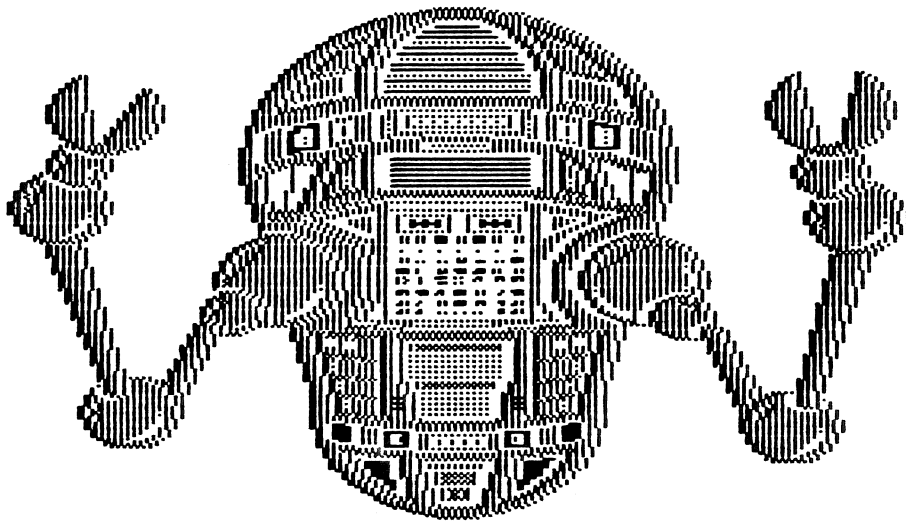


# A.C.E.C.

## Newsletter of the Atari Computer Enthusiasts of Columbus

VOLUME 4, No 9

September, 1986



ANALOG1.PIC  
FROM DOM #25B

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This newsletter is written and published monthly by the Atari Computer Enthusiasts of Columbus, Ohio (ACEC). ACEC is an independent, non-profit organization interested in exchanging information about any and all Atari Home Computer Systems.

Meetings are held on the second Monday of each month at 7:15 p.m., at DeSales High School (on Karl Road, just south of Morse Rd.), and are open to the public.

Dues are \$12.00 per year, and entitle members to all club benefits (Newsletter, Disk of the Month, Publications Library, SIG meetings, group discounts at selected area merchants, etc.).

The ACEC Newsletter welcomes contributions of articles, reviews, editorials and any other material relating to the Atari computers, or compatible hardware devices and software packages.

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The cover of this month's newsletter was printed with a Star SG-10 dot matrix printer, using XLent Software's TypeSetter 130. The newsletter itself was also printed with a Star SG-10 printer in elite pitch, using Batteries Included's PaperClip version 1.2X on a 256K RAM modified Atari 800 XL.

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From the  
Editor's  
Desk ...



SIG  
Notes!

Most of you, I hope, will have noticed that this month's newsletter has a new look. I also hope that you like this new look. Let me explain.

I received a phone call last Friday (yes, three days ago!) from our current newsletter editor, Mark Shuter. For perfectly understandable reasons, he could not work on this month's newsletter, and wondered whether I could fill in for him. The reason he thought of me in the first place is that, as you will discover during the officer nominations, I would like to be the next newsletter editor.

I have actually been considering this for some time now, and have had several ideas about how I would like "my" newsletter to look. What you are looking at now are some of those ideas (The ones I could get done in three days! I've got a few more on the back burner yet.).

So, this month's newsletter is actually a thinly veiled political advertisement for my campaign for newsletter editor (merely an extension of the premature "Vote for Dr. W. G. Lieuallen" poster which Mark put on last month's cover! Now you know what that meant!). I apologize to anyone else who would like to run for newsletter editor and didn't get a chance to "try-out" for the club. Hey, there's always next month!

If anyone else has any other suggestions for the newsletter, I'd be happy to listen -- even if I don't win the election!

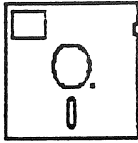
Warren Lieuallen

The August meeting of the ACEC Special Interest Groups was held on the 28th of August (which is why, I suppose, we called it the August meeting!). Many familiar faces were in attendance, as well as a few welcome newcomers.

As always, the Charles twins (Lusco and Brown) led their devoted followers into discussions of telecommunications and Atari BASIC programming, respectively. And as promised, yours truly led an unexpectedly large crowd through all the intricacies of PaperClip 1.2X. Lively discussions ensued in all of the aforementioned groups, and as the saying goes, "a good time was had by all".

The initial pessimistic attitude caused by my announcement of impending doom due to lack of a meeting place for September and October were not necessary. I have managed to secure a new location for both months' SIG meetings. That location is the Grandview Heights Public Library, located at 1685 West First Avenue, just west of Grandview Avenue.

The meeting times for the upcoming meetings are, as always, 7:15 p.m., on the last Thursday of each month. So, be at the Grandview Library (the conference room is downstairs -- just ask anyone!) on September 25th and October 30th. See you there!



Software  
Review

THE DESIGNER'S PENCIL  
BY ACTIVISION

There is a new graphics program by Activision which is different from the rest. With the other graphics programs, you use a joystick and draw "freehand". There are some predefined functions such as box, circle, line, etc. For the most part, however, you have to draw your masterpiece yourself.

With the Designer's Pencil you don't draw your creation -- you sort of program or design it. Then, your art work will be created for you by the program.

When you see the main screen you will see a list of instructions on the right side. These are the commands that the program uses. On the top of the screen is the prompt window. This will usually tell you what file you are using. On the left side of the screen is the program area. This is where you put your commands.

On the bottom of the screen is a list of the master commands. View will let you see your art work. Run will execute the commands you have placed in the program area. Insert will add a blank line in the program area, similar to Atari BASIC (It will put the blank line just above the highlighted rectangle.). Delete will delete the highlighted line in the program area. File will load, print or save the programs that you have made. Clear will erase the program from memory.

I have included a program that I created. It will draw lines in random directions and colors. Most of it is simple to understand. If you study the program, you will find it is a lot like BASIC. It has variables, GOSUB statements (jump), and GOSUB statements (jsub), too.

```
background=1 8 ;color 1 brightness 8
clear screen
hide pencil
L4 set d= 1
L5 jsub at L1
   jsub at L2
   jsub at L3
   skip if a=(b)
   jump to L6
   jsub at L1
L6 skip if a=(c)
   jump to L7
   jsub at L1
L7 skip if b=(a)
   jump to L8
   jsub at L2
L8 skip if b=(c)
   jump to L9
   jsub at L2
L9 skip if c=(a)
   jump to L10
   jsub at L3
L10 skip if c=(b)
   jsub at L3
   color 1=(a)
   color 2=(b)
   color 3 (c)
   use color (d)
   set e=rn 255 ;e=# between 0-255
   set dir (e) ;set angle to draw at
   0=up 64=right 128=down 192=left
   forward 48 ;move pencil in angle
   set by direction above 48 spaces
   d=d+1
   skip if d>3
   jump to L5
   jump to L4
L1 set a=rn 255
   return
L2 set b=rn 255
   return
L3 set c=rn 255
   return
```

It is a fairly interesting program to use. It does have a few draw backs, though. For one thing, if you wanted to draw a picture with this, you would have to plot all of your points out one by one. At least with the freehand-type of programs you can draw your own creation instantly.

by CHARLES W. BROWN



## Hardware Review

### ICD Multifunction I/O Board Specifications

6/21/86 (This document may be reprinted with permission from ICD, Inc. as long as it is unaltered.)

#### GENERAL DESCRIPTION

The ICD MIO Board is a multi purpose parallel device for the Atari 800XL and 130XE computers. It plugs directly into the parallel bus of the 800XL and uses an adaptor for the 130XE. This adaptor also adds two cartridge slots which support either right or left cartridges. These are the only two computers the MIO will work with.

The general functions this device can serve are: RAMDISK, printer port, printer buffer, MODEM port, and hard disk interface. Configuration software is built in.

The MIO is about the same size as a HAYES MODEM and is available in 256K and 1 Meg versions. The retail price is \$199 or \$349 with availability in August.

#### RAM

The RAM is not user upgradable since we use special RAM chips without using sockets. RAM disk software is built in or can be accessed in the \$D600 area. The RAM can be partitioned into several RAMDISKS and may be reserved as printer spooler (buffer) RAM. An external power supply maintains the memory even with the computer turned off.

#### PARALLEL PORT

This port is a 'centronics' parallel port to be used with parallel printers.

The connector is the same as the P:R: Connection so you can use the same cable.

#### SERIAL PORT

This is also the same type of connector as the serial port on a P:R: Connection. Can be used with a serial printer (supports XON/XOFF software handshake) or with the built in R: handler for a MODEM. Built in software diverts P: to R: as desired for serial printers.

#### PRINTER BUFFER

Works with either serial or parallel port as assigned. Allows FAUSE, RESUME, QUIT and MULTIPLE COPY functions.

#### HARD DISK INTERFACE

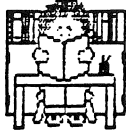
This allows the use of any SASI or SCSI hard disk controller of any size. Controllers can be mixed or matched on the same interface with no limitations going between drives.

#### SOFTWARE

Configuration software assigns drives D1: through D8:.. These drives can be FLOPPY, RAMDISK, or HARD DISK. Partitions are set using starting and ending sector numbers for each drive. SpartaDOS, if used, supports 16 Meg per drive.

For example: 40 Meg hard drive could be partitioned as: D1: (16MEG), D2: (16MEG) and D3: (8MEG). D4: could be FLOPPY #1, D5: 750K RAMDISK, D6: FLOPPY #2, D7: and D8: unused with 250K print spooler. (This is just one example; configuration is extremely flexible.)

SpartaDOS 3.2d (optional) is the recommended DOS but any DOS should work (but is limited by the DOS's own restrictions.)



An Atari  
Tutorial

Using The Input/Output Control Blocks  
Part 2 -- Opening A File

In last month's article, I tried to explain what the IOCB's were. This time I will give you an example of how they are used. Below is a listing of a macro assembler program. It asks the user for a file name. The program will attempt to load the file, and then give the appropriate message. I used macros to write my code. Since most of the print macros are the same, I will only list one out to save space.

```
4000 = 4000 ORG $4000 ;store the
object code at 4000 hex
;from 4000 to 4018 will clear the screen
4000 START: FUTREC CLEAR,#1,#0,#0;macro
call
4000 +A200 LDX #0 ;set the
channel offset for IOCB 0
4002 +A909 LDA #9 ;write
command
4004 +9D4203 STA ICCOM,X ;store the
command here
4007 +A99F LDA #LOW CLEAR ;low byte of
address of the variable
4009 +9D4403 STA ICBAL,X ;point to
data to be processed
400C +A941 LDA #HIGH CLEAR;high byte
of address of the variable
400E +9D4503 STA ICBAL,X ;high byte
pointer to transfer data
4011 +A901 LDA #1 ;low byte of
length of data to transfer
4013 +9D4803 STA ICBL,X ;hold low
byte of # of bytes to process
4016 +A900 LDA #0 ;high byte
of variable to print
4018 +9D4903 STA ICBLH,X ;high byte
of # of bytes to process
401B +2056E4 JSR $E456 ;jump to rom
routine that performs our task
the next routine prints message 1. the
```

phrase MS1 at 401e is a variable that holds the low byte of the number of bytes to print.

```
401E PUTREC MESS1,#MS1,#0,#0
this next routine called getrec is the
same as the basic command input ans#.
403C GETREC ANS,#20,#0,#0
403C +A200 LDX #0
403E +A905 LDA #5 ;read
command
4040 +9D4203 STA ICCOM,X
4043 +A98A LDA #LOW ANS ;low byte of
address of users input
4045 +9D4403 STA ICBAL,
4048 +A941 LDA #HIGH ANS
404A +9D4503 STA ICBAL,X
404D +A914 LDA #20 ;length of
input
404F +9D4803 STA ICBL,X ;store low
byte of length here
4052 +A900 LDA #0
4054 +9D4903 STA ICBLH,X
4057 +2056E4 JSR $E456
this next routine opens channel 1 for the
file entered by the user.
405A OPEN ANS,#4,#0,#$10
405A +A210 LDX #$10 ;set offset
for IOCB 1
405C +A903 LDA #3 ;open
command
405E +9D4203 STA ICCOM,X
4061 +A98A LDA #LOW ANS ;use users
input as file name
4063 +9D4403 STA ICBAL,X
4066 +A941 LDA #HIGH ANS
4068 +9D4503 STA ICBAL,X
;this next command is the auxiliary
command that tells the system that the
open is for a read operation
406B +A904 LDA #4
406D +9D4A03 STA ICAX1,X
4070 +A900 LDA #0 ;don't need
this command
4072 +9D4B03 STA ICAX2,X
4075 +2056E4 JSR $E456
4078 BD4303 LDA ICSTA,X ;get the
status of the open operation
407B C901 CMP #1 ;was it
okay?
407D F006 ^4085 BEQ OPENOK ;branch if
values were equal
;print error message
416B FUTREC ERROR,#ER,#0,#0
```

```

40B2 4CA340 JMP CLSE ;go to
routine that close's file
;print message 2
40B5 OPENDK: FUTREC MESS2,#MS2,#0,#0
his routine close's channel 1
40A3 CLSE: CLOSE #10
40A3 +A210 LDX #10 ;channel
offset for IOCB 1
40A5 +A90C LDA #0C ;close
channel
40A7 +9D4203 STA ICCOM,X
40AA +2056E4 JSR $E456
40AD A901 LDA #1
40AF BDF002STA CRSINH ;TURN CURSOR
OFF
this routine prints message 3
40B2 FUTREC MESS3,#MS3,#0,#0
;the next routine will print a blank line
4090 DONE: FUTREC EOL,#1,#0,#0
The next routine prints message 4.
40D0 40EE FUTREC MESS4,#MS4,#0,#0
The next routine prints message 5.
410C FUTREC MESS5,#MS5,#0,#0
The next 2 lines are the same as poke
764,255. this turns the keyboard code
off.
412A A9F LDA #FF ;255
412C BDFC02 STA CH ;KEYBOARD
CODE(764)
12F ADFC02 DLOOP: LDA CH
;read the keyboard code
4132 C90C CMP #12 ;RETURN KEY
4134 D00B ^413E BNE CONT ;branch
if no match
4136 A9FF LDA #FF
4138 BDFC02 STA CH ;TURN
KEYBOARD CODE OFF(POKE 764,25:
413B 4C0040 JMP START ;DO AGAIN
413E C91C CONT: CMP #2B
;ESCAPE KEY
4140 D0ED ^412F BNE DLOOP ;LOOP
UNTILL PROPER KEY IS HIT
RTS ;this
returns you to dos
41BA = 0014 ANS DS 20
419E = 0001 LEN DS 1
419F 7D CLEAR: DB #7D ;125
decimal like print chr$(125)
41A0 4552524F52 ERROR: DB 'ERROR
ENCOUNTERED'
41B5 504C454153 MESS1: DB 'PLEASE
ENTER FILE NAME'
= 0016 MS1 EQU *-MESS1
41CB 46494C4520 MESS2: DB 'FILE WAS

```

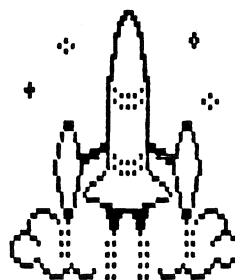
```

OKAY NO ERRORS'
=0017 MS2 EQU *-MESS2
41E2 594F555220 MESS3: DB 'YOUR FILE
IS NOW CLOSED'
=0017 MS3 EQU *-MESS3
MESS4: DB 'HIT RETURN TO DO AGAIN'
= 0016 MS4 EQU *-MESS4
420F 4F52204553 MESS5: DB 'OR ESCAPE
TO GO TO DOS'
= 0016 MS5 EQU *-MESS5
4225 9B EOL: DB $9B

```

In this program we used the IOCB's for different reasons: We cleared the screen; we printed several messages; we did a machine language input; we opened a disk file, and then we closed it. As you can see, the IOCB's were very busy. I hope that from this you will see how the IOCB's are used.

by CHARLES W. BROWN



**BLAST  
OFF!**

**WITH THE  
ACEC BBS**

**268-0405**

**24 HOURS**



Antic  
On-Line

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#### ANTIC'S LONDON REPORT:

ST Rules Britannia  
UK Software Ahead of USA

by JAMES CAPPARELL, Publisher

ANTIC just returned from London, represented there by Publisher and President James Capparell, and Marketing Director Gary Yost. Here's their report.

9/8-This article is being written on a Pan Am flight returning to San Francisco from London. What did we learn overseas? Well, there's five pence to a shilling...the people are extremely nice and the enthusiasm for Atari is excellent. But the weather in London is awful and pubs close at 11 pm.

Our most exciting discovery was the extreme enthusiasm for the Atari ST we found at the Personal Computer World Show held September 4-8 at London's Olympia Hall. Over 50,000 people got their first opportunity to see the 520ST and the 130XE. This was the eighth show sponsored by Personal Computer World Magazine so far, and by all reports it was the most successful. The Atari booth was one of the largest and best attended at the show. In the UK and European market, the ST looks like a strong winner.

Suprisingly, our British cousins have a leg up on developers in the States with stunning ST systems software, business software and games all ready for market. Perhaps because they are used to

programming for the Sinclair QL, a 68008 machine, they were primed and ready for the ST. The QL was a big disappointment with its small memory and slowness. So for Britons, the ST seems like the QL that never was. And the British are much more open to developing for a new, unproven machine than American companies are. Big Blue Mania has not set in, as the British think the IBM line is far too costly.

Atari Corp. was well represented with a large contingent from the states. Jack and Leonard Tramiel, Sig Hartmann, Sig Schreyer and Shiraz Shivji flew in from Sunnyvale. Additional support from Atari UK, (an excellent organization, I might add) came from Les Player, Robert Katz and Jon Dean. I was pleased to also see German, Swiss and French Atari representatives.

We found some excellent languages and software products you will soon see from the Antic Catalog or other publishers. These included accounting and small business packages, LANs and a possibility of UNIX. We saw several languages including UCSD and ISO Pascal code compilers (very professional, very fast), super-fast macro assembler-editors, Lattice C, Cambridge Lisp, MODULA II, FORTRAN 77, and CPM 2.2 emulation. (I bought UCSD Pascal back with me so watch for a review soon.)

For you telecom buffs, it's interesting to note that the first truly Hayes-compatible modem for the Atari was introduced at the show. It costs 399 pounds and contains six different protocols, including two for videotex graphics -- the one area in telecommunications where the English have a significant lead on us.

An animated game called Brattacas from Psygnosis Ltd. drew major crowds at the show. It had already been in development for the past two years on SAGE 68000 systems. So it was ready to be ported to the Atari ST and was brought



to beta level just a few weeks ago. Brattacas features cover art by fantasy artist Roger Dean. Better than arcade quality color characters move in a sophisticated scenario where the 520ST's graphics capabilities are exploited more than in any other program we've seen so far.

In an enclosed glass room was a 260ST with one megabyte of RAM. Basically, it was a 1040ST with a built-in floppy, but still a prototype. Alongside it, a 520ST with color monitor attached to a 10 megabyte hard disk was displaying pictures at blinding speed during the entire show.

As an interesting twist, an Israeli political cartoonist, Yakov Kirschen, (famous for his "Drybones" character in the Jerusalem Post) was featured in an front page article in the Sunday London Times. In the photograph, he was showing a 520ST interactive cartoon character which demonstrated how artificial intelligence can be applied to computers. His character can actually relate to the user. More on this after we interview Kirschen tomorrow during his visit to our office in San Francisco.

Also upcoming is a story about all the Atari products at the show, not just what was shown at the Atari booth, including a Zoids game and a demo of Jeff Minter's psychedelic Colourspace light synthesizer for the XL/XE and the 520ST. This does for color what the synthesizer did for sound, and gives you a light show on your micro.

On the 8-bit front, we found out that the official Atari UK 8-bit software catalog of over 600 titles contains 54 Antic Catalog products distributed by Software Express International, Antic's European distributor. Additionally, Atari UK issued a press release during the second day of the show with a list of 10 formally "Atari-approved" titles. We're proud to announce that the Antic Catalog's Earth Views and Space Base are among these first ten titles.

Antic has signed a number of publishing agreements with UK authors. This means the Antic Catalog will soon be bringing you lots of ST packages including development languages, systems software, business and productivity packages, utilities and games.

I would say that anyone who still doesn't believe that Atari and the ST are for real -- isn't for real. It's a great product at a great price (750 pounds in the UK) and has a growing list of developers. We saw a list of 450 developers in the UK alone. The day after the show closed, UK ST Product Manager Bob Katz returned to his office at 9 a.m. and found eight checks for development systems that had arrived by courier from developers who were itching to get started.

We were introduced to many fine Atari friends during our stay and were pleased to discover that our Atari community is just as enthusiastic and supportive in London and UK as in the United States.

Those of us who have long been so loyal and dedicated no longer have to feel embarrassed about being Atari fans. We have the fastest machine at the best cost and a growing development network. Watch Antic for ongoing Atari news from the states and around the world.

*Although this article is not the newest material, it clears up a situation which was not clear to me before I read it. -- Ed.*

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Microbits Warranty Changes  
by Gigi Bisson  
Antic Assistant Editor

8/5 --The new Supra (formerly MPP) customer service phone number is (503) 967-9081. New product orders may be placed at (503) 967-9075. The company has moved to smaller quarters at 1133 Commercial Way, Albany, OR 97321.

Supra will continue to honor the 90-day warranty for all MPP products sold after July 1, 1985, the date when Microbits Peripheral Products was purchased by Supra Corp.

But Ackerman says that for MPP products sold earlier, "Some formerly free warranty work will now have a handling charge." Warranty repair charges vary according to the product's retail price and range from \$15 to \$35.

It will also be harder for users to get through to the customer service department. "Be patient," Ackerman says, "There aren't as many phone lines as before."

A previous ANTIC ONLINE bulletin described Microbits Peripheral Products (MPP), of Albany, Oregon was purchased by Supra Corp. -- which is run by Alan Ackerman and John Wiley, the 22-year-old founders of MPP.

Legally, MPP went out of business. Supra bought the Microbits name from the bank that shut down MPP at the end of May and was threatening to liquidate the company's assets.

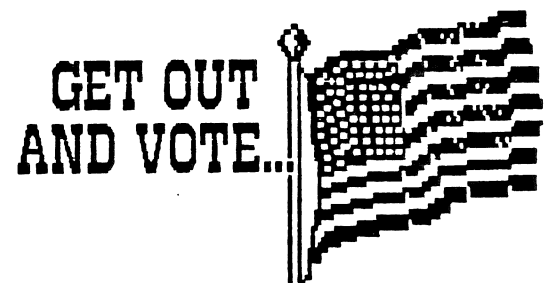
However, the MPP product line and even the brand name will live on as a Supra subsidiary. Microbits had been the top independent manufacturer of plug-in modems, printer buffers and memory expanders for Atari computers.

Ackerman and Wiley paint MPP as yet another victim of the computer shakeout. "It's been a tough time for some third-party Atari manufacturers, Ackerman says. "No stores were ordering anything for the old Atari computers. They were

all waiting for the 520ST to come out."

Supra still plans to release the new MPP products that were under development this spring. Orders are currently being taken for the MPP 1200A plug-in 1200 baud modem and the MicroNet resource sharing network that will enable up to eight Ataris to share printers and disk drives.

September shipping was anticipated for the MicroPort expansion port. Supra says the announced 10-megabyte \$800 hard disk is still on the way, although delayed. Supra offers a 20% discount on for users group purchases.



**FOR THE OFFICERS  
OF YOUR CHOICE**

**AT THE NEXT AGECC  
MEETING, 10/13**



**Foreign Facts  
From Far Away**

**Languages**

from the Mile High Atari Magazine  
Denver, CO (May 1986)

We are all interested in new languages as they become available on the Atari. From NECS (New England Computer Society) via Bits comes information about some new and exciting languages coming out. Some of these languages are not well known but do have ardent devotees. In fact, it is expected that many Atari users will become some of the most fanatic admirers of these obscure languages, for obvious reasons.

I cannot cover all of the languages in one article, so I will give you a synopsis of a few this time. I hope you will all be as excited about these new languages as I am.

**SIMPLE:** Acronym for Sheer Idiots' Monopurpose Programming Linguistic Environment. This language, developed at the Hanover College for Technological Misfits, was designed to make it impossible to write code with errors in it. The statements are confined to BEGIN, END and STOP. No matter how you arrange the program, you can't make a syntax error.

**DOGGO:** Developed at the Massachusetts Institute for Obedience Training, DOGO heralds a new era of computer-literate pets. DOGO commands include SIT, STAY, HEEL and ROLLOVER. An innovative feature of DOGO is "puppy graphics", which emulates a small cocker spaniel that occasionally leaves a "deposit" as he travels across the screen.

**SARTRE:** Named after the late, great existentialist philosopher Sartre, SARTRE is an extremely unstructured language. Statements in SARTRE have no purpose;

they just are. Thus, SARTRE programs are left to define their own functions. SARTRE programmers tend to be depressed, and are no fun at parties.

**FIFTH:** FIFTH is a very precise mathematical language wherein the data types refer to quantity. Data types range from CC, QUNCE, SHOT and JIGGER, to FIFTH (hence the name), LITER, MAGNUM, and BLOTTO. Commands refer to ingredients such as CHABLIS, CARDONNAY, GIN, VERMOUTH, VODKA and WHATEVERSAROUND. The many versions of the FIFTH language reflect the sophistication and financial status of its users. Commands in the Elite dialect include VSOP and LAFITE, while commands in the Gutter dialect include HOOCH and RIFFLE. The latter is a favorite of many frustrated FORTH programmers, who end up using the language extensively.

**VALGOL:** From its modest beginnings in California's San Fernando Valley, VALGOL is enjoying a dramatic surge of popularity across the industry. VALGOL commands include REALLY, LIKE, WELL, Y\*KNOW and OMIGOD. Variables are assigned with the =LIKE and =TOTALLY terms. Other terms include the "California Booleans" AWESOME and NOWAY. Repetitions are handled in FER-SURE loops. VALGOL is characterized by unfriendly error messages like "GAG ME WITH A SPOON" and "GROTTY TO THE MAX".

**C-:** This language was named for the grade received by its creator when he submitted it as a class project. C- is best described as a "low level" programming language. In fact, C- generally requires more statements than machine code to execute a given task. In this respect, it is very similar to COBOL.

**LITHP:** LITHP is an unremarkable language distinguished by the absence of an "S" in its character set. Other than the substitution of "TH" for all "S"'s. LITHP is thought to be useful in processing lithography.

Submitted by Mark Champine, edited by Stephen Lewis from ACE of Salt Lake and Warren Lieuallen from ACEC.

**ATARI COMPUTER ENTHUSIASTS  
OF COLUMBUS**

**UPCOMING MEETINGS:**

ACEC  
October 13  
November 10

SIG's  
September 25  
October 30

ACEC of Columbus Newsletter  
Dr. Warren Lieuallen, Editor  
1652 Hess Boulevard  
Columbus, OH 43212

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