Subscribe to Ars Pro++ and get a free Yubikey

PRO

Ars Pro++ is ad and tracker free, and offers the best reading experience. The hardware authenticating Yubikey is available world-wide. Upgrade your tech life!

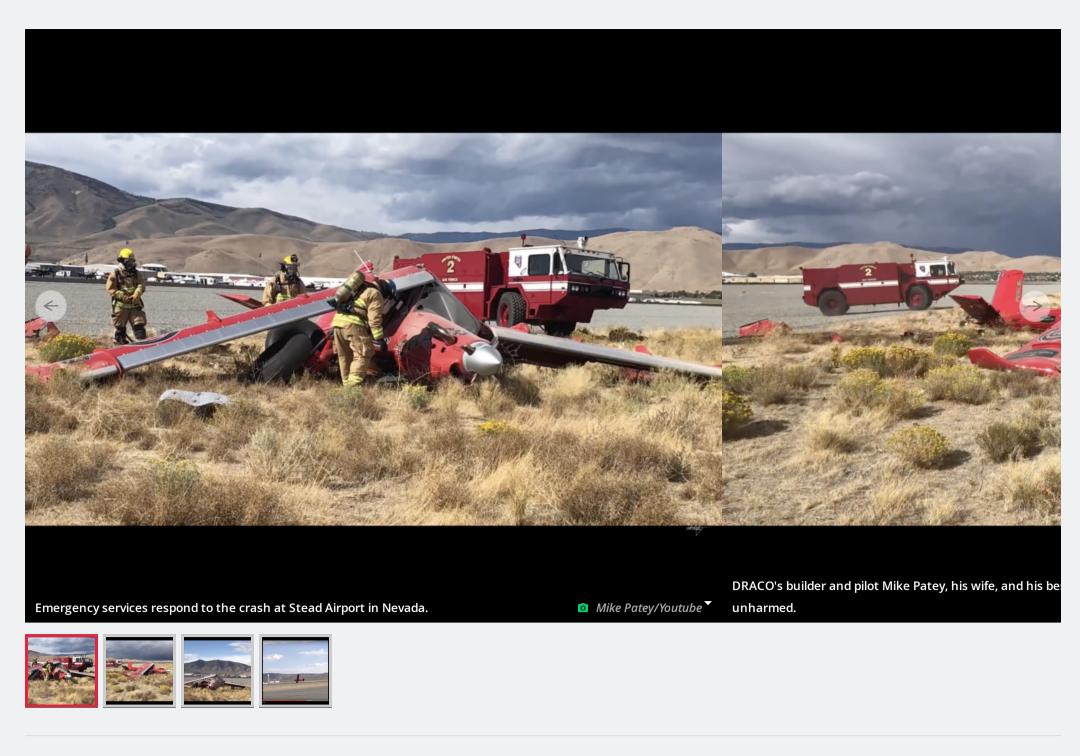




OUCH — The world's best bush plane is destroyed on takeoff in Reno

Mike Patey and his two passengers were unharmed, but the plane wasn't so lucky.

ERIC TEGLER - 9/18/2019, 12:15 PM



Mike Patey, the Utah entrepreneur who transformed his Polish-built Wilga 2000 short takeoff and landing (STOL) aircraft into a million-dollar "ultimate bush plane" called DRACO, crashed on takeoff leaving the Reno National Championship Air Races on Monday.



FURTHER READING One man designed and built the ultimate bush plane

Patey was attempting to depart Reno (where DRACO had been featured in a static display) the day after the races were over, seeking to beat a fast-moving weather front. With him aboard DRACO were his wife and best friend. All three escaped the crash without injury.

The incident

The crash occurred at about 10:12 pm local time. According to the Meteorological Aerodrome Report (METAR), the winds at Stead Airport were out of the southwest, blowing steady at 24 knots (28mph, or about 45km/h) and gusting to 38 knots (44mph, or about 71km/h). Patey was taking off on runway 26 with a crosswind from his left.

Taking off in a significant crosswind in a relatively light airplane like DRACO—which weighs about 2500lb or about 1100kg—is difficult under the best circumstances. Taking off in a howling crosswind, as Patey himself acknowledged, was not a good idea. Almost immediately after walking away from the crash with his wife and best friend, Mike Patey filmed and uploaded a YouTube video, acknowledging his mistake and demonstrating both his clarity of mind and his character.



The accident was basically a "ground loop," wherein an airplane exhibits a rapid and uncontrolled pivot away from its intended direction of takeoff or landing. Tail-dragger airplanes—that is, airplanes with the main gear in front and a tail wheel behind—are particularly susceptible to ground looping.

Prior to the takeoff roll, the video shows DRACO being pushed by the wind down onto its right main gear. The suspension travel of the trailing-link gear (which Patey recently improved) allows it to squat for off-runway, back-country landings. In these conditions, the gear's functioning aggravated the crosswind effect, with the left wing high and the right wing down even before takeoff.

Patey says he actually considered turning the airplane across the runway, into the wind, before takeoff but elected not to for various reasons. DRACO was then hit by a gust while Patey accelerated, which lifted the left wing further and took control out of Patey's hands.

"When that [left] wing lifted up, I had enough aileron and rudder [control]. I kicked [rudder] into it, trying to hold it and get the nose into the wind. I just about had it....And then I had a wind bump like nothing I've ever felt. It lifted that left wing and turned the belly directly to the wind. I had no aileron control... I've never felt like a kite in my life," he told Ars.

DRACO pivoted, skidded, and half-rolled gently into the desert sand adjacent to the runway. Patey said the impact was (fortunately) smooth, and he crawled out of the airplane via the left door, which had torn off. His wife and friend exited the airplane as well.

The dragon that was...

Patey named his airplane "DRACO" from a Latin-derived word meaning dragon or serpent. He re-designed and re-built the Wilga in early 2018 by himself in *five months*—an amazing feat for one man.

Unfortunately, DRACO appears to be a write-off. Both wings sheared at the root; the left main gear collapsed and is possibly torn off; the custom propeller's blades are gone; the turbine engine is almost certainly damaged; the fuselage is likely twisted; and the horizontal stabilizer on the tail has been displaced. Reconstituting such a unique airplane would be a difficult mountain to climb.

DRACO debuted at the world-renowned EAA Fly-In at Oshkosh in July 2018. It became an instant phenomenon, known not only to aviators and aviation enthusiasts but to a large chunk of the general public as well. It featured in aviation and general interest publications and showed up in numerous videos—including a GoPro promotional video with wingsuit jumpers.

The airplane was essentially a different kind of extreme bush plane with a turbo-prop. Its STOL performance, altitude, cruise, and payload capabilities were unlike just about anything outside current military aircraft. In DRACO, Patey won the most prestigious STOL competitions in the world, including the High Sierra Fly-In and the Valdez STOL Competition. Patey set a bar so high that DRACO was essentially ruled out of further competition. That, in part, is why Patey has embarked on a new STOL airplane project that he calls "Scrappy," which will be unveiled soon.

Patey admitted that the accident was his fault alone and that it will "haunt him for a long time," but he and his family are safe.

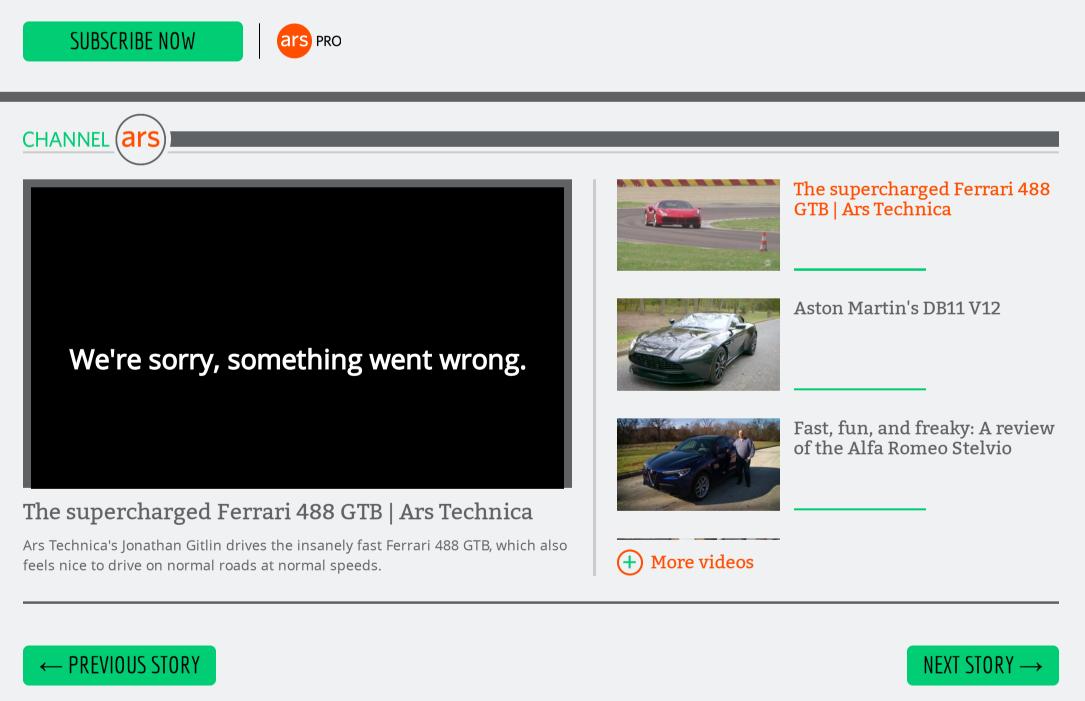
Listing image by Mike Patey/Youtube

READER COMMENTS

SHARE THIS STORY

No banner ads. No tracking. Just content.

Subscribe to ad-free Ars Pro for the best reading experience and subscriber-only perks, while directly supporting the content you love.



Related Stories

Sponsored Stories Powered by Outbrain

Today on Ars



RF Chirp tech: Long distance, incredible penetration, low bandwidth



Protocol found in webcams and DVRs is fueling a new round of big DDoSes



This new eco-friendly game packaging could save tonnes of plastic every year



The world's best bush plane is destroyed on takeoff in Reno



Report: Google Wifi 2 is half Wi-Fi router, half Google Home



HP debuts Elite Dragonfly 2-in-1 with ultra-light chassis, 24-hour battery life



Los Angeles partnership launches platform to help people catch phishes



Musk spent \$50,000 digging into critic's personal life

STORE SUBSCRIBE **ABOUT US RSS FEEDS VIEW MOBILE SITE** CONTACT US STAFF **ADVERTISE WITH US** REPRINTS



NEWSLETTER SIGNUP

Join the Ars Orbital Transmission mailing list to get weekly updates delivered to your inbox.

Email address



WIRED Media Group

© 2019 Condé Nast. All rights reserved. Use of and/or registration on any portion of this site constitutes acceptance of our User Agreement (updated 5/25/18) and Privacy Policy and Cookie Statement (updated 5/25/18) and Ars Technica Addendum (effective 8/21/2018). Ars may earn compensation on sales from links on this site. Read our affiliate link policy. Your California Privacy Rights

CONDÉ NAST

The material on this site may not be reproduced, distributed, transmitted, cached or otherwise used, except with the prior written permission of Condé Nast. Ad Choices