



Aviation Investigation Final Report

Location:	Yakataga, Alaska	Accident Number:	ANC21LA001
Date & Time:	October 10, 2020, 15:44 Local	Registration:	N96358
Aircraft:	Douglas C54	Aircraft Damage:	Substantial
Defining Event:	Runway excursion	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Other work use		

Analysis

The commercial pilot reported that the flight had been delayed for “nearly 2 weeks due to rain” but that the company had contacted their customer, who was a local resident of the area, and he had reported that the landing grass airstrip was “currently dry” and that he was unaware of any NOTAMs reporting that the runway was closed. The pilot reported that, while landing the airplane on the airstrip, the braking action was “zero” along the entire length of the runway. Subsequently, while about 5 knots, the airplane overran the end of the runway, and the nose landing gear collapsed. The airplane sustained substantial damage to the forward fuselage. The pilot reported that there were no preaccident mechanical failures or malfunctions with the airplane that would have precluded normal operation.

The pilot reported that, during a formal flight brief from a Federal Aviation Administration (FAA) Flight Service Station (FSS), he and the copilot asked if there was “anything special going on down there” that they should be aware of” but that FSS personnel did not mention any NOTAMs stating that the runway was closed to heavy airplanes nor was it mentioned when they activated the flight plan. However, according to FAA FSS recordings, during the first conversation, the pilot did not ask for any NOTAMs for the airport. During the second conversation, the FSS asked the pilots if they needed any weather information or NOTAMs, and the pilots responded, “no,” and that they “were all good.” A NOTAM had been issued, which stated, in part, that the landing runway was closed to aircraft that weighed more than 5,000 lbs. The airport chart supplement remarks stated, in part, that “the runway was extremely soft when wet...Use of heavy aircraft over 4,000 lbs gross not recommended during fall, winter, & spring due to” soft field conditions and rutting.” The pilot reported that the airplane’s weight was about 62,568 lbs at the time of the accident.

Probable Cause and Findings

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

The pilots' decision to land on a wet, soft runway, which resulted in the loss of braking action upon landing and a subsequent runway overrun and nose landing gear collapse.

Findings

Personnel issues	Decision making/judgment - Pilot
Aircraft	Surface speed/braking - Attain/maintain not possible
Environmental issues	Soft surface - Effect on operation
Environmental issues	Wet surface - Effect on operation
Personnel issues	Use of available resources - Pilot
Personnel issues	Use of available resources - Copilot
Personnel issues	Decision making/judgment - Copilot

Factual Information

History of Flight

Landing	Runway excursion (Defining event)
Landing	Nose over/nose down

Pilot Information

Certificate:	Airline transport; Commercial; Flight engineer	Age:	60,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	Unknown
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	September 16, 2019
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	December 18, 2019
Flight Time:	(Estimated) 17925 hours (Total, all aircraft), 2163 hours (Total, this make and model), 13748 hours (Pilot In Command, all aircraft), 207 hours (Last 90 days, all aircraft), 56 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Co-pilot Information

Certificate:	Commercial	Age:	59,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	Unknown
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	August 11, 2020
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	December 18, 2019
Flight Time:	(Estimated) 8832 hours (Total, all aircraft), 1964 hours (Total, this make and model), 2620 hours (Pilot In Command, all aircraft), 207 hours (Last 90 days, all aircraft), 56 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Douglas	Registration:	N96358
Model/Series:	C54 EDC	Aircraft Category:	Airplane
Year of Manufacture:	1944	Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	27284
Landing Gear Type:	Retractable - Tricycle	Seats:	3
Date/Type of Last Inspection:	October 7, 2020 AAIP	Certified Max Gross Wt.:	66670 lbs
Time Since Last Inspection:		Engines:	4 Reciprocating
Airframe Total Time:	33718 Hrs as of last inspection	Engine Manufacturer:	Pratt & Whitney
ELT:	C91A installed, not activated	Engine Model/Series:	R2000 7M2
Registered Owner:	ALASKA AIR FUEL INC	Rated Power:	1450 Horsepower
Operator:	ALASKA AIR FUEL INC	Operating Certificate(s) Held:	Certificate of authorization or waiver (COA)

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	PACY,36 ft msl	Distance from Accident Site:	
Observation Time:	19:53 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	8 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.27 inches Hg	Temperature/Dew Point:	3°C / 3°C
Precipitation and Obscuration:			
Departure Point:	Kenai, AK (PAEN)	Type of Flight Plan Filed:	VFR
Destination:	Yakataga, AK	Type of Clearance:	None
Departure Time:	13:44 Local	Type of Airspace:	Class G

Airport Information

Airport:	Yakataga Airport 0AA1	Runway Surface Type:	Grass/turf
Airport Elevation:	16 ft msl	Runway Surface Condition:	Rough;Vegetation;Wet
Runway Used:	8	IFR Approach:	None
Runway Length/Width:	4350 ft / 75 ft	VFR Approach/Landing:	Full stop;Straight-in

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	59.9935,-141.84587(est)

Administrative Information

Investigator In Charge (IIC): Swenson, Eric

Additional Participating Persons: Matt Dahl; FAA; Juneau, AK

Original Publish Date: April 20, 2022

Last Revision Date:

Investigation Class: [Class 4](#)

Note: The NTSB did not travel to the scene of this accident.

Investigation Docket: <https://data.ntsb.gov/Docket?ProjectID=102137>

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](#).