**ARISS International Monthly Meeting Teleconference**

**December 18, 2018, 1200 UTC**

Participants:

Oliver Amend

Frank Bauer

Gaston Bertels

Armand Budzianowski

Emanuele D’Andria

Francesco De Paolis

Shizuo Endo

Bruce Hunter

Bertus Husken

David Jordan

John Kludt

Keigo Komuro

Chet Latawiec

Glenn MacDonell

Lou McFadin

Ciaran Morgan

Ken Nichols

Jan Poppeliers

Keith Pugh

Kenneth Ransom

Sergey Samburov

Graham Shirville

Dave Taylor

Rosalie White

Satoshi Yasuda

Interpreter: Alexandra Tussing

Unable to attend:

Fabio Azzarello

Kerry Banke

Jean-Pierre Courjaud

Darin Cowan

Stefan Dombrowski

Gianpietro Ferrario

Tony Hutchison

Tatiana Kolmykova

Joe Spier

Mark Steiner

Eskil Van Loosdrecht

***Meeting Agenda***

**Roll Call—Rosalie White, K1STO**

**Welcome—Frank Bauer, KA3HDO**

Frank Bauer welcomed the team and thanked everyone for all they do for Amateur Radio and ARISS.

**1.     Call for Acceptance of Minutes—Rosalie White, K1STO**

[Decisional]

Summary: The minutes from the ARISS-International Monthly Meeting on November 20, 2018 were completed by Rosalie White on November 26, 2018. After a review, the minutes were distributed to ARISS Delegates on December 14, 2018.

Discussion: Gaston Bertels moved to accept the minutes and Dave Taylor seconded the motion. There were no objections, so the minutes were accepted.

**2.** **Bartolomeo Platform—Frank Bauer, KA3HDO & Oliver Amend, DG6BCE**

[Informational]

Summary: Oliver Amend reported that he has taken part in several recent phone discussions with people involved with the Bartolomeo platform.  A meeting was set up with all of the pertinent people, and an update will be given on this and recent actions.

Discussion*:* Oliver Amend stated that the launch of the Bartolomeo is planned for 2019. The team has manufactured the antenna and is working on a schedule regarding when the antenna must be upmassed to the ISS. Airbus and Bartolomeo are to procure and deliver the clamp for attaching the antenna, the coaxial cable, and the connector. There will be two spacewalks, one for the installation of the Bartolomeo platform and the second spacewalk for the installation of the antenna, possibly at the end of 2019.

Frank Bauer pointed out that this is an international project; development, integration and documentation for launch were handled by the US and European ARISS teams working together. Lou McFadin reported that building three antennas has gone well, and currently, they need to be tuned. In the first part of 2019, they will be shipped to Goddard Space Flight Center. Mark Steiner is working with some NASA experts who will coat the antenna kapton tape with silicon dioxide to keep the tape from flaking off in space. NASA and ESA are working with ARISS to determine the best SpaceX flight for the antenna that will also support Bartolomeo and ARISS.

**3. Protection of Contact Information—Frank Bauer, KA3HDO**

[Discussion]

Summary: The ARISS web site at [www.ariss.org](https://exchange.arrl.org/owa/redir.aspx?C=5EXDBHmVWKaO6pihaLgQgx1k4hfjeqW5DyN6raZ4xeS_us5m02HWCA..&URL=http%3a%2f%2fwww.ariss.org) lists a number of email addresses of ARISS team leaders.  In October, a group of these leaders received a few emails that were from a person trying what is called in the US, a phishing scam, where an unknown person trying to get others’ personal information.  Some steps should be taken to protect the team's emails listed on the web site. There are several options including removing the email addresses from the site, and in place of them would be some pertinent wording to click on that would allow interested persons to send an email to the appropriate team member, yet not see the team member's email address.  This and other options will be discussed at the meeting.

Discussion: Frank Bauer said the issue of people trying to get others’ personal information has been discussed in emails. In addition to hiding personal email addresses on the ARISS web site, ARISS could have an email address for each ARISS Region. Several people in each region would need to access these emails. For now, ARISS will begin with making email addresses invisible, and then decide what to do after that. As always, if a strange email is received, contact the sender in a separate email from the suspect e-mail, and in the separate email, ask about the strange email. Do not reply if you think the e-mail is suspect. If it is determined to be fake, delete it without replying or clicking on links.

Ciaran Morgan suggested having an ARISS international email address. Frank Bauer related that Keigo Komuro had suggested this as well. The problem would be having enough people to monitor the email.

**4. Upcoming SSTV Activities—Sergey Samburov, RV3DR & Frank Bauer, KA3HDO**

[Informational]

Summary: Sergey Samburov had suggested a new SSTV event in the late December-early January timeframe.  This event will include some additional NASA on the Air images as well as to commemorate the 18th anniversary of the first time the ARISS radios were turned on in the ISS on November 13, 2000.  A few images from the previous SSTV transmission that were inadvertently somewhat covered with the MMSTV wording may also be included as well as an image or two from ARISS-Russia.

Discussion: Sergey Samburov was thanked for offering an upcoming SSTV activity. The team has suggested that the new series have some images commemorating the 18th anniversary of the ARISS radios continually being on the air. The team would also like some images commemorating the long-term international team’s support of radio activities on Mir, the Shuttles, and the ISS. The NASA On The Air group would like to commemorate the 60th anniversary of Apollo circling the moon.

Frank Bauer is reviewing images and asked the team to send good images, and wants to finalize all images soon. The SSTV images help educate the world with history lessons.

Sergey Samburov reported that many ham radio operators really like the downlinked SSTV images. He would like some images that commemorate Mir starting to make ham contacts in 1988. He was unsure what date the upcoming SSTV event will take place; it may be late December or early January.

**5. Interoperable Radio System Multi-Voltage Power Supply Technical Interchange Meeting (TIM)—Frank Bauer, KA3HDO**

[Informational]

Summary: On November 27, 2018, the ARISS hardware team held a Technical Interchange Meeting (TIM) with NASA Safety and Engineering on changes that the team had made to the Multi-Voltage Power Supply (MVPS). The TIM was about the team's revisions to the MVPS, having devised an internal fan duct to force airflow over components to lower temperatures and increase the life and reliability of the power supply.  The team discussed the revisions with NASA, who agreed with the team's assessment of the change and gave the go-ahead to modify the MVPS as planned. ARISS can now fabricate flight units, run tests to close out the safety hazards and verify the ISS engineering requirements, and prepare the Interoperable Radio System for final flight certification.  Frank Bauer thanked the hardware team for their excellent engineering expertise and dedicated hard work for reaching this critical milestone.

Adding to that challenge, the team had received some late-breaking questions from NASA prior to the meeting, and had provided answers to the questions. During the TIM the team was informed that their answers satisfied the questions.  Lou McFadin, Kerry Banke, and Ed Krome were recognized by Frank Bauer for their extensive efforts under pressure, to get these late-breaking questions resolved.

Discussion: Frank Bauer reported that NASA said they are ready to set specific times for testing.

Lou McFadin said the team has the first prototype of the new air duct, and the first unit (flight identical unit) has been assembled. All the power supplies need to be laser etched with nomenclature. The team is purchasing electrical parts and mechanical parts, such as switches and fasteners, etc., to support the development of all 10 units needed to support ARISS. They are looking for contractors who can install parts on the circuit boards; there are nine boards in each of the ten power supplies.

**Ad hoc**

Special David St. Jacques ARISS Contact

Ciaran Morgan related that ARISS Delegates needed to approve the request for the ARISS-Canada team to support an ARISS contact with David St. Jacques for a group in ARISS-Europe’s region. Chet Latawiec and Glenn MacDonell stated that they have no objection, especially because David St. Jacques had said he wanted to talk to these school students.

Upcoming SSTV Award

Armand Budzianowski suggested ideas for expanded publicity for the awards and he had spoken with Slawovek Szymanowski whose team is ready to support the upcoming SSTV event. Frank Bauer thanked the Polish team and Armand Budzianowski and asked him to work with Dave Jordan on the publicity ideas.

ARISS-International Officer Elections

Bertus Husken sent email to all ARISS Delegates and asked them for nominations for ARISS-International election of officers. He received six responses and the current set of officers was nominated again. He asked each nominee if he or she wished to accept being nominated; all said yes. Frank Bauer thanked Bertus Husken and asked Rosalie White to send an email to all delegates to ask them to vote on the slate of officers.

ARISS Ad-hoc Exploration Technical Committee

The first meeting of this committee will be a December 20th teleconference. Email was sent by Frank Bauer to all ARISS Ddelegates and to those who were named to be a representative to the committee for their ARISS Regions. ARISS has been receiving questions from the space agencies about plans for Deep Space Gateway.

Possibility of Holding the Next Face-to-face Meeting in Canada

ARISS-Canada Delegates said they needed a little more time to make a decision on whether they can host the next face-to-face meeting; they hope to decide by the end of 2018. Glenn MacDonell reported that the team is interested in hosting, has held preliminary discussions, has found some possible facilities, but they have not received comments yet from the Canadian Space Agency. The agency is busy with plans for St. Jacques’s launch. ARISS-Canada is optimistic about hosting and hopes to have further information soon.

Frank Bauer asked that a final decision be made no later than the ARISS-International January monthly meeting.

Frank Bauer thanked all ARISS team members for the tremendous work done in 2018 that resulted in so many successes, and he said it is tremendous that everyone on the international team has the same goals and passion.

**Next Meeting**

The next meeting will be January 15, 2018 at 1200 UTC.

Respectfully submitted,

Rosalie White, K1STO

ARISS-International Secretary Treasurer

December 26, 2018