

SAFETY SUMMARY

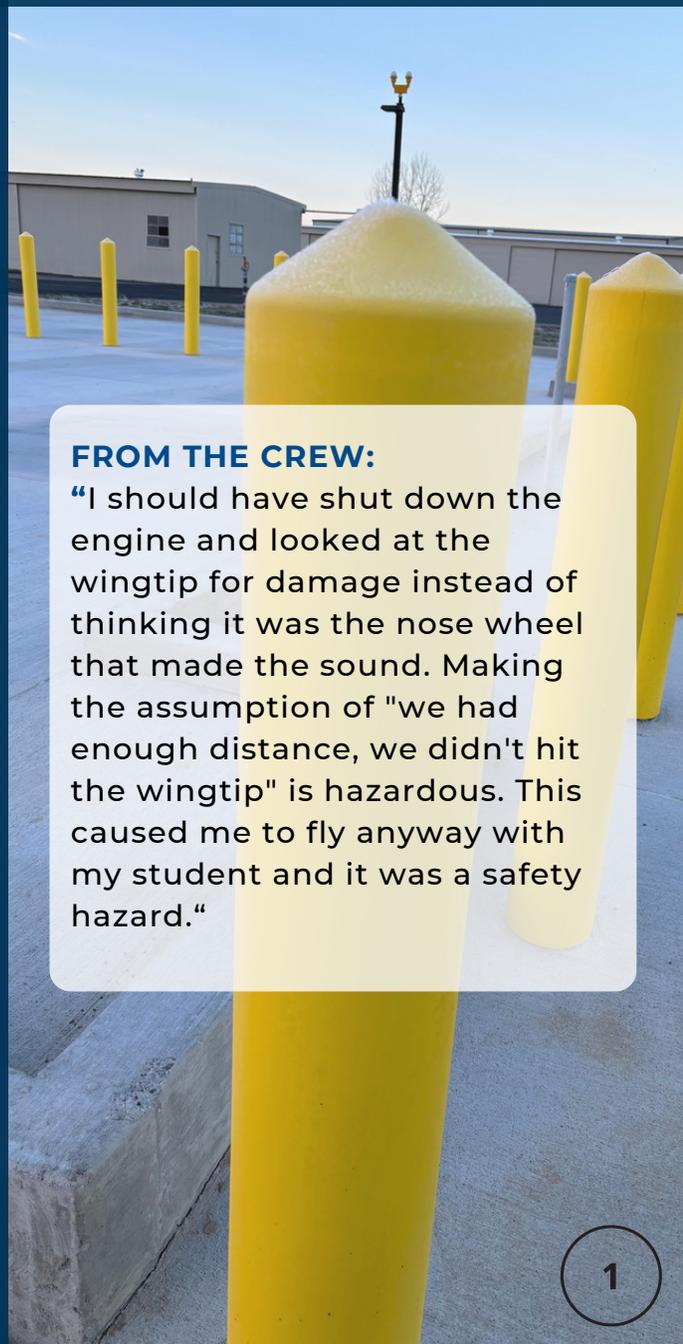
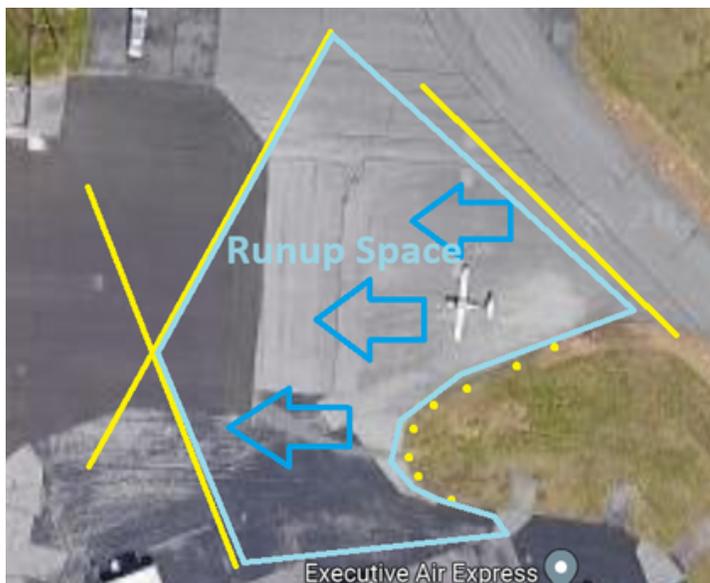


FEBRUARY 2024

EVENT DEBRIEFS: WINGTIP STRIKES

So far this semester we have had 2 aircraft taxi into the yellow poles near the south runup. In both cases, the crews got too close to the boundary of the runup area and misjudged the distance between the wingtip and the poles. Please take advantage of the full space we have. The yellow lines below mark the boundaries of the south runup.

These events resulted in damage, and in one case the crew proceeded to fly with a damaged wingtip. This could have resulted in more serious consequences. Remember, it is the PIC's responsibility to determine the aircraft is airworthy.



FROM THE CREW:

"I should have shut down the engine and looked at the wingtip for damage instead of thinking it was the nose wheel that made the sound. Making the assumption of "we had enough distance, we didn't hit the wingtip" is hazardous. This caused me to fly anyway with my student and it was a safety hazard."



FEBRUARY REPORT SUMMARIES

The following report summaries have been redacted and reworded to preserve submitter confidentiality.

The Department of Aerospace is committed to maintaining a positive safety culture, one in which error is seen as inevitable and admission of errors results in productive dialogue and learning opportunities for all. Some of the report summaries below include errors in checklist usage, policy compliance issues, and procedural deviations. Report submitters range in age and experience level from student pilots to senior management. The hazardous attitude of invulnerability may lead us to believe that we are incapable of making the same mistakes, but please fight complacency and diligently adhere to the policies and procedures designed with your safety in mind.

- A DA40 crew performed an RNAV Approach, circle to land, at a local airport at night during VFR conditions. According to the approach plate notes, circling at night was not permitted.

Don't forget to look at the notes on the approach plates!

- A DA40 crew initiated a normal takeoff and the takeoff roll felt abnormal. After monitoring the airspeed and not accelerating above 40 knots, the crew aborted the takeoff.

Monitoring engine instruments and making takeoff callouts are an important part of ensuring a safe flight!

- A PA-44 crew was doing single engine pattern work at KMBT. While on the downwind, the crew came in close proximity to a non-MTSU aircraft that was turning an extended downwind to base turn for runway 32 into KMQY.
- A crew performing steep turns inadvertently entered a cloud upon rolling out of the turn. The sky was clear except for a few clouds at the maneuver altitude.
- A fuel truck drove past a running aircraft with minimal clearance.
- During preflight it was noticed that the nose wheel tire was low on air. Maintenance filled up the tire and the aircraft took off without incident. After landing at the destination airport, the tire lost pressure again. The solo student used a tire pressure gauge and found that it read 0 psi. The student decided not to takeoff until the tire could be replaced.

When in doubt, shut down and exit the aircraft to examine potential damage!

- A crew experienced a hard landing at night due to a premature flare caused by the student's lack of familiarity with night operations, the extra weight in the rear seat, the inop PAPI, and a heavy headwind.
- A DA40 crew struck a wingtip on landing during a simulated engine-out approach. The crew delayed going around, despite an unstable approach, which resulted in damage to the right wingtip.

AEROSPACE

DEFROSTING OPERATIONS

Frost and ice present a unique hazard during the cold weather months! It is imperative to remember that accumulation of ice or frost can quickly become a critical inflight emergency. Accumulation of ice on a lifting surface has the ability to **reduce lift by up to 30%** and **increase drag by up to 40%**. This leads to increasing stall speeds at lower angles of attack and decreased controllability of the aircraft. As a reminder, the **DA-40 and PA-44 are NOT approved for flight into known or forecasted icing conditions.**



WHAT TO LOOK FOR!

Ground Ops uses a glycol solution to defrost the wings, tail, and control surfaces. It is the **PIC's responsibility** to determine that the aircraft is completely clear of frost and ice before departure.

Windshield cleaner and windshield wiper can be used to clear frost from the canopies. **Reduced visibility out of the canopies also presents an inflight hazard** and was a contributing factor in a recent MTSU wingtip strike event.

DON'T FORGET THE TAIL!



Make sure to inspect the **TOP** of the tail surface. There is a small ladder available for checking the tail for frost during preflight. It can be found in the storage shed. Ground Ops can be contacted at **615-890-5755** for assistance with defrosting.

Don't forget! Frost is not just a concern for morning flights! Check for surface contamination in the evening as well!



REPORTING DATA

February

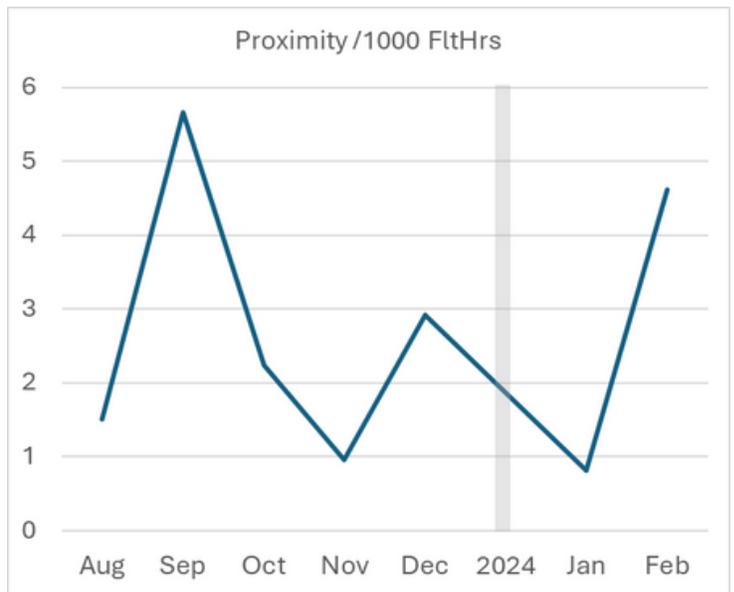
Total Reports: 66

IROPs: 12

33% Proximity

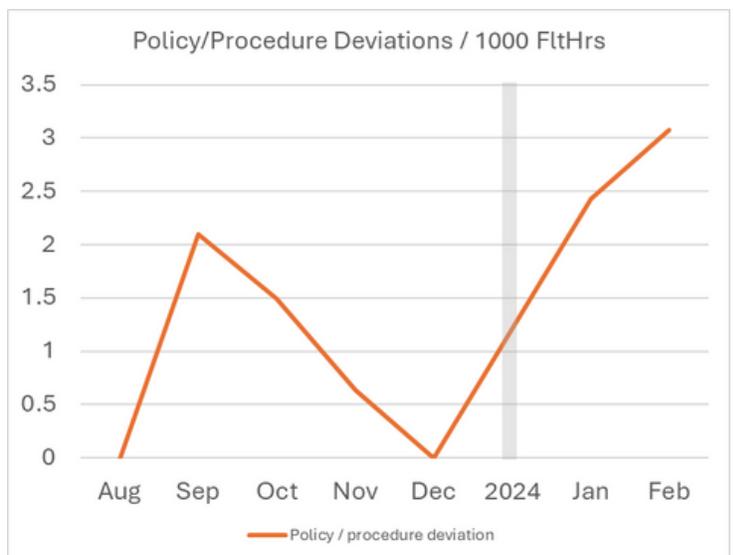


Proximity by Location	
Downwind	7
Takeoff/Landing	4
Instrument Approach	2
Maneuvering	2
Base	1



22% Policy/Procedure Errors

Policy/Procedure Errors	
Missed Checklist Item	4
SOP Compliance	4
Non-MTSU Aircraft	3
Skipped Checklist	1
SP&P Compliance	1





SAFETY NEWS

CHECKOUT THE LINK BELOW TO STAY UP TO DATE ON THE LATEST HOT TOPICS IN AVIATION SAFETY!

[Fatal flight training accidents. What can we do to make safer decisions?](#)



IMPORTANT TAKEAWAY

[Why do we need Arrival Alert Notices?](#)

To address wrong surface events where an aircraft lines up to or lands on the incorrect runway, taxiway, or airport, the FAA released Arrival Alert Notices (AAN) at various airports with a history of misalignment risk.



An observation from the data on instructional midair collisions is that the majority occurred at VFR/IFR cruise altitudes, even though pilots can maneuver at any altitude when below 3,000 feet agl. It seems that instructors select a target altitude such as 2,500 feet msl or 3,000 ft msl, where an analog altimeter needle would point straight up or straight down. A simple training mitigation may be to select a less congested altitude such as 2,700 feet msl, which deconflicts from IFR and VFR cruising flights.



Also available on  **ForeFlight**