

Cookie Cutter Project

Courtesy of EAA Chapter 2 (Larry Zepp) The original version is on the Chapter 2 website

The Cookie Cutter project is deceptively simple and easy to set up. There are a variety of ways to do the details, find what is right for your chapter and the resources you have. Safety should always be your top priority, so don't skip the details of deburring and think through your choice of creating the holes for the rivet.

Because of the scalability of the project it is popular with all ages (including adults) and a wide range of skills. Younger people and beginners can make simple shapes; more advanced builders can make more advanced shapes. Everyone seems to want to grab a piece of aluminum and start creating!



Two simple airplanes, and a certain spaceship a certain former YE chair used to fly.

Materials:

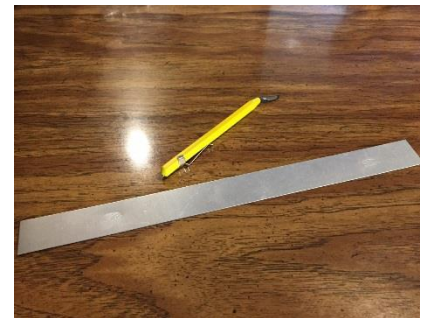
Aluminum strips: .008 to .025 thick, 3/4ths to 1 inch wide, 10 to 18 inches long. These strips should be prepared in advance, and deburred by adult volunteers to ensure participants will not cut themselves. Deburring can be done with a common deburring tool or with fine/medium grit sandpaper.

Special Note: There are many types of aluminum available. For safety concerns, food grade aluminum is advised, 3003, 5005, and 5052 are probably the most commonly available.

Rivets: The project can use any type of rivet. Pop rivets are relatively safe for participants and require low cost pop rivet guns. Traditional rivets will also work, but require an air supply and need to be closely supervised for safety.

Tools:

Drill or punch: The holes for the rivet can be made with drills or with a punch. Drills are a safety concern for participants, and pre-drilling by volunteers should be considered. Drills should only be used by participants under strong supervision and with the aluminum secured. Using a punch is much safer, and most participants can do that task on their own with little to no help.



A punch like this is available for around \$35. This punch has lasted through AirVenture and the mobile marketing unit use for an entire year and shows no sign of slowing down.

Hand seaming tool: Any hand seamer will work!

Jig for bending: We made a board with a variety of shapes that allows imaginations to flow. A round and a square element are probably all that is needed. Round elements were made of doweling and a scrap piece of black walnut turned on a lathe.



Die or stamp (completely optional): We had an EAA die made for us, the most expensive part of the whole operation. We wanted the people to have a souvenir they would remember, so stamped the logo into each piece of aluminum in several places.



The activity itself is straightforward. Hand the participant a piece of aluminum, they shape it as they like (having examples laying around for them to look at is helpful) you show them where to punch their holes, pop a rivet, and voila, a cookie cutter! This was amazingly well received by all!!

