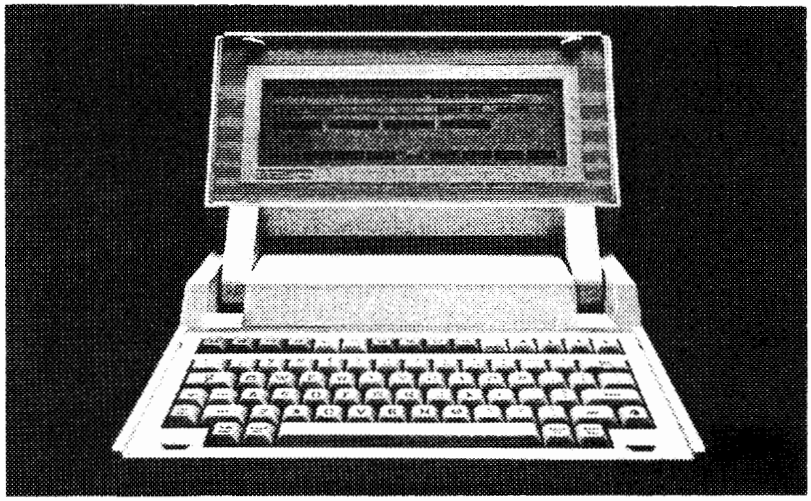
CROSSTALK Journal of Hewlett-Packard Technical Computer User Groups
OCT./NOV. 1984

Battery-powered portable packs power of a desktop



The Portable. the exciting new portable computer from Hewlett-Packard. provides you with work-saving productivity tools in a compact package that's no bigger than a three-ring binder.

With built-in software. a large amount of user memory and a fast operating system. The Portable gives you the computing performance of traditional desktop models.

The Portable is battery-operable and features an integrated display. full-size keyboard. built-in modem. 384Kb of ROM. 272Kb of RAM. built-in Hewlett-Packard Interface Loop and Serial (RS-232) Interface connections. and powerful software programs. It weighs only nine pounds.

This compact computer capability means you can take The Portable down the hall to a colleague's office. across town to a client's office. home for an evening or weekend. or even across country on a business trip.

Built-in software
In addition to the MS™ -DOS operating system. the following software is built in to the The Portable's permanent memory:

- Personal Applications Manager (P.A.M.): P.A.M. is the main menu on The Portable and shields you from complex computer syntax. The easy menu and keystroke format lend a see-and-select simplicity to the computer.
- 1-2-3™ from Lotus™: The integrated design of this best-selling software package lets you easily switch from spreadsheet analysis to information management to graphics without having to load additional programs or data.
- Memomaker: Memomaker is a WordStar®-compatible word processor that's extremely easy to use. Its softkey operation eliminates the need to learn special command sequences.
- Terminal emulation/Communications: When used with The Portable's built-in modem or serial-communication port. this package lets you easily communicate with and transfer files to and from other computers.

Each of the programs is accompanied by built-in help directories for instant access to on-screen instructions.

Lots of memory
There are two large memory compartments in The Portable. The first — 384Kb of permanent memory (ROM) — is the address for the operating system. built-in software and help screens. The second — 272Kb of non-volatile user memory — is reserved for storing data or

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additional programs. Part of this second compartment is used as a high-speed, solid-state disc drive, referred to as electronic disc. The electronic disc stores and retrieves information (such as a memo or spreadsheet) more than six times faster than conventional floppy media.

Getting started
To get started on The Portable, simply touch any key. The P.A.M. program menu will appear on the screen, and you can quickly select the appropriate program. In less than five seconds, you can start writing a memo, change a forecast, make a chart, sort a list or transfer a file to another computer.

Compatibility
The Portable-Desktop Link (PDL) enhances The Portable's flexibility. An optional plug-in card, it enables The Portable to communicate with the HP 150 and IBM PC (and compatible) computers. The Portable-Desktop Link equips desktop computers with the hardware and software needed to transfer a memo or spreadsheet from The Portable to a desktop, or vice-versa.

Expandability
The Portable system can be expanded with HP's new battery-powered peripherals, the ThinkJet printer and HP 9114A double-sided $3\frac{1}{2}$" flexible disc drive.

MS™-DOS is a U.S. trademark of Microsoft Corporation.
1-2-3™ and Lotus™ are U.S. trademarks of Lotus Development Corp.
WordStar® is a U.S. trademark of MicroPro International Corporation.
dBASE II™ is a U.S. trademark of Ashton-Tate.
Multiplan® is a U.S. trademark of Microsoft Corp.

Co-ordinator's Comments

Welcome to Crosstalk. It is a little late, but we are trying to correct the situation. The regularity of Crosstalk depends upon the number of articles contributed and the availability of a co-ordinator.

There is now a team of co-ordinators ready and willing to put Crosstalk out regularly every two months. Of course, Crosstalk can only go to press when there are sufficient articles to fill it — without the articles Crosstalk would only be a news sheet of new products and classifieds.

Please: if you have anything which may be of any use to someone else, then jot it down and send it in.

The co-ordinating team consists of: Glenda Patterson who has taken care of Crosstalk alone from the start; Stuart McKenzie a once HP3000 systems engineer, now getting his hands dirty on the HP 1000; Graham Eddy who is a new addition to HP and will be looking after HP 9000 Series 500; John Green who is also a newcomer to HP, and he will be looking after the HP 1000.

— JOHN GREEN
HP Melbourne

H.P.D.C.U.G.V. Committee Members — May 1984

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RECENT HPDCUGV MEETINGS

HP hospitality and free grog weren't the only attractions at the June meeting. Billed as a "convivial occasion to meet your fellow members on an informal basis", it proved to be just that. Several conversation groups formed spontaneously and fired along enthusiastically with particular interest matters, so much so that Phil Greetham, our host, wondered if they would ever let him clear up and go home. (Phil as you know is the perfect gentleman and would never have said as much). Apart from fewer turning up than expected, the only real criticism I remember was that any one guy could not be in three conversations at once! An open discussion revealed areas of specific need for future meetings.

After this the new committee drew up a programme to embrace an exciting mix of down-to-earth programming techniques sessions and special system presentations.

August's meeting got right down to the earnest business of short snappy presentations of "snippets" and tricks, most learned the hard way. John Michell, John Hedger and Graeme Rodwell each ensnared the willing audience with vital information, especially upon the topic of keystroke capture. A lively discussion ensued, having to be wound up all too early. HP kindly brought along their new Model 217 and plotters for inspection.

Keep an eye on "Forthcoming Events", as there are some interesting meetings and some SATURDAY WORKSHOPS scheduled as well.

— Chris Simpson (President)

P.S. — Just a reminder to all members that when you have an item of interest to raise at our meetings, try to remember to jot the information down on a piece of paper beforehand and make a few photocopies if possible. In this way your items are not so readily forgotten by those interested.

— Phil Greetham

'MICROWAVE DESIGN KIT' NOW AVAILABLE FOR H-P DESKTOPS

From your past interest in our CADEC (CAD for Electronic Circuits) and DESIGN KITS software packages you may well be interested to learn that the relatively new Microwave Design Kit will now run on the following HP computers.

HP9816, HP9817, HP9820, HP9826, HP9836, HP9836C, HP9920 of Series 200 & HP9020.

The minimum configuration is 300K bytes of RAM after BASIC 2.0 or equivalent BASIC 3.0 has been loaded. We also recommend the HP82906 graphics printer and any HP Plotter.

The Microwave Design Kit comprises programmes for:

1. Universal mathematic function plot
2. Narrowband, wideband matching filter circuits
3. Synthesis of narrowband microwave amplifiers (includes optimization for highest gain, lowest noise figure or highest output power)
4. Synthesis of wideband . . . etc. as above
5. Microwave oscillators . . . as parameters can be entered directly from HP network analysers, and a library of the most relevant microwave transistors can be built
   Thirty discreet frequencies to be stored per transistor
   Input format can be in Y or S parameters
   A utility is provided that calculates grounded emitter, base or collector parameters from performance
   This also applies for FET's.

The new book "Microwave Transistor Amplifiers" by Dr. Guillermo Gonzalez, Prentice-Hall 1984, is included.

The CADEC package can handle all circuit descriptions used in the Microwave Design Kit.

The complete Microwave Design Kit comprises three equal portions for narrowband, wideband and oscillator, priced as below.

	Duty Free	Duty Paid Excluding S/T	Duty Paid Including S/T
1. Complete Kit	$10,200	$10,210	$12,160
2. Any Single Portion	$3,665	$3,670	$4,370

Prices are based on an exchange rate of $1.00A = $0.84U.S.

For further information please call Peter Greenhalgh on (02) 922 6833.

COMPUTING THE AREA, CENTROIDS AND SECOND MOMENTS OF AREA OF A ARBITRARY POLYGON

By Stuart Gilmore, 10 Wirth Close, Bullcreek, 6155, W.A.

INTRODUCTION

Submission of the following was prompted by reading the interesting article in the Oct./Nov. 1983 issue of Crosstalk — "An algorithm for computing the centroid of a arbitrary polygon" by Jeff Deakin and Giles Puckett of the Australian Coal Industry Research Laboratories.

METHOD

The method has the same basic principles as used by Messrs. Deakin and Puckett but differs in one significant way:

Instead of projecting the rays to an average point inside the polygon, the rays are projected to the origin (0, 0) of the cartesian system.

This has two distinct advantages:

1) It is not necessary to calculate the averages to find point 0 inside the polygon, and
2) the areas and centroids of each elemental triangle can be simply calculated from the co-ordinates of the corners of each triangle avoiding the otherwise longer and probably less accurate method of using the lengths of sides and angles.

The overall result is a direct and accurate calculation of the centroids of the polygon with a significant saving in CPU time.

An additional advantage is that 'holes' may be accommodated simply.

Three restrictions however must be observed:

1) The whole of the polygon must be in the positive X, Y quadrant.
2) 'Solid' areas must be taken clockwise, 'holes' anti-clockwise and the connection between 'solid' areas and 'holes' must be observed by repeating the points of exit and entry.
3) After all co-ordinates have been entered, closure is achieved by entering the origin co-ordinates (0, 0).

PROGRAM

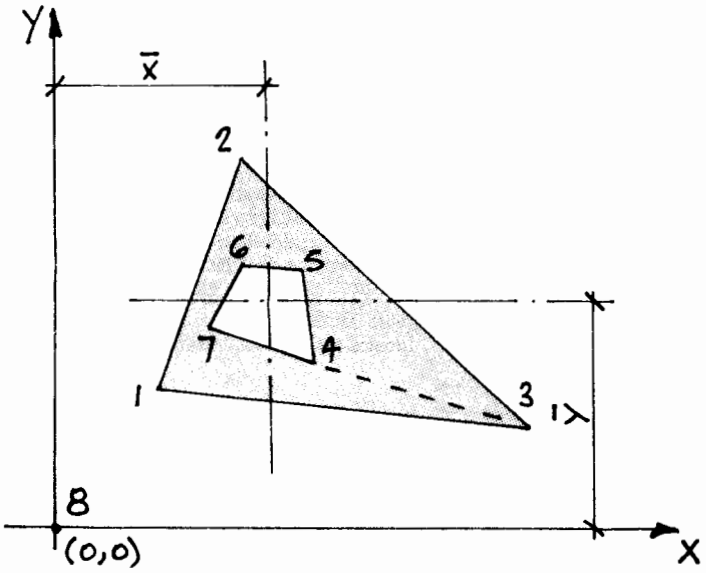
The program listed below is in a simple BASIC and is designed for manual entry of each co-ordinate in correct sequence. It also includes the second moments of area about each axis.

SECTS

SECTS Areas, Centroids and Inertias of a Polygon for X and Y axis.

This program calculates the above for any area bounded by straight lines with or without holes.

NOTE: The points must be entered in a strict sequence and all points must lie in the POSITIVE X, Y quadrant. The sequence is: for all 'solid' areas enter points in clockwise sequence, for all holes enter points in anti-clockwise sequence. See diagram below.



ENTER CO-ORDINATES IN SEQUENCE 1, 2, 3, 4, 5, 6, 7, 4, 3, 8.

The cartesian co-ordinates of each point in turn are entered in the sequence shown above, points number 3 and 4 being entered twice. Closure to point 8 (the origin 0, 0) is also necessary.

INPUT	— Values of X, Y.
OUTPUT	— Area. — Y centroid and Inertia X-X. — X centroid and Inertia Y-Y.
UNITS	— Any consistent units.

```
10REM AREAS,CENTROIDS AND INERTIAS FOR X AND Y AXES
20PRINT
30PRINT
40PRINT "AREA,CENTROIDS AND INERTIAS FOR X AND Y AXES"
50PRINT "~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~"
60PRINT
70PRINT "GIVE FIRST VALUES OF X AND Y"
80INPUT X1,Y1
90LET S1=S2=S3=S4=S5=0
100PRINT
110PRINT "GIVE NEXT VALUES OF X AND Y - X,Y"
120PRINT
130PRINT "NOTES - 1) PROMPT FOR SUBSEQUENT VALUES OF X AND Y IS ....?"
140PRINT
150PRINT "        2) LAST VALUES OF X AND Y TO BE X=0,Y=0"
160FOR J=1TO 100000.
170INPUT X2,Y2
180LET A=(X2*Y1-X1*Y2)/2
190LET C1=A*(Y1+Y2)/3
200LET T1=A*(Y1^2+Y1*Y2+Y2^2)/6
210LET C2=A*(X1+X2)/3
220LET T2=A*(X1^2+X1*X2+X2^2)/6
230LET S1=S1+A
240LET S2=S2+C1
250LET S3=S3+T1
260LET S4=S4+C2
270LET S5=S5+T2
280LET X1=X2
290LET Y1=Y2
300IF X2=0AND Y2=0THEN 320
310NEXT J
320LET Y=S2/S1
330LET X=S4/S1
340LET I1=S3-S1*Y*Y
350LET I2=S5-S1*X*X
360PRINT
370PRINT "AREA=";S1
380PRINT
390PRINT "CENTROID Y=";Y;"INERTIA Ixx=";I1
400PRINT
410PRINT "CENTROID X=";X;"INERTIA Iyy=";I2
420PRINT
430PRINT "DO YOU REQUIRE ANOTHER AREA - Y OR N"
440INPUT Q$
450IF Q$="Y"THEN 60
460PRINT
470PRINT "END OF PROG."
480END
```

ELEGY

Out there grows a graveyard
of good gear
Extent unknown;
Languishing in its antiquity and vanishing support
But yet able
full well its functions to fulfill.
Dust dolefully decorates
the fine features of these former friends;
While,
wooed by the new and beautiful,
gullible guardians are lured to greater promise and trapped
by new commitment to cheaper computers
squirm
at unconsidered conversion costs
and the agonies of incompatibility.
Mourn!
O ye suckers:
All the subtle features you have forfeited.
All the advantages of amortised assets.

Suffer!
The poorer performance.
The more difficult and dearer software development.
The need indeed
to revise, rewrite, retrain, reinstall.
Progress?
Or,
yet per chance, you parry the possibilities . . . .

Does the deathknell need to sound
Or can a duplicate be found
To free a keyboard up, maybe,
And give inbuilt redundancy?
Eliminate more software cost!
Its keeping going matters most.
Join the HP vintage band;
Consider buying secondhand!

— Chris Simpson, (03) 859 6643

P.S. — Did you know that you can buy a good used 9835A with 256K memory for approx. $4500, a 9831A for $1000 and a 9825A for $2000?

— C.S.

NEW PRODUCTS

Fast, quiet laser printer for personal computers

Eight times faster than a typical daisywheel printer, the LaserJet printer sits on a desktop and quietly provides letter-quality output.

Targeted for small businesses and offices, the LaserJet printer is so quiet that you can carry on phone conversations while sitting next to it as it prints. The printer registers a noise level of less than 55 decibels while printing documents.

Compatible with major software
Compatible with major existing software packages such as 1-2-3™ from Lotus™, MultiMate®, WordStar® PFS:® Write and BPI Accounting, the LaserJet printer can print either horizontally for business correspondence or vertically to create spreadsheets using a compressed character font.

Eight pages can be printed per minute while maintaining print quality nearly indistinguishable from copy produced on electric typewriters.

If you need speed and letter-quality output, then you will find the printer's 300-by-300 dots-per-inch resolution meets your requirements. In contrast, impact printers commonly offer resolutions of 70-150 dots per inch.

In addition to a standard typewriter Courier 10 font, which comes with the printer, the LaserJet printer offers up to six fonts in plug-in cartridges. With these cartridges, you can mix several typefaces on a page.

Separate impact printer unneeded
With the HP 150 touchscreen personal computer, the LaserJet printer has built-in raster-graphics capabilities and is compatible with screen-copy graphics on the HP 150. In addition, graphics printing can be done under program control from either the HP 150 or IBM PC.

Unlike many other personal printers, the LaserJet printer uses standard cut-sheet paper plus legal-size paper and European sizes A4 and B5. Bond paper with preprinted letterhead, envelopes, labels and transparencies designed for copiers are among the materials you can process on the LaserJet personal printer. It also comes with a built-in sheetfeeder, which can handle 100 sheets of paper at a time.

Disposable cartridge replaces ribbon
Instead of changing a messy ribbon cartridge on a conventional printer, you simply snap in a disposable cartridge. The cartridge lasts for about 3,000 pages of printing. Cost of using a cartridge is approximately 3.5 cents per page, less than a daisywheel film ribbon.

1-2-3™ and Lotus™ are U.S. trademarks of Lotus Development Corp. WordStar® is a U.S. registered trademark of MicroPro International Corporation. MultiMate® is a U.S. registered trademark of MultiMate International Corporation. PFS:® is a U.S. registered trademark of Software Publishing Corporation.

PUZZLE SOLUTION

The solution to last issue's puzzle is left to all you great programmers out there. Hope you have had fun solving it.

Winchester performance tripled for HP Series 200

Barbara Bennett-Brown/GLD

The new HP 9133D boasts a 14.8M-byte hard disc combined with a 3½" double-sided microfloppy packed with 630,000 bytes of removable storage. This combination provides HP Series 200 users an ideal storage solution for applications requiring fast on-line access to large amounts of data.

Series 200 users will be able to transfer 145K bytes of data per second, which is three times the rates of previous Winchester products when using the DMA and high speed HP-IB cards with the mainframe.

The double-sided microfloppy acts not only as a software loading device but also as a better back-up solution.

Since one can now store over 157 pages of text or 78,000 eight-digit numbers on each disc, reliability will be of paramount importance. To guard against data loss from dirt or contamination, a hard jacket and autoshutter enclosure protects the media from contaminants and the metal centring hub ensures accurate centring of the media. Also, special electronics have been incorporated in the drives to flash the access light alerting the user to replace the media before excessive wear can ruin the data.

The current installed base utilizing the single-sided systems will have forward and backward compatibility with the new double-sided drives through "single-sided formatting". Popular software packages will be written in single-sided format to allow use by both single and double-sided disc systems.

NEW PRODUCTS

Innovative design, low price mark compact new terminal

A compact new Hewlett-Packard display terminal. designed for improved user comfort. sells at a new low price.

The new HP 2392A display terminal has virtually all the functions of the HP 2622A block mode data entry terminal which it supersedes. plus a green screen and an ergonomically improved design. It costs 40% less than the HP 2622A terminal.

The lower price was made possible by VLSI circuit technology and a reduced component count. which result also in improved reliability.

Ergonomics
Even with a 12-inch diagonal display. the HP 2392A display unit takes up only about one cubic foot of desk space. It incorporates an integrated tilt and swivel mechanism so you can adjust its viewing angle to your personal preference and thus increase your comfort. You can place the detachable. low-profile keyboard either flat on a desk or angled toward you.

Characters are formed by a 9 × 14 dot cell and displayed in green on the screen. With smooth scrolling. you can read through as many as four pages of text without pause (up to eight pages as an option).

Applications
The HP 2392A terminal was designed for data entry. program development and data inquiry applications on the HP 3000 business computer.

HP 1000 real-time computer and HP 9000 engineering work-station. ANSI-standard compatibility is available at no extra cost and operates with computers from other companies. such as Digital Equipment Corporation.

The terminal is offered with 17 different language keyboard options for international use. Local editing keys combined with format mode and the 64-character line drawing set can ease data entry while cutting system overhead.

Data communications
The HP 2392A terminal offers flexible data communications with a combined RS-232/HP 422 port. enabling communication with HP and non-HP host systems. An optional second port provides a way to connect the terminal directly to a printer.

RTE INTERNALS

If anyone is interested in attending an RTE Internals Course please contact Brett Hutchinson. Systems Engineer. Melbourne. (03) 895 2745.

DESKTOP FORUM

More HP86B Snippets

* Have you noticed how sluggish the 86 is for a while after powerup and pressing <RUN> especially if it is a sizeable program? And any section of the program seems to speed up after it has been executed once?

  The reason appears to be that the 86 INITIALISES as it goes along. rather than all at once when <RUN> is pressed — clearly a compromise.

  If you wish the program to run at full speed once it gets going and you don't mind a lengthy delay before it starts running at all. try this: Instead of pressing <RUN> . simply press the two keys <INIT> <RUN> in quick succession. then go and have a cuppa.

* Autostart doesn't work with a 9121D disc drive and 86B. as the delay before disc operation is too short. Two 'fixes' have been suggested:
  (a) Install a relatively cheap time-delay-switch for the 86 only.
  (b) Contact Mark Michell on (03) 870 1125. as he could supply an EPROM suitably coded to cause a longer delay in the 86B upon powerup.

— Chris Simpson, (03) 859 6643
25/7/84

SPECIFICATIONS FOR SUBMISSION OF ARTICLES AND ADVERTISEMENTS

All material for Crosstalk should be sent to one of the addresses listed below, from where it will be forwarded to the co-ordinator for publication. Publication dates are subject to receipt of sufficient material. For specific details contact Glenda Patterson on (03) 895 2776.

ARTICLES: Articles should be typed with any diagrams and program listings in camera-ready form (Author's name, address and phone number should be included).

ADVERTISEMENTS: Display ads. should be in camera-ready artwork form. The printer may be instructed to layout ordinary typeface ads.

CURRENT ADVERTISING RATES:

Full page — $250
Half page — $125
Column/cm — $4

There is a 20% discount on these rates for regular advertisers. Classified ads. are free for user group members, and $10 each for non-members.

Advertisers will be billed upon receipt of ad. The user groups reserve the right to change rates, limit space availability and reject advertising which is deemed inappropriate.

ADDRESSES FOR SUBMISSION OF ARTICLES AND ADVERTISEMENTS:

HP Technical Computer Users Group, N.S.W.
Box 3060 GPO,
Sydney, 2001.
N.S.W.

Norm Kay,
HP1000 Users Group (Vic.)
C.S.I.R.O.
Box 160, Clayton, 3168, Vic.

H.P.D.C.U.G.V.
Mr Bernie O'Shannessy,
Arlec,
30-32 Lexton Road,
Box Hill, 3128, Vic.

HP Desktop Users Group (N.S.W.)
Dr. R. W. Harris,
C/o C.S.I.R.O. Division of Mineral Physics,
PMB 7, Sutherland, N.S.W. 2232.

HP86/87 FILE/80 BINARY

HP86/87 users have you ever wanted to:

- read a file directory into a string array and then conduct a search or sort operation on it?
- find if a floppy disc is write-protected?
- check if a string or sub-string is blank?
- read and write disc sectors in binary format?

or
- identify the current default mass storage device?

Well, there's a HP binary to do the job. The binary comes as part of the FILE/80 file management package and is named "FILE/80BIN."

With this binary loaded the following statements are available:

CAT$(I)
— finds the Ith entry in the catalogue of the current default Mass Storage device. A 24 character string is returned containing the standard CAT information in a compact form.

WPROT? (":D700")
— returns a 1 if the disc referred to is protected else it returns a 0.

BLANK? (K$[1,8])
— returns a 1 if the specified characters in K$ are blank else it returns a 0.

VOL$(":D700")
— returns the volume name of the specified disc.

MSUS$
— returns the msus of the current default mass storage device (also in the Electronic Disc ROM).

OPEN FILE file-name $&":D700", file-number
— open the file specified on the channel specified by file-number. Files 1-10 can be open at any given time.

RSECTOR buffer$,Sector,file-number
— reads the specified sector into buffer$ which must be dimensioned to 256 bytes. This is a binary read and reads a complete sector which may contain less than, equal to, or greater than one logical record.

WSECTOR buffer$,Sector,file-number
— writes a sector as above.

CLOSE FILE file-number
— close a channel specified by OPEN FILE.

TONI
— returns a 59 character string giving the title of the binary and the version date.

UNMASK A$
— Converts any inverse-video characters in A$ back into ordinary characters (opposite to HGL$).

DO817HPB

The following statements are also included but their use is unknown:-

POP POPALL (probably removes GOSUB returns from the operating stack)

REMOVE BLANKS Z$,A$,B$

RNUM (Z$) RCHR$("0") ICHR$("1", 2)

A. J. STEVENS,
Telecom Australia Research Laboratories, (03) 541 6532

PUZZLE PLACE

Ugly Basic

Find the hidden word without using a computer. (There are no prizes).

Colin Wells
The Downs School
Dartford, Kent, England

```
10 GOTO 210
20 FOR A=1 TO 3
30 IF A>1 THEN 50
40 GOTO 140
50 FOR B=1 TO 2
60 IF A<3 THEN 90
70 PRINT"E";
80 GOTO 130
90 IF A=2 THEN 120
100 PRINT"M";
110 GOTO 130
120 PRINT"T";
130 NEXT B
135 GOTO 160
140 PRINT"O";
150 GOTO 50
160 IF A<2 THEN 180
170 GOTO 190
180 PRINT"I";
190 NEXT A
200 GOTO 230
210 PRINT"C";
220 GOTO20
230 END
```

Ralph Baer

INSTALLING RTE-A LIBRARIES AND PROGRAM FILES

Recently, faced with the tedium of installing library files, lindexing them, and loading all the programs supplied in relocatable form with the transfer files, none of which worked in anything but file manager cartridges etc. etc. etc. etc., I, in a fit of 'peevment', wrote a transfer file which does the whole damn thing on its own.

What it does is this:

1. Copies all library files from the FMGR cartridge on which they were restored by FC to /LIBRARIES, lindexing them. It identifies library files by their '$' prefix. If the files already exist in the libraries directory, it replaces them. It only lindexes updated files.
2. Copies all loader command files (prefixed '#') to a subdirectory /UTILITIES/LOD-FILES. If a given command file exists, it is updated.
3. For all updated command files only it modifies file references in LI, RE or SE statements in each file in the following way:
   A. If the file reference is prefixed by a '$', it will be suffixed with '::LIBRARIES'.
   B. If the file reference is prefixed by a '%', it will be suffixed with '::16'.
   C. It also removes any type 6 file specification on the EN statement. (#PBV for example specifically puts its type 6 file on ::18 (!)).
4. It builds a command file to link all the programs. The new programs are put into a directory called /NEWPROGS. The /PROGRAMS directory is renamed /OLDPROGS and /NEWPROGS becomes /PROGRAMS.
5. Using the names of the new programs, it builds a file to purge the programs which have been updated out of the /OLDPROGS directory and copies any files left after this to the /PROGRAMS directory.

The next boot will cause new copies of any files replaced such as CI, PROMT, DRTR, etc. to be used. The /OLDPROGS directory and its contents can then be purged. Any files left in /OLDPROGS are irrelevent. Sometimes a file which has been updated cannot be purged from /OLDPROGS because it is busy (such as DRTR or CI) but the attempt to copy this file over to /PROGRAMS will fail because the file already exists in /PROGRAMS. Any other files will have been copied. Watch out, however, some of the copies may fail because of lack of disc space or something. You need to monitor the progress for screw ups. If a load falls over, the new program file won't exist and the old one will be copied across. Watch for this. The only reason I found that the loads wouldn't work is because I was short a few libraries which weren't on my FMGR cartridge in the first place.

There will be a file left in /PROGRAMS called 'LIND' which contains the names of the NEW program files.

There are three files involved, the main transfer file and two files called CHG and BUILD LINK (both EDIT transfer files). These two files reside on /UTILITIES.

After gen'ing C.83, I found that the C.83 programs and libraries were installed perfectly in about 45 mins. If anyone wants a copy of the files involved, just send me a linus tape or micro floppy and I will be happy to oblige.

HaVa A nIcE dAy NoW
ChEeRs — RaLpH

```
********* MAIN PROCEDURE FILE
*
*
WD,/LIBRARIES
PU,LIND
PU,PUF
*
* GET A LIST OF THE NEW FILES,PURGE .LIB FILES
*
DL,$@::16,F,LIND
EDIT,LIND,K3/|$K|ER
EDIT,LIND,SERE|1$X/{$[A-Z0-9]*}.*/PU,&1.LIB//|EC PUF
CI,PUF
*
* LINDX ACCROSS NEW LIBRARY FILES
*
EDIT,LIND,SERE|1$X/{$[A-Z.0-9]*}.*/LINDX,&1::16,&1.LIB//|ER
CI,LIND
*
* MOVE LOAD FILES INTO LOD_FILES DIRECTORY
* --RENAME D.RTR TO DRTR--
*
WD,/UTILITIES
CO,#@::16,LOD_FILES/@.LODE
*
* GET A LIST OF NEW COMMAND FILES
*
PU,LIND
PU,PUF
DL,LOD_FILES/@.LODE,F,LIND
*
* PURGE OLD .LOD FILES
*
EDIT,LIND,K3/|$K|WR|SERE|1$X/{[^.]*}.*/PU,LOD_FILES\/&1.LOD//|EC PUF
CI,PUF
*
* AND RENAME
*
RN LOD_FILES/@.LODE @.LOD
WD,/UTILITIES
*
* BUILD TRANSFER FILE TO CONVERT FILE REFERENCES IN XFER FILES



*
PU,PUF
CO,LIND,PUF
EDIT,LIND,SERE|1$X/{[^.]*}(.*)/EDIT,LOD_FILES\/&1.LOD,TR,CHG\///|ER
CI,LIND
PU,LIND
CO,PUF,LIND
*
* BUILD LINK FILE  & LINK INTO NEW DIRECTORY
*
EDIT,PUF,TR,BUILD_LINK/
*
**************WARNING*******************
*****************************************
*    PUT /NEWPROGS ON APPROPRIATE LU    *
*****************************************
*
CRDIR,/NEWPROGS,38
WD,/NEWPROGS
CI,/UTILITIES/PUF
RN,D.RTR,DRTR.RUN
*
* SWITCH DIRECTORIES
*
RN,/PROGRAMS,OLDPROGS
RN,/NEWPROGS,PROGRAMS
*
* PURGE NEW FILES FROM OLDPROGS AND MOVE ANY UN-UPDATED FILES ACCROSS
*
PU,@.MAP
DL,@.RUN,F,LIND
EDIT,LIND,K3/|$K|WR|SERE|1$X/{[^.]*}(.*)/PU,\/OLDPROGS\/&1.RUN//|ER
CI,LIND
CO /OLDPROGS/@.RUN /PROGRAMS/@.RUN
EDIT,LIND,1$X/PU,///|ER


*
*    BUILD_LINK FILE
*
SEREON
1$X/{[^.]*}{[^ ]*}(.*)/LINK,\/UTILITIES\/LOD_FILES\/&1\.LOD//
SEREOFF
1$X/ ///
ER



*
*    CHG
*
SEREON
1$X/{[SRL][IE]}{[ ,]}{{$}}{[^ :]*}(.*)/&1,&3&4::LIBRARIES//
1$X/{[SRL][IE]}{[ ,]}{{%}}{[^ :]*}(.*)/&1,&3&4::16//
1$X/ *{EN}{[, ]}.*/&1//
ER
```

COMING EVENTS

13th October: Workshop, HPDCUGV, 11 am. – 4 pm.
I/O & 'Tween Computers,
HP Melbourne.
Contact Chris Simpson (03) 859 6643.

15th October: 'HP9000 UX System Administrator' Course, HP Sydney.

22nd October: 'IMAGE 1000' course, HP Sydney.

22nd October: 'RTE-6 Session Monitor' Course, HP Sydney.

29th October: 'Intro to HP 1000' Course, HP Sydney.

29th October: 'HP9000 UX Introduction' Course, HP Melbourne.

5th November: 'FORTRAN/77' Course, HP Sydney.

5th November: 'RTE-6 System Manager' Course, HP Sydney.

5th November: 'HP9000 UX System Administrator' Course, HP Melbourne.

10th November: Workshop, HPDCUGV, 11 am. - 4 pm.
'Database Packages for Desktops',
HP Melbourne.
Contact Chris Simpson (03) 859 6643.

12th November: 'RTE-A Programming and System Management' Course, HP Sydney.

19th November: 'PASCAL/1000' Course, HP Sydney.

26th November: 'RTE-A Programming and System Management' Course, HP Melbourne.

3rd December: 'HP9845 Operating & Programming Course', HP Sydney.

NOTE: If you have requirements for training on any HP products not covered in our formal training programme. please contact Audrey May on (03) 895 2505.

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