1. The meeting was called to order by the Chair, D. Wilton, at 17:03 hours. A list of the members in attendance is provided at the end of these minutes.

2. Guest Michael A. Khayat of the University of Houston was welcomed and introduced.

3. The Chair noted with regret the passing of a number of highly-regarded URSI Commission B members: Bob McIntosh, Ralph Hiatt, Victor Twersky, Korada Umashankar, Gaspar Valenzuela, and Jim Wait.

4. The minutes from the Commission B business meeting of June 22, 1998 at the Renaissance Waverly Hotel, held during the 1998 URSI / AP-S Symposium, were approved.

CHAIR'S REPORT

5. It was announced that Eric Michielsson from the University of Illinois at Urbana-Champaign is the winner of the 1999 Booker Fellowship Award. Beginning this year, the triennial award will be presented at a U. S. meeting instead of at the General Assembly.

6. The membership list is in the process of being updated by the Commission. It is important that correct e-mail addresses be obtained since more URSI business will hopefully be conducted by e-mail in the future. Concerning the electronic distribution of minutes and other documents, it was pointed out that a text version should always be sent along with a word-processor
version (e.g., a Word document), since not all members are able to receive attachments or to read all types of word-processor documents.

7. References from U.S. authors for the *Radio Science References* diskette to be distributed at the General Assembly have been collected and have been sent to Professor Makato Ando, who is in charge of producing the diskette.

8. Nominees for each of the URSI awards were announced. There are two senior award nominations: Bob Collin has been nominated for the Van der Pol Gold Medal, and Akira Ishimaru has been nominated for the Dellinger Medal. In the junior awards category, Eric Michielsson has been nominated for the Koga Medal. Also, it was noted that 15 nominations have been made for URSI Young Scientist Awards.

9. The Chair noted that a ballot for electing Participants to the 1999 URSI General Assembly has been mailed out, and urged all voting members of URSI (i.e., active members) to return their ballots. A total of 22 Participants will be selected.

10. U.S. URSI Commission B must have its officers for the next triennium in place by the end of March. Prof. P. L. E. Uslenghi will automatically become Chair (no election needed), but an election must be held for a new Vice Chair. A nomination committee consisting of Don Wilton, Don Dudley, and George Uslenghi will oversee the nomination process.

11. The winners of the Student Paper Contest held during the present National Radio Science Meeting in Boulder were announced. The first place winner was N. G. Lehtinen (Commission H) from Stanford University. The second place winner was D. C. Wittwer (Commission B) from the University of Arizona. The third place winner was F. L. Teixeira (Commission B) from the University of Illinois Urbana-Champaign. Unfortunately, the third-place winner was not able to attend the Boulder meeting due to inclement weather.

12. The Chair reviewed the status of Web page development. The USNC Web page is already operational, and can be reached at www.usnc-ursi.org. The Web page will contain meeting announcements, member nomination forms, and other information. Links to a Commission B Web page are scheduled to be operational by the time of the 1999 URSI / AP-S meeting in Orlando.

13. The deadline for receiving applications for 1999 Raj Mittra Travel Grants is January 13, 1999. An announcement and application instructions may be found in the October issue of the AP Magazine.

14. A report on recently held and upcoming meetings was given. A preliminary total of 323 papers were submitted to the present Boulder meeting. A motion to accept the proposed dates of Jan. 5-8 (Wednesday–Saturday) for the Boulder 2000 meeting was passed. It was also noted that several special sessions are already planned for the Boulder 2000 meeting. (Note: see the TAC report below for further information on special sessions.) A summary of future scheduled and proposed meetings and the contact person for each is given below.

**AP-S / URSI:**

<table>
<thead>
<tr>
<th>Location</th>
<th>Contact Person</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orlando</td>
<td>C. Christodoulou</td>
<td>July 11 – 16, 1999</td>
</tr>
<tr>
<td>Salt Lake City</td>
<td>M. Iskander</td>
<td>June 25 – July 1, 2000</td>
</tr>
</tbody>
</table>
Boston R. McGahan July 8 – 13, 2001
San Antonio R. Nevels June 16 – 21, 2002
*Columbus W. Burnside June 23 – 27, 2003
*Calgary R. Johnston June 26 – July 3, 2004
*San Jose H-Y. Pao June 20-26, 2004

*under consideration

URSI XXVI General Assembly:

URSI EM Theory Symposium:

15. It was moved that URSI U.S. Commission B participate in all future proposed AP-S / URSI Symposia through the year 2002. The motion passed.

16. A motion was made to continue to support all societies currently represented on the USNC. These societies are the IEEE Microwave Theory and Techniques, Antennas and Propagation, and Geophysical and Remote Sensing Societies; the American Geophysical Union; the American Meteorological Society; and the American Astronomical Society. The motion passed.

17. The terms of USNC Members at Large J. Mathews (Commissions G, H) and F. Schuermeyer (Commission D) are expiring and new representatives are needed. The Commission voted to support Commission D’s nomination of Rick Ziolkowski to Member at Large.

18. Gary Brown will become Chair of USNC at the beginning of the next triennium, and hence USNC must elect a new Secretary. Nominations for USNC Secretary (along with a short biography) should be given to the nomination committee consisting of C. Butler, W. Gordon, and D. Chang (deadline: Feb. 1, 1999).

COMMITTEE REPORTS

19. R. Pogorzelski presented the report of the Membership Committee.

- There were two new nominations for membership, Joel T. Johnson (Ohio-State University) as an Associate Member and Cinzia Zuffada (JPL) as a Member. Both nominations were approved.
• It was noted that USNC is proposing a standard membership nomination form to be used by all Commissions. The form will be posted on the Web site and is modeled after the current Commission B nomination form.

20. R. Ziolkowski presented the report of the Technical Activities Committee (TAC). The committee consists of R. Ziolkowski (Chair), A. Cangellaris, D. Jaggard, R. Pogorzelski, and J. Williams.

• A summary of the Commission B sessions and joint sessions involving Commission B at the 1999 Boulder meeting were presented. The sessions listed below involved Commission B. The organizers of organized sessions are also listed.

  B session: *Surface Scattering and Related Problems (I & II)* (15 papers) (G. Brown and A. Maradudin)
  B/F session: *Foilage Penetration and Scattering* (7 papers) (R. Lang)
  B/H session: *Numerical Methods in Electromagnetics and Plasmas* (9 papers) (G. Joyce, G. Ganguli)
  B/H session: *Optical Radio Communications* (2 papers) (G. Hyde)
  B session: *EM Theory* (6 papers)
  B session: *Numerical Methods* (9 papers)
  B session: *Antennas and Guided Waves* (8 papers)

The total number of submissions for these sessions was 56.

• For the 1999 AP-S/URSI meeting in Orlando, the following special sessions involving Commission B are presently being organized:

  Applied Mathematics in Electromagnetics, A Memorial Session Honoring Prof. Ralph E. Kleinman (I & II) (D. Dudley, C. Butler, and T. Angell)
  Honorary Session for Prof. Donald G. Dudley (W. Johnson)
  EM Education (P. L. E. Uslenghi)
  Joint IEEE AP-S/URSI session: Conformal Antennas (D. Werner and L. C. Kempel)

Parveen Wahid is the contact person for the Orlando meeting for special sessions. However, Rick Ziolkowski will serve as the contact person for URSI, and will coordinate with her.
• Ideas for special sessions for the Boulder 2000 meeting should be forwarded to Rick Ziolkowski (ziolkowski@ece.arizona.edu). The following special sessions are presently being planned:

  B: Active Antennas (L. W. Pearson, wilson.pearson@ces.clemson.edu)
  
  B: Ultra Broadband Antennas for Wireless Communications
  (C. Butler, cbutler@eng.clemson.edu)
  
  B/D: Photonic Band-Gap Structures (D. Yang, hyang@eecs.uic.edu and R. Ziolkowski, ziolekowski@ece.arizona.edu)
  
  B/A/F/G.H/K: Memorial Session for Prof. James R. Wait
  (D. Hill, dhill@boulder.nist.gov)
  
  B/F: Rough Surface Scattering
  (A. Maradudin, aamaradu@uci.edu and G. Brown, randem@vt.edu)
  
  B/D: Optical Radio Communications (G. Hyde, rhogeof@erols.com)
  
  B/J: Advances in Reflector Antenna and Radio Telescope Design (J. Baars, jbaars@phast.umass.edu and Y. Rahmat-Samii, rahmat@ee.ucla.edu)

• There was a discussion concerning the format of submissions to joint AP-S/URSI sessions. The point was made that for these sessions both a one-page abstract and a summary are required, but the summary can be any length between one and four pages (the format of the references is also different between the URSI abstracts and the AP-S summaries).

21. The meeting was adjourned at 18:21 hours.

**Members and Associate Members in Attendance**


Respectfully submitted,

David R. Jackson
Secretary, U. S. URSI Commission B
Feb. 22, 1999