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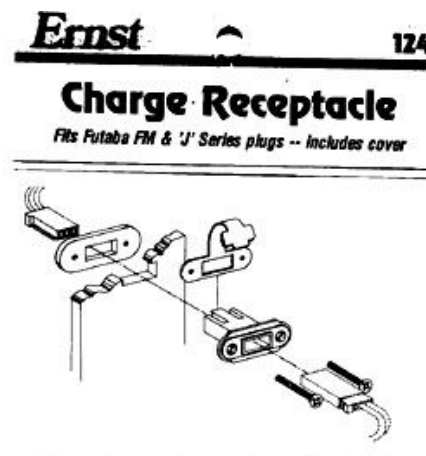
Subject: 158 Sailplane Today's Progress on the Final Assembly

Yesterday I began the final assembly of the Sailplane. However, I worked too late to get my report out, so I am posting it this morning.

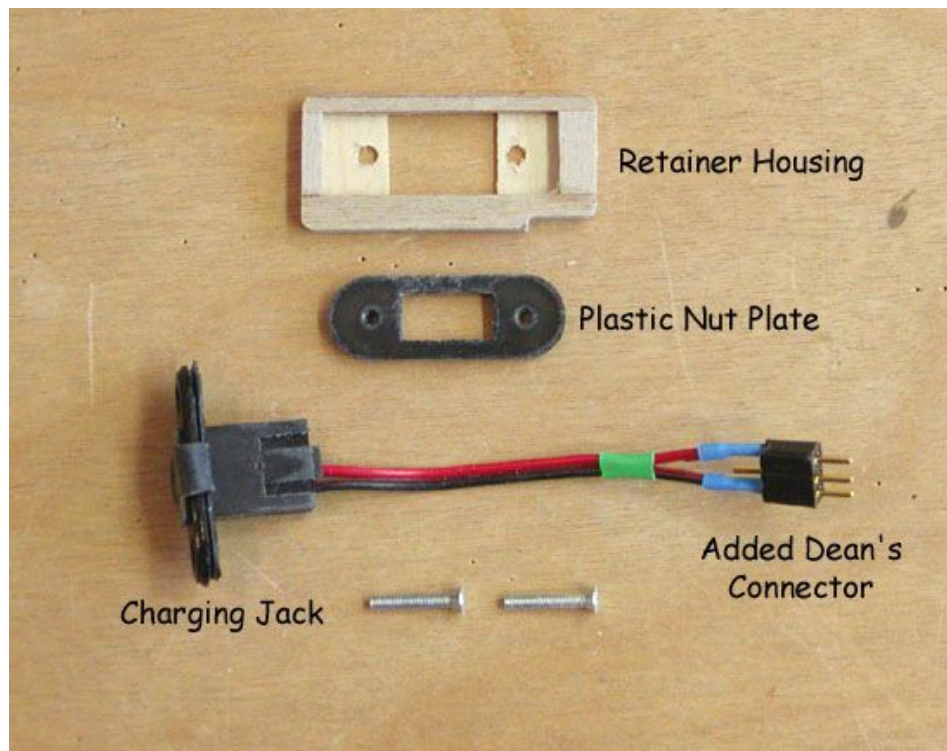
The picture below shows the internal radio switch that is operated from outside the fuselage. I wanted the switch on the right side of the fuselage so it would be accessible. By putting the switch inside, it is protected from the engine exhaust. You can just see the edge of the radio's charging mounted externally on the left side of the fuselage (*right side of picture*) opposite to the side of the engine's exhaust.



I use Futaba radio equipment with "J" series connectors in most of my models. Futaba never had a mounting fixture for the charging jack on its switch harness. However, as most of you know, a company named "Ernst" makes the No. 124 for the Futaba "J" series connector as shown below.



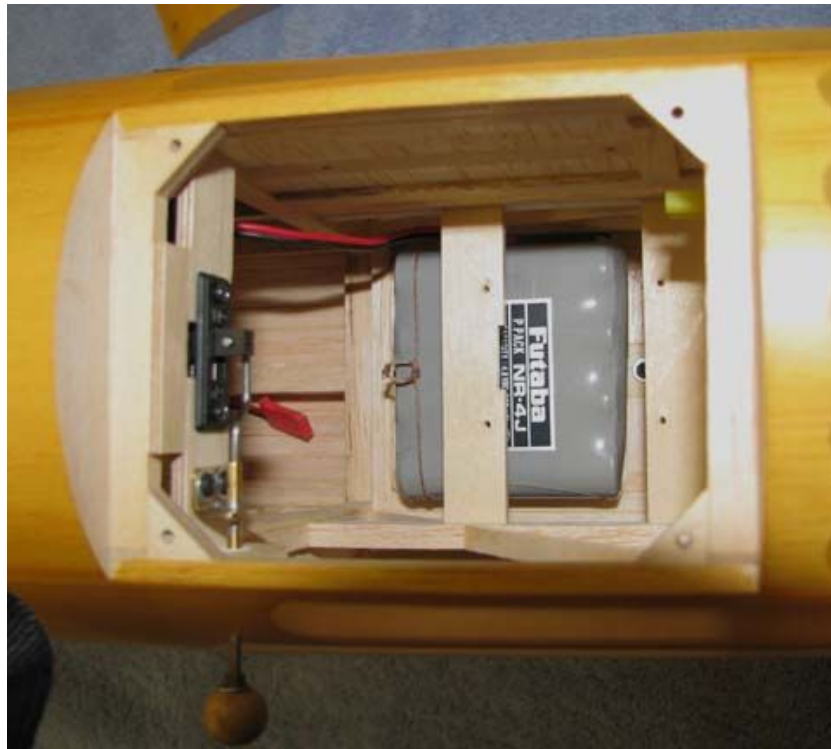
There are two problems with the Ernst Charge Receptacle: (1) once you get the male J connector inserted into the receptacle, it is almost impossible to get it out, which is necessary if you want to remove the switch harness from the aircraft and (2) I have always had a problem getting the plastic nut plate onto the receptacle body from inside the fuselage. So on this Sailplane radio installation, I decided to solve both of these problems as illustrated below. I cut the charging connector line on the Futaba switch harness in half and installed a Dean's connector, which is easy to plug in and unplug. This eliminated problem (1). Next, I made a wooden retainer housing out of 3/32" plywood that positions and holds the plastic nut plate in place inside the fuselage.



This picture shows a left side view of the Ernst charging jack.



The radio's 500 mAh NiCad flat battery pack is mounted on a Velcro plate, which is screwed to the top of the radio compartment as show below. The small loop you see is to assist in working the battery into position under the servo mounting beams.



Looking down into the radio compartment, you see the rudder servo mounted on the right and the elevator servo on the left over the battery with the Futaba 2.4 GHz FASST receiver mounted on the side. This is a compact compartment, which has to go together in a very specific sequence.



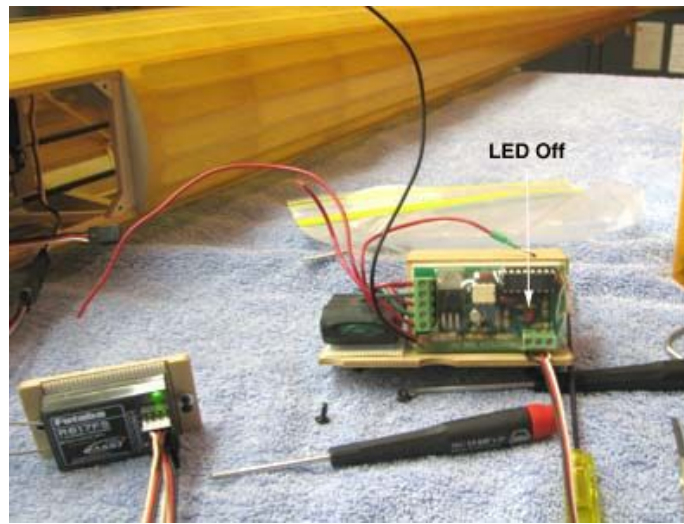
This picture shows the Sailplane's tail assembly attached to the fuselage on the work table.



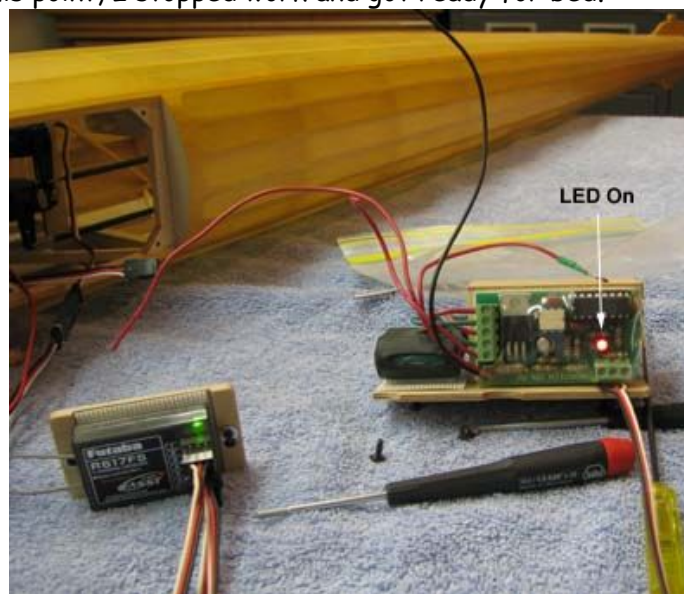
This is a close up view of the two push rod hook attached to the rudder and elevator control horns. I spent a little time setting up the new Futaba 7C transmitter to achieve the desired control deflections as well as programming the exponential functions for both the rudder and elevator.



I hooked up the integrated ignition unit containing Marv Stern's Aero Tech IGN-SW ignition module to the receiver external to the fuselage as shown below to work out its operation. Notice that LED indicating the Aero Tech IGN-SW ignition module is off when the transmitter throttle is off. this indicates that the ignition system is in active.



By advancing the throttle on the transmitter from off to slightly past midway of its travel, the LED came on instantly indicating the ignition system is now active. Marv's unit is nothing less than outstanding in both its size and functionality. At this point, I stopped work and got ready for bed.



Today I plan to continue the final assembly of the Sailplane.....Tandy