



Aviation Investigation Final Report

Location:	Grygla, Minnesota	Accident Number:	CHI01LA191
Date & Time:	June 29, 2001, 19:45 Local	Registration:	N3656B
Aircraft:	Air Tractor AT-301	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 137: Agricultural		

Analysis

The aerial application airplane sustained substantial damage on impact with terrain on initial climbout from a private airstrip. The pilot reported no injuries. The pilot's written statement indicated, "Took of[f] with a light load NW wind at 3-5 mph. Temp at 82[degrees.] After take off I passed trees on the west side of airport [and] right wing first fell [and] the air was bad [and] aircraft settled to the ground[.] The aircraft was destroyed[.]" The pilot listed no airplane "mechanical malfunction failure" on his statement. The temperature, 27 nautical miles and 230 degrees from the accident site, was 27 degrees C and the density altitude there was 2,802 feet above mean sea level.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot not maintaining altitude/clearance from terrain on takeoff. A factor was the high density altitude.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (F) WEATHER CONDITION - HIGH DENSITY ALTITUDE
2. (C) ALTITUDE/CLEARANCE - NOT MAINTAINED - PILOT IN COMMAND

Factual Information

On June 29, 2001, about 1945 central daylight time, an Air Tractor AT-301, N3656B, piloted by a commercial pilot, sustained substantial damage on impact with terrain on initial climbout from a private airstrip (2,600 feet by 50 feet, dry asphalt) near Grygla, Minnesota. The aerial application flight was operating under 14 CFR Part 137. Visual meteorological conditions prevailed at the time of the accident. No flight plan was on file. The pilot reported no injuries. The local flight was originating at the time of the accident.

The pilot's written statement indicated, "Took off[f] with a light load NW wind at 3-5 mph. Temp at 82[degrees.] After take off I passed trees on the west side of airport [and] right wing first fell [and] the air was bad [and] aircraft settled to the ground[.] The aircraft was destroyed[.]" The pilot listed no airplane "mechanical malfunction failure" on his statement.

At 1955, the Thief River Falls Regional Airport, near Thief River Falls, Minnesota, located 27 nautical miles and 230 degrees from the accident site, was: Wind 320 degrees at 8 knots; visibility 10 statute miles; sky condition clear; temperature 27 degrees C; dew point 16 degrees C; altimeter 29.92 inches of mercury.

At 1955, density altitude at the Thief River Falls Regional Airport was 2,802 feet above mean sea level.

Pilot Information

Certificate:	Commercial	Age:	56, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Single
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane single-engine	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	January 23, 2001
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	April 25, 2000
Flight Time:	7630 hours (Total, all aircraft), 2100 hours (Total, this make and model), 7500 hours (Pilot In Command, all aircraft), 100 hours (Last 90 days, all aircraft), 60 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Air Tractor	Registration:	N3656B
Model/Series:	AT-301	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	301-0303
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	April 19, 2001 Annual	Certified Max Gross Wt.:	5000 lbs
Time Since Last Inspection:	95 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	5935 Hrs at time of accident	Engine Manufacturer:	P&W
ELT:	Not installed	Engine Model/Series:	R1340 ANI
Registered Owner:	James Kahl Holte	Rated Power:	600 Horsepower
Operator:		Operating Certificate(s) Held:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	TVF,1116 ft msl	Distance from Accident Site:	27 Nautical Miles
Observation Time:	19:55 Local	Direction from Accident Site:	230°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	8 knots / 0 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	320°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.92 inches Hg	Temperature/Dew Point:	27°C / 16°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Grygla, MN	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	19:45 Local	Type of Airspace:	Class G

Airport Information

Airport:	Private Airstrip	Runway Surface Type:	Asphalt
Airport Elevation:	1170 ft msl	Runway Surface Condition:	Dry
Runway Used:	36	IFR Approach:	None
Runway Length/Width:	2600 ft / 50 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:	48.290611,-95.610054(est)

Administrative Information

Investigator In Charge (IIC):	Malinowski, Edward
Additional Participating Persons:	Tom Groshans; Federal Aviation Administration; Minneapolis, MN
Original Publish Date:	November 23, 2001
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=52605

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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](#).