



Project Mercury - Little Joe Launch Vehicle

Mission LJ-1
Cardmodel in 1:48 scale
Designed by Michael Urban

Thanks to David Weeks and Peter McMillan for providing information & images.



Instructions

- Cut holes where marked with red “C”
- Laminate parts with underlined part numbers to a total thickness of about 0.5 to 0.8 mm.
- Fold parts where marked with an indicator next to the parts

Little Joe

Roll part LJ1 into a cylinder and glue together using strip LJ1A.

At the top of the cylinder, glue part LJ1B so that the teeth of the connecting strip point upwards.

Glue part LJ2 into the top of the cylinder.

Glue part LJ4 to the back of LJ3 so that the black borders are visible through the holes of part LJ3. Glue both parts to the bottom of the cylinder, slightly recessed, so that the disk sits on the top line of the darker grey fields at the bottom of part LJ1.

Roll parts LJ5 to LJ8 into cones and into the holes of part LJ4 so that the cones match the disk at the marked lines. The cones should point to the outside.

Roll and glue parts LJ19 to LJ22 into cylinders and close at one side with parts LJ27-LJ30.

Roll and glue parts LJ23-26 into cylinders and glue to parts LJ27-LJ30.

Roll and glue parts LJ31 to LJ34 into cones and glue into parts LJ23-26, so that the parts meet at the marked lines. Glue all 4 assemblies to part LJ32 at the white circles. The engine nozzles should point to the outside.

Fold parts LJ15-LJ18 and close with parts LJ11-14, producing the fins. Glue the fins to part LJ1 at the marked white triangles.

Roll and glue LJ9 into a cone using LJ9A. Close the cone on the smaller side with part LJ10. Glue the assembly on top of part LJ1, using the protruding connection strip.

Mercury Boilerplate Capsule

Roll and glue part M1 into a cone using strip M1A. Close at top with part M2, at bottom with part M3.

Roll and glue part M6 into a cylinder using strip M6A. Close at one side with part M4, on the other side with part M5. When glueing M5, make sure that the black triangle points to the seam of part M6. Remember the position of the marked braces - they indicate the position of the escape tower struts.

Roll part M7 into a cone and glue together using M7A. Close at top with part M8.

Form part M9 into a little hat and glue on top of M8.

Glue the M6 assembly onto the top of the capsule and the M7 assembly on top of the M6 assembly.

Escape Tower

Roll ET1 into a cylinder and glue together using part ET1A. Close on one side with part ET2, on the other side with part ET3.

Form part ET4 into a little head and glue to part ET2.

Roll part ET8 into a cylinder and glue to the center mark of part ET4.

Roll parts ET5 to ET7 into cones and paint the inside black. Glue to the three outer circles of part ET4 so that the cones point to the outside.

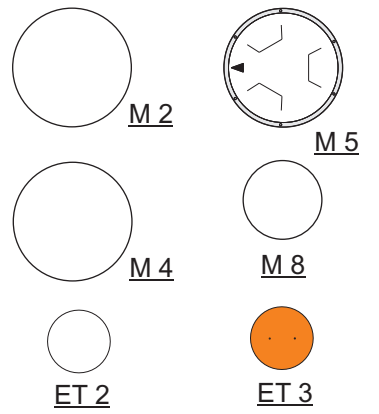
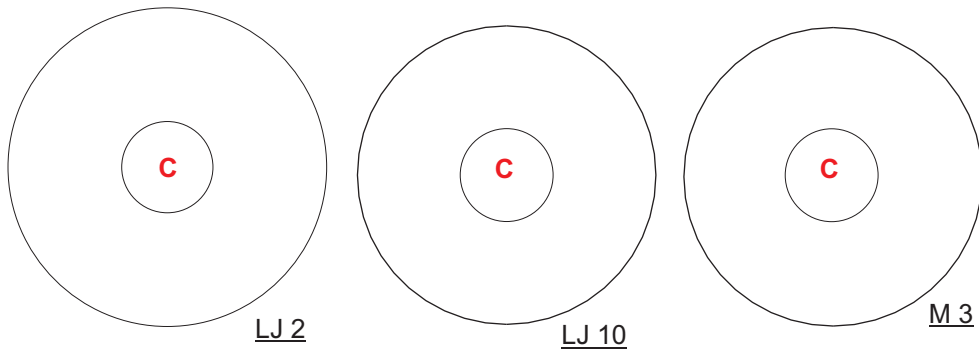
Cut two pieces of thin wire to length as indicated by the probe template and glue to the markers on part ET3.

Fold part Et9 and laminate it to double thickness with the colored field that is attached to the part. Carefully cut part ET9 and fold as indicated by the folding template. Glue together where the struts meet. As an alternative, you could also use part Et9 on the former page and print it on transparency. Then, you don't need to cut out all the thin struts.

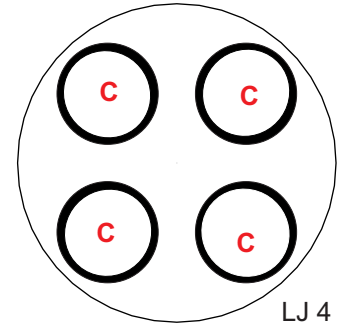
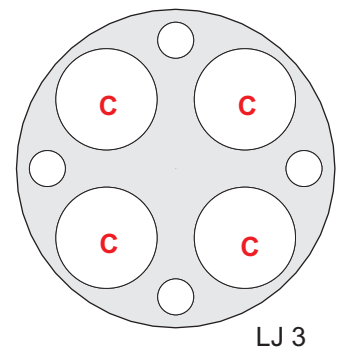
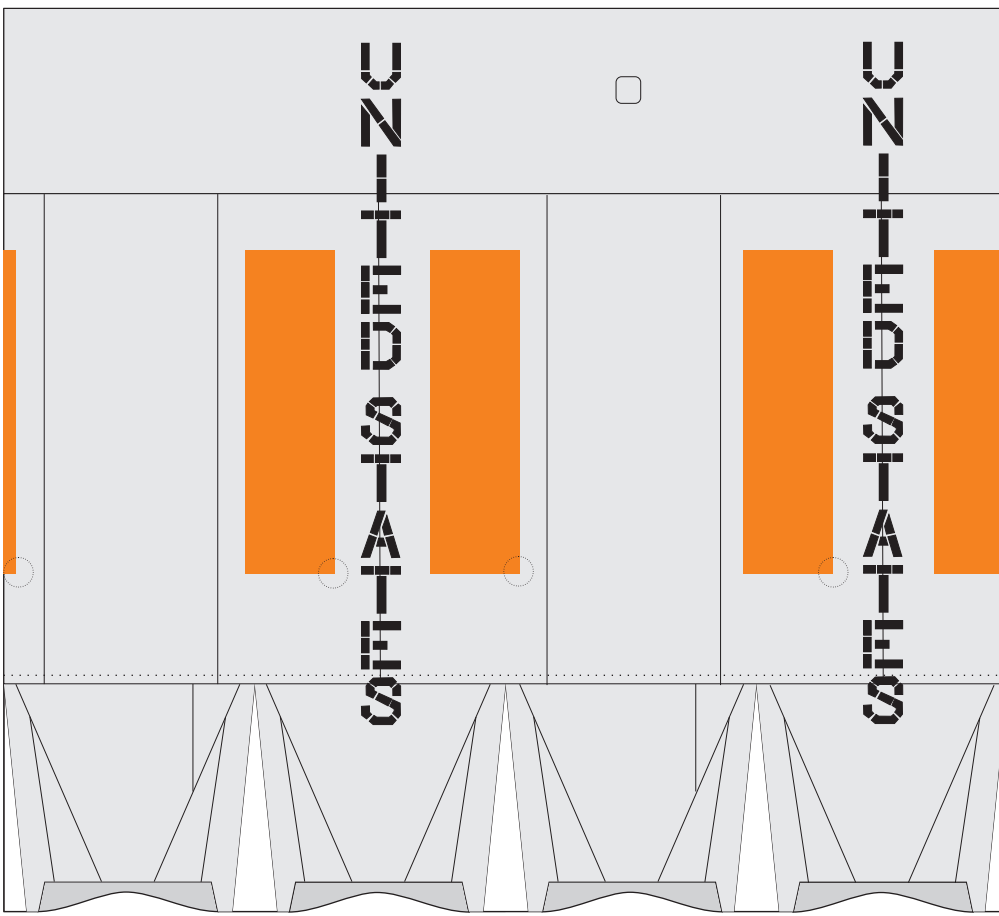
Glue the escape tower to the smaller end of ET9 so that the nozzles of the escape motor reach through the gaps between the struts.

Glue the assembly to part M5 - one vertical beam is exactly opposite to the seam of part M6. The bottom ends of the triangles at the bottom of part ET9 should fit into the little circle marks on part M5.

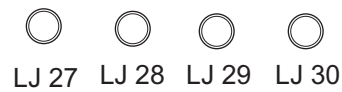
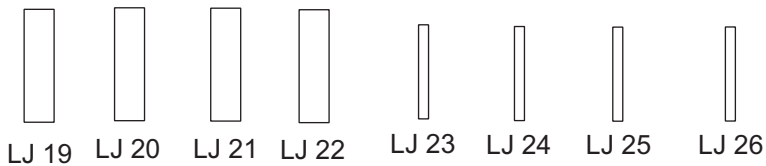
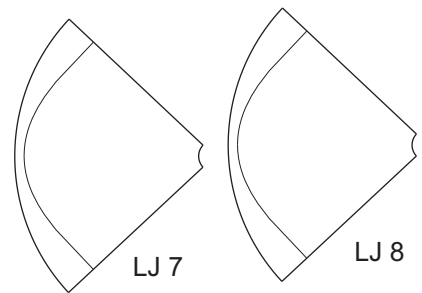
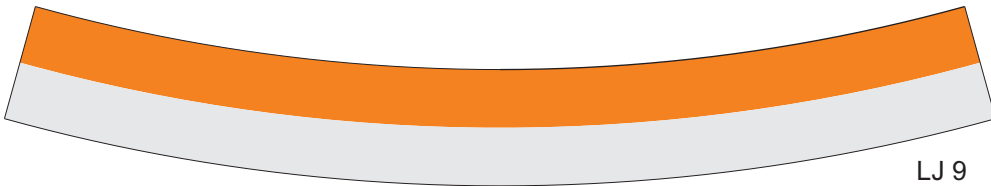
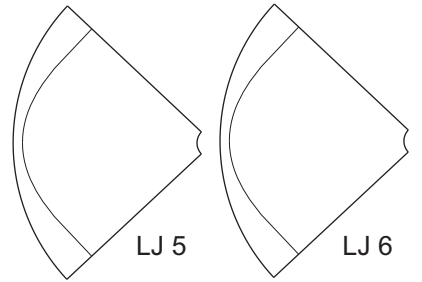
1 inch
1 cm



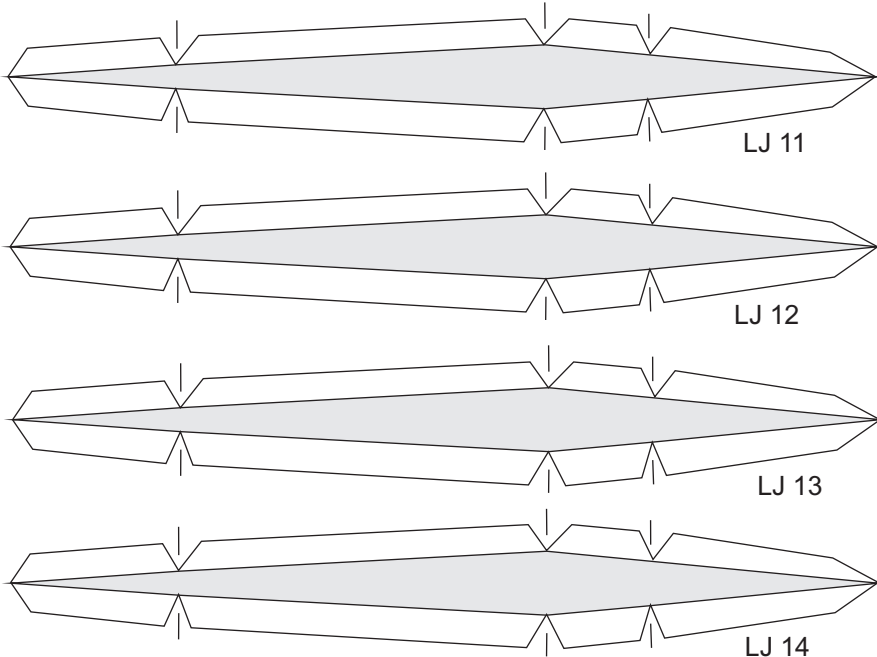
Laminate parts inside this frame to 0.5-0.8 mm thickness



LJ 1



1 inch
1 cm

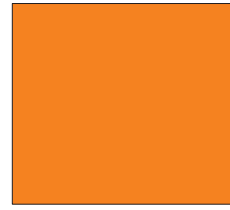


LJ 11

LJ 12

LJ 13

LJ 14



ET 1



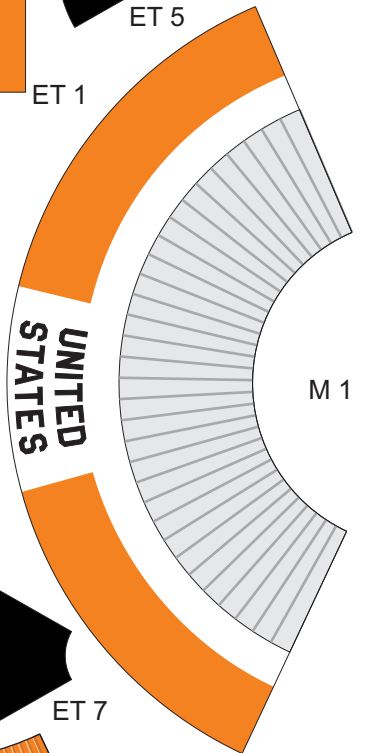
ET 5



M 9



M 6



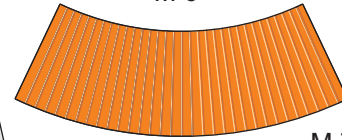
M 1



ET 6



ET 7



M 7



LJ 31



LJ 32



LJ 33



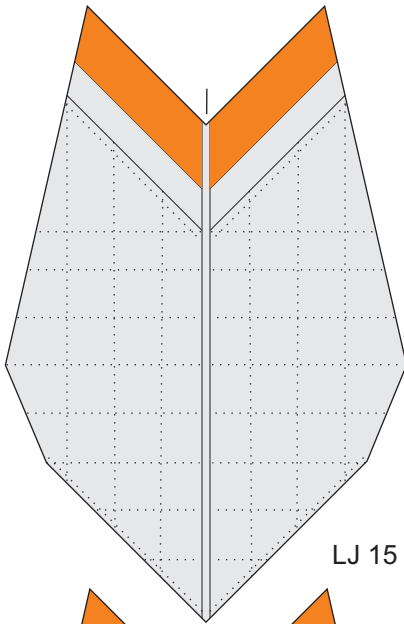
LJ 34



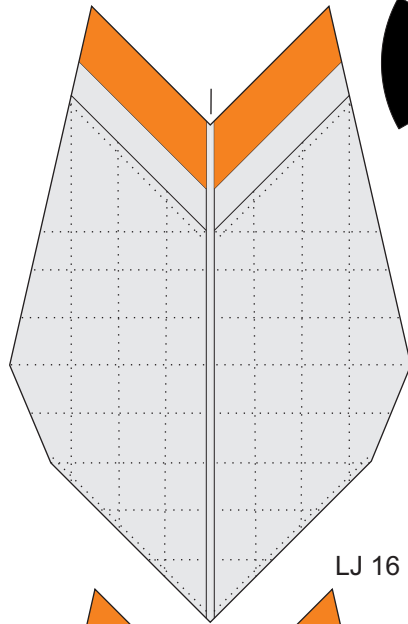
ET 4



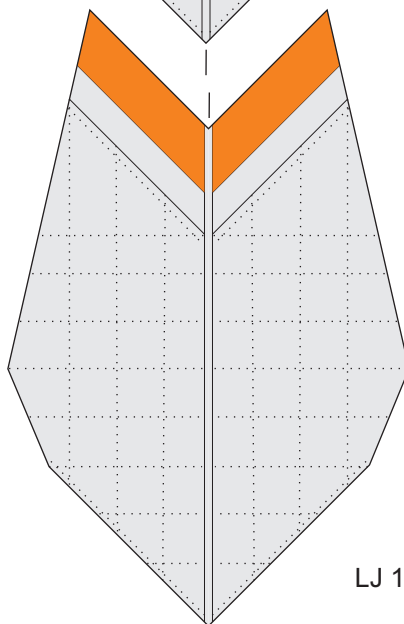
ET 8



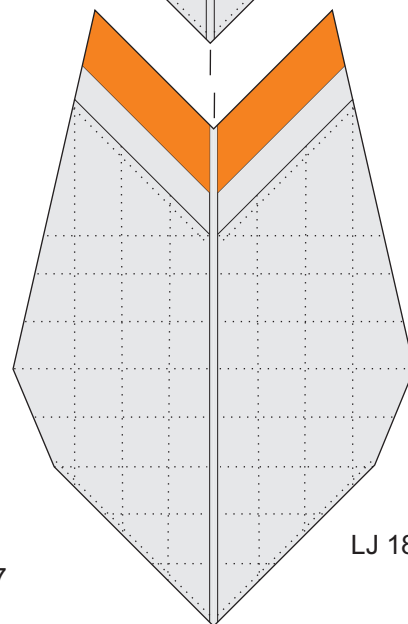
LJ 15



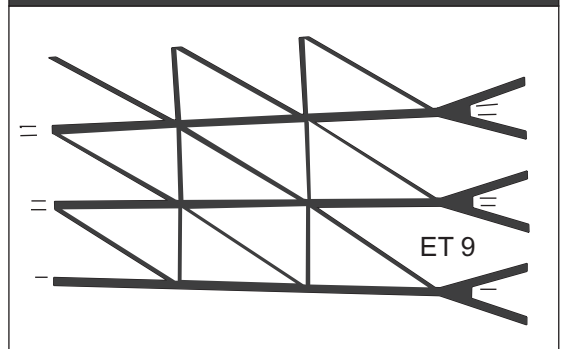
LJ 16



LJ 17

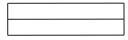
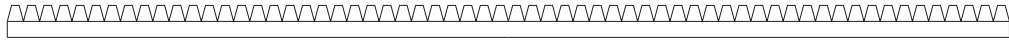


LJ 18



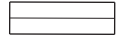
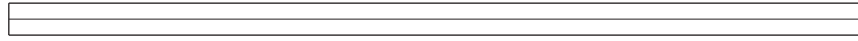
ET 9

1 inch
1 cm



LJ 1 B

LJ 9 A

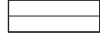


LJ 1 A

ET 1 A

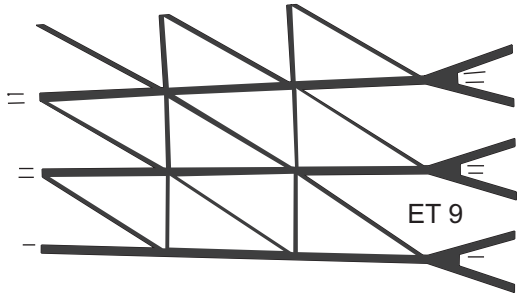


M 7 A



M 1 A

M 6 A



Template for probes



Escape Mast
Folding Template