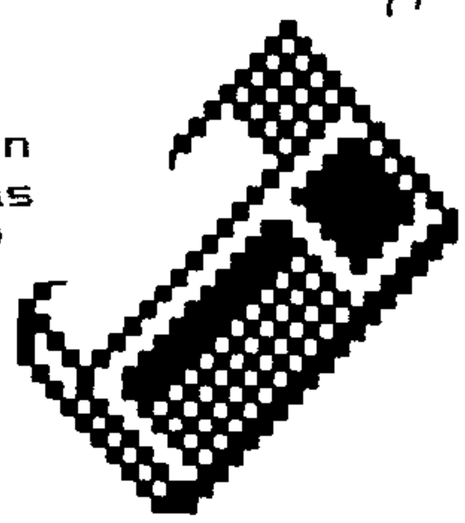
APR. 1983

FILE COPY A

PROP. of HUG
SET "A"
c/o R. Lumpkin
Houston Texas
713-469-5089



HUG

HOUSTON USERS GROUP

FIRST SUNDAY OF EVERY MONTH
2PM
NEXT MEETING: SUNDAY,

PRESIDENTS COMMENTS

The panel discussion at our last meeting produced a lot of questions and answers that should be of value to many of those in attendence. I was glad to see more people participating in the discussion because we are all there to learn and, hopefully, help others to learn more about using our computers and their associated equipment. I believe that when we start to use part of our meeting time in May to divide into smaller groups of common interest, such as novice, intermediate experience, that we will continue to improve our ability to learn and gain from attendence at our monthly meetings.

Don't forget, make a special effort to attend our next meeting on April 10 at 1:30 p.m. Please note the change in time and to the second Sunday of the month, for the April meeting, only. This is being done in order to accomodate our speaker, Mr. Edward K. Wiest, TI's Coordinator of Users' Groups. Ed has quite a program lined up for us and I don't think you will want to miss it.

I hope we are continuing to improve our meetings each month. I sincerely request your comments and suggestions for further improvement and ways to help all of us get more from the content of each meeting.

See you on April 10.

Wayne Wright

>>> THIS MEETING <<<

Our next meeting will be on Sunday, April 10, AT 1:30 pm (note the special time!!!). Our guest will be Mr. Edward Wiest, the Users Group Coordinator for Texas Instruments. He will show us the 99/2, CC-40, and a special demonstration involving quadrophonic sound. There will be drawings for several software packages, possibly including the new "Microsoft Multiplan".

Through the kindness of VIDEO CONCEPTS at the Galleria, we will have TWO large screen Televisions, so every one will be able to see the demonstrations!!!

Also, please note the change of location. We will be meeting in the Cafeteria in the Bechtel Building at 5400 Westheimer Way from now on. This area will give us a great deal more room for our meetings. Our thanks to Barton Wood and Don Thorpe for making the arrangements.

Notes from the editor

With this issue we have begun to run advertisements, both from commerical establishments and from individuals. This was done to help defray the costs of the newsletter. Your dues cover the costs to members of the club, but all the outside mailings (user group of other states, stores, handouts) are taxing our treasury. Ad space is $20.00 full page, $12.00 half page, $7.00 quarter page.

Any correspondence for the newletter can be sent to H.U.G.,PO Box 42829 Suite 214, Houston Texas, 77242.

In this issue we include a complete list of members. If by some chance you have been left out or information is incorrect let me know.

Finally for all who relied on the TI store in the Galleria for everything, A new store is opening, this one is in the Sharpstown Mall next to Penneys First level. I have been told that they plan to stock 99/4A and its accessories both from TI and third party. Also the 99/2 and CC40 with its accessories when available. They will also carry other things for those other computer makes. They open April 4th, lets support them. Oh yes, their phone number is 270-1257.

Any given program when running is obsolete.

The attnetion span of a computer is only as long as its electrial cord.

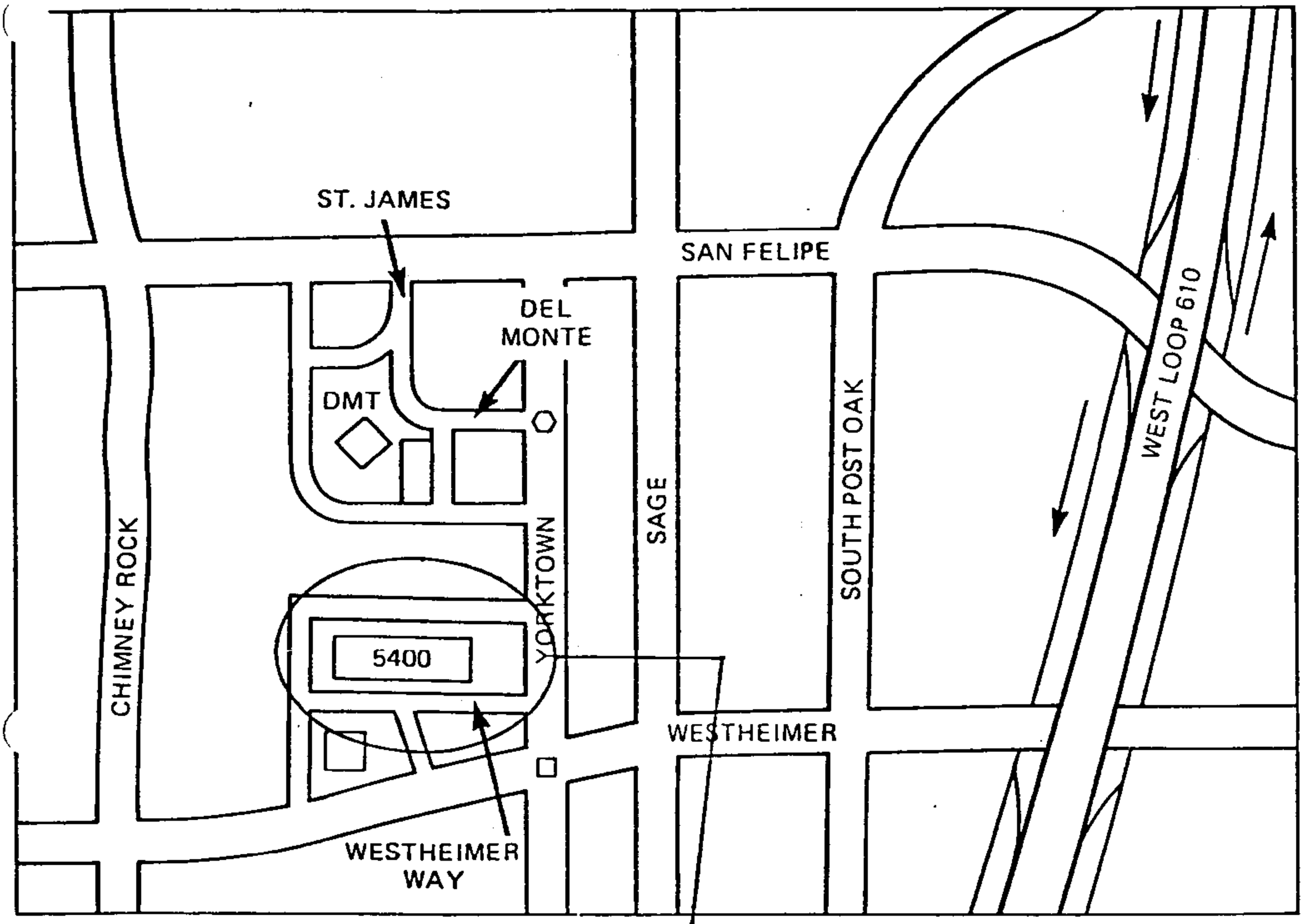
One good reason why computers can do more work than humans is that computers don't have to stop and answer the phone.

BRING YOUR FAMILY INTO THE FUTURE AT

ComputerAge

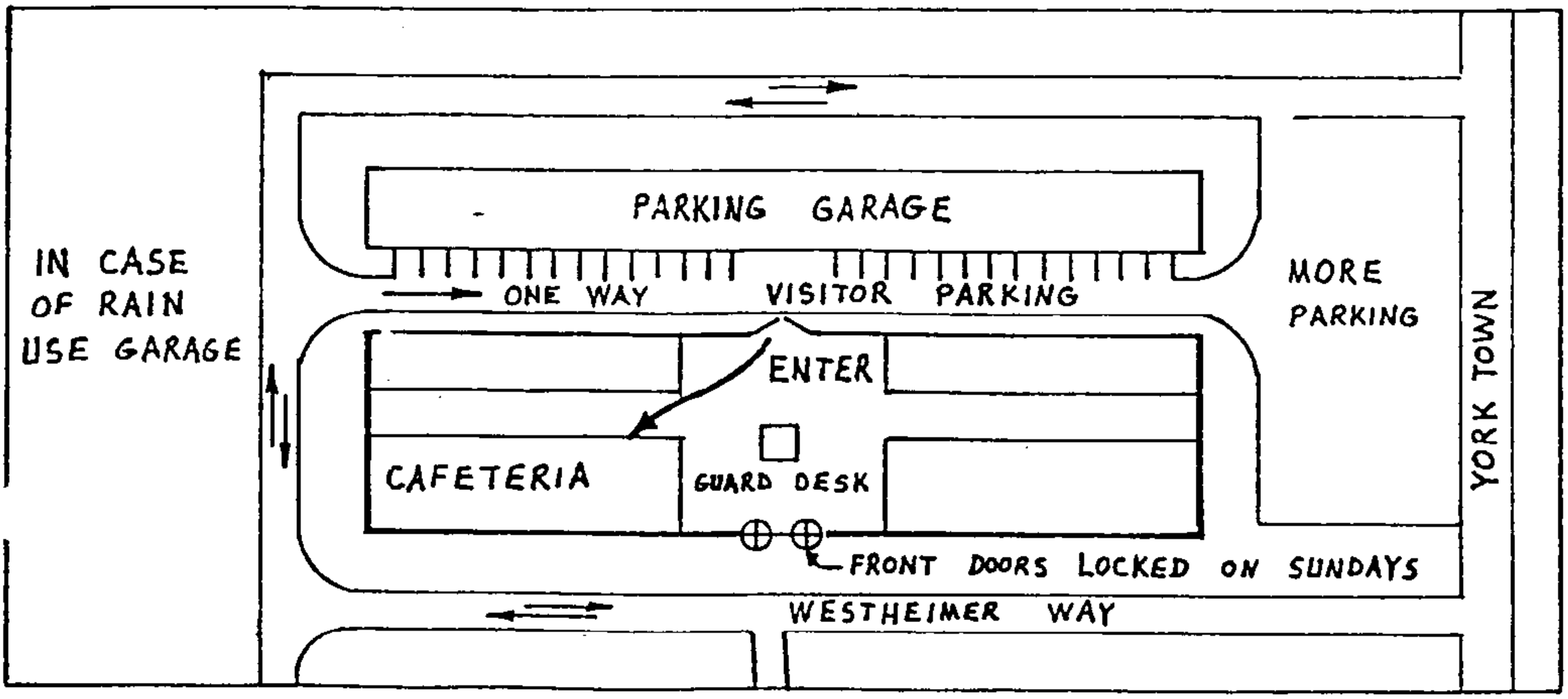
(713) 270-1257
160 Sharpstown Center

NEW HUG MEET LOCATION AT BECHTEL CAFETERIA 5400 WESTHEIMER WAY



LEGEND:

5400 – 5400 WESTHEIMER WAY
DMT – DEL MONTE TOWER
○ – FOUR WAY STOP
□ – SIGNAL LIGHT



TI-WRITER

I've been doing a great deal of work with TI-WRITER recently, and have discovered how to make it do several things which are <u>not</u> mentioned in the manual.

For example, in order to get an output of 120 characters across, set the following Format commands .FI;AD;LM 6;RM 126 (page 100-103). Then use the Special Character Mode (page 98, 146) ASCII Code 15 to send the compressed character code to the printer. After you have entered all the text, save the file and then run it through the Text Formatter. Your text will be printed out the full width of the paper (in this example with 6 character margins). The one drawback to this is that you can not use any tabular data since the above format commands will reformat all your text and data.

The Special Character mode is the key to accessing the various special character modes of your printer (since the Transliterate function doesn't work!). On page 146 there is a list of various ASCII codes, the method of inputting them into text is on page 98. Compare the list to the commands for your printer to determine which ones do what. For the Epson MX-80 here is a list of codes:

ASCII	Function	Press Key
14	Double Width on	Shift N
20	Double Width off	Shift T
15	Compressed Print on	Shift O
18	Compressed Print off	Shift R
27	Escape	FCTN R

Still more functions can be achieved by using the Escape code in combination with other Control codes.

27 52	Italics on	FCTN R;t
27 53	Italics off	FCTN R;u
27 45	Underline on	FCTN R;m;q
27 45	Underline off	FCTN R;m;@

To get some special functions it is necessary to use the Special Character Mode to embed the Escape code, then leave the Special Character Mode to enter the second Control character. The Control characters show on the screen, but do not print out on the printer. There should not be a space between the Escape code and the second Control Character.

		out of SC mode	in SC mode
27 83	Superscript on	FCTN R:	Shift S: Shift 2
27 83	Subscript on	FCTN R:	Shift S: q
27 72	Reset Super & Subscript	FCTN R:	Shift H
27 69	Emphasized print on	FCTN R:	Shift E
27 70	Emphasized print off	FCTN R:	Shift F
27 71	Double Strike on	FCTN R:	Shift G
27 72	Double Strike off	FCTN R:	Shift H
27 64	Resets ALL special modes to power up, including top of form	FCTN R:	@

If you have any questions, see me at the meeting. Hope this helps you get more out of TI-WRITER!

- Jane McAshan

P.S. If anyone can get the Transliterate command to work, let me know!

HUG MEETING MINUTES

MARCH 6, 1983

HUG GOT IT'S OWN COMPUTER

HUG PURCHASED THE FOLLOWING COMPUTER EQUIPMENT TO BE USED AT THE MEETINGS: TI-99/4A CONSOLE, EXPANSION BOX, DISK DRIVE AND EXTENDED BASIC MODULE ($794). REMAINING ITEMS STILL TO BE PURCHASED ARE A MONITOR AND MEMORY EXPANSION CARD. THIS EQUIPMENT AND FUTURE EQUIPMENT PURCHASES WERE MADE POSSIBLE BY A $10.00 ONE TIME ASSESSMENT FEE TO THE CLUB MEMBERS. THE $10.00 ASSESSMENT FEE WILL ALSO ALLOW EACH PARTICIPATING CLUB MEMBER TO RECEIVE $10.00 WORTH OF PROGRAMS FROM HUG'S LIBRARY. HOWEVER, EACH MEMBER WILL HAVE TO FURNISH A DISK OR CASSETTE TAPE TO RECORD THE PROGRAMS.

HUG'S PROGRAM LIBRARY

A LIST OF PROGRAMS AVAILABLE FROM HUG'S LIBRARY CAN BE OBTAINED FROM RALPH ARNOLD (497-3562), HUG'S LIBRARIAN. MEMBERS ARE ASKED TO IMPROVE THE PROGRAMS IN THE LIBRARY. IF YOU RESUBMIT A PROGRAM TO THE LIBRARY, YOU WILL RECEIVE 4 FREE PROGRAMS IN EXCHANGE.

NEWSLETTER EDITOR'S REPORT

BILL DEVALLE NOTED THAT ONLY PAID UP MEMBERS WILL RECEIVE A NEWSLETTER. LAST MAILING TOTALED 225 COPIES OF WHICH 65 WENT TO OTHER USER'S GROUPS AND PERSONS WHO HAVE PURCHASED THE COMPUTER IN THE PRECEDING 2 WEEKS. THOSE MEMBERS WHO HAVE PAID THEIR DUES AND HAVE NOT RECEIVED A COPY OF THE NEWSLETTER SHOULD CONTACT BILL DEVALLE. IF YOU HAVE AN ARTICLE YOU WOULD LIKE TO PUT INTO THE NEWSLETTER OR SOMETHING YOU WANT TO SELL, CONTACT BILL DEVALLE. ANY NEWSLETTER INPUT MUST BE RECEIVED WITHIN 2 WEEKS AFTER EACH MONTHLY MEETING IN ORDER TO BE PUBLISHED IN THE NEXT MONTHLY NEWSLETTER.

NEXT MEETING

THE GUEST SPEAKER AT THE APRIL 10, 1983 MEETING WILL BE MR. ED WIEST, TEXAS INSTRUMENTS HOME COMPUTER USER'S GROUP COORDINATOR. WIEST WILL GIVE AN OVERVIEW ON TI'S NEW COMPUTERS; THE TI-99/2 AND THE CC-40 COMPACT COMPUTER. HE IS PLANNING A SPECIAL DEMONSTRATION WITH LARGE SCREEN TV'S AND QUADRAPHONIC SOUND. WE NEED 4 SPEAKERS WITH SCREW TERMINALS FOR THIS MEETING. ANYONE INTERESTED IN DONATING THE USE OF SOME SPEAKERS, PLEASE CONTACT WAYNE WRIGHT @ 448-5119 OR JANE MCASHAN @ 783-2135.

HARDWARE AND SOFTWARE INFORMATION

"E.T., THE EXTRA TERRESTRIAL" IS THE NEWEST (UNANNOUNCED) GAME MODULE BY TI. IT IS DUE FOR RELEASE PROBABLY IN 3RD OR 4TH QUARTER.
"MICROSOFT MULTIPLAN" IS NOW AVAILABLE. IT IS AN UPDATED SECOND GENERATION OF VISICALC. IT LISTS FOR $99.95.
TOYS-R-US ARE CARRYING THE TI-CASSETTE RECORDER WHICH LISTS @ $69.95. THE RECORDER COMES WITH A CASSETTE CABLE AND AN INSTRUCTION BOOKLET.

THIRD PARTY COMMAND MODULE MANUFACTURING NEWS

JANE MCASHAN PROVIDED COPIES OF AN EXCELLENT ARTICLE THAT APPEARED IN THE MARCH 4, 1983 ISSUE OF THE WALL STREET JOURNAL. THE ARTICLE, ENTITLED "TEXAS INSTRUMENTS IS TRYING TO KEEP CONTROL OF SOFTWARE", IMPLIES THAT TI PLANS TO USE THE "GROM" CHIP IN FUTURE COMMAND MODULES IN SUCH A WAY TO MAKE IT DIFFICULT FOR THIRD PARTY SOFTWARE PRODUCERS TO MANUFACTURE COMMAND MODULES THAT WILL PLUG INTO THE TI-99/4A. THE ARTICLE STATES THAT TI IS ALTERING THE COMPUTER ELECTRONICS SUCH THAT IT WILL ONLY RECOGNIZE "GROM" CHIPS. TI IS THE SOLE PRODUCER OF "GROM" CHIPS AND WILL NOT LICENSE IT'S "GROM" TECHNOLOGY. FUNWARE HAS SIGNED AN AGREEMENT WITH TI TO PURCHASE THE "GROM" CHIPS IN ORDER TO PRODUCE THIRD PARTY COMMAND MODULES. MILTON BRADLEY, SCOTT FORESMAN, AND WALT DISNEY PRODUCTIONS HAVE AGREED TO DEVELOP PROGRAMS FOR THE TI-99/4A THAT TI WILL MAKE AND PRODUCE. OTHER COMPANIES SUCH AS ACTIVISION, IMAGIC, SPINNAKER SOFTWARE AND CBS SOFTWARE DO NOT PLAN TO ENTER THE THIRD PARTY COMMAND MODULE MARKET DUE TO TI'S ROYALTY PLAN. THIS POLICY COULD EVENTUALLY DISCOURAGE SOFTWARE AUTHORS ENOUGH FOR THEM TO SWITCH THEIR EFFORTS TOWARDS THE VIC-20 AND ULTIMATELY THIS WOULD HELP COMMODORE WIN OUT OVER TEXAS INSTRUMENTS. IF YOU HAVE PERSONAL FEELINGS ON THIS SUBJECT, PLEASE WRITE THE PERSONS LISTED IN THE WALL STREET JOURNAL ARTICLE OR CALL ONE OF THE CLUB'S OFFICERS FOR MORE INFORMATION.

MISCELLANEOUS

THE MARCH ISSUE OF "COMPUTE" MAGAZINE HAS 4 ARTICLES AND 2 GAMES ON THE TI-99/4A. "COMPUTE" MAGAZINE PLANS TO ISSUE A "PROGRAMMERS REFERENCE GUIDE - GAMES AND PROGRAMS" FOR THE TI-99/4A LATE THIS SPRING OR SUMMER.

WAYNE WRIGHT HAS WORKSHEETS FOR PROGRAMMING ASSEMBLY LANGUAGE.

MISCELLANEOUS CONTINUED

JANE MCASHAN ALONG WITH JOHN ANDREWS ANNOUNCED THEIR PLANS TO OPEN A NEW STORE CALLED "COMPUTER AGE". THEY PLAN TO CARRY THE TI-99/4A LINE AS WELL AS OTHER COMPUTER LINES. THE STORE WILL BE LOCATED AT SHARPSTOWN MALL NEXT TO J.C. PENNEY'S ON THE GROUND LEVEL. PLANS ARE TO OPEN AROUND APRIL 1.

IF ANYONE IS INTERESTED IN TRANSLATING PROGRAMS WRITTEN FOR OTHER HOME COMPUTERS. YOU SHOULD PURCHASE A BOOK CALLED "THE BASIC HANDBOOK - VERSION 2" PER JANE MCASHAN.

A SHORT LIST OF 3RD PARTY SOFTWARE REVIEWS WAS AVAILABLE AT THE LAST MEETING. CHARLES VADOVIC IS COORDINATING THE INPUTS FROM HUG MEMBERS. ALL REVIEWS SHOULD BE WRITTEN UP ON FORMS PROVIDED BY CHARLES.

THE 99'ER MAGAZINE

THE "99'ER MAGAZINE" SHOULD SOON APPEAR ON THE NEWSTANDS BEGINNING WITH THE APRIL ISSUE AT A SINGLE COPY PRICE OF 3.5Ø. THE "99'ER" HAS CHANGED ITS NAME TO THE "99'ER HOME COMPUTER MAGAZINE". A SUBSCRIPTION CAN BE OBTAINED BY CALLING 5Ø4-485-8796 AND CHARGING IT TO YOUR VISA OR MASTER CARD. THE MAGAZINE SUBSCRIPTION RATE IS $25/YEAR FOR 12 ISSUES. IF YOU PREFER, TO SEND IN YOUR SUBSCRIPTION MAIL TO: THE 99'ER HOME COMPUTER MAGAZINE, P.O. BOX 5537, EUGENE, ORE. 97405. FOR THE QUICKEST SERVICE, PHONE YOUR SUBSCRIPTION IN.

WORKSHOPS- WORKSHOPS

THE MAY 1, 1983 MEETING WILL CONSIST OF A SHORT BUSINESS MEETING. THE REMAINDER OF THE TIME WILL BE DEVOTED TO SPECIALIZED WORKSHOPS IN WHICH THE MEMBERS CAN PARTICIPATE.

PANEL DISCUSSION

A PANEL CONSISTING OF CURT GARCIA, LUIS HERNANDEZ, JOHN SEWELL AND JANE MCASHAN ANSWERED QUESTIONS FROM THE MEMBERS. THE PANEL PROVED QUITE SUCCESSFUL IN ANSWERING MOST OF THE MEMBERS' QUESTIONS. HOWEVER, IN THE FUTURE, WE MAY HAVE A QUESTION BOX IN WHICH MEMBERS CAN WRITE DOWN THEIR QUESTIONS AND ANSWERS CAN BE GIVEN IN THE NEXT NEWSLETTER OR MEETING DEPENDING UPON THE COMPLEXITY OF THE QUESTION.

"FORTH"- WHAT IS IT?

PART OF THE PROGRAM FOR MARCH 6, 1983 MEETING WAS TO BE PRESENTED BY PAUL KENT WITH A DEMONSTRATION OF HIS VERSION OF "FORTH", A PROGRAMMING LANGUAGE FOR THE TI-99/4A. UNFORTUNATELY, PAUL WAS ILL AND COULD NOT MAKE IT. HE PLANS TO GIVE A DEMONSTRATION IN THE NEAR FUTURE.

****
* M & S COMPUTER SYSTEMS *
TI-99/4A>>>$249.ØØ($149.ØØ after $1ØØ REBATE) W/ purchase of 2 or more modules
Peripherals, Command Modules, Software, WICO Joysticks>>>>>>>>>>15% OFF LIST!
HENHOUSE by Funware(First Third Party Command Module for the TI-99/4A)>>$34.ØØ
*Wide Selection of Educational Modules including 18 SCOTT,FORESMAN Modules not *
available from Texas Instruments>>>>>>>>>>>>>>>>>>>>CALL FOR INFO AND PRICING
* Call Mike Matula @ 713/486-Ø224 after 5:3Ø p.m. for more information *
* or write to: 15918 Cavendish Dr., Houston, Tx. 77Ø59 *
****

*** RELATIONAL OPERATORS ***

an article on TI 99/4(A) programming
By: Curtis Garcia
10202 Forum Park Drive #310
Houston, Texas 77036
(713)774-6881

The *Relational Operator (RO)* is a powerful programming tool which is not well explained by TI in the 99/4(A) manual. I will attempt to explain what a *RO* is and it's possible applications in this article.

A *RO* is a relational expresssion such as X=5 or Y>A. I'm sure you've seen this type of expression in *IF-THEN-ELSE* statements. The purpose of this article is to show new applications for this type of statement, and ways to conserve program space by using *RO's*.

The first thing that must be understood is how the computer interprets it in a program. The computer effectively replaces a *RO* expression with either a 0 if the expression is FALSE, or a -1 if the expression is TRUE. It is this fact which gives the *RO* the potential to do so much for us in a program, as I will demonstrate in this article.

The simplest form of the *RO* is the simple IF statement:

```
200 IF X=5 THEN 390
```

Then there is the OR statement (for TI Basic):

```
200 IF (X<1)+(X>9)THEN 390
```

And, there is the AND statement (for TI Basic):

```
200 IF (X=5)*(Y<5)THEN 390
```

The above expressions are all simple *RO's*. In each case, the computer will evaluate the *RO* and, if the result is other than zero, perform the command that follows the *RO*. If the evaluation results in a value of zero, control passes to the next line in the program. As you can see in the OR statement example, there are two relationships expressed, with a + between them. This causes the results of the evaluations to be added together. If the total is not zero (one or more of the expressions are TRUE), the command that follows is executed.

In the AND statement example, the results of the evaluations are multiplied. Thus, if either expression were FALSE, the total expression would also be FALSE (0)*(-1)=0 and control would pass to the next line. If both of these were TRUE, the result of the evaluation is not zero (-1)*(-1)=1 and the command that follows the *RO* would execute.

We've looked at the simplest application of the *RO* now. In Extended Basic you should use the OR and AND commands that are provided, since they are more space efficient than the methods shown above. In the next section I will show applications of *RO's* for Basic or Extended Basic with large potential savings of program space outside of the *IF-THEN-ELSE* statement.

The fact that the computer evaluates and equates *RO's* as a 0 if FALSE, and a -1 if TRUE, has many other applications when programming either in TI Basic or Extended Basic. Consider the following equivalent statements:

```
190 X=X+1
200 IF X<5 THEN 220
210 X=0
```

The above can be replaced with the statement below using a *RO*:

```
190 X=X+1+5*(X=4)
```

The above *RO* looks at the value of X BEFORE BEING MODIFIED BY THE CURRENT LINE. So, if X is 4, the *RO* is TRUE(-1), and the 5*(X=4) evaluates to a -5, which is added to the first part of the expression; X=X+1. Thus, X=4+1+(-5)=0.

This is the power of the *RO*, that you can set up relationships almost anywhere in your program, that can save memory space. The *RO* cannot be used in DIM statements or OPTION BASE statements, but may be used in all other programming applications where a numeric value is expected. These inclue FILE NUMBERS, CALL COLOR, HCHAR, VCHAR, DISPLAY, RECORD NUMBERS (in a file), FOR-NEXT LOOPS, ect.

A very graphic example of the space savings possible with *RO's* is shown in the following equivalent examples. In each case, a CALL KEY statement is used to detect any of the four arrow keys, which are being used to set the X and Y values. The X and Y values represent the row and column locations of a graphic character, with its travel limited to rows 1 thru 24 and columns 3 thru 30.

```
200 CALL  KEY(0,KEY,STATUS)
210 IF STATUS=0 THEN 200
220 IF KEY=68 THEN 260
230 IF KEY=69 THEN 300
240 IF  KEY=83 THEN 340
250 IF KEY=88 THEN 380 ELSE 200
260 Y=Y+1
270 IF Y<31 THEN 500
280 Y=30
290 GOTO 500
300 X=X-1
310 IF  X>0 THEN 500
320 X=1
330 GOTO 500
340 Y=Y-1
350 IF  Y>2 THEN 500
360 Y=3
370 GOTO 500
380 X=X+1
390  IF X<25 THEN 500
400 X=24
410 GOTO 500
```

The above can be replaced with the following equivalent statements:

```
200 CALL KEY(0,KEY,STATUS)
210 IF (KEY<>68)*(KEY<>69)*(KEY<>83)*(KEY<>88)THEN 200
220 Y=Y+(KEY=68)*(Y<30)-(KEY=83)*(Y>3)
230 X=X+(KEY=88)*(X<24)-(KEY=69)*(X>1)
240 GOTO 500
```

The above example uses the relational AND to check both the KEY and the value of the variable (either X or Y) BEFORE MODIFICATION; this prevents the variable from being modified to a value outside the desired range. You will notice that if either of a pair of *RO's* with a * between them is FALSE, the result is zero, so no change is made to the variable. Remember, when using the relational AND, if TRUE, the value is +1. If using the relational IF, the value is -1 if TRUE, so watch the signs you place in front of the *RO's* to get the desired results.

----------Name---------->	<----------Address--------->	<-----City----->	State:	Zip:	Phone:	Date:	GP	Classes:
Allen E.L.	13503 Cypress	Cypress	Tx	77429	469-8682			ABC
Anderson Adlee	4827 Benning	Houston	TX	77035	713/723-3053			AC
Arnold Ralph	12731 Westella	Houston	TX	77077	713/497-3562			AC
Bastardo J.R.	4938 Milwee	Houston	Tx.	77092	713/750-3851	Jan 83		ABC
Berkey, Jr. Harry A.	3002 Kevin Lane	Houston	TX	77043	713/462-2234	965-1206		AC
Beufiglio Deanna	11031 Sageleaf Lane	Houston	TX	77089	713/481-6921		83	AC
Bickle Larry	12606 Barryknoll Lane	Houston	TX	77024	713/467-6601			ACJ
Blackstone Raymond L.	525 Woodland	Houston	TX	77009	713/869-4629			AC
Bracht James	4707 Carbrook Ct.	Spring	TX	77373	713/353-8981			AC
Brouillette Jeff	5206 Mimosa	Bellaire	TX	77401	713/665-0298	623-0220		ACJK
Buckels John	12911 Lemur	Cypress	Tx	77429	251-9943			AB
Burnett Keneth D.	625 Wood Smoke	Houston	Tx	77013	713/455-8380	Jan 83		AB
COTHAM EDWARD T	6742 KURY LANE	HOUSTON	TX	77008	713/869-4715			ABC
Catham, Jr. Ed	6742 Kury	Houston	TX	77008	713/869-4715	754-4136		AC
Conrad Paul	819 Wade Hampton	Houston	TX	77024	713/467-7696			AC
Crawford Terry	5801 Lumberdale #215	Houston	TX	77092	713/682-8532			ACDF
Crystal John	17122 Colony Creek Dr.	Houston	TX	77379				AC
Dasenbrock Thomas M.	14406 Golden Cypress	Cypress	TX	77429	713/256-2804			ABCDEFGJKL
Delvalle William A.	3623 Kingsman Dr.	Houston	TX	77082	713/870-8869		LB	ACDEFGHIJK
Denton Gary L.	603 Scott	Pasadena	TX	77506	713/475-1566			ACK
Driscoll A.L.	711 S. Carroll	La Porte	TX	77571	713/470-2500		83	ADE
Duvalle Lucille	8352 N. Bayou	Houston	TX	77019	713/649-6190			ADEK
ESKIND CURTIS D.	8039 BARNHILL	HUMBLE	TX	77338	446-8308			ABC
Epps T. Lynn	5815 Reamer	Hoouston	Tx	77074		Jan 83		ABC
FRANCE RICH	904 WESTCOTT	HOUSTON	TX	77007	869-9854		Y	ABC
Farris George L.	12406 Lightcliffe	Houston	TX	77031	713/772-8013			ACDEFGK
Garcia Curtis	10202 Forum Park Dr., #310	Houston	TX	77036	713/774-6881		TR	ACDEFGIKL
Goddard Tim	19719 Ricelake Lane	Houston	TX	77084	713/492-0847			ACHK
Gould Neil	2831 Field Line	Sugar Land	Tx	77479	980-5789			ABC
Gragg F. Michael	1634 Lake Bluff	Seabrook	Tx	77586	713/538-1847	Jan 83		ABC
Hachey David L.	1751 Carriage Wav	Sugarland	TX	77478	713/980-2107	798-6002		ACJ
Harle Wiley B.	9643 Winsome	Houston	Tx	77063	782-7864			AB
Hart Wiliam T.	Box 453A	Hockley	Tx	77447	356-5647			AB
Herman Mr. & Mrs. Sanford	6219 Sanford Road	Houston	TX	77096	713/271-4171	960-4266	83	ACK
Hernandez Luis M.	12002 Dorrance	Stafford	TX	77477	713/498-4532	961-6218		AC
Hinds Tim	4911 Jason	Houston	TX	77096	713/667-5739			AC
Holmes Scott	5675 DeSoto, #223	Houston	TX	77091	713/688-1331			AC
Houston Kay	5942 W. Bellfort	Houston	Tx	77035	729-3061			AB
Hutchison Jim	5106 Prarieridge	Houston	Tx	77053	713/437-1973	Jan 83		ABC
JAMISON KEITH	7095 4TH ST.	KNOXVILLE	IA	50138				AB
JAROSZEWSKI TRAVIS	12332 NORKEY	HOUSTON	TX	77086	445-6081			ABC
Jackson Mike	4849 E. Ridgecreek	Houston	Tx	77053	437-5768			ABC
KEGRESSE E L(TONY)	5926 DEE	PASADENA	TX	77505	713/998-6911		AC	ABCDEFGIJK
KIRK JACK W	4607 PIN OAK	BELLAIRE	TX	77401	661-7135			ABC
KIRK TIMOTHY	14007 ROSETTA	CYPRESS	TX	77429	469-3400			ABC
Karpathy Sandor A.	4519 Kinloch	Houston	Tx	77084	713/463-7043	Jan 83		ABCJ
Kegreese E L (Tony)	5926 Dee	Pasadena	Tx	77505	713/998-6911	Jan 83		ABCDEFGJK
Korman John G.	9715 Braewick	Houston	TX	77096	713/723-8597			ACDEFGIJK
LEMLER MR & MRS R A	6815 LANDON	HOUSTON	TX	77036	713/771-3960			ABC
Lemler Mr & Mrs R A	6815 Langdon	Houston	Tx	77036	713/771-3960	Jan 83		AB
Lieske Don D	3226 Robinson	Missouri City	Tx	77459	713/437-5005	Jan 83		ABCDFK
Lolley Gene	1219 Ward	Rosenberg	Tx	77471	342-7311			ABCDEFGHIK
Lowe Clyde W.	2061 Royal Terrell	Conroe	Tx	77303	856-6686		V	ABC
MICHAELS DR.NICHOLAS	12439 HONEYWOOD	HOUSTON	TX	77077				ABC

----------Name---------->	<----------Address--------->	<-----City----->	State:	Zip:	Phone:	Date:	GP	Classes:
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Blackstone Raymond L.	525 Woodland	Houston	TX	77009	713/869-4029			AC
Bracht James	4707 Carbrook Ct.	Spring	TX	77373	713/353-8981			AC
Brouillette Jeff	5206 Mimosa	Bellaire	TX	77401	713/665-0298	623-0220		ACJK
Buckels John	12911 Lemur	Cypress	Tx	77429	251-9943			AB
Burnett Keneth D.	625 Wood Smoke	Houston	Tx	77013	713/455-8380	Jan 83		AB
COTHAM EDWARD T	6742 KURY LANE	HOUSTON	TX	77008	713/869-4715			ABC
Catham, Jr. Ed	6742 Kury	Houston	TX	77008	713/869-4715	754-4136		AC
Conrad Paul	819 Wade Hampton	Houston	TX	77024	713/467-7696			AC
Crawford Terry	5801 Lumberdale #215	Houston	TX	77092	713/682-8532			ACDF
Crystal John	17122 Colony Creek Dr.	Houston	TX	77379				AC
Dasenbrock Thomas M.	14406 Golden Cypress	Cypress	TX	77429	713/256-2804			ABCDEFGJKL
Delvalle William A.	3623 Kingsman Dr.	Houston	TX	77082	713/870-8869		LB	ACDEFGHIJ*
Denton Gary L.	603 Scott	Pasadena	TX	77506	713/475-1566			ACK
Driscoll A.L.	711 S. Carroll	La Porte	TX	77571	713/470-2500		83	ADE
Duvalle Luciile	8352 N. Bayou	Houston	TX	77019	713/649-6199			ADEK
ESKIND CURTIS D.	8639 BARNHILL	HUMBLE	TX	77338	446-8308			ABC
Epps T. Lynn	5815 Reamer	Houston	Tx	77074		Jan 83		ABC
FRANCE RICH	904 WESTCOTT	HOUSTON	TX	77007	869-9854		Y	ABC
Farris George L.	12406 Lightcliffe	Houston	TX	77031	713/772-8013			ACDEFGK
Garcia Curtis	10202 Forum Park Dr., #310	Houston	TX	77036	713/774-6881		TR	ACDEFGIKL
Goddard Tim	19719 Ricelake Lane	Houston	TX	77084	713/492-0847			ACHK
Gould Neil	2831 Field Line	Sugar Land	Tx	77479	980-5789			ABC
Gragg F. Michael	1634 Lake Bluff	Seabrook	Tx	77586	713/538-1847	Jan 83		ABC
Hachey David L.	1751 Carriage Way	Sugarland	TX	77478	713/980-2107	798-6002		ACJ
Harle Wiley B.	9643 Winsome	Houston	Tx	77063	782-7864			AB
Hart Wiliam T.	Box 4534	Hockley	Tx	77447	356-5647			AB
Herman Mr. & Mrs. Sanford	6219 Sanford Road	Houston	TX	77096	713/271-4171	960-4266	83	ACK
Hernandez Luis M.	12002 Dorrance	Stafford	TX	77477	713/498-4532	961-6218		AC
Hinds Tim	4911 Jason	Houston	TX	77096	713/667-5739			AC
Holmes Scott	5675 DeSoto, #223	Houston	TX	77091	713/688-1331			AC
Houston Kay	5942 W. Bellfort	Houston	Tx	77035	729-3061			AB
Hutchison Jim	5106 Prarieridge	Houston	Tx	77053	713/437-1973	Jan 83		ABC
JAMISON KEITH	7095 4TH ST.	KNOXVILLE	IA	50138				AB
JAROSZEWSKI TRAVIS	12332 NORKEY	HOUSTON	TX	77086	445-6081			ABC
Jackson Mike	4849 E. Ridgecreek	Houston	Tx	77053	437-5768			ABC
KEGRESSE E L(TONY)	5926 DEE	PASADENA	TX	77505	713/998-0911		AC	ABCDEFGIJK
KIRK JACK W	4607 PIN OAK	BELLAIRE	TX	77401	661-7135			ABC
KIRK TIMOTHY	14007 ROSETTA	CYPRESS	TX	77429	469-3408			ABC
Karpathy Sandor A.	4519 Kinloch	Houston	Tx	77084	713/463-7043	Jan 83		ABCJ
Kegreese E L (Tony)	5926 Dee	Pasadena	Tx	77505	713/998-0911	Jan 83		ABCDEFGJK
Korman John G.	9715 Braewick	Houston	TX	77096	713/723-8597			ACDEFGIJK
LEMLER MR & MRS R A	8815 LANDON	HOUSTON	TX	77036	713/771-3960			ABC
Lemler Mr & Mrs R A	8815 Langdon	Houston	Tx	77036	713/771-3960	Jan 83		AB
Lieske Don D	3226 Robinson	Missouri City	Tx	77459	713/437-5005	Jan 83		ABCDFK
Lolley Gene	1219 Ward	Rosenberg	Tx	77471	342-7311			ABCDEFGHI*
Lowe Clyde W.	2061 Royal Terrell	Conroe	Tx	77303	856-6686		V	ABC
MICHAELS DR.NICHOLAS	12439 HONEYWOOD	HOUSTON	TX	77077				ABC

HUG MEMBERSHIP LIST

Date: 03/25/83

Legend:

A = Member H U G

B = Newsletter

C = Cassette

D = Disk

E = Memory Exp.

F = Rs232

G = Printer

H = Thermal Printr

I = Modem

J = Speech Synth.

K = Extended Basic

L = Assembler