

Flight Procedure Tracking Form		Action: FLIGHT CHECK	Task Type: IAP	Date Open: 12/26/2018	Task #: 2015080411442901009	Request #: 20150804114429
Procedure: RNAV (GPS) RWY 14L AMDT 1			Airport ID: KNUQ	Airport: MOFFETT FEDERAL AFLD		Reimbursable #: NO
City: MOUNTAIN VIEW	ST: CA	GPS #:	Estimated Chart Date: 06/20/2019		FICO #:	
Fac ID: N/A		Fac. Type:			Specialist: MIKE MELSEN	
Procedure Review						
	Rec'd	Rel'd	Full Name	Comments		
Lead:	12/21/2018			<i>Digitally signed by</i>		
QA:				WARDELL HENNING		
Liaison:				Mar 28, 2019		
Procedure Comments:			ENROUTE-NON	Remark Type: INFORMATION		
CONTACT: ANDREW HENNING; AJV-A43 LEAD; 405.954.9954.						



MOUNTAIN VIEW, CALIFORNIA

AL-410 (FAA)

FIG

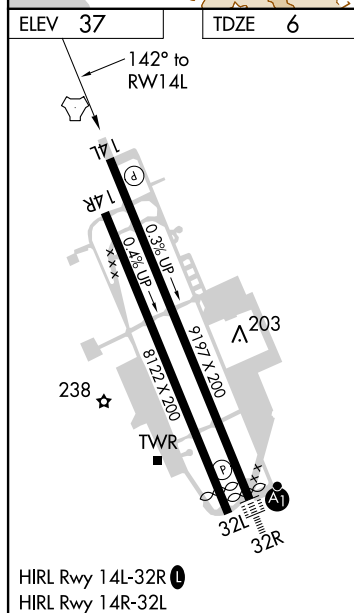
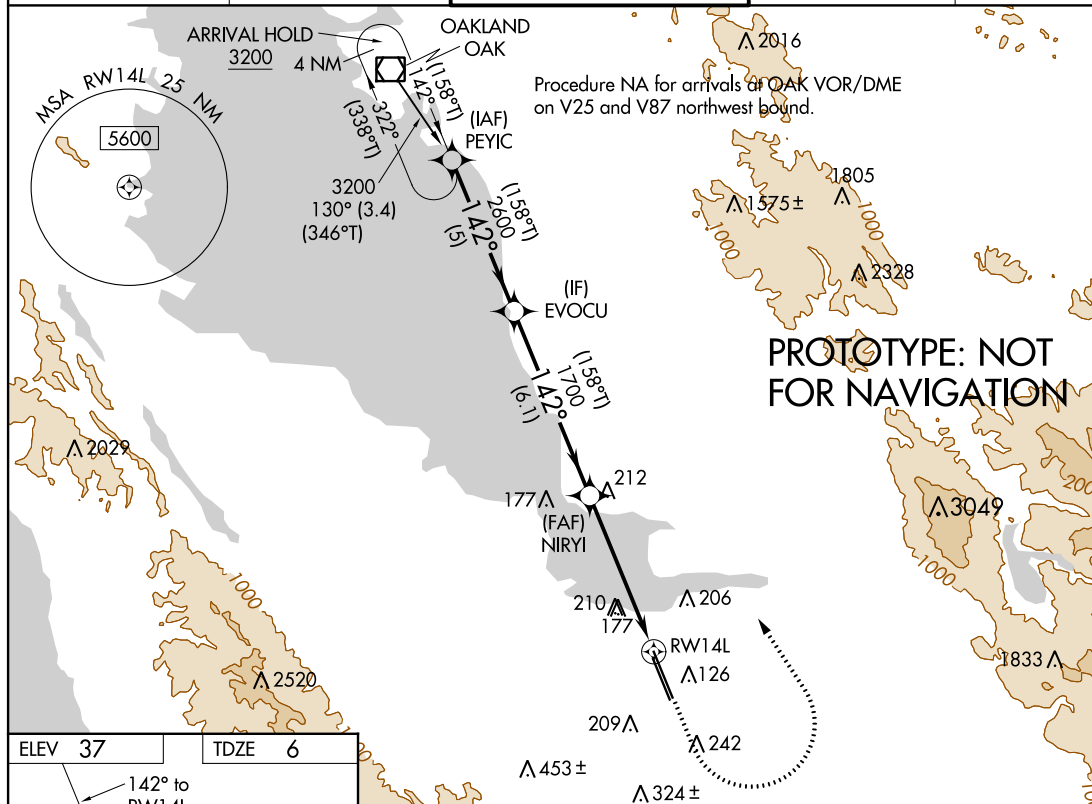
WAAS CH 70442 W14A	APP CRS 142°	Rwy ldg TDZE Apt Elev	9197 6 37
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NEW

RNAV (GPS) RWY 14L

MOFFETT FEDERAL AFLD (NUQ)

RNP APCH.		MISSED APPROACH: Climb to 500 then climbing left turn to 3200 direct PEYIC and hold.		
ATIS 124.175 283.0	NORCAL APP CON 120.1 290.25	MOFFETT TOWER ★ 119.55 0 (CTAF) 259.65	GND CON 121.85 278.95	CLNC DEL 296.75



<p>PEYIC 3200 (158°T) 142° EVOCU 2600 NIRYI 1700 1700 *1.1 NM to RW14L *LNAV only RW14L</p> <p>GP 3.00° TCH 53</p> <p>5 NM 6.1 NM 4.1 NM 1.1 NM</p>				
CATEGORY	A	B	C	D
LPV DA	256-¾ 250 (300-¾)			
LNAV/VNAV DA	326-⅞ 320 (400-⅞)			
LNAV MDA	440-1 434 (500-1)		440-1¼ 434 (500-1¼)	
CIRCLING	540-1 503 (600-1)	600-1 563 (600-1)	620-1½ 583 (600-1½)	780-2¼ 743 (800-2¼)

MOUNTAIN VIEW, CALIFORNIA

Amdt 1 FIG

NEW

37°25'N-122°03'W

MOFFETT FEDERAL AFLD (NUQ)

RNAV (GPS) RWY 14L

AUTOMATED AL-410 RNAV (GPS) RWY 14L
AUTOMATED AL-410 RNAV (GPS) RWY 14L

SW-2

19 MAR 2019

COMPILER: CG

REVIEWER:

DBL CHKR:

EFF: FIG

OLD

MOUNTAIN VIEW, CALIFORNIA

AL-410 (FAA)

18256

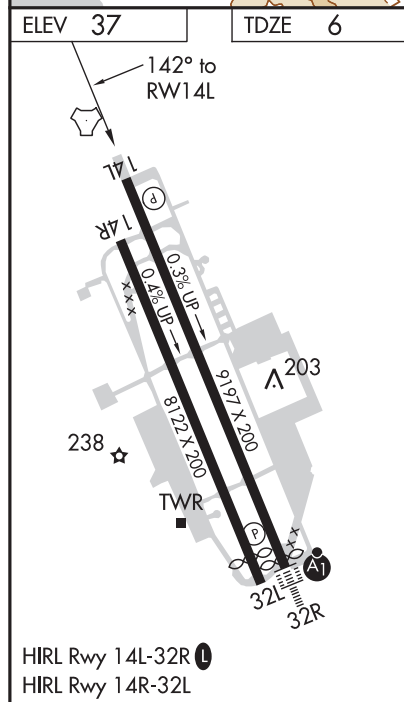
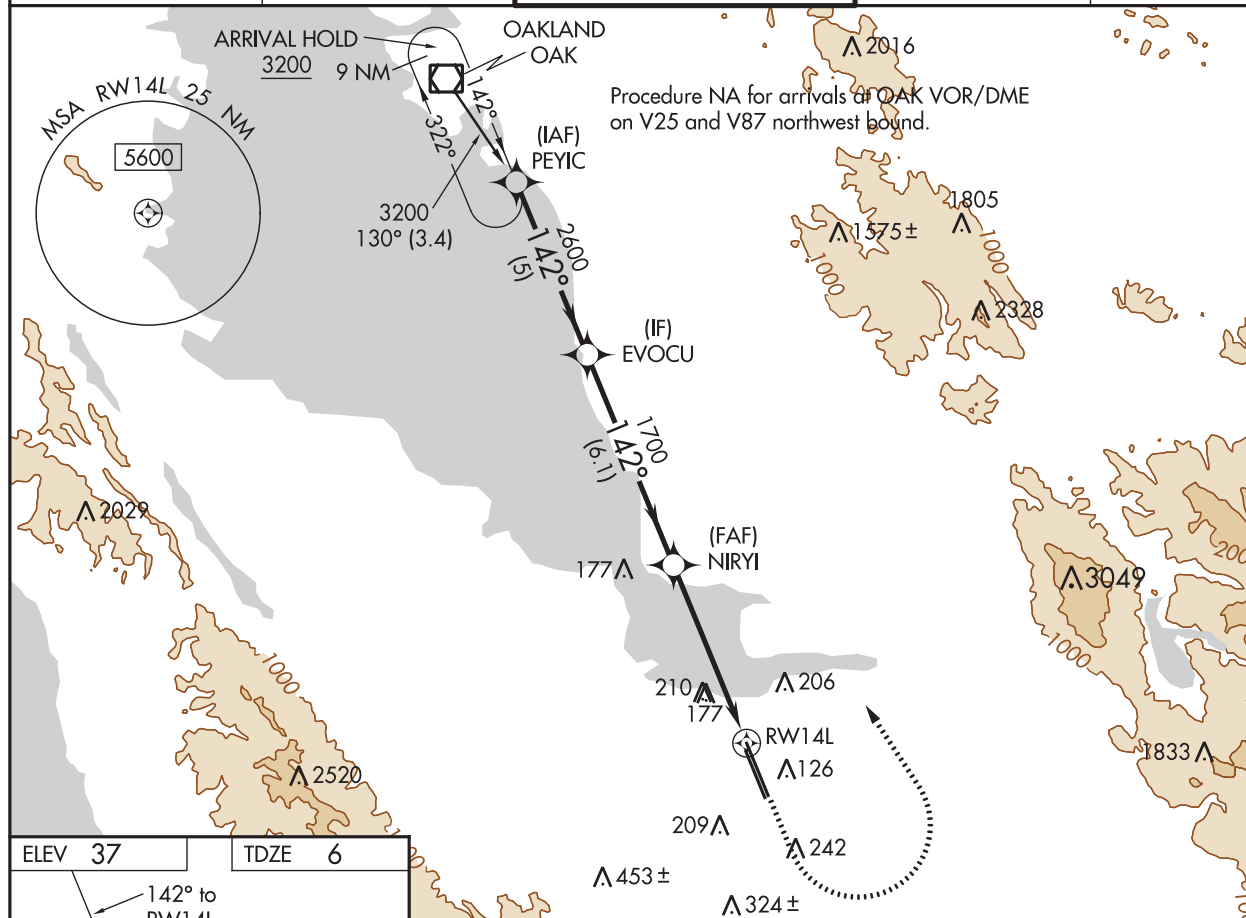
WAAS CH 70442 W14A	APP CRS 142°	Rwy Idg TDZE Apt Elev	9197 6 37
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CURRENT

RNAV (GPS) RWY 14L
MOFFETT FEDERAL AFLD (NUQ)

RNP APCH.	MISSED APPROACH: Climb to 500 then climbing left turn to 3200 direct PEYIC and hold.
<p>▼ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 0°C (32°F) or above 54°C (130°F). <p>▲ Circling Rwy 32L NA at night.</p> </p>	

ATIS 124.175 283.0	NORCAL APP CON 120.1 290.25	MOFFETT TOWER ★ 119.55 0 (CTAF) 259.65	GND CON 121.85 278.95	CLNC DEL 296.75
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	PEYIC	EVOCU	NIRYI	
	3200	2600	1700	
	GP 3.00° TCH 53			
	5 NM	6.1 NM	4.1 NM	1.1 NM
CATEGORY	A	B	C	D
LPV DA	255-3/4 250 (300-3/4)			
LNAV/VNAV DA	391-1 386 (400-1 1/8)			
LNAV MDA	440-1 435 (500-1)		440-1 435 (500-1 1/4)	
▲ CIRCLING	540-1 503 (600-1)	600-1 563 (600-1)	620-1 1/2 583 (600-1 1/2)	720-2 1/4 683 (700-2 1/4)

MOUNTAIN VIEW, CALIFORNIA

Orig 19JUL18

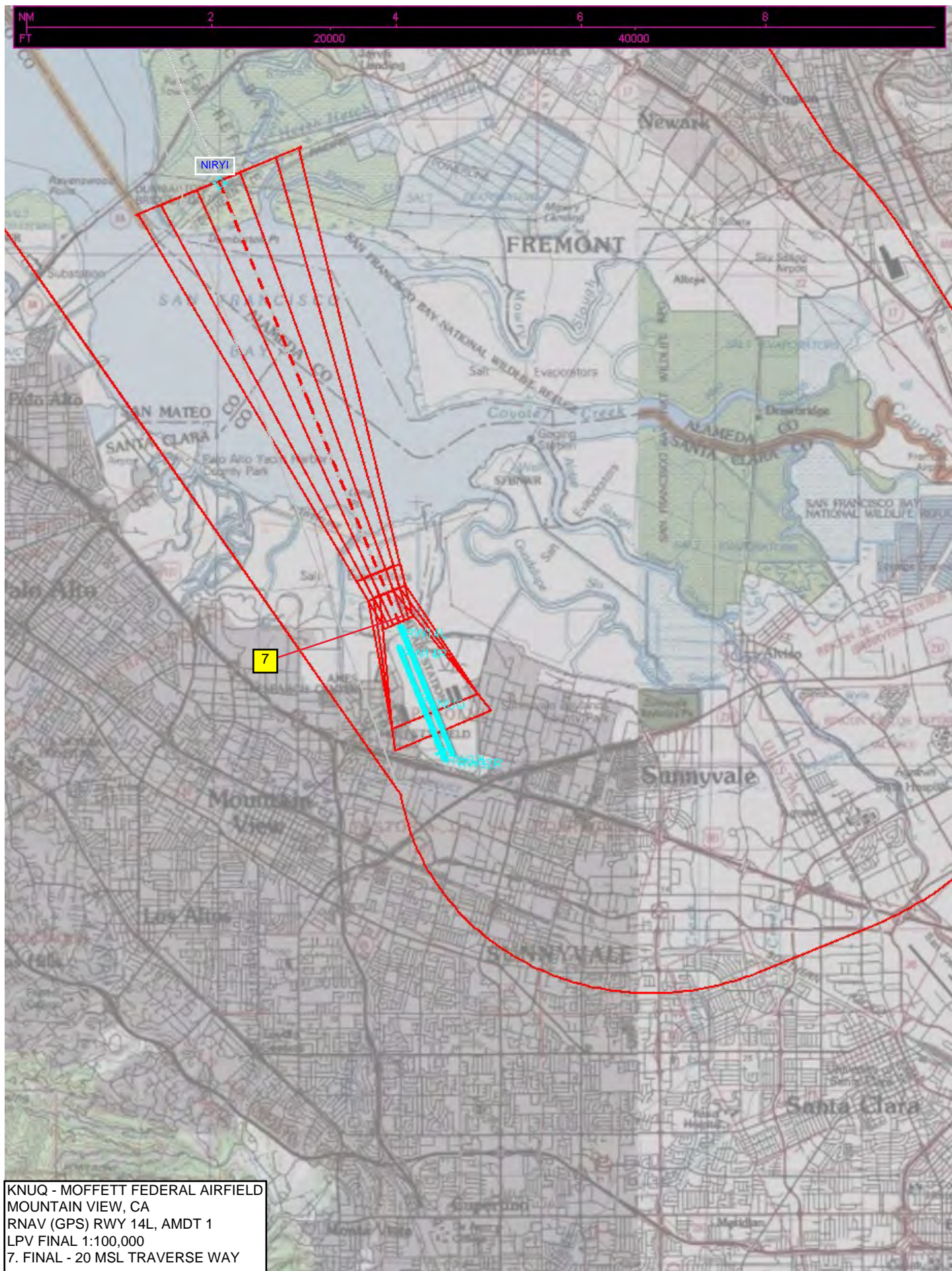
CURRENT

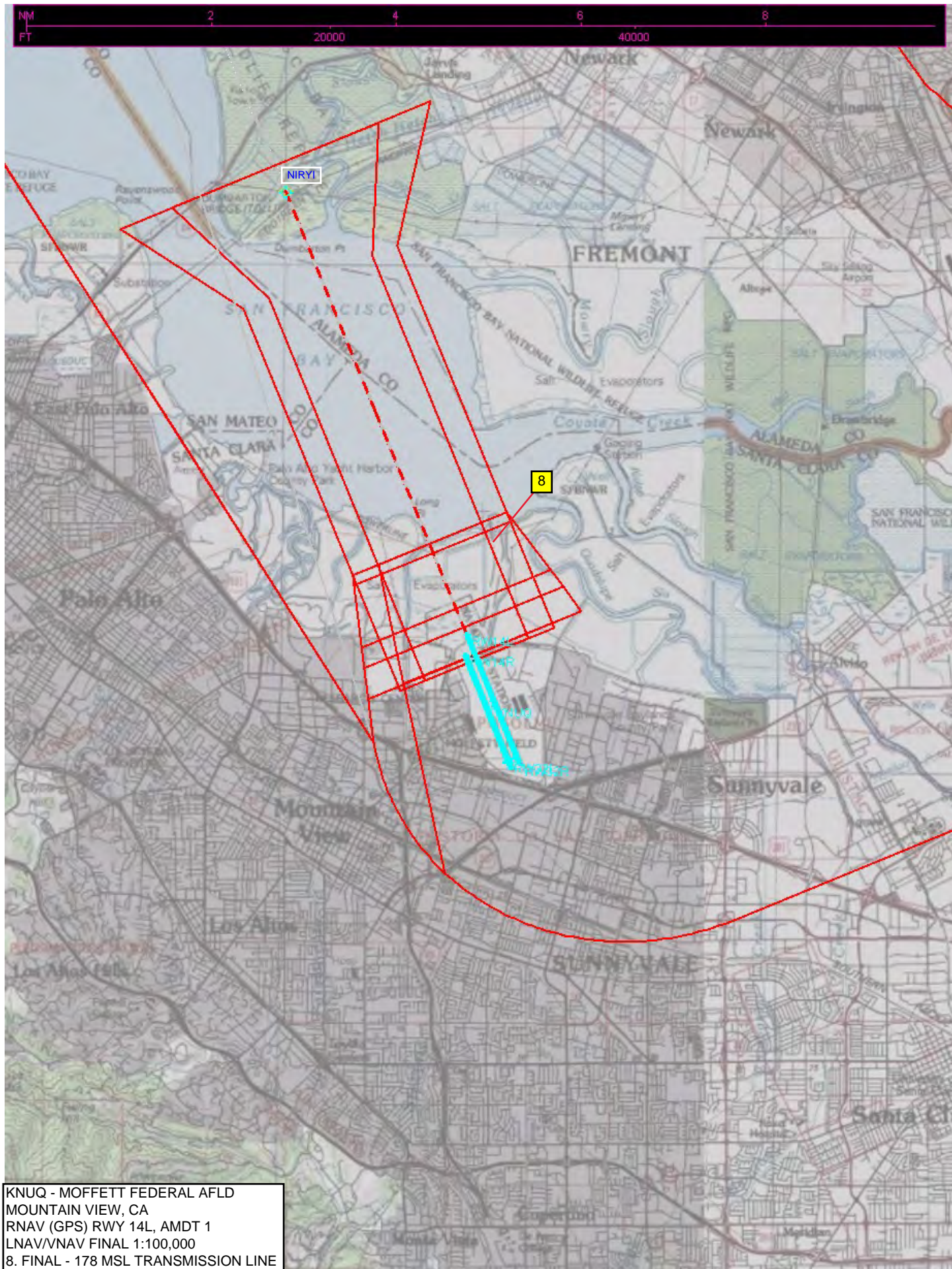
37°25'N-122°03'W

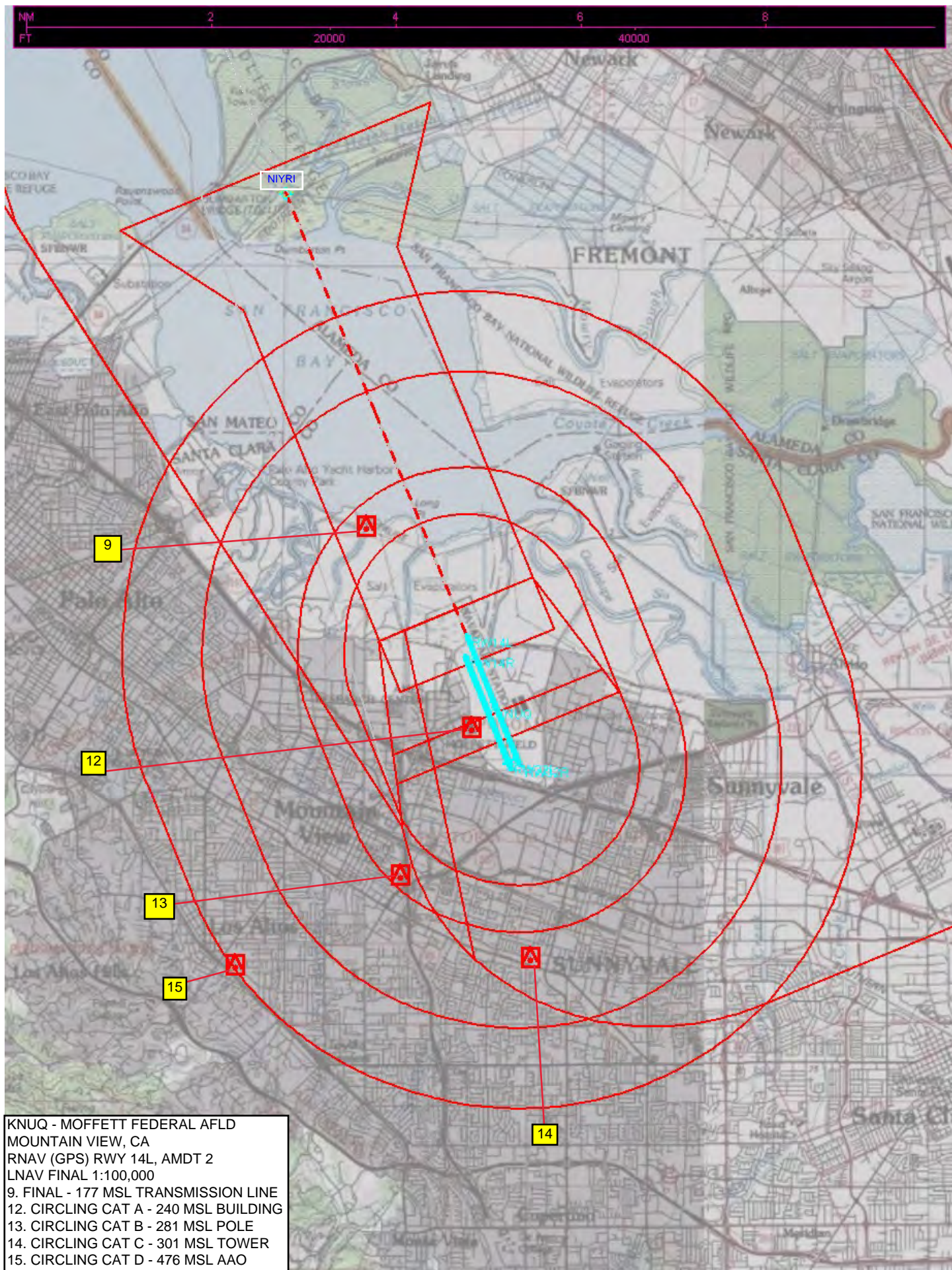
MOFFETT FEDERAL AFLD (NUQ)

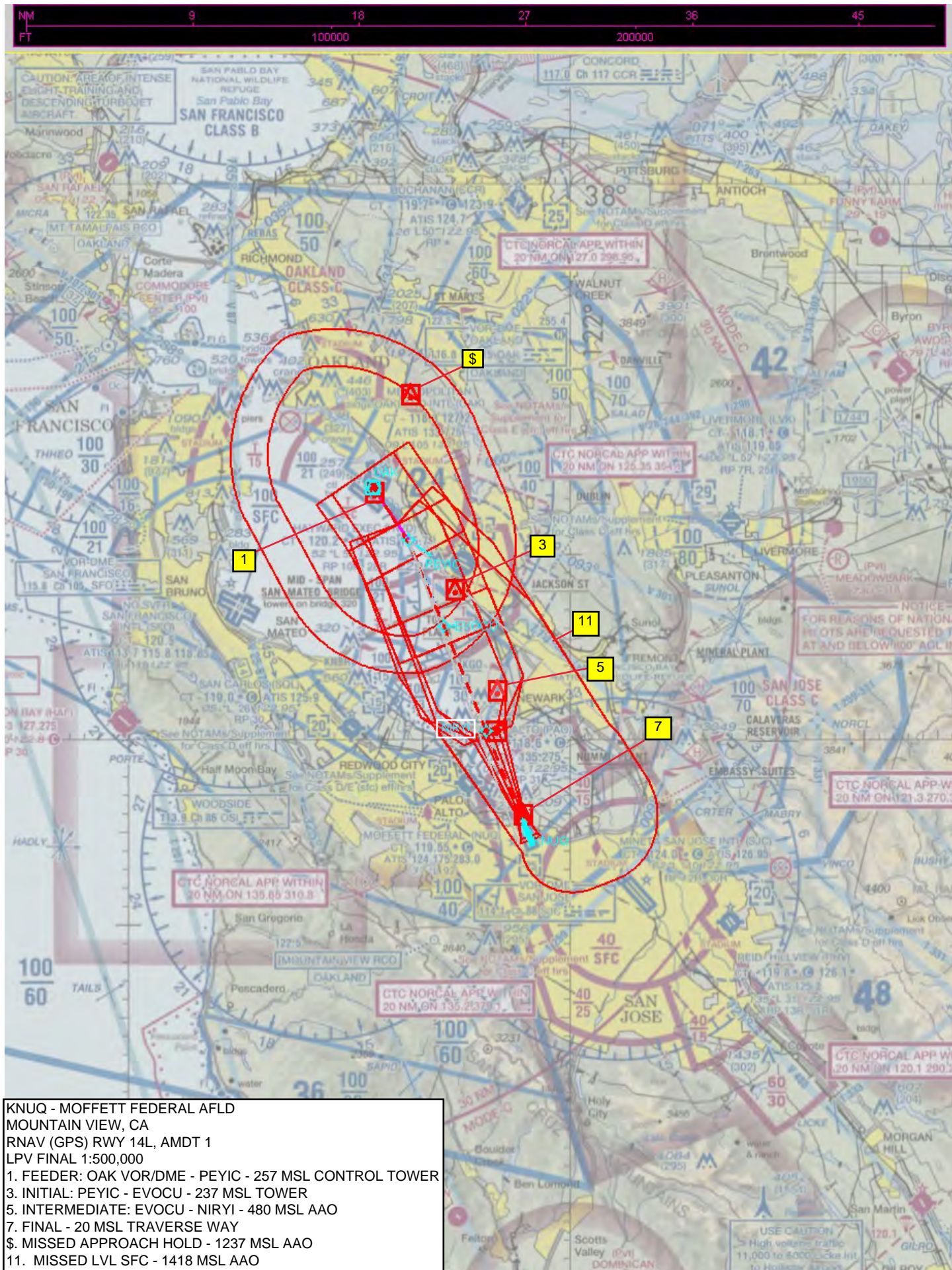
RNAV (GPS) RWY 14L

SW-2, 03 JAN 2019 to 31 JAN 2019









**U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
WESTERN SERVICE AREA**

CATEGORICAL EXCLUSION DECLARATION

Moffett Federal Airfield

**AMENDMENTS TO MULTIPLE PROCEDURES
RNAV (GPS) RUNWAY 32R, ORIGINAL**

Description of Action:

The FAA is proposing to amend multiple procedures and implement one new approach procedure at Moffett Federal Airfield (KNUQ) in Mountain View, California.

Amendments are proposed for the following procedures:

- 1. Instrument Landing System (ILS) or Localizer (LOC)/Distance Measuring Equipment (DME) Runway (RWY) 32 Right (R)**
- 2. LOC/DME RWY 14 Left (L)**
- 3. Tactical Air Navigation System (TACAN) 32L/32R**
- 4. SOUTHLAND DEPARTURE**

The proposed Area Navigation (RNAV) (Global Positioning System [GPS]) RWY 32 R, ORIGINAL approach procedure is an RNAV overlay of the ILS or LOC/DME RWY 32R approach procedure as amended.

Table 1 on the following page describes the proposed amendments to waypoints.

Table 1. Amendments to Waypoints

Name	Crossing Altitude (feet MSL ¹)	Crossing Altitude (feet AGL ²)	Change
AGAPE			
Old IF ³	4,800	2,656	Moves approximately 338 feet southeast along its existing track. ΔGE ⁴ = +114 feet
New IF “WP04”	4,800	2,542	
RIROC			
Old	4,100	2,716	Moves approximately 6,076 feet southeast along its existing track. ΔGE = +1,103 feet
New “WP05”	4,400	1,913	
NEWFX			
New SDF ⁵ “WP06”	3,800	3,290	
JULUD			
Old SDF	3,000	2,747	Moves approximately 9,114 northwest. ΔGE = -477 feet
New SDF “WP09”	2,500	2,266	
EBIYI			
Old FAF ⁶	2,100	1,900	Moves approximately 422 feet southeast along its existing track. No change in altitude.
New PFAF ⁷	2,100	1,900	
New SDF			
“WP03”	780	664	Located 1.69 NM south of the Missed Approach Point, CIKGA.
RURSE			
OLD SDF	4,100	2,680	Moves approximately 0.2 NM southeast along its existing track. Altitude increase.
NEW SDF	4,500	2,780	
JOVDA			
OLD SDF	3,000	2,747	Moves approximately 0.8 NM southeast along its existing track. Altitude increase.
NEW SDF	3,600	3,345	
EKECE			
FAF	2,100	1,896	Altitude increase.
PFAF	2,500	2,296	

Table 2 on the following page describes proposed procedure-specific amendments.

¹ MSL: mean sea level

² AGL: above ground level

³ IF: Intermediate Fix

⁴ ΔGE : Change in ground elevation

⁵ SDF: Step-Down Fix

⁶ FAF: Final Approach Fix

⁷ PFAF: Precision Final Approach Fix

Table 2. Description of Procedure-Specific Amendments

Procedure Name	Amendments
ILS or LOC/DME RWY 32R	Move the Intermediate Fix (IF) AGAPE 338 feet southeast along its existing track. Crossing altitude is 4,800 feet mean sea level (MSL)/2,542 feet above ground level (AGL). No change in ground track.
	Move RIROC 6,076 feet southeast along its existing track. Crossing altitude increases from 4,100 feet MSL to 4,400 feet MSL/1,913 feet AGL. No change in ground track.
	Move the intermediate Step-Down Fix (SDF) JULUD 9,114 feet northwest along its existing track. Crossing altitude decreases from 3,000 feet MSL to 2,500 feet MSL/2,266 feet AGL. No change in ground track.
	Add a new SDF fix with a crossing altitude of 3,800 feet MSL/3,290 feet AGL midway between RIROC and JULUD. No change in ground track.
	Move Final Approach Fix EBIYI approximately 422 feet southeast along its existing track. Crossing altitude is 2,100 feet MSL/1,900 feet AGL. No change in ground track.
	Add new SDF 1.69 NM south of the Missed Approach Point, CIKGA. Altitude will be 780 feet MSL/664 feet AGL. No change to ground tracks. No change to vertical profile.
	Update circling criteria to new criteria. Mandated by criteria updates.
	Rename procedure to “ILS or LOC RWY 32R”.
LOC/DME RWY 14L	Update straight-in and circling lines of minima to new criteria. Mandated by criteria updates. No changes to altitudes or ground tracks.
	Rename procedure to “LOC RWY 14L”.
TACAN RWY 32L/32R	Move RURSE 0.2 NM southeast along its existing track to allow for the maximum 318 feet/NM descent gradient. Increase crossing altitude from 4,100 feet MSL/2,680 feet AGL to 4,500 feet MSL/2,780 feet AGL for new obstructions. No change to ground track.
	Move JOVDA 0.8 NM southeast along its existing track to allow for the maximum 318 feet/NM descent gradient. Increase crossing altitude from 3,000 feet MSL/2,747 feet AGL to 3,600 feet MSL/3,345 feet AGL for new obstructions. No change to ground track.
	Increase crossing altitude at PFAF EKECE from 2,100 feet MSL/1,896 feet AGL to 2,500 feet MSL/2,296 feet AGL to increase the glide slope from 3.01 degrees (⁰) to 3.5 ⁰ .
	Update circling lines of minima to new criteria. Mandated by criteria updates.
SOUTHLAND DEPARTURE	Add top altitude of procedure. Update procedure to current criteria. No changes to ground tracks.

The FAA Air Traffic Organization (ATO) established a noise screening process to help determine the need for a detailed noise analysis of air traffic actions. The MITRE Corporation's Center for Advanced Aviation System Development prepared a guidance document, Guidance for Noise Screening of Air Traffic Actions (MITRE Guidance), to assist the FAA and others involved in proposed air traffic actions with a solid and repeatable approach to noise screening.

The RNAV/RNP Overlay (RNVO) Test is a tool described in the MITRE Guidance 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 RNVO Test screens for potential noise impacts resulting from an RNAV overlay of a conventional route or procedure, in this case the proposed RNAV (GPS) RWY 32R overlay of the ILS or LOC/DME RWY 32R procedure. This test applies to both jet and/or propeller traffic; failing this noise screening is an indication that the potential exists for extraordinary circumstances, or significant impacts.

The following data was used to conduct the RNVO Test:

1. Route width of the conventional procedure, ILS or LOC/DME RWY 32R, containing 95% of all operations; in this case, 0.46 nautical miles (NM).
2. Route width of the proposed RNAV procedure, 0.5 NM for RNAV procedures.
3. Altitude along the affected segment as the lowest of: 1) the typical altitude currently flown, and 2) the typical altitude expected to be flown once the RNAV overlay is implemented; in this case, 1,913 feet AGL.

Using the above data, the proposed RNAV (GPS) RWY 32R overlay passed the RNVO Test; therefore, further noise analysis is not required.

Declaration of Exclusion:

The FAA reviewed the above referenced proposed action, and the undersigned determined it 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 Pre-Screening Filter was completed 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 exclusions contained in FAA Order 1050.1F:

5-6.5.g. Establishment of Global Positioning System (GPS), Flight Management System (FMS), Area Navigation/Required Navigation Performance (RNAV/RNP), or essentially similar systems that use overlay of existing flight tracks.

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:

Robin Greisen

Acting Air Traffic Manager

Northern California Terminal Radar Approach Control (NCT)

Service Area Environmental Specialist Review/Concurrence

Signature:

**AUGUSTIN A
MOSES**

Digitally signed by AUGUSTIN A
MOSES
Date: 2018.11.20 08:11:33
-08'00'

Name:

Augustin Moses

Environmental Protection Specialist, Operations Support Group,
Western Service Center, AJV-W25

Service Area Director Review/Concurrence, if necessary

Signature:

PAUL C LITKE

Digitally signed by PAUL C LITKE
Date: 2018.12.07 05:27:42
-08'00'

Name:

Paul C. Litke

Acting Director, Air Traffic Operations
Western Service Area, AJTW