



Aviation Investigation Final Report

Location:	Bunnell, Florida	Accident Number:	MIA03CA128
Date & Time:	June 14, 2003, 09:30 Local	Registration:	UNREG
Aircraft:	Kolb Company MKIII	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Minor
Flight Conducted Under:	Part 91: General aviation - Flight test		

Analysis

The pilot stated that prior to the flight, the horizontal stabilizers which had been folded up were extended. He attached the lower elevator flight control cables and performed a preflight inspection of the airplane; he does not have a preflight checklist. Following the preflight, he started the engine and taxied to runway 24, and after landing traffic cleared the runway, he taxied onto the runway and applied power to takeoff. The airplane became airborne and when the flight was approximately 15 to 20 feet above ground level, he heard a "boom" sound, and experienced an immediate loss of elevator control. The airplane began a right turn and pitched nosed down. He reduced throttle to idle, and the airplane impacted the ground between runways 24 and 27. He later stated the leading edge of the right horizontal stabilizer rotated up 90 degrees. Each horizontal stabilizer (stabilizer) is structurally attached to the boom tube at the front and rear of each stabilizer. Additionally, a flying wire attaches to the top and bottom of each stabilizer. The front of each stabilizer is secured to the boom tube by a clevis and a safety pin which secures through a u-shaped bracket on the boom tube and a mating fitting on the stabilizer. The rear of each stabilizer is secured to the boom tube by a 1/4 inch diameter bolt and self locking nut which goes through a hinge. According to the pilot, postaccident the forward clevis pin and safety pin of the right stabilizer was not located. The upper and lower flying wires of the right stabilizer were not failed, and the 1/4 inch diameter bolt of the aft attach point was in-place.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The inadequate preflight inspection of the airplane by the pilot-in-command (pilot) for his failure to assure that the forward attachment of the right horizontal stabilizer was secured and safetied before flight resulting in rotation of the leading edge of the right horizontal stabilizer

and in-flight loss of control.

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION

Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. HORIZONTAL STABILIZER ATTACHMENT - NOT SAFETIED
2. (C) AIRCRAFT PREFLIGHT - INADEQUATE - PILOT IN COMMAND
3. HORIZONTAL STABILIZER - COLLAPSED

Occurrence #2: LOSS OF CONTROL - IN FLIGHT

Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

4. AIRCRAFT CONTROL - NOT POSSIBLE

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

Findings

5. TERRAIN CONDITION - GROUND

Factual Information

On June 14, 2003, about 0930 eastern daylight time, a Kolb MKIII homebuilt airplane, not registered with the Federal Aviation Administration, experienced an in-flight loss of control and crashed on the Flagler County Airport, Bunnell, Florida. Visual meteorological conditions prevailed at the time and no flight plan was filed for the 14 CFR Part 91 maintenance test flight. The airplane was substantially damaged and the private-rated pilot, the sole occupant, sustained minor injuries. The flight was originating at the time of the occurrence.

The pilot stated that prior to the flight, the horizontal stabilizers which had been folded up were extended. He attached the lower elevator flight control cables and performed a preflight inspection of the airplane; he did not have a preflight checklist. Following the preflight, he started the engine and taxied to runway 24, and after landing traffic cleared the runway, he taxied onto the runway and applied power to takeoff. The airplane became airborne and when the flight was approximately 15 to 20 feet above ground level, he heard a "boom" sound, and experienced an immediate loss of elevator control. The airplane began a right turn and pitched nosed down. He reduced throttle to idle, and the airplane impacted the ground between runways 24 and 27. He later stated the leading edge of the right horizontal stabilizer rotated up 90 degrees.

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According to the pilot, postaccident the forward clevis pin and safety pin of the right stabilizer was not located. The upper and lower flying wires of the right stabilizer were not failed, and the 1/4-inch diameter bolt of the aft attach point was installed.

Pilot Information

Certificate:	Private	Age:	50, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	Airplane single-engine	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	September 20, 2002
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	253 hours (Total, all aircraft), 82 hours (Total, this make and model), 23 hours (Last 90 days, all aircraft), 13 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Kolb Company	Registration:	UNREG
Model/Series:	MKIII	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	035
Landing Gear Type:	Tailwheel	Seats:	
Date/Type of Last Inspection:	May 17, 2003 Continuous airworthiness	Certified Max Gross Wt.:	650 lbs
Time Since Last Inspection:	10 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	400 Hrs	Engine Manufacturer:	Rotax
ELT:	Not installed	Engine Model/Series:	582
Registered Owner:	Unregistered	Rated Power:	65 Horsepower
Operator:	John E. Richmond	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Scattered / 3000 ft AGL	Visibility	10 miles
Lowest Ceiling:	Unknown	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	250°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.95 inches Hg	Temperature/Dew Point:	86°C / 75°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Bunnell, FL (X47)	Type of Flight Plan Filed:	None
Destination:	Bunnell, FL (X47)	Type of Clearance:	None
Departure Time:		Type of Airspace:	Class G

Airport Information

Airport:	Flagler County X47	Runway Surface Type:	Asphalt
Airport Elevation:		Runway Surface Condition:	Dry
Runway Used:	24	IFR Approach:	Unknown
Runway Length/Width:		VFR Approach/Landing:	

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	29.467222,-81.20639

Administrative Information

Investigator In Charge (IIC): Monville, Timothy

Additional Participating Persons:

Original Publish Date: November 25, 2003

Last Revision Date:

Investigation Class: [Class](#)

Note: This accident report documents the factual circumstances of this accident as described to the NTSB.

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=57449>

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The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).