



Aviation Investigation Final Report

Location:	CONWAY, South Carolina	Accident Number:	ATL91LA112
Date & Time:	June 15, 1991, 13:36 Local	Registration:	N2GV
Aircraft:	PIPER PA-12	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation		

Analysis

THE BANNER TOW PILOT WAS CRUISING ADJACENT TO A LOCAL GOLF COURSE AT 1000 AGL WHEN HE EXPERIENCED A GRADUAL LOSS OF ENGINE POWER FOLLOWED BY A COMPLETE LOSS OF ENGINE POWER. ATTEMPTS TO REGAIN FULL POWER AND RESTART THE ENGINE FAILED. THE PILOT MANEUVERED THE AIRPLANE INTO POSITION FOR AN APPROACH TO A FAIRWAY AND RELEASED THE BANNER. THE AIRPLANE CAME TO REST 15 FEET OFF THE DEPARTURE END OF THE FAIRWAY IN A WOODED AREA. SUBSEQUENT EXAMINATIONS OF THE AIRPLANE REVEALED THAT THE #2 EXHAUST VALVE HAD FAILED. THE ENGINE WAS LAST OVERHAULED 2556 HOURS PRIOR TO THIS ACCIDENT. THE EXHAUST VALVE'S TIME IN SERVICE WAS NOT DETERMINED.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: FAILURE OF THE NUMBER TWO EXHAUST VALVE, WHICH RESULTED IN LOSS OF ENGINE POWER.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF
Phase of Operation: CRUISE

Findings

1. (C) ENGINE ASSEMBLY, VALVE, EXHAUST - FAILURE, TOTAL

Occurrence #2: FORCED LANDING
Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: ON GROUND/WATER COLLISION WITH OBJECT
Phase of Operation: LANDING - ROLL

Findings
2. OBJECT - TREE(S)

Factual Information

Pilot Information

Certificate:	Commercial	Age:	54, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim	Last FAA Medical Exam:	April 5, 1991
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	4293 hours (Total, all aircraft), 1581 hours (Total, this make and model), 4058 hours (Pilot In Command, all aircraft), 260 hours (Last 90 days, all aircraft), 100 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N2GV
Model/Series:	PA-12 PA-12	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	12-824
Landing Gear Type:	Tailwheel	Seats:	3
Date/Type of Last Inspection:	August 23, 1990 Annual	Certified Max Gross Wt.:	1750 lbs
Time Since Last Inspection:	180 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2556 Hrs	Engine Manufacturer:	LYCOMING
ELT:		Engine Model/Series:	O-320-A2B
Registered Owner:	SKY SIGNS, INC.	Rated Power:	150 Horsepower
Operator:	SKY SIGNS, INC.	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	CRE ,33 ft msl	Distance from Accident Site:	25 Nautical Miles
Observation Time:	16:47 Local	Direction from Accident Site:	270°
Lowest Cloud Condition:	Unknown	Visibility	5 miles
Lowest Ceiling:	Broken	Visibility (RVR):	
Wind Speed/Gusts:	9 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	190°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	31°C / 23°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	CONWAY , SC	Type of Flight Plan Filed:	None
Destination:	N MYRTLE BEACH , SC	Type of Clearance:	None
Departure Time:	13:26 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	33.789993,-79.150657(est)

Administrative Information

Investigator In Charge (IIC):	Powell, Phillip
Additional Participating Persons:	DAVID ANDERSON; COLUMBIA , SC
Original Publish Date:	December 15, 1992
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=8420

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