



NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety
Washington, D.C. 20594

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Specialist's Report

OPERATIONAL FACTORS

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A. ACCIDENT

Location: Lafayette, Louisiana
Date: December 28, 2019
Time: 0921 Central Standard Time¹
Airplane: Piper PA31T; N42CV; Serial number 31T-8020067

B. AIR SAFETY INVESTIGATOR

Shawn Etcher
Air Safety Investigator
Operational Factors Division (AS-30)
National Transportation Safety Board

C. SUMMARY

On December 28, 2019, about 0921 central standard time, a Piper PA 31T airplane, N42CV, was destroyed when it was involved in an accident near Lafayette Regional Airport/Paul Fournet Field (LFT), Lafayette, Louisiana. The commercial pilot and four passengers were fatally injured. One passenger sustained serious injuries. Two individuals inside a nearby building sustained minor injuries and one individual in a car sustained serious injuries. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

D. DETAILS OF THE INVESTIGATION

On December 29, 2019, the Operational Factors investigator was assigned to acquire the accident pilot's training history and interview his most recent instructor.

On December 31, 2019, the Operational Factors investigator interviewed the accident pilot's most recent flight instructor who had conducted the pilot's recent flight review.

On May 16, 2020, the Operational Factors investigator interviewed the owner and pilot of the company that owned the airplane.

E. FACTUAL INFORMATION

1.0 Occupants of the Flight

The occupants included the accident pilot, seated in the left front seat, a student pilot seated in the right front seat, and four passengers seated in the cabin.

1.1 Pilot Information

The pilot was 51 years old. At the time of the accident, he lived near and operated the accident airplane out of LFT. He had approximately 1,530² hours of total flight experience and

¹ At the time of the accident Central Standard Time was Universal Time Coordinate (UTC) minus 6 hours or 1521Z

² On the pilot's most recent medical application, dated November 4, 2019, he reported 1,531 hours of total flight experience, and 46 hours of flight experience in the preceding 6 months of the medical application.

approximately 730 of those hours were in the aircraft make and model. According to records provided to the Operational Factors investigator, his most recent recurrent training in the aircraft was on April 22, 2019. Additionally, a logbook of the pilot indicated that the last entry in that logbook was dated July 25, 2017, on that date he recorded his total flight experience as 1,193.5 hours and of that 909.5 hours were in a multiengine land airplane. That logbook also included an endorsement for a flight review dated March 12, 2017.

According to the accident pilot's spouse³, the accident pilot primarily flew the Cheyenne II but did fly other aircraft as well. He did not fly charter flights. She was unsure of his total flight experience, because his most recent entry in his pilot's logbook was in 2017. His flight time and destinations varied. Additionally, she stated that the night prior to the accident the accident pilot told her that the flight would be a full flight and that the ceilings would be "low" for takeoff and landing. She further stated that, the airplane being a full flight "was not necessarily common but it did happen."

1.1.1 Pilot Certification Record

FAA Records of the pilot indicated the following:

Private Pilot – Airplane Single-Engine Land –certificate issued December 23, 2001.

Notice of Disapproval – Private Pilot - Airplane Single-Engine Land; Instrument – Airplane (First Failure) was issued on February 6, 2004. Unsatisfactory items: "All Portions of Test."

Notice of Disapproval – Private Pilot Airplane Single-Engine Land; Instrument – Airplane (Second Failure) was issued on August 27, 2004. Unsatisfactory items: Area of Operation IV Task F (Steep Turns) and Area of Operations VI Task B (Precision Approach).

Private Pilot – Airplane Single-Engine Land; Instrument – Airplane – certificate issued August 27, 2004.

Notice of Disapproval – Commercial Pilot Airplane Multiengine Land – certificate issued May 11, 2005. Unsatisfactory items: Area of Operation IV through XI, Area of Operation IV, Task A Unsatisfactory. (First Attempt).

Commercial Pilot – Airplane Multiengine Land; Private Pilot Privileges Airplane Single Engine Land; Instrument – Airplane – certificate issued May 12, 2005.

1.1.2 Pilot Certificates and Ratings Held at the Time of the Accident

Commercial Pilot (issued May 12, 2005)

Airplane Multiengine Land

Private Pilot Privileges – Airplane Single-Engine Land

Instrument – Airplane

Medical Certification Second- Class (Issued November 14, 2019)

³ For additional information about the pilots 72-hour history reference "Attachment 2 – Accident Pilot's Spouse Interview Summary" located in the docket associated with this event.

Limitation: Must wear corrective lenses⁴

1.1.3 Pilots Training and Proficiency Checks⁵

The pilot's most recent training event was conducted by a non-current flight instructor⁶. Additionally, previous training events were conducted with the same individual when he was a current flight instructor. The non-current flight instructor reported that during the most recent training event, the accident pilot and the airplane's owner would fly to Houston, Texas to conduct the training together.⁷ The non-current flight instructor stated that the ground training included utilizing the airplane manuals and discussing any abnormalities that either pilot had experienced in the previous 12 months. The non-current flight instructor stated that they had had "no big anomalies" in the preceding 12 months. During the flight portion of the training, they would practice hot starts and hung starts for the airplane's engines. He always conducted training in visual flight rules (VFR) conditions. Once airborne they would do a "series of stall training," which was done to the first indication of the stall and not a full stall, and steep turns at 5,000 feet msl⁸. The non-current instructor would then have the pilots practice single-engine go arounds with a simulated failed engine, that was conducted at 4,000 feet msl in order to remind the pilots that with this make and model of airplane, the climb rate on a single-engine may be only 300 feet per minute. He would start that maneuver by having the pilot descend from 5,000 feet at 700 feet per minute, he would zero-thrust one engine and then have the pilot conduct a go-around maneuver. Additionally, he stated that the airplane was equipped with 4-bladed propellers and did not have an autofeather system. Once all of the maneuvers were complete, he would have the pilot return to the airport to practice ILS⁹ and VOR¹⁰ approaches. He further stated that all the training was conducted in visual meteorological conditions. He did not simulate instrument conditions by having the pilot wear a "hood;" however, he would "load a pilot up enough so he would not have a chance to look outside."

During the recent training with the accident pilot, the non-current flight instructor stated that the pilot did "everything well" and "hand flew the airplane a lot." He further stated the accident pilot was "not an autopilot pilot as he enjoyed flying the airplane."

1.2 Student Pilot Information

The student pilot was 15 years old and was a relative of the airplane's owner. He was seated in the right front (co-pilot) seat. According to FAA records the student pilot certificate was issued on September 29, 2019 and was not valid to carry passengers nor was it valid to fly solo in any

⁴ According to FAA documentation the pilot wore "bifocal glasses all the time."

⁵ Source: Attachment 1- Recent Flight Training Interview Summary and Certificate

⁶ FAA airman certificate information indicated that the non-current flight instructor's certificate expired in February 2019 and had not been renewed at the time of this writing. 14 CFR 19(d) stated in part "*a flight instructor certificate expires 24 calendar months from the month in which it was issued, renewed, or reinstated, as appropriate.*" Additionally, 14 CFR 61.197 provided the renewal requirement for flight instructor certification.

⁷ Aircraft Flight Logs indicated that an entry dated April 22, 2019 recorded a route of flight from "LFT-DWH-Training-LFT." The entry indicated the accident pilot was part of that flight day. The total duration of the flights for the day was 2.7 hours. Source: Attachment 6 – Aircraft Flight Log [Excerpts]

⁸ mean sea level

⁹ Instrument Landing System

¹⁰ Very-high Omnidirectional Range

aircraft other than gliders or balloons. At the time of the accident no medical certificate had been applied for.

1.2.1 Pilot Certificates and Ratings Held at the Time of the Accident

Student Pilot (issued September 29, 2019)¹¹

Limitations: Carrying Passengers is Prohibited
Not Valid for Solo Flight in Aircraft other Than Gliders or Balloons until
Applicant Reaches 16th Birthday.

Medical Certification - None¹²

1.2.2 Student Pilot and Medical Certificate Requirements

According to 14 CFR 61.83 the eligibility requirements for a student pilot certificate were:

- (a) Be at least 16 years of age for other than the operation of a glider or balloon.*
- (b) Be at least 14 years of age for the operation of a glider or balloon.*
- (c) Be able to read, speak, write, and understand the English language. If the applicant is unable to meet one of these requirements due to medical reasons, then the Administrator may place such operating limitations on that applicant's pilot certificate as are necessary for the safe operation of the aircraft.*

According to guidance on the FAA website¹³ a pilot was required to obtain a medical certificate *before flying solo in an airplane, helicopter, gyroplane, or airship.*

2.0 Airplane

The airplane was a twin-engine, retractable landing gear, low wing turbine-powered airplane. The fuselage was an all metal, semi-monocoque structure. Additionally, the standard seating arrangements was for a six-place seating arrangement; however, the third and fourth seats could be reversed to face aft. There was an optional seventh or eighth seating configuration as well. The accident airplane included a seventh seat. The Pilot Operating Handbook, Section 2, Limitations required a minimum of one crewmember (pilot).

The airplane flight log was located, and the most recent recorded entry was December 18, 2019, the accident pilot's initials were associated with that flight entry.

¹¹ Title 14 CFR 61.19(c)(1) states – *a pilot certificate (including a student pilot certificate issued after April 1, 2016 issued under this part is issued without a specific expiration date.*

¹² Title 14 CFR 61.23(a)(3) states – *Must hold at least a third-class medical certificate – (i) when exercising the privileges of a private pilot certificate, recreational pilot certificate, or student pilot certificate, except when operating under the conditions and limitations set forth in §61.113(i).*

¹³ Source: <https://www.faa.gov/pilots/become/medical/> page last modified on November 18, 2019.



Photo 1: Accident Airplane. (Courtesy of Flickr)

3.0 Interviews

3.1 Company Owner¹⁴

The company owner, who also flew the airplane, reported that he and the accident pilot would hand fly the airplane up to a safe altitude of at least 2,000 feet.

He also stated that he and the accident pilot normally used the same flight instructor for their training, which he stated was the case for at least the previous 2 or 3 training events. During the flight portion of their training, they practiced the flight characteristics of the airplane. The owner's logbook recorded the most recent training event occurred on April 22, 2019. The entry for that training included the following statement, "*Recurrent training per FAR Part 91. Steep turns, Engine out, Emergency and Normal procedures.*" The owner also provided they did some single-engine work and some approaches. He also stated that during the ground portion of their training they had discussed the electrical system and regulations. Additionally, he and the accident pilot would occasionally fly together, and they would ask each other questions about various systems of the aircraft or other factors on the flight, in order to stay proficient. He also stated that the accident pilot was "*proficient in the airplane.*"

The owner of the plane provided that the accident pilot had "*a lot of involvement in the Cheyenne and wanted to be the very best that he could be at operating the airplane.*" He stated that the accident pilot was involved in the determination of what flight instruments to install in the airplane and was involved with the installation. He further stated that the accident pilot was "*very meticulous*" about understanding the flight instruments.

3.2 Hangar Manager

The FAA interviewed the hangar manager where the company stored the accident airplane and two additional aircraft, which included a Beechcraft Baron. According to a "Record of Conversation" produced by the FAA¹⁵ they interviewed the hangar manager three days following the accident. The record of conversation provided, in part, the following:

¹⁴ Source: Attachment 5 – Interview Summaries with Company Personnel.

¹⁵ Source: Attachment 4 - FAA Record of Conversation with the Hangar Manager.

The accident pilot had flown the Beechcraft Baron and a review of the [aircraft] logbooks confirmed that he had, however, he flew it “very little.”

Although the manager was unsure of the seating arrangements of the occupants on the accident flight, he indicated that the pilot “always like to put the biggest passengers in the back.” Additionally, the manager indicated that the accident pilot did have an ice cooler on the accident flight and that it may have contained alcoholic beverages. The cooler was placed on top of the lavatory, which was adjacent to the entry door and behind the last row of passenger seats.

The manager also indicated that the airplanes seating configuration was 4 seats behind the cockpit were in a club seating configuration and then behind the passenger seats was the lavatory and baggage area.

Additionally, the manager also provided the aircraft had returned from a flight on December 18, 2019 which corresponded to the most recent entry in the airplane flight log. He also reported that on December 18th he topped off only the nacelles with Jet A and did not top off the tip tanks on its final fueling. He added 200.7 gallons of Jet A fuel on the 18th.

3.3 Survivor

About 6 weeks following the event, the Investigator in Charge was able to interview the survivor. During that interview, the survivor provided that he had sat in the aft, forward-facing seat located on the left side of the airplane. There had been no safety briefing provided by the pilot prior to the flight.

He quantified that he had been on the airplane as it was being flown by the accident pilot 8 to 10 times in the preceding few years.

He reported that the takeoff roll and rotation “*seemed completely normal.*” Once the airplane had become airborne it felt like “*the airplane pitched up like the pilot was trying to get above or over the clouds.*” He further clarified that sometimes after takeoff the pilot would “*stabilize the airplane and then climb aggressively.*” Although he stated that it was “*a harder than normal pitching movement.*” Subsequently, he looked out the window and saw a glimpse of the ground, but that the airplane felt as though it was climbing up to the point where the impact sequence began.

4.0 Aircraft Flight Log

The aircraft flight log was recovered and documented. The flight log recorded a flight on April 22, 2019. The log entry indicated the following, under “Description of Inspections, Tests, Repairs and Alterations” and included the initials of the accident pilot and the airplane owner:

LFT-DWH¹⁶-Training-LFT

The entry indicated the recording tachometer time was 195.8 and the total time in service (which correlated to the next flight recorded beginning tachometer time) was 198.5 hours. The

¹⁶ David Wayne Hooks Memorial Airport, Spring Texas.

column titled “Today’s Flight” recorded 2.7 hours which correlated to the difference between the recording tachometer time and the total time in service time.

According to an online flight planning software the straight-line distance from LFT to DWH was 186 nautical miles on a course of 265°.

Additionally, the aircraft flight log also included an entry on March 13, 2017 that indicated a recorded tachometer time of 5,533.3 hours and the total time in service indicated 5,534.7 hours. The column titled “Today’s Flight” recorded 1.4 hours which correlated to the difference between the recording tachometer time and the total time in service time. The log entry indicated the following and included the initials of the accident pilot and the airplane owner:

LFT – LOCAL Training

That date and entry correlated with an endorsement in the accident pilot’s logbook for his flight review.

5.0 Weight and Balance

According to the Piper Aircraft Corporation, PA-31T, Cheyenne Pilot’s Operating Handbook (POH), Section 6 “Weight and Balance” stated in part:

In order to achieve the performance and flying characteristics which are designed into the airplane, it must be flown with the weight and center of gravity (C.G.) position within the approved operating range (envelope). Although the airplane offers flexibility of loading, when typically equipped it cannot be flown with the maximum number of adult passengers, full fuel tanks and maximum baggage. With the flexibility comes responsibility. The pilot must insure [sic] that the airplane is loaded within the loading envelope before takeoff, and that it stays within the loading envelope as fuel is consumed in flight.

Misloading carries consequences for any aircraft. An overloaded airplane will not take off, climb or cruise as well as a properly loaded one. The heavier the airplane is loaded, the less climb performance it will have.

Center of gravity is a determining factor in flight characteristics. If the C.G. is too far forward in any airplane, it may be difficult to rotate for takeoff or landing. If the C.G. is too far aft, the airplane may rotate prematurely on takeoff or tend to pitch up during climb. Longitudinal stability will be reduced. This can lead to inadvertent stalls and even spins; and spin recovery becomes more difficult as the center of gravity moves aft of the approved limit.

The figures below indicate the weight and balance of the aircraft and a graphical depiction of where calculated center of gravity would move as fuel was consumed. The weights in **bold** were the aircraft limitations from Section 2 “Limitations” of the POH. The “Rearward Limit Inches Aft of Datum” was listed as 138.0 inches¹⁷, Figure 2 below shows the CG envelope range. Additionally

¹⁷ The Datum Line is located 137.0 inches forward of the wing main spar centerline. Source: Piper Aircraft Corporation, Pilot’s Operating Handbook, Section 2.15 “Center of Gravity Limits (Landing Gear Extended).”

the POH listed the nacelle tanks as containing a maximum of 336 gallons of fuel. The weights in *italics* were estimated weights. All weights are in lbs.

Maximum Ramp Weight	9,050
Maximum Takeoff Weight	9,000
Maximum Landing Weight	9,000
Maximum Zero Fuel Weight	7,200

GENERAL WEIGHT AND BALANCE CHART

ITEM	WT. (LBS.)	ARM (IN.) ¹⁸	MOMENT (IN. LBS.)
BASIC AIRPLANE	5578.0	132.18	737279.00
PILOT'S SEAT ¹⁹	175.0	119.00	20825.00
COPILOT'S SEAT ²⁰	160.0	119.00	19040.00
SEAT NO. 3	185.0	159.00	29415.00
SEAT NO. 4	110.0	159.00	17490.00
SEAT NO. 5 ²¹	255.0	198.00	50490.00
SEAT NO. 6	125.0	198.00	24750.00
SEAT NO. 7 ²²	30.0	229.00	6870.00
FUEL GAL. (MAIN) ²³	2251.0		311300.00
FUEL GAL. (AUX)			0.00
BAGGAGE FORWARD (300 lb. max)		30.00	0.00
BAGGAGE AFT (200 lb. max)		255.00	0.00
TOTAL WEIGHT	8869.0	CG 137.27	TOTAL MOMENT 1217459.00
ZERO FUEL WEIGHT	6618.0	136.92	

Figure 1: Weight and Balance Calculation

¹⁸ Source: Attachment 7 - Pilot Operating Handbook [Excerpt]

¹⁹ Source: FAA - Pilot's most recent medical certificate application

²⁰ Source: FAA – Student Pilot's most recent application

²¹ Source: Survivors Interview with the IIC

²² The estimated weight was based on what was located on the accident scene and consisted of a soft sided cooler, 2 12-pack of beer and 2 bottles of wine.

²³ Source: Attachment 4 – FAA Record of Conversation with the Hangar Manager. The weight for 336 gallons of fuel was indicated in the POH, Section 6 Weight and Balance.

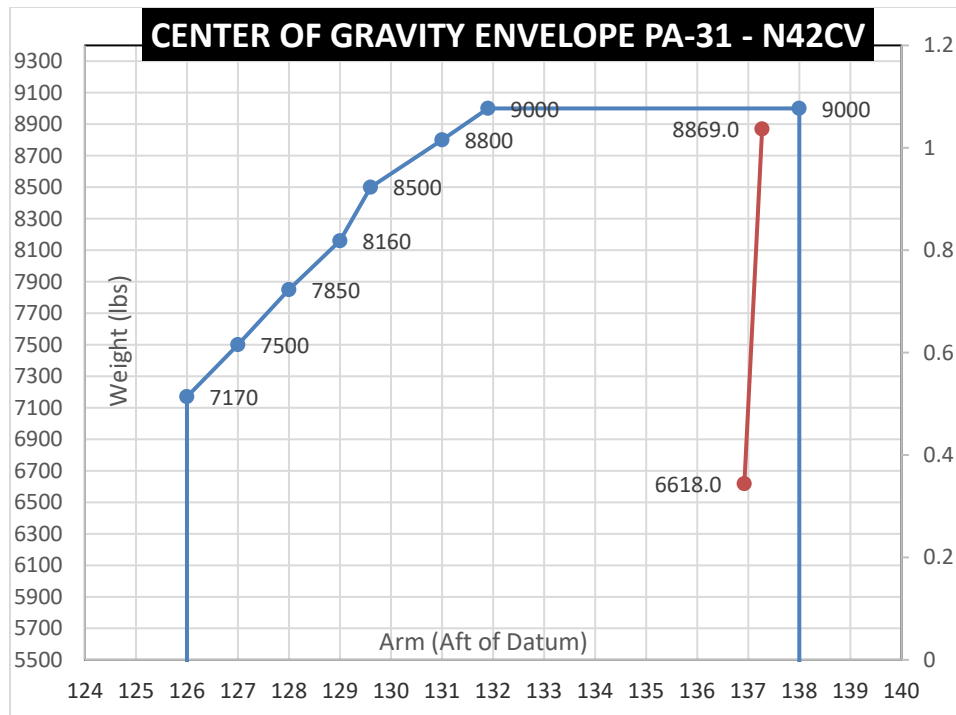


Figure 2: Center of Gravity Envelope

5.1 PA-31T General Loading Recommendations

According to the Piper Aircraft Corporation, PA-31T, Cheyenne Pilot's Operating Handbook, Section 6 "Weight and Balance" stated in part:

Load occupants from front to rear progressively and observe zero fuel weight limitations.

- (a) 1 to 5 Occupants - Load rear baggage compartment to capacity first.
- (b) 6 Occupants – Load front and rear baggage compartments equally.
- (c) 7 Occupants – Load front baggage compartment first and locate heaviest occupants forward. Fuel or baggage may have to be reduced.
- (d) 8 Occupants – Load front baggage compartment to bring C.G. within 138 inches rearward limit. Fuel must be reduced to keep the total weight within the 9,050 lb. Ramp Weight limit. Locate heaviest occupants forward.

NOTE

These general loading recommendations suggest normal proper loading procedures. The charts, graphs, instructions, and plotter should be checked to assure that the airplane is within the allowable weight vs. center of gravity envelope.

5.1.1 Seating Configuration

The PA-31T, Cheyenne, Pilot Operating Handbook, Section 7 "Description & Operation" provided the following seating configuration graph. It has been labeled for ease of reading.

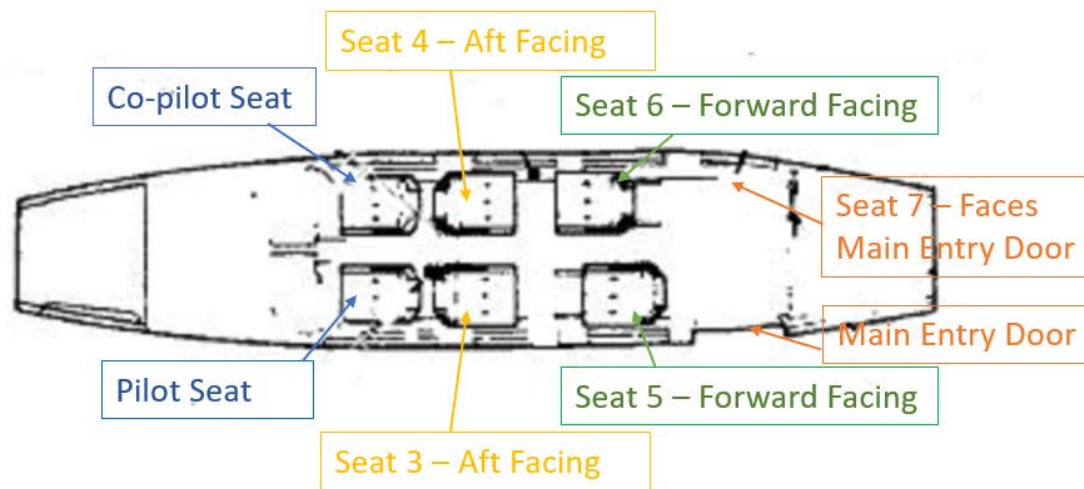


Figure 3: Seating Configuration

6.0 Additional Information

6.1 Flight Instructor Handbook

The Flight Instructor Handbook (FAA-H-8083-9A), Appendix C “Certificates, Ratings and Endorsements” provided, in part, the following guidance for flight instructor endorsements:

Flight instructors also have the responsibility to make logbook endorsements for pilots who are already certificated such as sport, recreational, private, commercial and instrument rated pilots, as well as flight instructors. Typical endorsements include but are not limited to flight reviews, instrument proficiency checks...

The flight instructor may add additional requirements or restrictions to the endorsements, such as an expiration date.

A review of the copies provided of the accident pilot’s logbook and a copy provided of the owner’s logbook did not indicate any additional requirements or restrictions.

Additionally, the Flight Instructor Handbook provided the following guidance, in part, on flight reviews and pilot proficiency:

The purpose of the flight review (required by 14 CFR section 61.56) is to provide for a regular evaluation of pilot skills and aeronautical knowledge. According to the regulation, it is also intended to offer pilots the opportunity to design a personal currency and proficiency program in consultation with a CFI. In effect, the flight review is the aeronautical equivalent of a regular medical checkup and ongoing health improvement program.

Professional flight instructors maintain knowledge and skill as instructors and as pilots. The flight instructor is at the leading edge of the aviation industry’s efforts to improve

aviation safety through additional training. The FAA encourages instructor pilot proficiency in two ways:

- By requiring a flight instructor to renew his or her certificate every 24 months
- Via the Pilot Proficiency Award Program (described in AC 61-91) ...

To maintain the operating privileges conferred by a pilot certificate or instrument rating, the pilot must have an endorsement for satisfactory completion of required recurrent training (e.g., flight review or instrument proficiency check).

6.2 Flight Review

Title 14 CFR 61.56 provided, in part, the following guidance and requirements for conducting a flight review:

(a) Except as provided in paragraphs (b) and (f) of this section, a flight review consists of a minimum of 1 hour of flight training and 1 hour of ground training. The review must include:

(1) A review of the current general operating and flight rules of part 91 of this chapter; and

(2) A review of those maneuvers and procedures that, at the discretion of the person giving the review, are necessary for the pilot to demonstrate the safe exercise of the privileges of the pilot certificate...

(c) Except as provided in paragraphs (d), (e), and (g) of this section, no person may act as pilot in command of an aircraft unless, since the beginning of the 24th calendar month before the month in which that pilot acts as pilot in command, that person has -

(1) Accomplished a flight review given in an aircraft for which that pilot is rated by an authorized instructor and

(2) A logbook endorsed from an authorized instructor who gave the review certifying that the person has satisfactorily completed the review.

(d) A person who has, within the period specified in paragraph (c) of this section, passed any of the following need not accomplish the flight review required by this section:

(1) A pilot proficiency check or practical test conducted by an examiner, an approved pilot check airman, or a U.S. Armed Force, for a pilot certificate, rating, or operating privilege.

(2) A practical test conducted by an examiner for the issuance of a flight instructor certificate, an additional rating on a flight instructor certificate, renewal of a flight instructor certificate, or reinstatement of a flight instructor certificate.

(e) A person who has, within the period specified in paragraph (c) of this section, satisfactorily accomplished one or more phases of an FAA-sponsored pilot proficiency award program²⁴ need not accomplish the flight review required by this section...

²⁴ The FAA WINGS - Pilot Proficiency Program was created to address the primary accident causal factors and was based on the premise that pilots who maintain currency and proficiency in the basics of flight will enjoy a safer and more stress-free flying experience. Source: https://www.faa.gov/wings/pub/learn_more.aspx A review of the FAA database did not show any entry for the accident pilot in the WINGS – Pilot Proficiency Program.

(h) The requirements of this section may be accomplished in combination with the requirements of § 61.57 and other applicable recent experience requirements at the discretion of the authorized instructor conducting the flight review...

6.3 Flight Review Endorsement

Advisory Circular (AC) 61-65H – Certification: Pilots and Flight and Ground Instructors, “Additional Endorsements,” dated August 27, 2018 provided an example of what was required to be endorsed in the pilots logbook by a qualified instructor at the completion of a flight review:

A.65 Completion of a flight review: § 61.56(a) and (c). *No logbook entry reflecting unsatisfactory performance on a flight review is required.*

I certify that [First name, MI, Last name], [grade of pilot certificate], [certificate number], has satisfactorily completed a flight review of § 61.56(a) on [date].

The accident pilot’s logbook, that was located, had the above statement templated at least 6 times, in the back of the pilot’s logbook in the “endorsements” section²⁵. One of those templated statements was endorsed on March 12, 2017, four of the templated statements were unfilled.

6.4 Recent Flight Experience

Title 14 *CFR* 61.57 provided, in part, the following guidance for recent flight experience required to act as a pilot in command of an aircraft:

(a) General experience.

(1) Except as provided in paragraph (e) of this section, no person may act as a pilot in command of an aircraft carrying passengers or of an aircraft certificated for more than one pilot flight crewmember unless that person has made at least three takeoffs and three landings within the preceding 90 days, and -

(i) The person acted as the sole manipulator of the flight controls; and

(ii) The required takeoffs and landings were performed in an aircraft of the same category, class, and type (if a type rating is required), and, if the aircraft to be flown is an airplane with a tailwheel, the takeoffs and landings must have been made to a full stop in an airplane with a tailwheel.

(2) For the purpose of meeting the requirements of paragraph (a)(1) of this section, a person may act as a pilot in command of an aircraft under day VFR or day IFR, provided no persons or property are carried on board the aircraft, other than those necessary for the conduct of the flight.

(3) The takeoffs and landings required by paragraph (a)(1) of this section may be accomplished in a full flight simulator or flight training device that is -

(i) Approved by the Administrator for landings; and

(ii) Used in accordance with an approved course conducted by a training center certificated under part 142 of this chapter...

²⁵ Source: Attachment 3 - Pilot’s Most Recent Located Logbook [Excerpt]

(c) Instrument experience. Except as provided in paragraph (e) of this section, a person may act as pilot in command under IFR or weather conditions less than the minimums prescribed for VFR only if:

(1) Use of an airplane, powered-lift, helicopter, or airship for maintaining instrument experience. Within the 6 calendar months preceding the month of the flight, that person performed and logged at least the following tasks and iterations in an airplane, powered-lift, helicopter, or airship, as appropriate, for the instrument rating privileges to be maintained in actual weather conditions, or under simulated conditions using a view-limiting device that involves having performed the following -

(i) Six instrument approaches.

(ii) Holding procedures and tasks.

(iii) Intercepting and tracking courses through the use of navigational electronic systems.

(2) Use of a full flight simulator, flight training device, or aviation training device for maintaining instrument experience. A pilot may accomplish the requirements in paragraph (c)(1) of this section in a full flight simulator, flight training device, or aviation training device provided the device represents the category of aircraft for the instrument rating privileges to be maintained and the pilot performs the tasks and iterations in simulated instrument conditions. A person may complete the instrument experience in any combination of an aircraft, full flight simulator, flight training device, or aviation training device...

(d) Instrument proficiency check.

(1) Except as provided in paragraph (e) of this section, a person who has failed to meet the instrument experience requirements of paragraph (c) of this section for more than six calendar months may reestablish instrument currency only by completing an instrument proficiency check. The instrument proficiency check must consist of at least the following areas of operation:

(i) Air traffic control clearances and procedures;

(ii) Flight by reference to instruments;

(iii) Navigation systems;

(iv) Instrument approach procedures;

(v) Emergency operations; and

(vi) Postflight procedures.

(2) The instrument proficiency check must be -

(i) In an aircraft that is appropriate to the aircraft category;

(ii) For other than a glider, in a full flight simulator or flight training device that is representative of the aircraft category; or

(iii) For a glider, in a single-engine airplane or a glider.

(3) The instrument proficiency check must be given by -

(i) An examiner;

(ii) A person authorized by the U.S. Armed Forces to conduct instrument flight tests, provided the person being tested is a member of the U.S. Armed Forces;

- (iii) A company check pilot who is authorized to conduct instrument flight tests under part 121, 125, or 135 of this chapter or subpart K of part 91 of this chapter, and provided that both the check pilot and the pilot being tested are employees of that operator or fractional ownership program manager, as applicable;*
- (iv) An authorized instructor; or*
- (v) A person approved by the Administrator to conduct instrument practical tests...*

(e) Exceptions.

(1) Paragraphs (a) and (b) of this section do not apply to a pilot in command who is employed by a part 119 certificate holder authorized to conduct operations under part 125 when the pilot is engaged in a flight operation for that certificate holder if the pilot in command is in compliance with §§ 125.281 and 125.285 of this chapter.

(2) This section does not apply to a pilot in command who is employed by a part 119 certificate holder authorized to conduct operations under part 121 when the pilot is engaged in a flight operation under part 91 or 121 for that certificate holder if the pilot in command complies with §§ 121.436 and 121.439 of this chapter.

(3) This section does not apply to a pilot in command who is employed by a part 119 certificate holder authorized to conduct operations under part 135 when the pilot is engaged in a flight operation under parts 91 or 135 for that certificate holder if the pilot in command is in compliance with §§ 135.243 and 135.247 of this chapter...

F. LIST OF ATTACHMENTS

Attachment 1 – Recent Flight Training Interview and Certificate

Attachment 2 – Pilot's 72-Hour History

Attachment 3 – Pilot's Most Recent Located Logbook [Excerpts]

Attachment 4 – FAA Record of Conversation with the Hangar Manager

Attachment 5 – Interview Summaries with Company Personnel

Attachment 6 – Aircraft Flight Log [Excerpts]

Attachment 7 – Pilot Operating Handbook [Excerpts]

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