## IEEE Robotics and Automation Society AdCom Meeting Minutes Minneapolis Hilton and Towers, Minneapolis, Minnesota April 23, 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, Program Chair, 1996 Conference
- 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
- P. K. Khosla, Chair, Education Committee
- 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 member

- R. B. Kelley, AdCom member
- K. Y. Goldberg, AdCom member
- J. K. Hodgins, AdCom member
- P. B. Luh, AdCom member
- A. M. Erkmen, AdCom member
- A. A. Goldenberg, AdCom member
- R. C. Luo, AdCom member and Chair, Sensor Integration & Fusion Tech. Comm.
- L. C. Fu, AdCom member
- B. Siciliano, AdCom member
- G. D. Hager, Co-Chair, Computer and Robot Vision Tech. Comm.
- N. P. Papanikolopoulos, Co-Chair, Computer and Robot Vision Tech. Comm.
- S. Lee, Chair, Neural Networks & Fuzzy Systems Tech. Comm.
- V. J. Lumelsky, Co-Chair, Robot Motion & Path Planning Tech. Comm.
- J. Yuh, Chair, Underwater Robotics Tech. Comm.
- H. Hemami, guest

## 1. APPROVAL OF AGENDA & MINUTES OF LAST ADCOM MEETING

The meeting was called to order by President Bekey at 12:22 p.m. Each of the individuals present introduced himself/herself. A motion to accept the agenda, with the addition of a report by Moraff, Co-Chair of the Long Range Planning Committee, was made and seconded. With a vote, the motion was unanimously approved. The minutes of the previous meeting were approved without any changes.

#### 2. REPORT ON STATUS OF THE SOCIETY

Bekey, President of the Society, made some brief remarks on our society, noting that it is the premier robotics and automation organization in the world and touching on its increasingly international representation. His vision for the future of the society focused on two items, a broadening of our charter and an increased growth in our membership.

## 3. DIVISION X DIRECTOR REPORT

Tarn, Director of IEEE Division X, spoke briefly on two topics: (1) concerns regarding IEEE membership renewals and (2) the structural changes that have been proposed within the IEEE to make it more efficient.

### 4. VICE PRESIDENT FOR TECHNICAL AFFAIRS REPORT

Zheng, Vice President for Technical Affairs, provided a brief report on the organization of the technical committees (Attachment A). He expressed concern over the fact that the only one of the 18 technical committees that dealt with manufacturing was currently without a chair. He also provided the list of Distinguished Lecturers for 1996-97 and noted the effort to provide a balanced distribution: Industry/Academia (6/6), U.S./International (8/4), and Male/Female (11/1).

## 5. VICE PRESIDENT FOR MEMBER ACTIVITIES REPORT

Hamel, Vice President for Member Activities, presented his report (see Attachment B) which included data obtained from the IEEE Membership Development Committee meeting held in January. One particularly surprising item was the fact that 50% of U.S. IEEE members do not belong to any society. For the RA society, membership is steady with over 6000 members (although it was noted that the number of senior members is relatively low). The membership development strategy includes (1) developing more student chapters, (2) encouraging affiliate memberships, and (3) an initiative to retain members who are in arrears (see letter in Attachment B). As one method of increasing student involvement, Hamel presented the following motion (via the Long-Range Planning Committee): "It is moved that an RAS-sponsored student competition be created as a means to promote, encourage, and support student involvement, and that the student competition committee be budgeted for \$10K to administer the events and to provide financial support to the student teams." After a brief discussion the motion carried unanimously. To attract affiliate memberships, Bekey presented a preliminary list of affiliate societies (Attachment C) and encouraged the AdCom to provide additions to the list.

## 6. VICE PRESIDENT FOR FINANCE REPORT

Orin, Vice President for Finance, provided a three-page financial report (Attachment D) that includes a summary of the society's income/expenses, net worth, and fees/rates. He pointed out that the society is in a deficit spending mode and that although the society had a break-even year in 1995, it was due largely to an exceptionally strong return of 25% on long-term investments. The projected net worth of the society for 1997 is \$304K, down from approximately \$500K in 1992, and short of the IEEE guideline of one year's worth of expenses in reserve.

To address this undesirable trend, Orin presented data on current and proposed fees and rates (which are closely related to income). The recommended fee and rate increases focused on three categories: (1) unbundling the transactions from member fees, i.e., charging an additional fee for the transactions, (2) non-member subscription rates, and (3) overlength page charges. In support of recommendation (1) Orin noted that the majority of other societies do not bundle their publications despite having comparable membership fees. In support of recommendation (2) Orin cited an IEEE market study that suggested subscription rate increases for RAS publications noting that they were of high quality and underpriced. He also pointed out that by underpricing its publications the RAS may be subsidizing other IEEE societies due to the

formula by which income from the All Periodicals Package is distributed. In support of recommendation (3) Orin pointed out that the \$125 overlength page charge for the RA Transactions has never been increased before, is on the low side compared to other transactions, and is even low compared to the conference's \$170 overlength page charge.

Corresponding to the above three recommendations, Orin presented the following three motions: (1) The transactions would be unbundled from society membership fees in 1997 with the member fee set at \$19 and the subscription rate for the transactions set at \$6. (2) The non-member subscription rate for 1997 would be set at \$225 for the transactions and \$85 for the magazine. (3) The mandatory overlength page charges for the transactions be increased to \$175. After a lengthy discussion, motion (1) was approved with one dissenting vote. Motion (2) was approved unanimously without any further discussion. After a clarification by Dick Volz, Editor of the Transactions, that the overlength page charge applied to both regular and short papers, motion (3) was approved with one dissenting vote.

## 7. NOMINATIONS COMMITTEE REPORT

- 7.1 **AdCom Elections** Klafter, Past President, discussed the upcoming AdCom elections and requested additional names for potential nominees. He also noted it was encouraging that he already had four names from region 9, which is not currently represented on the AdCom.
- 7.2 Election of President Elect Tarn, Chair of the Nominations Committee, then presided over the election of the President Elect. The Nominations Committee (consisting of all Past Presidents) nominated Steve Hsia and Toshio Fukuda. Tarn then opened the floor for additional nominations. No additional nominations were received and a motion by Klafter to close the nominations was unanimously passed. The two candidates then each provided a brief presentation on their qualifications and visions for the society. The two candidates were then asked to leave the room and several members commented on the nominees, noting that the society was fortunate to have two such highly qualified candidates. Through a closed ballot vote, Toshio Fukuda was elected as President Elect.

#### 8. MEETINGS COMMITTEE REPORT

- 8.1 1996 Conference. Norman Caplan, the General Chair for the 1996 Conference, and George Lee, the Program Chair, briefly reported on the conference noted that the conference was a success with over 700 registrants from 25 different countries. Of the 910 papers submitted, 588 were accepted. The contributions of Nikolaos Papanikolopoulos as Local Arrangements Chair were also acknowledged.
- 8.2 1997 Conference. Ray Harrigan, the General Chair for the 1997 Conference, provided a report concerning the plans for the conference (Attachment F). Prof. Mo Jamshidi is the Program Chair. The conference will be held in Albuquerque, New Mexico on April 20-25, 1997 at the Albuquerque Convention Center. (Due to the increased interest in exhibitor space for the 1996 conference, the entire

convention center has been rented to provide virtually unlimited space for exhibitions.) The progress report provided updated information on the technical program, status of the organization of the conference, schedule for paper submissions and conference announcements, and the preliminary conference program. Harrigan noted that they were tracking the 1996 conference very closely to validate the numbers in the proposed budget for 1997. One novel aspect for '97 is a plan to provide the proceedings on CD ROM that is projected to save approximately \$20K. Overall, the proposed budget projected \$470K in income and \$424K in expenses for a surplus of \$46K.

- 8.3 1998 Conference. Georges Giralt, the General Chair for the 1998 Conference, gave a brief progress report on the 1998 conference (Attachment G). Paolo Dario is the Program Chair. The conference will be held in Leuven, Belgium on May 16-21, 1998. The progress report included an overview of the conference organization, the conference theme, and conference facilities. In response to previous concerns about hotel accommodations, Giralt identified 825 rooms for the days of the conference. The budget summary guaranteed a minimum surplus of \$40K.
- 8.4 Cosponsorships. Fukuda, 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 H) gives the pertinent information for each of these meetings. Bekey mentioned that he has spoken with the Neural Networks Council concerning co-sponsorship of two workshops.

## 9. 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, links to other cites, and for obtaining data on usage of Web cites.

- 9.1 Richard Volz, Editor of the Transactions, gave a status report on the Transactions (Attachment I). A number of items of information were presented including an overall summary for the Transactions, submissions summary, review time analysis, publication summary, page charge statistics, and proposed Web page contents. The quality remains high with close to a 30% acceptance rate and there are currently no papers that have been in review over 9 months. Volz recommended that the page allocation for 1997 remain the same at 960 pages. He also presented data on how IEEE assesses page charges noting that there is a significant cost savings if authors submit electronic manuscripts in LaTeX using the IEEE style files (thus avoiding a \$16.50 per page charge for format conversion). Finally, he proposed exploring the possibilities of how to take advantage of the recent CD ROM compilation of all IEEE publications since 1988.
- 9.2 Kimon Valavanis, Editor of the Magazine, reported on the status of the Magazine. The magazine has increased to 64 pages with 4 papers per issue. All expenses are as budgeted and ad revenues have increased. There will be a new editorial

board in January 1997 that will include an RIA representative and Peter Luh as the liaison to the Transactions. Several special issues are also in the works.

#### 10. CONFERENCE BOARD REPORT

Caplan, Chair of the Conference Board, reported that the board had conditionally approved the 1999 conference to be held in Detroit on May 11-15. The general chair is Hadi Akeel, Vice President of FANUC Robotics, and the program chair is Yuan Zheng. For the 2000 conference there are currently two proposals, one by Peter Luh for Boston and one by Brian Carlisle for San Francisco. For 2001 there is a proposal from Taiwan as well as expressions of interest by groups from Korea and Sydney, Australia. There was a brief discussion on adopting a formal conference proposal deadline and proposal format in order to fairly evaluate competing proposals. There is also a proposal to hold the 2004 conference in Glasgow. Finally, Caplan suggested that we should not be constrained by the algorithm for determining potential conference sites (2 years in the U.S., 1 year outside the U.S.) and to consider all proposals regardless of location.

# 11. ROBOTICS AND INTELLIGENT MACHINES COORDINATING COUNCIL REPORT

Eicker, Chair of the Robotics and Intelligent Machines Coordinating Council, spoke concerning the interaction of Robotics Industries Association (RIA) members with the magazine and the RAS research community. He discussed the need for Memoranda Of Understanding (MOU), similar to that developed with the RIA, with other countries. He also reported on a proposed "Needs Workshop" with input by user and supplier communities to be held in the fall at Sandia National Laboratories in Albuquerque, NM.

## 12. REPORT OF SOCIETY'S TAB AND TECHNICAL COMMITTEES

Zheng, Vice President for Technical Affairs, reported on the work of the Society's technical committees (see Attachment A). Zheng asked each of the committee chairs to submit a plan for 1996 and create a homepage. He highlighted some of the activities of the technical committees. He closed his report by encouraging any members interested in creating additional technical committees on automation and manufacturing.

## 13. LONG RANGE PLANNING COMMITTEE REPORT

Bekey provided a brief report on the activities of the Long Range Planning Committee focusing on two items, first the set of Grand Challenges for the field and second the formulation of a student contest chaired by Bob Kelley.

## 14. CONSTITUTION AND BYLAWS COMMITTEE REPORT

Bekey asked for a motion to amend the bylaws by changing the position of Chair of the Publications Committee to Vice President of Publications. The proposed amendment was so moved, seconded, and passed unanimously.

#### 15. AWARDS COMMITTEE REPORT

Klafter provided a report on the two new society awards, the "Pioneer in Robotics and Automation" and the "Early Career" awards, that were previously approved by the AdCom. He presented a motion from the Award's Committee that the Pioneer award consist of \$1,000 cash, a plaque, and a certificate. After a brief discussion, the motion was passed unanimously. He then presented a second motion that the Early Career award consist of \$500 cash, a plaque, and a certificate. After a brief discussion on the definition of early, the motion was passed unanimously. Finally, Klafter noted that the committee was looking at a list of additional potential awards for possible adoption at the December meeting. Hsia, Co-Chair of the Awards Committee, announced the names of the four new IEEE Fellows. Congratulations were extended to Professors Book, Goldenberg, Hollerbach, and Klafter.

## 16. NEURAL NETWORKS LIAISON REPORT

Koivo, presented a report on the activities of the Neural Networks Council, focusing primarily on their continued consideration to merge with an existing society. Bekey gave some more background on the council's previous attempt at a merger and proposed that the Robotics and Automation Society consider the possibility of being a merger partner. After a lengthy discussion on the relative merits of a possible merger, Fukuda made the following motion: "The president of the Robotics and Automation Society has authorization to express an interest and participate in merger discussions with the Neural Networks Council." The motion was seconded and then passed with three abstentions.

## 17. SOCIETY INFORMATION ITEMS AND BUSINESS

Fukuda proposed the activation of the International Affairs Committee whose purpose would be to reflect the views of regional interests. He also presented a motion to the AdCom to approve the International Affairs Committee spending \$3,000 per year to invite international members to attend the AdCom. The motion was seconded and passed unanimously. Finally, he recommended a study to consider the creation of a Vice-President for International Activity.

## 18. ADJOURNMENT

The meeting was adjourned at 5:59 p.m. to convene next on December 7 in Albuquerque.

- ATTACHMENT A
- ATTACHMENT B
- ATTACHMENT C
- ATTACHMENT D
- ATTACHMENT E
- ATTACHMENT F
- ATTACHMENT G
- ATTACHMENT H
- ATTACHMENT I