



Aviation Investigation Final Report

Location:	ROLLING FORK, Mississippi	Accident Number:	MIA90LA083
Date & Time:	March 6, 1990, 09:30 Local	Registration:	N23509
Aircraft:	AIR TRACTOR AT-301	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 137: Agricultural		

Analysis

WHILE ON SHORT FINAL, THE PLT WAS UNABLE TO CONTROL THE ACFT ABOUT THE LONGITUDINAL AXIS. THE BANK CONTINUED UNTIL THE ACFT IMPACTED THE GROUND & CAME TO REST INVERTED. EXAM OF THE ACFT REVEALED THAT THE LEFT AILERON SEPARATED UPWARD IN-FLT. THE THREE BOLTS & SELF LOCKING NUTS USED TO SECURE IT WERE NOT LOCATED. THERE WAS NO DAMAGE TO THE AILERON ATTACH ARMS UNDER THE WING NOR WAS THERE DAMAGE TO THE AILERON'S ATTACH PIONTS. THE AILERON PUSH-PULL ROD WAS EXAMINED & WAS FOUND TO HAVE FAILED DUE TO OVER LOAD. AN ANNUAL INSPN WAS PERFORMED 5 DAYS EARLIER, BUT THE AILERON WAS NOT REMOVED. THE ACFT LOGBOOK DID NOT CONTAIN AN ENTRY INDICATING THAT THE AILERON WAS REMOVED.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE IN-FLIGHT SEPARATION OF THE LEFT AILERON DUE TO IMPROPER MAINTENANCE PROCEDURES AND AN INADEQUATE AIRCRAFT PREFLIGHT.

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings

1. (C) FLT CONTROL SYST,AILERON CONTROL CABLE/ROD - FAILURE,TOTAL
2. (C) FLT CONTROL SYST,AILERON CONTROL CABLE/ROD - OVERLOAD
3. (C) FLIGHT CONTROL,AILERON - SEPARATION
4. (C) MAINTENANCE - IMPROPER - UNKNOWN
5. (C) AIRCRAFT PREFLIGHT - POOR - PILOT IN COMMAND

Occurrence #2: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings
6. AIRCRAFT CONTROL - NOT POSSIBLE - PILOT IN COMMAND

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Factual Information

Pilot Information

Certificate:	Commercial	Age:	29, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Center
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	October 27, 1989
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	4336 hours (Total, all aircraft), 2113 hours (Total, this make and model), 4282 hours (Pilot In Command, all aircraft), 33 hours (Last 90 days, all aircraft), 33 hours (Last 30 days, all aircraft), 12 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	AIR TRACTOR	Registration:	N23509
Model/Series:	AT-301 AT-301	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	301-0391
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	March 1, 1990 Annual	Certified Max Gross Wt.:	5000 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	4851 Hrs	Engine Manufacturer:	P&W
ELT:	Not installed	Engine Model/Series:	R-1340
Registered Owner:	NICKS FLYING SERVICE INC	Rated Power:	600 Horsepower
Operator:	NICKS FLYING SERVICE, INC.	Operating Certificate(s) Held:	
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	GWO ,155 ft msl	Distance from Accident Site:	51 Nautical Miles
Observation Time:	10:00 Local	Direction from Accident Site:	45°
Lowest Cloud Condition:	Scattered / 10000 ft AGL	Visibility	10 miles
Lowest Ceiling:	Broken / 20000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	50°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	19°C / 7°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	None
Destination:	(2)	Type of Clearance:	None
Departure Time:	09:20 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:	0 ft msl	Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:	0 ft / 0 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC): Monville, Timothy

Additional Participating Persons:

Original Publish Date: September 4, 1992

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=32634>

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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](#).