



# Aviation Investigation Final Report

<b>Location:</b>	MILWAUKEE, Wisconsin	<b>Accident Number:</b>	CHI90LA115
<b>Date &amp; Time:</b>	April 20, 1990, 16:00 Local	<b>Registration:</b>	N179DD
<b>Aircraft:</b>	Beech F33A	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	3 Minor
<b>Flight Conducted Under:</b>	Part 91: General aviation		

## Analysis

THE PILOT ENGAGED THE AUTOPILOT APPROACH MODE TO EXECUTE A COUPLED ILS APPROACH WHILE HE WAS HIGH AND FAST WITH A 2000 FOOT PER MINUTE RATE OF DESCENT. THIS WAS OUTSIDE THE PARAMETERS FOR A STABILIZED APPROACH. WHEN THE AUTOPILOT CAPTURED THE GLIDE SLOPE, THE AIRCRAFT NOSED OVER SHARPLY, FLEW THROUGH THE GLIDE SLOPE, PULLED UP SHARPLY, FLEW THROUGH THE GLIDE SLOPE GOING UP, AND NOSED OVER AGAIN BEFORE THE PILOT COULD DISENGAGE THE AUTOPILOT. PILOT LANDED THE AIRCRAFT WITHOUT FURTHER INCIDENT, BUT THE PITCH EXCURSIONS HAD EXCEEDED THE STRESS LIMITS OF THE AIRCRAFT.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE UTILIZATION OF IMPROPER PROCEDURES ON THE PART OF THE PILOT IN COMMAND BY ATTEMPTING TO EXECUTE A COUPLED APPROACH OUTSIDE THE PARAMETERS OF THE AUTOPILOT.

## Findings

Occurrence #1: ABRUPT MANEUVER  
Phase of Operation: APPROACH - IAF TO FAF/OUTER MARKER (IFR)

- Findings
1. PROPER DESCENT RATE - EXCEEDED - PILOT IN COMMAND

2. (C) PROCEDURES/DIRECTIVES - NOT FOLLOWED - PILOT IN COMMAND
3. DESIGN STRESS LIMITS OF AIRCRAFT - EXCEEDED

## Factual Information

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	47, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<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 3 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	October 10, 1989
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	2003 hours (Total, all aircraft), 888 hours (Total, this make and model), 1915 hours (Pilot In Command, all aircraft), 52 hours (Last 90 days, all aircraft), 24 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Beech	<b>Registration:</b>	N179DD
<b>Model/Series:</b>	F33A F33A	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal; Utility	<b>Serial Number:</b>	CE743
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	5
<b>Date/Type of Last Inspection:</b>	June 1, 1989 Annual	<b>Certified Max Gross Wt.:</b>	3400 lbs
<b>Time Since Last Inspection:</b>	275 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	3886 Hrs	<b>Engine Manufacturer:</b>	CONTINENTAL
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	IO-520-BA
<b>Registered Owner:</b>	DELTA DELTA PARTNERSHIP	<b>Rated Power:</b>	285 Horsepower
<b>Operator:</b>	DELTA DELTA PARTNERSHIP	<b>Operating Certificate(s) Held:</b>	None
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	MKE ,723 ft msl	<b>Distance from Accident Site:</b>	4 Nautical Miles
<b>Observation Time:</b>	15:51 Local	<b>Direction from Accident Site:</b>	190°
<b>Lowest Cloud Condition:</b>	Unknown	<b>Visibility</b>	5 miles
<b>Lowest Ceiling:</b>	Overcast / 1000 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	5 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	300°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30 inches Hg	<b>Temperature/Dew Point:</b>	15°C / 12°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	FARGO , ND (FAR)	<b>Type of Flight Plan Filed:</b>	IFR
<b>Destination:</b>		<b>Type of Clearance:</b>	IFR
<b>Departure Time:</b>	13:10 Local	<b>Type of Airspace:</b>	Class E

## Airport Information

<b>Airport:</b>	MILWAUKEE MITCHELL MKE	<b>Runway Surface Type:</b>	
<b>Airport Elevation:</b>		<b>Runway Surface Condition:</b>	
<b>Runway Used:</b>	0	<b>IFR Approach:</b>	ILS
<b>Runway Length/Width:</b>		<b>VFR Approach/Landing:</b>	None

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Minor	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	2 Minor	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	3 Minor	<b>Latitude, Longitude:</b>	42.980438,-87.89933(est)

## Administrative Information

**Investigator In Charge (IIC):** Doub, Mark

**Additional Participating Persons:** DICK HANUSA; MILWAUKEE , WI

**Original Publish Date:** October 2, 1992

**Last Revision Date:**

**Investigation Class:** [Class](#)

**Note:**

**Investigation Docket:** <https://data.nts.gov/Docket?ProjectID=14658>

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