HOMEBREW COMPUTER CLUB

NEWSLETTER

THIS OUTSIDE PAGE IS UNREAL — That is, it's not the front and back of the "real" HCC NEWSLETTER. Instead, it is a form used by the six Bay Area Chapters of the Association for Computing Machinery (ACM). By using it, you may:

1. Request information and subscriptions (many without cost) from almost 90 organizations and publishers,

2. Subscribe to some of the local ACM publications, thereby keeping informed of their meetings, speakers, technical sessions, low-cost tutorials and seminars, etc.. All of these activities are open to *all* interested individuals; ACM membership is *not* required.

3. Apply for membership in the local ACM Chapters (Local membership requires membership in the national ACM).

This is also an opportunity for us to test bulk-rate mailing, costing $.018@ instead of $.13@ or $.26@. Also, the ACM is paying for this mailing. We would like to take this opportunity to thank them.

WHAT IS THE ACM? - It is the largest organization of computer specialists in the world. The enclosed brochure give more details. It has six local Chapters; two ACM Chapters, and four Special Interest Groups (SIG's):

The *Peninsula SIGMICRO Chapter* is particularly concerned with microprocessors and microprogramming, and is undoubtedly the group of greatest interest to the Homebrew mob. It has almost-monthly technical sessions. Though less than two years old, it has already sponsored a number of nationally known speakers. These have included:

Federico Faggin, the designer of all Intel micros from the MCS-4 through the 8080,
Mike Galey from IBM, the current Chairman of National SIGMICRO, and of the IEEE Tech. Committee on Microprogramming,
Justin Rattner, Manager of Bipolar Software in the Microcomputer Systems Department at Intel,
Mike Flynn, the Vice President of the IEEE Computer Society, and a full Professor of Electrical Engineering at Stanford,
Alan Kotok, the "father" of the PDP-10 Family of computers manufactured by Digital Equipment Corporation,
Sven Simonsen, Technical Director for Advanced Micro Devices (AMD),
David Wyland, Manager of Microprocessor Design at Monolithic Memories,   and on and on.

The talks have included: Do You Trust Your Calculator?,   Minicomputers for the Hobbyist
Designing a Microprocessor Based Product,   Technology and Microprocessor Design
The FPLA, a 2nd Generation LSI Element,   Bipolar & MOS Microprocessors, and the AMD2900 Family,   etc..

Sessions in the next several months will include:

A. J. Nichols, Manager of Microcomputer Applications, Intel, "Unusual Applications of Microprocessors" (April 8th),
Dr. George Rossman, Research Associate, Palyn Associates, "Soft Machine Architecture" (May 4th).

The other five Chapters of the ACM will also be of interest to HCC members, in varying degrees:

The *Peninsula ACM Chapter* has been active for 20 years. Its programs include monthly dinner speakers, low-cost tutorials, youth groups, a computer exhibit, and interest-free student loans at several local colleges and universities. Its speakers have included a considerable number of national and international figures in the computer profession. Recent speakers have included:

Henry Tropp, Smithsonian Institution, "The History of the Electronic Digital Computer"
David Hall, SRI, "Biocybernetic Communication: Research and Possibilities for Controlling Machines with Thought"
Daniel McCracken, author, lecturer, and consultant, "Computers and Public Policy"
Community Computer Center, "Computer Games and their Implications"   etc..

Peninsula Chapter tutorials, usually costing $20-$40 for a 1-3 day session, have included:

Practical System Design Using the Intel 8080 and the Motorola 6800,   Introduction to PL/I,
Computer Graphics: An Introduction and Survey   Microprocessor Survey
Structured Programming and Other Tools   Computer Abuse & Security,   etc ..

The *Peninsula SIGPLAN Chapter* is concerned with the design and implementation of programming languages and their compilers. As with the other Chapters, its roster of past speakers includes a number of nationally known computer scientists. Most of its sessions are probably outside of the mainstream of interest for the computer hobbyist, however. They usually concern compiler esoterica or language designs that presume more computer facilities than are usually found in hobbyist systems.

The *Golden Gate ACM Chapter* serves the San Francisco - East Bay - Marin County area in the same way that the Peninsula ACM Chapter serves the South and Central Peninsula, though it tends to be more oriented towards business data processing. It has monthly dinner speakers, seminars, tutorials, etc., which have included:

Steven Coles, SRI, Talking to a Robot in English   Henry Beitz, et al, Introduction to Data Structures (seminar)
George Anas, BART, The BART Computer Control System, A. J. Nichols, AMI, Introduction to Microprocessors,
Susan Nycum, attorney, Computer Crime   Doug Englebart, SRI, Human Augmentation Research Center, etc..

The other two Chapters are the *Golden Gate SIGBDP Chapter,* specifically concerned with Business Data Processing, and the *Bay Area SICDOC Chapter*, concerned with Systems Documentation.

SUBSCRIBE or JOIN? - Subscribing to the ACM Chapters' *Bit Dropper* will keep you informed about the activities of both the Peninsula and Golden Gate ACM Chapters, and the SIGBDP group. It will also furnish you with a comprehensive Calendar of Bay Area Computer-Related Events. Subscribing to the *SIGMICRO Newsletter* or the *SIGPLAN Notices* will keep you informed of the activities of those groups. The same holds true for the *SICDOC News.*

Joining the local ACM (either Chapter) provides several advantages: Members recieve somewhat reduced rates for the dinners at the Chapter meetings, and for the tutorials and seminars. They also receive the *Bit Dropper* as part of their membership, thereby receiving it for $1 less than the subscription cost (available primarily for nonmembers and institutions). However, local ACM membership requires current or forseeable national ACM membership... and that costs $11-$35.

Incidently, both the local and national ACM allow special reduced membership rates for students.

If you have further questions, contact: Jim Warren, Star Rt. Box 111, Redwood City 94062, (415)851-7075, 851-7664 .

Please, furnish as much information as possible. It helps *your* association to better serve *your* interests.
The *minimum* information you need furnish is your name, mailing address, and membership/subscription choices.
The additional information, however, *is of significant assistance* in our serving our membership:
  It provides indications of the make-up and variety of our membership. This aids in planning of meetings, speakers, topics, seminars,
  tutorials, etc., so that we may better provide--
    Some programs likely to interest a large majority, and
    Some programs specialized for each identifiable group and interest-area.
  It is *often* helpful or necessary to be able to--
    Contact someone at work, or at home in the evening or on a weekend,
    Identify everyone working or living in a particular geographic area,
    Contact someone in a particular position or having specific interests or expertise, or
    Identify everyone working within a particular company, institution, division, or site.

To use the Business Reply Mailer:
Insert your check for the chosen fees, so that it will cross the folds, centered where you will place a staple.
Fold in the obvious manner, exposing the Business Reply Mailer.
Staple it closed *with a SINGLE staple* that pierces the enclosed check, and mail it.

— — — — — — — — — — — — — — — *fold here* —

— — — — — — — — — — — — — — — *fold here* —

ACM SIG/SIC's, and other computer-related organizations that particularly attract your interest (no matter whether you are one of their members or subscribers):

Computer topics and subject areas that are of *particular* interest interest to you:

Additional comments & questions: This might include (but is certainly *not* limited to):
Prospective new members or subscribers (name, address),
"Very important people" who should be kept informed of our activities (name, address, justification),
Possible speakers, including yourself (name, address, topics)
Topics for meetings, tutorials, and seminars,
Locations for dinner meetings, technical meetings, seminars, and tutorials,
Etc..

If you would like more copies of this form for distribution to your professional associates and friends:

_____ quantity   mail to: ☐ work   ☐ residence

HOMEBREW COMPUTER CLUB

NEWSLETTER

Volume Number 2, Issue 2   February 29, 1976

THIS MONTH - Robert Reiling

BILL GATES - One response to Bill's letter to hobbyists that appeared in our last Newsletter is included in this issue. It is one opinion and, in fact, may represent the predominant thinking of hobbyists on this subject. Nevertheless there are other views and the next Newsletter will present one.

HARDWARE - Ray Boaz reports on the AMI 6800 microcomputer evaluation board for the OEM market. It's a big board with many features that will interest the hobbyist and the potential commercial user.

SOFTWARE - Last month I asked for software material and Jim Brick responded with an ASCII Keyboard Hexadecimal Loader. Many hobbyists can put this program to work immediately. It's on page six. The Newsletter could use more material like Jim's so how about sending a routine to me.

HOBBYIST CLUBS - Clubs are underway in many parts of the USA. A list is included in this issue of several clubs along with address information and newsletter data. If you plan to visit or move to the areas where these clubs are located why not write them in advance for meeting location and dates.

CLUB LIBRARY - Library materials (assorted) are kept by Gordon French and you may make arrangements with him for loans. One thing, however, make your request specific so that Gordon can help with your need. Also, respect his request to limit telephone calls to week nights between 7:00 P.M. and 10:00 P.M. More library information, Gordon's telephone number, and a book review by Ray Boaz are in this issue on page five.

DATA FILE - If you need Teletype equipment it's available in the Bay Area and the organizations listed on the DATA FILE page have expressed an interest in supplying the hobbyist. Other terminal devices will probably be on hand too.

BULLETIN BOARD - This is a collection of general items, sometimes commercial and sometimes just there because I thought it was of interest. If you need help, want to buy, sell, or whatever send information to me for this page.

HOW TO GET THE NEWSLETTER ETC. - Anyone interested in computers as a hobby may receive the Newsletter by sending his address to me and requesting it. The Newsletter is mailed monthly with the exact date being subject to all sorts of conditions etc. that affect me and consequently the schedule. If you have an input to the Newsletter send it and I will try to publish it as quickly as possible. Just for the record, however, I can't promise that everything sent will be published.

The Newsletter is paid for by donations. This will continue as long as donations at least equal the costs. What are the costs? Paid for are reproduction costs, postage, labels for addressing, some typing, and a few miscellaneous items. No one receives a salary or any other payment for submitting articles or spending an amazing number of hours "getting the Newsletter out".

CLUB MEETING SCHEDULE - Meetings are held every two weeks; March 17th, March 31st, April 14th, etc. Location of the meetings is Stanford Linear Accelerator Center, Menlo Park, California. Meetings begin at 7:00 P.M. Ask the guard at the gate for directions to the meeting room.

20 February 1976

Mike Hayes, MNH-AE
P. O. Box 167
Port Orchard, Wash. 98366

Bill Gates, Micro-Soft
1180 Alvarado S.E. No. 114
Albuquerque, New Mexico 87108

Regarding your Letter of 3 February 1976 Appearing in Homebrew
Computer Club Newsletter Vol. 2 No. 1

Dear Mr. Gates:

Your software has helped many hobbyists, and you are to be thanked
for it! However, you should not blame the hobbyists for your own
inadequate marketing of it. You gave it away; none stole it from you.
Now you're asking for software welfare so you can give more away.
If $2/hr is all you got for your efforts, then $2/hr is what they're
worth on the free market. You should either change your product or
change your way of selling it, if you feel it'll bring more money.
I'm sure that if I were MITS, I'd be chuckling all the way to the bank
over the deal I got from you. After all, your marvelous software has
allowed them to sell a computer which, without it, none would have
touched, except as a frustrating novelty item.

I congratulate you and MITS upon being major influences in the
founding of the computer hobby market. It's too bad you didn't get
the profit from your efforts that they did from theirs, but that's your
fault, not theirs or the hobbyists. You underpriced your product.

If you want monetary reward for your software creations, you had
better stop writing code for a minute and think a little harder about
your market and how you are going to sell to it. And, by the way,
calling all of your potential future customers thieves is perhaps
"uncool" marketing strategy!

Sincerely yours,

Dr. Michael N. Hayes

MNH-Applied Electronics

Copy to: R. Reiling
          Homebrew Computer Club

COMPUTER HOBBYIST CLUBS/NEWSLETTERS

Here is a partial listing of computer hobbyist clubs. These clubs have sent newsletters or other material about their club. All clubs are growing rapidly as more and more computer hobbyist's get together. If you know of other clubs please send information about them for future newsletters.

AMATEUR COMPUTER GROUP OF NEW JERSEY
S. Libes, ACG-NJ
U.C.T.I.
1776 Raritan Road
Scotch Plains, N.J. 07076
Newsletter-ACGNJ News

RAY AREA MICROPROCESSOR USERS GROUP
4565 Black Avenue
Pleasanton, CA. 94566
Newsletter - Under Consideration.
May input to HCC Newsletter.

CACHE (Chicago Area)
P. O. Box 36
Vernon Hills, Illinois 60061
Newsletter - CACHE Newsletter

CLEVELAND DIGITAL GROUP
C/O G. Henkel
6590 Chaffee Ct.
Cleveland, Ohio 44141
Newsletter - The Digital Digest

DENVER AMATEUR COMPUTER SOCIETY
P. O. Box 6338
Denver, CO. 80206
Newsletter - DACS Newsletter

EL PASO COMPUTER GROUP
9716 Saigon Drive
El Paso, TX. 79925
Newsletter - Version

HOMEBREW COMPUTER CLUB
P. O. Box 626
Mountain View, CA. 94042
Newsletter - Homebrew Computer
Club Newsletter

LLLRA HOBBYIST COMPUTER GROUP
c/o Charles D. Hoover
35 West Essex Street
Stockton, CA 95204
Newsletter-LLLRA Hobbyist
Computer Group

LONG ISLAND COMPUTER ASSOC.
Morris Balamut, Newsletter Editor
P.O. Box 864
Jamaica, N.Y. 11431
Newsletter - The Stack

SOUTHERN CALIFORNIA
COMPUTING SOCIETY
Box 987
South Pasadena, CA 91030
Newsletter - Interface (Magazine)

THE COMPUTER HOBBYIST
GROUP - NT
Bill Fuller, Newsletter Editor
2377 Dalworth 157
Grand Prairie, TX 75050
Newsletter - The Computer
Hobbyist Group - NT Newsletter

You may have a favorite hardware item or know of new items arriving on the market that will interest the hobbyist. Send a review and I will try to get it into the Newsletter. Mail your material to Robert Reiling, editor HOMEBREW COMPUTER CLUB NEWSLETTER, Post Office Box 626, Mountain View, CA 94042.
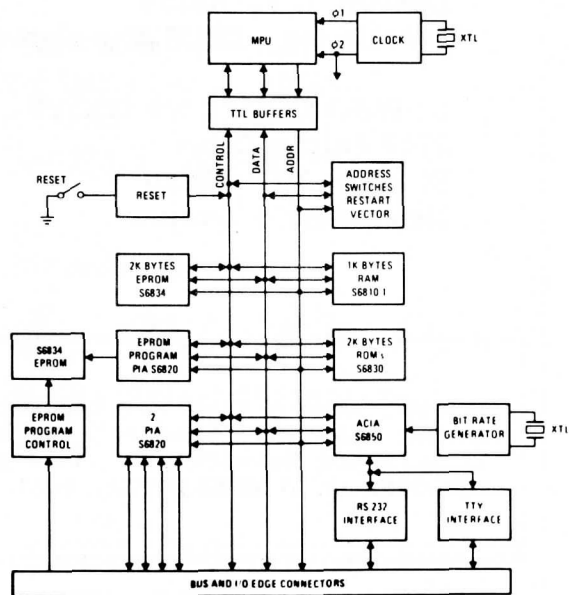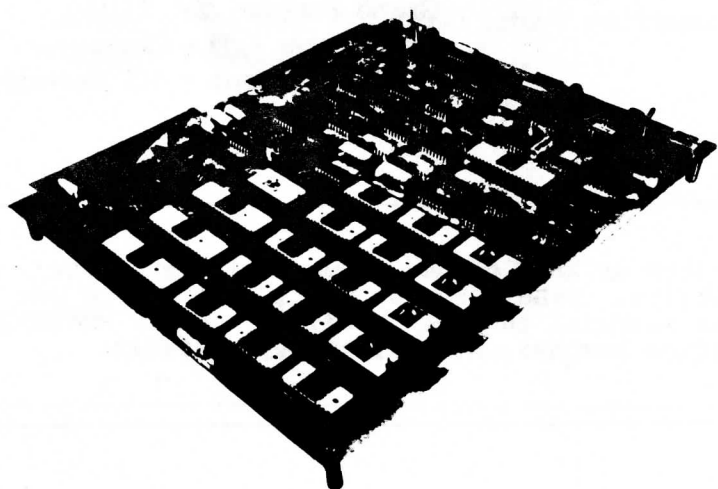
AMI PROTOTYPE BOARD - Ray Boaz

AMI has designed a 6800 microcomputer evaluation board for the OEM market
which has great possibilities for the hobbyist market also. It is a 10-1/2"
X 12" double-sided PC board with two edge connectors, one for the MPU bus
lines and the other for I/O. Of the 68 chips on the board, 19 are 6800
family parts. The board takes 5V @ 3A (fully loaded) if no EPROM or RS232
interface are required. Alone the board is not a microcomputer kit, but
add more memory and a power supply and you have a microcomputer without
comparison on the hobbyist market today.

The major features are - 2K ROM (6830), 2K EPROM (6834), 3 PIA's (6820),
1K RAM (6810), 1 ACIA (6850) for TTY or modem I/O, TTY or RS232 interface,
EPROM programming on board for 6834's, selection of crystal or variable speed
clock, interval timer, bit rate generator for selectable band rates, selectable
restart address, selectable DMA mode, and completely buffered MPU lines at
the edge connectors.

Software supplied in ROM consists of a complete monitor plus a ROM subroutine
program library. By using the software interrupt instruction with an ad-
ditional one byte offset, 25 subroutines may be called by the user at anytime.
Included in the subroutine library are: add A and B to X or subtract A and B
from X (16 bit operations); multiply A by B with a 16 bit result; print a
message string; push all status registers; pop all status registers; print 2
or 4 hex characters; and two breakpoint subroutines. One type of breakpoint
stops the program and prints the contents of the status registers, the other
prints the status and continues the program.

Complete documentation and a users manual are supplied with the evaluation
board. Also the ROM program has a complete listing so that the user knows
what he has in firmware.

For the hobbyist it is a real value because he can buy the board with all
parts or just the minimum required to get started, then add more as needed.
Anyone who is considering a 6800 system should look into this kit from AMI
before they buy any other kit.

BLOCK DIAGRAM

CLUB LIBRARY

Gordon French keeps the Club's library materials available for Club Members. The library consists of materials (documents, tapes, books, etc.) that have been given to Gordon for keeping in a central location. Gordon will loan these materials to responsible persons to help them get their systems up and running. All loaned materials must be returned. The Club nor Gordon have any reproduction facilities and cannot make copies of library materials. No copies are or will be made by the library.

If you have programs or other material that will be useful to fellow hobbyists, why not provide a copy or two to Gordon. Don't forget to provide documentation explaining your programs. Additionally, send information about your donation to the Newsletter.

Gordon French (415) 325-4209 7:00 to 9:00 P.M.

BOOK REVIEW - AN INTRODUCTION TO MICROCOMPUTERS
Adam Osborne and Associates, Inc.

Until recently when asked to recommend a book on microcomputers, I could not. But now there is an outstanding book dealing with the whole range of micro-computers. My first flip through this book pointed out what appeared to be a rather shallow approach (but I paid the $7.50 for it). However, on a complete reading for this review, I can say that Osborne has done a "standing ovation" job. It is an education for the novice, a handbook for the user (hobbyist or pro), and a reference for the "know-it-all."

The first good sign is the lack of manufacturing technologies (we just want to use the chips) and the use of a "general microcomputer" rather than "A" manufactures chip. The book is well organized and printed in such a manner that can only be an aid to the reader - boldface and light face type with subject matter in boxes at the right side of the page. A few pages on what a microcomputer is (Chapter 1), a few more on basic logic (Chapter 2), a few more on basic computer terms and operations (Chapter 3), and then into the CPU. Chapter 4 designs a CPU chip - what it is and how it works. Chapter 5 is all about the additional logic required - memory, interrupt handling, DMA, serial I/O, and real time logic. Chapter 6 (109 pages) is worth at least as many bucks in the cost of the book. It covers programming completely, going from basic information all the way to developing an instruction set for the "general microcomputer." Along the way addressing modes, page concept, sub-routines, branching, skipping, the stack, and interrupts are well covered. The summary of the "general instruction set" is put into table form and classified as to type of instructions. Which is used in Chapter 7 - Some Real Microcomputers - to classify the instructions for the several micro-processor chips covered. No comparison between chips is made but each is compared to the "general microcomputer" developed in the preceding chapters. Each chip covered has a summary of its instruction set - Intel could do well in using the one for the 8080, it is the best one around for it. Chapter 8 polishes off the apple with some guidelines to follow when selecting a micro-compressor chip.

Buy this book, READ IT, and know that you have done better than spending hundreds of dollars on a manufacturers design class.

Ray Boaz

ASCII KEYBOARD HEXADECIMAL LOADER – Jim Brick

This program allows one to key Hex characters directly into memory on an
ALTAIR or IMSAI machine (actually, any 8080). Each word (Hex digit pair)
is echoed in LEDs (front panel LEDs on IMSAI or your own design on the
ALTAIR). Backspace capability is provided. This program was written to
work with a cheap SWTP keyboard hooked directly to a parallel I/P port. The
address portion of the first instruction is changed to point to where loading
is to begin.

```
                     0004    ;       ASCII KEYBOARD HEXADECIMAL LOADER
                     0005    ;       WITH BACKSPACE AND ECHO (CANCEL KEY = BACKSPACE)
                     0006    ;       FOR LEDS WITH INVERTERS, CHANGE THE 2 'CMA'
                     0007    ;       INSTRUCTIONS TO NOP'S.
                     0008    ;
                     0009    ;       BY JIM BRICK
                     0010    ;
          00 FE      0011    INPUT   EQU     0FEH            ;INPUT PORT
          00 FF      0012    OUTPUT  EQU     0FFH            ;OUTPUT PORT
          00 30      0013    CANCEL  EQU     030H            ;KEYBOARD CANCEL CODE (SHIFTED)
                     0014    ;
                     0015            ORG     0400H           ;
0400 21 00 00        0016    HEXLDR: LXI     H,0000          ;LOAD ADDRESS (CHANGE TO SUIT)
0403 31 00 10        0017    BEGIN:  LXI     SP,1000H        ;INITIALIZE STACK POINTER
0406 CD 1E 04        0018    INLP:   CALL    READ            ;GO READ KEYBOARD
0409 07              0019            RLC                     ;SWAP LEFT
040A 07              0020            RLC                     ;   4 BITS
040B 07              0021            RLC                     ;      WITH RIGHT 4
040C E6 F0           0022            ANI     0F0H            ;KEEP ONLY LEFT 4 BITS
040E 77              0023            MOV     M,A             ;SAVE IN MEMORY
040F CD 1E 04        0024            CALL    READ            ;GO READ KEYBOARD
0412 1F              0025            RAR                     ;RESTORE RIGHT 4 BITS
0413 E6 0F           0026            ANI     0FH             ;KEEP ONLY RIGHT 4 BITS
0415 B6              0027            ORA     M               ;COMPLETE 8 BIT WORD
0416 77              0028            MOV     M,A             ;   INTO MEMORY
0417 2F              0029            CMA                     ;COMPLEMENT AC FOR IMSAI LEDS
0418 D3 FF           0030            OUT     OUTPUT          ;ECHO WORD IN LEDS
041A 23              0031            INX     H               ;NEXT MEMORY LOCATION
041B C3 06 04        0032            JMP     INLP            ;GO GET NEXT WORD
041E DB FE           0033    READ:   IN      INPUT           ;READ KEYBOARD
0420 07              0034            RLC                     ;'KP' BIT INTO CARRY
0421 D2 1E 04        0035            JNC     READ            ;LOOP IF 'KP' LOW (KEY STILL DOWN)
0424 DB FE           0036    BITS:   IN      INPUT           ;'KP' HIGH, GET NEXT CHARACTER
0426 07              0037            RLC                     ;'KP' INTO CARRY
0427 DA 24 04        0038            JC      BITS            ;LOOP IF 'KP' HI (KEY NOT PRESSED)
042A 47              0039            MOV     B,A             ;SAVE AC
042B E6 80           0040            ANI     080H            ;NUMERIC?
042D 78              0041            MOV     A,B             ;RESTORE AC
042E CA 35 04        0042            JZ      TCAN            ;OK IF NUMERIC
0431 D6 02           0043            SUI     02              ;-1 (SHIFTED)
0433 C6 14           0044            ADI     014H            ;MAP TO A-F
0435 FE 30           0045    TCAN:   CPI     CANCEL          ;PRESSED KEY = CANCEL?
0437 C0              0046            RNZ                     ;NO IF .NZ. ,RETURN
0438 2B              0047            DCX     H               ;DECREMENT MEMORY POINTER
0439 7E              0048            MOV     A,M             ;MEMORY INTO AC
043A 2F              0049            CMA                     ;COMPLEMENT AC FOR IMSAI LEDS
043B D3 FF           0050            OUT     OUTPUT          ;ECHO IN LEDS
043D C3 03 04        0051            JMP     BEGIN           ;GET NEXT CHARACTER
                     0052            END                     ;
```

OBJECT CODE (HEX)

```
0400     2100    0031    0010    CD1E    0407    0707    E6F0    77CD
0410     1E04    1FE6    0FB6    772F    D3FF    23C3    0604    DBFE
0420     07D2    1E04    DBFE    07DA    2404    47E6    8078    CA35
0430     04D6    02C6    14FE    30C0    2B7E    2FD3    FFC3    0304
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DATA FILE

00 000 110

TELETYPE EQUIPMENT

Teletype equipment is available locally to the computer hobbyist.
Other sources are probably available but have not come to our
attention. If your favorite supplier has been overlooked, please
send data for a future newsletter.

- CALL COMPUTER
  1961 Old Middlefield
  Mountain View, CA 94043
  Rental/Lease Terminals (415) 964-5331

- DATA TERMINALS COMMUNICATIONS
  1190 Dell Avenue
  Campbell, CA 95008 (408) 378-1112

  KSR33s start at $600 for rebuilt, as new, machines.
  10-15% off for HCC members (standard equipment
  only). Contact B. J. Worley at extension 20.

- SOLID STATE MUSIC
  2102A Walsh Avenue
  Santa Clara, CA 95050 (408) 246-2707

  TYMSHARE MODEL 200 (ASR33 with EIA interface installed
  and flourescent lamp for copy reading) rebuilt like new,
  guaranteed 90 days $750.00. Acoustic coupler and modem
  available, TYMSHARE 900-1 guaranteed 90 days, $75.

- WORLDCOM INC.
  1240 Mt. View-Alviso Rd., Suite E
  Sunnyvale, CA 94086 (408) 734-1560

  ASR33 and KSR33 terminals for sale and lease. Full
  maintenance available. Available for sale are KSR33s
  $500 and ASR33s $900-$1,000. Terminals lease from
  $45 per month and couplers lease from $15 per month.
  Other lines available on request. Contact Joe Gaynor.

NOTE - All prices listed are approximate and subject to change
without notice.

BULLETIN BOARD

HELP - Need direct contact with RGS-008A system owner who has his up - working and knows program entry process including: Cassette, keyboard, TTY interfaces (at least), Would like TVT-1 program for interface as well. Contact Gerald McKee, Box 992, Okmulgee, OK 74447. (918) 756-2978.

MULTIPLE PURCHASE OF AMI PROTOTYPE EVALUATION BOARDS - The AMI board reported on in this issue is being sold to groups of 25 at $142.00 (cost of board - tax - $1.00 expense fee). Included in this sale is: the PC board; 1-6800; 4-6810 RAM; 1-6820 PIA; 2-6830 ROM (or AMI equivalent); 1-6850 ACIA; complete documentation - users manual, parts list, placement chart, and ROM listing. All other parts must be purchased by buyer. Contact Ray Boaz (415) 494-7400 Ext. 5855, 9-4 Mon-Fri.

SCM EQUIPMENT - SASE puts you on roster for buy/sell/swap. W. J. Schenker, M.D., 2086 Essenay, Walnut Creek, CA 94596 (415) 687-8804.

MIKE 2 INFORMATION PACKET - Packet number one is now available for delivery. The price is $5 and this is a must item for all MIKE 2 owners. Several copies have been purchased by owners of other 8008 based systems and the over 60 pages of software listings should be useful to them with appropriate changes in the I/O.

The real hope is that this info packet will provide the impetus for the formation of an active national MIKE user organization. Plans have been made to send out a roster of known MIKE owners to all those that I have been able to locate. James W. Farschon, 3949 Mt. Everest Blvd., San Diego, CA 92111.

TRY COMPUTER GAMES - A wide selection of games suitable for use with elementary and high school curricula. Players find themselves challenged to guess the computer's secret word or secret number, where the hints are given in code; they can try to unscramble a list of numbers, beat the Tax-man, or find the moving Cricket. There are simulation games where players try to land a spaceship without crashing, manage the resources of a country, or direct the operations of a small business. Community Computer Center, 1919 Menalto Ave., Menlo Park, CA 94025. (415) 326-4444.

ACOUSTIC COUPLER - GTE acoustic couplers (not a modem) with amplifier and EIA connector $15. Solid State Music, 2102A Walsh Ave., Santa Clara, CA. 95050 (408) 246-2707.

WRITE FOR FLYER - Premier offering to computer enthusiasts. Parts, IC's, keyboards, cassette board, etc. Sargent's Dist. Co., 10268 Rosecrans, Bellflower, CA. 90706.

COMPANY WANTS HOBBYIST INPUTS - A small company is interested in supplying microcomputer systems and peripherals to the hobbyists, small business, and educational user. They need suggestions on what types of equipment or software, especially novel items, that would be used. Write with your suggestions and ask to be placed on mailing list. MinTerm Associates, Box 268, Bedford, Mass. 01730.

Check items about which you would like further information:
Concerning the San Francisco Bay Region ACM Chapters [PL* = 8] :
( )1   Please forward a copy of *San Francisco Bay Region ACM Activities*

I have read the above publication, but would like still more info concerning:
( )2   Peninsula ACM Chapter activities in general
( )3   Golden Gate ACM Chapter activities in general
( )4   Scheduling & arrangements for monthly speakers & meetings
( )5   Formal seminars & tutorials organized or sponsored by the Chapters
( )6   Rotating loan fund programs for students at Stanford & De Anza
( )7   Youth groups & youth activities conducted by the Chapters
( )8   The Computer Exhibit
( )9   The monthly publication, the *Bit Dropper*
( )10   Other publications of the Chapters
( )11   Sponsorship of publications
( )12   Chapter representatives in companies & institutions
( )13   Scheduling and arrangements for facilities for activities
( )14   Membership drive activities
( )15   Member & subscriber data-base maintenance
( )16   Publicity arrangements for forthcoming events
( )17   Public relations & Press laison
( )18   Executive Council organization, meetings & activities
( )19   By-Laws & elections for the Chapters
( )20   Chapter hospitality activities
( )21   Peninsula SIGPLAN Chapter (Programming Languages)
( )22   Peninsula SIGMICRO Chapter (Microprogramming & Microprocessors)
( )23   Golden Gate SICDOC Chapter (Systems Documentation)
( )24   Golden Gate SIGBDP Chapter (Business Data Processing)

Check items about which you wish further information. We will forward
your request to them:
Concerning the national ACM [PL* = 6] :
( )25   **National ACM activities & membership**
( )26   Institution & corporate affiliation
( )27   Regional & local ACM groups, nationwide
( )28   Pacific Regional Representative
( )29   ACM ombudsman program
( )30   National ACM Constitution & By-Laws
( )31   All national SIG's & SIC's (Special Interest Groups & Committees)
( )32   National ACM SIGPLAN activities & publications
( )33   National ACM SIGMICRO activities & publications
( )34   National ACM SICDOC activities & publications
( )35   National ACM SIGBDP activities & Publications
Concerning *other computer-related professional* organizations having *local*
groups and activities [PL* = 6] :
( )36   ASM (Association for Systems Management)
( )37   ATSU (Association for Time Sharing Users)
( )38   DPMA (Data Processing Management Association)
( )39   FORTRAN Language Development Group
( )40   IEEE Computer Society
( )41   IEEE (Institute of Electrical & Electronics Engineers)
Concerning *other computer-related professional* organizations [PL* = 6] :
( )42   ACL (Association for Computational Linguistics)
( )43   AEDS (Association for Education Data Systems)
( )44   AFIPS (American Federation of Information Processing Societies)
( )45   BCS (British Computer Society)
( )46   SCS (Society for Computer Simulation)
( )47   **SID (Society for Information Display)**
Other professional and *standards* organizations of possible interest [PL* = 5] :
( )48   AMS (American Mathematical Society)
( )49   ANSI (American National Standards Institute)
( )50   ASA (American Statistical Association)
( )51   CMC (California Mathematics Council)
( )52   MAA (Mathematical Association of America)
( )53   NBS (National Bureau of Standards)
( )54   NCTM (National Council of Teachers of Mathematics)
( )55   NTIS (National Technical Information Service)
( )56   SIAM (Society for Industrial & Applied Mathematics)
Major *educational institutions* in the San Francisco Bay region, offering programs
of possible interest to computer and information processing professionals [PL* = 4] :
( )57   De Anza Junior College, Extension & Evening Programs
( )58   San Jose State University
( )59   Stanford University, Digital Systems Lab & Electrical Engineering
( )60   Stanford University, Computer Science
( )61   U of Calif. at Berkeley, EE and Computer Science
( )62   U of Calif. at Berkeley, Extension Division
( )63   U of Calif. at San Francisco, Medical Information Sciences Program
( )64   University of Calif. at Santa Cruz, Computer Science
( )65   University of Calif. at Santa Cruz, Summer Programs
( )66   University of San Francisco, Computer Science
( )67   University of Santa Clara, Electrical Engineering & Computer Science

Check local Chapters' activities with which you might be
interested in assisting.

Monthly ACM Chapters' speakers:
( )1   Locating speakers, obtaining abstracts, etc.
( )2   Serving as a speaker
Tutorials & Seminars:
( )3   Organization and administration
( )4   Teaching tutorials and leading seminars
Youth Groups:
( )5   Organization, administration, providing facilities, etc.
( )6   Sponsorship, guidance, and assistance
Computer Exhibit:
( )7   Organization, administration and transportation
( )8   Repair, up-grading, and maintenance
The *Bit Dropper:*
( )9   Writing articles
( )10   Editing, copy preparation, paste-up, etc.
( )11   Printing
( )12   Collating, folding, stapling
( )13   Addressing, bundling by ZIP code
( )14   Transportation, mailing
( )15   Other publications: Suggestions
( )16   Providing financial or printing-facility support
( )17   Company or institution representative
Facilities for forthcoming activities:
( )18   Arranging and scheduling
( )19   Providing such facilities
Publicity and Public Relations:
( )20   Prepare handbills, posters, news releases, etc.
( )21   Distribute such printed publicity materials
( )22   Post handbills and posters around your organization
( )23   Initiate and maintain PR and publicity contacts
Membership Drive:
( )24   Locate and obtain mailing lists and labels
( )25   Process such lists and label-sets (manually & via computer)
( )26   Follow-up on requests for membership/subscription information
( )27   Follow-up on previous members/subscribers who do not renew
Membership/Subscription data-base:
( )28   Design, implement, and up-grade the system
( )29   Data entry
( )30   Data verification and correction
( )31   Data updating, changes of address, etc.
( )32   Prepare mailing labels, reports, summaries, etc.
SIG/SIC activities - Group(s) you may assist:

( )33 SIGPLAN	( )38 Tutorials & seminars
( )34 SIGMICRO	( )39 Publications
( )35 SICDOC	( )40 Facilities arrangements
( )36 SIGBDP	( )41 Publicity
( )37 Monthly SIG/SIC speakers	( )42 Memberships & subs.

Non-profit computer-related Bay region *organizations* [PL* = 3] :
( )68   CCC (Community Computer Center)
( )69   HCC (Homebrew Computer Club)
( )70   **PATCA** (Professional & Technical Consultants Assoc.)
( )71   **PCC (Peoples Computer Company)**

Computer-related *trade magazines* (M) and *newspapers* (N) [PL* = 2] :
Note: Unless marked "$", subs are free to qualified professionals.
( )72   Byte (computer hobbyists) ($M)
( )73   Computer Decisions (M)
( )74   Computer Design (M)
( )75   Computerworld ($N)
( )76   Datamation (M)
( )77   Digital Design (M)
( )78   EDN (M)
( )79   Electro-Mechanical Design (M)
( )80   Electronics ($M)
( )81   Electronics Design (M)
( )82   Electronics Engineering Times (N)
( )83   Electronic Products (M)
( )84   Infosystems (M)
( )85   Minicomputer News ($N)
( )86   Modern Data (M)
( )87   Northern Calif. Electronics News ($N)
( )88   PCC ($N)
( )89   R/D (M)

San Francisco Bay Region ACM / SIG / SIC Chapters   **MEMBERSHIP & SUBSCRIPTION**   Application and Information Request Form

— —

NAME: ☐ correct in the label   last name, other names [   ]   *PLEASE PRINT!*

DIRECT MAIL TO: ☐ work   ☐ residence   *Beware!* Some companies refuse to accept or distribute 3rd Class mail.

WORK: job/title/position/etc. [   ]

☐ work address is correct on the label

organization [   ]
(optional) secondary internal address
main mailing address (street or P.O.Box) [   ]   PL* (1-8) [   ]
city, state & ZIP code [ZIP   ]

PLEASE PRINT!

personal phone (area, number, extension) [AREA   NUMBER   EXTENSION]   PL* (1-8) [   ]

message phone (area, number, extension) [AREA   NUMBER   EXTENSION]   PL* (1-8) [   ]

RESIDENCE:

home mailing address (street or P. O. Box) [   ]

☐ work address is correct on the label.

city, state & ZIP code [ZIP   ]   PL* (1-8) [   ]

residence phone (area & number) [AREA   NUMBER]   PL* (1-8) [   ]

RECOMMENDED BY: (optional) [   ]

FEES: **MEMBERSHIP** in a local ACM Chapter (*includes* subscription to the *Bit Dropper*)
Requires membership in national ACM.   ☐ National ACM number is on the label.
Regular membership - Give national ACM number, or date by which you expect to join:
or
Student membership - Requires a faculty
  signature & name of institution: ————————————————

☐ Peninsula Chapter   **OFFICE USE:**
or
☐ Golden Gate Chapter

☐ $5.00/year (regular)
☐ $3.00/year (student)

SUBSCRIPTIONS (do *not* require membership in *any* organization, ACM nor SIG/SIC)
SIGBDP (Special Interest Group on Business Data Processing), notices via the *Bit Dropper*
SICDOC News (Special Interest Committee on Systems Documentation)
SIGMICRO Newsletter (Special Interest Group on Micropgoramming & microprocessors)
SIGPLAN Notices (Special Interest Group on Programming Languages & translators)

SIGBDP   ☐ no charge
SICDOC   ☐ $2.00/year
SIGMICRO ☐ $2.00/year
SIGPLAN ☐ $2.00/year

The Bit Dropper (this subscription offered primarily for nonmembers & institutions;
  membership, above, *includes* a *Bit Dropper* subscription)

Bit Dropper ☐ $6.00/year

MAIL THIS FORM TO:
Peninsula ACM, P. O. Box 60355, Sunnyvale, CA 94088   (or)
Golden Gate ACM, P. O. Box 26044, San Francisco, CA 94126.

total fees: ————— enclosed
Make checks payable to "Bay Area ACM".
Allow 30-45 days for first delivery and address changes.

NOTE: Publications are not forwarded to new addresses. They are returned, postage due. Please inform us of changes of address, immediately.

*— PL = PRIVACY LOCK:** By inserting a "key" between 1 and 8 in any "lock", you may control the Chapters' release of the associated personal
     information. If you do not insert a key, then the Chapter will insert a 1. Each lower-valued key includes all higher values.
     8—Chapter officers and members with an explicit "need to know."   4—Nonprofit Bay Area educational institutions.
     7—A (possible) Bay Region ACM Chapters Membership Directory.   3—Nonprofit computer-related groups.
     6—Other *computer-related professional* organizations.   2—Computer-related trade publications.
     5—Other *professional* organizations.   1—Anyone approved for release by Exec. Council.