



National Transportation Safety Board Aviation Accident Final Report

Location:	CHANTILLY, VA	Accident Number:	BFO88FA067
Date & Time:	07/20/1988, 1608 EDT	Registration:	N7267
Aircraft:	de Havilland DHC-6-200	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	1 Fatal

Flight Conducted Under: Part 91: General Aviation - Ferry

Analysis

THIS WAS THE FIRST FLIGHT AFTER A MAINTENANCE INSPECTION. THE FLAPS WERE LEFT FULL DOWN AFTER A POST-INSPECTION BY COMPANY MECHANICS, BEFORE THE FLIGHT. WITNESSES STATED THE FLAPS WERE DOWN WHEN THE AIRCRAFT TAXIED TO TAKEOFF ON RWY 19L. WITNESSES STATED THE AIRCRAFT CLIMBED STEEPLY AFTER IT LIFTED OFF WITH A PITCH ATTITUDE UP TO 60 DEGREES. ACCORDING TO WITNESSES, THE AIRCRAFT CLIMBED TO 200 TO 500 FT AGL, BEFORE IT STALLED AND DESCENDED NOSE DOWN IN A LEFT TURN. THE AIRCRAFT CRASHED ABOUT 300 FT LEFT OF AND 2000 FT DOWN THE RWY. EXAMINATION OF THE AIRCRAFT REVEALED THE FLAPS WERE FULL DOWN. THE SCROLL TYPE CHECKLIST WAS POSITIONED AT THE BEGINNING OF THE TAKEOFF CHECK. THE FLIGHT MANUAL RECOMMENDS A 10 DEGREE FLAP SETTING FOR TAKEOFF AND PROHIBITS FLAP FULL DOWN TAKEOFF. REVIEW OF PREVIOUS DHC-6 ACCIDENTS INVOLVING FLAP FULL DOWN RESULTED IN A STEEP TAKEOFF CLIMB AND EXCESSIVE PITCH ATTITUDE FOLLOWED BY A STALL. THE POSITION OF THE CONTROL LOCK SUGGESTS IT MAY HAVE BEEN IN THE LOCKED POSITION DRG THE TKOF.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT INADVERTENTLY MISUSED THE FLAPS, BY FAILING TO SET THE FLAPS TO THE PROPER SETTING. THE FLAPS WERE SET FULL DOWN. THIS CAUSED THE AIRCRAFT TO PITCH UP STEEPLY AFTER LIFTOFF. ADDITIONALLY, THE FLIGHT CONTROL LOCK WAS PROBABLY INSTALLED DURING SOME PORTION, IF NOT THE ENTIRE FLIGHT, WHICH PREVENTED FLIGHT CONTROL OPERATION. THE PILOT SUBSEQUENTLY FAILED TO MAINTAIN ADEQUATE FLYING SPEED AND THE AIRCRAFT STALLED. CONTRIBUTING FACTORS ARE THE PILOT'S INATTENTION AND HIS FAILURE TO ADEQUATELY USE THE CHECKLIST.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (C) RAISING OF FLAPS - NOT PERFORMED - PILOT IN COMMAND
2. (F) INATTENTIVE - PILOT IN COMMAND
3. (F) CHECKLIST - NOT USED - PILOT IN COMMAND
4. (F) PROCEDURES/DIRECTIVES - NOT FOLLOWED - PILOT IN COMMAND
5. (F) REMOVAL OF CONTROL/GUST LOCK(S) - INADVERTENT USE - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Factual Information

Pilot Information

Certificate:	Airline Transport; Commercial	Age:	50, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	Yes
Medical Certification:	Class 1 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	02/12/1988
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	12400 hours (Total, all aircraft), 120 hours (Last 90 days, all aircraft), 28 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	de Havilland	Registration:	N7267
Model/Series:	DHC-6-200 DHC-6-200	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	195
Landing Gear Type:	Tricycle	Seats:	21
Date/Type of Last Inspection:	07/19/1988, AAIP	Certified Max Gross Wt.:	11579 lbs
Time Since Last Inspection:	1 Hours	Engines:	2 Turbo Prop
Airframe Total Time:	10513 Hours	Engine Manufacturer:	P&W
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	PT-6A-20A
Registered Owner:	FAIRWAYS CORP.	Rated Power:	579 hp
Operator:	FAIRWAYS CORP.	Operating Certificate(s) Held:	On-demand Air Taxi (135)
Operator Does Business As:		Operator Designator Code:	FWYA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	IAD, 313 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	1550 EDT	Direction from Accident Site:	0°
Lowest Cloud Condition:	Unknown / 0 ft agl	Visibility	8 Miles
Lowest Ceiling:	Broken / 3400 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	150°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	30° C / 24° C
Precipitation and Obscuration:			
Departure Point:		Type of Flight Plan Filed:	IFR
Destination:	WASHINGTON, DC (DCA)	Type of Clearance:	IFR
Departure Time:	1607 EDT	Type of Airspace:	Class D

Airport Information

Airport:	DULLES INT'L (IAD)	Runway Surface Type:	Concrete
Airport Elevation:	313 ft	Runway Surface Condition:	Dry
Runway Used:	19L	IFR Approach:	None
Runway Length/Width:	11500 ft / 150 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	N/A	Aircraft Fire:	On-Ground
Ground Injuries:	N/A	Aircraft Explosion:	On-Ground
Total Injuries:	1 Fatal	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	DENNIS L JONES	Report Date:	06/11/1990
Additional Participating Persons:	EARL BORDEN; WASHINGTON, DC JOE HEXTER; WASHINGTON, DC JAMES DONNELLY; ONTARIO CANADA, LARRY C VANCE; MONCTON CANADA,		
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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