



National Transportation Safety Board Aviation Accident Final Report

Location:	OSWEGO, IL	Accident Number:	CHI00FA003B
Date & Time:	10/01/1999, 1600 CDT	Registration:	N5367G
Aircraft:	Beech T-34	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None

Flight Conducted Under: Part 91: General Aviation -

Analysis

N300SH, a Beech D-45, was destroyed on impact with terrain following a midair collision with N5367G, a Beech T-34, during a practice maneuver by the Lima Lima Flying Squadron. Both aircraft departed in sequence from 6-ship delta formation to perform a maneuver called a pop top break. The pop top break involved each aircraft to depart from the formation in sequence by entering a climbing 180-degree turn to follow the lead aircraft in trail. The narrow area of the human eye's visual field is approximately 10-15 degrees. A video tape of the accident flight shows a delayed entry into the turn by the D-45 relative to the T-34's entry into the maneuver. The pilot of the T-34 stated that he did not see the D-45 prior to the midair collision. The Lima Lima Flying Squadron did not have procedures in place to recover or adjust for maneuvers that were not successful.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the visual lookout not obtained by the pilot of the Beech T-34 and the inadequate procedure by the Lima Lima Flying Squadron. The delayed entry into the maneuver by the pilot of the Beech D-45 was a contributing factor.

Findings

Occurrence #1: MIDAIR COLLISION
Phase of Operation: MANEUVERING - TURN TO REVERSE DIRECTION

Findings

1. (F) MANEUVER - DELAYED - PILOT OF OTHER AIRCRAFT
2. (F) PROCEDURE INADEQUATE - OTHER INSTITUTION
3. (C) VISUAL LOOKOUT - NOT OBTAINED - PILOT IN COMMAND

Factual Information

See narrative CH100FA003A.

Pilot Information

Certificate:	Airline Transport	Age:	70, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	02/04/1999
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	20000 hours (Total, all aircraft), 600 hours (Total, this make and model), 15 hours (Pilot In Command, all aircraft), 57 hours (Last 90 days, all aircraft), 25 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	Registration:	N5367G
Model/Series:	T-34 T-34	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:		Serial Number:	BG243140909
Landing Gear Type:	Retractable - Tricycle	Seats:	2
Date/Type of Last Inspection:	09/09/2000, Annual	Certified Max Gross Wt.:	3050 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	IO-520-BA
Registered Owner:	GENE D MARTIN	Rated Power:	285 hp
Operator:	GENE D MARTIN	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	ARR, 706 ft msl	Distance from Accident Site:	5 Nautical Miles
Observation Time:	1553 CDT	Direction from Accident Site:	315°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	10 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	10°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	16° C / 0° C
Precipitation and Obscuration:			
Departure Point:	NAPERVILLE, IL (LL10)	Type of Flight Plan Filed:	None
Destination:	CHICAGO, IL (CGX)	Type of Clearance:	
Departure Time:	1535 CDT	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	
Runway Length/Width:		VFR Approach/Landing:	

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	MITCHELL F GALLO	Report Date:	04/06/2001
Additional Participating Persons:	EDWARD TOBIN; WEST CHICAGO, IL PAUL E YOOS; WICHITA, KS EDWARD I HICKS; NAPERVILLE, IL		
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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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](#).