



National Transportation Safety Board Aviation Accident Final Report

Location:	DALLAS, TX	Accident Number:	FTW87FA080
Date & Time:	03/24/1987, 2045 CST	Registration:	N73107
Aircraft:	CONVAIR CV-580	Aircraft Damage:	Substantial
Defining Event:		Injuries:	11 None

Flight Conducted Under: Part 121: Air Carrier - Scheduled

Analysis

METRO FLIGHT AIRLINES CONVAIR CV-580 ATTEMPTED TAKEOFF FROM RUNWAY 35L AT THE DALLAS/FORT WORTH AIRPORT (DFW) WITH CROSSWINDS EXCEEDING DEMONSTRATED CAPABILITY OF THE AIRCRAFT. THE TAKEOFF ATTEMPT VIOLATED COMPANY LIMITATIONS FOR CROSSWINDS IN THE CONVAIR CV-580. DURING THE TAKEOFF ROLL THE LEFT WING BECAME AIRBORNE AND RETURNED TO THE RUNWAY WITH SUFFICIENT FORCE TO ALLOW THE LEFT PROPELLER ASSEMBLY TO CONTACT THE RUNWAY CAUSING SEPARATION OF TWO PROPELLER BLADES AND LOSS OF DIRECTIONAL CONTROL. THE AIRCRAFT DEPARTED THE RUNWAY ONTO SOFT TERRAIN CAUSING THE NOSE GEAR TO COLLAPSE. THE NOSE OF THE AIRCRAFT DROPPED AND THE AIRCRAFT CAME TO REST ON A CONNECTING TAXIWAY.

Probable Cause and Findings

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

Findings

Occurrence #1: ON GROUND/WATER ENCOUNTER WITH WEATHER
Phase of Operation: TAKEOFF - ROLL/RUN

Findings

1. (F) WEATHER CONDITION - CROSSWIND
2. (C) WIND INFORMATION - DISREGARDED - PILOT IN COMMAND
3. (F) OVERCONFIDENCE IN PERSONAL ABILITY - PILOT IN COMMAND
4. (C) AIRCRAFT PERFORMANCE, TAKEOFF CAPABILITY - EXCEEDED
5. (F) OVERCONFIDENCE IN AIRCRAFT'S ABILITY - PILOT IN COMMAND
6. (C) PROCEDURES/DIRECTIVES - DISREGARDED - PILOT IN COMMAND
7. (C) INSTRUCTIONS, WRITTEN/VERBAL - NOT FOLLOWED - PILOT IN COMMAND

Occurrence #2: LOSS OF CONTROL - ON GROUND/WATER
Phase of Operation: TAKEOFF - ROLL/RUN

Findings

8. PROPELLER SYSTEM/ACCESSORIES, BLADE - OVERLOAD
9. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
10. (C) PROPER ALIGNMENT - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #3: NOSE GEAR COLLAPSED
Phase of Operation: OTHER

Findings

11. (F) TERRAIN CONDITION - SOFT

Occurrence #4: NOSE DOWN
Phase of Operation: TAKEOFF - ROLL/RUN

Factual Information

Pilot Information

Certificate:	Airline Transport; Commercial	Age:	32, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last Medical Exam:	10/01/1986
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	8819 hours (Total, all aircraft), 1127 hours (Total, this make and model), 158 hours (Last 90 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	CONVAIR	Registration:	N73107
Model/Series:	CV-580 CV-580	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal; Transport	Serial Number:	8
Landing Gear Type:	Retractable - Tricycle	Seats:	50
Date/Type of Last Inspection:	03/16/1987, Continuous Airworthiness	Certified Max Gross Wt.:	47000 lbs
Time Since Last Inspection:	17 Hours	Engines:	2 Turbo Prop
Airframe Total Time:	64429 Hours	Engine Manufacturer:	ALLISON
ELT:	Not installed	Engine Model/Series:	501D13
Registered Owner:	METRO FLIGHT INC.	Rated Power:	4500 hp
Operator:	METRO FLIGHT INC.	Air Carrier Operating Certificate:	Commuter Air Carrier (135)
Operator Does Business As:		Operator Designator Code:	MTRA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Night/Dark
Observation Facility, Elevation:	DFW, 596 ft msl	Observation Time:	1950 CST
Distance from Accident Site:	0 Nautical Miles	Direction from Accident Site:	0°
Lowest Cloud Condition:	Unknown / 0 ft agl	Temperature/Dew Point:	9° C / 0° C
Lowest Ceiling:	Broken / 5000 ft agl	Visibility	20 Miles
Wind Speed/Gusts, Direction:	15 knots/ 25 knots, 270°	Visibility (RVR):	0 ft
Altimeter Setting:	29 inches Hg	Visibility (RVV):	0 Miles
Precipitation and Obscuration:			
Departure Point:	DALLAS, TX (DFW)	Type of Flight Plan Filed:	IFR
Destination:	LONGVIEW, TX (GGG)	Type of Clearance:	IFR
Departure Time:	0000	Type of Airspace:	Class B; Class D; Class E

Airport Information

Airport:	DALLAS/FT. WORTH (DFW)	Runway Surface Type:	Concrete
Airport Elevation:	596 ft	Runway Surface Condition:	Wet
Runway Used:	35L	IFR Approach:	None
Runway Length/Width:	11388 ft / 150 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	3 None	Aircraft Damage:	Substantial
Passenger Injuries:	8 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	11 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	BOB DICKENS	Adopted Date:	03/10/1988
Additional Participating Persons:	DON HOLLIMAN; DALLAS, TX FRED JUNEK; IRVING, TX CHARES TEMPLIN; DALLAS, 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 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.