



National Transportation Safety Board Aviation Accident Factual Report

Location:	Childress, TX	Accident Number:	DFW06CA158
Date & Time:	06/01/2006, 1306 CDT	Registration:	N70AF
Aircraft:	Ayres S2R-600	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 137: Agricultural		

While in cruise flight, the 19,620-hour commercial pilot lost control of the rudder pedals and experienced trouble maintaining directional control of the single-engine, turbine powered agricultural airplane. The pilot reported that "he dumped his chemical load at a safe location" and elected to discontinue the aerial application flight. The pilot proceeded to a larger airport for a landing. The pilot added that he made several attempts to land as he was having trouble keeping the airplane aligned with runway 35 unless he maintained a much higher than normal airspeed on final approach. On his final attempt, the pilot was able to land, but as the airplane slowed down, it veered off the right side of the 5,949-foot long, by 75-foot wide asphalt runway. Following the loss of control, the left wing of the airplane collided with a tractor. A Federal Aviation Administration (FAA) safety inspector performed an on-scene examination of the airplane and found that the rudder horn was corroded and had completely separated. According to the pilot, the rudder horn is covered by fabric and it was difficult to inspect during a preflight inspection. The pilot added that even though the operator has a procedure in place to wash the airplane after spraying corrosive chemicals, he suggested that somehow chemicals had made contact with the rudder horn which caused the corrosion. At the time of the last 100 hour inspection, which was completed less than 11 days prior to the mishap, the tailwheel-equipped airplane had accumulated a total of 11,107.8 hours since new. The wind at the time of the accident was reported from 030 degrees at 8 knots.

Pilot Information

Certificate:	Commercial	Age:	63, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	
Medical Certification:	Class 2	Last FAA Medical Exam:	01/01/2006
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	19620 hours (Total, all aircraft), 2540 hours (Total, this make and model), 120 hours (Last 90 days, all aircraft), 45 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Ayres	Registration:	N70AF
Model/Series:	S2R-600	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Restricted	Serial Number:	2547R
Landing Gear Type:	Tailwheel	Seats:	
Date/Type of Last Inspection:		Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Garrett
ELT:		Engine Model/Series:	TPE-331
Registered Owner:	Goff's Flying Service	Rated Power:	
Operator:	Goff's Flying Service	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	CDS	Distance from Accident Site:	
Observation Time:	1253	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	30°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.19 inches Hg	Temperature/Dew Point:	27° C / 14° C
Precipitation and Obscuration:			
Departure Point:	Paducah, TX (3F6)	Type of Flight Plan Filed:	None
Destination:	Childress, TX (CDS)	Type of Clearance:	None
Departure Time:		Type of Airspace:	

Airport Information

Airport:	ChildressMunicipal Airport (CDS)	Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	040	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	
Total Injuries:	1 None	Latitude, Longitude:	34.433611, -100.286111

Administrative Information

Investigator In Charge (IIC):	Leah D Yeager
Additional Participating Persons:	Bruce Jeffcoat; Lubbock FAA?FSDO
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
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/ .