



# **Aviation Investigation Final Report**

Location: LAWRENCE, Kansas Accident Number: MKC86LA106

Date & Time: May 11, 1986, 15:30 Local Registration: N5531S

Aircraft: CESSNA 188 Aircraft Damage: Substantial

**Defining Event:** 1 None

Flight Conducted Under: Part 137: Agricultural

### **Analysis**

THE PILOT STATED THAT THE RIGHT MAIN TIRE ROLLED OVER SHARP ROCKS AND WAS SUBSEQUENTLY DESTROYED DURING THE TAKEOFF ROLL. THE PILOT FURTHER STATED THAT HE APPARENTLY OVER CORRECTED AND DRIFTED LEFT, DIGGING INTO A SOFT SPOT ON THE RUNWAY, AND NOSED OVER.

## **Probable Cause and Findings**

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

#### **Findings**

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER

Phase of Operation: TAKEOFF - ROLL/RUN

#### **Findings**

1. (F) PREFLIGHT PLANNING/PREPARATION - IMPROPER - PILOT IN COMMAND

2. TERRAIN CONDITION - ROUGH/UNEVEN

3. (C) LANDING GEAR, TIRE - BURST

4. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND

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Occurrence #2: NOSE OVER

Phase of Operation: TAKEOFF - ROLL/RUN

Findings 5. (F) TERRAIN CONDITION - SOFT

Page 2 of 5 MKC86LA106

# **Factual Information**

#### **Pilot Information**

Certificate:	Commercial	Age:	59,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	November 27, 1985
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	4000 hours (Total, all aircraft), 1600 hours (Total, this make and model), 4000 hours (Pilot In Command, all aircraft), 18 hours (Last 90 days, all aircraft), 7 hours (Last 24 hours, all aircraft)		

## **Aircraft and Owner/Operator Information**

Aircraft Make:	CESSNA	Registration:	N5531S
Model/Series:	188 188	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal; Restricted (Special)	Serial Number:	188-0031
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	March 3, 1986 Annual	Certified Max Gross Wt.:	3300 lbs
Time Since Last Inspection:	18 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2600 Hrs	Engine Manufacturer:	CONTINENTAL
ELT:	Not installed	Engine Model/Series:	0-470-R
Registered Owner:		Rated Power:	230 Horsepower
Operator:	MERRILL L. JOHNSON	Operating Certificate(s) Held:	
Operator Does Business As:		Operator Designator Code:	

Page 3 of 5 MKC86LA106

**Meteorological Information and Flight Plan** 

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	MKC ,758 ft msl	Distance from Accident Site:	31 Nautical Miles
Observation Time:	14:45 Local	Direction from Accident Site:	75°
<b>Lowest Cloud Condition:</b>	Clear	Visibility	20 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	26°C / 13°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ation	
Departure Point:	LAWRENCE , KS	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	15:30 Local	Type of Airspace:	Class G

## **Airport Information**

Airport:		Runway Surface Type:	Grass/turf
Airport Elevation:	1000 ft msl	<b>Runway Surface Condition:</b>	Dry
Runway Used:	24	IFR Approach:	None
Runway Length/Width:	2000 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:	39.020584,-95.210723(est)

Page 4 of 5 MKC86LA106

#### **Administrative Information**

Investigator In Charge (IIC): Vargas, Ramon

Additional Participating Persons:

Original Publish Date:

Last Revision Date:

Investigation Class: Class

Note:

Investigation Docket: https://data.ntsb.gov/Docket?ProjectID=34174

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.

Page 5 of 5 MKC86LA106