### Minutes of the

### IEEE Robotics and Automation Council

## December 13, 1983 Meeting

The Robotics and Automation Council met at the Riverwalk Marriott Hotel in San Antonio, Texas, on December 13, 1983. The following members were present:

- A. Abramovich, A. K. Bejczy, N. Caplan, J. F. Jarvis,
- W. Levine, R. W. Newcomb, R. P. Paul, T. Pavlidis,
- G. N. Saridis, S. Sastry, W. E. Snyder, H. E. Stephanou, and W. J. Trybula.

Also present were G. A. Bekey (Editor of the proposed IEEE Journal of Robotics and Automation), J. B. Cruz, Jr. (IEEE Vice President for Technical Activities), I. Engelson (IEEE Headquarters Staff Director for Technical Activities), and Y. C. Ho.

The meeting was called to order by Interim President G. N. Saridis at 9:05 A.M. Saridis outlined the meeting agenda, then gave a 10 minute overview of the council's history, organization, and objectives.

A. K. Bejczy, Chairman of the Publications Committee, followed with a 5 minute outline of the purpose of the proposed IEEE Journal of Robotics and Automation (JRA).

### 1. Discussion of the JRA

G.A. Bekey handed out a draft proposal for the JRA. The JRA is intended to be an archival journal and not a magazine. Publication is to begin in January 1985 on a quarterly basis. The proposal calls for a journal with the following six sections:

- Tutorial and review articles
- Applications papers
- Theoretical papers
- Short papers
- Book reviews
- A 4-page information insert (newsletter)

Each section is to be the responsibility of an associate editor. A review committee for each section is also to be formed. Bekey also proposed a tentative JRA budget for the years 1985, 86, and 87. He also described the assumed circulation on which the budget was planned. The proposed budget showed a loss for 1985, and a surplus for 1986 and 87. Although the 1984 budget has not been planned yet, it is clearly going to show a net loss, as there will be expenses associated with the advertising of the JRA in various magazines and newsletters, but no income will be generated in 1984. It was also decided that the Editor and the Associate Editors would not receive

any financial compensation (other than reimbursement for their expenses). Pavlidis felt that the budgeted secretarial expense was too high, while the budgeted mailing expenses were too low.

There was some discussion about the differential between the JRA subscription rate for members of the 8 parent societies, and the rate for IEEE members of non-parent societies. The council's consensus was that some differential should exist, in accordance with the IEEE's policy of encouraging members to join societies. However, this differential should not be too large, as that may encourage IEEE members to join a parent society in which they have no interest. Bekey and Saridis urged the council members to concentrate on the substantial issues affecting the orientation of the JRA, and avoid getting into details. Bekey will revise the proposed budget based on the input provided by the council members, and mail the new version to them.

A second focus of the discussion around the JRA proposal was the need to maintain balance between theoretical and application papers. The consensus of the council was that this need cannot be effectively served by imposing quotas. If, however, the balance between the two types of papers becomes unreasonable, the matter should be promptly brought up for discussion by the editorial board. Swift action will be required to avoid creating an image (either too theoretical or too applied) for the journal, as this would tend to drive away prospective authors as well as readers.

Motion 1: A motion was put forth by A. K. Bejczy that the council approve the proposed publication of a multisection journal with six associate editorships, and that furthermore, the council approve the modified budget in concept. The motion was passed unanimously by the council.

#### 2. Discussion on the subject of Conferences

Some general information about the International Conference on Robotics (organized by the IEEE Computer Society) was given by J. F. Jarvis (Conference Chairman), and R. P. Paul (Program Chairman). The conference will be held in Atlanta, Georgia, on March 13-15, 1984.

The discussion then focused on the annual Conference on Robotics that the council proposes to sponsor beginning in 1985. The main item of this discussion was the need to avoid any possible conflict or duplication with the computer vision activities of the Computer Society. The consensus of the council was that the Conference on Robotics proposed by the council will not conflict with the Conference on Computer Vision and Pattern Recognition organized by the Computer Society. Robotics is a multidisciplinary effort that requires the integration of a broad spectrum of research areas. A really useful interchange of ideas on robotics requires a single focused conference on the subject. Furthermore, there can be no conflict between computer vision and robotics, since the computer society itself sponsors conferences on both subjects. It was also noted that about 25% of the papers accepted for the Atlanta conference deal with vision, but pre-

sent no overlap or conflict with papers that are normally presented at the CVPR.

Motion 2: W.J. Trybula put forth a motion that there be one conference on Robotics per year, organized and sponsored by the IEEE, and that it be coordinated and sponsored by the Robotics and Automation Council which is the focal point of robotics activities within IEEE.

The motion was passed unanimously by the council.

## 3. Election of the 1984 Officers

Motion 3: J. F. Jarvis put forth the motion that G. N. Saridis be elected President of the council.

The motion was passed unanimously.

Motion 4: R. P. Paul put forth the motion that J. F. Jarvis be elected vice-President of the Council.

The motion was passed unanimously.

With the consent of ADCOM, the following officers and committee chairman were reappointed by the President:

- W. A. Gruver, Secretary
- H. E. Stephanou, Treasurer
- A. K. Bejczy, Chairman of the Publications Committee

## 4. Other Activities of the Council

N. Caplan is the U.S. delegate to a multinational group charged with developing a formalized program for "International Cooperation in Advanced Robotics". The concept of international collaboration originated at the 1982 and 1983 meetings of the heads of the U.S., French, Japanese, British, Canadian, Italian, and German governments. The activity is now in its early formative stages. The major participants in this effort will be the U.S., Japan, and France. The U.S. plans to stick to the research oriented issues, and will not be involved in space or manufacturing applications because of their sensitivity.

Caplan handed out a document in the form of a matrix (with technological research areas as columns, and possible applications areas as rows). He solicited input from council members on entries in this matrix where they see fruitful projects for potential workshops and/or collaboration with foreign countries. He will need this input before the next meeting of the group, which will be held in France in mid-January. Because of the short fuse, it was decided that individual responses from council members would be sent directly to Caplan.

Saridis expressed strong endorsement for Caplan's efforts, and promised the council that they would hear feedback from the international meeting in France at the next council meeting.

# 5. Next Council Meeting

The next meeting of the Council will be held Monday, March 12, 1:00 P.M. at the Atlanta Hilton, in Atlanta, Georgia.

## 6. Cooperation with Other Organizations

Saridis solicited input to help establish guidelines for reacting to calls for cooperation with non-IEEE organizations involved in robotics such as ASME and SME/RI.

The consensus of the council was that there is no pressing need for formal cooperation, since there is considerable commonality in the memberships of the various organizations involved in robotics. It was also felt that focus can be given to the IEEE conference by asking other organizations to co-sponsor our conference, but we should avoid long term entanglements. There was support for the idea of publishing other organizations meetings in our newsletter, and for the nomination of council members to act as liaison to the other organizations to make sure there is no conflict. The overall concept was to let each organization build on its own technical strength/depth, particularly in view of the fact that many of the organizations focus on robot applications.

## 7. Policy on Robotics Activities by Parent Societies

The thrust of this discussion revolved around the need to minimize any possible conflict with parent societies (e.g., competition for high quality papers).

There was a strong consensus that the JRA should project a high quality image beginning with its very early issue, even if that means that the first one or two issues are to consist of invited papers. Authors will be attracted to the JRA by the prospect of publishing in a premier journal with a high concentration of papers in their field, thus giving them higher visibility in literature searches. The focal point aspect of the journal should, therefore, be emphasized.

It was also agreed that the intent to publish the JRA should be advertised in the parent societies newsletter and magazines, and also by direct mailing. The idea of using the IEEE TIP (technical interest profile) to obtain a selective mailing list for interested members was supported.

The council also recognized the fact that people have their favorite transactions, and in many instances, well established publishing patterns, and will continue to submit robotics papers to the parent societies. The council will make no attempt to monopolize these papers, or to discourage parent societies from organizing related activities (such as special topic workshops) on robotics. Encouraging

parent societies to maintain a program in these areas will help create a pool of talent for editors, session chairman, etc.

Finally, Saridis promised the council members an up-to-date list of members names, telephones, postal addresses, and computer network addresses. There were no further items for discussion.

The meeting was closed at 11:50 a.m.

Respectfully submitted,

H. E. Stephanou W. A. Gruver