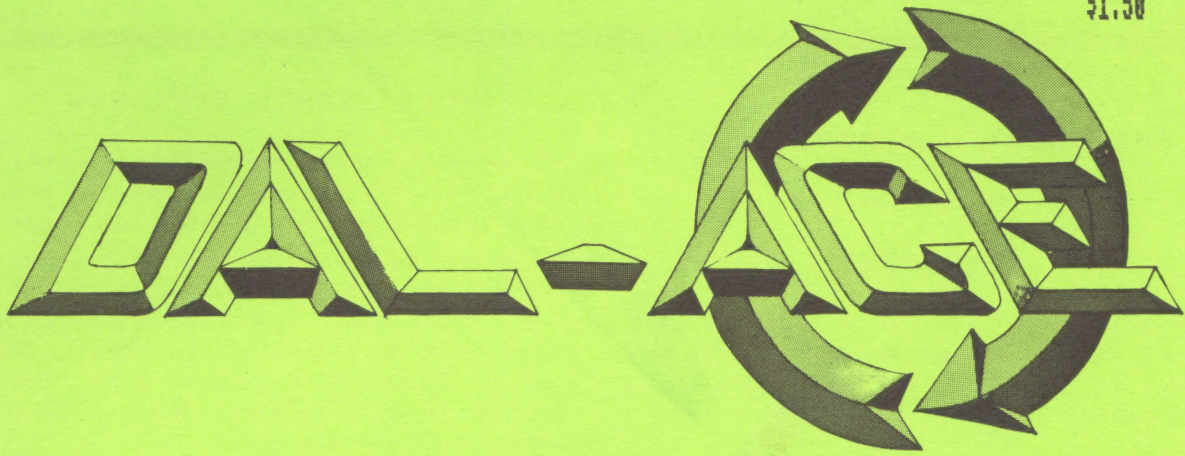


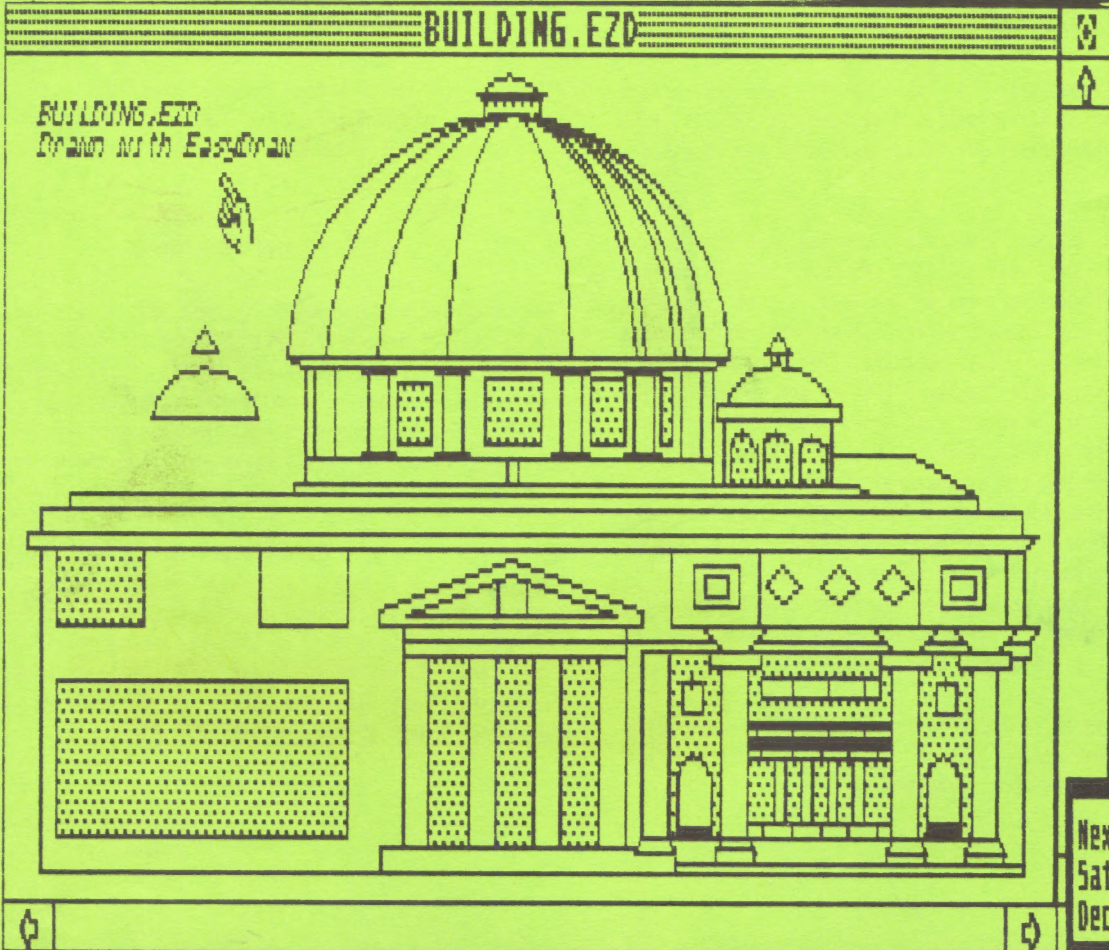
\$1.50



DALLAS Atari Computer Enthusiasts

VOLUME 7, ISSUE 11

NOVEMBER 1986



*BUILDING.EZD
Drawn with EasyDraw*

Next Meeting:
Saturday,
December 13th

PRESIDENT'S PERSPECTIVE

By John Pellet

ATARIFEST

There WILL be a fest next year, at INFOMART, scheduled for mid May, in conjunction with the regular DCC Users Forum. See you there! For more information, see the related article elsewhere in this issue!

TOYS FOR TOTS

Marc Salas has volunteered to head up this year's Toys For Tots benefit. He needs 3 or 4 volunteers for a few minutes effort between now and the December meeting. PLEASE HELP!

Toys For Tots will take place at our December meeting immediately following elections, as our program. We will again ask a nominal admission charge of \$3 or a new toy. Please don't wrap any toys, because they will just be unwrapped later. Come join the FUN!

What fun, you ask? A lot! We'll have door prizes galore, and that perennial highlight, an AUCTION, with Jim Chaney performing auctioneer duties in his inimitable fashion.

An auction sounds like fun, you say, but what are we auctioning, you ask? A lot! We have received quite a bit of software for review this year, and it all goes. ST? XL? XE? Doesn't matter - there will be something there you'll want. Plus, hardware. The club has quite a bit of serviceable hardware that we are not using, for one reason or another. It goes TOO! If that's not enough, here's YOUR chance to help. You know that great game you just don't play anymore? Or that printer you've stuck in the closet because you bought a laser? Or any other hardware or software (ORIGINALS only) you're willing to donate? Bring it on down. We'll auction it off for a good cause, so you don't have to store it, somebody else gets a bargain, and Christmas means more to a youngster in the area. What a deal!

So on December 13th, bring your unused stuff and after the elections stick around for a great auction, door prizes, and maybe more (come and see)!

NEXT YEAR'S OFFICERS

What follows is the Board approved slate of nominees for office in 1987, published here per our bylaws. Nominations from the floor are WELCOME! And they better be, because you may notice there is no nominee for Vice-President. I'm sure there will be one from the floor. Howard Chang has an article elsewhere in this issue, giving his perspective on the elections. Please read it! The rest of the nominees are hereby invited to put their views in next months issue. Current Board members are listed in italics.

PRESIDENT: *Larry Dineen*

VICE-PRESIDENT:

VP-COMMUN: Howard Chang

SECRETARY: Gary Loges

*John Funk*TREASURER: *Don Adams*

MBR @ LARGE: Frank Corlett

MBR @ LARGE: John Funk

MBR @ LARGE: Gary Fuquay

MBR @ LARGE: *Jeff Golden*

MBR @ LARGE: Dale Kassel

MBR @ LARGE: Nolan Terrill

MBR @ LARGE: Michael Trombley

MBR @ LARGE: Jeff Wilson

MBR @ LARGE: *Wally Wilinski*

MEETING DATES

The scheduled meeting dates for next year are: 1/3, 2/14, 3/21, 4/11, 5/9, 6/13, 7/11, 8/8, 9/12, 10/10, 11/14, & 12/5. As always, dates more than 90 in advance are subject to change. Note that the January date is the THIRD. Smack in the middle of the holiday. Do you want to meet then, or would it be better to cancel for the month? Think about it.

THANKS!

That's about it for this month. In December we're back to the second Saturday, so I'll see you on the 13th. If you are ENTHUSIASTIC, want the club to grow, be successful, and so forth, HELP! If YOU won't do it, it won't get done. **COME VOTE !!!**

ENTHUSIASTICALLY YOURS
JOHN PELLET

DCC News

October 13, 1986 Meeting

DCC sold a total of 54 tables at the October Forum.

INFOMART has decided to open their facility more than in the past. As a result, as some of you may have noticed, the Information Booth that used to be a fixture has been removed. Soon to follow it into oblivion is the Security Booth near the elevators. Also, INFOMART no longer requires a badge for admission. DCC plans to maintain member and guest badging to identify participants. This is needed since there are occasionally other programs taking place not related to the Forum, as occurred at the October meeting. Also, some merchants are offering discounts for Forum participants, using the badges as identification.

Remember the DCC information (answer only) phone number is 214-746-3297. If you can't remember the meeting date, give it a call before you drive down.

The Texas Computer Education Association will meet jointly with the Users Forum on November 15. They will have many education-related presentations, including special speakers, like Jim Butterfield, well-known author. Also, expect 30*40 additional tables in the vendor area, carrying educational items.

DAL-ACE and NT ST UG will be sponsoring AtariFest, a CES-like forum for Atari-related hardware and software, on May 7, 8, & 9, 1987. The latter day will be jointly with the May '87 Users Forum. Tickets to the exhibit hall for the 'Fest will be available at reduced cost for DCC-affiliated groups. More details will be announced as they are available.

The Dallas MIDI Group is beginning the affiliation process to join the DCC.

C-CAD (Center for Computer Assistance to the Disabled) will meet at INFOMART on April 4, 1987. DCC had been invited to meet jointly with them. After discussion, the Council decided not to move from the second Saturday, April 11, so no joint meeting will occur.

Tentative Forum dates for 1987 are: 1/3, 2/14, 3/21, 4/11, 5/9, 6/13, 7/11, 8/8, 9/12, 10/10, 11/14, and 12/5. Note that since these are more than 90 days away, they are tentative.

DCC will need a Vendor Manager Assistant, by the December meeting. If you are interested, contact any DCC representative.

AtariFest NEWS

By Bill Bailey

Good news from the DCC. They've released the rooms we need to have AtariFest. This means that we have the rooms for all three days. Now we need some volunteers to be on the following committees:

PUBLICITY

This committee will handle contacting local and national newspapers and magazines. Post on area BBS's, at local businesses, and promote AtariFest in any other manner.

VENDOR CONTACT

Contact and track the vendors that will be coming to AtariFest. Also, contact a local travel agent to arrange for discount hotel and travel.

SPEAKER CONTACT

Contact nationally known Atarians (e.g., Tom Hudson, Bill Wilkinson, ...) to speak at seminars during AtariFest.

SITE

Contract interior designers, insurance, security, etc. for AtariFest. INFOMART has a list of recommended firms, plus other help.

PROGRAM

Set up times for the speakers, arrange for demonstrations, set up door prizes, etc.

GENERAL HELP

Take tickets, assist vendors and speakers, assist other committees as needed, and so forth.

If you feel that you can help in any of these areas, or something left out, contact me at the Users Forum, or on any of the following BBS's:

DAL-ACE ST	267-4913
DAL-ACE 1	540-3270
NCC-1702	681-0362
Psychlo Empire	251-1175

I am usually on one or all of these boards every day. I'm looking forward to hearing from YOU!

Bill Bailey

The Eight-Bit Stretch:

More Bang for Your Buck (Part III)

By Jeff Wilson

I/O Bogs Down the Best of Them

Want to see frustration? Just watch the new owner of a hot micro with window management features and a megabyte of memory load some big application program from a copy-protected diskette. Not only does it take a while, but when it's ready, not much of that megabyte remains.

It takes so long because diskettes and the system interfaces that support them are slow. They're not a bad choice for inexpensive systems, but they force certain constraints upon software designers. They promote loading large programs in their entirety because their sluggishness makes more sophisticated techniques impractical. They force data into main memory for the same reason. Even some of the best programs end up treating diskettes just as tapes.

That's bad: big programs and data take forever to load. Worse: performance falls off a cliff once program & data exceed the size of main memory. Worse yet: the operating system is committed to ROM, speeding the boot process and freeing RAM, but lowering OS performance and making future updates more expensive. Worst: applications may not fit at all (e.g., singing the "Out-of-Memory Spreadsheet Blues").

These tendencies are bad for the 8-bit Ataris, but worse for the MC68000-based products. Their raw performance and graphic capabilities create expectations that can only be realized using in-memory programming techniques.

All of this is a roundabout way of saying that you won't be satisfied with one of the new machines unless you load it fully with memory and a hard disk. And if you think that's too expensive for now, you're reading the right DAL-ACE newsletter article. If you disagree, tell it to Mr. Dave "Horace Greeley" Gillen and he'll gladly publish your comments.

Faster disk I/O would offer a few "fringe benefits" to eight-bit Atari users beyond simply speeding programs. For instance, floppy diskettes and read/write heads alike last longer if extra disk rotations in search of sectors can be avoided. Second, the probability that an electrical power "spike" might corrupt a disk declines as the time to move data to disk goes down. And one more subtle point: since disk I/O and computation on

6502-based Ataris are strictly sequential (i.e., they don't overlap because there is no multiprogramming on these machines) and synchronized via polling, faster I/O reduces the fraction of CPU time wasted waiting for I/O completion.

Probing 8-Bit Atari I/O

If you've read this far, you'd like to know how quickly the computer that you already own shuffles bytes, and how you might make it go faster. It just so happens that I've written a benchmark program to do that.....

In our last installment, we showed how badly BASIC slows processing. So why bother with it? The program discussed here was prepared with MAC/65, the macro assembler from O.S.S. You can't get much closer than that to the 6502 in your machine.

The assembly code is easy to follow but difficult to use in your own projects. That's because it uses macros supplied in the MAC/65 Toolkit along with two of my own (NOTE and POINT). I've uploaded the code to the club BBS, should you wish to examine it. If Howard is truly indulgent, you'll even find twenty-five pages of a fully expanded assembly listing there on the board. But it's probably more fun to sit in rush-hour traffic on Central Expressway than to read that thing.

Here's what the program does.

First, it creates and reads a large file sequentially. This simulates wholesale program or data movement out of or into memory, by far the most common use of the Atari disk.

Next, it creates a new file and saves an array of pointers to the start of each sector. It then uses these pointers to read the file sequentially.

Finally, it uses the same pointers to navigate randomly within the file, first reading then writing. Such pointer-based access techniques could be applied in a "virtual array" paging scheme, whereby a disk-based data array would be segmented and mapped into a much smaller portion of physical memory dynamically.

It ain't really virtual memory, but it's a fairly sexy technique for a 6502 and potentially quite useful for spreadsheets, database programs, text processors, and other applications that manipulate large arrays. But getting back to the point of the exercise, nifty ideas like this are impractical if the disk system is a sloth.

For the record, all tests were conducted using a 130-XE, modified by addition of Newell Industries' Omniview XL/XE OS ROM (which shouldn't affect performance for these tests). I overworked an Atari 1050 disk drive equipped with ICD's U.S. Doubler (which doesn't affect AtariDOS performance). And of course my MAC/65 cartridge was plugged in at all times.

[Pause to reflect on the previous paragraph: Atari's eight-bit computer line is so stable and well standardized that products from four different vendors can peacefully coexist with it.]

Everything You Always Wanted to Know about Sectors but Were Afraid to Ask

So how slow is Atari diskette I/O? It's pretty darned slow. I looked at three filesystems of current interest to eight-bit Atari users:

* AtariDOS 2.5 / single density (125 data bytes per sector)

* AtariDOS 2.5 / double density (125 data bytes per sector)

* SpartaDOS 3.2 / double density (256 data bytes per sector)

I didn't test MYDOS, DOS-XL, AtariDOS 3.0 (shudder!), or any other DOS flavors. Maybe a dedicated reader will finish the job.

Lovers of the binary system will notice that AtariDOS sectors contain three data bytes fewer than a nice, round 128. Pretty tacky! That's because AtariDOS uses three of the 128 available bytes to chain file sectors together and support other filesystem functions.

AtariDOS chain pointers are 10 bits long and relate directly to physical sector locations. This implies several things. First, an AtariDOS filesystem can't be larger than 1024 (2**10) sectors, about 131,000 bytes. The largest possible file is actually smaller than the 130-XE's main memory! So forget about using unmodified AtariDOS with multi-megabyte hard disks. Since there's no support for file-relative random access, it's slow and painful to make backup copies of files organized in any way other than sequentially (e.g., ISAM is a disaster). Finally, AtariDOS does not support sparse file allocation: you've got to create the first N physical sectors of a file before you can touch sector N+1. This

complicates database applications.

Double-density SpartaDOS 3.2 is quite different. It maintains for each file a data structure called a sector map. The map relates physical disk sectors to their ordering within a particular file. Each map entry is two bytes long, thus providing for a filesystem of size up to 65,536 sectors. Each sector is 256 bytes long, all of it devoted to data. SpartaDOS could manage a diskette of 16,777,216 (2**24) bytes, if you could find one. It squeezes 104,320 bytes onto a real one. Access relative to the start of a file is provided: you can back up ISAM files quickly and simply. The sector map approach also supports sparse allocation. If that weren't enough, a hierarchical directory lets you organize files more conveniently. These features buttress ICD's claim that SpartaDOS was designed with hard disk support in mind.

Nothing comes for free. Certainly SpartaDOS must putter along slowly, encumbered by all of these features. Well, according to the ICD folks, they also took pains to minimize average access time. They claim to have reorganized the diskette format to avoid extra rotational time delays.

So much for claims and theory. Here's what really happened.

Large Sequential File Creation / Read
(Time in Seconds)

File Size (Sectors)	SD 3.2/DD (256)	AD 2.5/SD (125)	AD 2.5/DD (125)
512	52/77	215/158	230/163
256	26/38	109/ 80	116/ 82
128	14/20	58/ 41	60/ 42
64	7.5/10	29/ 20	33/ 22
32	N/A	16/ 11	19/ 11
16	N/A	9/ 5	13/ 6

The table's most dramatic message is SpartaDOS's obvious performance supremacy. It writes sectors about four times as fast as AtariDOS 2.5 and reads them about twice as fast. In fact, the last two tests are marked "N/A" for SpartaDOS because they zip by so quickly that measurement is unreliable.

Please note that reported file creation time includes the time needed to first delete a previous version, the typical case for many applications.

There are a few other lessons. Here is the same data, recast in terms of hundreds of bytes per second to account for the different sector sizes.

Large Sequential File Creation / Read
(10**2 Bytes/Second)

File Size (Sectors)	SD 3.2/DD (256)	AD 2.5/SD (125)	AD 2.5/DD (125)
512	25/17	3.0/4.1	2.8/3.9
256	25/17	2.9/4.0	2.8/3.9
128	23/16	2.8/3.9	2.7/3.8
64	22/16	2.8/4.0	2.4/3.6
32	N/A	2.5/3.6	2.1/3.6
16	N/A	2.2/4.0	1.5/3.3

Note that SpartaDOS writes faster than it reads data; AtariDOS works just the other way. SpartaDOS writing and reading and AtariDOS writing performances decline modestly with skinking file size; AtariDOS reading performance bobbles up and down. The test results suggest that ICD has indeed improved diskette layout for good performance. The double sector size doubtless helps as well.

One more surprising result that shows up in all tests: double density is slower than single density AtariDOS. This reverses the relationship of the data transfer rates for each density -- DD ought to transfer bytes to the controller twice as fast as SD. This reinforces my belief that disk layout is the dominant factor in eight-bit Atari I/O performance.

The next table shows average data rates for creating and reading small files. Unlike the last test, this one runs the same bits of code several times in succession. I put it together with the intention of generating more precise figures for small files. I was surprised to find that average performance declined.

Small File Sequential File Creation / Read
(10**2 Bytes per Second)

File Size	SD 3.2/DD	AD 2.5/SD	AD 2.5/DD
85	23.1/11.6	2.00/3.94	2.47/3.79
64	22.1/11.7	2.50/3.81	2.42/3.72
32	17.4/11.1	2.53/3.64	2.00/3.64
16	12.0/10.2	2.15/3.39	1.60/3.33
8	8.2/ 9.8	1.69/2.94	1.12/3.22

So much for sequential performance. Surely the SpartaDOS optimizations won't mean much in a test of random access. Indeed, the margin between SpartaDOS and AtariDOS narrows. But it surely doesn't disappear, as the following table shows (don't take the third digit too seriously -- it's not really significant).

Small File Random Write / Read
(10**2 Bytes per Second)

File Size (Sectors)	SD 3.2/DD (256)	AD 2.5/SD (125)	AD 2.5/DD (125)
85	10.7/10.7	2.40/3.05	2.55/3.21
64	11.6/11.1	2.50/3.21	2.60/3.21
32	12.8/12.2	2.60/3.29	2.55/3.29
16	13.5/12.2	2.60/3.13	2.60/3.21
8	15.1/13.5	2.40/2.78	2.55/3.05
4	15.1/14.2	1.90/2.27	2.45/2.78

It was lots of fun running this last test. It seemed as though my disk drive had become seek-crazed. Only the fact that the results were quite repeatable assures me of its accuracy.

Another surprise: As might be expected, SpartaDOS performance increases with decreasing file size. You'd think that performance would increase as the space over which the random seeks were distributed decreased, wouldn't you? Sure, and that's what makes the AtariDOS performance puzzling. It improves at first, then deteriorates as the file sizes decreases below 16 sectors.

What final lessons can we extract from this exercise?

1. SpartaDOS with the U.S. Doubler beats the pants off of AtariDOS. It increased the cost of my 130-XE system by about 20% but returned a four- to six-fold I/O performance improvement.

2. Two articles ago, we showed that the simplest floating point work using the quickest hardware available on an eight-bit Atari runs through about 4300 bytes per second (divide that by 20 to do the same work with BASIC on an unmodified 130-XE). This is roughly four times as fast as SpartaDOS can deliver data. These facts suggest that in-memory data handling techniques are generally the best way to go, even if you do have a relatively quick diskette system.

3. Much of this is academic if you have a big ramdisk. I wish someone would run these tests with one.

4. I've taken a year's life out of my 1050 doing this stuff. But now you don't have to.

[This is the last of Jeff's series of articles on stretching our 8-bit Ataris. I think he's done a fantastic job of giving us hints and tricks. Be sure to let him know that you appreciate his efforts. A BIG THANK YOU is in order.]

*That way, maybe he'll share more of his talents with us.
JGG*

*** Next Meeting: ***
*** Saturday, ***
*** December 13th ***

COMPUSERVE COPYRIGHT POLICY

Neil Shapiro, Chief Sysop, MAUG(tm), 10/06/86

This is a brief synopsis of events which led to the much reported CIS - BBS sysop Steven Sande mess.

Many of you may have read the article in INFOWORLD about how CompuServe lawyer's contacted BBS Sysop Steven Sande. This article was based on allegations made by Steven Sande and INFOWORLD printed these allegations as truth. The allegations made are simply not true. The facts are:

1) CompuServe received a complaint from the author of a COPYRIGHTED program that his program was being published by Sande's Mousetrap BBS without the author's permission. Copyrighted, not a public-domain.

2) CIS asked me to call the BBS and verify the author's complaint. Sande's short bulletin (signed with his nom de plume of "Captain Mac") specifically stated that Sande was going onto GENIE, CompuServe and Delphi every week to download ALL files and that for him \$25 to join his service there was no longer any need to join any of the networks.

3) Sande left a message on MAUG(tm) also stating that all files (not just public-domain) were being offered on his BBS. I deleted that message and sent him an EMAIL reply explaining that many of our files were copyrighted by authors and that it was unethical to take such files without the authors' permission.

4) CIS' lawyers sent Sande a note which did NOT ask him to close his BBS but simply asked that he cease the illegal acts above.

5) Sande left many messages on such networks as FidoNET claiming that CIS had told him to close his BBS and that it was public-domain files that were at issue. This is simply a misleading statement. CIS did not ask him to close his board. The files at issue were copyrighted files which CIS had received author complaints over.

6) Keep in mind that Sande's BBS was a commercial venture. Also keep in mind that Sande stated in his bulletin that he was making compilations of commercially available data.

7) BBS systems are the heart and soul of telecommunications. But the sysop of a BBS must operate within ethical and legal guidelines.

(Downloaded from CIS and edited by JLPellet.)

BBS EXCERPTS
edited by Jeff Golden

The following are some messages that were downloaded from the DALACE 8-bit board. While they do not say much about computers, I found them to be interesting, for the personal views they present, of our members, who did not know they were contributing to the newsletter.

We really do have a great bunch of interesting people in our membership. I only wish there was 10 times as much space, so as to allow printing more, of what you will find, everyday, on the DALACE bulletin board. So, get your modem and come join the fun.

Please excuse the typos that creep into any, and all, on-line conversations. To edit them out would remove the flavor of tele-communications.

To : ALL - FROM : BUTCH CROAN
SUBJ : PASCAL SIG

HELLO OUT THERE THOSE OF YOU WHO ARE LOOKING FOR A NEW LANGUAGE, DO YOU LIKE BASIC AND THINK IT IS THE ULTIMATE PROGRAMMING LANGUAGE IF SO PLEASE DON'T READ ANY FUTHER AS I WILL SAY SOME UNKIND THINGS ABOUT BASIC. DO YOU LIKE THE QUOTE FREEDOM OF A LANGUAGE THAT HAS NOT STRUCTURE, LIKE "C" OR ARE YOU ONE OF THOSE WHO DOESN'T PROGRAM ENOUGH TO BE CALLED A PROFESSIONAL BUT WOULD LIKE TO TAKE A SET UP FROM BASIC.

IF YOU ARE STILL WITH ME THR ALL THAT NAME CALLING ABOVE THEN WHAT I AM TRYING TO SAY IS I THINK THAT PASCAL IS EASIER TO LEARN THAN "C" AND TEACHS GOOD PROGRAMMING SKILLS AND IF A STEP UP FROM BASIC IN BOTH SPEED AND POWER AND FOR THOSE OF YOU WHO ARE ONE DAY GOING TO BUY AN 520/1040 ST ITS A GOOD LANGUAGE FOR THE NOVICE AND PRO ALIKE AND THAT IF BY CHANCE YOU DO NEED TO STEP UP THE "C" YOU WILL ACQUIRE SOME VERY GOOD EXPERIENCES ON THE WAY, SO IF YOU WOULD LIKE TO START A "PASCAL " SIG THEN REPLY TO ME CARE OF THIS BBS...

To : WES NEWELL - FROM : SYSOP
SUBJ : 55 MPH CONT

WES, I HAVE TO DISAGREE WITH YOU ABOUT SENDING DRUNK DRIVERS TO JAIL NOT BEING FUTILE. IF THAT'S THE CASE, THEN WE SHOULDN'T SEND ANYONE WHO VIOLATES THE LAWS TO JAIL. I ALSO DOUBT IF 99% OF DRIVERS COULD HAVE BEEN CONVICTED AT ONE TIME OR ANOTHER. IF THAT'S THE CASE THEN SOMETHING IS VERY WRONG WITH WHERE THE LEGAL LIMIT IS SET OR THE DRUNK DRIVER PROB IS MUCH WORSE

THAN I THOUGHT.

PEOPLE DIE FROM DRUNK DRIVERS, OVER HALF OF ALL TRAFFIC FATALITIES AS A MATTER OF FACT. THE SITUATION TODAY IS THAT WE'RE TOO LENIENT AND IT ISN'T WORKING. I DON'T NECESSARILY THINK THE OFFENDER SHOULD GO TO JAIL ON THE FIRST CONVICTION BUT SUBSEQUENT ONES? YEP, I THINK SO. UNTIL THE DAY COMES WHEN WE TAKE THIS PROBLEM SERIOUSLY, MANY MORE THOUSANDS OF INNOCENT PEOPLE ARE GOING TO DIE AT THE HANDS OF PEOPLE WHO DRINK AND DRIVE.

I DON'T REALLY THINK YOU CAN LUMP ALL DRIVER ED COURSES TOGETHER. I'M SURE SOME ARE BETTER THAN OTHERS. ALSO, ANY SCHOOL CAN ONLY PROVIDE THE FUNDAMENTALS. IT'S UP TO THE PUPIL TO APPLY WHAT IS LEARNED. CAN WE BLAME A MEDICAL SCHOOL FOR A LOUSY DOCTOR? MAYBE, BUT THEN AGAIN, MAYBE NOT. NOT UNLESS THE SCHOOL PERHAPS PUTS OUT A LOT OF BAD DOCTORS.

I GUESS THAT'S BESIDES MY ORIGINAL POINT THOUGH, REGARDLESS OF HOW GREAT WE THINK DRIVERS ED IS, THE STATS THEY CITED WEREN'T DRIVER'S ED STATS ON PROBABILITY OF FATALITY BUT ONE OF A NATIONAL STUDY. HOWARD

To : SCOTT PHELAN - FROM : SYSOP
SUBJ : 55 MPH

SCOTT, THE ORIGINAL INTENT WAS TO ALLOW THE GENERAL MESSAGE BASE TO ALSO INCLUDE 'DISCUSSIONS'. DOESN'T THIS WORK ALRIGHT? HOWARD

To : ALL - FROM : FRED SMITHSON
SUBJ : MACROS FOR 130

I am new to the board and need help writing a macro for logon to a mainframe with a 130 using "HomePak". Please call me at work before 12 Saturday 241-8248. ==FRED==

To : SYSOP - FROM : RACHEL DUKE
SUBJ : 55 MPH CONT

I justed wanted to place my opinion. I'm from a town smaller than Richardson back in West Virginia. The BIG highway (you know the one your parents won't let you drive on with only your learners permit) was two lanes each way. When I got here to Dallas two years ago I didn't do any driving. I was scared to death. I made my husband take me everywhere. This soon got boring so I decided to try Central Expressway. And I've made a discovery. If you don't go the peed everyone around you is going than you are a hazard and can cause an accident. I agree that everyone should go the speed limit but it just isn't reality to expect it. So, I do my best NOT to be a road hazard and travel the highways at 55 to 70. I've only had one accident on a highway here and that was on Central when the car in front of me made a dead stop in front of me. Fortunately noone was hurt. This incident

increased my conviction that to drive safely you need to be alert and drive the flow of the traffic. If you don't believe me just read the Texas Drivers Manual, I did when I came down and was surprised to discover that it states that you are to drive with the flow of the traffic. I thought this was ridiculous until I actually got out there. One last thing, I have never drag raced and don't think I would know how. And, I consider myself a safe driver. Drivers Ed - I took it my senior year to get lower rates on insurance. It was fun driving my teacher to the dry cleaners to get his clothes, to see his friends, etc. but as for learning anything the only thing I got was yelled at for making a mistake but never told how to correct it.

To : SYSOP - FROM : SCOTT PHELAN
SUBJ : 55 MPH

Howard, it works up to a point. That is when the discussion turns into a full-fledged debate as this one has. I think that some of the messages not pertaining to the discussion topic, get buried underneath the debate. [scott]

To : SYSOP - FROM : WES LEWIS
SUBJ : SPEED LIMIT???

HOWARD, THE ONLY PROBLEM WITH USING SAVED LIVES AS A CRITERIA IS THAT THIS RATIONALE WOULD EITHER ELIMINATE DRIVING COMPLETELY (THE MAXIMUM POSSIBLE SAVED LIVES) OR IT PLACES YOU IN THE POSITION OF SETTING THE "ACCEPTABLE" DEATH RATE WHEN YOU SPECIFY ANY SPEED LIMIT ABOVE ZERO. WES LEWIS

To: MATTHEW VANCE - FROM: ROBERT SHERRON
SUBJ : STUFF FOR SALE

MATT IF YOU STILL WANT TO SELL THE BROKEN ATARI 1050 OR THE KOALA PAD GIVE ME A CALL AT 288-5048. MAYBE WE CAN MAKE A DEAL OF SOME SORT. THANKS, ROBERT SHERRON

To : ALL - FROM : KIRBY OWENS
SUBJ : PD GEM

DOES ANYONE HAVE ANY DOCUMENTATION FOR THE PD PROGRAM GOS ON THE ST BBS? I CAN GET IT TO BOOT UP AND GET A DISK DIRECTORY, BUT NOTHING ELSE. ANY HELP WOULD BE APPRECIATED THANKS. KIRBY OWENS

To : WES LEWIS - FROM : KIRBY OWENS
SUBJ : 55 MPH CONT

WANT A SURE FIRE WAY TO PUT A DENT IN THE DWI PROBLEM? SENTENCE THEM TO PUBLIC SERVICE WORK IN AN EMERGENCY ROOM OR ON AN AMBULANCE SERVICE. AFTER YOU SCRAPE A FEW OF THEM UP, YOUR ATTITUDE BEGINS TO ADJUST ITSELF. I WAS A MEDIC IN THE USAF, AND HAVE MORE EXPERIENCE IN THIS ARE THAN I CARE TO THINK ABOUT. IT WORKS!! KIRBY

To : RON HUNTER - FROM : CURTIS COLLINS
SUBJ : 55 MPH
I agree with that! Houston is a nightmare to drive in.

To : ALL - FROM : SCOTT PHELAN
SUBJ : DAYLIGHT SAVINGS
Just a reminder to everyone, Daylight savings time ended last night. So, if you haven't set your clocks back, It's an hour earlier than what it says. Isn't it great to get an extra hour of sleep? [scott]

To : KIRBY OWENS - FROM : SCOTT PHELAN
SUBJ : PD GEM
Kirby, For one, it is joystick controlled, and there is, I believe, a built-in help file. Just move your joystick to the option in the upper right corner and press the button. Hope this helps,[scott]

To : WES LEWIS - FROM : TODD FANCHER
SUBJ : 55 MPH
What I was referring to was an incident that happened on Central Express way. A guy cut somebody off, or something like that, and the the people that he cut off pulled up beside him and shoot him. This type of incident happens quite frequently, in fact I've had a gun pulled on me at an intersection just because I blew my horn at the lady who was about to take the side of my truck off with her. She is now back in prison, seems she had escapd. Todd F.

To : SCOTT PHELAN - FROM : SYSOP
SUBJ : DAYLIGHT SAVINGS
BUT, SCOTT, WE HAVE TO GIVE THE HOUR BACK IN THE SPRING! FOR SOME REASON IT'S MUCH EASIER TO SET THE CLOCKS BACK THAN FORWARD! HOWARD

To : SCOTT PHELAN - FROM : KIRBY OWENS
SUBJ : PD GEM
THANKS FOR THE TIP. I HAD FINALLY FIGURED OUT MOST OF IT. IT IS SORT OF A CUTE LITTLE THING. HAVEN'T YET DECIDED WHETHER IT IS WORTH USING OR NOT. ANYWAY, THANKS AGAIN FOR THE HELP. KIRBY

To : FRED SMITHSON - FROM : RON HUNTER
SUBJ : MACROS FOR 130
FRED, First suggestion. Ditch HomeTerm and get Express. Second, you will have no trouble with Express macros. Ron

To : SYSOP - FROM : RON HUNTER
SUBJ : 55 MPH
Howard, The freeways in Houston are stop and go 24 hours a day. One problem is that they are always building them. I-45 has been under construction continuously for the last 30 years. Ron

To : SYSOP - FROM : DOW MULLENS
SUBJ : 55 MPH CONT

I agree that drunken drivers should go to jail. I think that first offenders should also spend some time in jail. There is no excuse for DWI. I believe that harsh punishment both jail and fines would make drunks think twice about getting behind the wheel.

To : SYSOP - FROM : JOHN PELLET
SUBJ : SPEED LIMIT???

Based on your previous messages, there is no (NONE) rationale, statistic, or argument that will convince you. Please feel free to decide for yourself. I will! jlp

To : ALL - FROM : MIKE VALANT
SUBJ : BORING

hmm... Driving, drunk drivers, highways, MPH, etc. This is getting boring. We really need a controversy base so that the 'general' things I see don't get drowned out.

To : ALL - FROM : MARC SALAS
SUBJ : 55mph

Back about 6 yrs. ago, smack dab in the middle of the "me generation", it was becoming fashionable to be assertive. Stories like Todd's (lady pulls gun on him for honking his horn) have led me to formulate one of my theorems - only a fool yells at a stranger.

A friend of mine always smiles and waves when he thinks he has been "flipped off" (given the finger). He figures it will anger the jerk and still cover him if it turns out he was mistaken as to the other's gesture.

To : SCOTT PHELAN - FROM : VERNON LEONARD
SUBJ : DAYLIGHT SAVINGS
AN EXTRA HOUR OF SLEEP? I JUST HAD TO WORK AN EXTRA HOUR THAT NIGHT.

To : SYSOP - FROM : VERNON LEONARD
SUBJ : DAYLIGHT SAVINGS
I THINK THE BEST THING TO DO IS JUST LEAVE THE CLOCKS ALONE!!! I EITHER HAVE TO WORK AN EXTRA HOUR FOR NO PAY OR LOOSE AN HOUR OF SLEEP.

To : VERNON LEONARD - FROM : RANDY RANDOLPH
SUBJ : DAYLIGHT SAVINGS
DAYLIGHT SAVINGS TIME IS BACKWARD. THE WAY IT WORKS IS FINE ON THE FAR EAST COAST...EVERY WHERE ELSE WE LOOSE BOTH ENDS OF THE DAY AT ONE TIME OR ANOTHER. RANDY

A Personal Opinion on the Elections
by Howard Chang

With the club officers elections coming up next month, I wanted to give you some food for thought on things we should be looking for in our officers.

As the candidates give their "speeches" at the December meeting, the following are some things I will be asking myself:

1) How visible and active has this person been in the club? Do I recognize the person or the name? (i.e. Has this person shown a genuine interest in the club by volunteering for special events, newsletter articles, or by voicing opinions at club meetings?)

2) Has this person attended the meetings consistently? It is imperative officers be present at the meetings. Previous history may be an indicator of future participation.

3) For the BBS users, does this person have a modem AND been active on the club BBSs? The BBS is one of those club activities that requires on-going funds to operate. Having officers who understand and can relate to the BBSs will enable them to make more intelligent BBS-related decisions. This is a very important aspect for continued support of the BBSs.

4) Does this candidate have defined goals for the position and the club? How about plans to achieve those goals?

Also, I think it's important these guidelines are applied to the current officers running for re-election. As members, we are affected by who is running the club for us. As SYSOP, I have been very intimately affected by those in office.

There's no doubt the members themselves determine whether the club is poor, mediocre, or great. The more the members care and ACTIVELY participate, the better the club will be. However, the officers provide the critical direction and often make required unilateral decisions. In other words, they can almost make or break the club.

I hope the above guidelines is helpful to you in making up your mind who to vote for. Please make it a point to attend this very important meeting and vote for who you think will do the best for YOUR club!!

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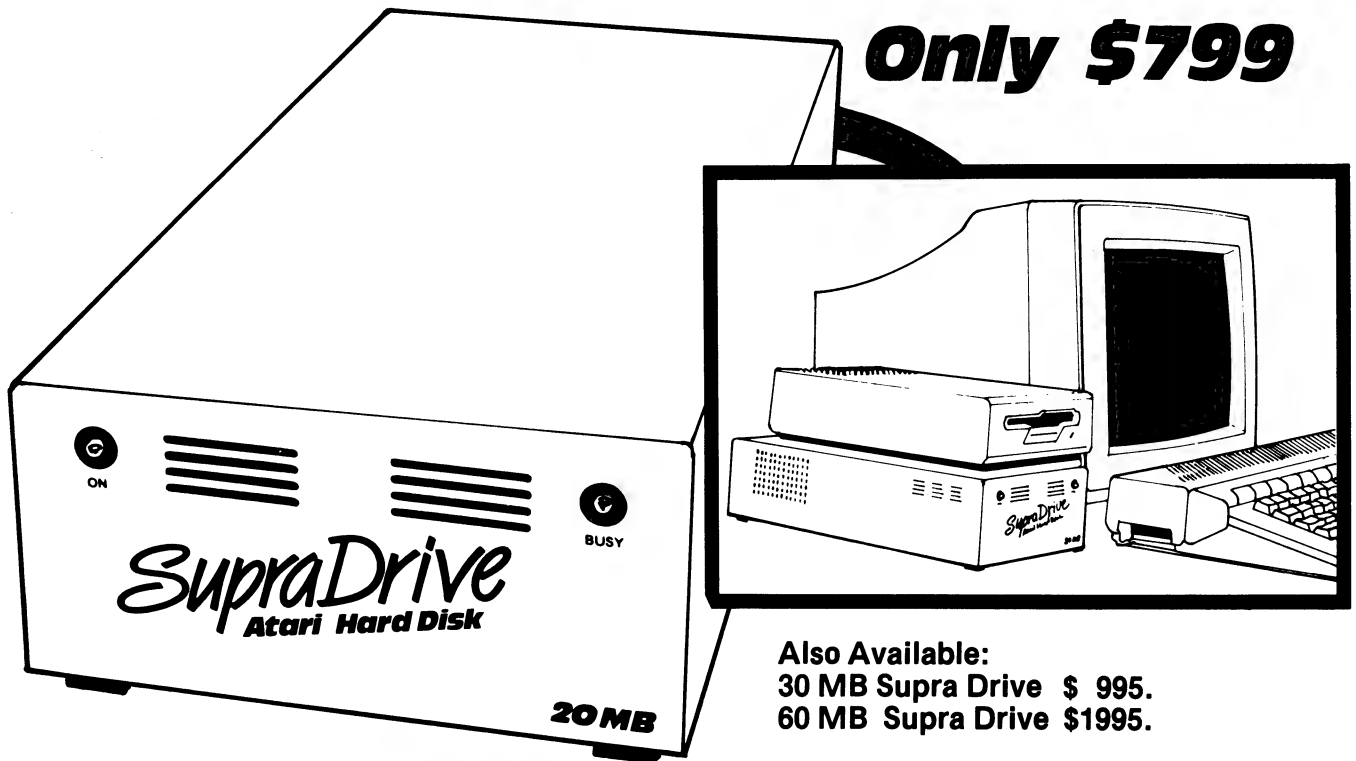
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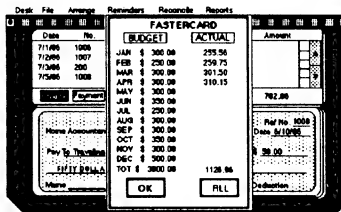
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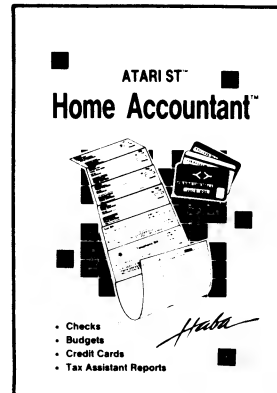
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Haba

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\$74⁹⁵

Real Programmers don't write specs. Users should consider themselves lucky to get any programs at all and take what they get.

Real Programmers don't comment their code. If it was hard to write, it should be hard to understand.

Real Programmers don't write applications programs. They program right down on the bare metal. Applications programming is for feebs who can't do systems programming.

Real Programmers don't eat quiche. They eat twinkies and Szechwan food.

Real Programmers don't write in Cobol. Cobol is for wimpy applications programmers.

Real Programmers programs never work right the first time. But if you throw them on the machine they can be patched into working in only a few 30-hour debugging sessions.

Real Programmers don't write in Fortran. Fortran is for pipe stress freaks and crystallography weenies.

Real Programmers never work 9 to 5. If any Real Programmers are around at 9:30 AM, it's because they were up all night.

Real Programmers don't write in Basic. Actually, no programmers write in Basic after the age of 12.

Real Programmers don't write in PL/1. PL/1 is for programmers who can't decide whether to write in Cobol or Fortran.

ATARI FAIR - SAN JOSE

25 September 1986

By Neil Harris

The Northern California Atari Expo this past weekend in San Jose had a few interesting developments besides the first sales of the Magic Sac (aka Mac Cartridge). Here's a brief report:

About 5000 people attended during the two days of the show. Among the speakers were Atari officials Sam Tramiel, Leonard Tramiel, Shiraz Shivji, Sig Hartmann, Richard Frick, and even myself. Other speakers included Jerry Pournelle, Tom Hudson, David Beckemeyer, Frank Cohen (of Regent), and Paul Heckel (Zoomracks).

Xanth displayed an amazing new ST animated demo, topping their previous effort of Fujiboink. This one had 4 large "bubbles" moving in and out in an "eggbeater" pattern with a red-white checkerboard pattern. Xanth also showed an ST version of Mazewars which permitted up to 15 ST's to be MIDIed together. For the uninitiated, this game is a 3-D 1st person game where you wander around trying to kill the others. They seem to be leaning toward making it freeware.

The FTL folks had a very pretty dogfight game for 1 computer or for 2 players with 2 ST's and MIDI cables. The graphics were similar to the games from Microprose, and the play action was so good that it was almost impossible to get near the machines all weekend. FTL also showed a later version of a dungeon game demo. Availability of both games is October.

Antic was showing their 3-D liquid-crystal-shutter glasses again, with some better demos than last time. Also from Antic was the 2nd issue of STart magazine, a very good-looking issue and a great improvement over the first one.

Metacomco unveiled 3 new programming tools: Cambridge Lisp, an interpreter and compiler with good GEM support added; BCPL, a C-like language (near as I can tell); and a Make utility. All are available right away.

Regent Software had their Regent Word 2, an upgrade using the normal ST character set (which made jerryp very happy) and full GEM support. They also showed Regent Base.

Nichtron had their videodisk controller ready for sale, along with an adventure game driver and the Dragons Lair disk. their ST Pool game is also ready to ship, another

very nice implementation.

QMI displayed a lot of vapor products that look quite nice. Steve Grimm's BBST is coming along nicely, including support for QMI's forthcoming ST-Net so multiple ST's can be linked to make a larger BBS. The big news from QMI was their Desk Cart, a cartridge-based desk accessory package similar to Cornerman but without all the memory being taken up. They also showed the ST-Talk Professional 2.0, ready to ship Real Soon Now.

Quickview Systems is almost ready to ship their Zoomracks 2, a GEM-based program which seems to have incorporated many user suggestions to make it easier to use and faster.

Haba was showing a few products that seemed a lot better than some of their earlier efforts. In particular, their HabaView data base manager which makes good use of the GEM user interface to create customized databases.

Hippopotamus was selling their ST Sound Digitizer and their Video Digitizer. The sound product was interesting - more when I've had a chance to play with the one I took home.

Oh yes - I'd better not forget to tell you what Atari showed. We had 2 ST's with the final working blitter chip. Everything seems to work very well (not to mention much faster). The blitter really helps when large pieces of memory are being moved, since there's more overhead to set it up than the RAM blit but less time actually used in the movement. Looks like a 1st-of-the-year release for the blit upgrade, at about \$120. A later version of Microsoft Write was shown, supporting features not seen at the LA Fair, specifically support of 6DOS-based proportionally-spaced fonts. Available late in the year (And I accused QMI of vapor???)

Supra had their 60-meg hard drive on sale for \$1795 (show special, the regular price is \$1995). They cooked up a special slide show demo at several frames a second, straight from the hard drive.

There were several booths showing MIDI software and products. In fact, one of the highlights of the show was having the ST on stage controlling ALL the synthesizers at the show, even the ones in the booths on the floor! Talk about surround sound.

BLAZING PADDLES

Reviewed By Bill Sheppard

Reprinted courtesy of Computing Today, found on Genie

SCORECARD

Features - 8
 Performance - 9
 Ease of Use - 10
 Error Handling - 7
 Documentation - 8
 Compatibility - 8
 Support - 8

From:

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48K Atari/Commodore 64 Disk
 Suggested List: \$34.95

While the Atari ST, Amiga, and Apple IIgs all sport some very impressive graphical abilities, it is apparent that the 8-bit graphics market hasn't been forgotten. Although the Atari 8-bits don't have the resolution of the newer 16-bit machines, Blazing Paddles incorporates many features previously found only on the higher-priced machines.

Blazing Paddles (a definite leader for Best Title for 1986) is an easy-to-use painting and drawing program. Joystick, Koala Pad, or light pen may be used as input devices. The Atari TouchTablet will work, but either up/down or left/right cursor movement will be opposite from the pad to the screen, depending on how the pad is oriented. The major functions supported include free sketching, dots, lines, connected lines, filled or empty boxes and ovals, text, zoom, scroll of entire picture, mirror, fill, spray paint, and the placement of pre-defined common objects (cars, people, buildings, etc.). Gray-scaled hard copy is available to Epson-compatible printers, as well as color copy to the Okimate 20.

Program operation is very similar to Micro Illustrator/Atari Artist, the programs which come with the Koala Pad and Atari Touch Tablet, respectively. The main screen consists of two rows of icons at the top of the screen, and two rows at the bottom. The middle 1/3 of the screen shows what is visible of the drawing in progress (the rest is hidden behind the icons). Using the input device initially chosen, the cursor can be

moved to any of the icons. If it is a drawing option (box, oval, sketch, lines, and the like) the icons will disappear leaving the full drawing on the screen. The cursor may then be moved around the screen without affecting what is presently there. For sketching, pressing the 'Action Button' will cause points to be plotted wherever the cursor is. In the case of drawing a box, oval, or lines, pressing the 'Action Button' will anchor either one end of the line, one corner of the box, or the center of the oval. Moving the cursor will stretch the shape in the direction moved from the anchor without affecting what is on screen. This allows the shape to be positioned exactly, at which time pressing the 'Action Button' will make the change permanent (unless the 'Undo Button' is pressed, which will restore the picture to its previous state under most conditions). What are the 'Action Button' and 'Undo Button'? This depends upon choice of input device. With joystick, light pen, and paddles, the button on each is the 'Action Button', and the BREAK key is the 'Undo Button'. With the Koala Pad or Touch Tablet, the left button is the 'Action Button' and the right button is the 'Undo Button'.

Along with the functions found on most Atari drawing programs, Blazing Paddles adds some not commonly found. Along with the option to add text on-screen, several fonts in several sizes are supported. Also, pre-drawn shapes are available. These are common objects, such as cars, buildings, musical symbols, and people, which may be placed anywhere on screen, and rotated in 45 degree increments. Size is not controllable, however, so the scene must be drawn to conform to the size of the object. While neither character sets nor shapes may be edited (the character sets are not compatible with those created by standard character set editors), three character sets and one shape set are internal to the program, and two character sets and three extra shape sets are found on the program disk. Also, three auxiliary disks containing various other character sets and shape sets are available for \$20 each, \$40 for all three from Baudville.

Windows may be cut out from the current drawing, and moved to another portion of the picture, or saved to disk, for later pasting into a new picture. These windows may not be resized, however.

Color selection is similar to that found in Micro Illustrator. Three foreground colors and one background color may be selected from a palette of 128 colors, as well as several patterns consisting of various mixes of two of the four colors currently selected. No provision for additional on-screen color is made.

Those DOS functions most needed are available from within

ST DS DRIVE SWAP

By John Pellet

the program, including disk catalog, format, and erase file. Saved pictures are saved in 62-sector files which appear to be saved in the exact same format as Micropainter files, so it should be easy to convert them to any other format necessary. A well-documented program is also included on the disk for loading picture files from BASIC.

The program performs well. Execution of all functions is fast, especially fills. The cursor has little trouble keeping up with the touch tablet, and the joystick speed seemed just about right to allow drawing accurately without being overly time-consuming.

Blazing Paddles is a program that can be used right out of the box, without consulting the instructions. A help screen for each type of input device is available, although most functions are self-explanatory. Once the manual has been briefly scanned, it would seldom need to be referenced again. Virtually all program control can be done with the input device, the BREAK, ESCAPE, and space bar are the only keys that need to be used, with the exception of entering text.

I encountered only one error, which occurred twice. When accessing the disk, the drive unexpectedly refused to respond. Whether this was related to my US Doubler, a bad disk sector, or the program is uncertain. It did require rebooting to access that particular drive, however.

The documentation is well-written, although it has been designed for the Commodore 64, with an insert explaining Atari differences. The program does seem to be slightly inconsistent with regards to the 'Undo Button'. While the documentation claims that the BREAK key is the 'Undo Button', when doing disk operations, only the ESCAPE key seems to respond. In all other situations, however, the BREAK key function properly.

Blazing Paddles makes an excellent all-around painting program. While lacking many of the features of Antic Software's RAMbrandt, it is much, much easier to use, and allows more thought to be spent on the picture being created, not the program being used to create it. For those already owning Micro Illustrator/Atari Artist, the several added features may or may not be worth the cost of the program. However, for those who don't currently have a drawing program, Blazing Paddles is a possibility well worth investigating!

Some of you may have noticed my recent report on my experiences swapping the single-sided drive in one of my 3.5" SF354 drives to a double-sided drive. For those of you with an interest, here is a detailed report of that operation.

FIRST, the *warnings and disclaimers*. While it would be difficult, you can ruin parts of your computer while doing this. And opening the case will certainly void your warranty. So consider carefully before you begin. Also, all of the instructions below pertain to the older drives with the small, square eject button. I have not seen inside the newer drives, with the large eject button, like in the 1040, so I can't vouch for any similarity. Finally, I did all of this and still encountered problems. Occasionally when booting with the new drive as drive B, I couldn't get the computer to recognize the second drive (double-clicking on B produced "Insert disk B in drive A" message). This was an intermittent problem until Larry Dineen told me that when using double-sided drives, you had to have a disk in the drive BEFORE turning on the computer. Since I've made sure to do this, the glitch has not reappeared. I can't tell you why the double-sided are different, but evidently they are. Now on to the goodies!

The first thing you have to do is remove the old drive. This can be accomplished as follows. Remove the four screws near the corners on the bottom of the drive. This allows the top case to be removed. To do so, lift it first at the rear, after carefully freeing the connectors, then slide it forward, freeing the eject button. This will leave you with the bare drive, in its shield, attached to a small daughter board at the rear. Now you can remove the three screws that mount the drive to the bottom case, and remove the drive. Now you need to remove the metal shield from the drive. This is done by removing the two screws in the side of the drive, then sliding the shield off the rear of the drive. It may be necessary to loosen the shield by removing the tape strip on the bottom (This strip holds the shield together, so try to keep it in good shape if you remove it.). Now you should have a bare drive, connected via black ribbon connector, and white power connector to the daughter board. The last step is to CAREFULLY remove these two connectors. They just slide off but DON'T pull on the cables to remove them. They may be carefully separated with a small screwdriver, or similar tool. Ta Da! You're finished taking things apart.

There are a couple of pieces you need from the old drive,

namely the faceplate and the eject button. The button can be snapped out of the old eject lever by pushing either of the snaps free from the bottom. The faceplate is attached by two screws from the top down in the drive mechanism. They are easily removed with a magnetic screwdriver.

Now you need to get the double-sided drive ready to install. The faceplate and eject button should be CAREFULLY reinstalled on the new drive. Somewhere on the top board are two adjustments you must make for the drive to operate properly. First, you must set it to D0. There will be a small jumper assembly, probably near the black connector, with jumper points labeled D0, D1, and maybe D3, and D4. If you don't get the drive set to D0, the motor will spin but you won't be able to access the drive. The drive is probably set at the factory to either D0 or D1. A small but critical adjustment.

The second thing you must do is the only tricky part. The terminating resistor must be replaced with the one from the SF354. If you don't remove the supplied version, everything will work, and seem to be all right. However, if the original resistor pack is left in, computer problems may ensue. It appears that with the resistor pack installed, the drive draws too much current from the computer, causing intermittent crashes. At least those were the symptoms I encountered, which I eliminated when I removed the resistor pack. Without the original from the SF354, 2 drive systems will be fine, but you can't write to the new disk if it's the only one in the system. Therefore, if you ever plan to use the new drive as the only one in a system, replacement is REQUIRED. The terminating resistor package is an inline multi-pin red resistor package, labeled RA1. It is probably located near the drive jumpers, between the black connector and the head, on the top board. On my factory single-sided drive, it is soldered in place and you have to desolder it carefully to use in the new drive. Then you can unplug the new one and replace it with the one from your SF354. Each has some gray writing on one side and should be replaced with the same orientation. The SF354 version has one fewer pins, but it seems to work fine.

With this completed you are ready to put it all back together. The first step is put the metal shield back on. It only goes one way which allows the screws to fit and access to the connectors. If your tape is somewhat worse for wear, you can tape over it with some package tape, like I had to do. Once you've screwed the shield down, plug the black and white connectors to their appropriate points. Now screw the drive back to the lower case. Now comes the only tricky part of the reassembly. Carefully fit the eject button in the upper case front, then turn

the whole thing upside down and snap the daughter board to the locating pegs in the upper case (these pegs locate the daughter board and receive the case mounting screws). The two case halves will then snap together and you can reinstall the four corner screws. Now you have a double-sided drive in your single-sided case.

Should you make the swap? It depends. I had a single-sided drive that was going bad, so I needed to do something. And I have filled up almost 10 data disks in the year I've had the machine. So the under \$100 for the bare drive made a lot of sense to me. But I still had to fiddle with it for a couple of weeks to gather the above information.

MISCELLANEOUS

Here are the pin assignments and cable details to connect an ST to a Sony KX-14CP1 monitor. Reproduced from the October, '86 issue of Current Notes.

ST Pin	FUNCTION	21 pin SCART PLUG Pin #
1	Audio OUT	2 & 6
2	Composite video	Not connected
3	General output	Not connected
4	Mono. detect	Not connected
5	Audio IN	Not connected
6	Green Out	11
7	Red Out	15
8	Ground	4
9	Horiz. Sync.	20 (via 22 Kohm resistor) 16 (via 350 ohm resistor)*
10	Blue Out	7
11	Monochrome OUT	Not connected
12	Vert. Sync.	20 (via 2.2 Kohm resist.)
13	Ground	21 (via screen, option.)

- * A voltage is needed to select RGB mode on the SCART input. A 350 ohm resistor is used between ST pin 9 and monitor pin 16. You may need to replace it with a 500 ohm linear potentiometer if a black band appears at the top of the screen, or if a faint image is present.

ST COPY PROGRAMS

Reviewed by John Pellet

As long as there are copy-protection schemes and people who use them, there will be a market for programs that defeat such protection. To date, I've seen five such programs for the ST, and this is a review of four of them. In alphabetical order they are: ACOPIER, COPY II ST, PROCOPY, and ST COPY. What I'm not going to tell you is which programs they will or won't copy. Basically, each will copy all software released before the current version. After that date, each will have trouble with new forms of protection. Based on the release dates, ACOPIER is the newest, but since I don't have any of the newer protected stuff, each seems to copy all of my software.

In addition to copying protected disks, each of these programs also greatly speeds copying disks in general. Even if you don't own any copy-protected commercial software, if you do any copying, like making working or backup disks, these programs are nice. Basically, each will copy a full disk to a non-formatted destination in less time than GEM takes to format a disk.

The table below describes the results of the speed tests performed. The programs used were either personally owned, or borrowed from friends. None of them are copy-protected. The table headings are abbreviated as follows: Ver is version number, S/F is sector copy with format and verification, N/VF is sector copy with format but without verification (If it is not selectable, it is assumed to be always on.), and B/N is bit or nibble copy. Times are in seconds. Note that sector copy may copy some protection schemes that rely on a straightforward non-standard format.

TIMING	Ver	Size	S/F	N/VF	B/N
ACOPIER	1.00	7.5	98	65	250
COPY II ST	1.1	21.3	82	na	390
PROCOPY	1.22	12.8	51	na	69
ST COPY	2.0	11.1	67	50	115

While the times above are significant, the feature chart below gives a rough guide to the features of each program. GEM means the program runs under GEM, FMT means is formatting the target disk an option (If the destination is already formatted, not doing so during copy can save many seconds.). VFY means is write verification an option. DS means does the program support double-sided disks. ABORT asks if the copy operation can be aborted by the user in mid-stream. TS means are specific tracks selectable by the user. ERR asks if errors are reported to the user. And IOS asks if the sector copy option will copy 10 sector per track

disks (my favorite way to squeeze a little more on a disk).

FEATURES	GEM	FMT	VFY	DS	ABORT	TS	ERR	IOS
ACOPIER (1)	N	Y	Y	Y	N	Y	Y	N
COPY II ST	Y	Y	N	Y	Y	Y	Y	N
PROCOPY (1,2)	N	Y	N	Y	N	Y	N	Y
ST COPY	Y	Y	Y	Y	N	N	N	Y

(1) Also permits multiple copies from 1 read.

(2) Will analyze disk and report results.

ACOPIER is a fast, multi-featured copy program. Since it is the latest release I've seen, it is reported to copy a couple of the latest releases that give the older versions trouble. It also allows the user to select many options about the copy operation. However, it does so via a poorly structured menu system, which must be stepped through by use of the cursor keys. Moreover, the menus and options are not visible from the main screen, but only on a help screen. I like to see the settings while it is operating, which all of the other programs accomplish. In my opinion, both the menus and the documentation are needlessly complex and could be quite confusing to the novice.

COPY II ST blends excellent documentation, GEM operation, many options (selected via mouse) with a proven track record in the industry. Central Point Software has a good record for COPY II on the PC and the Mac. And that experience shows on the version for the ST. In addition, they offer the only stated policy I saw with respect to updates. And they provide a list of the software they can copy and the menu settings to do so. The only feature I miss is the ability to toggle write verify. While the timing table shows this to be the slowest copier, it also gives the most detailed progress report of the copy process.

PROCOPY is a nice program. And its ability to analyze disk structure, and to make multiple copies from one read are nice features. Plus while it does not use GEM, all options and operations are function key controlled, with status shown on screen at all time. But I do like the GEM-based programs better. And there are public domain programs that make multiple copies.

ST COPY was the second copier on the market for the ST. And it is still one of the best. The only real gripes I have are it seems to be more sensitive to the amount of memory you have free and the desk accessories active than the others (i.e., sometimes it doesn't want to load), and the documentation suffers in comparison to COPY II ST. Also, it does not allow the user as much flexibility, or report as much data on the process as COPY II ST.

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 Production Crew: Frank Corlett
 Susan Henderson
 Jeff Wilson
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 Distribution Crew: Steve Markley
 Cathy Barros
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 James & Rachael Duke
 Advertising Manager: Don Adams 350-2206

NEWSLETTER SUBMISSIONS

Submissions are WELCOME in ANY form. It is extremely helpful if all submissions conform to this format:

- Condensed print (16 to 17 CPI).
- Column width of 56 characters (3 7/16 inches).
- Page length of 9 inches (54 lines @ 6 LPI).
- Right and left margins justified for text.

All submissions should be given to one of the staff above or brought to the production meeting both printed out and on a DOS or TOS disk.

DAL-ACE CALENDAR

Here is the current schedule of upcoming DAL-ACE events.

Saturday, November 29	Newsletter Production Mtg
Saturday, December 13	Main Meeting
Saturday, December 20	Newsletter Production Mtg
Saturday, January 3	Main Meeting
Saturday, February 14	Main Meeting

Newsletter production meetings are usually held at 1 PM on the Saturday two weeks before the regular meeting date at Jim Chaney's house, 916 E. Berkley in Richardson.

Main Meeting dates that are more than 90 days ahead of time are tentative. The Infomart reserves the right to change the dates, so check the newsletter for the latest schedule.

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 (left) and park at Infomart, on the left just after you go under Stemmons. If you're using the tollway, exit right on Wycliff, go left on Harry Hines to Oak Lawn and turn right. Infomart will be on your right. From the south, take Stemmons north then

follow above. Infomart is the big white steel and glass building south of the other 'marts. The main entrance faces Stemmons. Guests are WELCOME!!

*** MEETING INFORMATION AND AGENDA ***

10:00 - 10:30	NEWSLETTER EXCHANGE SIG
11:00 - 12:00	CLUB SALES
11:00 - 11:30	NEW ATARI USERS
11:30 - 12:00	MEMBERSHIP SIGNUP & NEWSLETTER DISTRIBUTION
12:00 - 2:00	8-BIT DEMOS BUSINESS MEETING OTHER DEMONSTRATIONS
1:00 - 2:30	CLUB SALES
2:00 - 4:00	ADVENTURE SIG ST SIG

Meeting rooms and additional information will be posted on the schedules at the main entrance, and the main kiosk, which will be manned from 9AM to 4PM. Disk-of-the-month and garage sales will be in the main meeting room. Vendor sales will take place in the basement.

NEWSLETTER ADVERTISEMENTS

Personal sale ads are free to current members

COMMERCIAL RATES:

Full page (7 1/2" H by 9" V)	\$35
Half page (7 1/2" H by 4 1/4" V)	\$25
Quarter page (3 1/2" H by 4 1/4" V) ..	\$15
* Long term contracts are available *	
* at reduced cost. *	

Ads must be camera ready. Copy must be received PRIOR TO the production meeting date at left. Mail copy to DAL-ACE Newsletter, P.O. Box 851872, Richardson, Texas, 75085-1872 OR contact the Advertising Manager listed at left. Copy received after the deadline will be run the following month. For contract advertisers, if no new copy is received by the deadline then the most current ad will be re-run.

**** DISCLAIMER ****

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8-BIT DISK LIBRARY JEFF GOLDEN 252-3268
ST DISK LIBRARY LARRY DINEEN 817-668-7296

DAL-ACE BULLETIN BOARD #1 540-3270
DAL-ACE ST BULLETIN BOARD #2 267-4913

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 members as well as for the dissemination of information about Atari computer products.

DAL-ACE membership is \$16.00 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 club officers. Members will note that their renewal date appears on their address label.

Other computer user groups may obtain copies of this newsletter on an exchange basis.

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DAL-ACE

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