

# **Aviation Investigation Final Report**

ANC18CA054

**Location:** Manley Hot Springs, Alaska **Accident Number:** 

Date & Time: July 16, 2018, 09:25 Local Registration: N1822M

Aircraft: Curtiss Wright C46 Aircraft Damage: Substantial

**Defining Event:** Runway excursion **Injuries:** 2 Minor

Flight Conducted Under: Part 91: General aviation

#### **Analysis**

The pilot reported that, following a precautionary shutdown of the No. 2 engine, he diverted to an alternate airport that was closer than the original destination. During the landing in tailwind conditions, the airplane touched down "a little fast." The pilot added that, as the brakes faded from continuous use, the airplane was unable to stop, and it overran the end of the runway, which resulted in substantial damage to the fuselage.

The pilot reported that there were 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 attain the proper touchdown speed and his decision to land with a tailwind without ensuring that there was adequate runway length for the touchdown.

## **Findings**

Aircraft Airspeed - Not attained/maintained

Personnel issues Aircraft control - Pilot

Personnel issues Decision making/judgment - Pilot

**Environmental issues** Tailwind - Effect on operation

Page 2 of 5 ANC18CA054

# **Factual Information**

## **History of Flight**

Landing	Miscellaneous/other
Landing	Runway excursion (Defining event)

#### **Pilot Information**

Certificate:	Airline transport; Flight engineer	Age:	40,Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 With waivers/limitations	Last FAA Medical Exam:	April 1, 2018
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	May 3, 2018
Flight Time:	6500 hours (Total, all aircraft), 3500 hours (Total, this make and model), 4500 hours (Pilot In Command, all aircraft), 62 hours (Last 90 days, all aircraft), 31 hours (Last 30 days, all aircraft)		

## **Co-pilot Information**

Certificate:CommercialAge:39,MaleAirplane Rating(s):Single-engine land; Single-engine sea; Multi-engine landSeat Occupied:RightOther Aircraft Rating(s):NoneRestraint Used:4-pointInstrument Rating(s):AirplaneSecond Pilot Present:YesInstructor Rating(s):NoneToxicology Performed:NoMedical Certification:Class 2 NoneLast FAA Medical Exam:January 1, 2018Occupational Pilot:YesLast Flight Review or Equivalent:April 17, 2018Flight Time:300 hours (Total, all aircraft), 135 hours (Last 90 days, all aircraft), 66 hours (Last 30 days, all aircraft)				
Other Aircraft Rating(s): None Restraint Used: 4-point Instrument Rating(s): Airplane Second Pilot Present: Yes Instructor Rating(s): None Toxicology Performed: No Medical Certification: Class 2 None Last FAA Medical Exam: January 1, 2018 Occupational Pilot: Yes Last Flight Review or Equivalent: April 17, 2018 Flight Time: 300 hours (Total, all aircraft), 135 hours (Last 90 days, all aircraft), 66 hours (Last 30 days, all	Certificate:	Commercial	Age:	39,Male
Instrument Rating(s): Airplane Second Pilot Present: Yes Instructor Rating(s): None Toxicology Performed: No Medical Certification: Class 2 None Last FAA Medical Exam: January 1, 2018 Occupational Pilot: Yes Last Flight Review or Equivalent: April 17, 2018 Flight Time: 300 hours (Total, all aircraft), 135 hours (Last 90 days, all aircraft), 66 hours (Last 30 days, all	Airplane Rating(s):		Seat Occupied:	Right
Instructor Rating(s): None Toxicology Performed: No  Medical Certification: Class 2 None Last FAA Medical Exam: January 1, 2018  Occupational Pilot: Yes Last Flight Review or Equivalent: April 17, 2018  Flight Time: 300 hours (Total, all aircraft), 135 hours (Last 90 days, all aircraft), 66 hours (Last 30 days, all	Other Aircraft Rating(s):	None	Restraint Used:	4-point
Medical Certification: Class 2 None Last FAA Medical Exam: January 1, 2018  Occupational Pilot: Yes Last Flight Review or Equivalent: April 17, 2018  Flight Time: 300 hours (Total, all aircraft), 135 hours (Last 90 days, all aircraft), 66 hours (Last 30 days, all	Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Occupational Pilot: Yes Last Flight Review or Equivalent: April 17, 2018  Flight Time: 300 hours (Total, all aircraft), 135 hours (Last 90 days, all aircraft), 66 hours (Last 30 days, all	Instructor Rating(s):	None	Toxicology Performed:	No
Flight Time: 300 hours (Total, all aircraft), 135 hours (Last 90 days, all aircraft), 66 hours (Last 30 days, all	Medical Certification:	Class 2 None	Last FAA Medical Exam:	January 1, 2018
	Occupational Pilot:	Yes	Last Flight Review or Equivalent:	April 17, 2018
	Flight Time:			

Page 3 of 5 ANC18CA054

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

Aircraft Make:	Curtiss Wright	Registration:	N1822M
Model/Series:	C46 UNDESIGNAT	Aircraft Category:	Airplane
Year of Manufacture:	1945	Amateur Built:	
Airworthiness Certificate:	Restricted (Special); Special flight (Special)	Serial Number:	22521
Landing Gear Type:	Retractable - Tailwheel	Seats:	2
Date/Type of Last Inspection:	May 5, 2018 AAIP	Certified Max Gross Wt.:	48000 lbs
Time Since Last Inspection:		Engines:	2 Reciprocating
Airframe Total Time:	37049.6 Hrs at time of accident	Engine Manufacturer:	Pratt & Whitney
ELT:	C126 installed, not activated	Engine Model/Series:	R2800-51M1
Registered Owner:		Rated Power:	2000 Horsepower
Operator:		Operating Certificate(s) Held:	Supplemental
Operator Does Business As:		Operator Designator Code:	EVAB

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	PAFA	Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
<b>Lowest Cloud Condition:</b>	Scattered / 4000 ft AGL	Visibility	10 miles
Lowest Ceiling:	Broken / 4000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	210°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:		Temperature/Dew Point:	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Fairbanks, AK (PAFA)	Type of Flight Plan Filed:	VFR
Destination:	Kenai, AK (PAEN)	Type of Clearance:	VFR;Cruise
Departure Time:		Type of Airspace:	Class G

Page 4 of 5 ANC18CA054

#### **Airport Information**

Airport:	Manley Hot Springs MLY	Runway Surface Type:	Gravel
Airport Elevation:	275 ft msl	<b>Runway Surface Condition:</b>	Dry
Runway Used:	36	IFR Approach:	None
Runway Length/Width:	3400 ft / 60 ft	VFR Approach/Landing:	Precautionary landing

#### **Wreckage and Impact Information**

Crew Injuries:	2 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Minor	Latitude, Longitude:	64.988891,-150.646942

#### **Administrative Information**

Investigator In Charge (IIC):	Williams, David
Additional Participating Persons:	Cary Meier; FAA; Fairbanks, AK
Original Publish Date:	March 18, 2019
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=97796

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

Page 5 of 5 ANC18CA054