

INCIDENT REPORT: SPOILERS OPEN ON TOW IN OWL

By: Stephen Nesser, CFI

Event:

Towards the end of the soaring season a pilot and passenger took off in the Owl. The pilot stated that he felt hurried by the efforts of other pilots to get him launched quickly and failed to place the spoilers in détente. Early in the tow the dive brakes opened. Brian Utley, the tow pilot, reported that climbing was nearly impossible and at best could fly just over stall speed. The corn was unharvested and as the tow flew over the corn, a guillotine release was a threat to the glider. Further, Brian reported that he could not see the glider in the rear-view mirror and was uncertain if the spoilers were open. A radio message from someone in the office alerted the pilot to the open airbrakes. The pilot closed the airbrakes and the remainder of the flight was without incident.

Analysis:

The Owl has large top and bottom spoilers, that produce significant drag and a high sink rate. Over a decade ago, club members did a test where the Super Cub successfully, though slowly, gained altitude with the Owl's spoilers open. However, variations in wind speed and direction, density altitude, engine performance, and aircraft load will provide significant day-to-day variation. That the tow plane was flying near stall speed, pulling a glider, put both the glider pilot, the passenger and the tow pilot at risk. Brian Utley is to be commended for a cool head and exceptional pilotage.

The top-and-bottom structure of the Owl's spoilers cause them to remain open, even at low speeds, because gravity holds the bottom spoilers down. Further, for the same reason they are likely to snatch open upon hitting a bump. Add a wind force on the spoilers at flight speeds, and they will only close with deliberate action by the pilot.

The pilot was contrite about his error, and accepted full responsibility for his actions. He suggested that future flight training include exposure to flight with open spoilers, and indicated he would have likely reacted more quickly had he had such training. Ultimately, this incident was due to pilot error.

Recommendations:

1. Pilots make their left hand into a fist and place it directly behind the spoiler handle before roll out begins. If the spoilers snatch open the pilot will immediately know, and the spoiler will only crack open. Do not place the hand on the spoiler as a rough ground out could accidentally pull the spoiler open.
2. FOO's encourage an unhurried approach on the flight line. This is not to be confused with running an inefficient flight line—but rather assure that once the pilot begins the checklist this is done without interruption or pressure to act quickly.
3. Pilots, as final authority to all portions of the flight, do not allow anyone to rush you through the preflight checklist, or any other aspect of safe operations.

4. Flight training and Flight Reviews should include flight (at altitude) with the spoilers open so that pilots become adept at promptly recognizing the in-flight signs of open spoilers. Clearly the tow pilot should be warned of this action prior to deploying the spoilers. This will simultaneously train the two pilots on flight with spoilers open in the glider.