

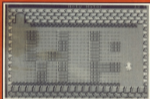
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Issue 62 June/July

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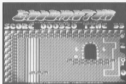


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Mailbag

Well, there I was thinking what am I going to do without any letters for this issue's column when a packet arrived from Stafford with a bundle of correspondence. I'm pleased by the variety and especially by the responses to previous pages for assistance. Thanks to many of you (including Bill Diggle, & M' Barry, Scott Sheering, Richard Carter, Stuart Murray and Dave Kessel) for the notes of support and encouragement for this column. Please remember MAILBAG is only as good as YOU make it so keep those letters coming in!

Allan J Palmer
sits in the hot seat
at the sorting office
awaiting your
letters on all things
Atari - get writing!

Write to MAILBAG at
Page 6 Publishing,
P.O. Box 54, Stafford,
ST16 1DR

HARDWARE HELP

S. W. Barry from Ashford, Kent writes to issue 68-M, Sponsor of Woodstone. Kent wrote saying he had problems with his 500 drive; on page 56 from my address I live in Ashford, Kent - only 48 miles from Maidstone. If you had printed his address or phone number I could have contacted him direct and helped him solve this problem. Is there a reason for not printing addresses? Normal practice is only to print full addresses if correspondents request it - some people may prefer not to have their details published. So, if you're happy to have your full address printed please indicate this specifically.

Mr. Barry continues:
"I have used Atari computers for some six years and have repaired and upgraded them as required. I am an electronics, book and disc to video hardware dealer when free calls. I do this for fun and do not cost for payments other than postage or the cost of components. So if you ATARI user has a problem please feel free to contact me at 17 Old Road Road, Ashford, Kent TN20 5GQ and I will see what I can do."

"Thanks for the offer Mr. B. I hope you will be able to assist some of your fellow Atari Classic owners. Also on the subject of hardware fault assistance, Dave Evans of the Type & Wave Atari User Group (TWAUG) has mentioned in correspondence to me that they have three or four contacts who can help with hardware problems. Why not drop TWAUG a line at P.O. Box 8, Walland, Type & Wave NE28 6GQ?"

NETWORKING THE ATARI CLASSIC

The request from Arthur Morris to last issue's MAILBAG for a way to link two machines in the same disk drive, monitor, etc. prompted a number of replies, some of which involve hardware modifications. I have to remind everyone that Page 6 and New Atari User cannot take responsibility for hardware modifications and repairs made by its readers. It is checked - don't! Plum out of the work was Richard Gore from Doncaster:

"Yes, it is technically possible to network what Ataris it is at least two units that I know of. The most comprehensive and professional way of doing this is to buy a 'Multipointer' from Computer Systems Set

from 0200, PO Box 17600, Rochester, New York 14617, USA (phone: 716-429-8888) because they do cost \$100.00 plus shipping. You basically link your computers together via the supplied interface cables which plug into the cartridge ports and work with any of the computers. One interface is the 'master' which you plug into the machine that you want to be your master (and hence your disk hard drives and printer attached to). The other machines are then 'slaves' and all their I/O is done via the master. It was originally designed for use in a BBS situation where the MultiPoint may not want to be his hard drive up by using it solely for the BBS. The 'Multipointer' could not Mr. Morris' needs but he wouldn't be able to attach more than one computer to his TV with each one based into a different channel, even with an aerial splitter, as the RF output is the same every month for all 25 of the machines in the picture and would interfere with each other. This can of course be overcome by simply having only one computer plugged into the TV at once!"

David Murray of FUTURE also suggested the 'Multipointer' and supplied CBI's address, etc. Richard continues:

"The obvious method involves taking a second HD socket into one of your computers and then connecting it to a personal computer via a standard I/O converter cable with pin 40 shorted, this will allow both your computers to use the same disk drive, printer, etc. but you must be careful not to try to use the drive, etc. from both computers at the same time. It is quite a simple task to perform but not one that I would recommend someone without solid exp experience to tackle.

It is also possible to transfer data from one computer to the other using this method, but by inserting pins 3 and 4 in the I/O cable and using suitable screen software on each machine. There was a brief article on this in Sigma Magazine 3 (or possibly 2) but it had a slight bug and was very brief. I haven't tried this yet so I can't say for certain that it will work but I have been told that it is theoretically possible."

It Rogers of South Hampton provided the suggestion:

- "All that is needed is the following:
1. Interface software (Rover, DDM, etc.)
 2. a RS232 interface for EARTH machine 3. a Null Modem cable
- Setting up is somewhat laborious without the machine, as it is using to make cable cables when you can't see what you're doing. I suggest the use of both, then you

Spreadsheets, or similar, is made up of a LOT more. All that is then necessary is to set one machine to upload, the other to download a file and target, job done. It should be possible for both computers to use the same disk drive(s), but to ensure that typing is better to the same drive from one machine or the SAME time FILE conversion problems. I therefore suggest that if a LUNGE is part of this setup, use the RAMDISK option to regulate this possibility.

Note that the solution is hinted at by the letter from Steve Davenport (From XE to ST) and some published in issue 81's MAILBAG. Obviously, the pin connections for pins for the ST are of no use for the 850 ones are. Something else to remember should be: Morris built his own cabinet, so that the wires for TX and RX also should be swapped or GND end of the Null Modem cable. He'll probably have to build a cable anyway, so start, in their multi window's case, it is case a new RS232 standard pin and socket on the 850 interface module. That is a 4 way 17' type instead of the usual 25 way pins."

Thank you for your input, Mr. Gore and Mr. Rogers. Incidentally, I believe Richard is the author of PRINT LAM which first appeared as a Bonus in a MGA issue disk, and its enhanced version can be available from Steve Davenport.

On this subject also, Mark Watson of North Humberstone notes that back in issue 53 where Ed Leitch describes how he linked his XE and Atari Portfolio. Ed also mentions building an interface to connect two XEs to a common set of peripherals and wondered if anyone would be interested in reading an article on this. Well, Ed has about everything in this discussion with your suggestions?

CONVERTING

TRANSDISK FILES

Stuart Murray from Aberdeen sent the following in response to C Andrews' request for a way of converting TransDisk files to standard HDL files. It suggested that the utility File2HDOS might be a solution.

"The File2HDOS (described as F2H2HD issue 3 will not convert TransDisk HDL files to standard HDOS 2.5 files. I believe TransDisk .GDL files will not convert either - they need one of the standard TransDisk menus. This means that File2HDOS will not convert them because Option 8 (boot disk) will only convert single-seg software disks (e.g. from Prologix, Ion E, Alpha, etc.). The other options allow conversion from MultiDisk, Soft C, Screenoff and Wilnos. I don't know of any T24 to HDOS programs on the market today, if in-

quire it could be possible to write such a program because of the many converter programs already available. However the simple solution is to use a floppy tape - Disk 2/Info 43. This allows you to place the converter program onto a boot disk which can then either be placed on a Horizon Menu or connected to DOS 2.5 with File2HDOS."

Thanks for the information, Stuart. One thought that comes to my mind is could someone write a survey of the various P.D. menu systems like Horizon, MultiDisk, etc. - also originated files, what their strengths and weaknesses are?

MANAGER TOOL

Stuart also reports that an enhanced version of this program brought by Freddy van den Heuveling is now available on MEGA PD disk 102 - write to Stuart at P1 Walker Road, Torry, Aberdeen AB11 3EN for more details of MEGA's PD selection.

MONITORS

It Siggers also responded to F Fry's issue 81 enquiry about monitors:

"The terms EGA, CGA and MGA are all used in conjunction with monitors for use on IBM PCs and compatibles, so it shouldn't worry about them too much. Any monitor be used for an Atari 8-bit must have a compatible video input. Most vendors advertise quality, if they have a "best" monitor on their. Personally, I use a Philips CR8003 monitor which has the advantage that, when bought new, it has a further month "on site" guarantee, i.e. they come to you should it need replacing."

DALEKS

John Steep from Australia hoped last issue for a version of Dalek Attack for the Atari Classic. Stuart Murray ignited some heat.

"The Game Master" by Atari contacted five Atari Dalek clones on the first level. They come of game from both sides. Although not true Daleks they are rejects from Starline's experiments (see here?)

New for some request for help ...

SERIAL PRINTER

S W Derry from Adelaide who volunteered hardware help two ahead needs some assistance with a recently acquired "... second printer made by Newbury Data 88

type 8800 - it works fine on my test plugs in to a Spectrum serial port and works great. It works with the other PC in serial mode, it won't work with any of my Atari and I have a standard 88000L, 250000L with 254K ram and Commodore's OS card, and a 1.2M2 - I have all the interface data, the board rates, the pin connections and the expertise to make any cabling or interfacing and it still won't work! I have been told that the serial driver (which that is part of the OS requires a device ID and that AtariWriters sets up this handle on last up card cannot be altered. Is this true? Can I modify AtariWriters' ROMS routine to access this printer and what's the cost of it what about the extra ram I have, can that be accessed? I hope some one can solve this one for me."

OS experts, who can help on this?

ATARIWRITER AND PROOFREADER

Steve Marston from Southall in Middlesex has a couple of questions. First he has "... AtariWriter on Turbo Type, and now here is also drive: could it be possible to use ProofReader in conjunction with AtariWriter on tape or does it only work with the cartridge version?"

I must admit that I didn't know AtariWriter was available on tape - I know a Turbo Load type Word Processor is available from Micro-Disseal - can anyone explain?

WORD FINDING

Steve also admits to being a computer-obsessed puzzle and has seen the calculator style word finders that enable part of a word to be input and which then returns a list of the alternatives on its display. Steve asks "... anything like this has ever been produced, or could be adapted for the Atari?"

I'm unaware of anything like this on the Atari Classic - I suspect that it would only be practical with a very large ROM disk. Any comments, anyone?

FAULTY CHIP

On the international front this issue, we have a letter from Peter Panagiotopoulos in Athens, Greece. Peter offers congratulations for the new-style MAILBAG columns he liked the dedication in issue 80 and reports that he's been having problems with his 88000L. To sum it all up, he has time it went for repair, it was returned with a faulty chip in its holder - the chip has the following text on it: "M81 04-020000

Mailbag

0144885-04 to 0144885 Philippines". Peter would like to know if it is easy to find this ring code and, to do a simple task like join to make the change himself? Peter can be contacted at 26 Road Palawan St., Riglers, Athens GR-102 45, Greece.

HOME FILING MANAGER

Nigel Ludlow from Darh has some questions about Home Filing Manager (HFM). I hope my article in issue 63 in reply to your previous questions were of help, Nigel.

"First, is it possible to copy HFM data disks - to back them up? I have tried using a couple of name copiers without success.

Oh dear, Nigel, you do seem to be having problems. I've just located on Page 6 disk D645 and used the Service Copy Utility as it is really a HFM data disk, and then successfully used the copied data disk with HFM - no problems in your problem linked with the corruption you write about below? Is your drive working 100%? Does the copier work, and it's only when you try to load into HFM that you have problems, or does the copier report errors? What else can you tell us about the problem?

Nigel continues:

"Alternatively, is there a better program to keep certain types of random/irregular data on? I like HFM because of its search facilities. I have a Customer Number on the top line of the first card, with search codes, if necessary, and the letter 'A' following the Customer Number. The lines below then contain their addresses. The next card has the same Customer Number followed by the letter 'B', and this contains any remarks such as phone number, date of order, etc. When I want to print address labels, I just call up all the 'A' cards and hit to print. One drawback of this is that I have to manually reset back the printer as hit often does label files printed on the HFM card is larger than the address labels I use. I have JaniViewers, PaperClip, and WinOffice I would own if Peter had better than HFM? I have tried reading the manuals with regard to mail merging, etc. but don't understand them - am I stupid?"

No Nigel, you're not stupid - the trouble is those programs are so flexible that the manuals only touch the surface of ways in which they may be used. It's up to users to contribute their ideas on how to use the programs for different situations. I do like your idea of using 'A' and 'B' cards within HFM - that's quite good and I might find a way of using something similar myself - thanks for the idea! PaperClip, will my former word processor for the Atari Classic (although I would have loved to acquire version 2.0 with SpellChecker) is fine if you just want to maintain a list of addresses to use for mail merging as is JaniView

ers. However, if you want to maintain other data as well as the addresses then a database is a better option. Microsoft's dBase could be a possibility - store your data using the Database module, then when you want labels, select the address records from the database file and print them using the Label Printer module. Anyone like to write a tutorial on using Microsoft?

Oh yes, regarding having to roll back the labels when printing from HFM - have you got the utility by Derrick Oraker in the PAUL's 6140 issue 13 yet? It should give you the ability to reset how many lines you want per label.

PRINT SHOP PROBLEM

Finally Nigel reports that he is "...unable to print anything using Print Shop" - although I can SORT/TRANS (I had the P.S. Companion) first. The P.S. chat appears to have 'lost' the code to drive a printer - even going to the Setup facility, is it possible to reprogram the file that handles that?

I wonder if this is yet another symptom of the apparent disk problems which have caused you difficulties with HFM? I note that in the P.S. Companion manual it states that "The setup procedure may not work successfully if your disk drive's speed is not of adjustment". Is there anyone with an in-depth knowledge of Print Shop who can shed any further light on the problem?

SOUND SAMPLING

Mark Watson of Driflington, North Ham-broviads would like some help with sound sampling:

"I have a 'Peeping' cartridge from Gravis International. I would like to know how to plug it into an amc, or how to merge sounds, etc. I think it is possible on Dig2-run com play but there sounds of amc. Please can someone out there write an article about sound sampling on the Atari Classic. I think a lot of people would be interested."

That sounds like a good idea to me - any volunteers?

FLIPPING DISKS

(I Heard) from Conroyville writes:

"I like the Page 6 Magazine advice - not only do they save a lot of typing in, but there are usually some extra games included on inserts. I do, however, find the scrolling messages take a long time to read and, frustrating if I want to see just part again, is there a way of showing the text

normally?"

Normally you could use a better display utility to search for the start of a text message on the disk and then display or print it, but the scrolling message on the title screen on the laser disks is compressed and included directly in the program by a special utility so cannot be read in this way. Occasionally, either by accident or design, the original text message is left on the disk usually with the filename 01-TR0.TXT and you can copy this to screen or printer with DOS or load it into a word processor.

Mr. Bennett continues:

"I found one of the disks was double-sided, and I could not use all the programs. The late ones, but could you avoid this in future issues? I have been using a watch timer to let me use both sides of standard double density disks in an unmodified 1080 drive. So far only one disk has failed to format both sides, but since I use standard 1080 should this be called Double Sided and Double Density?"

That's got me confused, Mr. B. Which issue disk are you referring to? The issue disks have had a bonus on side B for the last couple of years at least. How did this stop you using that particular disk? And then you talk about using both sides of your own disks by adding an extra month. A true double sided disk to me that can be written by a SE501 drive with the appropriate DOS so that both sides can be accessed without flipping the disk out - both physical sides are one logical disk. The usual practice of writing the 'other' side of a disk on the Atari Classic results in essentially each side of the disk being treated as a separate entity.

TRANSIDISK AND DOS

Daniel Dencoszek was pleased to see Raphael Eppler's article on solving problems with TransDisk 4 in issue 61. He has a lot of T10 files from a 8086/11080 system that he would like to run on his 1080E with US Double-enhanced DOS. Daniel has "...joined Eppler's program in RAM issue 61 and successfully changed D68220 to D681085. I have checked it copy files off my old disks and onto the new SE/XT menu disks. Again, in my great disappointment, the same old Error 107 came up. I can't access these SE/XT menu disks, we can't write to them, is it the 8080 drive fitted with US Double that's formatting the SE/XT disks in the wrong way?"

It sounds as though you may be experiencing the problems noted by Raphael in his article where D6822.5 has corrupted the game file. Come to Raphael, can you shed any light on the matter, please?

ORDERING FROM OVERSEAS

Mr. Bennett adds a few thoughts about buying software from abroad:

"I have found it difficult and expensive to send money abroad in foreign currency without the use of a credit card. What is the cheapest and best way?"

Good question - what order can our readers offer? Part of the trouble is the changes in services/charges offered by banks, etc. A couple of years ago, Citibank charged you \$5 to send a foreign currency cheque abroad - that wasn't too bad, but now, however, the fee was \$25! Has anyone had any experience with American Express or similar organisations? Incidentally, in recent correspondence with American contacts, DEC's International Reply Coupon doesn't appear to be quite so international, apparently not being recognised at all post offices.

And also related to this subject, Mr. Bennett reports that he has "...had a problem with a specific company, 'Tosmepag' of Germany, have a software program called *Searchworks* and I have been unable to get a reply from them over many months. An insured letter enclosing payment in Searchworks was returned marked 'Not Collected', and I have some letters to John Stanton waiting for his advice and if the law still exists."

COPYRIGHT

Again from Mr. Bennett, an interesting question on the subject of copyright:

"What happens about the copyright for foreign art information published in overseas magazines like the original 'Start User'?"

Another good question, we could also extend it to covered software publishers, then anyone know what the legal situation is in such instances?

ARTICLES WANTED

S/W Perry also notes that:

"Back in issue 82 was the first article of a new series by Mark Forster called 'Exposing Your Atari' - it was then dropped as it was considered to be too technical, but it might be included in some list of others it would be very useful. Can we ask the MAN at the top to re-examine or release the information in those willing to buy it. Please see what you can do."

The man at the top says we have been asked several times for this series to be re-evaluated or re-included, so there is an

obvious interest. The reason it was dropped was not that it was too technical but because we were advised that the article published contained a number of errors of the sort that would only be apparent to someone with in-depth technical knowledge. Since it was not possible for the editor to verify the accuracy of the remaining articles, it was considered safer to terminate the series.

Similarly, Bill Higgins from Leeds "...would appreciate a little bit more information in the operation of programs." Roy Goldsman's Thing Dat 3 is one of Bill's favourite programs and he's pleased by the articles that the Time & Ware User Group are running in their newsletters. They have available David Richardson's excellent user Guide for DEX. So, why not base those word processors up and put together some tutorials on using your favourite piece of software to best effect? Bill also expresses his thanks to Tommy from Cleveland who provided Bill with assistance following a request in an earlier issue of the magazine.

Peter Harrison of Canterbury, Surrey is also eager to hear, like John Young in issue 81, about how to use 'ACE C' from the IFA library. No info has arrived yet ... just a thought - and it might be totally useless - what if you load the 480/880 Translator first before loading 'ACE C' - does this make any difference?

HALLS OF FAME

Richard Carr adds a few thoughts to last issue's suggestion for including 'Hall of Fame' score files:

"Having Halls of Fame on a game disk is all very well for I, and I suppose other people too, like to write protect their master disks to protect their valuable software from being corrupted. I have had one of my master disks corrupted this way (fortunately I got it replaced - thanks David) and I certainly don't want it to happen again especially since it is not possible to replace many of the games I have. Therefore, what happens? I know everything says you should make backups, but its just not possible with many of the protected disks and an unformatted drive."

A valid point there, Richard. In the last column, I was really thinking of games appearing in magazines where you should be able to recreate the program if necessary. For commercial games, the master disk could remain write-protected and at the 'game over' point a prompt to insert a separate high score disk could take place, so the Hall of Fame remains on a separate disk. I'm sure I remember at least one game doing this - after all it's not that much different from a 'save game' feature.

NEW SOFTWARE

Richard also commented on the 8 bit software situation:

"There is some new software available from the dedicated suppliers still supporting the 8 bit - check out the price lists from David Pitt, Owen Geographical, Ladies International, Tiger Developments, not forgetting Page 6 and remember Miles Deller's software still has a massive range of old software at great prices. But don't expect the companies like Zappella Games to release any new products - their major problem lies in the fact distributors can't touch 8 bit software any more so it's not worth their while writing any more stuff. There are many games out there written and gathering dust waiting to be released. A few years ago there was a company producing tin games like 'Shades of the Desert' and 'Paperboy' - they produced Zappella announced 'Go Kart Simulator' - it never appeared. A new company came into a stream of their new games 'PAG 7' in Page 6, the company was called Parkway - Page 6's headline was 'NOT A PHANTOM' Oh yes it was, where is that game now and the rest of their titles? What really did happen to these people at Zappella? We have the 8 bit 2's the best 8 bit around, we'll support it for a long time to come' so well on these two excellent programmers Brian Jobling and Ken Dapkin? Come on guys you might not be able to buy a new Porsche with the money you'd make but surely you could find on a few more times to come more new software even if it means going into partnership with somebody like Page 6 or Miles Deller to get your games distributed and promoting them to your spare time?"

And on the new games theme, David Horrocks reports that he's very happy with his recent purchase of 'Operation Blood', the 'Mission will come from Poland' returned to issue 80. He's looking forward to more like this in the future especially the 'Lorraine' ones. Thanks!

Thanks again for your contributions which have made another Mega Mailbag. There is plenty for you to respond to in this column that don't leave your letters to the dust outside before the egg date - I have to leave them to get off to bed but the columns together in plenty of it to be mailed by that same egg date! If you can afford to send your letters as a text file on disk, as well as a printed copy it will save me time in compiling the columns - but typewritten or legible handwriting correspondence is still welcome.

"Take us out of orbit, Mr. Sisk!"
"Heading, sir?"
"That there, Thatamoy?"
"A most logical choice, Captain."

XE

program and alter it.

You will see on Line 1 the DATA statement containing the first menu entry. To add a new program, simply add a new line on the next available line number. The first element of the DATA statement is the text for the menu screen - always start this with the next available letter of the alphabet, followed by 21 characters of text for the title. The next two elements are the loading time in seconds in reverse digit order; the first number is the units, the second is the tens - for example, 2 seconds would be 20 while 10 seconds would be 21. The last element is the actual filename of the program (e.g. FILENAME:XXX) - the program assumes Drive 1, so no Dr' drive identifier should be used. Finally, on line 0 add one to the value of P (i.e. T+1) - this variable tells the menu how many entries to look for, and should always equal the number of programs on the disk.

For example, you wish to add a Galaxians game coded GALAXIAN to the menu. First, copy the actual file to the menu disk. Then how many seconds the game takes to load on a clock/watchset for example 14 seconds, and make a note of this. Next, load MENU2 and change line 1 to the following:
1 DATA 0 SuperGalaxians.1.GALAXIAN

For your next entry, follow the same procedure, but enter the data on line 2, for example:

2 DATA 0 SpaceAttack.2.SPACATTACK

Don't forget to change the value of P in line 0 to P=2. You should limit the number of entries per screen to 18, or the menu will roll off the bottom of the screen.

Lastly, once you have made your entries, re-save the menu program to disk under the original filename TRMENU2. When you reboot the disk by type TRUN the menu will appear, and you can proceed as normal. Make sure you have saved your amended MENU2 before rebooting or R/Runing!

TROUBLESHOOTING

The program is fairly easy to use once you have got the hang of the DATA statements, but if problems arise, do not fear, here are solutions to the most obvious problems.

```

07 0 MENU .....
08 2 MENU 0 .....
09 3 MENU 0 .....
10 4 MENU 0 .....
11 4 MENU 0 .....
12 5 MENU 0 .....
13 7 MENU .....
14 0 MENU .....
15 0 MENU .....
16 0 MENU .....
17 0 MENU .....
18 0 MENU .....
19 0 MENU .....
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90 0 MENU .....
91 0 MENU .....
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93 0 MENU .....
94 0 MENU .....
95 0 MENU .....
96 0 MENU .....
97 0 MENU .....
98 0 MENU .....
99 0 MENU .....
100 0 MENU .....

```

Listing 3

```

00 0 MENU 001,0101010000 00 000000 000000 -
000000 00
01 0 DATA 0.....Program Name,S.S.PFILE
NAME:001
02 00 PTIME 001,0101010000 01 PTIME 001,01
PTIME 001,0101 000000000000000000000000
03 00 001 000 000 000 0000 01 PTIME 001,00
0000000000 000,00000000
04 00 000 000 00001,00000000 00 00 0100
000 00,0,0,0,00000000 0,0,0 000000
05 00 000000 000000 00000 00 00000000 000000
00000 000000 00000 0
06 00 000000 00,0000 0000 0000 0000 0000
00 000000 00,0,0,0,0
07 00 000 000 00,0,0,0,0000 0000 000
08 00 000 000 0000 0000,0000000000000000
00000000,00,0000000 0000000000000000
09 00 000 0000 00,0000000 0000000000000000
10 000 0000 00,0,0,0,0000 0000000000000000
11 000 0000 000,000,00,0000000 000000000000
000000000000000000
12 000 000 000,000,000,000,001,00,000,00
000,00,000,0,0,0,000,000,000,000,000,000
000,000,000,0,000,00
13 000 0000 000,000,00,00,00,000,000,000,00
0,000,000,000,00,000,00,000,00,000,000
000,0
14 00 0000 000,000,000,000,000,00,00,00,0
00,000,000,000,00,0,0,000,000,000,00,0,0
0,00,000

```

Listing 3

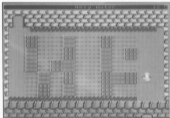
The new entry doesn't appear on the menu! Firstly, did you re-save TRMENU2 before rebooting? Did you change the value of P in line one to include the new entry?

I get an error message when I select the entry I want to load! Is the filename at the end of the DATA statement correct, and without a Dr' identifier? Did you actually copy this file to the disk?

The program I choose loads, but doesn't run correctly! Multi-load XE uses a machine code routine in pages 0 and 6 of memory for the timer. If the program you are loading uses page 0 or page 6 for machine code, a conflict is possible. Any well-written program should clear out this memory before it runs it, but if you have problems try adding the following line to the start of the program line 0 in our usually menu:
PUSH A=000 TO 000000 A=00000 A=000 A=10000
POP PUSH A=00000 A

This clears out the memory and should cause the problem. If the program still crashes, subtract one from the timer value in the MENU2 program - this will ensure that the machine code is not still running when your chosen program tries to run. I hope you find Multi-load XE useful. Feel free to customise the display to your own preferences, but avoid changing any of the data other than that described above, or you may crash the machine code routine. Last, but not least, have fun!

CROOKED HOUSE



It's one of those wild, windswept nights and your car splatters in a half-mile from anywhere. A flash of lightning illuminates an old mansion in the distance. You pull up your collar and dash to the house through the torrential rain.

You're invited in but soon you realize something is not quite right. Candelsticks keep disappearing and you keep falling over used syringes. Money appears then disappears. That object in the corner looks suspiciously like a bomb! You are thinking about the woman upstairs who seems to have more than her fair share of men friends when your train of thought is broken by the sharp crack of a revolver

Can you be the first to discover the identity of the thief, the drug pusher, the blackmailer, the terrorist, the prostitute and the murderer and then telephone the police with your answers?

One to six players attempt to solve the crimes. Move the joystick to select the number of players and press the joystick trigger to commence each player's turn. Turns last two minutes unless an incorrect accusation is made or until the player falls foul of a "nasty". The 20 suspects have keys to the safe rooms and bedrooms wherever you don't! The contents of the cupboards will help you through and you can pick these up by positioning yourself in front of a cupboard (the contents will appear on the left of the display line) and pressing the trigger. The object held appears in the middle of the display line. At the end of your turn your weapon transfers to the next player.

In order to accuse suspects you need to find out their names. Do this by standing in front of them. To use the phone position yourself in front of it and press the trigger. Move the joystick to select the appropriate suspect then press the trigger to accuse.

```

01 1 NEW
02 2 NEW
03 3 NEW
04 4 NEW
05 5 NEW
06 6 NEW
07 7 NEW
08 8 NEW
09 9 NEW
10 10 NEW
11 11 NEW
12 12 NEW
13 13 NEW
14 14 NEW
15 15 NEW
16 16 NEW
17 17 NEW
18 18 NEW
19 19 NEW
20 20 NEW
21 21 NEW
22 22 NEW
23 23 NEW
24 24 NEW
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97 97 NEW
98 98 NEW
99 99 NEW
100 100 NEW

```

```

01 100 NEW
02 101 NEW
03 102 NEW
04 103 NEW
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97 196 NEW
98 197 NEW
99 198 NEW
100 199 NEW

```

continued →

by Bill Halsall

TYPING IT IN

Cassette and disk users should type in Listing 1, SAVE or CSAVE a copy, then RUN the program. The program will check each line of data and inform you of any errors. Correct any errors and RUN the program again until all errors are eliminated. When this is done answer the cassette/disk questions accordingly to create a final tape or binary disk file.

Cassette users should load the boot tape created by first removing all cartridges and then turning on the computer while holding down the START key (OL and KE owners should hold down OPTION as well). Press RETURN and the tape will load and run automatically.

Disk users should clear Listing 1 from memory after saving and running it as above by typing NEW and pressing RETURN. Next, type in Listing 1 and save it on the same disk as the binary file created by Listing 1. Run the Listing 1 program with the disk in the drive and the game will load and run automatically.

HINTS TO GET YOU THROUGH

The suspects tend to use the same routes through the house unless they are going to bed.

The prostitute likes men in her bedroom.

Drug addicts use their disposable syringes and drop them as soon as they get them from the dealer. Being bio-degradable they will eventually disappear.

The terrorist has a tendency to leave bombs where he/she can pick them up later.

The Marksmaster is only fast for the money.

Listen for clues and follow trail of spent bullets (or footprints) to find the murderer.

The thief will steal anything which isn't nailed down.

Unfortunately, two people are having an affair and it appears to us the loose which can respicate matters.

Painting by numbers is a useful skill in the master room!

The grinding wheels can give you a nasty scratch!

The display list contains details of (explained) suspect answers, object field, shot details, room and player numbers. Please note that the room numbers are for reference only and some numbers are missing (i.e. 6,7,8) so don't waste time looking for rooms which don't exist.

The game ends when all six criminals are identified. Press trigger to play again. The criminals and weapons change each time.

YO, HO, HO ... KEEP THE PIRATES ALL AT SEA

It was interesting to find amongst this latest batch of mail a number of comments on the subject of pirating software. I can't make any comment, let our readers speak for themselves.

Martin Henrich from Leeds writes:

"I have been an Atari user for nearly 10 years and started out with an old 800 and a 10 meg disk. At that time (1985/4) plenty of software did exist, but at £20 to £40 each even for one-sector, while games for Spectrums, etc. were only a few. Games for a 14 year old boy were a rare occurrence. A couple of years later I acquired a 800XL, 1000 drive and a large number of new contacts with the same equipment. After years of being in the game wilderness I was presented with a chance to get all the games that I ever wanted, plus discs from America that I had never heard of, for the cost of a few blank disks. After a few months, my collection grew to several hundred titles, and I was getting about 5 new games every month until about 1990. Then the software market totally dried up. So new games were being written in this country, and virtually none in any other. At the time I was furious with the software publishers, blaming them for being 'anti-Atari' and 'pro-Commodore' and I also accused the computer media of the same crime.

By now I had bought one full-price game and owned over 300 copied programs. Around this time I had chosen meeting with one of the directors of English Software, the biggest UK company that produced Atari games. I complained that there was no new software being produced, and how his company had always cheated the Atari, but when he asked me how many English Software originals I owned compared to copies, I shut up quickly. I realised that I, my friends with disks, and thousands like us had been the cause of the death of the Atari 8-bit. My Atari gathered dust for a few years, until I recently discovered the small order companies in 'New Atari Here', and now the only software I use for need is sold as originals and I try to believe about this. But when I try to understand why people pirated software in such large amounts, I can see a reason.

Two years ago, a copy of 'War in Atlantis' (MSX cost £15. Could any Atari user honestly say that they would today pay almost £50 (equivalent price) for this game or any other? When there is the option of a free hacked game instead of an original that costs half a weeks wages, does the choice is obvious. The question of who to blame for this is less obvious. The Atari 8-bit software market was killed off by the sheer number of pirates, but the pirates themselves were created because of the ridiculous prices of the software in the early 80s. As a consequence, when prices came down to a reasonable level, the pirates were still there, and the gamers collectors (like me) took nothing an offer from them.

So, who can we blame? The software companies (including Atari) for selling software at a price that discouraged the buying of originals? The pirates that made sure that almost no-one bought the originals? Or the users who encouraged the pirates to exist to the numbers that they did? You decide, I can't."

Next from Richard Carter, in Ingeripal country - Jersey, Channel Islands:

"Can I say to people that if they love their Atari Classic then they should not, on principle, pirate any software - and who hasn't at some time or other copied a computer or music tape? Maybe it might make some money for their hard work the Atari Classic will keep going? Maybe even long enough that some hope the Atari owners will realize what a mistake they made using the best computer ever made. I can say this even though I own an Amiga. Have you tried Amiga HARC? If you have, you'll appreciate how good Amiga HARC is, especially the Editor?"

Now we have some comments from 'a pirate who has written up':

"Piracy on the Atari has been here since day one and will always be here, all that I use no doubt. The only people who own such piracy is the pirates themselves. Derek Berry's thesis regarding FMSI issues MSX are laughable because I honestly can't see FMSI being bothered with any person pirating software for the Atari 8 bit when they have their eye on a multi-house pirating and selling software as originals. To all true Atari 8-biters I say this: the software produced and sold nowadays is written by dedicated Atari 8-bitners like yourselves. Do you think it

is fair that all their tools should go financially unrewarded because everyone has pirated the software and hardly anyone has bought it? I mean, Atari 8-bit software sales are hardly going to make anyone rich, are they? They write the software out of a love for their computer and, of course, for a bit of money.

I can't understand software producers at all. For example Tiger Developments' disks have no protection at all 'Wipe up Puff' You are making it so easy for copies to be made and given to friends. Also disks like 'The Last Guardian' and 'Tiger for' - completely unprotected. Any disk copies from the Public Domain would be able to copy them. There is good news though - the European Atlantic seems to exert its software protection and disks like the Mega-Mags and Operation Flood have some excellent protection that can't be copied by Happs or Laser drives. This should certainly stop piracy in its tracks and so is great news.

As a final note I say to all MSX Atlanticians: please DO NOT pirate any new software produced - it is not fair on the authors, the publishers and the people who DON'T pirate games!"

Also on the subject of piracy, Stuart Murray who produces FUTURA disk mag made these comments in a recent letter to me:

"I've just had to spend two hours updating FUTURA 4 because 'Editor' is in fact a German commercial release which was 'cracked by its pirate'. I thought it was PC - writers by Peter Sublimus of ABBE: PC - I didn't notice the pirate's message on the title screen. From now on I'll be examining ALL title screens and I'll do this closely. I was planning to include a great game called 'Rise' on FUTURA 7 and I noticed the infamous 'Do protected by ...' message on the title screen."

Well, we can't change the past, but we can shape the future.

If we want the Atari Classic to survive with new software to be added to it, we must support the producers of any new software by purchasing originals, don't expect cheap bootlegging - just good usable software at a reasonable price!

Allan J. Palmer

INDISPENSABLE UTILITIES

Patrice Robert still enjoys playing golf but this issue turns his attention to more serious matters

Have you ever wanted to use some powerful utilities on your 8 bit machine? Yes, of course! But what kind of software? I have often wondered what are the essential utilities on the XL/XE. Some of the programs I have selected really give our computer huge power, a power I never thought was possible to have! Let's discover how great is the world of AT&T, as it relates to utilities, possibly the most interesting pieces of software.

STARTING WITH DOS

As you probably know from the first time you get a disk drive, the most important piece of software is a Disk Operating System to enable you to manipulate disks. For this most important job, the most powerful DOS is, without any contest, **SPARCDOCS** from ICD which allows you to format any disk (5 1/4 or 5 1/2) in any density (single, medium, double, double sided double density, hard drive) and also supports high speed transfer, even between disks of different formats. (This supposes you have a hardware enhanced drive - Happy, DZ duplicator, US-doubler etc.).

The other DOS to be recommended is **SEPERDOS 3.0** from Technical Support which was produced in 1988. It does the same work as SPARCDOCS, that is to say that it also supports the special XP254 format, but it also includes a special automatic loader for this special 288K disk drive. According to my knowledge, this is the only software offering this possibility.

COPYING DISKS

After a while, you will realize that you need a disk copier. However, you will notice that most of them don't copy every density or, perhaps, support only one-disk drive. According to my experience in this field, I highly recommend **US-BIN COPY 4** or **MYCOPY 3**, a tool (the ICD 6 Public Domain Library) which automatically detect the density of the source disk, read and write in high speed if you have a special enhanced drive, and then format the destination drive in the required density. Most important of all, they detect the number of drives that you have and display the progress of the copy on the screen by a moving bar (the US COPY 4 like in Basic) will know ST registers. As if this wasn't enough, they also use the

extra ram that you have up to 256K, so supporting the 128K2 non-disk and the Hambe XL. With these registers you can copy a single disk in one pass with a 128K2 in some seconds.

TRANSFERRING TAPES

Looking at your tapes, you will need a tape-disk transfer program. For this job, don't search for weeks and weeks, just buy **TRANSFER 4** produced in 1988 by Digimon and now available from PRCE-S. I must admit that with this software all the tapes I have tried to duplicate to disk have worked well and every transfer has been successful.

MAKING BOOT DISKS

If you have a large number of files on your disks, you might want to find an easy way to select and autorun your chosen program. I solved the problem in two ways. The first is by using a program called **NDOS AUTORUN** or **NDOS CONVERTER** which enable you to boot every file with a ".com" extender filename. You will probably say that every dedicated autorun can do it but the great advantage of this one is that you can write the whole name of the file, not being obliged to reduce it to 8 characters. In addition the autorun doesn't take up any room on your disk! That means that if your disk is full of files, giving you 0 free sectors when asking for a directory, NDOS will still write the autorun on the disk so that the presentation page appears on screen when booting with full names for all games or utilities.

The second utility I often use is called **SPEED START INITIALIZER** version 2 or 3, as it allows you to boot not only ".com" files, but also binary and Basic files and it supports single, medium and also double density disks if you are using an XP254 drive. Moreover, this program can make high speed boot disks if you have an enhanced drive and it also allows a normal drive to boot in high speed provided the autorun has been written by an enhanced drive. Really great!

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JUST FOR FUN!

Now, for the fun of it, and because it really needs to be seen on your XL, here's a look, or I should rather say here's a hear, at **S.A.M.** the Software-Automated Music from Don't Ask software produced in 1982 which gives a tongue to your computer. I wonder if the people who made SAM could make an operating DOS? It would be funny to hear our XL saying "Yes inserting your disk is drive 1", wouldn't it? If you like the synthetic voice, you probably might like to look at a picture and voice digitiser also such as **EASY SCAR B** from Innovative Concepts in 1982 and **DISE-VOICE**, the audio processing system, from Gemini software in 1984. If you need to draw water pictures, see **TECHNOLOGICAL DREAMS** which was produced in 1984 from Mod Hat software. I cannot see more beautiful pictures on my XL as this program can produce.

TWO IN ONE?

The following title made me rather sceptical when I heard of it. **SHAPENOTE** gives you the possibility to have two computers in one! I have to give an explanation I suppose. This little program from Tom Heat allows you the same satisfaction of configuring your XL or your extended XL in two parts so that you can load two different programs into memory which for this purpose is divided into two parts. The swap between the programs is made by pushing the shift-control key. I couldn't believe it until I saw it!

GETTING MORE SERIOUS

For the more serious work everybody owning a computer must have looked for a word processor. I highly recommend to you **FIRST KEYWORD PROCESSOR** as it runs the extra available ram of your XL. However, **ATASWITCHER** also gives good support as it includes spelling checker, mail merge database, alphabetical feature, telecommunication and one defensible printer driver. For the all in one package only two have the right to be mentioned here. I speak of **HOMEPAGE** from Hometek included in 1983 which include a word processing program called Hometext, a database called Hometail and a communication program called Hometerm. The other one will know to every interested 8-bit owner is of course **MEMO OFFICE 2** from Database software in 1987 from available from PAGE 88 as it includes word processor, spreadsheet, database, graphics, label printer and communications.

FAREWELL

I hope that this summary of much needed utilities will interest some of the 8-bit readers as it took me years (and money) to get the most powerful programs for my XL/XLX. If you want to speak of your experience with utilities or something else relating to our computer, why not write to me?

**Patrice ROBERT, 7, bd Marcel Fourquet,
93300 Noell-Malmaison, FRANCE**

The CLASSIC PD ZONE

DR. WHO ... PAPER PLANES ... UTTER LUNACY!

Welcome to the Classic PD Zone! Within this new column I will take you on a journey through the wonderful world of Atari 8-bit public domain software. As new commercial releases have slowed up, the PD sector has rolled up its sleeves and taken control of the 8-bit software scene. Many of today's PD titles could quite easily have been released commercially. The Classic PD Zone will offer you an insight into this ever-growing world of Atari 8-bit PD software. This time I give you a round-up of PD goodies...

THE COMPLETE Dr. Who

If you're a devoted fan of Dr. Who or just an occasional viewer, The Complete Dr. Who will be of interest to you. The current reports on BBC1 and the video re-release of the entire series has brought Dr. Who back into the public eye. I was a fan of the series and holed this disk with great anticipation. I was not disappointed.

The Complete Dr. Who disk consists of five text files which you can read or print, and an arcade adventure game. You are greeted with a menu offering six options: The Game, Cast and Episodes, Bibliography, Who is What?, Behind the Scenes, and Meet a Staff. I decided to leave the game until last as I wanted to create an atmosphere before playing it.

Cast and Episodes gives you a vast amount of information on the actors, script editors and producers of the Dr. Who series as well as a complete listing of all the episodes from the 25 seasons. This brought back many fond memories for me - I'd forgotten all about old K 9. It also reinstated me of my favourite episodes: Robots of Death and The Five Doctors.

Within the Bibliography there are details of almost forty Dr. Who books. These are not the books of the series - they are independent Dr. Who related publications. Some of them sound most obscure, e.g. 'The Doctor Who Cookbook', 'Dial the Doctor' and 'The Doctor Who Pattern Book'. Why was there never an Atari 8-bit cookbook?

'Who is Who?' is a very interesting article which attempts to prove that the Doctor and the Master (his enemy) are the same person. It also deals with the complexities of time travel. Although it was a most interesting read, it still not contained

that they are the same person. I'll leave you to make up your own mind.

Behind the Scenes is an detailed account of the final Dr. Who season (1989). It gives examples of accidental explosions on the set, changes to the original script and scenes that were cut.

The final text file is Meet a Staff. You are given full details on how to look the 1980 Season cast.

After reading all five text files I was ready to play the game.

Dr. Who Adventure is an arcade adventure game written in BASIC (it takes three minutes to initialise). It was featured on the disk because on Page 6 (issue disk 144). The menu menu gives you four options: Scenario, Play the Game, Solution, and After Program.

I began by reading the scenario. You play the Doctor himself. You are trapped on the planet Zog because the Master has revealed the Tardis unless by solving the Time Drive Unit. To escape you must locate the Time Drive Unit within one hour. However, there are many objects to collect and dangers to avoid.

Dr. Who Adventure will certainly not win any awards for graphics. It is typical of many arcade adventures written in BASIC - single colour objects, jerky animation, etc. The sound is also limited to the occasional click or hiss. In fact, I usually don't enjoy this type of game. However, for some reason I quite enjoyed Dr. Who Adventure. I think it was because I'd created a complimentary atmosphere by reading all the text files first. If you give it a chance you'll discover that the actual game content of Dr. Who Adventure is quite detailed and well put together.

If you find Dr. Who Adventure too difficult to complete, there is a full solution included. You can also alter the program if you wish.

Overall, I thoroughly enjoyed The Complete Dr. Who. The text files are extremely interesting and definitely worth the purchase of the disk alone. Dr. Who Adventure is an average arcade adventure which complements the text. Even with its mediocre graphics and sound I found myself battling through the High Priest's Temple and the Dark Room attempting to complete the game. However, I don't think there have a better title to include a Dr. Who text adventure instead of the arcade version. Even so, I heartily recommend The Complete Doctor Who to all fans of the series.

Classic PD Zone Rating : 75%

U.S. PAPER PLANE (PAPER AIRPLANE MAKER)



After my Dr. Who session I decided to try something a little different. U.S. Paper Plane helps you to construct paper airplanes. You also need an 80-column printer to print the designs.

There are 5 paper airplane designs on Side A of the disk. After a quick lesson (through all the designs I decided to construct the X31 design. After it was loaded from disk and displayed on the screen I pressed 'F' to print it. The X31 design was successfully changed to my Citrus 3200s. At this point, it doesn't look anything like an airplane. First, I pressed 'ESC' to select the folding instructions. This is where everything begins to take shape. You are given full step-by-step instructions on how to fold your chosen design. This is accomplished by a series of graphical representations of each stage of the folding process. The part to be folded is shown on the screen in bright yellow. The process is very simple to follow and before long I had completed my X31. I found it easier to use staples to hold everything together instead of paper-clips (although a paper-clip is essential for nose straight). After the graphical folding instructions you are given brief text instructions to make sure that you didn't miss anything.

On Side B of the disk you will find another 3 airplane designs and an art program called PolyPaint which is written in BASIC. It features many of the standard art functions (rectangle, circle, etc.) as well as a text function which allows you to place text anywhere on the screen. With PolyPaint you can design your own paper airplanes. My engineering skills did not stretch to a full design but I did enjoy experimenting with PolyPaint.

To sum up, U.S. Paper Plane is a gem of a program. It is very simple to use and produces excellent results. My X31 hangs from the shelf above my computer desk and attracts the attention of everyone who enters the room. "But does it fly?" I hear you ask. It goes like a dream!

Classic PD Zone Rating : 85%

LUNACY

Now it's time for some serious fun. Lunacy is a clone of the game Tetris. For those who haven't heard of Tetris, I'll give a brief description of the gameplay. You create various shapes which fall from the top of the screen. You must fit these shapes together at the bottom to create complete horizontal lines. After completing a line it will disappear and the remaining shapes fall by one line. The game ends when you no longer have space for new shapes.

The latest Classic has a wealth of PD Tetris clones. These include Tetris, Atlantis, Fortress, etc. The first one I played was Hot Blocks (page 4 issue disk #446). So what makes Lunacy stand out from the rest? Let's take a look...

When you load Lunacy you are greeted with the following message: "Thankyou Generals Warring! Extensive Research Has Consciently Proved That Playing Lunacy Will Result In Addiction". A nice touch. Next, you are asked to select between three different background themes. All three are quite good. You are then greeted by the main menu. Here you can select the starting level and line (the higher the line the less space the pieces level for and you're off!

In the middle of the screen there is a large black rectangle - this is the main play area within which you must fit all the pieces. To the top left you are shown the next piece and at the bottom your score and number of lines completed.

As with all Tetris clones, the gameplay is extremely addictive. It is one of those "just one more game" games. Created over the pieces in Lunacy is excellent (this is important on later levels). The graphics are very colorful with each piece having its own colour combination. The sound consists entirely of the background tune and this can be switched off and on by pressing 'N'.

I found Lunacy to be an excellent implementation of Tetris. In fact, it is probably my favourite (along with TWIX). I really enjoyed all the little extra touches such as the fast up message, selectable background music, highscore table and the way the lines disappear to the side during gameplay. You can also create your own background music if you own Playr Player II. In fact, Lunacy could quite easily have been commercially released.

Classic PD Zone Rating : 80%

See-ya!

Well, we've reached the end of our first trip into the world of Alan's bit public domain. Programs such as these mentioned above show the power of the Alan Classic. Next time, I'll be reviewing another mixed bag of PD games, including Hot Artix Deluxe. The Alan Classic goes overboard on!

This issues reviews are

DSH PD - PAPER AIRPLANE MAKER
DSH # 4 76 - THE COMPLETE DR. WHO
DSH # 4 76 - GORNYC

with Stuart Murray as your guide

Some Basic Notes on ... GRAPHICS

Ann O'Driscoll continues her guide to the various graphics modes so you can begin to write your own programs

DRAWING IN GRAPHICS 3 TO 7

The listing here is a simple program used to show what Graphics 3 to 7 are all about. These are the drawing or "map" modes. If you try to print a letter on one of these screens you'll produce a coloured square instead, with the size of the square dependent on the mode you are in.

AVAILABLE COLOURS

In Graphics 3 to 7, the COLOR command is used to pick the colour register. Register 4 (memory location 708) is used for the background and register 0 (memory location 700) is used for the points or lines. Graphics modes 3, 5 and 7 also use registers 1 and 2 (memory locations 706 and 710 respectively) for drawing, but none of the modes use register 3. Table 1

TABLE 1
COLOUR COMMANDS AND REGISTERS
IN GRAPHICS 3 TO 7

COLOR	REGISTER	LOCATION	GRAPHICS NO
1	0	(700)	3,4,5,6 and 7
2	1	(706)	3,5 and 7
3	2	(710)	3,5 and 7
0	4	(712)	3,4,5,6 and 7

shows the relationship between colour command numbers, registers and graphics modes. For example, the command COLOR 3 picks register number 1 at location 706. This register is used in Graphics 3, 5 and 7 but not in Graphics 4 or 6.

As in the case with the text modes, we use MOVECOLOR or PORE to change a colour to a register from its default value. These commands take the form MOVECOLOR a,C1 where "a" is the register number, "C1" is the colour you want (0-15) and "1" is your chosen luminance (0-14) even number(s) or PORE is INPUT1,C where "C1" and "1" are colour and luminance values as before, "a" is the memory location and 99 is a fixed number.

SCREEN RESOLUTION

Apart from the colour differences, Graphics 3 to 7 also vary with respect to the size of the individual blocks or "pixels" which may be printed on the screen. These range from the low resolution "chunky" Graphics 3 screen (90 pixels across by up to 24 pixels down) to the much finer Graphics 7 screen (180 pixels by up to 56 down). The details are given in Table 2. Basically, a Graphics 3 pixel is the same size as a Graphics 6 text character, being 9 bits wide by 5 screen lines high. Graphics 4 and 5 pixels are half that size (4.5 X 4) while Graphics 6 and 7 pixels are half this amount again (2.25 X 2).

THE PROGRAM

The listing lets you draw in the graphics modes with a joystick in port 1. There's also a "clear" option which draws a pattern in a selected mode.

LINE 45 of the listing asks you to choose between Graphics 3, 5 and 7. There was no need to include modes 4 and 6 because, as you can see from Tables 1 and 2, there are simply less colourful versions of Graphics 5 and 7 respectively. The maximum horizontal (MAX) and vertical (VMAX) screen coordinates, which are dependent on the graphics mode, are then marked out (**LINEs 60-70**).

The "see a pattern" routine begins at **LINE 300**. This simply draws lines from each of the 4 corners to the opposite end of the screen. The space between the lines is set by the size of the

DISK BONUS

GOLD GRABBER



by
Derrick Summers

Gold Grabber is a multi-screen maze game in which the object is to collect an ever increasing number of gold bars through ever more complex mazes. There are 16 levels supplied but others can be added with the editor and complete records of your progress through the various levels can be saved in disk.

There are two versions of the game with the second being more difficult as grey racks appear at random to block your path and the only trick that you go through you have to collect an extra Gold Bar to complete the level. These racks usually disappear when you hit them but an odd variation they remain in positions which may cause problems if you have to come back the same way.

In both games, if you hit a guard you may be lucky and escape but don't press your luck, you'll soon be hit. Even if you escape, the maze that is left behind could trap you in a section where there are no gold bars so escaping will not do you any good. There are also two editors and the difference between them is that in the second you can play level 1 with grey racks blocking your path.

All aspects of the game are covered in the instruction file on the disk and some details are also given on how you might adapt particular parts of the program to your preferences. At the end of a game you are given the chance of entering your scores on the High Scores Chart which will sort them in order as they are entered.

In addition to the High Scores chart there is a 'best hit' chart that tells you which screens have been played and where you lost your lives. With this program you have a choice of recording only the last game played or you can record every game played by moving the ROM to line 1250. If you wish to make a level start just delete the INIT files from the disk and the program will create new files as you play.

There are several more aspects to the game which you may fully covered by the instruction file and Gold Grabber should prove to be quite a challenge for anyone to complete it all.

GOLD GRABBER is the **BONUS** on the **Issue 67** disk which also contains all of the programs from this issue ready to run. Disk subscribers will receive their disk with their magazine but the disk is available separately for just **£2.95**. Write to **PAGE 5, P.O. Box 34, Stamford, ST16 7TB** enclosing your cheque, postal order or credit card details or order by telephone on **0783 213829** using **MAA, Mastercard** or **Switch**.

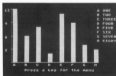
data provided in the program (menu option 2). The listing can now scroll up to 8 separate lines (D-8) in LINE 1100 and each line can have a name or label up to 8 characters long (L-8) in LINE 1100. The vertical or Y axis co-ordinates are determined by the values of the variables used and scrolling is done automatically. A letter is printed under each bar and the details, i.e. associated item labels are then given in a key at the right hand side of the screen.

The main point of interest of the program from a Graphics 5 viewpoint is the text printing, where time at LINE5-600-630. The routine looks in tabs at each character in the string to be printed (P%), gets its ASCII value and converts it to a non inverse character if necessary (LINE 610); C-127 means its inverse. Next it looks to see where the character is located in ROM, takes the 8 bytes which represent the letter and PORGs these into screen RAM using a FOR NEXT loop. In this way we can reproduce each character one line at a time.

For example, to put an 'A' on the screen, LINE 630 tells us that C=65 (the ASCII code for 'A'), LINE 630 tells us to subtract 32 from this (C-32) to get the ROM position of this particular character and LINE 630 tells us that the 8 bytes which define the letter 'A' start at memory location 57544+32*P = 57608. The first character starts at 57544, the second at 57544+1*P and the rest at 57544+2*1*P. The 'BT' variable in LINE 630 determines just where the letter will be displayed. Screen RAM starts at 8C (defined in LINE 3000) and the variables X0 and Y1, defined before the routine is called, are used to fit the offset from this (i.e. how far across or down the screen you want to be. For instance, X0=0 and Y1=0 will put the letter in the top left corner, X0=30 and Y1=0 will put it in mid screen.

There are examples of text printing throughout the listing. For instance, LINE 3000-3230 look after the legend or 'key' for the chart by printing each bar's letter followed by its associated label.

Finally, a few words on the X and Y axes routines. The program works out the scaling of the vertical axis by looking at each data value and setting the maximum number found equal to the variable Y1 (LINE 3000). This flag is used to quantify subdivisions as they are plotted by LINE 3030 and the 'unit' subdivision at LINE 3050. LINE 3000 adjusts each value by the scaling factor, S, and stores the answer in the S+M array. This tells us how high each bar will be in terms of the screen co-ordinates. On the X axis side, LINE 3070 draws the horizontal line, LINE 3210 fills in the blocks and LINE 3215 plots the relevant letter under each one.



THE TIPSTER



Would you believe that The Tipster doesn't really know everything and in fact goes to University? Well, University is getting on top of me once again on the issue for the month once again. I thought I left those behind at school's, but enough of this irrelevant title battle and on with the good stuff once again. It's going to have to be a short Tipster this time around because the tips are very far on the ground of the moment, something to do with the recession or something like that. Always best to blame someone or something else's. Only one map to come to this issue and that's Wood Mouse. CAR lets go and say what title the Tipster has for you. It mightn't be but remember it's of the highest quality!

From one of the statements of this column contains the following gathering of tips. Kevin Cooper has come up (trump) again with one of the tips on this page

TRANSITION from the manualist 50 needs only a few spaces to fit so here they are:-
4, 5, 7, 5, 5, 2, 4, 6, 5, 9, 7, 5, 5, 1, 2, 4, 6, 8, 7, 5, 2, 4, 6, 5.

ARCHON

Below is a list of all the characters in ARCHON and the opponents that they are best used on:

LIGHT SIDE CHARACTERS

- Knight** : Best used on Goblins
- Archer** : Best to be used on Goblins, and Manticores
- Yellkite** : A good one to kill Goblins and Manticores with
- Golem** : Best used to fight Trots
- Unicorn** : Use against the Basilisk, Dragon and the Sorceress
- Gjinn** : Best used against the Dragon and weaker creatures
- Phoenix** : Good to kill all of the Goblins with
- Wizard** : Can be used against all of the dark side characters

DARK SIDE CHARACTERS

- Goblin** : Best used against Knights
- Manticore** : Best used on Goblins and Archers
- Banshee** : A good character to kill Knights with
- Troth** : Good to fight Golems with
- Basilisk** : Use to fight the Unicorns and weaker creatures
- Dragon** : Good to use against the Gjinn
- Shape shifter** : Use against more powerful creatures
- Sorceress** : Can be used against all light side characters

GATHERING TIPS IN MAY (well June then)

TOMAHAWK

If you think of yourself as another Tom Cruise or Nicholas Cage in Wings of the Apache then you probably won't want to find out how to get better at Tomahawk. For the rest of you who probably have spent a long time playing this simulation on, to start off with, here are a few of the more important tips.

- C** - Dropper mode
- T** - Target blank - hold gun - activates the weapons
- SS** - Helicopter
- H** - Helipad
- B** - Bombs

(These letters appear in the bottom left corner of the main)

- N** - for location on joystick part 31 - Best objective - T0, T1, B0 etc.
- F** - Select weapons - Gun (2000 \$), Rockets (4000 \$), Missiles (5,1 mil)
- M** - Map - Selecting maps on helipad lets you move between sectors.
- Allied Forces** = Blue
- Enemy Armies** = Red
- Flanking Red & Blue** = opposing forces in same area
- H** - power

- Wave Forward** - Push Forward on Cycle joystick part 31
- Slow Down** - Pull Backwards on Cycle
- Turning / Banking** - Depress one of the 4 way cycle left/right - (press under 90 keys) use rudder (L / R) or joystick part 1 left / right
- Increase/Decrease altitude** - Q/A or joystick part 1 Forward/backward

When a target is in the sights, it will appear in the TADS (Target Acquisition and Designation) display on the bottom left corner of the screen.

- Red** = Hostile
- Blue** = Friendly

Units and Rockets must be manually aimed. The missiles will remain locked onto the target when it enters the sights.

- Tanks cannot be destroyed by the gun.



1	3	T1	4	L	6	7	8
9	4		C3	S-C		T3	
9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	32
33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48
49	50	51	52	53	54	55	56
57	58	59	60	61	62	63	64

WORD MAZE

The Tip
From Issue 47

Mapped by
Timothy Ashley

SP - SPORING
 CD - CROWN DOOR
 SD - SAGE DOOR
 SC - CROWN DOOR KEY
 SN - SAGE DOOR KEY
 CALC - CALCULATOR
 TO - TORCH
 POT - POTTER
 S.A.S.L.C.S.E.T.
 - JAWBURN WOOD
 M - MINE
 T3 - TELEPHONE 1
 T - MALL

HELP WANTED --- HELP WANTED --- HELP WANTED ---

Well that's all folks apart from the welcome notes of help from those people and there who need help with their games.

Kevin Grant of Harrogate needs help with **ZORK 1** in the underground complex. He wants to know how to get to the land of the dead to relieve the Crystal Skull. Also he wants to know to get from Riverain South to the trunk of Jewels. At the start he would also like to know how to get to the storage passage and finally at the start how do you open the grating. (Not to much to ask for is it? Not Good because it's up to you now.)

Other last words are Michelle and Lisa Thinder of Swindon. They are stuck at the bank for an amount number, also directions to the treasure which is given on the parchment, comes between two trees.

Also any tips on **KNIGHT ORC** would be greatly appreciated anyone got a map?

That's about all there is for this issue apart from saying **DAME W of Birmingham, PLEASE join I Love the solution for KROCKIN LEFT** as I've run out of solutions to print and I need space to fill up the columns.

QUICK ... E's ... QUICK ... E's ... QUICK ... E's

If you put a weight on the space bar, everything in **DAWN HAIDER** slows down and makes play easier. Thanks to Richard Miles for that tip.

If you have quickly leave then you'll confuse your opponent in **INTERNATIONAL KARATE**. This one is Steve Hargraves you have to thank for that one.

David Ellis says that in 2 player mode the other player cannot accelerate or decelerate when you are doing the same in **MIG ALLEY ACE**.

FREE CASSETTES!

If you have, or in the past, used by The Tipster you can claim a **FREE CASSETTE** from those currently available from The Tipster Shop but you won't get one if you don't send something to The Tipster - get tipping now!

HOW TO CLAIM

If you see your name in this column just drop us a line and say 'My name is ... and I claim my free Tipster cassette' and simply tell us which cassette you would like (give an alternative just in case). We will ship it off to you post-free (or through airmail). If you prefer you can always give us a ring instead on the usual number.

All that's left for me to say is that the address is as correct and everything will get in to the magazine section. Write to:

The Tipster
Page 6 Publishing
P.O. BOX 54
Stafford
ST16 1DR

COME ON TIPPERS - THE CUPBOARD IS NEARLY BARE

DISKFILE TRACKER

Most disk users will appreciate the importance of keeping accurate and up-to-date records of disk files. However, it is often tempting not to keep such records in the mistaken belief that you will remember which files are on which disks. This is fine for a couple of days or maybe even a week or two but what happens when you have worked on other projects in the meantime and then wish to find a previously saved file? What disk was that file on and what was the actual filename? Load a disk, scan the directory on, and on that disk. Try another disk and so on and so on. Frustrating to say the least.

Of course, no program can automatically keep-disk file records for you but the use of a suitable program can considerably reduce the time and effort required making the task very much easier.

THE SOLUTION

Unable to find a program which was sufficiently flexible and would produce printed output in the form I required I set about writing one to help in this respect. The result of my endeavour is presented here.

By now you may be thinking 'Oh no, yet another disk directory program'. If so, well you've partly right but I believe the solution presented here offers more than most.

PROGRAM OUTLINE

The main purpose of the program is to produce printouts of disk directories together with disk identifier information in either or both of two formats as follows.

1) DIRECTORY CATALOGUE SHEET

A listing of all filenames on a disk using 80 columns print width on A4 paper and.

2) DISK INSERT SHEET

Similar information to above but condensed to a size suitable for cutting out and keeping with the disk in it's sleeve.

The above options are user selectable while the program is running but you should note that as the print formats are quite different all printing of disk inserts is generally delayed until you 'load' the program or until the F10M buffer (F1) is almost full.

RUNNING THE PROGRAM

Type in the program listing if using TYPED for error checking. Don't forget to save a copy or two to disk before running just in case you have made any unrecorded mistakes. When then the program gives all necessary prompts and operates as follows.

1. **Load** directory from the disk to drive No. 1 into a long string. The main file string (F1) is dimensioned to 15000 in line 10100 and so has enough room for 13 disks each containing the maximum of 64 files. However, the F0M buffer should hold more like 30 to 35 average disk directories. To prevent this limit being exceeded, each time the file string pointer (F1) is updated line 100 checks to see if it has exceeded a safe limit of 12000. If so, the printing of disk inserts is forced and the string pointer is reset.

2. **if required**, set disk filenames giving priority to any predefined files - see below.

3. **if required**, set filenames into alphabetic order (omitting any predefined names as in 2.4)

4. **Display** main menu giving the following options -

4.1 **Display** the current disk directory on screen.

4.2 **Produce** a disk catalogue or insert sheet from the current disk directory. If this option is chosen, the program will ask for a disk number (1 to 999), disk side (A or B) and a disk file (1 to 64 alphanumeric characters). All this information will be printed on the appropriate sheet(s).

If a disk insert sheet is required the string file pointers are updated so processing the current disk directory information for later printing. It should be noted that if an insert sheet is NOT required, the file string pointers are not updated causing the current disk directory information to be overwritten by the next disk to be loaded. This prevents unnecessary use of memory.

4.3 **Exit** the program. Use of this option will cause any set unprinted disk inserts to be output.

When you have finished using the program you should leave it by using this option. Doing so will check that all disk insert

A Turbo Basic program

by D.T. Pinkney

sheets have been printed.

One word of warning! When you reach the final screen of the exit routine the program's exit variables will be cleared from memory, so make sure you have a second copy on disk or tape. However, before this final and critical stage is reached, you are given the chance of saving another disk, as a safeguard against losing the program in a moment of thoughtlessness.

FILENAME PRIORITY

As outlined in 3.0 above, priority may be given to any particular filenames you may wish. As presented the program gives priority to four filenames: DDBSYS, DUPSYS, AUTO48JN.SYS and AUTO80JN.HAS. These are contained in Data statements in lines 17520 to 17550. You can amend or delete these or add your own as required but you must also change the Data table containing the number of such files in line 17510. Alternatively, you may leave these lines intact and bypass the priority option by answering 'N' to the appropriate prompt.

ABOUT THE PROGRAM

The program (Listing 1) is quite long - about 59K but this increases to just over 31K when the program is run due to the setting up of the disk record header file, FR, in line 10400.

Although written in Turbo Basic[®] the program mostly uses only the simpler TURBO specific commands for program structure and legibility / understandability, so it should not be too difficult to convert it to any other type of Basic language.

The program has been developed and tested using an Atari 800XL, 1050-disk drive and Star LC10 printer but should work satisfactorily on any similar system including the old type 400/800's subject to the memory and language restrictions.

By keeping track of the number of lines printed the program is able to correctly control the printer in respect of page length and form feeds. Since my own preference is for A4 paper, the appropriate program variable is passed for this size (page length is controlled by variable MLP) which may altered before the program is Run - see later.

The Break key is disabled and, except on a last resort, the Reset key should not be used since although this will cause the program to stop and the computer to reset without loss of the program it will be very difficult to recover any unsprinted information held in the RAM buffer.

It should be understood that the actual directory information on the disk is not changed in any way. All the storing and sorting of information is done in the computer's memory so there is no chance of corrupting any programs or files on disk, by using this program.

The program is written in modular form using Procedures (Subroutines) to do specific tasks. This should make it fairly easy to follow and modify to suit your own requirements. Additionally, I have tried to make the program as user friendly and comprehensive / flexible as reasonably possible. You will be prompted to input information where required, helpfully all input is fully error trapped and where necessary nullified by specific error messages on the screen flashing out. Generally all commands are presented on options and require only one keystroke (no need to press RETURN).

PROGRAMMING NOTES

To save memory the use of REM statements has been kept to a minimum but this is partly compensated for by the use of variable and procedure names etc. which have some resonant-

ancy to their purpose. Additionally, where numerical constants are used fairly often, these have been replaced with self explanatory variables having the constants assigned to them. These variables (W, N1, N2 etc.) have the same meaning as constants 0, 1, 2 etc.

CHANGING OUTPUT

The general format and style of the printed output is controlled by variables. These may be altered to suit yourself and are listed together with their location and codes below.

MLPT Line 10410 Should contain the maximum number of lines which could be printed on the paper being used, set to 70 for A4 or 60 for 8.5" paper length.

HL Line 10430 Number of blank lines required at head of page - may be any number from 0 through 99. Incidentally this is the position to which you should set the printer head when first prompted to set the printer.

MSPL Line 10420 Determines the number of lines on which filenames may be printed on the disk insert sheet.

DPP Line 10440 Set to zero to print as many catalogue sheets as possible on each page. Set to 1 and only one catalogue sheet will be printed on each page.

LANDR_FL Line 10450 Set to zero to print 24 lines for filenames on each catalogue sheet. Set to 1 to print catalogue sheets in minimum number of lines.

LANDR_FL Line 10460 Set to zero print filenames on the insert sheet down the page. Set to 1 to print filenames in minimum number of lines.

Line 10470 in the initialisation routine checks that all the above preset variables are within a predefined range and, if not, the program will stop with an error message.

MODIFYING THE PROGRAM

Three customised screens are used to provide some enhanced control in respect of colour and layout of displayed information. The display list instructions for these screens is held in the Data statements in lines 17100 to 17300 but is transferred to memory locations 80800 to 808FF during the initialisation stage. The program is therefore able to flip between these screens almost instantly.

Most of the main subroutines used are capable of changing the screen colours / character luminance through the variables TITLECOL, DMCRCOL and CHMRCOL. If you wish to change the colour etc. of any particular screen, simply change the value assigned to the appropriate variable in the opening lines of the relevant procedure.

Should you find that the program as listed does not provide quite exactly what you require, it should be a relatively easy matter to change it. The subroutines are mostly self contained and self explanatory.

LAST WORD

There is of course no need to list this program every time you change a disk's contents. With the printouts provided there is usually sufficient room on the sheets to make several manual amendments. The program can then be RUN when the modified sheets are filed with changes.

I hope you will find this utility as useful and helpful as I have. It has certainly made keeping track of disk files much easier.

Listing overleaf

DISK FILE TRACKER

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01 1 0000 .....
02 1 0000 .....
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98 1 0000 .....
99 1 0000 .....
100 1 0000 .....

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001 0000 .....
002 0000 .....
003 0000 .....
004 0000 .....
005 0000 .....
006 0000 .....
007 0000 .....
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010 0000 .....
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DISK FILE TRACKER

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00 00000  L.000 0000.00
01 00000  00000000
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03 00000
04 00000  P000 00000.00 00
05 00000  T0000000000
06 00000  0000000000
07 00000  0000000000
08 00000  0000 000 0000 0000 0000000000
09 00000  P00000 00.00
10 00000  0 00000000 0000 00
11 00000
12 00000  P00000 00.00
13 00000  T 0000 00 00
14 00000  0000 00.00
15 00000  000
16 00000  00000000
17 00000
18 00000  P000 0000.00
19 00000  T000000000
20 00000
21 00000  P000 0000.00
22 00000  T 0000 0000 000000 0000 0000
23 00000
24 00000  P00000 00.00
25 00000  T 00000 0000 000000 00
26 00000  P00000 00.00
27 00000  T 000000 0000 0000
28 00000  P00000 00.00
29 00000  T 00000 0000 0000
30 00000  P00000 00.00
31 00000  T 00000 0000 0000
32 00000  P00000 00.00
33 00000  T 00000 0000 0000
34 00000  P00000 00.00
35 00000  T 00000 0000 0000
36 00000  P00000 00.00
37 00000  T 00000 0000 0000
38 00000  P00000 00.00
39 00000  T 00000 0000 0000
40 00000  P00000 00.00
41 00000  T 00000 0000 0000
42 00000  P00000 00.00
43 00000  T 00000 0000 0000
44 00000  P00000 00.00
45 00000  T 00000 0000 0000
46 00000  P00000 00.00
47 00000  T 00000 0000 0000
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74 00000  P00000 00.00
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94 00000  P00000 00.00
95 00000  T 00000 0000 0000
96 00000  P00000 00.00
97 00000  T 00000 0000 0000
98 00000  P00000 00.00
99 00000  T 00000 0000 0000

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01 00000  0000 00
02 00000  P00000 00.00
03 00000  T 000000 000 00
04 00000  P00000 00.00
05 00000  T 00000000 000000 00
06 00000  P00000 00.00
07 00000  T 00000000 000000 00
08 00000  P00000 00.00
09 00000  T 00000000 000000 00
10 00000  P00000 00.00
11 00000  T 00000000 000000 00
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63 00000  T 00000000 000000 00
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67 00000  T 00000000 000000 00
68 00000  P00000 00.00
69 00000  T 00000000 000000 00
70 00000  P00000 00.00
71 00000  T 00000000 000000 00
72 00000  P00000 00.00
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91 00000  T 00000000 000000 00
92 00000  P00000 00.00
93 00000  T 00000000 000000 00
94 00000  P00000 00.00
95 00000  T 00000000 000000 00
96 00000  P00000 00.00
97 00000  T 00000000 000000 00
98 00000  P00000 00.00
99 00000  T 00000000 000000 00

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Continued

CLAPTON ... KNOPFLER ...

Could your Atari help you become the next guitar superhero? John S Davison has been trying out *Guitar Wizard* a package that might just set you on the road to stardom

YOU?

New music-related programs for the 8-bit machine are as rare as hen's teeth these days, so I was delighted to receive *Guitar Wizard* for review. Although rare to see it's actually been around since 1980 in the USA, and thanks to Micro Discount it's now available in the UK. To run it you'll need an 8-bit machine with at least 48K memory, a disk drive, and optionally a joystick.

Guitar Wizard's purpose is to help guitar players learn fingerings of chords, scales, and intervals, and for matching scales with chords for improvisation. It's not intended for the guitar novice - don't expect it to teach you to play from scratch, because it won't. However, since you have some basic knowledge and skill with the guitar it could help speed up further progress. The program is divided into four sections, one for each of the basic functions mentioned above. All are extremely easy to use and understand, mainly because of the constant screen layout used throughout and the simple menus driven over interfaces.

The top third of each screen carries basic information about the current function, for instance for a chosen chord it displays root note name, chord name, names of notes in the chord, and note intervals.

The middle third of the screen shows a "guitarist's eye view" of the fretboard, with the six strings (each marked with its current tuning) and twelve frets. "Finger spots" are overlaid on this to show finger positions required to obtain the required notes in the chosen chord, scale, or interval. Depending on the option chosen these are marked with finger numbers (showing which fingers to put where), note names (telling you what the notes are), or intervals (relative to the root of the chosen chord or scale).

The bottom third of the screen holds the screen from which the function's options may be chosen, for instance whether to display fingerings, notes, or intervals in change chord mode or type; or to print out the currently displayed screen. You just make choices using arrow keys or joystick - it really couldn't be much easier to use.



played screen. You just make choices using arrow keys or joystick - it really couldn't be much easier to use.

CHORDS GALORE

The first section, Chord Wizard, is designed to show you recommended fingerings for a wide range of chords. It for each root note to be precise. Virtually every chord you could want to play - if it isn't you should be able to construct it from the knowledge the program has already given you. It goes further though - it can also show you the fingerings for the same chords in eight alternative positions on the fretboard, modifying the fretboard display to show up to the 15th fret where necessary.

Scale Wizard performs a similar task for scales. The top third of the screen now showing the scale root, scale name, names of notes in the scale, and scale intervals. It covers nine or ten different scale types for each of the twelve root notes in an octave including, in addition to the expected majors and minors, such ones as whole tone, pentatonic, blues, and half diminished scales, plus all the odd ones (Dorian, Locrian, Aeolian, etc.). That's a pretty comprehensive selection! Fretboard Wizard is a sort of "fretboard calculator". You can ask it to display the fingering positions for notes in any chord, or scale, or interval across the whole fretboard at once. The display looks very complicated with dozens of finger spots shown simultaneously, but could be very valuable for the more expert guitarist trying to work out the best way of playing long scales or runs. Another advanced feature is the program's

continued on page 39

GUITAR WIZARD

Headville
Available from Micro Discount
£10.95

RIGHT TO THE END

If you have *Dropzone*, you'll probably agree that it's one of the best games ever written for the Atari 16-bit. If you don't have it, shame on you - try and get it if you can. Although the graphics are stunning and it's fun to play, I think it's far too difficult. All you get is 3 lives, 3 bombs and 15 seconds of clock time. I usually can't get past the 2nd level, so the other day Steve Whitley and I decided to find out how the lives were initialized in the game and give ourselves a lot more than the 3 we had been allotted. We succeeded and then decided to give ourselves more bombs and to be really greedy, give ourselves more clock time! After we'd finished we decided to give ourselves more lives in *Draconus* also, which Steve has been unable to complete on the 3 lives you get with it. If you want to cheat at your own games of *Dropzone* and *Draconus*, read on.

THANKS TO HARVEY

In issue 26 of Page 9 Atari User, you'll find an article written by the HAWKQUICKY co-author, Harvey King Tin entitled "Zapping The Night Flyer". This is what made us decide to have a go at cheating at *Dropzone* as it wasn't on the list of games Harvey had cheated at, and this is the story of how we did it. You'll need a pop-up Machine Language Monitor like Supermon in your computer to modify games yourself, but I think Libras or Omnicron are much the same thing in England. Later on we'll tell you how to modify the sectors concerned on your *Dropzone* and *Draconus* disks, but for now we'll explain how we did it. Some knowledge of Machine Language is needed.

LOOKING FOR LIVES

Harvey King Tin says that most commercial game programs store the accumulator with the number of lives required. This in LDA #800 or LDA #802, etc., although sometimes they can use LDX or LDY to initialize lives in a game. If you load *Dropzone* in the normal manner and then jump into Supermon, you will need to know a few things about the game first, like where it loads into memory and finishes, and most importantly, what the hex address is so you can re-run the game after you modify a byte and see what happens. You can do it with a sector editor on disk, but this will take you all week to track down the right byte! The start address of *Dropzone* is 82780 and the End address is 88930. The Hex address is 80829. Knowing this, we can now look for any LDA #800 instructions which appear as AB 03 in the memory that *Dropzone* is running in, so I typed AB 03 from 2780 to 88C8 and check. Surprised, you'll find that there are 23 locations with these bytes. We changed every one, but alas, no extra lives. Next we tried AB 04 and found 8 locations, but none of these had the right ones either. This with LDA #800 0A2 00 which had 8

DROPZONE and DRACONUS DEFEATED

locations, and LDA #800 0A2 00 which had 7 locations. This was getting tedious. Finally we tried LDA #800 0A2 00 and found 24 locations! Great. But back now with us as the very first byte we changed was the right one, boring. This is at 80000 where the value of 800 is stored into 805AC. If you look at 8AC you will find nothing there! That's because the game hasn't been initialized yet, so go back and start the game first then jump back into Supermon and look at 8AC again. Now you'll see there is a 00 here, run the game again and be yourself be killed, then look into Supermon and look at 8AC again. It's an 04 now, so this is the location where your lives are initialized.

GIMME SOME BOMBS!

After success with the lives, we decided to find out how to give ourselves more bombs. If you look at location 80040 again you will see that the word LDA instruction stores a 802 into 805AD so if you look at 8AD you will indeed find there is a 03 here. Now, to run the game again and see a bomb, then look at Supermon and look at 8AD. It's an 00 now, so this is the location where the bombs are initialized. Good stuff. Now we decided to get really greedy and look for the routine that handles the amount of clock time given. The clock has the 15 seconds in the game before being exhausted.

We looked for a routine that checked if any key was pressed, which usually is LDA #0FC 0AD FC 00, and found 3 locations. 804DE is the routine that passes the game when the ESC key is pressed, and location 80608 checks for the SPACE key (loaded and also any other key pressed). We never checked the third location, as we had found what we wanted. We then entered a routine to check location 85A0 (LDA #85A0 just after the routine at 80608, so we decided to I-poke a routine that would STA #8A0 003 00 00, and there it was as plain as day at location 80240C, and checking back a couple of bytes (location 80829), we found the routine LDA #18, STA #80A0 0A2 00 0A2 00.

We changed AB 15 (LDA #818) to AB 7F (LDA #87F) and gave ourselves 955 seconds of clock time but then found the game

Mal East and Steve Whiteley
have discovered how to change
the disks to get much further
into these games and now
share their secrets with you

didn't like being changed as it opens the mail of text message, so I'd advise you to leave this one alone, but giving yourself 256 lines and 256 heads doesn't feature the game at all.

TIME TO ZAP THE DISK

Okay, enough of the technical stuff, this is how to change your disk. A word of caution though. Before you change anything, write down the sector number and the original value of any bytes you alter and please don't blame me or Steve if you screw anything up! You can use Supadisc or if you prefer a sector editor, load one that can look for a byte string on disk, then insert your Dragoon disk and look for the following byte string in hex:

00 04 00 00 00 and change it to **00 00 00 00 FF** for 250 lines

If you're greedy, look for

00 00 00 00 00 and change it to **00 00 00 00 FF** for heaps of bombs.

Actually, you'll find these bytes in the same sector on the lines, right at the beginning of the disk on track 000.

If you're really greedy, look for

00 00 FF 00 10 and change it to **00 00 FF 00 FF** for 100 seconds of clock time.

LET'S TRY DRACONUS

After getting Dragoon a working save, we then loaded Draconus and looked for the same byte string of 00 00 FF from 1 480 to 00 FF. We found 18 locations but attack it back on the first one. Change location 4200 to FF if you want to try it and Run from 3700. To change your disk, look for the byte string of

00 0F FF 00 00 and change it to **00 0F FF 00 FF** for 250 lines.

You should find this sector in track 007.

That's about it for the "software" hacking, so load up your new-chest disk and see what the higher levels in Dragoon look like, and see if you can finish Guardians. Use the solution supplied by *Adrian from Singapore* in issue 50 if you need to.

GRALIN International

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Radio Rally

Sunday 27th June, 1993
Longleat Park, nr Warminster, Wiltshire

All our classic software & hardware at reduced prices

+ 25% discount if you bring along this issue of *New Atari User* (Page 6 to those who remember)

Other attractions include a craft fair exhibition
For product details please refer to the last issue of Page 6

FANCY A TRIP TO GERMANY?

Derek Finn has received details of a major Atari 8-bit show (Mines) to be held in HANNOU (presumably Germany) on 21st August 1993 and wonders whether there would be enough interest to arrange a coach trip over there.

No firm details yet but if you are interested give Derek a ring on 001 050 0700 - if there is enough response the trip may well be arranged.

Guitar Wizard

continued

ability to help you explore alternative string tunings. Instead of using traditional tuning you can set each string to any pitch you wish. The program will then show you chord fingering positions based on this. You could also use the feature to help you learn to play other stringed instruments which don't use standard guitar tuning.

Finally there's Impression Wizard. This lets you choose a root note and chord type and it then recommends scales on which you can successfully base a matching improvisation. This could be a great help if you're composing or looking into improvisation patterns for rock, jazz, or other types of music.

TOTAL SILENCE!

Guitar Wizard includes some excellent features, but there's one major omission. Unbelievably, it makes NO use of sound! The 8-bit machines have four sound channels, so why the heck didn't the author use them for exactly demonstrating scales and chords? Perhaps it's because the sound chip tuning isn't 100% accurate? Who knows?

Apart from this one niggle Guitar Wizard is an excellent, high quality product. I was particularly impressed by its ease of use, in fact I think it's actually easier and quicker to use than books on the subject, a rare situation indeed! And at £19.95 it costs less than a decent tutor book or even an hour's tuition from a guitar teacher. So, if you're into guitar playing and are serious about improving your skills make sure you check it out. It could help turn YOU into a Guitar Wizard!

VIDEO TITLE SHOP

There is only one commercial program available for the Atari Classic to add titles to your video presentation, but is it any good?

Do you own a video camera? Are you fed up with hours of recording footage? Could you not something that would give your home movies a bit of life? Maybe you should give DataSoft's VIDEO TITLE SHOP a try.

VIDEO TITLE SHOP comprises two programs and a graphics package on three double-sided disks with two manuals and a quick reference card. To get the most out of the package you need a 544K ATARI disk drive, VCR and viewing screen. The package is designed to give a video titling facility, where text is superimposed on backgrounds, either blank or pictures created using the supplied "Micropainter" art program. Titles may be scrolled, wiped, faded, cyclled, painted and then faded away. By chaining together pictures in sequence simple animation may even be created. What the program will not do is superimpose titles onto a video background. That requires a piece of hardware called a Genlock, and as far as I am aware there isn't one yet available for the 800/1300 series, but I live in hope!

So what is it like to use? Well, once the disk is loaded up you are presented with a fairly impressive title screen, created using both the supplied art and titling programs. Commands are simple and are entered via the keyboard and/or joystick. The quick reference card is especially useful here as the list of

commands is quite extensive. The supplied manuals take you through the various stages, eventually producing for you in the form of a demo, examples of all the facilities provided in the program. Backgrounds, border styles and fonts may be loaded in from disk. There are 20 backgrounds, 5 border styles and two fonts supplied as the "Graphics Companion I", which takes up two of the three disks. You may also be able to use backgrounds from other sources as pictures are stored as GD vector files. I know this to be true as I have used "Tom Lutz" pictures and they work. The program may be further enhanced by obtaining a copy of the "Graphics Companion II", which contains more pictures, borders, fonts and clip art.

Sounds too good to be true? Well it does have its problems. The program has a tendency to lock up, infuriating when creating long sequences. Also, backgrounds may only be in a colour's with the titles using those same four colours, so great thought is needed when planning your screens. The process of creating sequences that can be loaded in from disk is very messy indeed, not helped by the format of the instruction manuals, though it's not impossible.

What about the results? I can only say brilliant! I have been using this program for over a year now and have achieved some excellent results. This is a piece of software trying out for screen use. It certainly isn't a budget program but gives outstanding results at a budget price. All I can say is buy it. You won't regret it!

Video Title Shop is available from Mirror Document and Graphics International.

We would like to give our credit for this review but the contributor forgot to give us his name. The disk came from B&B Software and we probably should know who it is but we'll remember. Perhaps there is a security flaw that our review is from identifying the author?

Source code for HIGHLIGHTER

```

0000 00000000          0000 0000          0000 000000          0000 000000          00000000 00000000
0001 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0002 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0003 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
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0005 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0006 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0007 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0008 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0009 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
000A 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
000B 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
000C 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
000D 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
000E 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
000F 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0010 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
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0013 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0014 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
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0017 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0018 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
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001A 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
001B 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
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001D 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
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0020 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0021 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
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0030 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
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0039 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
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003C 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
003D 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
003E 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
003F 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0040 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0041 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0042 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0043 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0044 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0045 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0046 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0047 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0048 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0049 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
004A 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
004B 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
004C 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
004D 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
004E 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
004F 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0050 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0051 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0052 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0053 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0054 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0055 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
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0057 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0058 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0059 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
005A 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
005B 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
005C 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
005D 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
005E 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
005F 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0060 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0061 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0062 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0063 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0064 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0065 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0066 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0067 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0068 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0069 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
006A 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
006B 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
006C 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
006D 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
006E 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
006F 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0070 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0071 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0072 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0073 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0074 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0075 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0076 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0077 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0078 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0079 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
007A 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
007B 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
007C 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
007D 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
007E 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
007F 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0080 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0081 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0082 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0083 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
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008C 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
008D 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
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008F 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0090 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0091 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
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0093 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
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0096 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0097 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0098 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
0099 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
009A 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
009B 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
009C 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
009D 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
009E 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
009F 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
00A0 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
00A1 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
00A2 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
00A3 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
00A4 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
00A5 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
00A6 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
00A7 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
00A8 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
00A9 00000000          0000 0000          0000 0000          0000 0000          00000000 00000000
00AA 00000000
```

TUTORIAL TIME

30 SECONDS AND COUNTING

In the last issue I talked about using the Atari clock for timing answers to a multiple-choice quiz. I did not explain carefully enough, however, and so I have been asked to help again to get the timing system working.

The fundamental problem with timing is that in that although the timer keeps running all the time, the display is only updated when you read the timer and update the display. In order that the time display is updated constantly there must be repeated calls to read the timer and print the result on screen. If your program stops and waits the display of the timer will stop also. This means that you cannot use GET or INPUT functions as both of these wait for a key press, so if you don't press a key the clock seems to stop and then when you finish thinking and type your answer the displayed clock will jump to the new time.

To give an example of what I mean I am using a simple addition test program based on a concept by Paul Robinson. I will not explain the program step by step, but have drawn an overall flow-chart of the program in figure 1. If you follow round the program flow in this figure you will see that some of the paths iterate very quickly. The slowest loop is the "Try Again" loop when you get the answer wrong. This means that if we just a timer anywhere in the main program flow it will update very infrequently. We have to find an alternative.

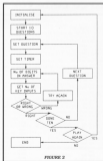
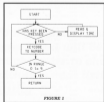
The answer lies in that part of the program where we get input from the keyboard. User input is the slowest part of the program - the computer has little to do but wait while you think about which key to press. In the main flowchart this is the box labelled "Get No of Key Inputs". In this box if the program sees a GET or INPUT the computer can only sit and wait as I said earlier, but it is possible to use this waiting time more constructively to achieve our timing requirements.

Look at figure 2. This is a simple flow chart of the "Key-Or" sub-routine (lines 1800 to 3000) of the program, which is where the key input actually occurs. This sub-routine is rep-

ated for each character of the answer, so it may repeat once or twice (once for 0-9 and twice for 10-17 and -1 to -7, no other answers are possible). What is happening is a continuous loop which seems to see if a key has been pressed, then reads the timer and updates the time display on screen. This loop iterates very quickly so the time is updated smoothly - the program only breaks out when it detects a key press. It then converts the keycode to the equivalent number 00 to 99 and returns with that value to the main program.

There is a slight complication in the "key-or" sub-routine - because it is possible for the answer to be negative we have to allow for input of a minus sign (-) as the first character of the answer. This is done in line 1805, and it sets the variable MINUS to 1 so that the first character in the answer is made a minus sign (line 3000).

Having a clock running also allows the screen to depend on



```

001 1 000 *****
002 2 000 0 *****
003 3 000 0 *****
004 4 000 0 *****
005 5 000 0 *****
006 6 000 0 *****
007 7 000 0 *****
008 8 000 0 *****
009 9 000 0 *****
010 0 000 0 *****
011 1 000 *****
012 2 000 *****
013 3 000 *****
014 4 000 *****
015 5 000 *****
016 6 000 *****
017 7 000 *****
018 8 000 *****
019 9 000 *****
020 0 000 *****
021 1 000 *****
022 2 000 *****
023 3 000 *****
024 4 000 *****
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026 6 000 *****
027 7 000 *****
028 8 000 *****
029 9 000 *****
030 0 000 *****
031 1 000 *****
032 2 000 *****
033 3 000 *****
034 4 000 *****
035 5 000 *****
036 6 000 *****
037 7 000 *****
038 8 000 *****
039 9 000 *****
040 0 000 *****
041 1 000 *****
042 2 000 *****
043 3 000 *****
044 4 000 *****
045 5 000 *****
046 6 000 *****
047 7 000 *****
048 8 000 *****
049 9 000 *****
050 0 000 *****
051 1 000 *****
052 2 000 *****
053 3 000 *****
054 4 000 *****
055 5 000 *****
056 6 000 *****
057 7 000 *****
058 8 000 *****
059 9 000 *****
060 0 000 *****
061 1 000 *****
062 2 000 *****
063 3 000 *****
064 4 000 *****
065 5 000 *****
066 6 000 *****
067 7 000 *****
068 8 000 *****
069 9 000 *****
070 0 000 *****
071 1 000 *****
072 2 000 *****
073 3 000 *****
074 4 000 *****
075 5 000 *****
076 6 000 *****
077 7 000 *****
078 8 000 *****
079 9 000 *****
080 0 000 *****
081 1 000 *****
082 2 000 *****
083 3 000 *****
084 4 000 *****
085 5 000 *****
086 6 000 *****
087 7 000 *****
088 8 000 *****
089 9 000 *****
090 0 000 *****
091 1 000 *****
092 2 000 *****
093 3 000 *****
094 4 000 *****
095 5 000 *****
096 6 000 *****
097 7 000 *****
098 8 000 *****
099 9 000 *****
100 0 000 *****

```

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001 000 *****
002 000 *****
003 000 *****
004 000 *****
005 000 *****
006 000 *****
007 000 *****
008 000 *****
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010 000 *****
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034 000 *****
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036 000 *****
037 000 *****
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040 000 *****
041 000 *****
042 000 *****
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046 000 *****
047 000 *****
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049 000 *****
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066 000 *****
067 000 *****
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069 000 *****
070 000 *****
071 000 *****
072 000 *****
073 000 *****
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075 000 *****
076 000 *****
077 000 *****
078 000 *****
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080 000 *****
081 000 *****
082 000 *****
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093 000 *****
094 000 *****
095 000 *****
096 000 *****
097 000 *****
098 000 *****
099 000 *****
100 000 *****

```

how fast the questions are answered. If you look at line 0080 you will see how I have calculated the variable AXX. AXX is the score from the current question which is added to the total score S. The maximum is 10 but with a reduction of 2 for each wrong answer and one less for every three seconds delay in answering. Just in case you take a very long time to answer or have more than 5 attempts at the answer the line goes on to set the minimum value of AXX to zero, so you do not get negative points!

I hope this second look at the use of a timer in a program is not too boring for all you quick people who understand perfectly first time - at least there is the bonus of a mathematical test program for you to get your teeth into. Addition, subtraction and multiplication are all fairly easy as you can guarantee whole number answers, if you want more of a challenge try division - the exact answer can have many decimal places, or

like division by three! may have an infinite number of decimal places - so how will you check for a correct answer? One method would be to look up operations from a data table (like the spin in the last issue) but with mathematical instead of verbal questions. But this would limit the operations to a predefined set instead of the infinite variety generated from a random method like the one used here. Perhaps it would be better to ask for accuracy to a specified number of decimal places ... I leave you to decide.

For those who were left a little puzzled by the introduction to timing in the last issue I hope this makes everything clear. Please write to me if you are still in doubt and can not make the time in your program work. As always my address is

**Ian Finlayson, 80 Roundstone Crescent,
East Preston, West Sussex, BN16 1DQ**

THE LAST XLENT WORD PROCESSOR?

After their formation at the PCW show of 1989, Xlent Software (UK) went on to launch a useful selection of printer-related utilities. Although sadly the company isn't active today, Ke-Soft of Germany has acquired the rights to distribute their existing products. David Costello's First Xlent Word Processor is among these and, some would argue, one of the best.

The original Xlent release was furnished with an instruction manual of 76 pages (admittedly these were not particularly well laid out) but Ke-Soft have seemingly decided that 7 sides of A4 will suffice. There were also versions in German but Ke-Soft have assured me that British customers will receive the English translation! I'm not sure that this level of tolerance will be adequate but, fortunately, the program's user interface is not difficult to comprehend and there are four screens of in-built help. As with most software, the best way to learn it is to press some buttons and see what happens!

The program's primary edit screen comprises a twenty-line text editing area surrounded by a tabs line above and four lines below set aside for commands, prompts and messages. In the bottom right hand corner there are six icons which can be used to select the print, cut, paste, search and disk utility functions. By pressing ESC or the joystick trigger whilst in edit mode, the user selection process is reset. At almost all other times the ESC key operates as an abort facility. Most of the editing keys act as you'd expect - insert, delete, cursor movement etc. - while less frequently accessed commands are available via Shift/Control key combinations. These include the valuable ability to place 'guts' markers in the text which can then be located with a rapid 'guts' command. Most options that ask the user a question have a sensible default answer that can simply be chosen by pressing Return - the general aim is to make user selections as friendly and effortless as possible. You can also modify various parameters to suit your personal preference - text and background colours, cursor type, insert or overwrite mode, joystick or keyboard input, for cursor movement, key repeat rate and joystick response speed.

The cut and paste facility is limited to a single screen of text with such operations. This can be a bit frustrating though an unusual feature is that you can edit the contents of the cut text buffer before pasting it back into place. You could also use it to create a new piece of text and copy this into several parts of your document. You can copy, cut and paste between two different documents using the program's dual window mode. The available memory is divided into two parts so that a document may be loaded and edited in each. You can't see both documents on screen simultaneously but you can swap between the two with a straightforward key press. The cut and paste buffer is shared between the two sections. At any stage you can quickly check how much memory remains and also determine how much space the document will occupy when saved onto disk. Disk utilities include directory, load listing, approval, insert or normal methods, save, delete, format disk and speed. The latter option lets you view a saved document without actually loading it into memory - a convenient function that is often overlooked.

A new word processor is a rarity but there are still good ones to be had. Paul Rixon looks at one that has just been re-released by a German company

Preparing your text for output involves placing format control codes in the document itself. With these you can set margins, page size, page foots, spacing, centring, justification, headers, footers, indents, page numbering and similar effects. You can also embed printer control codes in the text to handle the special features of your printer: a printer driver card/matrix set is provided so that almost any type of printer can be used, providing you know the relevant codes. You can output text in printer, screen or disk with single or double columns. Double columns mode is great for producing newsletters, and with a little experimentation (and an Epson compatible printer) you can even attach 82 vector uncompressed picture files to lines up the page. If you have a XLENT you can invoke a print spooler facility that lets you carry on typing while the document is printed; it works - albeit rather slowly and not without the occasional glitch. The screen output, or preview function, is created using an 80-column character display with special small characters. It's very handy for checking on the finished page layout before printing - not to mention being environmentally conscious!

Apart from lacking a spell checker, The First Xlent Word Processor is without major faults. With the notable exception of Suspicious and Papyrus, the program is more than a match for other word processors you'll find for the 8-bit Atari. It's fully featured, fast and friendly, as they say. As the price Ke-Soft are asking, it's also a very good bargain!

Write to Ke-Soft of Frankenstrasse 24, 04537 Meißen 4, Germany who supplied the review copy. The program may also be available from Wilco Discount.

Title:	THE FIRST XLENT WORD PROCESSOR
Publisher:	Ke-Soft
Price:	DM39.90
Format:	Disk

THE CURSE

If you have ever fantasized the scarcity of graphical adventures in the Atari 8-bit world you will surely be delighted to learn of Micro Design's latest discovery, *Avatar's Curse* - or **THE CURSE** for those who aren't too hot on PC-like - is a graphical "point and click" adventure featuring a generous helping of objects and locations. If, like me, you're not too keen on textual adventures you may be tempted to overlook the graphical variety too - but you would be missing out on some excellent entertainment.

The background to the adventure is rather vague but

Title: THE CURSE
Publisher: Avalon Micro
Discount:
Price: \$5.95
Format: Disk
Reviewed by: Paul Meier

it explains how your country has been cursed by the Ruler of Darkness and thereby loses the not nearly thrilling prospect of everlasting misery. Fortunately you have found the location of the Ruler's castle and now have a once-in-a-lifetime opportunity to free your country from his terrifying powers.

The screen view is divided horizontally into two sections. The upper portion shows your character in the various rooms of the castle while the lower part accommodates messages and prompts as required. The castle rooms are expertly drawn and shaded in a detailed 3-D perspective, by necessity at the expense of multiple colours. Using the joystick to operate a screen pointer you can select any element of each scene for closer examination. When you click the trigger a screen appears to inform you if there's anything



useful at the chosen position. If some action is appropriate - such as peering through a window or opening a door - your character will automatically attempt to perform the task. Numerous objects are required to progress through the screens, though you can hold only five items simultaneously. Magic spells must also be obtained and used to overcome certain problems, but these are stored in your spell book and so don't clutter your inventory.

Thankfully this doesn't seem to be one of those adventures

in which your character is pinned at every inanimate object. At one point you may be misled by your magic powers and have to search for the means to restore them, but a save game feature is thoughtfully provided to relieve any frustration. The potential drawback with adventure games is that once you've solved the problem and reached the conclusion, there's nothing left to do. However, *The Curse* would seem to offer a sufficient quantity of puzzles and screens to hold your interest for more than a short while.

THE "OPTION" KEY TO DISPLAY OPTIONS



In the beginning, there was an Atari 400 ... clearly afterwards there was 3-D TIC-TAC-TOE from Atari Corporation. Without, of course, inferring any criticism of Atari's sales and marketing strategy (letting?), it is interesting to note that this last-born year old ROM-based game has only just reached general circulation here in the UK. Was it worth the wait?

Tic-Tac-Toe is the American name for noughts and crosses and you may be wondering why anyone should want a computerized version. Surely

scribbling symbols on a sheet of paper is preferable to fiddling around with the joystick (and here you tried taking your computer on a picnic?). Another problem is that noughts and crosses cannot be won unless you introduce the human factor of imperfect decisions - attempting to beat the clever old computer may not be a lot of fun. Consequently, Atari's 3-D Tic-Tac-Toe isn't quite as straightforward as plain noughts and crosses. It's played on four flat grids which are drawn at an oblique angle to generate

3D TIC-TAC-TOE

the basic 3-D effect. As expected the object of the game is to place four X or O symbols in one horizontal, vertical or diagonal row using either one grid or all four. It may sound simple but Atari's glib instructions stretch to six miles of A1!

You can play Tic-Tac-Toe with a human opponent, using both joysticks, or with the computerized substitute. The latter has eight difficulty settings though even the highest incorporates a degree of randomness so that winning is not impossible (just *now* impossible). The computer moves quickly on level one but supposedly may ponder for twenty minutes if set to maximum playing strength - when you get tired of waiting you can hit the left key to force an immediate move. Start-up options include a set-up mode for experimenting with different situations and a game

variation called Bottom-Up. In Bottom-Up play most lights on the lower of the four grids and a move can only be made into a higher grid if the current pending square below is previously occupied. The overall objective doesn't change.

Graphics? We're talking about 1989's software don't forget now? I definitely found it deep. Okay, so it's not nearly so exciting with its early 8-bit status but the game itself is not at all unplayable, especially in two player mode. When you get tired of sipping tea/drink, Tic-Tac-Toe might provide a welcome respite.

3-D Tic-Tac-Toe is available from Micro Design.

Title: 3D TIC-TAC-TOE
Publisher: Atari Corp.
Price: \$19.95
Format: ROM
Reviewed by: Paul Meier

THE ACCESSORY SHOP

ISSUE 62

CLEARANCE SALE

IMPORTANT NOTICE

We have been offered, on our assignment, a substantial amount of software for the Atari 8-bit on disk, cassette and ROM cartridge. There are dozens upon dozens of titles many of which we have not featured before. In order that we can purchase this to bring you fresh titles in the coming months we need to clear much of our remaining stock - we need both the space and the finance to secure such a large offer.

So here we have a clearance sale - if you can help us clear our shelves we should be able to bring you a lot of new software in future issues. Virtually all prices have been reduced but we are limited in some cases as our prices are already less than half the normal price. Check out everything, and if there is something missing from your collection, buy it now - you might never see it as cheap again.

MUSIC PAINTER

An exciting educational program that helps to teach music by using colours instead of notes. For children or adults alike.

DISK ONLY
Our usual price £7.95
SALE PRICE £4.95

SUPER BREAKOUT

Breakout was the original simple yet totally addictive game and this enhanced version will provide even more addictive fun. Needs palette.

ROM
Our usual price £3.95
SALE PRICE £2.95

STRANGE ODYSSEY

At the galaxy's rim, there are rewards openly to be harvested from a long-dead alien civilization. Fabulous graphic adventures.

DISK ONLY
Our usual price £7.95
SALE PRICE £4.95



SPEED HAWK

One of Atari's last games for the 8-bit can now be yours at budget price! A smoothly scrolling arcade game in which you must defend the ring worlds of your solar system from pirates.

CASSETTE ONLY
Originally published at £9.95
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NIGEL MANSELL'S WORLD CHAMPIONSHIP

This software is presented in a colorful box with a picture of the racing instructor looking his championship cup aloft. The rear of the box is artistically decorated with screen shots that promise this to be "just another Formula One racing game". In common with this genre becoming it is covering its own advertisement - F1, I said this only to save later confusion, since the first time I came across the label I thought it was some form of new slot play!

The game comes on the one ordinary disk with a pretty coloured manual, printer and the almost flaglike wheel. The wheel is there as a copy protection device, carefully printed in flaglike dark grey on deep black. While appreciating this pretentious bit of stage machinery dead to users' tracks it also makes legitimate users' lives most annoying.

Once into the game the disk spins loudly and some attractive, not too stereotypical, music appears. The graphics whilst waiting are fairly encouraging and the player does indeed start to warm to the task ahead. Once the game has loaded and the protection been de-

ciphered the first object of the game becomes apparent. It was annoying when reading the manual to see the release placed on the use of the new ForceFeedback joystick but it becomes apparent this is probably not a game requirement but a marketing ploy. True enough the software allows other control methods, but the player is led to believe the new hardware makes the game so much more worthwhile. I did not have this piece of equipment and therefore cannot offer a comment but it did seem though that the use of the item was unnecessarily complicated.

I selected standard joystick mode and found the game complex enough. The start generates several icons with choices to be made. I suggest the 'improve with Mansell' option since it allows a solid practice with a dotted racing line to be followed for security. The only problem here is that Mansell will make drastically wrong comments about the performance of the player's driving ability. Still, having endured this, I went into the track. I decided to change several and try: misuses and remembered to change the default race so that I could instantly recognise my pit information then, engine revving. I was ready for the fray. The actual sounds were not too bad at all, although to my disappointment no I was not too sure if the sounds were an advertised actual digital reproduction of a Renault engine or just a very loud Honda GTR. I accept this was just my own problem since I am not one of those people who listens to racing cars' most intimate noises.

Notwithstanding the sound was strong and loud providing no more the starter allowed I was ready to go.

The game handled very well. There seemed to be no overt problems and the car reacted to my joystick's every command. I visited the pits for another exer-



fast piece of animation and even managed to finish the course. The scenery was different enough to know that the course were changing through the season and there was even a bit of weather to contend with, but the thrill seemed to wane all after several dozen laps. I accept that the Williams team to use as a model is well done, even having a visual display that seems to combine these terms as Murray Walker's chant. The game has everything the F1 fan could want and yet there seemed to be a little something missing, the game lacked a certain character. Certainly it has a strong claim to being one of the best SF F1 games about but it manages to miss on glitz too much. Maybe that is why it was named after Mr. Mansell?

Overall I felt that this was a game that had been produced to sell a particular joystick. The fact it exceeds the heights to become a pretty good game and a strong contender for SF race game of the month lists almost compensates. There do not seem to be many SF and better F1 race games about for this machine. Try it, but I suspect it may well come as a joystick bundle in the not too distant future.

- **GAMEPLAY** - Well, surprisingly playable really, don't believe the hype is all though.
- **SPORT & SOUND** - Again very strong the game performs well under pressure.
- **OVERALL** - I liked this game despite myself - take a look, it has some promise.



Title: NIGEL MANSELL'S WORLD CHAMPIONSHIP
Publisher: Greenlid
Price: \$25.99
Reviewer: Damon Roweth

CIVILIZATION

Civilization has finally found its way on to the ST1. I have been playing this game on the PC for many months now (never getting far beyond enjoying it excessively). This is the game that took Railroad Tycoon off the top spot and it still holds in the top ten of every machine it has been released for.

Largely (very loosely) according to some aficionados the game has its roots in Civilization, the trading board game. Having played both I think the connection is loose, and indeed the methods of obtaining your goals are very different. The object of the game is to bring your people from nomadic hunter folk to space age travelers and found a new space colony. If that is not to your taste then you can beat the opposition into the ground and win a military victory.

To explain the complexity of this game would take several thousand words, indeed so complex are its books that there are already two books available on the subject. Before my reluctance for this game lessens too unmercifully let's look at the hardware needed.

EATING MEMORY!

Justly this game needs at least a 1040 machine, it would ideally have something bigger. It comes on four double sided disks, not bad for the information in it, but it does mean certain sections need a great deal of disk swapping which slows everything down and makes for some frustrations. This is especially true of the graphics sequences which, although not altogether necessary, make for a great deal of atmosphere. If you are lucky enough to have a hard drive make sure you install it there. If you are not so lucky then the two floppy disk option is very necessary and if you have loads of

memory a ram disk will take the installation. It does not accommodate the Run Disk option to say with less than 4mb in board though.

The graphics are good and although they do not need to be as striking as some high tech shoot 'em ups, they do offer great deal of feel and some subtle clues.

The animation and playing speed are fair but again this is a thinking game and, somewhat like chess programs, does not need flash speedy movements.

Final advice to any player is to read the manual very thoroughly. Although the teaching mode is good there is nothing better than knowing what is available and how the game should be played. The mouse is necessary and makes many commands more usable. Once the game has been played a few times it may seem advisable to turn off as many of the palace building graphics and videotape options as comfortable. This does away with many tedious disk swaps.

New on to the game —

A RUN THROUGH

As with the Railroad Tycoon review the named way to explain the game is to run through a few turns. At the outset, the machine will ask if you want. The premise, almost historical, Earth or if you want, one created from scratch. Once your land has been created then select a difficulty level, number of computer opponents and, finally, the race you wish to be. There are a huge number of possible races and my advice is not to pick



Britain until you have some experience in the game.

For my example I shall suggest that the choice be Cleopatra level (Hard) with the maximum seven opponents, playing as the Egyptians. Since I do not feel smart today I shall play as Cleopatra (even though the software calls me King Cleopatra). The first view I receive of my kingdom is a wooded region on the bank-lands of a river with many unworked squares about me. My first choice is either to move the river or to build a city. If there appears to be one somewhere near I shall move near that and as long as the surrounding terrain is not too barren will set up my first city. I will notice as I move that hidden squares disclose themselves as I go near and the map of the world grows a little. Once the city is built, I accept the name offered and I am then offered a choice of things to build in this city. The advisors alert me to either buy soldiers or granaries. I start to build a militia now and wait until he is built or I have enough people to grow larger. As the population expands so does my ability to build. Indeed I may even have the location to start civilizing my people. I am asked what advance I wish to study. I will choose Bronze Working as that later troops can defeat them where better. I thought about Alphabet to enable other advances later but came down on the side of domestic affairs.

ION

From the dawn of man to the conquest of space



Eventually I am of sufficient population and armies to send out a scouting party and maybe start to create further cities to build more cities. All will be well until I meet other nations or barbarians. I can't trade with some cultures and in this game the first audience is with Queen Elizabeth I. She wishes to swap advances with me. I happily trade my Heron work for England's knowledge of map making (aiding effort). If I have developed writing by now then I may be able to use the diplomats I can build to set up embassies and/or send information from them. I might also find these upstart English are encroaching on my territory so if my technology allows I may even start a war with them.

Meanwhile deep in my empire my first city having grown large has completed it's expansion and I decide to build a Wonder of the World. Since it appears the Chinese have built pyramids I go for the Colosseum in the hope trade will increase, thereby improving income, lowering taxation and enabling study time to be enhanced. It is becoming apparent now that I have many decisions to make all the time. I even have to decide which is the best government at any time. Monarchy is good for expansionism and early on but later it helps to be a republic or democracy in order to maximize income and invention. I can't declare war as a republic/democracy though as my

people may also become unhappy and revolt. All these things need to be juggled. Financial stability versus expansion and invention, trade versus war, enlightened government or hard totalitarianism. The choices all need making on a regular basis. There are no correct decisions each depends on my given situation. Do you see your soldiers in making new cities and thereby encourage growth and prosperity or are they better employed tilling the land to provide more food or making roads for better travel? Subsequently pollution may be bad with factories and nuclear weapons, the same may map factories and there there is the space race as things become more frantic.

SCRATCHING THE SURFACE

This is a game with so many levels even an in depth review such as this cannot hope to do much the surface. I could probably rant on about this game for a long time to come and I look forward to writing comments and questions in New Atari User because the game on other machines has provided varied comments and hints alike. This is a game that needs talking about and thinking about.

I believe that the end result even makes the wrapping of floppy's not worth it. Do not be disappointed if you keep dying, it is possible to reach the end of the game alive albeit as an underdeveloped under thermal culture.

There's 80's built on many cities as you comfortably can, and keep the population up. Make sure you have diplomatic relations with as many nations as you can find and keep a strong defence force. If you have the production capability having the Great Library and the pyramids to name that a little useful.

In conclusion this is a game that is well worth getting to know. It is certainly worth finding some storage method that does not rely on floppy's and the game presents a challenge to anyone at all sorts of levels. This has to be one of those games that would appear on almost any hard computer disks. I can't recommend highly enough - except for those damn floppy swaps.

- **GAMEPLAY** - Thought provoking and smooth except for the floppy reader
- **SIGHT & SOUND** - I found both atmospheric and useful, turn off screen graphics to save on floppy's
- **OVERALL** - Get it now, if necessary get the hard drive or Atari upgrade to go with it

CIVILIZATION

Microprose

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Reviewed by
Damon Howarth



MAKING MUSIC WITH YOUR ATARI

Most music created on an ST is limited to three or four tracks but there are greater possibilities. Here John S Davison sets out on an ambitious project to produce a 21 part arrangement to be accompanied by a full printed score

One of the most challenging computer based music projects I've been involved in to date is now nearing completion. As it relied heavily on the use of Atari ST's I thought it would make a good subject for this column, so here's the story of ... The Albatross.

My good friend Derek West is a professional musician, and until recently he worked as a bandmaster in the RAF. His circle of friends includes the composer Gavin Whelan, who wrote a march called The Albatross especially for the Air Force bands. Gavin has a large number of published musical works to his credit, but for some reason, his publishers weren't interested in The Albatross. She clearly wanted to see it in print, so Derek and I decided to tackle it ourselves. After all, we both owned Atari ST's so already had some of the tools needed for the job.

SOFTWARE RULES!

1617 - hardware is only half the story. A computer is only as good as its software, and for this job the software had some pretty exacting requirements to fulfil. Basically, we needed a desktop publishing system for music, capable of handling all

the symbols found in standard music notation.

If had to be able to print a complete musical arrangement, including the conductor's score showing all 21 instrumental parts spread down each page, plus 21 individual parts - one for each instrument. As the individual parts are basically identical to those in the conductor's score we wanted to input the score only and then have the software extract and print each part automatically.

To check for transcription accuracy we also needed to hear the music played from the score after we'd entered it. This required the capability of MIDI playback using synthesizers to simulate the lead instruments. Then,

when everything sounded OK, we wanted the software to produce high quality output on dot matrix printers, as we didn't want the expense of having to buy a laser printer. After looking at virtually everything on the market we concluded there was really only one software product that came anywhere near our requirements - C.Lab's Notator, a room based sequencer and score printing package. I described its features in detail in Issues 54/55, so won't re-use them again - in this article we're more concerned with how it coped with a real life situation.

Getting familiar with something as complex as Notator isn't a trivial task, and we spent many evenings just trying out different features to see what they did. Despite reading the huge manual it still took months trial and error before we really understood how certain features worked. I started a notebook to record particular items - every time we did something new I briefly jotted down how we did it for future reference. It proved much easier to re-read my notes than to struggle with the manual again later.

The hardest part to sort out was the printing. Some of Notator's supplied printer drivers seemed to exactly match the Star, Panasonic, and IBM dot matrix printers Derek and I normally use. Printer 'driver' is the right word - we chose our printers crazy trying to find one with the right characteristics. Eventually, by modifying an existing driver using Notator's printer adaptation editor, we produced something that gave quite good results.

SOURCE MATERIAL

Obviously, when publishing music you need source material to start from. Gavin originally composed Albatross as her grand piano, and recorded the finished piece directly to multi-track tape. There was no written music at this point, so the recording had to be transcribed onto paper then specially arranged for performance by the RAF wind bands. This extremely skilled task was handled by George Goddies, another of Derek's music room friends. His handwriting band arrangement became our source material for input to Notator.

This raises an important point. You need PERMISSION to publish music - not only from its original composer, but also from the manager of the version you're working with, as both aspects are subject to copyright. In this case both Gavin and George were only too happy to give their consent to what we were doing.

We planned to use one of Notator's sequencer tracks for each instrumental part. Notator usually works with 161 tracks of

score—one for each MIDI channel—but it does have a special mode allowing you to couple together two sets of 16 tracks, necessary here to fit out 21 tracks in. We then had to get the handwritten musical notes off the page and into their appropriate tracks in the computer. Notator gives you a choice of input methods, which basically boil down to playing the stuff in from a MIDI instrument (such as a keyboard) in real time using the sequencer, or inputting it in step time using one of the available graphical editors. Both Derek and I are primarily wind instrument players and aren't very good at sight reading, input via a keyboard. So, in the absence of a suitable "poly-synths" MIDI wind instrument, if you hadn't guessed we had to make do with Notator's score editor to input the notes manually, a seriously tedious task.

BARE BONES

Our strategy was to build up the score one instrument at a time, so we began with the flute part and worked our way through that to the end. At this stage we only wanted to get the bare bones of the music in, so the only symbols needed were correct clef, time signature, key signature, bar lines, and the notes themselves. We deliberately ignored the performance markings such as phrasing marks and dynamics and left those for later. Virtually all this is achieved via mouse input, with symbols selected by simple click and drag operations. Even so, at the end of each session the poor old mouse must have been feeling pretty weary after the notes it trawled over my desk! Having entered the flute part we then played it back via MIDI using my Yamaha YR-200 synthesizer, set to a nice flute patch. Listening while following the handwritten notation it was fairly easy to spot any gross transcription errors, which could then be quickly corrected using Notator's score editor. When the part looked and sounded OK, we went on to the next instrument, the Eb clarinet part. This was treated in exactly the same way, except that after checking it out on a solo instrument we also played it back along with the flute part to check the two worked OK together. Over the next several weeks we used the same approach with all of the other parts, gradually building up the full wind band sound. Using the YR-200's multi-track facilities we were able to assign each sequencer track to a separate MIDI channel and give each channel a different instrumental sound.

We soon hit a small snag. The YR-200 can only play a maximum of eight notes at a time, so we ran out of notes after entering eight parts. The solution—connect up another synthesizer. Derek also has a YR-200, so we daisy chained this onto my YR-200 and continued the process. We hit the same problem again with 16 parts entered of course, so needed to add a third synth. We'd also run out of YR-200's now, so I had to connect in my lovely old Yamaha PSR-680 which gave us a further 12 notes of polyphony, more than enough to complete the job.

But now we hit a potentially more serious problem. MIDI has only 16 channels, so how on earth could we play back 21 different instrumental parts? The panic was soon over when we remembered that several parts are actually played on the same type of instrument—for instance there are three separate Eb clarinet parts, and these could all be allocated to the same channel. By sharing MIDI channels for similar sounds like this it was possible to stay within the 16 channel limit. If we really had needed 21 totally different sounds and hence 21 channels then C-Lab could have supplied a solution in the form of their "Epos" add-on for Notator. This is a piece of hardware which allows you to access PSR kits of 16 MIDI channels, with each channel individually addressable from within Notator.



AURAL v VISUAL

Precession parts were the last to be entered, and this created another problem. None of our synths had a score draw roll sound which could be easily triggered via MIDI. They only had single hits, so we had to create rolls the hard way! Every hit in a roll had to be individually written into the score, making the roll appear as a long sequence of stems/flags/accents. It sounded realistic when played via MIDI, but gave the wrong visual appearance to the score as draw rolls aren't normally written like this.

Another conflict between aural and visual aspects was that the score contains "repeat" sections, typically with the second time through having a different ending from the first. These differences are written as "first time" and "second time" bars, played consecutively in the score. Notator doesn't recognize repeat bars on the first/second time differences and just plays straight through both nearly as written. It doesn't interpret the notations as a real musician would. For correct playback we copied the repeats out in full, again compromising the visual aspect of the music.

To get round both the above problems we decided to produce two versions of *Blue Danube*, a "performance" version for accurate playback via MIDI and a "printing" version from which we'd eventually create our sheet music. Managing two sets of files made life more difficult, but under the circumstances it was the best we could do. We continued editing the two versions until convinced all the notes were correct, and then we were ready to start the fun and games involved in producing the first draft printouts. But the story of how we got on will have to wait until the next issue.

QUEST OR CRUS

A long time ago in an industry far far away the concept of the board game was resurrected. The inventors, having seen the joys of computers, felt something had to be done to wrest the populace from its front of the screen and back to relating to other people with healthy aggressive tendencies. The Iron Games Workshop had been working with role playing games for many years and even had several of their own board of games for sale. To manage their dream though they approached Milton Bradley, by masters in the world, and formed two of their ideas.

ENTER THE HERO

The games that came forth both had similar rule systems but with differing backgrounds. In the beginning was Hero Quest, a sort of Dungeons and Dragons game with pretty little models to move around, on a matle it up as you go board. The main goal to this game was that it served as an easy introduction to a somewhat cerebral and slightly cerebral world of fantasy gaming. Because the figures moved by a dice roll around a board, and because the enemy were visible and worked in a rule book of adventures. They became successful. It was a game I played on a demo to more than one Games Workshop in Britain. Fast, easy to play, and with enough continuity to allow for long term identification with the character, an excellent concept.

So, the powers that be realized that this was too good to waste on board gamers and thus they translated the white to the great perfect screen of the video chip. No more moving with figures that had to be painted and no need for a referee to read the plot and run the game. Dice rolling and book keeping became the computer's role which would maintain interest in the screen and play. Fortunately one old wizard in and made a promise for this to become a multi player game. The company looked in astonishment - a multi player Role Playing Game with a point to it. The plot worked and thus Hero Quest

came to a computer near you.

The game is very simple, it has excellent atmosphere and a fairly strong music and effects background. The software takes care of all the things which would slow progress down and the graphics, while certainly not of the quality present in a real 3D plastic or lead figure, are most striking. The whole event is more driven with the option to create 1 to 4 characters of set abilities. There is a set campaign to go through, indeed there are even subplots of connecting further scenarios in the machines if the PC has in fact a bonus add on screen included as these extensions are awarded.

The play is simple yet effective. Each character throws a dice and can proceed up to that many squares, along the way they may search for goodies, traps, doors or any other object that takes their fancy. Combat is equally simple with the player largely unable to affect the outcome except for buying better armour and weapons as the game progresses. I really liked this implementation. It is not as deep as Dungeons Master type games and it presents only one problem an episode but it is fun, and it does present the option for up to four people to run a character, for the use to control all four but this can become cumbersome if enjoyed it with just one character making his way through the trials of life in the final world saving quest.



Do you wanna be a Hero?

BLAST OFF

Coming to the screen this had as a board game the same combination of Milton Bradley and Games Workshop worked on Space Crusade, a game using the same sort of dice system but with more graphics. A sort of Space Dungeons and Dragons meets Commander Ripley and her alien. Again this sticks very much to the original game and gives a strong feeling of cohesive play. This time though only a maximum of three players can take part, each with a squad of hardened Space Marines all trying to destroy the evil on various space craft - over the square area and the large modified reading manual. Perhaps this limits itself even more to the computer game since running a marine squad is not unlike the way from Alien II where Ripley follows individuals around the caves and guides their footsteps to the motherlode. The game has loads of techic stuff like read robots and heavy laser artillery. Graphically on a par with Hero Quest, it keeps a sense of urgency about the whole proceeding as the transport ship will leave your unit stranded at the Alien's mercy after certain time limits.

The success of the mission is measured in varying ways. Keeping the squad alive is a major aim to good scores and long term survival. Making sure at least the

USADE?

Damon Howarth, a fantasy game player ever since being found in a woodland clearing by a passing troll, checks out how well board games translate to computer



or would you rather be a Crusader?



primary and if possible secondary mission goals are reached is sure to help the end result. If the scores are good enough at the end of any given mission then the commander will receive awards and extra mission points. Obviously the player gets credit up the ladder of success from *Beginner to Admiral*. The tank-on screen as in the *Voyage Beyond* software takes the *Space Crusaders* past their initial adventures on to greater and better glories.

The sound effects are good and sci-fi like, the opening music pleasingly dramatic. The game itself seemed to be more complicated to get to grips with than *HeroQuest* and as such presented more of a problem in winning. Certainly this game has opened the route to future adventures and I know that this game has definitely caught the gamers' imagination more than *HeroQuest*. Many suggestions for it emanate from *Games Workshop*. As a space role play it does not top the thought games but as a war game with special masters and other jolly special effects it has a lot going for it.

I made no apologies for reviewing these two games in the same article, both use a similar playing engine and have equally high quality graphics and ease of play. Both provide an unprecedented ease of multi-player use and both have an interesting knack of ensuring that players are both supportive, both states and re-

als. The downside seems to be in the game saving requirements for both, they need especially formatted floppies and can only store limited missions on each disk. This is not too great a disadvantage as any player would probably only need his last one or two games saved at any one time.

The software makes a great hit by duplicating the board game in its entirety without taking too many computer concessions for ease of programming. Such adaptations as are made are based game enhancements rather than downgrading limitations.

HeroQuest represents excellent value for money if only because it is half the price of the board game. The only downside to these is that, unlike the board games, there are no options to make your own adventures or even paint the figures in a most poignant way.

As a long time Fantasy Role Player I would get both these products as a pair with the rather good role diagrams included for an old game called *Tunnels and Trolls*. Wonderful stuff when your 1000th job was or more can be bothered to Game Review for D.M.I. I don't hold but my personal favourite was *HeroQuest*.

- **GAMEPLAY** - Very straight forward, initial setup takes a little thought, then *flow*
- **SMOOTH & SOUND** - Look atmospheric and good, both games use the sound to enhance rather than to hide problems
- **OVERALL** - Excellent games I have enjoyed playing these - *immaculate in execution*

HEROQUEST & SPACE CRUSADER

Publisher Gremlin

Price: £10.99p (HeroQ)

£25.99p (SpaceC)

PD **Paul Rixon's** WORLD

There's little doubt that programming *Acas* never loses its popular among NT users as it has among 8-bit enthusiasts.

Whenever you switch on an *Acorn ST* it'll give you greeted by a familiar flashing 'Newly' prompt that almost invites you to write a Basic program. When you boot up on *Acorn ST* you're faced with the GEM desktop's disk drive icons that seem to invite you should run someone else's program. Furthermore, *ST* programming isn't heavily published by the glossy *ST* magazines. Owing to the lack of a standard language, most are unwilling to publish program listings and tutorials for fear they will appeal only to a minority of readers. No wonder that many users view programming the *ST* as a mysterious activity that only the incredibly clever and dedicated 'hobby' types are able to indulge in. Of course, the truth is that anyone can have a go—and fortunately, without a great deal of expense. Just take a look in the public domain:

BASIC BEGINNINGS

Most people are introduced to programming through some form of Basic. *Acorn's* own *ST Basic* has always been regarded as something to avoid and this has enabled other company's commercial products to capture an appreciable chunk of the market. *GFA Basic* is among the most popular dialects and has the advantage of being widely supported by public domain authors. There are several **GFA BASIC HELP** disks in the Page 5 library. They contain a mixture of tutorial hints, code examples and documented programs. The first disk includes some tips on subjects ranging from how to test if your printer is connected to writing multi-tasking applications. There are

also demos of animated graphics and a conversion program for porting GMS-80 II files into *GFA Objects*. If you're familiar with *GFA Basic* you'll more than likely know what to do with that! The second help disk focuses on the subject of cloning boxes and features a system called *Diox*. All you do is follow the instructions to steadily place and edit the various cloning box features and choose their respective 'properties'. *Diox* then generates the actual source code to implement the desired interface. The third volume in the series carries four more 'big' files on subjects such as how to create a TTP-File, Take Parameters file and how to cope with desktop accessories. There are several example programs, ready to run. The disk is rounded off with an interesting manual making system, enabling the creation of double-sided A5 manuals from plain ASCII text files. Elsewhere,

SAMPLE GFA BASIC PROGRAMS 1 is an excellent source of programming hints and also a good advertisement for *GFA Basic*. Among the contents are a fractal drawing program, a fascinating 3D cube demo, a drawing system and a 3D-landscape style game. Also included is a run-only version of *GFA Basic* so you don't need the full compiler to sample the delights. You might decide to buy it later!

MORE MODULA

The *Modula 3* language is based on the more widely known Pascal and, due to its relative simplicity and clarity of code, is often used to teach programming technique on university courses. *Modula* who are lucky enough to run an *ST* could therefore benefit greatly from the **ST SHAREWARE MODULA 3** development system from *ANA systems*. The two disks contain mainly *ASCED* files which can be easily explored to obtain the source files (such as a *Modula 3* compiler, linker, libraries and development shell). The libraries and shell have all been written using the supplied compiler. The minimum hardware requirements are a 386SX with two disk drives or a 384DX. Obviously a hard disk is ideal! The compiler runs about 380K; to compile a medium sized program, so 386SX users may find that the Development Shell is

a bit restricting. The compiler and linker can also be run from a suitable run-time host environment. A version of the famous *Microlinear* text editor can be found on the disk though you are invited to use a preferred substitute. Incidentally, the latest release of *Microlinear*, **MICROLINER 3.10** is available separately from the library. With this one you also get a comprehensive manual, tutorial and help files. Unless you are already familiar with *Modula 3* you will need access to a suitable reference guide since the disk does not contain those's go any further than explaining the text after they enter and solve technical matters. You can obtain help on some items in the program by holding down the ALT key while you click on the appropriate item. For a small sum you can register with California-based *ANA Systems* and thereby receive the full set of documentation.

C THIS

C is very much the 'W' language in the microcomputer world just now and has always been the first choice for serious *ST* programmers. C was written to support the development of the UNIX operating system in the early 1970s and has since been developed to run on a variety of hardware platforms, from the Sunstar Spectrum to the largest mainframes. C combines the convenient elements of high level languages with the speed and efficiency of assembler. There are several dialects in the public domain and so with all language applications you are expected to have some pre-acquired knowledge, or at least a decent reference manual. In the case of C there is a great quantity of literature to choose from and while some books are extraordinarily priced, others—such as *Learning to program in C* in the *Modula* range—are readily affordable. Obviously if you plan to get deeply involved in the more specific aspects of C programming, you will need a relevant source of information, such as the *Compucon* technical reference guides. To begin with, any C book should suffice. **BOOKS ON C** is widely regarded as the

best among public domain C compilers and has been highly acclaimed in several ST magazines. The most recent version - **ROBSON C 3.00B** (though not an 'official' release) - is known as the 'best and nerve' edition since it's accompanied by a friendly installation utility that creates directories and sets everything up without requiring fiddly re-configuration. The files are initially compressed so you need to have some formatted disks handy before you run the install program. The Robson C Compiler is a complete implementation of the C language as defined by Kernighan & Ritchie. The system incorporates a compiler, optimizer, assembler and linker, as well as other associated utilities. Version 3.2 of the public domain files runtime library is included and for IBM support, version 1.5 of the public domain ConFast library is supplied. There is also a relatively generous helping of documentation. The compiler was written, like so many PD programs, because the author wanted something better than the buggy commercial product he was using. The Robson compiler is therefore loosely based on the original commercial program Microsoft but apparently runs faster and generates better code than its predecessor. Source code and executable files for all components of the Robson compiler can be freely distributed, since it's classified as a freeware product. In fact, the authors encourage you to make lots of copies and give them away!

C HERE FOR HELP

To help you get accustomed to C I've looked upon there are currently no fewer than four sample code disks available. The first disk - **SAMPLE C PROGRAMS** - is a good starting point since the program comes here are not too complex. Executable, source code and documentation files are included as appropriate for a variety of demos and utilities. They include financial graphics, multiple file printing and even a C compiler! In the second collection there are useful 'make' utilities to aid program development and also a tutorial package. Disk three offers

more than 8 screen sizes everything is compressed to save space. There are dozens of example C routines and intriguing stuff such as the source code to the archive utility itself, a disk formatter and a TINY picture handler. If you have some knowledge of C but are stuck on a particular aspect of ST coding, this disk could well answer many of your questions. Finally, many people have played HACK on mainframe computers but now you can see the source code on your ST. Thanks to the fourth disk of sample C, you'll find a virus detection utility too, too.

EXPLORING FURTHER

Out of space already? No fear we've looked at some of the 'mainstream' programming languages available for the ST. However, there are by no means (far) only ones on offer in the public domain. A surprisingly large array of specialised languages exist and exploring their nature and uses can be quite an adventure.



It is rather difficult to illustrate programming languages so here, instead, is a picture of our catalogue which lists all these disks and more. Yours for £1.95 but you'll get a refund voucher.

The next PD World column will continue with the languages theme but examine some of those lesser known titles. There may also be a chance to delve into some alternative operating systems. This is all getting a bit technical! Games addicts may not be assured that there will be the usual entertainment round up in the subsequent issue. See you then.

HOW TO GET THEM

The disks featured in PD World can be obtained from the PAGE 6 ST Library. When referring to a specific disk please use the unique reference code for identification. A printed catalogue describing all the library disks is available from PAGE 6 at a cost of £1.95, refundable against the first free disk ordered. This includes a copy of the PAGE 6 CATALOG 2000 which is otherwise priced at £1. The disks featured in this issue are:

- | | |
|-------------------------------------|------------------------------------|
| ST16 - SAMPLE C PROGRAMS | ST17A - CFA BASIC HELP 2 |
| ST16A - SAMPLE CFA BASIC PROGRAMS 1 | ST17B - SHARDWAR MODULE 1 (DISK 1) |
| ST16B - SAMPLE C PROGRAMS 2 | ST17C - SHARDWAR MODULE 2 (DISK 2) |
| ST16C - CFA BASIC HELP 1 | ST18 - MICROMACS 3.0B |
| ST16D - CFA BASIC HELP 2 | ST19A - SAMPLE C CODE 4 |
| ST16E - SAMPLE C CODE 1 | ST19B - ROBSON C 3.0B |

Prices for standard disks are £2.95 each or £2.50 each for five or more but prices are lower for members of the PAGE 6 ST Club. Write to PAGE 6, P.O. Box 24, Harlow, ST16 1QR. Telephone 0283 212628 with credit card orders.

AIR WARRIOR - Part 2

LIVE COMBAT!

First I must apologize for not giving this second part of the Air Warrior article due in time for the last issue. Fair to say that a combination of circumstances would swallow up the time I'd scheduled for producing it too. I WASN'T to fault. Anyway, better late than never, so here goes. The first part of the article reviewed the Air Warrior package. This, if you remember, is an air combat simulator which can run as a single flight simulator on your PC, or as a full multi-player combat simulator via the use of On-Line Inter-Link's multi-drive computer. You can dial into this service using a 32000 or 24000 bps modem via the normal public phone system. We're now going to look at the multi-player aspect of Air Warrior and see how it works in practice.

Air Warrior doesn't have a fixed combat scenario, as the action depends on what the players decide they want to do. They inhabit a simulated world, which consists of two main parts. Firstly there's the text based "command room" part which you occupy when not actually in combat. Here you view what is actually happening, decide strategy, plan missions, etc. Then there's the graphical simulation part where the real combat action occurs.

THREE THEATRES

Where does the combat aspect come from - who are your opponents? Well, the simulated world is divided into three different operational theatres, known as European, Pacific, and World War I and each involves three adjacent countries called with starring emphasis) A, B, and C. You elect to belong to one of these countries, and battle against players from the other two. The different theatres are provided to give variety in scenery and types of aircraft available to fly.



The Air Warrior package contains a large colour map of Europe, in flight, and on the back there's a map of the European theatre showing the three countries and their major features. As well as geographical features such as mountains, mountains, and rivers it also shows some of strategic interest such as airfields, fuel dumps, factories, and so on. These can be bombed, but may be restored to operational status by dispatching rebuilding supplies to them via truck, runway and cargo plane. These trucks and planes then become legitimate targets too, of course!

Each country has several satellites, from which it operates a motley collection of aircraft. British, American, Japanese, German, and Russian planes. The countries can't afford expensive modern warplanes like nuclear, squid, and get their aircraft as cheaply as possible from wherever they can. It's just as curious to supply an interesting collection of aircraft for you to fly, of course!

Your job is to fly any available aircraft and inflict maximum damage on the enemy with it, by shooting down his aircraft, bombing his strategic installations, destroying his resupply convoys, and

generally giving him hell. He, of course, will be trying to do exactly the same to you! You can operate alone, as a member of an organised squadron, or even fly as a crew member (e.g. as a gunner) in aircraft piloted by someone else. You can also operate on the ground, defending or attacking targets using a jeep, tank, or "Hakkozer" anti-aircraft vehicle. If the air is thick with enemy planes you might just stand a better chance of success with one of those!

TRAINING AREA

Before going into combat, you'll probably want to do some training in Air Warrior's training area, where you can practice the skills required. Here you can fight a real opponent without risk of getting killed. There are also a number of solo planes flying around, so you can get some easy target practice in - but beware, as they sometimes shoot back! You can get out too here too - training sessions are often run by expert pilots, who can show you what to do. Then, when ready, you can venture out into the real combat area.

After declaring your allegiance to one of the three countries you can proceed to the conference room located in that country's headquarters. Here you'll meet your counterparts, form up sections of up to sixteen players, and plan group missions. If you want to talk to pilots at other airfields or in flight you can use the radio. By tuning it to the required frequency you can converse with other people using that frequency.

Next move is to the briefing room at one of the airfields. Pilots and crews can meet here for last minute discussions immediately before entering their chosen aircraft and setting off on a mission. Also, if you want to join a bomber crew as a gunner you can do it here. Certain aircraft can also carry "observers", and you can request to fly in the observer's seat on someone else's mission. In fact, many people can observe from a single aircraft, so this is a great way for an expert to demonstrate combat techniques to beginners.

GOING ONLINE

OK, so what's the multi-player version like to use? First thing you do is to establish contact with the Line's computer. With your modem connected and Air Warrior software loaded (and configured) for 1200 or 2400 bps and 8-N-1 (if you find the access number at 081-528-6293). After a few rings the system answers, you get a greeting message, and you're in.

After logging in you're presented with a screen giving you access to different areas of On-Line's system, including news, information, electronic mail, general issues, the games area itself, and an area for paying money into your account. The last named is very important, as without cash credited you can't do much - logging on and paying cash into your account is about it! When you buy the Air Warrior package it includes 420 worth of online time, and this gets credited to your account when you need to be registered online. However, you can only spend this on Air Warrior time, you're still barred from On-Line's other facilities until you've paid with real cash. When using the system your account is debited at £1.50 per hour, and when it runs dry you can top it up again online via your credit card. You can also opt to pay a fixed charge of £9.95 per month for unlimited use of the system - a bargain if you get addicted!

Your phone charges are on top of this of course, so it can get quite expensive.

especially if you're calling long distance. Via BT the long distance off peak call cost is around £4.48 per hour, or about £2.75 per hour if like me you subscribe to Mercury's domestic service. Warning - call only during off-peak cheap rate periods, unless you want to bankrupt yourself! You can also access the system via the "HotPlus" low cost data communications service. Call On-Line's centre line on 081-528-6114 for more details if you're interested.

On-Line were very slow at crediting my account with the initial £20, but from then on things went reasonably smoothly - except the training. I tried on several occasions to enter Air Warrior's training area, but the system kept telling me it was temporarily unavailable. So, it was in at the deep end - into combat without training! I went to an airfield, selected a Focke Wulf F19, and entered the "fly" command. At this point the program switched into graphics mode and began to behave just as it did when running as a stand alone flight simulator without the remote link to On-Line.

You soon become aware of other players though. Radio chatter between aircraft gets displayed onscreen so you can "hear" what other pilots are saying to each other. You can join in too by typing messages on the BT's keyboard. If you switch into radio mode you can see what other aircraft are around and find how many are enemies. You can then take off, shoot a course to intercept them, and the real fun can begin!

BANDITS AHEAD!

First visual contact with other players is a mass of tiny black dots in the distance, but the system soon begins to help by displaying icons to help you visually track and identify them, telling you the aircraft type, country allegiance, and supplies range information. As you get closer the dots grow in size and eventually become recognizable aircraft silhouettes. Keeping them in view can become difficult, as if they're enemies they're probably seen you chasing and will try to get on your tail. Expect to get harassed fairly quickly!

If you play at being a boss, will don't expect to survive for long in your early encounters! There are six enemy silhouettes or fire control systems to help you here - it's air gunnery and dogfighting skills that count! Those enemy fighter jets all

seem to know what they're doing, and it's not long before you lose the track and white of their bullets around you (great computer sound effects here!) and an explosion indicating you've had it. If you're quick you can bail out, otherwise you're dead. If you want to fly alone go after some truck convoys or a cargo plane, but watch for protecting air cover. A better plan is to team up with someone with experience from your own country, and fly with them until you've learned how to stay alive.

The online multi-player version of Air Warrior is really a very complex game. The further into it you get, the more involved it becomes. I've merely scratched the surface of its capabilities here, you need to read the manuals supplied in fully understand its potential, and try it in the yourself to appreciate its qualities. I must admit I was surprised at how addictive and exciting I found it, and the graphical and other shortcomings mentioned in part one of this article just don't seem to matter. Once again it's gameplay that counts, and this is enhanced enormously by one thing missing from most other computer games - the human element. Here you're interacting with real live people who display human, unpredictability, cunning, and other human traits in a way no computerised opponent can.

The only problem is these phone charges - unless you live within local call distance of the On-Line computer your real phone bill could give you a heart attack. If you can trust yourself to control your online time to affordable levels then give it a try. You'll find the experience a very enjoyable one.



AIR WARRIOR
On-Line Entertainment
Price: £34.95

Reviewed by John S Davison

VIDEO KID

I remember this game from several issues back when it was released at full price with a free game of Kid Gloves in its box. The game has not changed at all, but no longer does Kid Gloves appear with it. The interesting aspect of this re-release is whether software publishers actually read reviews, my concluding thought when I first reviewed this being that it should have been a budget game from the outset.

The plot is still the same, not surprisingly. The character you play has been dragged into a world of video films and needs to escape by completing several levels floating around and generally shooting things that get in his way.

The controls are more easy-learn than originally. I remember that originally our hero used to float around

more or less at his own whim but this time he is steered more subtly. The graphics and sound are still strong and the Kid still an irresistibly cute (is Dennis The Menace?). The game is still the same and presents some entertaining problems and some fast-paced action. The sound track is pleasant but unmemorable, the setting is colorful and the goals cartoonish like.

This is not a game that is going to anybody's joystick alliance or make millions and be treasured here in, but on the other hand it is pleasant and more interesting than many similar products. Technically I cannot fault the game, more so as it has reached a reasonable price. Indeed the game presented as it



is now looks as good as any games console platform can and at much less cost.

If you like your games retro and your action fairly laid back it is worth trying this at the now cut down price. I did not find it particularly addictive and the whole seemed a bit stoney but overall the effects are memorable.

Personally I would not buy this if only for the lack of originality of gameplay but if you are new to the ST or have not many platform games then this would find space in a collection. The game does show off the ST's abilities somewhat but not originally enough to be exciting.

FACTS

Title: VIDEO KID
Publisher: GEMSTAR (USA)
GOLDIE
Price: £7.99
Developer: Damien Horvath

SIGHT & SOUND

As expected, acceptable and good

GAMEPLAY

Acceptable and smooth, overall reasonable

VERDICT

A somewhat better than average budget platform game. Unlike many but there are few more exciting ones about

THE ULTIMATE VIRUS KILLER v. 5.7

reviewed by Les Kittingham

Ever since the first virus appeared on the ST there have been various programs to ensure that you can check your disks for infections. Many have been public domain, a few have been commercial offerings, but only one has been continuously updated to reach the positions where it is, without doubt, the only virus killer you should buy for your ST.

The Ultimate Virus Killer started life as a public domain program and was one of the best but then the author Richard Karasnikov caught the bug (excuse the pun) and began to develop the program into just what it is today - the ultimate virus killer. The full story of the development of this program is in a massive text file on the disk and makes most interesting reading.

Most ST users must know what a virus killer does, it kills viruses, and it seems hardly necessary to explain its function in a review. UVK certainly does that but it also does a lot more, including re-examining your disks against further attack and repairing corrupted hard sectors which may have been damaged by other programs or by stress. Perhaps this aspect of the program demonstrates

more than any other just how much work has gone into making UVK the most comprehensive program of its kind for it can repair not less than 850 different bootsectors. That means the author has transcribed the boot sector code for this many commercial programs just on the off chance that you might need to repair a particular disk.

Really impressive doesn't it? But just look at the other statistics and you will be amazed. The current version of UVK can recognise 1,580 bootsectors, 68 bootsector viruses, 5-link viruses, 58 anti-viruses, 139 resident applications and 33 different parser formats. It seems that Richard Karasnikov has tested and included virtually every known piece of ST software so far produced!

Using UVK is a piece of cake. Just insert a disk press F1 for help and follow the prompts. The program will tell you if the disk is safe, if it has been contaminated or if it has a virus. If it is a commercial program or has a recognised anti-virus, warnings are that it will tell you exactly what programs it is. If a virus is found then you will be alerted and given the immediate chance to destroy the virus and reinsert the disk. Simple. With

just a few keystrokes for each disk you can test your entire collection in a relatively short time. At the end of a session the program will tell you just how long it has taken and how many different infections were performed.

UVK is even so comprehensive that there is little to complain about. Sure you will find a disk one day that it does not work like that if you do you can send the boot sector over to Richard Karasnikov and he will include it in the next update, sending those impressive statistics soaring ever higher.

A virus killer has to be recommended as an essential tool for every ST user and, as far as I am concerned, there is no need to look any further than UVK.

All right, just one complaint to finish with. I reviewed the software on Wednesday 26th May but the program insisted that it was installed Monday. Now I know I can't trust it to kill viruses but can I really be sure it was telling the truth when it told me I was killing viruses on Michael Palin's birthday?

UVK is distributed by Douglas Commerce centers and is available from a number of centers at just £5.95

WHERE CAN I FIND? ...

The Atari 8-bit computers are, without question, the finest home computers ever designed and can still hold their own against any home computer. More powerful than any 8-bit and much easier to access than any 16-bit, it is a great pity that software and hardware support is dwindling. You can still find support for your machine, though, and this directory should get you on the right track. It is by no means comprehensive and we would be happy to receive details of any other companies, simpler or in the world that still support Atari.

We cannot guarantee either response you might get if you write to any of these companies, but give it a try; they need your support as much as you need theirs. Send a couple of international reply coupons in an envelope and, if you don't get a reply, the more you lose is a few bits. But if you do get a response, it could open up a whole new world and add years to the useful life of your Atari. Don't forget to keep us informed if you find good support for your Atari Classic.

Software Industry

442 East Waring Avenue
State College, PA 16802
Good PD selection. More just began stocking commercial games from overseas.

Software Systems

PO Box 121
Oakton, VA 22129
Turbo-016 16-bit upgrade board, Transputer hardware for using IBM keyboards on the 8-bit, and other hardware.

MSI Computer/Vision

2780 Scott Boulevard
Santa Clara, CA 95050
Tel. 408/986-5800
High selection of software and hardware items. Also some new commercial games, see available elsewhere.

Signature Software

1040 Annapolis (at
Lafayette), VA 22045
Good PD/software selection with excellent documentation.

Chicago In Heat

12 80th Vista Place
Schaumburg, Ill. 60195

Independent programmer has produced 12 excellent commercial disk quality games for the 8-bit.

Special Software

2825 Waver Street
Beverlyfield, MA 02045
Area for independent, producing good educational software.

UltraSoft

15 East 30th Street
Bloomington, PA 17015
8-bit specialty software.

NEEDS Software

18 Wrenly Drive
Farmington, NY 11737
Printing related software.

IB Computers

3341 S.W. Government Hills
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Valley Plaza Shopping Center
Beaverton, Oregon 97005
503/837-9425

RedCom

PO Box 3343
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CompuD

PO Box 5420
San Jose, CA 95128
510/251-5182
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De Ville Software

800 East 24th Street
Riverside, NE 68067
Chess and PD software
games.

Miles Reiter Software

219/221 Camerick Road,
Chesham
Camerick, Middleshire
WS11 2QQ
England

Hardy games to everybody
and, apparently highly re-
garded in the UK.

Success Software

1871 East 34th Street,
Suite 229
Brooklyn, NY 11229
PO Office disk.

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Bristol, CT 06010

Newell Industries

PO Box 203
Tulsa, OK 74068
Tel. 514/442-8600

Innovative Concepts

2170 Mason Drive
Warren, MI 48093
313/284-0020
Aerovetics, hardware, PD
software.

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Geeks International

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Tye & Wear
SO24 6JG
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available to members and
non-members.

WORLD

S. J. Murray
71 Walker Road
Tues. Aberdeen
881 948,
Scotland

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magazine FUTURE, also available
in our tape.

Mike Macart (Berk Post)

265 Chester Road
Stoney, West Midlands
BB11 5JL 5178

Large selection of commercial
software, also hardware and
replacement parts.

Tiger Developments

28 Melrose Avenue
Watson, Calif
West
CA14 792
Commercial 8-bit software.

Wait, is a list of magazines that supporting the 8-bit Atari!

8-BIT CLASSIC

170 Spout Hill Rd, 302
Fruitt
PA, 19355-1008
USA

A new bi-monthly magazine
formed by a number of disk
related users in Long Is-
land on the States.

Current Bits

120 North Johnson Road
Suffolk, VA 22170
A truly excellent Atari oriented
magazine, supporting both
8-bit and 16-bit.

Atari Interface

2887 Monahan Circle
Ann Arbor, MI 48106
313/255-8825

A magazine supporting both
8-bit and 16-bit, with input from
atari 1-bit (Europe) in the US,
Canada and the UK. They also
produce a monthly 8-bit disk.

New Atari User (NAU) 8

P.O. Box 94
Suffolk, 2016 1208
England
0493 213828

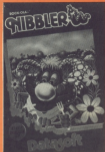
A professionally produced
magazine supporting both
8-bit and 16-bit. Also long PD
library for both hardware and
commercial software.

ENC&L (Modern Atari)

21 Strawberry Way
Beverly Hills
Beverly, North York
SA11 1BE
Scotland
Disk based magazine and
commercial software.

This list was originally pub-
lished by the 8-bit magazine
A8 in July 1990 and updated
by NewAtari (our long
running address) you will find it
valued above. Many thanks to
them and to all who are still
supporting the 8-bit. Long may
it continue!

Please keep us informed if you
know of any additions.



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