Radio Amateur Satellite Corporation
Strategic Plan 2021-2035

Strategic Plan

Organization

Our Vision

Our Vision is to deploy satellite systems with the goal of providing wide-area and continuous coverage communications, to continue active participation in human space missions, and support a stream of LEO satellites developed in cooperation with the educational community and other Amateur Radio satellite groups.

Our Mission

AMSAT is a non-profit volunteer organization which designs, builds, and operates experimental satellites and promotes space education. We work in partnership with government, industry, educational institutions, and fellow Amateur Radio societies. We encourage technical and scientific innovation and promote the training and development of skilled satellite and ground system designers and operators.

Our Core Values

We lead by example.

We respect the individual.

We work collaboratively towards a common purpose and shared goals.

We embrace change and innovation to help our members, our partners, and ourselves.

We are committed to the Amateur Radio satellite community.

We are open and honest in our communication.

Above all, we act with integrity.

Strategic Satellite Objectives and Organization Goals

Highly Elliptical Orbits

1. Upward to HEO. Develop and deploy a series of spacecraft capable of providing wide-area and continuous coverage from high-Earth and geostationary transfer orbits.

Greater Orbit, Larger Footprint

2 GOLF. Develop and deploy a series of increasingly capable spacecraft through a program to learn skills and systems for which we do not yet have the necessary low-risk experience, including active attitude control, deployable/steerable solar panels, radiation tolerance for Commercial off the Shelf (COTS) components in higher orbits, and propulsion.

Amateur Radio on the International Space Station

3. AREx-A. Partner with ARISS and ARISS-USA to advance Amateur Radio's presence aboard NASA's International Space Stations, Deep Space Gateway and Artemis missions and provide opportunities to engage with astronauts in lunar and deep space operations.

Low Earth Orbit

4. LEO. Support a stream of LEO satellites developed in cooperation with the educational community and other Amateur Radio satellite groups.

- **4.1 FM Operations.** Develop, deploy, and support a series of 1u spacecraft to support continued FM amateur satellite operations in low Earth orbit.
- **4.2 Partnerships.** Develop a plug-and-play communications solution for educational and other Amateur Radio CubeSat programs, providing a VHF/UHF telemetry beacon, command receiver, and linear transponder or FM repeater communications module.

AMSAT STEM Initiatives

5. AMSAT Education. Support science, technology, engineering, and mathematics (STEM) initiatives and training programs for satellite and ground system designers and operators.

- **5.1 CubeSat Simulator.** Continue development of AMSAT's CubeSat Simulator Program.
- **5.2 High Altitude Ballooning.** Develop program to support and sponsor the use of amateur radio in high-altitude balloon (HAB) launches.
- **5.3 Youth Initiative.** Develop an educational outreach program that encourages youth to pursue STEM interests in space science and communication technology.