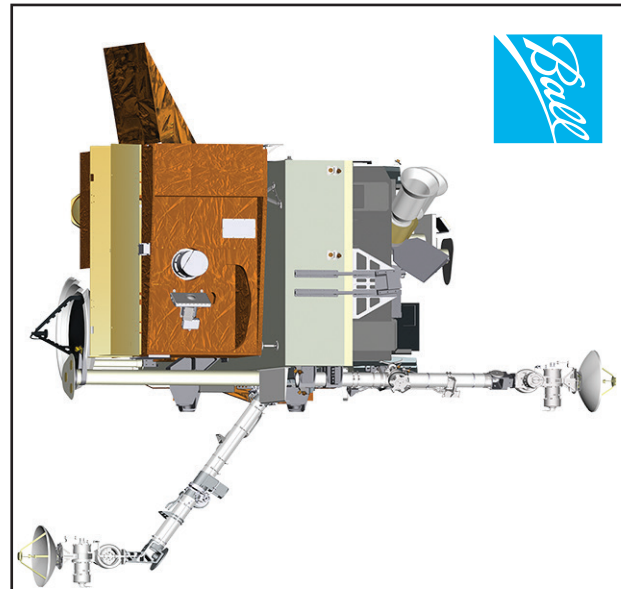




## Bus and Devices



# JPSS-1

Hurricanes, tornadoes, heat waves, and severe snowfalls happen more often than ever. We rely on spacecraft orbiting Earth to warn us of such weather. We also rely on spacecraft to measure climate features, such as the average rainfall in a region.

The JPSS-1 spacecraft carries five devices to forecast our weather and monitor our climate. Ball Aerospace designed and built OMPS, the device that measures ozone in our atmosphere. Ball also designed and built the bus, which is the main structure that carries and powers the devices. JPSS-1 was launched in 2017.

Learn more at:

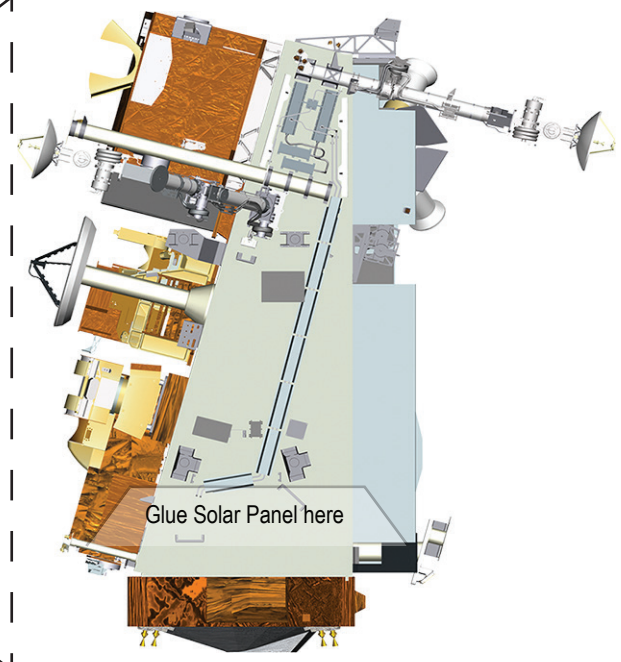
[www.jpss.noaa.gov](http://www.jpss.noaa.gov)

[www.ball.com/aerospace](http://www.ball.com/aerospace)

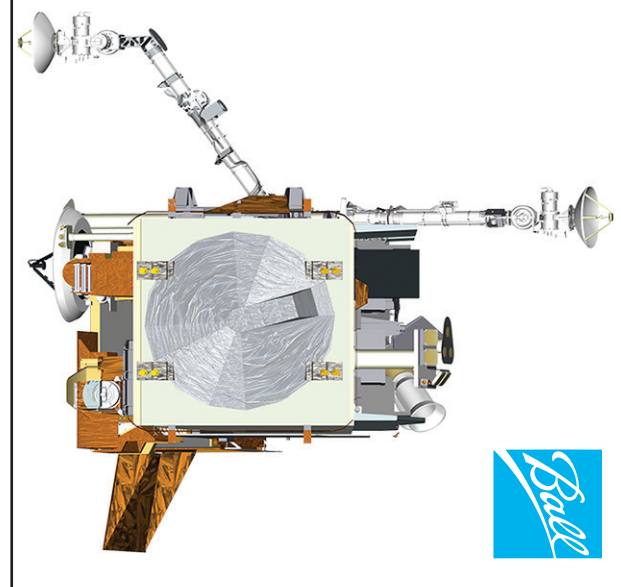


## Joint Polar Satellite System-1

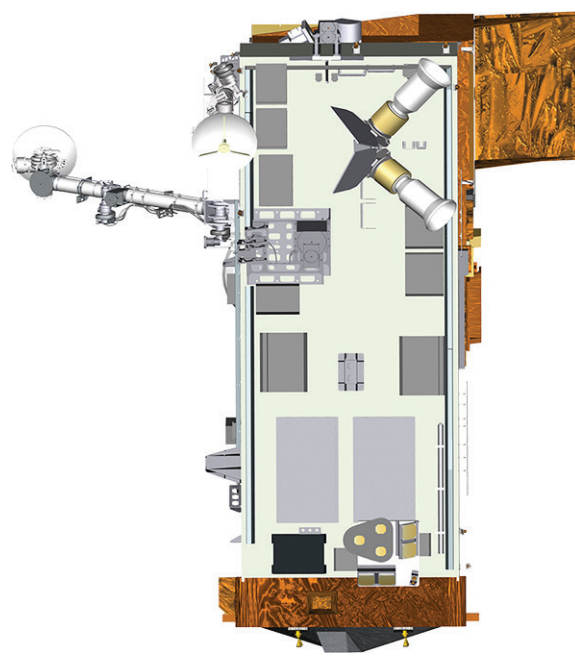
Fold down and glue here



Glue Solar Panel here

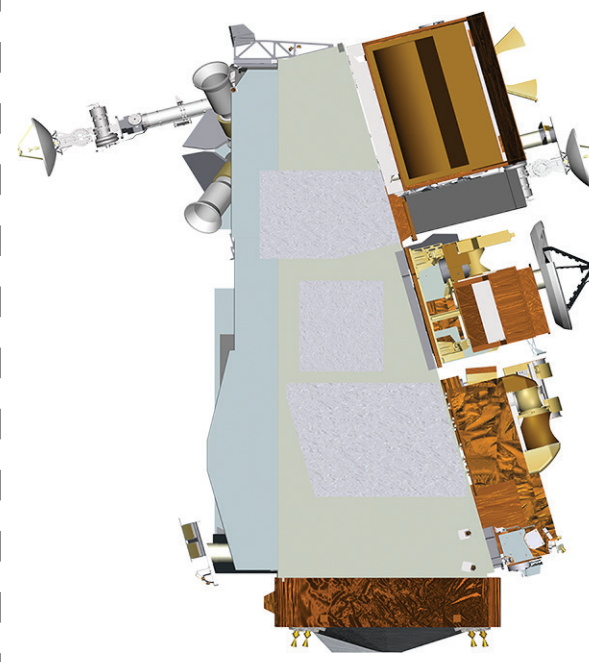


Fold down and glue here



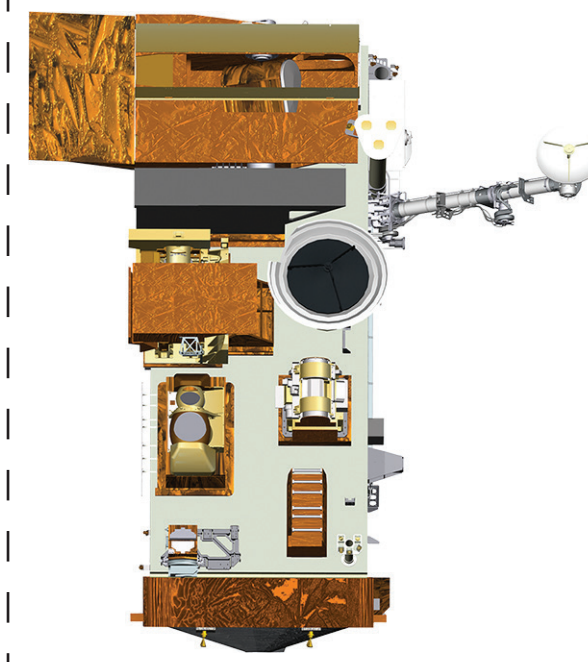
Fold down and glue here

Fold down and glue here



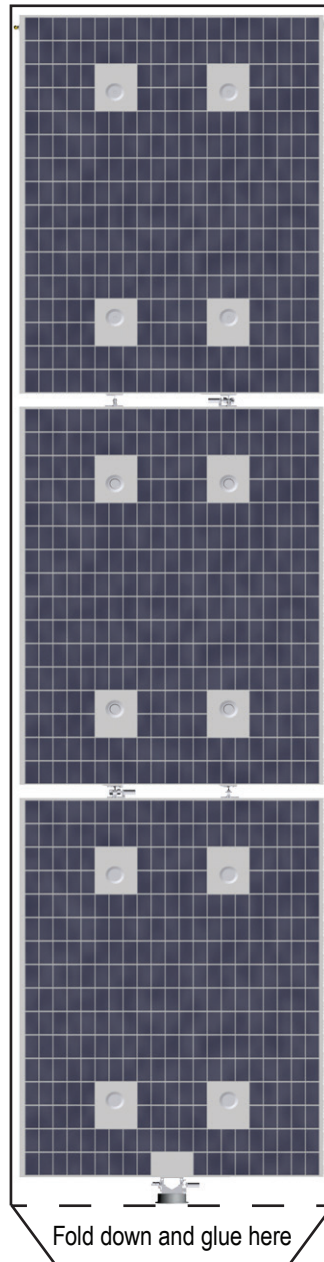
Fold down and glue here

Fold down and glue here



Fold down and glue here

## Solar Panel



Fold down and glue here

### Materials

- Ball-point pen or large sewing needle
- Ruler
- Scissors
- White glue, glue stick, or clear tape

### Build Your Own JPSS-1 Model (1/40<sup>th</sup> scale)

1. **Look** over the pattern to get an idea of what you will be doing. Notice that there are dashed lines and solid lines.
2. **Score** all the dashed lines on both parts to make them easier to fold. To score, use a ruler and a ball-point pen or sewing needle. Line up the ruler along a dashed line, and then firmly draw back and forth along the ruler.
3. **Cut** out the bus along the solid lines using scissors.
4. **Fold** down the flaps on the bus that say "Fold down and glue here," but don't glue yet.
5. **Fold** down along the other dashed lines on the bus.
6. **Cut** out the solar panel and then fold the flap.
7. **Glue or tape** the bus's flaps to close it up. If you're gluing, apply a **very thin layer**.
8. **Glue or tape** the solar panel to the bus where marked.

GO BEYOND.®