



National Transportation Safety Board Aviation Accident Final Report

Location:	KEYSTONE, FL	Accident Number:	MIA97LA202
Date & Time:	07/01/1997, 0000 EDT	Registration:	N772T
Aircraft:	DFL Holdings Inc. TANGO	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	1 Fatal
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The pilot departed on a local flight and did not return. The wreckage was located the following day. Examination of the wreckage revealed the airplane collided with trees and terrain spinning to the left. Examination of the airframe, flight controls, engine assembly and accessories revealed no evidence of a precrash mechanical failure or malfunction. All components necessary for flight were present at the crash site.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: an in-flight loss of control for undetermined reasons.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: UNKNOWN

Findings

1. (C) REASON FOR OCCURRENCE UNDETERMINED

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

Factual Information

On July 1, 1997, at an undetermined time, an experimental DFL Holdings Inc., Model: Tango, N772T, operating as a 14 CFR Part 91 personal flight, crashed in the vicinity of Keystone, Florida. Visual meteorological conditions prevailed and no flight plan was filed. The airplane was destroyed and the airline transport rated pilot was fatally injured. The flight originated from Keystone Airpark at about 1330 eastern daylight time.

The airplane was reported as missing on July 1, 1997, and was located on July 2, 1997, in the northeast corner of restricted area 2903A.

Examination of the crash site revealed the airplane collided with trees in a nose down attitude with little horizontal movement spinning to the left. The left wing was bent slightly up, was attached at the forward portion of the wing, and separated 10 to 12 inches on the trailing part of the wing. The right wing tip bottom was found two feet forward of the right wing. The fuel tanks were ruptured and browning of the vegetation was present. Torsional twisting, "s" bending and chordwise scarring was present on the propeller blades. Tree branches found in the vicinity of the crash site exhibited 45-degree "v" cuts

Examination of the airframe, flight controls, engine assembly and accessories revealed no evidence of a precrash mechanical failure or malfunction. All components necessary for flight were present at the crash site. For additional information see FAA inspector's statement

Personnel who had known the pilot since college stated, he had the experience and talent to fly the tango airplane, but at times had shown less than good judgment performing maneuvers at low altitudes and buzzing at tree top level before and after joining the military. He was informed about the characteristics of the tango airplane, was instructed not to perform aerobatics, power on stalls, or spins, and to consider it as a low g aircraft. After initially flying the airplane the pilot informed them that the airplane did a great "pull close" maneuver.

Postmortem examination of the pilot was conducted on July 3, 1997, by Dr. Margarita Arruza, Associate Medical Examiner, Jacksonville, Florida. The cause of death was multiple injuries. Postmortem toxicology studies of specimens from the pilot were performed by the Forensic Toxicology Research Section, Federal Aviation Administration, Oklahoma City, Oklahoma. These studies were negative for basic, acidic, and neutral drugs. Ethanol 21.000 mg/dl was detected in the blood, 30.00 mg/dl ethanol was detected in the muscle fluid, 1.00 mg/dl acetaldehyde was detected in the muscle fluid, 16.000 acetaldehyde was detected in the blood, and 5.000 mg/dl n-propanol was detected in the blood.

The wreckage was released to MSG Ronald Watson, Provost Marshals Office, Camp Blanding, Florida, on July 11, 1997. The pilot log books were released to the deceased pilot's father, Dr. Richard K. Ames, on August 19, 1997.

Pilot Information

Certificate:	Airline Transport; Commercial	Age:	35, 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:	No
Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine; Instrument Airplane	Toxicology Performed:	Yes
Medical Certification:	Class 1 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	11/07/1996
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	4218 hours (Total, all aircraft), 3 hours (Total, this make and model), 2335 hours (Pilot In Command, all aircraft), 32 hours (Last 90 days, all aircraft), 22 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	DFL Holdings Inc.	Registration:	N772T
Model/Series:	TANGO TANGO	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental	Serial Number:	001
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	1750 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Lycoming
ELT:	Not installed	Engine Model/Series:	O-360-A1A
Registered Owner:	DFL HOLDING INC.	Rated Power:	
Operator:	DFL HOLDING INC.	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Not Reported
Observation Facility, Elevation:	GNV, 152 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	1253 EDT	Direction from Accident Site:	0°
Lowest Cloud Condition:	Scattered / 3000 ft agl	Visibility	10 Miles
Lowest Ceiling:	Broken / 25000 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	350°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	32° C / 23° C
Precipitation and Obscuration:			
Departure Point:	(42J)	Type of Flight Plan Filed:	None
Destination:	GAINESVILLE, FL (GNV)	Type of Clearance:	None
Departure Time:	1330 EDT	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	CARROL A SMITH	Report Date:	04/10/1998
Additional Participating Persons:	CARL F COLEMAN; ORLANDO, 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 pubinquiry@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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