Aviation Investigation Final Report

Location:	Florence, Oregon	**Accident Number:**	WPR14FA244
Date & Time:	June 15, 2014, 09:45 Local	**Registration:**	N28718
Aircraft:	GRUMMAN AMERICAN AVN. CORP. AA 5B	**Aircraft Damage:**	Destroyed
Defining Event:	VFR encounter with IMC	**Injuries:**	2 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

A witness reported observing the noninstrument-rated private pilot departing the airport in marginal visual meteorological conditions; the pilot was conducting a personal flight. The witness further reported that, about 1 hour later, he could hear airplane engine noise approaching the airport but that he could not see the airplane due to low ceilings and visibility. The witness also noted that the weather conditions were quickly deteriorating. Another witness reported that, while he was walking along the beach, he heard airplane engine noise in the low clouds, which he estimated were about 100 ft above ground level (agl). This witness reported that a small airplane then emerged from the clouds above the river traveling westbound away from the airport and that the airplane then "pitched up and reentered the cloud[s]." Shortly after, he saw the airplane exit the low clouds about 400 yards offshore in a near-vertical attitude with the right wing low before it impacted the ocean. No radar data depicting the accident flight were available. A majority of the airplane was not located in the ocean; therefore, postaccident airframe and engine examinations could not be conducted.

An automatic weather observation system located 2 1/2 miles from the accident site reported overcast clouds at 300 ft agl and visibility of 1 1/4 miles around the time of the accident. Witnesses estimated that the actual ceiling and visibility were lower near the accident site. In addition, a band of low stratiform-type clouds was present over the coast and the accident site. The low cloud ceiling and restricted visibility conditions would have been conducive to the development of spatial disorientation as the noninstrument-rated pilot maneuvered in the low-visibility conditions. The airplane's rapid descent from the clouds was consistent with the pilot's flight into instrument meteorological conditions and subsequent loss of airplane control due to spatial disorientation.

Postaccident toxicology testing detected 6-ß-natrexol, the primary metabolite of naltrexone, in the pilot's blood and liver. Naltrexone alone is not known to be generally impairing, but early in treatment, its use can precipitate symptoms of withdrawal. Without more information about the underlying condition that

led to the pilot's use of naltrexone, it could not be determined whether or not the condition contributed to the accident.

Probable Cause and Findings

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

The noninstrument-rated pilot's visual flight into instrument meteorological conditions, which resulted in his spatial disorientation and the subsequent loss of airplane control.

Findings

Personnel issues	Spatial disorientation - Pilot
Personnel issues	Aircraft control - Pilot
Environmental issues	Low ceiling - Effect on operation
Environmental issues	Low visibility - Effect on operation
Aircraft	(general) - Not attained/maintained

Factual Information

History of Flight

Maneuvering	Loss of visual reference
Maneuvering	VFR encounter with IMC (Defining event)
Maneuvering	Loss of control in flight
Uncontrolled descent	Collision with terr/obj (non-CFIT)

On June 15, 2014, about 0945 Pacific daylight time, a Grumman American AA-5B, N28718, impacted the Pacific Ocean about 3 miles northwest of Florence Municipal Airport (6S2), Florence, Oregon. The private pilot and one passenger were fatally injured, and the airplane was destroyed. The airplane was registered to and operated by the pilot under the provisions of 14 Code of Federal Regulations Part 91 as a personal flight. Marginal visual meteorological conditions prevailed for the flight, and no flight plan was filed. The flight originated from 6S2 at about 0845.

Witnesses reported that they observed the pilot depart the airport in marginal visual meteorological conditions. About one hour later a witness heard an airplane engine noise approaching the airport but could not see the airplane due to low ceilings and visibility, the witness also noted that the weather conditions were quickly deteriorating. Another witness reported that, while he was walking along the beach, he heard an airplane engine noise in the low clouds estimated to be 100 ft. above ground level (AGL). The witness reported that a small airplane then emerged from the clouds above the river traveling westbound away from the airport. The pilot then "pushed the throttle up, pitched up, and reentered the cloud[s]." Shortly after, he observed the airplane exit the low overcast about 400 yards offshore in a near vertical attitude with the right wing low before it impacted the ocean.

There was no radar data available of the accident airplane or the departure airport.

Pilot Information

Certificate:	Private	**Age:**	68,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Unknown
Other Aircraft Rating(s):	None	**Restraint Used:**	Unknown
Instrument Rating(s):	None	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	Yes
Medical Certification:	Class 3 With waivers/limitations	**Last FAA Medical Exam:**	July 29, 2013
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	
Flight Time:	(Estimated) 660 hours (Total, all aircraft), 30 hours (Last 90 days, all aircraft)		

The pilot, age 69, held a private pilot certificate for airplane single-engine land issued December 19,

2008, and a third-class airman medical certificate issued July 29, 2013 with the limitation that he must wear corrective lenses. The pilot's logbook was not recovered for examination. On the application for his most recent medical certificate, he reported 660 total flight hours. The pilot was not instrument rated.

Aircraft and Owner/Operator Information

Aircraft Make:	GRUMMAN AMERICAN AVN. CORP.	**Registration:**	N28718
Model/Series:	AA 5B	**Aircraft Category:**	Airplane
Year of Manufacture:	1978	**Amateur Built:**	
Airworthiness Certificate:	Unknown	**Serial Number:**	AA5B0772
Landing Gear Type:	Tricycle	**Seats:**	
Date/Type of Last Inspection:	April 1, 2014 Annual	**Certified Max Gross Wt.:**	2401 lbs
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:	3062.4 Hrs as of last inspection	**Engine Manufacturer:**	LYCOMING
ELT:	Not installed	**Engine Model/Series:**	IO360 SER
Registered Owner:	MUNGER RICHARD S	**Rated Power:**	180 Horsepower
Operator:	MUNGER RICHARD S	**Operating Certificate(s) Held:**	None

The four-seat, low-wing, fixed-gear airplane, serial number AA5B-0772, was manufactured in 1978. It was powered by a Lycoming O-360-A4K 180-hp engine and equipped with a Sensenich model 76EM8S10-0-64 fixed-pitch propeller. Review of copies of maintenance logbook records revealed an annual inspection was completed on April 1, 2014, at a recorded tachometer reading of 1013.0 hours, airframe total time of 3062.4 hours, and 968.1 engine hours since major overhaul. The tachometer and the Hobbs hour-meter were not located at the accident site which precluded determining the current readings.

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument (IMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	6S2,51 ft msl	**Distance from Accident Site:**	3 Nautical Miles
Observation Time:	09:55 Local	**Direction from Accident Site:**	148°
Lowest Cloud Condition:		**Visibility**	1 miles
Lowest Ceiling:	Overcast / 300 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	5 knots /	**Turbulence Type Forecast/Actual:**	/ None
Wind Direction:	270°	**Turbulence Severity Forecast/Actual:**	/ N/A
Altimeter Setting:	29.98 inches Hg	**Temperature/Dew Point:**	13°C / 13°C
Precipitation and Obscuration:	Heavy - None - Drizzle		
Departure Point:	Florence, OR (6S2)	**Type of Flight Plan Filed:**	None
Destination:	Florence, OR (6S2)	**Type of Clearance:**	None
Departure Time:	08:45 Local	**Type of Airspace:**	Class G

A review of recorded data from the 6S2 automated weather observation station 2 ½ miles southeast of the accident site revealed that, at 0955, conditions were wind from 270 degrees at 5 knots, visibility of 1 ¼ mile, temperature and dew point temperature 13 degrees Celsius, and overcast clouds at 300 feet above ground level (agl).

The Geostationary Operational Environmental Satellite 15 (GOES-15) infrared image at 0945 PDT (1645Z) depicted a band of low stratiform type clouds over the Oregon coast and the accident site with cloud tops near 13,500 feet.

Airport Information

Airport:	Florence Municipal Airport 6S2	**Runway Surface Type:**	
Airport Elevation:	51 ft msl	**Runway Surface Condition:**	Unknown
Runway Used:		**IFR Approach:**	None
Runway Length/Width:		**VFR Approach/Landing:**	None

Wreckage and Impact Information

Crew Injuries:	1 Fatal	**Aircraft Damage:**	Destroyed
Passenger Injuries:	1 Fatal	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	2 Fatal	**Latitude, Longitude:**	43.976387,-124.106941(est)

The airplane was believed to have impacted the Pacific Ocean about ¼ mile from the shoreline. The main wreckage was not located; however, various components that washed up on shore were recovered. Some of the items recovered were the airplanes right wing flap, rudder, elevators, right landing gear wheel, pieces of airplane sheet metal, and various parts of the airplane's interior. The remainder of the airplane was not located.

Due to the limited number of recovered airplane components, a postaccident airframe and engine examination was not completed.

Medical and Pathological Information

An autopsy was performed on the pilot on June 20, 2014 by the Oregon State Police Medical Examiner. The cause of death was reported as blunt force trauma.

The pilot had reported no chronic medical conditions and no chronic medication use to the Federal Aviation Administration (FAA) or his personal physician. The autopsy identified moderate single vessel coronary artery disease without evidence of a pervious scar or muscle injury. Postaccident toxicology conducted by the FAA Civil Aerospace Medical Institute identified 6-β-natrexol, the primarily metabolite of naltrexone, in the pilot's blood and liver.

Naltrexone has only one use and it is an aid for people with alcohol or opioid abuse to maintain sobriety. Naltrexone alone is not known to be generally impairing, but early in treatment its use can precipitate symptoms of withdrawal. Despite multiple attempts, the reason for the pilot's use of this drug was unable to be determined.

Administrative Information

Investigator In Charge (IIC):	Link, Samantha
Additional Participating Persons:	Marty Conroy; Federal Aviation Administration; Hillsboro, OR
Original Publish Date:	May 16, 2016
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=89439