



Aviation Investigation Final Report

Location:	Corning, Arkansas	Accident Number:	CEN09LA239
Date & Time:	April 7, 2009, 12:06 Local	Registration:	N36597
Aircraft:	AIR TRACTOR INC AT-301	Aircraft Damage:	Substantial
Defining Event:	Loss of engine power (total)	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Ferry		

Analysis

The commercial pilot was on departure from initial takeoff when the engine "popped" several times and stopped producing power. The pilot performed a forced landing in a rice field off the departure end of the runway. The pilot found the number one cylinder head cracked during a postaccident examination of the airplane. Additional examination of the airplane revealed damage to the left aileron and both horizontal stabilizers. Additional examination of the cracked cylinder head could not be accomplished and a cause of the failure was not determined.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A loss of engine power due to the failure of the number one engine cylinder for undetermined reasons.

Findings

Aircraft	Recip eng cyl section - Failure
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Factual Information

History of Flight

Initial climb	Loss of engine power (total) (Defining event)
Initial climb	Off-field or emergency landing

On April 7, 2009, at 1206 central daylight time, an Air Tractor AT-301 airplane, N36597, was substantially damaged during a forced landing following a loss of engine power near Corning, Arkansas. The commercial pilot was not injured. The flight was being conducted under the provisions of Title 14 Code of Federal Regulations Part 91 without a flight plan. The cross country flight was originating from Corning Municipal Airport (4M9), Corning, Arkansas. Visual meteorological conditions prevailed at the time of the accident.

The pilot stated he had just purchased the airplane and the accident flight was his first in that airplane. He and a mechanic examined the airplane prior to flight and did not observe any anomalies with the airplane or engine. The pilot started the engine and allowed it to idle and warm up for fifteen minutes prior to taxiing to takeoff. He stated the preflight and engine run-up were normal.

The pilot reported he was on departure from initial takeoff when the engine "popped" several times and stopped producing power. The pilot performed a forced landing in a rice field off the departure end of the runway. The pilot found the number one cylinder head cracked during a post accident examination of the airplane.

Examination of the airplane revealed damage to the left aileron and both horizontal stabilizers bent downward. Examination of the cracked cylinder head was not possible and a cause of the failure was not determined.

Pilot Information

Certificate:	Commercial	Age:	Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Single
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 With waivers/limitations	Last FAA Medical Exam:	
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Make:	AIR TRACTOR INC	Registration:	N36597
Model/Series:	AT-301	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	301-0331
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:		Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	P&W
ELT:		Engine Model/Series:	R1340 SERIES
Registered Owner:	WENZEL RICHARD E	Rated Power:	600 Horsepower
Operator:	WENZEL RICHARD E	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:		Condition of Light:	
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:		Visibility	
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	
Precipitation and Obscuration:			
Departure Point:	Corning, AR (4M9)	Type of Flight Plan Filed:	Unknown
Destination:		Type of Clearance:	
Departure Time:		Type of Airspace:	

Airport Information

Airport:	Corning Municipal Airport 4M9	Runway Surface Type:	
Airport Elevation:	292 ft msl	Runway Surface Condition:	
Runway Used:		IFR Approach:	None
Runway Length/Width:		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:	36.410083,-90.579666(est)

Administrative Information

Investigator In Charge (IIC):	Baker, Daniel
Additional Participating Persons:	Chris Kliewer; FAA; Little Rock, AR
Original Publish Date:	September 10, 2009
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=73615

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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](#).