DAL-ACE

Volume 10, Issue 1 January, 1989
Dallas Atari Computer Enthusiasts

WHO...

... is up to lots of great stuff in January?

Dal-ACE

that's who!

Upcoming events ...

Infomart meetings Jan. 14, Feb. 18

Big SIG Jan. 30 at Town East Federated

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Pages 17 and 18 were lifted directly from the 9/88 SLCC Journal to show some of what is possible in the DTP field using an 8-bit. The pages were produced entirely using 8-bit technology. Our thanks to Bob Wooley and SLCC for their efforts.

Election News

Here are the results of the elections for the Dal-ACE board of officers for 1989, held at the December Infomart meeting.

President

Donny Arnold

Vice President

Brenda Arnold

Vice President of Communications

Anita Uhl

Treasurer

Rene Tucker

Secretary

Michael Duke

Members at Large

Terry Borchardt

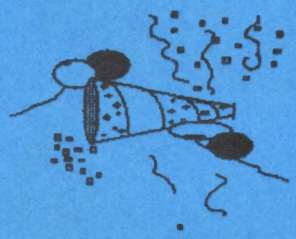
Dave Gramm

Randy Randolph

Marc Salas

Ralph Salmeron

Please join me in thanking last year's board, both those members who were reelected this year and those who could not continue to serve, and wishing the new board the best in the new year.



Our Cover Art

OWL.IMG is from our new collection of .IMG clip art in the Dal-ACE ST Disk Library. Disks 114 and 115 are full of images scanned at 203 dpi; thus, they retain a great deal of detail without (usually) taking up too much precious memory.

DTP devotees should definitely check out these disks; it's a lot more pleasant to grab clip art off a disk than to sit watching your printer head move back and forth while you scan stuff!

COMDEX News

Ed note: the following report was compiled from various sources, including a Dal-Ace member who attended COMDEX.

Atari was not on the main floor of this year's COMDEX; instead it was located in the Gold Room. There were about 25 or 30 exhibitors in Atari's room. Some of these had booths on the main floor and did not seem to be overly concerned with their little table in Atari's area, leaving them unattended at least part of the time. This marked the second or third (depending on whom you ask) COMDEX at which Atari had nothing new to show. There were two transputers (two worked out of the five that were shipped); the laptop ST was shown to a "select few" in a hotel room, but not to the public at large. Fleetwood Mac performed in the Gold Room; Atari has no problems in the U.S. MIDI market!

ISD Marketing was showing Calamus, a complex DTP program that retails for $299 and should be available now.

UltraScript, the PostScript emulator, was shown and appeared to be working well. SoftLogik's Pagestream (formerly Publishing Partner Professional) was running on a Moniterm large screen monitor. by all reports, it looked great!

The makers of GFA BASIC fired Michtron as their U.S. distributor; it is to be assumed the fireworks might have something to do with GFA v 2.0 being on the last Start disk. They asked Dave Small if he might be interested in serving as North American distributor; he said no.

Nice N' Software was selling the **CRICIT** (Cash Register and Inventory Control) business software for the ST. New is **CRICIT BAR CODE + PLUS**, which adds the capability to read the bar codes on packaging. Business owners can get a free demo of CRICIT BAR CODE + PLUS by writing or calling:

Igor Tertysznyj
Nice & Software
103 Queen Street
South Kitchener
Ontario N2G 1W1
(519)744-7380

Though some reports say Seymor-Radix had nothing new to show, that's not true. They have a new scanner specifically designed for use with the HP DeskJet. The hardware differs from the IMG Scan, though the software is basically the same. the new gadget will scan 782 dpi both vertically and horizontally. Not bad! Speaking of scanners, Navarone had their new flatbed scanner for the ST. ST Scan prints straight to the Atari laser printer!

Atari said they were only shipping product to a select few dealers in the U.S. Looks like we're still the poor stepchildren. Sam Tramiel has announced official online affiliation with CIS and the Atari User Fora. There should be a direct Easyplex line to him and Sig soon (maybe by now).

All in all, third party developers were out in force, showing lots of great new products. BUT... those same developers were getting pretty disgusted with Atari's by now familiar scorn for the American market, lack of cooperation with developers and potential developers, and general attitude of "who cares -- as long as we're making money?" Atari may have a hard row to hoe in the future if Jack & Co. don't shape up and figure out that they're not operating in a vacuum!

Can You Count?

I want you to add up the column of numbers at right, but I don't want you to do it in the usual way. Instead of adding up the columns as we were taught in school, count aloud by saying each new total as you mentally add it. (One thousand, one thousand ten, two thousand thirty, and so on.) When you're all finished, look below to see if you've come up with the correct total.

1000
10
1020
10
1030
10
1010
10

Answer:

If you said five thousand (5,000), don't feel bad. Nearly everyone says that. The real answer, however, is four thousand one hundred (4,100).

The Grapevine

News, Rumors, and Product Announcements

News

Atari shows!

ST World will be producing several **World of Atari shows** that will promote the entire line of Atari products: the game machines, 8-bit computers, and ST/Megas. The first of these is scheduled for April 22-23, 1989 at the Disneyland Hotel, Anaheim, CA. There are booths for 80 exhibitors, and several conferences and workshops. They are also looking at Dallas as a possible site! Anyone who wishes to join me in a letterblitz to pledge our support and assistance at a local Atari show, write to the address below. I will try to get information about other shows as it becomes available.

ST World Reseller
1385 Cleveland Loop Dr.
Roseburg, OR 97470-9622

Michtron still strong

Michtron, having sold $1 million in ST software in 1987, is still going strong for Atari users. They have signed agreements with Kuma and HiSoft from England, EAS from Germany, and Vogler from Austria to publish their software in North America.

Atari donates system to good cause

ST World Reseller reports that Atari has donated a desktop publishing system to the National Center for Computer Crime Data (NCCCD) to compile its second report on computer crime, security, and ethics. The NCCCD is a non-profit research institute that studies and reports on the means to prevent, detect, investigate, and prosecute computer crime.

Lucas suing SSS

I always thought imitation was the sincerest form of flattery; evidently, George Lucas doesn't feel the same way. Seems that Solar Systems Software came out with Templates of Doom, a program that used an Indiana Jones-like character to familiarize users with the spreadsheet. Lucas is suing for copyright infringement.

Atari vs. Nintendo (again)

Atari Games Corp. is suing Nintendo Co. for $100 million. Atari claims that Nintendo's licensing arrangements with software developers, which prevent the developers from marketing their games independently, violates anti-monopoly laws.

Product Announcements

Up, up and away!

Falcon AT is an F-16 fighter simulation from Spectrum Holobyte with outstanding 3D graphics; it's very realistic. Contact:

Spectrum Holobyte
2061 Challenger Dr.
Alameda, CA 94501
(415)522-0107

Space Pong

Zero Gravity from Michtron is a version of Pong that is played in three dimensions in zero gravity, against another player or the computer. $29.95 from Michtron/Microdeal at this address:

Michtron, Inc.
576 S. Telegraph
Pontiac, MI 48053
(313)334-5700

Attention, programmers

HiSoft has brought out four new programming tools for the ST. **DevPakST Version 2** is an all new version of its DevPak editor/assembler/debugger/, a stand alone assembler and debugger, and a fast linker. $99.95. **Power BASIC** is ultra compatible with industry standard Microsoft BASIC and supports more features! If you use the built-in GEM editor, you can compile from a handy menu! $79.95. **HiSoft BASIC** is a superset of Power BASIC. Its Symbolic debugger lets you look for symbols instead of hard to find hex numbers. Program profiling tells you which lines are executed most often, and DevPak can be used to rewrite those parts into assembly language for added speed. $159.95. **WERCS** is the WIMP (Windows Icon Mice Pointers) Environment Resource Construction Set, a complete resource editor for all STs. All from Michtron/Microdeal, address above.

Tale telling

Ever wanted to write your own adventure game? A good one, with graphics, animation, and a helpful user interface? **Talespin** will enable you to do just that. You can import graphics from any of the popular drawing programs, use dialog boxes to make selections mouse-driven, re-use graphics for a grdually changing scene, and incorporate digitized sound, for starters. Use compressed picture files and the reusable graphics to build a lerger game. There's an internal art package to touch up your pictures, and you can switch color palettes for each page. and there's lots more. Check this out. $99.95 from Michtron/Microdeal, address above.

DTP Helper!

Migraph has released Border Pak, over 40 different object oriented borders that can be used to enhance newsletters, flyers, brochures, greeting cards, and more. These borders print at the highest resolution of your output device, from a dot matrix all the way to a laser printer! They can also be eidited to suit individual needs using Easy Draw. Retail $34.95 from:

Migraph, Inc.
200 S. 333rd St. (220)
Federal Way, WA 98003
(206)838-4677

DTP on an 8-bit?

by Bob Woolley SLCC

(This was done entirely on an 8-bit)

We have been doing the Journal on a number of STs using Publishing Partner for about a year and a half now. This combination gives us a nice looking document, not so much from the abilities of the computer system, but rather the quality of the printing on Jim Hood's Qume laser printer. The "system" (computer and software) allows for lots of nice visual programming - multiple fonts, point sizes, graphics, etc, but the high resolution of the laser really makes it look "nice", not the computer. Try printing the same PP file on a good dot-matrix printer and you'll be looking around for a laser after the first sheet. Even a 24 pin, LQ printer does not quite do the job on paper. The nice layout just does not make up for the lack of detail.

So? Big deal! Lasers look better than ribbon smashers. Buy a laser, then! Well,,, The laser printers aren't exactly cheap and since they all have a couple of megabytes of memory in them, they aren't likely to get cheap in the near future. They also use rather expensive toner cartridges ($60-$100!), can't print in color, and have lots and lots of little parts to go bad on you. If you consider the cost of the system ($1000 for the computer and $2000 for the laser), the results are pretty good. Certainly good enough for a newsletter ..... Except ..... For an old 8-bitter like me, it seems like something could be done on our side of the fence that would look pretty good and cost a little less.

Me and my big ideas.... It took me long enough just to learn how to use the ST! Add to that the hours and hours it takes to do anything useful with Publishing Partner .... and I want to do it on an 8-bit now! The best thing to come along in a long time is the DeskJet printer from Hewlett - Packard. It costs less than $700 if you shop around, and prints almost as good as a laser (this is done on a DeskJet). The only problem is that it does not use the Epson control codes, but rather the HP PCL (Printer Command Language) Level III commands. This is great if you have an HP LaserJet driver, but not many programs for the eight bitters have them (anybody want to do one??). I am using AtariWriter Plus as a word processor, so I thought I could just stuff in OPTION "O" controls where I might need them. Hah! Drive a person nuts doing it that way! Somewhere in AW+, the traffic cop for those escape codes has fallen asleep. I got elongated print when I wanted 10 CPI, no margins, 6 point, page ejects, no header, page numbers on the top of the next page ..... I didn't need all that!

All I DID need was an EPSON emulator cartridge plugged into one of the two cartridge slots! (yeah, sure! I just tried this piece and it didn't go into elite - needed a C/R after the control-G6. Worked OK without the C/R a few minutes ago! You figure it out. (One nice thing about using the internal printer fonts on a printer like this is that it only takes a minute to print a test of what you have so far. A Publishing Partner file is printed in graphics mode, which can take 10 minutes to print out.) Anyway, with the optional EPSON cartridge ($75), the DeskJet works great with AW+. I suppose I could make an AW+ driver for the native DeskJet mode and use that, but, I imagine that some of you would like to get a Journal before the meeting!

So, what do we need for reasonable DeskTop Publishing? I'll rattle off a few operations that you can get with AW+ and the DeskJet/EPSON.

(DTP continued)

- Obviously, you have two column printing.

- Block right

- Center

- Headers and Footers (used in this article to print "SLCC JOURNAL" and the page number at the bottom of the page)

- And a bunch of typestyles:

Pica

Condensed

Proportional

Superscripts and Subscripts

None of which I can show you in two column mode since AW+ blows it's brains out if you use one font in the left column and a different one in the right column. This means the whole article has to look like a textbook where you are running two columns. Guess how long it took me to figure that out (not exactly in the book, you know).

What about graphics?

The graphics modes are pretty much limited to the character mode graphics available on an FX-80. Which is absolutely nothing - zip - nada. Not too helpful, there. But, there are a few places where a little sun can shine.
Like this:

@#&%$!!!

If you think changing pitch goofs up AW+ in double column mode, just guess how bad it gets when you throw a couple dozen lines of graphics mode into the left column. Using the MERGE function of AW+ and a program called Qwik Pix, from White Lion Software, you can add Print Shop icons to your AW+ files (there is also a version for PaperClip). It would work OK if you printed one narrow column on each page and then did a little cut and paste..... But that isn't Desk Top Publishing - that's Kitchen Table Mess. This whole article was printed in one shot - no paste-ups!

I am NOT impressed!!

This type of problem seems to plague most of the things I tried to do on this project. Either there is nothing to drive my printer, or the program will not do double column printing (which includes all of the "old" word processors), or the features I am trying to use together are not compatible (a euphemism for massive lockup time). Many of these glitches could be remedied by using graphics mode for the whole document, but to provide adequate resolution, you need LOTS 'O DOTS. That means millions of calculations and mucho memory. And more than a 1.79MHZ clock speed with an 8-bit bus.

But, it is not my intention to convince anyone that you can't do DTP on an 8-bit. I think it can be done - I just haven't found out how, yet. It does not look like AtariWriter Plus is going to make the grade unless I find some kind of backdoor here. I still haven't tried PaperClip and Qwik Pix PC, but, I doubt that PC has any better way to do double columns than AW+. Too bad. The DeskJet does a nice job on the printing end and Federated is selling an 800XL, an XM301, and an XF551 for $199! If we can get something to do the software job for us, we can DTP for less than $1000! It certainly doesn't take me any longer to type the text into an XL than it does on an ST. If I could just add some graphics here and there and print double columns, I'd be set. I even have a drive that will read an ST disk full of clip art directly into my XL..... (heehee).

Napoleon in Russia-Borodino 1812 Wins Major Award

From a press release from IntelliCreations, Inc.

October 19, 1988 -- Chatsworth CA. The strategy war game, Napoleon In Russia-Borodino 1812, today received the "Fire & Movement and Charles S. Roberts Award" for Best Pre-20th Century War Strategy Game. The Award is given to honor significant achievements in the field of wargaming and was presented to games programmer Steve Kerenek of Kerenten Software. Napoleon in Russia-Borodino 1812 is published by IntelliCreations, Inc.

The award is named after the presenting publication, *Fire & Movement*, and Charles S. Roberts, "the father of board wargaming." Fire & Movement is a Long Beach, CA based publication specializing in board and software wargame reviews; interviews with gamers and game creators; and calendars of events. Charles S. Roberts created the first modern strategic wargame, Tactics, and founded the company, Avalon Hill (now the Avalon Hill Game Company), in the fall of 1958. Avalon Hill was the first business exclusively devoted to what Roberts calls "adult games."

Napoleon in Russia-Borodino 1812 recreates the battle outside Moscow where Napoleon had the chance to crush the Russian army. Instead, he ended up letting it escape. Once the Russians mended their crippled battalions, they counter-attacked, sending Napoleon back across Europe.

Game play can involve short skirmishes or the entire battle. Other features include command over infantry, cavalry, and artillery divisions; scrolling battle map with prominent terrain; and options covering fatigue, morale levels, battle speed, difficulty modes, and player selections (two players or one player against the computer). Authenticity makes this game intriguing. The map is based on the original 1839 Russian Military re-enactment of the action and on photographs commissioned by Tsar Nicholas to commemorate the 100th anniversary of the battle.

Napoleon in Russia-Borodino 1812 is available for the Atari 8-bit for $24.95 from IntelliCreations, Inc. 19808 Nordhoff Place, Chatsworth, CA 91311, (818)886-5922.

THANKS

Thanks to James Duke for helping us to get this issue of the Dal-ACE newsletter printed somehow. Jim let us port our files over to his machine to be printed out on his dot matrix printer, so you wouldn't have to miss an issue. Next time you see him, tell him thanks!

Falcon Software to be Basis for Military Flight Trainers

From a Spectrum Holobyte press release

The latest in military technology for flight training simulators is coming from an unlikely source: the entertainment software industry. Sphere, Inc. has announced that its game FALCON, an F-16 fighter simulation, will be the basis for a line of low-cost aircrew trainers for the armed forces.

Sphere has signed a 7-year contract with Perceptronics, Inc. to furnish the software for a family of F-16 training products called the ASAT.

FALCON, the foundation for the ASAT software, was developed by Sphere and is marketed through Spectrum Holobyte. Earlier this year, FALCON received three Excellence in Software Awards from the Software Publishers Association.

The ASAT line will be produced and marketed by Perceptronics, a pioneer and leader in low-cost simulation technology. The ASAT family will include seven trainers ranging from a Basic Tabletop Trainer through advanced Instrument and Emergency Procedures Cockpit Trainers, as well as Cockpit Trainer with a MiniDome.

According to Sphere's CEO Gilman Louie, the current advanced technology of flight simulations in entertainment software, coupled with the complex and sophisticated combat scenarios developed by Perceptronics, is what attracted the attention of the military. He says, "When they saw the technology available in FALCON, they realized it would be possible to build trainers at a fraction of the cost of traditional military simulators."

Phil Handley, Perceptronics Product Manager and former USAF F-15 wing commander, explains that up to a dozen of the ASAT trainers can be networked so that entire flights of pilots can work together to hone team skills.

Sphere is known for its computer simulations published under the Spectrum HoloByte trade name, such as GATO, and FALCON. Perceptronics serves a full range of growing military needs for training, simulation and decision support Major Perceptronics contracts include development of network tank simulators and precision gunnery training simulators for TOW and DRAGON anti-tank missiles.

For more information on FALCON or Sphere, contact Rita Harrington, Sphere, In., 2061 Challenger Drive, Alameda, CA 94501, (415)522-3584. For more information on ASAT products, contact Phil Handley at Perceptronics, 21135 Erwin Street, Woodland Hills, CA 91367, (818)884-3485.

Everything You Ever Wanted to Know About GDOS (and more)

By Douglas N. Wheeler

Reprinted from BAAUG newsletter, 9/88

What is GDOS?

GDOS is an extension to GEM which adds new capabilities to your ST. GDOS is available with many commercial Atari programs, as well as to registered Atari developers ($500 if it is to be distributed with a product, free if it is not going to be distributed).

The three primary new capabilities are:

1. The ability to use multiple fonts in various point sizes on the screen, printer, and other output devices.

2. Allows the creation of metafiles, which are standardized files intended to be usable by many different applications. This allows files created in one program to be used in another.

3. Support for various output devices with resolutions up to 32,767 x 32,767 (including emulation of this resolution on the screen). This allows graphics to be printed at the highest resolution of the output device.

How to use GDOS

In theory, using GDOS is as simple as putting GDOS.PRG in your AUTO folder and booting the computer. In practice, though, a series of conditions must be met. The most important of these conditions is that there must be a valid ASSIGN.SYS file present in the root directory of the boot disk.

The following is a typical ASSIGN.SYS file.

```
PATH=C:\GDOS.SYS
;
01p SCREEN.SYS ; default screen
;
02p SCREEN.SYS ; low resolution
ATSS10.FNT ; fonts
ATSS12.FNT
ATSS18.FNT
ATSS24.FNT
ATTP10.FNT
ATTR10.FNT
ATTR12.FNT
ATTR18.FNT
ATTR24.FNT
;
03p SCREEN.SYS ; medium resolution
ATSS10CG.FNT
ATSS12CG.FNT
;
ATSS18CG.FNT
ATSS24CG.FNT
ATTP10CG.FNT
ATTR10CG.FNT
ATTR12CG.FNT
ATTR18CG.FNT
ATTR24CG.FNT
;
04p SCREEN.SYS ; high resolution
ATSS10.FNT
ATSS12.FNT
ATSS18.FNT
ATSS24.FNT
ATTP10.FNT
ATTR10.FNT
ATTR12.FNT
ATTR18.FNT
ATTR24.FNT
;
21 FX80.SYS ; Epson 9-pin dot-matrix printer
ATSS10EP.FNT
ATSS12EP.FNT
ATSS18EP.FNT
ATSS24EP.FNT
ATTP10EP.FNT
ATTR10EP.FNT
ATTR12EP.FNT
ATTR18EP.FNT
ATTR24EP.FNT
;
31r META.SYS ; metafile driver
ATSS10MF.FNT
ATSS12MF.FNT
ATSS18MF.FNT
ATSS24MF.FNT
ATTP10MF.FNT
ATTR10MF.FNT
ATTR12MF.FNT
ATTR18MF.FNT
ATTR24MF.FNT
```

As you can see, I have divided the file into distinct groups. The first line of the ASSIGN.SYS file is used to tell GDOS where the fonts and device drivers are located. This line must always start with PATH= which is followed by a pathname of up to 64 characters locating the fonts and drivers.

Following the path identifying line is the list of device drivers and their associated fonts. Each group is composed of four parts. First is a number representing the type of device:

01-10 Screen drivers
11-20 Plotter drivers
21-30 Printer drivers
31-40 Metafile drivers
41-50 Camera drivers
51-60 Tablet drivers

The Atari STs have four built-in device drivers:

01 Default screen (used when an application doesn't care about screen resolution)
02 Low resolution screen
03 Medium resolution screen
04 High resolution screen

Immediately following the device number may be a "load flag" of either "p" or "r." A "p" indicates that the device driver is "p"ermanent and does not need to be loaded by GDOS. Because the ST has its screen drivers built into ROM, there will be a "p" after devices 01-04. An "r" indicates that the device driver should be kept "r"esident, causing GDOS to load the device driver immediately and hold it in memory. If a load flag is not present, GDOS will only load the device driver when an application opens (accesses) that device.

After the device number and the load flag is the filename of the device driver as it appears in the disk directory. In the case of ROM resident drivers, the filename is only a place holder (but must be present). Keep in mind that the device driver must be in the folder specified in the path line.

On the lines following those three items is a list of fonts associated with that device (again, these are the filenames as they appear in the indicated path of the disk).

You may have noticed a few lines with semicolons (;) in them. GDOS will treat any text on a line to the right of a semicolon as a comment and will ignore it.

Some ASSIGN.SYS files have a device 00 (00p SCREEN.SYS). This can help prevent incompatibilities between GDOS and some older (pre-GDOS) programs. On the other hand, including it can cause other problems. It is suggested you leave it out unless absolutely necessary.

Editing/Creating ASSIGN.SYS

Now, why would you want to change your ASSIGN.SYS file? Well, if you have just one program that uses GDOS and you are happy with the fonts you have, then there is no reason to change it. But, now that GODS is beginning to be used more on the ST, many of us are acquiring a collection of GDOS applications and fonts. By editing or creating a new ASSIGN.SYS, you could create a "universal" ASSIGN.SYS and font/driver folder to be used with all of these programs!

Luckily, the ASSIGN.SYS file is a standard text (ASCII) file which may be edited with most text editors and word processors. The only requirement is that the file does not contain any formatting codes. This can usually be accomplished in a word processor by turning document mode off, or selecting "Save as text" (check your word processor manual for exact instructions for doing this). If you are using a text editor, such as MicroEmacs or Tempus, there shouldn't be any special saving techniques.

Starting at the top, the first thing you may want to change is the PATH= line at the beginning of the ASSIGN.SYS file. By changing this line, you can put your fonts and printer drivers on another disk or hard drive partition (instead of your boot disk). If you are using floppies, keep in mind that this directory (folder) must be present when an application accesses any of the GDOS devices. Also, to speed booting, this directory should be present when GDOS is loaded.

Below is a list of my recommended configurations based on what arrangement of disk drives is being used.

One floppy drive:

Boot disk (drive A) with:
AUTO folder containing GDOS.PRG
GDOS.SYS folder containing the fonts and drivers
ASSIGN.SYS with PATH=A:GDOS.SYS
any GDOS application(s)
(you may wish to create separate boot disks for each GDOS application)

Two floppy drives:

boot disk (drive A) with:
AUTO folder containing GDOS.PRG
ASSIGN.SYS with PATH=B:\GDOS.SYS
Font/driver disk (drive B) with:
GDOS.SYS folder containing fonts and drivers
Application disk (drive A after booting GDOS) with:
Any GDOS application(s)
(you may wish to create separate application disks for each GDOS application)

Hard drive (booting from floppy):

Boot disk (drive A) with:
AUTO folder containing hard drive boot program and GDOS.PRG
ASSIGN.SYS with PATH=C:\GDOS.SYS
Hard drive partition C with:
GDOS.SYS folder containing fonts and drivers
Any hard drive partition with:
Any GDOS application(s) (may be on any partition)

Hard drive (autobooting):

Hard drive partition C with:
AUTO folder containing GDOS.PRG
GDOS.SYS folder containing fonts and drivers
ASSIGN.SYS with PATH=C:\GDOS.SYS
Any hard drive partition with:
Any GDOS application(s) (may be on any partition)

Of course, these are only suggestions, and other

configurations may be better for different applications.

Hopefully you should now be able to create other setups without too much difficulty. There are a few "musts" that have to be observed:

1. Each GDOS.PRG must be in the AUTO folder of the boot disk.

2. ASSIGN.SYS must be in the root directory of the boot disk.

3. The PATH= line in the ASSIGN.SYS file must contain the complete pathname of the folder containing the fonts and drivers. (GDOS.SYS is Atari's current name for this folder -- previously, Atari called it GEMSYS. You may, of course, choose any name you like.)

4. The fonts and drivers must be in the right place when an application tries to open a device.

Adding a new device driver or new fonts is very simple. All you have to do is put the device driver and/or fonts in the correct folder (as defined by PATH=) then add the filenames to the ASSIGN.SYS file.

A bit about fonts

One question about GDOS fonts that people ask is, "When are the fonts loaded?" Many people are under the impression that all the fonts are loaded when GDOS is initially loaded. This is not true (and cannot be done). An "r" loading flag in the ASSIGN.SYS file will cause GDOS to load only the device driver, not the fonts. Fonts are loaded only after an application opens a device and asks for the fonts to be loaded. At that time, GDOS will attempt to load all the fonts for that device. If there is an error (can't find the font, not enough memory, etc.) GDOS will skip over that font and continue with the next one. When an application is through with the fonts, it can "unload" the fonts to free up that memory.

Another fact that many people don't understand is that the font filename is irrelevant to GDOS. Each font has a "header" consisting of various parameters. Some of these are: point size, font name, and a font ID which is used to identify fonts of the same type (i.e. all Swiss fonts have the same ID). Another thing to note is that GDOS does not handle line spacing. Line spacing is handled by the application, regardless of the actual size of a given font. Some programs use the point size to determine line spacing, and others use the actual height of the font (yes, the point size can be set different from the actual size).

For those of you creating your own fonts (with GEMFED, FONTZ!, or any other way), you must assign a unique font ID (from 0 to 32,767) to each of your fonts, and all fonts of the same type (i.e. Times), but of different size, must have the same ID. You should also note that some GDOS applications can only use fonts with an ID between 0 and 255. Because of this, it is advisable to keep your font IDs in that range.

Another thing you must know when creating your own fonts is the resolution of the devices you are creating the fonts for. The following is a list of most of the currently available devices and their resolution.

Low resolution screen 45 x 45 (horizontal x vertical dpi)
Medium resolution screen 91 x 45
High resolution screen 91 x 91
9-pin dot matrix printer 120 x 144
24-pin dot matrix printer 180 x 180 or 360 x 360 (NEC P-series only)
Laser printer 150 x 150 (some) or 300 x 300
(dpi figures for the screen are approximate)

As you can see, most of these devices have square (round) pixels. This allows for sideways printing using the same fonts as for vertical (normal) printing. A notable exception to this is with the 9-pin dot matrix printers, which will distort characters when printing them sideways. Different drivers handle this differently; they either ignore the fact (and print distorted characters sideways), or they print the left and right sides of a horizontal page on two separate vertical pages, which must then be taped together. The first method is the easier (and faster) of the two, but the second method will produce correct characters, and the taping isn't too bad if you are going to photocopy the final product.

It would be possible to create separate fonts for sideways printing, but so far this has not been done. Also, some Epson printers have a 144 x 144 dpi mode (double plotter mode) which could be utilized. This would not only allow undistorted sideways printing, but offers sightly higher resolution in the horizontal axis.

Font filenames

As I stated earlier, font filenames are not used by GDOS. To us humans, though, consistent filenames can greatly simplify things. With the official release of GDOS (late 1987), Atari adopted a standardized way of naming font files. Here I will explain Atari's idea and add a few extensions.

A font filename like ATSS10EP.FNT may look meaningless to someone who doesn't know how the filename was derived, but is, in fact, very functional.

The first and second characters (AT) indicate the creator/distributor of the font (in this case Atari). Atari has suggested that these characters be "AT" for all fonts used on the Atari; this seems meaningless to me since I don't have any fonts for any other computers on my ST disks (why would I?). I feel that these two characters can be put to better use to specify the creator or distributor of the font.

The third and fourth characters (SS) identify the typestyle (in this case sans serif). These should be unique to a particular rendition of a typeface.

The fifth and sixth characters (10) specify the point size of the font. This should be the point size as printed on the device the font was designed for, not the pixel height. Also, sizes less than 10 should have a leading zero (i.e. 06) to maintain the overall structure.

The seventh and eighth characters (EP) specify the device for which the font was designed (in this case the Epson 9-pin driver). If there are no seventh and eighth characters, the font is assumed to be for the high resolution

screen.

The filename extender on all fonts will be .FNT.

Although not many companies or individuals have produced GDOS fonts for the ST (yet), I recommend that all font filenames follow this convention to avoid confusion. I also suggest a few standard identifiers:

Creator/distributor:

AT - Atari
MG - Migraph*
TW - Timeworks*
NC - Neocept*
Typestyles:
SS - Sans Serif (Atari's Swiss)
TR - Times Roman (Atari's Dutch)
TP - Typewriter (Atari)
DB - Dingbats (Timeworks' Bullets)*
DL - Drury Lane (Timeworks)*
MA - Madison (Timeworks)*
RK - Rockface (Timeworks)*
RA - Ravinia (Timeworks)*
CL - Camelot - (Neocept)*

Device:

(none) - Monochrome graphics (high/low res screen)
CG - Color graphics (medium resolution screen)
EP - Epson 9-pin dot matrix printer (120 x 144)
SP - Star NB-15 24-pin dot matrix (180 x 180)
LB - Atari SMM804 9-pin dot matrix (120 x 144)
LS - Standard laser printer (300 x 300)
MF - Metafile
MG - Monochrome graphics (high/low resolution)*
NC - NEC P-series 24-pin dot matrix (360 x 360)*
LL - Low resoluiton laser printer (150 x 150)*
LQ - Epson LQ-series 24-pin printers (180 x 180)*

* indicates unofficial representations which I suggest in an effort to standardize font filenames and to simplify the whole matter.

In many cases, the creator/distributor is not important, in which case the first four characters can be used for the typestyle. You will also notice that I have listed typestyles from various companies; I have done this because I recommend that you rename all of the fonts you currently have to match the above conventions. This will save you a lot of confusion in the future when you may have ten times as many fonts. One thing to note, if you create a master ASSIGN.SYS file, is that although the Timeworks Swiss and Dutch fonts are different from Atari's, they use the same font IDs. GDOs could get very confused if you have two fonts with the same ID and point size. My personal recommendation is to replace Timeworks' Swiss and Dutch fonts in the 10, 12, 18, and 24 point sizes with the ones from Atari, as I feel these are much more professional and true to the original Helvetica and Times Roman typefaces.

Because the font filename convention has changed since GDOS was first made available, it is helpful to know the old format (which is still being used in many cases). The old font filenames were laid out as follows:

cccrttp.FNT

ccc - Creator/distributor (for screen fonts, i.e. MIG=Migraph) or Device (for other fonts, i.e. EPS=Epson 9-pin printer)
r - Resolution (i.e. L=low res, H=high res)
tt - Typeface (i.e. SS=sans serif, as above)
pp - Point size (as above)

Metafiles

Metafiles are theoretically ideal graphics files (keeping in mind that text is represented graphically) which can be exchanged between different GDOS applications. Metafiles are those files with a .GEM extender. Metafiles are "ideal" in the respect that they are resolution independent. They are simply instructions for the computer to recreate a page on any output device at that device's highest resolution. This is accomplished by storing commands for drawing lines, circles, rectangles, text, etc., unlike most picture files (.NEO, PI?, etc.) which store the dots making up an image.

Unfortunately, the metafile standard is not being used consistently yet. This results in programs not being able to read metafiles created by another application. In most cases, the fault lies with the program trying to load the metafile, not the creator. Many different parameters must be present to properly represent the image. As such, they have difficulty loading the files which don't have those parameters. Currently, Easy-Draw (version 2.3) is the most capable fo the available GDOS applications, and can read just about any metafile.

Some of the more recent GDOS applications are allowing the use of GEM image files (those ending in .IMG). These are bit-mapped images similar to those created by the various ST paint programs (but without the screen size and resolution limitations). As is the case with other paint files, these images may be jagged or blocky when printed on a high resolution device.

A very important fact about images in metafiles is that the metafile does not actually contain a copy of the image. The metafile only contains the filename of the image on disk. This means that you must not remove the disk containing an image while the metafile is being printed, and every time you print that metafile, the image must be in the same disk (or you will have to change your file). If GDOS can't find the image, it will just skip over it. Be warned.

For all you programmers, currently some programs (such as OUTPUT.PRG and OUTPRINT.PRG) have difficulty handling metafiles with large coordinates. Try to keep the coordinate space as small as possible while still maintaining enough for good output quality.

Miscellaneous comments

If you are using the Timeowrks Desktop Publisher ST (TDTP), you must run the FONTWID.APP program each time you modify the ASSIGN.SYS file. Another important fact is that the relative widths of the Timeworks

fonts are not the same for different devices. What this means is that if you create a document with TDTP installed for use with an Epson 9-pin printer, then load the file into TDTP installed for use with a laser printer, the text will be reflowed. This may result in page breaks, lost text, extra white space, etc. The best solution to this problem is to create the document with a TDTP installed for the device which will create the final copy. Another idea is to use Atari's fonts (if you have them -- they are not public domain), as the relative sizes between devices is very close (there still may be a few differences, but they can be fixed readily).

It should also be noted that Timeworks' ASSIGN.SYS file is a mess. Apparently they list all the fonts they have available for all their device drivers in one ASSIGN.SYS file. I suggest you create your own based on the information presented here.

For those of you who have seen a lot of D.E.G.A.S. Elite GDOS fonts floating around, don't get too excited. For those to print properly (even blocky), you must have matching printer fonts for the screen fonts. GEMFED or FONTZ! greatly simplifies this process, but if you intend to create a complete set of fonts in four or five sizes, you will have a lot of work ahead of you.

Anyone creating fonts for the general public (either commercial or public domain), try to remember that not everyone is using the same kind of monitor or printer you are. If at all possible, create fonts for all the devices I have listed above.

For those of you creating fonts with FONTZ!, you should be aware that scaling fonts may change the aspect ratio of the characters. I'll say it again: Creating high quality fonts is a lot of work. Period.

I didn't mention metafile fonts. These are not really fonts, but merely width tables designed to keep correct character spacing in a file when used with different GDOS applications. They are rarely used and, in most cases, can be eliminated without any loss of quality.

Because GDOS has gone through many revisions, there is some confusion over which is the latest. When GDOS is loaded, a message is displayed on the screen saying that it is installed and giving the version number. The original GDOS displayed "GEMVDI Installed." After that, it switched to "GDOS Version 1.1x Installed." The most common were 1.1, 1.2, 1.3, 1.5, and 1.8. The newest revisions of GDOS display "GDOS RELEASE 1.x Installed," with 1.1. being the newest (1.0 is still widely used). As you can see, it is very important to read the bootup message when determining which revision you are using. Also, as a side note, if you can't get RELEASE 1.0 or 1.1, you should try to avoid Version 1.8, which had some problems.

To prevent problems with some of the device drivers available, fonts should be listed in the ASSIGN.SYS file in ascending order by font ID. Some device drivers will not find fonts which are listed out of ID order.

Some of the GDOS fonts available have the entire ST character set defined, including Greek, Hebrew, and other characters (most of which are unused by the average person). As you might imagine, these take up space, usually more than 50% of the font file! So, if you're running out of memory (especially with a Mega ST2 and SLM804), you can use FONTZ! to strip out the upper characters. Do this by setting the upper ASCII value to 127.

Many people who have seen printouts of GDOS text have complained that the text is blocky. This blockiness is usually the result of font scaling. If a device driver does not have a font available in the requested size, it will use the next smaller size, or it may double the size of a smaller font. If it uses the next smaller size, the text will look strange, because it will have the spacing of the requested size, with the character size of the actually used size. When doubling a smaller font, blockiness will occur, and even then, the requested size may not be obtained. The best solution to this problem is to be aware of what size fonts are available, and only use those in your files.

Currently there are rumors of a future version of GDOS which supports scalable outline (or vector) fonts. It's important to realize that GDOS does not create the characters. The device drivers are responsible for creating the actual characters, and these could be rewritten to support outline fonts without any (or very minor) changes to GDOS.

Ever since GDOS was released for the ST, people have been complaining, saying that GDOS was supposed to be included with the ST. While Atari may have planned that originally, I don't believe Atari ever stated publicly that GDOS was to be included. Keep in mind that much of the early ST documentation was based on the IBM version of GEM and reflects DRI's handling of GDOS, not Atari's.

Also, at this time, Atari has no plans to incorporate GDOS into the TOS ROMs.

Glossary

Aspect Ratio - The relation of width to height. Maintaining a constant aspect ratio ensures the same proportions regardless of size.

Device (Graphics Device) - Anything used to create some form of output, usually on a video screen or printed on paper or film.

Device Driver - A computer program used to control a device as specified by a "master" application.

Font - A typeface of a given style and point size.

GDOS - Graphics Device Operating System; an extension to the Atari ST's operating system allowing for the use of various fonts and graphics devices.

GEM - Graphics environment Manager; the portion of the ST's operating system which is responsible for most of the visual aspects of the ST.

Header - A portion of a file (usually at the beginning) containing various parameters describing the file.

Line Spacing - The distance between successive lines of text, usually measured in points.

Parameter - A number or other symbol used to represent a given attribute (dimension, color, direction, size, mode, etc.).

Pixel - Picture element; a single dot, usually one ofmany used to create a complete image on a video screen or printed on paper or film.

Point - A typographical unit of measure; approximately 1/72".

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I'd like to thank Paul Mazurek, from Migraph, for his comments and suggestions for this document.

CLUB DUES HAVE RISEN!

Dal-ACE yearly club dues have been raised to $20! Please do not mail in your renewal with $16; it's not fair to those members who attend meetings and pay the full $20. Our dues are still lower than those of many clubs, and for your money you get to participate in one of the best organizations extant. So be a sport and send in the correct amount!

Maxis Software and Velocity Development Join Broderbund Lineup of

Affiliated Labels

From a Broderbund press release

Broderbund Software Inc. has signed affiliated label agreements with Maxis Software of Lafayette, CA and Velocity Devolopment of Palatine, IL, both publishers of entertainment software. They join Broderbund's other affiliated label publishers: Kyodai Software Marketing Inc., MacroMind, and Origin Systems.

Broderbund will exclusively handle sales distribution for Maxis and Velocity products through its national organization. The two companies will remain responsible for designing, publishing, and marketing their respective products, according to Jeannine Cook, Broderbund's manager of affiliated labels.

"We're very excited about our new association with Maxis and Velocity," said Gary Carlston, Broderbund's chairman of the board. "Both companies represent cutting-edge technology, and these agreements will give us an instant presence in aerial combat games -- a major growth area in the entertainment software market.

Maxis and Velocity have each recently released jet-fighter combat programs for different segments of the market.

SkyChase from Maxis is modeled on US Air Force and Navy flight-training competitions. Players choose from a fleet of seven jet fighters, each with its own authentic flight characteristics. Users can challenge a friend, or battle the computer in either Easy Mode (practice) or Ace Mode (practically unbeatable).

SkyChase features full stereo sound, fast, smooth wire-frame animation, and joystick control. Available for Amiga and Atari ST computers, it carries a suggested retail price of $39.95.

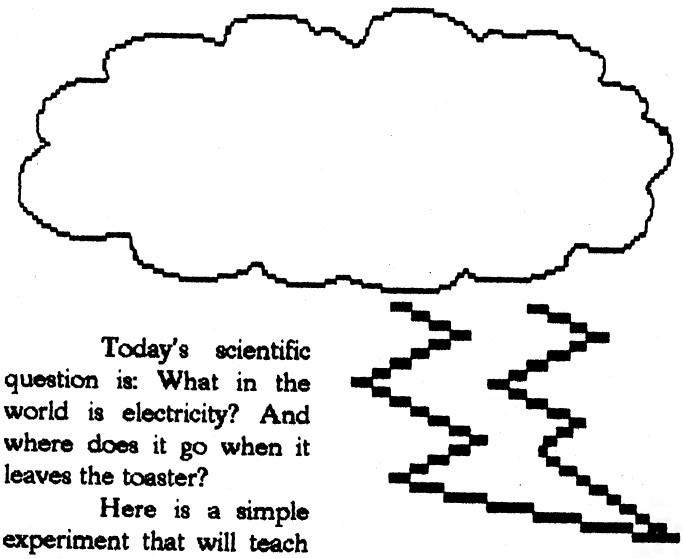
Maxis was founded in 1987. Jeff Braun is president, and his management team includes Will Wright and Steve Hales; all three have extensive backgrounds in software development. Maxis is working on four other entertainment programs scheduled for release in 1989.

Velocity's new game, Jet Fighter: the Adventure, is only available for IBM PC/Tandy computers. Velocity Development, Inc., Formerly Intellisoft Systems, was founded in 1985 and is headed by Moses Ma, Tom Ptak, and Bob Dinnerman. Among the programs Velocity has developed is the critically acclaimed Interceptor, a best-selling aerial combat game for the Amiga.

Electricity

Humor, author unknown

Reprinted from Mile High Atari Magazine, 8/88



Today's scientific question is: What in the world is electricity? And where does it go when it leaves the toaster?

Here is a simple experiment that will teach you an important electrical lesson. On a cool, dry day, scuff your feet along a carpet and then reach into a friend's mouth and touch one of his dental fillings. Did you notice how your friend twitched violently and cried out in pain? This teaches us that electricity can be a powerful force; but we must never use it to hurt others unless they need to learn an important electrical lesson.

It also teaches us how an electrical circuit works. When you scuffed your feet, you picked up a batch of "electrons," which are very small objects that carpet manufacturers weave into carpets so that they will attract dirt. The electrons travel through your bloodstream and collect in your finger. Here they form a spark that leaps into your friend's filling and then travels down to his feet and back into the carpet; thus completing the circuit.

Amazing electronic fact: If you were to scuff your feet long enough without touching anything, you would accumulate so many electrons that your finger would explode! But this is very rare; you shouldn't worry about it unless you have carpeting.

Although we modern persons tend to take our electric lights, radios, computers, etc. for granted; hundreds of years ago, people did not have any of these things. It was just as well, for there was no place to plug them in. Then along came the first electrical pioneer, Benjamin Franklin, who flew a kite in a lightning storm and received a serious electric shock. This not only proved that lightning was powered by the same force as carpets; it also damaged Franklin's brain so severely that he started speaking only in incomprehensible maxims such as, "A penny saved is a penny earned," and, "Early to bed, early to rise, etc." Eventually he had to be given a job running the Post Office.

After Franklin came a herd of pioneers whose names live on as part of our terminology: Myron Volt, Mary Louise Amp, James Watt, and Bob Transformer, to name just a few. These pioneers conducted many important electrical experiments. For example, in 1780 Luigi Galvani discovered (this is the truth) that when he attached two different kinds of metal to the leg of a frog, an electric current developed and the frog's leg kicked, even though it was no longer attached to the frog, who was dead anyway. Galvani's discovery led to enormous advances in the field of amphibian medicine. Today, skilled veterinary surgeons can take a frog that has been seriously injured or killed, implant pieces of metal in its muscles, and watch it hop back into the pond just like a normal frog, except for the fact that it sinks like a brick.

Many think that the greatest electrical pioneer of all was Thomas Edison, who was a brilliant inventor despite the fact that he'd had little formal education and lived in New Jersey. Edison's first major invention, in 1877, was the phonograph; which would soon be found in thousands of American homes where it would basically sit until 1923 when the phonograph record would be invented. But Edison's greatest achievement came in 1879, when he invented the Electric Company. His design was a brilliant adaptation of the simple electrical circuit: the company sends electricity through a wire to a customer, then immediately gets the same electricity back through another wire, and then (this is Genius) sends it right back to the customer again!

This means that an electric company can sell a customer the same batch of electricity thousands of times a day and never get caught, since very few customers take the time to examine their electricity closely. In fact, the last year in which any new electricity was generated in the United States was 1897. The utility companies have been merely reselling it ever since, which is why they have so much free time to apply for rate increases.

Today, thanks to men like Edison and Franklin and to frogs like Galvani's, we receive almost unlimited benefits from electricity. For example, in the last decade scientists have developed the laser, an electronic appliance that emits a beam of light so powerful that it can vaporize a bulldozer 2000 yards away. On the other hand, it is so precise that surgeons can use it to perform delicate operations on the human eyeball, provided they remember to change the power setting from VAPORIZE BULLDOZER to DELICATE.

Can you name
the only
virtual page
image creation and
editing program
available for
the Atari ST?

Touch-Up
by
Migraph.

MIGRAPH Inc. 200 S. 333rd St. (220) Federal Way, WA 98003 800-223-3729

Touch-up is a monochrome image editor that runs on all color and monochrome Atari ST systems with 1Mb of RAM. If you're using your ST for Desktop Publishing you'll find this program to be invaluable. Available December 1988. For complete information call our toll free line, or outside the U.S. call 206-838-4677.

Touch-Up Facts and Features

Version 1.0 for the Atari ST

Migraph Touch-Up™ is a comprehensive image design tool for producing high-resolution monochrome bit-mapped graphics on the Atari ST. It combines a wide range of drawing tools with special effects, outline font technology, and screen editing functions, and makes them accessible to all levels of users. Whether creating an image from scratch, or using a scanned or a painted image, Touch-Up provides the means to produce high-quality image files that can be used in many Desktop Publishing systems. From concept to completion, Touch-Up allows you to produce the images that you need!

Editing

- Memory buffer allows the creation and editing of images larger than the screen size
- Common drawing tools for basic shapes--lines, boxes, rounded boxes, circles, ellipses, arcs, pies, polylines and point
- Freehand sketch tool for added creativity
- Flexible and precise complex curves: Bezier and B-Spline
- Select any area of an image to use as your fill pattern
- Ability to set pen color and size, line style and thickness, fill patterns and writing modes (XOR, transparent/reverse transparent)

Interface

- Full GEM implementation featuring drop-down menus, on-screen icons, tear away menus and keyboard shortcuts

Clip Area

- Ability to select and manipulate any area of the image
- Editing functions include--clear, set, invert, flip, mirror, rotate, slant, cut, paste, move, copy, stretch and compress
- On-screen image size information box
- Load .GEM and .IMG files into the clip area
- Process control for masking, edging and contrast

Printer/Scanner Functions

- Produce .IMG/.GEM files which can be printed via Output or Outprint
- Quick print mode writes directly to GDOS drivers such as Atari laser printer
- Expandable for future support of popular scanners

Screen Editing Functions

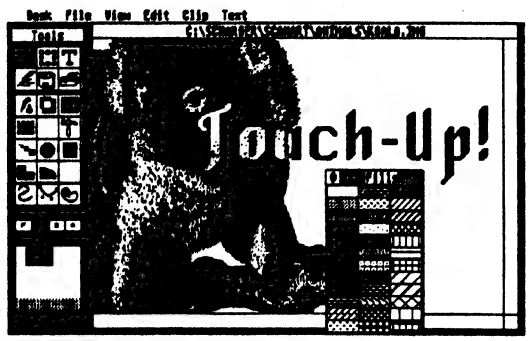
- Screen editing mode provides a complete paint program with the expected features
- Includes most of the memory buffer editing commands plus additional features like lasso and air-brush

Formats

- Load color & monochrome formats including: .IMG, Neo, MacPaint, Degas, Printmaster. Also PCX (mono only)
- Save in monochrome formats including: .IMG, IFF/ILBM, TIFF, GIF and paint formats such as MacPaint, Printmaster, Degas, and PCX

Text

- Scalable outline fonts for optimum control and clarity
- Variety of typefaces and styles
- Ability to fill text with patterns



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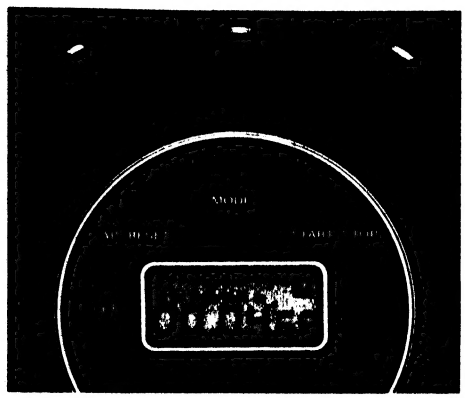

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COMPILER:

One-pass generating relocatable code. Absolute addressing of globals allows program's code and data to be as large as memory allows. Ultrafast linker accepts both Laser C and DRI format object files.

EDITOR/SHELL:

Integrated editor and development shell. Cut,copy, and paste between files. Pull-down menus and dialog boxes to control editor and run complier. Fast scrolling and text entry—supports large files. Special window can be used as a command line interpreter. Built-in dynamic disk cache and facilities for RAM resident compiler and other Laser utilities.

UTILITIES:

Resource Construction Program, full-featured Make utility, linker, dissassembler, archiver/librarian accept Laser C and DRI objects files.

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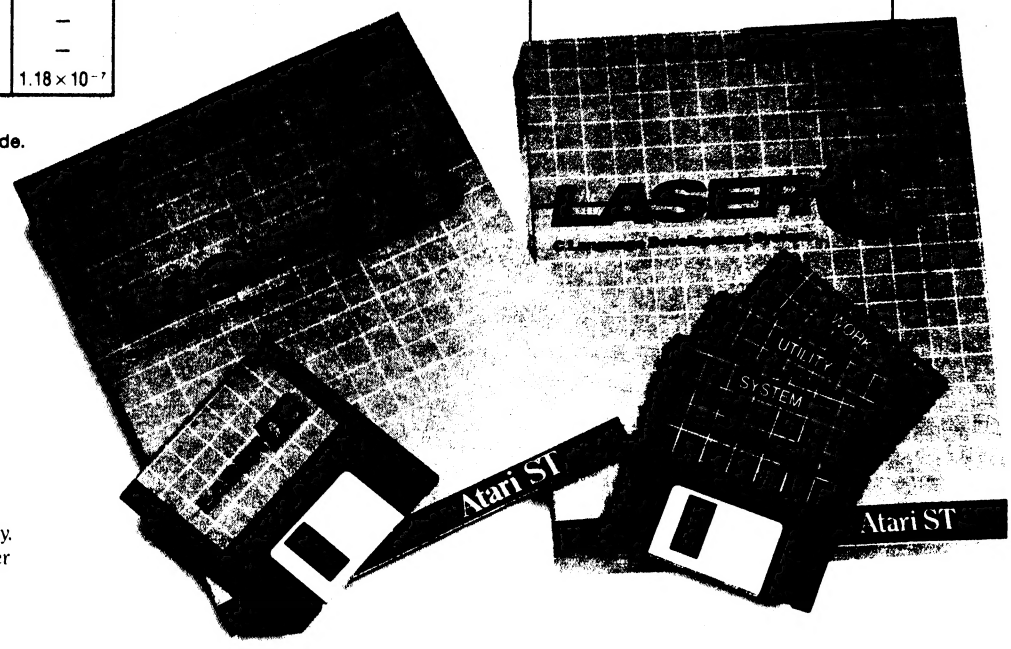
Source and assembly level debugger. Evaluate any C expression to print or set variables. Source and assembly mode allows interaction with complier output. Disassemble or dump memory. Set breakpoints with the mouse on C lines or machine instructions. Watch C variables or machine registers. Multi-window user interface. Simple command structure.

	Laser C			Mark Williams C v3.0		
	Compile/ Link	Run	Error	Compile/ Link	Run	Error
Hello.c	2.43	—	—	15.98	—	—
Apskel.c	8.88	—	—	26.5	—	—
Sieve.c	4.59	2.45	—	23.9	2.77	—
AES	35.6	—	—	103	—	—
Savage	6.31	36.4	1.73×10^{-10}	30.82	83.0	1.18×10^{-7}

All times in seconds.
AES consists of nine source files totaling 1142 lines of code.
AES is built using Make.
Mark Williams C using RAM disk.



Megamax, Inc.
DEVELOPMENT SYSTEMS

Box 851521, Richardson, Texas 75085-1521
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Most Wanted List

Dal-Ace Experts

Donny Arnold ..... 289-6746 ..... call before 10 p.m.
8-bit general knowledge

Joe Camblin ..... 221-7825 ..... call from noon to 2 a.m.
MIDI & desktop publishing

Larry Dineen ... (817)668-7296 ..... call during day.
ST general knowledge

Eb Foerster ..... 357-7602 ..... call from 7 to 10 p.m.
Turbo BASIC, SynFile, SynCalc, Assembly

Ron King ..... (817)283-0674 ..... call from 5 to 10 p.m.
8-bit hardware

John Saunders ..... (817)566-0318
C and Assembler languages

Michael Trombley 429-6134
8-bit general knowledge

Ralph Tenny ..... 235-4035 ..... call from 7 to 10 p.m.
ST general knowledge and hardware

Rene Tucker 223-6176
8-bit general knowledge

Wally Wilinsky ..... 506-0352 ..... call from 6 to 10 p.m.
MIDI

John Winer 907-1348
Systems programming and general knowledge

Infomart Directions

From North Dallas, take either Stemmons (I-35E) or the Dallas North Tollway south. From Stemmons, take the Oak Lawn exit, turn east, and park at the Infomart. If you are using the tollway, exit right on Wycliff, go left on Harry Hines Blvd. to Oak lawn, and turn right. From the south, take Stemmons north, then follow above directions. Infomart is the big, white, steel and glass building south of the other 'marts. GUESTS ARE WELCOME!!!

Editorial Policy

The Dal-ACE editorial staff reserves the right to edit your submission for spelling, punctuation, grammar, clarity, and for reasons of space limitations.

Newsletter Submissions

Submissions are welcome in any form. It is requested of any 8-bit user that s/he upload articles to the club BBS or furnish a disk or hard copy to the editor.

Newsletter Advertisements

Personal ads are free to all current members. Please see the editor for details.

Commercial Rates

Full page $35

Half page $25

Quarter page $15

Business card $10

For an additional $10 per full page or $5 per partial page, you can request that your ad be placed on the inside front or back cover or the center-page spread. This service is first come, first serve.

Ads must be camera ready. Submission deadline for ad copy is the first of the month prior to publication date. That is, November 1 will be the deadline for your ad to appear in the December newsletter. Mail copy to the address on the back page, or contact the advertising manager, editor, or Vice President of Communications. Copy received after the deadline will be run the following month. For contract advertisers, if no new ad is received prior to the deadline, the most recent ad will be run.

Disclaimer

The material printed in this newsletter reflects the opinions of the authors. Opposing opinions are solicited. Unless otherwise stated, the material in this newsletter is not copyrighted and no rights are reserved.

The purpose of this newsletter is to present information for your consideration. Neither the editor nor Dal-Ace make claims for the validity or usefulness of this material. The reader is the final judge of any product or advice presented.

Infomart Meeting Dates

Firm dates: January 14, February 18, March 11

Tentative dates: April 8, May 13, June 10, July 8, August 12, September 23, October 14, November 11, December 16.

Meeting Information

10:00 - 11:00 8-bit SIG
11:00 - 11:30....Disk Sales
11:30 - 12:00....Main Meeting
12:00 - 12:30....New users SIG
.....Newsletter Exchange SIG
12:30 - 2:00 .....ST SIG

Dal-Ace Officers

President	Donny Arnold	289-6746
Vice President	Brenda Arnold	289-6746
VP Comm	Anita Uhl	492-8682
Secretary	Michael Duke	739-3116
Treasurer	Rene Tucker	223-6176
M.A.L.	Terry Borchardt	296-4699
M.A.L.	Dave Gramm	(214)370-7143
M.A.L.	Randy Randolph	381-7624
M.A.L.	Marc Salas	255-8425
M.A.L.	Ralph Salmeron	254-8633

Dal-Ace Volunteers

Editor	Angela Burns	368-4725*
Ad Manager	Marc Salas	255-8425
BBS	Anita Uhl	492-8682
8-Bit Library	Tim Mixson	356-4725
ST Library	Angela Burns	368-4725*

Due to personal circumstances, you must leave a message with Angela's husband, Ray, between 7 p.m. and 7 a.m., no Fridays. She will get back to you as soon as possible.

Dal-Ace Bulletin Board

Metro (214)255-8256

Dal-Ace

Dallas Atari Computer Enthusiasts

Dal-Ace is an independent user education group not affiliated with the Atari Corporation. This is the official newsletter of Dal-Ace and is intended for the education of its membership as well as for the dissemination of information about Atari computer products.

Dal-Ace membership is $20 per year. BBS-ONLY membership is $10 per year. This newsletter is written, edited, and published by volunteers. Its availability and/or distribution may, at times, be subject to circumstances beyond the control of the club officers. A pink address label indicates that your membership expires this month.

Other users' groups may obtain copies of this newsletter on an exchange basis.

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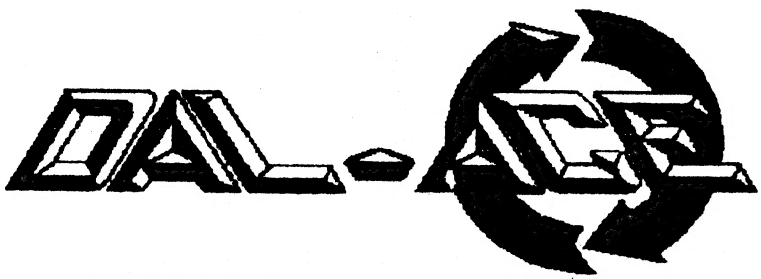

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