

Inflatable Antennas Support Emergency Communication



Glenn Research Center

**GATR Technologies
Huntsville, Alabama**

Originating Technology/NASA Contribution

- ◆ NASA launched the first of its inflatable space structures in the form of large, metalized balloons—the Echo satellites, in 1960
- ◆ New interest was spurred with the successful deployment of the Inflatable Antenna Experiment during STS-77 in 1996



Partnership

- ◆ ManTech SRS Technologies received Small Business Innovation Research (SBIR) funding to develop an inflatable solar concentrator; the technology was applicable to inflatable antennas
- ◆ GATR licensed the technology from SRS and improved it through a Glenn Space Act Agreement
- ◆ The technology won an “R&D 100” Award

Product Outcome

- ◆ Certified by the Federal Communications Commission, the ground-based inflatable antennas are transported in two portable cases and can be quickly deployed in remote areas
- ◆ GATR provided communications after Hurricane Katrina, wildfires in California, and the 2010 Haiti earthquake