

# The Robot Companion

Newsletter of the Dallas Personal Robotics Group

March 1987

Meeting - Feb. 1987

We had such a large group, it filled the room! There was standing room only! Hey Bud; next time, we'll need more chairs!

Bud Collins gave suggestions for hooking an Apple Mac to the Hero 2000. However, so far, the reliability factor is 50 percent.

Walter Bryant discussed his and Bev's navigation system and offered to bring a video tape of it to the next meeting.

Ed Rivers described the IBM PC version of a 6800 assembler that he originally wrote on a Radio Shack Model 1. I have personally used this one and recommend it highly to those of you interested in assembly language. Ed has graciously allowed us to add this program to our library. Thanks, Ed!

Walter then led a discussion on how the club can divide the programming tasks between members. There will have to be coordination between programmers on line numbers, variables, etc. Pooling resources will reduce the number of times we reinvent the wheel.

Next, Walter read the letter from our new member in Bogota, Columbia. He has a fully loaded Hero I and has written programs that map a room using the sonar.

New paying members are :

William Bradley  
Garland, Texas

Adam Bradley  
Garland, Texas

Niel and Nancy Bratteli  
Paris, Texas

Mr. and Mrs. Buford H. Carter, Jr.  
Richardson, Texas 7508

Chris J. Hamilton  
Dallas, Tx 75248

After our break, I demonstrated how my Hero I can do a 360 degree scan, locating the nearest wall, then walk up to it and get flush to it. I installed two microswitches on the front of the robot, each is wired to a different input bit on the experimenter's board. The main use I have for this function is to build a Hero I recharging station. My idea is

to run two parallel metallic strips a given distance above the floor that can mate with two electrodes on the front of the Hero I. This way, he will not have to go to one given spot, but needs only approach a wall. If the recharging strips are not there, he can turn 90 degrees, and approach the next wall, repeating this until he either finds the electricity, or runs down. (Oops!).

It was announced that our next user lab will be at Walter/Bev's home, Sunday March 8th at 2 pm.

Our club librarian, Stan, asks that contributed programs be sent on MS/PC-DOS disks, for the library.

The club is currently listed in the Texas Computer Shopper, Heath's REMark Magazine (which lists Walter & Bev's address and Joe Rowe's phone number). We will soon be listed with the IEEE society. If any of you have ideas for other places that we can use for furthering the cause, let us know!

The drawing, under great supervision was held, and Bev won the \$100.00 for the North Town mall exhibit.

#### Crime Story:

The club was donated a Hero Jr. by the Heathkit store through a most unfortunate series of circumstance. It seems that a burglar broke into someone's home. The Jr. put up a valiant struggle, but was overpowered and picked up and thrown to the ground. The resulting crash left the Jr. in more pieces than a jigsaw puzzle. Fortunately, the home was insured, and the owners received a new Jr. The Heathkit store donated the 'pieces' to the club to do with as we see fit. At the same time, we were given miscellaneous robot kits, parts, and other stuff. Thanks, Bud!

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At the user's lab, last weekend, there was an excellent turnout. Walter told me that there were at least 12 new people there. The day was spent demonstrating the various functions of the Hero 2000. One of the visitors, Roger Arrick, has volunteered to supervise the reassembly of the above mentioned Hero Jr. Good Luck, Roger!

And speaking of the Hero 2000, Walter has been complaining that his power reading always reads 100 percent, no matter how long the robot has been running. A Heathkit technician has recommended that he wire a variable resistor in series with this circuit to allow him to set the voltage level to some lower value. This way, at least, he can tell when it is docked, as then the power will register 100%.

Our next meeting, March 21, at 3:33 PM, at the Heathkit store in Garland, will feature a video tape showing the future of industrial robotics and demonstrate how the Japanese are using robots to make other robots. See you there!