

IEEE Robotics and Automation Society AdCom Meeting Minutes
Detroit, MI
Tuesday May 11, 1999

LIST OF ATTENDEES

T. Fukuda, President; Co-Chair, Micro Robots & Cellular Robots Tech. Comm.
S. Hsia, President Elect; Chair, Long Range Planning Comm.; etc.
G. A. Bekey, Past President; Chair, Nominations Comm.
G. N. Saridis, Founding President
D. E. Orin, Vice President for Finance
K. Kosuge, Vice President for Member Activities; Chair, Int'l Affairs Comm.; etc.
Y. F. Zheng, Vice President for Technical Affairs; Program Chair, 1999 Conf.
B. Siciliano, Vice President for Publications
A. A. Maciejewski, Secretary; Prog. Chair, 2002 Conf.; Chair Const./Bylaws Comm.
P. Luh, Editor of Transactions
R. Snyder, Ad Sales and News Editor of Magazine
W. R. Hamel, General Chair, 2002 Conf.; Trans. Mechatronics Treasurer
N. Caplan, Chair, Conference Board
S. Sugano, Chair, Meetings Comm.
H. Akeel, General Chair, 1999 Conference
B. Carlisle, General Chair, 2000 Conference
O. Khatib, Program Chair, 2000 Conference; AdCom member
W. H. Kwon, General Chair, 2001 Conference
B. H. Lee, Program Chair, 2001 Conference
L. C. Fu, Program Chair, 2003 Conference
R. D. Klafter, Chair, Awards Comm.
A. M. Erkmén, AdCom; Co-Chair, Education Comm.
R. R. Murphy, Co-Chair, Education Comm.
T. Tsubouchi, Co-Chair, Education Comm.
P. J. Eicker, Chair, Robotics and Intelligent Machines Coordinating Council
H. Moraff, Co-Chair, Long Range Planning Comm.

A. K. Bejczy, AdCom member
J. D. Crisman, AdCom member; Co-Chair Human-Robot Interface & Coord. TC
G. Giralt, AdCom member
H. N. Koivo, AdCom member
V. J. Lumelsky, AdCom member
S. Yuta, AdCom member
P. Dario, AdCom; Co-Chair, Medical Robotics Tech. Comm.
K. Y. Goldberg, AdCom member
C. S. G. Lee, AdCom; Chair, Conf. Liaison; etc.
S. Lee, AdCom; Chair, Assembly & Task Planning TC; etc.
R. C. Arkin, AdCom member
A. J. Koivo, AdCom member
R. A. Volz, AdCom member
J. Xiao, AdCom member
X. Yun, Co-Chair, Mobile Robots Tech. Comm.
A. P. del Pobil, Co-Chair, Robot Motion & Path Planning Tech. Comm.
J. Yuh, Co-Chair, Underwater Robotics Tech. Comm.
J. J. Leonard, Co-Chair, Underwater Robotics Tech. Comm.
K. Tanie, Chair, Virtual Reality in Robotics Tech. Comm.
M. Kaneko, visitor

1. APPROVAL OF AGENDA

The meeting was called to order by President Fukuda at 12:45 p.m. He initiated the meeting by congratulating the newly elected AdCom members: R. C. Arkin, K. Ikeuchi, P. K. Khosla, A. J. Koivo, B. Siciliano, and J. Xiao. He then announced that Bruno Siciliano is our new Vice President for Publications and appointed Dick Volz to fill Siciliano's position as a member of the AdCom. A motion to accept the agenda and the minutes of the Oct. 18, 1998 AdCom meeting without any changes was then passed by the AdCom.

2. REPORT ON STATUS OF THE SOCIETY

Fukuda briefly reported on several items of interest to the Society, namely (1) that Society reserves were over \$1 million, (2) that the Society's Transactions is very highly regarded (ranked 45th in the 1997 Journal Citation Report filtered for Engineering, Electrical and Electronic), (3) that the Society's conferences are doing very well, (4)

that there are approximately 6,000 Society members, (5) that the Society will be giving its new awards (Early Career and Pioneer) for the first time, (6) that the Society is expanding its agreements with sister societies (four in Japan and one in France) and (7) that the Society should prepare for its periodic review with IEEE. (See Attachment A for details.)

3. VICE PRESIDENT FOR TECHNICAL AFFAIRS REPORT

Zheng, Vice President for Technical Affairs, provided a report on the technical activities of the Society (Attachment B). He opened by discussing four emerging research areas that have generated significant interest and activity: (1) personal robotics, (2) biological robotics, (3) medical applications, and (4) mobile robots. He then reported on the Distinguished Lecturers Program and gave a list of the lecturers for 1998-1999 but noted that there had not been any lectures in the last seven months. Zheng then turned to a discussion of the technical committees, noting that he has tried to emphasize their activities in his four-year tenure as Vice President. He announced the resignation of Kok-Meng Lee as Chair of the Manufacturing Automation Technical Committee and the appointment of Yu (Michael) Wang and Chen Zhou as his replacements. He closed his report by highlighting some of the activities of the more active Technical Committees, including the Micro Robots and Cellular Robots, Computer and Robot Vision, Robot Motion and Path Planning, Underwater Robotics, Service Robots, and Multisensor Integration Technical Committees.

4. VICE PRESIDENT FOR MEMBER ACTIVITIES REPORT

Kosuge, Vice President for Member Activities, opened his report (Attachment C) by noting that IEEE membership was up 4.7% last year to 334,811. He mentioned that the Nominate a Senior Member Program (where a society receives \$10 for each member elevated to senior grade) was being continued for 1999. He then notified the AdCom about the Information Advantage Program for IEEE members that provides such services as an online bibliography of IEEE publications, a document delivery service, online periodicals (OPeRA), personal email aliases, and an online bookstore. (Additional information and web addresses for these services are in Attachment C.) He then provided detailed membership statistics, broken out by region and grade (Society membership is up by 4.3% in 1998) and reviewed some of the actions being taken to increase membership, including the offer of free membership to new members who join at our conferences. He closed his report by requesting input for updating the Technical Interest Profile form that is included with membership applications.

5. VICE PRESIDENT FOR FINANCE REPORT

Orin, Vice President for Finance, provided a financial report (Attachment D) that included five items: (1) review of income/expenses for 1998, (2) 1999 budget, (3) 2000 preliminary budget, (4) publications income, and (5) unbudgeted expenses. He opened his report by announcing that 1998 was the best year ever for the Society (for the third year in a row) with a surplus of \$428.3K that included \$192K from ICRA, \$165.2K from the Transactions, \$78.9K from investments, \$53.7K from the

Magazine (with member fees) and \$53.1K from the Book Broker Program. The 1998 surplus contributed to a net worth of approximately \$1.19 million (the first time it has been over \$1 million). The budget for 1999 and the preliminary budget for 2000 call for surpluses of \$105.1K and \$291.4K respectively. He noted that nonmember publications income, i.e., income from individual and ASPP sales to libraries, is rising substantially and that the Book Broker Program is now generating a net income.

Orin then reported in detail on the Society's publications income. He presented data showing that approximately 80% of the Transactions income comes from nonmember subscriptions and that IEEE marketing analysis estimated that our nonmember rates are only 50% of the market average. IEEE recommended that our Society increase our nonmember rates by 15% for next year in order to reach 67% of the market average in three years. (The 67% figure is comparable to the rates for publications of other professional and not-for-profit societies such as the Association for Computing Machinery.) He then presented a motion from the Financial Activities Board to increase the member fee by 5% to \$20, the Magazine nonmember rate by 14% to \$125, and the Transactions nonmember rate by 9% to \$350 for the year 2000. An amendment to keep the member fee at \$19 was then made and seconded. After a lengthy discussion, the amendment was defeated by a vote of 14-7 and the original motion was passed with one dissenting vote. Orin concluded his discussion of publications income by presenting detailed data on income from the Book Broker Program.

Orin closed his report by bringing a motion from the Financial Activities Board to approve the following unbudgeted expenses: (1) \$1.5K for travel expenses for our representative to the ITS Council, (2) \$4.8K for Transactions Editor's expenses associated with implementing electronic submission, (3) \$2K for the logo committee, and (4) \$2.5K for the Secretary's duplication and mailing expenses. The motion was unanimously passed by the AdCom.

6. VICE PRESIDENT FOR PUBLICATIONS

Siciliano, Vice President for Publications, opened the publications report (Attachment E) by touching on several topics. First, he expressed his interest in exploiting the potential of the web for enhancing interaction between Society members as well as electronic submission and review of publications. Next, he mentioned three projects with IEEE press that were underway and encouraged the AdCom to provide suggestions on potential subjects and authors for additional books. He also noted that the proposal for a new Transactions was currently "frozen". Finally, he closed his report by presenting subscription statistics on Society publications noting that the Transactions subscriptions are down from 6,851 in 1992 to 3,144 in 1998 (primarily due to its unbundling in 1997).

6.1 Transactions on Mechatronics Hamel, Treasurer of the Management Committee for the Transactions on Mechatronics, presented his report on the finances of the Transactions (Attachment F) which is doing very well. The actual 1998 surplus was \$93.1K which was significantly better than projected. The total reserves are at \$131.5K of which \$43.8K (one-third) is our Society's. (The surplus

is split equally among the Robotics and Automation Society, the Industrial Electronics Society, and the Dynamics, Systems, and Controls Division of the ASME, although the Design Division of ASME will also become a partner starting in 2000.)

- 6.2 Transactions on Robotics and Automation** Volz, the outgoing Editor-in-Chief of the Transactions, began his report with an update on this efforts to reduce time to publication (Attachment G). He reminded the AdCom that IEEE's goal was a maximum of two years from initial submission to publication and that our Society's Transactions was currently at an average of 102 weeks. However, he noted that the 1998 data used by IEEE was for papers submitted in 1996 so that they don't reflect the recent efforts to reduce these times. In particular, the time from final acceptance to publication has been reduced by six months during the last four years by increases in page allocation that have reduced our backlog of accepted papers. He then pointed out several procedures that have been implemented by the Editor-in-Chief, Editors, and Associate Editors, to reduce the probability of problem papers and reduce review times in general, including electronic submission and review (see Attachment G for more details).

Volz then presented a brief report on the status of the Transactions including the usual statistics on submissions, review time, and page charges (Attachment H). He noted that the special issue on Virtual Reality in Robotics and Automation would be out in June, the special issue on Manufacturing Design Systems, which had 21 papers submitted for it, was scheduled for April of 2000, and a special issue on Manufacturing Technology for Semiconductor Production was just approved. Volz then explained how overlength page charges could be used to buy extra pages for the Transactions, however, it should not exceed 5% of the budgeted amount in order to not risk losing reallocation money from the ASPP. With this in mind, he presented the following two-part motion from the Editorial Board. First, that the AdCom approve a page budget of 1024 pages for the Transactions in 2000 along with giving the Editor-in-Chief the authority to use the overlength page charges to increase the number of pages up to a maximum of 5%. Second, to forward a request to the the Periodicals Council to lobby for a change in the reallocation formula to remove the penalty for exceeding the budgeted page count by more than 5%. After a brief discussion the motion was unanimously passed.

Luh, the incoming Editor-in-Chief of the Transactions, then led a discussion on the Society's vision for the future of the Transactions (see Attachment I). Maintaining a high quality publication with an efficient review process were considered a high priority. Much of the remaining discussion revolved around the implications of becoming an increasingly more electronic medium. The AdCom closed the discussion by thanking Dick Volz for his five years of exceptional service as Editor-in-Chief of the Transactions.

- 6.2 **Magazine** Snyder, Ad Sales and News Editor of the Magazine, presented a brief report on the status of the Magazine (Attachment J). The financial situation is good, with a surplus of \$42.4K for 1998, and Brian Benbrook is in place as Managing Editor. The Magazine has a new look along with an increase in the page budget, four new associate editors being added, and several special issues in process.
- 6.3 **New Publications** Volz then turned to the issue of a possible new transactions (Attachment K). He summarized the two reasons that the IEEE Periodicals Council rejected our previous proposal for a new transactions, i.e., they were suspicious of our motive being purely financial and they did not feel that we were publishing enough pages to warrant creating a new publication. He also noted that with the change in the Editor-in-Chief that this may not be a good time to also propose a new transactions. However, he presented several possible actions to increase the number of pages being published, including having Technical Committee Chairs actively solicit paper submissions, publishing periodic special issues on the same topic, and joining with other societies on joint publications.

7. CONFERENCE BOARD REPORT

Caplan, Chair of the Conference Board, opened his report by giving a brief update on potential future conference sites, including the consideration of New Orleans for 2004 and Barcelona for 2005.

- 8.1 **1999 Conference.** Akeel, the General Chair for the 1999 Conference, gave a status report on the just starting 1999 Conference. At the time of his report there were 777 registrants with an income of \$336K and expenses of \$257K, however, he emphasized that these numbers were changing as he spoke. He also pointed out the coordination with the RIA conference that included access to each others exhibits and a joint panel discussion. Zheng, the Program Chair for the 1999 Conference, then presented data on the technical content of the conference (Attachment L). There were 521 papers accepted from 837 submissions for an acceptance rate of 62%. The largest number of submitted papers (165) were in the area of mobile robots. Zheng's report concluded with a brief discussion on what is a desirable acceptance rate for ICRA conferences.
- 8.2 **2000 Conference.** Carlisle, the General Chair for the 2000 Conference, gave a report on the preparations for the 2000 Conference to be held in San Francisco on April 23-29. The theme of the conference was "Robotics and Automation: The next generation" and it would emphasize interaction between the industrial community and the research community. The conference committee organization is complete with details on the web (<http://robotics.stanford.edu/ICRA2000>). The budget is based on an estimate of 800 attendees for an income of \$349K and a surplus of \$116K. Khatib, the Program Chair for the 2000 Conference, then gave a brief summary on the organization of the technical sessions that includes a reduction in the number of tracks and length of presentations in order to increase the interaction between attendees.

- 8.3 **2001 Conference.** Kwon, the General Chair for the 2001 Conference, gave an update on the status of the 2001 Conference to be held in Seoul, Korea on May 21-26 (Attachment M). The theme of the conference is “Frontiers of Robotics and Automation in the New Millennium” and the committee organization is available on the conference web site (<http://www.icra2001.org>). He closed his report by noting that the conference will have financial support from several companies and government organizations, including Samsung, and would be held concurrently with KOFA (Korean Factory Automation Show).
- 8.4 **2002 Conference.** Hamel, the General Chair for the 2002 Conference, gave a report on the 2002 Conference to be held in Washington, DC. He opened by listing several of the advantages of the conference site including direct international access, an excellent metro system, extensive sight seeing, and proximity to government, industrial, and academic institutions. The conference committee organization is underway including Maciejewski as Program Chair; Lynne Parker, Shigeki Sugano, and Antonio Bicchi as Vice Chairs; Caplan as interim Local Arrangements Chair; and George Lee as Publications Chair. Two hotels in Crystal City, the Hyatt and Marriott, are currently being considered for the conference hotel.
- 8.5 **2003 Conference.** Fu, the Program Chair for the 2003 Conference, presented a very brief update on the 2003 Conference to be held in Taipei, Taiwan on May 19-24 at the Grand Hotel Taipei. The technical program will include 12 parallel sessions, special industrial sessions, and exhibitions in conjunction with the International Automation Show in Taipei. Additional information is available on the web site (<http://icra2003.csie.ntu.edu.tw>).
- 8.6 **1998 IROS Conference** George Lee, the Program Chair for the 1998 IROS Conference, provided a brief financial report on IROS'98 (Attachment N). There were 423 attendees and a surplus of \$80K. The usual financial distribution for IROS is 15% for the Robotics and Automation Society, 35% for the Industrial Electronics Society, 30% for the Robotics Society of Japan, and 20% for SICE, however, because SICE did not contribute any financial resources to IROS'98, they did not share in the distribution of the surplus. This resulted in our Society receiving 18.75% of the surplus or approximately \$15K. Lee closed by noting that the Society's financial commitment to IROS was being increased to 25%.

9. MEETINGS COMMITTEE REPORT

Sugano, Chair of the Meetings Committee, provided a report on the 16 conferences for 1999 and the five conferences for 2000 that were approved by the Conference Board for Sponsorship, Cosponsorship or Technical Cosponsorship (Attachment O). He closed his report by pointing out that one of our 100% sponsored conferences (MEMS99) had an unexpectedly low surplus (despite a larger than anticipated attendance/income) due to a 47% increase in catering expenses (Attachment P).

10. NOMINATIONS COMMITTEE REPORT

Bekey, Chair of the Nominations Committee, reminded the AdCom that there would be an election for six new AdCom members in the fall and encouraged them to submit nominations.

11. AWARDS COMMITTEE REPORT

Klafter, Chair of the Awards Committee, announced that there were three Fellows elected from the Robotics and Automation Society: Bill Hamel, Yilong Chen, and János Ferenc Bitó. He once again urged the AdCom to nominate their eligible colleagues for the Fellow Award. He also announced that the Society would be giving its Early Academic Career Award (to Ning Xi) and its Pioneer in Robotics and Automation Award (to Shigeo Hirose) for the first time this year. Bekey then presented a motion from the Awards Committee to establish two new \$1K awards to be given at the next five ICRAs for the best conference papers in robotic manipulation and vision. The \$10K for these two awards was being donated by Ben Wegbreit and they would be called the “Wegbreit Best Paper Award in Robotic Manipulation” and the “Wegbreit Best Paper Award in Vision”. The motion was unanimously approved.

12. SOCIETY INFORMATION ITEMS

Fukuda provided information on four items of interest to the Society. First, the ITS Council was formed in January with Ümit Özgüner as its president. Second, Fukuda appointed Lumelsky and Dario as our representatives to the newly formed Sensor Council (which was asking for a one time \$2K donation). Third, TAB is expected to take action on the Nanotechnology Committee in June. Finally, Fukuda reported that the Society was moving forward with agreements with other robotics and automation societies in the world in an effort to be more global.

13. PRESIDENT ELECT REPORT

Hsia, President Elect, made a brief report on two items of interest to the Society (Attachment Q). The first item was a summary of the New Technology Directions Committee which is a standing committee of TAB whose charge is to anticipate the direction of new technologies and spearhead their development by IEEE. The second item was the development of a policy for granting a waiver of the G & A fee that is required of conferences requesting technical co-sponsorship. The granting of waivers would be considered on a case by case basis and is primarily geared for conference in developing/third world countries.

14. LONG RANGE PLANNING COMMITTEE REPORT

Moraff, Co-Chair of the Long Range Planning Committee, presented a report on the three topics discussed in this committee, namely the technical committees, the web, and industry participation. Regarding the technical committees, it was suggested that there be guidelines and support for starting new technical committees and that information from the Technical Interest Profiles be used for increasing participation. He also suggested that technical committees be involved in the planning process and

invited their chairs to attend the Long Range Planning Committee meetings. Concerning the web, the committee suggested starting a forum for technical discussions, increasing the number of links to our publications, and forming a web site advisory committee. Finally, suggestions for increasing industrial interaction included the co-location of meetings, planning more joint activities, and having representatives on each others committees.

15. ROBOTICS AND INTELLIGENT MACHINES COORDINATING COUNCIL REPORT

Eicker, Chair of the Robotics and Intelligent Machines Coordinating Council, presented a report on the status of RIMCC (Attachment R). He summarized some of its achievements including a Memorandum of Understanding (MOU) between our Society and the North American Robotics Industries Association (RIA), a “needs” workshop in 1996 that led to an expo on Capitol Hill in 1997, and the current overlapping ICRA and RIA conference. He closed his report by discussing the movement toward a national robotics initiative in 2001 and invited everyone to attend the panel discussion on this topic to be held tomorrow.

16. CONSTITUTION AND BYLAWS COMMITTEE REPORT

Maciejewski, Chair of the Constitution and Bylaws Committee, then presented a report on the proposed changes in the bylaws concerning the creation of a Vice-President for Conferences and restructuring of the Conference Board (Attachment S). A motion to approve the proposed amendment was passed unanimously by the AdCom. The amendment will be published in the Society Magazine and filed with the IEEE TAB. It will go into effect 30 days thereafter. He then presented a report on the proposed changes to the bylaws concerning the Transactions (Attachment T). The AdCom will vote on adopting these changes at the next meeting. There was then a motion to draft changes to the bylaws that would require a summary of any proposed changes to the bylaws to be printed in the Magazine, along with a link to a web address that contains the exact changes, prior to a vote by the AdCom. The motion was passed unanimously.

17. EDUCATION COMMITTEE REPORT

Murphy, Co-Chair of the Education Committee, reported on the activities of this committee. The committee is currently involved in developing mechanisms to facilitate the transfer of knowledge, increasing the involvement of students in Society activities, and developing procedures to highlight advances and achievements in the Society. Unfortunately, the student activities scheduled for ICRA'99 had to be canceled, but similar events will be planned for future meetings. Murphy closed her report with an invitation for all Society members to participate in the activities of the Education Committee.

18. INTERNATIONAL AFFAIRS COMMITTEE

Kosuge, Chair of the International Affairs Committee, gave a brief report on the activities of this committee in 1999 (Attachment U). These activities included improving the networking between the various chapters throughout the world by organizing meetings between chapter chairs at conferences and providing free overstock conference proceedings through the Book Broker Inventory Program by having the Society cover the cost of shipping.

19. RELATIONSHIP WITH OTHER ORGANIZATIONS

Makoto Kaneko, a representative from the Robotics and Mechatronics (R & M) Division of the Japan Society of Mechanical Engineers (JSME), presented a draft of an agreement between the R & M division and our Society (Attachment V). He then provided some background on the Robotics and Mechatronics Division of JSME, which contains 5,500 members (more than the entire Robotics Society of Japan), and that already has a strong relationship with ASME. After some discussion, two amendments were proposed to the draft. The first was to replace item (6) with the following wording: "Members of the R & M Division can register for ICRA at IEEE member rates and members of the R & A Society can register for R & M Division sponsored meetings at JSME member rates." The second amendment was to explicitly state that the agreement was for a two year trial period. A motion to approve of the draft agreement with the above two amendments was made and approved by the AdCom.

Giralt then provided information on MOUs between ASTI (Association Française des Sciences et Technologies de l'Information, roughly translated as the Information Processing Society of France) and the IEEE (Attachment W) and the Computer Society (Attachment X). He plans on providing a draft of a similar agreement between ASTI and our Society at the next AdCom meeting.

Hamel then reported that our Society would be technically co-sponsoring the "Journal of Robotics and Mechatronics." (There had been some questions concerning tax status that were resolved at a recent TAB meeting.)

20. RAS LOGO COMMITTEE

Hamel, chair of the Logo Committee formed at ICRA'98, discussed the process that the committee went through to produce the new Society logo. Hamel then made a motion that the new logo be approved as the official logo of the Robotics and Automation Society and that it be registered with IEEE. After a brief discussion the motion was passed by the AdCom.

21. ADJOURNMENT

The meeting was adjourned at 6:21 p.m. to convene next on Dec. 4, 1999 in San Francisco, CA.