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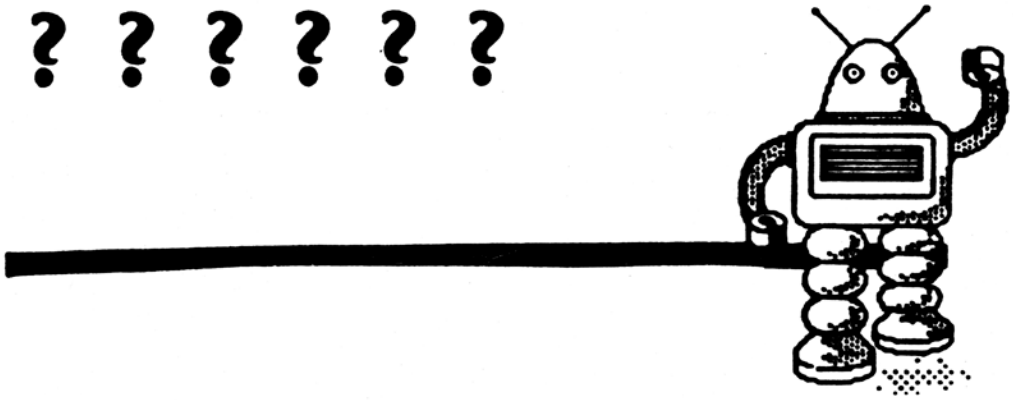

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NAME THE NEWS LETTER

YOU PROBABLY NOTICED OUR NEWS LETTER DOES NOT HAVE A NAME. AT THE NEXT MEETING SUGGESTIONS FOR A NAME WILL BE COLLECTED. YOU ARE WELCOME TO MAIL IN A NAME IF YOU CAN NOT ATTEND. AT THE SUCCEEDING MEETING A VOTE WILL BE TAKEN TO DETERMINE THE BEST NAME. A SMALL PRIZE WILL THEN BE AWARDED.

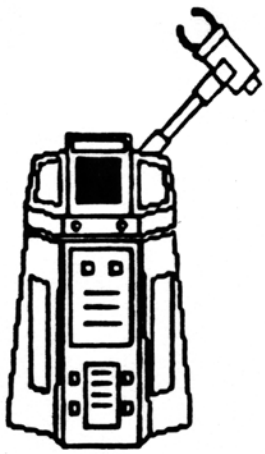
SPECIAL GUEST SPEAKER AND AGENDA

OCTOBER MEETING TO FEATURE DR. TED SPARR

Dr. Ted Sparr of the University of Texas at Arlington will be the featured speaker at the next Dallas Personal Robotics Group meeting on Saturday, Octoboer 20 at 4:00 pm. Dr. Sparr is coordinating the establishment of the new ten million dollar Advanced Robotics Research Institute in Fort Worth. The center will open in the fall of 1985 and will be one of the top robotics research centers in the nation.

In addition to Dr. Sparr's presentation, we will be distributing copies of Hero I programs and discussing plans for future projects. Don't miss this exciting meeting at the Heath Computer Center on Ross Avenue at Central Expressway!o

"EPROM BURNER" FOR HERO I



BY **Mike Shrum**

I have recently finished assembling my Hero I robot. Prior to purchasing him I did alot of research and read as much material as I could about Hero I. The need for more memory and a better way to store frequently used programs, besides cassettes which I detest, seemed very necessary. After getting into the details of Hero I, I found a program and hints on how to build an Eprom Burner for him. This enhancement will allow you to burn your frequently used programs into a 4K Eprom that will plug into the U417 socket on the CPU board. This takes some reconfigurations of the jumpers. The Eprom program loads into high ram so you can save any users programs in low ram. The four modes of operations are, (1) burn or program, (2) load, (3) verify, and (4) examine. The third mode of operation is a very helpful enhancement that is not allowed in cassette loading from Hero I.

The addition of the Eprom Burner is simple and inexpensive. It takes (3) IC's plus the Eprom, (3) 9-volt batteries, some wire and hardware, and can be built on Hero's experimental board. It's an add on I think every Hero owners will be interested in.

Complete description, software, and schematic's should be available at the next Dallas Personal Robotics meeting. See you there.

PROGRAM LIBRARY

H E R O 1 S O F T W A R E L I B R A R Y

The Dallas Personal Robotics Group is establishing a library of useful Hero 1 programs and subroutines. The initial contributions to the library will be available at the October 20th meeting. This will include subroutines for indexed speech tables, reciting decimal and hexadecimal numbers, obtaining the current date and time, speaking the current time, and converting from binary coded decimal numbers to binary numbers. A program using these routines to make Hero 1 a talking clock will be included.

The library programs will be made available to all members on a continueing basis. We need your contributions of programs to make this a valuable service to our membership. We will discuss standardized formats and distribution proceedures at the meeting. Be there to get your copy of these useful programs!

SURPRISE PROGRAM

BY BEV AND WALTER BRYANT

THIS PROGRAM CAN BE LOADED INTO YOUR HERO. LOAD THE FOLLOWING, STARTING AT ADDRESS 0100.

```
72 01 25 3F 3F 3F D3 D4 15 D3 D0 29 D3 D4 15 72 01 75 3F 3A FF FF
FF FF FF FF FF FF FF FF FF FF
```

YOU SHOULD NOW BE AT ADDRESS 0120.

```
72 01 25 20 FE 6D 55 63 6A 0B 09 12 38 32 23 5E 4B 49 5D 3A 02 00
0D 1F 0E 29 2A 2D 3C 29 0D 06 21 29 4D 6F 40 4D 35 37 1F 02 00 19
32 0D 1E 2F 00 0D 1E 06 21 29 4E 55 4D 6F 40 4D 35 37 1F 02 00 19
32 0D 1E 3F 03 FF FF FF FF FF FF FF FF FF
```

YOU SHOULD NOW BE AT ADDRESS 0170.

```
72 01 75 20 FE 6D 62 61 4D 1B 2F 00 12 0C 34 34 2B 32 25 3C 21 18
3F 3F 3F DB D5 C8 9B 95 88 13 15 08 3F 03 FF
```

P A R T Y T I M E !

Both human and robotic members of the Dallas Personal Robotics Group are invited to a Halloween costume party at Joe and Shubash Rowe's home at 7:30 pm, Saturday, October 27. Food and margarita's will be provided. All humans, robots and other creatures are welcome. The Rowe's home is just off Abram's Road in Richardson, about 1/2 mile north of Richland College. The address and phone are as follows:

405 Tiffany Trail
Richardson, TX 75081
Phone 690-1575

We look forward to seeing you there!

A BOOK REVIEW -

Basic Robotic Concepts
By John M. Holland
Howard W. Sams & Co., Inc., 1983
Softcover, $19.95

Reviewed by Joe Rowe

I have read quite a number of books on robotics over the last couple of years and have found them to fall into two main categories. The first category consists of introductory books by authors who often know little about robotics and consequently contain little useful information. The second category consists of highly technical books by robotics experts. These books are often filled with mathemetical notation undecipherable to anyone other than students of advanced mathematics. These books also offer little to someone interested in personal robotics.

It was consequently a surprise and joy for me to discover Basic Robotic Concepts. John Holland presents an excellent overview of the field of robotics in a manner which should be understandable to almost anyone. The amazing thing is that he also provides a great deal of useful technical information without going beyond basic mathematics.

This book covers a wide range of topics, including:

- A brief history of robotics
- Electric, hydraulic and pneumatic motors
- Manipulator design
- The problems and solutions of mobility
- The complexities of vision systems

Also included are an appendix covering the more coplex mathematics of manipulators for those interested and an appendix of basic programs for use in designing mobile robots.

Overall, this is an excellent book for someone with basic technical knowledge. It contains a great deal of useful information applicable to personal robots. John Holland seems to have started a third category of robotics books. Let's hope this is the start of a new trend!

DALLAS PERSONAL ROBOTICS GROUP

PROPOSED GOALS

August 18, 1984

The purpose of the Dallas Personal Robotics Group is to encourage and promote the development of personal robotics. In accordance with this purpose, the following have been proposed as suitable goals for the organization. We solicit the input of the members for revising or adding to these goals.

- Encourage participation by all those interested in personal robotics regardless of their level of technical knowledge.
- Facilitate the exchange of information among those with varying abilities, equipment, and interests.
- Educate the general public concerning the present and future capabilities of personal robots.
- Facilitate joint projects requiring the resources and abilities of more than one member.
- Provide continuing technical education for members with varying levels of expertise.

Please direct your comments and questions about the organization to one of the following officers.

Joe S. Rowe, Acting President
405 Tiffany Trail
Richardson, Texas 75081
Home (214) 690-1575, Work (214) 661-6428

Robert G. Winingham, Acting Vice President
6026 E. University, #265
Dallas, Texas 75206
Home (214) 739-0645, Work (214) 720-8700

Walter Bryant, Newsletter Editor
814 Mokingbird Circle
Lewisville, Texas 75067
Home (214) 436-6225, Work (214) 783-2141

John Mitchell, Acting Secretary
Heath/Zenith Computer Center
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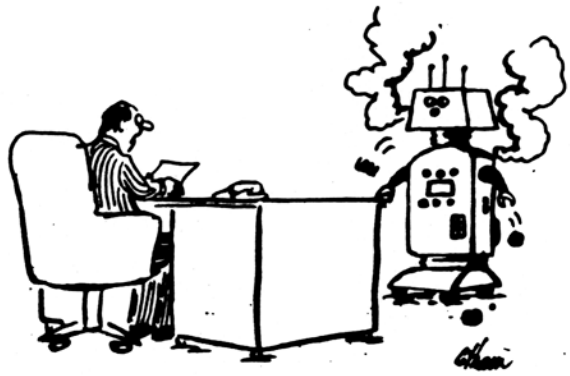
THE WALL STREET JOURNAL



"Of course, if you're not feeling well take the rest of the day off!"