Three-ring Propeller Earrings


**Tools:** Two flat-nose pliers; chain-nose pliers; round-nose pliers; nylon-tip pliers; side-cutters; digital caliper; compass; round file; Argentium solder paste; butane torch; Solderite board; pickle solution; baking soda; rotary tumbler; and steel shot.

**Materials:** Six 16-gauge, 11mm ID jump rings; two 24-gauge, 4½-inch wires; six 6mm blue beads; six 4mm red beads; and a pair of earring backs.

Many Thanks, Scott David Plumlee - www.davidchain.com

The 3-ring Propeller Earrings starts with three 16-gauge, 11mm jump rings that have been assembled into a spiraling Flower formation, and then each ring is individually soldered closed. To obtain equal spacing of the spiraling frames, each of the rings is pulled outward by three soldering pins in a triangle pattern on the Solderite board, allowing the three rings to be soldered a second time into the gravity-defying Propeller formation. Each of the three frames are then embellishing with 6mm blue and 4mm red Czech glass beads within a circular wire wrapping pattern, and completed with a pair of earring backs.

The 16-gauge, 11mm ID jump rings can be created at home by wrapping 16-gauge wire around a 1/4-inch ID (10.16mm OD) gas pipe mandrel. The natural spring-back of half-hard 16-gauge wire should produce a 10.5 to 11mm ID jump ring. Notice that the gas pipe has a drilled hole to hold the wire’s spring tension, and the pipe is threaded into a tapering coupler to fit into a Jacob’s chuck within a 3.6v electric screwdriver to wrap the wire around the gas pipe mandrel into a coil.

*ID = inside diameter   OD = outside diameter*
1. With a digital caliper’s measurement, set the compass gate to 17mm between spike and pencil tip, and then draw an arc with the pencil on the Solderite board.

2. Reposition the compass’s spike along the previously drawn arc, and draw a second pencil arc on the Solderite board.

3. Reposition the compass’s spike at the intersection of the first and second arcs, and then draw a third pencil arc; completing a rounded triangle shape on the Solderite board.

4. Use the tip of a round-nose file to drill a ¼-inch (3mm) deep hole at each of the three arc intersections, which will each hold a soldering pin as shown.

5. Create four soldering pins by cutting two paperclips in half, straighten the bend, and then wrap a small loop at one end with round-nose pliers.

Three soldering pins will be used to pull apart three rings, to be soldered into a gravity-defying Propeller formation.
6. Spiral three 16-gauge, 11mm rings, so each ring is added in a consistently spiraling angle.

7. On the Solderite board, individually solder each ring by adding a dab of solder paste to each ring’s joint, and use the butane torch to melt the solder paste to secure each ring.

CAUTION: Always use proper ventilation when soldering and allow the soldered metal to cool down before handling - please.

8. Place the three-ring form on the Solderite board, pull each ring outward with three pins, and then carefully rotate each soldered joint inward to sit on top of its neighboring ring.

9. Add three dabs of solder paste to the center of the three rings, at the three points where the rings overlap.

10. Use the butane torch to melt the solder paste to secure the three frames. Once cool, double check that the frames are soldered together, and then clean the heat discoloration in a pickle solution. Tumbling the finished Propeller design with steel shot will shine the metal and also provide a stress test of the solder connections.
12. Start the bead embellishment by wrapping a double-loop around the upper frame with the ending ¼-inch of 24-gauge wire, and add one 6mm blue glass bead.

13. Wrap the wire one full loop around the opposite side of the upper frame, leaving a slight gap in the wrapping, and add one 4mm red glass bead onto the wire.

11. Repeat steps 6-10 to create a matching pair of 3-ring Propellers.

14. Position the 4mm bead into the gap between the upper and right frames, and wrap the wire 1½ times around the right frame, bringing the remaining wire up through this frame, and add a 6mm bead onto the wire.

15. Wrap one full loop around the opposite side of the right frame, leaving a slight gap in the wrapping, and add a 4mm bead onto the wire.

Note: The wire-wrapped bead embellishment travels in a clockwise pattern; starting at the upper frame, through the right frame, through the left frame, and finally terminating at the upper frame in a circular pattern.
16. Position the 4mm bead into the gap between the right and left frames, and wrap the wire 1½ times around the left frame, bringing the remaining wire up through this frame, and adding a 6mm blue glass bead onto the wire.

17. Wrap one full loop around the opposite side of the left frame leaving a slight gap in the wrapping, and add one 4mm red glass bead onto the wire.

18. Position the 4mm bead into the gap between the left and upper frames, wrap the wire 1½ times around the upper frame, and trim off any excess wire to complete the beading.

19. Repeat steps 12-18 to embellish the second 3-ring Propeller formation, and add the earring backs to complete the project.

Here are some alternative beading options for the 3-ring Propeller Earrings design. This pair has been handcrafted from gold-filled wire, Argentium solder paste, and a variety of gemstone beads. The left Propeller is set with 6mm faceted red carnelian, and 4mm blue lapis lazuli beads. The right Propeller is set with 6mm blue lapis lazuli beads, and 4mm blue turquoise beads. As well, I used a hammer against anvil to forge each of the three frames slightly for aesthetics.