



National Transportation Safety Board Aviation Accident Final Report

Location:	Chugiak, AK	Accident Number:	ANC03LA009
Date & Time:	11/01/2002, 1345 AST	Registration:	N8199
Aircraft:	Arima Kolb Fire Star II	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The private pilot/owner reported that the experimental homebuilt airplane had been stored outside, and had not been utilized within the last two years. He said that just prior to the accident, he had accomplished three successful touch-and-go landings. During the fourth takeoff roll, the airplane climbed to about 50 feet above the runway, and the Rotax 503 engine suddenly lost significant power. During the subsequent forced landing, the airplane collided with several trees. The airplane sustained substantial damage to the wings, fuselage, and empennage. An FAA inspector inspected the airplane and reported that both carburetor float bowls contained murky, silty, and rust-colored fuel.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inadequate preflight inspection which failed to remove contaminated fuel from the airplane's fuel system, resulting in a loss of engine power during takeoff.

Findings

Occurrence #1: LOSS OF ENGINE POWER(PARTIAL) - NONMECHANICAL
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (C) FLUID,FUEL - CONTAMINATION
2. (C) AIRCRAFT PREFLIGHT - INADEQUATE - PILOT IN COMMAND

Occurrence #2: FORCED LANDING
Phase of Operation: EMERGENCY LANDING AFTER TAKEOFF

Occurrence #3: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: EMERGENCY LANDING AFTER TAKEOFF

Findings

3. OBJECT - TREE(S)

Factual Information

On November 1, 2002, about 1345 Alaska standard time, a wheel-equipped experimental homebuilt Arima Kolb Fire Star II airplane, N8199, sustained substantial damage when it struck trees during a forced landing after takeoff from the Birchwood Airport, Chugiak, Alaska. The airplane was being operated as a visual flight rules (VFR) local area personal flight under Title 14, CFR Part 91, when the accident occurred. The airplane was operated by the pilot. The solo private pilot was not injured. Visual meteorological conditions prevailed. The flight originated at the Birchwood Airport about 1300. No flight plan was filed.

During a telephone conversation with the National Transportation Safety Board (NTSB) investigator-in-charge on November 1, the pilot reported that the accident airplane had been stored outside, and had not been utilized within the last two years. He added that just prior to the accident, he had accomplished three successful touch-and-go landings on runway 19R. He said that on the fourth touch-and-go landing roll, he added power for another takeoff. As the airplane climbed to about 50 feet above the runway, he said the engine, a Rotax 503, suddenly lost significant power, and he selected a forced landing area ahead of the airplane. During the forced landing, the airplane collided with several trees. The airplane sustained substantial damage to the wings, fuselage, and empennage.

On November 1, a Federal Aviation Administration (FAA) operations inspector, Anchorage Flight Standards District Office, traveled to the Birchwood Airport to inspect the airplane. The inspector reported that both carburetor float bowls were found to contain murky, silty, and rust-colored fuel.

Pilot Information

Certificate:	Private	Age:	77, Male
Airplane Rating(s):	Single-engine Land; Single-engine Sea	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Expired	Last FAA Medical Exam:	10/14/1996
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	300 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Arima	Registration:	N8199
Model/Series:	Kolb Fire Star II	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental	Serial Number:	1
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	Condition	Certified Max Gross Wt.:	700 lbs
Time Since Last Inspection:	1 Hours	Engines:	1 Reciprocating
Airframe Total Time:	23 Hours at time of accident	Engine Manufacturer:	Rotax
ELT:	Not installed	Engine Model/Series:	503-DCD1
Registered Owner:	Wallace S. Arima	Rated Power:	55 hp
Operator:	Wallace S. Arima	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:		Visibility	
Lowest Ceiling:	Broken / 4000 ft agl	Visibility (RVR):	
Wind Speed/Gusts:	Calm /	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	7° C
Precipitation and Obscuration:			
Departure Point:	Chugiak, AK (BCV)	Type of Flight Plan Filed:	None
Destination:	Chugiak, AK (BCV)	Type of Clearance:	None
Departure Time:	1300 AST	Type of Airspace:	Class D

Airport Information

Airport:	Birchwood (BCV)	Runway Surface Type:	Asphalt
Airport Elevation:		Runway Surface Condition:	Dry
Runway Used:	19R	IFR Approach:	None
Runway Length/Width:	4010 ft / 100 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	61.400000, -149.500000

Administrative Information

Investigator In Charge (IIC):	Clinton O Johnson	Report Date:	07/23/2003
Additional Participating Persons:	Pat J Leonard; Federal Aviation Administration; Anchorage, AK		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.ntsbt.gov/pubdms/ .		

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).