National Aeronautics and Space Administration

EUROPA CLIPPER
Simple Model

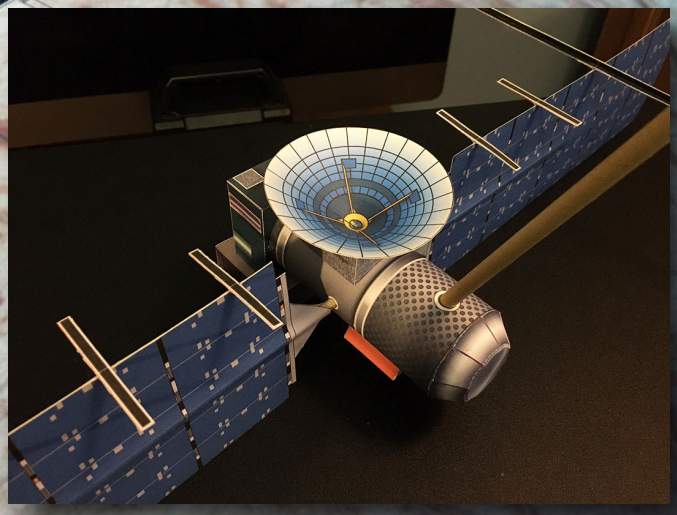
Age level: Grades 5–8

Degree of difficulty: Beginner

Estimated time to build as an individual: ~2.5 hrs

Estimated time to build as a group: ~2 hrs (Tip: Reduce build-time by dividing into teams for cutting and gluing.)

Finished model size: 22 inches long



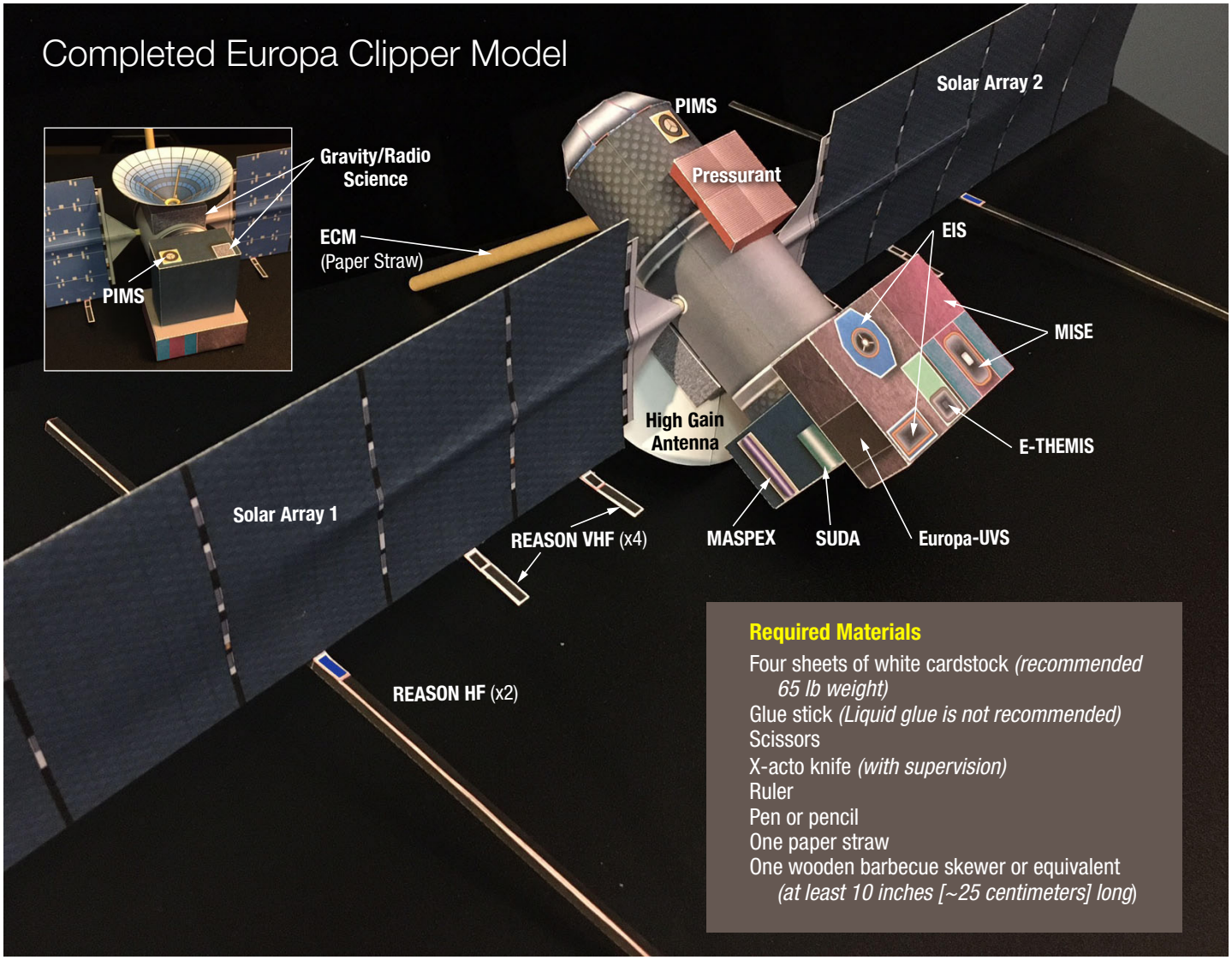
JPL D-107885 11/21

NASA's Europa Clipper spacecraft will conduct a detailed survey of Jupiter's moon Europa to determine whether the icy moon could harbor conditions suitable for life. The spacecraft, in orbit around Jupiter, will make about 40 to 50 close passes over Europa, shifting its flight path for each flyby to soar over a different location so that it eventually scans nearly the entire moon.

After each flyby, the spacecraft will send its haul of data back to Earth. The time between flybys will also give scientists time to study the data and consider adjusting the timing and trajectory of future flybys if they find regions that spark curiosity and need more study.

An artist's rendering of Europa and Jupiter based on images sent by visiting spacecraft.
Credit: NASA/JPL-Caltech

Completed Europa Clipper Model

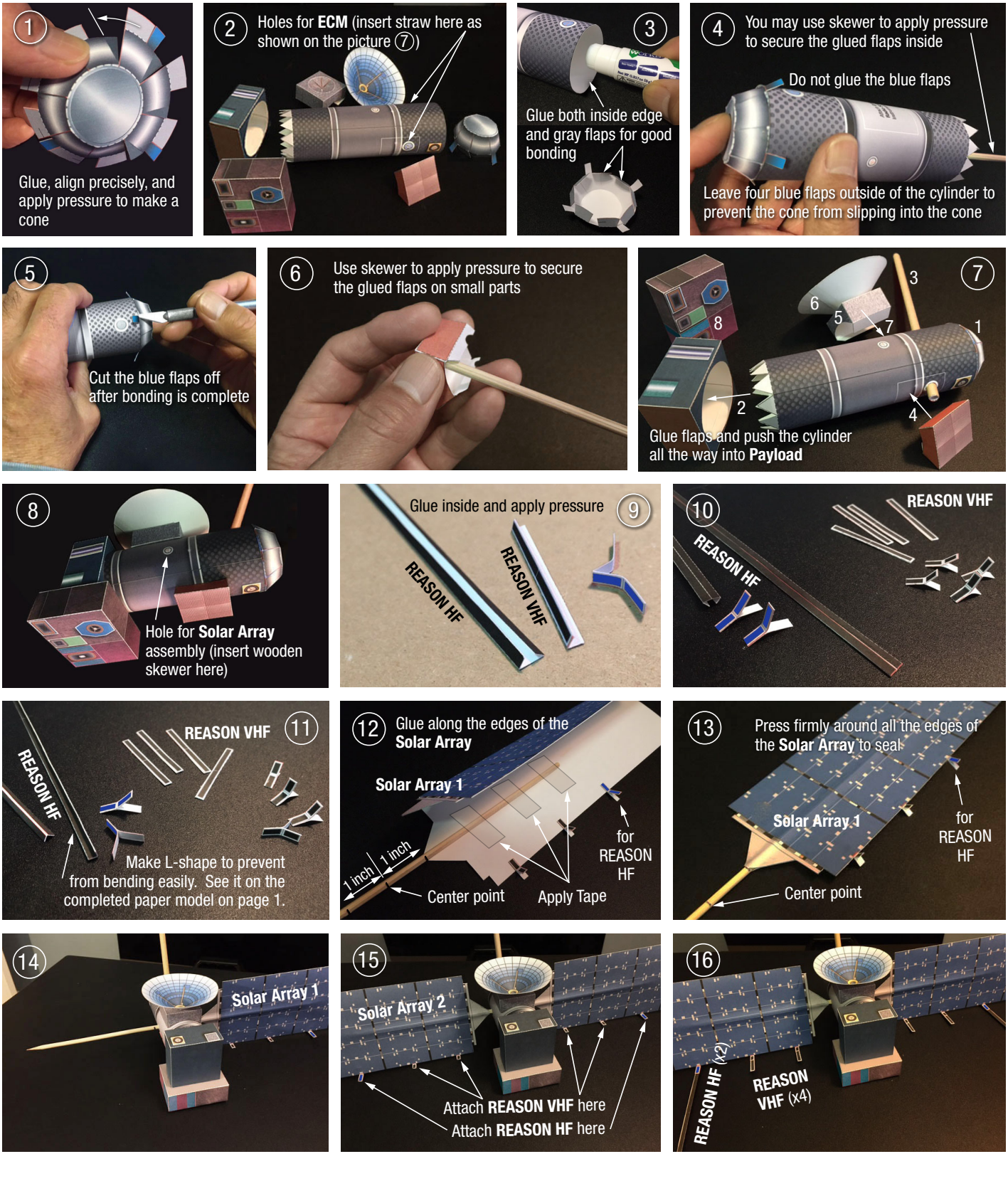


Required Materials

- Four sheets of white cardstock *(recommended 65 lb weight)*
- Glue stick *(Liquid glue is not recommended)*
- Scissors
- X-acto knife *(with supervision)*
- Ruler
- Pen or pencil
- One paper straw
- One wooden barbecue skewer or equivalent *(at least 10 inches [~25 centimeters] long)*

INSTRUCTIONS

Print pages 3–6 of this instructional PDF in color on white cardstock. Use an X-acto knife (gently press to avoid cutting through) to score along all the dashed lines. Next, cut out all the parts, fold where indicated, and glue the dark-gray areas first; glue the light-gray areas afterwards. **Make sure to follow this instructional sequence to assemble. Also, follow the build sequence on photo (7) to assemble these parts.** Use color print for desired results.



Score along all the dashed lines

Glue the dark gray areas first

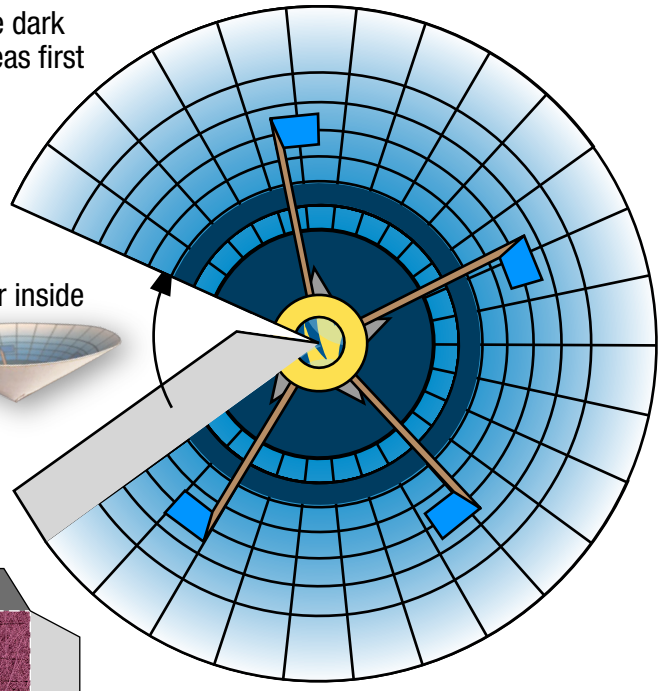
EIS

MISE

E-THEMIS

Attach **Payload** here

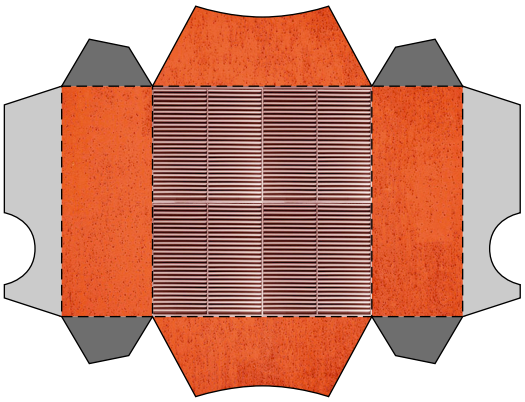
Color inside



High Gain Antenna

Europa-UVS

Pressurant



Cut on red lines

Payload

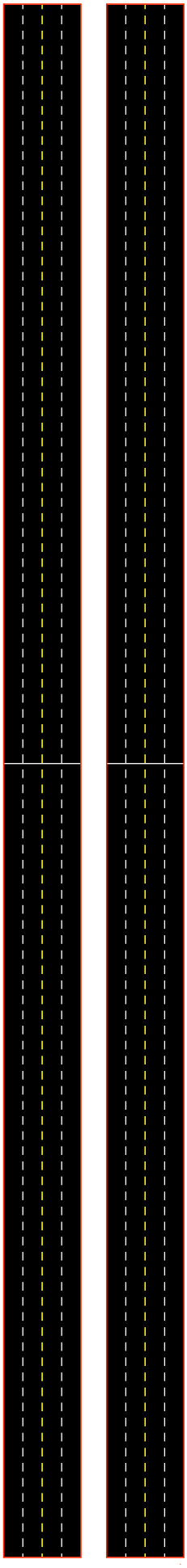
SUDA

Cut out

MASPEX

Gravity/Radio Science
(Instrument 1)

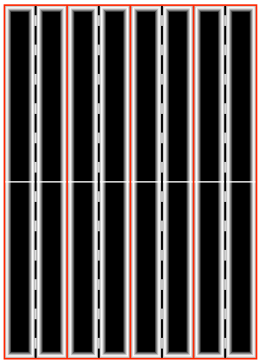
PIMS



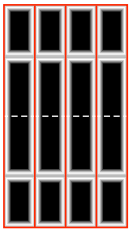
a

REASON-VHF (x4)

a

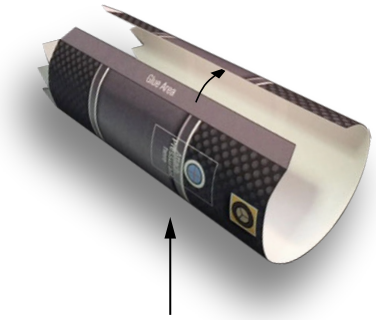


b



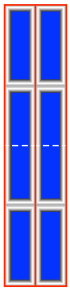
Cut on red lines

Score along all the dashed lines

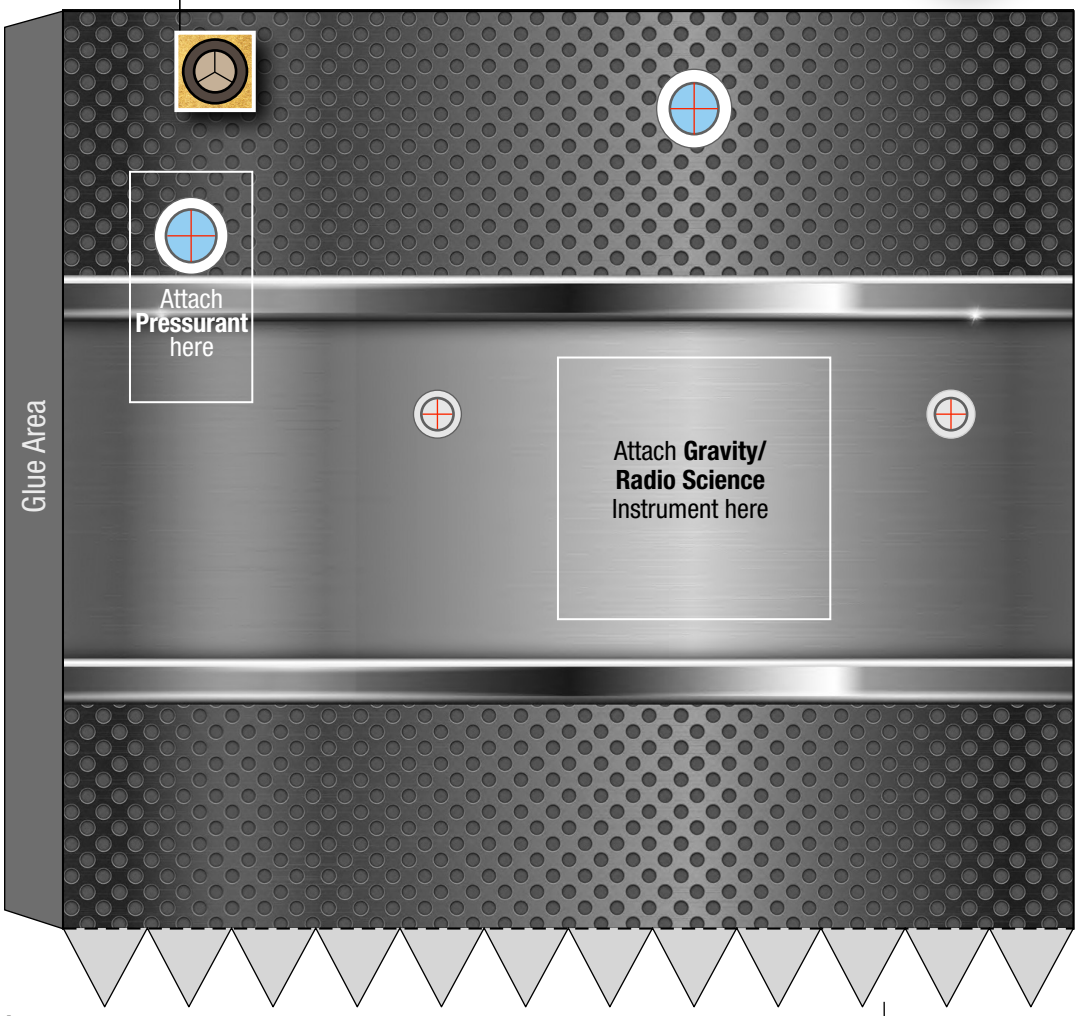


PIMS

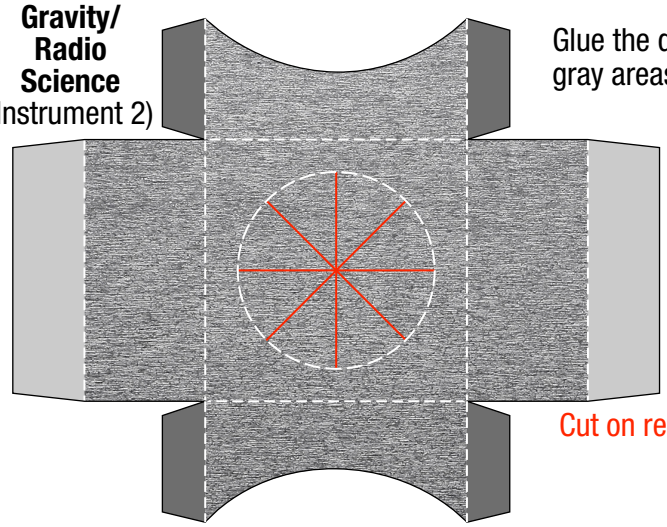
b



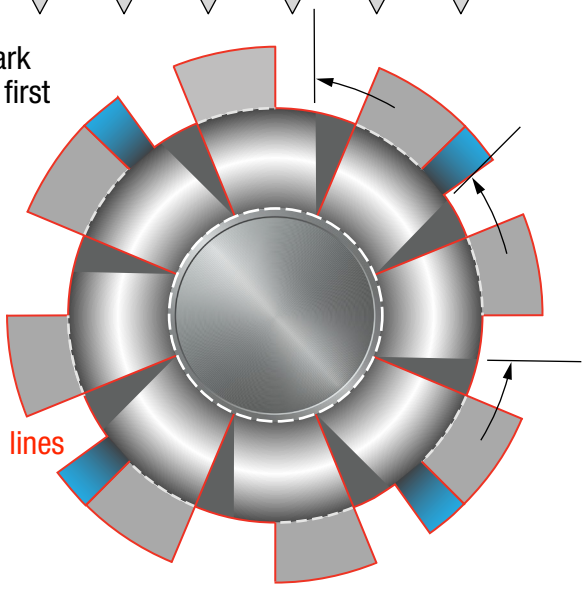
REASON-HF (x2)



Gravity/ Radio Science (Instrument 2)



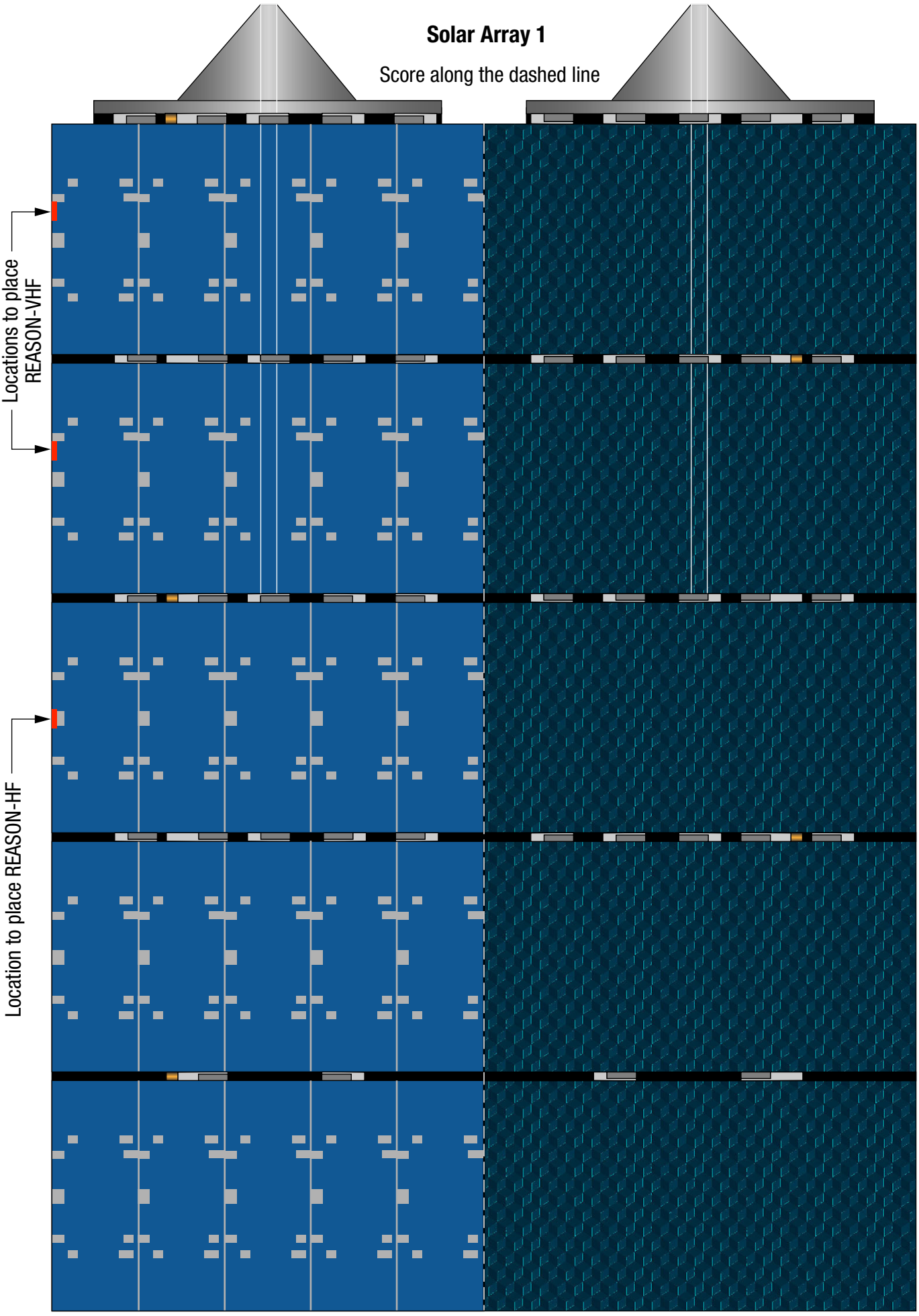
Glue the dark gray areas first



Cut on red lines

Solar Array 1

Score along the dashed line



Solar Array 2

Score along the dashed line