

# **JUNIOR ROLLING OFF RUNWAY**

## **June 27, 2020**

### **WEATHER**

Wind: Light and variable

### **DESCRIPTION OF INCIDENT**

On Thursday, June 25 2020, The Pilot described the Junior's "pedals shooting forward" resulting in a hard landing and loss of some steering control.

The Pilot next flew the Junior on Saturday, June 27. After releasing from tow NW of Stanton the Pilot flew towards Cannon Falls where other soaring pilots were successfully thermalling. Finding no lift, and down to 1,600' AGL the pilot considered the option of flying "straight in" to Runway 27. Checking the Landing Pattern Box charts, he was confused by the meaning of the two-mile by two-mile brown square, in order to not violate the landing pattern rules, the Pilot chose to enter the pattern for Runway 36 from the east on a long base leg (right hand pattern). The Pilot made two radio calls reporting his location and intentions.

At the same time, tow pilot Toby Hanson was on left base for Runway 36. Mr. Hanson aborted his landing to leave the pattern open for the Pilot. Mr. Hanson reported that it took a long time for the Pilot to arrive at the turn from base to final.

The Pilot reported that he was: 1. high as he turned base to final, 2. was attentive to speed, 3. had an okay touchdown, 4. landed further down the runway than usual, and 5. started his turn off the runway prematurely and therefore rolled into an alfalfa crop east of the runway.

The Pilot reported being “frustrated” after stopping, reacted as if he was in the ASK-21, and opened the canopy latch on both sides (activating the canopy jettison mechanism). The canopy became partially disconnected with one pin partially engaged. The pilot exited the glider, removed the remaining pin, and set the canopy on the alfalfa. Brian McCullagh replaced the canopy and reinserted the pins. Airport Manager, John Quilling checked the pilot and aircraft. The Pilot asked Mr. Quilling if an A&P needed to check the glider and Mr. Quilling said no. Mr. Hanson (who is an A&P) checked the canopy hinges and confirmed it looked okay.

The Junior was returned to the flight line and flown by Brian McCullagh. Mr. McCullagh reported that the canopy opened further than he expected and determined the restraining wire was not attached.

The Pilot said “Everyone knows the wheel brake doesn’t work” and “It is common knowledge that the wheel brake on the Junior doesn’t work.”

Mr. Hanson said that he did the annual on the Junior this spring, tested the wheel brake and it worked fine. Mr. Biggs tested the Junior’s wheel brake on June 30 and found it operational. Mr. Andrews verified that the wheel brake was effective on June 30. The Daily Inspection Logbook had no notations about the wheel brake being ineffective in the last several months.

## **ANALYSIS**

The Pilot had a very minor issue with the Junior on June 25<sup>th</sup> – the rudder pedals shot forward during the landing resulting in difficulty steering the Junior.

The Pilot assumed the Junior wheel brake was inoperable and flew the glider without having the issue resolved by the Director of Equipment. Any glider should be considered inoperable if the wheel brake is faulty.

It would have been prudent for the Pilot's to start the return to the airport at a higher altitude, allowing for a normal left-hand pattern, or an entry onto the crosswind leg for a left-hand pattern.

Given the Pilot's concern about being low on the east side of the airport the decision to fly a right-hand pattern was a safe choice, and the Pilot's two radio calls about position and intent well-done.

The Pilot was high on final. It would have been safer for the Pilot to have entered the right-hand pattern in the downwind leg, giving the Pilot more time in pattern to announce position, scan for conflicting traffic, and an opportunity to lose altitude. Further, given that the Pilot was high on final, and that there were no other pilots in pattern at the time, a series of altitude-losing S-turns would have lost sufficient altitude for a normal touchdown.

The Pilot rolled into a field because the turn from the runway was started at too high a speed. Rolling off the runway in a tail-wheel glider should be started at a slow speed to prevent rolling off the runway and damage by a wing loop.

Given that the Director of Equipment and a flight instructor determined that the Junior's wheel brake was operational, it is possible that the Pilot failed to apply the wheel brake. The Junior has a brake lever on the spoiler handle—a unique position for club aircraft.

More care should have been exercised in reassembling the canopy so that it was properly installed, including attaching the retaining wire. Pilots unfamiliar with the system should find an experienced pilot to check their work before flight.

There were two flight instructors at the field that day, though in the air at the time of the incident. It would have been sensible for one of the flight instructors to have been notified of the incident at the earliest practical time.

## **ACTIONS**

1. The Pilot has agreed to secure training in S-turns.
2. The Junior was checked to assure the wheel brake is functioning.
3. The Pilot was briefed on putting the rudder pedals in détente.
4. The Pilot was debriefed and safe flying choices discussed in detail with two flight instructors.
5. The Landing Pattern Charts are being changed, and the brown square eliminated to maximize clarity.
6. This report was published in the MSC Incidents file.
7. Encourage all pilots to check changes to a glider with a pilot familiar with the assembly of the make and model of the glider.
8. Flight instructors to assure they emphasize the position and use of the wheel brake when checking new pilots out for Junior flight privileges.
9. Training in S-turns on final will become part of the MSC training curriculum.

Dick Andrews, CFI-G, and Stephen Nesser, CFI-G Chief Flight Instructor 7/21/2020