



Aviation Investigation Final Report

Location:	FORT PIERCE, Florida	Accident Number:	MIA89LA127
Date & Time:	April 13, 1989, 13:00 Local	Registration:	N3159D
Aircraft:	AIR TRACTOR AT-301	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 137: Agricultural		

Analysis

THE PLT STATED THAT WHILE CLIMBING AFTER TAKEOFF, THE ACFT ENG STARTED TO GRADUALLY LOSE POWER, THEN STARTED MISSING. SUBSEQUENTLY, HE MADE AN EMERGENCY LANDING IN SOME PALMETTO BUSHES, WHICH DAMAGED THE ACFT'S LANDING GEAR & WINGS. AN EXAM OF THE ENG REVEALED THE #5 CYLINDER ASSEMBLY WAS CRACKED, WHICH RESULTED IN THE LOSS OF POWER. THE PLT NOTED THAT THERE WERE HOMES IN THE AREA, WHICH PRECLUDED HIM FROM JETTISONING HIS LOAD.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: FAILURE OF THE NUMBER FIVE CYLINDER. FACTORS RELATED TO THE ACCIDENT WERE: THE PROXIMITY OF HOMES IN THE AREA, WHICH PRECLUDED JETTISONING OF THE CHEMICAL LOAD, AND HIGH VEGETATION IN THE EMERGENCY LANDING AREA.

Findings

Occurrence #1: LOSS OF ENGINE POWER(PARTIAL) - MECH FAILURE/MALF
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (C) ENGINE ASSEMBLY,CYLINDER - FAILURE,TOTAL

Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

Findings

2. (F) OBJECT - RESIDENCE
3. LOAD JETTISON - PERFORMED

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

4. (F) TERRAIN CONDITION - HIGH VEGETATION

Factual Information

Pilot Information

Certificate:	Commercial	Age:	57, Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Center
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	25000 hours (Total, all aircraft), 3700 hours (Total, this make and model), 26300 hours (Pilot In Command, all aircraft), 162 hours (Last 90 days, all aircraft), 60 hours (Last 30 days, all aircraft), 8 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	AIR TRACTOR	Registration:	N3159D
Model/Series:	AT-301 AT-301	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	301-0471
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	March 15, 1989 100 hour	Certified Max Gross Wt.:	1500 lbs
Time Since Last Inspection:	96 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	4232 Hrs	Engine Manufacturer:	P&W
ELT:	Not installed	Engine Model/Series:	R-1340-53H1
Registered Owner:	SOUTHEASTERN AIRCRAFT SALES	Rated Power:	600 Horsepower
Operator:	S.EASTERN AERIAL CROP SVC.	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	VRB ,24 ft msl	Distance from Accident Site:	10 Nautical Miles
Observation Time:	12:50 Local	Direction from Accident Site:	360°
Lowest Cloud Condition:	Scattered / 1500 ft AGL	Visibility	7 miles
Lowest Ceiling:	Broken / 25000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	12 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	20°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	24°C / 21°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	FORT PIERCE , FL (FPR)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	13:00 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:	0 ft msl	Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:	0 ft / 0 ft	VFR Approach/Landing:	Forced landing

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:	

Administrative Information

Investigator In Charge (IIC): Hill, Bruce

Additional Participating Persons:

Original Publish Date: June 28, 1991

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.ntsb.gov/Docket?ProjectID=32421>

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