

TBS file: A25F0173

Investigator Notes - Allan Chaulk:

Subject Matter: Conversation with Mr. Martin Holte, Fire Boss Technical Support Lead, Wipaire.

Contact information:

Martin Holte

Office: [REDACTED] Mobile: [REDACTED]

[REDACTED]

[REDACTED] South St. Paul, [REDACTED]

Purpose: Investigator Chaulk was seeking technical information the process of converting an Air Tractor 802 to an Air Boss. Of Note: This was not a formal TSB interview.

Details:

- Mr. Holte volunteered information on his aviation background.
- AMP since 2002 – 3 years' experience as Inspection Authority.
- Pilot since 2003.
- 18.5 years employed by Wipaire.
- Last 3 years he has been in Technical Support Lead.
- Mr. Holte was deployed to CYYT to troubleshoot and rectify a voltage control problem that occurred during the flight to CYYT.

Of note: Mr. Holte was very willing to share his experience and knowledgeable with me.

Aerodynamic changes made in the conversion of an AT802 to a FireBoss:

- Lower finlet removed on part of the hull to install a FireBoss finlet.
- Ventral Fin change to meet Part 23 stability test criteria.
- Inboard flap is cut off then reinstalled with two heavy plates attached.
- Landing gear removed – amphibious floats installed.
- On single seat models Vortex Generators are installed.
- A few degrees of rudder travel may be added.
- Elevator Trim Tab is extended by 1 inch for stability. (All other control surfaces retain Air Tractor factor specs such as ailerons and flaps.
- AT802 has a PT6-67A installed rated at 1424 HP, when converted to a FireBoss the HP is increased to 1600HP. (Note: FireBoss A/C were originally certified with 1350 HP)

Information related to N4025K and how it was equipped/configured including for the ferry flight:

- The A/C was primarily equipped with analog instruments including engine instruments.
- Garmin 215 Nav Comms.
- Garmin 275 Attitude Indicator. (Note: Driven by VOR as a CDI.
- Engine monitoring system fed from engine instruments.

- Fuel Tanking utilized the aircrafts normal tanks and the aircraft hopper. Modifications to use the hopper as a fuel take was completed in accordance with FireBoss Service Letter SL258. The SL is available on the FireBoss website – it went live 12/07/23.

Information related to what equipment was noticed onboard the aircraft before departure out of CYYT:

- 1 - Garmin 496 – GPS portable.
- 1 - Garmin 796 – possible but was not hooked up.
- 1 - Garmin 345 transponder was seen but not hooked up.
- 1 - VHF ICOM unit with antenna
- 1 - Tablet mount – minus the tablet. (No century unit to drive table visible)
- 1 - Starlink antenna which made the aircraft internet capable according to the pilot. Could provide updates while enroute.
- 1 - Life raft.
- 1- Portable Oxygen system.
- 1 – Garmin inReach (Possibly the mini version)

Information related to pilot attire before departure from CYYT:

- The pilot was wearing a flight suit and a life preserver.
- No survival suit was noted although there is the possibility one may have been onboard the aircraft.
- The pilot appeared prepared and eager to begin the flight as the weather was considered to be suitable for the next two days.

Information related to voltage control problem and rectification - N4025K:

- Approximately 2 hours into the flight to CYYT a circuit breaker tripped, and the low voltage light illuminated.
- The pilot shut off all non-essential equipment to reduce electrical load and then lowered the landing gear.
- The pilot continued the flight and landed in CYYT uneventfully.
- The pilot then retired to a hotel until Mr. Holte arrived in CYYT.
- Mr. Holte arrived in CYYT at approximately 02:30 Newfoundland Daylight Time (UTC/GMT - 2:30 hours).
- Mr. Holte arrived at the aircraft approximately 03:00 NDT.
- The aircraft was parked at the Irving Aviation FBO. [REDACTED]
- Work began at approximately 03:15 NDT – set up equipment – pilot ran the aircraft while Mr. Holte completed voltage/load checks for troubleshooting purposes.
- Troubleshooting revealed that the Generator Control Unit (GCU) required replacement.
- Mr. Holte checked all associated wiring and then replaced the GCU.
- The aircraft was run-up for voltage/load testing which confirmed that the system was serviceable, and that the aircraft could be returned to service.

- Mr. Holte then remained at the airfield until after the aircraft departed on the ferry flight.

Other items of note:

- Irving Aviation may have CCTV camera(s).
- It has not been determined if the ELT had a remote switch in the cockpit.
- It has not been confirmed if the ELT had an Unwater Locator Beacon attached. Note: Air Tractor D. Lowe is of the opinion it likely did not have a ULB.
- It has not been determined if the ADSB antenna is located on the top or bottom side of the aircraft.

End of notes 5/9/2025 1:24:05 PM ADT.

Allan Chaulk

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Transportation Safety Board of Canada / Government of Canada

