IEEE Robotics and Automation Society AdCom Meeting Minutes
Sheraton, Uptown, Albuquerque, NM
December 7, 1996

LIST OF ATTENDEES

G. A. Bekey, President

T. Fukuda, President Elect; Chair, Long Range Planning Comm.; etc.

R. D. Klafter, Past President and Co-Chair, Awards Committee

D. E. Orin, Vice President for Finance

W. R. Hamel, Vice President for Member Activities

Y. F. Zheng, Vice President for Technical Affairs and AdCom member

A. A. Maciejewski, Secretary

T. J. Tarn, Director of IEEE Division X and Chair, Nominations Committee

R. A. Volz, Editor of Transactions

K. P. Valavanis, Editor of Magazine

R. Snyder, Managing Editor of Magazine

M. B. Leahy Jr., Chair, Publications Committee and AdCom member

N. Caplan, Chair, Conference Board and General Chair, 1996 Conference

R. Kress, Co-Chair, Meetings Comm. & Chair, Teleoper. & Telerobotics Tech. Comm.

C. S. G. Lee, Prog. Chair, 1996 Conf. and Co-Chair, NN & Fuzzy Syst. 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; Chair, Medical Robotics Tech. Comm.

S. Hsia, Co-Chair Awards Committee

B. Carlisle, General Chair, 2000 Conference

O. Khatib, Prog. Chair, 2000 Conference

W. H. Kwon, General Chair, 2001 Conference

B. H. Lee, Prog. Chair, 2001 Conf. & Co-Chair, Robot Motion & Path Plan. TC

P. J. Eicker, Chair, Robotics and Intelligent Machines Coordinating Council

H. Moraff, Co-Chair, Long Range Planning Committee

A. J. Koivo, Neural Networks Liaison and AdCom member

A. K. Bejczy, AdCom member

J. D. Crisman, AdCom & Co-Chair, Human-Robot Interface & Coord. Tech. Comm.

R. B. Kelley, AdCom member

K. Kosuge, AdCom and Co-Chair, Human-Robot Interface & Coord. Tech. Comm.

K. Y. Goldberg, AdCom member

J. K. Hodgins, AdCom member

A. A. Goldenberg, AdCom member

R. C. Luo, AdCom member and Chair, Sensor Integration & Fusion Tech. Comm.

L. C. Fu, AdCom member

N. P. Papanikolopoulos, Co-Chair, Computer and Robot Vision Tech. Comm.

S. Lee, Chair, Assembly and Task Planning Tech. Comm.

V. J. Lumelsky, Co-Chair, Robot Motion & Path Planning Tech. Comm.

J. Yuh, Chair, Underwater Robotics Tech. Comm.

I. Walker, guest

1. **APPROVAL OF AGENDA & MINUTES OF LAST ADCOM MEETING**
The meeting was called to order by President Bekey at 12:45 p.m. Each of the individuals present introduced himself/herself. A motion to accept the agenda was made and unanimously approved. After noting that the minutes are now made available electronically on the Web at `http://ee.www.ecn.purdue.edu/~maciejew/ieee/ras.html` the minutes of the previous meeting were approved without any changes.

2. **CONFERENCE BOARD REPORT**
Caplan, Chair of the Conference Board, opened his report by noting that it was divided into two parts, one being informational items to the AdCom for conferences that had already been approved (1996, 1997, and 1998) and the other being conference proposals that required a vote by the AdCom (final approval for 1999, new proposals for 2000 and 2001).

2.1 **2001 Conference.** Caplan noted that there were two very competitive proposals presented to the conference board for the location of the 2001 conference and that the board recommended the proposal from Korea. Wook Hyun Kwon, General Chair for the 2001 Conference, then presented the proposal to hold the 2001 Conference in Seoul, Korea (Attachment A). Prof. Beom Hee Lee is the program chair. The justifications for the location included the fact that Korea is the fourth largest robot market, Seoul is one of the world's largest cities, and there is a large degree of support from local industry. Kwon presented an overview of

the organizing committee, the conference site (the brand new Seuol International Convention Center), and the support of local industry. The base registration fee is to be $400 with an estimated 700 attendees and a projected income of $645K resulting in an estimated surplus of approximately $80K. The exact dates for the conference have not been finalized but it was noted that later in May was preferable so as not to conflict with academic schedules. A motion was made by Caplan to approve the proposal to hold the 2001 Conference in Seoul as presented by Kwon. The motion was seconded by Fukuda and was unanimously approved by the AdCom.

2.2 **2000 Conference.** Brian Carlisle, the General Chair for the 2000 Conference, presented a proposal to hold the 2000 Conference in San Francisco on April 23-28. Prof. Oussama Khatib is the Program Chair. The justifications for the location included the success of the previous conference held there in 1986, the ease of access, and the proximity of robotics industry, research, and educational institutions as well as the opportunities for sightseeing. The theme for the conference is "Robotics and Automation the Next Generation" and the Robotics Industries Association is being solicited for their active participation. A hotel rate of $149 for a single room has been locked in with the San Francisco Hilton and Tower (the same hotels used for the 1986 Conference). The base registration fee is to be $400 with an estimated 795 attendees and a total projected income of $505K resulting in an estimated surplus of between $70-$100K. A motion was made by Caplan to approve the proposal to hold the 2000 Conference in San Francisco as presented by Carlisle. The motion was seconded by Giralt and unanimously approved by the AdCom.

2.3 **1999 Conference.** Caplan noted that the 1999 conference was conditionally approved for Detroit and was being presented for final approval. Yuan Zheng, the Program Chair for the 1999 Conference, presented the revisions to the 1999 proposal budget. The base registration fee was increased from $350 to $375 with an estimated 700 attendees. The projected total income was $405K resulting in a surplus of approximately $43K. The conference hotel will be the Westin Hotel in downtown Detroit at a rate of $107 for single or double occupancy. Caplan noted that the conference board had given final approval to the revised proposal and made a motion that the AdCom give final approval to the revised proposal to hold the 1999 Conference in Detroit as presented by Zheng. After some concerns were raised by Fukuda regarding the budget, the motion was seconded by Bekey and approved by the AdCom with one dissenting vote.

2.4 **1998 Conference.** Georges Giralt, the General Chair for the 1998 Conference, gave a brief progress report on the 1998 conference to be held in Leuven, Belgium on May 16-21, 1998. The theme of the conference is "Intelligent Machines: From the Shop-Floor to Personal Robots." Two special features of the conference are an increased emphasis on attendance from Central/Eastern Europe and the South Mediterranean and on real world applications. In addition, the IEEE Advisor and Organizing Committee was formed, consisting of Steve Hsia, Dick Klafter,

T.J. Tarn, and chaired by Norm Caplan, to take advantage of the knowledge and experience from previous conferences. The budget was updated to include an increase in the base registration fee from \$380 to \$400. Paolo Dario, the Program Chair for the 1998 Conference, presented an overview of the program committee, including the appointments of Vincent Hayward, Bruno Siciliano, and Kazuo Tanie as Vice-Chairs, Rolf D. Schraft as the Industry-Oriented Program Chair, Ken Goldberg as Workshop and Tutorials Chair, and Peter Luh as the Video Proceedings Chair. Updated information on the conference is maintained at `http://www/laas.fr/icra-98` on the Web.

2.5 **1997 Conference.** Ray Harrigan, the General Chair for the 1997 Conference, provided a brief status report on the 1997 Conference to be held on April 20-25 at the Albuquerque Convention Center. There were 901 papers submitted with an anticipated acceptance rate of 63%. There were 10 workshops and 2 tutorials accepted and 30 videos received. The banquet speaker is Thad Starner from MIT and his talk will be on "Wearable Computers." The projection for industrial income has already been achieved and the total surplus is still estimated to exceed \$40K. The proceedings will be on CD-ROM, searchable by keywords and possibly searchable by abstract contents but there will also be a printed extended program that contains paper titles, authors, and abstracts. Mo Jamshidi, the Program Chair for the 1997 Conference, then made some comments and answered questions concerning the paper review process.

2.6 **1996 Conference.** Lee, Program Chair for the 1996 Conference, presented some historical data on previous Conferences and noted that the 1996 Conference had the largest surplus, \$110,999. The major source of income is from registration but the largest increases in income relative to previous conferences were from the sales of proceedings and miscellaneous income. Lee then presented some thoughts on increasing income and controlling expenses (Attachment B).

There was then some discussion concerning the possibility of increasing income through expanded use of exhibits and advertisements. Caplan then presented a motion to request \$5K from the AdCom to hold an additional Conference Board meeting. The motion was seconded by Bekey and unanimously approved by the AdCom. Caplan then presented two information items, first that Taiwan would present a formal proposal to the AdCom for the 2003 conference and second that he has appointed two conference board liaison people, Steve Hsia as the financial liaison and T. J. Tarn as the meetings liaison.

3. PUBLICATIONS COMMITTEE REPORT

Michael Leahy, Chair of the Publications Committee, made some opening remarks concerning the magazines increased presence on the Web for informational items and links to other sites. He also noted that the magazine would be starting an annual feature on the state of the art in robotics based on input from the technical committee chairs.

3.1 **Transactions** Richard Volz, Editor of the Transactions, opened his report by recognizing Antti Koivo for all his work as an editor for the past five years and announcing that Vladimir Lumelsky would be taking over for him. In addition to the overall summary for the Transactions, publications summary, submissions summary, review time analysis and Web page contents (Attachment C), Volz's report contained three main discussion items (1) page allocations for next year, (2) electronic publishing, and (3) a proposal for a new transactions. Concerning item (1), Volz noted that there was an approximately one year backlog of papers waiting for publication. To deal with this issue he presented a motion for a one time increase of 168 additional pages for 1998 (the equivalent of approximately one issue). The motion was seconded by Orin. Bekey then suggested that the financial impact of this motion be studied and presented to the financial activities board prior to a vote of the AdCom. Orin and Volz then noted that the results of the financial impact analysis could be presented to the AdCom at the next meeting with still enough time to meet the IEEE deadline and thus the motion was tabled. Concerning item (2) Volz reported that four IEEE societies would begin publishing their transactions electronically starting in Jan. 1997. He noted that at this point in time it was an expensive proposition and recommended that our society track the results of this project to determine if we should consider electronic publication of our transactions. Concerning item (3), Volz reported that the Industrial Electronics Society is proposing a new transactions on factory automation. After discussing the implications of such a transactions, Volz presented a motion to establish a committee to develop a proposal for a second transactions of the Robotics and Automation Society to be brought to the AdCom in April. The motion was seconded by Fukuda and passed unanimously. Bekey then commented that he would contact the president of the Industrial Electronics Society concerning their proposed transactions. Bill Hamel then made a brief report on the Transactions on Mechatronics noting that they are doing very well in terms of subscriptions (1483 whereas only 1000 were budgeted) and that Robotics and Automation Society members are the major subscribers. The budget results are also very good with an anticipated reserve of $10-20K.

3.2 **Magazine** Kimon Valavanis, Editor of the Magazine, reported on the status of the Magazine. The magazine concluded it's first three year period on Dec. 31, 1996 and a new editorial board is in place as of Jan. 1, 1997 (with members Jill Crisman and Paul Backes from the original board serving one additional year). Paper submissions were steady until August with a decline during September to November. Reviews and publication decisions are still made within three months. Ad revenues have doubled since 1994 thanks to the work of Roz Snyder. Special issues to appear in 1997 include (1) Robotics in Europe (EU funded research), (2) DEDS for Robotics and Automation, and (3) Grand Challenges in Robotics. Articles are being solicited for two special issues on "who is who and doing what" reports focusing on Australia and Singapore.

4. DIVISION X DIRECTOR REPORT

Tarn, Director of IEEE Division X, was congratulated by Bekey for his Distinguished Member Award from the Control Systems Society. Tarn thanked the Robotics and Automation Society for their support and announced that Mike Masten will be taking over as the Division X Director.

5. VICE PRESIDENT FOR TECHNICAL AFFAIRS REPORT

Zheng, Vice President for Technical Affairs, provided a report on the distinguished lectures program and on the activities of the technical committees (Attachment D). He presented a motion to approve four new technical committees on (1) Agricultural Robotics, chaired by John Billingsley and Allen Teichert, (2) Human-Robot Interface and Coordination, chaired by Jill Crisman and Kazuhiro Kosuge, (3) Robotics Software, chaired by Margaret Olson, and (4) Sensor Guided Manipulation in Automation, chaired by Bijoy K. Ghosh. The motion was seconded by Bejczy and approved by the AdCom. New appointments to existing technical committees included Sukhan Lee as chair of the Assembly and Task Planning Technical Committee and George Lee as Co-Chair of the Neural Networks and Fuzzy Systems Technical Committee. At the conclusion of Zheng's report, Bekey noted that he would like to encourage the establishment of specialized workshops by the technical committees.

6. VICE PRESIDENT FOR MEMBER ACTIVITIES REPORT

Hamel, Vice President for Member Activities, presented his report (Attachment E) which included membership data, information on student chapters, and the results of the arrears initiative and the membership survey. The Society membership is stable at around 6,000 members with 1600 student members and 2,300 members in arrears. Although our student membership is one of the largest of all societies, we still have only one student chapter. Hamel encouraged everyone to form a student chapter at their institution. The results of the arrears initiative were not encouraging: of the 750 letters sent only 16 renewals were obtained. The results of the membership survey indicated that the society is dominated by academics who are relatively early in their careers and have a broad range of interests. Hamel closed his report by noting several methods for increasing membership of both affiliate and regular members.

7. VICE PRESIDENT FOR FINANCE REPORT

Orin, Vice President for Finance, provided a financial report (Attachment F) that included a summary of the society's income, expenses, and net worth. He opened his report by noting that the society was placed on the IEEE Financial Watch List due to deficits in the last four years and a budgeted deficit for 1996. He pointed out that the society had a break-even year in 1995 due largely to an exceptionally strong return of 25% on long-term investments. The reason for the IEEE report showing a $33.7K deficit was due mostly to an accounting adjustment associated with the 1988 conference. The 1996 budget shows a $22K deficit, however, there should actually be a substantial year-end surplus due to the 1996 conference showing an actual surplus of approximately $110K (the largest on record) which is much higher

than the budgeted surplus of only \$20K. The 1997 budget has a conservative projected surplus of \$4K resulting from the projected income due to the rate increases approved by the AdCom at the last meeting and a projected surplus of \$45K from the 1997 conference. Due to the significant impact that the conference has on the budget for the Society, a conference liaison position has been created. In order to control the expenses of the Society, Orin proposed a motion that the following procedure be used for the approval of unbudgeted expenses: (1) Unbudgeted expenses associated with funding a new program should be brought to the Financial Activities Board prior to the AdCom meeting. (2) Before approval, the Vice-President for Finance presents the financial impact to the budget to the AdCom. (3) The AdCom votes for funding of the program. The motion was seconded by Fukuda and passed unanimously by the AdCom.

8. **NOMINATIONS COMMITTEE REPORT**

Klafter, Past President, presented the results of the AdCom elections. There were 677 ballots returned from the approximately 4,500 voting members. The six winners from among the twelve excellent candidates are: Tony Bejczy, Jill Crisman, Georges Giralt, Steve Hsia, Vladimir Lumelsky, and Shin'ichi Yuta. The newly elected members of the AdCom were all congratulated.

9. **PRESIDENT ELECT REPORT**

Fukuda, President Elect, presented some of his thoughts on the main activities of the Society, namely, its technical, publication, and social relationship activities. He pointed out that our Society has four publications (including joint publication of the Transactions on Mechatronics and the Journal of MEMS) and encouraged the start of a new transactions. He concluded his report by setting a goal of a \$500K net worth for the Society by the year 2000.

10. **MEETINGS COMMITTEE REPORT**

Kress, Co-Chair of the Meetings Committee, briefly reported on the meetings that we have approved for technical cosponsorship or cosponsorship (with financial support). The handout he provided (Attachment G) gives the pertinent information for each of these meetings (a total of 41 meetings between 1993-1996 and an additional 30 meetings since 1996). There was some discussion concerning the concept of charging conferences for cosponsorship or technical cosponsorship. Fukuda then presented a motion for approval of sponsorship of MEMS '98 and cosponsorship of a list of conferences including AIM '97, ISATP '97, IROS '97, IROS '98, and CIRA '97. Bekey then amended the motion to include sponsorship of the conference "Automatic Identification Technology '97" along with a \$5K advance. The motion was seconded and unanimously approved by the AdCom.

11. **ROBOTICS AND INTELLIGENT MACHINES COORDINATING COUNCIL REPORT**

Eicker, Chair of the Robotics and Intelligent Machines Coordinating Council, reported on the NSF/DOE Workshop on Research Needs in Robotics and Intelligent Machines for Emerging Industrial and Service Applications that was held on Albuquerque, NM in October 28-30, 1996. He reported that it was a very successful workshop and that all the participants were in agreement at the end. The action items following the workshop are the creation of a Web site, a summary report, and informational trips to Washington. Eicker then presented a proposal to the AdCom consisting of the following four items: (1) a state of the technology presentation at the annual Robotics Industry Association (RIA) meeting, (2) a Robotics and Automation Society booth at the annual RIA meeting, (3) a request for $2K per year to support items (1) and (2), and (4) to stage Robotics and Automation Society workshops on applied topics at the annual RIA meeting. Due to Orin's previous motion concerning the procedure for approving unbudgeted expenses, this proposal could not be voted on by the AdCom, but would be considered by the Financial Activities Board and then presented at the next AdCom meeting. Eicker then reported that the proposal to the U.S. Activities Board for $15K for preparing a whitepaper and travel to Washington was approved and Orin noted that $2K of that could be used to support items (1) and (2) in the above proposal. The AdCom then thanked Eicker for all of his work on the Robotics and Intelligent Machines Coordinating Council.

12. **LONG RANGE PLANNING COMMITTEE REPORT**

Moraff, Co-Chair of the Long Range Planning Committee, provided a brief report on the discussions in this committee. The planning for the society focused on five major facets: technical issues, political/social issues, human resource issues, membership issues, and financial issues.

13. **CONSTITUTION AND BYLAWS COMMITTEE REPORT**

Maciejewski, Chair of the Constitution and Bylaws Committee, presented a report on the proposed changes in the bylaws concerning the creation of a Vice-President for Publications (Attachment H). The AdCom will vote on adopting these changes at the next meeting.

14. **AWARDS COMMITTEE REPORT**

Klafter, Co-Chair of the Awards Committee, provided a report on the four new society awards. The Technical Activities Board approved two of the awards, the "Robotics and Automation Society Early Academic Career Award in Robotics and Automation" and "Robotics and Automation Society Early Government/Industry Career Award in Robotics and Automation." Each award consists of $500 cash, a plaque, and a certificate. He then encouraged the AdCom to consider nominees for these awards. The two "Pioneer" awards were turned down but will be brought back to the Technical Activities Board for reconsideration. Hsia, Co-Chair of the Awards Committee, then reported on the activation of the Best Transactions Paper Award. He then noted that

the Industrial Electronics Society AdCom has recently approved in principle an award of \$250 for the best paper in the Transaction of Mechatronics starting with publication year 1996. Fukuda then presented a motion that the Robotics and Automation Society also approve \$250 for the best paper in the Transactions of Mechatronics award. The motion was seconded by Hamel and unanimously approved by the AdCom. Hsia then noted that several new fellows for 1997 would be announced soon and that the deadline for fellow nominations for 1998 are due by March 15, 1997. The nomination kit is available by contacting `fellow-kit@ieee.org` through email.

15. **NEURAL NETWORKS LIAISON REPORT**

Koivo, the Neural Networks Liaison, reported on activities of the Neural Networks Council, which has tabled proposals for potential mergers with other societies. He noted that their finances are very good and that they have organized several conferences. Their Transactions are also doing very well and a new Transactions on Evolutionary Computations has been approved. He also reported that future International Conference on Neural Networks meetings will be jointly organized by the Neural Networks Council and the International Neural Networks Society. The Council has also been actively collaborating with other societies on joint conferences, including the CIRA conference with the Robotics and Automation Society.

16. **REPORT ON STATUS OF THE SOCIETY, INFORMATION ITEMS AND NEW BUSINESS**

Bekey opened his report on the status of the society by noting that many of the informational items had already been covered in other reports. He reported that international agreements similar to that with the RIA are in the works with Australian and Japanese industrial robot societies. Action items included election of representatives to the Neural Networks Council (Koivo is now an officer and not eligible) and other committees of the Technical Activities Board. Bekey also recommended that our Society join the International Federation of Robotics. Bekey then presented a proposal to form a committee to meet with a committee from the Systems, Man, and Cybernetics Society to explore the possibility of a merger. After a lengthy discussion Zheng moved that such a committee be formed and the AdCom unanimously approved. Additional action items that were introduced included student membership on the AdCom and revival of the R&A Book Series. Finally, Bekey presented a motion to have some AdCom decisions performed electronically by either email or fax. The motion was seconded by Fukuda and unanimously passed by the AdCom. Tarn then presented a motion to move up the timing of the election of the President Elect. The motion was seconded by Giralt and unanimously passed by the AdCom.

17. **ADJOURNMENT**

The meeting was adjourned at 6:16 p.m. to convene next on April 21, 1997 in Albuquerque.