



National Transportation Safety Board Aviation Accident Final Report

Location:	PORTALES, NM	Accident Number:	FTW98LA383
Date & Time:	09/02/1998, 1740 MDT	Registration:	N50620
Aircraft:	Air Tractor AT-502B	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	1 Minor
Flight Conducted Under:	Part 137: Agricultural		

Analysis

The pilot was flying westbound into the sun (275 degrees, 7 degrees above the horizon) during an aerial application pass over a cotton field. There was a circular pivotal sprinkler system which extended from the northern center of the field to the southeast. The pilot said that he looked over to adjust his onboard global positioning system and he struck the sprinkler. The impact separated the left main landing gear and initiated a fire in the right hand forward part of the cockpit. The pilot landed the airplane in the adjacent peanut field and the airplane ground looped during the emergency landing attempt. The airplane was destroyed during the subsequent post landing fire.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain adequate altitude/clearance during an aerial application. Also causal was the inadvertent ground loop/swerve during the landing.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: MANEUVERING - AERIAL APPLICATION

Findings

1. (F) OBJECT - OTHER
2. (C) ALTITUDE/CLEARANCE - INADEQUATE - PILOT IN COMMAND
3. (C) DIVERTED ATTENTION - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: LANDING

Findings

4. GROUND LOOP/SWERVE - INADVERTENT - PILOT IN COMMAND

Factual Information

On September 2, 1998, approximately 1740 mountain daylight time, an Air Tractor AT-502B, N50620, was destroyed by fire following an emergency landing near Portales, New Mexico. The commercial pilot, the sole occupant in the airplane, received minor injuries. The airplane was owned/operated by King AG Leasing Inc. under Title 14 CFR Part 137. Visual meteorological conditions prevailed for the local aerial application flight which originated approximately 25 minutes before the accident. No flight plan had been filed.

According to the pilot, he had flown 7 or 8 east-west passes over a cotton field, and was flying westbound into the sun (266 degrees, 19 degrees above the horizon). He said that there was a circular pivotal sprinkler extending from the northern center of the field to the southeast. He was adjusting his onboard global positioning system (GPS) and when he looked up, "I was right at the sprinkler." He said that he "immediately pulled up elevator but still struck the sprinkler." The pilot stated that a fire broke out in the right hand forward part of the cockpit and he knew he had to get out as soon as possible.

The pilot reported that the sprinkler impact had separated the left main landing gear and when he landed in the adjacent peanut field, the airplane ground looped to the left. He further stated that when the airplane came to rest, "I opened the left cockpit door and bailed out as quick as possible." The pilot received second degree burns on his right hand and arm, and first degree burns on his face.

Pilot Information

Certificate:	Commercial	Age:	45, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Center
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	07/01/1998
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	7255 hours (Total, all aircraft), 750 hours (Total, this make and model), 7195 hours (Pilot In Command, all aircraft), 290 hours (Last 90 days, all aircraft), 170 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Air Tractor	Registration:	N50620
Model/Series:	AT-502B AT-502B	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Restricted	Serial Number:	502B-0457
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	08/31/1998, Annual	Certified Max Gross Wt.:	8000 lbs
Time Since Last Inspection:	40 Hours	Engines:	1 Turbo Prop
Airframe Total Time:	780 Hours	Engine Manufacturer:	P&W
ELT:	Not installed	Engine Model/Series:	PT6-34AG
Registered Owner:	KING AG LEASING INC.	Rated Power:	750 hp
Operator:	KING AG LEASING INC.	Operating Certificate(s) Held:	
Operator Does Business As:		Operator Designator Code:	K3AG

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	CVN, 4214 ft msl	Distance from Accident Site:	15 Nautical Miles
Observation Time:	1655 MDT	Direction from Accident Site:	20°
Lowest Cloud Condition:	Scattered / 12000 ft agl	Visibility	7 Miles
Lowest Ceiling:	Broken / 23000 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	140°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	33° C / 8° C
Precipitation and Obscuration:			
Departure Point:	PRIVATE STRIP, TX (NONE)	Type of Flight Plan Filed:	None
Destination:	SUDAN, TX (NONE)	Type of Clearance:	None
Departure Time:	1715 CDT	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Destroyed
Passenger Injuries:	N/A	Aircraft Fire:	In-Flight
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC): JAMES F STRUHSAKER **Report Date:** 03/31/2000

Additional Participating Persons: ROBERT L FELDMAN; LUBBOCK, TX

Publish Date:

Investigation Docket: NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov, or at 800-877-6799. Dockets released after this date are available at <http://dms.nts.gov/pubdms/>.

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).