



National Transportation Safety Board Aviation Incident Final Report

Location:	FORT LAUDERDALE, FL	Incident Number:	MIA92IA090
Date & Time:	03/01/1992, 1209 EST	Registration:	N6786C
Aircraft:	CESSNA 402C	Aircraft Damage:	Minor
Defining Event:		Injuries:	4 None

Flight Conducted Under: Part 135: Air Taxi & Commuter - Scheduled

Analysis

THE NOSE LANDING GEAR COLLAPSED AFTER IT WAS LOWERED TO THE RWY DURING THE LANDING ROLL. EXAM OF THE NOSE LANDING GEAR ASSY BY AN FAA MAINTENANCE INSPECTOR INDICATED THAT THE NOSE LANDING GEAR ACTUATOR WAS NOT DAMAGED. IT WAS REMOVED FOR EXAM. DISASSEMBLY REVEALED THAT AN EXTRA PACKING (SIMILAR TO AN O-RING) WAS INSTALLED. THIS ALLOWED THE NOSE LANDING GEAR DOWN AND LOCKED LIGHT TO ILLUMINATE BUT SHUT THE MOTOR OFF BEFORE THE NOSE LANDING GEAR WAS FULLY EXTENDED. REVIEW OF THE AIRPLANE LOGBOOKS INDICATE THAT A PROGRESSIVE INSPECTION WAS SIGNED OFF TWO DAYS BEFORE THE ACCIDENT. DURING THE INSPECTION IT WAS NOTED THAT THE NOSE LANDING GEAR ACTUATOR SWITCH WAS LEAKING. THE CORRECTIVE ACTION INDICATES THAT THE O-RINGS WERE REPLACED. ACCORDING TO THE ILLUSTRATED PARTS LIST OF THE NOSE LANDING GEAR ACTUATOR, TWO PACKINGS ARE INSTALLED. ACCORDING TO THE DIRECTOR OF MAINTENANCE, THE MECHANIC RESPONSIBLE FOR REPLACEMENT OF THE PACKINGS WAS PROVIDED WITH TWO, BUT ONLY REMOVED ONE FROM THE ACTUATOR. THIS RESULTED IN THE EXTRA PACKING. THE ACFT HAD ACCUMULATED 4 HRS & 6 CYCLES SINCE THE INSPECTION 2 DAYS EARLIER.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this incident to be: IMPROPER OVERHAUL BY COMPANY MAINTENANCE PERSONNEL AND INACCURATE GEAR DOWN AND LOCKED INDICATION IN THE COCKPIT.

Findings

Occurrence #1: NOSE GEAR COLLAPSED

Phase of Operation: LANDING - ROLL

Findings

1. (C) GEAR DOWN AND LOCKED - INACCURATE
2. LANDING GEAR, NOSE GEAR - FAILURE, TOTAL
3. (C) MAINTENANCE, OVERHAUL - IMPROPER - COMPANY MAINTENANCE PERSONNEL

Factual Information

Pilot Information

Certificate:	Airline Transport; Commercial; Flight Engineer	Age:	55, Male
Airplane Rating(s):	Multi-engine Land; Multi-engine Sea; Single-engine Land; Single-engine Sea	Seat Occupied:	Left
Other Aircraft Rating(s):	Glider; Helicopter	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	10/04/1991
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	15000 hours (Total, all aircraft), 250 hours (Total, this make and model), 250 hours (Last 90 days, all aircraft), 100 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N6786C
Model/Series:	402C 402C	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	402C0413
Landing Gear Type:	Retractable - Tricycle	Seats:	10
Date/Type of Last Inspection:	02/27/1992, Continuous Airworthiness	Certified Max Gross Wt.:	6850 lbs
Time Since Last Inspection:	4 Hours	Engines:	2 Reciprocating
Airframe Total Time:	11498 Hours	Engine Manufacturer:	CONTINENTAL
ELT:	Installed, not activated	Engine Model/Series:	TSIO-520-VB
Registered Owner:	JOHAN PAT, INC.	Rated Power:	325 hp
Operator:	AIRWAYS INTERNATIONAL	Operating Certificate(s) Held:	Commuter Air Carrier (135)
Operator Does Business As:		Operator Designator Code:	FAHA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	FLL, 11 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	1213 EST	Direction from Accident Site:	360°
Lowest Cloud Condition:	Scattered / 2500 ft agl	Visibility	10 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	40°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	26° C / 14° C
Precipitation and Obscuration:			
Departure Point:	MIAMI, FL (MIA)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	VFR
Departure Time:	1150 EST	Type of Airspace:	Class D

Airport Information

Airport:	FT.LAUDERDALE-HOLLYWOOD (FLL)	Runway Surface Type:	Asphalt
Airport Elevation:	11 ft	Runway Surface Condition:	Dry
Runway Used:	9	IFR Approach:	
Runway Length/Width:	5276 ft / 100 ft	VFR Approach/Landing:	Full Stop; Traffic Pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Minor
Passenger Injuries:	3 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	4 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	Timothy W Monville	Report Date:	09/14/1993
Additional Participating Persons:	TOM LAIRD; FORT LAUDERDALE, FL STEVE GORDON; FORT LAUDERDALE, FL		
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/ .		

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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](#).