



Aviation Investigation Final Report

Location:	Collinsville, Oklahoma	Accident Number:	DFW08CA229
Date & Time:	September 14, 2008, 18:44 Local	Registration:	N531MS
Aircraft:	Sukhoi SU-31M	Aircraft Damage:	Substantial
Defining Event:	Collision with terr/obj (non-CFIT)	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot entered the traffic pattern in the single seat, tail-wheel-equipped, experimental airplane for landing to runway 35. When he turned to final approach "everything looked normal." On short final, the pilot stated that he saw orange markers on wires just prior to contact with transmission lines. After cutting through two transmission lines, the pilot aborted the landing and performed a go-around. A visual inspection from another aircraft confirmed that the landing gear appeared to be intact. The pilot stated that the airplane was "shaking violently," but was controllable, and the pilot landed safely. The pilot shut down after landing and exited the aircraft normally. A Federal Aviation Administration inspector responded to the scene and confirmed substantial damage to the main wing spar, left aileron, and landing gear. One propeller blade was missing approximately 18 inches. The electrical transmission lines were replaced by the local power company.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain clearance from marked transmission lines while on final approach.

Findings

Personnel issues	Knowledge of geographic area - Pilot
Environmental issues	Wire - Awareness of condition

Factual Information

History of Flight

Approach-VFR pattern final	Collision with terr/obj (non-CFIT) (Defining event)
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Pilot Information

Certificate:	Private	Age:	48, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Single
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 3 Without waivers/limitations	Last FAA Medical Exam:	May 25, 2007
Occupational Pilot:	No	Last Flight Review or Equivalent:	June 8, 2008
Flight Time:	1391 hours (Total, all aircraft), 127 hours (Total, this make and model), 1343 hours (Pilot In Command, all aircraft), 40 hours (Last 90 days, all aircraft), 30 hours (Last 30 days, all aircraft), 7 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Sukhoi	Registration:	N531MS
Model/Series:	SU-31M	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Experimental (Special)	Serial Number:	02-01
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	August 20, 2008 Annual	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	261 Hrs as of last inspection	Engine Manufacturer:	Vedeneyev
ELT:	Not installed	Engine Model/Series:	M14P
Registered Owner:	On file	Rated Power:	360 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KTUL	Distance from Accident Site:	14 Nautical Miles
Observation Time:	18:53 Local	Direction from Accident Site:	180°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	13 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	340°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.09 inches Hg	Temperature/Dew Point:	20°C / 17°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Claremore, OK (KGCM)	Type of Flight Plan Filed:	None
Destination:	Vera, OK (OK01)	Type of Clearance:	None
Departure Time:	18:20 Local	Type of Airspace:	

Airport Information

Airport:	Sky Haven Airpark OK01	Runway Surface Type:	Grass/turf
Airport Elevation:		Runway Surface Condition:	Dry
Runway Used:	35	IFR Approach:	Visual
Runway Length/Width:	4400 ft / 75 ft	VFR Approach/Landing:	Traffic pattern

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	Latitude, Longitude:	36.424619,-95.902363(est)

Administrative Information

Investigator In Charge (IIC):	Gamble, William
Additional Participating Persons:	Jimmy J Wynne; FAA FSDO; Oklahoma City, OK
Original Publish Date:	January 22, 2009
Last Revision Date:	
Investigation Class:	Class
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=68928

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