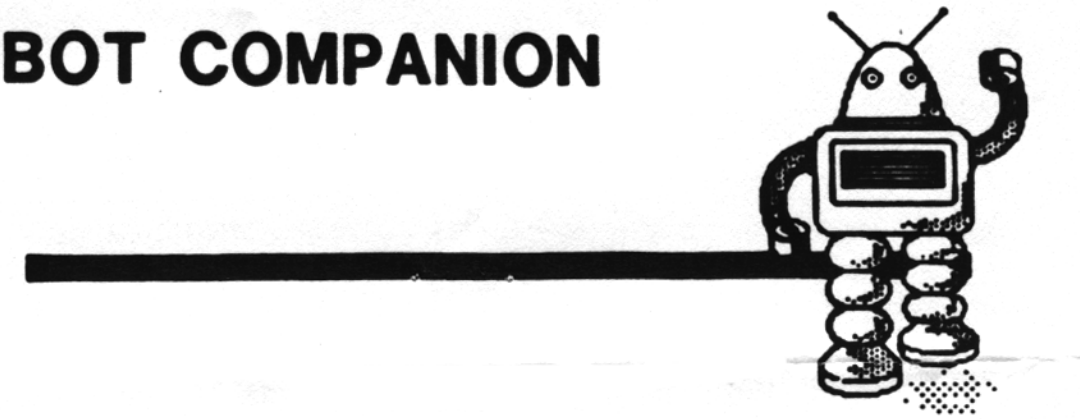
THE ROBOT COMPANION



Published by
THE DALLAS PERSONAL ROBOTICS GROUP

VOLUME 2, NO. 1 JANUARY-FEBRUARY 1985, PUBLISHED BI-MONTHLY

AGENDA

Meeting on January 19, 1985 at the Heath Computer Center in Dallas, Texas.

- Improved BASIC - Joe Rowe
- Club Project Proposals
- Special Users' Lab (for people with and without a robot) January 27, 1985 in Lewisville - Walter Bryant
- Club elections (be sure to come and vote!!)
- Club dues; $10.00 per year per family

CLUB PROJECT PEPOSALS

The club will have a series of on-going club projects. These projects will be proposed and conducted by club members. The projects will be of such a nature as to encourage group participation. The goal is to coordinate the variety of special skills and varied interests of our club members. In this way, we as a group, will be able to achieve far more and in a shorter time, than any one individual can. Please bring your suggestions and ideas to the next club meeting.

One suggestion by the editor is to define our usage of the word "robot". A robot has at least three major characteristics.

1) A robot will have at least one type of electro/mechanical appendages, or wheel, or light, or speaker, or etc., which it can control.

2) A robot will have at least one type of environmental sensor which will allow it to detect ambient light, or sound, or motion, or etc.

3) A robot will have at least one otyope of on-board computer, which may be mechanical or electrical. This computer can receive input from the sensor(s), as directed by programming, and produce logical responses of the appendage(s), etc., again per the computer programming.

We as a group can refine and add to these three major divisions. The various projects directly pertaining to robots may be listed under one of these three groups. In addition, of course, we should have social activities, club committee factions, etc., which would relate to any social organization.

SPECIAL USERS LAB

On January 27, 1985 (Sunday), there will be a special users lab held in Lewisville at the Bryant's residence from 2 to 5 PM (814 Mockingbird Circle). This will be an informal hands-on lab. We will have small groups demonstrating some of the more advanced hardware/software that has only recently become available, some of which was created by our own fellow club members. There will alos be hands-on demos for members who may not yet have a robot. Any and all members who wish to produce a demo of their own are encouraged to participate. Please call 436-6225 or speak with Walter after the monthly meeting on the 19th.

```
~/T100 REM                    HERO-1 MEMORY DUMP
110 REM                        By Joe Rowe
120 REM
130 REM  This program creates a formatted memory dump of the specified
140 REM  range of HERO-1 memory addresses on a terminal connected to
150 REM  the robot's serial port.  It requires that the robot have
160 REM  HERO-1 BASIC. memory expansion with at least 8K ram. and the
170 REM  serial port.  The program formats a dump with sixteen bytes
180 REM  per line in hexadecimal format (4 bytes per column) with
190 REM  ASCII character representation of displayable characters in
200 REM  another column.  The format is designed for screens capable
210 REM  of displaying 80 characters per line.  Any terminal or micro-
220 REM  computer with terminal emulation software can be used.  The
230 REM  baud rate used is not critical in this program.
240 REM
250 REM  These REM statements may be omitted when the program is
260 REM  entered into the robot to conserve memory.  This program
270 REM  is in the public domain and may be used or modified as you
280 REM  see fit.
290 REM
300 PRINT "Please enter starting address on the robots keypad."
310 DPRINT "$Fr"
320 S=0: E=0
330 FOR I = 0 TO 3
340 S = S + ((16 ^ (3 - I)) * KEYIN)
350 NEXT I
360 PRINT "Please enter ending address on the robots keypad."
370 DPRINT "$To"
380 FOR I = 0 TO 3
390 E = E + ((16 ^ (3 - I)) * KEYIN)
400 NEXT I
410 PRINT: PRINT TAB(24); "HERO-1 MEMORY DUMP": PRINT
420 FOR J = S TO E STEP 16
430 X = J: L = 4
440 GOSUB 650
450 PRINT " - ";
460 L=2
470 FOR K=0 TO 12 STEP 4
480 FOR I=0 TO 3
490 X = PEEK(J + K + I)
500 GOSUB 650
510 NEXT I
520 PRINT " ";
530 NEXT K
540 PRINT "  *";
550 FOR K = 0 TO 15
560 X = PEEK(J + K)
570 GOSUB 710
580 NEXT K
590 PRINT "*"
600 NEXT J
605 PRINT
610 INPUT "Enter 0 to END or 1 to display more memory" I
620 IF I = 0 THEN GOTO 760
630 IF I = 1 THEN GOTO 300
```

"The robotic forces have secured the objective and are now looting and pillaging the village."

```
640 GOTO 610
650 FOR M = (L - 1) TO 0 STEP -1
660 V = (X / (16 ^ M))
670 X = X - (V * (16 ^ M))
680 IF V < 10 THEN PRINT CHR(48 + V);: ELSE PRINT CHR(55 + V);
690 NEXT M
700 RETURN
710 IF X >= 32 THEN 740
720 PRINT ".";
730 GOTO 750
740 IF X > 127 THEN PRINT ".";: ELSE PRINT CHR(X);
750 RETURN
760 DPRINT "$"
770 END
```

CLUB ELECTIONS

The election for all club officers wil be held during the next meeting on the 27th. Anyone wishing to seek office should call Walter Bryant at 436-6225, or announce his or her intentions at the first of the meeting. Your vote could easily affect the outcome of the elections and the future of The Dallas Personal Robotics Group. Come help shape the future of robotics.

CLUB DUES

Club dues will be collected at the next meeting on the 19th. The fee will be $10.00 per family. This will cover mailing cost on the newsletter for a full year and other miscellaneous costs the club may incur.

Please note that the editor to the newsletter for The Dallas Personal Robotics Group is the "editor" of the club activities published in the newsletter. He is not the "author" of the newsletter. I would like to encourage all club members to participate in our club activities. Just a verbal input on your activities will allow your efforts, accomplishments and opinions to be shared with all club members through the newsletter.

Thank you,
Walter Bryant. Editor