



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	BELUGA, AK	<b>Accident Number:</b>	ANC92LA013
<b>Date &amp; Time:</b>	11/02/1991, 1500 AST	<b>Registration:</b>	N68291
<b>Aircraft:</b>	CESSNA 152	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	2 None

**Flight Conducted Under:** Part 91: General Aviation - Instructional

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## Analysis

WHILE AT 3,500 FEET IN NORMAL CRUISE FLIGHT, THE ENGINE LOST POWER. DURING AN ATTEMPTED FORCED LANDING, THE AIRPLANE STRUCK TREES AND THEN NOSED OVER ON ITS BACK. EXAMINATION OF THE ENGINE REVEALED THE NUMBER 2 CYLINDER EXHAUST VALVE BROKE AND SEPARATED WHILE IN CRUISE FLIGHT.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: AN EXHAUST VALVE FAILURE. CONTRIBUTING TO THE ACCIDENT WAS THE ROUGH, UNEVEN TERRAIN, AND TREES.

## Findings

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

### Findings

1. (C) ENGINE ASSEMBLY, VALVE, EXHAUST - FAILURE, TOTAL  
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Occurrence #2: FORCED LANDING  
Phase of Operation: DESCENT - EMERGENCY  
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Occurrence #3: NOSE OVER  
Phase of Operation: LANDING

### Findings

2. (F) TERRAIN CONDITION - ROUGH/UNEVEN
3. (F) OBJECT - TREE(S)

## Factual Information

### Pilot Information

<b>Certificate:</b>	Flight Instructor; Commercial	<b>Age:</b>	28, Male
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land	<b>Seat Occupied:</b>	Right
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Seatbelt, Shoulder harness
<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 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	03/01/1991
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	850 hours (Total, all aircraft), 288 hours (Total, this make and model), 642 hours (Pilot In Command, all aircraft), 237 hours (Last 90 days, all aircraft), 81 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	CESSNA	<b>Registration:</b>	N68291
<b>Model/Series:</b>	152 152	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	No
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	15282233
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	10/28/1991, Annual	<b>Certified Max Gross Wt.:</b>	1670 lbs
<b>Time Since Last Inspection:</b>	8 Hours	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	3339 Hours	<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	Installed, activated, aided in locating accident	<b>Engine Model/Series:</b>	O-235-L2C
<b>Registered Owner:</b>	JOSEPH & ANNE WILBUR	<b>Rated Power:</b>	110 hp
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	None
<b>Operator Does Business As:</b>	FLIGHT SAFETY OF ALASKA	<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	, 0 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	0000	Direction from Accident Site:	0°
Lowest Cloud Condition:	Scattered / 6000 ft agl	Visibility	90 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	20 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	80°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	2° C / 0° C
Precipitation and Obscuration:			
Departure Point:	KENAI, AK (ENA)	Type of Flight Plan Filed:	VFR
Destination:	ANCHORAGE, AK (MRI)	Type of Clearance:	None
Departure Time:	1415 AST	Type of Airspace:	Class G

## Airport Information

Airport:	GAS LINE STRIP (NONE)	Runway Surface Type:	Gravel
Airport Elevation:	200 ft	Runway Surface Condition:	Dry
Runway Used:	12	IFR Approach:	None
Runway Length/Width:	1000 ft / 50 ft	VFR Approach/Landing:	Forced Landing

## Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	

## Administrative Information

Investigator In Charge (IIC):	James Michelangelo	Report Date:	05/03/1993
Additional Participating Persons:	CAROL GILES; ANCHORAGE, AK		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at <a href="mailto:pubinq@ntsb.gov">pubinq@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.gov/pubdms/</a> .		

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).