

Flight Procedures Cover Page	Task Action: FLIGHT CHECK	Task Type: Segment	Estimated Chart Date: 11/03/2022	APWS Task ID: E1BE78DF36BE4FF283C9F43539614CE9	APWS Project ID: 4EBC7EA16F884A5DA589F57C84B7339B
Procedure: T227 GLOWS, AK TO FIPSU, AK		Enroute: YES	Specialist: Sarmiento, April		Agreement Number:
Airport ID:			Airport City:		State:
Facility ID:	Facility Type:	Flight Inspection Remark Type: New FC Slot			
<p>Procedure Comments: AIRWAY STARTING POINT: GLOWS, AK 42615.88N/1481517.88W</p> <p>AIRSPACE DOCKET: 19-AAL-60</p> <p>CONTACT CASIMIR TABAKA 405-954-7931</p> <p>6/29/2022 THIS IS AN UPDATED COPY OF THE PROCEDURE DEVELOPED ON 4/13/2022</p> <ol style="list-style-type: none"> 1. CHANGED GNSS MEA/MRA FROM 10000 TO 11000 2. CHANGED PUB FROM NO TO YES 3. CHANGED SEGMENT REMARK FROM MEA SET TO 10000 FOR TWO-WAY VHF COMMUNICATIONS TO MEA SET TO 11000 FOR TWO-WAY VHF COMMUNICATIONS PER FLIGHT INSPECTION REPORT DATED 6/22/2022 					

Digitally signed by
CASIMIR L TABAKA
Jun 30, 2022

QUALITY
18
CHECKED

Flight Procedures Cover Page	Task Action: FLIGHT CHECK	Task Type: Segment	Estimated Chart Date: 09/08/2022	APWS Task ID: E1BE78DF36BE4FF283C9F43539614CE9	APWS Project ID: 4EBC7EA16F884A5DA589F57C84B7339B
Procedure: T227 GLOWS, AK TO FIPSU, AK		Enroute: YES	Specialist: Sarmiento, April		Agreement Number:
Airport ID:			Airport City:		State:
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FIPC BASIC FORM						
PROCEDURE: T227 GLOWS, AK TO FIPSU, AK			AIRPORT NAME:		AIRPORT ID:	SPECIAL CONTROL NO: KG-04-402-22
FAC ID: T227		CITY:			ST: AK	ORIG CHART DATE: 09/08/2022
DFL TYPE: PROC/N	THIRD PARTY: <input type="checkbox"/> YES	EST. TIME ON SITE: 0.5	REIMB. NUMBER:	PTS TASK ID:		
PREFLIGHT NOTES						
REVIEWER:					DATE:	
COMMENTS:					CHECK ONE: <input type="checkbox"/> FLT CK REQ <input type="checkbox"/> NFCR <input type="checkbox"/> REJECT	
						YES NO
					CPV COMPLETE?	X
PROCEDURE RESULTS						
INSPECTION DATE: 06/22/2022	CREW #: VN085	N #: N86	INSTRUMENT PROCEDURE STATUS: <input type="checkbox"/> SAT <input checked="" type="checkbox"/> SAT W/CHANGES <input type="checkbox"/> UNSAT		ARINC CODING: <input type="checkbox"/> SAT <input type="checkbox"/> SAT/GOLD <input type="checkbox"/> UNSAT	
FLIGHT INSPECTOR SIGNATURE: kenneth e jack @ 06/23/2022 18:39			PRINTED NAME: JACK, KENNETH EARL			NOTAM INITIATED? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
FLIGHT INSPECTOR REMARKS: Special Number: KG-04-402-22, T227 GLOWS, AK to FIPSU, AK. Complete. Sat with changes. Changes: FIPSU to JIFFS change MRA\MEA to 11000 MSL for communication with ATC.						
IN-FLIGHT OBSTACLE REPORT						
OBSTRUCTION ID #:	COORDINATES OR LOCATION:	GNSS ALTITUDE (MSL):	BAROMETRIC ALTITUDE (MSL):	HEIGHT ABOVE GROUND LEVEL:		

1 OF 6
SCALE: 1: 500,000

FAI AAO (1907)

T227 PERZO TO FAI VTAC
GNSS MEA 3400
MCA AT FAI 3600 N

T227 GLOWS TO PERZO
GNSS MEA 3600

SEE TWR FREQ TAB

PERZO

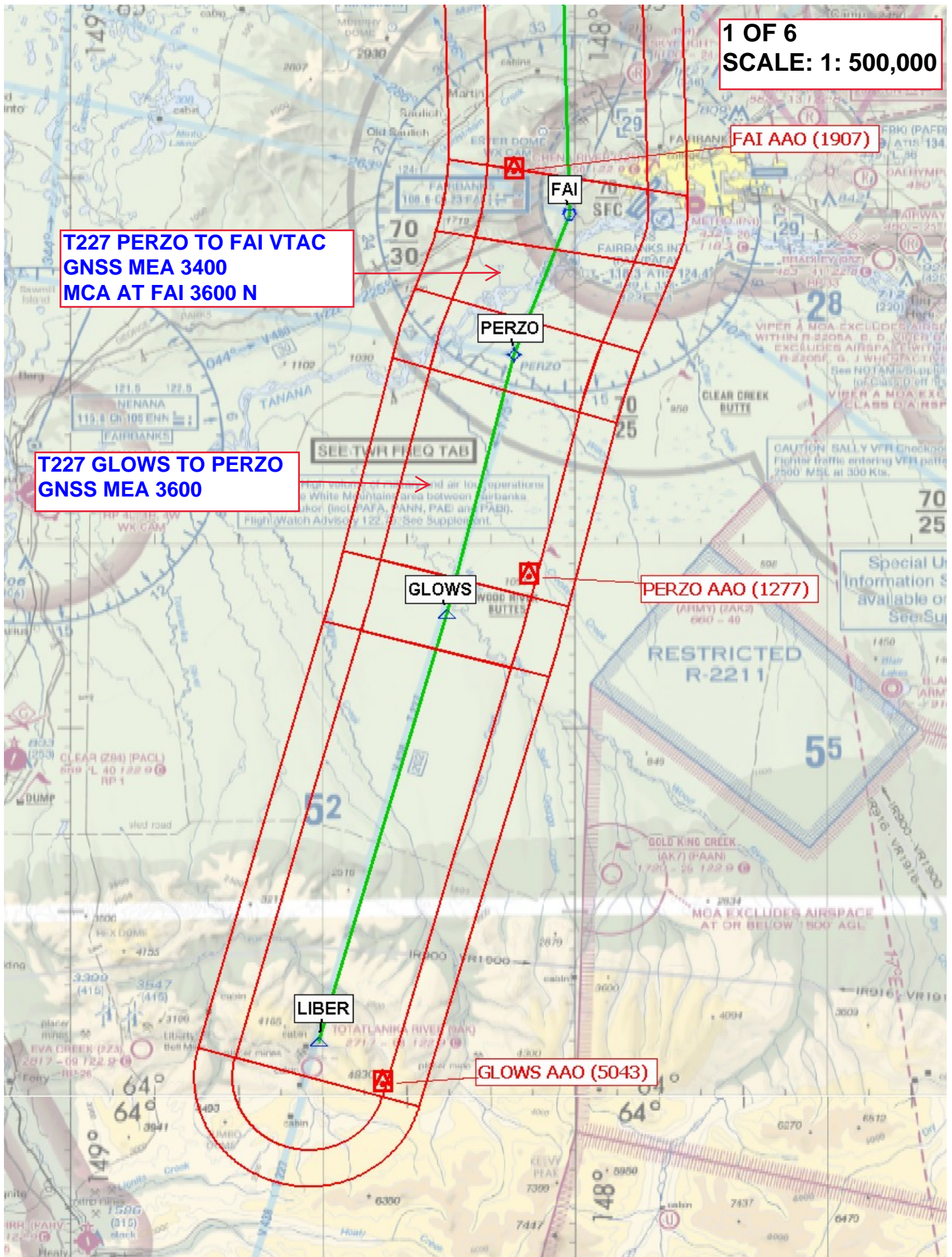
GLOWS

PERZO AAO (1277)

RESTRICTED
R-2211

LIBER

GLOWS AAO (5043)



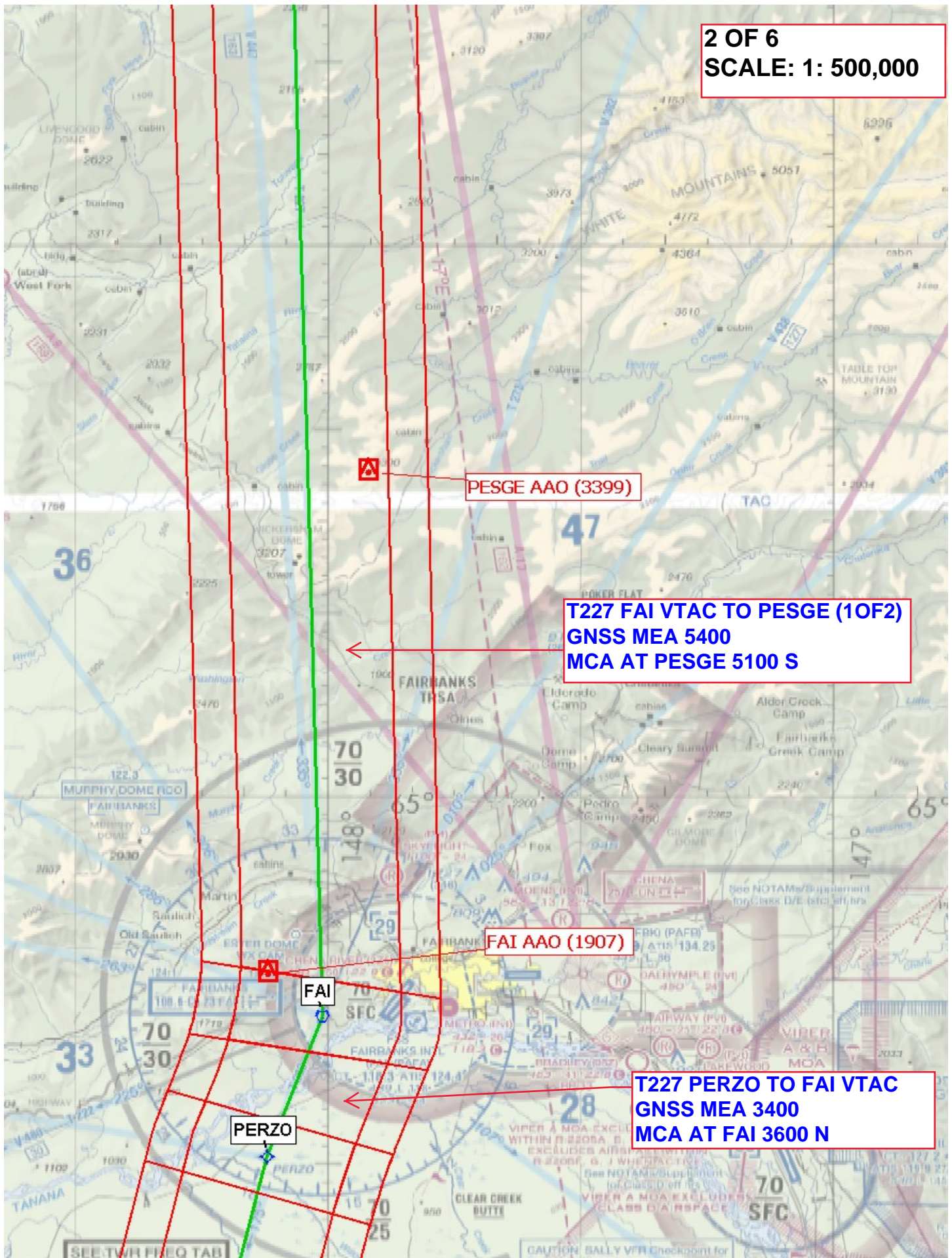
2 OF 6
SCALE: 1: 500,000

PESGE AAO (3399)

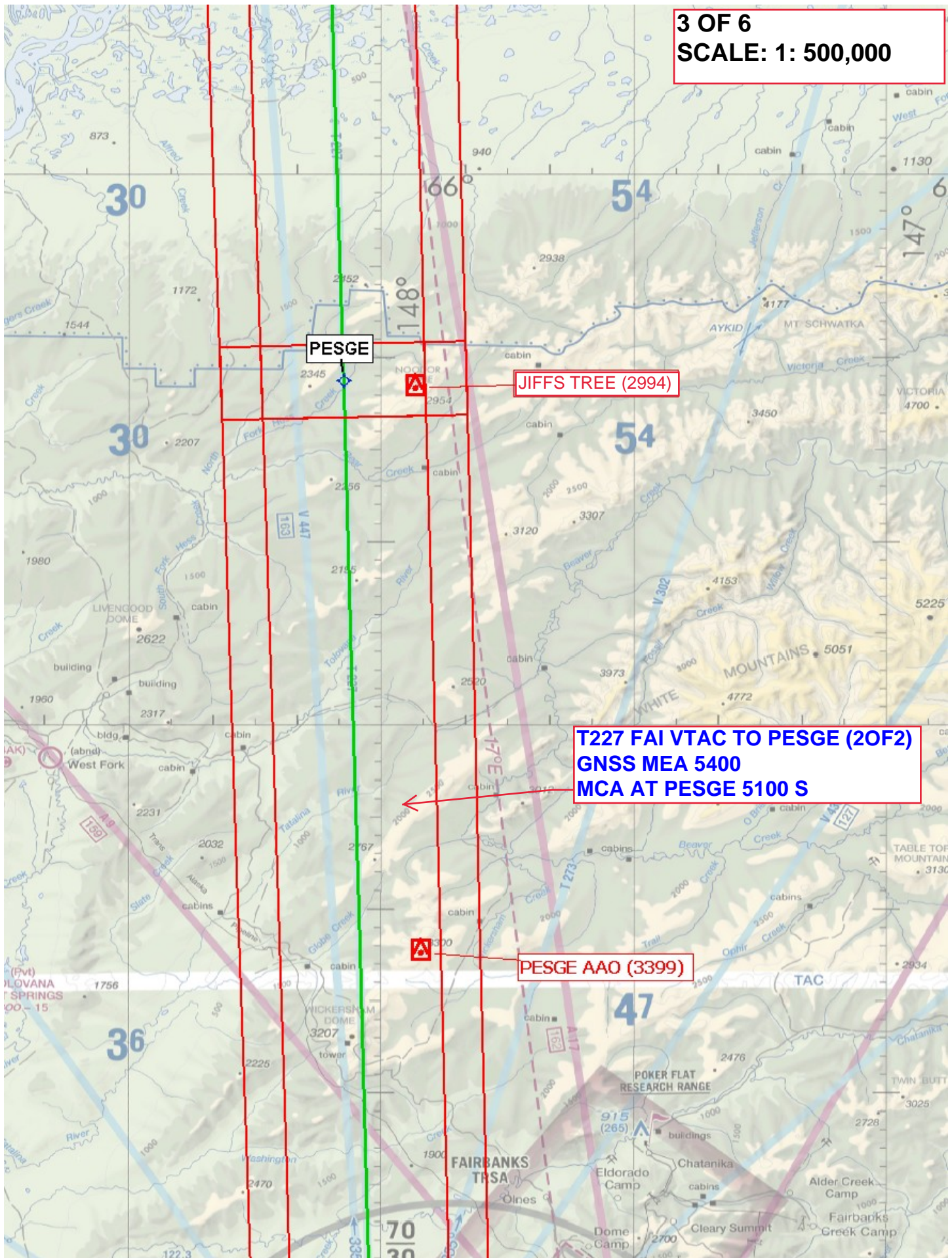
T227 FAI VTAC TO PESGE (10F2)
GNSS MEA 5400
MCA AT PESGE 5100 S

FAI AAO (1907)

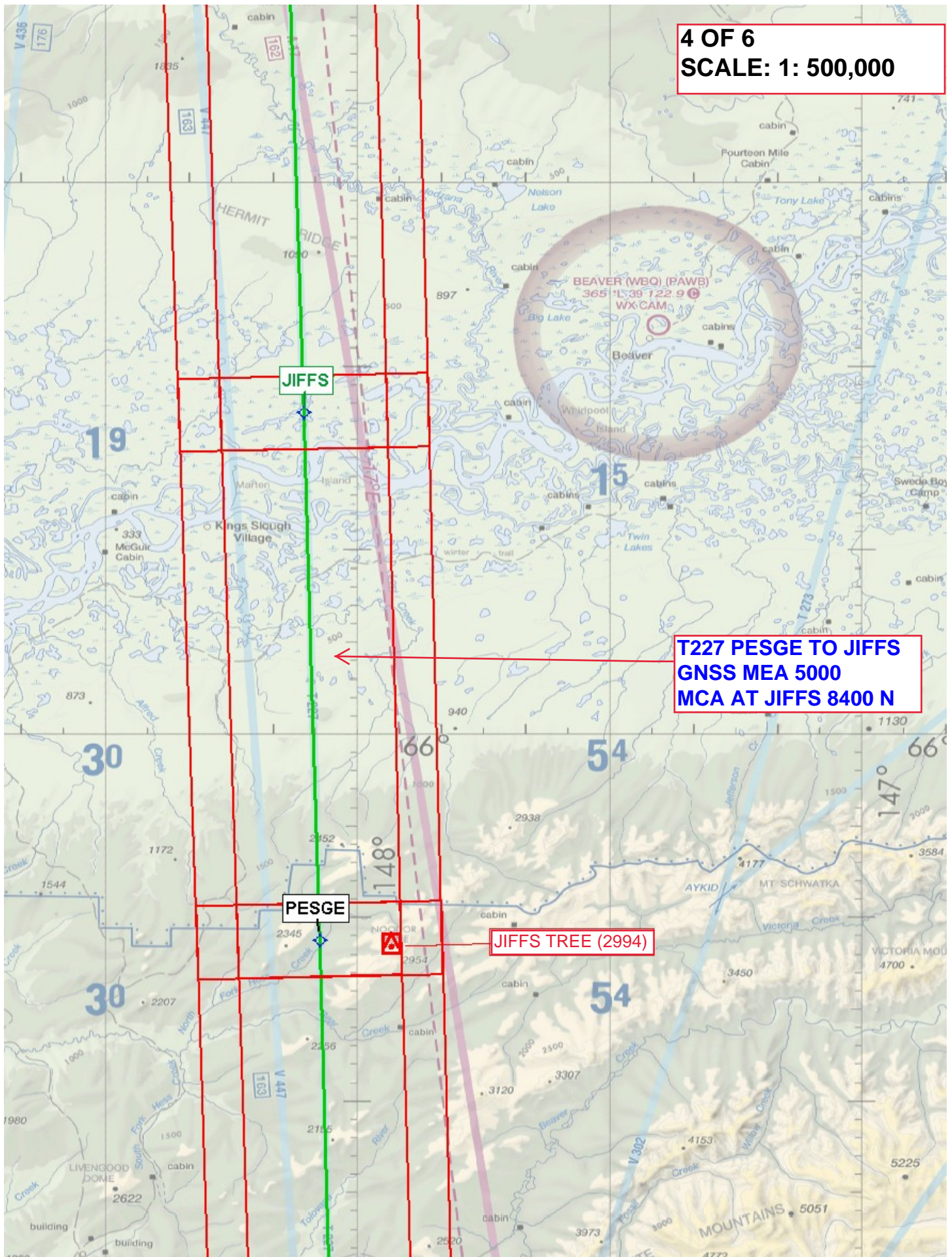
T227 PERZO TO FAI VTAC
GNSS MEA 3400
MCA AT FAI 3600 N



3 OF 6
SCALE: 1: 500,000



4 OF 6
SCALE: 1: 500,000

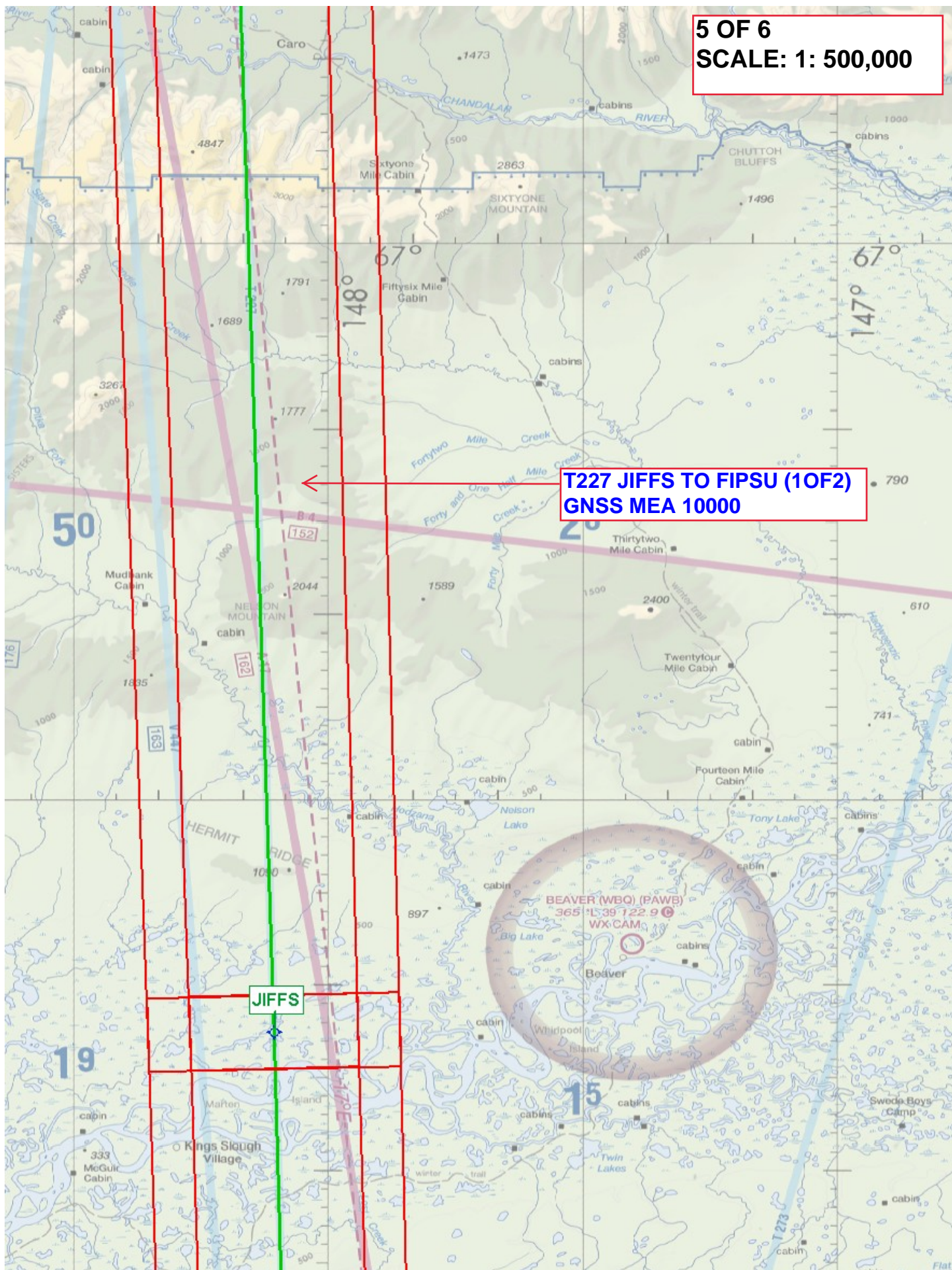


5 OF 6
SCALE: 1: 500,000

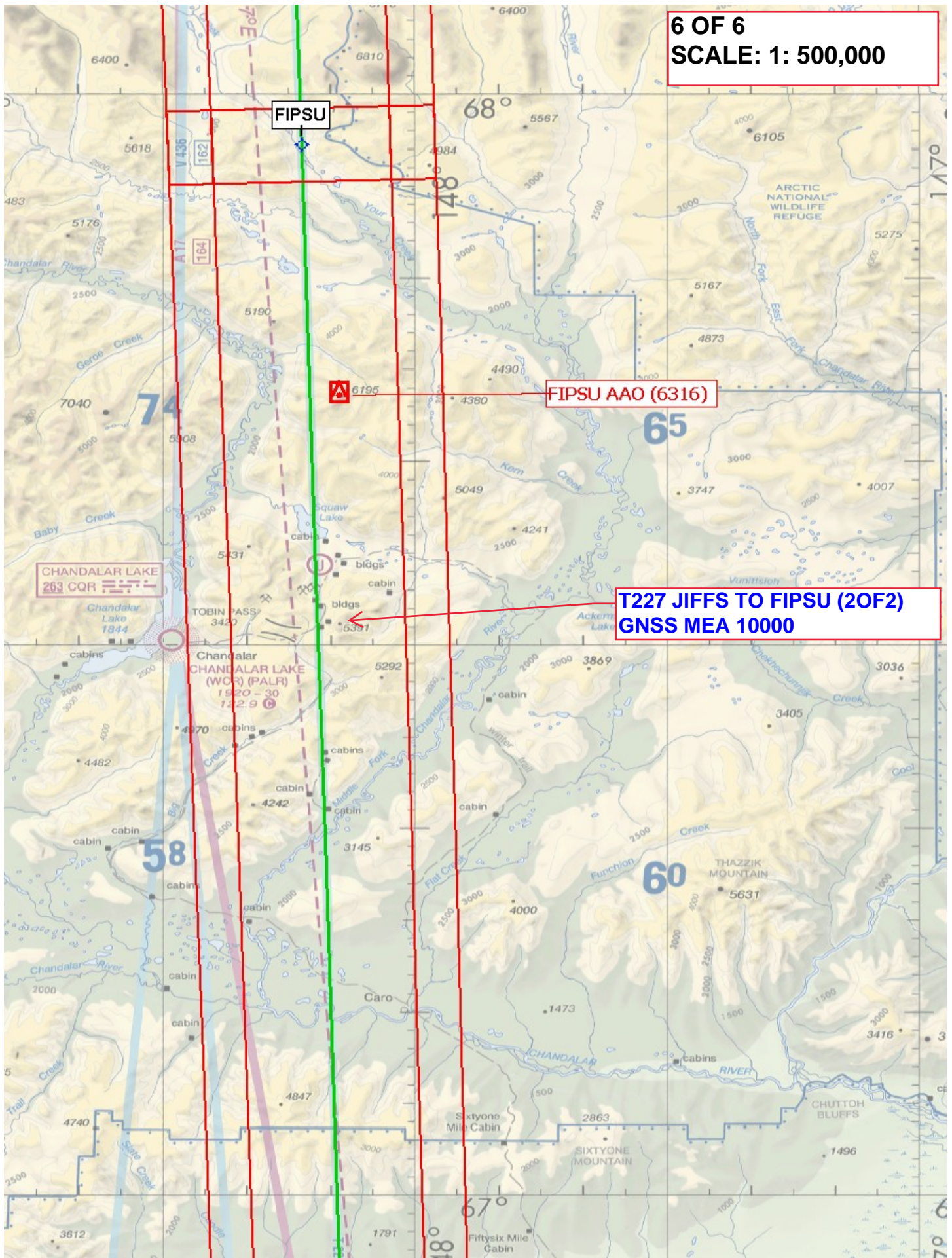
T227 JIFFS TO FIPSU (10F2)
GNSS MEA 10000

JIFFS

BEAVER (WBO) (PAWB)
365° L 39° 122.9
WX CAM



6 OF 6
SCALE: 1: 500,000



**U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
CATEGORICAL EXCLUSION DECLARATION**

Alaska

T Routes Structure

Description of Action:

The Federal Aviation Administration (FAA) is proposing to modernize portions of the Alaska low altitude Air Traffic Services (ATS) route network by amending 25 existing T routes and creating 30 new T routes to provide options in addition to the current conventional Federal airways.

T routes are available for use by global positioning system (GPS) equipped aircraft from 1,200 feet (ft) above the surface (or in some instances higher) up to but not including 18,000 ft mean sea level (MSL). The Proposed Action would ensure low minimum en route altitudes (MEA) are maintained and ensure the continuation of safe and efficient operations. An MEA is the lowest published altitude between two points that assures the required navigational signal coverage and communication requirements while meeting obstacle clearance requirements between those points. Aircraft must be able to avoid icing, turbulence, and other conditions by having the ability to fly at the lowest possible safe altitude. However, aircraft on T routes tend to fly higher than the published MEAs.

The Proposed Action is necessary to mitigate the forecasted decommissioning (DeCom) of non-directional beacons (NDB) and canceling of Federal airways in Alaska. The current relevant Federal airways are named with a prefix of either A, B, G, R, or V. An alternative airway structure must be developed given the lack of NDB acquisition, maintenance, sustainment programs, and the increasing number of NDBs that are being decommissioned. Without an alternative airway structure, aircraft would be forced to fly at higher altitudes; this would force instrument flight rules (IFR) aircraft that are not equipped with de-icing protection to fly closer to—or within—the icing level, which could potentially create a safety issue for the aircraft.

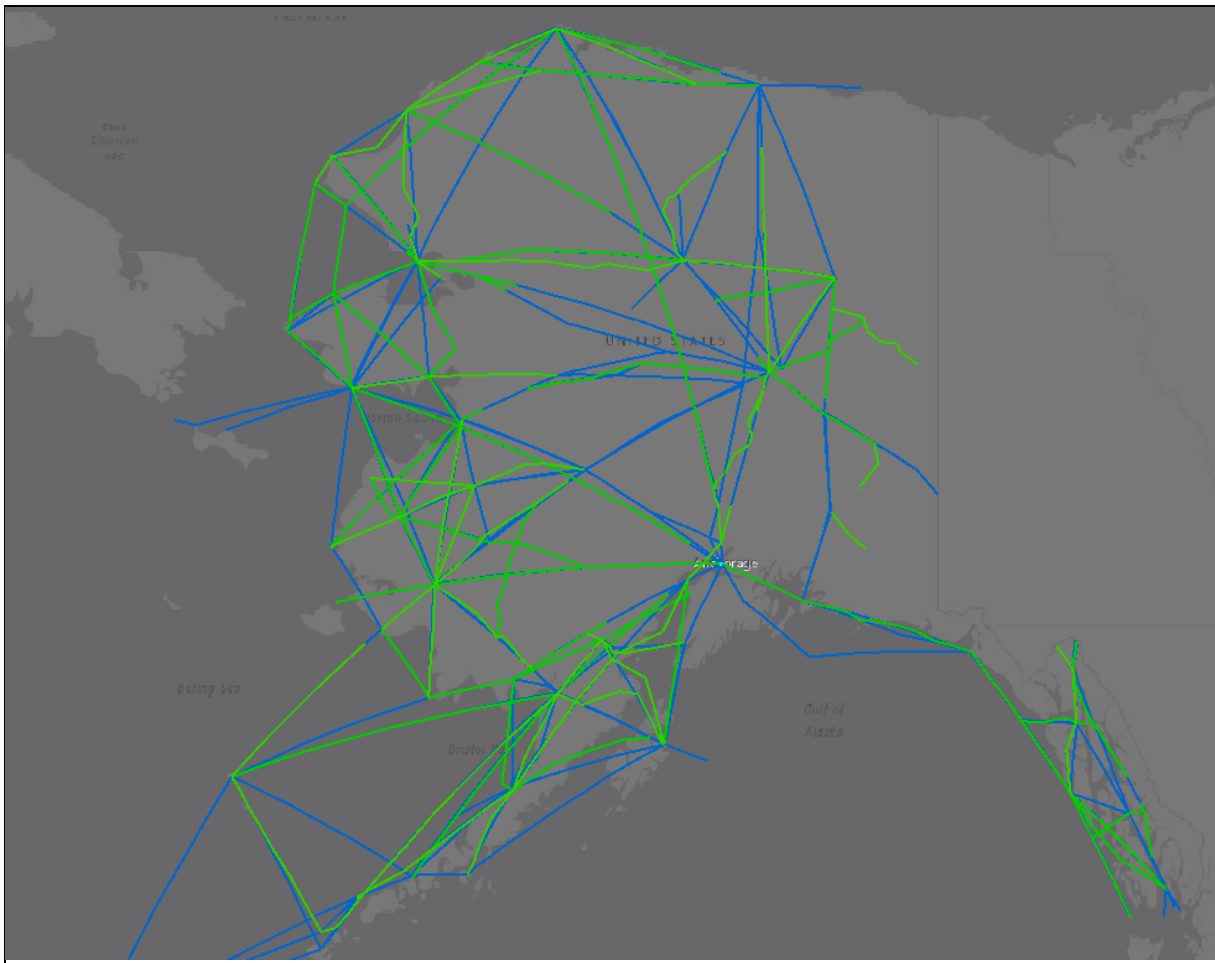
The Proposed Action is driven by an effort to modernize Alaska's ATS route structure using satellite-based navigation and is consistent with the Radio Technical Commission for Aeronautics (RTCA) Tactical Operations Committee's recommendations for the Performance Based Navigation (PBN) route system (dated March 2017). The Alaska Low Altitude Recommendation 5 states that the *"FAA should evaluate all Colored Federal airways for: (a) direct replacement (i.e., overlay) with a T route that offers a similar or lower MEA; (b) the replacement of the colored airway with a T route in an optimized but similar geographic area while retaining similar or lower MEA; or (c) removal with no route structure (T route) restored in that area because the value was determined to be insignificant."*

In addition to RTCA recommendations, specific T routes were proposed jointly by the Aircraft Owners & Pilots Association (AOPA) and Alaska Airmen's Association (AAA). Furthermore, some proposed amendments are driven by recommendations from Alaska air traffic control facilities.

T routes proposed for amendments include: T222, T223, T225, T226, T227, T228, T229, T230, T231, T232, T233, T235, T241, T242, T244, T260, T266, T267, T269, T270, T271, T275, T277, T278, and T282.

T routes proposed as new: T308, T364, T366, T367, T368, T369, T370, T371, T372, T373, T374, T375, T376, T377, T378, T379, T380, T381, T382, T383, T384, T385, T386, T388, T390, T396, T415, T417, T433, and T435.

Following figure depicts the proposed T route structure in green superimposed on the relevant existing route tracks in blue.



In accordance with FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, Paragraph 5-2, Extraordinary Circumstances, the FAA has reviewed the Proposed Action for factors and circumstances in which a normally categorically-excluded action may have a significant environmental impact requiring further analysis. The FAA has determined that no extraordinary circumstances exist that warrant additional environmental review.

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:

Initial Environmental Review (IER) was conducted by the FAA 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 applicable categorical exclusion is:

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.

Recommended by:**Air Traffic Manager Review/Concurrence**

Signature: KRISTINE M KUBITZ Digitally signed by KRISTINE M KUBITZ
Date: 2022.01.28
11:42:48 -09'00' Date: _____

Name: Talon Medema
Air Traffic Manager
Anchorage ARTCC

Concurrence by:**Western Service Area Environmental Specialist**

Signature: VIKAS UBEROI Digitally signed by VIKAS UBEROI
Date: 2022.01.28
13:02:27 -08'00' Date: _____

Name: Vikas Uberoi
Environmental Protection Specialist, Operations Support Group
Western Service Center, AJV-W25

Approval by:**Western Service Area Director or Designee Approval**

Signature: BYRON G Y CHEW Digitally signed by BYRON G Y CHEW
Date: 2022.01.31
07:28:14 -08'00' Date: _____

Name: B. G. Chew
Acting Group Manager, Operations Support Group
Western Service Center, AJV-W2



Federal Aviation Administration

Memorandum

Date: August 31, 2021

To: George Gonzalez, Acting Manager, Rules & Regulations Group, AJV-P2

From: B. G. Chew, Acting Group Manager, Operations Support Group,
Western Service Center, AJV-W2

Subject: Request for Notice of Proposed Rulemaking (NPRM) for Amendments to
Federal Airway T-227. (Regional Docket No. 19-AAL-60)

The Western Service Center (WSC), Operations Support Group (OSG), requests the following Federal Airways amendments for T-227. The regional docket number for this Federal Airways action is 19-AAL-60.

Background

This amendment is part of a larger and comprehensive T-Route modernization project for the state of Alaska. The project mission statement is to modernize Alaska's Air Traffic Service, Area Navigation (RNAV) route structure using satellite based navigation.

Development of new T-Routes and optimization of existing T-Routes will enhance safety, increase efficiency, access, and will provide en route continuity that is not subject to the restrictions associated with ground based airway navigation.

As part of this project, the FAA evaluated the existing Colored Airway structure for: (a) direct replacement (i.e., overlay) with a T-Route that offers a similar or lower Minimum Enroute Altitude (MEA) or Global Navigation Satellite System Minimum Enroute Altitude (GNSS MEA); (b) the replacement of the colored airway with a T-Route in an optimized but similar geographic area while retaining similar or lower MEA; or (c) removal with no route structure (T-Route) restored in that area because value was determined to be insignificant.

Industry/users have indicated a desire that the FAA transition the Alaskan en route navigation structure away from any dependency on Non-Directional Beacons (NDB), and move to develop and improve the RNAV route structure.

The Western Service Center (WSC) believes this request is time sensitive given the increasing number of NDBs that are currently and/or scheduled out of service, and the lack of an NDB acquisition, maintenance, or sustainment program, which forces aircraft flying under Instrument Flight Rules (IFR) that are without de-icing protection to fly at higher MEAs, with the potentially associated loss of safety.

Amendments

The proposed amendments to T-227 are part of the effort to modernize the Alaska T-Route structure. There are several sections of the current airway that are proposed for amendment:

- 1) Segments between WP GENFU to BIG LAKE VORTAC (BGQ).
Replacement of the Port Heiden NDB (PDN), with WP WIXER.
- 2) Reroute over WP WEZZL between WP BATTY and WP AMOTT for lower GNSS MEAs.
- 3) Additional WPs were added to provide connectivity with other proposed T-Routes: JIFFS, FEDGI, ZAFPO, and GAMIC.
- 4) Airway rerouted over WP PERZO to provide Instrument Approach connectivity to the Fairbanks International Airport (PAFA) and route continuity with T282.

Figure 1: Current/Amended T227: PDN NDB to WP ZAFPO



Figure 2: Current/Amended T227: WP GAMIC to AMOTT

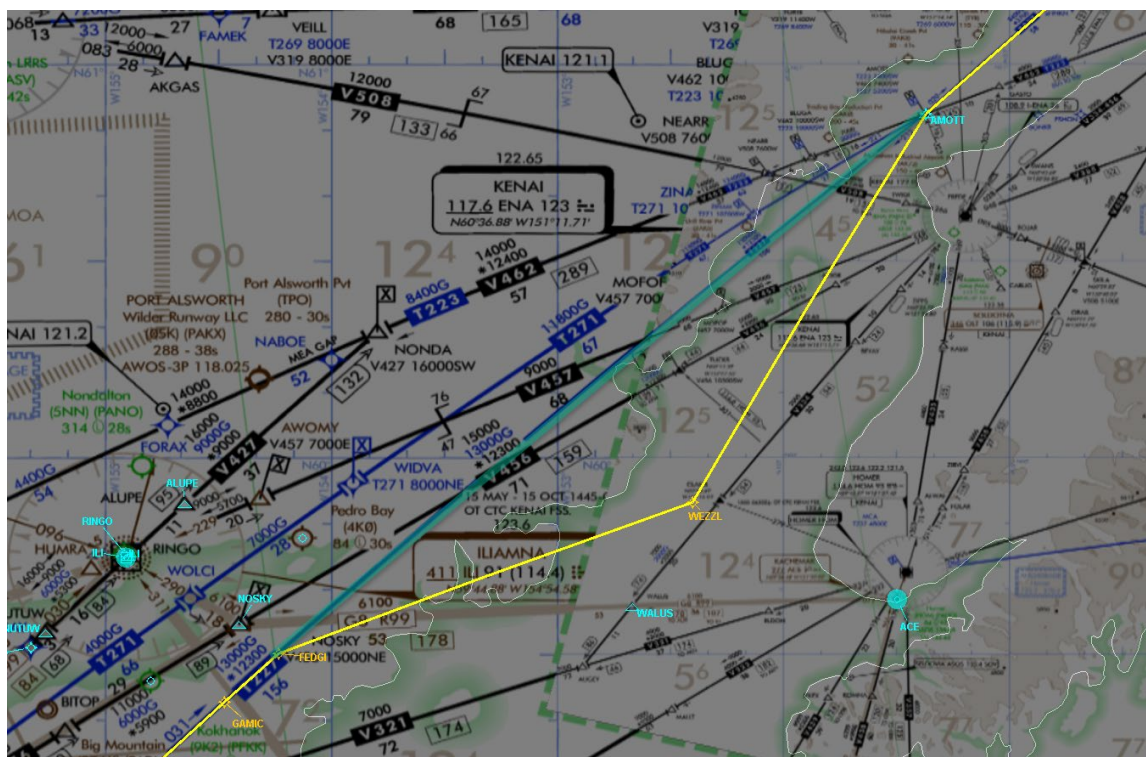
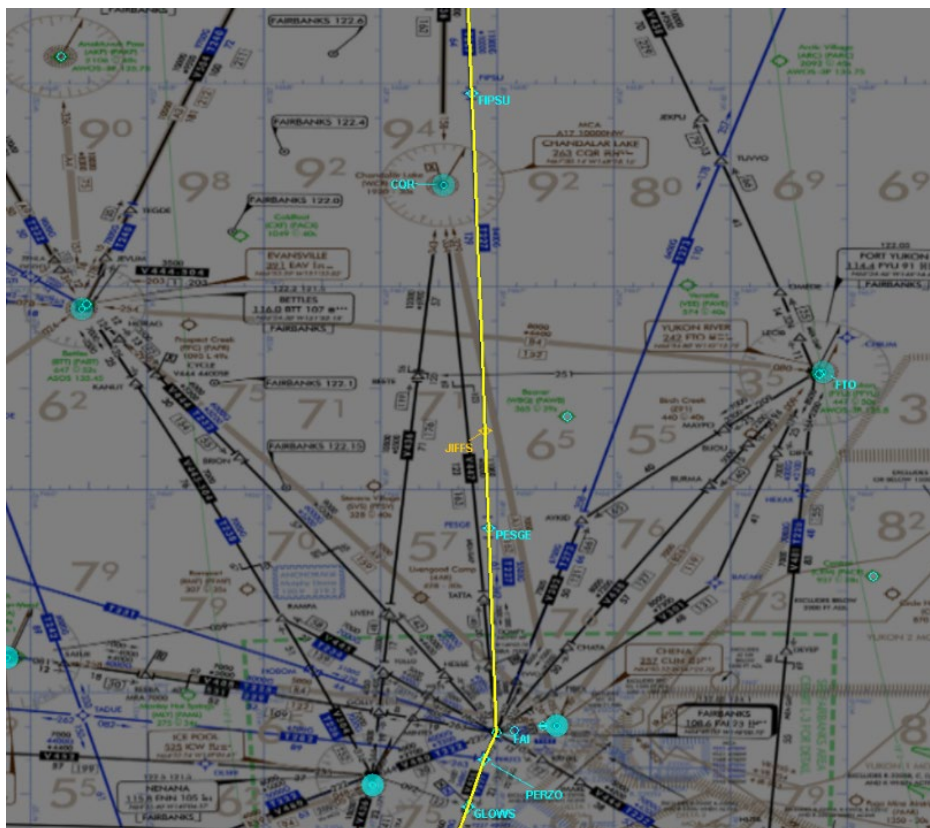


Figure 4: Current/Amended T227: FAI VORTAC to WP FIPSU



Current T-227 Legal Description:

T-227 SYA to SCC

SYA	VORTAC	(lat. 52°43'06" N., long. 174°03'44" E.)
JANNT	WP	(lat. 52°04'18" N., long. 178°15'37" W.)
BAERE	WP	(lat. 52°12'12" N., long. 176°08'09" W.)
ALEUT	Fix	(lat. 54°14'17" N., long. 166°32'52" W.)
MORDI	Fix	(lat. 54°52'50" N., long. 165°03'15" W.)
GENFU	Fix	(lat. 55°23'18" N., long. 163°06'21" W.)
BINAL	Fix	(lat. 55°46'00" N., long. 161°59'56" W.)
PDN	NDB/DME	(lat. 56°57'15" N., long. 158°38'51" W.)
BATTY	Fix	(lat. 59°03'57" N., long. 155°04'42" W.)
AMOTT	Fix	(lat. 60°52'27" N., long. 151°22'24" W.)
BGQ	VORTAC	(lat. 61°34'10" N., long. 149°58'02" W.)
FAI	VORTAC	(lat. 64°48'00" N., long. 148°00'43" W.)
SCC	VOR/DME	(lat. 70°11'57" N., long. 148°24'58" W.)

AMENDMENTS 02/09/12 76 FR 76891 (Amended)

Amended T-227 Legal Description:

T227_FULL SHEMA, AK to DEADHORSE, AK

SHEMA, AK (SYA)	VORTAC	(lat. 52°43'05.78"N., long. 174°03'43.50"E.)
JANNT, AK	WP	(lat. 52°04'17.88"N., long. 178°15'37.23"W.)
BAERE, AK	WP	(lat. 52°12'11.96"N., long. 176°08'08.53"W.)
ALEUT, AK	WP	(lat. 54°14'16.58"N., long. 166°32'51.82"W.)
MORDI, AK	WP	(lat. 54°52'49.87"N., long. 165°03'15.24"W.)
GENFU, AK	WP	(lat. 55°23'18.64"N., long. 163°06'20.78"W.)
BINAL, AK	WP	(lat. 55°45'59.99"N., long. 161°59'56.43"W.)
WIXER, AK	WP	(lat. 56°54'29.00"N., long. 158°36'10.00"W.)
CULTI, AK	WP	(lat. 58°15'11.91"N., long. 156°31'19.57"W.)
FEDGI, AK	WP	(lat. 59°30'10.87"N., long. 154°14'14.80"W.)
WEZZL, AK	WP	(lat. 59°53'13.86"N., long. 152°24'12.63"W.)
AMOTT, AK	FIX	(lat. 60°52'26.59"N., long. 151°22'23.60"W.)
BIG LAKE, AK (BGQ)	VORTAC	(lat. 61°34'09.96"N., long. 149°58'01.77"W.)
GLOWS, AK	WP	(lat. 64°26'15.88"N., long. 148°15'17.88"W.)
PERZO, AK	WP	(lat. 64°40'22.99"N., long. 148°07'20.15"W.)
FAIRBANKS, AK (FAI)	VORTAC	(lat. 64°48'00.25"N., long. 148°00'43.11"W.)
DEADHORSE, AK (SCC)	VOR/DME	(lat. 70°11'57.11"N., long. 148°24'58.17"W.)

Proposed chart date for this action: 09/08/2022

For further information concerning this matter, please contact Derrick Aubuchon, PBN Specialist, Operations Support Group, Western Service Center, at (206) 231-2258.