Installation of the CEP interface harness, CEP900-I04, into the HGU-55 helmet

STEP 1 **CONNECTOR ASSEMBLY**

1. Remove the right earcup from its location inside the helmet.
2. Position helmet so that the right side is facing up, with the helmet opening toward you.
3. Locate the hole to be drilled in the helmet shell. It is one inch forward of the screw that is on the rear of the right eardome.
4. Measure one inch forward of the screw and 5/8 inch from the edge roll and mark. See Figures 2 and 3.
5. Drill a 3/8" hole through the helmet shell at this location. Be careful to not damage the earcup or wire to the earcup.
6. Trim around the edge of the hole removing loose, excess fibers. Remove the Velcro™, 1/4 inch around the hole on the inside of the helmet to allow the washer to be positioned against the inside helmet shell.
7. Insert the CEP900-I04 interface, Figure 3, through the 3/8-inch hole, **feeding the brass pins attached to the** black and white wires through the hole first. Seat the connector into the hole with the ABS spacer between the outer shell and the connector.
8. On the inside of the helmet, pass the solder tab washer over the grommet and position on the inside of the shell over the connector threads.
9. Pass the connector nut over the grommet, may be a challenge the first time, and thread onto the connector threads.
10. Position the solder tab washer so the solder tab so it is parallel to the edge roll and directed toward the rear of the helmet and tighten the connector nut. The torque on the nut should be about 96-inch ounces.
11. Using long nose pliers, pull the solder tab washer at the solder hole up and away from the helmet shell about 1/2 inch. Solder the black **ground** wire to the solder tab washer. Bend the solder tab back to the surface of the helmet.

STEP 2 **EARCUP ASSEMBLY**

1. Position the helmet with the right earcup down, toward the table surface.
2. Remove the earphone from the **retaining harness.**
3. Disconnect the earphone receiver, using a jeweler's screwdriver.
4. **One at a time,** loosen the set screw in the brass pins that are attached to the ends of the black and white wires. (Careful to not loosen too far).
5. Join each of the earphone pins into the back of the CEP interface pins, **black/black wire and white/white wire** and tighten the set screws.
6. Re-attach the earphone receiver to the two joined pins.
7. Replace the earphone receiver, and the earphone retaining foam into the earcup.
8. Position the earphone retainer in the harness at its original position for the user.

9. **Test the interface by listening for audio signals first through the earcups and then through the CEP.**
10. **Installation is complete if clear audio signals are present.**

Figure 1. Right side view of the HGU-55 helmet showing the CEP connector.

Figure 2. Close-up, showing location of the CEP connector in the HGU-55.