



# Aviation Investigation Final Report

<b>Location:</b>	DAYTONA BEACH, Florida	<b>Accident Number:</b>	MIA00LA035
<b>Date &amp; Time:</b>	December 1, 1999, 10:55 Local	<b>Registration:</b>	N35RH
<b>Aircraft:</b>	Howard Aircraft Corp. DGA-15P	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The airplane's new owner was familiarizing himself with the landing characteristics of the 1943 Howard DGA-1 in crosswind conditions, with the seller aboard, when he attempted a go-around following a bounced landing that resulted in a loss of control, a skid off the left runway edge, a left wingtip strike of the ground, and collision with a tree.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain directional control during an attempted go-around, and the subsequent wing tip strike of the ground and collision with a tree. A factor in the loss of control was the crosswind conditions present during the landing attempt.

## Findings

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER  
Phase of Operation: GO-AROUND (VFR)

### Findings

1. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
2. (F) WEATHER CONDITION - CROSSWIND

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Occurrence #2: ON GROUND/WATER COLLISION WITH OBJECT  
Phase of Operation: GO-AROUND (VFR)

Findings

3. OBJECT - TREE(S)

## Factual Information

On December 1, 1999, at about 1055 eastern standard time, a Howard DGA-15P, N35RH, registered to a private individual, operating as a Title 14 CFR Part 91 personal flight, crashed on landing at the Spruce Creek Airport, Daytona Beach, Florida. Visual meteorological conditions prevailed and no flight plan was filed. The airplane received substantial damage and the commercial-rated pilot and airline transport-rated passenger were not injured. The flight departed Flagler County Airport, Bunnell, Florida, about 20 minutes before the accident.

According to the pilot, he had very recently bought the airplane from the passenger, and was in the process of familiarizing himself with its handling characteristics. They had conducted airborne familiarization en route from Spruce Creek to Flagler, where they landed and fuelled. They had returned to Spruce Creek, and were conducting takeoffs and landings on runway 05 into a "significant" left crosswind. On the second landing, intended to be a full stop, the airplane's left main wheel touched down first, the airplane bounced, and the pilot attempted a go-around that resulted in a skid off the left side of the runway into an adjacent tree. The pilot stated surface winds at Spruce Creek were from 360 degrees at 18 to 22 knots, and severe turbulence. The pilot stated that he understood that the seller's responsibility was not as a co-pilot or safety pilot, and was a pilot-rated passenger only.

According to FAA personnel, the pilot stated he lost control of the airplane during the go-around attempt, the left wing struck the ground, and the airplane impacted a large oak tree off the left side of the runway. The temporary registration showing the transfer of ownership was properly displayed, and had been properly forwarded to FAA Aircraft Registry, Oklahoma City. The passenger made no attempt to take over the controls. The Daytona Beach FAA ATCT, located 7 miles north of Spruce Creek, reported winds at 1053, were from 010 degrees at 15 knots, gusting to 23 knots.

## Pilot Information

<b>Certificate:</b>	Commercial	<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>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 Valid Medical-w/ waivers/lim	<b>Last FAA Medical Exam:</b>	January 16, 1998
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	595 hours (Total, all aircraft), 3 hours (Total, this make and model), 401 hours (Pilot In Command, all aircraft), 28 hours (Last 90 days, all aircraft), 6 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Howard Aircraft Corp.	<b>Registration:</b>	N35RH
<b>Model/Series:</b>	DGA-15P DGA-15P	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	Yes
<b>Airworthiness Certificate:</b>		<b>Serial Number:</b>	760
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	August 2, 1999 Annual	<b>Certified Max Gross Wt.:</b>	4500 lbs
<b>Time Since Last Inspection:</b>	13 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	1700 Hrs	<b>Engine Manufacturer:</b>	P&W
<b>ELT:</b>	Installed, activated, did not aid in locating accident	<b>Engine Model/Series:</b>	985-AN12
<b>Registered Owner:</b>	RICHARD F. KELSO	<b>Rated Power:</b>	450 Horsepower
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	None
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	DAB ,34 ft msl	<b>Distance from Accident Site:</b>	7 Nautical Miles
<b>Observation Time:</b>	10:53 Local	<b>Direction from Accident Site:</b>	360°
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	Broken / 4000 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	15 knots / 23 knots	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	10°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30 inches Hg	<b>Temperature/Dew Point:</b>	13°C / 2°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	BUNNELL , FL (X47 )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	(7FL6)	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	10:35 Local	<b>Type of Airspace:</b>	Class E

## Airport Information

<b>Airport:</b>	SPRUCE CREEK 7FL6	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	24 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	5	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	4000 ft / 100 ft	<b>VFR Approach/Landing:</b>	Go around;Traffic pattern

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	1 None	<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>	29.169454,-81.139511(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Stone, Alan
<b>Additional Participating Persons:</b>	LARRY L STORIE; ORLANDO , FL
<b>Original Publish Date:</b>	November 30, 2000
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=47852">https://data.nts.gov/Docket?ProjectID=47852</a>

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