## FARS Meeting Minutes 7/7/08 17:30-19:00 IGARSS 2008, Boston, MA

- The meeting was called to order at 17:30 by chair J. Johnson. Slides used in the meeting are available at: <a href="http://www.ece.osu.edu/~johnson/fars">http://www.ece.osu.edu/~johnson/fars</a>. Action items determined from the meeting are highlighted in bold in what follows.
- General information on FARS was first reviewed. FARS currently has 56 members, of which around 70% are from the US. Achieving a larger international membership remains a goal. 1\* Members are encouraged to recruit other members for the FARS committee.
- The officer status of the committee was then reviewed:

J. Johnson is currently serving a second term as chair (term expires Oct 2009), and there is no official co-chair at present (thanks to D. Kunkee for providing assistance). We are seeking a co-chair volunteer (co-chair is appointed by the chair.) Officers are limited to a maximum of two 2-year terms, so as of Oct 2009 J. Johnson will no longer be able to serve as an officer.

Duties shared by the officers include preparing three short reports for the GRSS adcom per year, organizing a FARS session at IGARSS, attending and making a short presentation at the annual technical committees at IGARSS, maintaining the committee membership list and web materials, and defining any other agenda items for the committee. A travel budget is available to support attendance at GRSS adcommeetings (partial for the IGARSS adcommeeting), as well as the SFCG meeting (more below.)

2\* We need a FARS co-chair immediately, with the goal of transitioning to the chair office in Oct 2009. Please email <u>Johnson.1374@osu.edu</u> if you are willing to volunteer. Requirements for the next year would be to learn the officer responsibilities, then assume them with a new co-chair in 2009. Assistance from the membership is sought in this process. See meeting slides for more information.

• A review of the committee's work in assessing the potential impact of 57-64 GHz devices on passive remote sensing was then presented. See the meeting slides for detailed information. The analysis presented indicates that the lower-power 802.15.3 devices are not expected to impact remote sensing, this appeared to be the consensus of the meeting attendees as well. Currently discussions are in progress with the WCAI organization promoting a higher power standard that could possibly cause interference.

**3\*** Contact the FARS chair if you are interested in being included in these discussions.

- FARS preparation for the the Space Frequency Coordinating Group annual meeting (SFCG-28) was then discussed. GRSS is an "observer" member of the SFCG, so that GRSS can submit documents for consideration by the SFCG group. More info on the SFCG can be found on the FARS website and in the slides from the FARS meeting. FARS member Steve Reising volunteered to represent GRSS and FARS at the SFCG-28 meeting (more info at <a href="http://www.sfcgonline.org/">http://www.sfcgonline.org/</a>)
- Previously it had been agreed that GRSS FARS should review previous documents agreed upon by the SFCG that involve Earth remote sensing:
  - o RES 5-9R1 "Protection of Frequency Bands Allocated to Passive Sensing and Radio Astronomy" (2001)
  - o RES 19-6R1 "EESS Active Sensing Requirements > 100 GHz" (2000)
  - o RES 21-2R2 "Requirements, Performance, and Protection Criteria for EESS (Passive) Sensors" (2004)
  - o RES 21-3R2 "Protection of EESS (Passive) Sensors from Ultra Wideband Device Emissions" (2005)
  - o RES 23-2 "Use of Synthetic Aperture Radars in the Band 5250-5570 MHz" (2003)
  - o RES 23-3 "Use of the Allocation for EESS (active) in the Band 432-438 MHz" (2003)
  - o RES 24-2 "Use of the allocation for EESS (active) in the band 94-94.1 GHz" (2004)
  - o REC 18-1 "Use of the Bands 31.3–31.8 GHz and 36-37 GHz for EESS passive Sensing" (1999)
  - o REC 24-2 "Frequency assignment guidelines for active remote s ensing in the Mars region" (2004)
  - A quick review of these documents by the FARS chair showed no significant points of issue, as they are all generally compatible with the protection of microwave remote sensing.
  - However, the SFCG-28 already has an agenda item to review RES 21-2R2, which basically is a table similar to ITU RS 1029-2 listing bands important for passive sensing and associated sensitivity requirements. These lists were reviewed in the meeting, but no clear comments for FARS were identified.
- 4\* Please review the frequency tables from the meeting slides and contact the FARS chair if you have any comments.
  - Ohris Ruf then raised the question of whether it would make sense for such documents in the future to incorporate a reasonable filter response for a protected radiometry band (e.g. L-band) and then use this to set emission limits on portions of the spectrum near the protected band. This was discussed and regarded as possibly reasonable, but a very clear document would need to be created in order to make this tenable. Chris Ruf indicated

- that he would attempt to prepare a draft of such a document for futher consideration.
- It was also suggested that the 57-64 GHz analysis presented at the meeting could be submitted as an "informational" document to the SFCG meeting, this will be done by the FARS chair.
- It is expected at the WRC 2011 meeting that consideration of frequency allocations at 275-3 THz will occur. Although it is not clear at present how frequency management would work at such bands, a document establishing the utility of certain bands for remote sensing remains useful. This issue will also be discussed at the upcoming SFCG meeting. John Zuzek of NASA presented a table (<a href="http://www.ece.osu.edu/~johnson/Table.pdf">http://www.ece.osu.edu/~johnson/Table.pdf</a>) and a document from ESA (<a href="http://www.ece.osu.edu/~johnson/275GHz.doc">http://www.ece.osu.edu/~johnson/275GHz.doc</a>) describing these frequencies, and requested input from the FARS community on the accuracy of this information.. 5\* The FARS membership is requested to review the list of frequency bands generated, and to provide any input to John Zuzek (john.e.zuzek@nasa.gov).
- FARS chair J. Johnson is serving as co-organizer of a joint remote sensing/radio astronomy session on "RFI: problems and solutions" at the upcoming URSI General Assembly in Chicago (August 10-16<sup>th</sup>, 2008).
- Tom Von Deak of the NASA Spectrum Office then informed the meeting that the GEO frequency management task AR-06-11 has been proposed to be "demoted" in importance to a sub-task in a new GEO workplan. It was felt that this was counter to GEO needs for remote sensing. The FARS chair subsequently is working with the GEO task leader (Philippe Tristant) to try to convince the GEO office not to demote this task. 6\* Any FARS members having a relationship with the GEO program are requested to work to support this as well.
- Please send any inputs for the revised FARS website to J. Johnson.
- Other agenda items not addressed were tabled. Meeting adjourned at 19:00.