

Joshua Lindberg

From: [REDACTED]
Sent: Wednesday, September 3, 2025 3:44 PM
To: Joshua Lindberg
Subject: RE: N83PS New Holstein WI

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From my report.

On July 26, 2025, at 1533z / 1033 CDT, an Aerotek Pitts S-2A, piloted by its owner from the back seat with a passenger in the front seat, diverted from Wittman Regional Airport (KOSH), WI, to new Holstein Municipal Airport (8d1), WI, due to an unlatched canopy. The aircraft ground looped after landing on a dry concrete runway 32, resulting in substantial damage to the right wing and empennage, and causing the collapse of the Right main and tail landing gears. The intended destination was Austin Straubel International Airport (KGRB), WI .

Upon touchdown, the tailwheel created an oscillating skid mark for approximately 200 feet while tracking straight, followed by an increasing round track arch to the left for another 200 feet, with skid mark oscillation unabated. The aircraft subsequently departed the runway, ground looping and collapsing the right main and tail wheel assemblies. The pilot and passenger were uninjured.

The METAR at the nearby Sheboygan County Airport (KSBM), WI, at the time of the accident reported no gusts and zero ground wind, although the pilot stated he landed with a left crosswind. According to the pilot, the canopy unlatched upon departing Wittman Regional Airport and slid back to the first detent, which induced noise but was not overly disruptive, prompting the diversion to New Holstein. He noted that the first detent is an approved location for flight and that no maintenance corrective action was required for the canopy.

The aircraft was equipped with a non-approved aviation products (P/N 6134) tailwheel assembly and (P/N 6171) tail spring. The pilot had owned the aircraft for less than a year before this accident.

METARs from Sheboygan County Airport (KSBM), WI 18 miles southeast of New Holstein Municipal Airport (8D1), WI; before and after the accident as follows:

KSBM 261453Z AUTO 00000KT 10SM CLR 25/20 A2998 RMK AO2 SLP149 T02500200 55002
KSBM 261553Z AUTO 00000KT 10SM OVC060 26/21 A2999 RMK AO2 SLP151 T02560206

Airworthiness: The accident aircraft initially featured a Pitts Maule Tailwheel (part #: SFS-1-4) with an 18-inch leaf spring (part #: 2-2250). This configuration was altered on January 06, 1978, when a Scott 2000 series tailwheel was installed through a field approval. Further changes occurred on April 22, 1984, with the installation of a Maule model SFSA; not field approved. A significant modification was recorded on February 23, 2009, although the log entry did not specify part numbers. It is suspected that this was when the aircraft was fitted with an unapproved Aviation Products tailwheel assembly (part #: 6134) and a tail spring (part #: 6171) measuring 21 inches in length.

The installation of the unapproved tailwheel assembly and tail spring contributed directly to the tailwheel's oscillating skid marks observed upon landing, heightening the risk of a ground loop. An incorrect tailwheel or tail spring assembly can create a negative caster angle, further exacerbated by the additional weight of a passenger, leading to reduced trail and increased shimmying. Moreover, rudder springs that were connected but not

harmonized with the unapproved tailwheel assembly further contributed to the tailwheel oscillations, compromising the aircraft's landing stability.

4. Airman/air agency competence:

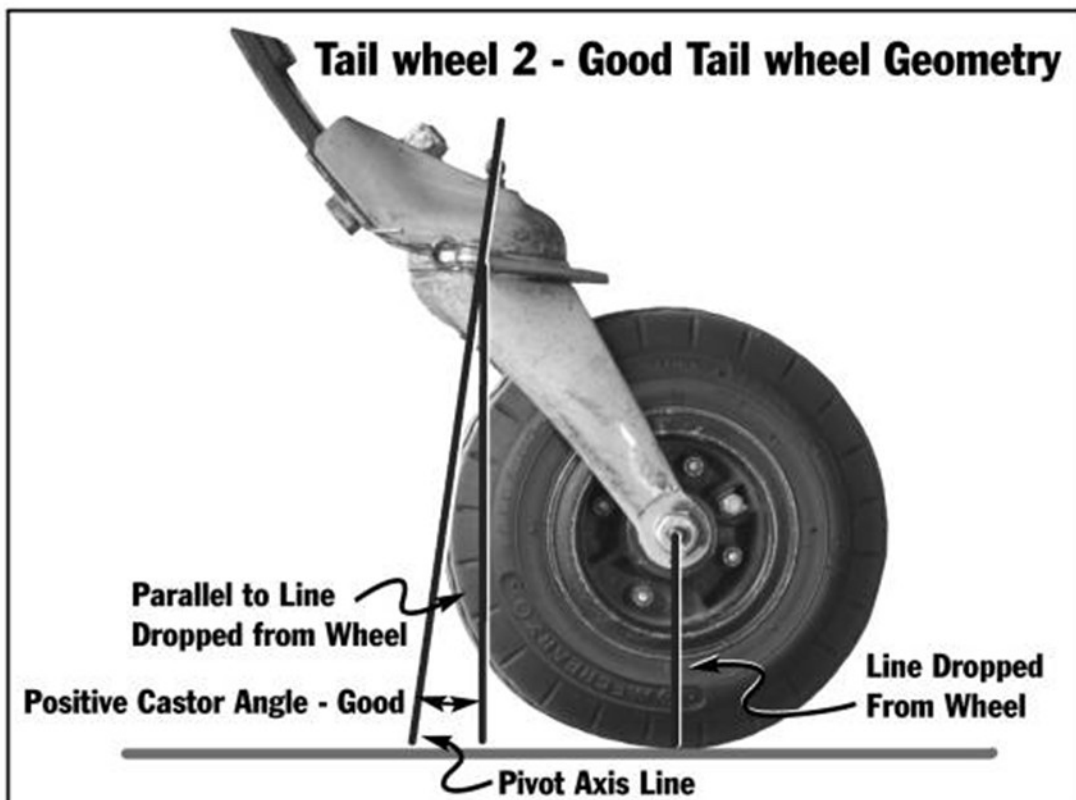
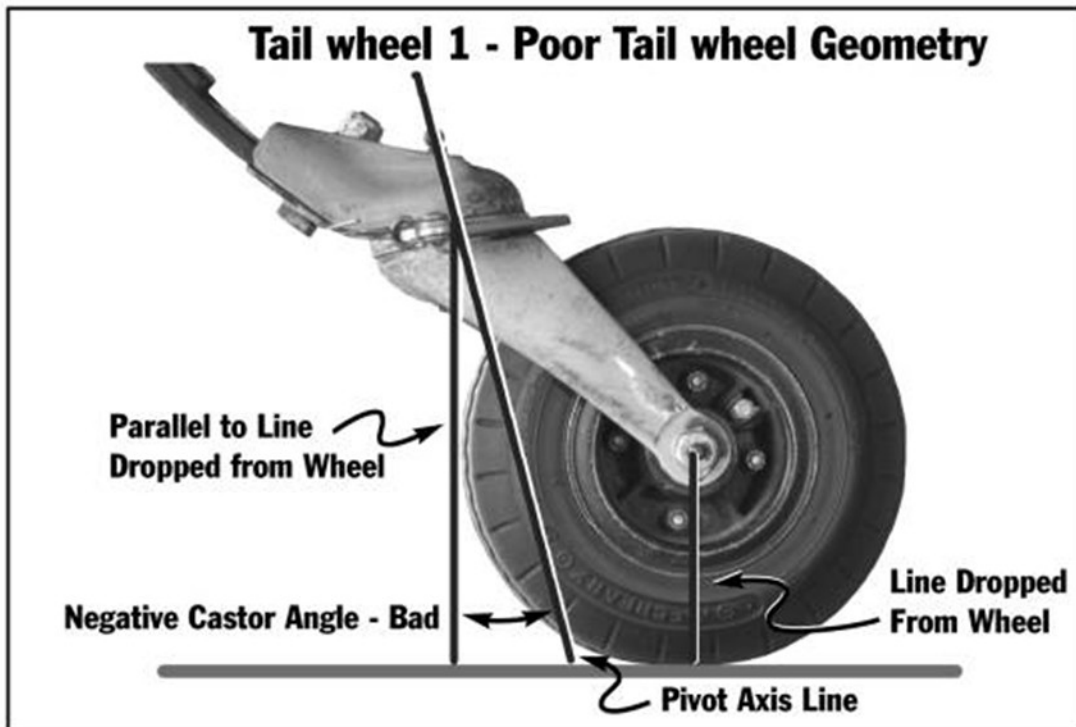
The pilot made a critical error by not conducting thorough preflight checks, resulting in an unsecured aircraft canopy. This oversight led to significant noise and wind disturbance inside the cockpit, compelling the pilot to divert to a different airport. The diversion introduced additional challenges, as airport runways can vary in size, width, and slope, potentially causing misjudgments in the aircraft's flight path toward the runway. The combination of the unsecured canopy, along with the accompanying noise and wind disturbance, significantly increased the Pilot's workload and pressure during the flight. Upon landing, the oscillating tailwheel further contributed to the pilot's loss of control, ultimately resulting in a ground loop. This sequence of events underscores the importance of meticulous preflight checks and situational awareness, especially when dealing with unexpected diversions and challenging runway conditions.

From: [REDACTED]
Sent: Friday, August 22, 2025 3:45 PM
To: Joshua Lindberg [REDACTED]
Subject: RE: N83PS New Holstein WI

Joshua,

I have been off work [REDACTED] the last two days but saw your email I do plan to get the -23 complete by next week. Anyway, what I discovered so far as to the aircraft [REDACTED] is that the tailwheel assembly was replaced three times with a different model. The original Maule Tailwheel SFS-1-14 replaced by a Scott 2000 series, the Scott 2000 series tailwheel replaced by a Maule tailwheel model SFSA, the Maule tailwheel model SFSA replaced by the Aviation Products 6134, The only approved change was via the FAA Form 337 Major Repair and Alteration - Airframe, Powerplant, Propeller, or Appliance on 06 January 1978. The Aviation Products tailwheel is utilized on experimental aircraft (at least would need field approval to be installed on this, N93PS, certified Standard/ Acrobatic aircraft). The Aviation Products tailwheel has a much longer tail spring, than the Maule & the Scott....this can change a lot of things....impact the fail-limit of the aircraft airframe (that square extruded frame member – see attached picture 6158c). Also, but not verified, creating a negative castor, especially with more weight in the aircraft (during the accident the aircraft was flown with the pilot in the aft seat, and passenger in the front seat...that is the pilot was not the sole occupant in this flight). A negative castor will create a shimmy.

[Taming the Tail Wheel Shimmy - Glasair Aircraft Owners Association](#)



Tail wheel with positive and negative castor angles—exaggerated.
 The terms positive and negative are simply the naming convention I choose to use, as they agree with my textbook references.

- On 23 February 2009 (see log page for that date) I infer or at least think possible this is when the Aviation Products tailwheel was installed. The Technician [REDACTED] would be 93 years old.

- the Maule tailwheel model SFSA was installed on 22 April 1984.
- New Tailwheel springs were installed on 06 November 1982. And
- On 06 January 1978 per logpage entry and a 337, a Maule Tailwheel SFS-1-14 was removed and replaced by a Scott 2000 series tailwheel.
- The tailwheel assembly, which ascertained by us to be Aviation Products to be P/N 6134 tailwheel, 6-inch double fork, with a 20 degree attach block. And that the tail spring it is a P/N 6171, 7/8" diameter out of the fuselage tapers to 5/8" at the tailwheel (a straight taper, sold as a blank, undrilled, stainless steel).
- Aviation Products stated the tailwheel is probably 25 years old, that it looks in good shape (per pictures I sent to them). They stated It looks like its cadmium plated, is that correct they asked? And that the steering arm was machined on their profiler, which they have not used it in years..

From: Joshua Lindberg [REDACTED]
Sent: Thursday, August 21, 2025 9:50 AM
To: [REDACTED]
Subject: RE: N83PS New Holstein WI

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Hey John,

Can you send me your notes from this tailwheel exam or the -23 report? Hoping to write this up and get it submitted.

Thanks!
Josh

From: [REDACTED]
Sent: Monday, August 11, 2025 8:55
To: Joshua Lindberg [REDACTED] >
Subject: RE: N83PS New Holstein WI

[CAUTION] This email originated from outside of the organization. Do not click any links or open attachments unless you recognize the sender and know the content is safe.

Thanks Josh,

These photos will be also attached to NTSB box. I was at the New Holstein airport this last Saturday (my own time)...just wanted to know more as to the tail landing gear assembly. I am in School today...but, definitely a phone call to you as to findings.

John

