

Event Description: JOSEPH MICHAEL KROL, MINI-MAX CRASH

Accident: CEN22LA074 Event Date/Time: December 13, 2021

Aircraft Incident Scene Location: [REDACTED] South Bend, IN 46619

Other Persons Present

Scott Lambrecht	Richard Wojs
FAA Aviation Safety Inspector	FAA Aviation Safety Inspector
(O) [REDACTED]	(O) [REDACTED]
(E) [REDACTED]	(E) [REDACTED]

Other Persons Contacted

Trooper Scott Hipsher	Dave Cooper	Lt. Aaron Smith
St. Joseph County, IN Police	Team Mini-Max	St. Joseph County, IN Police
(M) [REDACTED]	(M) [REDACTED]	(M) [REDACTED]
(E) [REDACTED]	(E) [REDACTED]	(E) [REDACTED]

Rod Bettcher	Todd Fox	Joshua Linberg
Bettcher Towing	NTSB – Duty Desk	NTSB – Assigned Investigator
(O) [REDACTED]	(M) [REDACTED]	(M) [REDACTED]
(A) [REDACTED]	(E) [REDACTED]	(E) [REDACTED]
Lakeville, IN 46536		

Jim Leon
The Ultralight Place
(M) [REDACTED]
(E) [REDACTED]

Witness

Doug Cunningham
Witness – Scene Home Owner
(M) [REDACTED]
(E) [REDACTED]
[REDACTED]
South Bend, IN 46619

Crew Members

Passengers

Joseph Michael Krol	NONE
Pilot in Command	
[REDACTED]	
Mill Creek, IN 46365	
Cert #: None	

Scene Description: On December 14, 2021 at 14:08 CST, I was notified by FAA Front Line Manager, Chet Cybulski, that on December 13, 2021, at approximately 1700 EST, an unregistered ultralight aircraft crashed near Chain-O-Lakes Airport (3IN7), at [REDACTED] South Bend, IN, a residential neighborhood. St. Joseph County Police responded and took pictures of the scene and interviewed the pilot, Mr. Joseph Krol. Pilot was given a field sobriety test and failed with a result of .114. Mr. Krol was taken into police custody, taken to the hospital then to jail. Aircraft was impounded by Bettcher's towing. On December 15, 2021 at 0816 CST I spoke with NTSB, Todd Fox, and advised him I was going out to see an aircraft

Investigation Plan Description: Evaluate aircraft to determine if it meets the definition of Ultralight Vehicles per 14 CFR part 103 (≤ 254 LBS, fuel ≤ 5 gal., speed ≤ 55 kts, stall ≤ 24 kts). If aircraft is NOT an ultralight vehicle, assess damage to the aircraft and property to determine if the occurrence qualifies as an accident or incident per 49 CFR part 830. Assess for any possible maintenance issues that could have contributed to this occurrence. Review aircraft, engine, and propeller logbooks to determine if the aircraft is properly maintained.

Investigatory Steps Performed

Arrival

On the way to the impound yard where the aircraft was located I called the Regional Operations Command Center (ROCC) and was connected with NTSB, Todd Fox. I explained to Mr. Fox my investigation plan. He requested copies of the police report and pictures. Once he reviewed the documents I emailed him he assigned the accident to Joshua Lindberg. Inspector Lambrecht, Wojs, and I arrived at Bettcher Towing on December 15, 2021 at 1115 EST and met with Rod Bettcher. Mr. Bettcher provided access to the aircraft in the impound lot. Aircraft was sitting on its belly in the gravel lot. Took pictures in multiple directions around the aircraft.

Aircraft Description

Aircraft appears to be a Team Mini-Max 1600R. Aircraft has single seat, is wood structured, and fabric covered. Engine is piston driven with a 2 blade propeller.

Pieces Present

The horizontal stabilizer, left and right elevator, vertical stabilizer, tail wheel and rudder were attached to the aircraft fuselage. The engine compartment was broken off the fuselage. The left wing was broken in half, one half attached to the fuselage and the other completely detached. The right wing was broken off the fuselage at the wing root. The outboard portion of the left wing was connected to the right wing by the landing gear struts and axle. The left flaperon was connected to the fuselage by the control cable, and was completely broken off the left wing. The right flaperon was broken off the right wing, and the control cable was broken at the connecting point on the flaperon. The left and right wheel and tires were attached to the axle. The canopy was resting on the fuselage but was broken off the hinge. The instrument panel was separated from the cockpit structure. The engine compartment was broken off of the fuselage and connected only by the throttle cable. The propeller was a 2 blade, with one blade connected and one blade broken in half. The muffler was broken off the exhaust pipe on the engine.

Continuity of Cables

Verified continuity of the control cables from left flaperon, left and right elevators to the control stick. Verified continuity of the control cables from the rudder and tail wheel to the rudder pedals. Verified continuity of the throttle cable from the throttle to the engine. The right flaperon control cable was broken off at the end where it attaches to the flaperon.

Fuel

Examined the fuel tank and did not find any punctures or cracks. The fuel tank cap was on. A small amount of fuel, estimated about 2 quarts, was present in the tank. Measured the fuel tank and found its size to be 21.25" long, 9.25" wide, and 8.125" high. Fuel tank wall thickness was measured as an estimated .25" thick. Determined thru the following volume formula that the fuel tank is capable of holding approximately 6 gallons of fuel.

$$\begin{aligned}
\text{Volume} &= L \times W \times H \\
&= 21.25 \times 9.25 \times 8.125 \text{ [Exterior Measurement]} \\
&= (21.25 - 0.25 - 0.25)(9.25 - 0.25 - 0.25)(8.125 - 0.25) \text{ [Interior Measurement]} \\
&= 20.75 \times 8.75 \times 7.625 \\
&= 1,384.414 \text{ in}^3 \\
231 \text{ in}^3 \text{ per U.S. Gallon} \\
&= 1,384.414 \text{ in}^3 / 231 \text{ in}^3 \\
&= \underline{5.99 \text{ U.S. Gallons}}
\end{aligned}$$

Drained 24 fluid ounces of fuel from the fuel tank into a clear mason jar. Fuel appeared to be clear and bright. The container was closed and swirled. A slight amount of sediment was observed at the bottom of the fuel vortex. No water was observed.

Propeller

The Propeller was attached to the engine, with one propeller blade broken in half along its width. The data placard on the propeller stated “Warp Drive N118898”. No damage was observed on propeller blade that was whole. The outboard portion of the broken propeller was recovered later in the day at the accident site.

Engine

Found an engine data tag stating it was a Bombardier Rotax Type 503, Mot.No. 3951433. The engine was examined for leaks and cracks, none were observed. Removed the igniter leads from the spark plugs and no defects were observed. Removed the forward spark plug and no defects were observed. Rotated the propeller and did not feel any substantial binding. Placed my thumb over the forward spark plug port and had another inspector rotate the propeller. Verified the cylinder built pressure. Reinstalled the spark plug in the forward cylinder and removed the aft spark plug, no defects were observed. Placed my thumb over the aft spark plug port and had another inspector rotate the propeller. Verified the cylinder built pressure. Reinstalled the spark plug in the aft cylinder. Removed the exhaust stack from the engine to view the side of the forward and aft piston. Found the forward and aft pistons have scoring/gouging along their circumference, in the direction of travel. Metal shavings were present in the exhaust housing of the engine. Removed oil fill plug and observed oil in the engine housing.

Instruments

The instrument panel had a cylinder head temperature gauge, RPM gauge, EGT Gauge, Altimeter, Airspeed Indicator, and a compass. There was also a switch and a primer knob. All gauges were at zero, with the exception of the altimeter which indicated 400 feet. No Hobbs or hour counter was found.

Aircraft Markings and Data Tags

No U.S. registration markings were found on the aircraft. An aircraft identification plate was not found. Found that the left and right side of the empennage had a marking of C-IDGF. This was painted over with red paint. Reviewed the public TCCA Registry database and found a Team Mini Max Basic Ultra-light aeroplane was registered in Canada from December 17, 1991 until September 23, 1992, under C-IDGF. The serial number was MK202.

Aircraft Documents

No airworthiness certificate or registration documents were found in the aircraft. No manuals, or any other documents were found in the aircraft. No aircraft, engine, or propeller logs were presented for review at this time.

Discussed the findings with NTSB, Joshua Linberg. No other steps were requested to be taken at that time. Investigator Limberg advised me that we could release the aircraft to the impound yard. He also asked me to inform the impound yard owner that any costs incurred, such as tow and storage, would be the responsibility of the aircraft owner.

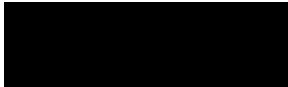
We departed the scene at 1425 EST.

Accident Scene

We arrived at the accident scene [REDACTED] (South Bend, IN) at 1522 EST. I introduced myself to the home owner at this address, Mr. Doug Cunningham, and provided him my credentials. Mr. Cunningham recounted the events as he recalls, which can be found in file “Cunningham, Doug_2021.12.15_FAA Form 1360-33 Record of Visit, Conference, Meeting.” We walked the property where the aircraft impacted and found a muffler spring on Mr. Cunningham’s sidewalk, and the other half of the propeller next to his garage. Mr. Cunningham said the propeller was placed there when they found it. The Heather Ridge neighborhood sign bricks had red paint transfer marks, there was a large gouge in the earth in front of the sign, the light assembly from the lamp post was broken off, and the decorative garden bricks were displaced around the neighborhood sign. There were numerous small pieces of wood with red paint that matches the aircraft.

We noticed the house across the street appeared to have 2 security cameras and a video door bell. Nobody answered the door so I asked Mr. Cunningham to give them my card and let them know I’d like to talk with them.

We departed the scene at 1545EST.



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KLINGBEIL
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Beau Klingbeil
Aviation Safety Inspector