



# National Transportation Safety Board Aviation Incident Data Summary

<b>Location:</b>	FAYETTEVILLE, AR	<b>Incident Number:</b>	MKC881A046
<b>Date &amp; Time:</b>	02/02/1988, 1058 CST	<b>Registration:</b>	N322PX
<b>Aircraft:</b>	SAAB-FAIRCHILD SF-340A	<b>Injuries:</b>	3 Minor, 20 None
<b>Flight Conducted Under:</b>	Part 135: Air Taxi & Commuter - Scheduled		

## Analysis

THE CAPT RPRTD THAT DRG THE LNDG ROLL, THERE WAS A LOUD NOISE FROM THE LEFT ENG FOLLOWED BY HVY SMOKE & AN ENG FIRE WARNING BELL. HE STOPPED THE ACFT ON A TWY & ORDERED AN EVACUATION. THE FLT ATTENDANT HAD DIFFICULTY OPENING THE FLOOR-LEVEL EMERG EXIT. NO SLIDE OR ROPE WAS AVAILABLE FOR EXITING THE ACFT; 3 PSGRS RCVD MINOR INJURIES WHEN THEY DROPPED ABT 5-1/2 FT TO THE ICY TWY. AN EXAM REVEALED THE LEFT ENG POWER TURBINE (PT) HAD AN UNCONTAINED FAILURE. A TEARDOWN INSPN OF THE ENG REVEALED THAT A 'B' NUT ON THE STAGE 4 COMPRESSOR BLEED TUBE COUPLING HAD BECOME DISCONNECTED. THIS RESULTED IN A LOSS OF COOLING AIR TO THE PT ROTOR CAVITY & OVERHEATING OF THE STAGE 4 TURBINE DISK. MEASUREMENT OF THE STAGE 3 & 4 DISKS SHOWED RADIAL (CREEP) GROWTH OF .006' & .150', RESPECTIVELY. THERE WAS EVIDENCE OF HVY BLADE TIP RUBS INTO THE STATOR TIP SHROUD BACKING MATERIAL (DRG APPLICATION OF REVERSE THRUST), THEN FAILURE OF THE STAGE 4 TURBINE BLADES & THE PT MODULE.

## Probable Cause

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

## Findings

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

### Findings

1. 1 ENGINE
2. (C) BLEED AIR SYSTEM,FITTINGS - LOOSE
3. (C) MAINTENANCE,INSTALLATION - IMPROPER - COMPANY MAINTENANCE PERSONNEL
4. (F) BLEED AIR SYSTEM,FITTINGS - LEAK
5. (C) TURBINE ASSEMBLY,TURBINE WHEEL - OVERTEMPERATURE
6. (C) TURBINE ASSEMBLY - FAILURE,TOTAL

Occurrence #2: MISCELLANEOUS/OTHER  
Phase of Operation: STANDING

### Findings

7. MISC EQPT/FURNISHINGS,SLIDES - NOT INSTALLED
8. DOOR,EMERGENCY EXIT - OTHER

9. MISC EQPT/FURNISHINGS - INADEQUATE

10. MISCELLANEOUS EQUIPMENT - NOT UNDERSTOOD - FLIGHT ATTENDANT

## Pilot Information

<b>Certificate:</b>	Airline Transport; Commercial	<b>Age:</b>	50
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land	<b>Instrument Rating(s):</b>	Airplane
<b>Other Aircraft Rating(s):</b>	None	<b>Instructor Rating(s):</b>	None
<b>Flight Time:</b>	7314 hours (Total, all aircraft), 7060 hours (Pilot In Command, all aircraft), 287 hours (Last 90 days, all aircraft), 7 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	SAAB-FAIRCHILD	<b>Registration:</b>	N322PX
<b>Model/Series:</b>	SF-340A SF-340A	<b>Engines:</b>	2 Turbo Prop
<b>Operator:</b>	EXPRESS AIRLINES	<b>Engine Manufacturer:</b>	GE
<b>Operating Certificate(s) Held:</b>	Commuter Air Carrier (135)	<b>Engine Model/Series:</b>	CT7-5A2
<b>Flight Conducted Under:</b>	Part 135: Air Taxi & Commuter - Scheduled		

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Instrument Conditions	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	FYV, 1251 ft msl	<b>Weather Information Source:</b>	Weather Observation Facility
<b>Lowest Ceiling:</b>	Overcast / 900 ft agl	<b>Wind Speed/Gusts, Direction:</b>	8 knots / , 20°
<b>Temperature:</b>	-3°C	<b>Visibility</b>	4 Miles
<b>Precipitation and Obscuration:</b>			
<b>Departure Point:</b>	MEMPHIS, TN (MEM)	<b>Destination:</b>	(FYV)

## Airport Information

<b>Airport:</b>	DRAKE FIELD (FYV)	<b>Runway Surface Type:</b>	Asphalt
<b>Runway Used:</b>	16	<b>Runway Surface Condition:</b>	Slush covered
<b>Runway Length/Width:</b>	6006 ft / 100 ft		

## Wreckage and Impact Information

<b>Crew Injuries:</b>	3 None	<b>Aircraft Damage:</b>	Minor
<b>Passenger Injuries:</b>	3 Minor, 17 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Latitude, Longitude:</b>			

## Administrative Information

Investigator In Charge (IIC): RAMON E VARGAS

Adopted Date: 07/29/1992

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](mailto:pubinq@ntsb.gov), or at 800-877-6799. Dockets released after this date are available at <http://dms.nts.gov/pubdms/>.

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