



# Aviation Investigation Factual Report

<b>Location:</b>	Arriba, Colorado	<b>Accident Number:</b>	CEN11LA323
<b>Date &amp; Time:</b>	May 5, 2011, 17:30 Local	<b>Registration:</b>	N5192F
<b>Aircraft:</b>	AIR TRACTOR INC AT-402A	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Controlled flight into terr/obj (CFIT)	<b>Injuries:</b>	1 Serious
<b>Flight Conducted Under:</b>	Part 137: Agricultural		

## Factual Information

On May 5, 2011, about 1730 mountain daylight time an Air Tractor AT-402A airplane, N5192F, impacted terrain after descending from cruise flight near Arriba, Colorado. The commercial pilot received serious injuries. The airplane sustained substantial damage. The aircraft was registered to and operated by a private individual under the provisions of 14 Code of Federal Regulations Part 137 agricultural flight. Visual meteorological conditions prevailed for the flight, which was not operating on a flight plan. The airplane departed a private airfield about 1630.

A witness observed the airplane at a low altitude heading in a southeasterly direction. Shortly after that, the airplane impacted the ground at a high rate of speed. The witness also noted that the airplane was not performing aerial application at the time.

The first responders were able to assist the pilot from the airplane. The pilot was hospitalized and could not remember the details of the flight.

A Federal Aviation Administration Inspector responded to the accident site, which was a wide open flat field used for farm crops and no trees or obstacles in the vicinity. The airplane had extensive damage to the airframe and no postcrash fire. All components of the airplane were accounted for at the accident site.

The wreckage was recovered and a follow-up exam conducted at a salvage yard. Examination of the wreckage at the salvage yard revealed control continuity and no pre-impact abnormalities with the airframe. A visual examination of the propeller revealed that all three blades had similar bends and marks. One propeller blade had about 6-inches of the blade tip torn off. Two blades were curled towards the non-cambered side with polishing of the blades. The third blade had multiple bends. The signatures and marks on the three-bladed propeller are consistent with engine power at the time of the accident.

A SOTLOC global positioning system (GPS) data card was removed from the airplane and forwarded to the NTSB Vehicle Recorders Laboratory for data extraction. Review of the SATLOC data for the accident date started near Arriba, Colorado, at 1536:40 mountain standard time [the time has not been corrected for daylight savings]. The data tracked the airplane in a northwest direction, before the airplane appeared to work an area with multiple back-n-forth tracks. An individual track was then identified as the airplane headed in an easterly direction. The data revealed the airplane was at an altitude of about 5,300 (mean sea level) and an airspeed of 140 knots. The altitude remained about the same until approximately one minute before the data ends at 1626:27. About 1625:00, the airplane started a descent from 5,300 feet and ended at an altitude of about 5,033 feet. According to Google Earth, the elevation of the ground in the general vicinity of the accident site was about 5,080 feet. In the

last two minutes of data, the airplane increased its speed from about 140 knots to 158 knots, when the data ends.

## Pilot Information

<b>Certificate:</b>	Commercial; Flight instructor	<b>Age:</b>	54,Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Single
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	Airplane single-engine	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Unknown	<b>Last FAA Medical Exam:</b>	May 2, 2011
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	November 6, 2010
<b>Flight Time:</b>	(Estimated) 8209 hours (Total, all aircraft), 1812 hours (Total, this make and model), 8029 hours (Pilot In Command, all aircraft), 35 hours (Last 90 days, all aircraft), 24 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	AIR TRACTOR INC	<b>Registration:</b>	N5192F
<b>Model/Series:</b>	AT-402A	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Restricted (Special)	<b>Serial Number:</b>	402A-1093
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	1
<b>Date/Type of Last Inspection:</b>	October 10, 2010 Annual	<b>Certified Max Gross Wt.:</b>	
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Turbo prop
<b>Airframe Total Time:</b>	2249 Hrs as of last inspection	<b>Engine Manufacturer:</b>	P&W
<b>ELT:</b>	Not installed	<b>Engine Model/Series:</b>	PT6A SERIES
<b>Registered Owner:</b>	On file	<b>Rated Power:</b>	500 Horsepower
<b>Operator:</b>	On file	<b>Operating Certificate(s) Held:</b>	None
<b>Operator Does Business As:</b>	On file	<b>Operator Designator Code:</b>	ZJZG

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	KLIC	<b>Distance from Accident Site:</b>	25 Nautical Miles
<b>Observation Time:</b>	17:55 Local	<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	10 knots / None	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	160°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30.09 inches Hg	<b>Temperature/Dew Point:</b>	18°C / -3°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Arriba, CO	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Arriba, CO	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	16:30 Local	<b>Type of Airspace:</b>	

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Serious	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 Serious	<b>Latitude, Longitude:</b>	39.279323,-103.270805(est)

## Administrative Information

Investigator In Charge (IIC):	Hatch, Craig
Additional Participating Persons:	Joshua I Pritchard; FAA FSDO; Denver, CO
Report Date:	March 27, 2012
Last Revision Date:	
Investigation Class:	<a href="#">Class</a>
Note:	
Investigation Docket:	<a href="https://data.nts.gov/Docket?ProjectID=79049">https://data.nts.gov/Docket?ProjectID=79049</a>

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