



National Transportation Safety Board Aviation Accident Final Report

Location:	LAUREL, MS	Accident Number:	ATL83LA080
Date & Time:	01/02/1983, 0344 CST	Registration:	N5291M
Aircraft:	SWEARINGEN SA-226TC	Aircraft Damage:	Substantial
Defining Event:		Injuries:	20 None

Flight Conducted Under: Part 91: General Aviation - Personal

Analysis

AT 11,000 FT MSL DURING CRUISE A PROP SEPARATED FROM THE LEFT ENG. THE ENG WAS FEATHERED & THE PLT OBSERVED THE ENG DISPLACED INBOARD & DOWNWARD. AN EMERGENCY LANDING WAS MADE & UPON LANDING THE LEFT MAIN GEAR WAS FOUND TO BE RETRACTED. THE ACFT SLID TO A STOP COMING TO REST ON THE ADJACENT TAXIWAY. METALLURGICAL EXAMINATION REVEALED THAT THE BLADE FAILED FROM FATIGUE INITIATING AT CORROSION PITS ON THE INTERIOR OF THE FAILED BLADE BALANCE HOLE. THE PAINT IN THE BALANCE HOLE WAS DISCONTINUOUS & NON-UNIFORM. THERE WAS NO EVIDENCE OF THE HOLE HAVING BEEN SHOTPEENED. OVERHAUL INSTRUCTIONS REQUIRE SHOTPEENING OF THE BALANCE HOLE. TSO WAS CALCULATED AS 1565.8 HRS.

Probable Cause and Findings

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

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION

Phase of Operation: CRUISE - NORMAL

Findings

1. (C) PROPELLER SYSTEM/ACCESSORIES, BLADE - CORRODED
2. (C) PROPELLER SYSTEM/ACCESSORIES, BLADE - FATIGUE
3. (C) PROPELLER SYSTEM/ACCESSORIES, BLADE - FAILURE, TOTAL
4. (C) MAINTENANCE, OVERHAUL - INADEQUATE - OTHER MAINTENANCE PERSONNEL
5. (F) PROPELLER SYSTEM/ACCESSORIES, BLADE - SEPARATION

Occurrence #2: LOSS OF CONTROL - ON GROUND/WATER

Phase of Operation: LANDING - ROLL

Findings

6. (C) LANDING GEAR, NORMAL RETRACTION/EXTENSION ASSEMBLY - INOPERATIVE
7. (C) GEAR EXTENSION - NOT POSSIBLE - PILOT IN COMMAND
8. (C) DIRECTIONAL CONTROL - NOT POSSIBLE - PILOT IN COMMAND
9. (F) GROUND LOOP/SWERVE - UNCONTROLLED - PILOT IN COMMAND

Factual Information

Pilot Information

Certificate:	Airline Transport	Age:	31, Male
Airplane Rating(s):	Multi-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):		Restraint Used:	Seatbelt
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	03/30/1982
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	5469 hours (Total, all aircraft), 2800 hours (Total, this make and model), 5135 hours (Pilot In Command, all aircraft), 82 hours (Last 90 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	SWEARINGEN	Registration:	N5291M
Model/Series:	SA-226TC SA-226TC	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Restricted	Serial Number:	TC202E
Landing Gear Type:		Seats:	20
Date/Type of Last Inspection:	12/20/1982, AAIP	Certified Max Gross Wt.:	12500 lbs
Time Since Last Inspection:	42 Hours	Engines:	2 Turbo Prop
Airframe Total Time:	4437 Hours	Engine Manufacturer:	AIRESEARCH
ELT:	Installed, not activated	Engine Model/Series:	TPE3313UW303G
Registered Owner:	PLANES, INC.	Rated Power:	940 hp
Operator:	PLANES, INC.	Operating Certificate(s) Held:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument Conditions	Condition of Light:	Night/Dark
Observation Facility, Elevation:	, 0 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	0000	Direction from Accident Site:	0°
Lowest Cloud Condition:	Unknown / 0 ft agl	Visibility	2 Miles
Lowest Ceiling:	Overcast / 300 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	Calm /	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	13° C / 12° C
Precipitation and Obscuration:			
Departure Point:	BATON ROUGE, LA (BTR)	Type of Flight Plan Filed:	IFR
Destination:	CHAMBLEE, GA (PDK)	Type of Clearance:	IFR
Departure Time:	0000	Type of Airspace:	Class E

Airport Information

Airport:	PINE BELT REGIONAL (PIB)	Runway Surface Type:	Asphalt
Airport Elevation:	298 ft	Runway Surface Condition:	Wet
Runway Used:	18	IFR Approach:	ILS
Runway Length/Width:	6501 ft / 150 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	19 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	20 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	PRESTON E HICKS	Report Date:	
Additional Participating Persons:			
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 pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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](#).