



Air Tractor, Inc.
Accident Investigation

FIELD NOTES

NTSB Accident Number:

CEN17LA284

Date & Location of Accident:

18 Jul 2017
Reyno, Arkansas

NTSB REQUESTED CONFIDENTIAL:

The information contained in this report is produced for the sole purpose of providing observations and information to the NTSB and/or FAA during an active accident investigation. No entity may release or share this information prior to its inclusion in the NTSB's public docket without the express written consent of Air Tractor, Inc.

PREPARED BY:

Robert Salyers
Air Tractor, Inc.





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Accident Investigation

FACTUAL INFORMATION

AIRCRAFT:

AT-802A manufactured in 2017
802A-0714
N816FF

DATE & TIME:

07/18/2017
~1715 hrs. local (CDT)

INJURIES:

None

LOCATION:

Approx. 4 miles West of Reyno, AR
GPS Coord: N35.359919°, W90.809365°

PILOT:

William Campbell
Certificate No. [REDACTED]

OPERATOR:

Steve Cusson
C & C Flying Service
[REDACTED]
Pocaontas, AR 72455

NTSB INVESTIGATOR:

Todd Fox
NTSB Central Region
[REDACTED]
Denver, CO 80239
[REDACTED]
Office: [REDACTED]

INSURANCE:

Old Republic Aerospace
Contact: Eleazar Nepomuceno
[REDACTED]
Dallas, TX 75248
Office: [REDACTED] Cell: [REDACTED]

FAA INVESTIGATOR:

Bill Kelly
Little Rock FSDO
[REDACTED]
Office: [REDACTED]
Fax: [REDACTED]

SALVAGE:

Dawson Aircraft, Inc.
[REDACTED]
Clinton, AR 72031
Will Dawson [REDACTED]

OTHER CONTACTS:

Late Aircraft Repair
[REDACTED]
Pocahontas, AR 72455
[REDACTED]

OTHER CONTACTS:



Example of AT-802A

The information contained in this report is the result of travelling to the incident site on 7/19/2017, accompanied by Bill Kelly, FAA Inspector, Little Rock FSDO, Steve Cusson, Owner / Operator, William Campbell, Pilot, and Kevin Late, Late Aircraft Repair, Pocahontas, AR. Arrival at the scene was at approximately 1500 hrs CDT. The aircraft had not been recovered by the salvage company at this time.

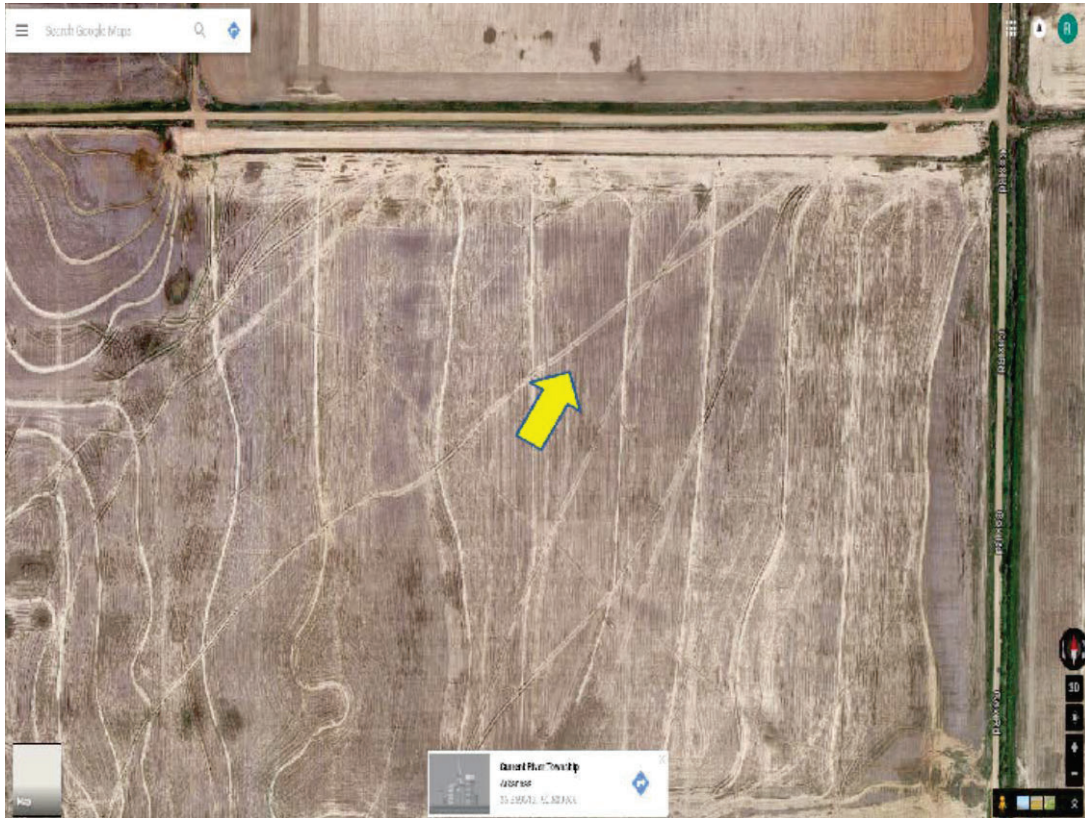
This report is subject to revision as additional information becomes available. The intent of this report is to provide details relating to the investigation of the subject incident. This report is not to be shared with any person outside the scope of this official investigation.

GENERAL OBSERVATIONS OF WRECKAGE:

Upon arrival at the scene, it was noted that the aircraft was located in a soybean field approximately four (4) miles west of Reyno, Arkansas located on the west side of Cox Rd., one half (1/2) mile south of Hurst Rd. It was reported that the aircraft was being operated from the adjacent landing strip (unimproved) running east / west along the north edge of the soy bean field. The aircraft came to rest heading approximately 030° at approximately N35.359919°, W90.809365°, as depicted by yellow arrow. (See Photo 1)

It was reported that prior to my arrival, the investigating FAA inspector, Mr. Bill Kelly and Kevin Late of Late Aircraft Repair in Pocahontas, Arkansas verified control linkages and range of travel of engine controls. All engine controls were fully intact and properly rigged with no damage noted.

The ground impact marks and suspected travel of the aircraft, prior to and after impact, were not noted. The final position of the aircraft is made only as an observation in this report.



(Photo 1)

The aircraft was confirmed to be an AT-802A serial number 802A-0714 (Photo 2), registered as N816FF (Photo 3). This aircraft was manufactured in 2017. The aircraft hourmeter showed an elapsed time of 8.5 hours (Photo 4). The engine was confirmed to be a PT6A-65AG engine serial number PCE-PN0314 (Photo 5)



(Photo 2)



(Photo 3)

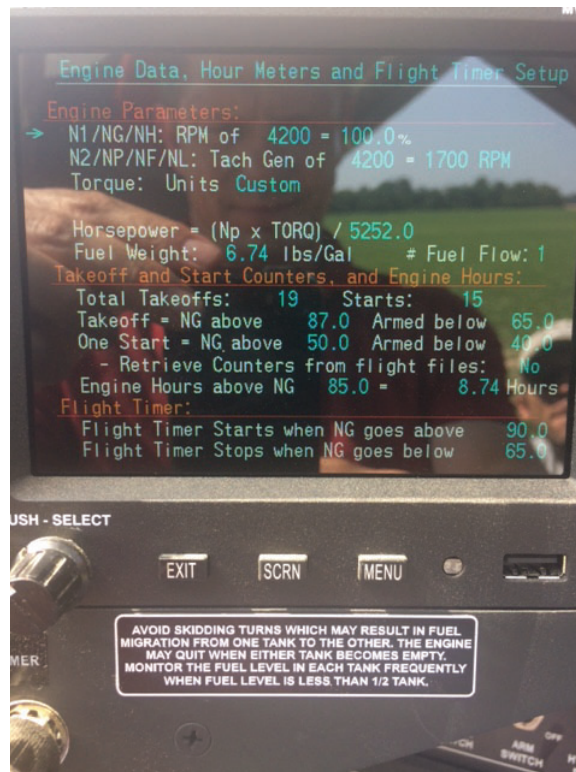


(Photo 4)



(Photo 5)

The aircraft was fitted with an MVP-50T Digital Engine Monitoring System. The Engine Data, Hour Meter, and Flight Timer Setup page showed the engine to have 8.74 hours of operation above 85% Ng, 19 Total Takeoffs, and 15 Total Starts (See Photo 6). It was verified to be properly programmed for an AT-602 with a PT6A-65AG installed.



(Photo 6)

The aircraft was located in the soybean field in an upright position with the fuselage oriented on a north easterly heading (approximate heading 030°). The main landing gear sustained minimal damage / distortion, but was intact and remained attached to the mount structure, with no visible damage to landing gear mounting structure. The wings remained attached to the fuselage in their normal location, with minimal impact damage to the wingtips. The right wing sustained slightly more damage than the left, along with the right hand aileron and flap assemblies. The left hand wing was minimally damaged outboard towards the wing tip. The fuselage structure was generally undamaged. The aft fuselage and empennage were generally undamaged, other than the tail landing gear spring and rudder horn. The right hand elevator sustained minor impact damage.



(Photo 7) Wreckage as viewed from the front



(Photo 8) As viewed from the front left



(Photo 9) As viewed from left



(Photo 10) As viewed from left rear

FUSELAGE:

The fuselage was unaffected and completely intact with no damage. The right hand main landing gear was deflected inboard with permanent set (See Photo 11). The left hand main landing gear appeared generally undamaged (See Photo 12).



(Photo 11)



(Photo 12)

COCKPIT:

The interior of the cockpit was examined with no anomalies noted. The aircraft was fitted with AmSafe cockpit restraint system airbags and were not deployed. The Kawak throttle quadrant was intact with control linkages properly connected. All engine controls moved freely through full range of motion (See Photo 13).



(Photo 13)

Fuel indication on MVP-50T displayed 55.5 gallon in left fuel tank and 142 gallon in the right (See Photo 14). A fuel sample was taken from both wing tanks to verify presence of fuel. The engine fuel control unit (FCU) fuel filter housing was removed to verify presence of fuel at the engine. Fuel existed at all locations.



(Photo 14)

WINGS:

Both wings remain intact with damage by ground impact. The flaps were symmetrically extended and properly connected. (See photo 15 and 16) The right hand flap sustained damage on the outboard end trailing edge (See photo 19). The left hand flap appeared undamaged (See photo 20). The right hand wing sustained significantly more damage than the left. The right hand wing exhibited impact marks from the flap outboard to the wing tip (See photo 17). The left hand wing displayed minor impact damage on trailing edge outboard of aileron (See Photo 18).



(Photo 15)



(Photo 16)



(Photo 17)



(Photo 18)

Both ailerons remained intact and installed in their proper placement on the wings. The right aileron received minimal damage (See Photo 19).



(Photo 19)



(Photo 20)

EMPENNAGE:

The tail landing gear was detached from the mount structure and lay adjacent to the empennage. (See photo 21). The vertical fin and rudder remained intact, with minimal impact damage to the rudder horn (See photo 22 and 23). The left hand elevator boost tab separated from its mounting locations but controls remained attached (See photo 22).



(Photo 21)



(Photo 22) L/H elevator boost tab circled in red



(Photo 23) – Damaged rudder horn circled in red

The left hand horizontal stabilizer was generally undamaged, with the exception of the separated aforementioned elevator boost tab (See photos 24 and 25). The right hand elevator exhibited impact damage on outboard end (See Photo 26)



(Photo 24)



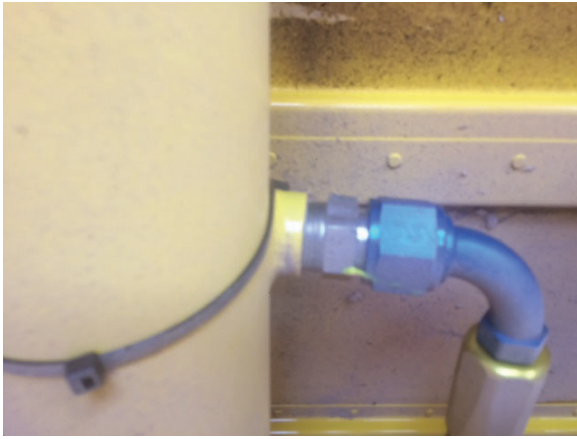
(Photo 25)



(Photo 26)

FUEL SYSTEM AND ENGINE INDICATION:

The fuel system was inspected for continuity and component condition. The header tank was intact and fuel lines secure (See photo 27 and 28). The electric boost pump fuel lines were intact and secure (See photo 29). The fuel selector valve was intact and operational with all fuel secure (See photo 31). The engine driven (low pressure) fuel pump was intact and fuel lines secure (See photo 31).



(Photo 27)



(Photo 28)



(Photo 29)



(Photo 30)



(Photo 31)

The MVP-50T Digital Engine Monitor system was noted to be functional when electrical power was applied with the engine not operating. The fuel and oil lines (IE. Tq.(hi), Tq.(low), Fuel Pressure, and Oil Pressure) leading to the transducers were intact and not damaged (See photo 32). The transducer cannon plugs were properly installed and intact (See photo 33).



(Photo 32)



(Photo 33)

POWERPLANT:

The engine was confirmed to be a PT6A-65AG engine serial number PCE-PN0314. The engine exhibited no apparent damage or external oil or fuel leaks. All engine controls were checked for continuity and full range of motion. No anomalies noted. The engine controls were noted as being in the following positions: Power Lever – Idle, Propeller – feather, Condition Lever – Cut-off (See Photo 13).

The engine fuel control unit was confirmed to be P/N: 8063-641 / CPW 3055142-05, S/N: 20786730 (See Photo 34) inspected with no anomalies noted. The FCU override input arm was safety wired to the “off” position as the aircraft was not equipped with a manual FCU override (See Photo 35). The Py filter bowl was intact and properly safety wired (See Photo 36).

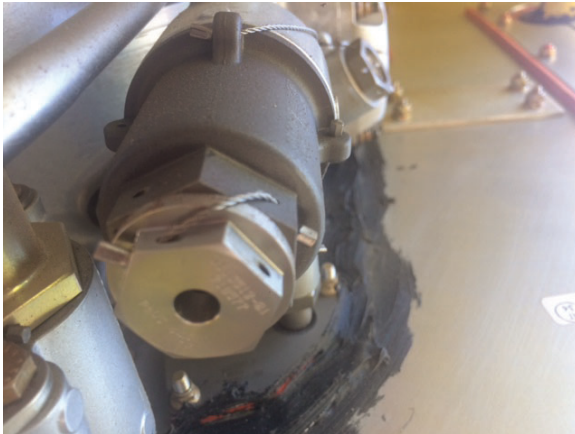
The gas generator was rotated freely utilizing the air conditioner compressor drive on the accessory gear box (AGB) with no anomalies noted. The power section and reduction gear box (RGB) rotated freely by turning the propeller through by hand. The propeller was undamaged and did not appear to have impacted the ground.



(Photo 34)



(Photo 35)

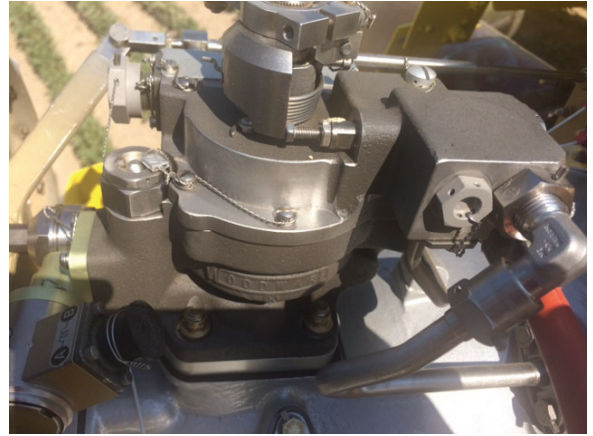


(Photo 36)

The engine primary governor (propeller governor or constant speed unit) was verified to be P/N: 66503-210960-01 (See Photo 37). It was intact with no leakage noted. Input controls operated normally throughout the full range of motion (See Photo 38). The propeller governor Py bleed link was found intact and fully seated against the cut-off stop (See Photo 39). The engine overspeed governor was intact and no damage noted (See Photo 40).



(Photo 37)



(Photo 38)



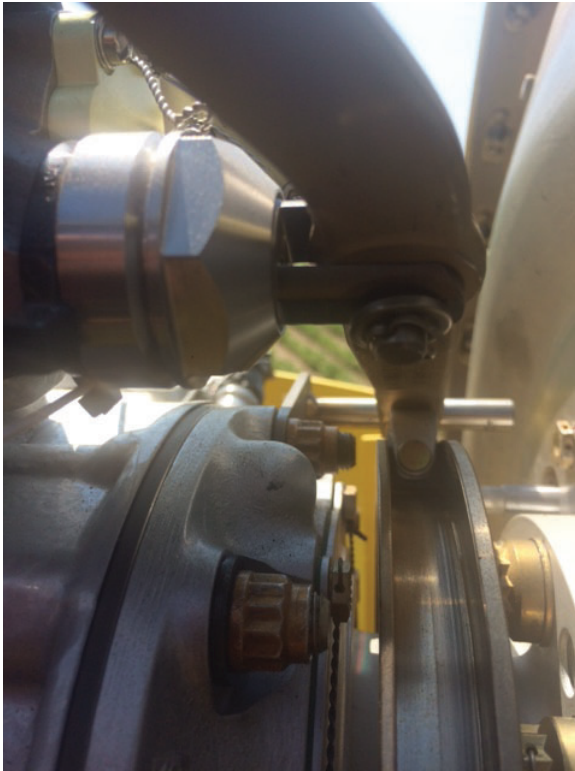
(Photo 39)



(Photo 40)

PROPELLER CONTROLLING:

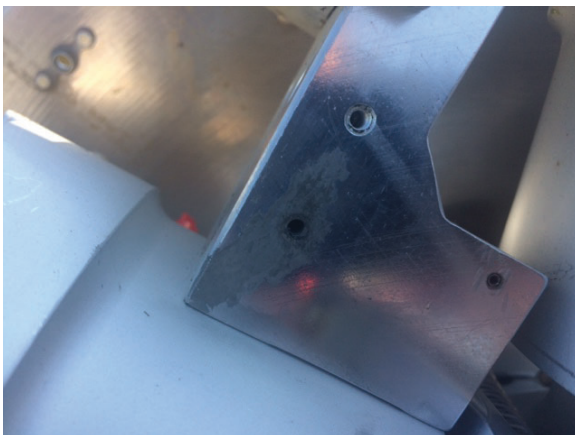
The propeller beta system was correctly connected and continuous. The beta plunger appeared properly rigged (flush) and beta block properly seated under the guide pin in the propeller beta ring (See Photo 41). The low pitch “beta nuts” were undisturbed (See Photo 42). The only anomaly noted was slight surface corrosion on propeller counterweight (See Photo 43).



(Photo 41)

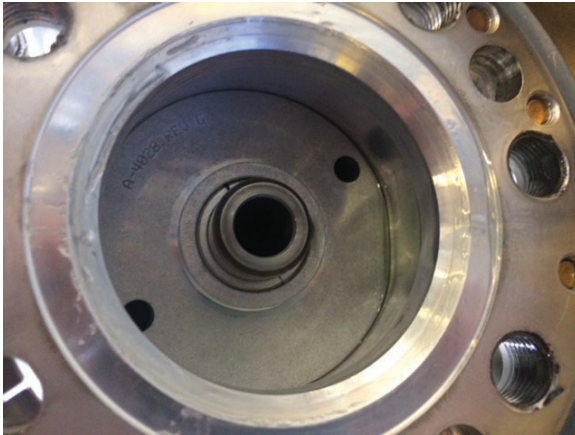


(Photo 42)

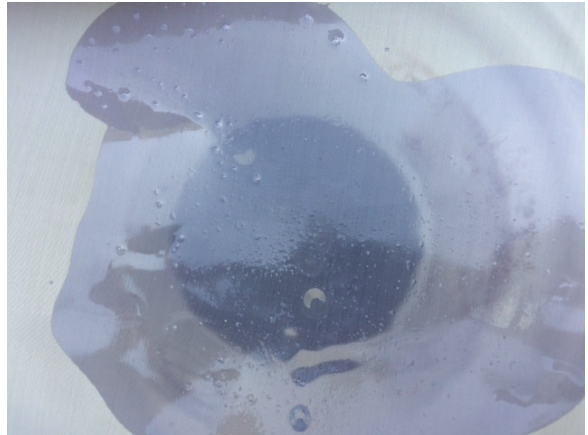


(Photo 43)

The incident aircraft was relocated to Air Tractor, Inc. located in Olney, Texas and arrived on the morning of July 26, 2017. Technicians removed the propeller. The oil was captured and sifted through a fine mesh screen to inspect for debris. No debris was noted either in the propeller shaft or from the oil drained from the propeller hub (See Photos 44 and 45)



(Photo 44)



(Photo 45)

MVP-50T FLIGHT DATA

The flight data files as recorded by the MVP-50T Digital Engine Monitoring System were downloaded onto a USB drive under FAA inspector and owner supervision, and reviewed while on site. One (1 ea.) copy was provided to the FAA representative and one (1 ea.) to the aircraft owner. Copies of that file will remain with this report. The MVP-50T data stored within the unit on the aircraft was not deleted or modified.

Maximum engine parameters obtained during this event as evidenced by data log "Flt76_07-18-17f" line 4052 at time stamp 17:09:29 were as follows:

Tq: 6920 Ft. Lbs.
Np: 790 RPM
Ng: 104.2%
Wf: 111 GPH
ITT: 765

DISTURBANCE OF WRECKAGE:

No portion of the wreckage was removed by me during my involvement in this accident investigation. My disturbance of the wreckage was limited to handling components to the extent necessary for identification and documenting their condition. Any inspection panels that were not installed were removed prior to my arrival with the exception of the left hand side engine cowling, lower engine cowling, and propeller spinner. The safety wire on the FCU fuel filter was removed to facilitate the removal of the fuel filter housing and filter assembly to inspect for the presence of fuel. I did not make any modification to the aircraft wreckage that would result in loss of evidence.