Oxford Flying Club
Aviation Hazard or Incident Report (HIR)

To: OFC Safety Officer	From: [redacted]	Date:
Note: Refer to Club website	Note: Name is optional but helpful.	April 3, 2019

Description of incident or observed hazard: (Provide date, time, and location, as applicable. Include a detailed and accurate description while being as concise as possible.)

See attached

Recommendations to eliminate, correct, or minimize the hazard:

See attached

Safety Officer Investigation summary:

Safety Officer Name: Landon Sock Date: May 22, 2019

Tracking # (assigned by Safety Officer): HIR-2019-001A
Probability (assigned by Safety Officer): 3- Unlikely
Severity (assigned by Safety Officer): 3- Major
Resulting Risk Code (assigned by Safety Officer): 2- (See below)

Note: Risk Assessment Code of 5 requires immediate notification of the Club President.

Corrective action taken (Completed by Safety Officer):

Risk code 2- Acceptable with no further action needed under the existing circumstances. However, any hazards must be identified & controlled.

Safety Committee Recommendations

- Recommend two people be present when moving any plane into the hanger. (Not implemented)
- Additional lighting on the tarmac to assist with night hanger egress/ingress. (Not implemented)

Corrective action completion date June 11, 2019 by A. Amato

INSTRUCTIONS: Fill out using additional sheets as necessary. Fold and forward completed form to the Oxford Flying Club Safety Officer.

Thank you for your interest in your Safety Program.

Oxford Flying Club HIR

Attachment to report dated April 3, 2019

On March 8, 2019, around 2:30 p.m., I damaged N8261H by causing its propeller while its engine was running to strike the tow bar that was attached to the nose wheel. Prior to the damage occurring, I was placing the aircraft back in the hangar after having successfully completed an Annual Insurance Check (AIC) for the Archer with club CFI Jeff Parkin.

While I was alone backing the aircraft into the hangar with the tow bar after the completion of the AIC, the aircraft came to a rest prematurely as the main wheel became stuck in a depression formed by the lip of the concrete hangar floor and a thick band of ice running parallel to the hangar. See the two photos below.

First, I tried using the tow bar to push the aircraft over the concrete lip of the hangar floor by rocking the plane. Unsuccessful with that approach, I then attempted to back the aircraft by pushing on the wing over the main wheel on the door side. As both main wheels were essentially double chocked, I was not able to get enough momentum to get the aircraft over either the ice or concrete barriers by either method. I made one more attempt using the tow bar and then another by pushing the wing over the main wheel on the door side. As I was alternating between these approaches, the tow bar remained attached to the aircraft.

While I was attempting to back the aircraft by hand, melting chunks of ice were falling on the aircraft causing me to become increasingly concerned they might damage the airframe. With the rocking approach unsuccessful and my worries increasing about airframe damage from falling ice, I quickly decided to start the engine to power the aircraft forward to a point clear of the falling ice zone. The back and forth between tow bar and wing pushing and the distraction of the

falling ice caused me to forget that I left the tow bar attached to the nose wheel when I moved from the wing position on that last push to the cockpit.

Upon starting the engine, it ran normally. As I gently added power to get the aircraft over the ice hump, the nose started to lower slightly and then I heard a loud clang. With the engine still running normally, I pulled the mixture to the cut-off position simultaneously realizing that the propeller had struck the tow bar. The engine shut down normally.

My inspection revealed that the tow bar had been thrown about 5 feet to the side of the aircraft landing on the apron. The tow bar did not strike anything after it was thrown. One end of the propeller had about a one-inch square curl caused by the strike. See photo below.

I immediately reported the damage to the club president Bob Ham. With the added hands of club member Wayne Tremallo, who quickly arrived on the scene after being contacted by Bob, we were able to push the aircraft back into the hangar.

Prior to the flight, Jeff and I pulled the aircraft out of the hangar without any problems with me using the tow bar. At the time I did observe the ice hump provided some resistance, but I do not recall whether Jeff who was with me at the aircraft added any additional muscle as my concentration was focused on pulling the aircraft in a straight line. Upon our return from the AIC flight, I was able to use the tow bar to position the aircraft partially into the hangar with the wings just outside the bay to allow for refueling. Foot traction on the apron was good other than on the thick band of ice running parallel to the hangar door. Soon after the aircraft was positioned for refueling, Jeff and I observed ice starting to fall on the empennage. I again moved the aircraft with the tow bar this time about 10 feet away from the hangar to avoid ice damage. Based on my comfort in moving the aircraft before and after the flight, the need for assistance to push it back after the refueling was not apparent. Accordingly, I insisted Jeff not waste his time by remaining until the fuel truck arrived and I did not ask the Atlantic lineman for his assistance after refueling.

Recommendations

The club should adopt a policy requiring the operator's hands remain connected to the tow bar anytime it is connected to the airplane regardless of whether flight is intended.

The club should adopt a policy addressing whether an aircraft may be moved if hazards such as ice in front of the hangar and ice falling from the hangar roof exist and pose a risk of injury to a person or damage to club aircraft.