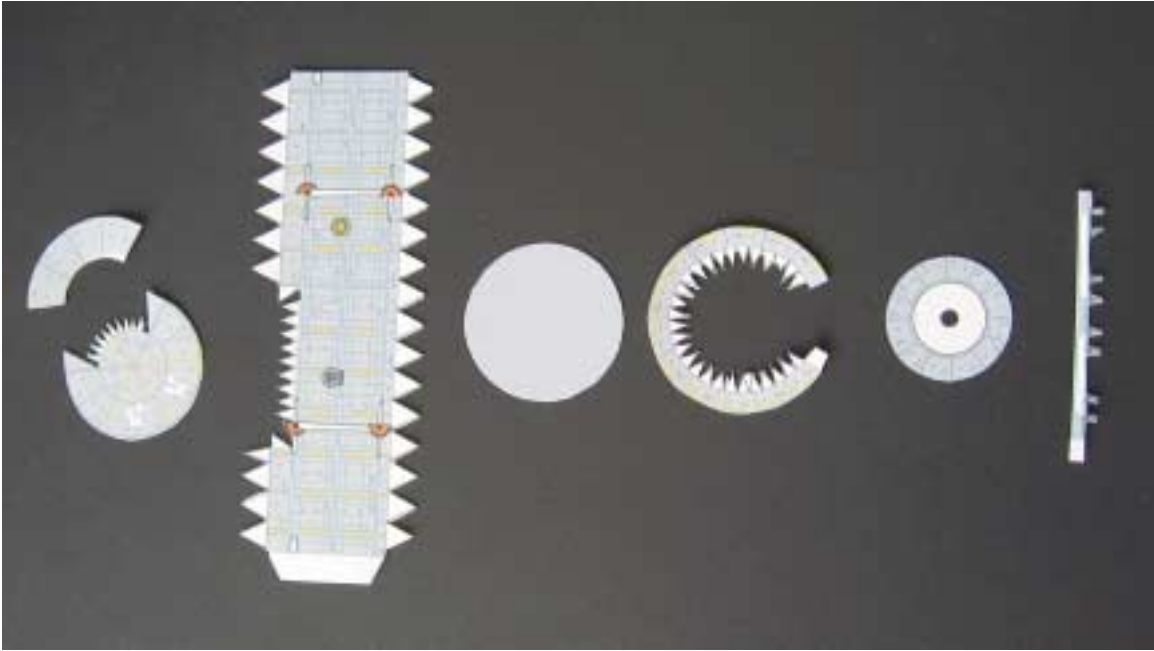
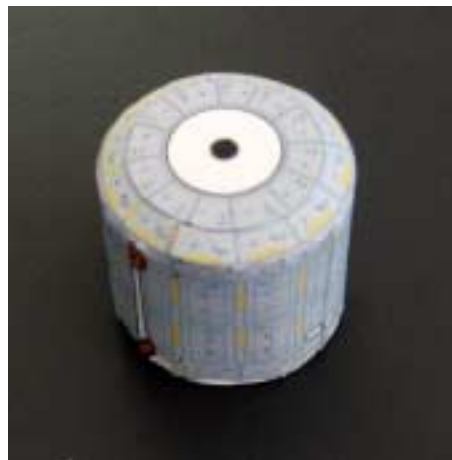


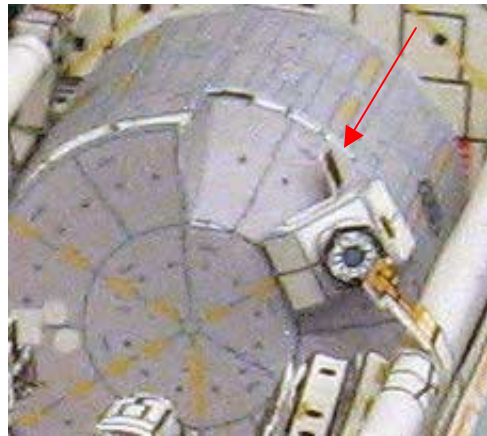
Building the Japanese Experiment Logistic Module – Pressurized section



Parts needed for this build. (This belongs to the draft model. The final model differs slightly)







Arrow points to a visual target (black rectangle)

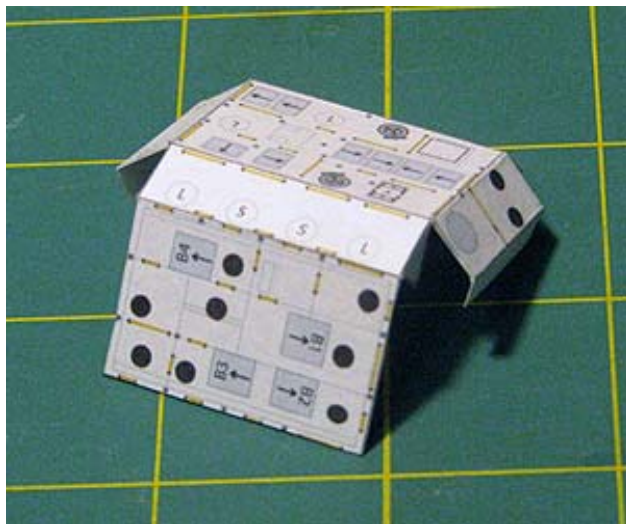
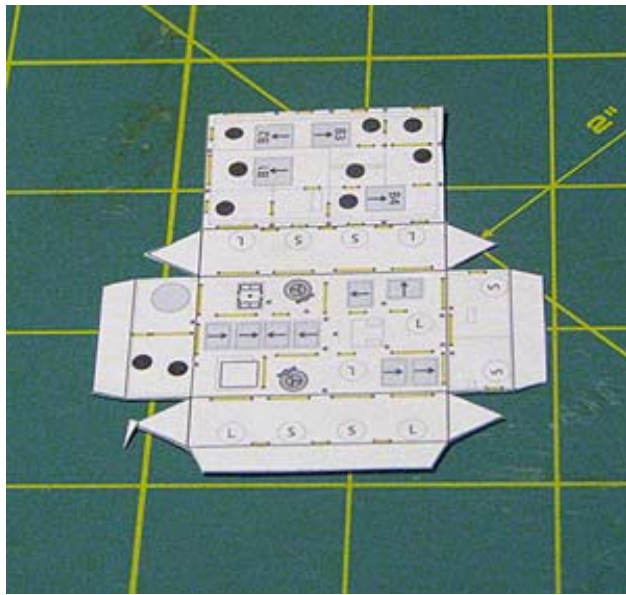
NASA gallery website has photos for this mission that are of great value for reference.

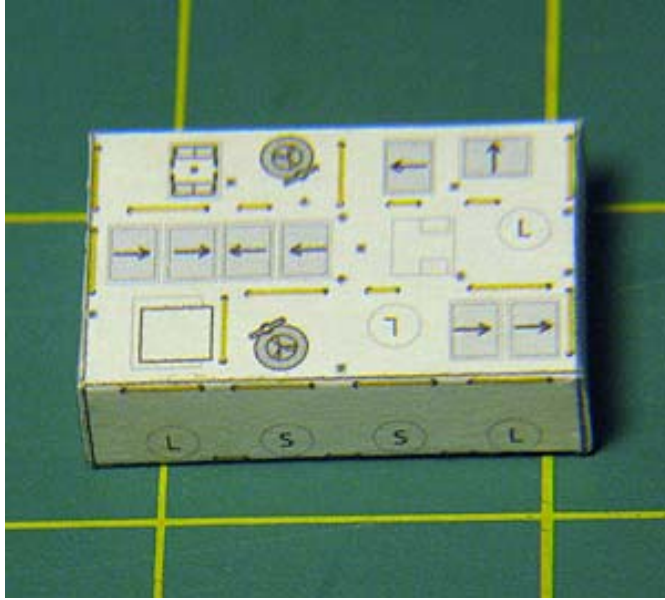
Photos show the position of the other elements when building this Docking System. Note how the side thin parts are glued at the bottom of the Docking System.



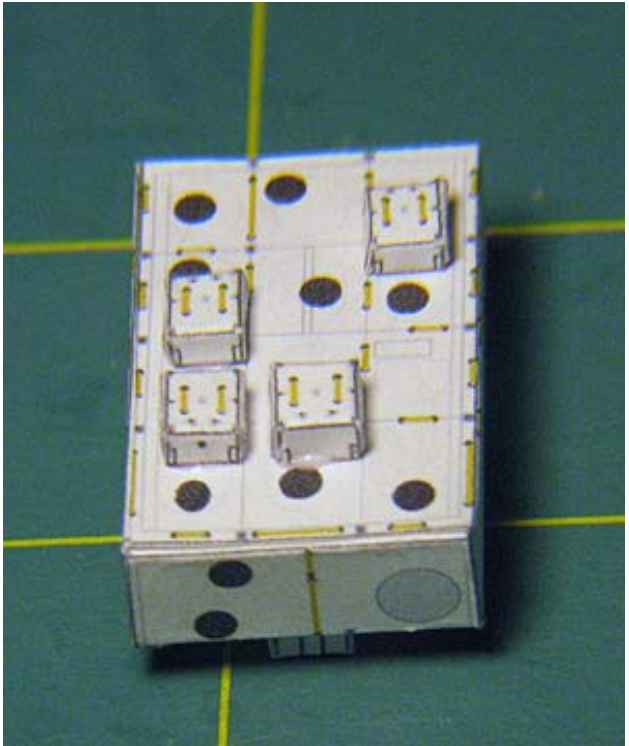
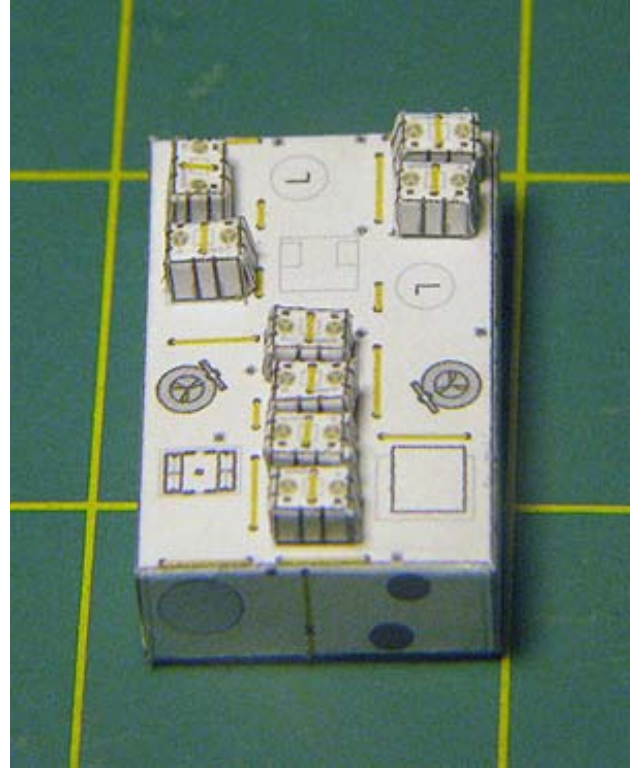
Note location of KU-band antenna that is glued on the tab from the right payload bay door.

Building the JEM Exposed Facility (EF) – (Bays 4 to 7)

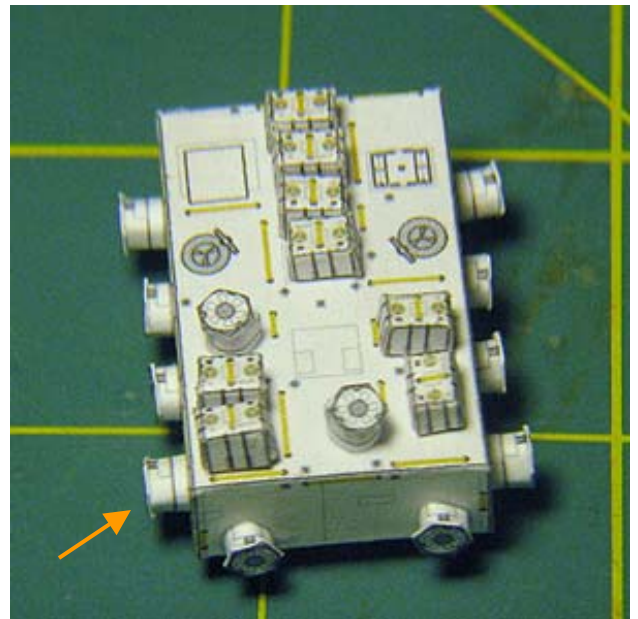




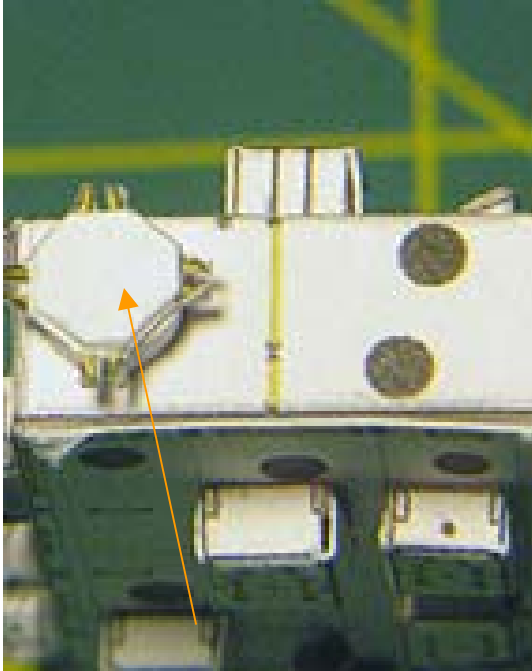
Glue the 8 small boxes following the direction of the arrows. These are the **Robot essential Orbital Replacement Units (R-ORU)**



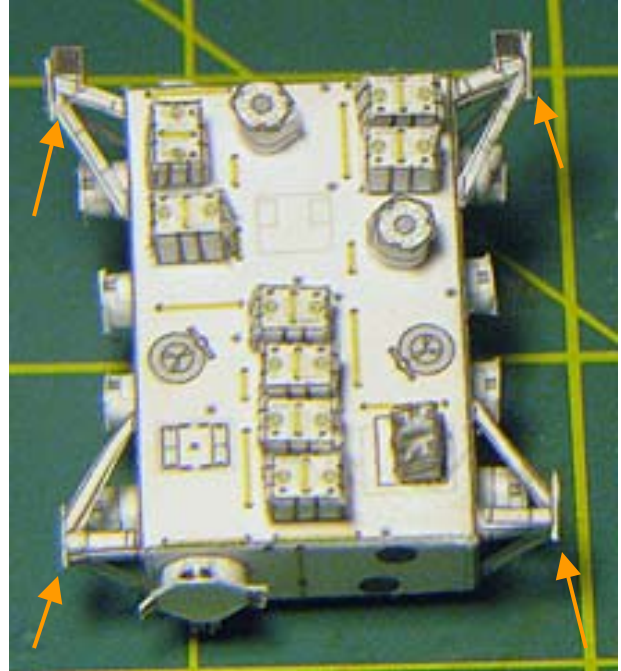
The underside of the JEM-EF showing the 4 **EVA ORU's (E-ORU)**



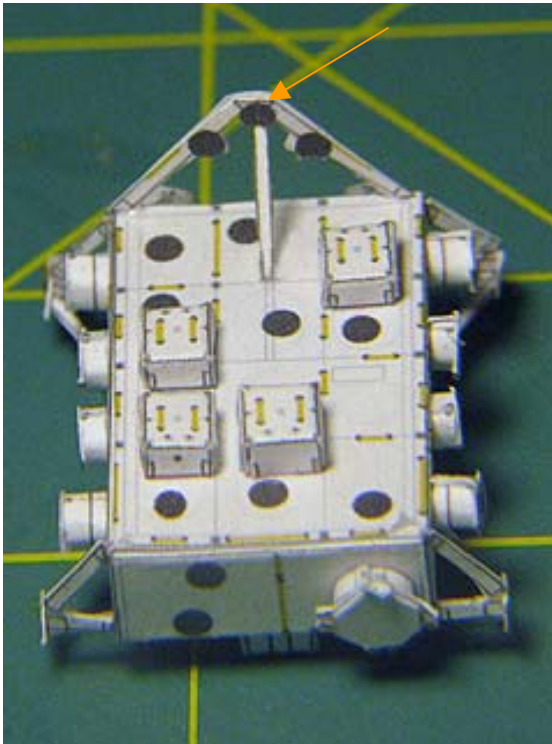
Then glue each of the Exposed Facility Units (12) covering the circles on all sides. Note that there are smaller (S) and larger (L) units.



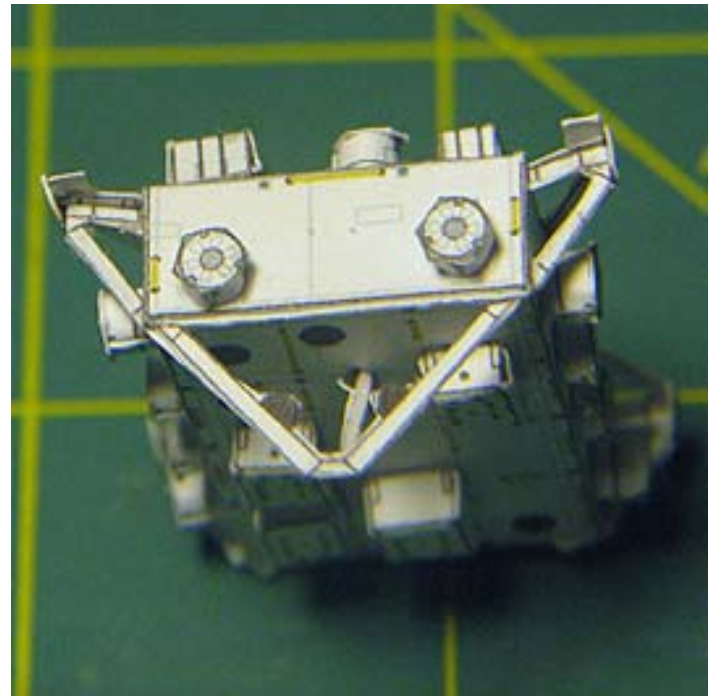
Location of the Berthing mechanism that attaches to KIBO.

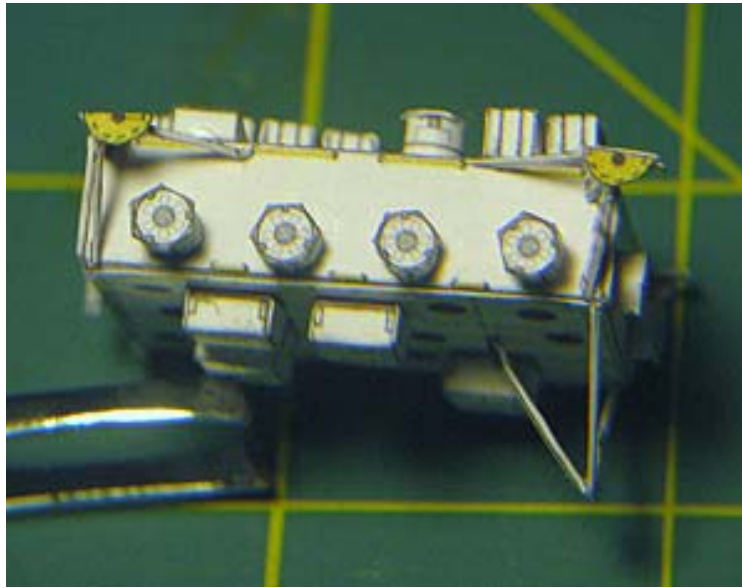


Note the location of the Trunnion attachments for the payload bay.

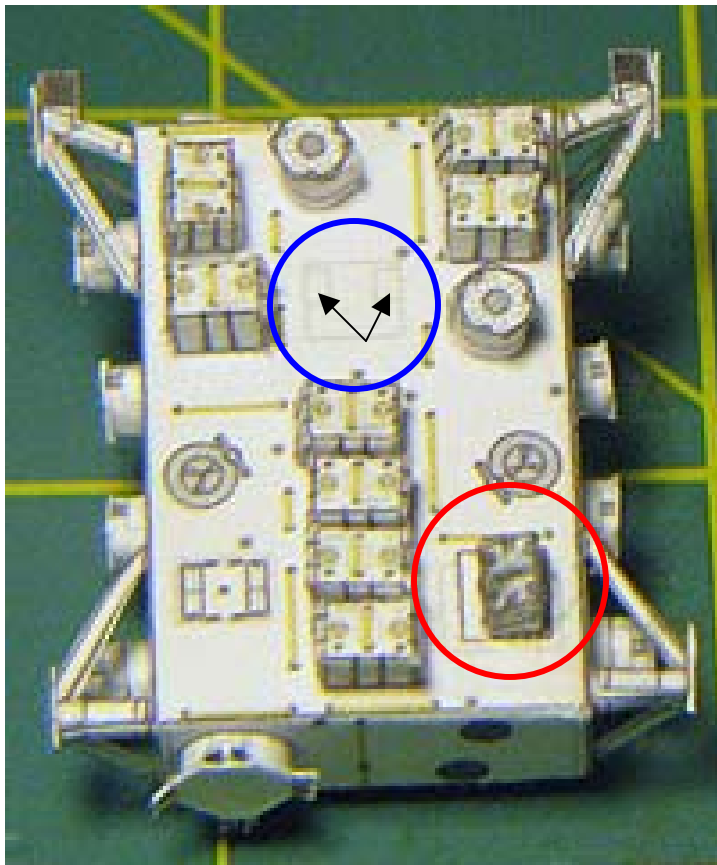


Note location of fifth attachment point to the payload bay.





Visual Equipment and Small Fine Arm Stowage Equipment (SSE)



Two other elements were added to the final model but not shown on this beta model.

The blue circle indicates where the **Visual Equipment** is located. The 2 small squares are where these extra parts will be glued vertically.

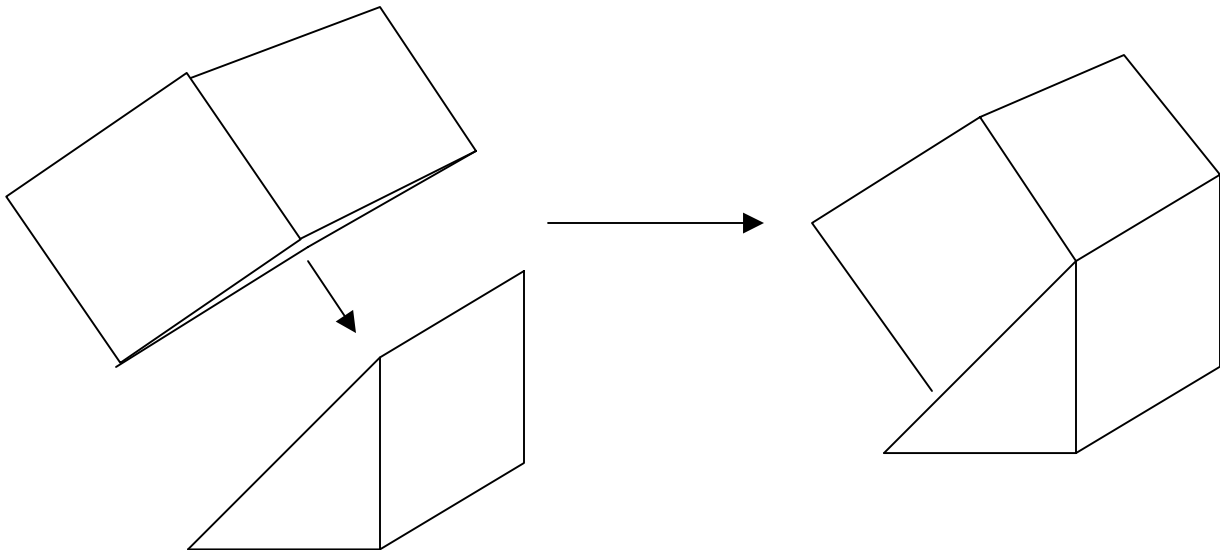
The red circle is the SSE area. On this beta model only one part is shown. The diagram on the next page shows how the **SSE** is configured for this mission. On a future Shuttle mission, the Small Fine Arm will complete this SSE.

Visual Equipment

Simple design for 1:144
payload bay
configuration model
only.
A separate design will
be available for a Space
Station configuration at
a later date.



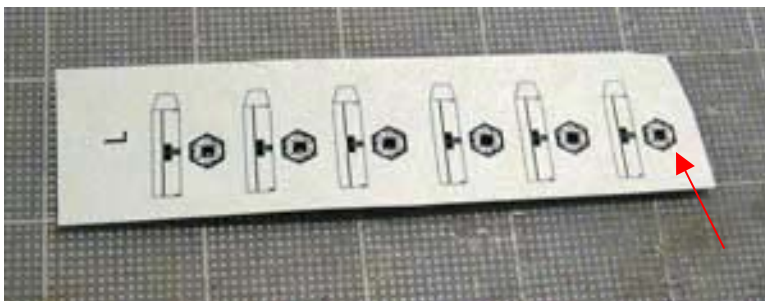
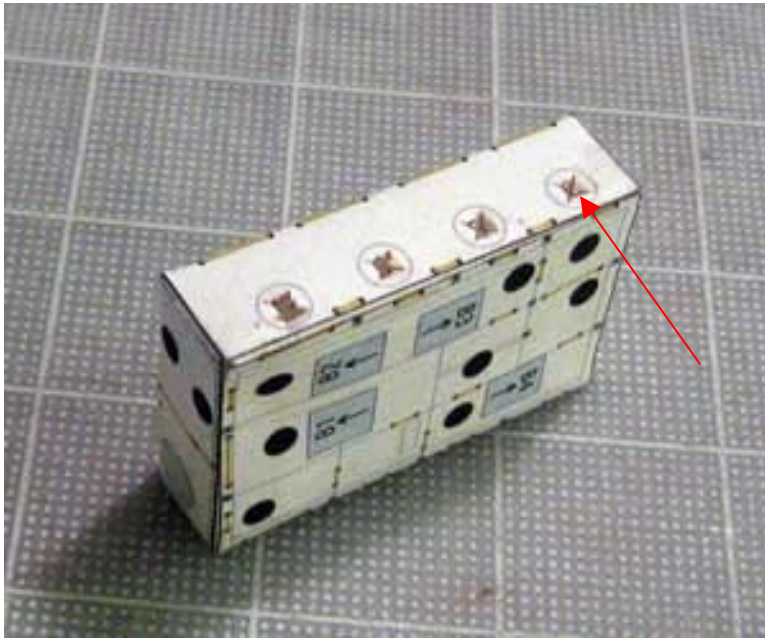
Small Fine Arm Stowage Equipment (SSE)



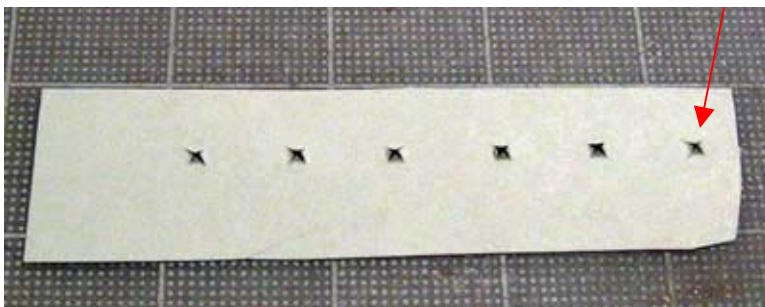
Putting the model together with KIBO

The JEM-EF has been designed to attach to the KIBO module through a rectangular connector. It is glued permanently.

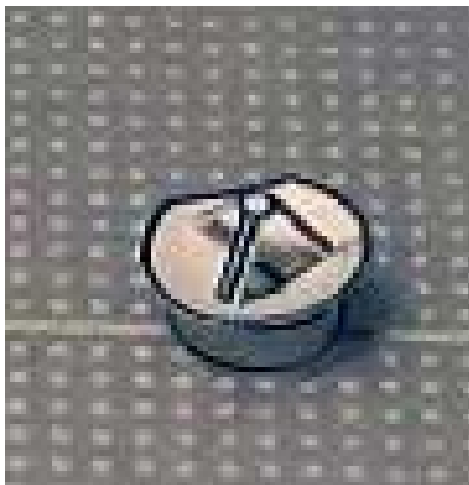
The 3 external payloads have also been designed to attach to the JEM-EF, but are not glued. These payloads are temporary elements.



All the red "X" inside the circles that surround the JEM-EF and on the attachment hexagons needs to be cut with a craft knife in order to make an opening so the external payloads can be attached without gluing.

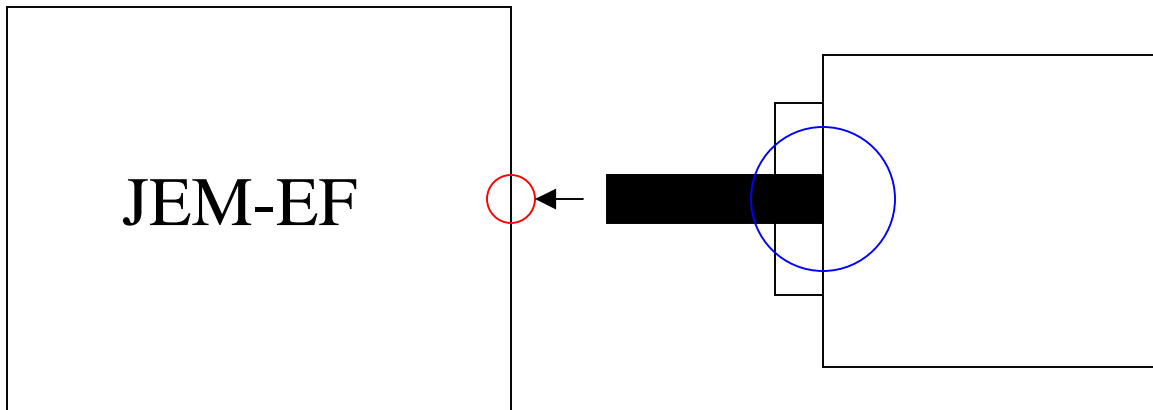


Special assembly for the ICS-EF

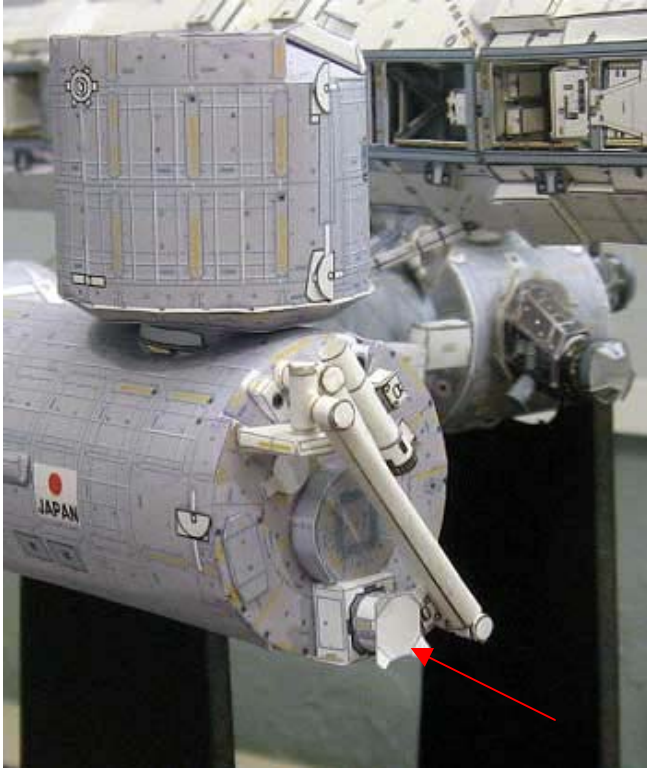




The other 2 external payloads are simple rectangular boxes and the assembly is straightforward. The arrow shows the black cylinder that serves as a connector for attachment to the JEM-EF.



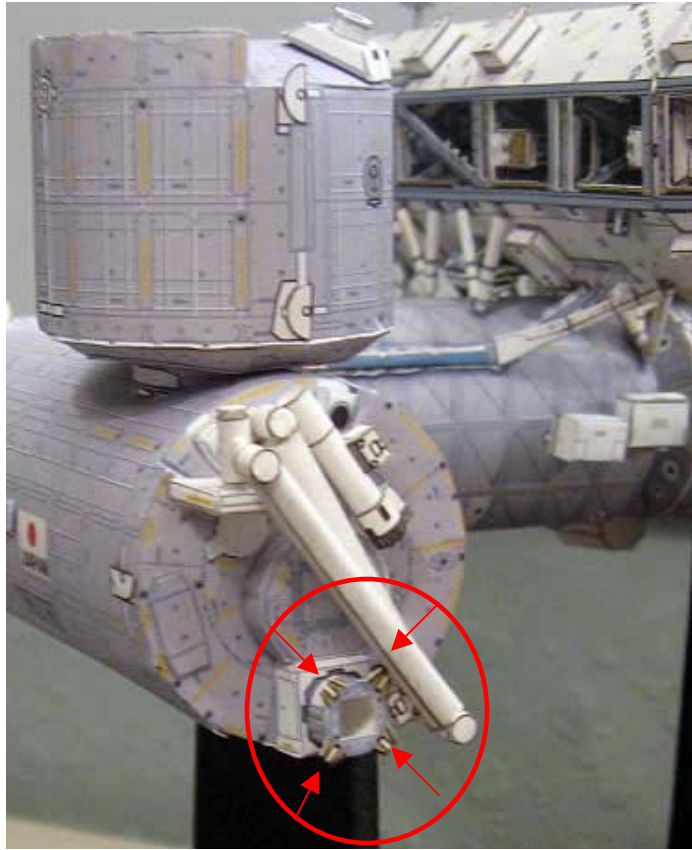
Note that the black cylinder perforates the hole on the payload attachment (blue) and also perforates the hole on the JEM-EF side, this way the payload is attached without gluing.



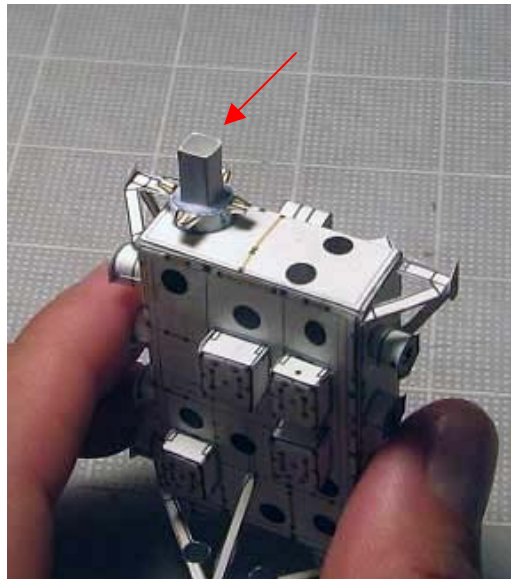
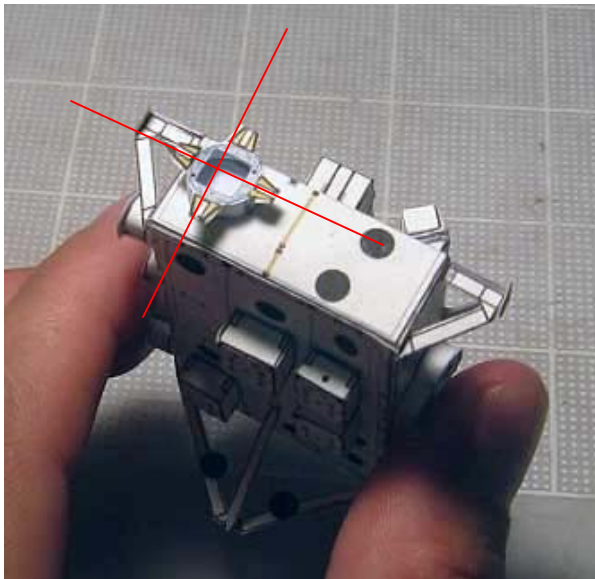
This is the original KIBO berthing mechanism in launch configuration. This part is available through STS-124 mission payload file.



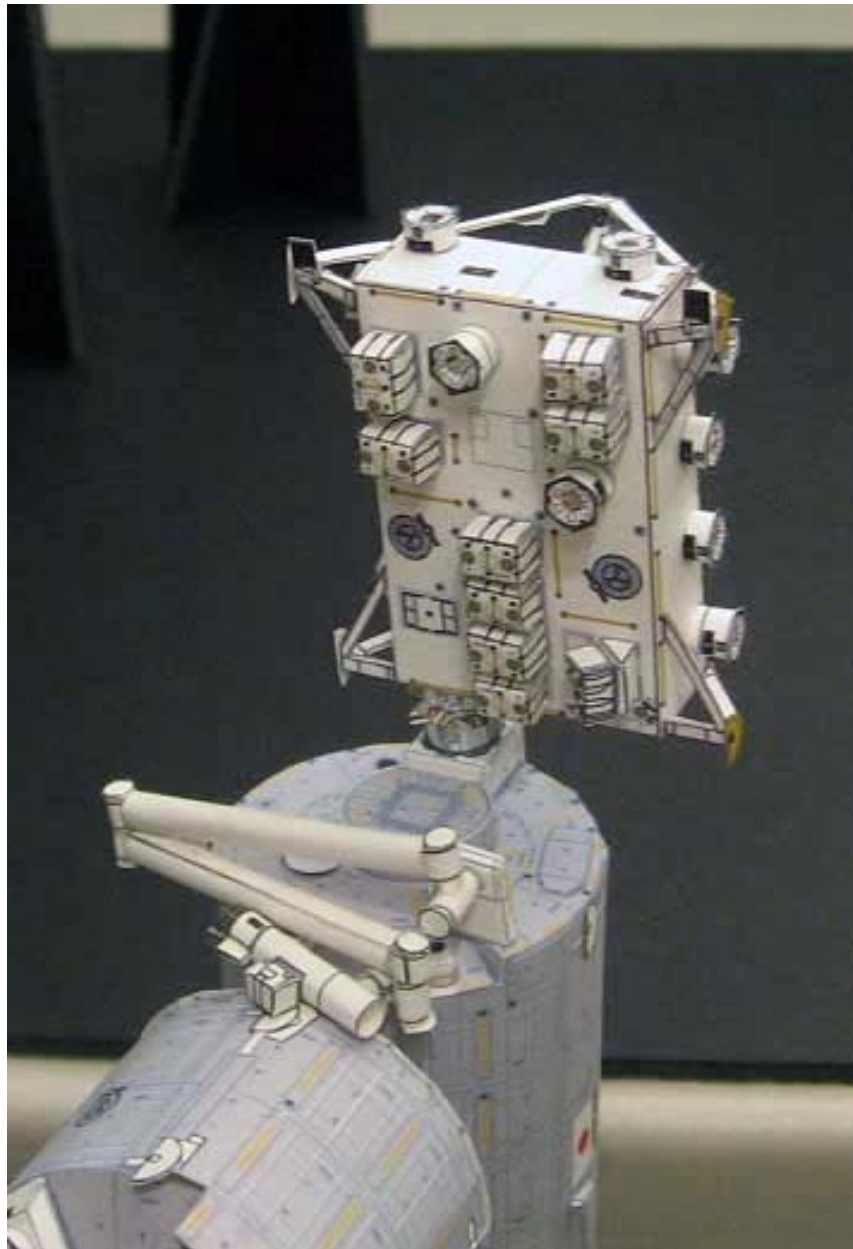
This is the berthing mechanism used to attach both KIBO and the JEM-EF for this mission. Note the square opening destined for a compatible connector.



KIBO with new berthing mechanism.
Note the orientation of the petals in X.



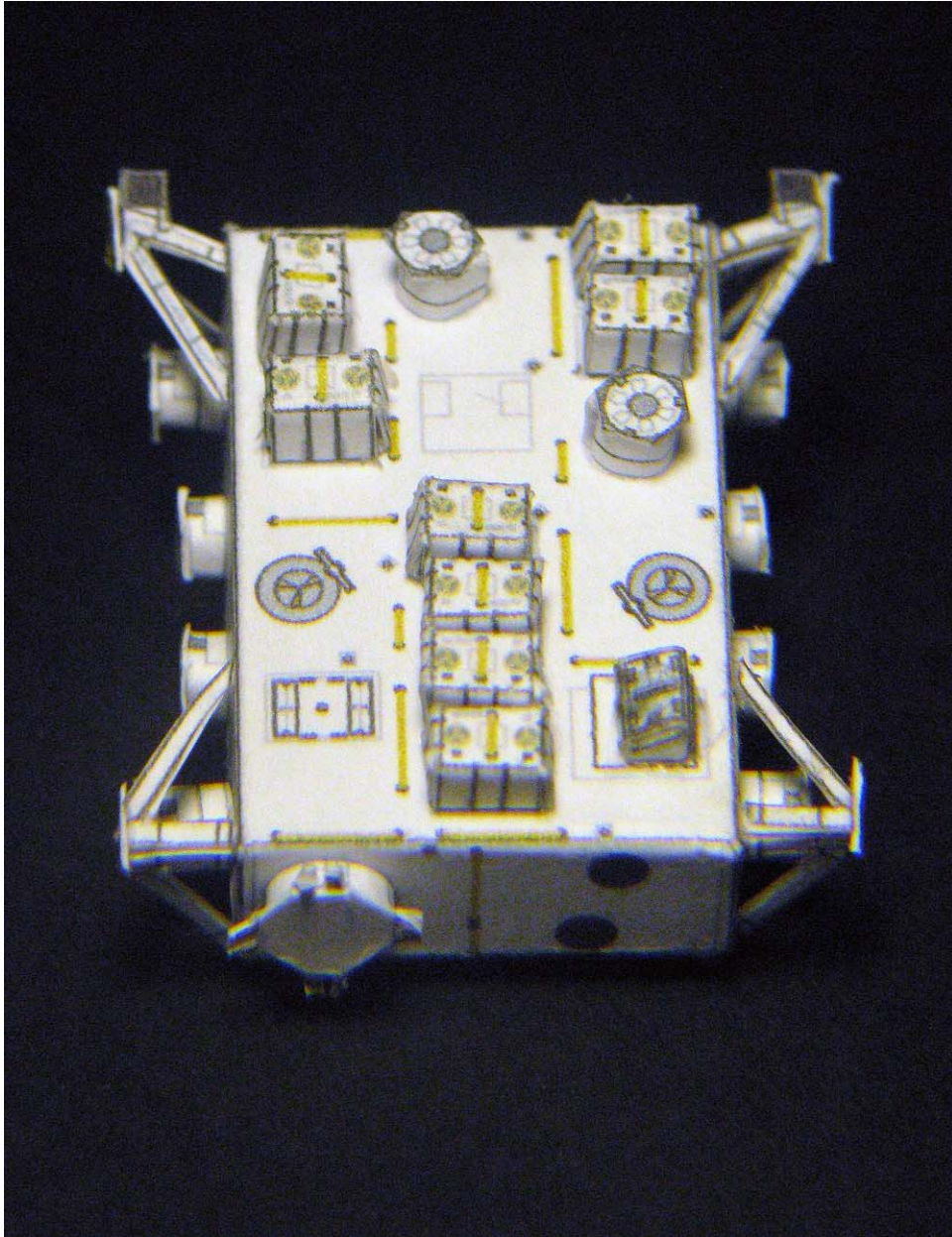
JEM-EF with berthing mechanism with rectangular connector. Note the orientation of the petals in +.

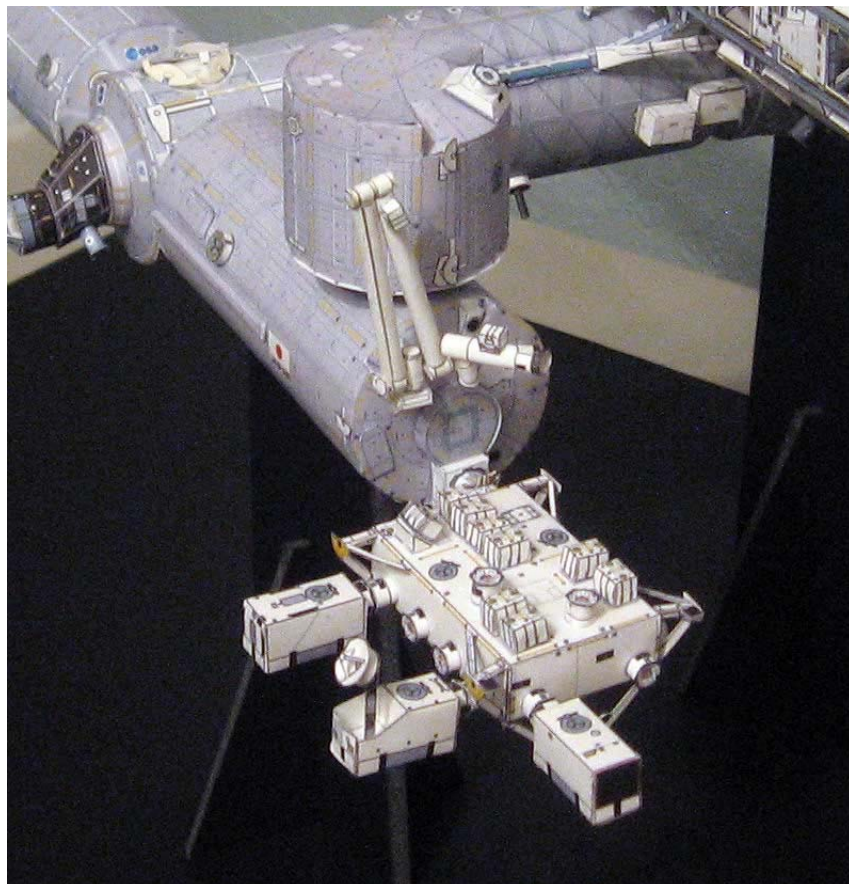
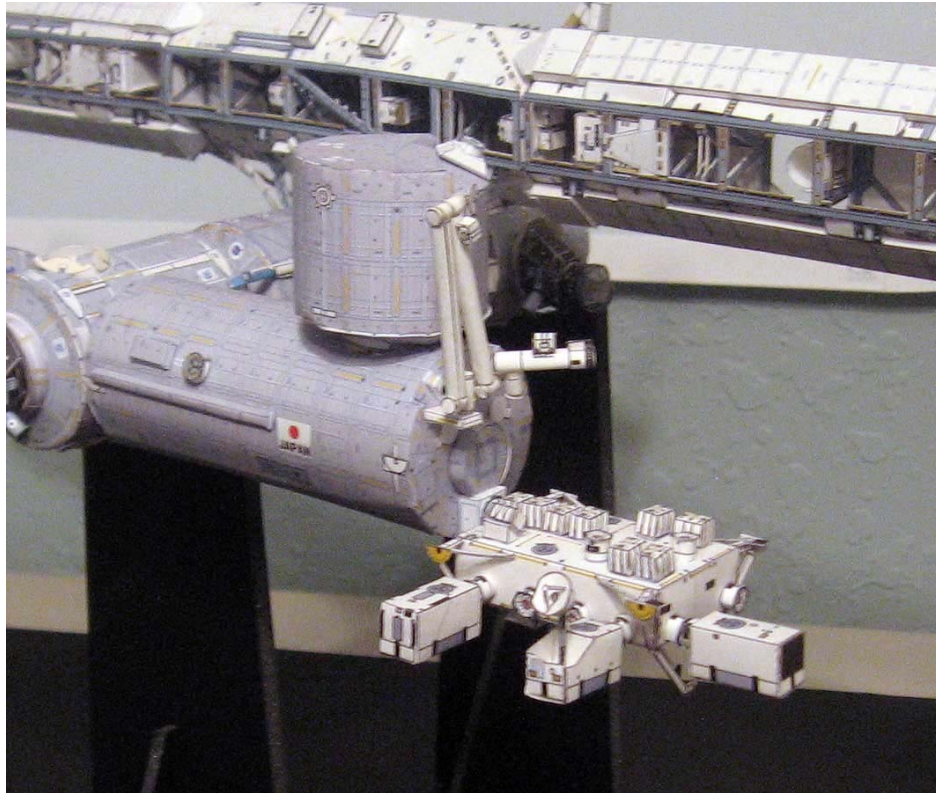


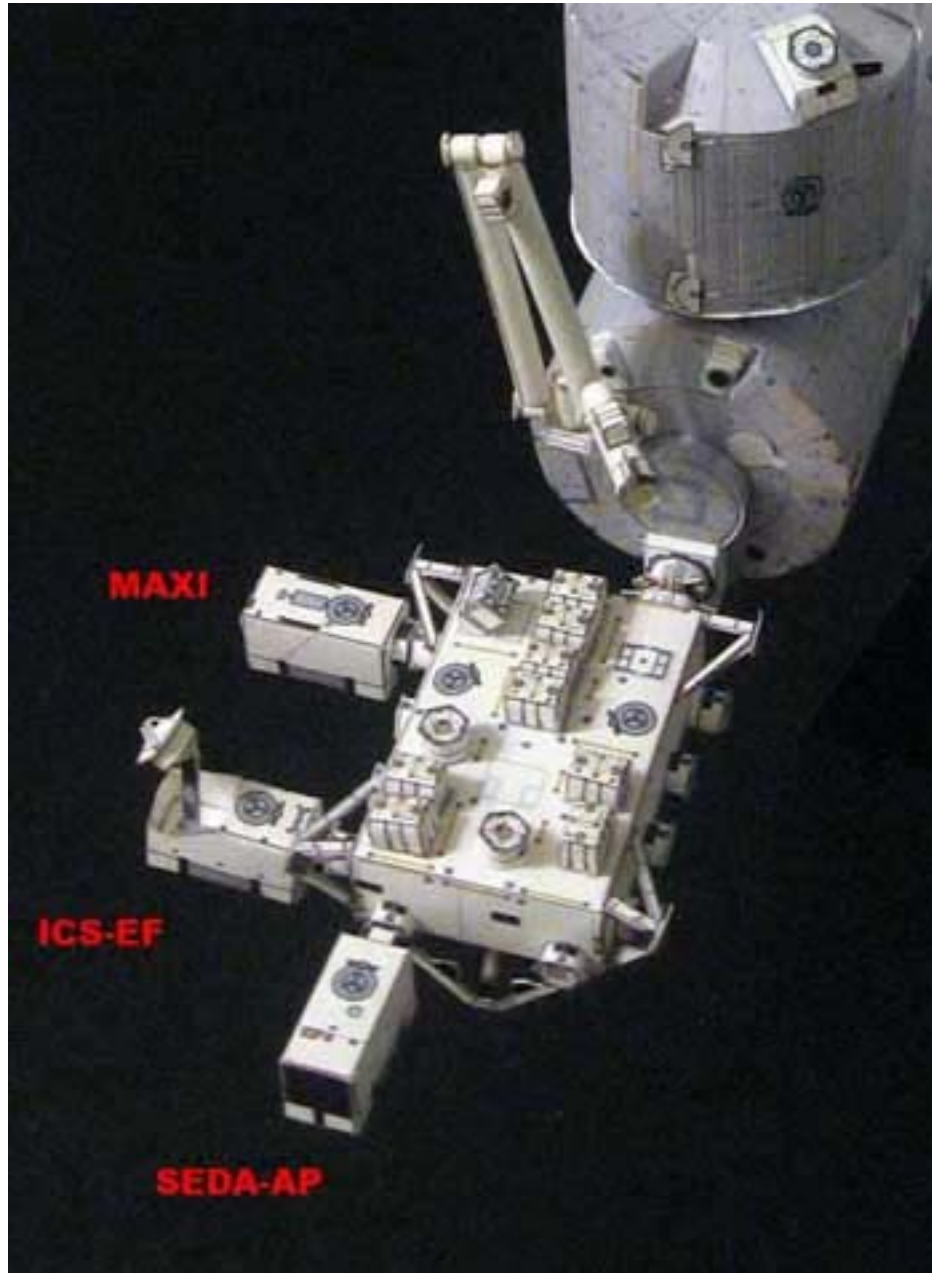
Critical step:

Glue both KIBO to JEM-EF and let it dry completely until it hardens.
Then, the external payloads can be attached.

Reference







Enjoy!

<http://www.axmpaperspacescalemodels.com>