



Aviation Investigation Final Report

Location:	Vineyard Haven, Massachusetts	Accident Number:	ERA23LA300
Date & Time:	July 15, 2023, 15:15 Local	Registration:	N444RR
Aircraft:	Piper PA46	Aircraft Damage:	Substantial
Defining Event:	Medical event	Injuries:	1 Fatal, 1 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

According to the passenger, the 79-year-old pilot was performing a go-around when he experienced a medical emergency and “blacked out.” The passenger took control of the airplane and made an emergency gear-up landing, which resulted in substantial damage to the left wing. First responders found that the pilot was in cardiac arrest upon extricating him from the airplane.

A review of the pilot’s medical history revealed his incapacitation was most likely due to a sudden in-flight cardiac event that led to the cardiac arrest. The event was likely related to the pilot’s significant underlying heart disease, which included coronary artery disease and damage from a previous heart attack.

The Federal Aviation Administration (FAA) granted the pilot a series of Authorizations for Special Issuance of third-class medical certification based on annual medical testing and favorable status reports from the pilot’s primary care and cardiology physicians. However, records from the pilot’s most recent aviation medical examination did not include any indication that the pilot reported his history of coronary artery disease, heart attack, or coronary artery bypass graft (CABG) to the Aviation Medical Examiner (AME). There also was no indication that the pilot presented his previously issued Authorization of Special Issuance letter to the AME, as required, and his most recent batch of medical reports submitted to the FAA provided no obvious indication that his incapacitation risk was substantially higher than the FAA had previously found acceptable when it issued his third-class medical certification by Special Issuance.

The pilot reported using several medications. However, whether effects from the pilot’s medication contributed to his incapacitation could not be determined.

Probable Cause and Findings

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

The pilot's incapacitation due to a sudden in-flight cardiac event, which resulted in a gear-up landing.

Findings

Personnel issues	Cardiovascular - Pilot
------------------	------------------------

Factual Information

History of Flight

Approach-VFR go-around	Medical event (Defining event)
Landing	Landing gear not configured
Landing	Landing area undershoot
Landing	Abnormal runway contact

On July 15, 2023, at 1515 eastern daylight time, a Piper PA46-500TP airplane, N444RR, was substantially damaged when it was involved in an accident near Vineyard Haven, Massachusetts. The pilot was fatally injured, and the passenger sustained minor injuries. The flight was operated as Title 14 *Code of Federal Regulations* Part 91 personal flight.

According to the passenger, the pilot had just performed a go-around while on approach to runway 6 at Martha’s Vineyard Airport (MVY), Vineyard Haven, Massachusetts, when he experienced a medical emergency and “blacked out.” The passenger, who was not a pilot, took the flight controls and made an emergency, gear-up landing on airport property. The airplane bounced several times after touchdown, then came to rest upright with the left wing fractured. According to the passenger, there were “no mechanical issues whatsoever” that would have precluded normal operation of the airplane.

According to FAA airman records, the pilot’s most recent third-class medical certificate was issued June 1, 2023. Previously, the pilot had been granted a third-class Authorization for Special Issuance medical certificate, which required that he provide extensive documentation of his health conditions to the FAA.

A review of the pilot’s medical history revealed that he had high blood pressure since 1970, which he treated with medications, as well as coronary artery disease with prior heart attack, and coronary artery bypass graft (CABG) procedures in 1981 and 1996. He also had a history of atrial fibrillation since 2019, which he treated with blood-thinning medication to reduce the stroke risk posed by the condition.

The pilot’s first aviation medical examination after either of his CABG procedures was in 2002. Between 2002 and 2005, there was no documentation that his heart disease was reported to or identified by the FAA. The first aviation medical examination at which the pilot reported a history of coronary artery disease and prior heart attack was in 2006. Between 2006 and 2022, the FAA granted the pilot a series of Authorizations for Special Issuance of third-class medical certification, based on annual medical testing and favorable status reports from the pilot's primary care and cardiology physicians.

The pilot's most recent Authorization for Special Issuance was granted in July 2022. The Authorization letter did not authorize Aviation Medical Examiner (AME) issuance of medical certification at the next examination, due June 2023. Instead, the letter indicated that the FAA would decide about granting the pilot another Authorization of Special Issuance based on review of additional information that the pilot was required to submit in advance of that examination. The FAA had not yet received that information by the time the examination occurred on June 1, 2023, and had not granted any new Authorization for Special Issuance or completed any action to change the status of the pilot's medical certificate at the time of the accident.

At the pilot's June 1, 2023, aviation medical examination, he reported a history of high blood pressure and atrial fibrillation. He reported using the medications apixaban, atorvastatin, chlorthalidone, doxazosin, eplerenone, and potassium chloride. Records from the examination did not include any indication that the pilot reported his history of coronary artery disease, heart attack, or CABG to the AME. There also was no indication that the pilot presented his Authorization of Special Issuance letter to the AME, as required. The AME, who had not previously evaluated the pilot, noted the pilot's atrial fibrillation, documented that the pilot met *Conditions AMEs Can Issue* criteria for high blood pressure, and did not note any other cardiac history. The AME then issued the pilot a third-class medical certificate limited by a requirement to use corrective lenses to meet vision standards at all distances.

On June 8, 2023, 7 days after the medical examination, the FAA received the medical documents that were needed to reevaluate the Authorization for Special Issuance for the pilot. These included a March 2023 laboratory report, a May 2023 echocardiogram report, a May 2023 treadmill stress echocardiogram report, and a May 2023 report of a 24-hour cardiac monitoring study. Additionally, the FAA received May 2023 letters from the pilot's primary care and cardiology physicians. Similar to previous such letters in the pilot's FAA medical certification files, these letters characterized the pilot as being in stable, outstanding health, with above-average exercise capacity, great compliance with medications and monitoring, and an excellent prognosis.

Following the accident, first responders found that the pilot was in cardiac arrest upon extricating him from the airplane. He regained a pulse with resuscitative efforts and was transported to a community hospital before being transferred by air ambulance to another hospital, where he died five days after the accident. During his hospital stay, he did not have any sustained ventricular arrhythmia, nor did he have conclusive electrocardiographic or echocardiographic findings of a new heart attack, although biomarkers indicative of heart muscle damage were elevated following his cardiac arrest. The cause of his initial cardiac arrest was not definitively diagnosed but was documented as likely scar-mediated ventricular arrhythmia versus less-likely acute coronary syndrome.

The Commonwealth of Massachusetts Office of the Chief Medical Examiner (OCME) performed an autopsy of the pilot. According to the autopsy report, his cause of death was

hypertensive and atherosclerotic cardiovascular disease, and his manner of death was natural. His heart was enlarged, with thickening of the ventricular walls and interventricular septum. Coronary artery disease was also noted.

The pilot's toxicological testing after the accident included negative hospital tests for ethanol and tricyclic antidepressants using serum collected at 1809 on the date of the accident. Testing performed at the request of the OCME detected alprazolam at 3.1 ng/mL in serum/plasma collected at 2008 on the accident date. Testing performed by the FAA Forensic Sciences Laboratory detected alprazolam at 4 ng/mL, as well as atorvastatin, chlorthalidone, doxazosin, and tadalafil, in serum collected at 2220 on the accident date. Other medications detected by the pilot's toxicological testing were documented in hospital records as having been administered to him after the accident, and before specimens were collected for investigative purposes.

Pilot Information

Certificate:	Private	Age:	79, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	June 1, 2023
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	3955 hours (Total, all aircraft)		

Passenger Information

Certificate:		Age:	Female
Airplane Rating(s):		Seat Occupied:	Right
Other Aircraft Rating(s):		Restraint Used:	
Instrument Rating(s):		Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	
Medical Certification:		Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N444RR
Model/Series:	PA46 500TP	Aircraft Category:	Airplane
Year of Manufacture:	2006	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	4697278
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	March 1, 2023 Annual	Certified Max Gross Wt.:	5092 lbs
Time Since Last Inspection:		Engines:	1 Turbo prop
Airframe Total Time:		Engine Manufacturer:	Pratt & Whitney
ELT:	Installed	Engine Model/Series:	PT6A-42A
Registered Owner:	ACCESS YACHT SALES INC	Rated Power:	500 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	MVY, 59 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	14:53 Local	Direction from Accident Site:	255°
Lowest Cloud Condition:	Scattered / 2200 ft AGL	Visibility	10 miles
Lowest Ceiling:	Broken / 5000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	13 knots / 19 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	190°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.99 inches Hg	Temperature/Dew Point:	27°C / 24°C
Precipitation and Obscuration:	Light - None - Rain		
Departure Point:	White Plains, NY (HPN)	Type of Flight Plan Filed:	
Destination:	Vineyard Haven, MA	Type of Clearance:	IFR
Departure Time:	14:13 Local	Type of Airspace:	Class D

Airport Information

Airport:	Martha's Vineyard Airport MVY	Runway Surface Type:	Asphalt
Airport Elevation:	67 ft msl	Runway Surface Condition:	
Runway Used:	6	IFR Approach:	Visual
Runway Length/Width:	5504 ft / 100 ft	VFR Approach/Landing:	Go around

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal, 1 Minor	Latitude, Longitude:	41.385161,-70.620422

Administrative Information

Investigator In Charge (IIC):	Read, Leah
Additional Participating Persons:	Craig Souza; FAA/FSDO; Boston, MA
Original Publish Date:	July 22, 2025
Last Revision Date:	
Investigation Class:	Class 3
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=192636

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](#).