Aviation Investigation Final Report

Location:	Galena, Alaska	**Accident Number:**	ANC08LA113
Date & Time:	August 30, 2008, 16:00 Local	**Registration:**	N4886U
Aircraft:	Cessna 206	**Aircraft Damage:**	Substantial
Defining Event:	Loss of engine power (total)	**Injuries:**	1 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The private pilot reported that while in level cruise flight during a Part 91 personal flight, the engine began to run rough and lose power. After seeing the engine fuel pressure fluctuating, the pilot switched fuel tanks. He said the roughness improved momentarily, followed by a strong smell of fuel in the cockpit, which was followed by a complete loss of engine power. Unable to restart the engine, the pilot selected a marshy tree-covered site as a forced landing area. During the forced landing, the airplane collided with trees, and sustained substantial damage to the fuselage and wings. During a postaccident examination, an FAA inspector discovered that the main fuel line between the engine driven fuel pump and the main fuel servo assembly was disconnected, and noted that neither the fuel line nor the connectors were damaged during the accident. A review of the airplane's maintenance records revealed that a maintenance technician had removed the fuel line about 1.9 hours before the accident. During an interview with the FAA inspector, the maintenance technician that removed and reinstalled the fuel line stated that he could not specifically recall if he had tightened the fuel line fitting after the initial installation, and presumed he had not.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The en route loss of engine power due to a mechanic's failure to tighten a fuel line fitting, which became disconnected in flight.

Findings

Personnel issues	Installation - Maintenance personnel
Aircraft	(general) - Incorrect service/maintenance

Factual Information

History of Flight

Prior to flight	Aircraft maintenance event
Enroute	Loss of engine power (total) (Defining event)
Emergency descent	Collision with terr/obj (non-CFIT)

On August 30, 2008, about 1600 Alaska daylight time, a float-equipped Cessna 206 airplane, N4886U, sustained substantial damage during a forced landing, about 62 miles southeast of Galena, Alaska. The airplane was operated as a personal flight under the provisions of 14 Code of Federal Regulations (CFR) Part 91 when the accident occurred. The solo private pilot received minor injuries. Visual meteorological conditions prevailed, and no flight plan was filed. The flight originated at the Wasilla Lake Sea Plane Base, Wasilla, Alaska, about 1300, and was en route to Kiana, Alaska.

During a telephone conversation with the National Transportation Safety Board (NTSB) investigator-in-charge on August 31, the pilot reported that while in level cruise flight the engine began to run rough and lose power. He said that he saw the engine fuel pressure fluctuating, so he elected to switch fuel tanks in an effort to restore engine power. He noted that the roughness improved momentarily, followed by a strong smell of fuel in the cockpit area, which was followed by a complete loss of engine power. He said that he was unable to restart the engine, and selected a marshy tree-covered site as a forced landing area. During the forced landing, the airplane collided with trees, and sustained substantial damage to the fuselage and wings.

On September 2, a Federal Aviation Administration (FAA) airworthiness inspector from the Anchorage Flight Standards District Office traveled to the Big Lake Airport, Big Lake, Alaska, and examined the airplane after it was recovered. The inspector reported he discovered that the main fuel line between the engine driven fuel pump and the main fuel servo assembly was disconnected, with no apparent impact damage to either the line or its connector.

The FAA inspector said that during his postaccident review of the airplane's maintenance records, he discovered that a maintenance technician had removed the fuel line about 1.9 hours before the accident. During a follow-up interview with the FAA inspector, the maintenance technician that removed and reinstalled the fuel line stated that he could not specifically recall if he had tightened the fuel line fitting after the initial installation, and presumed he had not.

Pilot Information

Certificate:	Private	**Age:**	64,Male
Airplane Rating(s):	Single-engine land; Single-engine sea	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 3 With waivers/limitations	**Last FAA Medical Exam:**	July 26, 2008
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	April 4, 2008
Flight Time:	3371 hours (Total, all aircraft), 36 hours (Total, this make and model), 3371 hours (Pilot In Command, all aircraft), 28 hours (Last 90 days, all aircraft), 10 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	**Registration:**	N4886U
Model/Series:	206	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	U20606144
Landing Gear Type:	Float	**Seats:**	6
Date/Type of Last Inspection:	May 20, 2008 Annual	**Certified Max Gross Wt.:**	3300 lbs
Time Since Last Inspection:	42 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	1546 Hrs as of last inspection	**Engine Manufacturer:**	Continental
ELT:	C91 installed, activated, aided in locating accident	**Engine Model/Series:**	IO-550-F
Registered Owner:	Nugent Equipment LLC	**Rated Power:**	300 Horsepower
Operator:	Howard Hugent	**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	PAGA	**Distance from Accident Site:**	64 Nautical Miles
Observation Time:	13:00 Local	**Direction from Accident Site:**	290°
Lowest Cloud Condition:	4000 ft AGL	**Visibility**	10 miles
Lowest Ceiling:	Broken / 5000 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	/	**Turbulence Type Forecast/Actual:**	/
Wind Direction:		**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:		**Temperature/Dew Point:**	10°C
Precipitation and Obscuration:			
Departure Point:	Wasilla, AK	**Type of Flight Plan Filed:**	None
Destination:	KIANA, AK	**Type of Clearance:**	None
Departure Time:	13:00 Local	**Type of Airspace:**	

Wreckage and Impact Information

Crew Injuries:	1 Minor	**Aircraft Damage:**	Substantial
Passenger Injuries:	N/A	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	1 Minor	**Latitude, Longitude:**	64.738052,-158.940002(est)

Administrative Information

Investigator In Charge (IIC):	Johnson, Clinton
Additional Participating Persons:	Rick Hrubes; Federal Aviation Administration (Operations); Fairbanks , AK Craig Johnson; Federal Aviation Administration (Airworthiness) ; Anchorage, AK
Original Publish Date:	May 12, 2009
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=68860