**ARISS International Monthly Meeting Teleconference**

**March 20 2018, 1100 UTC**

Participants:

Oliver Amend

Frank Bauer

Gaston Bertels

Armand Budzianowski

Jean-Pierre Courjaud

Darin Cowan

Emanuele D’Andria

Bruce Hunter

Tony Hutchison

David Jordan

Keigo Komuro

Chet Latawiec

Eskil Van Loosdrecht

Erik Lopez

Lou McFadin

Ciaran Morgan

Keith Pugh

Kenneth Ransom

Sergey Samburov

Graham Shirville

Dave Taylor

Rosalie White

Satoshi Yasuda

Interpreter: Olga Moncuquet

Unable to attend:

Fabio Azzarello

Kerry Banke

Stefan Dombrowski

Francesco De Paolis

Gianpietro Ferrario

Bertus Husken

Tatiana Kolmykova

Ken Nichols

Jan Poppeliers

Joe Spier

Mark Steiner

***Meeting Agenda***

**Roll Call—Rosalie White, K1STO**

**Welcome—Oliver Amend, DG6BCE**

Oliver Amend welcomed the team to the March ARISS-International meeting.

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

      [Decisional]

Summary: The minutes from the ARISS-International Monthly Meeting on February 20, 2018 were distributed to ARISS Delegates on March 1, 2018.

Discussion: After distributing the February meeting minutes, Rosalie White received no comments from the team. A motion was made by Bruce Hunter to accept the minutes. Ciaran Morgan seconded the motion. There were no further comments; the minutes stand as approved.

**2.    2018 ARISS-International Face-to-face Meeting—Oliver Amend, DG6BCE and Frank Bauer, KA3HDO**

[Informational]

Summary: The ARISS-US Team has held discussions about the 2018 ARISS-International Face-to-face Meeting in the Washington DC area. All “no-go” dates were submitted for considering when to hold the meeting.

Discussion:  A first overview about potential meeting dates, location, hotel, room prices, and transportation was emailed by Frank Bauer. Oliver Amend discussed the details. The meeting location would be College Park Airport and Museum in College Park, Maryland. Dates that would work well for the team are October 7-12 and October 15-20, which would not conflict with the AMSAT-UK Colloquium on October 13-14.

Rosalie White stated that the hotel with the best options had a higher room price, but there are nearby local transportation options and attendees would not need rental cars, which offsets the higher room cost. Frank Bauer will study other hotel options and look into potential issues for the mobility challenged.

Team members were asked to email Frank Bauer, Oliver Amend, and Rosalie White by March 24 if there was a major preference for one of the options of dates.

**3. Expectations, the Number of School/Group Contacts in July-December 2019 –Kenneth Ransom, N5VHO**

[Informational]

Summary: How do we determine the number of school/group contacts to be done in a year? Kenneth Ransom considers several variables and factors that help determine the projections and will explain them.

Discussion:  Kenneth Ransom predicts the number of school and group contacts that can be hosted during January to June and July to December of each year. He stated that the biggest challenge in predicting the number is learning the level of support of each licensed crew member. He has identified crew members who can potentially support ARISS contacts from July to December 2019. However, the crew members have not finalized their support levels, and that is important information in determining how many contacts can be planned.

A base number for planning is an average of one ARISS contact per week. The risk of only planning around this base number is if a crew member decides his or her support level needs to be less than 1 per week. Or, if a crew member really enjoys the first few ARISS contacts and wants to become even more supportive, having used only the base number for planning means ARISS would miss out on have accommodating more schools. Kenneth Ransom will continue to communicate with upcoming crew members to learn more about what to predict for July to December 2019.

**4. Overview, the Gerst Mission—Oliver Amend, DG6BCE; Ciaran Morgan, M0XTD; Francesco DePaolis, IK0WGF**

[Informational]

Summary: Alexander Gerst’s ISS mission, named “Horizons,” is 8 June to 27 October 2018, and 10 ARISS sessions for the German Space Agency DLR are planned, 9 as direct contacts. Several sessions will be conducted for two schools combined together in a single contact; this offers opportunities for 16 ARISS-Europe schools with ARISS applications.

ARISS-Europe has begun initial planning for the Parmitano mission in May to October 2019. The application submission window extends from February to end of March 2018 for potential events in the timeframe of January to June 2019.

Discussion:  Ciaran Morgan reported that 10 ARISS contacts for Gerst were identified by DLR, which had specific flagship requests for two direct contacts. It *may* be possible for Gerst to support another school depending on a number of variables. Peter Kofler will be the main contact and the mentor for all schools. Plans are in place and activity is being worked to ensure contacts will be successful.

Luca Parmatano will be on the ISS in the timeframe of May to October 2019.  ARISS-Europe has begun planning for this mission.

**5. HTT Current, Upcoming and Future HamTV ARISS Projects—Gaston Bertels, ON4WF**  [Informational]

Summary: In March, Gaston Bertels gave a top-level report on HTT projects. He will give a more in-depth summary of current, near-time, and future ARISS technical projects the HTT is working on.

Discussion:  Gaston Bertels reported that the team continues to meet every two weeks and the agenda always begins with an overview of how the European and Australian HamTV ground stations are functioning. The agenda also covers the status of the Interoperable Radio System, aspects of MarconISSta, and what might need updating on the HTT web site. The team is studying how to help hams set up simple ground stations with simple antennas and a basic power supply. The team would like to develop three relatively inexpensive HamTV receivers and fixed antennas for connection to the TS Merger Server. This would allow schools to take advantage of educational opportunities that might also involve contests or DIY activities with a reward to the schools for reception of signals.

**6. Update on the IORS Safety Data Package— Frank Bauer, KA3HDO**

[Informational]

Summary: The ARISS hardware team recently completed the safety data package for Phase 2 for the Interoperable Radio System; the package was submitted to NASA. The Flight Safety Review was postponed by NASA to March 21.

Discussion:  The IORS team is prepared and looking forward to the upcoming Flight Safety Review. Most recently, they submitted a set of answers to some comments that were prepared by the Safety review team based on the ARISS IORS Phase 2 safety submittal. Results of the Phase 2 review will be shared at the next ARISS teleconference meeting.

**7. Status, Deep Space Gateway (DSG) / ESA Education Call for Ideas—Oliver Amend, DG6BCE**

[Informational]

Summary: A presentation workshop for ESA DSG was held at ESTEC on 05 December 2017. The educational aspects have been presented at top level. ESA, NASA, and other DSG partners are currently collecting requirements for the DSG platform, and are not yet at the payload definition phase. After the early spring 2018 meeting of DSG partners, ESA should have more information.

Discussion:  Oliver Amend found an ESA document that listed the inputs on DSG research opportunities. One set of inputs was dedicated to education, and ham radio was listed along with the ARISS presentation topic. ARISS Officers are in close contact with ESA Education, NASA, and CASIS regarding DSG and will inform the team as things advance.

**Ad hoc**

ARISS Committee Reports -- Six-Month Schedule—Rosalie White, K1STO

The ARISS Board made a decision to lighten the team’s workload by easing the schedule for submitting ARISS reports to twice yearly. One exception to this is the ARISS Ad-hoc Ham TV Technical Team quarterly reports because this committee often has critical projects and many topics to discuss. Another exception will be if a committee is working on a project that is changing rapidly.

It is important to have reports at the ARISS annual face-to-face meeting, so best efforts will be made to set a due date approximately six months from the face-to-face meeting date for the second yearly committee reports. With the face-to-face meeting planned for October, committee reports will be due in early May 2018. Dave Taylor noted that April is the six-month point. However, most team members will not have time to complete a report by the April ARISS-International meeting.

IAC Papers for 2018—Oliver Amend, DG6BCE

The International Astronautical Conference (IAC) 2018 takes place at Bremen, Germany on 1-5 October 2018. Two abstracts for papers have been submitted by the ARISS team:

-- Amateur Radio on the ISS - Next Generation HamTV System

-- Amateur Radio HamTV Fixed Antenna Network (HamTV Fan)

The IAC committee will decide in the end of April 2018 about papers to accept.

Jean-Pierre Courjaud will submit a paper on the “Pigtail Project” that was discussed in Rome. Sergey Samburov and Tatiana Kolmykova will present a paper on the Russian satellites and could share some information, along with details on Service Module ham radio activities, for the papers to be written. Oliver Amend will accept the Russian information, and will continue to inform the team on progress.

Space Ops Paper for 2018—Frank Bauer, KA3HDO

A paper related to ARISS was proposed by Frank Bauer to the Space Ops conference organizers. The conference is in late May in Marseille, France, and the proposed paper was accepted.

Oleg Artemyev

Sergey Samburov reported that during his mission on the ISS, Oleg Artemyev will be very interested in ham radio. He will use the call sign RS0ISS.

**Next Meeting**

Frank Bauer thanked Oliver Amend for leading the meeting. Sergey Samburov thanked Olga Moncuquet for her work. The next meeting will be April 17, 2018 at 1100 UTC.

Respectfully submitted,

Rosalie White, K1STO

ARISS-Secretary-Treasurer

April 9, 2018