEDING ON COURSE.

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 11L, LIGHTING BEGINNING 109 FT FROM DER, ON CENTERLINE, UP TO 4 FT AGL/336 FT MSL. POLE 648 FT FROM DER, 542 FT LEFT OF CENTERLINE, 16 FT AGL/349 FT MSL. ELECTRICAL SYSTEM 1223 FT FROM DER, 662 FT RIGHT OF CENTERLINE, 30 FT AGL/363 FT MSL. POLE 1229 FT FROM DER, 664 FT RIGHT OF CENTERLINE, 33 FT AGL/365 FT MSL. TREE, POLE BEGINNING 1414 FT FROM DER, 668 FT RIGHT OF CENTERLINE, UP TO 377 FT MSL. SIGN, TRANSMISSION LINE BEGINNING 1694 FT FROM DER, 862 FT RIGHT OF CENTERLINE, UP TO 51 FT AGL/383 FT MSL.

NOTE: RWY 11R, LIGHTING 10 FT FROM DER, 55 FT RIGHT OF CENTERLINE, 1 FT AGL/331 FT MSL. GENERAL UTILITY 159 FT FROM DER, 433 FT LEFT OF CENTERLINE, 3 FT AGL/334 FT MSL. POLE 329 FT FROM DER, 280 FT LEFT OF CENTERLINE, 21 FT AGL/349 FT MSL. TOWER 664 FT FROM DER, 274 FT LEFT OF CENTERLINE, 34 FT AGL/362 FT MSL. POLE 1205 FT FROM DER, 569 FT RIGHT OF CENTERLINE, 54 FT AGL/382 FT MSL. POLE 1458 FT FROM DER, 393 FT RIGHT OF CENTERLINE, 54 FT AGL/384 FT MSL. POLE 1598 FT FROM DER, 294 FT RIGHT OF CENTERLINE, 55 FT AGL/385 FT MSL. ELECTRICAL SYSTEM, POLE BEGINNING 1598 FT FROM DER, 262 FT RIGHT OF CENTERLINE, UP TO 57 FT AGL/386 FT MSL. TREE 2648 FT FROM DER, 442 FT RIGHT OF CENTERLINE, 398 FT MSL.

NOTE: RWY 29L, LIGHTING 9 FT FROM DER, 55 FT LEFT OF CENTERLINE, 2 FT AGL/331 FT MSL. LIGHTING 10 FT FROM DER, 54 FT RIGHT OF CENTERLINE, 1 FT AGL/331 FT MSL. TRANSMISSION LINE, POLE BEGINNING 997 FT FROM DER, 620 FT LEFT OF CENTERLINE, UP TO 55 FT AGL/385 FT MSL. TREE, TRANSMISSION LINE BEGINNING 1132 FT FROM DER, 189 FT LEFT OF CENTERLINE, UP TO 396 FT MSL. TREES BEGINNING 1457 FT FROM DER, 172 FT LEFT OF CENTERLINE, UP TO 429 FT MSL. TREES BEGINNING 1668 FT FROM DER, 2 FT RIGHT OF CENTERLINE, UP TO 378 FT MSL. TREE 1905 FT FROM DER, 359 FT RIGHT OF CENTERLINE, 380 FT MSL.

NOTE: RWY 29R, LIGHTING 9 FT FROM DER, 54 FT RIGHT OF CENTERLINE, 2 FT AGL/334 FT MSL. POLE 994 FT FROM DER, 601 FT RIGHT OF CENTERLINE, 29 FT AGL/364 FT MSL. POLE BEGINNING 1019 FT FROM DER, 548 FT RIGHT OF CENTERLINE, UP TO 30 FT AGL/365 FT MSL. TREES BEGINNING 2315 FT FROM DER, 847 FT LEFT OF CENTERLINE, UP TO 395 FT MSL.

CONTROLLING OBSTACLES:

RWY 11L, 11R, 29L, 29R (VCOA): 782 FT MSL TOWER 365039.00N/1194116.00W, 10886 FT MSL AAO 370830.00N/1190339.00W.

OBSTACLE MANDATING ODP ROUTE DEVELOPMENT: RWY 11L, 11R: 3722 FT MSL TOWER 364445.00N/1191656.00W, 10886 FT MSL AAO 370830.00N/1190339.00W. RWY 29L, 29R: 10886 FT MSL AAO 370830.00N/1190339.00W.

REMARKS:

CLIMB GRADIENT REQUIRED TO RECEIVE FRA VORTAC RADIALS AND GUIDANCE DUE TO ELEVATION OF FRA NAVAID.



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<u>CITY, STATE</u>	<u>AIRPORT</u>	<u>EFFECTIVE DATE</u>	<u>AMDT NO</u>
FRESNO, CA	FRESNO YOSEMITE INTL	10 OCTOBER 2019	9

FLIGHT INSPECTED BY:

JORDAN ROLIH
Digitally signed by
CASIMIR L TABAKA
May 17, 2019

OFFICE SYMBOL:

FICO

DATE:

3/18/19

DEVELOPED BY:

ROBERT HAMILTON (AUSTIN GOTCHER)
Digitally signed by
CASIMIR L TABAKA

OFFICE SYMBOL:

AJV-A422

DATE:

11/13/2018

APPROVED BY:

JULIE MORGAN
Digitally signed by
CASIMIR L TABAKA
Mar 21, 2019

OFFICE SYMBOL:

AJV-A420

DATE:

REQUIRED EFFECTIVE DATE:

ROUTINE

COORDINATED WITH:

A4A ALPA AOPA APA HAI NBAA

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OTHER:

ZOA, APT AMGR, FAT ATCT

CHANGES - REASONS:

1. ADDED CLIMB GRADIENT. - FRA VORTAC ELEVATION IS 2045 FT HIGHER THAN KFAT. CLIMB GRADIENT ADDED TO ENSURE FRA VORTAC RECEPTION.
2. CHANGED RWY 11L/R TEXTUAL DEPARTURE PROCEDURES FROM "CLIMBING LEFT TURN HEADING 292, THENCE CONTINUE CLIMB ON HEADING 292 AND FRA VORTAC R-201.75 TO NIVEE INTIFRA 8.00 DME, CONTINUE CLIMB IN HOLD (HOLD S, RT. 021.75 INBOUND) TO CROSS NIVEE AT OR ABOVE 5000." TO "CLIMB HEADING 112.00 TO 2500, THEN CLIMBING LEFT TURN HEADING 075 TO INTERCEPT FRA VORTAC R-155 TO FRA VORTAC. CROSS FRA VORTAC AT OR ABOVE 6000." - REDESIGN OF DEPARTURES DUE TO VORMON DECOMMISSIONING OF CZQ VORTAC, FPT REQUEST.
3. CHANGED RWY 29L/R TEXTUAL DEPARTURE PROCEDURES FROM "CLIMB HEADING 292, THENCE CONTINUE CLIMB ON HEADING 292 AND FRA VORTAC R-201.75 TO NIVEE INTIFRA 8.00 DME, CONTINUE CLIMB IN HOLD (HOLD S, RT. 021.75 INBOUND) TO CROSS NIVEE AT OR ABOVE 5000." TO "CLIMB HEADING 292.00 TO 2500, THEN CLIMBING RIGHT TURN HEADING 325 TO INTERCEPT FRA VORTAC R-208. CROSS FRA VORTAC AT OR ABOVE 6000." - REDESIGN OF DEPARTURES DUE TO VORMON DECOMMISSIONING OF CZQ VORTAC, FPT REQUEST.
4. ADDED VCOA. - CLIMB GRADIENT IS REQUIRED DUE TO THE ELEVATION OF THE FRA VORTAC.
5. UPDATED TAKEOFF OBSTACLE NOTES AND OBSTACLES MANDATING ODP ROUTE DEVELOPMENT. - NEW OBSTACLE DATA/TERRAIN EVALUATION.

03/21/19: THIS IS A UPDATED COPY OF THE FORM DEVELOPED ON 11/13/18.

1. CHANGED FRA VORTAC CROSSING ALTITUDE FROM 5000 TO 6000.
2. ADDED CLIMB IN HOLD AT FRA VORTAC TO CROSS FRA VORTAC AT OR ABOVE MEA/MCA FOR ROUTE OF FLIGHT PER FLIGHT CHECK.

QUALITY
4
CHECKED