Launch Complex 34
1/480th Scale

Cape Canaveral Air Force Station Launch Complex 34 (**LC-34**) is a launch site on Cape Canaveral, Florida. LC-34 and its twin to the north, LC-37, were used by NASA as part of the Apollo Program to launch Saturn I and IB rockets.

Work began on LC-34 in 1960, and it was formally dedicated on June 5, 1961. The complex consisted of a launch platform, umbilical tower, mobile service tower, fueling facilities, and a blockhouse. Two steel flame deflectors were mounted on rails to allow placement beneath the launch platform. The service tower was likewise mounted on rails, and it was towed to a position 185 meters west of the pad before launch. At 95 meters high, it was the tallest structure at LC-34.
The blockhouse, located 320 meters from the pad, was modeled after the domed reinforced concrete structure at LC-20. During a launch, it could accommodate 130 people as well test and instrumentation equipment. Periscopes afforded views outside of the windowless facility.

Saturn I series
LC-34 saw its first launch on October 27, 1961. The first Saturn I, Block I, mission SA-1, lofted a dummy upper stage on a suborbital trajectory into the Atlantic. The subsequent three Saturn I launches took place at LC-34, ending with SA-4 on March 28, 1963. The six ensuing Saturn I, Block II launches were conducted at LC-37.

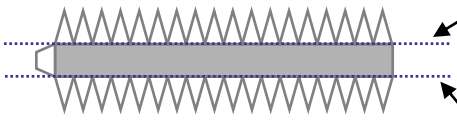
Saturn IB series
LC-34 was extensively modified to support Saturn IB launches, which began in February 1966. New anchor points were built to fasten the service structure in place during high winds. Access arms on the umbilical tower were rebuilt to match the larger rocket. At the 67-meter level, the swing arm was outfitted with a white room to permit access to the command module at the top of a rocket.
Two Saturn IBs (AS-201 and AS-202) were successfully launched from LC-34 before the Apollo 1 fire brought Apollo activities at the spaceport to an abrupt halt. After the fire, extinguishing equipment was installed at the top of the umbilical tower, and a slide wire was set up to provide astronauts a quick escape in the event of an emergency.
The first manned Apollo launch—Apollo 7 on October 11, 1968—was the last time LC-34 was used. NASA considered reactivating both LC-34 and LC-37 for the Apollo Applications Program, but instead LC-39B was modified to launch Saturn IBs.

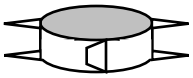
Date	Time (GMT)	Launch Vehicle	Mission	Payload	Remarks
October 27, 1961	15:06	Saturn I	SA-1	(none)	First use of LC-34, First flight of Saturn I.
April 25, 1962	14:00	Saturn I	SA-2	Highwater	Self-destruct detonated after completion of mission to test effects of water at high altitudes on communications.
November 16, 1962	17:45	Saturn I	SA-3	Highwater	Self-destruct detonated after completion of mission to test effects of water at high altitudes on communications.
March 28, 1963	20:11	Saturn I	SA-4	(none)	
February 26, 1966	15:06	Saturn IB	AS-201	Apollo CSM	First flight of Saturn IB and Apollo Spacecraft
August 25, 1966	17:15	Saturn IB	AS-202	Apollo CSM	
October 11, 1968	15:02	Saturn IB	Apollo 7	Manned Apollo CSM	First manned Apollo flight, last use of LC-34

Special Thanks To:
George Blanchette
Kip Teague, The Project Apollo Image Gallery: http://apolloarchive.com/apollo_gallery.html
Wikipedia: http://en.wikipedia.org/wiki/Main_Page
NASA Technical Reports Server (NTRS): http://ntrs.nasa.gov/search.jsp
The Apollo Saturn Reference Page: http://www.apollosaturn.com/LC34/LC34.htm
Carl “Surfduke” Hewett – check out his “big” LC-34 model!

Apollo Historical Series
1/480th Scale Launch Complex 34
Assembly Instructions

1) Score along base of glue tabs of Part 1A, Thrust Liner, as indicated in illustration, roll into tube with printed side in, and fold glue tabs out.

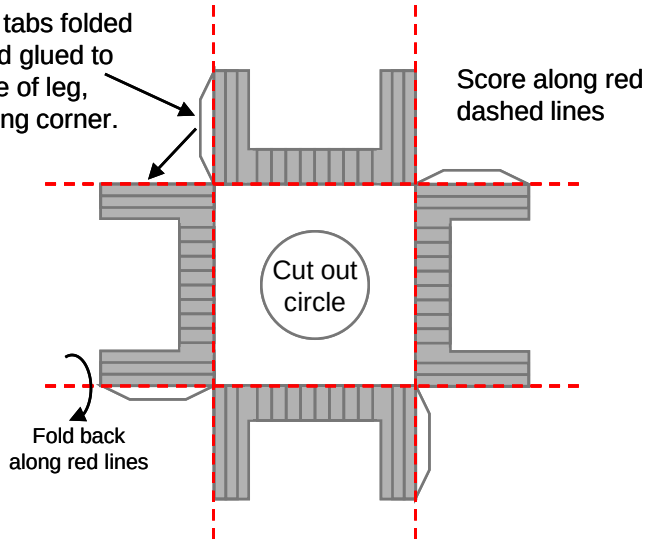




Finished Thrust Liner
Note – most glue tabs in illustration removed for clarity

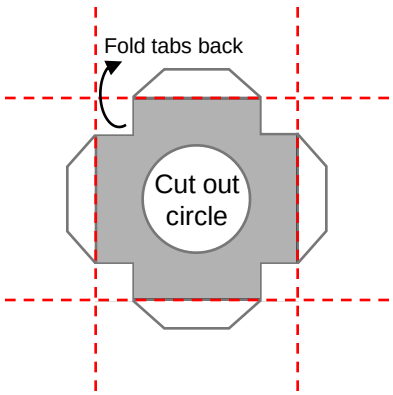
2) Carefully cut out circle in the middle of part 1B, Pedestal Top. Score as indicated in illustration, and form into a "table", printed side out.

White trapezoids are glue tabs for corners of pedestal legs.



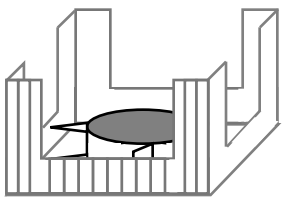
3) Carefully cut out circle in the middle of part 1C, Pedestal Bottom. Score as indicated in illustration, and fold glue tabs away from printed side.

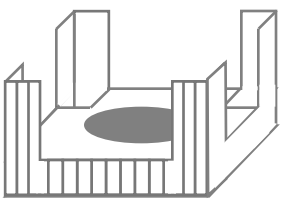
White trapezoids are glue tabs for inside side walls of pedestal top.



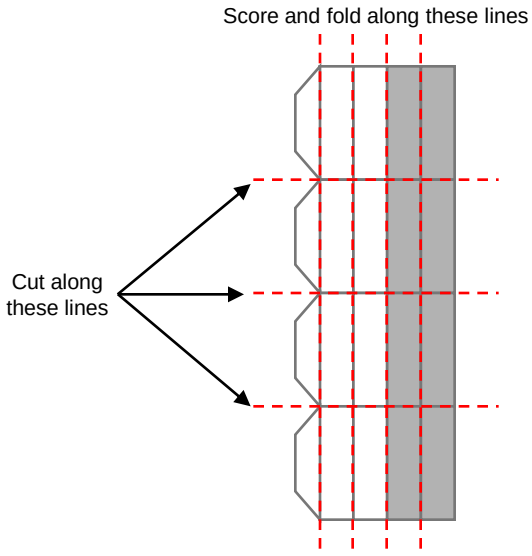
4) Glue part 1A, Thrust Liner, formed in step 1 to the inside bottom of the Pedestal Top. Center the liner on the hole.

Glue part 1C, Pedestal Bottom to Pedestal Top/Thrust Liner assembly, printed side out, "sandwiching" the liner between the Pedestal's top and bottom. Be sure part 1C's glue tabs are on the inside of part 1B.

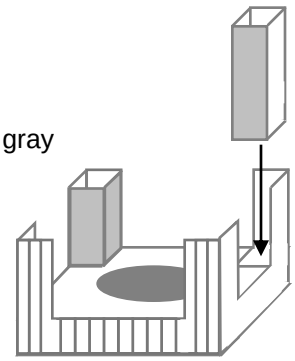


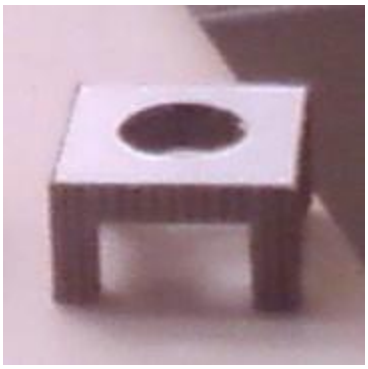


5) Score, cut, and fold parts 1D, Pedestal Legs, as indicated in the illustration

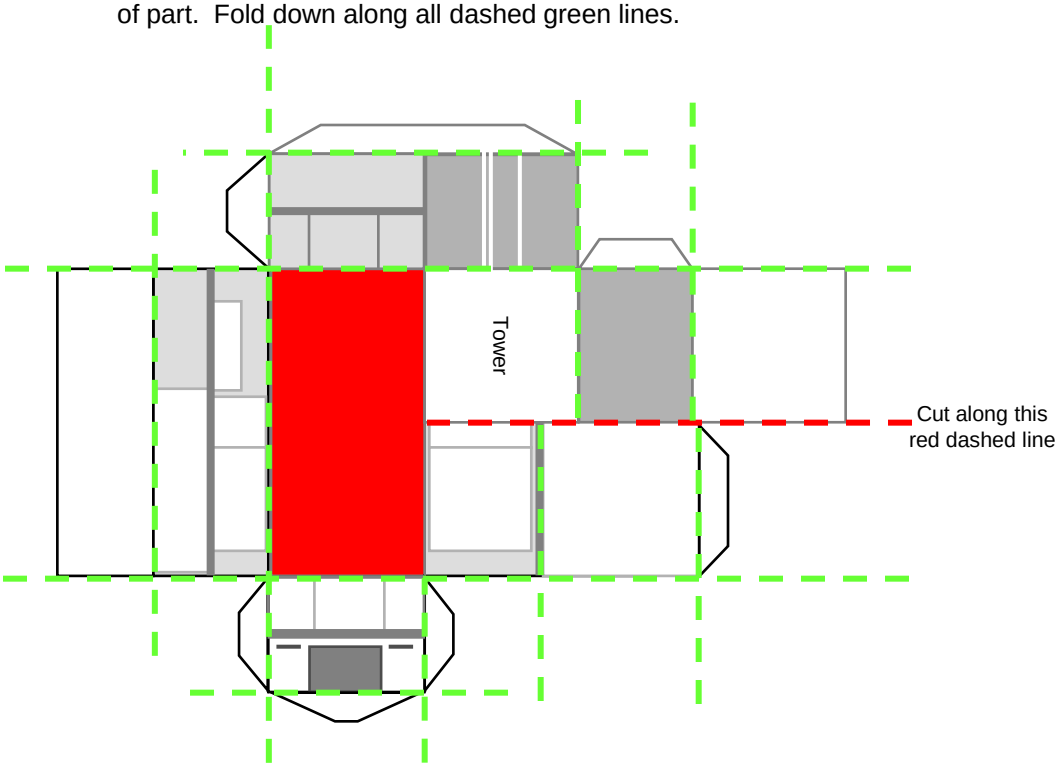


6) Insert Pedestal Legs into slots in Pedestal Bottom, gray sides out, facing inside of Pedestal.

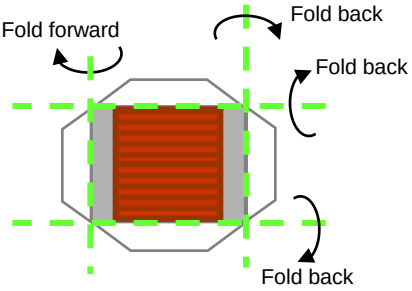




7) Score part 4A along dashed green lines indicated in illustration. Carefully cut where indicated by dashed red line, starting with red rectangular roof, extending past end of part. Fold down along all dashed green lines.



8) Score part 4B along dashed green lines indicated in illustration. Fold the top, bottom, and right glue tabs back, away from printed side. Fold left glue tab FORWARD, toward printed side



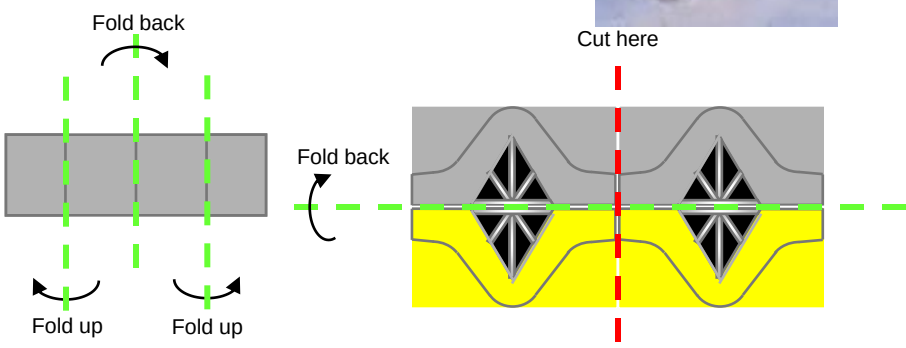
9) Assemble parts 4A and 4B. Part 4B fits in open area on right side of tower base. Final part, when viewed from top should be a red and white "L" shape.

Note: All side views are oriented as if you were looking at the part from that side

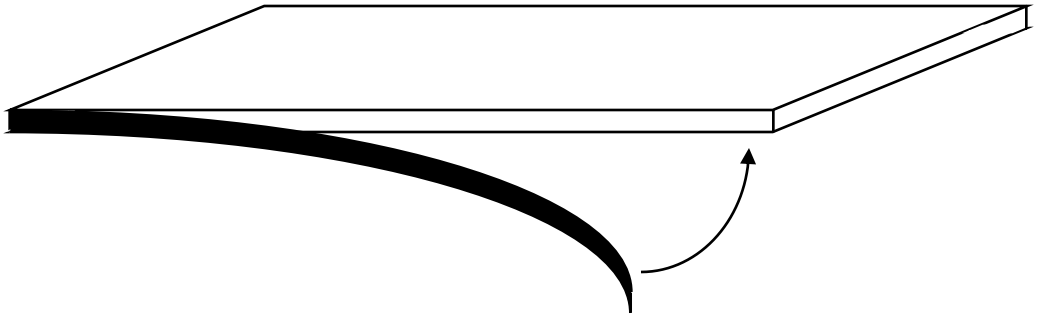
10) Score parts 7A and 7B, Thrust Deflector. Cut part 7A along the line depicted below. Apply thin coat of glue to unprinted side of 7A and fold as shown creating parts gray on one side, yellow on the other. When glue is dry, cut along top gray line, leaving two parts that look like this:

Note: The Thrust Deflector is a VERY tight fit between the Pedestal and the model base, so consider carefully cutting on the inside of the lines.

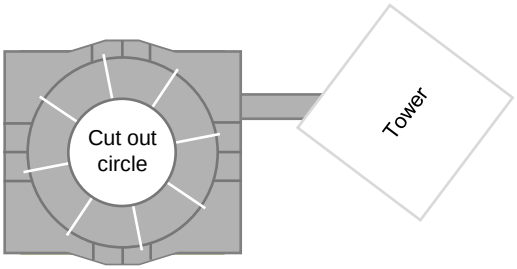
Edge glue part 7B to both halves of 7A. Parts 7A should be yellow side out. 7B should follow the contour depicted in green below.



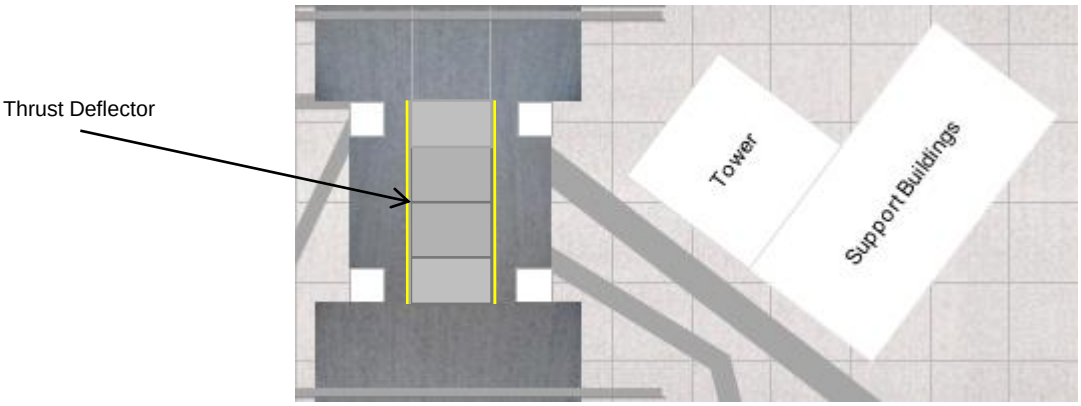
11) Choose a model base, Part 11 – it is recommended to glue the base to a piece of foamboard, cardboard, wood, etc, in order to prevent the base from warping. One can then measure the thickness of the base, cut strips of cardstock that thickness, color them black (or the color of your choosing), and wrap the base to cover the "ragged edges".



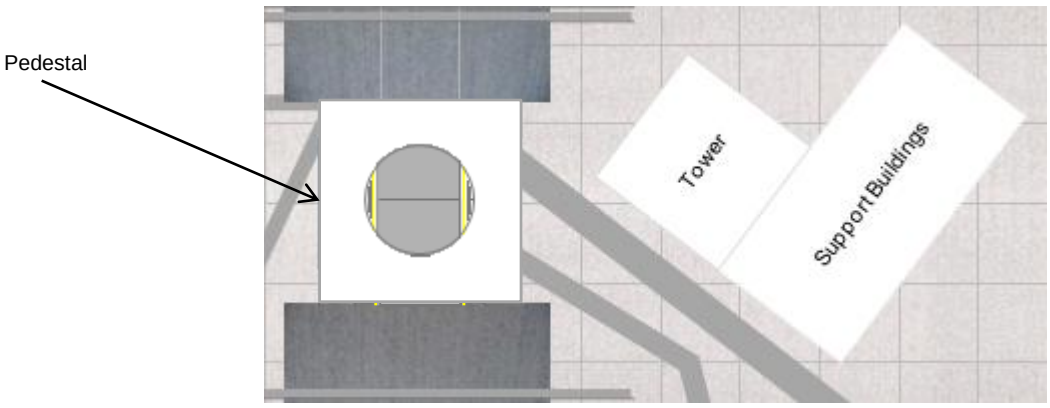
12) Carefully cut the circle from Part 2, Pedestal Cap, then cut part from sheet.



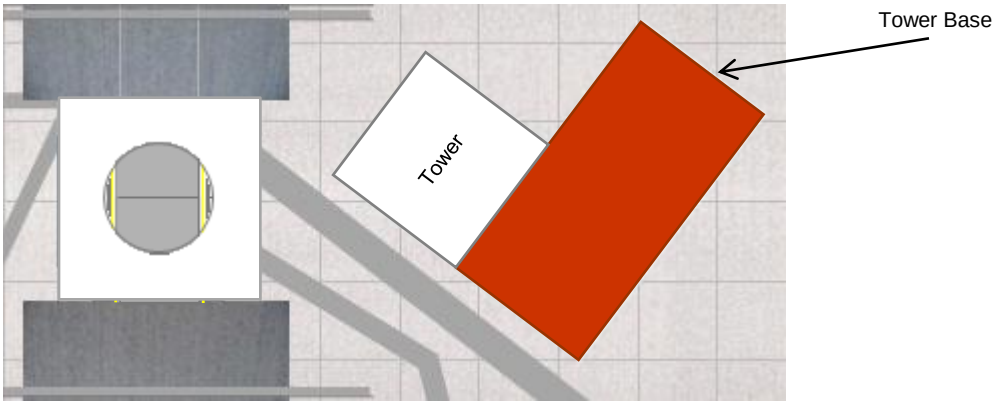
13) Glue the Thrust Deflector to the model base in the location shown. Use the Pedestal to insure alignment – the four white squares are the location of the Pedestal legs. The Thrust Deflector is a VERY tight fit under the Pedestal, and extends slightly into the exhaust hole. This is NOT a mistake. Apparently, the real hardware had to be tilted to be removed for maintenance. Adjust as necessary to insure good fit.



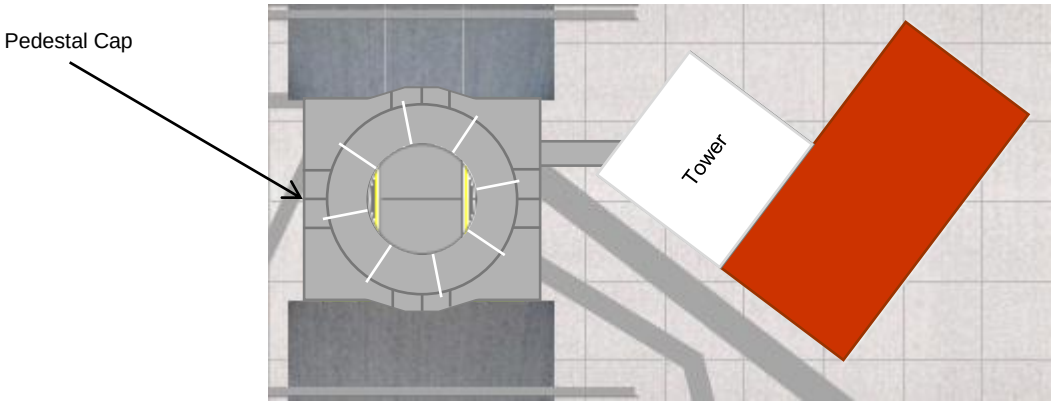
14) Glue Pedestal in place over Thrust Deflector, aligning the bottom of the legs with the white squares on the model base.



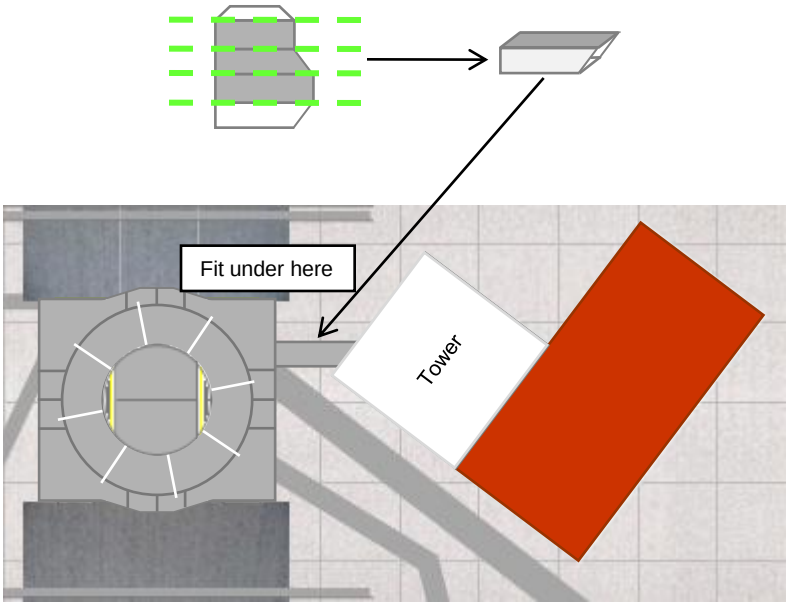
15) Glue Part 4A/4B assembly, Tower Base, to location indicated on model base.



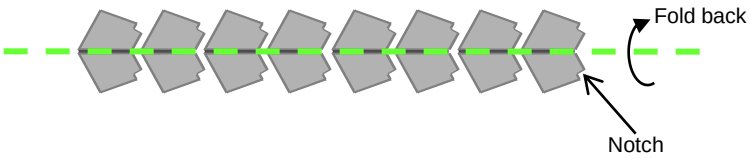
16) Glue Part 2, Pedestal Cap, to Pedestal and Tower Base.



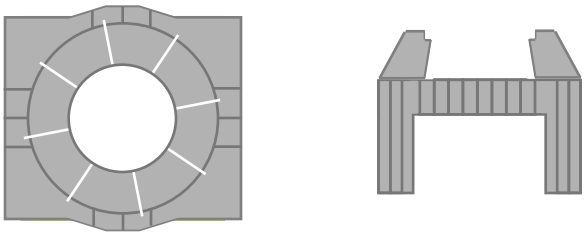
17) Score and fold part 3, Walkway, where indicated by green lines in illustration and form into open-ended box. Dry fit under Walkway portion of Part 2, Pedestal Cap and trim if necessary to get tight fit. Glue into place.



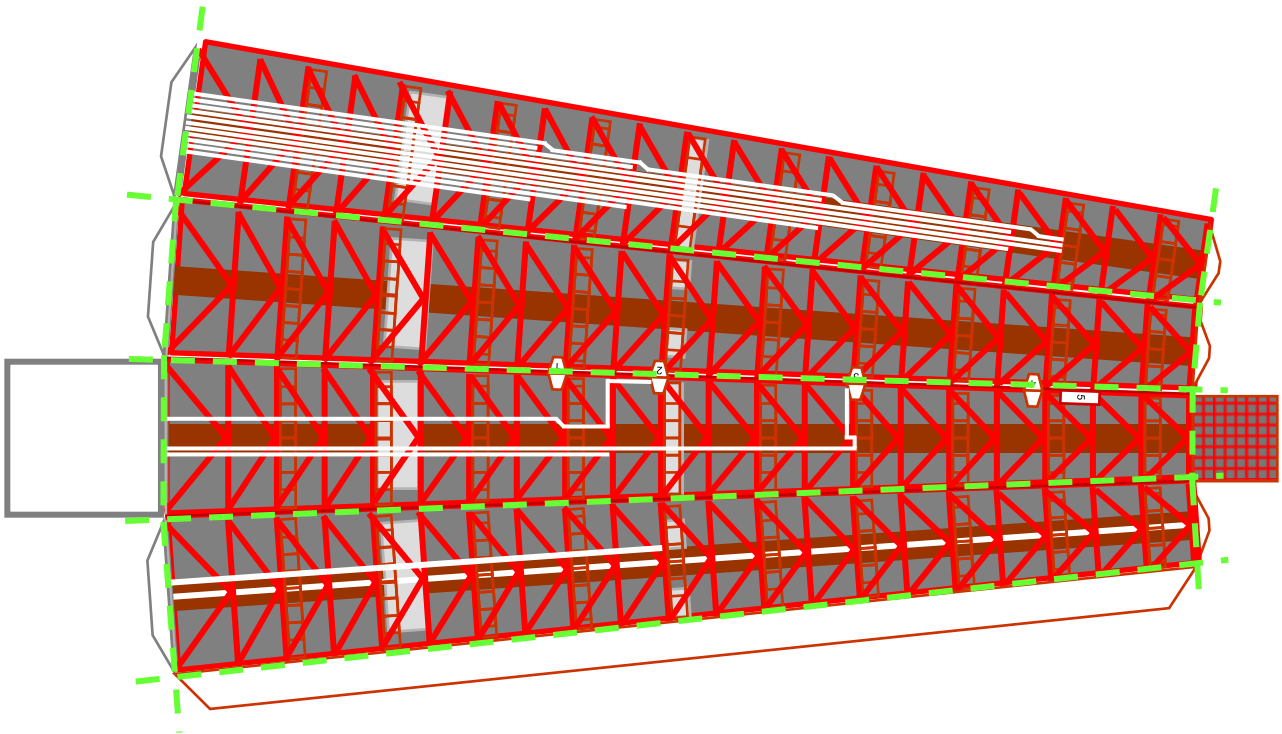
18) Score and fold Parts 6, Hold Down Arms and Tail Service Arms along green line. Apply a thin coat of glue on the unprinted side and fold. When the glue is dry, cut out each arm, carefully clipping out the “notch” in each – the notches are what support and hold the Saturn IB models on the pad.



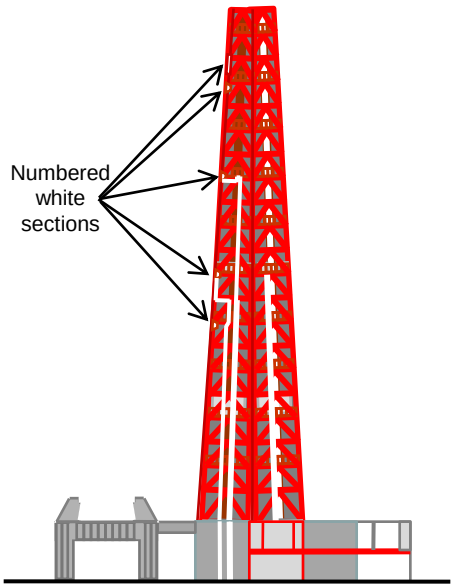
19) Glue the Hold Down Arms to the Pedestal Base on the white lines surrounding the hole, slanting toward the center.



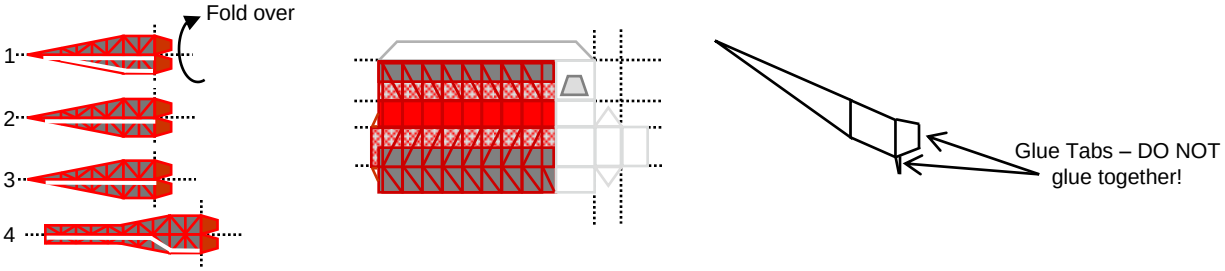
20) Score and fold tower at it’s corners, as indicated, then glue closed.



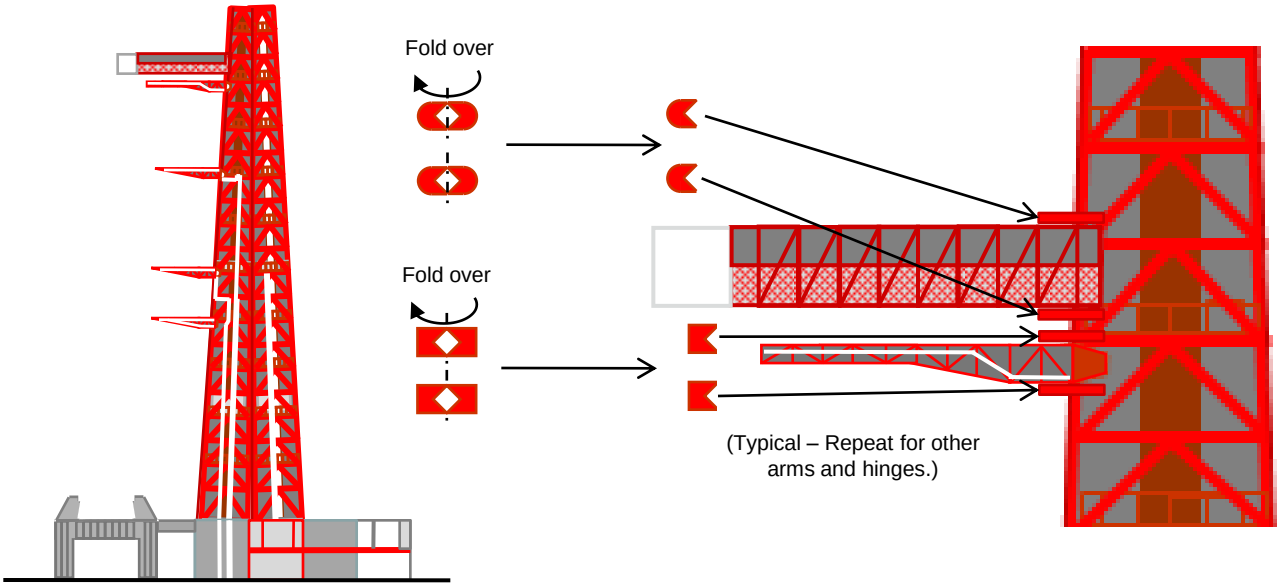
21) Glue Tower to Tower Base, making sure to align the corner with the numbered white sections toward the Pedestal.



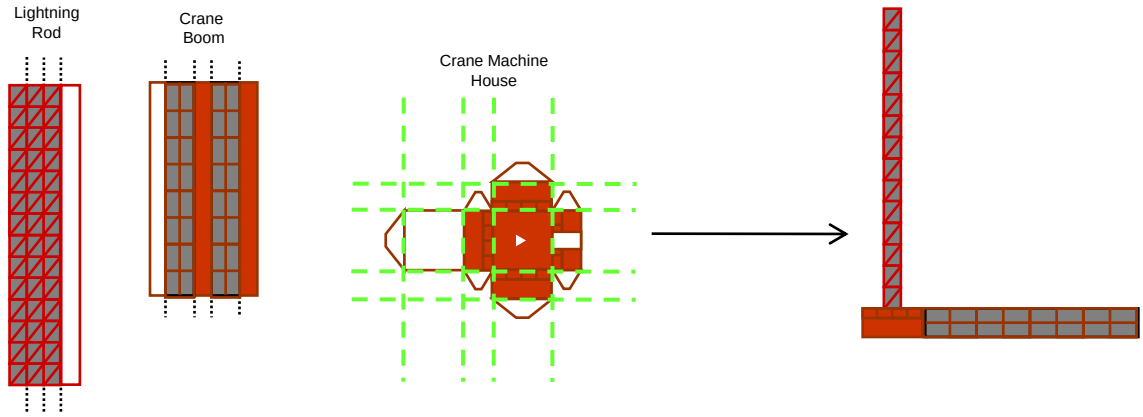
22) Score, cut out, fold, and glue Parts 9A & 9B, Access Arms. Score/Fold lines are indicated by the black dotted lines. Note that for Arms 1-4, there are trapezoidal glue tabs meant to glue the arms to the Tower. Be certain to not glue these tabs together!



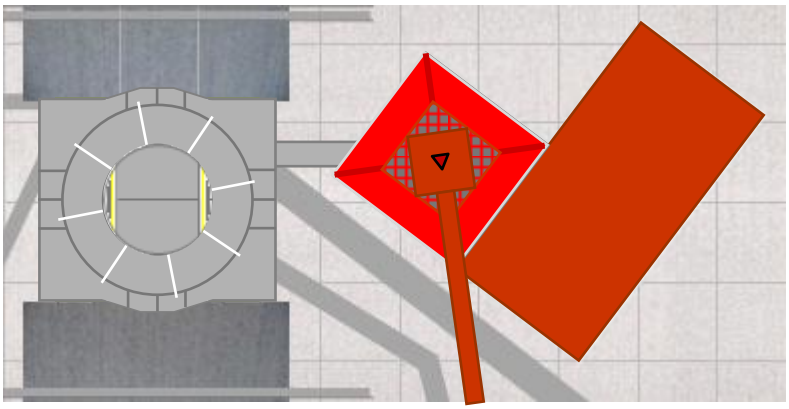
23) Glue Access Arms to indicated locations on Tower. Score, fold over, and glue Parts 9C and 9D, Access Arm Hinges. When dry, cut out and cut out triangular-shaped white notches. Glue a hinge assembly above and below each arm.



24) Score, fold, and glue Parts 8A-C along the lines indicated. Glue Part 8B, Lightning Rod, to white triangle on top of Part 8A, Machine House. Glue Part 8C, Crane Boom, to white rectangle on front of 8A.



25) Glue crane assembly to top of tower. The configuration shown below is typical of the way NASA seemed to rotate the crane out of the way of the vehicle, particularly for Apollo 7.



Your model is now complete!