USNC-URSI Meeting Minutes National Radio Science Meeting Millennium Hotel Boulder, Colorado 7:00 pm, Tuesday, January 5, 2010 Prepared by Katie Bowman and Steven C. Reising

Members Present: Yahya Rahmat-Samii (Chair), Steve Reising (Secretary), George Uslenghi (Past Chair), Gary Brown (Accounts Manager), Katie Bowman (NAS Representative), David Jackson (Member-at-Large), Zoya Popovic (Member-at-Large), David Woody (Member-at-Large), Janet Stapleton (Member-at-Large), Gianluca Lazzi (Member-at-Large), Steven Weiss (Member-at-Large), Ozlem Kilic (Comm A), Nader Engheta (Comm B), Dev Palmer (Comm C), John Papapolymerou (Comm D), Danilo Erricolo (Comm E), Albin Gasiewski (Comm F), Frank Lind (Comm G), William Amatucci (Comm H), James Cordes (Comm J), Susan Hagness (Comm K), William Davis (Int'l URSI Comm A Vice-Chair and USNC-URSI Webmaster), John Mathews (Int'l URSI Comm G Vice-Chair), Roger Lang (Int'l URSI Comm F Vice-Chair), Ross Stone (Int'l URSI Assistant Secretary-General), Jennifer Bernhard (IEEE AP-S Liaison and Comm D Vice-Chair), Eric Mokole (Government Liaison)

Guests Present: Chris Holloway (Comm A Vice-Chair), Sembian Rengarajan (Comm B Vice-Chair), Dave Giri (Comm E Vice-Chair), V. Chandrasekar (Comm F Vice-Chair), Mike Newkirk (Comm F Secretary), Richard Bradley (Comm J Vice-Chair), Tommy Thompson (Comm J Secretary)

- 1. **Welcome:** Yahya Rahmat-Samii, Chair of the USNC-URSI, opened the meeting at 7:00 pm. This was followed by introductions. Yahya then briefly reviewed the categories of committee membership and general procedures for the meeting. He also noted that the current USNC Commission G Chair, John Sahr, is stepping down from his role. The Commission G Vice-Chair, Frank Lind, will become the Commission G Chair, and an election will be held for a new Vice-Chair.
- 2. **Approval of January 2009 Minutes:** The minutes of the previous USNC-URSI meeting were approved.
- 3. **Approval of Agenda:** The meeting agenda was approved.
- 4. **Report by the Chair:** Yahya briefly reviewed the relationship of the USNC-URSI to The National Academies and to the ten URSI Commissions. He highlighted the USNC website (www.usnc-ursi.org) and thanked Bill Davis for his hard work on maintaining it. He encouraged all members to visit and publicize the site. He then listed recent and continuing USNC initiatives from the past year. These include:

- a. Continuation of the 3-day meeting format, with session start times synchronized (8:20 am / 1:20 pm)
- b. Continuation of the option to purchase boxed lunches
- c. Continuation of the inclusion of program front matter introducing the USNC
- d. Continuation of the lunch for student awardees
- e. Development of a new website for paper submission and review
- f. The presence of a book company exhibitor at the meeting
- g. Finalization of the 2009-2011 USNC-URSI appointments
- h. Enhanced interaction with international URSI and with other national organizations
- i. Assembly of statistical data on the USNC, Commissions, and NRSM. An electronic feedback questionnaire will also be sent to all 2010 NRSM attendees (using Survey Monkey).
- j. Discussions of additional fund raising for USNC activities
- k. Planned development of a USNC operations manual
- 1. The need to begin planning for USNC nominations for the major URSI awards at the 2011 GA

Finally, Yahya mentioned correspondence with URSI President Lefeuvre and the desire to improve communication between the chairs of the international URSI Commissions and those of the various national Commissions. It was noted that the most recent edition of the Radio Science Bulletin provides contact information for the international URSI Chairs, since this information is not readily identifiable on the website.

- 5. **Report by the Past Chair:** George Uslenghi reported on his progress in helping to strengthen relationships with international URSI. In particular, he noted:
 - a. The URSI GASS will be held in Turkey from August 13-20, 2011. The URSI Board has accepted the USNC proposal to organize a student paper competition similar to the one which was held at the 2008 GASS in Chicago. Steve Reising will run the competition and the USNC will provide \$5,000 to support it.
 - b. George is serving as the Chair of the scientific program committee for the 2011 GASS. He has not received responses from many of the international URSI Commissions on their topics and sessions, which is needed for the planning meeting in April 2010. He asked Chairs and Vice-Chairs at the USNC meeting for assistance in following up.
 - c. The URSI Board has approved a book series in collaboration with the Instituto Superiore Mario Boella. An international editorial board has been established and the initial two books will soon be released. The book series introduction and call for proposals was distributed.
 - d. The announcement of the ICEAA 2010 in Sydney, Australia was distributed. The meeting is co-sponsored by URSI and IEEE AP-S; the meeting reflects URSI's desire to engage with additional regions of the world such as Africa and South America.

- 6. **Report by the Account Manager:** Gary Brown reviewed the major income and expenditures for the USNC "private funds" account, which include the surpluses generated at the National Radio Science Meeting and the joint summer meeting with AP-S. The USNC currently has about \$94,000 in this account. It helps support key activities such as the student travel awards and U.S. participation in URSI General Assemblies. A suggestion was made that perhaps the USNC might consider establishing a graduate Ph.D. fellowship program to help stimulate advanced study in radio science by U.S. students.
- 7. **Report by the NAS Representative:** Katie Bowman conducted the required annual background and conflict of interest discussion and distributed the necessary bias and conflict reporting forms; all voting members of the USNC must sign and return these forms. She also provided the USNC-URSI items included in the new proposal submitted to NSF (period 7/1/10-6/30/13). These items include payment of U.S. dues to URSI, student travel award support, travel for a 3-member U.S. delegation to the 2011 General Assembly, and a second requested USNC-URSI meeting to be held at The National Academies. Finally, she presented a figure on the relatively low number of women participating in the USNC-URSI, and suggested that the committee consider how to continue to engage and support diversity in radio science.
- 8. Comments from Ad Hoc Members, Society Representatives, and Government Liaisons: Discussion included the difficulty in attracting U.S. students to pursue advanced degrees in radio science and the hiring challenges faced by Defense Department agencies. The Army Research Office currently provides partial support for the student travel awards program and will continue to explore with The National Academies the potential for developing a funding vehicle that incorporates the ability for additional DoD agencies to contribute. It was also suggested that the USNC consider the idea of summer workshops on radio science-related topics, which could be of interest and help to attract students.

It was reported that the IEEE AP-S paper submission for the summer joint meeting will change in 2011 and will use a two-column format that increases the amount of material able to be included within the four-page requirement. It is unclear how or whether this will affect the proportion of AP-S and URSI submissions.

9. Naming of the Student Paper Competition: A motion was made to name the student paper competition in honor of Ernest K. Smith, who recently passed away. Ernie Smith was a long standing contributor to URSI and to the USNC, was involved in the early creation of the student paper competition, was involved in the creation of many of the URSI awards, and also contributed greatly to the success of the National Radio Science Meeting in Boulder. The following motion was made by Gary Brown: "The United States National Committee of the

International Union of Radio Science takes very special note of the many years of dedicated service to the organization by Dr. Ernest Smith who recently passed away in Boulder, Colorado. Ernie, as many of us shall always remember him, took great pride and pleasure in aiding the USNC-URSI in its mid-winter Boulder meetings and the many functions undertaken therein. Perhaps foremost in his vision was the Student Paper Contest, which he helped create and foster to the level of prominence it presently enjoys. In this regard, the officers and members of the USNC-URSI take great pride in henceforth naming the Student Paper Contest the USNC-URSI Ernest K. Smith Student Paper Competition in the hope that this will serve as a reminder to all students and members of USNC-URSI of Ernie's devotion and long service to his profession." The motion passed unanimously.

- 10. Experience with the new conference website: Feedback was requested on experience using the new abstract submission and paper review software for the 2010 URSI Boulder meeting. Several suggestions were received regarding to the ability of joint session organizers to view submitted papers, for communications with authors to be copied to session organizers, and the ability to request to move papers to other sessions. Commissions were requested to consider any additional feedback. It was also emphasized that the standard paper presentation is 20 min.
- 11. **Distribution of Commission reporting forms:** Steve Reising reported that he would send the form electronically to chairs; the completed form should be emailed back to him prior to the Executive Committee breakfast meeting on January 8.
- 12. **Preliminary report on the 2010 NRSM:** Registration numbers and paper submission numbers increased in 2010 relative to 2009. In 2010 the total number of accepted papers is 347 in 45 sessions (compared to 291 papers in 36 sessions in 2009). A graph comparing 2009 and 2010 papers by Commission indicated particular growth from Commission F; C and K also showed significant increases. A total of 321 registrations had been received prior to the opening of on-site registration, allowing the USNC to make a surplus at the meeting. Approximately 100 students are being supported for travel awards. For 2011, a box will be added to the student support request asking students whether they have previously received an award; if needed, priority will be given to students receiving the award for the first time. It was also suggested that the committee explore ways to better follow up with previous student winners and keep them engaged. Finally, the 2010 student paper competition had 13 submissions, with five papers selected for second round review and 3 finalists chosen to speak in the Plenary Session.
- 13. **Report on the 2009 IEEE AP-S/USNC-URSI Meeting:** Ross Stone reported that the 2009 joint meeting in Charlotte, NC encountered attrition issues, possibly due to H1N1 concerns, the economy, and the location. However, although AP-S paper submissions were down, URSI submissions appeared less affected. The USNC-URSI paper proportion was 24.7% and so the USNC will receive an

expected surplus of \$30-35,000. USNC Commissions A, B, C, D, E, F, and K participated in the meeting, which included one URSI and seven joint special sessions. The 2011 joint meeting will be held on July 3-9 in Spokane, Washington, and Commissions were asked to finalize whether or not they will participate during this Boulder meeting. Ross also asked Commission Chairs to please announce the following meetings:

- a. Asia-Pacific Radio Science Conference: Sept. 22-26, 2010 in Japan. This is a major URSI sponsored conference between General Assemblies and all 10 URSI Commissions will participate.
- b. 9th Intl Symposium on Antennas, Propagation, and EM Theory: Nov. 29-Dec. 2, 2010, sponsored by the Chinese URSI National Committee.
- c. ICEAA 2010: Int'l Conference on Electromagnetics in Advanced Applications: Sept. 20-24, 2010 in Australia.

It was noted that an increasing number of radio science and communications meetings are being organized in the Asia-Pacific region; as a result the USNC should try to send representatives when possible and stay involved in the developments.

- 14. **Future Meetings:** Bill Davis reported that over the last year the MOU had been signed between IEEE and the National Academies. The dates and locations of upcoming joint summer meetings are:
 - a. Toronto, 8-17 July 2010 this is <u>not</u> a North American Radio Science Meeting
 - b. Spokane, 3-8 Jul 2011
 - c. Chicago, 8-14 Jul 2012
 - d. Orlando, 7-13 Jul 2013
 - e. Memphis, 6-12 Jul 2014 (Miami still a possibility)
 - f. Winnipeg,12-18 Jul 2015 this <u>will</u> be a NARS (Vancouver still a possibility)
 - g. 2016 Detroit possible
 - h. 2017 Vancouver possible
- 15. **Dates and Plenary for 2011 NRSM:** The committee approved the 2011 meeting dates as follows:
 - a. USNC-URSI Committee Meeting Tuesday, January 4
 - b. NRSM Wednesday, January 5 Friday, January 7
 - c. Executive Committee Breakfast Meeting Saturday, January 8

The plenary topic for 2011 will be open and will be organized by Yahya and Steve. Beginning in 2012, the plenary sessions will again be organized by rotating pairs of USNC Commissions.

16. **Old business:** It was reiterated that the 2010 joint meeting in Toronto is not a NARS. The next NARS will be held in 2015.

- 17. **New business:** Zoya Popovic agreed to draft a brief report on the 2010 NRSM which can be published in the AP-S newsletter and in the Radio Science Bulletin. Ross Stone needs the finished report (2 published pages) by May 15 for inclusion in the June issues. The brief report can also be circulated to universities and institutions that are active in radio science but which do not currently participate in the NRSM. Finally, Gary Brown requested any suggestions for ways to increase and build on female participation in the radio science meeting.
- 18. **Review of action items by the Commissions:** Steve reiterated that he will email the Commission reporting form. The items on the form for which Commission discussion/input were requested are:
 - a. Does your commission have any feedback regarding the new web site for NRSM paper submission and session formation?
 - b. Does your commission have any suggestions for USNC nominations for 2011 URSI GA Awards?
 - c. Will your Commission participate in the 2011 IEEE AP-S/URSI Meeting in Spokane, WA, to be held July 3-9?
 - d. Does your Commission have any suggestions for fund raising for USNC, focusing on proposals to government agencies?
 - e. Does your Commission have any input from students?
 - f. Can your Commission help us identify universities or other institutions who are active in Radio Science but do not participate in the USNC-URSI National Radio Science Meeting?
 - g. Please announce the following future conferences during your business meeting:
 - i. Asia-Pacific Radio Science Conference: September 22-26, 2010 in Toyama, Japan. Abstract Deadline: March 31, 2010.
 - ii. 9th Int'l Symposium on Antennas, Propagation and EM Theory: Nov. 29-Dec. 2, 2010 in Guangzhou, China. Paper Deadline: August 31, 2010.
 - iii. ICEAA 2010: Int'l Conference on Electromagnetics in Advanced Applications: September 20-24, 2010 in Sydney, Australia. Abstract Deadline: February 26, 2010.
- 19. **Adjournment:** The meeting was adjourned at 10:30 pm.