Aviation Investigation Final Report

Location:	Anchorage, Alaska	**Accident Number:**	ANC18FA045
Date & Time:	June 13, 2018, 12:05 Local	**Registration:**	N9423B
Aircraft:	Cessna 175	**Aircraft Damage:**	Substantial
Defining Event:	Midair collision	**Injuries:**	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

Two wheel-equipped, high-wing airplanes, a Cessna 207 and a Cessna 175, collided midair while in cruise flight in day visual meteorological conditions. Both airplanes were operating under visual flight rules, and neither airplane was in communication with an air traffic control facility. The Cessna 175 pilot stated that he was making position reports during cruise flight about 1,000ft above mean sea level when he established contact with the pilot of another airplane, which was passing in the opposite direction. As he watched that airplane pass well below him, he noticed the shadow of a second airplane converging with the shadow of his airplane from the opposite direction. He looked forward and saw the spinner of the converging airplane in his windscreen and immediately pulled aft on the control yoke; the airplanes subsequently collided. The Cessna 207 descended uncontrolled into the river. Although damaged, the Cessna 175 continued to fly, and the pilot proceeded to an airport and landed safely. An examination of both airplanes revealed impact signatures consistent with the two airplanes colliding nearly head-on.

About 4 years before the accident, following a series of midair collisions in the Matanuska Susitna (Mat-Su) Valley (the area where the accident occurred), the FAA made significant changes to the common traffic advisory frequencies (CTAF) assigned north and west of Anchorage, Alaska. The FAA established geographic CTAF areas based, in part, on flight patterns, traffic flow, private and public airports, and off-airport landing sites. The CTAF for the area where the accident occurred was at a frequency changeover point with westbound Cook Inlet traffic communicating on 122.70 and eastbound traffic on 122.90 Mhz. The pilot of the Cessna 175, which was traveling on an eastbound heading at the time of the accident, reported that he had a primary active radio frequency of 122.90 Mhz, and a non-active secondary frequency 135.25 Mhz in his transceiver at the time of the collision. The transceivers from the other airplane were not recovered, and it could not be determined whether the pilot of the Cessna 207 was monitoring the CTAF or making position reports.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The failure of both pilots to see and avoid the other airplane while in level cruise flight, which resulted in a midair collision.

Findings

Personnel issues	Monitoring other aircraft - Pilot
Personnel issues	Monitoring other aircraft - Pilot of other aircraft

Factual Information

History of Flight

Enroute-cruise	Midair collision (Defining event)

On June 13, 2018, about 1205 Alaska daylight time, a wheel-equipped Cessna 207 airplane, N91038, and a wheel-equipped Cessna 175 airplane, N9423B, collided midair near the mouth of the Big Susitna River, about 20 miles west of Anchorage, Alaska. The commercial pilot of the Cessna 207 was fatally injured. The private pilot of the Cessna 175 was not injured. Both airplanes received substantial damage. The Cessna 207 was operated by Spernak Airways, Inc., as a Title 14 *Code of Federal Regulations* (*CFR*) Part 135 nonscheduled commuter flight. The Cessna 175 was registered to the pilot who was operating it as a 14 *CFR* Part 91 personal flight. Visual meteorological conditions prevailed in the area, and both airplanes were operating under visual flight rules at the time of the accident. The Cessna 175 departed a remote fish camp about 1126 en route to the Lake Hood Seaplane Base (PALH); no flight plan was filed. The Cessna 207 departed Merrill Field (PAMR), Anchorage, about 1200, and was destined for Tyonek Airport (TYE), Tyonek, Alaska, with company flight following procedures in effect.

The pilot of the Cessna 175 stated that, while in level cruise flight about 1,000 ft mean sea level (msl), he was making position reports via radio and established contact with the pilot of a Piper Super Cub passing below him in the opposite direction. As he watched the Piper Super Cub pass well below his airplane, he noticed the shadow of an airplane from the opposite direction converging with the shadow of his airplane. He looked forward and saw the spinner of the converging airplane in his windscreen, and he immediately pulled aft on the control yoke. The pilot stated that his airplane climbed abruptly just before the two airplanes collided. After the collision, he observed the Cessna 207 descend uncontrolled into the river. He then assessed the condition of his airplane and circled over the wreckage of the Cessna 207 numerous times, looking for any survivors, marking the location, and using his radio to enlist the help of any pilots in the area. Realizing that no one had escaped the partially-sunken wreckage of the Cessna 207, the pilot elected to return to PALH. He said that a good Samaritan pilot in another airplane responded to his distress calls, flew alongside his airplane, provided him with a damage report, and escorted him back to PALH.

A second good Samaritan pilot in a float-equipped airplane who heard multiple distress calls and emergency personnel communications landed on the river near the partially-submerged wreckage and confirmed that the pilot was deceased.

A review of archived Federal Aviation Administration (FAA) radar data revealed that two unidentified targets, correlated to be the accident airplanes, converged from opposite directions about 1,000 ft msl near the mouth of the river. The data showed that, about 1 minute before the presumed accident time, the westbound target, believed to be the Cessna 207, began a descent to about 874 ft msl then initiated a climb to an altitude about 900 ft msl just before the targets appeared to merge. That airplane's track disappeared about 1205. The eastbound target, believed to be the Cessna 175, maintained an altitude about 1,000 ft msl throughout the sequence. After the targets appeared to merge, the eastbound airplane

initiated a climb, returned to the area near where the targets converged, and circled before leaving the area.

Pilot Information

Certificate:	Private	**Age:**	53,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	3-point
Instrument Rating(s):	None	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 3 With waivers/limitations	**Last FAA Medical Exam:**	February 20, 2017
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	April 1, 2017
Flight Time:	1015 hours (Total, all aircraft), 315 hours (Total, this make and model), 1015 hours (Pilot In Command, all aircraft), 14 hours (Last 90 days, all aircraft), 14 hours (Last 30 days, all aircraft)		

Cessna 207 Pilot

The pilot, age 56, held a commercial pilot certificate with ratings for airplane single- and multi-engine land and instrument airplane. Additionally, he held a flight instructor certificate for airplane single-engine. His most recent FAA third-class medical was issued on June 12, 2017, with no limitations.

According to the operator's training records, the pilot was hired with 1,442 total hours of flight experience, including 1,200 hours of experience in Alaska, and 514 hours in Cessna 207-series aircraft. At the time of the accident, he had accumulated about 767 additional hours in the accident airplane make and model. His most recent airman competency check, which was administered by a company check airman, was completed on June 15, 2017.

The pilot's flight and duty records revealed that he was off duty on June 10. On June 11, his duty day started at 0700 and ended at 1700, and he flew 5.7 hrs. On June 12, his duty day started at 0700 and ended at 1700, and he flew 4.8 hrs. On the day of the accident, his duty day started at 0700, and he flew 0.9 hour before the accident flight.

Cessna 175 Pilot

The pilot, age 53, held a private pilot certificate with a rating for airplane single-engine land. His most recent FAA third-class medical was issued on February 20, 2017, with the limitation that he must wear corrective lenses.

The pilot reported 1,015 total hours of flight experience, with about 315 hours in the accident airplane make and model.

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	**Registration:**	N9423B
Model/Series:	175	**Aircraft Category:**	Airplane
Year of Manufacture:	1958	**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	55223
Landing Gear Type:	Tricycle	**Seats:**	4
Date/Type of Last Inspection:	December 16, 2017 Annual	**Certified Max Gross Wt.:**	2350 lbs
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:	5296.29 Hrs as of last inspection	**Engine Manufacturer:**	Lycoming
ELT:	C91 installed, activated, did not aid in locating accident	**Engine Model/Series:**	O-360-A1A
Registered Owner:	On file	**Rated Power:**	180 Horsepower
Operator:	On file	**Operating Certificate(s) Held:**	

Cessna 207

The airplane was manufactured in 1968 and was equipped with a Continental IO-520F engine rated at 300 horsepower. A review of the maintenance records revealed that the most recent 100-hour inspection of the airframe and engine was completed on May 6, 2018, when the airframe had accumulated 31,711.5 hours total time in service. The engine was overhauled and installed on the airframe on November 29, 2016, and had accumulated 766.6 hours as of the most recent 100-hour inspection.

Cessna 175

The airplane was manufactured in 1958 and was equipped with a Lycoming O-360 A1A engine rated at 180 horsepower. A review of the maintenance records revealed that the most recent annual inspection of the airframe and engine was completed on December 13, 2017, when the airframe had accumulated 5,296.29 hours total time in service. The engine had accumulated 1,171.93 hours as of the most recent annual inspection.

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	PANC	**Distance from Accident Site:**	20 Nautical Miles
Observation Time:	19:53 Local	**Direction from Accident Site:**	108°
Lowest Cloud Condition:	Few / 4500 ft AGL	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	5 knots / None	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	290°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29.9 inches Hg	**Temperature/Dew Point:**	13°C / 6°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		**Type of Flight Plan Filed:**	None
Destination:	Anchorage, AK	**Type of Clearance:**	None
Departure Time:		**Type of Airspace:**	Class G

The closest weather reporting facility was located at Anchorage International Airport (ANC), Anchorage, Alaska, about 20 miles east of the accident site. The 1153 observation recorded wind from 290° at 5 knots; 10 statute miles visibility; few clouds at 4,500 ft, few clouds at 10,000 ft, scattered clouds at 20,000 ft; temperature 55°F; dew point 43°F; and an altimeter setting of 29.91 inches of mercury.

Wreckage and Impact Information

Crew Injuries:	1 None	**Aircraft Damage:**	Substantial
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	1 None	**Latitude, Longitude:**	61.270832,-150.552215(est)

Cessna 207

Due to the location of the wreckage of the Cessna 207 in the silt-laden waters of the Big Susitna River, the wreckage could not be examined at the accident site. An aerial survey of the site revealed that the wreckage was inverted and partially submerged near the mouth of the river. The left main tire and a portion of the fuselage were protruding from the water.

After recovery, the wreckage was examined at the facilities of Alaska Claims Services, Wasilla, Alaska.

The empennage was separated from the aft fuselage. Both left and right horizontal stabilizers remained attached to their respective attach points, but sustained impact damage. The left elevator remained

attached to its respective attach points. The right elevator remained attached at its inboard attach point but separated at its outboard attach point and was bent upward about mid-span. The vertical stabilizer sustained leading edge accordion-style crushing damage.

The main landing gear gearbox, with both left and right main landing gear, separated from the fuselage.

A portion of the cockpit, fuselage, wings and their respective control surfaces, rudder, a majority of the instrument panel, along with the engine and propeller, were not recovered.

Cessna 175

The Cessna 175's left main gear leg with the wheel attached, as well as other debris, was found on the east bank of the river about 1,380 ft east of the Cessna 207's main wreckage. The left main landing gear and nosewheel were separated and missing. The right main landing gear tire was cut with features consistent with a propeller strike, and the outboard portion of the right elevator sustained impact damage with red paint transfer. The airplane sustained substantial damage to the fuselage and right elevator.

The left and right wing, wing flaps, and ailerons remained attached to their respective attach points and were relatively undamaged.

The left and right horizontal stabilizers, vertical stabilizer, rudder and left elevator all remained attached to their respective attach points and were relatively undamaged. The outboard portion of the right elevator sustained impact damage with red paint transfer.

The fuselage sustained impact damage to the lower fuselage just forward of the left main gear leg.

Communications

The pilot of the Cessna 175 reported that he had a primary active radio frequency of 122.90 Mhz and a non-active secondary frequency 135.25 Mhz in his transceiver at the time of the collision.

The transceivers from N91038 were not recovered.

In May 2014, following a series of midair collisions in the Matanuska Susitna (Mat-Su) Valley, the FAA made significant changes to the common traffic advisory frequencies (CTAF) assigned north and west of Anchorage, AK. The FAA established geographic CTAF areas based, in part, on flight patterns, traffic flow, private and public airports and off-airport landing sites. The CTAF for the area where the accident occurred was at a frequency changeover point, with westbound Cook Inlet traffic communicating on 122.70 and eastbound traffic communicating on 122.90 Mhz.

Both airplanes were operating in Class G airspace, and there was no regulatory requirement for either airplane to be equipped with two-way radio communications.

Medical and Pathological Information

An autopsy of the Cessna 207 pilot was performed by the Alaska State Medical Examiner, Anchorage, Alaska, on July 5, 2018. The cause of death was attributed to multiple blunt force injuries.

Toxicology testing performed at the FAA Forensic Sciences Laboratory, was negative for alcohol or drugs.

Administrative Information

Investigator In Charge (IIC):	Banning, David
Additional Participating Persons:	
Original Publish Date:	November 6, 2019
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=97474

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.

Aviation Investigation Final Report

Location:	Anchorage, Alaska	**Accident Number:**	ANC18FA045
Date & Time:	June 13, 2018, 12:05 Local	**Registration:**	N91038
Aircraft:	Cessna 207	**Aircraft Damage:**	Destroyed
Defining Event:	Midair collision	**Injuries:**	1 Fatal
Flight Conducted Under:	Part 135: Air taxi & commuter - Non-scheduled		

Analysis

Two wheel-equipped, high-wing airplanes, a Cessna 207 and a Cessna 175, collided midair while in cruise flight in day visual meteorological conditions. Both airplanes were operating under visual flight rules, and neither airplane was in communication with an air traffic control facility. The Cessna 175 pilot stated that he was making position reports during cruise flight about 1,000ft above mean sea level when he established contact with the pilot of another airplane, which was passing in the opposite direction. As he watched that airplane pass well below him, he noticed the shadow of a second airplane converging with the shadow of his airplane from the opposite direction. He looked forward and saw the spinner of the converging airplane in his windscreen and immediately pulled aft on the control yoke; the airplanes subsequently collided. The Cessna 207 descended uncontrolled into the river. Although damaged, the Cessna 175 continued to fly, and the pilot proceeded to an airport and landed safely. An examination of both airplanes revealed impact signatures consistent with the two airplanes colliding nearly head-on.

About 4 years before the accident, following a series of midair collisions in the Matanuska Susitna (Mat-Su) Valley (the area where the accident occurred), the FAA made significant changes to the common traffic advisory frequencies (CTAF) assigned north and west of Anchorage, Alaska. The FAA established geographic CTAF areas based, in part, on flight patterns, traffic flow, private and public airports, and off-airport landing sites. The CTAF for the area where the accident occurred was at a frequency changeover point with westbound Cook Inlet traffic communicating on 122.70 and eastbound traffic on 122.90 Mhz. The pilot of the Cessna 175, which was traveling on an eastbound heading at the time of the accident, reported that he had a primary active radio frequency of 122.90 Mhz, and a non-active secondary frequency 135.25 Mhz in his transceiver at the time of the collision. The transceivers from the other airplane were not recovered, and it could not be determined whether the pilot of the Cessna 207 was monitoring the CTAF or making position reports.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The failure of both pilots to see and avoid the other airplane while in level cruise flight, which resulted in a midair collision.

Findings

Personnel issues	Monitoring other aircraft - Pilot
Personnel issues	Monitoring other aircraft - Pilot of other aircraft

Factual Information

History of Flight

Enroute-cruise	Midair collision
Uncontrolled descent	Collision with terr/obj (non-CFIT)

On June 13, 2018, about 1205 Alaska daylight time, a wheel-equipped Cessna 207 airplane, N91038, and a wheel-equipped Cessna 175 airplane, N9423B, collided midair near the mouth of the Big Susitna River, about 20 miles west of Anchorage, Alaska. The commercial pilot of the Cessna 207 was fatally injured. The private pilot of the Cessna 175 was not injured. Both airplanes received substantial damage. The Cessna 207 was operated by Spernak Airways, Inc., as a Title 14 *Code of Federal Regulations* (*CFR*) Part 135 scheduled commuter flight. The Cessna 175 was registered to the pilot who was operating it as a 14 *CFR* Part 91 personal flight. Visual meteorological conditions prevailed in the area, and both airplanes were operating under visual flight rules at the time of the accident. The Cessna 175 departed a remote fish camp about 1126 en route to the Lake Hood Seaplane Base (PALH); no flight plan was filed. The Cessna 207 departed Merrill Field (PAMR), Anchorage, about 1200, and was destined for Tyonek Airport (TYE), Tyonek, Alaska, with company flight following procedures in effect.

The pilot of the Cessna 175 stated that, while in level cruise flight about 1,000 ft mean sea level (msl), he was making position reports via radio and established contact with the pilot of a Piper Super Cub passing below him in the opposite direction. As he watched the Piper Super Cub pass well below his airplane, he noticed the shadow of an airplane from the opposite direction converging with the shadow of his airplane. He looked forward and saw the spinner of the converging airplane in his windscreen, and he immediately pulled aft on the control yoke. The pilot stated that his airplane climbed abruptly just before the two airplanes collided. After the collision, he observed the Cessna 207 descend uncontrolled into the river. He then assessed the condition of his airplane and circled over the wreckage of the Cessna 207 numerous times, looking for any survivors, marking the location, and using his radio to enlist the help of any pilots in the area. Realizing that no one had escaped the partially-sunken wreckage of the Cessna 207, the pilot elected to return to PALH. He said that a good Samaritan pilot in another airplane responded to his distress calls, flew alongside his airplane, provided him with a damage report, and escorted him back to PALH.

A second good Samaritan pilot in a float-equipped airplane who heard multiple distress calls and emergency personnel communications landed on the river near the partially-submerged wreckage and confirmed that the pilot was deceased.

A review of archived Federal Aviation Administration (FAA) radar data revealed that two unidentified targets, correlated to be the accident airplanes, converged from opposite directions about 1,000 ft msl near the mouth of the river. The data showed that, about 1 minute before the presumed accident time, the westbound target, believed to be the Cessna 207, began a descent to about 874 ft msl then initiated a climb to an altitude about 900 ft msl just before the targets appeared to merge. That airplane's track disappeared about 1205. The eastbound target, believed to be the Cessna 175, maintained an altitude

about 1,000 ft msl throughout the sequence. After the targets appeared to merge, the eastbound airplane initiated a climb, returned to the area near where the targets converged, and circled before leaving the area.

Pilot Information

Certificate:	Commercial	**Age:**	56,Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	3-point
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	Airplane single-engine	**Toxicology Performed:**	Yes
Medical Certification:	Class 2 Without waivers/limitations	**Last FAA Medical Exam:**	June 12, 2017
Occupational Pilot:	Yes	**Last Flight Review or Equivalent:**	June 15, 2017
Flight Time:	2210 hours (Total, all aircraft), 1280 hours (Total, this make and model), 1900 hours (Pilot In Command, all aircraft), 193.1 hours (Last 90 days, all aircraft), 75 hours (Last 30 days, all aircraft), 7 hours (Last 24 hours, all aircraft)		

Cessna 207 Pilot

The pilot, age 56, held a commercial pilot certificate with ratings for airplane single- and multi-engine land and instrument airplane. Additionally, he held a flight instructor certificate for airplane single-engine. His most recent FAA third-class medical was issued on June 12, 2017, with no limitations.

According to the operator's training records, the pilot was hired with 1,442 total hours of flight experience, including 1,200 hours of experience in Alaska, and 514 hours in Cessna 207-series aircraft. At the time of the accident, he had accumulated about 767 additional hours in the accident airplane make and model. His most recent airman competency check, which was administered by a company check airman, was completed on June 15, 2017.

The pilot's flight and duty records revealed that he was off duty on June 10. On June 11, his duty day started at 0700 and ended at 1700, and he flew 5.7 hrs. On June 12, his duty day started at 0700 and ended at 1700, and he flew 4.8 hrs. On the day of the accident, his duty day started at 0700, and he flew 0.9 hour before the accident flight.

Cessna 175 Pilot

The pilot, age 53, held a private pilot certificate with a rating for airplane single-engine land. His most recent FAA third-class medical was issued on February 20, 2017, with the limitation that he must wear corrective lenses.

The pilot reported 1,015 total hours of flight experience, with about 315 hours in the accident airplane make and model.

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	**Registration:**	N91038
Model/Series:	207	**Aircraft Category:**	Airplane
Year of Manufacture:	1969	**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	20700027
Landing Gear Type:	Tricycle	**Seats:**	6
Date/Type of Last Inspection:	May 6, 2018 100 hour	**Certified Max Gross Wt.:**	3803 lbs
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:	31711.5 Hrs as of last inspection	**Engine Manufacturer:**	CONT MOTOR
ELT:	C91A installed	**Engine Model/Series:**	IO-520 SERIES
Registered Owner:	SPERNAK AIRWAYS INC	**Rated Power:**	285 Horsepower
Operator:	SPERNAK AIRWAYS INC	**Operating Certificate(s) Held:**	Commuter air carrier (135), On-demand air taxi (135)

Cessna 207

The airplane was manufactured in 1968 and was equipped with a Continental IO-520F engine rated at 300 horsepower. A review of the maintenance records revealed that the most recent 100-hour inspection of the airframe and engine was completed on May 6, 2018, when the airframe had accumulated 31,711.5 hours total time in service. The engine was overhauled and installed on the airframe on November 29, 2016, and had accumulated 766.6 hours as of the most recent 100-hour inspection.

Cessna 175

The airplane was manufactured in 1958 and was equipped with a Lycoming O-360 A1A engine rated at 180 horsepower. A review of the maintenance records revealed that the most recent annual inspection of the airframe and engine was completed on December 13, 2017, when the airframe had accumulated 5,296.29 hours total time in service. The engine had accumulated 1,171.93 hours as of the most recent annual inspection.

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	PANC	**Distance from Accident Site:**	20 Nautical Miles
Observation Time:	19:53 Local	**Direction from Accident Site:**	108°
Lowest Cloud Condition:	Few / 4500 ft AGL	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	5 knots / None	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	290°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29.9 inches Hg	**Temperature/Dew Point:**	13°C / 6°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Anchorage, AK	**Type of Flight Plan Filed:**	Company VFR
Destination:	Tyonek, AK	**Type of Clearance:**	None
Departure Time:		**Type of Airspace:**	Class G

The closest weather reporting facility was located at Anchorage International Airport (ANC), Anchorage, Alaska, about 20 miles east of the accident site. The 1153 observation recorded wind from 290° at 5 knots; 10 statute miles visibility; few clouds at 4,500 ft, few clouds at 10,000 ft, scattered clouds at 20,000 ft; temperature 55°F; dew point 43°F; and an altimeter setting of 29.91 inches of mercury.

Wreckage and Impact Information

Crew Injuries:	1 Fatal	**Aircraft Damage:**	Destroyed
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	1 Fatal	**Latitude, Longitude:**	61.270832,-150.552215(est)

Cessna 207

Due to the location of the wreckage of the Cessna 207 in the silt-laden waters of the Big Susitna River, the wreckage could not be examined at the accident site. An aerial survey of the site revealed that the wreckage was inverted and partially submerged near the mouth of the river. The left main tire and a portion of the fuselage were protruding from the water.

After recovery, the wreckage was examined at the facilities of Alaska Claims Services, Wasilla, Alaska.

The empennage was separated from the aft fuselage. Both left and right horizontal stabilizers remained attached to their respective attach points, but sustained impact damage. The left elevator remained

attached to its respective attach points. The right elevator remained attached at its inboard attach point but separated at its outboard attach point and was bent upward about mid-span. The vertical stabilizer sustained leading edge accordion-style crushing damage.

The main landing gear gearbox, with both left and right main landing gear, separated from the fuselage.

A portion of the cockpit, fuselage, wings and their respective control surfaces, rudder, a majority of the instrument panel, along with the engine and propeller, were not recovered.

Cessna 175

The Cessna 175's left main gear leg with the wheel attached, as well as other debris, was found on the east bank of the river about 1,380 ft east of the Cessna 207's main wreckage. The left main landing gear and nosewheel were separated and missing. The right main landing gear tire was cut with features consistent with a propeller strike, and the outboard portion of the right elevator sustained impact damage with red paint transfer. The airplane sustained substantial damage to the fuselage and right elevator.

The left and right wing, wing flaps, and ailerons remained attached to their respective attach points and were relatively undamaged.

The left and right horizontal stabilizers, vertical stabilizer, rudder and left elevator all remained attached to their respective attach points and were relatively undamaged. The outboard portion of the right elevator sustained impact damage with red paint transfer.

The fuselage sustained impact damage to the lower fuselage just forward of the left main gear leg.

Communications

The pilot of the Cessna 175 reported that he had a primary active radio frequency of 122.90 Mhz and a non-active secondary frequency 135.25 Mhz in his transceiver at the time of the collision.

The transceivers from N91038 were not recovered.

In May 2014, following a series of midair collisions in the Matanuska Susitna (Mat-Su) Valley, the FAA made significant changes to the common traffic advisory frequencies (CTAF) assigned north and west of Anchorage, AK. The FAA established geographic CTAF areas based, in part, on flight patterns, traffic flow, private and public airports and off-airport landing sites. The CTAF for the area where the accident occurred was at a frequency changeover point, with westbound Cook Inlet traffic communicating on 122.70 and eastbound traffic communicating on 122.90 Mhz.

Both airplanes were operating in Class G airspace, and there was no regulatory requirement for either airplane to be equipped with two-way radio communications.

Medical and Pathological Information

An autopsy of the Cessna 207 pilot was performed by the Alaska State Medical Examiner, Anchorage, Alaska, on July 5, 2018. The cause of death was attributed to multiple blunt force injuries.

Toxicology testing performed at the FAA Forensic Sciences Laboratory, was negative for alcohol or drugs.

Administrative Information

Investigator In Charge (IIC):	Banning, David
Additional Participating Persons:	
Original Publish Date:	November 6, 2019
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=97474

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.