


<b>Flight Procedure Tracking Form</b>		<b>Action:</b> FLIGHT CHECK	<b>Task Type:</b> IAP	<b>Date Open:</b> 09/16/2015	<b>Task #:</b> 2015080411442904001	<b>Request #:</b> 20150804114429
<b>Procedure:</b> RNAV (GPS) RWY 32L ORIG			<b>Airport ID:</b> KNUQ	<b>Airport:</b> MOFFETT FEDERAL AFLD		<b>Reimbursable #:</b> NO
<b>City:</b> MOUNTAIN VIEW	<b>ST:</b> CA	<b>GPS #:</b>	<b>Estimated Chart Date:</b> 07/19/2018		<b>FICO #:</b> 1213578	
<b>Fac ID:</b> N/A		<b>Fac. Type:</b>		<b>Specialist:</b> SYLVAN DRAKES		
<b>Procedure Review</b>						
	<b>Rec'd</b>	<b>Rel'd</b>	<b>Full Name</b>	<b>Comments</b>		
<b>Lead:</b>	05/02/2018	06/07/2018	TRACEY STILES			
<b>QA:</b>	06/07/2018	06/07/2018	TRACEY STILES			
<b>Liaison:</b>	06/07/2018	06/08/2018	MARY MCDONALD			
<b>Procedure Comments:</b>			<b>Remark Type:</b> INFORMATION			
<p>CONTACT: PATRICK MULQUEEN OR URRUTIA ADOLFO, 405.954.4073/2079.</p> <p>6/29/18: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 06/07/18.</p> <p>1. CHANGED THE CODED CA LEG ALTITUDE FROM 600 TO 337.</p> <p>2. CHANGED LINE 2 FROM PROFILE STARTS AT CEVGI TO PROFILE STARTS AT HOSNU AND ADDED CEVGI TO LINE 4.</p> <p>3. CHANGED LTP HAE IN ADDITIONAL FLIGHT DATA FROM -22M TO -21.5M.</p> <p>VN8200-6 (05/26/2005)</p>						

Data as of: 06/29/2018 12:19:33 PM

<b>FIPC BASIC FORM</b>						
<b>PROCEDURE:</b> RNAV (GPS) RWY 32L ORIG			<b>AIRPORT NAME:</b> MOFFETT FEDERAL AFLD		<b>AIRPORT ID:</b> KNUQ	<b>SPECIAL CONTROL NO:</b> SG-06-080-18
<b>FAC ID:</b> KNUQ32L		<b>CITY:</b> MOUNTAIN VIEW			<b>ST:</b> CA	<b>ORIG CHART DATE:</b> 07/19/2018
<b>DFL TYPE:</b> PROC/S	<b>THIRD PARTY:</b> <input type="checkbox"/> YES	<b>EST. TIME ON SITE:</b> 0.4	<b>REIMB. NUMBER:</b>	<b>PTS TASK ID:</b> 2015080411442904001		
<b>PREFLIGHT NOTES</b>						
<b>REVIEWER:</b>					<b>DATE:</b>	
<b>COMMENTS:</b>					<b>CHECK ONE:</b> <input type="checkbox"/> FLT CK REQ <input type="checkbox"/> NFCR <input type="checkbox"/> REJECT <div style="border-top: 1px solid black; display: flex; justify-content: flex-end; width: 100px;"> <div style="border-right: 1px solid black; padding: 0 5px;">YES</div> <div style="padding: 0 5px;">NO</div> </div>	
					<b>CPV COMPLETE?</b> <div style="border-top: 1px solid black; display: flex; justify-content: flex-end; width: 100px;"> <div style="border-right: 1px solid black; padding: 0 5px;">X</div> <div style="padding: 0 5px;"></div> </div>	
<b>PROCEDURE RESULTS</b>						
<b>INSPECTION DATE:</b> 06/21/2018	<b>CREW #:</b> VN167	<b>N #:</b> N58	<b>INSTRUMENT PROCEDURE STATUS:</b> <input type="checkbox"/> SAT <input checked="" type="checkbox"/> SAT W/CHANGES <input type="checkbox"/> UNSAT		<b>ARINC CODING:</b> <input type="checkbox"/> SAT <input checked="" type="checkbox"/> SAT/GOLD <input type="checkbox"/> UNSAT	
<b>FLIGHT INSPECTOR SIGNATURE:</b> scott a thompson @ 06/29/2018 15:03			<b>PRINTED NAME:</b> THOMPSON, SCOTT ANDREW			<b>NOTAM INITIATED?</b> <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<b>FLIGHT INSPECTOR REMARKS:</b> Two errors noted in original coding for procedure. 1) altitude at LNAV MDA was coded as if the MAWP was at the threshold and not located 0.48 nm from the threshold; this was corrected in the updated .ari file from 91' to 268'. 2) CA altitude of 600' in missed segment was not reflected in the missed approach verbiage; coding was changed from 600' to 337' to match missed approach verbiage. Corrected .ari file and 8260-3 verified so procedure is now sat with changes. (Originally submitted as "CU").						
<b>IN-FLIGHT OBSTACLE REPORT</b>						
<b>OBSTRUCTION ID #:</b>	<b>COORDINATES OR LOCATION:</b>	<b>GNSS ALTITUDE (MSL):</b>	<b>BAROMETRIC ALTITUDE (MSL):</b>	<b>HEIGHT ABOVE GROUND LEVEL:</b>		

<b>FIPC BASIC FORM</b>						
<b>PROCEDURE:</b> RNAV (GPS) RWY 32L ORIG			<b>AIRPORT NAME:</b> MOFFETT FEDERAL AFLD		<b>AIRPORT ID:</b> KNUQ	<b>SPECIAL CONTROL NO:</b> SG-06-080-18
<b>FAC ID:</b> KNUQ32L		<b>CITY:</b> MOUNTAIN VIEW			<b>ST:</b> CA	<b>ORIG CHART DATE:</b> 07/19/2018
<b>DFL TYPE:</b> PROC/S	<b>THIRD PARTY:</b> <input type="checkbox"/> YES	<b>EST. TIME ON SITE:</b> 0.4	<b>REIMB. NUMBER:</b>	<b>PTS TASK ID:</b> 2015080411442904001		
<b>PREFLIGHT NOTES</b>						
<b>REVIEWER:</b>					<b>DATE:</b>	
<b>COMMENTS:</b>					<b>CHECK ONE:</b> <input type="checkbox"/> FLT CK REQ <input type="checkbox"/> NFCR <input type="checkbox"/> REJECT <div style="display: flex; justify-content: flex-end; margin-top: 5px;"> <div style="border: 1px solid black; padding: 2px 5px;">YES</div> <div style="border: 1px solid black; padding: 2px 5px; margin-left: 5px;">NO</div> </div>	
					<b>CPV COMPLETE?</b> <div style="border: 1px solid black; padding: 2px 5px;">X</div>	
<b>PROCEDURE RESULTS</b>						
<b>INSPECTION DATE:</b> 06/21/2018	<b>CREW #:</b> VN167	<b>N #:</b> N58	<b>INSTRUMENT PROCEDURE STATUS:</b> <input type="checkbox"/> SAT <input type="checkbox"/> SAT W/CHANGES <input checked="" type="checkbox"/> UNSAT		<b>ARINC CODING:</b> <input type="checkbox"/> SAT <input type="checkbox"/> SAT/GOLD <input checked="" type="checkbox"/> UNSAT	
<b>FLIGHT INSPECTOR SIGNATURE:</b> scott a thompson @ 06/26/2018 12:00			<b>PRINTED NAME:</b> THOMPSON, SCOTT ANDREW			<b>NOTAM INITIATED?</b> <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<b>FLIGHT INSPECTOR REMARKS:</b> For LNAV VDA, coded altitude at JIRAP (MAWP) is 91'. JIRAP (MAWP) is 2074.5' from the RW32L displaced threshold; to match the LPV glidepath TCH of 55.0, the coded altitude at JIRAP should be approximately 218'. Using the LNAV VDA, an aircraft would be delivered at 55' AGL at 0.48 nm from threshold using the incorrect coding. LPV FAS data checked SAT.						
<b>IN-FLIGHT OBSTACLE REPORT</b>						
<b>OBSTRUCTION ID #:</b>	<b>COORDINATES OR LOCATION:</b>	<b>GNSS ALTITUDE (MSL):</b>	<b>BAROMETRIC ALTITUDE (MSL):</b>	<b>HEIGHT ABOVE GROUND LEVEL:</b>		

MOUNTAIN VIEW, CALIFORNIA

AL-410 (FAA)

FIG

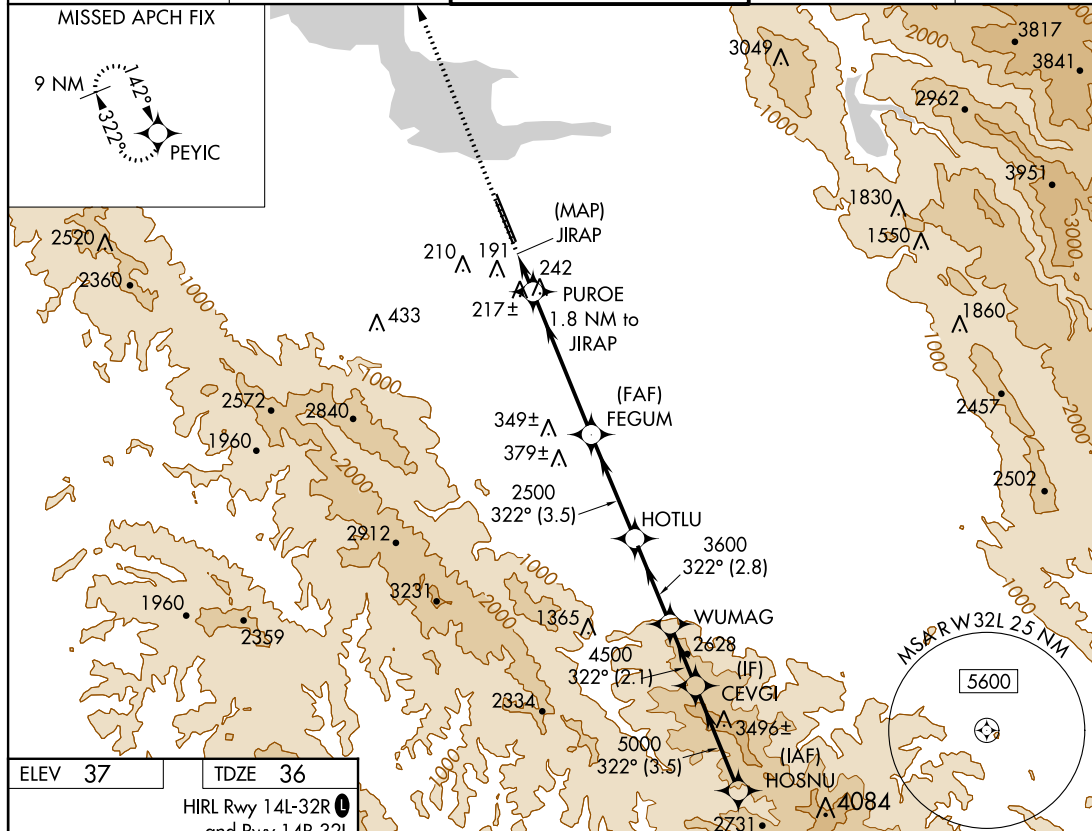
WAAS CH <b>50242</b> <b>W32A</b>	APP CRS <b>322°</b>	Rwy Idg TDZE Apt Elev	<b>7520</b> <b>36</b> <b>37</b>
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# RNAV (GPS) RWY 32L

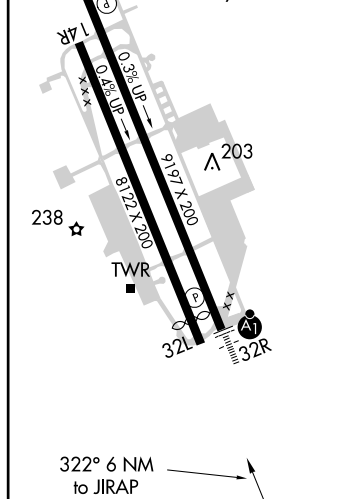
MOFFETT FEDERAL AFLD (NUQ)

RNP APCH.	MISSED APPROACH: Climb to 3200 direct PEYIC and hold.
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ATIS <b>124.175 283.0</b>	NORCAL APP CON <b>120.1 290.25</b>	MOFFETT TOWER ★ <b>119.55 0 (CTAF) 259.65</b>	GND CON <b>121.85 278.95</b>	CLNC DEL <b>296.75</b>
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ELEV 37	TDZE 36
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3200	PEYIC	HOSNU 5500
* LNAV only	PUROE 1.8 NM to JIRAP	FEGUM 2500
	HOTLU 3600	WUMAG 4500
	CEVGI 4500	GP 3.50° TCH 55
0.5	1.8	4.7 NM
3.5 NM	2.8 NM	2.1 NM
CATEGORY	A	B
LPV DA	337-1	301 (300-1)
LNAV/VNAV DA	468-1¼	432 (500-1¼)
LNAV MDA	480-1	444 (500-1)
CIRCLING	540-1	600-1
	503 (600-1)	563 (600-1)
	620-1½	720-2¼
	583 (600-1½)	683 (700-2¼)

AUTOMATED AL-410 RNAV (GPS) RWY 32L  
AUTOMATED AL-410 RNAV (GPS) RWY 32L

SW-2  
22 MAY 18  
COMPILER: CG  
REVIEWER:  
DBL CHKR:  
EFF: FIG

MOUNTAIN VIEW, CALIFORNIA

MOFFETT FEDERAL AFLD (NUQ)

Orig FIG

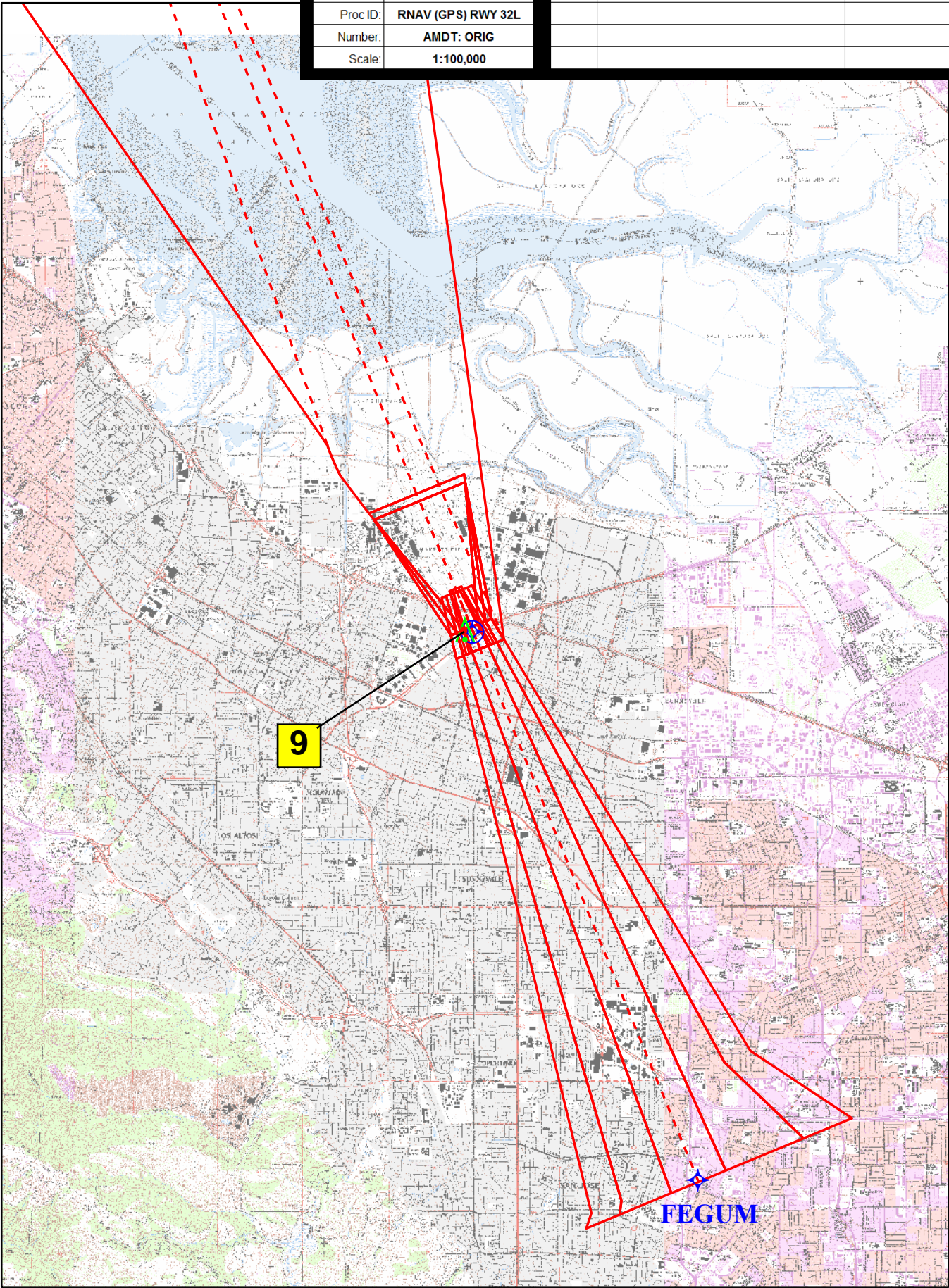
37°25'N-122°03'W

RNAV (GPS) RWY 32L

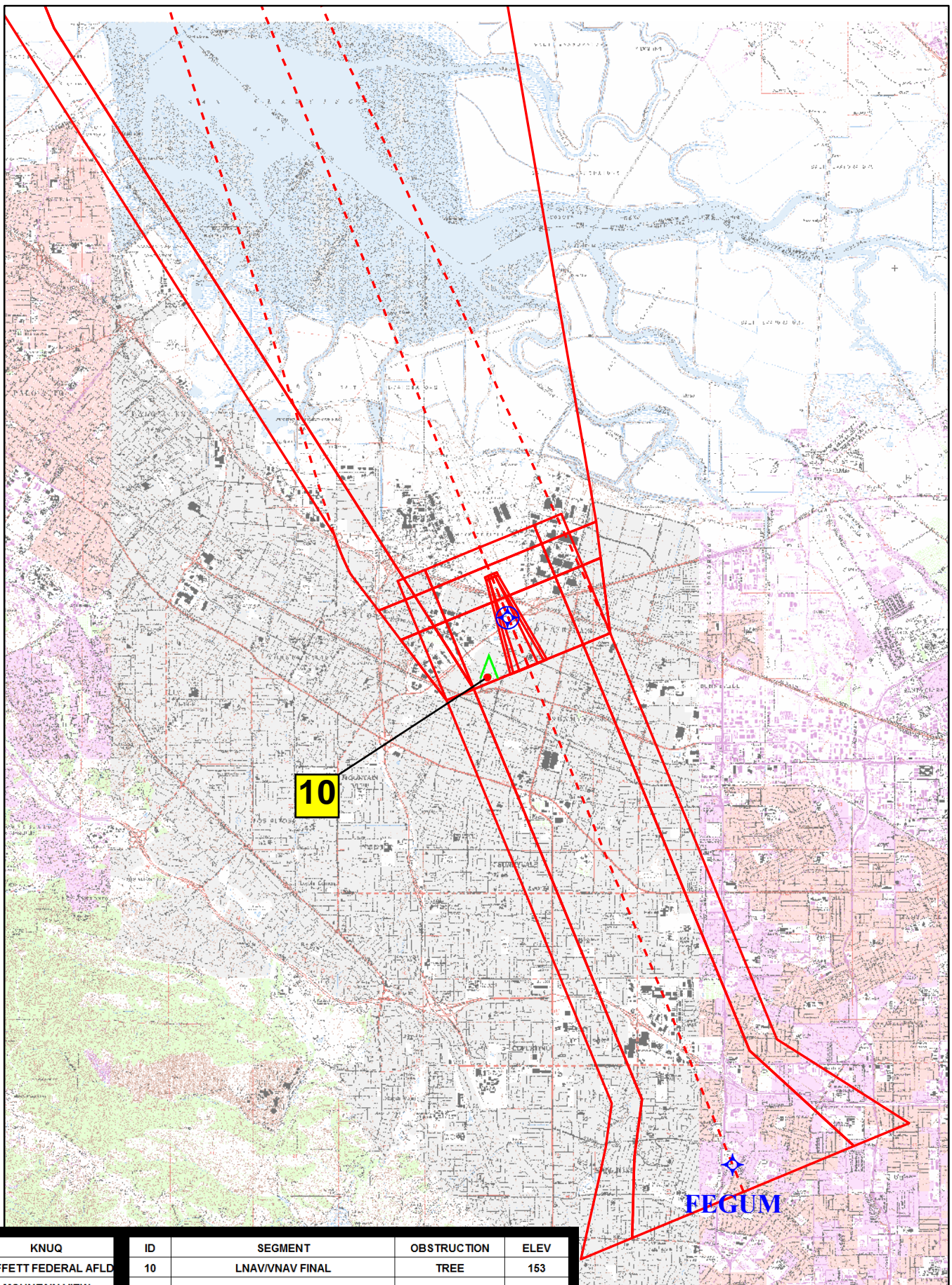


Airport ID:	KNUQ
Apt Name:	MOFFETT FEDERAL AFLD
City:	MOUNTAIN VIEW
State:	CA
Proc ID:	RNAV (GPS) RWY 32L
Number:	AMDT: ORIG
Scale:	1:100,000

ID	SEGMENT	OBSTRUCTION	ELEV
9	LPV FINAL	TREE	115
9	MISSED APPROACH PENETRATION	TREE	115



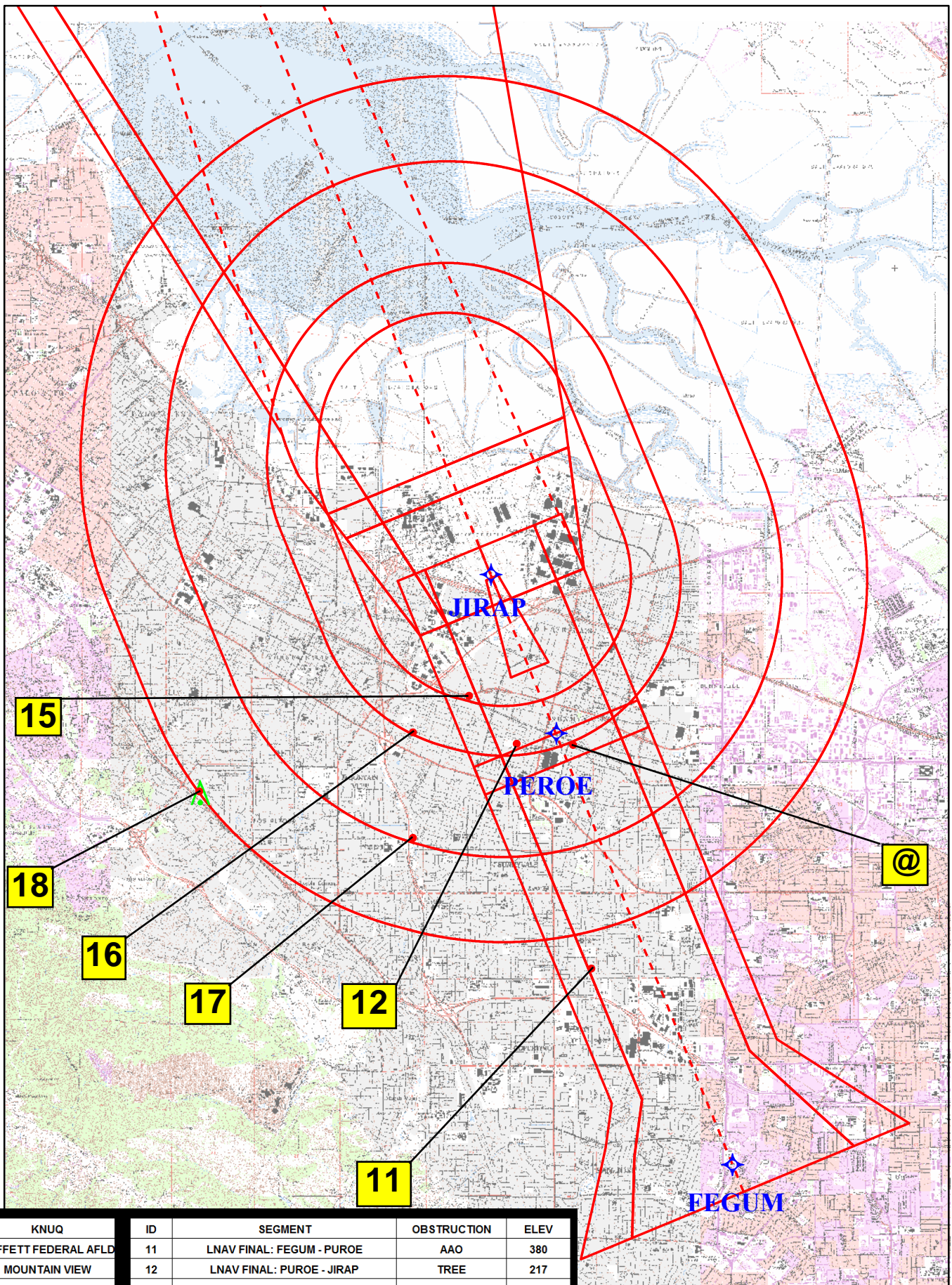




Airport ID:	KNUQ
Apt Name:	MOFFETT FEDERAL AFLD
City:	MOUNTAIN VIEW
State:	CA
Proc ID:	RNAV (GPS) RWY 32L
Number:	AMDT: ORIG
Scale:	1:100,000

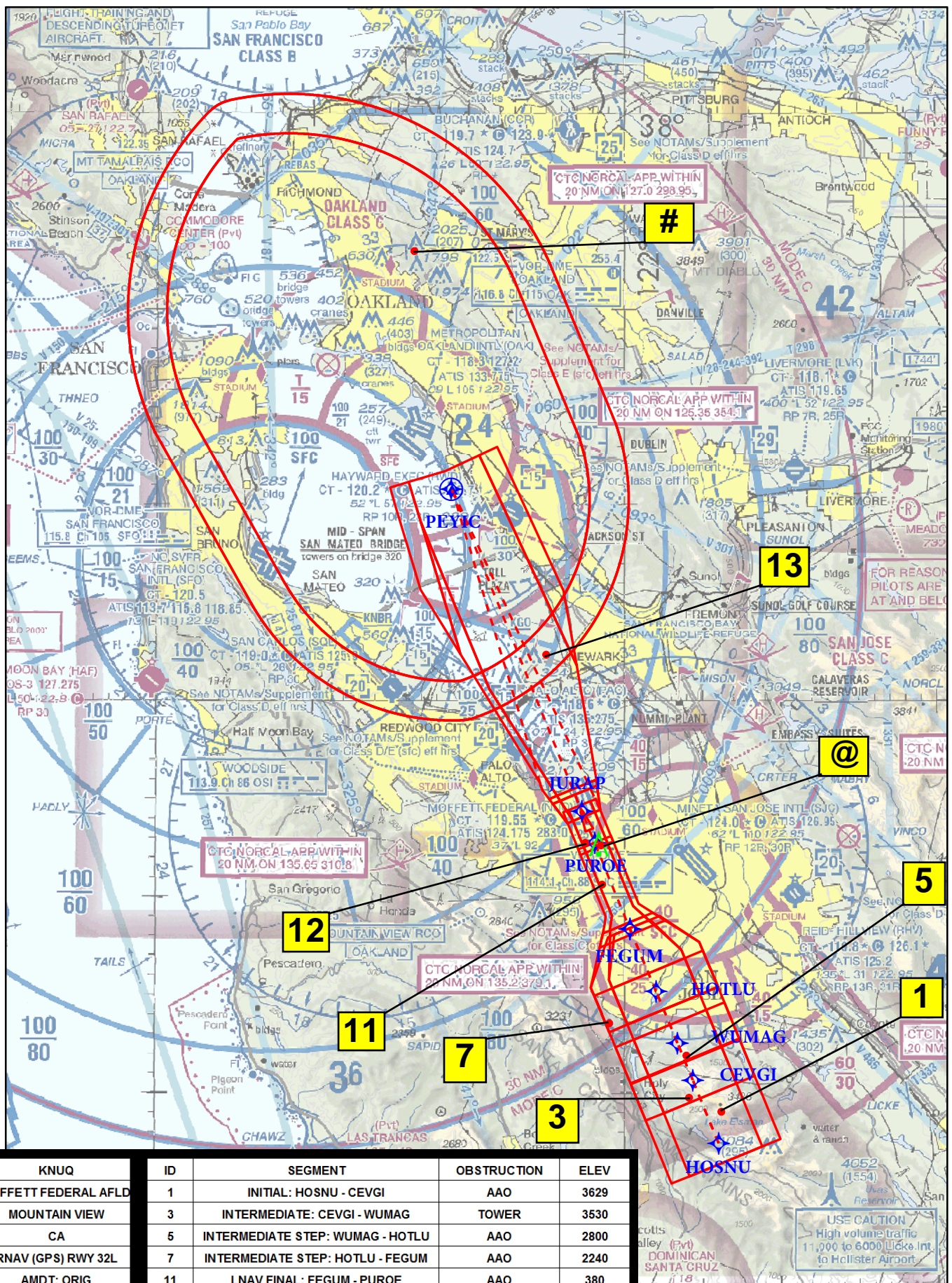
ID	SEGMENT	OBSTRUCTION	ELEV
10	LNAV/VNAV FINAL	TREE	153





Airport ID:	KNUQ	ID	SEGMENT	OBSSTRUCTION	ELEV
Apt Name:	MOFFETT FEDERAL AFLD	11	LNAV FINAL: FEGUM - PEROE	AAO	380
City:	MOUNTAIN VIEW	12	LNAV FINAL: PEROE - JIRAP	TREE	217
State:	CA	15	CIRCLING CAT A	BLDG	240
Proc ID:	RNAV (GPS) RWY 32L	16	CIRCLING CAT B	POLE	281
Number:	AMDT: ORIG	17	CIRCLING CAT C	TOWER	301
Scale:	1:100,000	18	CIRCLING CAT D	AAO	410
		@	ORDER 8260.3 CHAPTER 2 APPLIED	TANK	242





Airport ID:	KNUQ	ID	SEGMENT	OBSTRUCTION	ELEV
Apt Name:	MOFFETT FEDERAL AFLD	1	INITIAL: HOSNU - CEVGI	AAO	3629
City:	MOUNTAIN VIEW	3	INTERMEDIATE: CEVGI - WUMAG	TOWER	3530
State:	CA	5	INTERMEDIATE STEP: WUMAG - HOTLU	AAO	2800
Proc ID:	RNAV (GPS) RWY 32L	7	INTERMEDIATE STEP: HOTLU - FEGUM	AAO	2240
Number:	AMDT: ORIG	11	LNAV FINAL: FEGUM - PUROE	AAO	380
Scale:	1:500,000	12	LNAV FINAL: PUROE - JIRAP	TREE	217
		13	MA LVL SURFACE	AAO	480
		#	MISSED APPROACH HOLD	AAO	1237
		@	ORDER 8260.3 CHAPTER 2 APPLIED	TANK	242



## RAPT Consensus Form

Date: 9-10-2015

Airport Name: Moffett Federal AFLD ICAO: KNUQ State: CA

Project Request: REQUEST #20150804114429 FROM NUQ AIRPORT MANAGER: REQUEST THE FAA CREATE AND PUBLISH WAAS/GBAS ENHANCED GPS APPROACHES TO THE LOWEST POSSIBLE MINIMA FOR ALL FOUR RUNWAYS AT KNUQ (MOFFETT FIELD). I BELIEVE AN OBSTRUCTION SURVEY WAS COMPLETED BACK IN 2011, BUT IF NECESSARY WE WILL PAY TO HAVE IT DONE AGAIN. ON APRIL 1, 2015 PLANETARY VENTURES (A SUBSIDIARY OF GOOGLE INC) TOOK OVER MANAGEMENT AND OPERATIONS OF MOFFETT FIELD UNDER A 60+ YEAR ADAPTIVE REUSE LEASE WITH NASA. IN OUR EFFORTS TO UPGRADE THE AIRPORT WE WOULD LIKE TO ADD NEW NEXTGEN NAVIGATION ENHANCEMENTS TO THE AIRPORT. ALTHOUGH THE AIRFIELD HAS AN AGING ILS (W/O DME) AND A MILITARY TACAN APPROACH, THE TWO ARE NOT COMPATIBLE WITH THE FAA'S NEXTGEN OR GOOGLE'S VISION FOR THE FUTURE.

Project Request Approved: ☒ Disapproved: ☐ (see comments)  
Comments:

Scope of Project: Procedure request is feasible. Airport MAGVAR is 2.85 degrees out of tolerance, and it is suggested that the MAGVAR be updated since the ILS OR LOC/DME RWY 32R and the LOC/DME RWY 14L will require amendment to current criteria, runway numbers do not need to be updated. CAT E minima will be retained on the conventional approaches for the military component at the airfield.

Procedures to be included in this project for MAGVAR, criteria update, and new publication:

- RNAV (GPS) RWY 32R: LPV, LNAV/VNAV, LNAV
- RNAV (GPS) RWY 14L: LPV, LNAV/VNAV, LNAV (GQS penetrations will require waiver, in controlled portion of airport with gates)
- RNAV (GPS) RWY 32L: LP/LNAV lines of minima (GQS penetrates prevent LPV, may be mitigated before publication to allow LPV)
- RNAV (GPS) RWY 14R: LPV, LNAV/VNAV, LNAV
- ILS OR LOC/DME RWY 32R
- LOC/DME RWY 14L
- HOOKS DEPARTURE
- TAKEOFF MINIMUMS

If the military choose to update the TACAN equipment as well, the following procedures will require amendment:

- TACAN RWY 32L
- TACAN RWY 32R
- SOUTHLAND DEPARTURE

Priority Assigned: 2

Project Tracking Number:



Service Center Flight Procedures Team



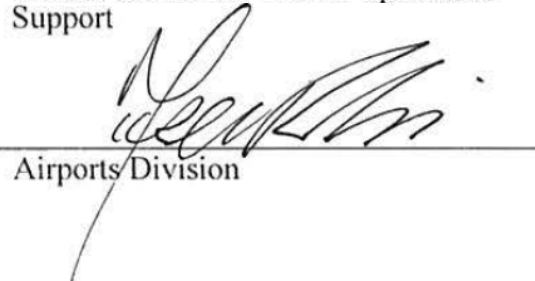
Flight Standards Division NextGen Branch



Service Center Planning and Requirements  
Group



Service Center Air Traffic Operations  
Support



Airports Division



**DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION  
CATEGORICAL EXCLUSION DECLARATION**

**Moffett Federal Airfield**

**RNAV (GPS) RUNWAY 14L  
RNAV (GPS) RUNWAY 14R  
RNAV (GPS) RUNWAY 32L**

**Description of Action:**

The FAA is proposing to implement three approach procedures for the Moffett Federal Airfield (KNUQ) in Mountain View, California. The Airport has requested a new Area Navigation (RNAV) (Global Positioning System [GPS]) procedure for Runways (RWY) 14L, 14R and 32L.

The proposed procedures: (1) RNAV (GPS) RWY 14L; (2) RNAV (GPS) RWY 14R; and (3) RNAV (GPS) RWY 32L will follow the existing conventional procedures from the Initial Approach Fix (IAF) to the Final Approach Fix (FAF). The proposed procedures are RNAV overlays of conventional procedures; all fixes IAF to FAF, altitudes and ground tracks, and missed approach instructions will be the same.

The noise screening Aviation Environmental Screening Tool (AEST), which supersedes the NST, was used to complete the analysis of potential effects due to the change in the aircraft noise exposure level. AEST incorporates the noise pre-screening tools in the FAA Guidance for Screening of Air Traffic Actions.

The RNAV/Required Navigation Performance (RNP) Overlay Test (RNVO) is a tool to determine if the change in the lateral dispersion of a route is enough to cause a change in noise exceeding the noise screening thresholds. The results of the RNVO Test indicate that potential noise impacts from the RNAV overlays of the conventional procedures are not expected; therefore, further noise screening is not required.

**Declaration of Exclusion:**

The FAA has reviewed the above referenced proposed action and it has been determined, by the undersigned, to be categorically excluded from further environmental documentation according to FAA Order 1050.1F, "Environmental Impacts: Policies and Procedures." The implementation of this action will not result in any extraordinary circumstances in accordance with FAA Order 1050.1F.

**Basis for this Determination:**

The Aircraft Procedure Environmental Prescreening Filter Form was processed and reviewed by the Western Service Center. This review was conducted in accordance with policies and procedures in Department of Transportation Order 5610.1C, "Procedures for Considering Environmental Impacts" and FAA Order 1050.1F.

The proposed procedure meets the following categorical exclusion contained in FAA Order 1050.1F:  
*5-6.5.i. Establishment of new or revised air traffic control procedures conducted at 3,000 feet or more above ground level (AGL); procedures conducted below 3,000 feet AGL that do not cause traffic to be routinely routed over noise sensitive areas; modifications to currently approved procedures conducted below 3,000 feet AGL that do not significantly increase noise over noise sensitive areas; and increases in minimum altitudes and landing minima.*



**Facility Manager Review/Concurrence**

Signature \_\_\_\_\_

Name: \_\_\_\_\_

William E. Smith  
Air Traffic Manager  
Moffett Federal Airfield, NUQ

Date: \_\_\_\_\_

30 JAN 2018

**Concurrence by:**

**Western Service Area Environmental Specialist**

Katherin Mariann  
Matolcsy

Digitally signed by Katherin Mariann  
Matolcsy

Date: 2018.01.31 05:15:02 -08'00'

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Signed by Katherin Matolcsy - Leidos NISC Contract Support  
For:  
Marina Landis  
Environmental Protection Specialist, Operations Support Group  
Western Service Area, AJV - W22

**Approval by:**

**Western Service Area Director or Designee Approval**

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Kim A. Stover  
Director, Air Traffic Operations  
Western Service Area, AJTW

Date: \_\_\_\_\_

2/6/18