



# Aviation Investigation Final Report

<b>Location:</b>	WINDSOR, Virginia	<b>Accident Number:</b>	BF088LA069
<b>Date &amp; Time:</b>	July 24, 1988, 18:15 Local	<b>Registration:</b>	N31253
<b>Aircraft:</b>	BELLANCA 7GCAA	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation		

## Analysis

WHILE ON LONG FINAL AFTER A GLIDER TOW FLIGHT THE ENG LOST POWER. A FORCED LANDING WAS MADE IN AN OPEN FIELD AND WHEN THE PLT APPLIED BRAKES, THE ACFT NOSED OVER. POST ACCIDENT EXAM OF THE ACFT REVEALED 1 GALLON OF FUEL REMAINED. THE PLT REPORTED THAT HE INITIATED THE FLT WITH 3 GALLONS OF FUEL ON BOARD. THE ACFT OPERATOR STATED IT WAS STANDARD PROCEDURE FOR THE TOW ACFT TO TAKEOFF WITH THE MINIMUM AMOUNT OF FUEL ON BOARD TO COMPLETE THE FLIGHT.

## Probable Cause and Findings

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

### Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL  
Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

#### Findings

1. (C) PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND
2. (C) FUEL SUPPLY - INADEQUATE - PILOT IN COMMAND
3. (C) FLUID,FUEL - EXHAUSTION

Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY  
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Occurrence #3: NOSE OVER  
Phase of Operation: LANDING - ROLL

Findings

4. (F) TERRAIN CONDITION - SOFT

## Factual Information

### Pilot Information

<b>Certificate:</b>	Commercial; Military	<b>Age:</b>	28, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Front
<b>Other Aircraft Rating(s):</b>	Glider	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	Glider	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Expired	<b>Last FAA Medical Exam:</b>	May 1, 1986
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	1900 hours (Total, all aircraft), 170 hours (Total, this make and model), 1810 hours (Pilot In Command, all aircraft), 82 hours (Last 90 days, all aircraft), 12 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	BELLANCA	<b>Registration:</b>	N31253
<b>Model/Series:</b>	7GCAA 7GCAA	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	25072
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	December 9, 1987 Annual	<b>Certified Max Gross Wt.:</b>	1650 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	2664 Hrs	<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	Not installed	<b>Engine Model/Series:</b>	O-320-A2B
<b>Registered Owner:</b>	TIDWATER SOARING SOCIETY	<b>Rated Power:</b>	150 Horsepower
<b>Operator:</b>	TIDWATER SOARING SOCIETY	<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>	ORF ,27 ft msl	<b>Distance from Accident Site:</b>	23 Nautical Miles
<b>Observation Time:</b>	17:50 Local	<b>Direction from Accident Site:</b>	80°
<b>Lowest Cloud Condition:</b>	Scattered / 3500 ft AGL	<b>Visibility</b>	6 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	6 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	130°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30 inches Hg	<b>Temperature/Dew Point:</b>	29°C / 21°C
<b>Precipitation and Obscuration:</b>	N/A - None - Haze		
<b>Departure Point:</b>	WINDSOR , VA (3VA8)	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>		<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	18:00 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	GARNER 3VA8	<b>Runway Surface Type:</b>	Grass/turf
<b>Airport Elevation:</b>		<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	0	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>		<b>VFR Approach/Landing:</b>	Forced landing

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 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>	1 None	<b>Latitude, Longitude:</b>	36.799251,-76.730133(est)

## Administrative Information

**Investigator In Charge (IIC):** Kleckner, Pamela

**Additional Participating Persons:** LEO BOHNKE; RICHMOND , VA

**Original Publish Date:** June 7, 1989

**Last Revision Date:**

**Investigation Class:** [Class](#)

**Note:**

**Investigation Docket:** <https://data.nts.gov/Docket?ProjectID=11426>

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