



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

# Aviation Investigation Final Report

|                                |   |                         |             |
|--------------------------------|---|-------------------------|-------------|
| <b>Location:</b>               | Bealeton, Virginia                        | <b>Accident Number:</b> | ERA10CA500  |
| <b>Date &amp; Time:</b>        | September 24, 2010, 12:00 Local           | <b>Registration:</b>    | N65648      |
| <b>Aircraft:</b>               | Boeing A75N1                              | <b>Aircraft Damage:</b> | Substantial |
| <b>Defining Event:</b>         | Loss of control on ground                 | <b>Injuries:</b>        | 2 None      |
| <b>Flight Conducted Under:</b> | Part 91: General aviation - Instructional |                         |             |

## Analysis

According to the certificated flight instructor (CFI), the purpose of the flight was for the pilot under instruction (PUI) to conduct airwork and grass field landings. The PUI was seated in the rear seat and the CFI was seated in the front seat. The PUI stated that the CFI was on the flight controls in conjunction with him since it was going to be his first landing on a grass strip. The CFI stated that he advised the PUI that the PUI had authority over the flight controls to which he received an acknowledgement. On the first touchdown, the tailwheel-equipped airplane bounced and became airborne, then touched down a second time. After the second touchdown, when the airplane began turning to the right, the flight instructor took over authority of the flight controls and applied left rudder, which was ineffective. The airplane then ground-looped 90 degrees and struck a cluster of trees. Post-accident examination revealed that the airplane incurred damage to both lower wings. Both pilots reported no preimpact mechanical malfunctions or anomalies with the airplane.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot under instruction's improper recovery from a bounced landing and the flight instructor's delayed remedial action, which resulted in a ground loop and collision with trees.

## Findings

|                         |   |
|-------------------------|---|
| <b>Aircraft</b>         | Landing flare - Not attained/maintained |
| <b>Personnel issues</b> | Aircraft control - Pilot                |
| <b>Personnel issues</b> | Delayed action - Instructor/check pilot |

## Factual Information

### History of Flight

|                                |  |
|--------------------------------|--|
| <b>Landing-flare/touchdown</b> | Abnormal runway contact                    |
| <b>Landing-flare/touchdown</b> | Loss of control on ground (Defining event) |
| <b>Landing-landing roll</b>    | Collision with terr/obj (non-CFIT)         |

### Flight instructor Information

|                                  |   |  |                   |
|----------------------------------|---|--|-------------------|
| <b>Certificate:</b>              | Airline transport; Commercial; Flight instructor  | <b>Age:</b>                              | 87,Male           |
| <b>Airplane Rating(s):</b>       | Multi-engine land   | <b>Seat Occupied:</b>                    | Front             |
| <b>Other Aircraft Rating(s):</b> | None  | <b>Restraint Used:</b>                   |                   |
| <b>Instrument Rating(s):</b>     | Airplane  | <b>Second Pilot Present:</b>             | Yes               |
| <b>Instructor Rating(s):</b>     | Airplane single-engine  | <b>Toxicology Performed:</b>             | No                |
| <b>Medical Certification:</b>    | Class 2 With waivers/limitations  | <b>Last FAA Medical Exam:</b>            | August 12, 2009   |
| <b>Occupational Pilot:</b>       | UNK   | <b>Last Flight Review or Equivalent:</b> | November 22, 2009 |
| <b>Flight Time:</b>              | (Estimated) 20995 hours (Total, all aircraft), 60 hours (Total, this make and model), 10000 hours (Pilot In Command, all aircraft), 17 hours (Last 30 days, all aircraft) |  |                   |

### Pilot Information

|                                  |   |  |               |
|----------------------------------|---|--|---------------|
| <b>Certificate:</b>              | Private   | <b>Age:</b>                              | 26,Male       |
| <b>Airplane Rating(s):</b>       | Single-engine land; Multi-engine land   | <b>Seat Occupied:</b>                    | Rear          |
| <b>Other Aircraft Rating(s):</b> | None  | <b>Restraint Used:</b>                   |               |
| <b>Instrument Rating(s):</b>     | Airplane  | <b>Second Pilot Present:</b>             | Yes           |
| <b>Instructor Rating(s):</b>     | None  | <b>Toxicology Performed:</b>             | No            |
| <b>Medical Certification:</b>    | Class 3 With waivers/limitations  | <b>Last FAA Medical Exam:</b>            | July 3, 2009  |
| <b>Occupational Pilot:</b>       | UNK   | <b>Last Flight Review or Equivalent:</b> | June 26, 2010 |
| <b>Flight Time:</b>              | 665 hours (Total, all aircraft), 13 hours (Total, this make and model), 588 hours (Pilot In Command, all aircraft), 10 hours (Last 90 days, all aircraft), 4 hours (Last 30 days, all aircraft) |  |               |

## Aircraft and Owner/Operator Information

|                                      |                              |                                       |                 |
|--------------------------------------|------------------------------|---------------------------------------|-----------------|
| <b>Aircraft Make:</b>                | Boeing                       | <b>Registration:</b>                  | N65648          |
| <b>Model/Series:</b>                 | A75N1                        | <b>Aircraft Category:</b>             | Airplane        |
| <b>Year of Manufacture:</b>          |                              | <b>Amateur Built:</b>                 |                 |
| <b>Airworthiness Certificate:</b>    | Aerobatic                    | <b>Serial Number:</b>                 | 75-972          |
| <b>Landing Gear Type:</b>            | Tailwheel                    | <b>Seats:</b>                         | 2               |
| <b>Date/Type of Last Inspection:</b> | March 10, 2010 Annual        | <b>Certified Max Gross Wt.:</b>       | 2950 lbs        |
| <b>Time Since Last Inspection:</b>   |                              | <b>Engines:</b>                       | 1 Reciprocating |
| <b>Airframe Total Time:</b>          | 3985 Hrs at time of accident | <b>Engine Manufacturer:</b>           | Continental     |
| <b>ELT:</b>                          | Installed, not activated     | <b>Engine Model/Series:</b>           | W670-6N         |
| <b>Registered Owner:</b>             | Pegasus Air LLC              | <b>Rated Power:</b>                   | 220 Horsepower  |
| <b>Operator:</b>                     | Pegasus Air LLC              | <b>Operating Certificate(s) Held:</b> | None            |

## Meteorological Information and Flight Plan

|   |                                  |   |                  |
|---|----------------------------------|---|------------------|
| <b>Conditions at Accident Site:</b>     | Visual (VMC)                     | <b>Condition of Light:</b>                  | Day              |
| <b>Observation Facility, Elevation:</b> | HWY, 336 ft msl                  | <b>Distance from Accident Site:</b>         | 4 Nautical Miles |
| <b>Observation Time:</b>                | 13:01 Local                      | <b>Direction from Accident Site:</b>        | 20°              |
| <b>Lowest Cloud Condition:</b>          | Clear                            | <b>Visibility</b>                           | 10 miles         |
| <b>Lowest Ceiling:</b>                  | None                             | <b>Visibility (RVR):</b>                    |                  |
| <b>Wind Speed/Gusts:</b>                | 7 knots / None                   | <b>Turbulence Type Forecast/Actual:</b>     | /                |
| <b>Wind Direction:</b>                  | 200°                             | <b>Turbulence Severity Forecast/Actual:</b> | /                |
| <b>Altimeter Setting:</b>               | 30.07 inches Hg                  | <b>Temperature/Dew Point:</b>               | 34°C / 14°C      |
| <b>Precipitation and Obscuration:</b>   | No Obscuration; No Precipitation |   |                  |
| <b>Departure Point:</b>                 | Manassas, VA (HEF )              | <b>Type of Flight Plan Filed:</b>           | VFR              |
| <b>Destination:</b>                     | Bealton, VA (29VA)               | <b>Type of Clearance:</b>                   | None             |
| <b>Departure Time:</b>                  | 11:30 Local                      | <b>Type of Airspace:</b>                    |                  |

## Airport Information

|                             |                             |                                  |            |
|-----------------------------|-----------------------------|----------------------------------|------------|
| <b>Airport:</b>             | Rhynalds Ranch Airport 29VA | <b>Runway Surface Type:</b>      | Grass/turf |
| <b>Airport Elevation:</b>   | 285 ft msl                  | <b>Runway Surface Condition:</b> | Dry        |
| <b>Runway Used:</b>         | 28                          | <b>IFR Approach:</b>             | None       |
| <b>Runway Length/Width:</b> | 2500 ft / 120 ft            | <b>VFR Approach/Landing:</b>     | Full stop  |

## Wreckage and Impact Information

|                            |        |                             |                           |
|----------------------------|--------|-----------------------------|---------------------------|
| <b>Crew Injuries:</b>      | 2 None | <b>Aircraft Damage:</b>     | Substantial               |
| <b>Passenger Injuries:</b> |        | <b>Aircraft Fire:</b>       | None                      |
| <b>Ground Injuries:</b>    | N/A    | <b>Aircraft Explosion:</b>  | None                      |
| <b>Total Injuries:</b>     | 2 None | <b>Latitude, Longitude:</b> | 38.524166,-77.736389(est) |

## Administrative Information

|  |   |
|--|---|
| <b>Investigator In Charge (IIC):</b>     | Gunther, Todd   |
| <b>Additional Participating Persons:</b> | Keith Clark; FAA/FSDO; Herndon, VA  |
| <b>Original Publish Date:</b>            | March 16, 2011  |
| <b>Last Revision Date:</b>               |   |
| <b>Investigation Class:</b>              | <a href="#">Class</a>   |
| <b>Note:</b>                             | This accident report documents the factual circumstances of this accident as described to the NTSB.   |
| <b>Investigation Docket:</b>             | <a href="https://data.nts.gov/Docket?ProjectID=77393">https://data.nts.gov/Docket?ProjectID=77393</a> |

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