

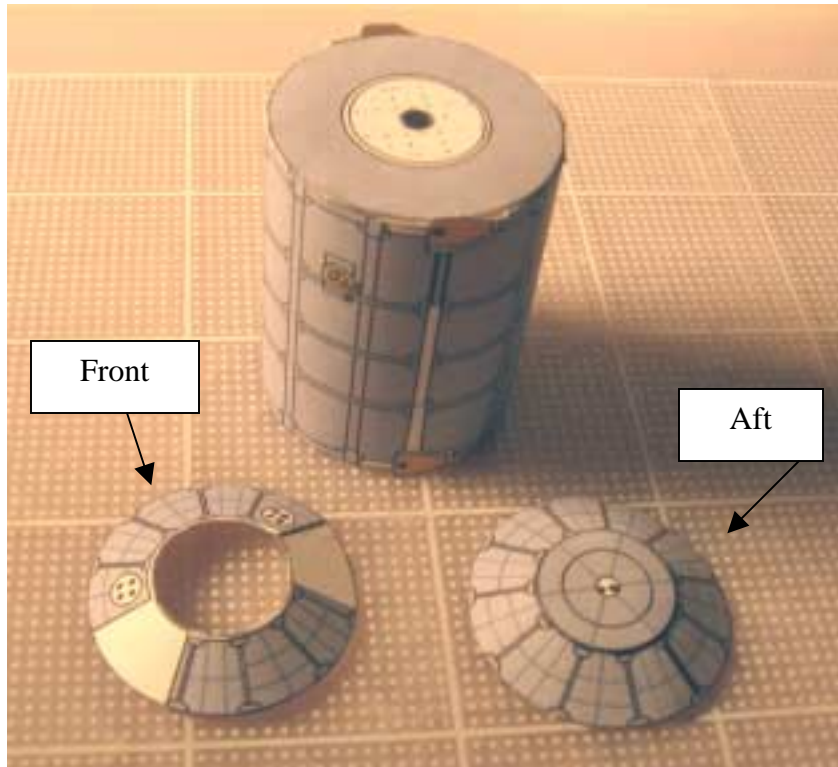


Revised
© 2008

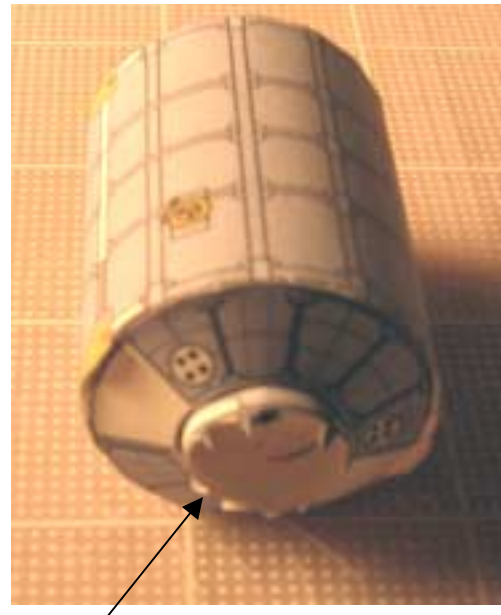
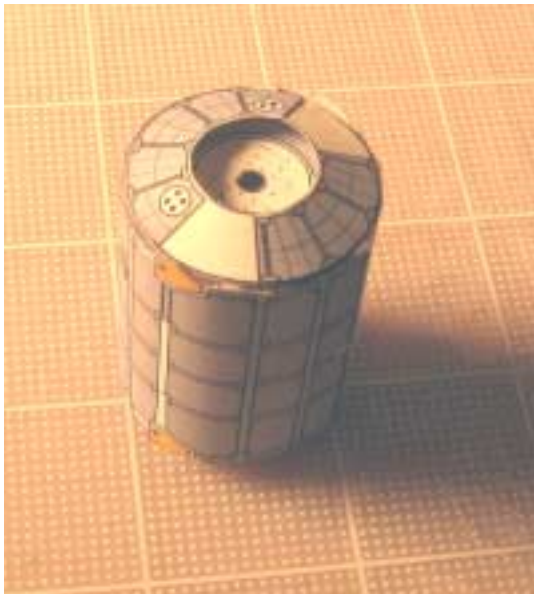
Assembly Instructions for STS-114 payload (Discovery's Return to Flight)



Building “Raffaello” Multipurpose Logistic Module

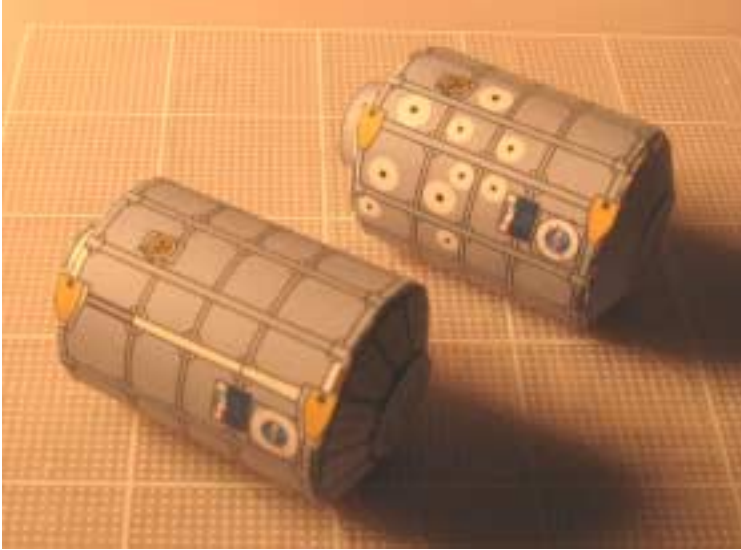


Make a cylinder as photo shows and glue both conical parts on both ends.



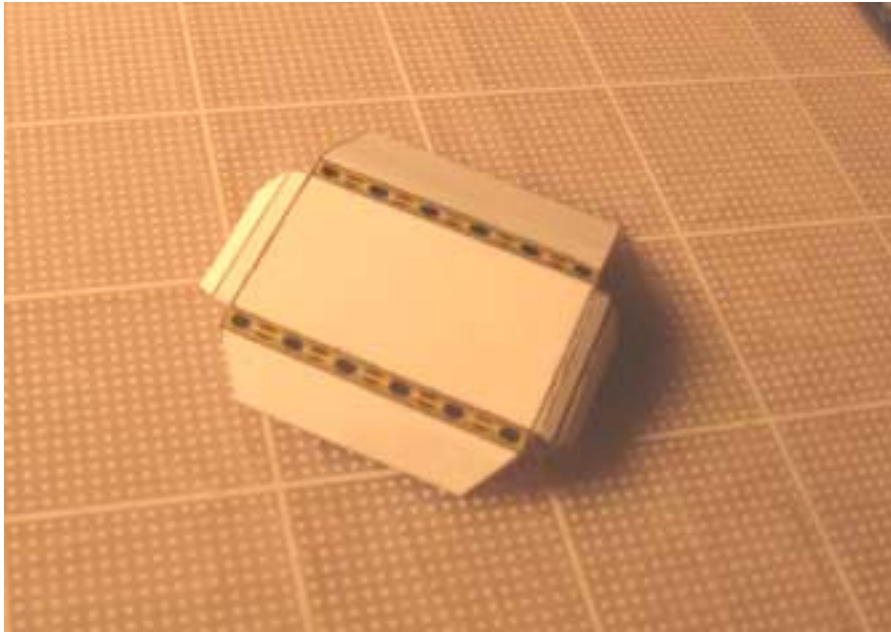
Attached the Docking system

See photos for reference when building this module.

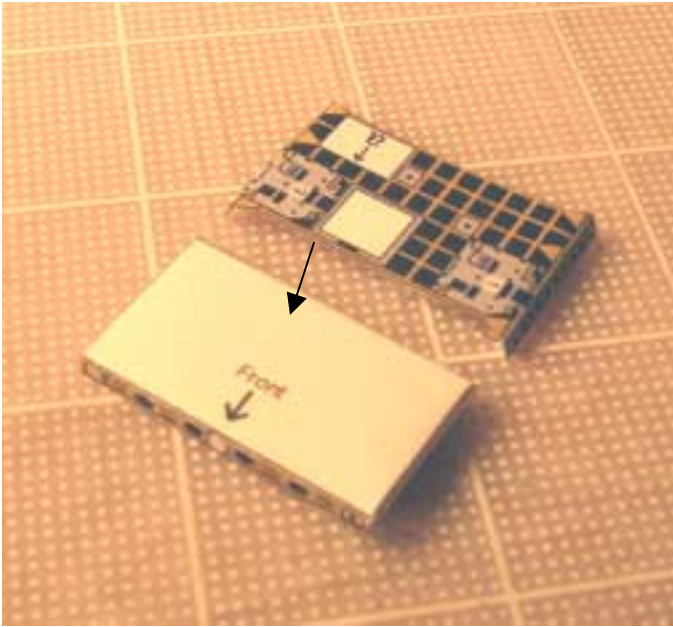


Note that the circular white patches are not present for this mission. These Visual Targets first appeared during the first missions for Leonardo and Raffaello (STS-102, STS-100, STS-105, STS-108, and STS-111)

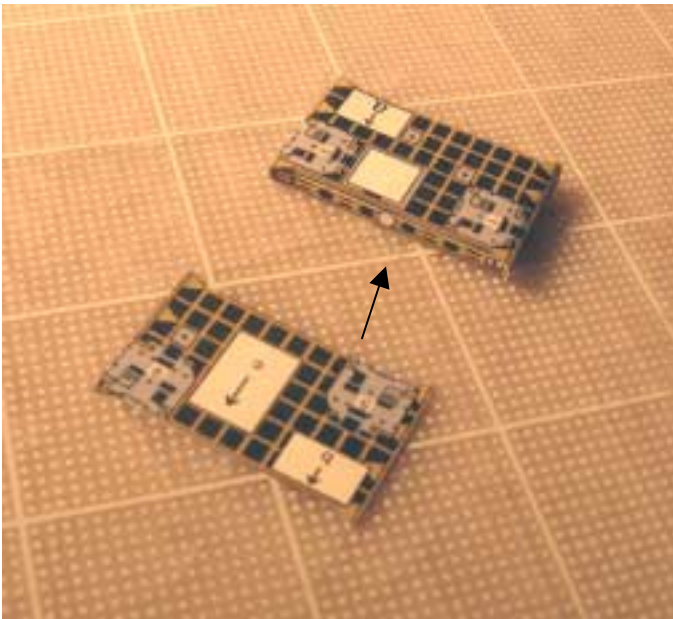
Building the External Stowage Platform-2



First build the main part of this platform as photo shows. This photo shows the prototype.



Glue the upper portion of the platform on top of the main part as photo shows.



The bottom part is glued on the underside of the main platform part.
Note that the arrows on both parts indicate where is the “Forward” position.

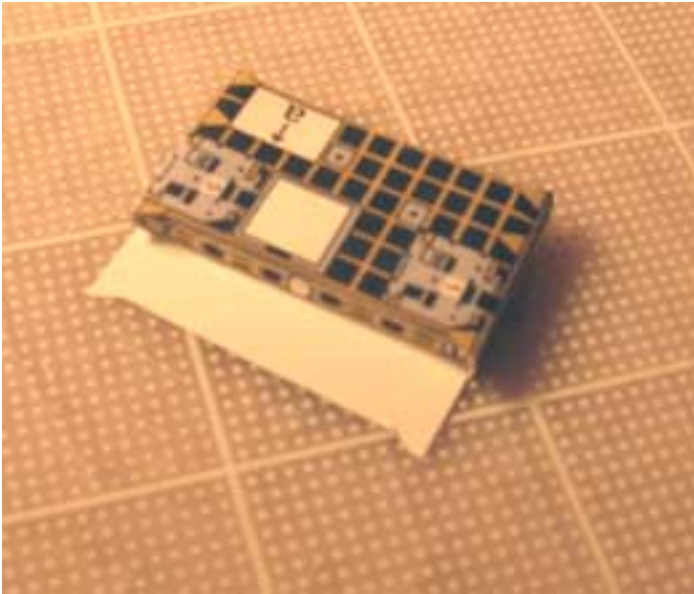


Photo shows the bottom part under the main platform ready to be glued. Letters will indicate which parts go where.

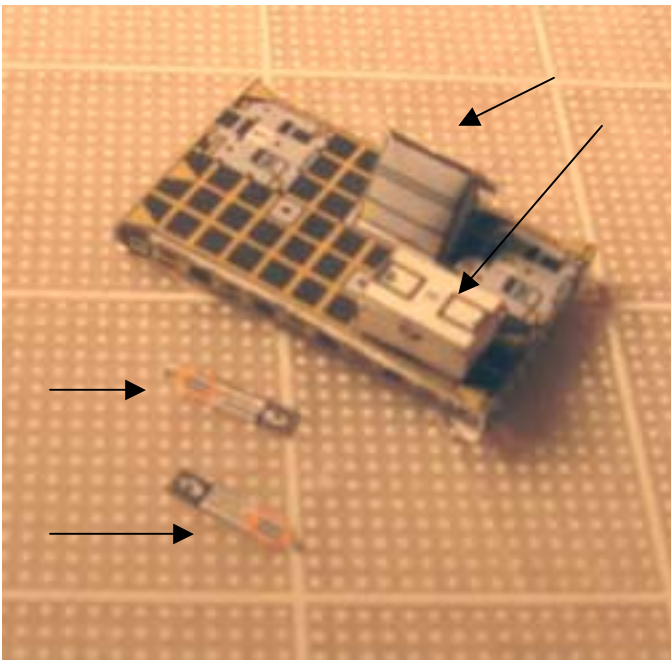


Photo shows the 2 boxes that are located on top of the platform, one is a white box easily recognized and the other is a triangular structure where 2 small parts are glued on both sides.



Another view of the upper part of the platform

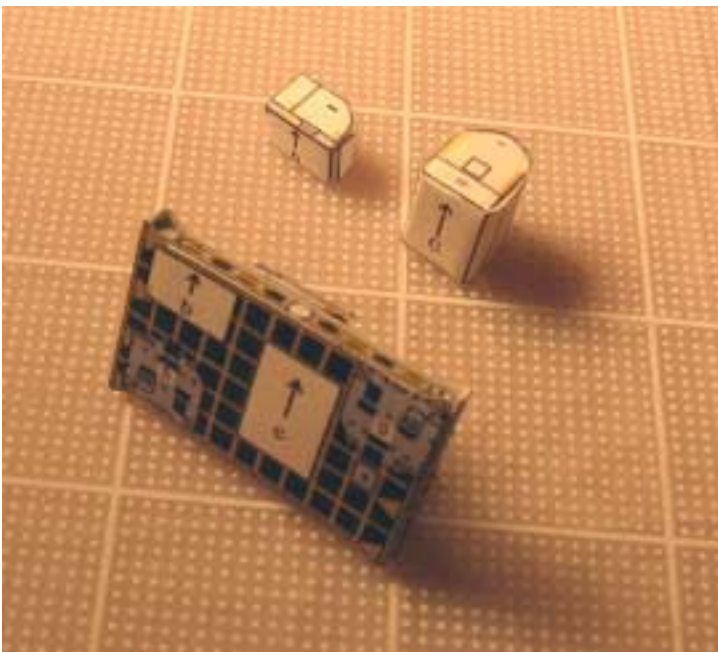
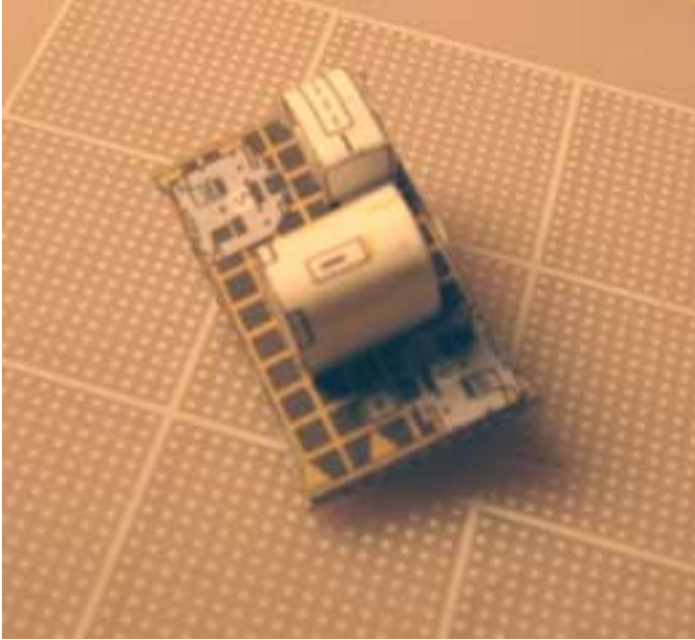
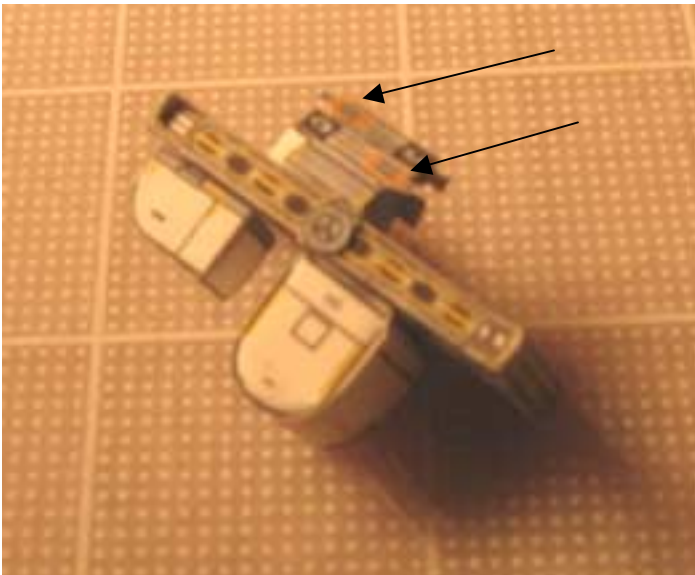


Photo shows the underside of the platform with the 2 boxes that are glued to their respective letter location. Match arrows and then glue parts.



Another view of the underside of the platform showing how the boxes are positioned.



This prototype part shows how it will look when all boxes are glued.
Arrows point to the small parts that are glued to the triangular shape. Note that on this photo a mistake was done. Actually these parts will be opposite to what this photo shows. Look for final photo to see the final position of these parts.

Building the Gyroscope and the Tile and RCC Repair box

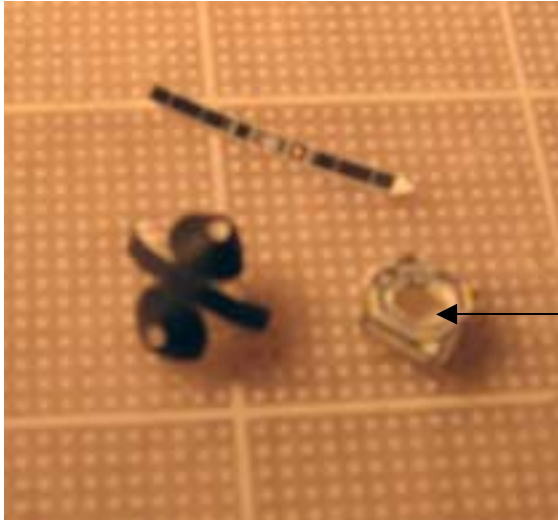


Photo shows all the elements needed to build this gyroscope which will be glued on top of the aft structure in the payload bay.

Arrow indicate that this part is cut open so the gyroscope can fit half way.

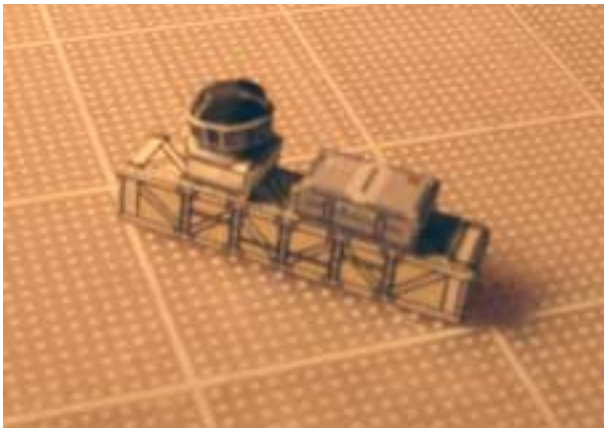
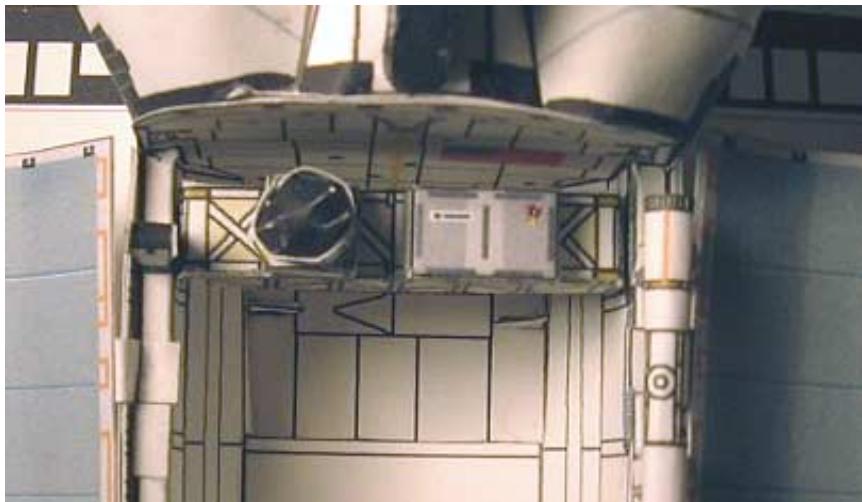


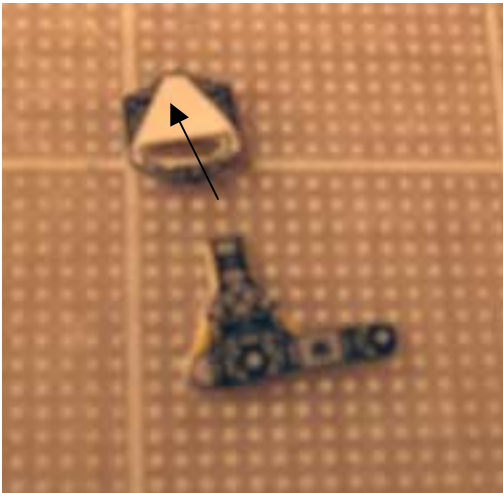
Photo shows final position of both the Gyroscope and the Tile repair box on top of the aft payload bay support structure.



Building the attachment point to Quest Airlock Module (ISS)



These 2 parts are folded as photo shows. Cut open where indicated.



Glue the L shape part on top of the triangular white area as photo shows.

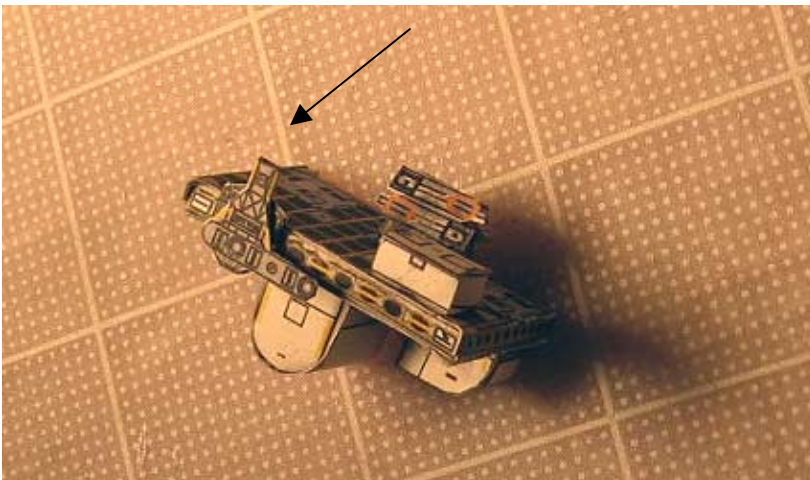
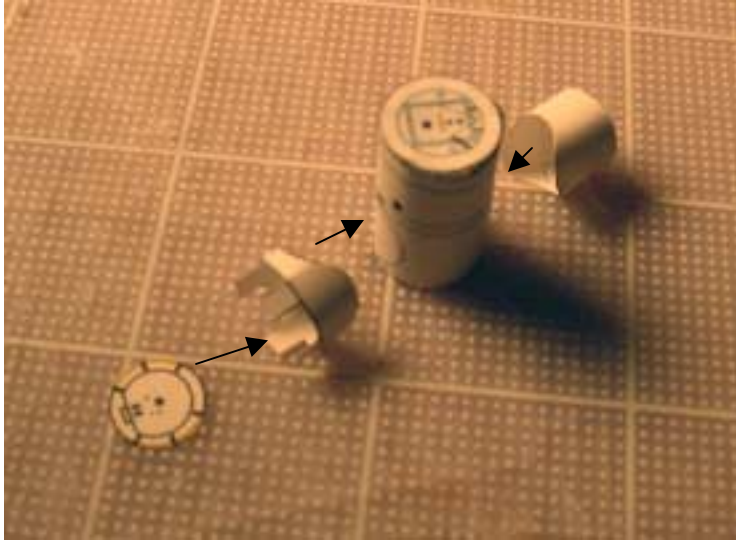
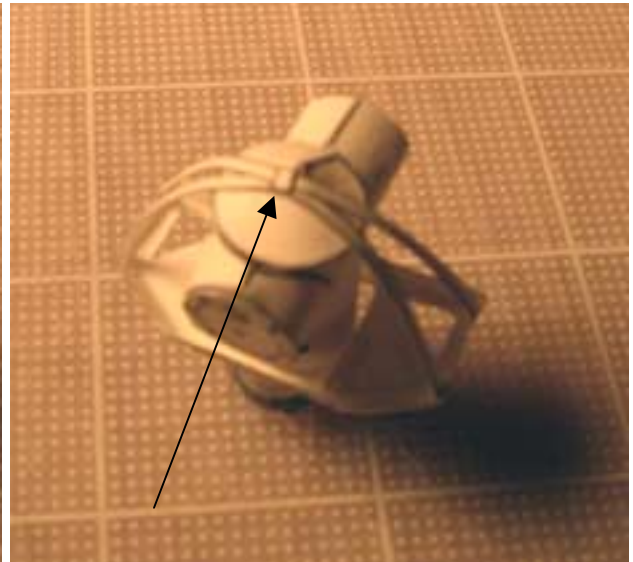
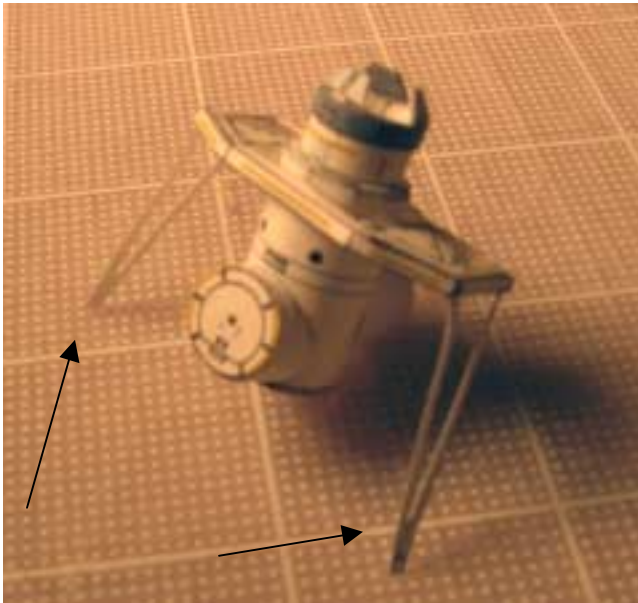


Photo shows final position of the attachment structure on the ESP-2 for payload bay version only. Note details for reference.

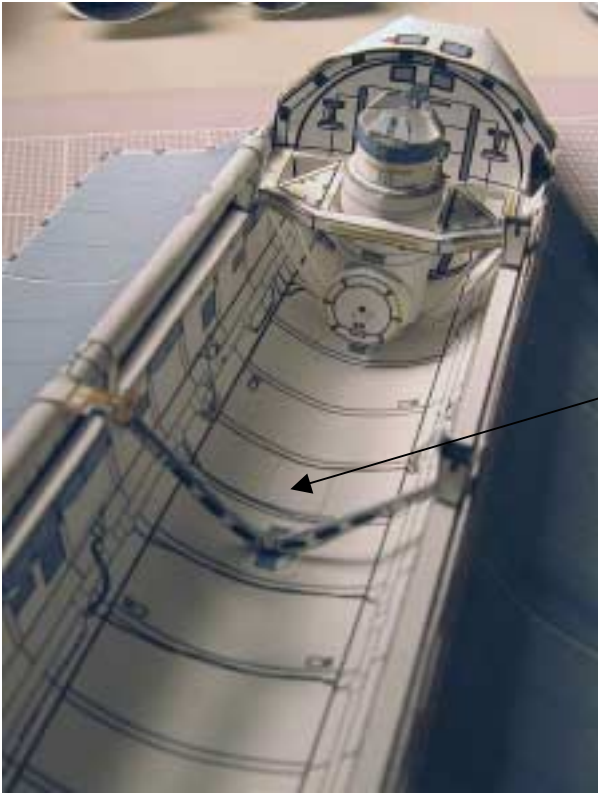
Building the Orbiter Docking System



Make a cylinder and glue the elements indicated on this photo.



Photos show the position of the other elements when building this Docking System. Note how the side thin parts are glued at the bottom of the Docking System.

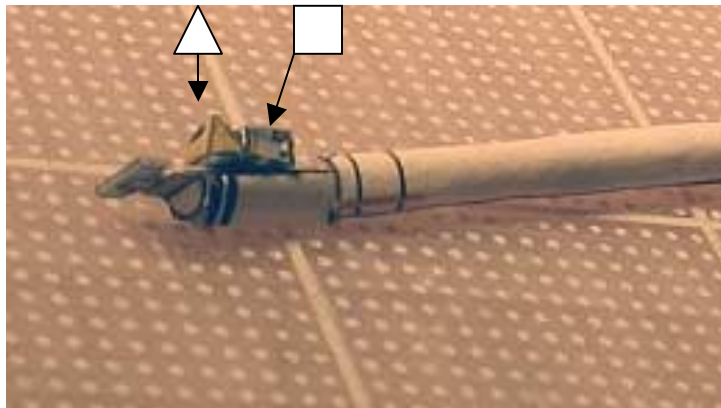
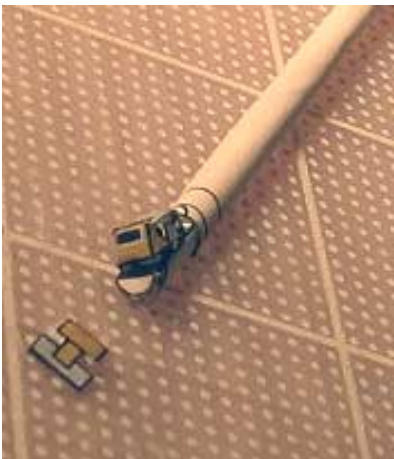


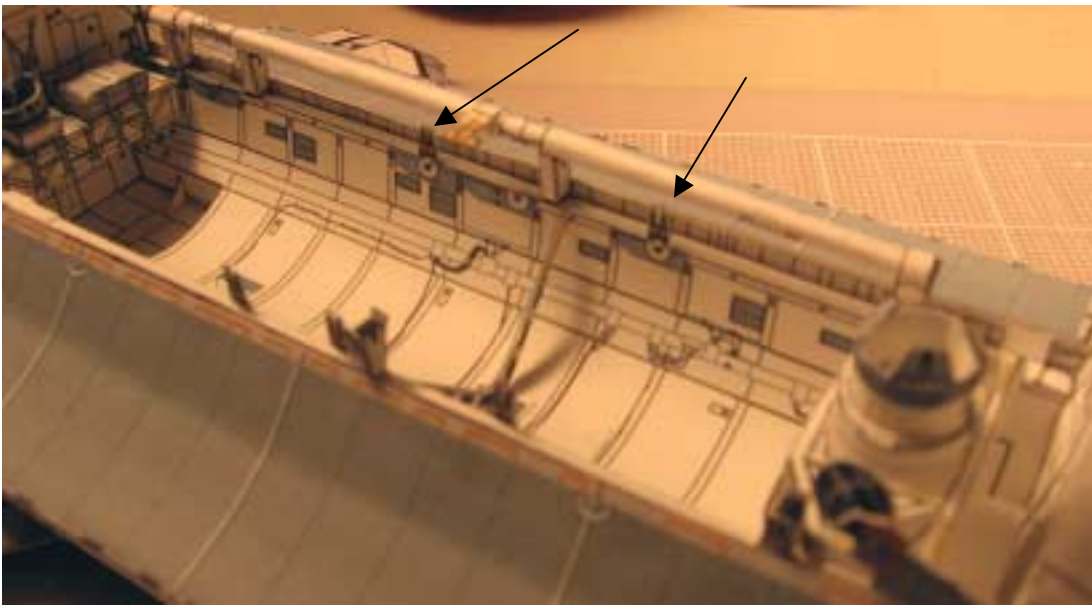
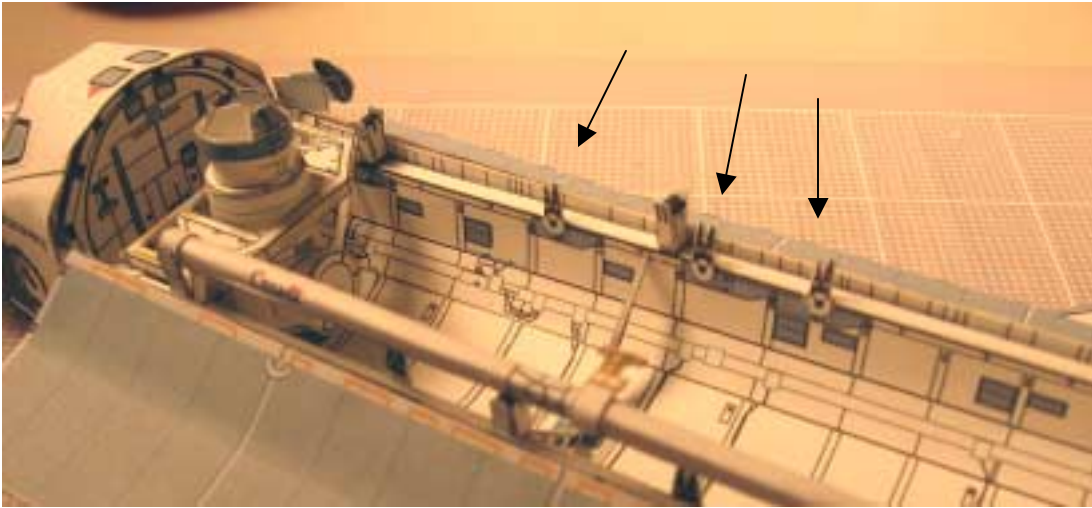
This photo shows final position for the Docking System at the front payload bay area.

Also note location of the Support beam that is located underneath the External Stowage Platform-2.

Building the Orbiter Boom Sensor System (OBSS)

Build as if you are building the Robotic Arm. The only difference is the bottom end. Photo shows elements on this end. It has a small box, a triangular box and the TV camera on the tip.



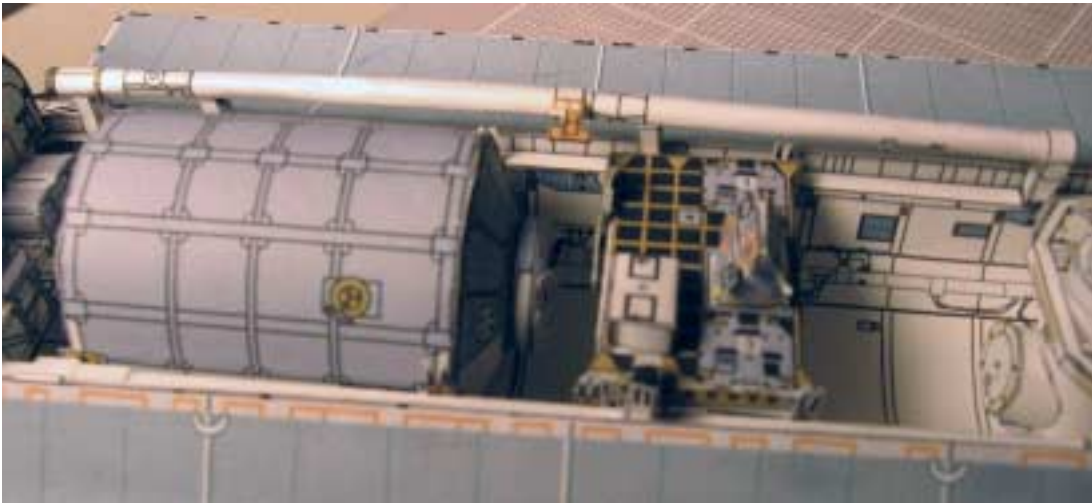
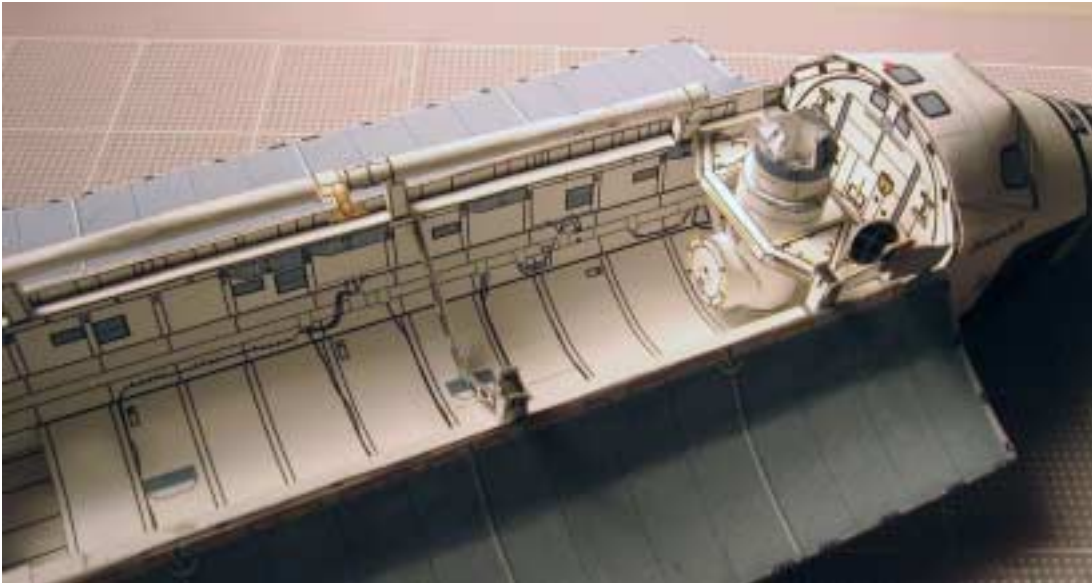


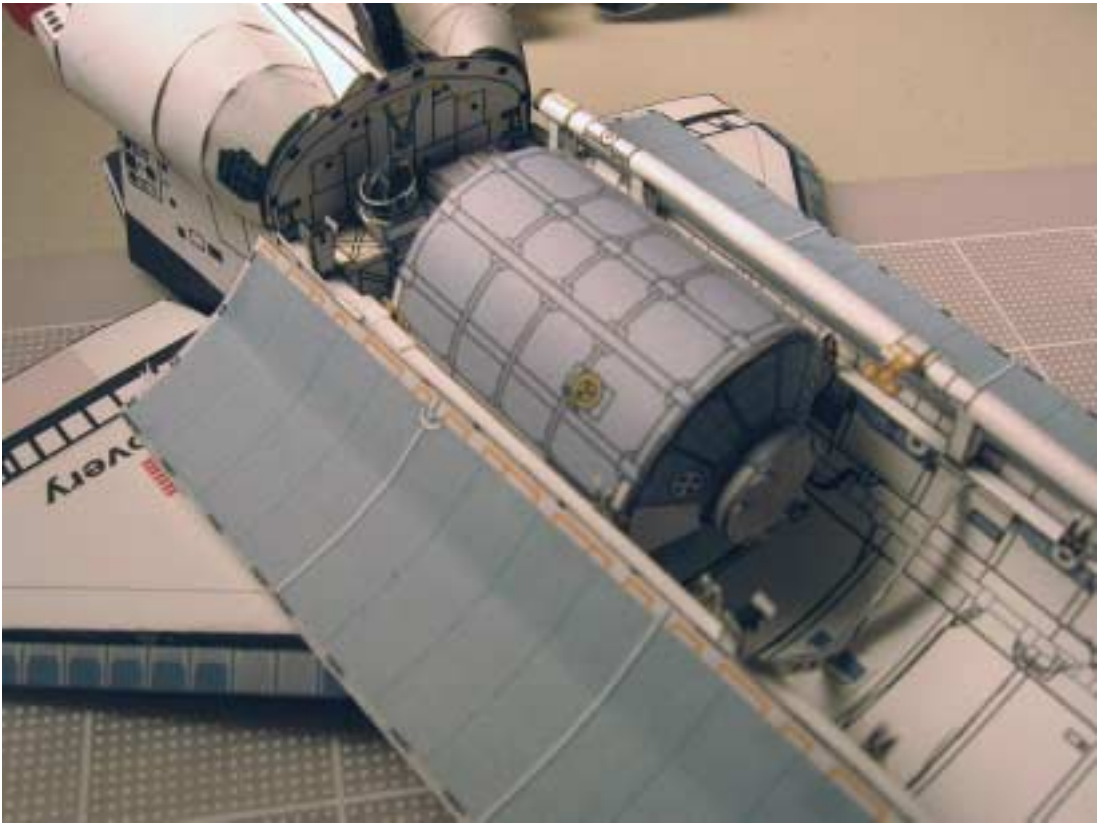
Note position of the Attachment points for the External Stowage Platform-2 and for the “Raffaello” Multipurpose Logistic Module.

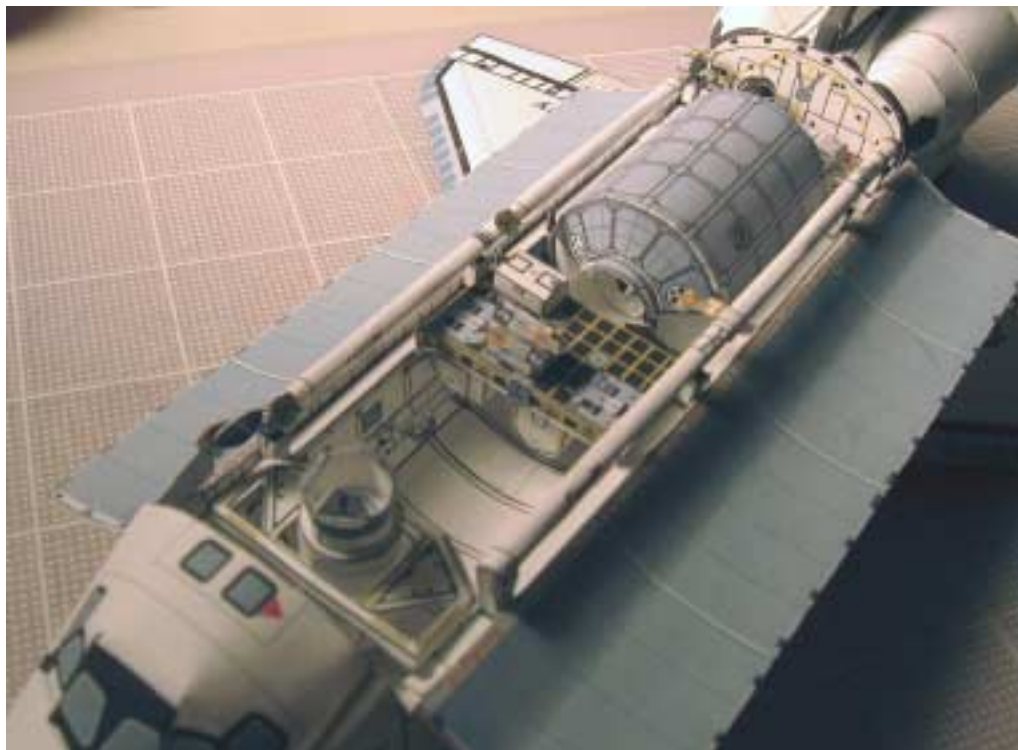
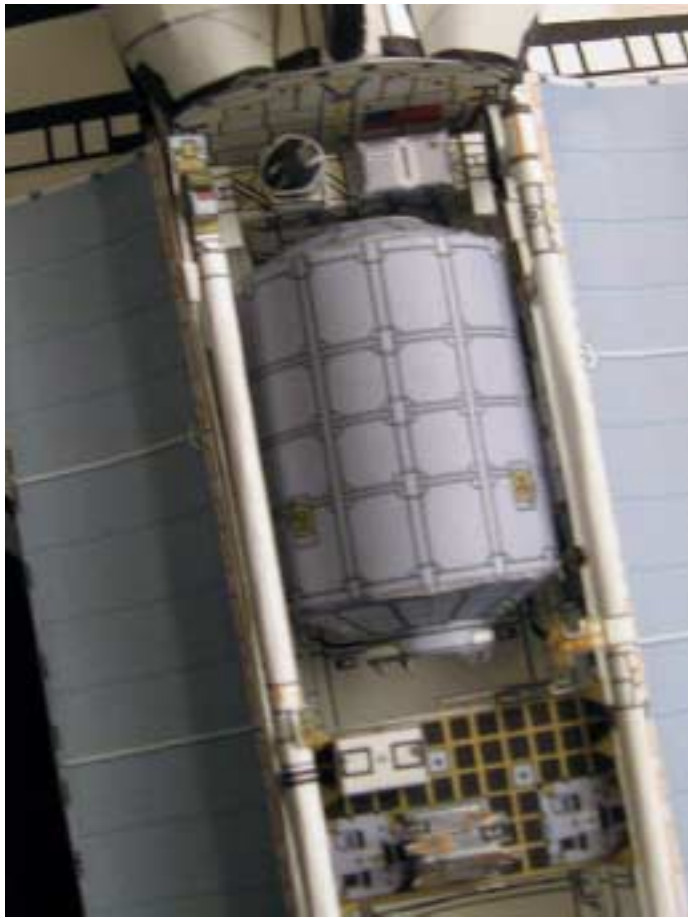


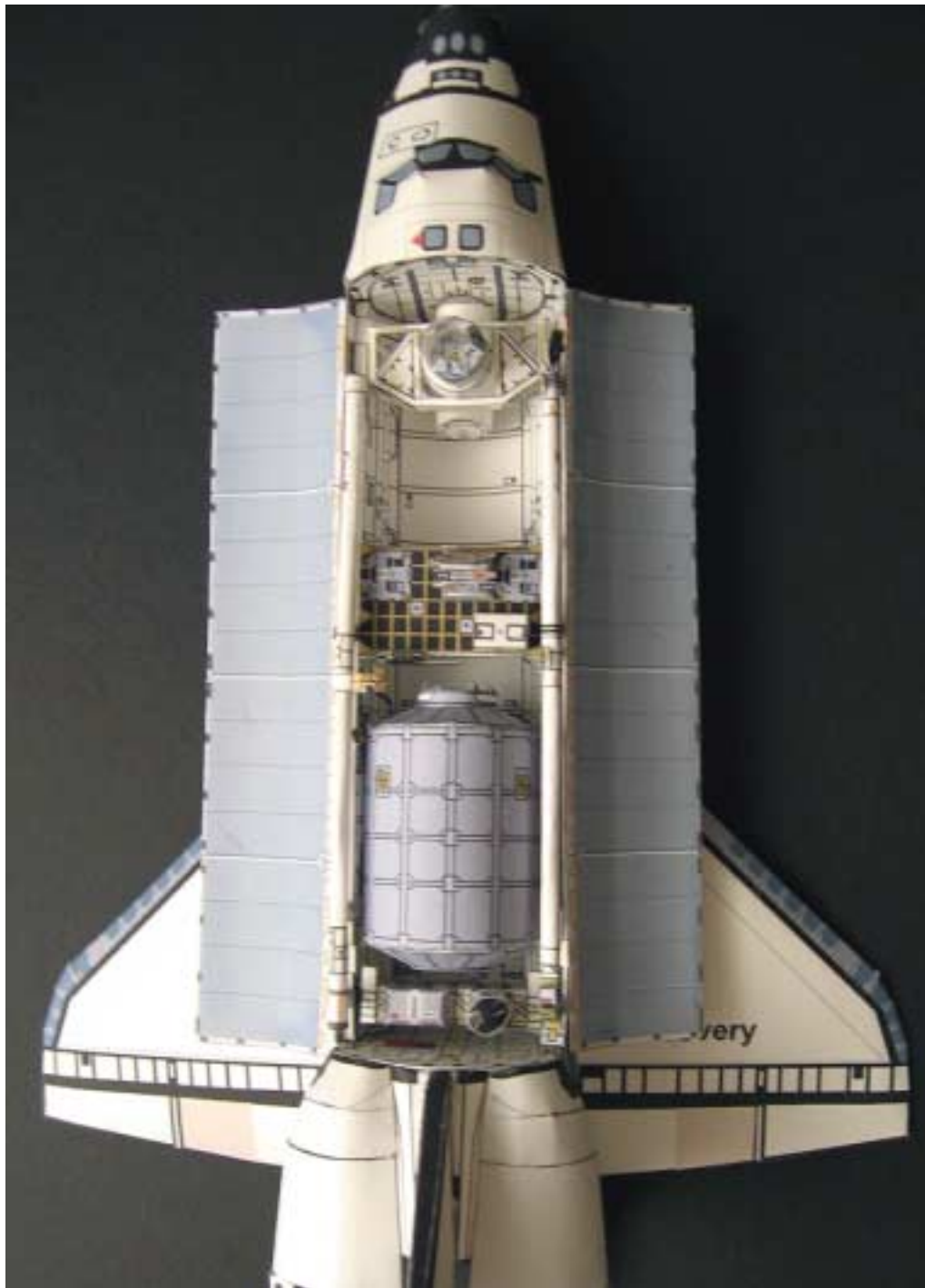
Note location of KU-band antenna that is glued on the tab from the right payload bay door.

More photos for reference:

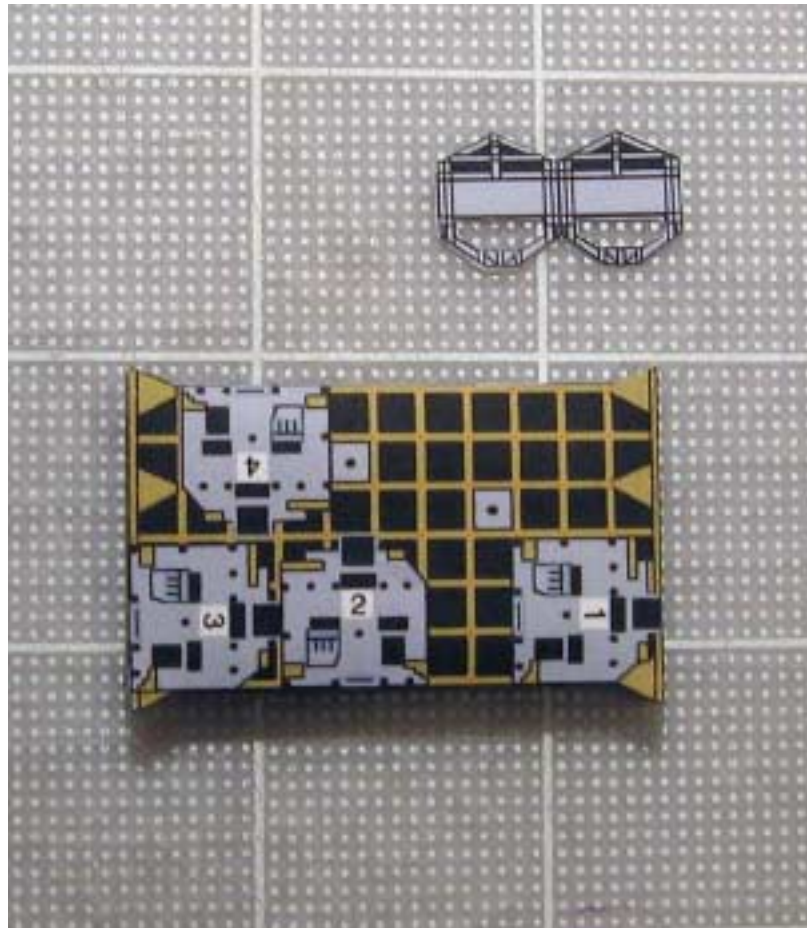






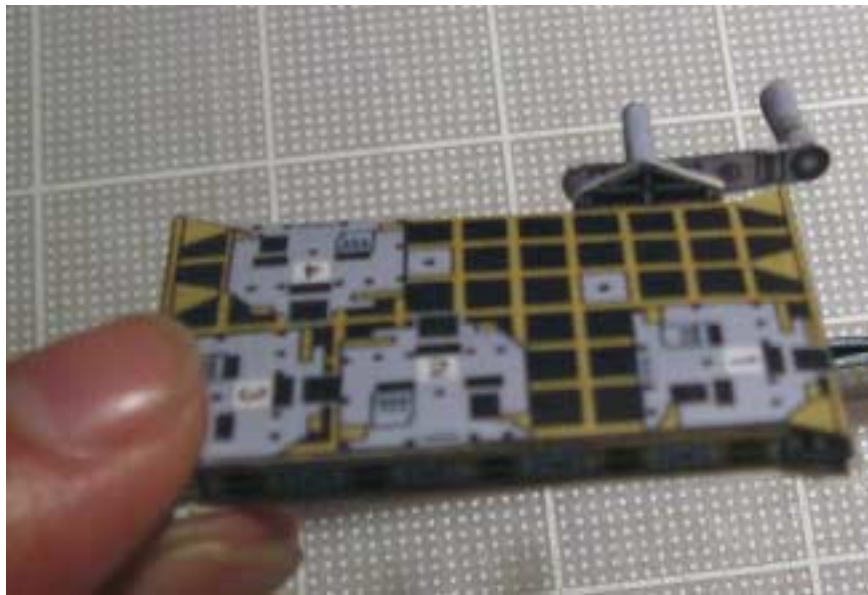
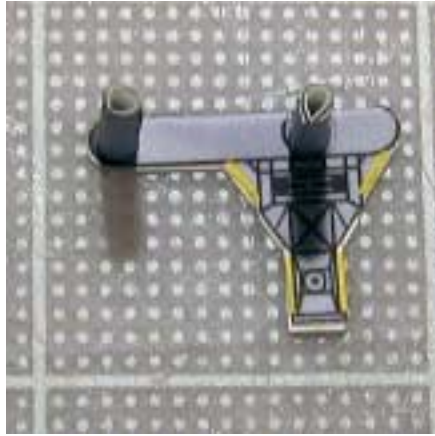


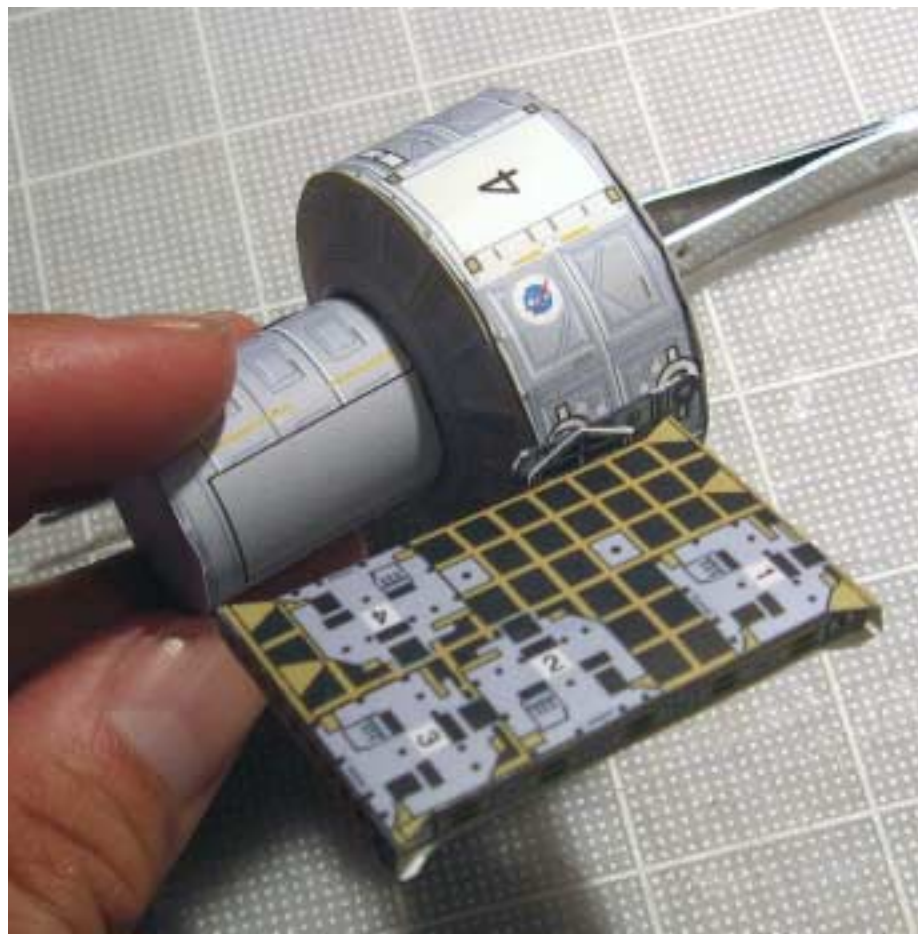
UPDATE for Space Station version model only
(Applies to both 1:144 and 1:100 scale models)

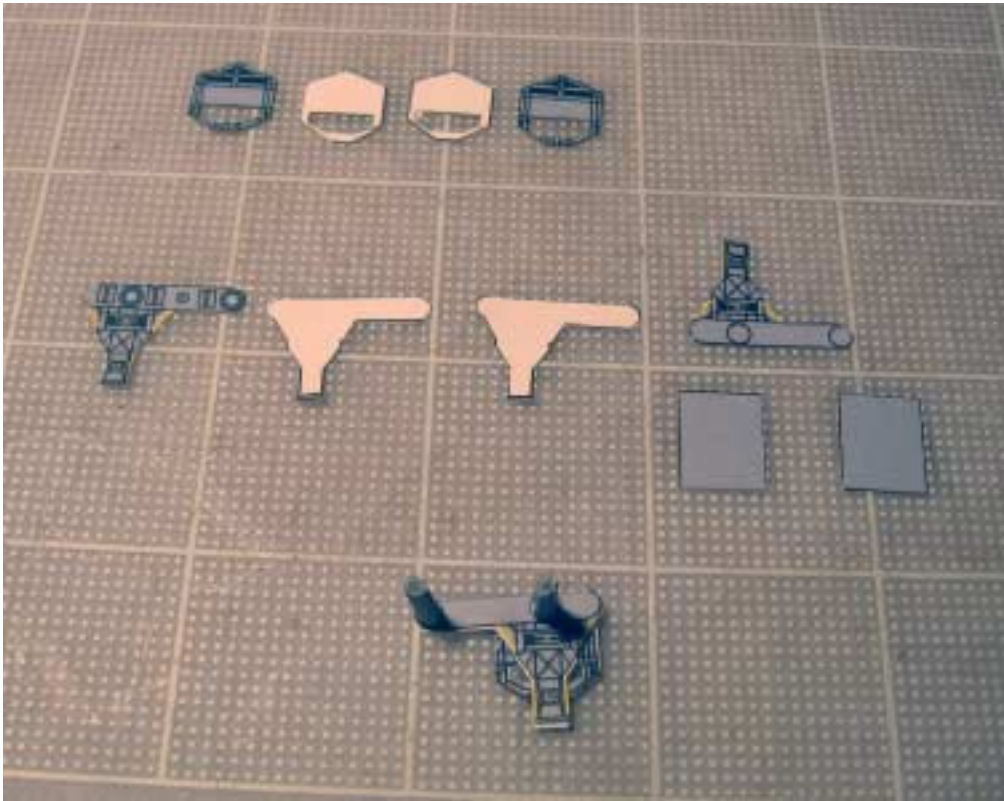


The ESP-2 file has been revised and new parts are replacing the old payload files for this mission. In order to not lose the detailed floor of the ESP-2 with its panels, the modeler now has the option to build separate ESP-2 platforms for all configurations to date. Note that the panels on both the top and bottom floors of the ESP-2 are numbered. This helps to indicate where the ORU's or elements are to be placed on the ESP-2.

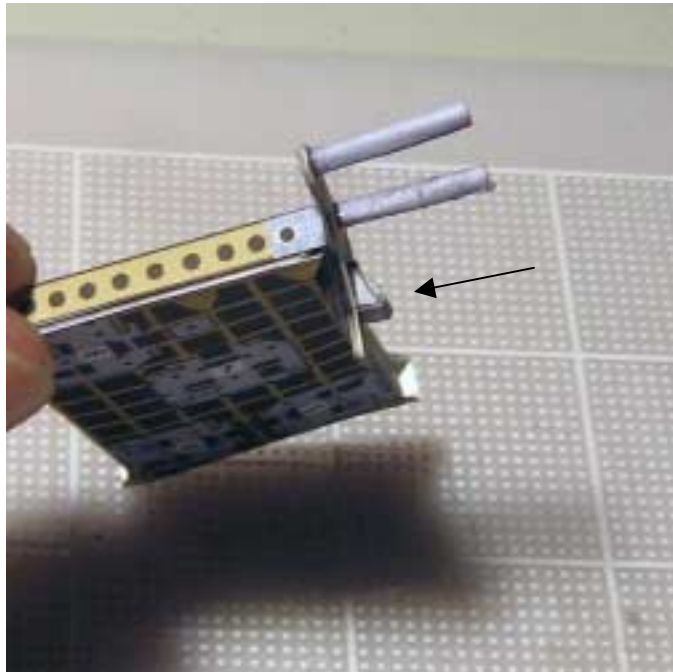
Photos on the next page indicate how the ESP-2 is connected to the "Quest" Airlock module.





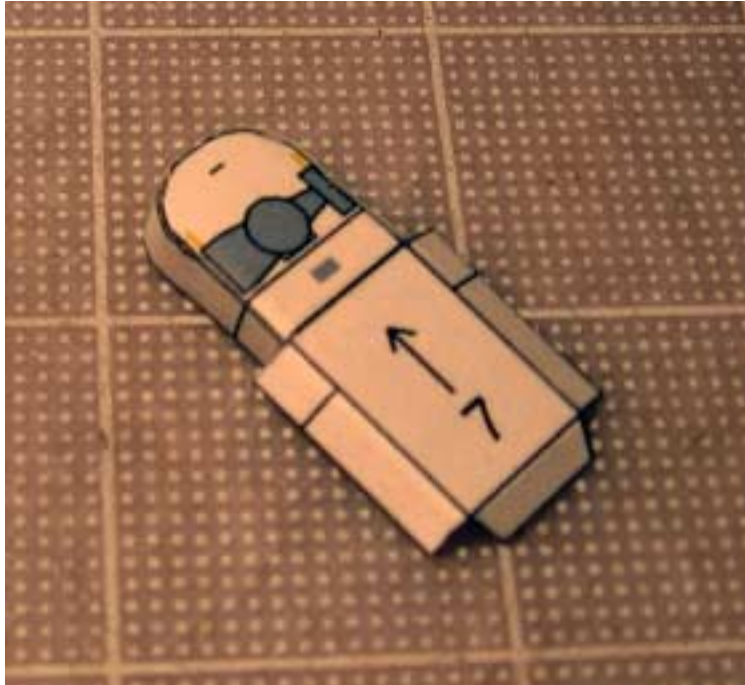


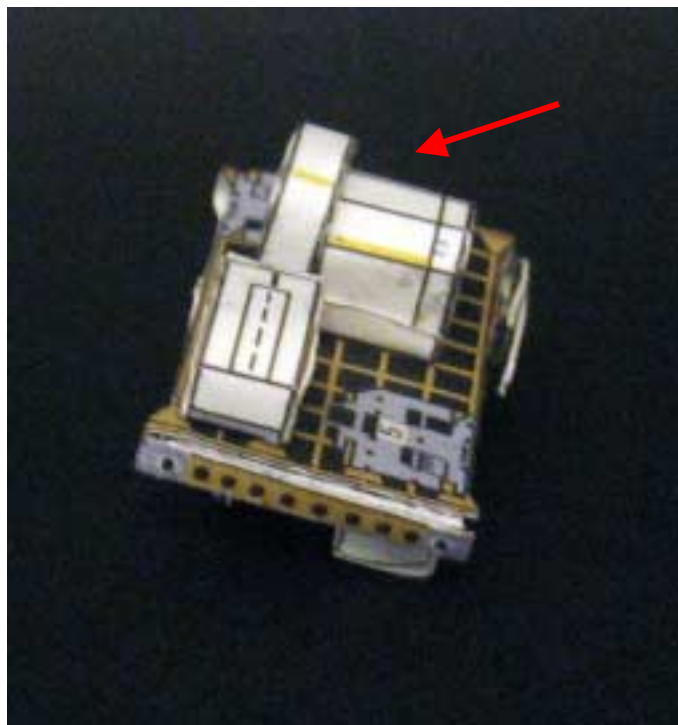
Parts for 1:100 model only



For 1:100 scale model only: a wedge has been added to keep the ESP-2 horizontal when connected to “Quest”. This wedge will prevent the platform from bending downward from the horizontal position.

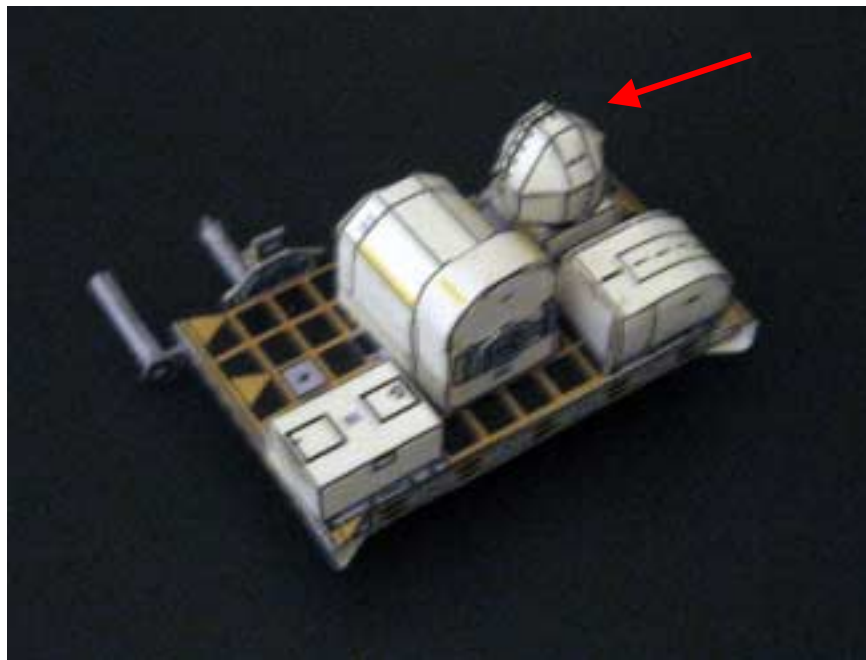
New design for the Flex Hose Rotary Coupler







These parts will form the Gyroscope with its thermal cover used for ESP-2 configuration during STS-118 and STS-120 missions. This part will be released for STS-118 mission as well at a later date along with the complete ESP-3 elements for that mission.



Enjoy this paper model!
<http://www.axmpaperspacescalemodels.com>