

**Minutes of the 2023 AMSAT Board of Directors Meeting  
Held at the Sheraton DFW Airport Hotel, Irving, TX – October 19-20, 2023**

1. Pursuant to due notice, the Board of Directors of the Radio Amateur Satellite Corporation (AMSAT) convened at the Sheraton DFW Airport Hotel in Irving, TX, at 8:05am Central Daylight Time with President Robert Bankston, KE4AL, in the chair and the following Directors present:

Mr. Barry Baines, WD4ASW  
Mr. Jerry Buxton, N0JY, Vice President - Engineering  
Mr. Andrew Glasbrenner, KO4MA, Vice President - Operations  
Dr. Mark Hammond, N8MH  
Mr. Frank Karnauskas, N1UW (Alternate), Vice President - Development  
Mr. Bruce Paige, KK5DO  
Mr. Paul Stoetzer, N8HM, Executive Vice President

The following Directors were not present:

Mr. Zach Metzinger, N0ZGO

The following Officers and guests were also present:

Mr. Jonathan Brandenburg, KF5IDY, Assistant Vice President – Engineering  
Mr. Burns Fisher, WB1FJ  
Dr. Alan Johnston, KU2Y, Vice President – Educational Relations  
Mr. Rich Gopstein, KD2CQ  
Mr. Nick Pugh, K5QXJ  
Mr. Dave Taylor, W8AAS, AMSAT US Delegate to ARISS International  
Mr. Dennis Veselka, KI4KNC

The following Officers were not present:

Mr. Steve Belter, N9IP, Treasurer  
Mr. Jeff Davis, KE9V, Secretary

2. The first order of business was the election of the corporate officers. President Bankston presented the following proposed slate of officers:

President: Mr. Robert Bankston, KE4AL  
Executive Vice President: Mr. Paul Stoetzer, N8HM  
Vice President – Engineering: Mr. Jerry Buxton, N0JY  
Vice President – Operations: Mr. Drew Glasbrenner, KO4MA  
Vice President – Educational Relations: Dr. Alan Johnston, KU2Y  
Vice President – Development: Mr. Frank Karnauskas, N1UW  
Treasurer: Mr. Steve Belter, N9IP

Secretary: Mr. Jeff Davis, KE9V

**3. Dr. Hammond moved that the current slate of officers be elected by acclamation. The motion was seconded by Mr. Paige and was adopted unanimously. The officers, as listed at Minute 2, were declared elected.**

4. Mr. Zach Metzinger, N0ZGO, joined the meeting at 8:25am.

5. President Bankston presented his President's Report, reviewing the current AMSAT team, membership, and financial status. He noted that membership is down by approximately 50 members year over year to 3,950. However, he noted the organization is in a strong financial position with about \$150,000 in cash and \$1,419,000 in reserves. He also reviewed the organization's strengths, weaknesses, opportunities, and threats. Discussion ensued regarding long-term opportunities and challenges.

6. The meeting recessed at 9:38am.

7. The meeting reconvened at 9:55am. Dr. Mark Johns, KOJM, AMSAT News Service Senior Editor, joined the meeting at this time.

8. Mr. Stoetzer, in the absence of Mr. Davis, presented the Secretary's Report. He noted the election drew 388 voters, slightly down from 2022's 407 voters. He also presented the minutes from the January 3, 2023 Teleconference and requested their approval.

**9. Mr. Paige moved the approval of the minutes of the January 3, 2023 Teleconference as presented. The motion was seconded by Dr. Hammond and approved by a vote of 5-0. Mr. Glasbrenner and Mr. Baines abstained, noting they were not Directors at the time this meeting was held.**

10. Mr. Bankston noted that Mr. Belter was not present at this meeting and did a brief overview of the financial review and IRS Form 990 Status. As of October 1, 2023, AMSAT had \$1,598,709.37 in total financial resources between the EagleBank checking account, PayPal account, and the Merrill Lynch investment account. He noted that \$110,231 is subject to donor restrictions. A discussion ensued regarding the use of restricted funds.

11. Dr. Johnston delivered his Educational Relations Update. He noted that orders for CubeSatSim PCBs had picked up with schools and other groups ordering batches of 3-5. He then reviewed the status of the CubeSatSim version 2.0, currently in beta and asked for opinions on a free upgrade board being offered to previous purchasers of the CubeSatSim PCB set to get feedback during the beta period. After discussion, it was agreed to offer the free upgrade to the first 50 purchasers of the three board CubeSatSim PCB set who respond.

12. Mr. Buxton and Mr. Brandenburg delivered the Engineering Update. He noted that there are about 35 volunteers on the various engineering teams – working on GOLF, Fox Plus, and

ASCENT. A few of the volunteers have been with AMSAT since the early 1980s. Volunteers typically commit 4-5 hours per week. He reviewed the current hurdles and potential resolutions for the Engineering team. He then reviewed the status of the current AMSAT Engineering programs, starting with GOLF.

13. Mr. Bill Reed, NX5R, and Mr. Lou McFadin, W5DID, joined the meeting at 11:30am.

14. The meeting recessed for lunch at 11:45am.

15. The meeting reconvened at 1:04pm. Dr. Alan Johnston, KU2Y, and Mr. Dave Taylor, W8AAS, were not present.

16. Mr. Buxton and Mr. Brandenburg continued the Engineering update with a discussion of the 3U CubeSat space frame being developed by AMSAT ASCENT under an ARDC grant. Mr. Brandenburg then went through a list of current ASCENT projects, including an SSTV payload, a CubeSat form factor SDR transceiver, FM transponder, PACSAT, various sensors, a GPS payload, and a reaction wheel controller. After ASCENT, he moved on to Fox Plus, noting that Fox Plus A will carry a V/u linear transponder. Two future ASCENT projects include a microwave ground station and small satellite thruster. Mr. Brandenburg noted possible partnerships with the University of North Dakota and Morehead State University and opened the notion of partnering with AMSAT-UK and AMSAT-DL. Discussion ensued regarding timelines for current projects. Fox Plus A may be ready by late 2024. GOLF-TEE is planned for delivery in May 2025. GOLF-1 is planned for delivery in November 2026.

17. The meeting recessed at 2:36pm.

18. The meeting reconvened at 2:53pm.

19. Mr. Glasbrenner delivered his Operations report. He noted that AO-7 is still operating and it's 50<sup>th</sup> anniversary is next year. AO-16 is in full sun, but they have not been able to revive it. AO-85 is end of mission. AO-91 is partially operational – sometimes it's operational and sometimes it's not. There does not seem to be a pattern. AO-91 will be six years old next November. AO-92 came back online this morning after being considered end of mission. AO-109 is also active with just the exciter as the PA has failed. Reports continue of FT8 and even the occasional SSB QSO. The Dwingeloo dish is occasionally collecting telemetry.

20. Mr. Karnauskas delivered his Development report. He noted that he would cover most of the information during his Symposium presentation. He reviewed challenges with communication and disseminating our message to a wider audience. He also noted that we were approached by Jan King, W3GEY/VK4GEY, regarding celebrating the 50<sup>th</sup> anniversary of AO-7 during 2024 and that we plan to pursue multiple outlets – including mainstream outlets. Mr. Bankston offered his thanks to Mr. Karnauskas and Mr. Metzinger for hosting the Symposium this year.

21. Mr. Lee Smith, KD2DRS, joined the meeting at 3:00pm.

22. Dr. Mark Johns, K0JM, presented the ANS report noting that there are over 4,000 subscribers and that the bulletins go out every week. A discussion ensued regarding ANS format. It was agreed that a more modern format than the current plain text would be beneficial and Dr. Johns agreed to pursue a solution.

23. Mr. Bankston presented an IT report in the absence of Mr. Alberti. A discussion ensued on the difficulties maintaining the amsat.org mail alias service. .

24. Mr. Paige gave the report on contests and awards. He noted that AMSAT Field Day only drew 19 entries, which was the lowest participation in a while. However, the total QSOs were higher given IO-117. In the past year, 7 Communication Achievement Awards, 2 Sexagesimal, 1 Century, 7 South Africa, 10 Rover, 11 GridMaster, 2 Reverse VUCC, and 2 W4AMI awards have been issued. He also gave a report on the web store. \$67,220.41 in gross sales over the past year. Products consisted of 259 SatPC32 licenses, 168 copies of the Getting Started with Amateur Satellites, 83 AMSAT CubeSatSim PCBs, 45 M2 LEO Packs, and others.

25. The meeting recessed at 4:00pm.

26. The meeting reconvened at 4:13pm. Mr. Tom Schuessler, N5HYP, joined the meeting at this time.

26. Mr. Bankston discussed the Export Control and Economic Sanctions Compliance Training Program. He noted that AMSAT Engineering volunteers would need to complete an IRS Form I-9 to document their status as U.S. persons and then complete a short training presentation on an annual basis. Discussion ensued regarding implementation of the program.

27. At 5:04pm, the meeting recessed until 8:00am on October 20<sup>th</sup>.

28. The meeting reconvened at 8:00am on October 20<sup>th</sup> with President Robert Bankston, KE4AL, in the chair and the following Directors present:

Mr. Barry Baines, WD4ASW

Mr. Andrew Glasbrenner, KO4MA, Vice President - Operations

Dr. Mark Hammond, N8MH

Mr. Frank Karnauskas, N1UW (Alternate), Vice President – Development

Mr. Zach Metzinger, N0ZGO

Mr. Bruce Paige, KK5DO

Mr. Paul Stoetzer, N8HM, Executive Vice President

The following Directors were not present:

Mr. Jerry Buxton, N0JY, Vice President - Engineering

The following Officers and guests were also present:

Mr. Jonathan Brandenburg, KF5IDY, Assistant Vice President – Engineering

Mr. Burns Fisher, WB1FJ

Mr. Dennis Veselka, KI4KNC

Mr. David Bowman, G0MRF, AMSAT-UK

The following Officers were not present:

Mr. Steve Belter, N9IP, Treasurer

Mr. Jeff Davis, KE9V, Secretary

Dr. Alan Johnston, KU2Y, Vice President – Educational Relations

29. Mr. Bankston opened with a discussion of AMSAT's policies and procedures, specifically the financial policies and procedures. He explained an amendment to the financial policies to capitalize assets that cost \$1,000 or more.

30. Mr. Nick Pugh, K5QXJ, joined the meeting at 8:05am.

31. Mr. Jerry Buxton, N0JY, joined the meeting at 8:07am.

32. Discussion ensued regarding the location of AMSAT's pick and place machine.

33. Old business being concluded, the meeting moved on to new business.

34. Discussion ensued regarding the information available to the membership and public regarding Engineering projects and a schedule for public release of information.

35. Discussion ensued regarding budgeting procedures for Engineering projects. Mr. Brandenburg noted that he had recently purchased two prototype CubeSat microthrusters that did not fit into the outline of the Engineering budget that had been submitted during the 2023 budgeting process.

36. Mr. Tom Schuessler, N5HYP, joined the meeting at 8:55am.

**37. Mr. Buxton moved that the 2023 Budget be amended to reallocate \$7,500 of the Engineering budget to two microthrusters. The motion was seconded by Dr. Hammond. After discussion, Mr. Buxton withdrew the motion as moot as the Engineering budget for hardware as approved by the Board was not broken down into specific categories. Thus, the purchase of microthrusters, as described in Minute 35, did not require any additional Board action.**

38. The meeting recessed at 9:30am.

39. The meeting reconvened at 9:42am. Mr. Lou McFadin, W5DID, joined the meeting at this time.

40. Mr. Bankston compiled a list of further items for new business to discuss by the end of the meeting. Further new business discussion followed.

41. Mr. Stoetzer raised the issue of a document repository to manage corporate documents for improving management of the corporation and communication among Board members and officers. It was broadly agreed that a solution would be sought with AMSAT IT.

42. Mr. Glasbrenner was recognized to discuss a few issues, including the need for updated satellite tracking software. A potential new software package was discussed. He also mentioned that more senior leadership should attend satellite and space conferences. It was agreed that there would be an increase in the amount budgeted for attendance at conferences in the 2024 Budget.

43. Mr. Metzinger was recognized to express opposition to discuss potentially hiring a part-time employee. Mr. Bankston noted that any services would be contracted and that AMSAT would not be hiring any employees. A discussion also ensued on the AMSAT IP Policy. It was agreed that ideas for updating it would be developed and discussed in January.

44. Mr. Karnauskas was recognized to discuss organizational challenges related to volunteer management. He argued that we need to define positions before filling them with volunteers. It was also argued that positions need to be morph to fit the volunteers, thus rigidly defined positions may not help to obtain new volunteers in all cases.

45. Mr. Buxton was recognized to discuss continuing challenges related to ITU/FCC satellite authorization. Mr. Buxton suggested obtaining external support for satellite authorization. Mr. Glasbrenner, as the AMSAT licensee, concurred. It was broadly agreed that it would be a benefit to obtain services. Mr. Stoetzer noted that there are \$3,500 in funds restricted for legal services and satellite authorization could fit into that category.

46. Mr. Bankston brought up the 50<sup>th</sup> anniversary of AO-7 and mentioned plans for celebrating the anniversary, as previously discussed by Mr. Karnauskas. He also discussed potential locations for the 2024 Symposium. It was broadly agreed that Tampa, Florida would be the location of the 2024 Symposium.

47. Mr. Chris Thompson, GOKLA, and Mr. Bill Reed, NX5R, joined the meeting at 11:00am.

48. Mr. Bankston mentioned his desire for re-engagement with our sister AMSATs around the world on satellite programs. The Board broadly agreed that the President should reach out to international AMSAT leadership and begin discussions.

49. Discussion ensued regarding active non-disclosure agreements. Although there are active agreements with regards to certain components purchased by Engineering, there are no active agreements over broader issues.

50. Mr. Bankston discussed the Getting Started Guide and the need for a new editor to update the publication, which is labeled as the 2020 edition.

**51. Mr. Paige moved that the meeting adjourn, seconded by Mr. Stoetzer. Without objection, the motion was adopted and the meeting adjourned at 11:42am.**

Respectfully submitted,

/s/ Paul Stoetzer

Paul Stoetzer, N8HM  
Executive Vice President