



Woodworking 102

(The PIC of this real incident which occurred about 40 years ago has agreed for this to be revealed.)

To repair a wooden spar (or metal spar, too, as far as that goes), in the olden days at least, one did a 10/1 splice. That means the length of the splice is ten times the thickness of the material being spliced, such as a spar cap. So, a half inch thick spar cap requires planing down a ramp like portion five inches long on both sections being spliced back together to fit over/under each other, perfectly matched, touching completely over the total splice area, to be glued together, with or without doublers, depending upon one's faith in one's work, among other things. It is helpful when doing such work to enlist the aid of a master wood workman like Don Mitchell, who old-timers may recall was one such person, par excellence.

Why in the world would one ever do such a splice on a perfectly good glider? One reason might occur if two pilots of a side-by-side seating Pratt Read (PR), attempting a new state record distance flight, found they had to make an off-field landing only about 10-15 miles from where their flight started, far, far short of the distance needed for a new record. That in and of itself would be no reason, especially if the landing was safely made in a totally adequate open field. Luckily, the field they selected was big and an aero retrieve seemed more than doable. Who the heck ever wants to take apart those big very, very heavy wings of a PR?

A call to a very nearby gliderport only a couple of miles away quickly brought a towplane overhead, which circled the downed PR and two pilots and then, without even flying a pattern, left. A call to that gliderport determined that the towplane pilot had said: 'It's not suitable for an aero retrieve of that ship.'

Well, that's just ridiculous, they decided, it's a perfectly adequate field with plenty of room and fairly level, so a call was made to the origin airport for an aero retrieve. Sure enough, a towplane soon appeared, landed and the retrieve was very quickly set to go. With the two again aboard the PR, the tow started, albeit fairly slowly; it's a big heavy bird and even heavier with two aboard. Since the field was slightly slanted, perpendicularly to the direction of tow, as speed was gathered, the PR gradually moved left as well as forward, down the slight slope, towards the side of the field.

That very big bang they heard was the left wingtip hitting a fence post supporting the barbed wire fence lining the field's edge. They had moved sideways enough as they gathered speed to have that occur just as they were about to become airborne. A quick release and uneventful run-out to a stop followed. The towpilot came back and landed and they all found about 1-2 feet of the PR's left wingtip broken and hanging/dangling loose from the wing. Not a good thing!

Guess what? Yes, they found they were right about one thing; the PR is a big heavy-winged glider to disassemble, which was followed by a trailering back to origin where

eventually the above-mentioned repair was made. So, what are the safety lessons to be learned from this experience:

1 - Listen well to the most experienced towpilot in the area; there's just a chance that maybe he knows what he's talking about.

2 - Just because it's a shame to leave one pilot alone on the field during an aero retrieve from a field with some disadvantages to towing, is no reason to not choose the safer single person aboard choice, making for a lighter load for quicker acceleration of the towplane.

3 - Heavy, hard to take apart gliders are more easily flown again if no repairs have to be made prior to next flight.

4 - Get-home-itis is an insidious pressure we don't easily recognize and accept that it's occurring.

5 - Is there enough room, because you will move sideways on down-slopes during the towing ground run.

6 - When towing across a down-slope, should the wing be level with the down-slope, or level with the horizon?

7 - Don't think you know it all, even when you do.

The PIC of the above flight was me; my passenger/pilot was Mike McVey and that knowledgeable towpilot was Harry Perl. The other towpilot will not be revealed. Nor will the many names of those required to disassemble and reassemble the PR.

