Official magazine for users of Heath computer equipment.
“REMark” is a HUG membership magazine published quarterly. A subscription cannot be purchased separately without membership. The following rates apply.

<table>
<thead>
<tr>
<th></th>
<th>U.S.</th>
<th>Canada &amp; Domestic</th>
<th>Mexico</th>
<th>International</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial</td>
<td>$14</td>
<td>$16</td>
<td>$24</td>
<td></td>
</tr>
<tr>
<td>Renewal</td>
<td>$11</td>
<td>$13</td>
<td>$18</td>
<td></td>
</tr>
</tbody>
</table>

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 ............ Jim Blake
Graphics Ron Hungerford
HUG Secretary ............... Susan Gilfoyle
Software Developer .............. Gerry Kabelman

Copyright © 1980, 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.
Official magazine for users of Heath computer equipment.
On the cover... is the first photograph of a computer on the GREAT WALL. A Heath H 88.

on the stack

>CAT

They Call Me ‘Mr. Brake’ ........................................... 3
Jim Blake

Getting Started With MBASIC and HDOS
With Particular Reference to Random Files .............. 4
William N. Campbell M.D.

Improvements to FOCAL-8 .................................... 15
Patrick Swayne

The Ins and Outs of MODEMs ................................. 16
D. C. Shoemaker

INIT and SYSGEN “how to” .................................. 20

Buggin’ HUG .................................................. 22

Meetings and Club Notices .................................. 27

KISS, Keep It Simple, Stupid ............................ 28

Consultant’s Corner ....................................... 29
Staff

Software .................................................... 30
**HOW ABOUT A POSTER FOR YOUR COMPUTER ROOM**

on the stack

**CAT**

MicroNET and other SOFTSTUFF .................. 3
  Jim Blake

Getting Started with a Text editor .................. 4
  William N. Campbell, M.D.

Microsoft BASIC: Output Flexibility
with Heath-configured CP/M .................. 8
  John R. Thomas

Local HUG News .......................... 9

Keep It Simple, Stupid (KISS) .................. 10

Changes to Doc Campbell's Article
(In REMark Issue 10) .......................... 14

New HUG Software .......................... 15

Do Your Own Thing .......................... 16
  Patrick Swayne

HUG Parts List .......................... 16

Using Printers with the H11A .................. 17
  Jim Buszkiewicz

H8-2 Interface .......................... 18
  Wallace K. Izuu

Consultant's Corner .......................... 18

File Handling in BASIC .......................... 19
  Jim Tennant

Buggin' HUG .......................... 21

New Products from Non-Heath Sources .......................... 23

Changes for HDOS Boot-Up .......................... 24

Revision to HUG's Modem
Communication System .......................... 26
  A. Richard Tinder

Type-Ahead Buffer for HDOS 1.6 .......................... 27
  Robert C. Johnson

Addendum to the Microsoft BASIC
Software Reference Manual .......................... 28

Spinwriter for the H89 .......................... 31

“REMark” is a HUG membership magazine published quarterly. A subscription cannot be purchased separately without membership. The following rates apply.

<table>
<thead>
<tr>
<th>Region</th>
<th>Initial</th>
<th>Renewal</th>
<th>US FUNDS</th>
<th>International</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.</td>
<td>$18</td>
<td>$15</td>
<td>$20</td>
<td>$28</td>
</tr>
<tr>
<td>Canada &amp; Domestic</td>
<td>$20</td>
<td>$17</td>
<td>$25</td>
<td>$22</td>
</tr>
<tr>
<td>Mexico</td>
<td>$25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>International</td>
<td>$28</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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 .................. Jim Blake
Assistant Editor and Software Developer .................. Patrick Swayne
HUG Secretary .................. Nancy Strunk
Software Developer .................. Gerry Kabelman
Software Developer .................. Jon Falkner

Copyright © 1980, 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.
on the cover . . . .

Here's another of our great new wall posters.

on the stack

CAT

The New HDOS .................................................. 3
Patrick Swayne

"Turnkey" Operation with HDOS Version 1.6 ............... 4
William N. Campbell, M.D.

A Proposed Graphics Command Set
for High Level Languages ................................... 9

Maintain a Library in Microsoft BASIC .................. 10
D. J. Powers

Using AT: in MBASIC .......................................... 12
William W. Moss, M.D.

Set HDOS Stand-Alone ....................................... 13

Cut Down Drive Run Time ................................. 13

FORTRAN Corner ............................................. 14
James G. Jerling

Tiny BASIC Tricks ............................................ 15

HUG Parts List ............................................... 16

New HUG Products .......................................... 16

Type My Name Ten Times ............................... 17

File Catalogs in MBASIC .......................... 19

Voice for the H8 ............................................. 19

Build Your Own EPROM Programmer .................... 20

Screen Formatting in BASIC .......................... 22
Bob Thomas

MOUNTALL ..................................................... 23

LP: Listing with the H11A .............................. 25

Buggin' HUG ..................................................... 26

A Text Pre-Processor for RUNOFF .................... 29
William N. Campbell, M.D.

MBASIC to Machine Code Link ..................... 30

Local HUG News ............................................. 31

Surise, Sunset ................................................ 32
Laird D. Shearer

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

<table>
<thead>
<tr>
<th>U.S.</th>
<th>Canada &amp; Domestic</th>
<th>Mexico</th>
<th>International</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial</td>
<td>$18</td>
<td>$20</td>
<td>US FUNDS</td>
</tr>
<tr>
<td>Renewal</td>
<td>$15</td>
<td>$17</td>
<td>US FUNDS</td>
</tr>
</tbody>
</table>

Membership in England, France, Germany, Belgium, Holland, 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 ....................... Jim Blake
Assistant Editor and Software Developer  Patrick Swayne
HUG Secretary  Nancy Strunk
Software Developer  Gerry Kabelman
Software Developer  Jon Falkner

Copyright © 1980, 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 thereby 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.
Official magazine for users of Heath computer equipment.
on the cover . . . .

Yes, Virginia, there is ORG-0 CP/M for Heath 8-bit computers.

CP/M® is a registered trademark of Digital Research Corp.
Illustration by Ray Massa.

on the stack

"REMark #2 Is Due in 10 Days!" ......................... 3
Jim Blake

Home Control with the ET-3400 ...................... 4
Michael C. Frieders

The Magic Egg ....................................... 9
Bob Ellerton

Build an EPROM Programmer .......................... 10

H11A File Management ................................. 11
Douglas H. McNeill, M.D.

Simultaneous Equations ............................... 12
George J. Sellers

Local HUG News ...................................... 13

H88 Software from HUG ............................... 15

HUG Product List .................................... 16

New HUG Products .................................. 17

Diablo Remote Control ............................... 18
Lloyd E. Johnson

MicroNET Sample Run ............................... 19

FORTRAN Corner .................................... 23
James G. Jerling

Another Pointer to the Type-Ahead Buffer ........... 24
Jay H. Gold

CHASE — An Animated Graphics Game ................ 27
Tim Stanley

Buggin' HUG ...................................... 29

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

<table>
<thead>
<tr>
<th></th>
<th>U.S.</th>
<th>Canada &amp; Domestic</th>
<th>Mexico</th>
<th>International</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial</td>
<td>$18</td>
<td>$20</td>
<td>$28</td>
<td></td>
</tr>
<tr>
<td>Renewal</td>
<td>$15</td>
<td>$17</td>
<td>$22</td>
<td></td>
</tr>
</tbody>
</table>

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
Software Developer ............. Jon Falkner

Copyright © 1980, 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.