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## IN THIS ISSUE

## EDITORIAL

Please notice the improvement in the quality of this sonth's issue of the Newaletter. The professional duplication of this month's issue was due to the generosity of JACG's long-time supporter (and long-time advertiser in our Nevsletter) GEMIMI EMTERPRISES of Cedar Knolls. GEMIHI underurote the cost of duplication. A very lagge "Thank you" for their timely assistance in our "hours of need".

As to the club treasury, updated reports vill be found in this issue, which indicate that, although the club lost considerable reserve over the past year, our financial position is iaproving, and it would appear only a matter of a fev months (MAXIMH) before printed issues of the Newsletter again thecone a reality! I think that the ney club policy of requiring a Treasurer's Report in every issue of the Newsletter will go a long way in preventing the "near-disaster" of last month from ever or ving again.

I recently peceived a letter from Len Labriola relative to the ST litrary and a perceived lack of eaphasis on it by the Executive Connittee. Well, 1 think that Charlie Miller's article in this issue goes a long way in dispelling concerns in that area. ST ownership within the JACE is groving, and as it does, so will weeting content, library content, and Newsletter content! of course, all such content (either or 16 bit) is predicated on the cooperation and involvenent of the nembership; vithout contribution there can be NO content!


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# IN STOCK－ATARINSTTSQETHAREIN STOCK <br> TIMATS RIGHT IN STOCK－IF WE FAIL TO HAUE IT FGR YOU： IUST AAY FOR IT IWO WELL SHIP IT TO YOU FーRーEーE！！？ 






## A FEW WORDS ABOUT THE ST LIBRARY

Charlie Miller-JACs

Last month was the first time that ve saw a "Disk of the Month" sale offered froi the ST library. Well, if you liked it, you will be glad to hear that it will be a uonthly feature of the ST library just as it is with the 8-bit portion of the library. So each month you can look forvard to being able to purchase a disk for $\$ 3.00$ rather than the normal 55.00 . To assist in this project, I plan subuit a fev lines to the neusletter each month and inform you as to what the "Disk of the Month" will be for the current and upconing zonths. I may also offer some information here that I think asy apply to the ST library. I aay just offer some opinions of ay oun if not requested to be quit!

This month the "Disk of the Month" special will be 'isk t25. This disk features ST Writer version 1.70 uhich Was the latest version at the time 1 dounloaded it and entered it into the library. You will also find the utility ARC. TTP and it's DOC file. I thought this would be handy to include since it is the "Official" compression utility of Comp-u-serve nov. If you have any questions as to what $5 T$ Writer 1.70 offers over the original take a peek in the "Winter 1986" is5ue of 'Start' magazine at an article about version 1.50 which should give you an idea as to where 1.70 is heading, Bet you are saying "Hey, that vas the Disk of the Month last month" and you would be right but l'n not giving out cigars. The reason it is the "Disk of the Month' again is that 1 wasn't avare that there would be a disk of the month until $I$ shoved up last month and was informed of the practice. So I decided that for those who got caught off guard you get another chance this month.

April's 'Disk of the Month' vill be the CP/K Enulator that was released to the public domain by Atari. These files are all cospressed but again you will find the ARC.TPP progran and it's Docs for your conventence. This emulator is a bit tricky but I managed to get it to work and there is included some text to help you with it. If the emulator sells vell and if interest is shoun for it, we have access to a large CP/M library and would consider putting some of these programs on $31 / 2$ inch disks and including then in the library.

I got advance notice from Dave Noyes the newsletter editor of a "letter to the editor" concerning the ST library and I guess the SI SIG in general. First I would have to say the obvious that the ST SIG is only a portion of the menbership and that if ST ouners expect the STs to
get their fair share of exposure then a fair share of sT ouners will have to participate. Take a look and see how gany St ouners are on the board or how aany vert villing
ro serve as l6-bit V.P. when asked last month. If you're not part of the solution you sust be part of the problen. But although this explanation is heard in every club for just about every ailment, it does have some merit so take a good look and consider if there is anything or way that you can contribute.

In the future I hope to be introducing nore disks to the library that I hope will be of interest to you. One thing we sete to be lacking in the library is games, I believe I have some that vill enable se to introduce a disk of ganes in the near future. I also hope to offer a disk of .ACC files you may select for installation upon bootup. Someone asked ae last month about a VTIOO emulator, I now have one which will be available in the library, I aluays liked to gee nev pictures in Neo or Degas forsat and believe I have some fresh entries to introduce to you. I hope I can keep up and find new naterial to hold your interest, but in the meantine take a look and see uhat you can contribute also so we can all enjoy our STs and JACG all the more.

## TREASURER'S REPORT REVISED

S. Vandenberg -Treasurar - JACG

STARTING BALAMCE $1 / 1 / 86 \quad 35711.00$
IMCDME


| EXPENGES |  |
| :--- | ---: |
| Nevsletter Print. | 8962.76 |
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| Travel | 746.20 |
| Hiscellaneous | 30.00 |
|  | 341.66 |

TOTAL EXPENSE 16713.61
Ending balance 12/31/86 $\$ 859.39$

I recently purchased RUBBER STAMP by X-LENT SOFTMARE, and have found it a dandy tool for naking address and return-address labels. Standard PRINT SHOP graphics, graphics made especially for RUBBER STAFP, or graphics which can be converted to same, may be used, along vith text of varying fonts, on the labels. There are editors for both text and graphics to enable one to modify, or if artistic, to generate one's oun text and graphics. I vould consider ayself a rank amateur in my skills with it at present - but this has neither dampened my enthusiasu, nor prevented ie from generating some very decent labels. Perhaps when I becone more acquainted vith RUBBER STAMP I will "deno" it for the club.

As far as ease to use, I have found it better to use the manual infrequently, as it tends to be somevhat confusing to ne. Experimenting seemed to generate sore success than trying to follow the manual.

In typical Noyes fashion - less than three weeeks after I purchased RUBBER STAMP, a public-donain labelling progran utilizing PRINT SHOP graphics and text fonts appeared in the April issue of ANTIC. Al though it doesn't have all the 'bells and whistles' that RUBBER STanf does it has the RIEHT price!

Cمsing- THE BETIER BBS

Presenting the most powertul bulletin board over writen for the Atari s-bit computer. The Carina B8S is absolutely the most expandable buliedin' board for your Atarl. th has features that you will find on most bulletin boards plus many other features that make telecommunications easier, more fun, andis lot less monotonous.

## WHY IS THIS BEs SO MUCH BETTER?

The power of this system is mostly attributed to the Modem Operating: Environment. Ht makes possible tha ability to run BASIC programs WITH. LITTLE OR NO MODIFICATION on your bulietin board. it also allows you as the Systems Operator (SysOp) of tha Carina BES to drop into BASIC ONLINE at any time and make modifications to your program from across the country if need be. No other Atari buHetin board has this feature.

## YOU MEAN I CAN CHAMOE THE PHOQRAMST

Yes, the Modem Operating Environment aliminates the need to perform modern optrations. The bulletin board is written in understandable BASIC and is, in fact, designed with moditication in mind. The Carina B8S is aiso modut baged. This mealns you are no tonger restricted by the memory of your computer, but rather by the amount of on-line storage on your diak drives and your ramdisk. The Carina BES itself is not 1 but 7 separate programs. It is a massive system that can be expended beyond: your imagination.

## WHAT PROGRAMS COME WITH ITT

The modules included are: The waitcall modute which performs user logon/logoff functions, the buthetin board itself which controls all message base and databases, the file-transter mocule with $X$-Modem upiond/ downioad transfer protocol, the message editor (with extensive word processor-like functions), the SysOp commands with the most powertul functions available for any bulletin board on-line. the sub-commands module which contains miscellaneous extra functions, and an on-line trivia game. The Carina BES has aptotal of 44 commands inctuding 17 SysOp functions. It is easy to add any other modules of your own, plus there is plenty of room to add any other functions in different modules.

## DOES THE CARIMA BES USE ONE-LETTEA COMMANDS?

No; the Carina $88 S$ uses word commands as opposed to single letters. For example, typing "Read New" will'show you all new messages since your last call. If you prefer just typing one letter, that can be done also. Each command has a macro key that will type the words for you. Typing Ctri-R Ctri-N will duplicate the above input you can also stack more than one command on a line. It is more powertul and a lot easier.

## WHAT EOUIPMENT DO I NEED?

To run the Carina BBS youiwill need an Azari 8-bit computer, at least 1 drive, and a modem: A printer can also be used. The Carina BBS will work with most DOS's and many differemt interfaces and moderns. The Carine 88S is known to work with the Atari 850 intertace, the ATR 8000, the Hayes Simantmodem, the MPP $1000 \mathrm{C} / E$ modems, and the Q -Modem. It also supports 1200 and 2400 baud.

## WHAT ELSE CAN IT DO?

- Ascil and/or Atascil modes supported
- Virtually unlimited message bases and databases
- Self-compacting message bases eliminating the need for constant maintenance:
- Automatic validation and access-control configuration allowing the Carina bes to run by itself
- Allows editing of previously posted messages
- True Electronic-MaH
- And MUCH more

There really isn't enough room to tell you all that the Carina B8S can do. The best way to find out what it can do is to call 305-793-2975 for an online demonstration or write for more information.
HOW CAN I GET ONE?
To order, send check or money order in the amount of $\$ 69.95$ (tax and shipping included) to:

Carina Software Systems
12390 57th Road North
Royal Palm Geach: FL. 3341 t

## PRESIDENTIAL PONDERINGB

Joe Kennedy - JaCE

Well, velcome to the sooner than expected last edition of Presidential Ponderings. Those of you who read this colum (ther: are such people I hope) know that ['ll be moving to Gerasay for three years for a new assignaent with the company that $I$ work for. Since the treasury can't stand the drain of monthly round-trip tickets from Duesseldorf, I as tendering ay resignation as President effective at the March meeting hovever $I$ will be continuing as a member of the JACG. With that in wind I hope you'll allow a little reniniscing, I joined the jaCG a little over four years ago. lumediately the benefits of menbership were evident in the form of the information fron the meetings and the disk library everything in those days was for the 8 -bit machines. Yes I got a lot out of the JACE: just by attending the neetings. But I felt the need to do something wore than sit and vatch at the meetings. Initially it was upiting for the newsletter. But what was done is not the point. The point is that you get so much more out of the JACB when you put something into it that I can't conceive of everybody not wanting to do sonething for the group. Furthef (being naturally selfish) I vould hope that everyone would get involved in one way or another so that the JACE prospers and grows during my stay in Germany for I want the JACG to be here when I return. Right now is a good time to get involved, particularly for the ney l6-bit nembers or for the 8 -bit menbers who still know the advantages of the best hose computers ever made. So get involvad - GIVE A BIT!!!

With the new offices of Vice-President 8-bit and l6-bit, we should be going along way towards making our group stronger with a bright future, After all both are excellent wachines and both have long useful futures and should exist together with enthusiasts for both models. Another harbringer of a good future is the revised Treasurer's report that you'll find in this issue. As you can see we still spent sore than we took in last year but the figures are just little better and the cash on hand total is uuch better. But none the less fiscal responsibility in the fore of the measures discussed in last month's neusletter is essential for the continued grouth of the JACE.

Grouth is only possible uith the efforts of good people. I eust say that we have some very good people working to aake the JACE better. Harder vorkers than what we have would be hard to find. Bob Mulhearn keeps the menbership rolls, handles the distribution of the neusletter, and manages all the exchange newsletters from the other groups. Dave Noyes puts together the newsletter during visits at home between jaunts around the world.

Sam Cory spends more time on the disk library than most people have vaking hours. Doug Van Hook, Brett Calligari and Charles Miller all work on the disk library. Gapy Gorski, tho just wanted to find out a little about his computer, is our advertising manager, sales manager at the meetings and has the JACE BBS in his home. Toa Pazel, who vill be the President after the March metting, has witten many prograns for the JACB including the title screen for the library disks. Shree Vandenberg has toiled as our Treasuret. Ton Pluck has worked as the Progran Chairnan and contributed heavily to the newsletter. Don forbes, Ken Pietrucha and wany others contribute regularly to the neusletter. To all of these great people, and those that I should have mentioned but overlooked, thank you for helping to wake the JACG the fantastic group that it is. This is a long list but it is a finite list. So don't let these people do it all. Get involved and help out.

A little current business - the Trenton Computer Festival is scheduled for April 11-12. If anyone has a desire to present a paper, please contact Manuel Ayres at 201-968-6112. The Atari Fair is schedulad for the weekend of Harch 14-15. If you're reading this at the neeting, that's good. You can go to the Hilton Hotel in Allentown, PA this afternoon or tomorrou for this fair.

Just a last thank you for the opportunity to have served as your President even if it has been for an ablureviated term.

## TREASURER'S REPORT fegruary 1987

S. Vandenberg - Treasurer - JACG

Starting allance $2 / \mathrm{t} / \mathrm{B7}$ \$1231.37
INEOHE 830.00
EXPENSES 26.45
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NB. January's balances show in the february 1987 JACG Nevsletter have been revised and should be:

INCDME $\$ 1660.57$
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# ANNOUNCING <br> THE END OF READING as we know it 

In our February issue
Chantal interviews Kristofferson, you interview the President \& much much more...


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## ST Version now available

## Packing Strings in FORTH By Robert Meyers

Handling strings in FORTH can be maddening, I speak from experience. I have made repeated attenpts at clearing PAD (the temporary buffer), uriting to it, sending the contents to the disk and keeping track of the string on the disk. Even when it works, I can't reaenber how to do it the next tine. The hallmark of FORTH is simplicity, but it can be complicated at tines. There is a vay, however, if go back to the beginning. In my case, this means rereading the standard books before losing the thread or dozing off, e.g. Brodie, Winfield and, a nev one on FORTH-83, Mastering FDRTH, by Anderson and Tracy.

FORTh stores characters in three basic vays: (1) at PAD (the temporary buffer), (2) as ASCII numbers in variable arrays or (3) in sequences of bytes on disk. The least permanent of these is PAD which is written ovar constantly. Variables are wore permanent since they are -eserved spaces in menory and are not uritten over. The -osst pernanent, hovever, is the disk itself. This is where you would want to store database information. When given an address of one of these three locations, COUNT returns the nunber stored at the original address and, at the second position on the stack, the next address. Thus PAD COUNT vill return the number at $P A D$ and the address of the second byte in the buffer, When given a number n and an address adr, TYPE prints $n$ characters starting at adr. TYPE will print to screen or the printer, if it is open. COUNT TYPE then work in tanden to output text. COUNT gets the length and the starting address of the text and TYPE outputs it. The main problem in putting this together is insuring that the length of the string is in the first byte. That neans that, if we are using PAD to store the text, ve have to find a way of storing the length of the fext in the first byte with the text itself starting in the second.

A string vith the length in the first position is alled "packed" string. The trick is to get the length of the string uhen you inpat it and pack the string, i.e. nove everything over 50 the length can go first. FARTH-83 contains SPAN uhich stores the length of a string as it is input, but fig-FORTH (e.g. Valforth, APX FORTH and the public-donain FORTH available in the library) has no such word.

A word that solves the problen is CPACK. Given a destination addres5, CPACK will do three things: 1. it vaits for up to 80 characters to be input up to a return, 2. it stores the length in the first byter, and 3. it soves the length byte and string to the address. The definition, siaplified from linfield, p. 91, is:

```
: CPACK I dest adr--
    ." >" CR quERY CR ! MORD HERE
    DUP CO I+ ROT SHAP CHOVE;
```

CPACK eliminates the need to clear the string or buffer
before you use it. Since the length of the string is stored in the first byte, you can print the string you input no natter what else is in the string. CPACK also saves the troutle of eliainating trailing blanks. You also don't need a special definition type for string arrays; the normal array type becomes a string array because the length is in the first byte.

To illustrate, try PAD CPACK. The ' $>$ ' vill appear. Type in what you vant; PAD COUNT TYPE will get it back. (For convenience, define GET as COUNT TYPE.) or ve can set up an array. Enter:

## - Variable test 12 allot

This creates an array TEST, initialized to 0 and reserves the following 12 bytes. That neans we have a 13 -byte array with one extra to store the length. (VARIABLE reserves a i6-bit number while allot reserves 8-bit locations-thus a total of 14 bytes.) If we now try TEST CPACK, we can input text to TEST and retrieve it when we wish with TEST GET.

The useful application of CPACK is to store strinqs on disk. The following yords allow you to store a list of grocery itens on disk, then read then to the printer. If you want the iten put on your shopping list, type ' $Y$ ' whan the iten appears. The idea derives for a vell-known BASIC progran (see ABCs of ATARI COMPUTERS; p. 70), but as usual the FQRTh equivalent is more elegant and shorter. The progran is uritten in Valforth.

0 Variable item
161 CONSTANT FIRST-SCREEN
: HHERE?
ITEM 8 16 : 128 /MOD FIRST-SCREEN
4 + BLOCX + UPDATE :
: FILE WHERE? CPACK ;
: FILE F FILE L ITEM + ! ;
: SEEITEMS

- ITEM !

BEGIN WHERE? CDUYT DUP
$0)$ HHILE
OVER ONER TYPE CR

- Y to type *KEY $89=$

IF ON P: 5 SPACES TYPE CR
QFF P: ELSE DROP DROP ENDIF
CR 1 ITEM + ! CR ;

ITEM keeps track of the current item; FIRST-SCREEN is the screen on the disk where the itens are stored; I use 165 since it is usually at the end of the disk out of the way. WHERE? calculates the address of the ites wanted on the disk. Note that the aximue length for each item is 15 bytes: 15 plus 1 for the length to a total of 16 . This is convenient since 16 divides equally into 128 , the size of a block in ValForth. It is too difficult and not worth it to save disk data as one continuous string; when a string you want to save falls at the crease between blocks, you have to save part on one, get the next block, then store
the rest. The last word, SEEITEMS, reads through the items on the disk until it finds one with a length of 0 , i.e. the last one.

Of course; no items are stored on screen 161 when you load the screens. When you first run it, the pointer in
 the next item current. Type FILE+. When the caret appears, enter, say, CaRROTS, then return. Type FILE again and enter the aext iten, say PEAS. Continue until you have input the itens you usually shop for. Later, if you want to add items, run SEEITEMS to the last iten; then use FILEt, SEEITEMS will read the file and ask whether you want a printout or not for each item as it appears on the screen. In this way, you nake your own shopping list of items you need.

The program is not fancy; there is no title or special formatting to give a pleasing display, Like forth itself, it is short and functional - the beauty is in the progran.

As you can set, these techniques can be extended. You can make databases and file card prograns in which you store material directly to disk so you can retrieve it later. It even looks pretty simple once you see how to do it.

## ATARIURITER AND HORDPROCESSING HACROS

Barry R. Weissman - JACs
One of the niceties that $I$ niss when doing wordprocessing with ay ATARI is the convience of HACROs. That is the ability to assign other vords, letters or symbols to a key or series of key strokes. Well never fear, you too can generate eacros for your vordprocessor. I will talk about ATARIMRITER + , but the idea is applicable to any other wordprocessing progran.

ATARIHRITER + has the ability to merge other files into the current file. To do this, just press OPTiOW then the file name and that file is added to your current file.

To create a macro, just create a separate file for any vords, letters or syabols that you need. Store then with a simple file name and recall then with optlon L. To give you an example: I store the codes needed for special printing characters such as bold, italics or underlining. Also, if I an using a vord or phrase many times in a letter, l'll make a nacro file so I won't make any aistakes typing it each tine.

Write a Speech
For the Boss

## by Donald Forbes - JACG

Bass: "I nesd to urite a speech for our marketing convention in Las Vegas next month. Hy brain isn't functioning too vell this morning. Give ae some notes."

The boss knous hou to give orders (that is why he is the boss) but he is not a writer. So that is why you have a jots. What to do?

So you juep on your tive machine and set the tive controls for the year 1943, and the location controls for Library of the Command and General Staff School at Forth Leavenuorth, Kansas. Off the shelf you pick the staff officer's manual Army Field Manual FM 101-3 and turn to the section on the five-paragraph field order. Perhaps this aly give you the structure for the speech your boss vants to make.

What is the five-paragraph field order? The easiest uay to explain it is with a diagran.

So once more you hop back into your time machine and set the time controls for the sumer of 1916, and the location controls for france and the battlefields of Verdun (the scene of the greatest mass slaughter in human history).

Fron the battlefield you pick up one of the standard British Lee-Enfield rifies and exasine the sighting wechanish. The end of the barrel has a rectangular projection that you can see when you peep through the circular opening (adjustable for yardage and windage) in the sight. You have to center the rectangle in the circle and then pull the trigger.

Here is a picture:


You can use the sight to visualize the five-paragraph field order.

The life of the arsy staff officer revolves around planning and preparation. When the general issues an order, it is in the fore of a carefully prepared document in a rigidly defined format. $>$

Paragraph One is dedicated to Intelligence. Paragraph One $A(1, a)$ covers intelligence of the eneny, and we can visualize it as the top half of the circle. Paragraph ane B (1.b) covers infornation of supporting units, represented by the two circle sectors at lover left and lovef right.

Paragraph Two defines the aission of the conmand as a unole: "This batallion vill attack on the unole front to capture Pork Chop hill.' In the diagrac we can represent this paragraph as the rectangle in center of the lover half of the circle.

Paragraph Three is: mission of front line troops, and the top third of our rectangle.

Paragraph Four is: aission of supply troops, and the botton third of our rectangle.

Paragraph Five is: location of the comand post (where to find the general), and the middle third of our rectangle in the diagran.

So now we have the franevork (with its oun memonic) for a speech for our boss for any occasion at any monent in time. Here is a sample speech that covers all the bases.

1. a. We are being clobbered by the competition, who are now offering computers with larger mesories and faster access speeds at lover prices. The governaent has lowered trade barriers 50 that foreign producers are now able to undercut our prices.
2. b. Congress is auare of our plight and is about to give us some needed tax advantages.
3. Bur marketing plan for this year is to bring out innovative softuare that will raise our market share from 8 per cent to 10 per cent.
4. Bur sales staff is gearing up to handie a 20 per cent expansion of our custoner list.
5. Our supply departaent will be able to handle a 20 percent increase in sales.
6. I will be touring our dealer sales offices and can be reached at any tine by calling our home offise number.

Your boss is back in the office. So how did the speech go
ovep at Las Vegas?
BOSS: That was a great speech that I urote. It was the hit of the convention. Now I have to write another one like it for the sumaer convention in Honolulu."

The day before our next meeting will be the second Friday the 13th. this year. We all know that this is suppose to be a bad luck day, but no one can explain why. fusiness loses aillions of dollars when friday falls on the 13th, of the month. Enployees take the day off or just do as little as possible so as to avoid injury. Every year must have one of these days, but can never have sore than three.

Fear of the number 13, or Triskaidekaphobia, is the sost widely heid superstition in the world.

No one in his right aind would ever allow himself to be operated on in operating roon $\$ 13$, so rost hospitals don't have a roon \$ 13.

Nost lagger hotels and office buildings don't have a 13th. floor. If you look at the elevator buttons, you will see they go from 12 directly to 14.

If you travel to the Geneva International Airport, you won't have to worry about arriving at or departing from gate © 13 , there is none. The twenty-four hour clock doesn't have a i3th. hour. It has been replaced with 12A.

In her book, F.D.R. My Boss, Grace Tulley, F.D.R.'s gecretary, points out that he vas afraid of being one of thirteen persons at a table. He would often call her at the last ainute to be the fourteenth person.

A piece of trivia, the source of which I can not find, states that when Princess Margaret was born at Slanis Castle in Scotiand, her birth was not recorded for three days. It was not until another birth occurred which could be recorded as the thirteenth birth, that her's was written down.

The only negative thing 1 can think of is that a jury of tuelve plus the judge nakes thirteen, which is unlusky for some.

If all this talk of the number " 13 " bothers you, then I'd like to help. Reach into your wallet and take out all your dollar bills and send the to we, these bills are loaded with things thirteen at a time.

Start with the pyramid on the back of the bill and you will find it has thirteen steps. On the other side of the bill is an eagle with thirteen stars over his head. If you count the leaves on the branches in his left claw, you will find thirteen leaves while his right claw holds thirteen arrous.

If you survive friday the 13th., and it's easier for you, I'll accept your dollars at the next meeting.


#   <br> NLTW LTW THE REAGL THING WITH AN INSTRLLCTION EADK！！！！ 


 SONGWRITER
RACING DESTRUETIGN
PINBALL CONSTRUCT PEGGAMMON SPY VS SPY 1 ： 2 CONAN
MR DO
PQLE PQSITITN
AGE DF ADVENTIRE ARCHON
ARCHON
CUT \＆PASTE
ONE IN GNE
KORON：S RIFT
PITSTAF II
RESCUE AT FRATACHL
BALLBLAZER
REALM DF IMPDSGIEIL
DRAGONRID GF PERN
EIOOLON
TGUCHDOUN FIOTBALL
JUMFMAN IP
FINANEIAL COOKBOOK
HARD HAT MACK
MAIL ORDER MONSTERS
M．IJ．L．E．
MUROER IN ZUNDEPNUF
SUPER BOLILEEREAGH
PITSTOP
MUSIC CONSTRUCTION
MONIE MAKER

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# Personal Computer System 

## The Only One Megabyte Computer for under



FEATURES:

- Integrated CPU, keyboard, disk drive design.
- 1,048,576 bytes RAM.
- 196,608 bytes ROM.
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- Full-stroke, 94-key intelligent keyboard.
- $31 / 2^{\prime \prime}$ double-sided. double-densiry disk drive. 720 kilobyte storage capacity (formatted).
- Two-button mouse.
- Sound generating capabilities -3 voices from 30 Hz to above audible range.
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- Selectable graphic resolution: $640 \times 400$ monochrome. $640 \times 200 \times 4$ colors. $320 \times 200 \times 16$ colors.
- Midi Iri/Out ports.
- Industy standard parallet interface port.
- RS232C serial modern port.
- Floppy disk port (including controller) for 2nd disk drive.
- Hard disk port.
- ROM cartridge port.
- Mouse and joystick ports.


## TECHNICAL DATA:

- MC68000 microprocessor: 32-bit internai, 16-bit external architecture.
- Clock speed 8 MHz .


## REOUIREMENTS:

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Which Language?
by Donald Forbes - JACB

The hardest choice of any programer is: Which language?

For his nicrocomputer he can choose from any one of a dozen, ranging alphabetically from Assembler at one end to Prolog at the other.

Here is a tabulation of the principal features of ten high-level languages. The ratings are on a scale from 1 to 5 (yery poor-1, poor-2, fair-3, good-4, excellent-5) and the following stands for best-in-category.

| 8 C | C | F | F | 1 | L | n |  | P |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | 0 | 0 | 0 | 1 | 0 | 0 |  | a |
| S | $B$ | 1 | R | 5 | 9 | d |  | 5 |
| I | 0 | $t$ | $T$ | P | 0 | v |  | c |
| C | 1 | h | R |  |  | 1 |  | 1 |
|  |  |  | A |  |  |  |  | 1 |
|  |  |  | N |  |  |  |  |  |
|  |  |  |  |  |  | 2 |  |  |


| Mumerical computations | 4 | 4 | 2 | 2 | 5 |  | 3 | 4 |  | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Character handling | 5* | 5 | 4 | 3 | 2 | 5 | 5 | 4 |  | 3 |
| Data structures | 3 | 5 | 5 | 2 | 3 | 4 | 4 | 5* |  | 1 |
| Control structures | 3 | 5 | 3 | 4 | 3 | 3 | 5 | 5* |  | 2 |
| Console input/output | 5* | 4 | 2 | 3 | 4 | 2 | 4 | 5 |  | 5 |
| File input/output | 4 | 4 | 5 | 3 | 4 | 2 | 2 | 5 |  | 2 |
| Subroutine interface | 2 | 3 | 2 | 3 | 5 | 4 | 4 | 5* |  | 2 |
| Lou-level operations | 3 | 5 | 2 | 5 | 2 | 2 | 2 | 5 |  | 1 |
| User friendliness | 5 | 3 | 3 | 2 | 3 | 4 | 5: | 4 |  | 5 |

Hunerical computation means ability to support applications that do extensive number crunching. FORTRAN, although it is the oldest of these language5; is the clear winner and the overwhelaing favorite of engineers and sathematicians. The losers are COBOL, Forth and LISP.

Character handling has a vinaer in BASIC, with $C_{1}$ LISP and Logo in second place. the loser here is fartrali.

Data structures involves the ability to support records, lists and arrays. The winners are Modula-2 and Pascal, vith $C$ and CDBOL in second place. PILOT, the $\rightarrow$
loser, only supports simple variables and character strings.

Control structures means support for IF-THEN-ELSE, a CASE statement, counted loops, conditional loops, functions and subroutines, and recursion. The winner is Modula-2, with 6 and Pascal in second place: PILDT finishes last.

Console input/output refers to ease of reading and uriting data to the console. BASIC is the clear vinnef. vith LISP and COBOL the losers.

File input/output covers ease of reading and writing data to disk files. COBOL is the clear winner, followed by Module-2. The losers are LISP, Logo and PILOT.

Subroutine interface covers passing data to and from subroutines and functions. Modula-2 is tops; with FORTRAN in second place. BASIC, COBOL and PILOT stand at the botton.

Loy-level operations refers to the ability to hande bits and bytes, needed to interface with the computer harduare such as uriting a driver routine for a serial interface to a moden. $C$ is the winner here (in fact, the暗IX operating systen was uritten in $C$ as were Franework and dBASE III and the PC version of SAS) with forth and Modula-2 in second place. PILOT is the clear loser.

User friendly refers to ease of understanding as well as uriting, compiling and executing a progran. Logo, the vinner, can be taught to children just past the reading age. C and forth are poverful tools in the hands of experts but they give no protection against stupid nistakes and thus can be frustrating to beginners.

These evaluations are all from chapter 13 of a book by computer expert Charles $F$. Taylor who taught computer programing, probability, statistics and inventory theory as a member the faculty of the Naval Postgraduate School. The book (TAB BOBKS, 1984, 360 pages; $\$ 16$ ) is entitied *The Master Handtook of High-Level Hicrocomputer Languages" and shovs you hou to create your own address book in any one of the ten languages. ("What better way to find out which language is best for you?")

## Which language is best?

If you add up the numbers in each one of the coluans you will come up with the folloving scores:

| Modula-2 | 42*) |
| :--- | :--- |
| C | $38 \%$ |


| LOgo | $34 \%$ |
| :--- | :--- |
| FORTRAN | $31 \%$ |
| COBOL | $28 \%$ |
| LISP | 28 |
| fOrth | 27 |
| PILOT | 24 |

What these numbers mean is that, if you vish to pick only one language for a variety of applications; then you should pick one of the top four: Modula-2, C, Pascal or BASIC.

If you wish to specialize, then you have to make a choice.

For business applications, you would choose COBOL, followed by BASIC, C, Modula-2 and FORTRAN.

For scientific applications, you would pick fORTRAN or one of the general purpose languages.
for computer-aided instruction the ranking would be PILOT folloved by LOgo and LISP and BASIC.

Character manipulation choices are C, BASIC, Logof LISP folloued by Pascal and Modula-2 but never fORTRAM.

Byte and bit-tuiddlets would pick $C$ and Modula-2 and Forth.

For sall children, start then on Logo in kindergarten and BASIC in sixth grade.

Artificial intelligence applications begin with either Prolog or LISP.

What does it all mean? You way end up with only one wife or only one husband; but nobody reads only one book. You ay end up speaking nothing but English, but if you progran then perhaps now ay be the time to teach yourself another language.

## Text Effects

by Eli Tonlinson - JACS

Making text look good on the sereen can greatly enthanee a person's iupression of your program. I have written a fey routines that you inight want to try out and add to your own programs. The first routine I have listed will fade a screen in.

100 POKE 710;0:POKE 709,0:POKE 752,1
110 ?CHR 3 (125)
120 POSITION 2,2:?"HI THERE,*
130 FOR $L=0$ TO 14 STEP 2
140 POKE 709,L
150 FOR T=1 TO 24: HEXT T
160 NEXT L
170 END

The pokes in the progran perfora the follouing functions. POKE 710,0 sets the backround color to black. POKE 709,0 sets the character color to black. POKE 752,1 eliminates the cursor. (POKE 752,0 would return the cursor.) The ?CHR\$(125) clears the screen. The actual fade is done in lines 130 to 160 . The first loop inceases the value you will poke to location 709. This will cause the characters to get little brighter each time. The loop at line 150 is just to slow down the fade.

The second routine displays a text line by expanding the line from the center on the screen.

100 DIM As (40), Bs (40)
110 ?CHRS(125):POKE 752,t:A\$="This should look really
nice."
$120 x=20$
130 FOR L=1 TO LEM(A $) / 2$
140 B $\$=A \$(1, L):$ : $\$(\operatorname{LEN}(B \$)+1)=A \$(\operatorname{LEN}(A \$)-L, \operatorname{LEN}(A \$))$
150 POSITION X-L, 10:? $3 \$$
160 NEXT L
170 END

If you would like to experiment with this program, in line 120 the value of $X$ is where the text expands from. I set it to 20 which is the center of the screen. In line 150 , the number 10 in the POSITION $\mathrm{X}-1,10$ is how wany lines down that text vill be displayed.

The last routine I have included displays graphics 2 text on the top of the screen.

100 DL=PEEK(560)+PEEK(561)*256:POKE DL+3,71:POKE $\mathrm{DL}+6,11:$ ? CHR (125)
110 POKE 708, P4:POSITION 5,0:?"HI THERE.* •

In line 100 the POKE 708,14 sets the color of the big text.

With these routines and a little experimenting you can add lots of nice little touches to many text oriented programs.


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ST - SIG January Meeting
by Donald Forbes = JACG

You are trying to keep abreast of the technology and are about to buy an Atari ST at a rock-hottom price. But the weather kept you avay from the January neeting, Here is the rundoun:

Don Ursen, chairman, called the meeting to order at II Ah after some 35 meabers trooped from the Bell Labs auditorius to the spacious lobby.

1. An ST with color monitor was available for demos, thanks to a loan from a vendor.
2. Bulletin board: The nueber is 469-6190.
?. ST Library: Disks art available for $\boldsymbol{t} 5$ each.
3. CURRENT NOTES LIRRARY: A list of 96 disks was distributed. They can be ordered from Current Notes Library, 122 N. Johnson Rd., Sterling VA 22170 for $\$ 4$ eath plus postage ( $\$ 1$ for every 6 disks).
4. GEM: A new varsion of the GEM interface is now available.
5. IBM Emalation: Softuare is now available for IBM emulation, although most existing software is for the 5 $1 / 4$ inch disk. The enulation is sloy, and there is still a problet with graphics. People may hesitate to pay $\$ 300$ for partial i8M emtation capability.
6. DEMD: Three volunteers agreed to stage demos for the 520 (using singlemsided disks) for the next reeting.
J. MEETIMS ST: A motion was nade and approved that the club te asked to purchase a wore capable ST systel for meetings, including the now standard double density disk.
7. SERVICIMG: Dependabie Parts in Chathan vill provide servicing.
8. MEW OISK: Has word processing, graphics, 3 games and 1 tutorial.
9. BASIC: A new fast, structured BASIC called GFA BASIC yas denoted and is available for $\$ 60$. It is comparable to Turbo Basic on the 8 -bit machine.
10. SIMLATION: There is a new simulation game salled Barbary Coast.
11. KIT: A developer's kit can still be obtained from

Atari.
14. THE ATARI ST EXPLORER: An excellent single volume reference to the ST is finally available (John Braga, Kuna) for $\$ 15$.
15. UTILITIES: There vas a deno of a nev library disk containing a randisk with automatic file copying to the ramisk at startup. Commend TOS was also demo' ed.

If you were one of the smart ones who bought Atari stock late last year at $11 \mathrm{~L} / 2$ and then saw it double in price because of cheaper harduare and sore available softuare, you alay uant to attend the ST - SIS meetings to help keep track of your investment.

## FEBRUARY'S MEETING <br> IN BRIEF <br> Reported by Tom Pluck, JACG

The Fehruary neeting was held at Bell Labs in Murray Hill, our normal metting site.

After Bot Mulhearn's 2 \& session, Doug Van Hook demonstrated the next JACG library monthly disk, a new Print Shop disk. It has a total of 49 graphics on it, all which were made by Gernan Atarians. They can be converted to Visualizer format for demos.

Next, Mark Knutsen, our BBS Sysop hooked up to the BBS via model and shoved us what the bulletin board is all about. He showed teginners hou to $\log$ on, and the nore experienced users E-mail and messages.

Afteruards; Shree Vandenberg, our Treasurer demo'd hou to use a Comadore mouse on the Atari 8-bit uachines. It enulates a joystick, 50 any joystick program can be used with it. For the KE's you need a joystick extension cord, which you can get at Radio Shack for \$3.99. For a finale, she showed us Centipede and boy, the mouse speeds things up! The nouse goes for approximately 40 dollars.

Last but not least, Editor Dave Noyes showed , 15 a type-in database that can be found in Analog magazine *42. It vas quick, easy, and free! If you do not need a lot of records, this is for you. it's not Synfilet, but in some vays, it's better. It is also available on JACG library disk 98.

Three lucky people won 2 disks each from the JACG library, and another won an ST magazine. Ghost Hunter was donated for raffle by Computer Systems Consultants. Th-th-th-th-that's all folks!

I vasn't sure about the meaning of CAD so I turned to the dictionary for clarification. I'll share what I found vith you:
cad (kad), n.[(cadet], a man or boy whose behavior is not gentlemenly; ill-mannered fellow.

With that cleared up, I'll begin to reviev our disk of the wonth. 3-1 CAD (DISK 105) - Three Disensional Computer Aided Design. This progran was uritten by Steven J. Ulstad. If is the best public domain CAD prograin I've seen. Anyone considering the purchase of Super 3-0 Plotter II will find this disk a great introduction to CAD.

When the progran is first loaded you will set a velcome screen from Stpzatcte. Thanks to a library exchange between StpzaxCiE and Librarian Saw Cory this disk, and many sore have been added to our library.

The selection senu provides a HELP option, and a CAD30 option. The CAD henu has eight functions available. This next bit of advice I can never seen to remenber... THE EXISTIMG SCREEN IS CLEARED FROH MEMORY WHEN THE CAD FUNCTION IS SELECTED. In fact I had some really spectacular 30 designs to show at the aeeting, but I pressed CAD and erased thes (only kidding).

What l'v really trying to say is that some of the menu choices are not obvious. Even after reading the documentation it takes experimentation to get the "feel" of the systel.

The hardest part of the arogran to understand was the use of the cursor, as well as the joystick in the CAD Draving mode. The cursor is positioned at the Axis you are planning to draw. For the longest tiae I could only draw two dimensional objects because l kept aissing the role of the cursor.

I have had this disk for a month and still don't know everything I would like to about it. For example, 1 . think I can dray each piece of furniture in ay living to scale, and eerge then together in different places using this progran's merge function. One thing is certain... this progran provides everything you need to design your nev kitchen, see that your house would look like with dorners, or any other design task you may want to try.

As an added bonus, the Flip Side of the disk has a variety of utility programs as well as... Yes, another GAD program. This CAD prograe is written in BASIC. While it
is easier to use, it does not have all of the features, nor does it have 3 l capability. XY PLOT/GRAPA/ENTRY is an X to $Y$ plotting systen wich generates a nice line graph which can be printed. MENurkR2 is a menu creator program which I've seen before.

This disk is an example of the High Quality disks which can be found in our library. We try to demonstrate disks which have exceptional value and performance, and ! can pronise you that we are not running out of these very special Public Domain Goods.

> The Temple of Apshai Trilogy by Tou Pluck-JACG

Ever since The Temple of Apshai by Autonted Simulations came out, there has been a flood of fantasy adventure games that let you adventure with the joystick. Now, Epyx has revamped the original, and added two mope: The Upper Reaches of Apshai and the Curse of Ra. Together, they are a nice package....

The graphics on these games are very nice, so that you can tell the difference between an giant leech and a dust uraith if one happens to attack you. the aniaation of your character is auch better than -that of the monsters, and you can tell the difference between the three different sword attacks: parry, attack, and thrust. You can also use a bou.

Out of each of the three games-on-a-disk, there are four levels of dungeon each and three difficulty levels, that is, you have 36 different varieties of play. Whev! There are also many traps and secret doors to find.

One of the Upper Reaches of Apshai levels is 50 easy, it's almost a joke! Have you ever construed a field mouse as a monster? Well, you will get laughs from the prompts "Oh No! Killep Tomato!" and other silly monsters. The major flaw of the game is playability. If you are used to a game keeping your interest for years, forget it. This wears out in about 10 months, leaving you in the dust.
gelieve ne, work was put into thig, but if you do not like fantasy games, look suice before you buy.

Hext conth: Star Raiders II, by Atari -Doctor Dead
P.S., for ay reputation: Last month someone accused me of girating things on BBS's. Here's the truth: I don't oun a noden, and I don't oun a single piece of pirated softuare.

BAAUG 12／86 10405t unine fix

R．P．Hulhearn－JACG
this month brimgs a mixed assortment from around the horld．comaex mas a subject covered by hany mewsletters．

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This Week in lag．．．．．．
（\＄）atari corp．posts Earnimgs－－ 1986 a profitable year

〈 ${ }^{\text {s }}$ ）EXPRESS！STATUS REPORT－－ nen versions forthcoming
（＊）LEDBETTER RESIGMS AS SIG＊ATARI SYGOP

〈＊〉 CHICAGO IMAG EXCERPTS－－ WHAT＇S NEW IN THE ATARI MAGS

〈＊）ganes conputers play noh PLAYIMG HITH THE ST＇S

〈＊〉 FIRM accused of piraing sharehare prograns

〈＊）ADDIMg a hard drive to your atari 8－bit－－step by step

All this and more in this weeks edition of Lmagazine．．．．．

SUNHYVALE, Calif.--(BU)--Atari Corp. reported Friday record results of operations for the year ending Dec. 31, 1986.

Sales for the fourth quarter were $\$ 92,667,000$ vs. $365,350,000$ for the prior year, an increase of 41.8 percent. Income before extraordinary credit for the fourth quarter was $\$ 11,950,000$. Wet incone vas 322,997,000, or 87 cents per share, v5. $\$ 14,899,000$, or 64 cents per share for 1985.

Sales for the year ending Dec. 31, 1985, vere $\$ 258,131,000$ vs. $\$ 141,987,000$ for 1985, an increase of 81.8 percent. Incose before extraordinary credit for 1986 was $\$ 25,050,000$ v5. a loss of $\$ 14,314,000$ for 1985.

Met incone for 1986 vas $\$ 44,516,000$. Net income per share vas $\$ 1.89$ in 1986 v5. a loss of 62 cents in 1985.
'Our strong performance in 1986 is the result of groving consumer avareness of the value of the ST personal computers and a resurgence in denand for video game systems;" said Sal Tramiel, president.

The ST is steadily gaining market share in the United States and is already one of the largest selling personal computers in Europe. Sales of video gane systems continued to be strong, with the coupany enjoying one of its best Christass seasons for video gane sales in. recent years.

Traniel said the introduction of advanced computer and video gase products will drive the conpany's grouth in 1987. Atari announced iaportant new products in January, including an IBM PC clone that will sell for less than 5500 ; more poverful multi-negabyte versions of its ST computer line and a laser printer for desktop publishing; and the power ful XE video game system.

[^0] virtually debt free and have a solid
equity base on which to build the company's future."

Atari Corp. is one of the largest manufacturers and marketers of personal computers and video gane systens in the world. Atari Corp. is located at 1196 Borregas Ave., Sunnyvale, Calif. 94086. Telephone: 408/745-2000.

CONTACT: Atari Corp., Sunnyvale
Greg Pratt, $408 / 745-2349$
or
Anidei and Co., San Francisco
Gary Frank or Hunter Gooch,
$415 / 788-1333$

X $\times$ ZMAG MENSFILE--8-BIT MENS
....Express! Status Report

## [The Terainal Prograns]

1030 Express-Currently at Version 2.1
850 Express-Currently at Version 3.0
MPP Express-Currently at Yersion 1.0
The gcheduled release of 3.0 for the 1030 and MPP has been delayed. Probably won't be released till sumer at the earlists.
[The BBS Programs]
1030 Express-Currently at Version 2.0 950 Express-Currently at Version 1.0 ST Express-Carrently in Beta Test

The ST version of BBS Express! is currently runaing in beta test. Call the Midnight Express BBS at (804) 379-4156 and at elf Express (219) 233-5777 to check it out for yourself.

We are currently recording all suggestions for additional features for the 1030 and 850 versions of $8 B 5$ Express!. He are also looking into ways to incorporate som of these suggestions. at this tiae and until a solution to the memory limitation can be worked out, we do not have any scheduled release dates for upgrades to the 1030 and 850 versions.

As the status of the Express! series of programs change, ve vill update the status here, so you can get the inside scoop here instead of the 'Runor Mill'.

If you currently oun the 1030/XH301 version of BBS Express! and would like to upgrade to the 850-compatible version, send your original disk (again?!?), \$14.95, plus $\$ 2$ to cover shipping and handing (total \$16.95) to us. Please include a note saying that you are upgrading to the 850 version of the BBS.

The 850-conpatible version of BBS Express! is now shipping! To run the 850 version, you must have an 850 interface (or compatible $[P: R: 1$ ) and your soden MUST be able to hang ur with the OTR lead.

Hatch for more Express updates and status reports as they become available.
Xx. .Ledbetter Leaves SIGEATARI......

## 

Fron: Keith Ledbetter
To: SIGatatari Menbers

Effective Saturday, 2/14/87, I an resigning as a SYSGP on SIG*Atari. I have accepted a nell job that requirar relocation, and I feel that the requirements of the job will no longer leave ne the tiae needed to hold a SYSOP title here.

I plan on staying active on Compu-Serve as time pernits, and can be reached under my non-SYSOP ID of 72457,3442.

I vould like to thank everyone on Compu-Serve for the enjoywent that I have gotten out of this job. And, a big thanks to the other SYSOPs of SIGzatari. I have greatly enjoyed by tine here, and look forvard to continuing to be a part of the fine Sigxatari network.

Remember, receiving the JACE Newsletter is just one of the many benefits of being a member of JACG.

MAIL TO:
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Pinebrook, MJ 07058
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Take a moment and look at your mailing label on a recent issue of the JACG newsletter. Check the bottom right hand corner following "Last Issuen". This is the month/year when your membership expires. Try to renew at least one month early. This heips us keep our book keeping in order and avoids your missing any iscuins of the newsletter.

There are two tasy ways to renew:
i. Fill out a membership renwwal form in the front lobby before our monthly meeting and present it with $\mathbf{5 2 0}$ in cash or checto to the Treasurer. Add \$6 for first class mailing of the nowsietter.
2. Capy the information on your mailing label and send, with your remittarce, to:

> Robert P. Mulhearn
> O Crescent Road
> Pinebrook, NJ 07058

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