



The Radio Amateur Satellite Corporation



Barry A. Baines WD4ASW
President

AMSAT

AMSAT Status Report
2016 AMSAT Annual Meeting

13 NOV 16



AMSAT-NA Highlights

- ❑ Organizational Changes
- ❑ 2016 Accomplishments
- ❑ 2017 Goals/Concerns
- ❑ Organizational Concerns
- ❑ Fundraising



2016-2017 AMSAT Board of Directors

2017	Barry Baines, WD4ASW	Westborough, MA
2017	Jerry Buxton, N0JY	Granbury, TX
2017	Andrew Glasbrenner, KO4MA	New Port Richey, FL
2017	Robert McGwier, N4HY	Elliston, VA
2018	Tom Clark, K3IO	Clarksville, MD
2018	Mark Hammond, N8MH	Coats, NC
2018	Bruce Paige, KK5DO	Houston, TX
	Alternates (1-Year)	
	Paul Stoetzer, N8HM	Washington, DC
	Clayton Coleman, W5PFG	Palestine, TX



Senior Leadership Team

President	Barry Baines, WD4ASW	Westborough, MA
Executive VP	OPEN	
VP Operations	Drew Glasbrenner, KO4MA	New Port Richey, FL
VP Engineering	Jerry Buxton, N0JY	Granbury, TX
VP User Services	OPEN	
VP Marketing	OPEN	
VP Human Space Flight	Frank Bauer, KA3HDO	Silver Spring, MD
Secretary	Paul Stoetzer, N8HM	Washington, DC
Treasurer	Keith Baker, KB1SF/VA3KSF	Corunna, ON
Manager	Martha Saragovitz	Silver Spring, MD



Other Key Leaders (Appointed by the AMSAT President)

VP-Educational Relations	Joe Spier, K6WAO	Weimar, CA
Director-Field Operations	Gould Smith, WA4SXM	Knoxville, TN
Dayton Hamvention Ops	Steve Belter, N9IP	Lafayette, IN
AMSAT Journal Editor	Joseph Kornowski, KB6IGK	Austin, TX
ANS Editor	Lee McLamb, KU4OS	Cocoa, FL
Website Content Manager		
ARISS International Delegate	David Taylor, W8AAS	Columbia, MD
ARISS International Delegate	Stefan Wagner, VE4NSA/VE4SW	Winnipeg, MB
IT Team Leader	Joe Fitzgerald, KM1P	Boston, MA



Overview

AMSAT's Mission Statement

As of 21-Feb-04

- AMSAT designs, builds and operates experimental satellites and promotes space education.
 - » Focus is on coverage and availability
- **Partnerships**
 - » NASA, ARISS – Human Space Flight
 - » Education: Foundations, Universities
 - » LEO satellite projects and education outreach
- **Technical and scientific innovation**
- **Training and development**
 - » Designers and Operators.



Overview

AMSAT's Vision Statement

As of 24 OCT 08

- Deploy **satellite systems**
 - » Wide area
 - » Continuous coverage
- Participation in **human space missions**
- Support a stream of **LEO satellites**
 - » Developed in cooperation with the educational community and other amateur satellite groups.



Overview

AMSAT's Vision Statement

To Summarize:

“Keep Amateur Radio in Space”



Summary of 2016 Accomplishments/Issues

- Fox-1Cliff Ready for Launch
- Fox-1D Ready for Launch
- Fox-1E Acceptance into CSLI (FEB 2016)
- P-4B Payload Accommodation Study Completed (MAR 2016)
- RadFXSat-2/Fox-1B Environmental Testing (ELaNa-XIV)
- Evolving Partnerships:
 - » Virginia Tech Collaborative Agreement
 - Camera project flies on Fox-1C and Fox-1D
 - » Vanderbilt University (ISDE) payloads for Fox-1A & RadFxSat/Fox-1B
 - » University of Iowa HERCI payload for Fox-1D
 - » Ragnarok Industries: NASA CubeQuest Challenge
 - » Fox-1A success opens new relationships



Summary of 2016 Accomplishments/Issues

- Fox program materials placed in public domain
- Development of relationships on education continues (ARRL)
- ARISS Program evolves w/enhanced funding relationships
- AMSAT Journal published on time
 - » New Editor Joe Kornowski, KB6IGK and his team have done stellar work
 - » Major membership benefit
 - » Generation of content a major concern
- Leadership changes:
 - » Withdrawal of JoAnne Maenpaa, K9JKM (BoD member)
 - » Withdrawal of Lou McFadin, W5DID (BoD member)
- IT Development Concerns
 - » Modernization & expanded capabilities
 - » IT support for Martha



2017 Goals/Expectations

- Launch of Fox-1C & Fox-1D (Sherpa on Falcon-9)
- Launch Fox-1B in March 2017 (ELaNa-XIV)
- Potential Launch of Fox-1E in December 2017 (ELaNA-XX)
- P4-B Partnership with Virginia Tech
 - » Payload Analysis Study completed with recommendation to USG
 - » Uncertainty regarding status of primary payload
 - » AMSAT to develop Ground Terminal, Submit IARU coordination papers, Manage the Amateur Payload
 - » S/C payload development under VT w/AMSAT assistance as desired
 - » Fundraising beyond \$100K Payload Analysis is VT's responsibility



2017 Challenges: “A View to the Future”

- ARISS: Program Operates Under New Relationships
 - » ARISS must raise funds for both operating expenses and capital needs
 - » AMSAT/ARRL handle School Selection Process
 - » Amateur Hardware a major concern
- Education Outreach: Space communications in the classroom
- Export Control: Revised rules/Learning the new environment
 - » VT: Office of Export Security & Research Compliance
 - » EAR opens new opportunities for collaboration with other AMSATs
- Cubesat Licensing: Experimental vs. Amateur Satellite Service
- ‘IT Future’’: Renewed focus on enhancing capabilities
 - » Transition to web-based membership platform
 - » AMSAT Store will be upgraded
 - » AMSAT will utilize 3rd party service providers to create capabilities



2017 Challenges: “A View to the Future”

- Content Management for our Media Outlets-Soliciting Materials
 - » AMSAT Journal (Joe, KB6IGK)
 - » AMSAT Website (Need Content Manager)
 - » Seeking content/expanding sources/sharing resources
- Building awareness/support for AMSAT
 - » Social Media reach-Facebook & Twitter
 - » Translating “Likes” to Memberships/Support
- Field Operations Leadership Team Changes
 - » Gould Smith, WA4SXM is the new Director-Field Operations
 - » Patrick Stoddard, WD9EWK is “Lead Area Coordinator”
 - » Focus on Enhancing Field Operations Reach and Impact



AMSAT Organizational/Financial Trends

Membership

- Membership Trends (US and Foreign)
 - » Sep 2016 - 3226
 - » Dec 2015 - 3306
 - » Dec 2014 - 3424
 - » Dec 2013 - 3145
 - » Dec 2012 - 3698
 - » Nov 2011 - 3385
 - » Nov 2010 - 3660
 - » Nov 2009 - 3646
 - » Nov 2008 - 3501
- Success may breed Success
 - » Fox-1A Launch Membership Special appears to be having an impact on renewals
 - » Additional launches may (hopefully) generate additional support



AMSAT Organizational/Financial Trends

Current income from dues and other sources are not sufficient to cover day-to-day expenses

- Overall membership levels has major impact on providing operating funds to keep the organization running
- Projected operating deficit in 2017 approx. \$147K
 - » Need 3,340 additional members @ \$44.00/year to break even
 - » Operating losses covered by reserves, non-designated donations
 - » Level of deficits is not sustainable in the long run
- Growing the membership is critical to sustaining AMSAT
 - » Successful launches provide an opportunity to generate growth
- AMSAT members are encouraged to recruit others to join AMSAT in order to increase cash flow to pay the bills
 - » Need to bring the next generation on board



AMSAT Fundraising

- ❑ It costs real \$\$\$ to have a presence in space
- ❑ AMSAT continues to look for ways to encourage donations
 - » PayPal
 - » Web store
 - » Online Funding sources
 - » “Challenge Coin”
 - » Fundraising is a multi-year effort
 - » Learn from ARISS fundraising efforts (generating grants)
 - » Does VT’s P4-B fund raising strategy/implementation provide a “teaching moment” on how to develop/manage major capital campaigns?
 - » Do our successes of the past five years (ARISSat-1, Fox-1 Program, ARISS) provide the foundation for “Case for Support?”



2017 Challenges: “A View to the Future”

- Major Programs in Collaboration with VT
 - » Uncertain timeframes and resource requirements

- Focus on Fox-1 Engineering/Fox-1 Follow-On
 - » Due to end-of-life parts issues, do we redesign key Fox-1 systems to keep the current program going?
 - » Does AMSAT move forward on a new program (“Golf”)?

- Enhance the management team
 - » Recruiting Talent
 - » Succession Planning
 - » Bring in the next generation of leadership



2017 Challenges: “A View to the Future” Strategic Planning

- Time for a major strategic planning development process
 - » 12 years since the last intense review
 - » We're at a cross roads in terms of defining future satellite projects
 - » Financial concerns continue

- Strategic Planning is a Process
 - » Strategic Planning is the responsibility of the Board which sets the strategic direction of AMSAT
 - » Understand AMSAT's current “SWOT” (Strengths/Weaknesses/Opportunities/Threats)
 - » Look at all facets of the organization's structure and ability to function in the current and projected environment



2017 Challenges: “A View to the Future” Strategic Planning

- Strategic Planning covers a wide area
 - » Determine “Where we are”
 - » Identify “What’s important”
 - » Define “What we must achieve”
 - » Determine “Who is accountable”
 - » “Review, Review, Review”
- What are the “Outputs”?
 - » Create Mission Statement: “The current Who and What is AMSAT?”
 - » Create Vision Statement: What does AMSAT want to accomplish in the future?
- The source of inspiration and motivation looking forward (next 5-20 years)
- What do we aim to achieve?
- How will “success” be measured?
 - » Document SWOT



2017 Challenges: “A View to the Future” Strategic Planning

- What are the “Outputs”? (cont'd)
 - » Identify initial resources needed to achieve the vision
 - Financial
 - Organizational
 - Personnel
 - Outside Support

 - » Define Follow-up Action Items
 - Board
 - Senior Officers
 - Departments



How can AMSAT Members Help in 2017?

- Recruit individuals to become members/rebuild the ‘base’
 - » Member’s “word of mouth” is the most effective recruiting tool available
- Recognize that satellite projects are multi-year projects that require financial support each year
 - » Capital campaign programs provide specific funds for satellite projects
- Donate to our launch campaign for Fox-1C/-1D and future opportunities in 2017 and beyond as you are able
- Use AO-85 and other existing satellites—rebuild interest in amateur radio in space
- Write articles for the AMSAT JOURNAL
- Provide content for website/webpage updating
- Volunteer your time and talent-identify a need and work to resolve it