



The Radio Amateur Satellite Corporation
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Dear AMSAT Member:

Enclosed is your ballot for the 2009 AMSAT Board of Directors. This year there are four positions up for election. Please take the time to review the statements from the candidates and make your choice. Deadline for receipt of ballots in Silver Spring, MD, is September 15, 2009. Your vote is important and is one of the privileges of AMSAT membership.

Being the mid-year, this is a good time to briefly review with you the status of AMSAT and our various projects. Many of you attended the AMSAT Forum at the Dayton Hamvention and heard directly from our team leaders involved with these projects. Here is a summary of what was presented:

1. The SuitSat-2 electronics, under development for ARISS (Amateur Radio on the International Space Station), continues on track for delivery to Russia this fall for eventual placement on the International Space Station and subsequent deployment during a space walk in 2010. The SuitSat-2 prototype was on display during Hamvention and visitors to the AMSAT booth heard several of the transmission types to be available on the flight model. SuitSat-2 offers a 'flying testbed' for AMSAT technology, including SDX (Software Defined Transponder), which will become the foundation for future AMSAT satellite projects.

ARRISS has been notified that the Orlan Space suit that was in storage on the ISS for eventual use with the SuitSat-2 electronics has been removed due to storage space limitations. This means that the electronics, developed by AMSAT, will be integrated in a new satellite structure currently under development. Once launched to ISS, this stand-alone satellite is expected to be deployed by the ISS crew during an EVA space walk.

2. ITAR (International Traffic in Arms Regulations) is a major issue for AMSAT due to concerns about our ability to work with our fellow AMSAT organizations on satellite projects. We continue to work with our attorney and the State Department to ensure AMSAT's compliance with ITAR and to seek clarification on future steps that we may pursue for continued development of projects with AMSAT-UK and AMSAT-DL.

3. The AMSAT Lab continues to be a major focus. As you may recall, we are in legal proceedings to regain ownership of our Clean Room, currently housed at the Hawk Institute for Space Sciences. Meanwhile, we removed all of our equipment from the facility in March 2009. We are currently actively looking for a new 'home' for the AMSAT Lab, preferably at a university location where the host is interested in partnering with AMSAT to develop space engineering opportunities for students.

4. The Engineering Task Force continues its work to develop a strategy for future AMSAT engineering projects. There are several ongoing conversations taking place to see if AMSAT could provide a 'rideshare payload' on future low orbit flights based upon the SDX technology created for SuitSat-2 as well as adapting a 'modular' approach to spacecraft systems development. Such an approach offers significant flexibility and relatively fast development time that will allow AMSAT to take advantage of new launch opportunities as they develop.

5. AO-51 continues to perform following its fifth birthday in space on June 28. We are starting to see the impacts of 'advancing age' of the spacecraft, particularly with regard to the batteries and their ability to retain a charge. There have been several software crashes in the past few months that we had not previously experienced. While the satellite continues to provide outstanding service, it is clear that AMSAT should start considering a follow on project to supplement AO-51 in the next few years.

6. ARISS continues to play an important role in the lives of school children and our educational mission. Will Marchant, KC6ROL replaced Frank Bauer, KA3HDO as our VP-Human Space Flight in March. In addition, Maurice-Andre Vignault, VA2MA agreed to serve as the Canadian delegate to the ARISS Working Group in April.

7. The AMSAT Store continues to be a popular means for individuals to renew their AMSAT membership as well as order AMSAT merchandise such as the LVB tracker. This is our latest product offering that provides automatic rotor control.

We will continue to provide timely information via the ANS and the AMSAT Journal on the status of our various projects as new information is available. Please take the time to read these articles. The Hamvention AMSAT Forum presentations are available as video downloads from the AMSAT website.

You will also find in this envelope an announcement regarding the 2009 AMSAT Symposium that takes place at the BWI Sheraton, October 9-11, 2009. You may register for the Symposium using the AMSAT Store. We will be celebrating the 40th Anniversary of AMSAT, which was incorporated on March 3, 1969 in Washington, DC. Along with celebrating our past accomplishments, we expect that our team leaders will present updates on the status of their projects at Symposium. These volunteer teams are working hard to develop the technology to provide the satellite communications that we are all looking forward to placing in orbit. However, our ability to achieve these ambitious goals is dependent upon having the funds necessary to design and build our spacecraft. Please give generously to help make our common dream a reality.

73,

AMSAT Board of Directors

I would like to help AMSAT keep amateur radio in space:

Name _____ Call _____

Address _____

City _____ State _____ Zip/Postal Code _____

Daytime Phone Number _____ Email _____

___ \$35 ___ \$50 ___ \$75 ___ \$100 ___ \$250 Other \$ _____

Charge # _____ Exp date _____

AMSAT®

Board of Directors Candidates 2009

Listed Alphabetically

Barry A. Baines, WD4ASW, LM1971

I currently serve as President of AMSAT and as a member of the Board of Directors (BOD). I have represented our membership as a BOD member since 1999 and I ask for your vote.

I've been licensed since 1977 and hold an Extra Class License. I became a life member of AMSAT in 1982 and a life member of ARRL in 1983. I was active on AO-10 and AO-13. I was an active member of the Phase 3-D Integration Lab in Orlando, FL from 1994 to 2000 spending many weekends commuting from Jacksonville to Orlando to help with construction of the satellite (AO-40) and laboratory maintenance. Before the demise of AO-40, it was a thrill for me to operate via a satellite that I helped to build. I've been an Area Coordinator since 1992 and have given club presentations and satellite demonstrations at a number of hamfests over the years. Since 1995 I have served AMSAT in a variety of positions including VP-Field Operations (1995-2004), VP-Marketing & User Services (2004-2006), and Corporate Secretary & VP Special Projects (2006-2008).

I earned a MBA from University of Florida in 1981 following six years of duty in the US Navy as a Surface Warfare Officer. During a subsequent 22-year career with CSX Transportation I held a number of management positions in Sales & Marketing, Service Design, and Intermodal Operations. My professional background has served AMSAT well as I have assisted AMSAT in the development of a forward-looking vision of the future, identified a set of challenging, but achievable goals and then worked hard to lead the organization towards achieving these objectives.

AMSAT is at a critical crossroads that presents challenges and significant opportunities. We are in the process of 'rebuilding' a viable organization that is capable of building satellites and attracting support for the mission and vision that we're pursuing. There have been some very positive developments over the past eight months worth noting. First, AMSAT is successfully fulfilling an 'ITAR Strategy'. Second, I have appointed an 'Engineering Task Force' that is actively pursuing several satellite opportunities based upon AMSAT's current level of engineering skills and financial strength. This team is making solid progress and their depth of work and pursuit of potential options are encouraging. Third, the SuitSat-2 project will be completed this fall, establishing not only a new level of technology but putting 'real hardware' into space in 2010. These three areas represent solid accomplishments for AMSAT that I want to continue to encourage as a BOD member. I see my role on the BOD as one who will encourage further work in the areas of fund raising and developing relationships with other organizations who support AMSAT's activities, as AMSAT must continue to broaden its base of support.

We must continue to evolve into an organization that attracts enthusiastic volunteers willing to use their time and talent to help AMSAT achieve our goals as well as attract support from donors willing to provide significant funding to make our vision a reality. I want to help AMSAT's Board of Directors develop new major capital campaign skills as we adjust to the funding realities of what we must do to place our satellites in orbit. If you have any specific questions, please e-mail me at wd4asw@amsat.org.

Alan Biddle, WA4SCA

I have been licensed since 1964, an Amateur Extra since 1982, am a life member of the ARRL, AMSAT, and QCWA, and the first member of the AMSAT President's Club. My technical education includes a physics PhD from the University of Wisconsin. Professionally, I have been a USAF pilot, NASA physicist working on first materials and then space environment, and finally an America Airlines captain, now fully retired.

I have been active on all major satellites and modes since 1987. While I regularly sample the various satellites, I am not a big talker, but prefer to listen, learn, and understand. My greatest interest is experimenting with new modes and opportunities to understand how they really work. I am definitely not a techie builder, but more of a techie user. I Elmer others on both the basic and exotic modes. By sharing this practical knowledge, and as a regular at the Dayton AMSAT booth, I have gained a good understanding of the wide range of our members' interests and abilities.

Why am I, someone who has always been involved outside of formal AMSAT positions asking for your vote? As happens in every organization, there is a need for periodic review by experienced individuals who can look at both the current situation and future opportunities dispassionately, unencumbered by past associations. It is no secret that amateur satellite programs are going through a tough period. Launch opportunities are down, costs are up. That is not to say they are no opportunities, but they do need careful, realistic cultivation. I am dedicated to a Phase 3 or Phase 4 constellation, but there is no magic bullet which will give us one. However, there will be interim opportunities for more modest, focused spacecraft with technologically advanced packages. In turn these will give us credibility and infrastructure when more extensive, and expensive, opportunities become available. Their successful deployment will also aid in developing positive visibility and increased funding sources which we must have to proceed. By being realistic and at the same time growing our base, both in technology and resources, we will bring the next HEO or geosynchronous package that much nearer. If elected to the board, I will focus on prudent, achievable programs which rebuild our internal expertise and position us to create and exploit future opportunities.

Drew Glasbrenner, KO4MA

Thank you for the nomination for election to the AMSAT Board of Directors for a second term. My interest in amateur satellites began in 1992 with DOVE, MIR and the RS series. I have been a ham since 1987, hold an Extra class license, and am active on satellite and terrestrial VHF/UHF. I currently serve as the Vice President of Operations for AMSAT directing the operation of our satellites, as well as an active Area Coordinator representing AMSAT at many hamfests throughout Florida. Professionally I am a geologist specializing in near-surface geophysics and direct sensing methods, and am an alumnus of The University of South Florida.

In my first term as a Director, I have tried to best represent the interests of the active operators within AMSAT, often replying to questions and complaints on AMSAT-BB and other online forums. Some of the other activities I am proud over the last year include the partial recovery of AO-16 and retasking as a voice repeater, establishment of a set of loaner gear for DXpeditions such as K5D, and managing the AO-51 Operations Committee and providing a wide range of modes on that satellite. I have also enjoyed working with the Engineering Task Force on developing a modular approach to design of our future projects, and approaching satellite builders about cooperative rideshare opportunities.

Over the next two years I hope to see AMSAT initiate and complete a new satellite project, regardless of whether HEO, MEO, or LEO, or whether it is a free flying satellite or a package on another spacecraft. We must investigate and pursue all opportunities to this end.

Tony Monteiro, AA2TX

Tony Monteiro, AA2TX, has been a ham since 1973 and holds an Extra Class license. He joined AMSAT in 1994 and since then, most of his ham activities have been devoted to satellites. He was awarded VUCC-Satellite #58. He has also worked 49 states on just LEO satellites and awaits a really high orbit LEO to be able to reach Hawaii from his home QTH in North Andover, MA.

Tony was the author of the "InstantTune" software and has written many satellite articles that have appeared in AMSAT, ARRL, and CQ-DL publications. His AO-40 cardboard box antennas were a particularly popular hit with both satellite and WiFi enthusiasts.

Tony is currently developing the DSP code for the Software Defined Transponder that will fly on SuitSat-2. This will be the first software radio in space on an amateur satellite and it will provide an FM voice, packet, and slow-scan television downlink, a CW beacon, a BPSK telemetry beacon and a linear transponder all at the same time. On his previous satellite project, he designed the RADAR Fence Transponder that was the primary mission for the Navy OSCAR-60 (RAFT) Cubesat. He also provided some antenna modeling work on RAFT.

As a member of the AMSAT Engineering Task Force, Tony has been working to help define re-usable modules that can be quickly configured and deployed as satellite payloads. The engineering team has been focusing on future options for AMSAT including spacecraft and launch opportunities. The software defined transponder is an important element of this as it allows configuration changes without requiring new hardware design.

Tony has degrees in electrical engineering and computer science and worked in the communications industry for his entire professional career. He started at Bell Labs as a member of the technical staff and progressed through a series of start-up companies in engineering management. He finally ended up at Cisco Systems where he worked on ADSL, voice-over-packet and content-routing technologies and he served as chief architect of the consumer products division. He retired in 2002.

AMSAT faces both challenges and opportunities. Tony has always been a strong supporter and would like to help AMSAT move forward.

Bill Ress, N6GHZ

For the past year, I've been serving on your Board as the Alternate. It has been a busy and productive year and I would like your support again this year, since there is much to be done. Without a doubt, AMSAT-NA faces many challenges, but as a new Board member, I've been able to bring a fresh perspective and new enthusiasm to help solve some of our pressing issues.

ITAR

During the past year, I have strongly supported our efforts to understand the impacts that ITAR (International Trade in Arms Regulations) has had on past satellite development for AMSAT and to help resolve the issues that helped bring our satellite development activities to a halt. Our efforts have resulted in obtaining a "clean bill of health" from the US State Department for our past satellite building activities, which were in conflict with ITAR. With these ITAR issues resolved, we can now develop the guidelines that our satellite builders will need to follow to prevent future conflicts with ITAR.

AMSAT'S ENGINEERING TASK FORCE

At the October 2008 Board meeting, I was an advocate of modifying our Mission Vision statement to consider not just HEO (high earth orbit) satellites, but to adapt our strategy to put us into a position to consider "any" suitable launch opportunity that could get AMSAT back into space. As part of that strategy, AMSAT needed to start developing key circuit modules and sub systems so that we would be better prepared for launch opportunities as they develop. At that meeting, I volunteered to put together and chair the Engineering Task Force to put that strategy in place. Since October 2008, we have been having bi-weekly teleconferences that have focused on that goal. We have also expanded our efforts to include uncovering launch opportunities. In fact, we are currently in preliminary discussions with an organization for a ride share launch opportunity that one of our team members uncovered.

We also realize that AO-51 is starting to show its age, so we have starting to focus on developing the follow-on satellite. We will be evaluating how we can best use our technical assets and creative ideas to formulate a "realistic and attainable" satellite project and get started on that project. The effort will likely incorporate many of the "modules" being developed for SuitSat-2.

SUITSAT-2

Three of the Engineering Task Force members have also been heavily involved in helping get SuitSat-2 built and ready for a trip to space. I have been doing the development of the linear 435/145 MHz transponder, and that effort, and those of the other team members, is resulting in well-defined and characterized modules which can be readily adapted to meet AMSAT's goal of having hardware ready to meet "any" launch opportunity.

MY OBJECTIVE

I've been very busy, working along with the new leadership, to help define and direct our efforts to get us prepared for whatever launch opportunity is presented to us. A lot of good "foundation" work has been accomplished this past year, but I need your vote so that I can continue my efforts to insure that AMSAT is once again building satellites. Contact me at N6GHZ@AMSAT.ORG with your comments, questions and even your criticisms.

BACKGROUND

I was first licensed in 1957 as KN2HDG. That was the first step leading to my professional career in electronics. I graduated in 1968 from Cal Poly, San Luis Obispo with a BSEL. From there, I went on to have a rewarding career in the RF/microwave industry with companies like California Microwave, Omni Spectra and Radian Technology, where I designed and built components for the satellite industry for companies like Hughes, TRW and Lockheed. I now run a RF/microwave components company. I am also a member of Project Oscar, ARRL, AMSAT-UK and AMSAT-ZL (Go KiwiSat!)

Thanks for your support!