



National Transportation Safety Board Aviation Accident Final Report

Location:	PEARLAND, TX	Accident Number:	FTW94FA060B
Date & Time:	01/02/1994, 1630 CST	Registration:	N739TL
Aircraft:	CESSNA 172N	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	3 Fatal

Flight Conducted Under: Part 91: General Aviation - Instructional

Analysis

AS AN INSTRUCTOR (CFI) & STUDENT IN A CESSNA 172 WERE MAKING TOUCH-&-GO'S ON RUNWAY 14R, A BM-4 PILOT TRANSMITTED ON UNICOM THAT HE WAS APPROACHING FROM THE WEST FOR A BASE ENTRY. REPORTEDLY, THE CESSNA PILOTS WERE TRANSMITTING THEIR POSITIONS ON UNICOM, ALSO. THE BM-4 SUBSEQUENTLY TURNED BASE TO FINAL BEHIND THE CESSNA & WAS SEEN CONVERGING ON THE CESSNA IN DISTANCE & ALTITUDE. IMPACT OCCURRED ON SHORT FINAL. WITNESSES SAID THE AIRPLANES REMAINED TOGETHER, ROTATED TO THE LEFT & DESCENDED VERTICALLY TO THE GROUND. THE BM-4 COLOR WAS WHITE WITH YELLOW TRIM & THE CESSNA WAS COLORED WHITE WITH BROWN TRIM. YELLOW PAINT TRANSFER WAS OBSERVED ON THE UPPER LEFT WING SURFACE, AFT CABIN SUPPORT POST & AFT WINDSHIELD OF THE CESSNA. LEADING EDGE DAMAGE OF THE RIGHT WING OF THE BM-4 WAS APPROXIMATELY EQUAL TO THE WIDTH OF THE AFT CABIN WINDOW OF THE CESSNA. AN IMPACT SIGNATURE MEASUREMENT AT THE OUTBOARD PORTION OF THE LEFT FLAP OF THE CESSNA WAS APPROXIMATELY EQUAL TO THE BM-4 RIGHT LANDING GEAR STRUT WIDTH.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: INADEQUATE VISUAL LOOKOUT BY THE PILOT OF THE HAWK BM-4, WHICH RESULTED IN HIS FAILURE TO SEE-AND-AVOID THE CESSNA 172. THE BM-4 PILOT'S NON-STANDARD PROCEDURE FOR ENTERING THE TRAFFIC PATTERN WAS A RELATED FACTOR.

Findings

Occurrence #1: MIDAIR COLLISION

Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings

1. (F) VFR PROCEDURES - NOT FOLLOWED - PILOT OF OTHER AIRCRAFT
2. (C) VISUAL LOOKOUT - INADEQUATE - PILOT OF OTHER AIRCRAFT

Occurrence #2: LOSS OF CONTROL - IN FLIGHT

Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

Factual Information

SEE NARRATIVE FOR FTW94FA060A.

Pilot Information

Certificate:	Commercial	Age:	32, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane Single-engine	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	12/10/1993
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	800 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N739TL
Model/Series:	172N 172N	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	17270792
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	09/23/1993, 100 Hour	Certified Max Gross Wt.:	2300 lbs
Time Since Last Inspection:	78 Hours	Engines:	1 Reciprocating
Airframe Total Time:	2165 Hours	Engine Manufacturer:	LYCOMING
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-320-H2AD
Registered Owner:	EAGLE MICRO SYSTEMS	Rated Power:	160 hp
Operator:	ELLINGTON AERO CLUB, INC.	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	HOU, 47 ft msl	Distance from Accident Site:	8 Nautical Miles
Observation Time:	1650 CST	Direction from Accident Site:	340°
Lowest Cloud Condition:	Unknown / 0 ft agl	Visibility	15 Miles
Lowest Ceiling:	Broken / 25000 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	13 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	150°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	18° C / 13° C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(T02)	Type of Flight Plan Filed:	None
Destination:	(T02)	Type of Clearance:	None
Departure Time:	1624 CST	Type of Airspace:	Class G

Airport Information

Airport:	CLOVER FIELD (T02)	Runway Surface Type:	Asphalt
Airport Elevation:	44 ft	Runway Surface Condition:	Dry
Runway Used:	14R	IFR Approach:	None
Runway Length/Width:	4300 ft / 70 ft	VFR Approach/Landing:	Traffic Pattern

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	JOYCE M SMITH,	Report Date:	01/11/1995
Additional Participating Persons:	JOHN T MERRIFIELD; HOUSTON, TX		
Publish Date:	04/12/2016		
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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