



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	KEY WEST, FL	<b>Accident Number:</b>	MIA89LA076
<b>Date &amp; Time:</b>	02/03/1989, 1130 EST	<b>Registration:</b>	N99Y
<b>Aircraft:</b>	WACO YMF	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	3 Minor

**Flight Conducted Under:** Part 91: General Aviation - - Sightseeing

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## Analysis

THE PLT STATED THEY HAD JUST PASSED OVER A SCHOOL OF DOLPHIN WHILE ON A SIGHTSEEING FLT OVER WATER AT ABOUT 100 FT. HE REVERSED COURSE TO THE LEFT IN ORDER TO RETURN TO THE FISH & WHILE IN THE TURN THE ACFT ROLLED ABRUPTLY TO THE LEFT. ACFT ROLLED INTO A VERT BANK & THE ACFT HIT THE WATER INVERTED & SANK IN ABOUT 12 FT OF WATER. THE PLT STATED THAT HE HAD OBSERVED A C-130 TYPE ACFT FLYING IN THE AREA AT APPROX 800 FT JUST BEFORE THE ACCIDENT. THE PLT STATED THAT HE & HIS WIFE RECALLED HE HAD BEEN MAKING A LOW STEEP BANK OVER THE WATER AND HE RECALLED GRAVITY FORCES PRESSING THEM DOWN INTO THE SEAT DURING THE TURN. THEY HAD COMPLETED THE 1ST STEEP TURN AND WERE IN THE 2ND BANK OF ABOUT 90 DEGS WHEN A 'GUST' WAS FELT & THE NEXT THING THEY KNEW, THEY HIT THE WATER UPSIDE DOWN. NEITHER PAX RECALLED SEEING ANY OTHER ACFT IN THE AREA. ONE PAX STATED THAT HE HAD SOME PREVIOUS FLT TIME INCLUDING SOLO.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE INABILITY OF THE PLT TO MAINTAIN CONTROL AFTER ENCOUNTERING HIS OWN WAKE TURBULENCE AT A LOW ALTITUDE DURING A STEEP TURNING MANEUVER.

## Findings

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

### Findings

1. (C) WAKE TURBULENCE - ENCOUNTERED - PILOT IN COMMAND
2. (C) ALTITUDE - INADEQUATE - PILOT IN COMMAND
3. (C) MANEUVER - EXCESSIVE - PILOT IN COMMAND

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

## Factual Information

### Pilot Information

<b>Certificate:</b>	Airline Transport	<b>Age:</b>	59, Male
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land	<b>Seat Occupied:</b>	Rear
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Seatbelt, Shoulder harness
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Valid Medical--w/ waivers/lim.	<b>Last FAA Medical Exam:</b>	03/02/1988
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	11500 hours (Total, all aircraft), 500 hours (Total, this make and model), 11000 hours (Pilot In Command, all aircraft), 60 hours (Last 90 days, all aircraft), 20 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	WACO	<b>Registration:</b>	N99Y
<b>Model/Series:</b>	YMF YMF	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	No
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	F-5-002
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	3
<b>Date/Type of Last Inspection:</b>	02/02/1989, 100 Hour	<b>Certified Max Gross Wt.:</b>	2650 lbs
<b>Time Since Last Inspection:</b>	1 Hours	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	1402 Hours	<b>Engine Manufacturer:</b>	JACOBS
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	R-755-B2M
<b>Registered Owner:</b>	CONCH CLASSIC AIR TOURS	<b>Rated Power:</b>	275 hp
<b>Operator:</b>	CONCH CLASSIC AIR TOURS	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	EYW, 7 ft msl	Distance from Accident Site:	15 Nautical Miles
Observation Time:	1132 EST	Direction from Accident Site:	90°
Lowest Cloud Condition:	Scattered / 2000 ft agl	Visibility	10 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	130°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	26° C / 18° C
Precipitation and Obscuration:			
Departure Point:	KEY WEST, FL (FYW)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	1100 EST	Type of Airspace:	Class G

## Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	2 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 Minor	Latitude, Longitude:	

## Administrative Information

Investigator In Charge (IIC):	RONALD W BIRD	Report Date:	01/11/1990
Additional Participating Persons:			
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 <a href="mailto:pubinq@ntsb.gov">pubinq@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.gov/pubdms/</a> .		

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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](#).