

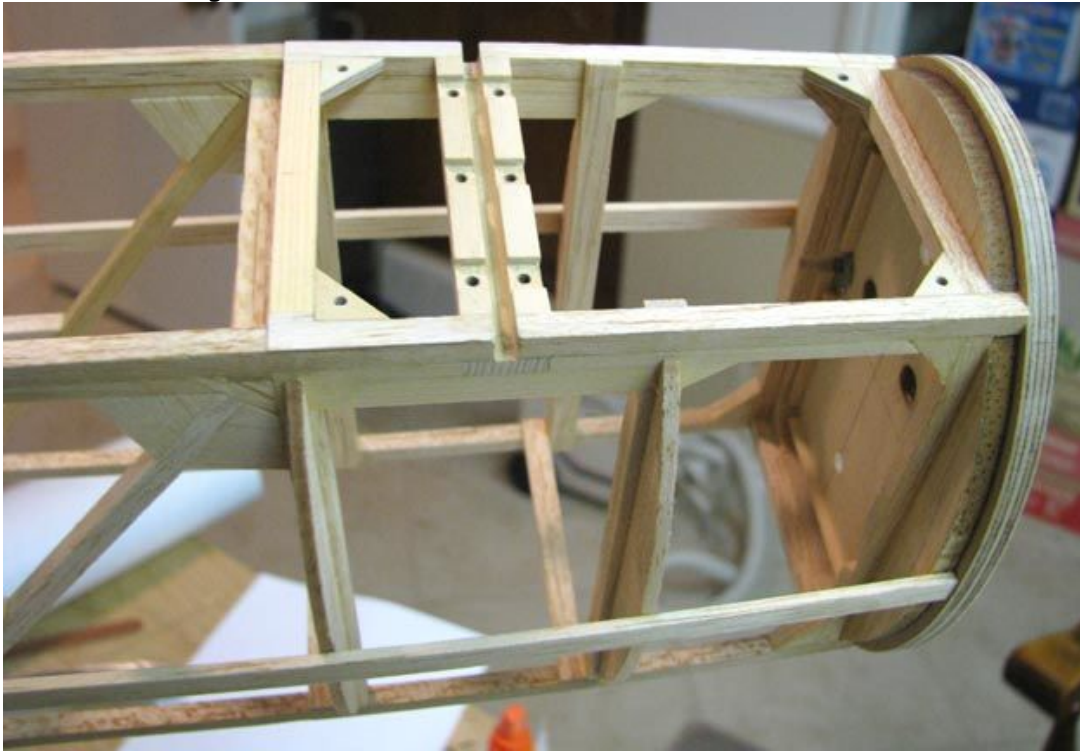
From: ["Tandy C. Walker" <tandyw@flash.net>](mailto:tandyw@flash.net)

To: ["Walker, Tandy C." <tandyw@flash.net>](mailto:tandyw@flash.net)

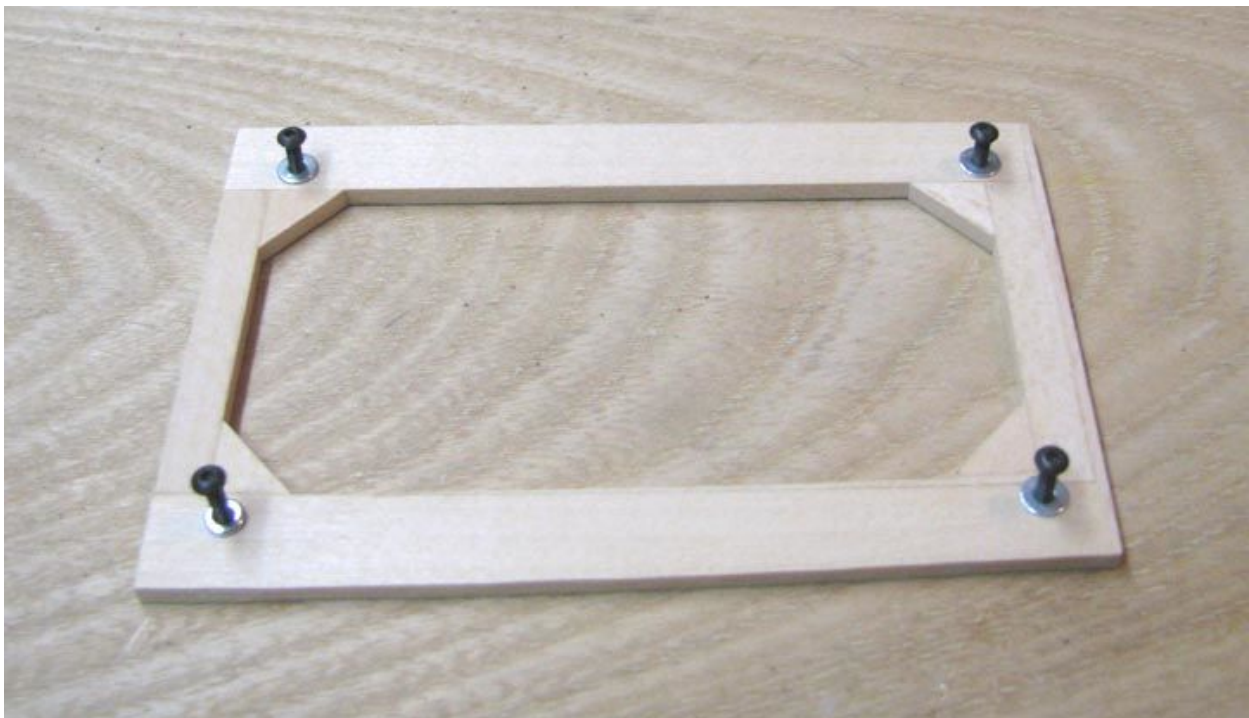
Date: 1/28/2009 1:38:31 PM

Subject: 34 Sailplane Ignition and Radio Access Hatch Cover Frame Construction

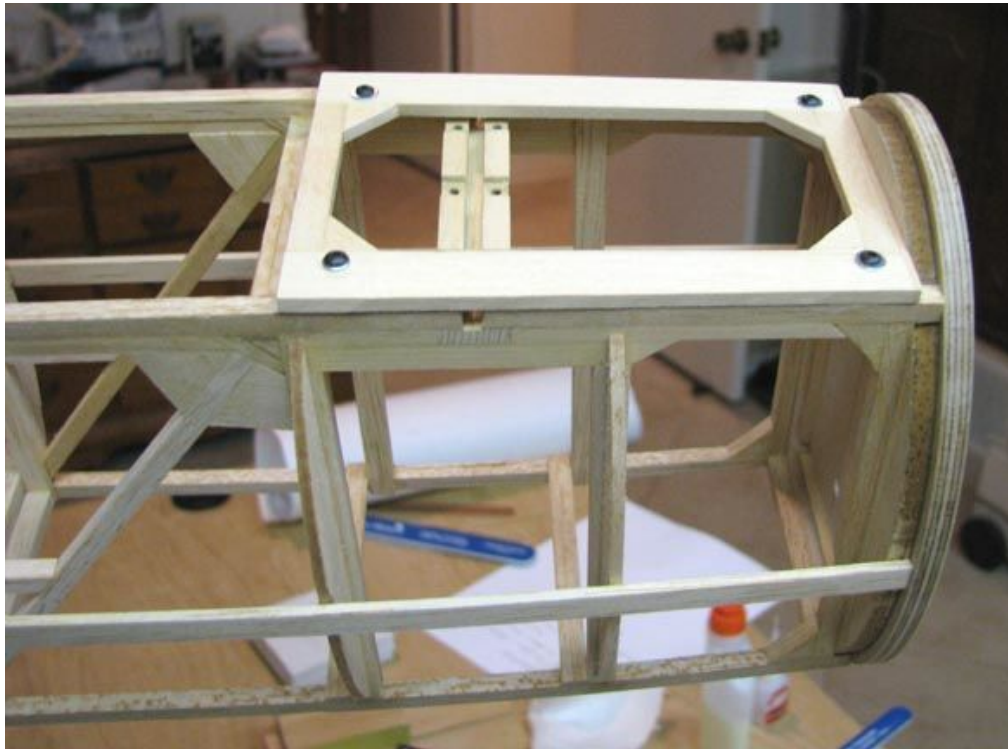
Monday, I started working on the Sailplane's bottom forward hatch located right behind the firewall for the removal of the ignition unit. The picture below shows the four 1/8" plywood triangles glued in the corners of the hatch opening. These are drilled and threaded with 2-56 threads for retention of the hatch cover. Notice that the hatch opening extends aft beyond the rear landing gear strut slot in order to permit the landing gear to be completely removable. One other thing to point out is that I added additional very thin wood to the bottom of the curved longerons to make them flat for the hatch cover interface.



The frame of the hatch cover is shown below. It is made out of 1/8" thick bass wood and reinforced in the four corners. Four holes were located (*to be discussed later*) and drilled out for the four 2-56 cap screws as shown below.



This picture was taken on Tuesday and shows the frame of the ignition hatch cover secured to hatch opening with the four 2-56 cap screws. Later the cover will be completed by adding bulkhead pieces and planking to the frame of the hatch cover.

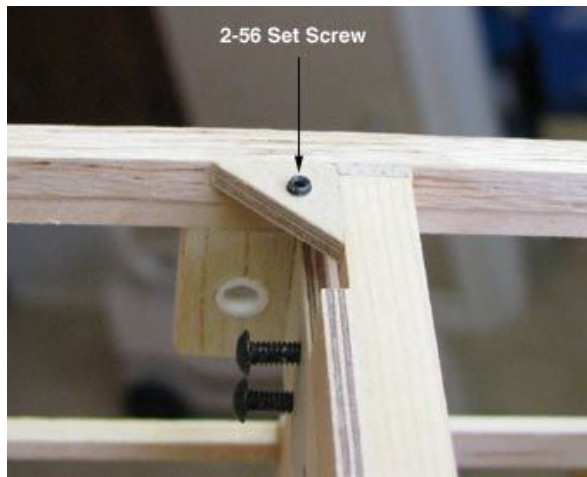


Tuesday evening I started working on the Sailplane's bottom aft hatch for access to the radio equipment. Even though the same procedure was used as described above, I decided to document the method I use to transfer the hole pattern from the fuselage to the radio hatch cover frame, since I did not do this in the discussion above. I know that there is a risk of being too tutorial, but maybe this discussion will help some less experienced modelers.

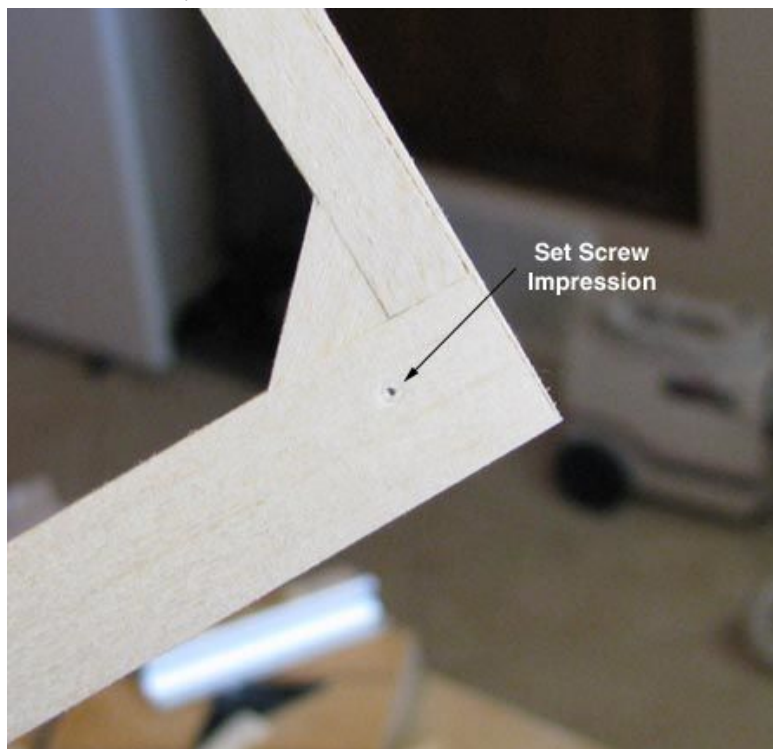
The picture below shows one of the small 2-56 set screw I purchased from Micro Fastener.



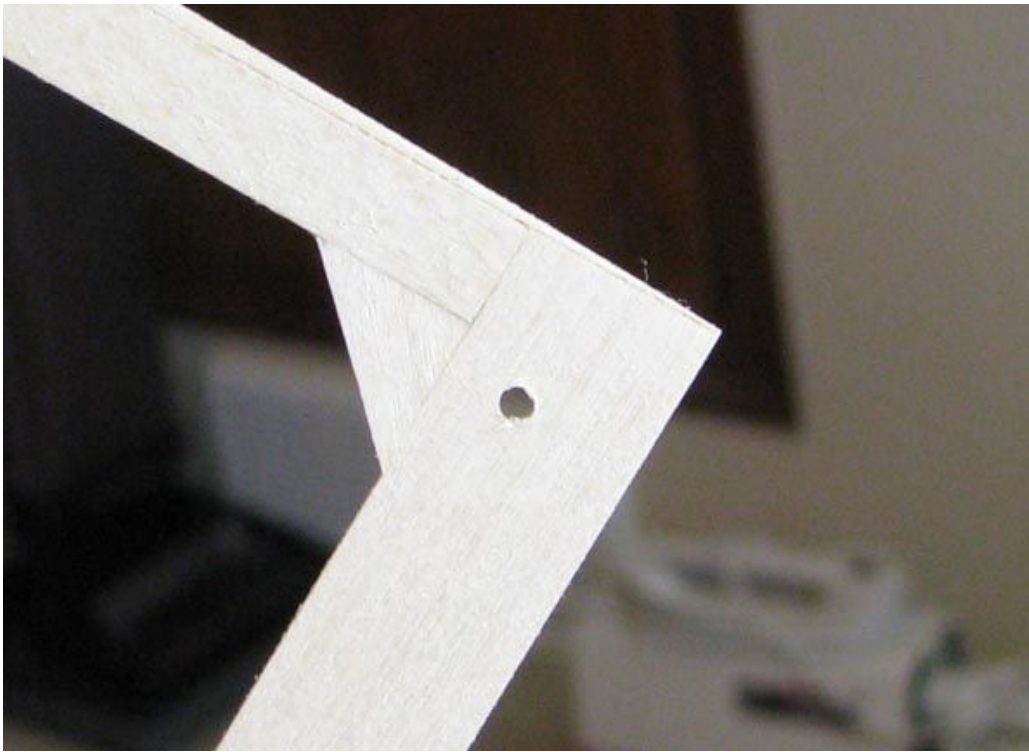
The set screw is screwed into the threaded hole of one of the 1/8" plywood triangles glued in the corners of the radio hatch opening as shown below. Notice that the set screw is left sticking out above the plywood triangle about a 1/32".



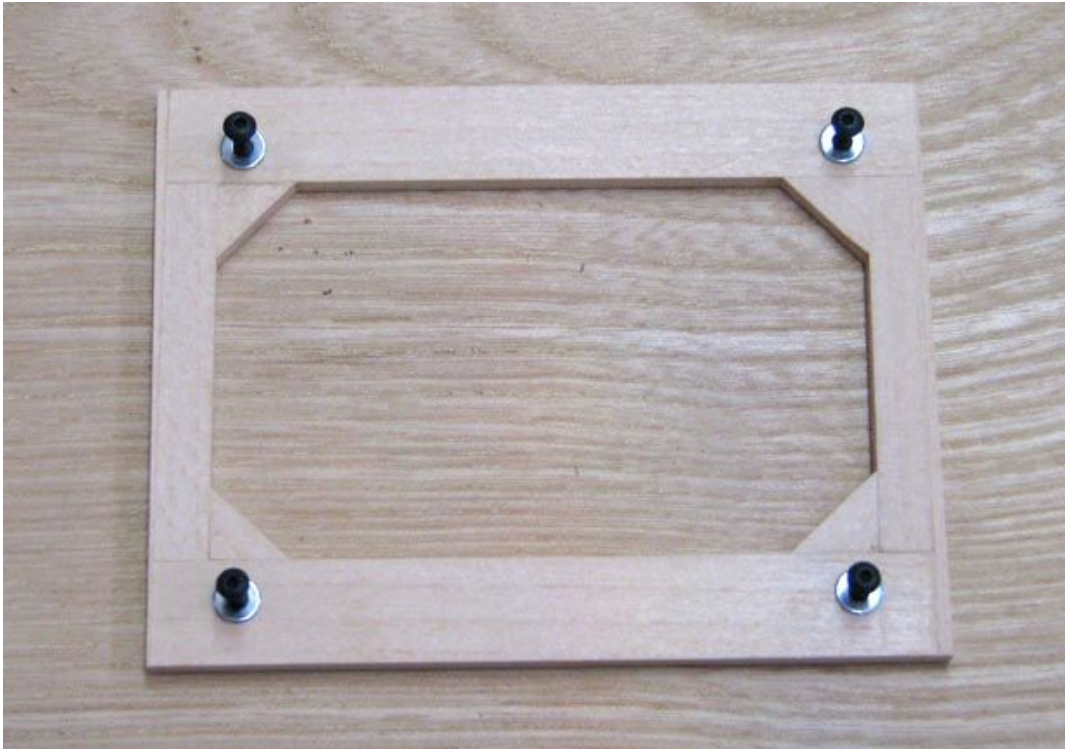
The frame of the radio hatch cover is centered over the hatch opening and pressed down onto the raised set screw, which leaves a slight circular impression on the cover. If you look very close, you can see the circular impression. The center of the impression is marked with a pencil and then a sharp punch is pushed into the pencil mark for drilling as shown below.



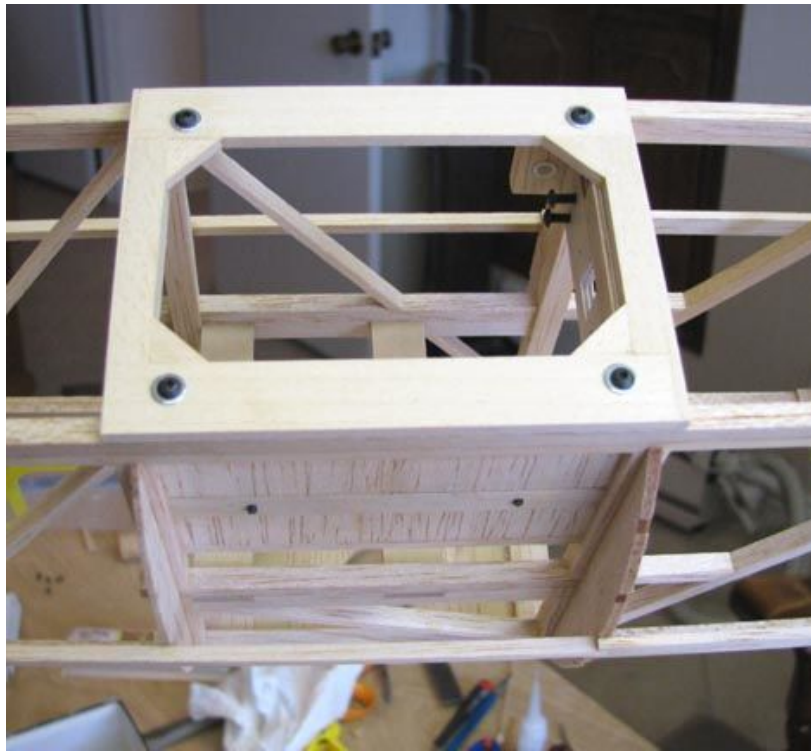
The frame of the radio hatch cover is then placed in the drill press and a No. 44 drill bit is used to drill out the hole for the 2-56 cap screw as shown below.



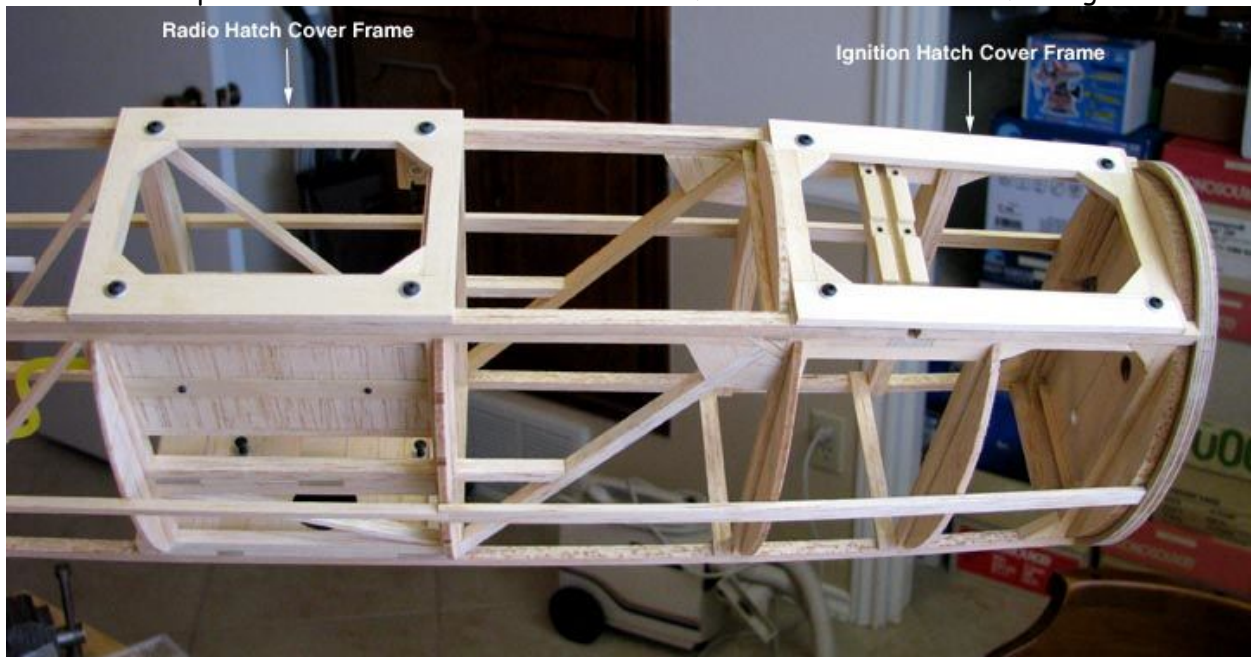
To complete the discussion, the set screw is then moved to another 1/8" plywood triangle and screwed into its threaded hole. The frame of the radio hatch cover is attached to the fuselage with a 2-56 cap screw, aligned with hatch opening, and again the frame pressed down onto the raised set screw leaving a circular impression on the cover, which is then drilled out. This process is continued until all four holes have been transferred and drilled in the radio cover's frame as shown below.



This picture before lunch today shows the frame of the radio hatch cover secured to hatch opening with the four 2-56 cap screws. Later the radio hatch cover will be completed by adding bulkhead pieces and planking to the frame of the hatch cover.



The picture below shows both hatch cover frames attached to the fuselage.



At this point in the Sailplane's construction, I have to discontinue the project, put away my tools, and clean up the model room. We started the regiment of the pre-op eye drops yesterday in preparation for cataract surgery on my left eye, which is scheduled for 11:30 a.m. in the morning. Therefore, this construction report may be my last one for a while, depending upon the time it takes for my vision to recover. However, I will be thinking about what needs to be done next and I will start on the project again as soon as my vision will permit me go back to work.....Tandy