



Aviation Investigation Final Report

Location:	WYNDMERE, North Dakota	Accident Number:	DEN84LA206
Date & Time:	July 1, 1984, 08:10 Local	Registration:	N4638
Aircraft:	GRUMMAN G-164A	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 137: Agricultural		

Analysis

SOD WAS WORN FROM THE MIDDLE OF THE STRIP & THE STRIP WAS WET. THEREFORE, THE PLT ELECTED TO USE THE LEFT SIDE OF THE SOD STRIP FOR TAKEOFF. DURING THE TAKEOFF ROLL, THE LEFT SPRAY BOOM DRAGGED INTO WHEAT THAT WAS GROWING BESIDE THE RWY & THE ACFT VEERED LEFT. STRIPS OF WHEAT ABOUT 30 FT WIDE HAD BEEN PLANTED ON EACH SIDE OF THE RWY. AFTER CROSSING THE WHEAT, THE ACFT WENT INTO A WET BEAN FIELD & NOSED OVER. THE PLT WAS UNAWARE THAT THE BOOM HAD DRAGGED IN THE WHEAT & VEERED THE ACFT UNTIL AFTER THE ACCIDENT.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

Findings

Occurrence #1: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER

Phase of Operation: TAKEOFF - ROLL/RUN

Findings

1. (F) TERRAIN CONDITION - CROP
2. (C) CLEARANCE - MISJUDGED - PILOT IN COMMAND

Occurrence #2: LOSS OF CONTROL - ON GROUND/WATER

Phase of Operation: TAKEOFF - ROLL/RUN

Findings

- 3. DIRECTIONAL CONTROL - NOT POSSIBLE - PILOT IN COMMAND
- 4. GROUND LOOP/SWERVE - UNCONTROLLED - PILOT IN COMMAND

Occurrence #3: NOSE OVER
Phase of Operation: TAKEOFF

Findings

- 5. (F) TERRAIN CONDITION - WET
- 6. (F) TERRAIN CONDITION - SOFT

Factual Information

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	24, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Center
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--no waivers/lim.	Last FAA Medical Exam:	December 21, 1983
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	486 hours (Total, all aircraft), 192 hours (Total, this make and model), 366 hours (Pilot In Command, all aircraft), 249 hours (Last 90 days, all aircraft), 7 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	GRUMMAN	Registration:	N4638
Model/Series:	G-164A G-164A	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	1071
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	March 15, 1984 Annual	Certified Max Gross Wt.:	3750 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	4500 Hrs	Engine Manufacturer:	P&W
ELT:	Not installed	Engine Model/Series:	R-985
Registered Owner:	THOMPSON AERIAL	Rated Power:	
Operator:		Operating Certificate(s) Held:	
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:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	60 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	24°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	00:00 Local	Type of Airspace:	Class G

Airport Information

Airport:	THOMPSON NA21	Runway Surface Type:	Grass/turf
Airport Elevation:	1075 ft msl	Runway Surface Condition:	Wet
Runway Used:	36	IFR Approach:	None
Runway Length/Width:	2600 ft / 60 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:	46.260341,-97.129035(est)

Administrative Information

Investigator In Charge (IIC): Winningham, Fred

**Additional Participating
Persons:**

Original Publish Date:

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=16421>

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

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](#).