



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

# Aviation Investigation Final Report

<b>Location:</b>	Harlan, Kentucky	<b>Accident Number:</b>	ERA23FA048
<b>Date &amp; Time:</b>	November 3, 2022, 10:09 Local	<b>Registration:</b>	N84R
<b>Aircraft:</b>	Beech A36	<b>Aircraft Damage:</b>	Destroyed
<b>Defining Event:</b>	VFR encounter with IMC	<b>Injuries:</b>	1 Fatal
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The pilot was a physician, and the purpose of flight was to attend to his patients for scheduled appointments at a medical office near the destination airport. He had frequently flown into the airport, which was located in mountainous terrain. Review of flight track data found that the flight followed a route that was consistent with what the pilot had entered into a flight planning application shortly before flight. Upon arrival in the destination airport area, the pilot announced over the airport's common traffic advisory frequency that he would circle to land. There were no further communications recorded from the pilot.

Flight track data revealed that the airplane completed a total of three approaches to the runway. The weather conditions reported at the time of the approaches were low instrument flight rule (IFR) conditions. Based upon hourly weather observations at the airport, surveillance video, and a pilot-rated witness located at the airport, visibility was likely restricted to 200-300 ft due to fog and low clouds. Based upon a witness statement and flight track data, it is likely that on each approach the pilot descended to a lower altitude in search of the runway environment. On the third and final approach, the airplane impacted a ravine and steep rock wall about 50 ft below the runway elevation and 375 ft short of the runway threshold (the runway sat atop of rising terrain, with a valley below). Based on this information, it is likely that the pilot descended below the runway elevation on final approach, which resulted in the pilot's controlled flight into terrain while searching for the runway environment.

The pilot did not file a flight plan, nor communicate with air traffic control during the flight after departing under visual flight rules (VFR). The airport had one published GPS circling instrument approach procedure. The airplane's flight path and altitude were not consistent with this approach, and the weather conditions were far below published visibility and cloud ceiling minimums for the approach. Additionally, a few weeks before the accident, the airport had

issued a Notice to Air Mission, which advised that the runway end identifier lights, and all airport lights, were out of service. Due to the extremely low visibility and clouds, it is unlikely that the runway lights would have aided the pilot's search for the runway environment.

Review of the pilot's past flights into the accident airport found that he routinely conducted teardrop circling maneuvers to land in poor weather. Within the 90 days before the accident, a total of four flights were identified in which the pilot was able to land by circling over the airport under IFR or low IFR weather conditions. The approaches were likely conducted under VFR and into instrument meteorological conditions (IMC), given that the altitudes and flight track flown were not consistent with the published instrument approach procedure.

There was one additional flight located in the pilot's logbook, about four years before the accident, where remarks noted that he attempted an approach to the accident airport to check the low IFR conditions. The remarks noted that the low IFR conditions were confirmed during an approach, and he subsequently diverted to a nearby airport that he also frequently flew to. This nearby airport's weather reporting station, around the time of the accident, reported similar low IFR conditions to the accident airport.

There was no record that the pilot received a weather briefing before the flight, and it is not known what information he reviewed. Had he checked the weather, he would have seen that the destination airport was reporting low IFR conditions, as well as the other nearby airport that he had diverted to on the flight four years prior. While the pilot had logged several hours of actual instrument flight experience in the preceding 90 days before the accident, he did not possess instrument currency for the accident flight (nor had he filed an IFR flight plan).

The investigation found that the pilot routinely flew VFR to the accident airport and conducted circling maneuvers to land into IMC. The pilot's repeated VFR flight into IMC, his decision to fly an approach that was not consistent with the instrument approach procedure published for the airport, and lack of instrument currency demonstrated an anti-authority hazardous attitude, in which he repeatedly disregarded regulations and demonstrated poor judgement. It is possible that the pilot's decision to conduct the flight was in-part influenced by his scheduled appointments with his patients, which would have increased the external pressures to complete the approach to landing.

Toxicology testing revealed that the pilot had used phentermine, a stimulant and anorectic medication used to treat obesity. The drug also has a possible side benefit of increased alertness. Methamphetamine was also detected at low levels in some of the pilot's tissue specimens; methamphetamine is also a central nervous stimulant and can be medically indicated to treat obesity. Due to extensive injuries, no blood specimens were available for toxicological testing, so whether these medications were at therapeutic levels could not be determined.

The pilot's use of prohibited substances, in addition to his decisions to habitually fly to the airport under VFR and into IMC, is a further example of poor judgment and an anti-authority

hazardous attitude. The detection of these medications was more emblematic of his disregard of safety and rules than of impairment. Thus, while stimulants were detected in the pilot’s tissues, it is unlikely that the effects of the pilot’s use of phentermine and methamphetamine contributed to this accident.

The sedating antihistamine chlorpheniramine was also detected in the pilot’s liver and muscle tissue, which is commonly taken to treat colds. Due to the lack of specimens available for toxicology testing, it is unknown whether the pilot had experienced side effects or if chlorpheniramine was at therapeutic levels. Thus, it could not be determined if the effects from the pilot’s use of chlorpheniramine was a factor in this accident.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The pilot’s visual flight rules flight into instrument meteorological conditions during an approach to land at an airport in mountainous terrain, which resulted in controlled flight into terrain. Contributing to the accident was the pilot’s hazardous anti-authority attitude.

Findings	
Personnel issues	Decision making/judgment - Pilot
Environmental issues	Low ceiling - Decision related to condition
Environmental issues	Low visibility - Decision related to condition
Personnel issues	Personality - Pilot
Environmental issues	Time/schedule pressure - Decision related to condition

# Factual Information

## History of Flight

Approach-VFR pattern final	VFR encounter with IMC (Defining event)
Approach-VFR pattern final	Controlled flight into terr/obj (CFIT)

On November 3, 2022, about 1009 eastern daylight time, a Beech A36 airplane, N84R, was destroyed when it impacted terrain at the Tucker-Guthrie Memorial Airport (I35) Harlan, Kentucky. The private pilot was fatally injured. The airplane was operated by the pilot as a personal flight conducted under the provisions of Title 14 *Code of Federal Regulations* Part 91.

According to the pilot’s family and I35 airport personnel, the pilot frequently flew into the accident airport for work. The pilot was a physician, and he was scheduled to see patients in Harlan, Kentucky on the day of the accident.

According to automatic dependent surveillance – broadcast (ADS-B) data, the airplane departed from Knoxville Downtown Island Airport (DKX), Knoxville, Tennessee, at 0932. There was no record of a flight plan or weather briefing for the flight, nor was there any communication with air traffic control.

The flight track was consistent with a route of flight the pilot had entered into the flight planning application Foreflight about 0929. The route contained multiple user defined waypoints towards the I35 airport. The reported ADS-B altitude data for the entirety of the flight was in error and did not correspond to a reliable value.

Review of archived audio recordings of the I35 common traffic advisory frequency found that as the pilot entered the traffic pattern area he stated, “Harlan Tucker Guthrie bonanza 84 romeo is two and a half to the west will circle for landing Harlan Tucker Guthrie.” There were no further radio communications recorded.

The flight track data revealed that the airplane completed multiple approaches and maneuvers over the airport environment. About 0958, the airplane flew over runway 8 and made a slight right turn followed by a left 180° teardrop turn. This was the first pass over runway 8. About 1000, the airplane flew over runway 26 on an extended centerline before it made another left teardrop 180° turn back toward runway 8. About 1002, the airplane made a second pass over runway 8 before it made a slight right turn again and another left 180° teardrop turn. About 1005, the airplane flew over runway 26 on a longer extended centerline before it made another left 180° teardrop turn to intercept an extended centerline course for runway 8. This was the third and final approach to runway 8.

About 1009, the airplane followed an extended centerline course toward runway 8. The last recorded position was at 1009:54, about 0.1 nautical mile from the runway 8 threshold. Subsequently, the airplane impacted a ravine and steep rock wall about 50 ft below the runway elevation and 375 ft from the runway 8 threshold. Figure 1 displays an overview of the ADS-B flight track.

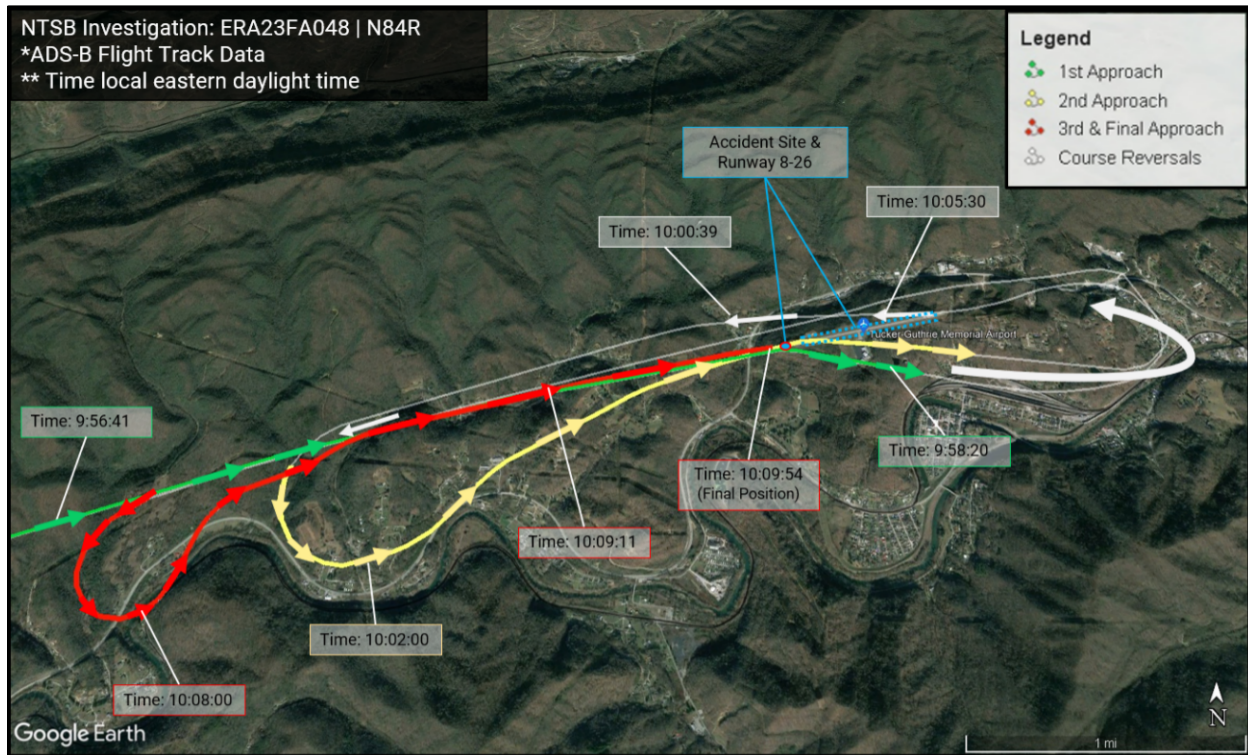


Figure 1 - ADS-B flight track displaying the three approaches to runway 8 in addition to the 180° left teardrop turns (displayed in white). The green line represents the first approach. The yellow line represents the second approach and the red line represents the third and final approach.

According to a pilot-rated witness that was at the I35 airport terminal, he heard the accident airplane complete two approaches to runway 8. He did not visually observe the accident airplane due to the fog and low clouds. The first approach seemed to be high, and the second approach sounded “really low.” For both passes the witness reported that the engine noise was a steady piston engine sound, with no noticeable increases or decreases in power.

After the second pass, the witness assumed the airplane had performed a missed approach. The engine sound became more distant from the airport, and he did not hear the accident airplane again, nor did he hear the accident airplane’s eventual impact with terrain.



## Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	56, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Unknown
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	Yes
<b>Medical Certification:</b>	BasicMed Without waivers/limitations	<b>Last FAA Medical Exam:</b>	April 12, 2021
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	March 30, 2021
<b>Flight Time:</b>	3754 hours (Total, all aircraft), 3421 hours (Total, this make and model), 3535 hours (Pilot In Command, all aircraft), 58 hours (Last 90 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Review of the pilot's electronic logbook found that his most recent flight review and instrument proficiency check (IPC) was completed on March 30, 2021. In the past six months, the pilot logged three instrument approaches. The last flight logged was on October 28, 2022. The pilot did not meet the instrument currency requirements as prescribed in Federal Aviation Regulation § 61.57(c) Recent flight experience, which in-part required the completion of six instrument approaches.

Review of commercially available flight track data for the accident airplane, and review of the pilot's logbook from August 1, 2022, to November 1, 2022, found that the pilot had completed over 35 flights originating from either McGhee Tyson Airport (TYS), Knoxville, Tennessee, or DKX airport (the accident departure airport), to Middlesboro Bell County Airport (1A6), Middlesboro, Kentucky, or I35 airport. The 1A6 airport was along the route of flight between DKX and I35, located about 23 miles southwest from I35. In the three months before the accident, the pilot landed at I35 at least 15 times.

The investigation further reviewed recent commercially available flight track data for the accident airplane and recent flights the pilot had logged to I35 airport. The review identified that the pilot routinely landed at I35 when the airport was reporting instrument flight rule (IFR) conditions or low IFR conditions. The flight track approaches varied; however, multiple flights displayed a similar circling maneuver and approach to runway 8 as in the accident flight.

On September 27, 2022, the pilot completed a flight to I35 and landed at 0950. The Meteorological Aerodrome Reports (METARs) published around the time of the approach indicated IFR conditions. The METAR published nearest to the time of the landing observed a broken cloud ceiling at 100 ft and 10 statute miles of visibility. The flight track data showed that the flight completed a similar circling maneuver pattern over I35 as compared to the accident flight; however, the flight landed after the second approach to runway 8. The flight track was not consistent with the published GPS-A instrument approach procedure.

On September 6, 2022, the pilot completed a flight to I35 and landed at 1048. The METARs published around the time of the approach indicated IFR conditions. The METAR published nearest to the time of the landing observed a broken ceiling at 500 ft and 10 statute miles of visibility. Review of the flight track showed that the pilot completed a straight-in approach to landing, which was not consistent with the GPS-A instrument approach procedure.

On September 1, 2022, the pilot completed a flight to I35 and landed at 1004. The METARs published around the time of the approach indicated IFR conditions with a broken ceiling at 300 ft and 10 statute miles of visibility. Shortly before the approach, visibility was reported as 7 statute miles and the ceiling was overcast at 100 ft. The pilot completed a straight-in approach to runway 8; however, before landing, a 360° right turn was completed before rejoining the final approach and landing on runway 8. The track was not consistent with the GPS-A instrument approach procedure.

On August 30, 2022, the pilot completed a flight to I35 and landed at 0912. The METARs at I35 published around the time of the approach indicated IFR conditions.

On August 28, 2018, an additional notable flight to I35 was identified in the pilot's logbook. The flight track data were not available. The logbook remarks entry stated that the weather conditions at I35 were IFR, with cloud ceilings reported at 100 ft and visibility at 1/4 statute miles. The remarks further stated that he conducted a "fly by" to check the ceiling at I35 and "confirmed" the weather conditions. He then diverted to 1A6 airport. The logbook remark stated: "IFR at i35 did a fly by to check ceiling reported at 100 and .25 viz. Confirmed, went back to 1a6."

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Beech	<b>Registration:</b>	N84R
<b>Model/Series:</b>	A36	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1977	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	E-1146
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	6
<b>Date/Type of Last Inspection:</b>	December 12, 2021 Annual	<b>Certified Max Gross Wt.:</b>	3600 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	5416 Hrs as of last inspection	<b>Engine Manufacturer:</b>	Continental Motors
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	IO-520-BA
<b>Registered Owner:</b>	On file	<b>Rated Power:</b>	285 Horsepower
<b>Operator:</b>	On file	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Instrument (IMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	I35, 1552 ft msl	<b>Distance from Accident Site:</b>	0 Nautical Miles
<b>Observation Time:</b>	10:15 Local	<b>Direction from Accident Site:</b>	80°
<b>Lowest Cloud Condition:</b>	200 ft AGL	<b>Visibility</b>	0.25 miles
<b>Lowest Ceiling:</b>	Overcast / 200 ft AGL	<b>Visibility (RVR):</b>	175 ft
<b>Wind Speed/Gusts:</b>	/	<b>Turbulence Type Forecast/Actual:</b>	None / None
<b>Wind Direction:</b>		<b>Turbulence Severity Forecast/Actual:</b>	N/A / N/A
<b>Altimeter Setting:</b>	30.37 inches Hg	<b>Temperature/Dew Point:</b>	8°C / 8°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Knoxville, TN (DKX)	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Harlan, KY (I35)	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	09:32 Local	<b>Type of Airspace:</b>	Class G

According to METAR observations around the time of the accident, the I35 airport was experiencing low IFR conditions. About 1015, a METAR observed that the visibility was less than 1/4 statute miles, and the ceiling was overcast 200 ft above ground level (agl). Review of METARS at the I35 airport found that from 0815 to 1055 the visibility was less than 1/4 statute mile, and the ceiling was overcast 200 ft agl. About 1115, about one hour after the accident,



the I35 METAR reported VFR conditions, with the visibility improving to 10 statute miles, and scattered clouds at 200 ft agl.

Surveillance video screenshots were provided by the I35 airport at the time of the accident, as viewed in Figure 2.



Figure 2 - Surveillance video screenshot at the time of the accident, as viewed from the airport terminal.

The estimated visibility (based on measurements to known objects via aerial imagery) was limited to about 175 ft due to fog and low clouds. An additional image was provided (figure 3), that displayed improved visibility about an hour and a half after the accident.



*Figure 3 - Surveillance video screenshot taken at 1130 the day of the accident, showing that the fog had burnt off and visibility had improved, as viewed from the airport terminal.*

The pilot-rated witness reported that near the time of the accident the weather conditions were very foggy. He reported that he could see no farther than the south runway edge area and the red 8-26 runway sign from the terminal fueling area. As measured with aerial imagery, this distance was about 250 - 300 ft.

At Middlesboro Bell County Airport (1A6), Middlesboro, Kentucky, about 23 nautical miles southwest of I35, multiple METARs an hour before and after the accident time reported low IFR conditions due to visibility restricted by fog and mist and low cloud ceilings.

The weather conditions at the departure airport were VFR at the time of the pilot's takeoff.

## Airport Information

<b>Airport:</b>	TUCKER-GUTHRIE MEML I35	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	1564 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	8	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	3461 ft / 75 ft	<b>VFR Approach/Landing:</b>	None

According to the FAA chart supplement, the I35 airport was located in mountainous terrain. The airport sat atop a mined and flattened mountain top at an elevation of 1,563 ft mean sea level. The terrain below was an elevation of about 1,172 ft msl. The airport had one runway (8-26), which was 3,461 ft long and 75 ft wide. The airport was equipped with a light beacon and runway 8 was equipped with runway end identifier lights. Approaching runway 8, the terrain featured a steep rock wall ravine about 350 ft before the runway threshold.

The I35 airport had one published instrument approach procedure. The GPS-A instrument approach procedure was offset from the runway heading by 10°. The circling minimum descent altitude was 2,920 ft mean sea level (1,356 ft above ground level [agl]). The weather minimums prescribed on the approach procedure were a ceiling of 1,400 ft agl and 1 ¼ mile visibility for Category A aircraft (or 1 ½ visibility for Category B). The pilot's flight track and maneuvering over the airport was not consistent with this instrument approach procedure.

At the time of the accident, a Notice to Air Mission (NOTAM) was in effect noting that all airport lighting was out of service. The NOTAM was issued on October 19, 2022, and its estimated duration was until October 20, 2023.

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Fatal	<b>Aircraft Damage:</b>	Destroyed
<b>Passenger Injuries:</b>	N/A	<b>Aircraft Fire:</b>	On-ground
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 Fatal	<b>Latitude, Longitude:</b>	36.857933,-83.365427

All major portions of the airplane were located; a post-impact fire consumed a majority of the cockpit, fuselage, and portions of the left wing. Figure 4 provides an overview of the airport environment approaching runway 8 and the distribution of wreckage.

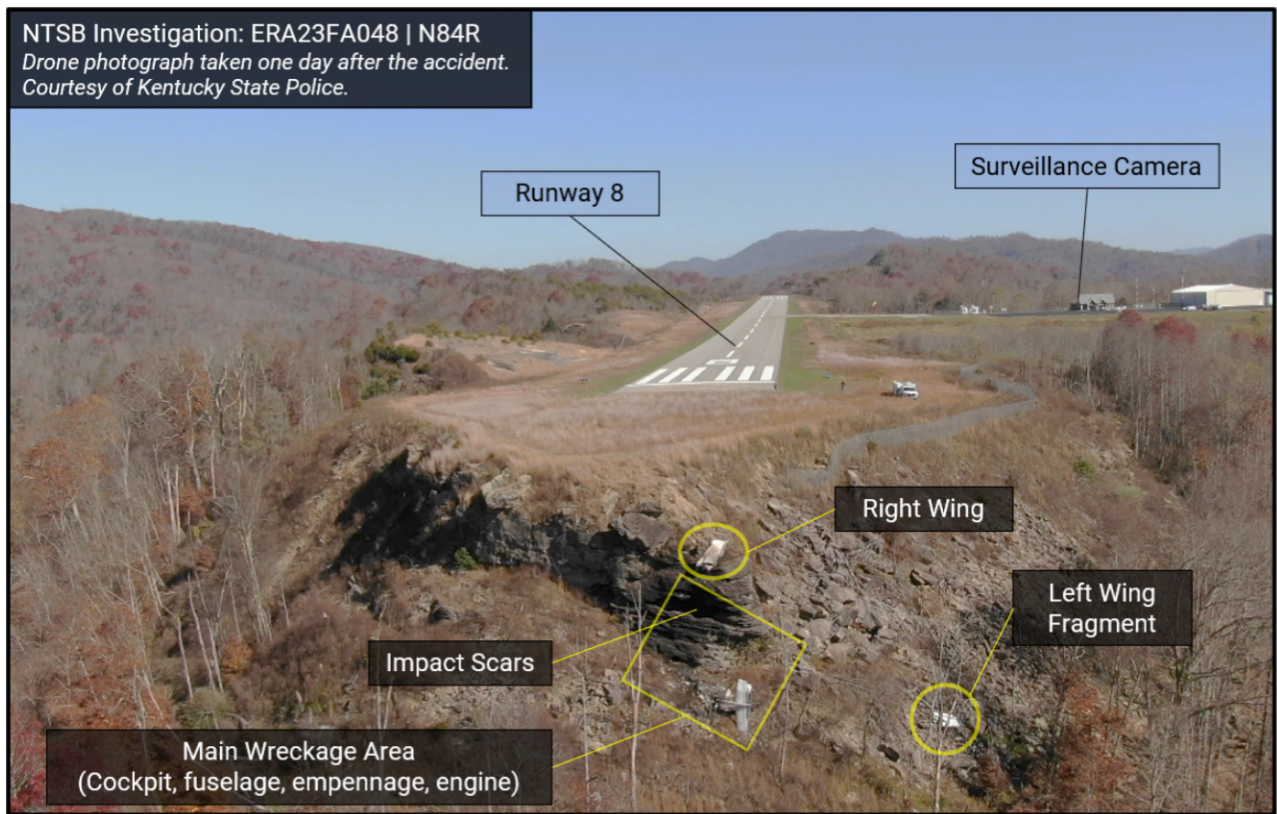


Figure 4: Overview of the airport environment and distribution of wreckage

Flight control cable continuity was established from the elevator, rudder, and elevator trim tabs to the fire-damaged forward cabin area. The left and right aileron control cable ends were identified in the forward cabin area and traced to the outboard wing areas where they were separated in tensile overload. Due to the impact and fire damage, the position of the flaps, landing gear, and fuel selector could not be determined.

The cockpit, switches, levers, and flight instruments were all severely damaged or entirely consumed by fire. It was not possible to obtain any instrument reading from the recovered instrumentation. The attitude indicator was disassembled, and its gyro and housing exhibited rotational scoring.

The engine had separated from its mount and the airframe. A large fracture hole was observed at the right forward area of the engine crankcase, which was consistent with impact related damage, and which prevented engine rotation. Examination of the engine and its components revealed no evidence of preimpact mechanical malfunctions or failures. Only one propeller blade was recovered at the accident site. The blade exhibited tip curling and leading edge gouging.

The vacuum pump remained attached to the engine accessory section. When the pump was partially disassembled, its gears were intact and the unit appeared normal.



Postaccident examination of the airframe and engine discovered no preimpact mechanical malfunctions or failures.

## Medical and Pathological Information

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According to the autopsy report from the Office of the State Medical Examiner, Frankfort, Kentucky, the pilot's cause of death was extensive blunt force injuries and thermal burns, and the manner of death was accident. No significant natural disease was identified.

Toxicology testing performed for the coroner's office was positive for methamphetamine in the pilot's brain tissue. Toxicology testing by the FAA Forensic Sciences Laboratory detected methamphetamine in the pilot's brain tissue at 40 nanograms per gram (ng/g) and in his lung and muscle tissue; results were inconclusive in his liver tissue and his kidney tissue was unsuitable for analysis. The stimulant phentermine was detected in his liver, brain, kidney, muscle, and lung tissue. The sedating antihistamine chlorpheniramine and the non-sedating cough suppressant dextromethorphan and its metabolite dextrorphan were detected in the pilot's liver and muscle tissue. No blood specimens were available for analysis.

Methamphetamine is a Schedule II controlled substance that is a central nervous system stimulant. It is medically indicated to treat attention deficit hyperactivity disorder (ADHD), narcolepsy, and obesity. Methamphetamine has a high potential for abuse, and providers are cautioned to sparingly prescribe the medication and not to prescribe methamphetamine to combat fatigue or replace rest in normal persons. The use of methamphetamine may impair the ability to engage in hazardous activities such as driving a motor vehicle. The FAA does not allow a medical certificate to be issued if the pilot is using methamphetamine.

Phentermine is a Schedule IV prescription medication indicated for treating obesity in patients with a body mass index 30 kilograms per meter squared or greater. Phentermine is a stimulant and has similar activity to amphetamine. There is a risk for abuse and dependence and so should be only prescribed as a short-term adjunct for weight reduction. Adverse reactions can include overstimulation, dizziness, insomnia, tremor, and headache. Phentermine may impair the ability to operate machinery or drive a motor vehicle. The FAA does not allow a medical certificate to be issued if the pilot is using phentermine.

Chlorpheniramine is a sedating antihistamine available over the counter to temporarily relieve symptoms of allergies and colds such as runny nose or watery eyes. The FAA provides guidance on wait times before flying after using this medication; post-dose observation time is 60 hours, and the medication is not for daily use.

## **Additional Information**

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According to the FAA Pilot's Handbook of Aeronautical Knowledge, Chapter 2 Aeronautical Decision Making, hazardous attitudes and antidotes were discussed. The chapter stated in part:

### **Hazardous Attitudes and Antidotes**

Being fit to fly depends on more than just a pilot's physical condition and recent experience. For example, attitude affects the quality of decisions. Attitude is a motivational predisposition to respond to people, situations, or events in a given manner. Studies have identified five hazardous attitudes that can interfere with the ability to make sound decisions and exercise authority properly: anti-authority, impulsivity, invulnerability, macho, and resignation.

Hazardous attitudes contribute to poor pilot judgment but can be effectively counteracted by redirecting the hazardous attitude so that correct action can be taken. Recognition of hazardous thoughts is the first step toward neutralizing them. After recognizing a thought as hazardous, the pilot should label it as hazardous, then state the corresponding antidote. Antidotes should be memorized for each of the hazardous attitudes so they automatically come to mind when needed.

The antidote provided for anti-authority was 'Follow the rules. They are usually right.'

## **Preventing Similar Accidents**

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Manage Risk: Good Decision-making and Risk Management Practices are Critical (SA-023)

### **The Problem**

Although few pilots knowingly accept severe risks, accidents can also result when several risks of marginal severity are not identified or are ineffectively managed by the pilot and



compound into a dangerous situation. Accidents also result when the pilot does not accurately perceive situations that involve high levels of risk. Ineffective risk management or poor aeronautical decision-making can be associated with almost any type of fatal general aviation accident.

### **What can you do?**

- Develop good decision-making practices that will allow you to identify personal attitudes that are hazardous to safe flying, apply behavior modification techniques, recognize and cope with stress, and effectively use all resources. Understand the safety hazards associated with human fatigue and strive to eliminate fatigue contributors in your life.
- Understand that effective risk management takes practice. It is a decision-making process by which you can systematically identify hazards, assess the degree of risk, and determine the best course of action.
- Be honest with yourself and your passengers about your skill level and proficiency. Refuse to allow external pressures, such as the desire to save time or money or the fear of disappointing passengers, to influence you to attempt or continue a flight in conditions in which you are not comfortable.
- Be honest with yourself and the FAA about your medical condition. If you have a medical condition or are taking any medication, do not fly until your fitness for flight has been thoroughly evaluated.
- Plan ahead with flight diversion or cancellation alternatives, and brief your passengers about the alternatives before the flight.

See <https://www.nts.gov/Advocacy/safety-alerts/Documents/SA-023.pdf> for additional resources.

The NTSB presents this information to prevent recurrence of similar accidents. Note that this should not be considered guidance from the regulator, nor does this supersede existing FAA Regulations (FARs).

## Administrative Information

**Investigator In Charge (IIC):** Gerhardt, Adam

**Additional Participating Persons:** Sean B. Smith; FAA/FSDO; Louisville, KY  
Peter J. Basile; Textron Aviation; Wichita, KS

**Original Publish Date:** April 25, 2024

**Last Revision Date:**

**Investigation Class:** [Class 3](#)

**Note:**

**Investigation Docket:** <https://data.nts.gov/Docket?ProjectID=106244>

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).