SAFETY GRAM 4.0

November 2020

AIR FORCE SERVICES

AERO CLUB

FLIGHT TRAINING CENTER

Air Force Aero Clubs,

In this month's Safety Gram we will look at a semi-recent incident that happened within the Aero Club Enterprise. The slides below give a factual summary of what happened and my own unofficial analysis, conclusions, and recommendations based on my experience as an instructor and safety professional. I also offer some areas to discuss amongst your clubs.

As you discuss this incident within your club I don't want the focus to be on the probable mistake made during the landing because it could happen to any student first learning to fly and is by far not the worst thing I have ever heard of or seen happen from my experience instructing. The focus should be on how to prevent similar occurrences from happening again and the importance of good conservative risk management/decision making.

This incident shows how and why risk management and proper decision making is key to breaking the chain of events in serious mishaps. Luckily, nothing else happened, but it easily could have been much worse. There were multiple opportunities for both the individuals involved and outside entities to call "knock-it-off", but no one did. Managers and Instructors should look at this event and think how they are educating their students and members not only how to fly, but also how to become a Pilot-In-Command that uses sound risk management/decision making when unexpected situations happen.

Fly Safely,

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Aero Club Mishap Summary

Overview

- Summary
- Analysis
- Conclusions
- Recommendations
- Discussion

Summary

An Instructor Pilot (IP) and Student Pilot (SP) were on a routine flight lesson with the goal of accomplishing the SP's initial solo. The IP observed the SP's landings in a dual setting and determined they were safe and proficient to endorse the solo portion of the flight. The SP took off and first solo landing was uneventful. On the second landing the SP noticed the windsock showed a slight left-to-right crosswind. On the second landing the SP reported feeling a wind gust, the left wing lifting, and nose suddenly veering to the left unexpectedly. The SP pulled the throttle to idle and applied brakes coming to a stop off of the runway in a grassy. The SP notified the ATC (Tower) they had entered the grassy area and requested clearance to taxi back to the runway for the final solo takeoff and landing. The SP performed an engine run up, noting all engine instruments were normal, and completed the third takeoff and landing. The SP taxied the aircraft back to the parking area where damage was discovered on the propeller by the IP and SP.

Analysis

- Dual portion and SP first landing were uneventful.
- On SP's 2nd landing an unexpected left-to-right crosswind gust, which was still within Solo limits, as confirmed by actual weather data, caused the left wing to rise and the airplane to weather vane into the direction of the wind on the SP's second landing. Due to improper crosswind controls the SP was not aligned properly on landing roll out and departed the prepared surface coming to a stop in the grass. The IP was not able to see from his vantage point this happen.
- The SP notified tower he had entered the grassy area and elected to request taxi back to the runway, perform and engine run-up, and complete the final takeoff and landing. The IP attempted to monitor the communications, but switched to frequency after
- The final takeoff and landing were uneventful.

Conclusion

- At an unknown time, either while departing the prepared surface, or taxiing back onto the prepared surface, the propeller most likely struck the ground or picked up FOD from the ground causing significant damage to the propeller.

Recommendations

- Ensure Communications can be monitored for Solo Students while in pattern at all times
- Ensure tower knows expectations for Solo Students
- Have a way to communicate with tower if needing to relay message to Solo Students
- Ensure Student Pilots are capable of conservative risk management and decision making

Discussion

- Crosswind Controls
  - Are students getting practice dual?
- Continue to land or go around?
- Risk Management/Decision Making
  - Input from Tower
  - Instructor monitoring procedures
  - Student pilot risk management/decision to continue

QUESTIONS?