



REMark

Issue 14 • February 1981

Official magazine for users of Heath computer equipment.

on the cover

Summer — Don't we wish!

Photo by Gerry Kabelman

on the stack

>CAT

REFORMAT.HUG	3
<i>Bob Ellerton</i>	
ET3400 Morse Code Transmitter	4
<i>Allen H. Wolach</i>	
DBMS (Data Base Management Systems)	10
<i>William N. Campbell, M.D.</i>	
Disk Care — Or Else	14
<i>Bob Ellerton</i>	
Patch PATCH	15
<i>Robert Pearce</i>	
New HUG Software	16
HUG Products List	17
Dynamic RAMs and the Z80 Adapter	18
QSE (Quick Simple Editor)	19
<i>Robert Pearce</i>	
Hex Output for ASM	20
Type-Ahead Buffer	21
<i>J. J. Thompson</i>	
MicroNET SYSOP	22
<i>Terry Jensen</i>	
H11 Owners — Too Much Time?	22
<i>Tom Kneisel</i>	
The Piece of Paper	23
<i>John Beetem</i>	
H19/H89 Screen Control	24
<i>William B. Rothman</i>	
Modifications to HDOS 1.6	25
<i>Jack Thompson</i>	
DUP Update	27
Non-Heath Products for Heath Computers	28
Local HUG News	29
Buggin' HUG	30
Congratulations! to Larry Towner	31
ROCKET	32
<i>Rick Comito</i>	

"REMark" is a HUG membership magazine published ten times yearly. A subscription cannot be purchased separately without membership. the following rates apply.

	U.S. Domestic	Canada & Mexico	International
Initial	\$18	\$20	US FUNDS \$28
Renewal	\$15	\$17	US FUNDS \$22

Membership in England, France, Germany, Belgium, Holland, Sweden and Switzerland is acquired through the local distributor at the prevailing rate.

Back issues are available at \$2.50 plus 10% handling and shipping. Requests for magazines mailed to foreign countries should specify mailing method and add the appropriate cost.

Send payment to:

Heath Users' Group
Hilltop Road
St. Joseph, MI 49085

Although it is a policy to check material placed in REMark for accuracy, HUG offers no warranty, either expressed or implied, and is not responsible for any losses due to the use of any material in this magazine.

Articles submitted by users and published in REMark, which describe hardware modifications, are not supported by Heathkit Electronic Centers or Heath Technical Consultation.

HUG Manager and EditorBob Ellerton
Assistant Editor and
Software DeveloperPatrick Swayne
HUG SecretaryNancy Strunk
Software DeveloperGerry Kabelman
HUG BBTerry Jensen

Copyright © 1981. Heath Users' Group

HUG is provided by Heath Company as a service to its members for the purpose of fostering the exchange of ideas to enhance their usage of Heath equipment. As such, little or no evaluation of the programs in the software catalog, REMark or other HUG publications is performed by Heath Company, in general and HUG in particular. The prospective user is hereby put on notice that the programs may contain faults the consequences of which Heath Company in general and HUG in particular cannot be held responsible. The prospective user is, by virtue of obtaining and using these programs, assuming full risk for all consequences.

REMark

on the cover

Sunset on Lake Michigan
Photo by Gerry Kabelman.

on the stack

>CAT

RENEWAL.HUG	3
<i>Bob Ellerton</i>	
A KISS for Assembly Programming	4
<i>Bob Ellerton</i>	
PAGED: A Text Editor Anyone Can Use	7
<i>Scott Witt</i>	
H11 FORTRAN vs. BASIC	8
<i>Peter Vijlbrief, M.D.</i>	
Using RDT to Make a Hex-Octal Assembler	12
<i>Patrick Swayne</i>	
H8COMM/H89COMM Modification	15
New HUG Software	16
Movin' On	16
<i>Terry Jensen</i>	
HUG Product List	17
\$10,000 FIRST PRIZE	18
Some Thoughts on Writing Game Programs	19
<i>Roy S. Reichert</i>	
Sorting and Merging Sequential File Data	23
<i>William N. Campbell, M.D.</i>	
Tiny BASIC Tricks	24
Buggin' HUG	26
Non-Heath Products	28
HUGBB Via MicroNET	29
<i>Terry Jensen</i>	
Local HUG News	31
HUG Posters	32
Making Waves in Tiny BASIC	32

"REMark" is a HUG membership magazine published ten times yearly. A subscription cannot be purchased separately without membership. the following rates apply.

	U.S. Domestic	Canada & Mexico	International
Initial	\$18	\$20	US FUNDS \$28
Renewal	\$15	\$17	US FUNDS \$22

Membership in England, France, Germany, Belgium, Holland, Sweden and Switzerland is acquired through the local distributor at the prevailing rate.

Back issues are available at \$2.50 plus 10% handling and shipping. Requests for magazines mailed to foreign countries should specify mailing method and add the appropriate cost.

Send payment to:

Heath Users' Group
Hilltop Road
St. Joseph, MI 49085

Although it is a policy to check material placed in REMark for accuracy, HUG offers no warranty, either expressed or implied, and is not responsible for any losses due to the use of any material in this magazine.

Articles submitted by users and published in REMark, which describe hardware modifications, are not supported by Heathkit Electronic Centers or Heath Technical Consultation.

HUG Manager and Editor Bob Ellerton
Assistant Editor and
Software Developer Patrick Swayne
HUG Secretary Nancy Strunk
Software Developer Gerry Kabelman
HUG BB Terry Jensen

Copyright © 1981. Heath Users' Group

HUG is provided by Heath Company as a service to its members for the purpose of fostering the exchange of ideas to enhance their usage of Heath equipment. As such, little or no evaluation of the programs in the software catalog, REMark or other HUG publications is performed by Heath Company, in general and HUG in particular. The prospective user is hereby put on notice that the programs may contain faults the consequences of which Heath Company in general and HUG in particular cannot be held responsible. The prospective user is, by virtue of obtaining and using these programs, assuming full risk for all consequences.

 **REMark**

on the cover

Sudeley Castle near Cheltenham Spa, England
(See DND Page 16 for real adventure!)

Photo by Gerry Kabelman

on the stack

>CAT

A KISS for Assembly Programming	3
Create, Change, Display, and Print as Address File	6
Safe Disk Reset	10
Attention H11 Owners	11
<i>(Hard Disk Group Purchase)</i>	
Manipulation of String Data with MBASIC	13
<i>William N. Campbell, M.D.</i>	
Changes for HDOS 2.0 Boot-Up	15
New HUG Software	16
Adventure Using HDOS 2.0 and a Single Drive	16
HUG Product List	17
More on Home Conrtol with the ET-3400	18
<i>Michael C. Frieders</i>	
What's a FOCAL?	20
RS-232 to 20 mA Current Loop Converter for the H19 or H80	25
Buggin' HUG	26
8K Memory Blues	26
<i>Kurt Shultz</i>	
HUGBB on MicroNET	27
Hole to Fill	31
H11/H19 Video Editor	32
That Football in Tiny BASIC	32

"REMark" is a HUG membership magazine published ten times yearly. A subscription cannot be purchased separately without membership. the following rates apply.

	U.S. Domestic	Canada & Mexico	International
Initial	\$18	\$20 US FUNDS	\$28
Renewal	\$15	\$17 US FUNDS	\$22

Membership in England, France, Germany, Belgium, Holland, Sweden and Switzerland is acquired through the local distributor at the prevailing rate.

Back issues are available at \$2.50 plus 10% handling and shipping. Requests for magazines mailed to foreign countries should specify mailing method and add the appropriate cost.

Send payment to:

Heath Users' Group
Hilltop Road
St. Joseph, MI 49085

Although it is a policy to check material placed in REMark for accuracy, HUG offers no warranty, either expressed or implied, and is not responsible for any losses due to the use of any material in this magazine.

Articles submitted by users and published in REMark, which describe hardware modifications, are not supported by Heathkit Electronic Centers or Heath Technical Consultation.

HUG Manager and EditorBob Ellerton
Assistant Editor and
Software DeveloperPatrick Swayne
HUG SecretaryNancy Strunk
Software DeveloperGerry Kabelman
HUG BBTerry Jensen

Copyright © 1981. Heath Users' Group

HUG is provided by Heath Company as a service to its members for the purpose of fostering the exchange of ideas to enhance their usage of Heath equipment. As such, little or no evaluation of the programs in the software catalog, REMark or other HUG publications is performed by Heath Company, in general and HUG in particular. The prospective user is hereby put on notice that the programs may contain faults the consequences of which Heath Company in general and HUG in particular cannot be held responsible. The prospective user is, by virtue of obtaining and using these programs, assuming full risk for all consequences.

REMark

REMark

Issue 17 • May 1981



Official magazine for users of Heath computer equipment.

on the cover

Chicago Marina on Lake Michigan —

Photo by Gerry Kabelman, Again!

on the stack

>CAT

A Re-visit with "The Source"	3
A Kiss for Assembly Programming	4
Using the LSI-11/23 with the H11	7
<i>Thomas G. Barnum</i>	
Super RAM Test for the H89	8
<i>Herbert Drake</i>	
HUGBB via MicroNET	12
Buggin' HUG	14
New HUG Software	16
HUG Product List	17
Wither STAT?	18
Comments on the Pascal Language	21
<i>Fred Pospeschil</i>	
Color Graphics in Tiny Pascal	24
Tiny BASIC Tricks	28
Who's on First?	29
Local HUG News	29
HUG Meets at the WCCF	30
"PRINT USING" for B H BASIC	30
H8 to H11 interface	31
Electronic Billboard	32
<i>Roy S. Reichart</i>	

"REMark" is a HUG membership magazine published ten times yearly. A subscription cannot be purchased separately without membership. the following rates apply.

	U.S. Domestic	Canada & Mexico	International
Initial	\$18	\$20	US FUNDS \$28
Renewal	\$15	\$17	US FUNDS \$22

Membership in England, France, Germany, Belgium, Holland, Sweden and Switzerland is acquired through the local distributor at the prevailing rate.

Back issues are available at \$2.50 plus 10% handling and shipping. Requests for magazines mailed to foreign countries should specify mailing method and add the appropriate cost.

Send payment to:

Heath Users' Group
Hilltop Road
St. Joseph, MI 49085

Although it is a policy to check material placed in REMark for accuracy, HUG offers no warranty, either expressed or implied, and is not responsible for any losses due to the use of any material in this magazine.

Articles submitted by users and published in REMark, which describe hardware modifications, are not supported by Heathkit Electronic Centers or Heath Technical Consultation.

HUG Manager and EditorBob Ellerton
Assistant Editor and
Software DeveloperPatrick Swayne
HUG SecretaryNancy Strunk
Software DeveloperGerry Kabelman
HUG BBTerry Jensen

Copyright © 1981. Heath Users' Group

HUG is provided by Heath Company as a service to its members for the purpose of fostering the exchange of ideas to enhance their usage of Heath equipment. As such, little or no evaluation of the programs in the software catalog, REMark or other HUG publications is performed by Heath Company, in general and HUG in particular. The prospective user is hereby put on notice that the programs may contain faults the consequences of which Heath Company in general and HUG in particular cannot be held responsible. The prospective user is, by virtue of obtaining and using these programs, assuming full risk for all consequences.

 **REMark**

Official magazine for users of Heath computer equipment.

REMark

Issue 18 • June 1981



on the cover

Big Ben at high noon.

Photo by Gerry Kabelman

on the stack

>CAT

Know Your Group	3
Using the Epson MX-80 Printer with the H89	3
HUG Bug	3
A KISS for Assembly Language Programming	4
Screen Formatting on the H11	7
Ed Judge	
Extended Configuration Mod for HDOS 1.6	9
MBASIC POKE ... a No-No?	10
Buggin' HUG	14
Listings Available Shortly for HDOS 2.0	15
New HUG Softwared	16
HUG Product List	17
Number Base Conversions in FORTH	19
The Versatile LPH24.DVD	20
HUGBB Via MicroNET	22
HUGBB Via "SOURCE"?	23
Real-time Functions under HDOS MBASIC	24
Disk Catalogs from BASIC or Tiny Pascal	25
Luis E. Suarez	
Comments on the FORTH Language	27
A Caution from Q. A.	29
Using Double Sided Drives on the H17	30
Local HUG News	31

"REMark" is a HUG membership magazine published ten times yearly. A subscription cannot be purchased separately without membership. the following rates apply.

	U.S. Domestic	Canada & Mexico	International
Initial	\$18	\$20	US FUNDS \$28
Renewal	\$15	\$17	US FUNDS \$22

Membership in England, France, Germany, Belgium, Holland, Sweden and Switzerland is acquired through the local distributor at the prevailing rate.

Back issues are available at \$2.50 plus 10% handling and shipping. Requests for magazines mailed to foreign countries should specify mailing method and add the appropriate cost.

Send payment to:

Heath Users' Group
Hilltop Road
St. Joseph, MI 49085

Although it is a policy to check material placed in REMark for accuracy, HUG offers no warranty, either expressed or implied, and is not responsible for any losses due to the use of any material in this magazine.

Articles submitted by users and published in REMark, which describe hardware modifications, are not supported by Heathkit Electronic Centers or Heath Technical Consultation.

HUG Manager and Editor Bob Ellerton
Assistant Editor and
Software Developer Patrick Swayne
HUG Secretary Nancy Strunk
Software Developer Gerry Kabelman
HUG BB Terry Jensen

Copyright © 1981. Heath Users' Group

HUG is provided by Heath Company as a service to its members for the purpose of fostering the exchange of ideas to enhance their usage of Heath equipment. As such, little or no evaluation of the programs in the software catalog, REMark or other HUG publications is performed by Heath Company, in general and HUG in particular. The prospective user is hereby put on notice that the programs may contain faults the consequences of which Heath Company in general and HUG in particular cannot be held responsible. The prospective user is, by virtue of obtaining and using these programs, assuming full risk for all consequences.

REMark

REMark

Issue 19 • August 1981



Official magazine for users of Heath computer equipment.

on the cover

Ontario Place in Toronto, Canada

Photo by Gerry Kabelman

on the stack

>CAT

SUBMIT Update	3
Recovering a Deleted File	5
<i>Donald Harton</i>	
Menu-Driven Demo Program	9
<i>Gene Sevin</i>	
Basic Printer Information for the Hobbyist	9
<i>Robert G. Traub</i>	
RDT in Review	11
<i>Andy Drssler</i>	
Loosing Weight with HDOS 2.0	12
New HUG Software	16
HUG Products List	17
Using the HDOS Type-Ahead Buffer in BASIC	18
<i>Don M. Deck</i>	
HUGBB Via MicroNET	20
Column Indicators for Your Editor	22
<i>Dean K. Gibson</i>	
New Monitors for the H89	23
<i>Dean K. Gibson</i>	
Buggin' HUG	24
Local HUG News	25
HDOS Scalls — The Straight Scoop	27
<i>John O. Corbett</i>	
Russian Roulette for the ETA-3400	30
Source Update	32

"REMark" is a HUG membership magazine published ten times yearly. A subscription cannot be purchased separately without membership. the following rates apply.

	U.S. Domestic	Canada & Mexico	International
Initial	\$18	\$20	US FUNDS \$28
Renewal	\$15	\$17	US FUNDS \$22

Membership in England, France, Germany, Belgium, Holland, Sweden and Switzerland is acquired through the local distributor at the prevailing rate.

Back issues are available at \$2.50 plus 10% handling and shipping. Requests for magazines mailed to foreign countries should specify mailing method and add the appropriate cost.

Send payment to:

Heath Users' Group
Hilltop Road
St. Joseph, MI 49085

Although it is a policy to check material placed in REMark for accuracy, HUG offers no warranty, either expressed or implied, and is not responsible for any losses due to the use of any material in this magazine.

Articles submitted by users and published in REMark, which describe hardware modifications, are not supported by Heathkit Electronic Centers or Heath Technical Consultation.

HUG Manager and EditorBob Ellerton
Assistant Editor and
Software DeveloperPatrick Swayne
HUG SecretaryNancy Strunk
Software DeveloperGerry Kabelman
HUG BBTerry Jensen

Copyright © 1981. Heath Users' Group

HUG is provided by Heath Company as a service to its members for the purpose of fostering the exchange of ideas to enhance their usage of Heath equipment. As such, little or no evaluation of the programs in the software catalog, REMark or other HUG publications is performed by Heath Company, in general and HUG in particular. The prospective user is hereby put on notice that the programs may contain faults the consequences of which Heath Company in general and HUG in particular cannot be held responsible. The prospective user is, by virtue of obtaining and using these programs, assuming full risk for all consequences.

 **REMark**



REMark

Issue 20 • September 1981

Official magazine for users of Heath computer equipment.

on the cover

""but Uncle Gerry . . . ?

BACK-TO-SCHOOL

NUMBERS — An example of **COMPUTER AIDED INSTRUCTION**.

Photo by Gerry Kabelman

on the stack

>CAT

*CAI — WITH "NUMBERS"	3
Gerry Kabelman	
REMark 20 — A Special Issue	6
The HDOS Device Driver Programmer's Guide	7
Al Dallas, Dale Lamb, Tom Jorgenson	
New HUG Software	16
HUG Product List	17
A Review of Small Business Package III	23
Terry Jensen	
Corrections to SBPIII	24
Gerry Kabelman	
Buggin' HUG	25
Using an Extended Capacity Drive as SY0:	28
Patrick Swayne	
HUGBB Stuff	29
Heath Related Products	31
Local HUG News	32

*Computer Aided Instruction

"REMark" is a HUG membership magazine published ten times yearly. A subscription cannot be purchased separately without membership. the following rates apply.

	U.S. Domestic	Canada & Mexico	International
Initial	\$18	\$20	US FUNDS \$28
Renewal	\$15	\$17	US FUNDS \$22

Membership in England, France, Germany, Belgium, Holland, Sweden and Switzerland is acquired through the local distributor at the prevailing rate.

Back issues are available at \$2.50 plus 10% handling and shipping. Requests for magazines mailed to foreign countries should specify mailing method and add the appropriate cost.

Send payment to:

Heath Users' Group
Hilltop Road
St. Joseph, MI 49085

Although it is a policy to check material placed in REMark for accuracy, HUG offers no warranty, either expressed or implied, and is not responsible for any losses due to the use of any material in this magazine.

Articles submitted by users and published in RE-Mark, which describe hardware modifications, are not supported by Heathkit Electronic Centers or Heath Technical Consultation.

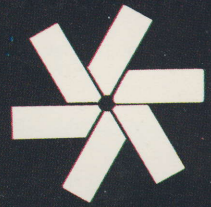
HUG Manager and Editor Bob Ellerton
Assistant Editor and

Software Developer Patrick Swayne
HUG Secretary Nancy Strunk
Software Developer Gerry Kabelman
HUG BB Terry Jensen

Copyright © 1981. Heath Users' Group

HUG is provided by Heath Company as a service to its members for the purpose of fostering the exchange of ideas to enhance their usage of Heath equipment. As such, little or no evaluation of the programs in the software catalog, REMark or other HUG publications is performed by Heath Company, in general and HUG in particular. The prospective user is hereby put on notice that the programs may contain faults the consequences of which Heath Company in general and HUG in particular cannot be held responsible. The prospective user is, by virtue of obtaining and using these programs, assuming full risk for all consequences.

 **REMark**



Issue 21
October
1981

R E M a r k

Official magazine for users of Heath computer equipment.

on the cover

THE TOE!

Photo by: K. Andersen

on the stack

>CAT

Anyone Can Build a Computer	3
Yo! Ho! Ho! and a Bottle of Rum!	3
Heath/Zenith on Foreign Shores	3
John R. Beran	
Correction to "Losing Weight"	4
Making Neighbors out of HDOS and CP/M	5
MBASIC to Machine Code Link Revisited	6
More Changes to HDOS 2.0 Bootup	11
Tiny Pascal Patch	11
Binary Search Routine for MBASIC	
Random Disk Files	12
William N. Campbell, M.D.	
CP/M??	14
New HUG Software	16
HUG Products List	16
Interface Your ET/ETA-3400 to the SS-50 Bus	18
VARPTR in MBASIC	23
Heath Related Products	27
HUGBB Helps and Hints	28
Local HUG News	29
Buggin' HUG	30
BLACKMAX	32

"REMark" is a HUG membership magazine published ten times yearly. A subscription cannot be purchased separately without membership. the following rates apply.

	U.S. Domestic	Canada & Mexico	International
Initial	\$18	\$20	US FUNDS \$28
Renewal	\$15	\$17	US FUNDS \$22

Membership in England, France, Germany, Belgium, Holland, Sweden and Switzerland is acquired through the local distributor at the prevailing rate.

Back issues are available at \$2.50 plus 10% handling and shipping. Requests for magazines mailed to foreign countries should specify mailing method and add the appropriate cost.

Send payment to:

Heath Users' Group
Hilltop Road
St. Joseph, MI 49085

Although it is a policy to check material placed in REMark for accuracy, HUG offers no warranty, either expressed or implied, and is not responsible for any losses due to the use of any material in this magazine.

Articles submitted by users and published in REMark, which describe hardware modifications, are not supported by Heathkit Electronic Centers or Heath Technical Consultation.

HUG Manager and EditorBob Ellerton
Assistant Editor and
Software DeveloperPatrick Swayne
HUG SecretaryNancy Strunk
Software DeveloperGerry Kabelman
HUG BBTerry Jensen

Copyright © 1981. Heath Users' Group

HUG is provided by Heath Company as a service to its members for the purpose of fostering the exchange of ideas to enhance their usage of Heath equipment. As such, little or no evaluation of the programs in the software catalog, REMark or other HUG publications is performed by Heath Company, in general and HUG in particular. The prospective user is hereby put on notice that the programs may contain faults the consequences of which Heath Company in general and HUG in particular cannot be held responsible. The prospective user is, by virtue of obtaining and using these programs, assuming full risk for all consequences.

REMark

REMark

Issue 22 • November 1981



Official magazine for users of Heath computer equipment.

on the cover

NOVEMBER MORNING — —

PHOTO BY: GERRY KABELMAN

on the stack

>CAT

A Little Help From Our Friends	3
Clock Watcher's Delight	4
Continuing in CP/M	11
Pascal Corner — Part 1	15
<i>Henery E. Fale</i>	
New HUG Software	16
HUG Product List	17
Adapting the MORSE-8 CW Program for Use with the H89	18
<i>Robert R. Anderson K2BJG</i>	
Corrections to 885-1091 Grading and Scorekeeping	23
SBPIII on 8-inch Drives	23
Give a Voice to your ET-3400	24
<i>John Hubbard</i>	
Buggin' HUG	25
BB's Via MNET	26
DMM's Are Coming	27
The All New H25/Z25 Line Printer	27
The SOURCE — DIRECTADD and DISEARCH	28
Special HUG/Heath Sale	30
Corrections to PrinText	31

"REMark" is a HUG membership magazine published ten times yearly. A subscription cannot be purchased separately without membership. the following rates apply.

	U.S. Domestic	Canada & Mexico	International
Initial	\$18	\$20	US FUNDS \$28
Renewal	\$15	\$17	US FUNDS \$22

Membership in England, France, Germany, Belgium, Holland, Sweden and Switzerland is acquired through the local distributor at the prevailing rate.

Back issues are available at \$2.50 plus 10% handling and shipping. Requests for magazines mailed to foreign countries should specify mailing method and add the appropriate cost.

Send payment to:

Heath Users' Group
Hilltop Road
St. Joseph, MI 49085

Although it is a policy to check material placed in REMark for accuracy, HUG offers no warranty, either expressed or implied, and is not responsible for any losses due to the use of any material in this magazine.

Articles submitted by users and published in REMark, which describe hardware modifications, are not supported by Heathkit Electronic Centers or Heath Technical Consultation.

HUG Manager and EditorBob Ellerton
Assistant Editor and
Software DeveloperPatrick Swayne
HUG SecretaryNancy Strunk
Software DeveloperGerry Kabelman
HUG BBTerry Jensen

Copyright © 1981. Heath Users' Group

HUG is provided by Heath Company as a service to its members for the purpose of fostering the exchange of ideas to enhance their usage of Heath equipment. As such, little or no evaluation of the programs in the software catalog, REMark or other HUG publications is performed by Heath Company, in general and HUG in particular. The prospective user is hereby put on notice that the programs may contain faults the consequences of which Heath Company in general and HUG in particular cannot be held responsible. The prospective user is, by virtue of obtaining and using these programs, assuming full risk for all consequences.

REMark

REMark

Issue 23 • December 1981



Official magazine for users of Heath computer equipment.

on the cover

*Merry Christmas
from the Heath Users' Group*

on the stack

>CAT

DBMS's in HDOS	3
New HUG Software	16
HUG Product List	17
Let There Be Sound!	18
B H BASIC vs MBASIC	20
DS Patch for HDOS ASM 104.06.00	23
Ted Eitel	
A Tiny SY.DVD	23
Pascal Corner Part II	24
Henry Fale	
The "Sector Zapper"	28
Richard L. King	
Disk Options for the H89/Z89	30
Local HUG News	30
Buggin' HUG	31



"REMark" is a HUG membership magazine published ten times yearly. A subscription cannot be purchased separately without membership. The following rates apply.

	U.S. Domestic	Canada & Mexico	International
Initial	\$18	\$20	US FUNDS \$28
Renewal	\$15	\$17	US FUNDS \$22

Membership in England, France, Germany, Belgium, Holland, Sweden and Switzerland is acquired through the local distributor at the prevailing rate.

Back issues are available at \$2.50 plus 10% handling and shipping. Requests for magazines mailed to foreign countries should specify mailing method and add the appropriate cost.

Send payment to:

Heath Users' Group
Hilltop Road
St. Joseph, MI 49085

Although it is a policy to check material placed in REMark for accuracy, HUG offers no warranty, either expressed or implied, and is not responsible for any losses due to the use of any material in this magazine.

Articles submitted by users and published in REMark, which describe hardware modifications, are not supported by Heathkit Electronic Centers or Heath Technical Consultation.

HUG Manager and Editor Bob Ellerton
Assistant Editor and
Software Developer Patrick Swayne
HUG Secretary Nancy Strunk
Software Developer Gerry Kabelman
HUG BB Terry Jensen

Copyright © 1981. Heath Users' Group

HUG is provided by Heath Company as a service to its members for the purpose of fostering the exchange of ideas to enhance their usage of Heath equipment. As such, little or no evaluation of the programs in the software catalog, REMark or other HUG publications is performed by Heath Company, in general and HUG in particular. The prospective user is hereby put on notice that the programs may contain faults the consequences of which Heath Company in general and HUG in particular cannot be held responsible. The prospective user is, by virtue of obtaining and using these programs, assuming full risk for all consequences.

REMark