The Comet Nucleus Tour, or CONTOUR, Mission will take a spacecraft closer to the heart of a comet, its nucleus, than ever before. The CONTOUR spacecraft will fly by at least two comets during its travels, dramatically improving knowledge of key characteristics of comet nuclei and assessing their diversity.



# **CONTOUR Spacecraft Model Instructions:**

Scissors A Straight Edge

### Materials Needed:

- CONTOUR Model Print-Outs, preferably on stiff paper
- White Glue

## A: The Body of the CONTOUR Spacecraft

- 1. Cut out the main section of the spacecraft ("A"), including the area for the antenna labeled with a "1."
- 2. Fold each tab labeled with a "2" or "3" towards the blank side of the paper.
- 3. Crease the paper between the solar panels in section "A2" by folding along the lines separating them.
- 4. Crease the paper along the connection between the dust shield ("A1") and the solar panels ("A2") and along the connection between the antenna ("A3") and the solar panels ("A2").
- 5. Fold every solar panel on "A2" to bring together tab "3" and the opposite edge of section "A2". Glue or tape together to create an octagon.
- 6. Fold over "A1" and glue it to all tabs on "A2."
- 7. Fold over "A3" and glue it to all tabs on "A2."

#### **B: The Dust Shield Connectors**

- 1. Cut out all the dust shield connectors in section "C."
- 2. Fold the connectors along the black lines to create stands, as shown. (It may be helpful to use a straight edge, such as a ruler, for this step.)

### **C: The Dust Shield**

- 1. Cut out all layers of the dust shield (labeled "C1" or "C2").
- 2. Glue two dust shield connectors onto each layer of the dust shield in the boxes labeled "5."
- 3. Glue each layer of the dust shield together, one on top of the other, using the dust shield connectors.
- 4. Glue two dust shield connectors onto the dust shield section, "A1," of the body of the spacecraft in the boxes labeled "5."
- 5. Glue C2 to the top of the dust shield layers, using the dust shield connectors.
- 6. Glue the entire dust shield ("C") onto the main body of the spacecraft ("A") using the dust shield connectors.

#### **D: The Antenna**

- 1. Cut out the antenna.
- 2. Bring edge "6" and "7" together and glue or tape.
- 3. Glue the antenna into the hole (labeled "1") on the body of the spacecraft.



