

# TANDY WALKER'S 2<sup>nd</sup> A CLASS BOMBERF-W51 to FW54

## FW:51 Class A Bomber Alternate Engine Installation

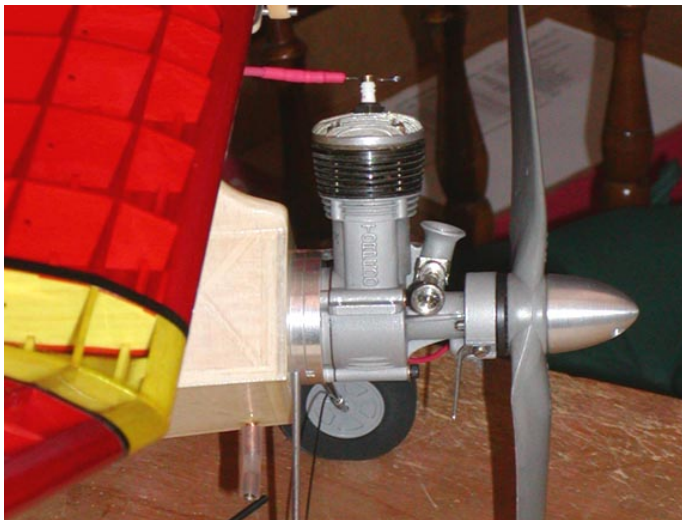
This series of three pictures shows the Shilen Torpedo .29 installed in the little Bomber to convert it to Class B back up ship, if required.

The total weight increased from 816 grams to 838 grams. In order to keep the C.G. at 50%, I had to use two aluminum mounting plates and the slightly heavier Fox aluminum spinner as shown in the first picture.

The second picture just shows more of the Bomber with the Shilen Torpedo 29 installed. The last picture shows that in order to radially mount the Shilen Torpedo .29 using these mounting plates, it is necessary to clock the engine about 10 degrees to the right because of a conflict with the mounting plate holes.

If push came to shove, I could also install the Shilen Torpedo .32 and fly all three Class A, B, and C ignition events with this little bomber.

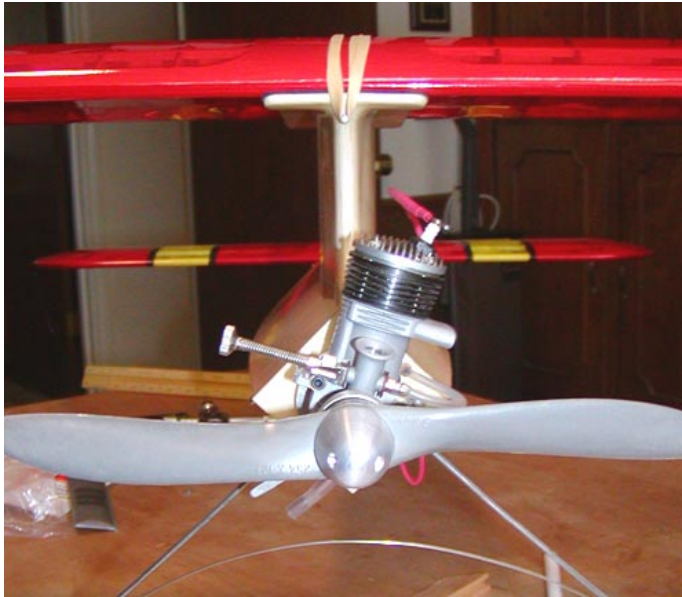
Granted, Class C would not be very competitive in the flyoff!.....Tandy



Torp .29 Install 1.jpg



Torp .29 Install 2.jpg



Torp .29 Install 3.jpg

## FW:53 Class A Bomber - Flight Test

This morning my young neighbor, Doug Martin, and I left at 0645 for the Mid Cities Flying Field just north of Arlington to conduct the long awaited flight test of the new Class A Bomber. The early morning weather was absolutely beautiful. It was clear and sunny with surface winds out of the south west at just 1 mph according to the net weather station. The first picture of me fueling the little Bomber clearly shows the beautiful conditions and the early morning shadows. Since Doug was launching, there was no one to take pictures of the take off, however, he did take a few shots of the gliding Bomber. I am not sure why there were no shots taken of the Bomber landing?

The Bomber flew right off the drawing board with no problems what so ever. The radio range was checked out with the transmitter antenna collapsed prior to flight with the engine running and no ignition interference was observed. No radio glitching occurred during the 35 sec power climb and there was no radio signal problems throughout the entire morning of flight testing. During gliding flight, no rudder trim was required. However, a little elevator up trim was required to slow the Bomber down in the glide.

Flights 1 and 2 were made using an APC 9 X 5 prop. The first flight time was short at 4 min 30 sec due to too lean an engine run resulting in low altitude. I readjusted the Shilen OT .19 and the second flight time was a respectable 5 min 50 sec in the dead air (remember also that the Shilen OT .19 is still relative new and will improve as it builds up run time). On the third flight, I changed props to a APC 9 X 4 and the flight time fell off to only 3 min and 50 sec. Clearly, the APC 9 X 5 is the better prop for this engine/airframe combination. The engine's exhaust residue remained relative clear showing no excessive new engine wear.

I also flew the R/C Assist Fubar 600X powered with the Super Tiger .35, but more on that latter. All in all, it was a successful flight test and I am most pleased.



*1Bomber Flight Test Fueling.jpg*



*2Bomber Flight Test.jpg*



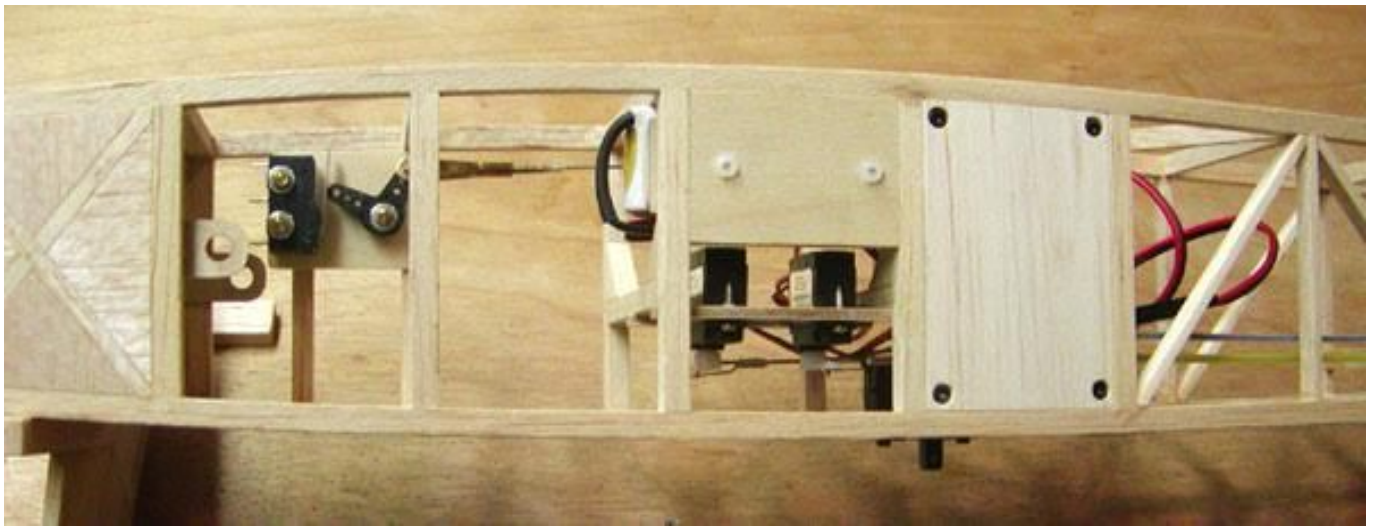
*3Bomber Flight Test.jpg*



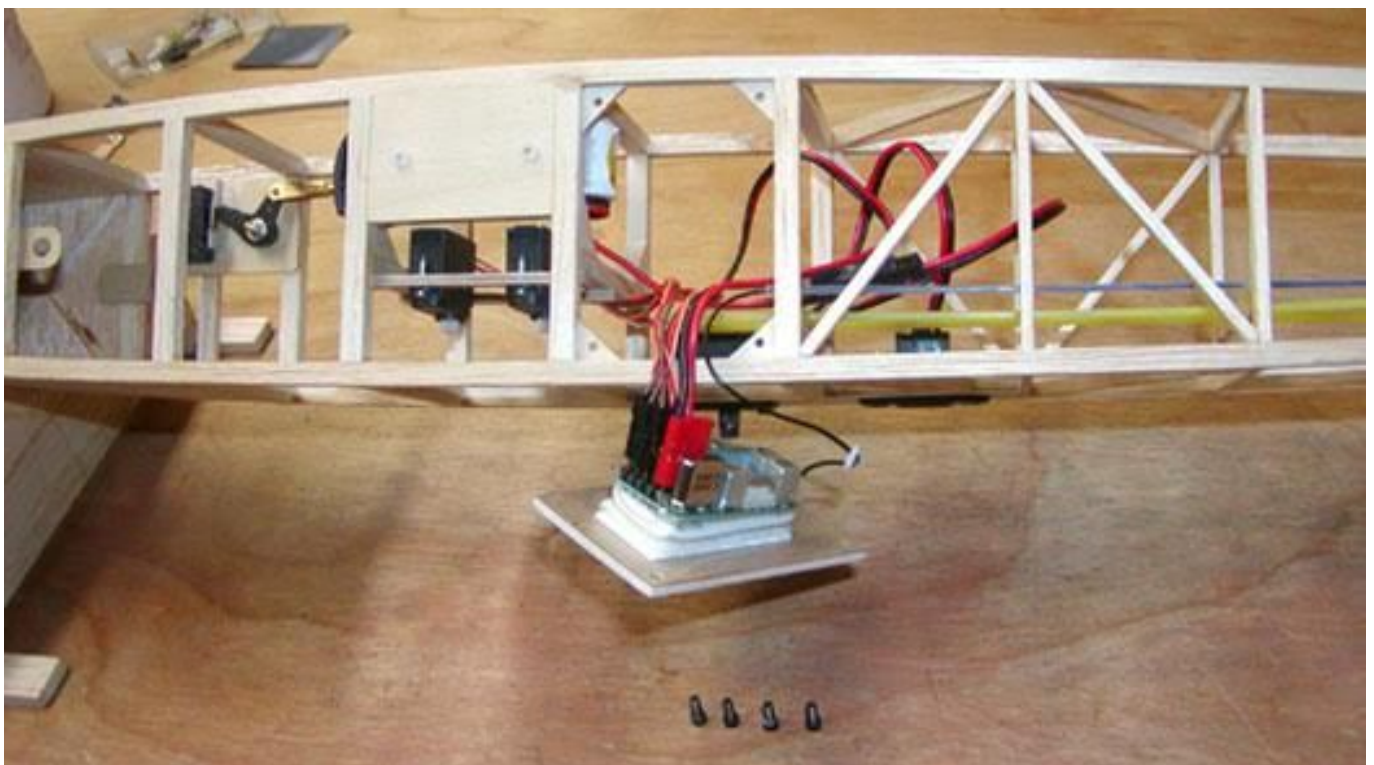
*4Bomber Flight Test.jpg*

## **FW:54 415 sq. in. Bomber Receiver Retrofit**

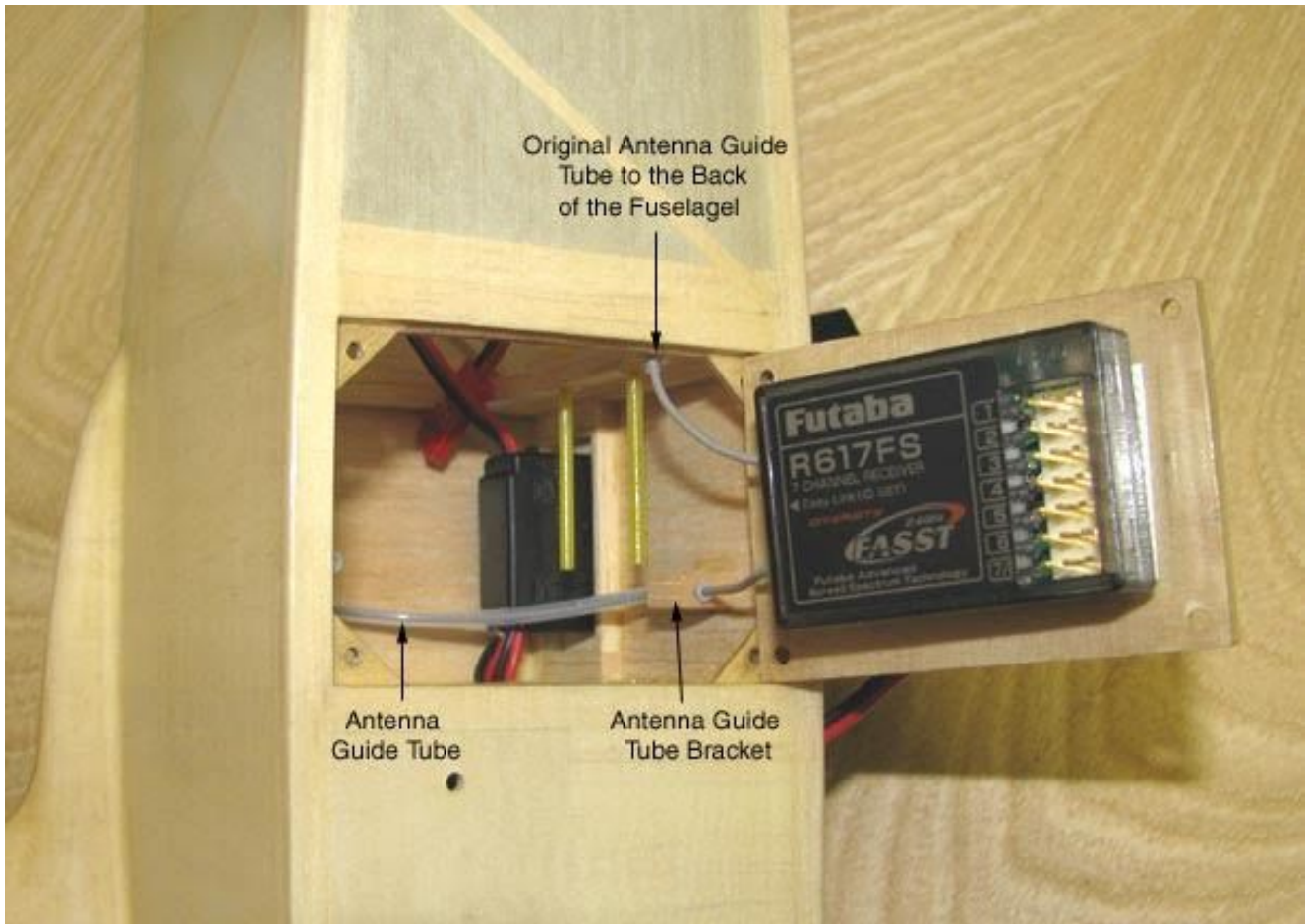
Today I installed one of the new Futaba FASST 2.4 GHz R617FS receivers in the fuselage of the 415 sq. in. Bomber. To begin with it is instructive to refer back to a couple of construction pictures taken during the installation of the original radio.



*This shows the hatch cover on the fuselage made for access to the receiver.*



*This shows the original installation of the FMA M-5 receiver attached to the back of the fuselage's receiver hatch cover with Velcro. Note the antenna guide tube with the M-5 receiver's antenna inside running to the back of the fuselage.*



*I removed the M-5 receiver and attached the new Futaba FASST 2.4 GHz R617FS receiver to the back of the fuselage's receiver hatch cover with new Velcro as shown below. Notice below that one of the receiver's antennae is routed into the original antenna guide tube running to the back of the fuselage. I glued in a balsa bracket shown just under the receiver to position a "U" shaped antenna guide tube shown below.*



*I glued in a second balsa bracket shown below on the other side of the fuselage to hold the antenna guide tube in its "U" shape. The antenna guide tube runs down the side of the fuselage, across the bottom, and up the other side placing the antenna contained within at 90 degrees to the other antenna running to the back of the fuselage as per the FASST instructions. Now I just plug in the connectors to receiver and screw the hatch down.*

Trevor,

This is the last report No. 54 and completes the series on the Second Class A Bomber project. ....Tandy