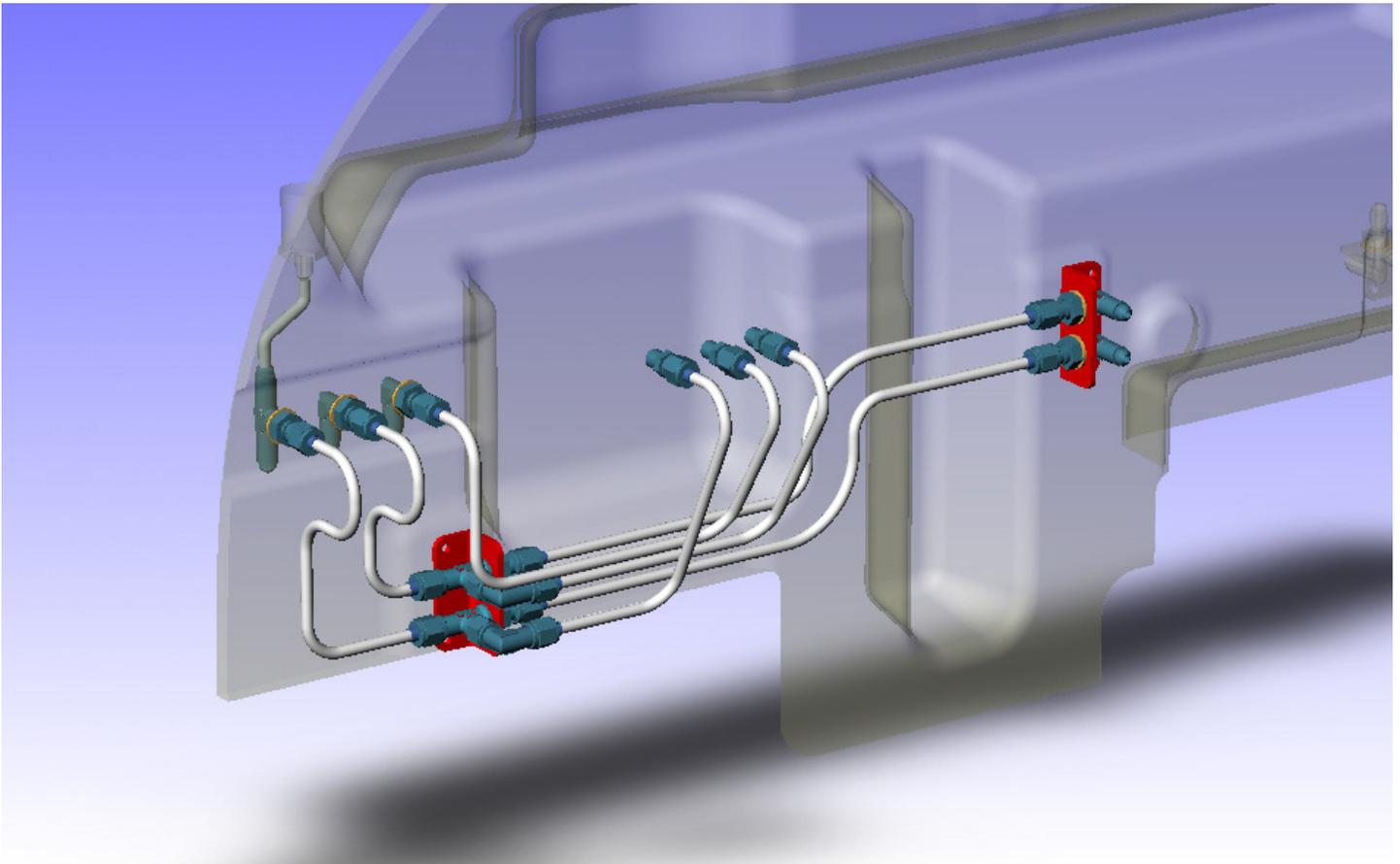


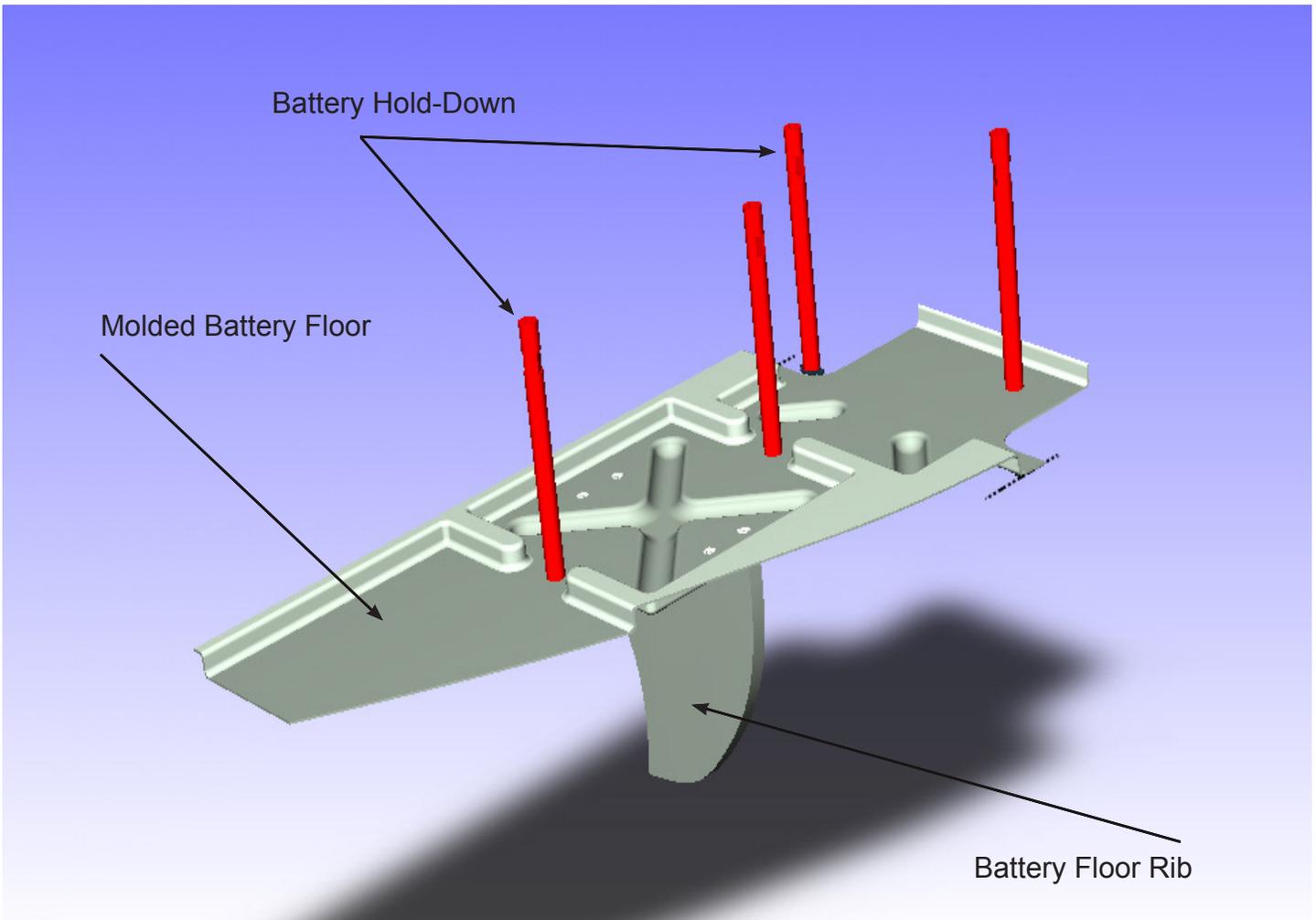
# Kit # 110

## Nose Bulkhead Hydraulic Lines

7/29/2014



## Kit # 111 Components

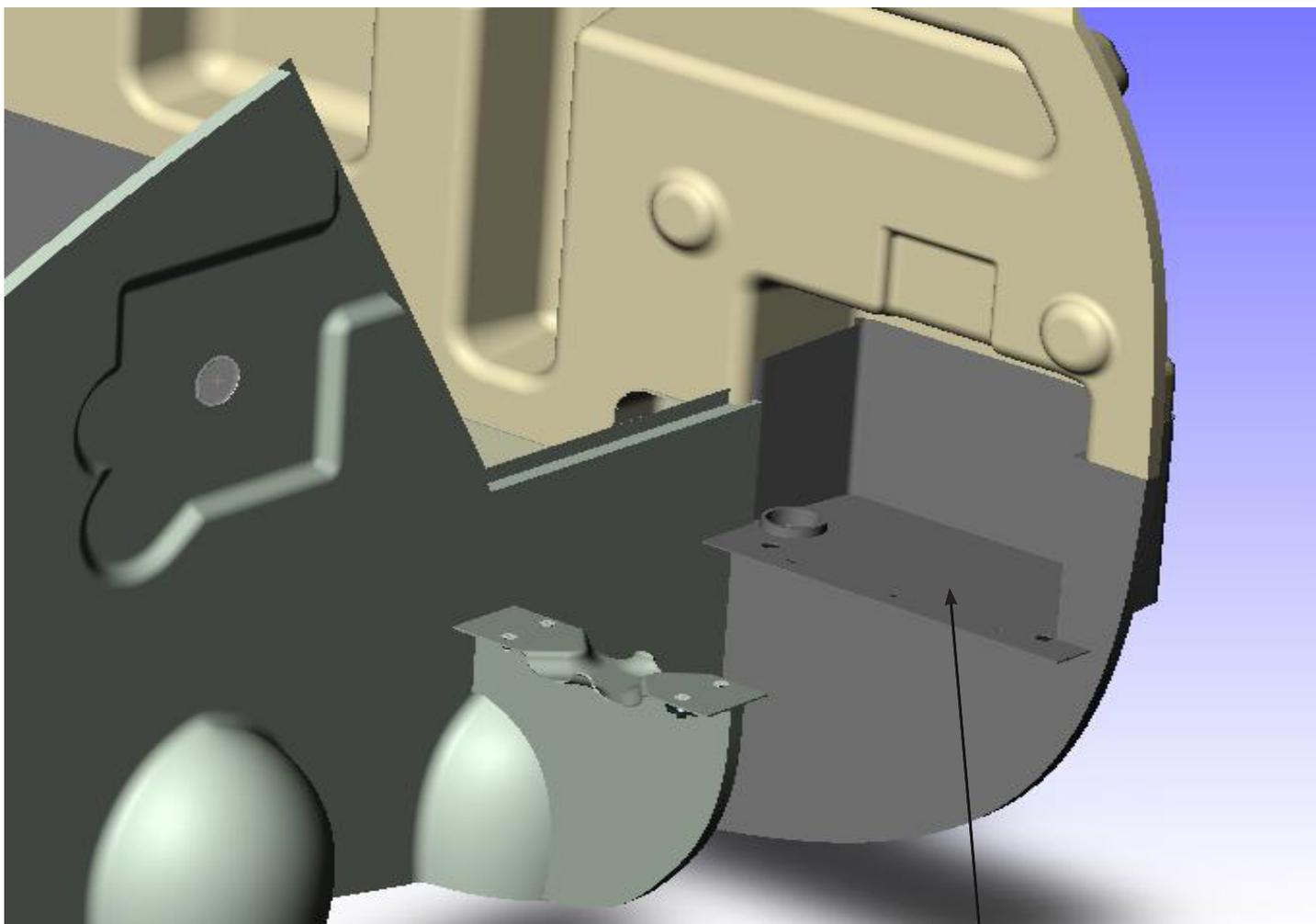


### **Prerequisite: the nose bulkhead and nose longerons must be installed**

1. The first step will be to install a fiberglass angle onto the lower nose bulkhead.
2. Next, the molded battery floor can be installed.
3. The battery floor rib is installed
4. Nutplates are installed for the aft battery hold-down rods

The hold-down rods have flat spots milled on one end. This is for a 7/16" wrench to screw the rod into the floor. The two aft rods are marked with an "L" and the two forward rods are marked with an "S". The forward rods are 1/16" shorter than the aft rods to allow for the thickness of the floor as explained later.

Also included in this kit is a sheet of precure for the shelf and a fiberglass angle used as a flange to mount nutplates for the aft battery hold-down rods.

**Fig. 1**

Battery Shelf

The lower bulkhead needs a shelf to hold the aft battery as shown in figure 1 above. We provided a precure sheet to make the shelf.

This should be about 7 1/4-inches high from the inside skin of the fuselage as shown in figure 2 and figure 3 on the next page.

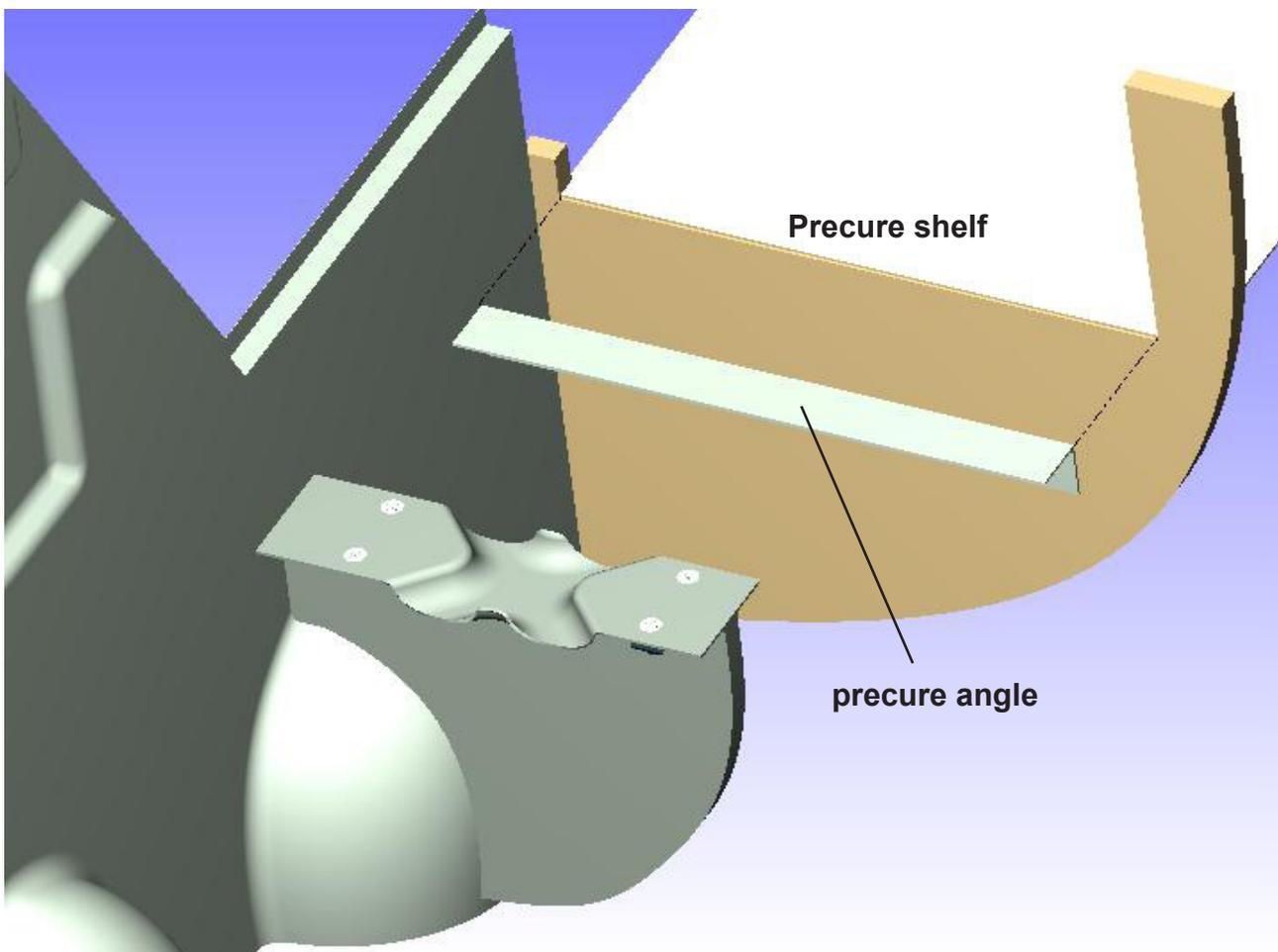
When trimming the shelf to fit, make sure it is level.



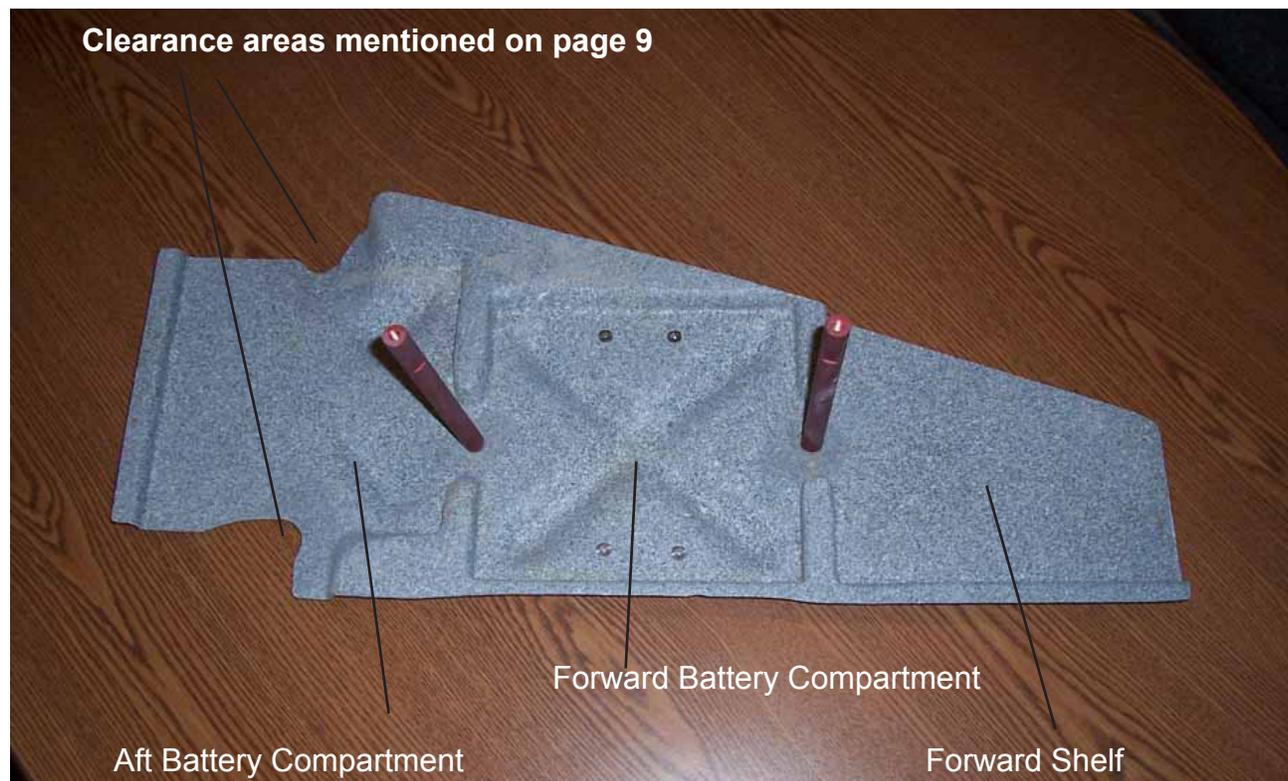
**Fig.3**



Also note in figures 2 & 3 the fiberglass angle that is bonded to the lower bulkhead. Another view is shown below in figure 4. Bond the angle so that the top surface is flush with the aft battery shelf. This angle is used to mount two nutplates for the aft battery hold-down rods.



**Figure 4**



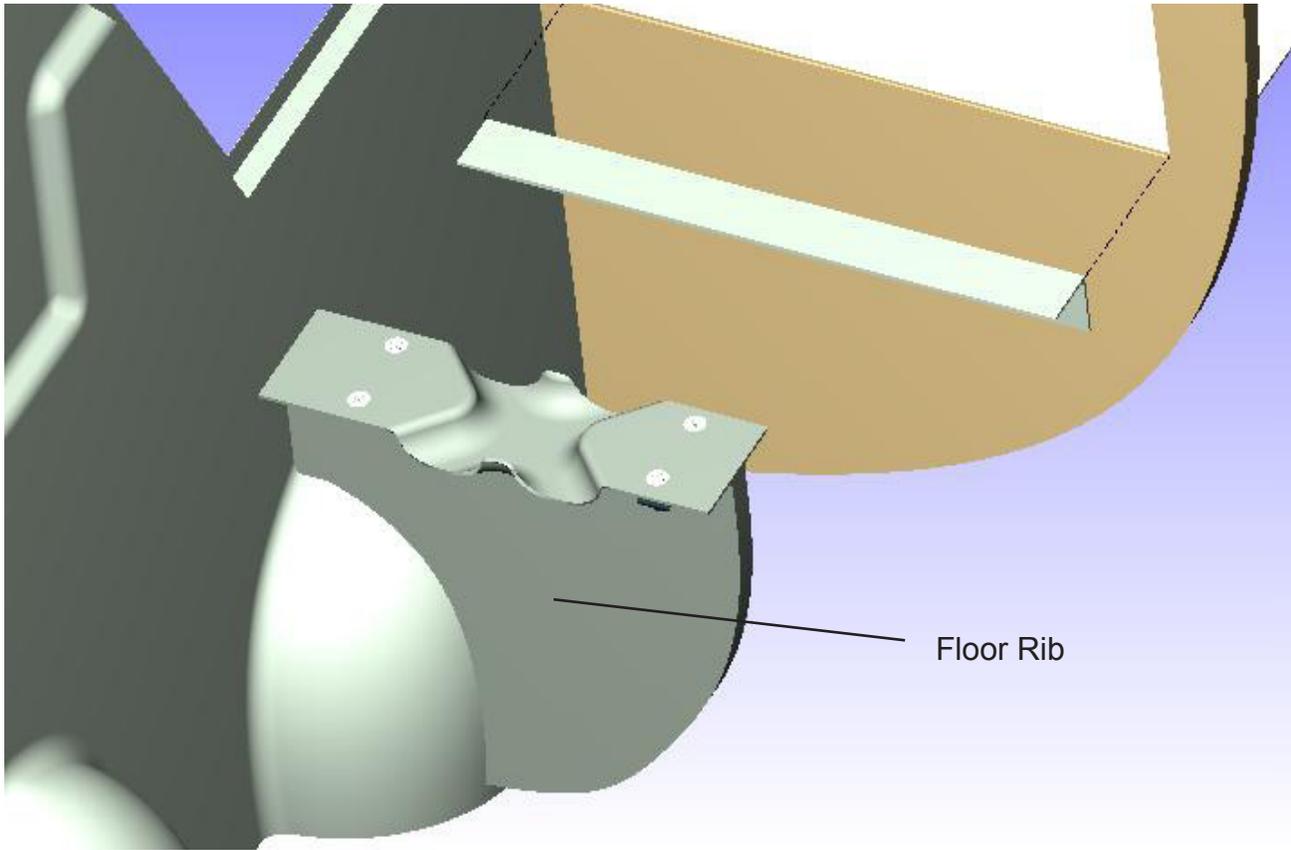
**Figure 5**

First, mount a Concorde RG24-15M battery in the aft compartment of the floor. Mount the two hold-down rods marked with an “S” to the battery. Mark the rod locations on the battery floor.

Important!--these two marks need to be above the **precure angle** previously bonded to the lower nose bulkhead.

Next, trim the molded battery floor to fit. The finished shape should look similar to the floor shown in figure 5 above. Trim and sand the perimeter of the molded battery floor so it sits level in the fuselage. Notice in figure 5 that there is about a 1/2-inch clearance between the forward battery and the nose longeron (the bottom edge in figure 5). Also, be sure not to trim too much from the opposite side that the forward battery no longer fits in the floor. (The battery would hit the inside fuselage skin before sitting on the floor.)

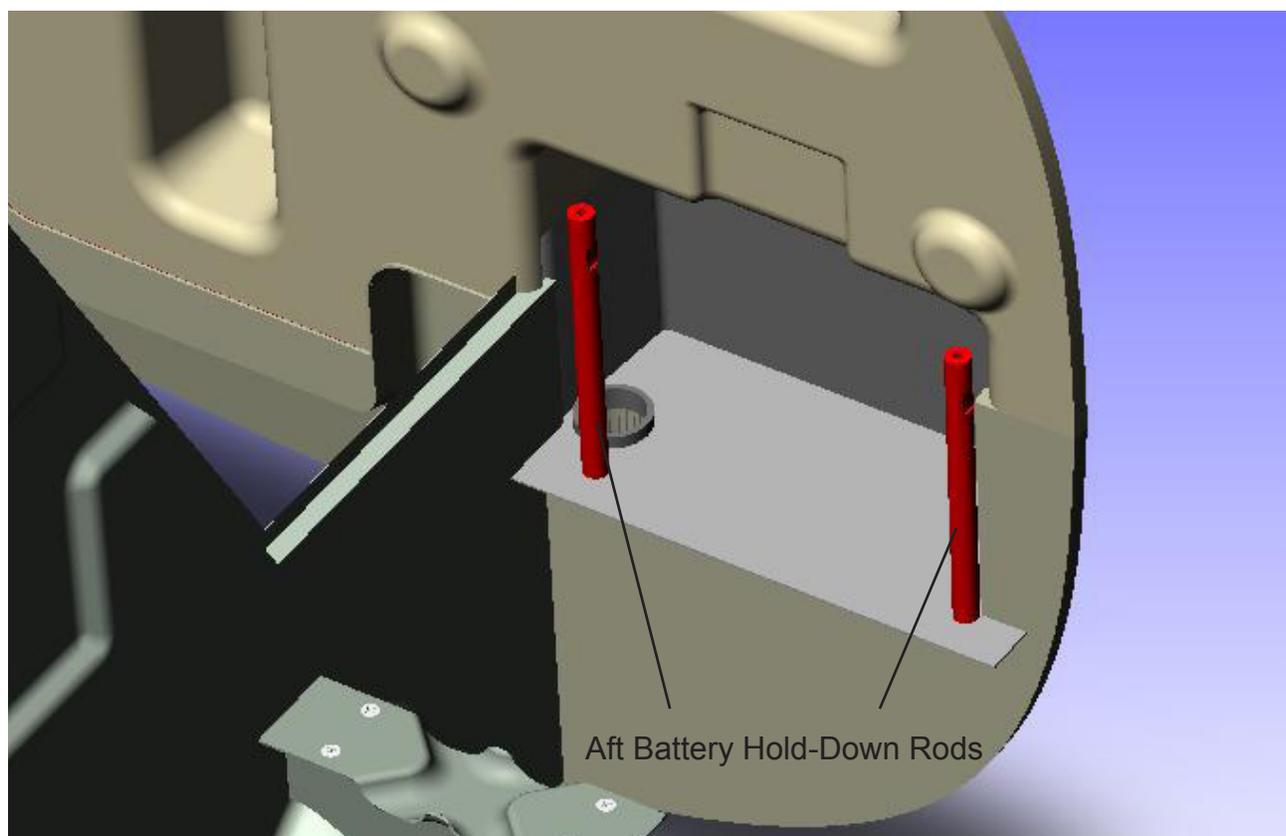
The forward shelf area isn't necessary and can be trimmed off if desired. We used this space to mount a few electronics in one airplane.



**Figure 7**

Mount the battery floor rib to the molded battery floor. sand and shape the rib to fit as shown in figure 7. The battery floor should sit horizontal in the fuselage when finished. With the floor rib still mounted to the floor, apply milled fiber to the exposed foam edge, place the assembly into the fuselage and allow to cure.

When cured, remove the screws holding the floor to the rib and remove the floor. apply two layers of 7781 fiberglass strips 2-inches wide to permanently bond the rib to the fuselage.



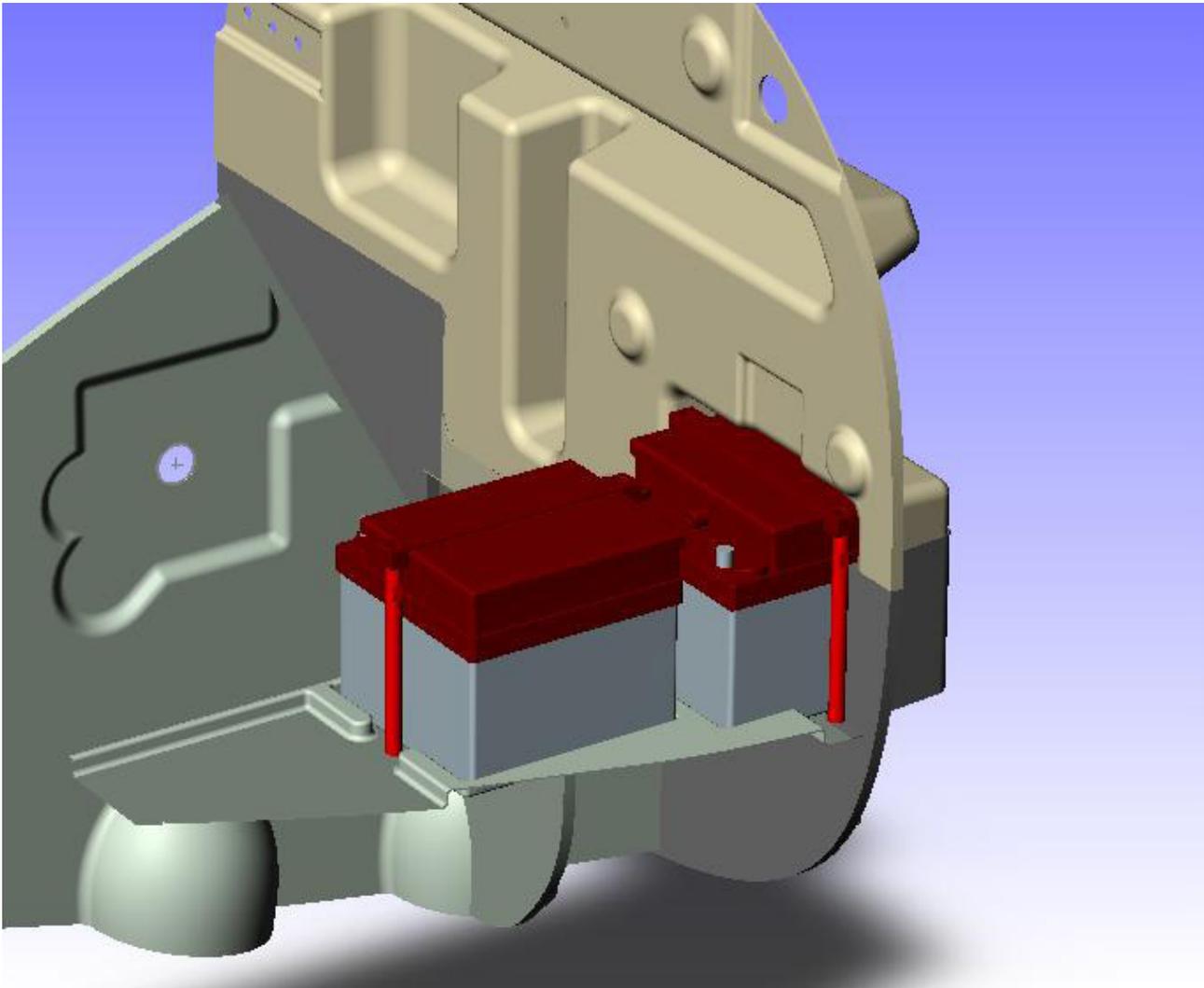
**Figure 8**

There should still be marks on the battery floor locating the aft battery hold-down rods from page 7. Remove material from the battery floor so that the hold-down rods will mount directly to the fiberglass angle as shown above in figure 8. You can also see the final shape of the clearance area in figure 5 on page 7.

Reinstall the battery floor onto the battery rib. Reinstall a Concorde battery into the aft battery compartment. Install the two hold-down rods marked with an “L” onto the battery. Mark the locations on the fiberglass angle.

Remove the battery and floor from the fuselage. Install the two nutplates provided to the fiberglass angle.

Another example of this step is shown in figure 10 on page 11.



**Figure 9**

Figure 9 shows the finished installation.



**Figure 10**

