IEEE Robotics and Automation Society AdCom Meeting Minutes Convention Center, Albuquerque, NM April 21, 1997

LIST OF ATTENDEES

- G. A. Bekey, President
- T. Fukuda, President Elect; Chair, Long Range Planning Comm.; etc.
- D. E. Orin, Vice President for Finance
- W. R. Hamel, Vice President for Member Activities
- Y. F. Zheng, Vice President for Technical Affairs and Prog. Chair, 1999 Conference
- A. A. Maciejewski, Secretary
- M. B. Leahy Jr., Chair, Publications Committee and AdCom member
- R. A. Volz, Editor of Transactions
- K. P. Valavanis, Editor of Magazine
- R. Snyder, Managing Editor of Magazine
- R. Kress, Co-Chair, Meetings Comm. & Chair, Teleoper. & Telerobotics Tech. Comm.
- R. W. Harrigan, General Chair, 1997 Conference
- M. Jamshidi, Program Chair, 1997 Conference
- G. Giralt, General Chair, 1998 Conference and AdCom member
- P. Dario, Prog. Chair, 1998 Conf.; AdCom; Co-Chair, Medical Robotics Tech. Comm.
- H. Akeel, General Chair, 1999 Conference
- B. Carlisle, General Chair, 2000 Conference
- O. Khatib, Prog. Chair, 2000 Conference
- W. H. Kwon, General Chair, 2001 Conference
- C. Laugier, General Chair, IROS '97
- S. Hsia, Co-Chair, Awards Committee and AdCom member
- P. Khosla, Chair, Education Committee
- P. J. Eicker, Chair, Robotics and Intelligent Machines Coordinating Council
- H. Moraff, Co-Chair, Long Range Planning Committee
- T. J. Tarn, Chair, Nominations Committee and Neural Networks Liaison
- K. Kosuge, AdCom and Co-Chair, Human-Robot Interface & Coord. Tech. Comm.

- K. Y. Goldberg, AdCom member
- J. K. Hodgins, AdCom member
- A. J. Koivo, AdCom member
- P. B. Luh, AdCom member
- A. M. Erkmen, AdCom member
- R. C. Luo, AdCom member and Chair, Sensor Integration & Fusion Tech. Comm.
- L. C. Fu, AdCom member
- B. Siciliano, AdCom member
- A. K. Bejczy, AdCom member
- V. J. Lumelsky, AdCom member
- S. Yuta, AdCom member
- S. Lee, Chair, Assembly & Task Planning; Co-Chair, NN & Fuzzy Syst. Tech. Comms.
- G. D. Hager, Co-Chair, Computer and Robot Vision Tech. Comm.
- T. M. Sobh, Co-Chair, Discrete Event Dynamic Systems Tech. Comm.
- C. S. G. Lee, Co-Chair, Neural Networks & Fuzzy Systems Tech. Comm.
- G. Menga, Chair, Prog. Environments in Robotics & Automation Tech. Comm.
- K. Gupta, Co-Chair, Robot Motion & Path Planning Tech. Comm.
- B. K. Gosh, Chair, Sensor Guided Manipulation in Automation Tech. Comm.
- J. Yuh, Chair, Underwater Robotics Tech. Comm.
- K. Tanie, Chair, Virtual Reality in Robotics Tech. Comm.
- R. B. Kelley, guest

1. APPROVAL OF AGENDA

The meeting was called to order by President Bekey at 12:37 p.m. Each of the individuals present introduced himself/herself. A motion to accept the agenda was made and unanimously approved.

2. REPORT ON STATUS OF THE SOCIETY

Bekey opened his report on the status of the Society by noting that the Society is in good financial shape. He commented on several activities that represented a broadening of the vision and influence of the society, including sponsoring two conferences in cooperation with other societies, i.e., CIRA (Computational Intelligence in Robotics and Automation) and CPRA (Control Problems in Robotics and Automation), and the proposal for a new transactions. Bekey also informed the AdCom of his meeting

with the president of the Systems, Man, and Cybernetics Society at the IEEE Technical Activities Board and their continued interest in pursuing discussions concerning a merger of our two societies. A committee consisting of Art Sanderson, Tony Bejczy, Vladimir Lumelsky, George Bekey, and Toshio Fukuda were to meet with them in May.

3. DIVISION X DIRECTOR REPORT

It was announced that Mike Masten, the new Division X Director, would give a report at the next AdCom meeting in December.

4. VICE PRESIDENT FOR TECHNICAL AFFAIRS REPORT

Zheng, Vice President for Technical Affairs, provided a report on the activities of the technical committees (Attachment A). He announced the appointment of Oussama Khatib as a new Distinguished Lecturer and the appointment of Kamal Gupta and Angel P. del Pobil as the new co-chairmen of the Robot Motion and Path Planning Technical Committee. He noted that there were currently eighteen technical committees and that they were very active (e.g., organizing sessions for conferences and special issues for the transactions). He also discussed several ideas for increasing membership in the technical committees, including attracting members from other societies. He concluded his report by recognizing the efforts of all the chairmen of the technical committees. At the conclusion of Zheng's report, Bekey commented that he would like to encourage the technical committees to consider using the special sessions that they organize as a vehicle for publishing edited books.

5. VICE PRESIDENT FOR MEMBER ACTIVITIES REPORT

Hamel, Vice President for Member Activities, presented his report (Attachment B) which included a discussion of the current membership status, ideas for membership development, and a review of the results of the membership survey. He noted that the membership data coming from IEEE was now very accurate and that the total membership was stable at around 6,000. He reported on a meeting of the IEEE Membership Development Committee at which concerns about the drop in student enrollment were discussed. However, he pointed out that this is not an issue for our Society since we have a relatively large and stable student enrollment. He also reported that the Affiliate Membership Initiative has been started and appears very encouraging. (Affiliates are members of approved societies (listed in Attachment B) who can join the Robotics and Automation Society without joining IEEE, which results in a cost reduction of approximately 50%.) He requested that the AdCom members who are members of other societies provide him with the name of a contact person that he could approach concerning affiliate membership. Hamel closed his report by reviewing the results of the membership survey (see Attachment B) and announcing that Rich Hooper (the Robotics and Automation Society nominee) was selected as the Division X PACE (Professional Activities Council for Engineering) Coordinator.

6. VICE PRESIDENT FOR FINANCE REPORT

Orin, Vice President for Finance, provided a financial report (Attachment C) that included a review of income/expenses for 1996, the 1997 budget, the preliminary 1998 budget, and a breakdown of AdCom committee expenses. He opened his report by noting that 1996 was a very good year primarily due to an exceptional conference surplus and a very good return on investments, resulting in the first net surplus in 5 years (\$63K) despite a projected deficit. (The IEEE report shows a surplus of \$103K due to adjustments for the 1994 conference and a grant to RIMCC.) The projection for 1997 is that it will be only a break-even year (based on a \$45.8K surplus from ICRA) due in large part to a large increase in AdCom expenses (\$24.9K over 1996). The preliminary budget for 1998 shows a small surplus of \$7.4K based on a projected surplus of \$66K for ICRA and an increase in nonmember rates for the Transactions (from \$225 to \$275) and Magazine (from \$85 to \$95). The small size of this surplus is due to another large increase in AdCom expenses (\$29.4K over 1997), primarily due to increased expenses for AdCom travel to Europe for ICRA '98.

Orin then reported in detail on the large increases in AdCom Committee expenses for the last two years (Attachment C). He presented a list of proposed reductions to the 1997 budget that were approved by the Financial Activities Board which included the following items: Conference Board (\$5K to \$1K), Distinguished Lectures Program (\$5K to \$3K), International Affairs Committee (\$3K to \$1.5K), Member Activities Board (\$20K to \$10K), sending the February issue of Control Systems Magazine to RA members (\$7K to \$0), and the Magazine Editorial Reimbursed Expenses (\$15.9K to \$14.4K). He also reminded the AdCom that there was now an unbudgeted expense form that had to be filled out and presented to the Financial Activities Board prior to being presented to the AdCom (Attachment D). Lumelsky then presented a motion that the AdCom approve of the budget reductions recommended by the Financial Activities Board. The motion was seconded by Bejczy and passed unanimously by the AdCom. Bekey then thanked Orin for his exemplary job of taking care of the Society's finances.

7. NOMINATIONS COMMITTEE REPORT

Fukuda, President Elect, requested that AdCom Member Nominations (consisting of a photo, statement, and bio not exceeding 300 words total) be sent to Tarn, Chair of the Nominations Committee, by July 31 in preparation for the AdCom Election to be held in October. Bekey and Tarn later reviewed the nomination process emphasizing that anyone can be guaranteed to be on the ballot by submitting a petition signed by 25 members.

8. CONFERENCE BOARD REPORT

8.1 1997 Conference. Ray Harrigan, the General Chair for the 1997 Conference, provided a status report on the 1997 Conference (Attachment E). He reported that as of April 17, 1997 the conference had a surplus of \$54K based on an income of \$340K and expenses of \$286K (there were 713 pre-registrants, accounting for \$240K of the income, with total registration anticipated to be near 800). There

were 574 papers scheduled for presentation out of 899 that were submitted, for an acceptance rate of 63%. The 12 workshops and tutorials had a total of 148 registered attendees. In addition to the usual conference awards, the new "Kayamori Best Automation Paper Award" will be presented for the first time. Harrigan noted that there were 206 total events associated with the conference and that this represented a significant amount of work and responsibility for the local arrangements chair. Harrigan and the AdCom then expressed their appreciation to Jerry Stauffer for his outstanding work in that capacity. One disturbing item that Harrigan brought to the attention of the AdCom is that the IEEE Conference Information Line (212-705-7900) had no knowledge of this conference. Harrigan closed his report by providing some preliminary recommendations based on his experiences (Attachment E).

- 8.2 1998 Conference. Georges Giralt, the General Chair for the 1998 Conference, gave a progress report on the 1998 conference to be held in Leuven, Belgium on May 16-21 (Attachment F). He focused on some of the unique features of the conference, e.g., first time that the conference was being held at a university, special tracks for case studies from industry, and proactive encouragement of traditionally underrepresented countries. The estimated surplus for the conference is \$67.7K based on an income of \$536.7, expenses of \$469, and an estimated 700 registrants, with a base registration fee of \$400. (Giralt guaranteed a minimum surplus of \$40K.) Paolo Dario, the Program Chair for the 1998 Conference, presented an overview of the technical program review process and on the role of the vice-chairs. To maintain or increase the quality of the conference, the acceptance rate is targeted at 50% with "satellite" events such as panels, roundtables, contests, and demonstrations used to increase the attendance of people not presenting papers.
- 8.3 1999 Conference. Hadi Akeel, the General Chair for the 1999 Conference, gave a brief status report (Attachment G) on the 1999 Conference to be held in Detroit on May 10-15 (overlap with the RIA conference). The hotel contract has been signed with The Westin Hotel at the Renaissance Center. The chairs for the organization committees have been selected. The tentative plenary and keynote speakers being considered are the Vice President of GM or Ford and the Chairman of Fanuc Corp. Akeel closed his report by noting that all preparations for the conference are on schedule.
- 8.4 2000 Conference. Brian Carlisle, the General Chair for the 2000 Conference, gave a brief update on the 2000 Conference to be held in San Francisco on April 23-28. He noted that conferences held in San Francisco tend to have a 15% increase in attendance as compared to other venues so that he estimated 900-1,000 attendees. A hotel contract has been signed with the San Francisco Hilton and Tower with a reduced room commitment of 2050 rooms as previously suggested by the AdCom. Several concerns were raised regarding the timing of the conference due to conflicts with university schedules and travel arrangements (April 23 is Easter Sunday).

- 8.5 **2001 Conference.** Wook Hyun Kwon, General Chair for the 2001 Conference, gave a brief update on the 2001 Conference to be held in in Seoul, Korea. He noted that the conference site would be the Seuol International Convention Center but that the date was not yet finalized.
- 8.6 2003 Conference. Ren Luo, General Chair for the 2003 Conference, presented a proposal to hold the 2003 Conference in Taipai, Taiwan. The proposal had been previously approved by the Conference Board. Li-Chen Fu is the Program Chair. Luo cited several desirable characteristics of the proposed location including good conference facilities, easy accessibility for international travelers, local industry for technical tours, tourist attractions, and a pleasant climate. The budget projected a surplus of approximately \$77K from a total income of \$588K and total expenses of \$511K, based on 595 attendees. After a brief discussion concerning selecting conference dates that accommodate university schedules, Hsia made a motion to approve the proposal to hold the 2003 Conference in Taipai as presented by Luo. The motion was seconded by Fukuda and unanimously approved by the AdCom.
- 8.7 CIRA '97 Sukan Lee, Co-Chair of the Technical Committee on Neural Networks and Fuzzy Systems, presented a report on CIRA '97 (Computational Intelligence in Robotics and Automation) to be held at the Hyatt Regency in Monterey, California on July 10-11 (immediately following ICAR '97, the 8th International Conference on Advanced Robotics). CIRA '97 is sponsored by the IEEE Robotics and Automation Society and the Neural Networks Council. The general chair is Antti Koivo and the program chair is Sukan Lee. There were approximately 75 papers submitted with an anticipated acceptance rate of 50-60%.
- 8.8 **CPRA** '97 Kimon Valavanis presented a report on CPRA '97 (Control Problems in Robotics and Automation), a one day workshop to be held at the Hyatt Regency in San Diego, California on Dec. 9 (as part of the IEEE Conference on Decision and Control). The program chair is Bruno Siciliano. All of the finances for this year's workshop are being handled by the Control Systems Society with the Robotics and Automation Society handling the finances for the next CPRA workshop. Siciliano noted that selected papers from workshop proceedings would be published as an edited volume of the Springer-Verlag Series of Lecture Notes on Control and Information.
- 8.9 IROS '97 Christian Laugier, General Chair of IROS '97 (IEEE/RSJ International Conference on Intelligent Robots and Systems), presented a brief update on this conference which is to be held in Grenoble, France on Sept. 7-11 (Attachment H). There were 396 papers submitted of which 274 were accepted. The projected total income is \$247K with total expenses at \$235K for a projected budget surplus of \$12K, which is based on a conservative estimate of 300 attendees.
- 8.10 **IROS** '98 George Lee, Program Chair of IROS '98, provided a brief presentation on this conference which is to be held in Victoria, B.C., Canada on Oct. 12-16 (Attachment I). The General Chair is Andrew K. C. Wong. Lee noted that the Robotics and Automation Society only sponsors approximately 15% of the cost

sharing for this conference and suggested that the AdCom may want to consider increasing this percentage.

9. MEETINGS COMMITTEE REPORT

Fukuda, Co-Chair of the Meetings Committee, started his report by reviewing the four categories of sponsorship that the Robotics and Automation Society recognizes: (1) Sponsorship, (2) Co-Sponsorship, (3) Technical Co-Sponsorship, and (4) Cooperation. Sponsorship and Co-Sponsorship involve budget approval for the meeting whereas Technical Co-Sponsorship and Cooperation require that a \$500 General and Administrative Fee be paid to the Society. He then provided a handout with all of the information on the meetings that had been approved by the Meetings Committee for one of the four categories of sponsorship (Attachment J). After a brief review of some of these meetings, Lumelsky made a motion to approve the sponsorship of all the meetings approved by the Meetings Committee. The motion was seconded by Giralt and unanimously approved by the AdCom. Bekey then reported that the Robotics and Automation Society was approached by the Instrument Society of America and that they were willing to provide financial support (\$1K) for our society to organize a technical session and provide a keynote speaker for the Industrial Automation Computing Conference to be held in Portland, Oregon on June 28 to July 1, 1998.

10. PUBLICATIONS COMMITTEE REPORT

- 10.1 Magazine Kimon Valavanis, Editor of the Magazine, reported on the status of the Magazine. The magazine is doing very well with expenses being reduced for 1997. There are special issues planned on "Robotics and Automation in Europe" for Dec. 1997 and March 1998. The Magazine is aggressively trying to solicit more papers (although with the scheduled special issues, there are enough papers to publish through Dec. 1998). The review cycle time is still three to four months.
- 10.2 Transactions Richard Volz, Editor of the Transactions, started his report with the usual summary of the Transactions including statistics on submissions, review time, and page charges (Attachment K). The submission rate is increasing, after a reduction in 1996. Planned special issues include one on "Virtual Reality" and a simultaneous special issue with ACM on "Object-Oriented Architectures for Distributed Control Systems in Robotics and Factory Automation." The acceptance rate for papers is relatively constant at approximately 30%. Volz then presented the details of the analysis that he performed in order to build a model of the finances for the Transactions (Attachment K). To catch up with a slight backlog in papers, Volz requested that there be a motion for a one time increase of 64 pages to the Transactions to bring the total to 1024. The motion was made by Orin, seconded by Fukuda and unanimously passed by the AdCom. Volz then gave a brief update on electronic publishing and indicated that there was no question of if the Society would get involved, just a question of when it will get involved.

The remainder of his report was devoted to the proposal for a new transactions. He indicated that the proposal for the new transactions was a natural step in the Society's increased emphasis on automation and applications. He then presented an overview of the financial analysis for the proposed new transactions that was performed to cover a broad range of subscription scenarios (based on the Transactions model discussed previously). He suggested a non-member subscription rate of \$175 in order to optimize the amount that would be returned to the Robotics and Automation Society. Volz then requested to have a motion to proceed with the new transactions with subscription rates of \$175 for non-members, \$5 for members, and \$4 for students. The motion was made by Lumelsky and seconded by Fukuda. Volz then clarified the distinction between splitting the existing Transactions versus creating an entirely new transaction, indicating that a split would result in a higher subscription rate (because current subscribers would not have to check a box to subscribe to the new transactions when they renew). Following a lengthy discussion on the impact of the new transactions, Leahy proposed an amendment to the motion that a statement of purpose be prepared for both of the transactions and that this document be approved at the December AdCom. The amended motion was then unanimously approved by the AdCom.

11. SOCIETY INFORMATION ITEMS

Bekey briefly summarized several information items for the Society including: making the past transactions of the Society available to Eastern European Libraries on microfiche, not creating another student robot contest (due to our involvement with other society's contests), and obtaining student participation at future AdCom meetings by contacting universities in the city where the meeting is being held.

12. PRESIDENT ELECT REPORT

Fukuda, President Elect, briefly presented some of his thoughts on the Society, reiterating his goal of \$500K net worth for the Society by the year 2000. He also proposed considering the start of a new transactions on virtual reality. He closed his presentation by expressing his desire to create a big award for exceptional service or achievement.

13. LONG RANGE PLANNING COMMITTEE REPORT

Moraff, Co-Chair of the Long Range Planning Committee, provided a report on the discussions in this committee. The planning for the society focused on five major categories: technical issues, political/social issues, human resource issues, membership issues, and financial issues. The specific issue considered at their most recent meeting was the question: What do our members want? The answers to this question were broadly characterized as being related to either information, professional contacts, or recognition. Moraff closed his report by presenting a proposal to create a Web Site Development Committee under the Vice-President for Publications. Such a motion was made by Goldberg, seconded by Tarn, and unanimously approved by the AdCom.

14. ROBOTICS AND INTELLIGENT MACHINES COORDINATING COUNCIL REPORT

Eicker, Chair of the Robotics and Intelligent Machines Coordinating Council, presented a brief report on the activities of RIMCC. These consisted of preparing: (1) a show for the House and Senate Manufacturing Coalitions at the Capitol based on the results of the "Needs" workshop (see 12/7/96 meeting minutes) and (2) a proposal to the US government for approximately \$50 M/year to work on technologies and applications of robotics.

15. CONSTITUTION AND BYLAWS COMMITTEE REPORT

A motion to approve the minutes of the previous meeting without any changes was made by Orin, seconded by Bekey, and unanimously passed by the AdCom. 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 Publications (Attachment L). 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.

16. AWARDS COMMITTEE REPORT

Hsia, Co-Chair of the Awards Committee, presented an update on the Awards Committee's activities. He noted that the first "King Sun Fu Best Transactions Paper Award" would be presented at the conference banquet. He also reported that there were several highly qualified candidates for fellow this year that the committee was evaluating. He encouraged the AdCom to nominate qualified candidates noting that candidates must be senior members at the time of nomination and members for at least five years. He closed his report by recognizing the two new fellows for this year, Dick Volz and Yuan Zheng, who were then congratulated by the AdCom. Bekey then gave an update on the new Society awards, noting that their were already several nominations for the "Early Career" awards and that he would be presenting a recommendation for approval of the "Pioneer" awards at the next meeting of the Technical Activities Board in June (the previous proposal was turned down).

17. EDUCATION COMMITTEE REPORT

Khosla, Chair of the Education Committee, requested a discussion on the role of this committee. He noted that several years ago it was this committee's responsibility to run the workshops and tutorials for the conference, however, this was now the duty of the Tutorials and Workshops Chair (selected by the General Chair). After a ten minute discussion there was a consensus to keep the responsibility for the conference's tutorials and workshops under the control of the General Chair, that book publication would be the responsibility of the Vice-President of Publications, and that the President would select the Society's representative to the IEEE TAB Education Committee. The role of the Education Committee would be more focused on issues such as the development of instructional materials, the undergraduate and graduate

curriculum, continuing education, and related items as specified in a document to be prepared by Khosla.

18. NEURAL NETWORKS LIAISON REPORT

Koivo, the former Neural Networks Council liaison, gave a brief report on the activities of the Neural Networks Council. The issue of a merger with another society is no longer being discussed. An agreement between the Neural Networks Council and the International Neural Networks Society to jointly sponsor future neural network conferences is scheduled for approval by the Neural Networks Council AdCom in June. He closed his report by noting that there has been some talk in the virtual reality community regarding starting their own council and that the Robotics and Automation Society may want to consider the impact of this possibility. (Currently the Virtual Reality Annual International Symposium is jointly sponsored by the Neural Networks Council and the Computer Society.)

19. NEW BUSINESS

Fukuda, presented a motion from the International Affairs Committee which recommended the creation of a Vice-President for International Activities. Ideally, this vice-president would be from a region that has no other representatives in the Society. There was then a lengthy discussion on the precise responsibilities of this position. The AdCom then reached a consensus to table the motion and have Fukuda and Maciejewski prepare a draft of the required changes to the bylaws that would be considered by the AdCom in December.

20. ADJOURNMENT

The meeting was adjourned at 5:30 p.m. to convene next on December 14, 1997 in San Diego.