



# National Transportation Safety Board Aviation Accident Final Report

---

<b>Location:</b>	PONTIAC, MI	<b>Accident Number:</b>	CHI88FA041
<b>Date &amp; Time:</b>	01/10/1988, 1017 EST	<b>Registration:</b>	N800AW
<b>Aircraft:</b>	FAIRCHILD SA226T	<b>Aircraft Damage:</b>	Destroyed
<b>Defining Event:</b>		<b>Injuries:</b>	3 Fatal
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Instructional		

---

## Analysis

ACFT WAS SCHEDULED FOR AN INSTRUCTIONAL FLT. DURING THE WX BRIEFING, THE CFI TOLD THE FSS SPECIALIST THAT THE FLT WOULD INCLUDE ENG-OUT PRACTICE. WITNESS STATEMENTS INDICATE THAT THE ACFT ROLLED SHARPLY TO THE RT AND NOSED DOWN AFTER ATTAINING ABOUT 100 FT OF ALT DURING THE CLIMB AFTER TAKEOFF. THE ACFT STRUCK THE GROUND LEFT PROP AND LEFT WING TIP FIRST, IN AN INVERTED FLT ATTITUDE. DURING THE POST ACCIDENT INVESTIGATION, THE RT ENG PWR LEVER WAS SUBJECTED TO LAB EXAM AND IT WAS FOUND THAT THE LOWER AFT PART OF THE LIFT GATE DETENT WAS WORN. THIS CREATED A RAMPING EFFECT BETWEEN THE ROUNDED EDGE OF THE LIFT GATE AND THE FLT IDLE STOP. A WORN LIFT GATE DETENT WOULD ALLOW THE POWER LEVER TO INADVERTENTLY BE MOVED INTO THE BETA RANGE, CAUSING ASYMMETRICAL DRAG AND DEGRADED AIRPLANE PERFORMANCE, PARTICULARLY IN CRITICAL PHASES OF 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) - MECH FAILURE/MALF  
Phase of Operation: TAKEOFF - INITIAL CLIMB

### Findings

1. 1 ENGINE
  2. (F) EMERGENCY PROCEDURE - SIMULATED - PILOT IN COMMAND(CFI)
  3. (C) THROTTLE/POWER LEVER - WORN
  4. (C) PROPELLER SYSTEM/ACCESSORIES,REVERSING SYSTEM - DEPLOYED INADVERTENTLY
- 

Occurrence #2: LOSS OF CONTROL - IN FLIGHT  
Phase of Operation: TAKEOFF - INITIAL CLIMB

-----

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation: DESCENT - UNCONTROLLED

## Factual Information

### Pilot Information

<b>Certificate:</b>	Airline Transport; Flight Instructor	<b>Age:</b>	54, 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
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	Airplane Multi-engine; Airplane Single-engine	<b>Toxicology Performed:</b>	Yes
<b>Medical Certification:</b>	Class 2 Valid Medical--w/ waivers/lim.	<b>Last FAA Medical Exam:</b>	12/22/1987
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	22000 hours (Total, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	FAIRCHILD	<b>Registration:</b>	N800AW
<b>Model/Series:</b>	SA226T SA226T	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	No
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	T403
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	8
<b>Date/Type of Last Inspection:</b>	10/22/1987, AAIP	<b>Certified Max Gross Wt.:</b>	12500 lbs
<b>Time Since Last Inspection:</b>	16 Hours	<b>Engines:</b>	2 Turbo Prop
<b>Airframe Total Time:</b>	1515 Hours	<b>Engine Manufacturer:</b>	GARRETT
<b>ELT:</b>	Installed, activated, did not aid in locating accident	<b>Engine Model/Series:</b>	TPE-331-100
<b>Registered Owner:</b>	AMERICAN SERVICE CORP.	<b>Rated Power:</b>	840 hp
<b>Operator:</b>	AMERICAN SERVICE CORP.	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	PTK, 980 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	1019 EST	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	10 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	250°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	-14°C / -17°C
Precipitation and Obscuration:			
Departure Point:	PONTIAC, MI (PTK)	Type of Flight Plan Filed:	IFR
Destination:		Type of Clearance:	IFR
Departure Time:	1017 EST	Type of Airspace:	Class D

## Airport Information

Airport:	OAKLAND PONTIAC (PTK)	Runway Surface Type:	
Airport Elevation:	980 ft	Runway Surface Condition:	
Runway Used:	27L	IFR Approach:	None
Runway Length/Width:	6200 ft / 150 ft	VFR Approach/Landing:	None

## Wreckage and Impact Information

Crew Injuries:	2 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	1 Fatal	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 Fatal	Latitude, Longitude:	

## Administrative Information

Investigator In Charge (IIC):	GEORGE H SEIDLEIN	Report Date:	11/28/1989
Additional Participating Persons:	E J PYTLARZ; DETROIT, MI T PERRY; DETROIT, MI K PFITZER; PHOENIX, AZ J D MORGAN; SAN ANTONIO, TX		
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:pubinquiry@ntsb.gov">pubinquiry@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> .		

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

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](#).