National Transportation Safety Board
Aviation Accident Final Report

Location:	SEDONA, AZ	**Accident Number:**	LAX98LA313
Date & Time:	09/26/1998, 0945 MST	**Registration:**	N7025J
Aircraft:	Grumman HU-16C	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	6 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The private pilot/owner seated in the right seat was type rated in the airplane. The second pilot in the left seat manipulating the flight controls, held an ATP and flight instructor certificates, but was not type rated in the airplane. The second pilot had a total of 1.9 hours in the airplane. Both pilots stated that they selected runway 3 for landing based on weather reports and that other airplanes were using that runway. During landing rollout, propeller reverse power was selected and the left engine came in before the right engine, which caused the airplane to veer left, and braking was used to correct the heading. The propellers were brought out of reverse and the airplane continued to exit the left side of the runway and collapsed the nose gear. The manager of the FBO said they were advising runway 21 as the active runway. The pilot of another airplane said that he had just landed on runway 21 and that there were two other airplanes in the traffic pattern for runway 21 when the accident airplane landed on runway 3. He stated that winds were 130 degrees at 14 knots and the conditions in the pattern were turbulent. The pilot noted that after he landed the wind kept shifting direction from a southeasterly to northeasterly heading. No mechanical anomalies were found during an examination of the propeller reverse system or the braking system.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot in command's selection of the wrong runway for the prevailing wind conditions, and the second pilot's inadequate compensation for the winds. Factors in the accident were the second pilot's lack of experience in the aircraft and the pilot-in-command's inadequate supervision of the flight. Additional factors were the variable and gusty, cross wind and tail wind conditions.

Findings

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER
Phase of Operation: LANDING - ROLL

Findings
1. (F) WEATHER CONDITION - CROSSWIND
2. (F) WEATHER CONDITION - TAILWIND
3. (F) WEATHER CONDITION - GUSTS
4. (F) WEATHER CONDITION - VARIABLE WIND
5. (C) WRONG RUNWAY - SELECTED - PILOT IN COMMAND
6. (F) LACK OF TOTAL EXPERIENCE IN TYPE OF AIRCRAFT - COPILOT/SECOND PILOT
7. (C) COMPENSATION FOR WIND CONDITIONS - INADEQUATE - COPILOT/SECOND PILOT
8. (C) SUPERVISION - INADEQUATE - PILOT IN COMMAND

Occurrence #2: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER
Phase of Operation: LANDING - ROLL

Findings
9. TERRAIN CONDITION - SOFT

Occurrence #3: NOSE GEAR COLLAPSED
Phase of Operation: LANDING - ROLL

Findings
10. LANDING GEAR,NOSE GEAR ASSEMBLY - OVERLOAD

Factual Information

On September 26, 1998, at 0945 hours mountain standard time, a Grumman HU-16C, N7025J, veered off runway 3 on the landing rollout at the Sedona, Arizona, airport. The airplane, operated by the pilot under 14 CFR Part 91, sustained substantial damage. The private pilot/owner, two flight crewmembers, and three passengers were not injured. Visual meteorological conditions existed for the personal flight and no flight plan was filed. The flight departed from the Flagstaff, Arizona airport.

Sedona Automated Weather Observation System reported the winds from 180 degrees at 9 knots gusting to 14 knots.

The aircraft owner holds a private pilot certificate with a type rating in the Grumman HU-16C, and was in the right seat. The second pilot, who was in the left seat and manipulating the flight controls, holds airline transport pilot and flight instructor certificates, but is not type rated in the aircraft. The second pilot has a total of 1.9 hours in the aircraft.

The owner stated that as they approached Sedona, reported winds were from 180 degrees at 10 to 15 knots; however, other airplanes were reporting using runway 3 for landings. He stated that they entered downwind midfield for runway 3. There were no discrepancies noted with the approach or touchdown, and the initial rollout was "normal." The owner reported that when the second pilot selected propeller reverse power, the left engine came in before the right engine and caused a slight deviation to the left. He stated that braking was used to correct the heading. After the initial correction the right brake locked. The owner stated that the propellers were brought out of reverse and the aircraft continued to exit the left side of the runway. He noted that the right tire failed "sometime" during the rollout.

The second pilot, who was at the controls of the airplane during the landing sequence, reported that weather information was obtained via UNICOM. He stated that the winds were from the southeast and the weather was clear with unrestricted visibility. He further noted that other airplanes were landing on runway 3. The pilot reported that on the landing rollout he selected propeller reverse power, and the power came in "asymmetrically causing a left tracking moment." He advanced the throttles to idle and attempted to return to centerline. He stated that after the right tire failed, the airplane continued to cross a taxiway. He reported that the nose trunnion failed and the nose, left float and left wing contacted the ground.

The manager for Red Rock Aviation, a Fixed Based Operator (FBO) at the airport, reported that UNICOM was advising runway 21 as the active runway, and that the winds were from 180 degrees at 9 knots gusting to 14 knots.

The pilot of another airplane, who witnessed the accident, reported that he had just landed on runway 21 and that there were two other airplanes in the traffic pattern for runway 21. He stated that winds were reported at 130 degrees at 14 knots and the conditions in the pattern were turbulent. The pilot noted that after he landed the wind kept shifting direction from a southeasterly to northeasterly heading. Another ground witness stated that the airplane's wings were rocking back and fourth before touchdown and it appeared to him that the left wing tip contacted the ground before the aircraft veered off the runway.

The airplane was inspected by a Federal Aviation Administration (FAA) inspector on-scene. He reported that there was a skid mark on the left side of the runway. The FAA inspector stated that there were no mechanical anomalies found during an examination of the propeller

reverse or the braking systems.

Pilot Information

Certificate:	Private	**Age:**	46, Male
Airplane Rating(s):	Multi-engine Land; Multi-engine Sea; Single-engine Land; Single-engine Sea	**Seat Occupied:**	Right
Other Aircraft Rating(s):	Glider	**Restraint Used:**	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	**Second Pilot Present:**	Yes
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	**Last Medical Exam:**	02/12/1998
Occupational Pilot:		**Last Flight Review or Equivalent:**	
Flight Time:	4500 hours (Total, all aircraft), 360 hours (Total, this make and model), 4500 hours (Pilot In Command, all aircraft), 65 hours (Last 90 days, all aircraft), 14 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	Grumman	**Registration:**	N7025J
Model/Series:	HU-16C HU-16C	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	No
Airworthiness Certificate:	Restricted	**Serial Number:**	131910
Landing Gear Type:	Retractable - Tricycle	**Seats:**	13
Date/Type of Last Inspection:	04/17/1998, Annual	**Certified Max Gross Wt.:**	33500 lbs
Time Since Last Inspection:	43 Hours	**Engines:**	2 Reciprocating
Airframe Total Time:	4119 Hours	**Engine Manufacturer:**	Curtis Wright
ELT:		**Engine Model/Series:**	R-1820-76
Registered Owner:	STEPHEN L. RITLAND	**Rated Power:**	1425 hp
Operator:	STEPHEN L. RITLAND	**Air Carrier Operating Certificate:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	**Condition of Light:**	Day
Observation Facility, Elevation:	SEZ, 4827 ft msl	**Observation Time:**	0945 MST
Distance from Accident Site:	0 Nautical Miles	**Direction from Accident Site:**	0°
Lowest Cloud Condition:	Clear / 0 ft agl	**Temperature/Dew Point:**	
Lowest Ceiling:	None / 0 ft agl	**Visibility**	10 Miles
Wind Speed/Gusts, Direction:	9 knots/ 14 knots, 180°	**Visibility (RVR):**	0 ft
Altimeter Setting:		**Visibility (RVV):**	0 Miles
Precipitation and Obscuration:			
Departure Point:	FLAGSTAFF, AZ (FLG)	**Type of Flight Plan Filed:**	None
Destination:	(SEZ)	**Type of Clearance:**	None
Departure Time:	0920 MST	**Type of Airspace:**	Class E

Airport Information

Airport:	SEDONA (SEZ)	**Runway Surface Type:**	Asphalt
Airport Elevation:	4827 ft	**Runway Surface Condition:**	Dry
Runway Used:	3	**IFR Approach:**	None
Runway Length/Width:	5132 ft / 75 ft	**VFR Approach/Landing:**	Full Stop; Traffic Pattern

Wreckage and Impact Information

Crew Injuries:	3 None	**Aircraft Damage:**	Substantial
Passenger Injuries:	3 None	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	6 None	**Latitude, Longitude:**	

Administrative Information

Investigator In Charge (IIC):	TEALEYE C CORNEJO	**Adopted Date:**	06/21/2000
Additional Participating Persons:	MICHAEL GONZALES; SCOTTSDALE, AZ		
Publish Date:			
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.ntsb.gov/pubdms/.		