



National Transportation Safety Board Aviation Accident Final Report

Location:	Ganado, TX	Accident Number:	CEN12CA221
Date & Time:	04/02/2012, 0910 CDT	Registration:	N4544S
Aircraft:	AIR TRACTOR INC AT-402A	Aircraft Damage:	Substantial
Defining Event:	Loss of visual reference	Injuries:	1 None
Flight Conducted Under:	Part 137: Agricultural		

Analysis

On the day before the accident, the pilot installed dry fertilizer equipment on the airplane. Later that afternoon, the pilot removed the dry fertilizer equipment and installed spray booms and a spray pump in preparation for dispensing a liquid chemical the next day. The following day, during the takeoff roll, chemicals started covering the windshield, and the windshield washer had no effect. The pilot lost all outside visual references and was unable to maintain level flight. The airplane impacted the ground and slid to a stop. Postaccident examination revealed that the hopper vent had not been turned around. The hopper was still pressurized and chemicals blew out of the hopper lid onto the windshield.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The improper positioning of the hopper vent, which allowed chemicals to escape and cover the airplane's windshield.

Findings

Aircraft	Windows-windshield system - Damaged/degraded
Personnel issues	Incorrect action selection - Pilot (Cause)

Factual Information

History of Flight

Takeoff	Loss of visual reference (Defining event) Collision with terr/obj (non-CFIT)
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Pilot Information

Certificate:	Commercial	Age:	34, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Single
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 With Waivers/Limitations	Last Medical Exam:	04/28/2011
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	02/25/2012
Flight Time:	3600 hours (Total, all aircraft), 550 hours (Total, this make and model), 3550 hours (Pilot In Command, all aircraft), 90 hours (Last 90 days, all aircraft), 52 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	AIR TRACTOR INC	Registration:	N4544S
Model/Series:	AT-402A	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Restricted	Serial Number:	402A-0782
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	03/01/2012, Annual	Certified Max Gross Wt.:	7860 lbs
Time Since Last Inspection:		Engines:	1 Turbo Prop
Airframe Total Time:	7746 Hours	Engine Manufacturer:	P&W
ELT:	Not installed	Engine Model/Series:	PT6A-27
Registered Owner:	COASTAL FLYING SERVICES INC	Rated Power:	680 hp
Operator:	NELSON FLYING SERVICE	Air Carrier Operating Certificate:	
Operator Does Business As:		Operator Designator Code:	NEOG

Meteorological Information and Flight Plan

Observation Facility, Elevation:		Observation Time:	0900 CDT
Distance from Accident Site:		Condition of Light:	Day
Direction from Accident Site:		Conditions at Accident Site:	Visual Conditions
Lowest Cloud Condition:	Few	Temperature/Dew Point:	21 °C
Lowest Ceiling:	Broken / 2500 ft agl	Visibility	10 Miles
Wind Speed/Gusts, Direction:	5 knots, 140°	Visibility (RVR):	
Altimeter Setting:		Visibility (RVV):	
Precipitation and Obscuration:			
Departure Point:	Granado, TX (NONE)	Type of Flight Plan Filed:	None
Destination:	Granado, TX (NONE)	Type of Clearance:	None
Departure Time:	0910 CDT	Type of Airspace:	Class E

Airport Information

Airport:	Coastal Flying Service (NONE)	Runway Surface Type:	Grass/turf; Gravel
Airport Elevation:	40 ft	Runway Surface Condition:	Dry
Runway Used:	16	IFR Approach:	None
Runway Length/Width:	3000 ft / 25 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None		

Administrative Information

Investigator In Charge (IIC):	Arnold W Scott	Adopted Date:	05/21/2012
Additional Participating Persons:	James D Stahl; FAA Flight Standards District Office; Houston, TX Ray L McCall; FAA Flight Standards District Office; Houston, TX		
Publish Date:	05/21/2012		
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.		
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=83279		

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