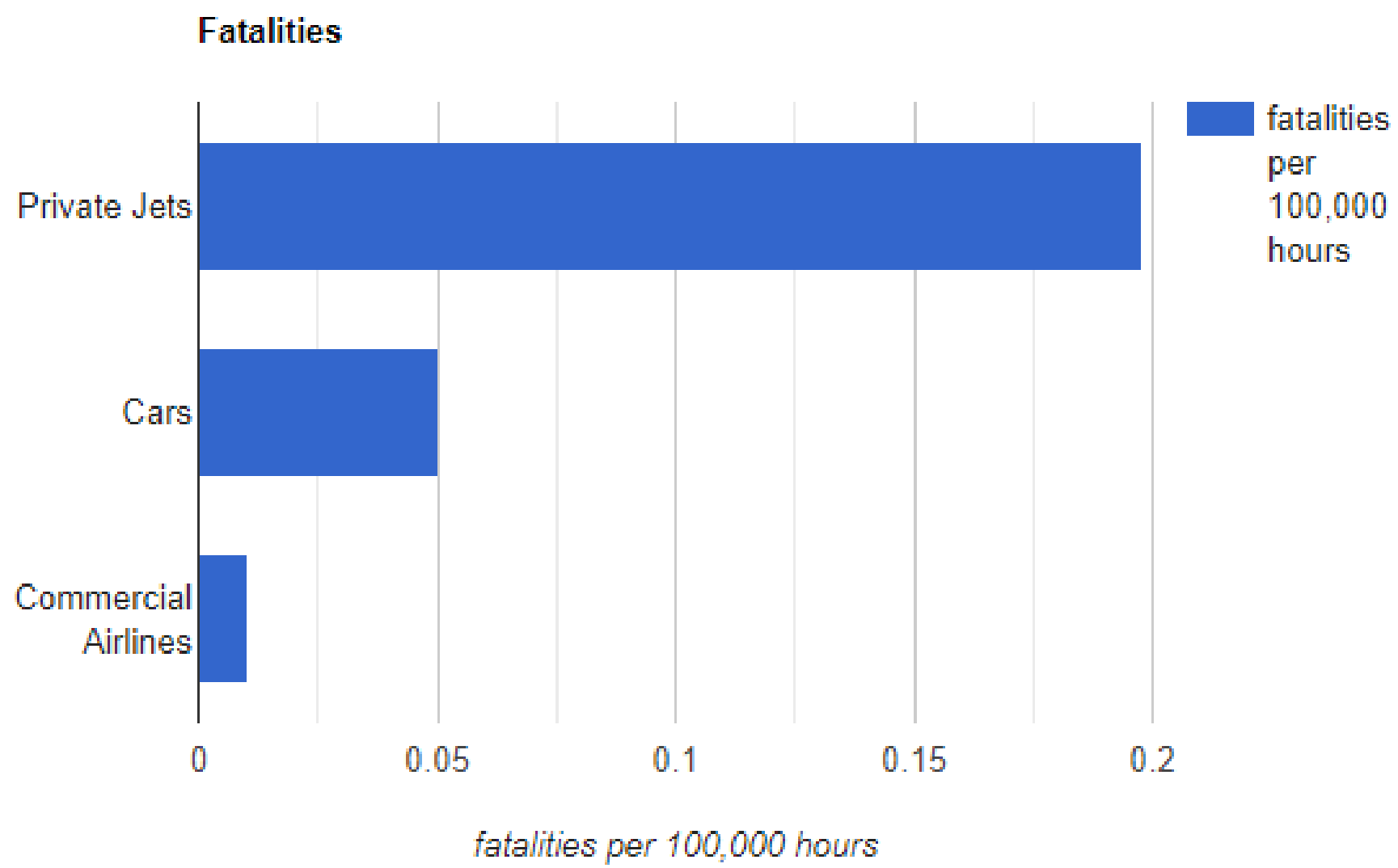




Airplane Crash Litigation







Challenges



Lack of fact witnesses



Need expert witnesses



More technical







National Transportation Safety Board

Go Team Ready to go 24/7

Preliminary Report

Factual Report

Final Report

Creation Date: 10/23/2018

Last Modified: 01/06/2021 1:14 PM

Public Release Date & Time: 01/07/2021 8:00 AM

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#	Title	Pgs	Photo	Type	File
1	AIRCRAFT PERFORMANCE STUDY	6	0	Text/Image	View
2	MEDICAL FACTUAL REPORT	5	0	Text/Image	View
3	WEATHER STUDY REPORT	30	0	Text/Image	View
4	WEATHER ATTACHMENT 1	1	0	Other	View
5	WEATHER ATTACHMENT 2	1	0	Other	View
6	WEATHER ATTACHMENT 3	4	0	Text/Image	View
7	WEATHER ATTACHMENT 4	4	0	Text/Image	View
8	WEATHER ATTACHMENT 5	2	0	Text/Image	View
9	WEATHER ATTACHMENT 6	1	0	Text/Image	View
10	WEATHER ATTACHMENT 7	1	0	Other	View
11	WEATHER ATTACHMENT 8	1	0	Other	View
12	WEATHER ATTACHMENT 9	1	0	Other	View
13	WEATHER ATTACHMENT 10	1	0	Other	View
14	MAPS AND DIAGRAMS	3	0	Text/Image	View
5	RECORDS OF CONVERSATION	1	0	Text/Image	View
16	RADAR INFORMATION	2	0	Text/Image	View
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18	PILOT INFORMATION	1	0	Text/Image	View
19	PERFORMANCE DATA	2	0	Text/Image	View
20	WEIGHT AND BALANCE	1	0	Text/Image	View
21	STATEMENT OF PARTY REPRESENTATIVES TO NTSB INVESTIGATION	2	0	Text/Image	View
22	TOXICOLOGICAL REPORT PILOT	2	0	Text/Image	View

An audio recording of the airports common traffic advisory frequency captured the pilot's radio transmissions during the takeoff. The pilot transmitted he was taking off and shortly thereafter announced "failure."

The airplane came to rest in a nose-down attitude on a heading about 252° in a hayfield about 2,350 ft from the departure end of runway 10. All major components of the airplane remained within the immediate vicinity of the main wreckage. The airplane sustained extensive impact damage with aft crush deformation to the leading edges of both wings. The wings remained partially attached to the fuselage and the tail section had separated at near the aft backage area and was folded downward, over the right wing.

During postaccident examination of the recovered wreckage, the No. 3 cylinder was found mechanically damaged. Removal of cylinder No. 3 revealed the exhaust valve head had separated from the exhaust valve stem which remained in the exhaust valve guide. The piston had separated and was lying damaged within the cylinder barrel. Metal fragments were found in the oil sump and the other cylinder piston skirts exhibited varying degrees of mechanical damage. The No. 3 cylinder connecting rod was bent forward.

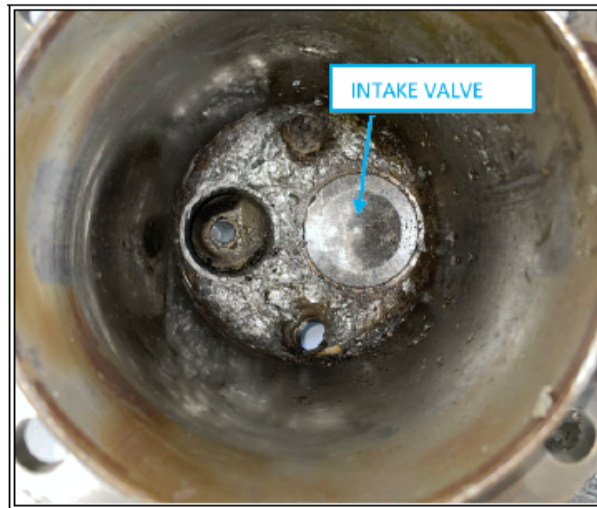


Figure 3: Cylinder No. 3 combustion area.



Final Reports

Probable Cause
Finding.

Inadmissible
under 49 U.S.C.
Sec. 1154(b).

Factual Reports

Factual Reports
may be admissible
as public record.

All factual data
collected by NTSB
investigation.

Data for your
aeronautical
expert to rely on.



08:33:00 / 5700

A satellite map of a mountainous region with a vertical path marked by small circles. The path starts at the top and goes down. The terrain is rugged with various shades of brown, green, and white, indicating different elevations and vegetation. The path is a dashed line with small circles at each data point.

08:33:12 / 5825

08:33:24 / 6050

08:33:36 / 6150

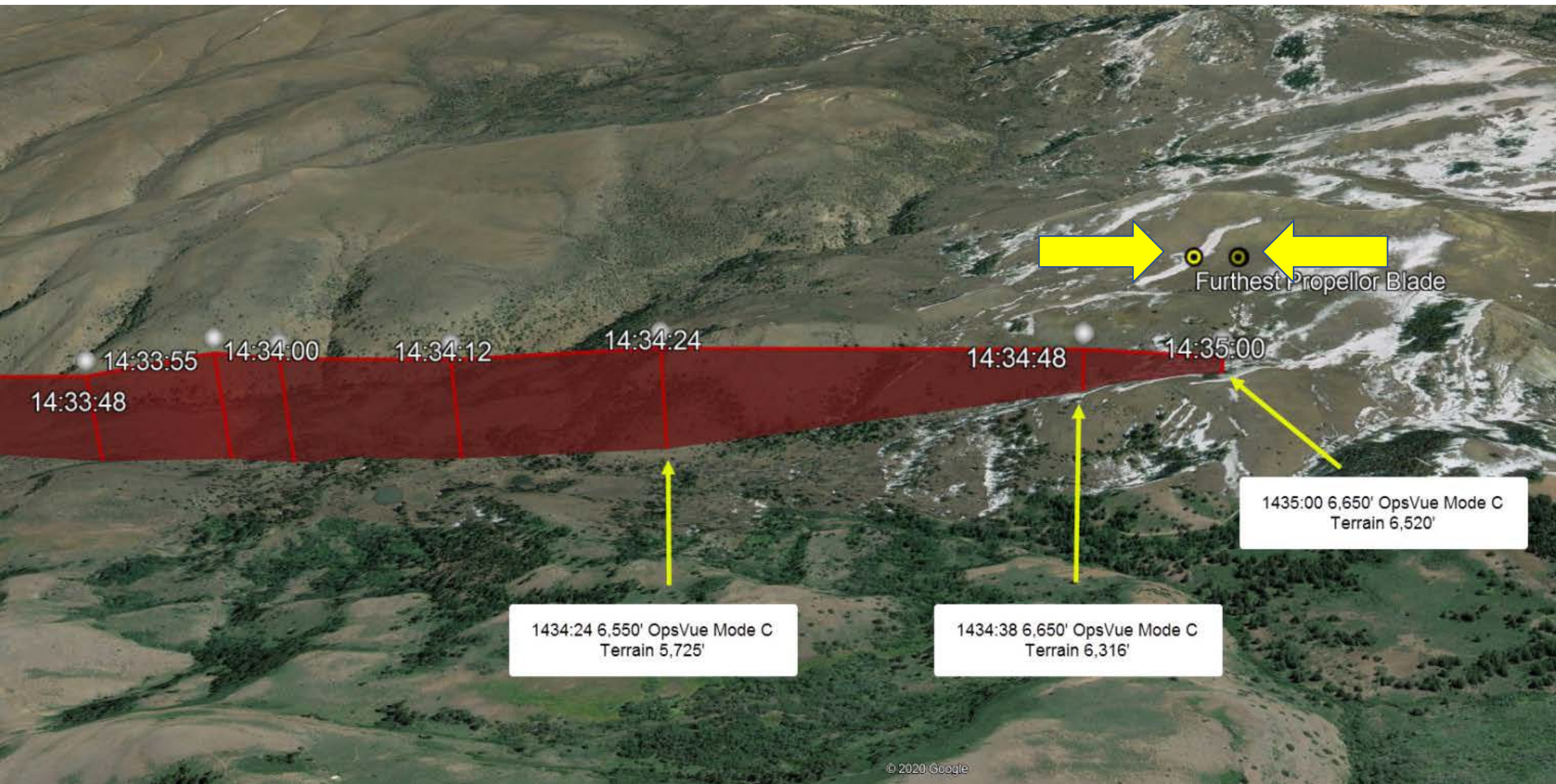
08:33:48 / 6250

08:34:00 / 6375

08:34:12 / 6450

08:34:24 / 6550

08:34:48 / 6650

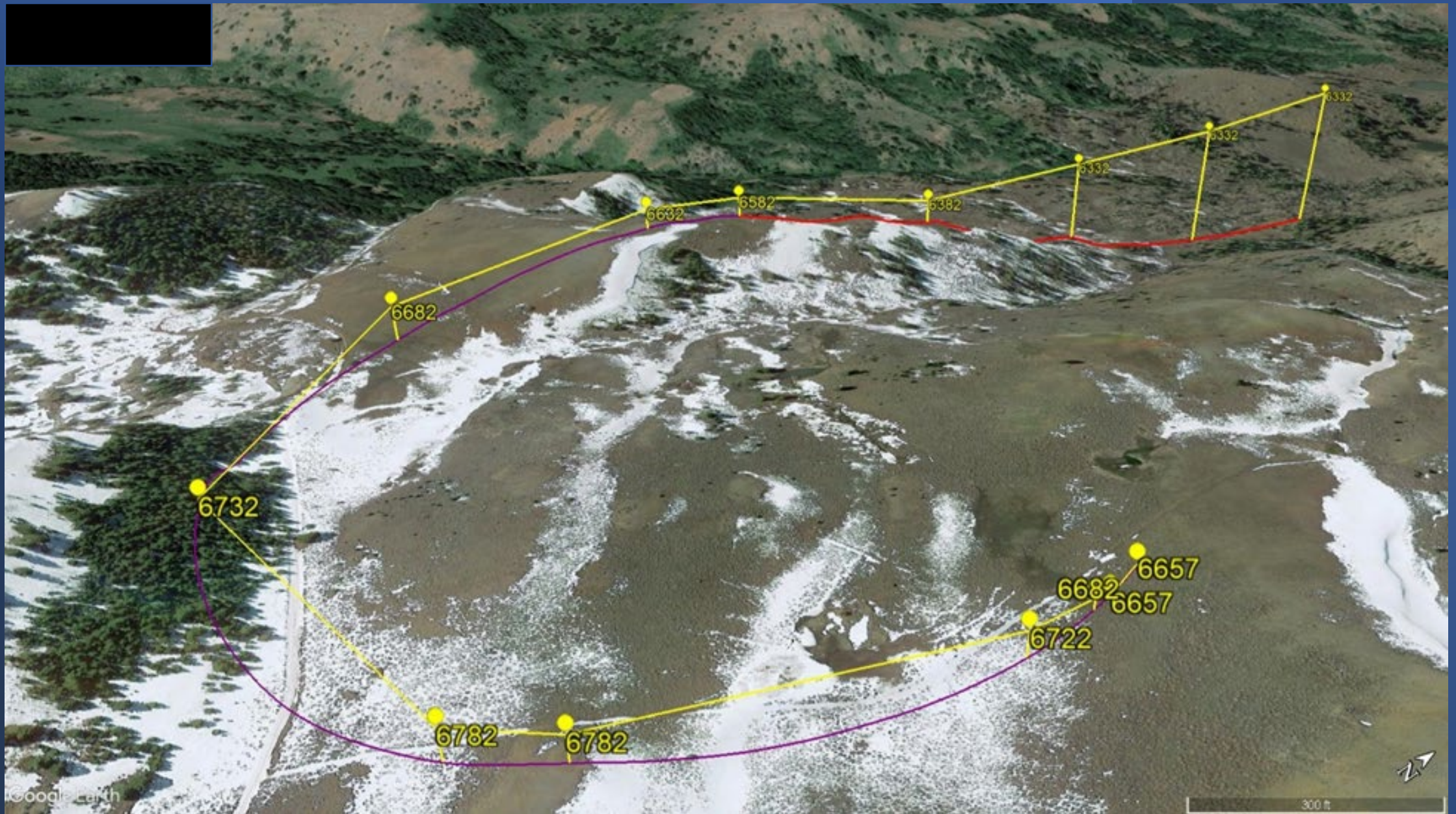


Furthest Propellor Blade

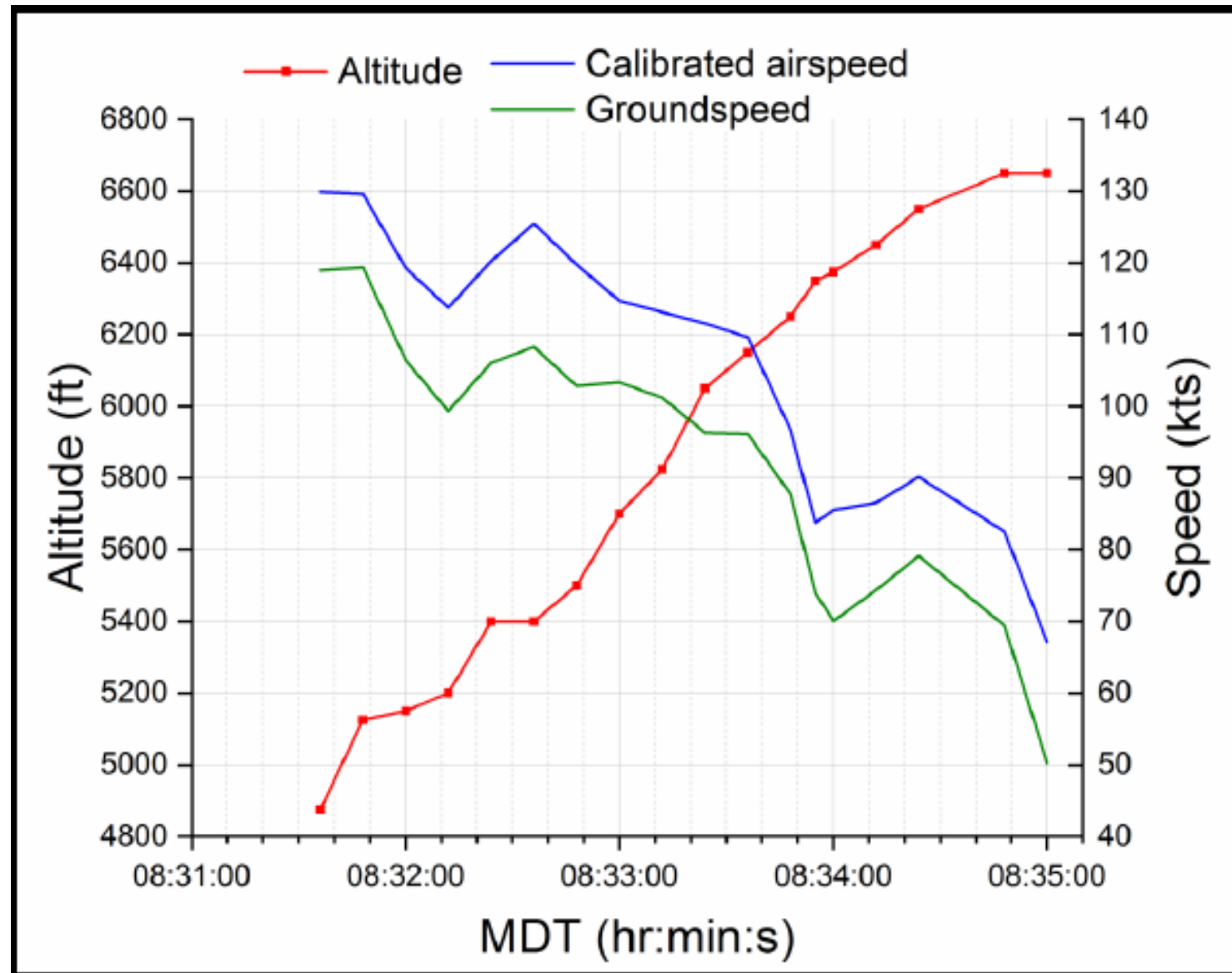
1434:24 6,550' OpsVue Mode C
Terrain 5,725'

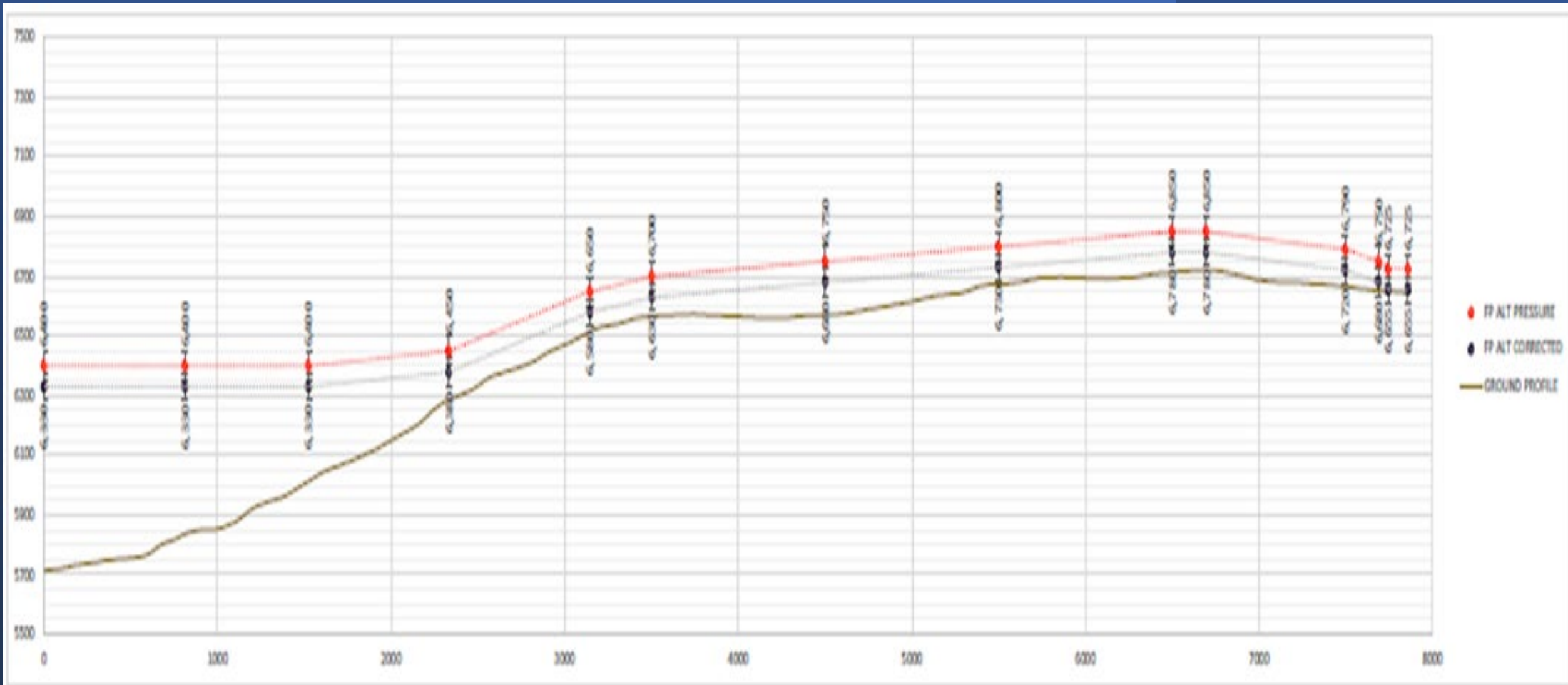
1434:38 6,650' OpsVue Mode C
Terrain 6,316'

1435:00 6,650' OpsVue Mode C
Terrain 6,520'









Pilot Information

Certificate:	Private	Age:	73, Male
Airplane Rating(s):	Single-engine land; Single-engine sea	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	BasicMed	Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	4560 hours (Total, all aircraft), 4416 hours (Pilot In Command, all aircraft), 32 hours (Last 90 days, all aircraft), 4 hours (Last 30 days, all aircraft)		

At the time of the pilot's last medical examination, he reported having type 2 diabetes, high blood pressure, high cholesterol, and hypothyroidism. He was issued a special issuance, third-class medical certificate with the limitation that he must have glasses available for near vision and that stated, "Not valid for any class after 12/31/2017. Not valid outside the borders of the United States." The pilot completed the BasicMed educational course and obtained a BasicMed physician attestation in December 2017.

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N732MV
Model/Series:	T210 M	Aircraft Category:	Airplane
Year of Manufacture:	1976	Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	21061628
Landing Gear Type:	Tricycle	Seats:	6
Date/Type of Last Inspection:	August 13, 2018 Annual	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	Reciprocating
Airframe Total Time:	6801.1 Hrs as of last inspection	Engine Manufacturer:	Teledyne Continental
ELT:	C126 installed, activated, aided in locating accident	Engine Model/Series:	TSIO-520-R
Registered Owner:		Rated Power:	300 Horsepower
Operator:		Operating Certificate(s) Held:	None

The airplane's weight and balance were calculated based on the airplane's empty weight and the pilot's and two passenger's reported weights. The airplane's gross weight at the time of the accident was estimated to be about 3,900 lbs, which was about 100 lbs over its maximum allowable gross weight. The calculations also showed that the airplane had a more forward center of gravity.

The airplane's Pilot's Operating Handbook provides stall speeds at the airplane's maximum gross weight. For an airplane operating at the maximum gross weight and with a forward center of gravity, the airplane's stall speed with 10° of flaps was 68 KCAS at 0° bank; 73 KCAS at 30° of bank; and 96 KCAS at 60° of bank.

equated to about 100 lbs over the maximum gross weight of the airplane, 3,800 lbs, with a more forward center of gravity. The detailed computations are appended to this report.

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KMAN, 2537 ft msl	Distance from Accident Site:	32 Nautical Miles
Observation Time:	14:35 Local	Direction from Accident Site:	20°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	90°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.85 inches Hg	Temperature/Dew Point:	13°C / 9°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Marsing, ID (ID40)	Type of Flight Plan Filed:	None
Destination:	Murphy, ID (1U3)	Type of Clearance:	None
Departure Time:	08:10 Local	Type of Airspace:	Class G

A friend of the pilot was notified of the accident shortly after it occurred and flew out to the accident location. He reported that, while maneuvering about 1 mile east of the accident site at 6,500 ft msl, his onboard weather system displayed that the wind was from the southwest at 38 knots. A High-Resolution Rapid Refresh model for 0900 in the area surrounding the accident indicated a surface wind from 245° at 15 knots. The wind speed increased to 25 knots by 5,700 ft msl and the wind speed remained between 25 and 35 knots from 5,700 through 14,000 ft msl. The model indicated a chance of light-to-moderate, low-level wind shear in between the surface and 6,000 ft msl. A chance of light-to-moderate, clear air turbulence existed in several layers between the surface and 12,500 ft msl.

- The WRF analysis winds: For the final 5 minutes of the plane's flight, winds were generally out of the southwest. The speeds ranged between approximately 32 and 40 knots. These are from the 780 mb level which in the region at the time of the flight was ~6,900 feet MSL.

Wreckage and Impact Information

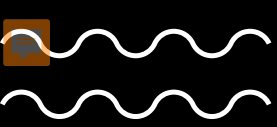
Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	2 Fatal	Aircraft Fire:	On-ground
Ground Injuries:	N/A	Aircraft Explosion:	Unknown
Total Injuries:	3 Fatal	Latitude, Longitude:	43.075279,-116.77111(est)

Two of the propeller blades had separated from the hub. All three propeller blades exhibited chordwise scratches. Two of the blades exhibited S-type bending. The blade that remained in the propeller hub exhibited forward bending.

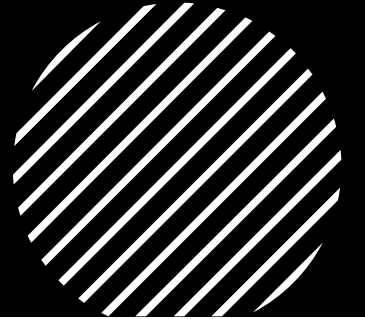
Toxicology testing performed on specimens from the pilot by NMS Labs detected caffeine; quinine; loratadine and its metabolite descarboethoxloratidine, which is a nonsedating over-the-counter medication for heartburn and colds; and buprenorphine (11 ng/gm) and its metabolite norbuprenorphine (22 ng/gm). Buprenorphine, which is a controlled substance, is used to treat severe pain. Buprenorphine carries a warning from the Federal Drug Administration that it “may impair mental and/or physical ability required for the performance of potentially hazardous tasks (e.g., driving, operating heavy machinery).” Further, opiates cause, in part, sedation, alterations in cognitive and sensory efficiency, respiratory depression, nausea, vomiting, headache, and sleep and concentration disorders.



Federal Preemption



Sources of the Standard of Care



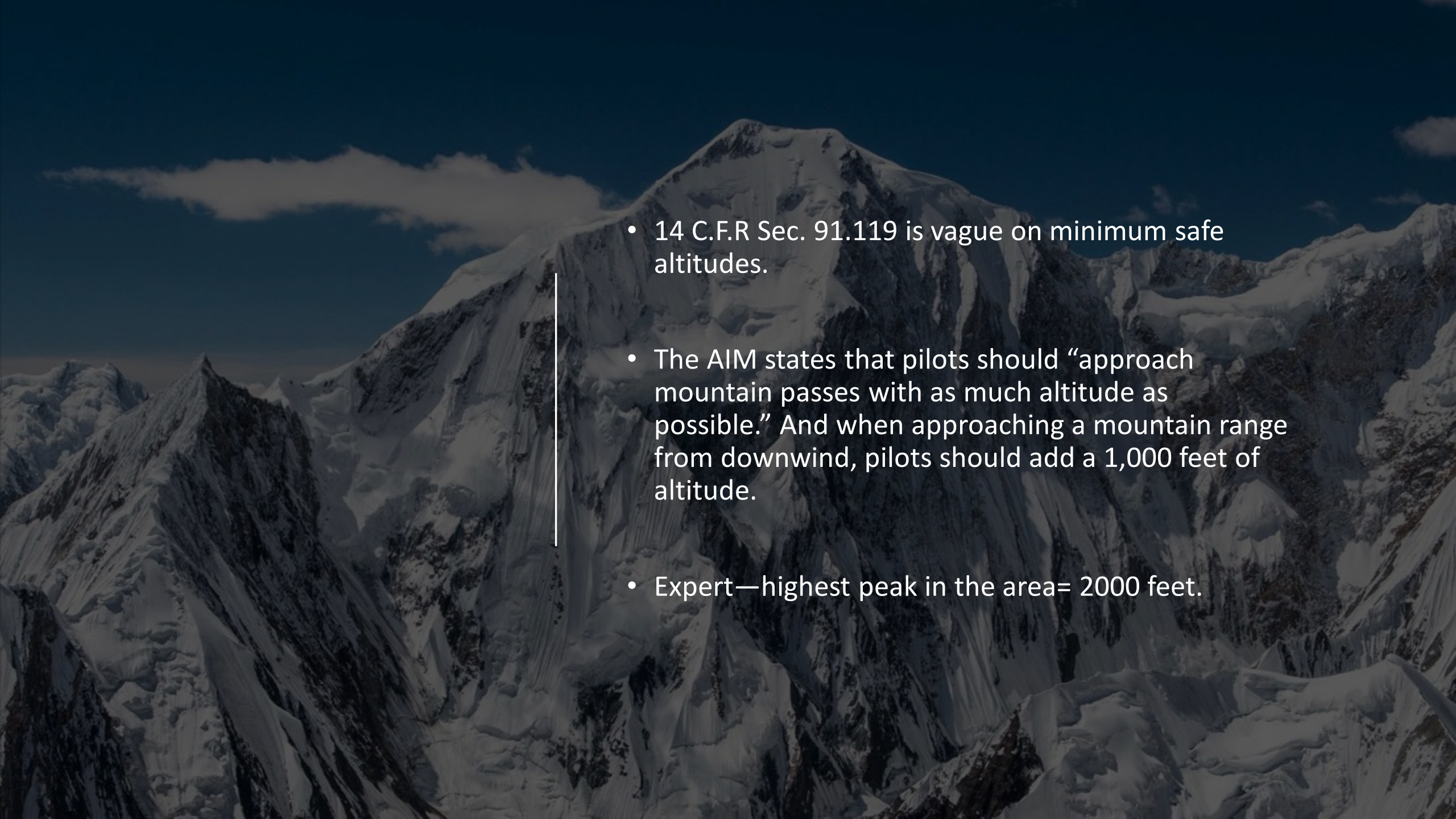
Federal Aviation Regulations.



Aeronautical Information Manual.



Advisory Circulars.

- 
- 14 C.F.R Sec. 91.119 is vague on minimum safe altitudes.
 - The AIM states that pilots should “approach mountain passes with as much altitude as possible.” And when approaching a mountain range from downwind, pilots should add a 1,000 feet of altitude.
 - Expert—highest peak in the area= 2000 feet.

