Aviation Investigation Final Report

Location:	Dillingham, Alaska	**Accident Number:**	ANC14LA056
Date & Time:	July 28, 2014, 15:45 Local	**Registration:**	N8883C
Aircraft:	Piper PA-22	**Aircraft Damage:**	Substantial
Defining Event:	Abrupt maneuver	**Injuries:**	3 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported that, after the airplane entered the right downwind leg of the traffic pattern for runway 19, he received the airport wind information, which indicated wind from 290 degrees at 8 knots gusting to 12 knots; this resulted in a quartering tailwind for the landing. During the landing, the tailwheel-equipped airplane started to veer left and then ground looped, which resulted in the separation of the right main landing gear and impact with the runway surface. The pilot reported no mechanical malfunctions or failures with the airplane that would have precluded normal operation.

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 directional control during the landing due to his decision to attempt a landing with a quartering tailwind, which resulted in a ground loop and impact with the runway surface.

Findings

Aircraft	Directional control - Not attained/maintained
Personnel issues	Decision making/judgment - Pilot
Personnel issues	Aircraft control - Pilot
Environmental issues	Tailwind - Effect on operation

Factual Information

History of Flight

Landing-landing roll	Other weather encounter
Landing-landing roll	Attempted remediation/recovery
Landing-landing roll	Abrupt maneuver (Defining event)
Landing-landing roll	Loss of control on ground
Landing-landing roll	Part(s) separation from AC
Landing-landing roll	Collision with terr/obj (non-CFIT)

On July 28, 2014, at 1545 Alaska daylight time, a tail wheel-equipped Piper PA-22, N8883C, experienced a ground loop during landing roll on runway 19 at the Dillingham Municipal Airport (DLG), Dillingham, Alaska. The airplane sustained substantial damage to the right wing and right horizontal stabilizer. The pilot and two passengers were uninjured. The airplane was registered to and operated by the pilot under the provisions of 14 Code of Federal Regulations Part 91 as a personal flight that was not operating on a flight plan. Visual meteorological conditions prevailed at the time of the accident. The flight originated from Ekuk, Alaska, at 1500 and was destined to DLG.

The pilot stated in his National Transportation Safety Board (NTSB) Pilot/Operator Accident/Incident Report that he departed from Ekuk, Alaska, at 1500 to fly two passengers to DLG where they were going to take a commercial flight home.

The pilot also stated that during the approach to DLG, the DLG Automatic Terminal Information Service reported wind from 220 degrees at 8 knots gusting 12 knots. The pilot flew the airplane over the runway and entered a right downwind for runway 19 (6,400 feet by 150 feet, grooved asphalt). After seeing the airport windsock, he asked for a wind check which reported wind 290 degrees at 8 knots gust 12 knots. The pilot said that he considered landing on runway 01 but at the time another airplane reported entering downwind for runway 19 so he continued his approach to land on runway 19 with a quartering tailwind. He said that during the landing and as the airplane touched down onto the runway, he reduced engine power to idle as the airplane tail lowered onto the runway. As the airplane slowed, he looked away from the runway for a second and when he looked up and outside, the airplane started to slowly veer to the left. He slid his foot up onto the rudder pedal to apply right brake, but because he was wearing flip flops, his foot slipped off. He thought about adding engine power to gain rudder control but decided that reapplication of right brake would be sufficient. The airplane started to speed up and was headed toward the right edge of the runway. As the airplane neared the runway, the pilot allowed the airplane to ground loop so as to remain on the runway. The right main landing gear sheared off and the airplane collapsed on its right wing, and the propeller struck the ground while the engine was operating at idle power. The airplane slid for about 15 feet before coming to a stop.

The pilot reported that there was no mechanical malfunction/failure with the airplane.

The pilot reported that the airplane weight at the time of the accident was 1,920 lbs. The airplane gross weight was 1,950 lbs.

During a telephone conversation with the NTSB Investigator-In-Charge, the pilot stated that during the landing, the airplane was not slowing, and he "jammed" right rudder to avoid going off the departure end of the runway. He said that Piper PA-22 airplanes are "really short coupled," and the accident airplane was equipped with a larger set of tires. The braking performance with the larger set of tire is not as good on asphalt surfaces as on unimproved landing surfaces.

Pilot Information

Certificate:	Private	**Age:**	43
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 3 Without waivers/limitations	**Last FAA Medical Exam:**	September 25, 2011
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	
Flight Time:	650 hours (Total, all aircraft), 605 hours (Total, this make and model), 650 hours (Pilot In Command, all aircraft), 35 hours (Last 90 days, all aircraft), 35 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	**Registration:**	N8883C
Model/Series:	PA-22	**Aircraft Category:**	Airplane
Year of Manufacture:	1953	**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	22-1465
Landing Gear Type:	Tailwheel	**Seats:**	4
Date/Type of Last Inspection:	September 26, 2013 Annual	**Certified Max Gross Wt.:**	1950 lbs
Time Since Last Inspection:		**Engines:**	Reciprocating
Airframe Total Time:		**Engine Manufacturer:**	Lycoming
ELT:	Installed, not activated	**Engine Model/Series:**	O-360
Registered Owner:	Travis Ball	**Rated Power:**	160 Horsepower
Operator:	Travis Ball	**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	DLG,82 ft msl	**Distance from Accident Site:**	0 Nautical Miles
Observation Time:		**Direction from Accident Site:**	
Lowest Cloud Condition:	Clear	**Visibility**	20 miles
Lowest Ceiling:	Broken	**Visibility (RVR):**	
Wind Speed/Gusts:	7 knots /	**Turbulence Type Forecast/Actual:**	/ None
Wind Direction:	250°	**Turbulence Severity Forecast/Actual:**	/ N/A
Altimeter Setting:	29.96 inches Hg	**Temperature/Dew Point:**	22°C / 13°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Ekuk, AK	**Type of Flight Plan Filed:**	None
Destination:	Dillingham, AK (DLG)	**Type of Clearance:**	None
Departure Time:		**Type of Airspace:**	

Airport Information

Airport:	Dillingham Municipal Airport DLG	**Runway Surface Type:**	Asphalt
Airport Elevation:	82 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	19	**IFR Approach:**	None
Runway Length/Width:	6400 ft / 100 ft	**VFR Approach/Landing:**	Full stop;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 None	**Aircraft Damage:**	Substantial
Passenger Injuries:	2 None	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	3 None	**Latitude, Longitude:**	58.819431,-157.8609(est)

Administrative Information

Investigator In Charge (IIC):	Gallo, Mitchell
Additional Participating Persons:	Roy Redifer; Federal Aviation Administration; ANC FSDO; Anchorage, AK
Original Publish Date:	January 14, 2015
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=89774