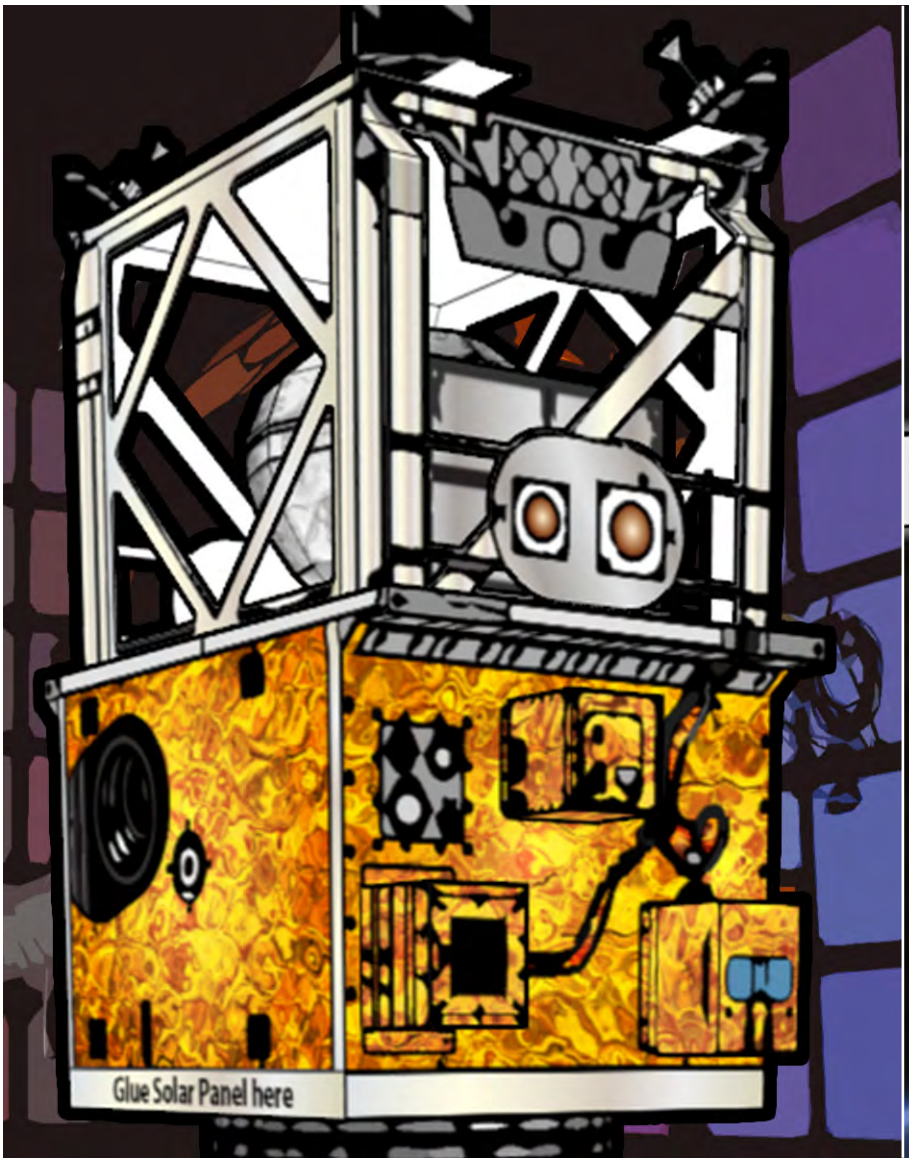
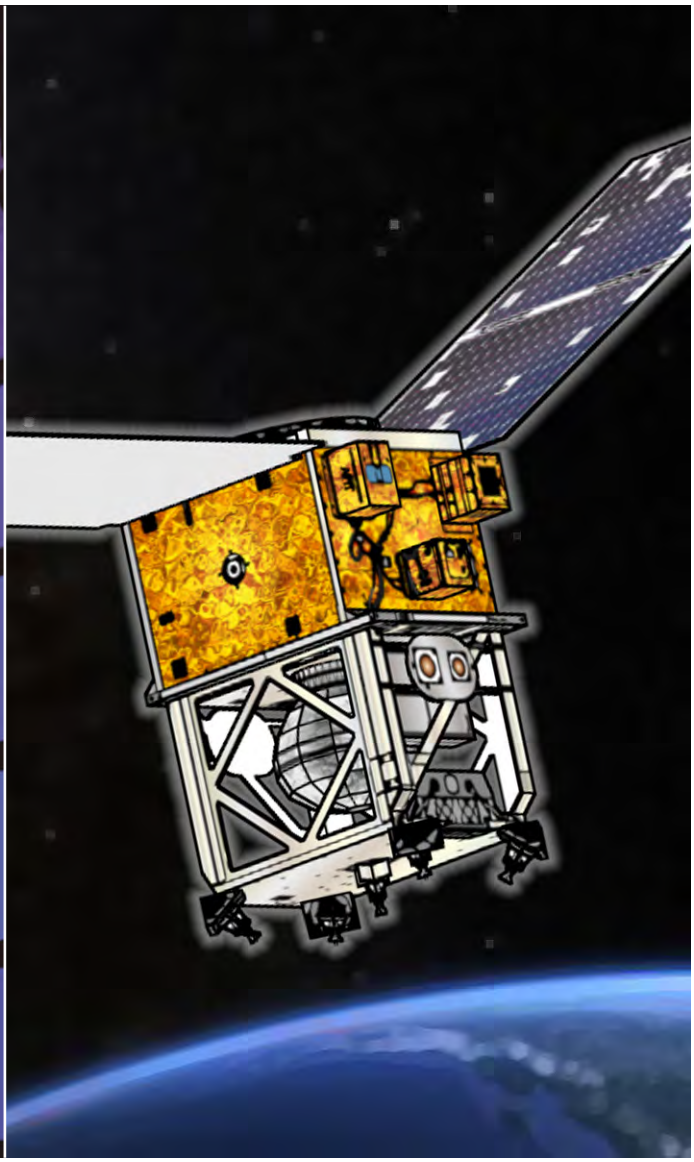
GREEN PROPELLANT INFUSION MISSION
DETAILED PAPER MODEL





GO BEYOND WITH BALL.®

Spacecraft fuel is going green with NASA's Green Propellant Infusion Mission. Ball Aerospace developed the GPIM spacecraft and now leads the team that's demonstrating this high-performance, non-toxic propulsion fuel on orbit for the first time.

Build your own 1/10 scale detailed GPIM paper model with this kit.

INSTRUCTIONS

1. Score each part before cutting out.
2. Cut out and assemble; matching number sets.
3. Fold parts along score lines.
4. Checkfit each part before gluing, matching alignment as indicated.
5. Assemble using minimal glue; wipe off excess.

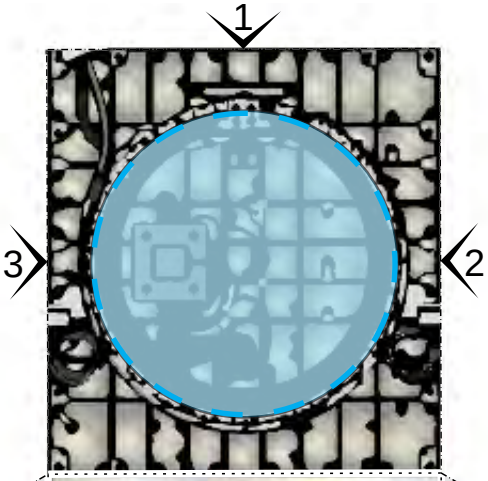
TOOLS NEEDED

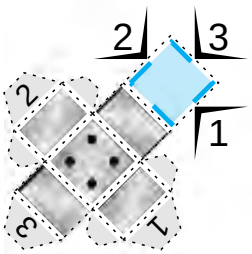
- Small scissors (for cutting all curved lines)
- Hobby knife with a new blade (required for cylinders)
- Scriber, ball-point pen, small knitting needle or large, smooth sewing needle (for scoring folds)
- Ruler
- Cutting board, if using a hobby knife (tagboard or cardboard is OK)
- Dowel or round pencil; table edge is OK (for forming curved parts)
- Rubber or foam pad (for forming curved parts)
- Tweezers (for holding and bending small parts)
- White glue
- Toothpicks (for glue applications)

FORMING PARTS

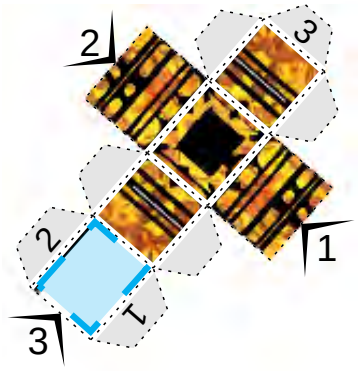
- Scoring slightly weakens the paper so you can make perfect folds. Use a scriber or other round-tipped tool to firmly draw along fold lines.
- To form a cylinder, roll the part between a dowel or round pencil and a foam pad; repeat as needed. Before gluing, check for a good fit.
- It is best to use glue very sparingly; too much results in warping and excessive drying times. Use a toothpick with a small puddle of glue on scrap paper. Do not try to glue too much at a time on any part. Glue only 4 or 5 tabs at a time, and let them dry before moving on.

Launch Ring

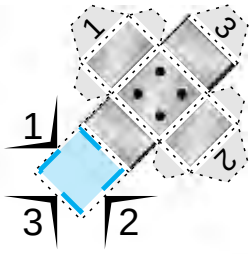




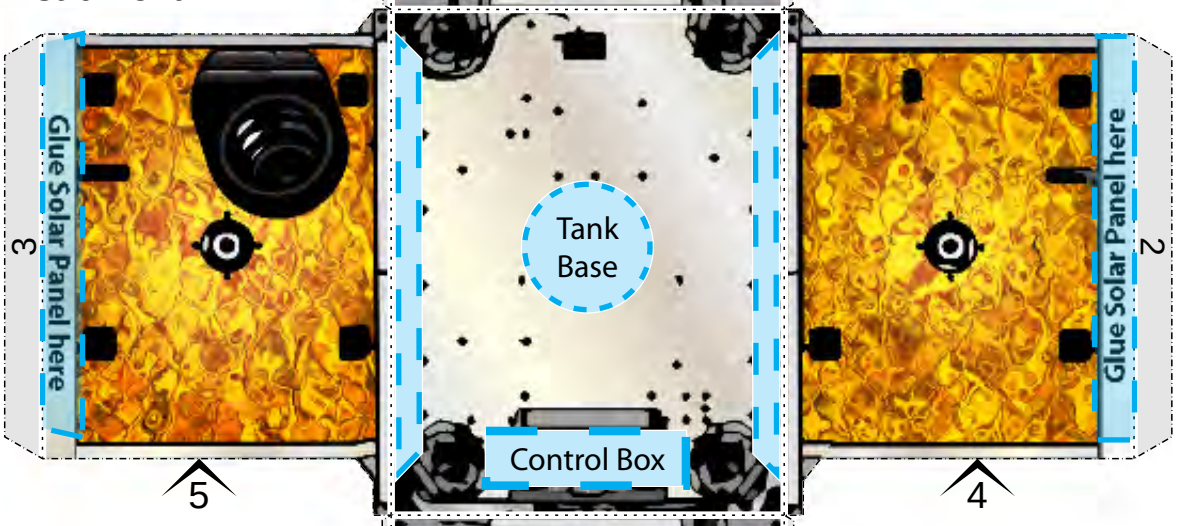
Counter Weight 1

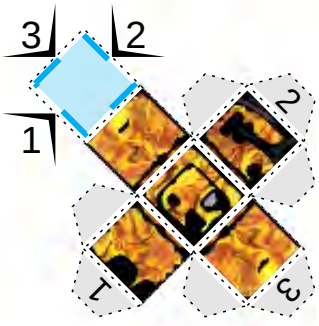


Instrument 1

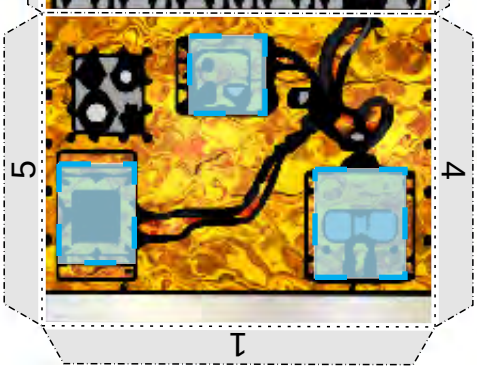


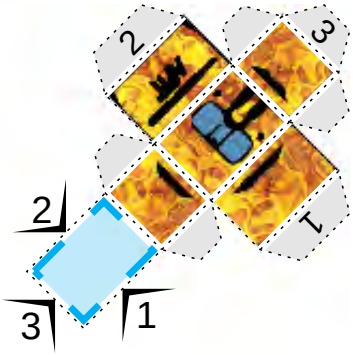
Counter Weight 2



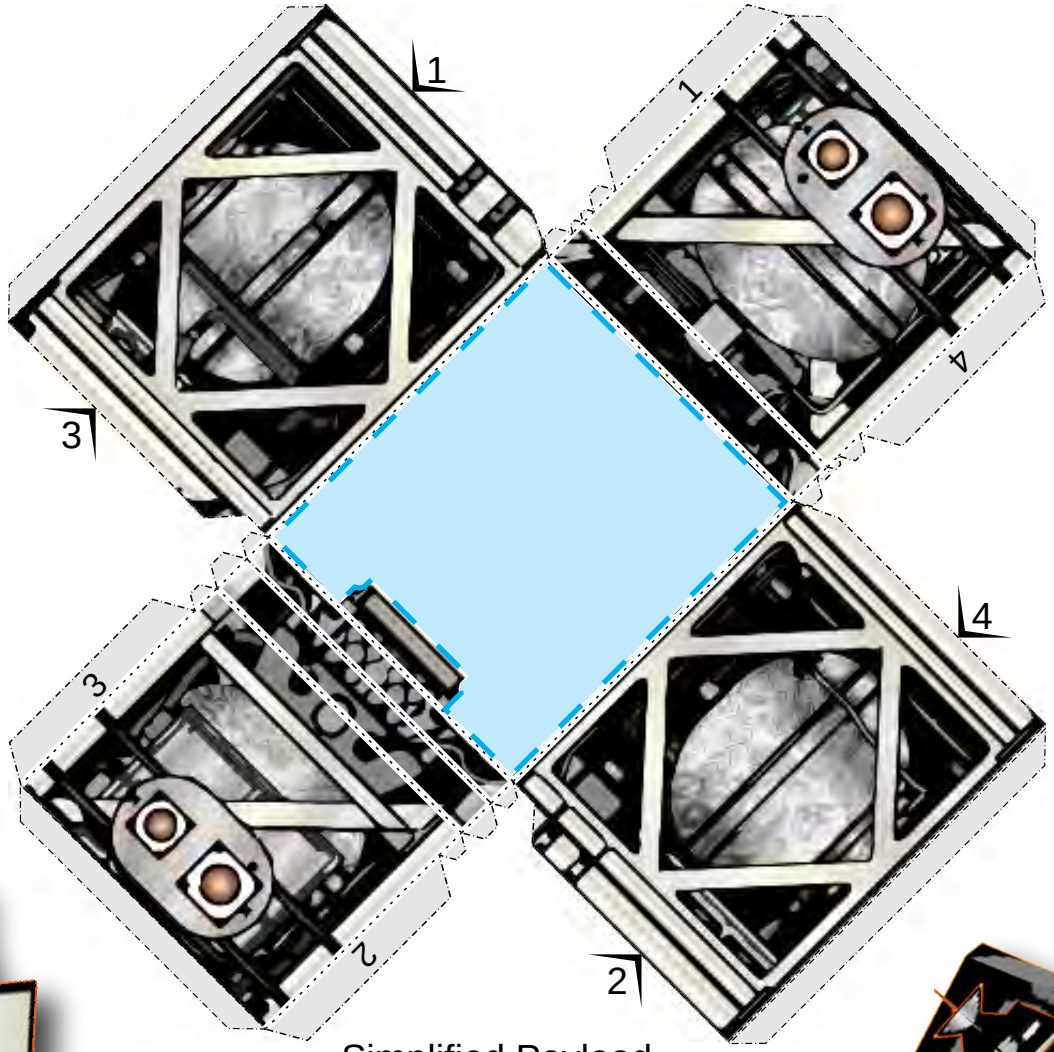


Instrument 2

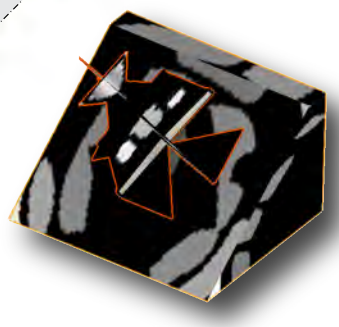


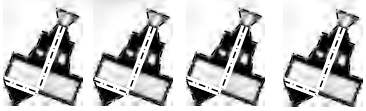


Instrument 3



Simplified Payload





Center Thruster

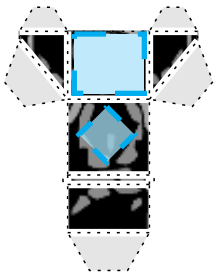
Top Deck

Thruster 1

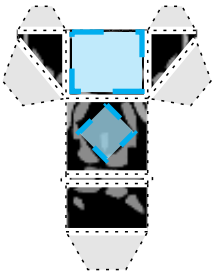
Thruster 2

Thruster 3

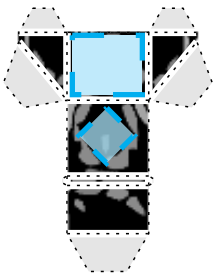
Thruster 4



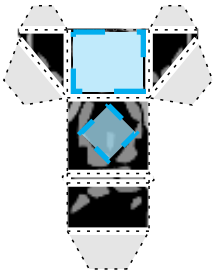
Mount 1



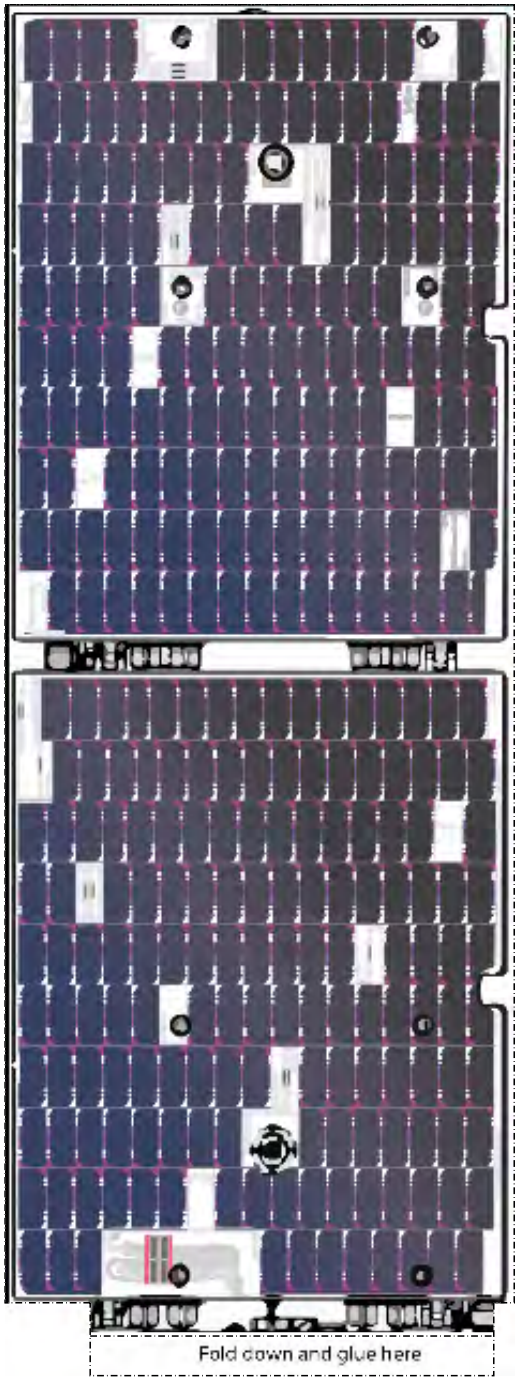
Mount 2



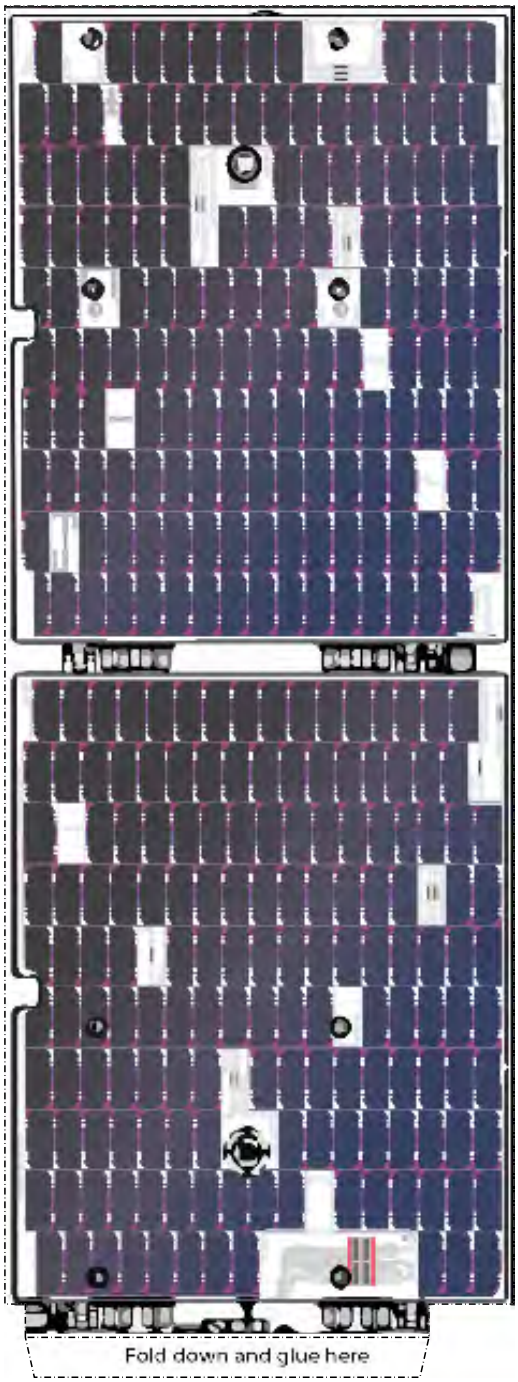
Mount 3



Mount 4

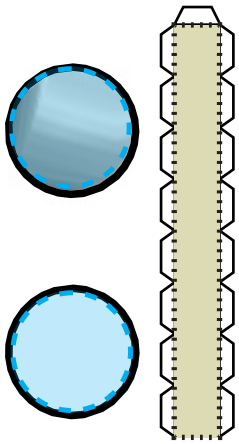


Perpendicular Solar Panel

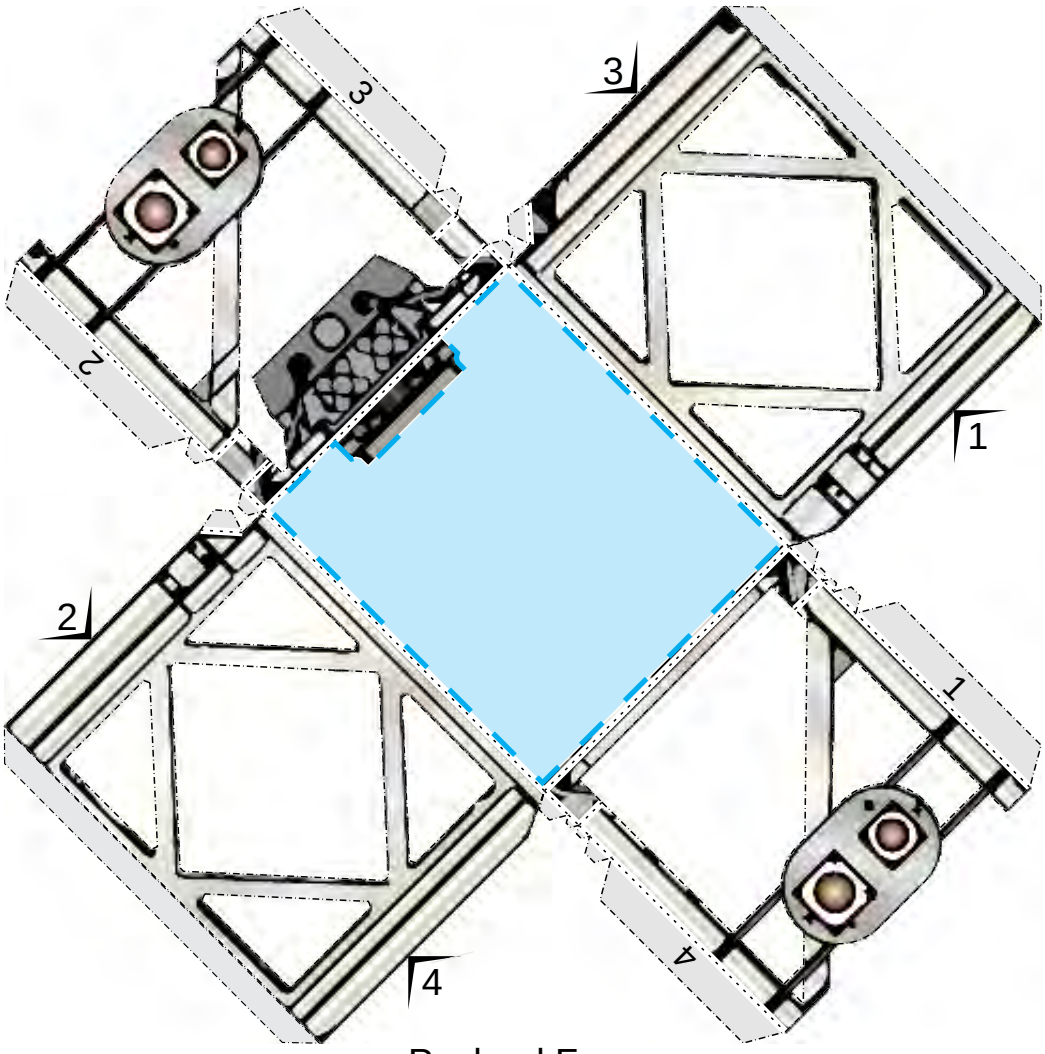


Angled Solar Panel

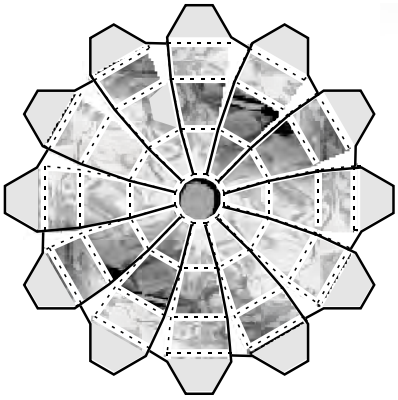
Model Stand



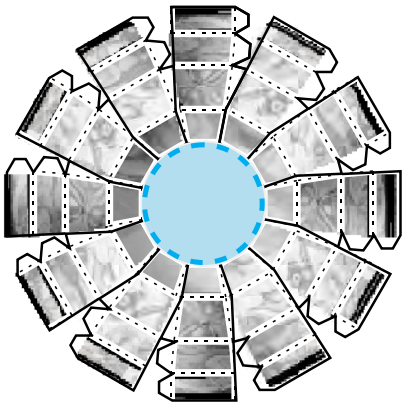
Tank Base



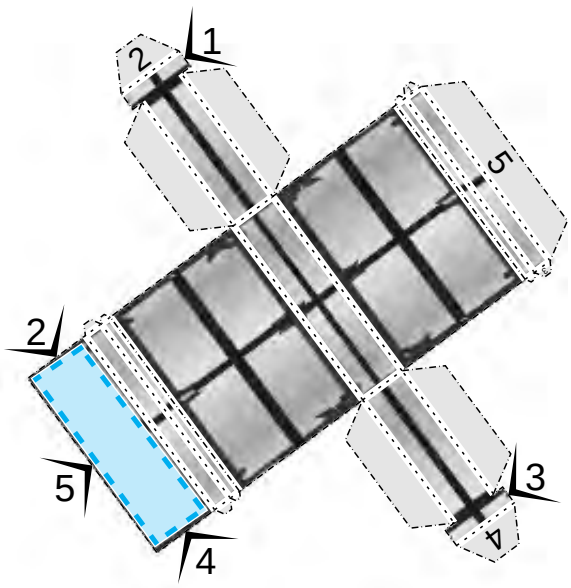
Payload Frame



Tank Top



Tank Bottom



Control Box