

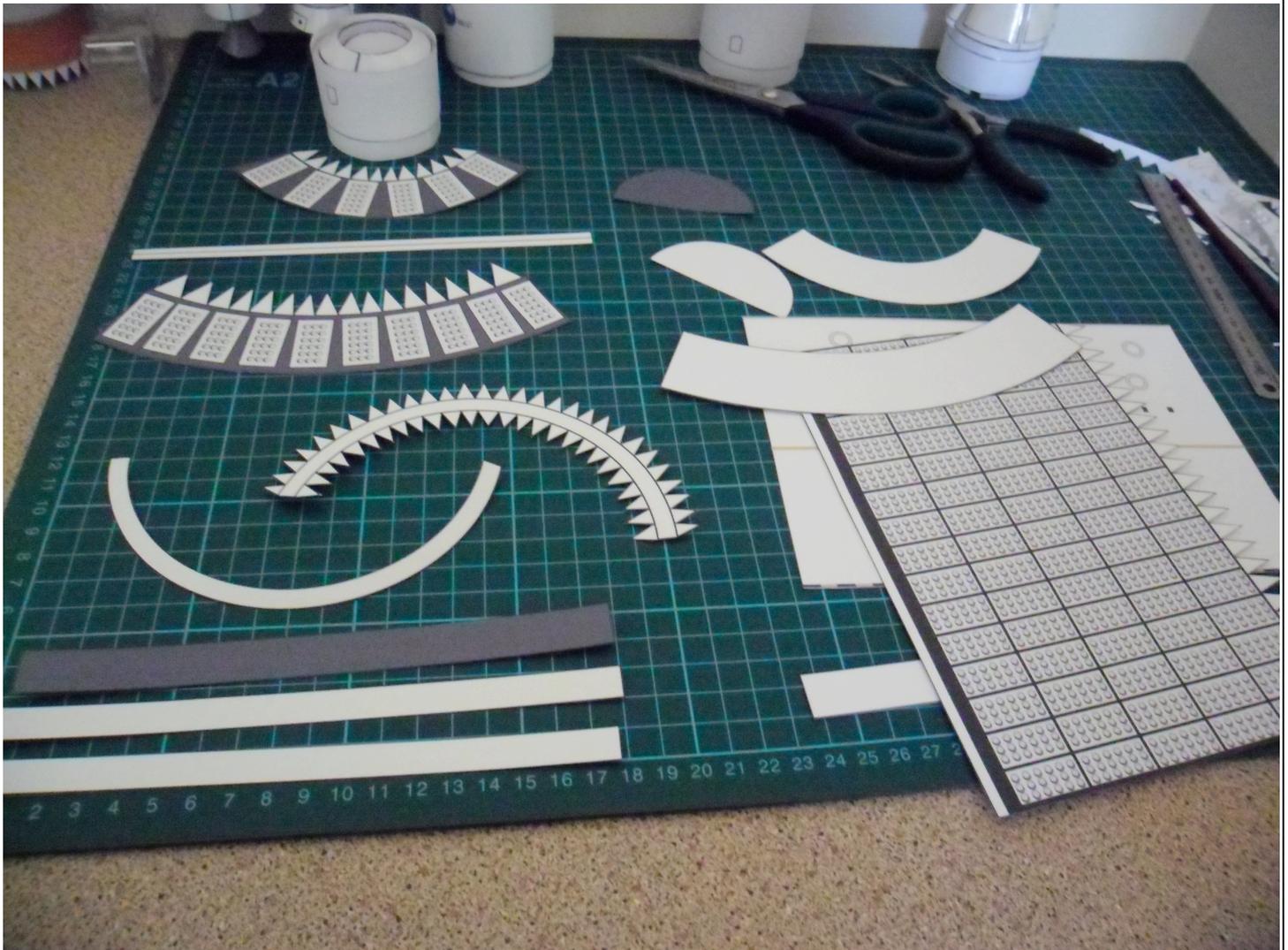
Instruction Manual: Ariane V

6-metre Diameter Payload Fairing

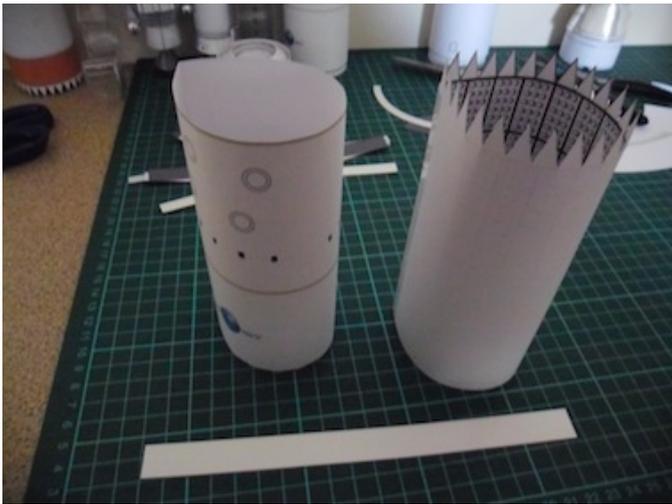
Designer's comments: This model has been designed based on engineering blueprints, conceptual diagrams and illustrations. No actual vehicle of this type has ever been built. As such, a certain degree of 'artistic licence' has been used to create a model that exhibits at least a modicum of realism.

The assembly of a model should follow a procedure that vaguely resembles the method for cooking a meal; i.e.

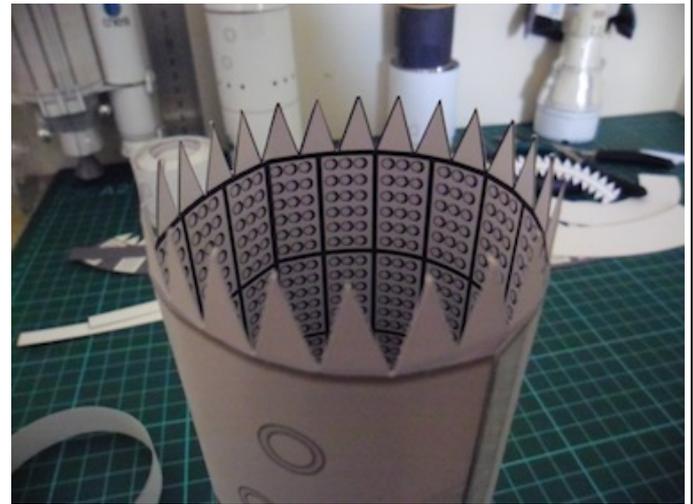
- Prepare a place where you can work, without distractions.
- Get all of your equipment (utensils) out and ready.
- Get all of your parts for the model (ingredients) printed, cut out and ready to start.
- Lastly, try to have a location for your model prepared in advance, so that when it is finished, you will know where to place it.



1. Cut out all of the parts and have them in front of you, ready to commence the assembly. Your parts should appear the same as the pieces that are shown in the above image.



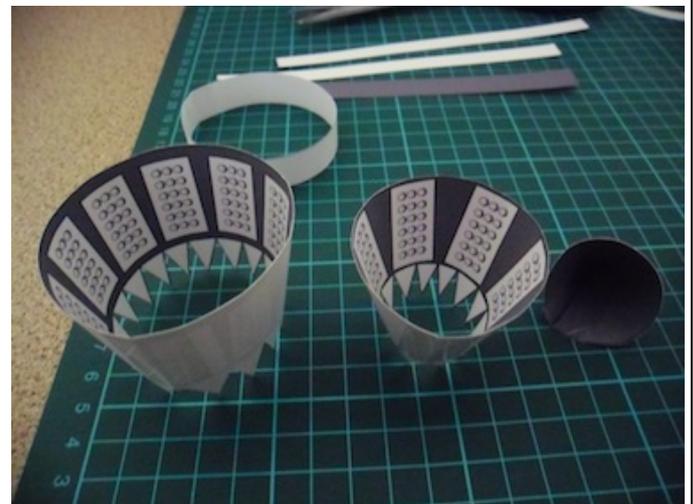
2. Roll the exterior and interior cylinders (F4-E and F4-I), gluing them together to create the main cylinder.



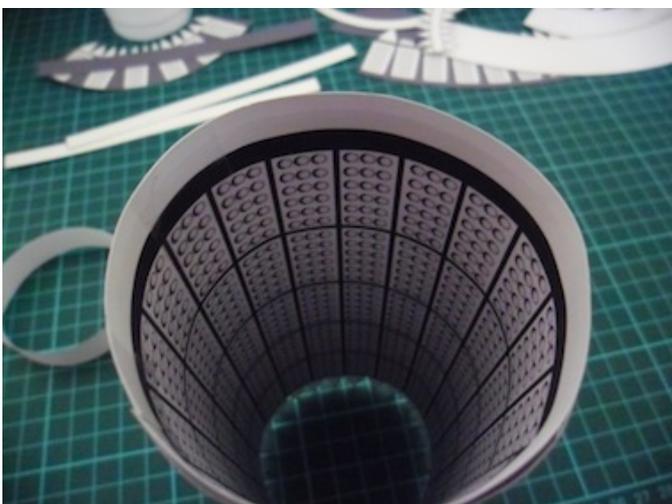
5. The upper portion of the fairing has the glue tabs visible and ready for connecting. These tabs will be glued to F3-I.



3. Notice how the base of the cylinder (shown upside down) has a small white band visible. This is the part F5-I.



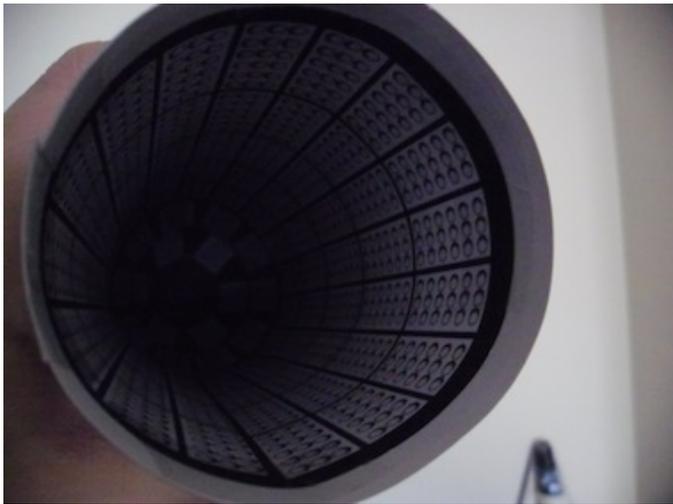
6. The upper cones (interior sections, F3-I, F2-I and F1-I) when they are connected and ready to be glued to the cylinder.



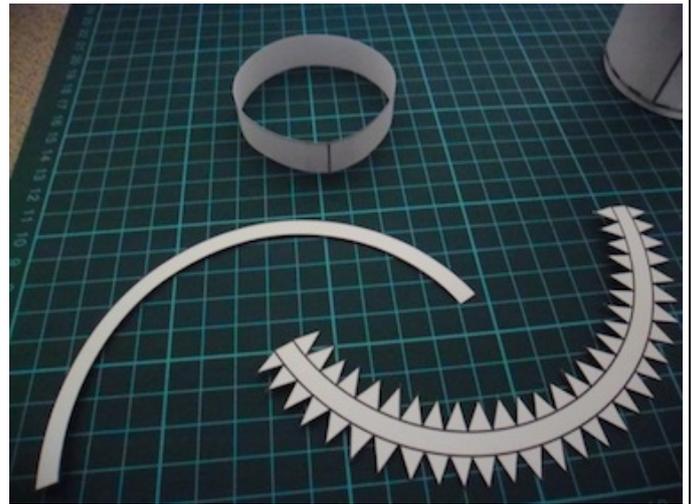
4. This white band (F5-I) is the “connector” to the lower section of the fairing.



7. The parts F3-I, F2-I and F1-I are glued to the interior. F3-E, F2-E and F1-E (to the exterior).



8. The interior of the finished cylinder section. The camera really didn't do justice to the final model.



11. The parts F6-E (and glue tab) with F7-E. These will connect the fairing to the Ariane V.



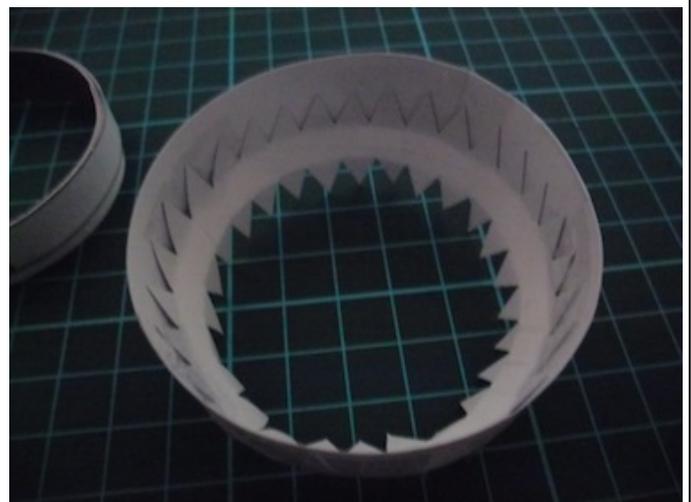
9. The base of the fairing will be capable of being "connected" to one of the Ariane V upper stages.



12. F6-E is glued together to form a truncated cone. The glue tab and F7-E are also glued together.



10. The two cylindrical bands (F6-I and F7-I) will form a cylindrical base for the main fairing and a connection to the upper stage. **Note:** do not glue the pieces together yet – see instruction # 15 (below).



13. The glue tab is attached to the part F5-E. However, the main truncated cone of the glue tab is left unattached...



14. Glue the part F-E to the truncated cone section of the glue tab.



17. You should now have two separate pieces of the fairing: the main cylinder and the connector.



15. Glue the part F6-I to the outside of the lower tabs. Glue the part F7-I to the inside of the tabs.



18. The connector should fit exactly on top of an upper stage of the Ariane V.



16. This glue the part F7-E to the outside of F6-I. The lower section of the fairing should look like this. My model (fairing) was built using sticky tape but all the pieces can be glued together.



19. The main cylinder can then fit on top of the connector... allowing the entire fairing model to be placed on to of an existing Ariane V model (see next page).



Due to the enlarged size and the absence of any internal reinforcers (taking up precious room), your model should be able to accommodate a variety of different satellite models.

20. This is the finished model of the 6m fairing on top of an early test model of the Ariane V (1:96 scale). Notice the difference in the diameter of the core of the Ariane V in comparison to the enlarged fairing. The original Ariane V (5.2 metre diameter) fairing is seen at the bottom-right of the image.