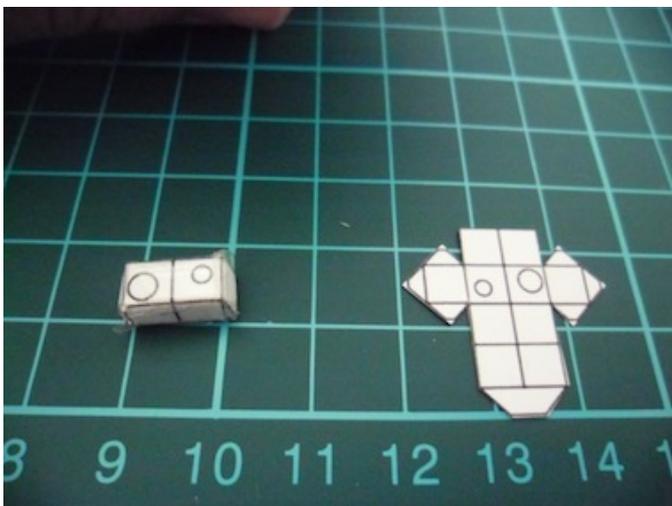


56. A “science pod” will be folded to create a rectangular prism – to be glued at the rear.



57. As you can see, the science pod will be only a centimetre in length (and that’s at 1:96 scale).



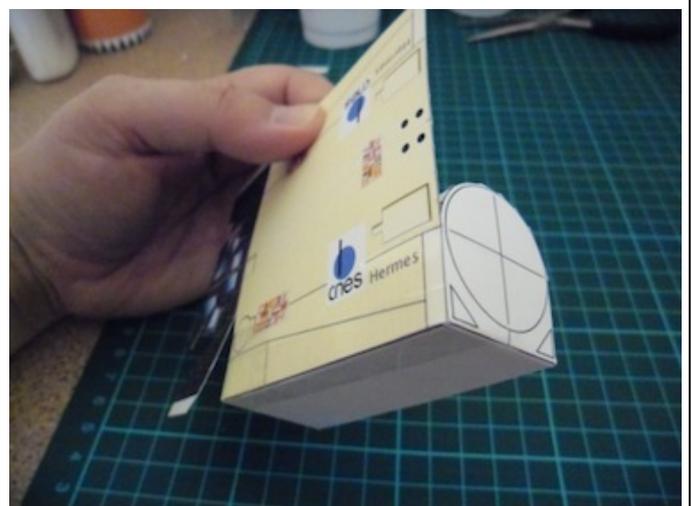
58. The science pod is glued inside the rear support ring. Design drawings of the Hermes (circa 1990) show small science pods at the rear of the vehicle.



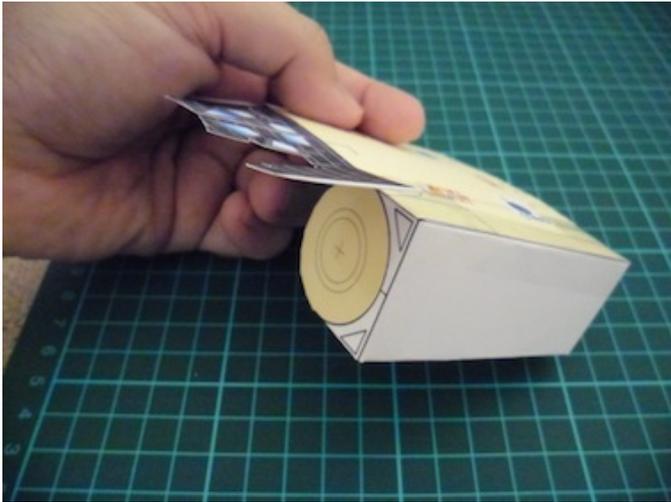
59. These two parts make up the main fuselage of the Hermes space shuttle.



60. You need to be especially careful with the cutting out of the “fiddly bits” around the cockpit windows.



61. Glue one side of the fuselage down onto the internal bracing. Bend the fuselage over the side.



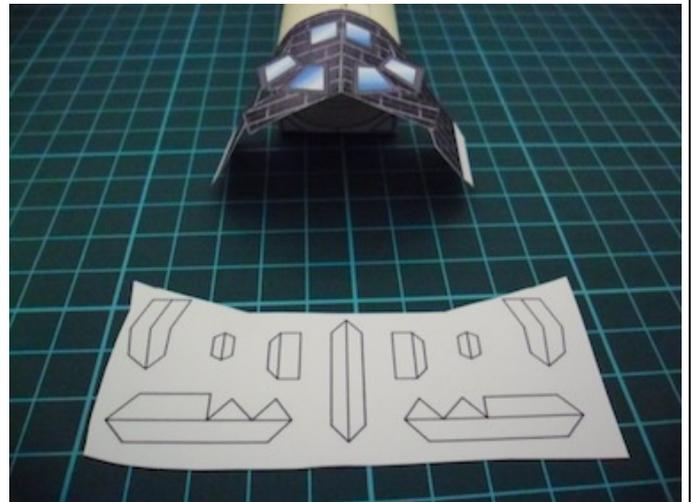
62. The ends of the internal support can be glued to the fuselage to provide rigidity.



65. You have the choice of gluing the internal support bracing with the “docking connection” facing either way (forward or backward).



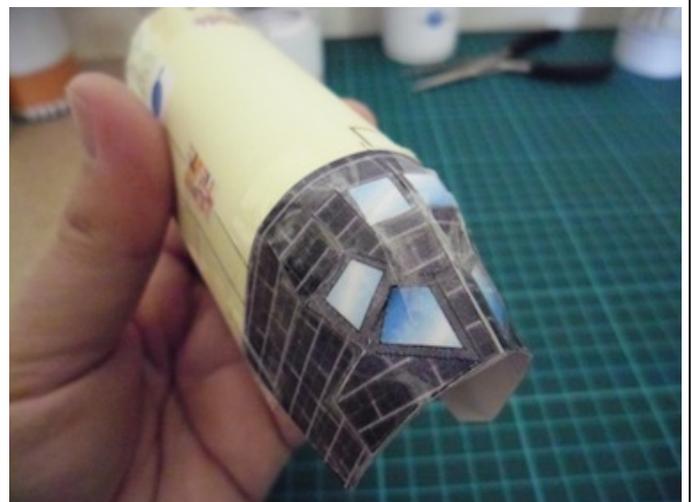
63. The fuselage will look like this... a cylindrical section with a lot of delicate fiddly bits at the front.



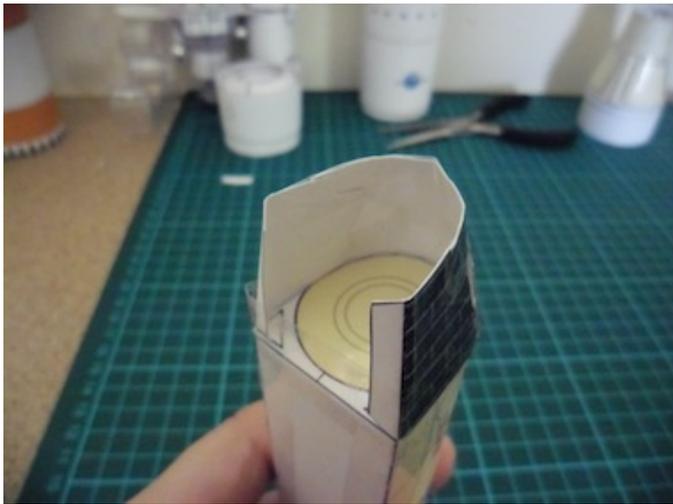
66. These are the glue tabs for the forward section of the fuselage (around the cockpit windows).



64. Your model should be even at the back (i.e. no overhanging portion of the fuselage).



67. If you use sticky tape, your cockpit will end up looking like the above image (it will look better if you use glue).



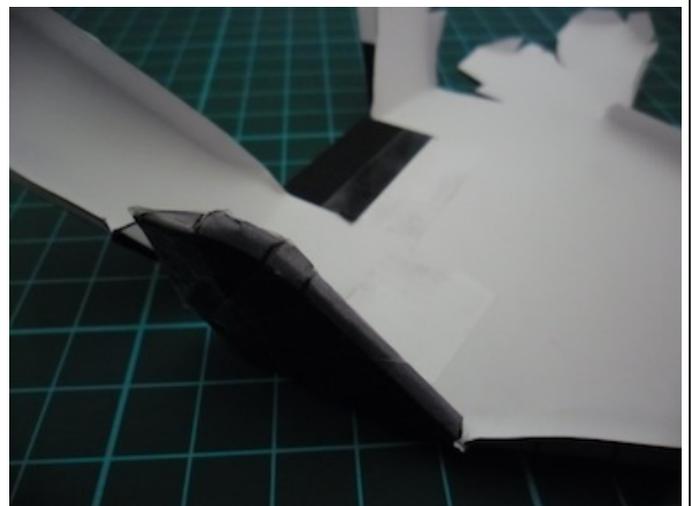
68. The forward cockpit of the Hermes, glued together as a single piece.



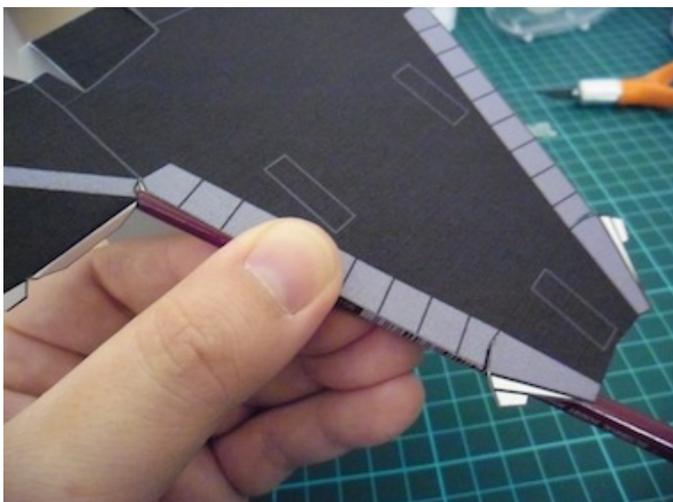
71. The "winglets" are glued down to the wing, resulting in a 90° between the wing and the fins.



69. To maximize structural strength, the entire wing surface area has been designed as a single part.



72. Here is another view of the winglet/fin. The curved section is made from several small tabs.



70. Take a thin instrument (such as a very fine paint brush) and roll the leading edges of the wing around the handle.



73. The main section of the [upper] wing is then folded into position. The "hinge" of the fold is the rear wing-flap.



74. Here is one wing section and tail-fin folded into position, with the other side still unfolded.



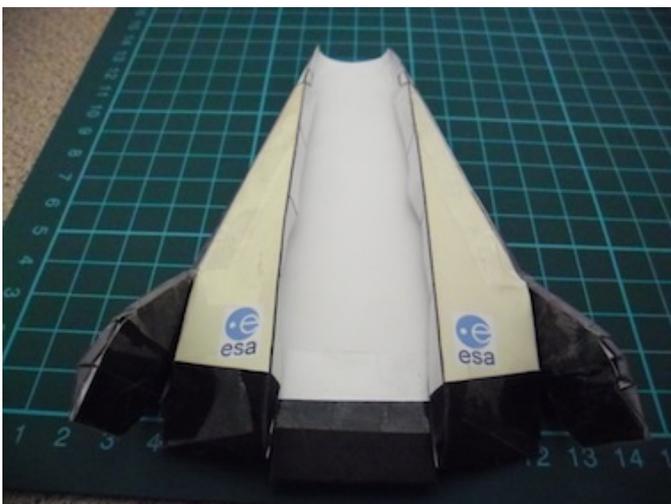
77. The upper wings should be “standing” above the lower wing section due to the side panels.



75. This construction has been done to provide a comparison between the folded and unfolded parts.



78. In this image, the side panel (for one wing) is clearly visible. This will be used as a glue tab.



76. After you have done the same procedure to both sides, you can then see how the overall wing design of the Hermes is to be created.



79. The side panels can have glue put onto them and the central fuselage can then be put into position – but don't do this yet! (see below).



80. The front of the Hermes after the fuselage has been put into position (to check for any cutting errors).



83. Remove the fuselage from the wings. Glue (or sticky tape) the nose section to the fuselage.



81. I have balanced the Hermes [forward section] on the resource module to check for errors.



84. Here is another view of the finished nose section.



82. These parts make up the nose section of the forward fuselage. All the parts are tiny... so you will probably need tweezers to manipulate them.



85. Put glue onto the wing supports, then slide the central fuselage into the slot in the centre of the wings.



86. There should be glue on the tabs (white sections visible in the above image) when you join the parts.



89. Your Hermes should look like this, assuming that you are building the “flight ready” version.



87. The fuselage should slide into position – perhaps with a bit of effort.



90. The finished Hermes with the resource module glued (or sticky taped) to the forward fuselage.



88. Once the fuselage and the wings are together, wait for the glue to dry before attempting to attach the Hermes shuttle to its resource module.



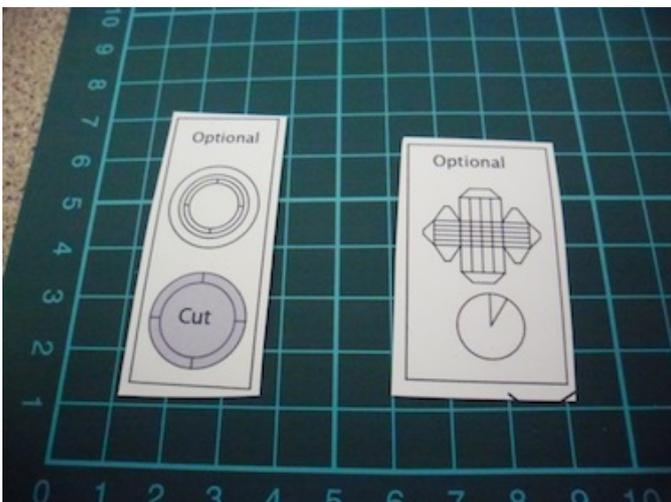
91. Here is the rear of the finished model. **Note:** the white support cylinder at the rear is only white on this test model. Your rear cylinder is coloured yellow, just like the rest of the Hermes.



92. Your Hermes should fit onto the upper stage adaptor cylinder and still maintain balance.



93. This is what your Hermes should look like when finished and mounted onto the upper stage.



94. The two sets of parts (above) are optional. The left makes a hatch for the Hermes when in the "re-entry mode" the other part is for a small antenna.

Left: the finished Hermes on a test model Ariane V.

