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October/November

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for the Dedicated
Atari User'

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Editorial copy date is 16th October

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THE THIRD
ALTERNATIVE
MICRO SHOW
AND ELECTRONICS FAIR

SATURDAY NOVEMBER 11th
10 am to 5 pm

BINGLEY HALL, STAFFORDSHIRE SHOW CENTRE

ADMISSION: ADULTS - £2.00 CHILDREN - £1.00

COME AND SEE THE FOLKS FROM PAGE 6, NEW ATARI USER, B.U.G., CITY BBS, BOURNEMOUTH AND POOLE USER GROUP, MILES BETTER SOFTWARE, CALLISTO COMPUTERS AND OTHERS TO BE CONFIRMED AT THE SHOW THAT REALLY SUPPORTS THE 8 BIT ATARI

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news scene

ATARI CONTINUES TO SUPPORT THE XE

The British Grand Prix of Silverstone was the venue chosen by Atari to launch their new AtariSoft software label, which will provide software not only for Atari computers but IBM, Commodore and others as well.

An invite to The British Grand Prix was not something to turn down as your father dubiously looked off at about six in the morning to watch as much of the Formula 1 practice as possible before finding the Atari hospitality tent. Atari had hired two hospitality suites—one of which was set out for lunch and the other set up as a sort of games-arcade with all the planned releases on show and a couple of stock racing cars controlling the new Atari Grand Prix game. Of course software for the ST was expected but would there be anything for the XL/XE? Indeed there was, a good selection of games that have just been released or are due to be released by the end of the year. The titles were announced in the last issue of NEW ATARI USER and several are reviewed in this issue.

In what of Atari's commitment to the XL/XE? I asked Bob Kato, Atari's software development manager, whether the idea of producing software for other machines was simply to make it easier to support their own machines. He replied: "Very much so, take the XL/XE for example, in today's market it would not be viable to set up a label producing only 8 bit titles but by covering other machines as well we can ensure that we can support the 8 bit as much as possible". One other interesting point is that many of the programmers of the latest 8 bit games were also invited along for the free lunch and hospitality, a sign that Atari still take the 8 bit machines seriously.

I would like to tell you more, but the incredible noise of Formula 1 engines was making outside and the qualifying laps the pole position were about to begin. I can tell you that no computer game, not even Atari's Pole Position can match up to the excitement of the real thing so I just had to dash off. Overall a great day and nice to know that Atari are still supporting the 8 bit machines. Look out for the AtariSoft titles **NUCLEUS, BLACK LAMP CYGNUS XI, TIGER ATTACK, SPEEDHAWK, HEARTACHE** and **SLING SHOT** in your local shops, and for those to prove to Atari that the demand for 8 bit software is still there. If you want them, they will provide them! Many of the titles on show for the ST are lined up for conversion to the XL/XE.

PRINTER USER GROUP

User Groups for computers are relatively common but how about a User Group that concentrates solely on printers? That is the idea of Nick Gathers up in London who wants to get together with other printer owners to set up a national user group whose members could exchange information, swap files, contribute to a newsletter and all the usual things that user groups get up to. He also envisages its active bulletin and "skills exchange".

Sounds like a good idea, so few printer owners actually use their printers to the full extent. How many of you understand how to vertically and horizontally tabulate on your printer or design downloadable fonts? What about graphics? Have you ever programmed your printer? If you feel that the user group idea might appeal to you drop Nick a line, including a stamped addressed A envelope and he will send you more details. Write to Nick Gathers, WHITEHORN LANE, 4, Barkin Crossway, Ipswich, Suffolk, IP14 5AP.

MORE BUDGET RELEASES

There are a reasonable amount of budget re-releases coming your way for the XL/XE at the moment. Appaloosa Games have acquired the budget rights to the Tyronek catalogue and are also releasing some of Dromek's titles. There are some excellent games being released on cassette at £2.95 which include **MIRAL FORCE**, a superb scrolling game from Tyronek which includes wretched speed, **SIDWINDER** which has been covered for a while but still remains extremely playable, **SOCCER MANAGER** and **THE LIVING DAYLIGHTS** which was a relatively low full price release from Dromek.

Alternative Software have also been busy securing budget rights and will be releasing the aforementioned catalogue which includes a couple of excellent flight simulators, **SPITFIRE 99** and **STRIKE FORCE BARRIERS** both at £2.95. If you have never tried a flight simulator, you now have no excuse! At the lower price of £1.99 are a couple of arcade games, **TRAILBLAZER** and **WHO DARES WINS 2**. Not a bad lot for XL/XE owners. With Atari's new releases reviewed in this issue there should be a reasonable amount of new software covered at the present time for you to try.

SPARES ... SPARES ... SPARES

Judging by the number of requests we receive there are a lot of XL/XE owners and there aren't too many support shops when it comes to finding spares when small problems crop up with their systems. We have many letters, for instance, from readers who have been advised that they must buy a new cassette recorder simply because the Play button is broken! Someone who might well be able to help is Derek Ives who runs an Atari 8-Bit Spares and Information service which began life as an add-on from the Birmingham User Group. The latest brochure issued is packed full of hints to get items such as replacement keyboards for the 1000X, game packs, various chips for computers and drives, modules for the 1000 disk drive, replacement buttons for the 1000 and 1001X cassette recorder and lots more besides. And that's not all, there are

also some excellent bargains such as 8000Xs of £24 apiece and game screen monitors for £32 plus VAT prices lots for memory upgrades and interfaces.

Supplies of many items can be limited so most items are on a first come basis. If you are interested we suggest you give Derek a ring on 021 333 3730 to see what goodies he might have on offer.

ANOTHER ATARI SPECIALIST

8-Bit Computer Systems of Blackbyre can apparently ditching most of the other brands of computer to concentrate entirely on Atari and that doesn't just include the ST, they fully intend to support the 8 bit machines as well. That's good news for all Atari owners.

MAILBAG

write to
Mailbag
P.O. Box
54,
Stafford
ST16 1DR
ENGLAND

DO IT YOURSELF

I read with interest and dismay the review of HAWKQUEST and agree it would be a good choice if software of this quality was not so rare. The 8 bit market. The article finished with the idea that we should write to companies asking them to publish it. My idea is that perhaps PAGE 4 should consider publishing it through their Assembly Shop through not on public domains. If it was successful, then maybe other software titles could be released this way?

Simon Budget,
Chichester

We would love to publish games of this quality that sometimes a program is too good for us being made, we have to face the fact that STV AT&T USER and the Accessory Shop don't reach all Atari owners - more that Atari and that an established software company with access to the correct distribution channels could

sell many many copies than we could, or at least they should be able to. In the case of programs like HAWKQUEST we would prefer that the program was as widely available as possible so that the authors could enjoy greater success. We understand that that has been expressed an interest in publishing HAWKQUEST and will let you know whether it is due for release. Even though we will not be selling the game ourselves, we have hopefully been instrumental in its release.

STRETCHING THE LIMITS

I am a dedicated Atari devotee who has worked on Atari for many years and a very competent machine code programmer but one of the features that has always annoyed me is how to obtain more than four colours on a horizontal line in Atari 14 without using raster. On PCs or horizontal terminals, I believe it can be done because Atari

mode 4 can display five colours (four pixelfield and the fifth is obtained by setting bit 7 in the character number - this corresponds to register 711 being zero). Since Atari mode 4 is equivalent in terms of colours and pixel combinations to Atari mode 14, it should be possible to get that fifth colour, but how?

There are games around that have used this fifth colour, for example World Katana Championship. This had six colours on one horizontal line - brown background, and the player and his uniform, pink for their face, black outline outline and yellow for the high score table. One of these colours was probably due to hardware sprites but only one colour seems to get the necessary definition all sprites would have to be the same colour, but it still leaves the fifth colour unexplained. Can anybody help? If anyone can solve this I will give them a copy of my latest new game (see Black II).

SOLVING SOME OF THE XF551 PROBLEMS

There seems to be general dissatisfaction with the XF551 disk drive amongst your readership. I have only just created this model drive and I must admit at first it did seem inferior to the 1050 model, not being able to write to the back of the disk, although the drive itself is much quieter and quieter than the old model. As far as not being able to do it is deemed to be though, it definitely works well as a double sided, double density drive with the right DOS. There are three readily available DOS 4 available from several sources, by Staffed Software, 1007 West London Avenue, Decatur, Illinois 62532-1517, U.S.A., price £30 plus £1 postage - AT&T DOS 4.11 available from Atari Comp 1196 Boregas Avenue, Sunnyvale, California 94086, U.S.A., price £30 and XPARTS DOS v1.1 or X available in the UK from Frontier Software.

Of all the above (perhaps 4 seems to be the best but as a cost. It comes in cartridge form

so no disk space is used for DOS files. The major drawback with any of the above is that none are compatible with DOS 3 or 3.5 and only (perhaps) will convert existing DOS 2.5 files to its new format that it does work and is fairly easy to use. For those who wish to stick to DOS 3.5 there is however one other solution. COMPUTERS SOFTWARE SERVICES, P.O. Box 12466, ROCHESTER, NEW YORK 14617, U.S.A., have a device for sale called an X5551 (ENHANCER 128.95 + plug - they accept VHS). When fitted to the XF551 drive this device allows the drive to write to both sides of the disk in the 'normal' fashion (i.e. by 'flipping' the disk, sounds great and it works and has been in a state! The XF551 obtains its timing pulse from the timing hole on the disk, consequently when the disk is flipped, the motor cannot pick up the hole, so becomes this problem. The XF551 ENHANCER drives its timing pulse from the motor supply as

did the 1050 drive. The problem with this solution is of course that the Americans use a ROM to manage supply so the ENHANCER needs a small modification to make it compatible with a 'normal' 80 bit system, or you have to Britain. This is a simple 60 pin pulse generator and if anyone is interested in carrying out this modification then please contact me at FR. FRAYN@JHEAT, SAFFRON WALDEN, NEW HAVEN and I will gladly supply the details. The end result is an XF551 drive that behaves like a quieter, quicker 1050.

My second topic is the AT&T 286808 patches. Are there many out there who, in wanting to use their Atari 5 bit for more than just playing games, purchased the, supposedly, 'Epson compatible' 286808 only to find that it wouldn't work with any of the great software packages such as Wordshop and Drive Out II? Well, with a little cash outlay it will. The first product you need is

P.S. The game is great - great graphics, superb animation of Joe and the Punks. My wonder is to go out and buy it straight away!

Barry Southam
Author of *Joe Blake*

Making like a lot of readers it does! We have published solutions to 'impossible' programming tasks before so can expect thanks this one! Sounds like a job for Paul Lay to me!

GOOD SUPPORT

Reading most G.D. Wood's letters in issue 38 concerning dealers who have given good support, and your reply, I feel inclined to add my voice.

Lately this year I wanted to upgrade to a more competitive software processor. I contacted all of the 'big' names who offer serious software and usually claim that they will obtain any software to the extent of im-

porting it if necessary. I asked for PaperClip, Superstudio and the Jet-Kee! Word Processor, all of which have been returned favourable in the mail too distant past. In each case they could not offer the software, nor offer any alternative except *Interwrite* and were not willing to try and obtain a copy of any of them.

Through your Resource file I contacted Livingston Computer Centre who do not have a copy in stock, however they continued to try and locate a copy of PaperClip, keeping me informed. After three or four weeks another customer offered them a second hand copy and they were sufficiently interested to assemble my enquiry and contacted me with an offer. Through their good service I now have a copy of PaperClip.

One point from this episode is where has all the serious software gone! Even programs that have or in the U.S. seem to be unobtainable, much less those being any hope of future releases. Not all of us have sufficient demand to dump our 8 1/2 floppy and invest in an IT. Finally in response to your editorial, I was one of those who went to the London Alternative Micro Show and, yes, I would support similar initiatives, such as you outline, again. I found it more appalling than the major shows where you can however get and struggling to get some to stands of interest.

M. Lambert,
Maldenhead

Ever anyone know of a retailer that still has good stocks of 8 1/2 programs available? Write and tell us. The only 'new' serious programs seem to be the 'Turbo' programs imported by Computer House. Good on ...

TOP CLASS

I have an XT170 which I use in particular with TurboDraw80 and TurboText, and must say that with these two programs you have everything you need to run a small business. The TurboDraw is an excellent package, it makes accounting very

easy, producing statements as often as one wants! Also it is very good for VAT etc. It must be the equivalent of CROM's words of IBM software! TurboText is the best word processor I have ever used on the 8 bit AMX. You can use exactly where you are on the page, very handy when writing long documents. It also automatically puts your own address at the top of a letter if you want it to. For the first time I actually feel like sitting down and writing some letters!

I hope that many AMX users will support Microcenter via Computerhouse with this software.

J.D. Beach,
Wolverhampton

WHY I DIDN'T GO

You asked for some feedback why less people turned up to the AMX Show at the end of June, so I felt obliged to give my reasons. The reason why I failed to turn up was because PAGE 6 ATARI USER managed to dissuade me. A trip to London is difficult enough but to be told that the show was almost entirely ST orientated put the nail in the coffin.

Perhaps if PAGE 6 had commented on the Show's 8 bit good points then I might have gone. *NEW ATARI USER* remains a brilliant magazine but would it be possible to print photos of all the PAGE 6 going and contributors, so far I've seen John Swearing, Mark Hutchings and (I think) the late, great Gary Francis (is he still in Sydney?) both amongst the Page 6 Contributors Award, wherever happened to that?

If you print this letter I'd like to say 'hello' to Keith S, in Preston.

P. Doughty
Theodores, Lincs

Just if we put you off going to the Show that you should know by now that Page 6 doesn't believe in, all this fuggy business, we would rather you get the true picture even if it is at times negative. To try and get folks along to the Show by emphasizing a very small part out of proportion would be

wrong. Another problem is that it is not until you get to a Show that you find out just what is there and, although only a small part of the Show, there was if I do happen and a lot of bargains to be had if you hunted them out. Why not come along to the Alternative Micro Show? There will be Atari 8 bit support there but, again, only as part of a larger show. The trouble is if you don't go the AMX exhibitors will think it's not worthwhile and the Atari support will die. The future of 8 bit support has little with the users, you should try and show your support wherever the opportunity arises. As to the photos, how come you have seen a photo of Gary Francis, after I've never even seen one? And who gave this on credit without us knowing about it? The chap you are thinking about is actually Paul Lay. We're often thought about including photos of the contributors but most of them are irretrievable any. Still if there are any eyes amongst the contributors and we get any photos in plain brown envelopes, we'll put them in a future issue (Roger's Gallery?)

BACK ISSUES

I am writing on an old Atari User fan who was a bit confused at first of buying your superb magazine. Unfortunately as I have missed issues 34 to 37 I have great trouble in understanding some of your articles. Why don't you offer a back issue service like Atari User used to do?

Matthew Preston
Widmore, Bucks

But we did! Somewhere in this issue you will find full details of the back issues available and how to get them. You probably read the issue in which we tell you the back issue page is under inspection in another article. It wouldn't all fit in so rather than cut an article we dropped both the Back Issue page and Resource file.

Letters to the Editor



SHIFT IT

A MIND BOGGLING PUZZLE BY R. C. GOODFELLOW



then ENTER Listing 2. With Listing 1 loaded, just type ENTER "DARKING.LST" or ENTER "C" and the two programs will merge. Now SAVE or SAVE a copy of the merged program. Once the final combined program has been saved the two original listings and the "listing" listing are no longer required and may be deleted.

PLAYING SHIFT IT

When you type REM there will be a very short delay and the title screen will be displayed. At the bottom you will see the picture you will be trying to solve, (once it has been shuffled). If you do not like it, press the space bar and it will change to another one. There are four puzzles and three levels of difficulty of picture. The puzzles and their relative difficulty are as follows, 1 is the easiest

Letters A - P	Level 1
Numbers 1 - 10	Level 1
The flag symbol	Level 2
Page 6	Level 3

Many moons ago a Professor Rubik unlocked onto an unsuspecting world that hatched of most, the Rubik's cube, and so man's mind turned to why trying to figure it out.

Now, for Atari owners, there is that it, a two-dimensional sliding squares Rubik's style cube, that will once again need you reasoning for the answer (with some speciality (Long Hauler if available)). Not the most descriptive of descriptions but where you play it you'll get the idea. It's (loosely) stated it is cross between a sliding square puzzle and the 'cube', but in two dimensions. There is a wrap-around effect, so that if you move the first column up, the top square becomes the bottom square.

Confused? Not surprising. Put simply if you like a puzzle then you'll probably enjoy Shift It.

TYPING IT IN

Just type in Listing 1 and save it to disk or cassette. THEN I will help with all those control codes from line 18000 onwards but if the thought of all those control characters troubles you, you can skip these and type in Listing 2 instead.

If you want to take the easy way you will need to type in Listing 1 but stop when you come to line 30000. Now SAVE or SAVE the listing so far to disk or cassette, type NEW and then type in Listing 2. Listing 2, where complete should use the SAVE or CHAIN for safety's sake. Now get a spare tape or disk ready and RUN Listing 2. This will create a listed version of lines 30000 onwards on disk or tape.

Next stage is to LOAD or CLOAD Listing 1 and

Page 6 is the hardest because it has the most 'valley bits' in it and it also has a space just to make things more awkward.

You can set the number of shuffles your chosen puzzle will receive by pressing a key from 1 to 9. Pressing 1 will only shuffle the puzzle 5 times, while 9 will shuffle it 45 times. There are random shuffles and so you leave it in pretty much the same condition as when it started, though 40 shuffles should deal with Rubik's like that.

When you have chosen your puzzle and the difficulty level, press the START key or press the joystick button and you will be transported to the actual game screen, and the shuffles will begin. On the left hand side of the screen is what the finished puzzle should look like and the one on the right is the puzzle you have to solve. On the screen will be an arrow, this is your cursor. Moving the joystick will make the cursor move. The control of this can be a little tricky at first but it will soon become natural. To 'slide' a row or column along move the cursor into position with the arrow pointing in the direction of the 'slide' and press fire, the squares will then move in that direction complete. You just continue this doing until it's finished. Press any on it's up to you.

If you find the puzzle too difficult to complete and you want to try a different one, press the ESCAPE key and you will be dumped back to the title screen.

I hope that you find SHIFT IT to be an enjoyable challenge and that it does not destroy your brain too quickly! If any interesting points can remain in my memory and add a substitute to solve the puzzle when you get stuck instead of the drastic 'I quit' solution please send me a copy as I would be most interested to amend the program.

SHIFT IT Listing 1

00 1000 0000
 01 1000 0000
 02 1000 0000
 03 1000 0000
 04 1000 0000
 05 1000 0000
 06 1000 0000
 07 1000 0000
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Amethyst Software

DISK BONUS

GRIDWARS

by Ross McNaughton



Fast and furious action created with Broderbund's ARCADE MACHINE

It's Monday morning again and the start of another week's hunting on the Grid. Luckily you take to the controls of your fleet of remote controlled blasters and try to blast only of the profits. All the rules say you should hunt in pairs but the greater danger of getting it alone is offset by the higher gain. Your main targets are the giant Phosor spiders, work up to a maximum 200 credits, but they are not the only creatures on the Grid, just one they're the most dangerous. Only by clearing the grid of everything, from the harmless Crawlers and Go-Worms to the deadly Spinners, Mines and Fire Bombers, can you hope to succeed.

So to it many men, the work needs to be done and without these Credits life is going to be dull indeed. All you need to take along is your joystick, it'll all come back as the adventure starts to flow.

GRIDWARS was created with **THE ARCADE MACHINE** published by Broderbund, a program that enables top quality arcade games to be created quite simply and with very little programming knowledge. Sadly it is no longer available commercially but there must be a number of Atari owners who have a copy. Any more programs out there willing to be included as a future **NEW ARCADE GAMES DISK BONUS**?

GRIDWARS is available on the **BONUS** on this issue's disk. Disk subscribers will have received their copy already but the disk is available separately for just £2.95. Send a cheque or Postal Order with a written order to **PAGE 6, P.O. Box 54, Stafford, ST16 1DR** or use the order form on page 49.

NEWS STATION

I can hardly believe it: Not on the heels of Page Minded (reviewed last issue) we have another 4-bit desktop publishing package! This one, known as News Station, hails from the USA and is now being imported into the UK by Collins Computers.

The package contains one single-sided 3.5" disk and a cradily presented career stapled instruction booklet. I can't understand why they didn't use News Station to produce a clever-looking instruction manual, as the one supplied isn't much of an advert for a desktop publishing program.

News Station is designed for producing high quality posters, signs, brochures, adverts, news sheets, and similar documents. To run it you'll need an 8-bit machine with at least 48K memory, a disk drive, an 8-pin 800 printer interface (or equivalent), and a graphics capable dot matrix printer. Drivers are supplied for several popular printers, including Epson 8000 and MX80 hard copywriters, Star/Gemini 8030 and 103, MFC ProWriter, and the Atari XMM-801 (which doesn't need an interface). Other printers may be supported by building a custom driver using the utility program supplied.

The disk contains two main programs, known as The Photo Editor and the Press. The Photo Editor provides facilities for composing and editing a spreadsheet of text and graphics drawings as a 'plate', while The Press handles the printing function. Its font files are also supplied, so you can print your text in different sizes. This is rather nicely compared to the 30+ fonts provided with Page Minded. There are no sample documents either, so you have to learn by building your own from scratch.

News Station's only unit of printed output is the page, which consists of eight 'plates' (two across by four down the page), each of which must be composed using the Photo Editor. A plate may be sized within a page, and blank plates employed if you want to leave part of your page unused, so you don't need to compose eight unique plates before you can print. You can only enter five or six plates at a time, making the lining up of text or graphics across plate boundaries a real pain. It's therefore essential to accurately sketch the page design on square ruled paper beforehand, so you know where the boundaries fall.

PLATE EDITING

The Photo Editor screen is divided into two parts. The top area measures 520 x 152 pixels (40 x 12 characters) and represents the plate, while the bottom half holds three lines of status and option selection data. Commands are entered directly from the keyboard mainly as CTRL-key combinations, as there are no menus.

The editor operates in two modes, text or graphics, and by flipping between them, you can work either at the character or pixel level. Text mode allows you to key in any standard keyboard character or the Atari's special graphics characters. The keyboard must be in UPPER-CASE for the latter to work, a point not mentioned in the instructions.

The editor can use the standard Atari font plus one alternate font of any given instead. A different alternate font may be loaded from disk at any time, providing it's supplied as a

John S Davison gets another chance to try a desk top publishing program for the XL/XE and finds a very impressive package

standard 8 vector font file. Once text has been placed on the plate using a particular font it remains unaffected by subsequent loading of other fonts. This gives you freedom to use as many different fonts as you wish within a plate.

There's no font editor provided, so you can only change the supplied fonts or build new ones via a separate program. Font editors together with ready-made fonts are often available from public domain software libraries, indeed there is one excellent one with a few fonts in the PAGE 5 Library on Disk 800 and several fonts can be taken off the PAGE 4 laser disk. Incidentally, Page Minded's fonts loaded into News Station without trouble.

You're not just limited to standard size characters, as fonts may be used in 48 different sizes! This means you can put big bold headlines at the top of your page, with detailed text in a smaller size underneath, however the simple font scaling method and makes the larger characters look rather blocky.

Positioning of text is completely manual, there's no automatic centring, wordwrap, wordflow, justification, or other fancy features. Toggling position is indicated by a flashing cursor, which moves as you type, Insert and Delete keys aren't supported, and there are no block manipulation facilities either, so text editing is somewhat tedious and can be very time-consuming!

Other facilities in text mode allow you to set the left margin width, to inter-paragraph your text by moving the cursor up or down in units of one scan line and to alter the spacing between lines of characters. ASCII files from a wordprocessor or text editor may also be loaded into a plate, and this worked OK with StarWriter Plus files. However, no text line may be longer than 40 characters, as excess characters are lost.

GRAPHICS TOO!

This is where News Station scores over Page Minded. It can also handle graphics in the form of Print Shop icons and standard 63 vector picture files.

One or more Print Shop icons can be loaded anywhere on the plate in any of three sizes, but again I found the largest size loaded to blackness and also noticeably distorted the picture's proportions. Icons can be easily loaded from Print Shop icon library disks, but not directly from the original Print Shop or

NEWS STATION

New Desktop Publishing Program for Atari 8-Bit Machines

THIS NEWS AND PUBLISHING DESIGN NEWS STATION TURNING UP AN EARLY STAMP
WAS THE FIRST OF A LONG SERIES OF... PRINTING... PRINTING... PRINTING... PRINTING...
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YOU CAN ALSO USE

Print Shop Icons



Tools



Printer



File



...in different sizes too!



Picture Files

It's also possible to import 62 VECTOR picture files into News Station. This picture of Pete was drawn with artist/artist by John Harrison Jr.



'FACE'

by

John Jr.



Lines and Patterns

Vertical and horizontal lines can easily be drawn using the joystick and eye-catching patterns created with the Atari's control characters.

Print Shop Companion program disks. These need moving to a wordlist first, but News Station's instructions don't tell you how. I did it by loading the required icons into Print Shop's Icon Editor and saved them to a wordlist from there.

A low cost alternative source of graphics for News Station is the Page & Print Shop Collection and Cyber Pack disks, which between them contain over 1000 yes, one thousand, ready-made icons. You'll find an icon for virtually every purpose here, and at less than \$2 per disk, you can't go wrong.

I also loaded 62 vector Micropointer picture files without problems, however, only the top five-sixths of the picture fit onto the plate, a real nuisance if you're using pictures which weren't drawn with News Station in mind. If you're drawing them specially you can allow for this though.

The most popular 8-bit art package is probably Amibitmap, but its compressed picture files are incompatible with News Station. However, there's an unadvertised feature in Amibitmap permitting the saving of files in 62 vector format, just press the < (Green/True) key while viewing the picture and a 62 vector file called PICTURE will immediately be written to disk. If you then use DOS to rename it with a file extender of PC, you'll find it loads into News Station without trouble.

The Plot Editor provides another means of producing graphics or editing imported pictures. You can draw directly onto the plate

using the keyboard, joystick, or Mouse Pad. Facilities are extremely basic, allowing only line drawing and pixel flipping, so if you need more than this you'll have to use a separate art program and import the graphics as described above. It's a good pity the author didn't include support for the Atari Touch Tablet though, as Mouse Pad is almost unknown in the UK.

ROLL THE PRESS!

Printing is handled via The Press, achieved by simply selecting the printer type and the right plates from your data disk to make up a page. But be careful! If you accidentally choose a wrong plate there's no apparent way of correcting your error. Oh, of course, aborting the printing run, which automatically follows plate selection. This is very frustrating, and a classic case of stupid design. However, I discovered an unadvertised feature (bug?) - if you press the numeric 1 key, the disk directory is re-read and all plate selections blanked, allowing you to start over again!

I managed to lock up the program several times, and couldn't see why. News Station isn't very good at error messages either, and sometimes not ignoring my attempts to communicate with it without telling me what I was doing wrong. Once you see the printed output though, you'll forgive the program its unwelcoming little foibles. On my Sun 6318 the quality was impressive, and easily good enough for most home and small business uses.

Did I say foibles? Perhaps I should say glaring foibles and omissions, but there's probably nothing you can't work around. Even so, the output really should provide a better instruction manual, some sample photos, more error messages, and redesign The Press's plate selection code. It'd also like access to DOS facilities, a font editor, and simultaneous viewing of multiple plates included, but this is probably wilder thinking.

Despite its shortcomings I really like News Station. It's one of those rare packages which genuinely expands the scope and capabilities of your 8-bit Atari. This is especially true when used in conjunction with programs such as AtariArtist and Print Shop, and while it's not as slick or as easy to use as these, it's every bit as useful. If you need a simple, general purpose desktop publishing package, News Station could be the one.

NEWS STATION

Published by Reeve Software
Available from Callisto Computers
Price £23.50

LEARN TO READ

Learn to Read is an educational program for children learning to read. A sentence is displayed with a word missing (replaced by ??). A list of 4 options is given for the word in the box below. The child must decide which word is correct and press a key 1-4 corresponding to the correct word. There are 30 words to fill in per game, and a check routine ensures that the same question is not repeated in each game. When the game is over the score out of ten is shown, along with the option to play again (START) or to quit (QUIT).

The questions in the listing are only examples and can be changed quite easily. The sentences and word choices can be made fairly easy, as they are at present, or made more complicated by using very similar words as the choices. Alternative spellings could be used or even foreign languages. The choice is yours.

The questions are held in DATA statements from line 1000 in steps of 10. Each question is built up as follows:

THE QUESTION, WORDS, WORDS, WORDS WORDS, WORDS, COMMENT

Word 1-4 are the possibilities. Keypcode is the key handle code for which key will contain the correct answer. The keys 1-4 have the following handle codes:

- 1 - 31
- 2 - 30
- 3 - 26
- 4 - 24

Correct is the correct word. Just take a look at the questions in the program to get the idea and change the DATA to suit yourself. The program is set up for 30 sets of questions but this can be changed by altering the figure 30 on line 201 to the number of questions you require. All questions must be added as DATA with increments of 30. The new lines added would be 1581 and 1611 and so on.

by Dean Garraghty

This listing is published in response to requests that we publish more listings that use simple basic commands and that can be changed quite easily by the user. Let us know what you think of these type of programs and, if we get a positive response, we will publish more.

READ

```

01 1 000 *****
02 2 000 0 LEARN TO READ 0
03 3 000 4 100
04 4 000 4 000 001100010
05 5 000 0
06 6 000 0
07 7 000 4 000 0000 0000 - 0110001 01 0
08 8 000 *****
09 9 000
10 10 000 00000000 001000 001000 0010
11 11 000 00011000 0011000 00000000 0000
12 12 000
13 13 000 00000000 00100000 01100000 0010
14 14 000
15 15 000 00000000 00100000 01100000 0010
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17 17 000 00000000 00100000 01100000 0010
18 18 000 00000000 00100000 01100000 0010
19 19 000 00000000 00100000 01100000 0010
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21 21 000 00000000 00100000 01100000 0010
22 22 000 00000000 00100000 01100000 0010
23 23 000 00000000 00100000 01100000 0010
24 24 000 00000000 00100000 01100000 0010
25 25 000 00000000 00100000 01100000 0010
26 26 000 00000000 00100000 01100000 0010
27 27 000 00000000 00100000 01100000 0010
28 28 000 00000000 00100000 01100000 0010
29 29 000 00000000 00100000 01100000 0010
30 30 000 00000000 00100000 01100000 0010

```

**A simple educational
program for teaching
English or other languages
that you can easily amend
to suit your own needs**

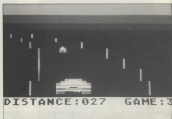
MEAN MOTOR

The day is over, more deals concluded, the effect of the Porsche Scandal has worn off and it's time to head on home. You see the flex into the Porsche and away we go! Oh, so is that the time? Mandy's doing something special tonight - a special chicken piece in that exquisite lemon sauce with a lightly breaded salad, from the new C-Plan diet book - and she'll be awfully wild if I'm late. Better stop on it tonight.

Isn't it amazing? Everytime you need to get somewhere in a hurry there are all these rightfull people on the road just getting in your way. You'd think that they can see this in Porsche, just try to avoid them I suppose, don't want to scratch the paintwork. I just hope that the car phone doesn't ring, it might be Mandy.

Blimey blimey!

Or ... another driving game!



by
Gavin Davidson

TUNING UP

You may like to try your hand at a spot of tuning. Try a few POBIs into the following:

- 2002 - Determines frequency of right hand bends
- 2003 - Determines frequency of left hand bends
- 2004 - Determines frequency of oncoming cars
- 2005 - Time allowed for game (default: 1 minute)

HOW TO DRIVE

START: BEGINS GAME
SELECT: CHANGES LEVEL (1-4)
OPTION: RESETS THE GAME

Each level last one minute. If a distance of 80 or over is obtained the game will progress to the next level. There are 8 levels to get through.

KEYENCE

LEFT: goes left
RIGHT: goes right
FIRE BUTTON: slows down the car

Your car automatically goes through gear changes. Hitting poles at the side of the road is not good for the paintwork and may crash your car


```

123 0 0 70 177 130 0 170 0 0 0 0
01 070 0070 0 0 001 0 0 000 00 0 00
0 000 0 000 0 0 070 000 0 000 000 0 00
0 0 000 0 000 0 000 0 00 00 000 000
02 000 0070 0 070 000 000 000 000 000
0 070 0 0 0 070 000 000 000 000 000
03 000 0070 0 070 000 000 000 000 000
0 070 0 0 0 070 000 000 000 000 000
04 000 0070 0 070 000 000 000 000 000
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39 000 0070 0 070 000 000 000 000 000
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40 000 0070 0 070 000 000 000 000 000
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41 000 0070 0 070 000 000 000 000 000
0 070 0 0 0 070 000 000 000 000 000
42 000 0070 0 070 000 000 000 000 000
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43 000 0070 0 070 000 000 000 000 000
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44 000 0070 0 070 000 000 000 000 000
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45 000 0070 0 070 000 000 000 000 000
0 070 0 0 0 070 000 000 000 000 000
46 000 0070 0 070 000 000 000 000 000
0 070 0 0 0 070 000 000 000 000 000
47 000 0070 0 070 000 000 000 000 000
0 070 0 0 0 070 000 000 000 000 000
48 000 0070 0 070 000 000 000 000 000
0 070 0 0 0 070 000 000 000 000 000
49 000 0070 0 070 000 000 000 000 000
0 070 0 0 0 070 000 000 000 000 000
50 000 0070 0 070 000 000 000 000 000
0 070 0 0 0 070 000 000 000 000 000

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Lissajous' HARMONICS

by
JIRI NEJEDLY

After Atari User magazine was incorporated with PAGE 6 we found that we had inherited a large collection of disks sent in by RJ readers. These were mainly the "5-LINERS" and a lot of time was spent trying them all out. Unfortunately, many were very similar in content and most had apposed letters, either in PAGE 6 or elsewhere. Where names and addresses were given the material was returned, however, we do not seem to have received all the material during the handover and some people may never see their disks again. PAGE 6 is very sorry about this, if we had the letters they would be returned.

Some of the programs I tried out concerned equations, many of them obscure and suitable for interested parties only. They were the type that needed an input from the user and then printed an answer on the screen. Nothing that we could really use in the magazine.

After an hour or two of this I was getting quite dependent until I happened to notice a name that I had just encountered during the time I was studying 'CF level physics. I tried it out and was suddenly struck with the familiarity of having seen this before some years ago.

The program comes from DR NEJEDLY from Czechoslovakia. The French physicist's name was Lissajous (who died in 1826) and he investigated the superposition of two harmonic motions. Sounds heavy going but it is, literally, child's play as you will find out.

The idea is that you draw a line on a table in one direction, your hand being the first motion. Then, at the same time, you get the table to move in another direction - the second motion. This will result in some weird but, most often, some very pretty patterns. Now, read your mind back several years and try to remember a child's toy consisting of a drawing board that moved and a pen as a penholder. For the life of me I cannot remember what the commercial name of it was, but it was a toy typical in the, say, Father Price range. If anyone knows the name of this toy would they please contact the magazine and I will be the wit of our readers know in my regular column?

Anyway, enough of all that. What follows is a simple five line program with an obscure (to most of us) equation that comes to life through our Atari computers. The nice thing about this program is that it does not have dozens of numbers for a machine code routine that will stress absolutely nothing. When you get tired inputting numbers you can always fiddle with the parameters of the program itself.

```

10 00 000000 000000 0 0 0 000 00 0 0
01 00 00
02 00 00 00 00 00000000 00000000 0000
03 00 0000 0 0 0 0000000000000000
04 00 00000 000000000000000000000000
05 00 00000000 000000000000000000000000
06 00 0000000000 000000000000000000000000
07 00 000000000000 000000000000000000000000
08 00 00000000000000 000000000000000000000000
09 00 0000000000000000 000000000000000000000000
10 00 000000000000000000 000000000000000000000000
11 00 00000000000000000000 000000000000000000000000
12 00 0000000000000000000000 000000000000000000000000
13 00 000000000000000000000000 000000000000000000000000
14 00 00000000000000000000000000 000000000000000000000000
15 00 0000000000000000000000000000 000000000000000000000000
16 00 000000000000000000000000000000 000000000000000000000000
17 00 00000000000000000000000000000000 000000000000000000000000
18 00 0000000000000000000000000000000000 000000000000000000000000
19 00 000000000000000000000000000000000000 000000000000000000000000
20 00 00000000000000000000000000000000000000 000000000000000000000000
21 00 0000000000000000000000000000000000000000 000000000000000000000000
22 00 000000000000000000000000000000000000000000 000000000000000000000000
23 00 0000000000000000000000000000000000000000000 000000000000000000000000
24 00 00000000000000000000000000000000000000000000 000000000000000000000000
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PAGE 6 would still like to see small programs like this, not necessarily five liners, but something easy to type in and that is fun or useful. I must warn you now that we have had dozens of discovery letters and the like, so scratch your heads and come up with something new.

Mark Hutchinson

Kenny Dalglish

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Above - Listing 8
Centre top - Listing 7
Centre bottom - Listing 5
Right - Listing 6

USING THE ROUTINES

The SOUNDING VIB routine uses a counter to count one of 4 operations - how the sound chip is using the value contained in the register PITCH 1, how voices 1 etc, then instead the PITCH2 value. Normally this operation would cause every Vertical Blank interval to 50 seconds, but the DILLAS register is used to slow things down by cutting the routine until the value of a counter (COUNT 1) is equal to the value found in the register DILLAS.

The routine will run as it is stand. When used within a large program use it on a subroutine. The simplest way of doing this

EXPLOSIONS .. GUNSHOTS ...

USING WITH BASIC PROGRAMS

is to use a REM instruction and put a REM instruction at line 100 to return to the main program. Try altering the values loaded into the registers (lines 230 to 300) and see what happens. If the FLAG is set to a value of zero then the sound is turned off. This means that voices 1 or 2 will be switched off every Vertical Blank. If you want to also include non-VBL sound effects in your program then use voices 1 and 4 or control the VBL by using a similar set VBL routine as in lines 360 to 430 of Listing 1 but make the VBL routine simply REM 230VBL to cancel the effect of the sound VBL.

Listing 4.2 is the source code for the machine code data to be used from within a BASIC program. The first part (lines 270 to 480) alter the registers by passing parameters from the BASIC program. This prohibits the flexibility of the machine code routine.

Listing 4.5 is a BASIC routine that loads the machine code data to a string variable. The code is relocatable and will not clash with any other memory area that your BASIC program uses. This means that the actual address of the Vertical Blank


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101 PRINT "***** LISTING 10 *****"  
102 DIM SOUND(255)  
103 FOR I=0 TO 255  
104 SOUND(I)=I  
105 NEXT I  
106 GOTO 1000  
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Above - Listing 10
Center top - Listing 11
Center bottom - Listing 13
Right - Listing 12

routine will change according to what the string \$TIME is located in the variable table. Line 100 of the BASIC listing calculates this and assigns it the routine ADDR which is then passed to the machine code routine line 110. Note that when the program stops at line 100, the sound effect still continues, demonstrating that the VM routine is independent of the BASIC program.

To use this and the other sound effect routines in your own programs, it can be switched on or off, once the machine code routine has been set up, by altering the value of the variable \$MUSIC (1=on, 0=off) and repeating the machine code call in line 110. Try altering the values of PITCH, PITCH2, DELAY and VOLUME as well and hear what happens. Normally

the volume should be between 2 and 14 - any other value will give strange effects.

TYPING AND SAVING

If typing in the routines, save them to tape or disk first. Any mistake in the DATA statements can cause the system to crash.

The programming techniques used to create the OCEAN, EXPLODE, SANESOM and MARRM routines are similar to the Fast-Steps effect. I have not included the source code for use with BASIC as they use the same method found in listing 4.2.

Experiment with the routines. If you set a low value for DELAY in the explode sound effect it will sound like a gunshot.

The engine sound effect (listing 4.12 and 4.13) uses a joystick to alter the pitch of

```
101 PRINT "***** LISTING 11 *****"  
102 DIM SOUND(255)  
103 FOR I=0 TO 255  
104 SOUND(I)=I  
105 NEXT I  
106 GOTO 1000  
107  
108  
109  
110  
111  
112  
113  
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the sound. This has obvious uses in a car or motorcycle game.

SOME MUSIC

The final routines (4.14, 4.15) show how to add a simple tone using fast routines. The data for the tone is found in lines 760 to 790 of the machine code listing and lines 540 to 580 in the BASIC routines. Each note of the musical scale can be represented by a value between 0 and 255 (see your Atari manual for a list of these). To vary the different length of time that notes

MACHINE CODE

SOUND EFFECTS

```

100 REM ***** SOUND 1 *****
101 REM ***** NO 1 *****
102 REM ***** 40000 HZ *****
103 REM ***** 1000000 *****
104 REM ***** 100 *****
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106 *****
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108 REM *****
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300 REM *****

```

Above - Listing 14

Right - Listing 15

are sounded the data for each note can be repeated. A value of zero means silence. I am not a musician so the tone-determined is just a simple nursery rhyme, but the technique can be adapted for more professional sounding music.

The routine can accept your own compositions using two-part harmony by altering the data statements. The machine code only version can accept up to 255 notes for each voice, and the data for use within BASIC can use up to 128 notes for each voice. The value of the register STOPFLAG or the notifiable FLAG must be altered to the required number of notes. The BASIC version loads the note data into Page 0 (addresses 1000 to 1792) which is normally not used by BASIC.

These programs show how sound effects can be created without much effort. If you are a machine code programmer try reproducing the routines - you may end up with your Atari sounding like Pink Floyd or Tangerine Dream!

THE CASSETTE DATABASE

THE FINAL ROUTINES

Ian Finlayson's database is concluded this issue to leave you with a fully working program to which you may add further refinements

Here we are at the last stages of the database program. The only important module of the program which remains to be typed is a sort routine which allows the database to be sorted in different ways. This will make your data easier to use once it is entered. I have also written a short set of 'instructions' and as well as these I will suggest a little tidying up and also ways that you can improve the program if you wish. First to remind you of the way to combine the four parts of the program. Type each of the four listings, check it carefully with Type 3 and test it to tape with LIST "C", then ENTER each in turn. Be sure to enter them in the same order as they were published, as the later listings deliberately overwrite some of the earlier lines. If you already have parts 1 to 3 combined and working just type this listing. LIST it to tape. LOAD the previous versions and ENTER this one to add it. Finally SAVE the whole.

THE SORT ROUTINE

Sorting things is one of the activities that computers can very easily do, and it is quite easy to develop a simple program which will sort items in a list or, as in this case, in a string. One of the simplest ways such as a bubble sort would be the easiest to understand, but with a program written in Basic it is really necessary to use something better as the sort process would be awfully slow. I can no expect of writing theory and so I looked for help on this aspect of the program. Fortunately I found just the thing on one of the Page 6 public domain disks. Disk #34 (Utilities 5) has a short program that compares a bubble sort, double sort and shell sort. The shell sort is much the fastest but it is rather difficult to follow. I have just taken the original program and modified it to suit my needs in the database. Many thanks to Steve Gaiden of Eugene, ACL, the author of the original routine. Here is a brief description of what I have done.

Line 28 is modified to include the line number for the Date Sort subroutine described below and sets the variable FL to the length of one record.

Lines 301 to 3036 set up the menu screen for the sort. I have chosen to provide sorts based on Surname, Forename and Date.

Lines 3036 to 3056 get the value of the keypress and apply an offset OFF depending on the selection. If a valid selection is not made the program jumps back to 3002 and restarts the selection process. The offset is the distance into the record at which the field we wish to sort on starts. If we wished to sort by Forename OFF would be 220 as Forename is the first field of each record.

I have included the sort by date on it is a special case, the conventionally with the date in the form day, month, year (or DDMMYY for short), but if we sort this as it stands the day will be given higher priority than the year so that, for example, 2000-11 is considered to be greater than 1981-02. The result of such a sort would be very confusing to say the least. This is why there is a GOSUB to the subroutines listed in line 3024 before the main sort starts.

Lines 3056 to 3068 are the sort itself. I will not try to talk you through this as it is fairly complex, you will have to get a book

on sort theory from your library if you are interested. It is easier to believe if you remove all the OFFs on if the sort is being done on the whole record, not on individual fields within the record. **Line 3110** goes to Dataset again so the date field is switched back to its normal order before line 3120 returns to the main menu.

INSTRUCTIONS

Lines 11500 to 11576 contain the instructions. I will not dwell on this as they are straight text strings resulting in two screens of instructions. At the end of each screen a GOSUB 8433PPROD is put in so that the instructions stop on screen until a key is pressed.

DATE SORT

As I mentioned above the most significant part of the date must come first in order to sort the date logically - that means that the year must be first, then the month and finally the day of the month. The short subroutines DateSort1 assumes each record in turn and takes the date in the conventional form DDMMYY and swaps the first two digits with the last two to give YMMDDYY. When writing is complete DateSort1 is used again to put the date back to normal.

PRINTING TO TAPE

I must now clear up a mistake I made back in lines 28 when I said 'for some record strings that use INPUT from tape pick up 10 spaces in front'. The reason there were 10 spaces in front was because I put there three clearing the new data routine! Look at line 2880 it reads "F #LST" and in a print statement a control means "tab" and the default value of the tab is 10 spaces. So, if the line is changed to F #LST there will not be 10 spaces in the front of every record.

If you make this change you must also change line 2870 in the load subroutines to read INPUT #1,DEL; DATE\$(1)*15-11-0485. Be careful if you are making these changes and note that any data recorded with the old program will be incompatible with the new - it will not register correctly with the fields of the database because the blank spaces will not be stripped off during the loading process.

Many thanks to Knodd Sand in Norway for identifying my mistake and taking the trouble to write and inform me.

DEVELOPING THE PROGRAM

a. Crash Proofing - I have kept the program fairly simple with the result that it is certainly not fully crash proof. Crash proofing can be quite complicated and the appropriate programming will occupy material that is better devoted to data. However there is

```

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one area in which a little extra protection is really inserted that is the program subroutines. This routine is used many times by the program and it would be easy to insert a line or two which ensure that the keyboard is set to upper case and normal rather than inverse characters. This will eliminate quite a bit of potential trouble. I received keyboard input in some detail back in Page 4 issue 10 (January/February 1988) if you need guidance.

In the All Free Memory - I do not know how many addresses the average person needs to keep track of, but there will always be a need to fit in just one more. I have set up for 100 in the initialization statement at line 1000, but this can be increased quite easily, all that need be done is to increase the size of DATE, key, but there is a snag - if you make it too big the computer's memory will be insufficient and the program will crash - probably with an error 2,3 or 8. An easy way to check how much spare memory you have with your specific hardware configuration is to insert a temporary value line 45 as follows: 45 999995100

When you run your program this comes after the initialization subroutines in which all strings are dimensioned. It will stop the program and print a value equal to the free memory. Most of this memory can be added to DATE, but leave a little for the variables which are introduced later in the program (there are several in the sub subroutines for instance). Don't forget to delete line 45 when you have finished with it or your program will stop here every time.

Find Some Extra Memory - If you wish to aggrandize your memory for a few more months you can delete all the DIM statements from the program without changing its operation in

any way. I advise you to keep one back-up copy with the ROMs in the future whenever any programs without comments are made more difficult to follow when you want to get it and change them. You can also delete the instructions. Another way of saving memory is to put several statements on one program line - again this makes the program less readable, and it must be done carefully or you may inadvertently remove a line which is referenced elsewhere in the program, but quite a bit of memory can be saved. Do not combine lines with IF in them or you will probably change the logic.

If you are a fortunate disk user there is a utility on Page 6 library disk #7 called "Compact" which will copy out much of this memory saving for you automatically.

A Further Enhancement - I know of one young man who is working on a program which uses the joystick instead of the cursor keys to point to the various selections and menus of a database, and I look forward to seeing the end result.

Essentially I am thinking of developing the program for disk use, and rewriting it in Turbo Basic for speed and readability.

There must be many other ways that it can be enhanced and many applications other than an address list that it can be modified for. Please let me know of the developments you make. Write to me also if you have problems with the program, but please be as specific as possible and include return postage - send your whole cassette if you wish, I will return it.

My address is: Ian Finlayson, 60 Roundstone Crescent, East Preston, West Sussex BN16 6PQ.



HOW TO BEAT THE HEDGEHOG

Proving the point that there's always someone out there who can help a fellow Atarier, along comes Mark Standing of Westbury, White with an answer to Karen Pryor's plea (in issue 25) for help on **SPIKY HARROD** ... JUMP from the FAR LEFT of the screen onto the line wall, as the WALK flies to the RIGHT. Then, when the WALK flies to the LEFT quickly JUMP onto the higher top wall. As the WALK returns JUMP straight UP then JUMP to the RIGHT as the second BUG goes DOWN; then go RIGHT ... you are now in Screen 2!

Another answer for Karen was missed out of the last issue - 'how the Id-chopping it out really' - when he wanted help on **MENIN 2499 ER**, here's that missing answer ... And the game there go to a 'safe' place (Screen 1, Type 2) (Hippocri-TRIPPOCALOCCI then press SHFT and 1 to 0, 1 = Level 1, 0 = Level 10, Am I helping?)

CHEATS AND PASSWORDS!

Let's have it, most of us like to cheat once in while don't we? Michael Wood of Stockport has sent in this bundle of tips for all sorts of games so anyone who is stuck on this lot can dig out those games and try again. First off is **GHOSTCHASER**. If you type TANDA, you will have extra lives and be able to cheat on the next level. In **DONKEY KONG JR**, holding SHFT and typing BOKGA will get you in cheat mode. Now press K and the cheat won't be able to kill you! Press 3 to move to the next screen. Getting Invincible can copy their points score forward to **LEADERBOARD** by pressing OPTION to leave the game and go on to the next course.

Send from Michael

The Keep Walkman Personal Hi-Fi provided in the last issue should be right up to Gary Francis for his solution to the cheat Crystal but you might want to see if this is so we are sending it instead to Michael Wood for his bundle of tips. I'll trust the Editor about the keyboard to try and get this to read something else to Gary?

The bad loss of crazy suggestions about what to give away in this column like bikes, expensive sports equipment and golf clubs! Come on gamers, do you know how much these things cost? Just to show that The Tipster is not mean, next time we will go easy and give away a **HERBARIUM 12121800004** like Dany Louckart drives in Belgium! Yay and we'll even show in the glid! Get writing, you never know how lucky you might be!

Thank you everybody for your continuing support for your fellow Atari gamers and your superb efforts in supplying me with valuable information and maps. I must point out that it would not be right for me to publish maps from other sources - ORIGINAL WORK ONLY PLEASE - but they are useful for reference (sometimes) We try to maintain a balance between old and recent games as we also try to give a fair share of all types of games. This input relies solely on readers' requests and contributions to keep it coming!

I'm particularly pleased (and intensely grateful) to hear from Gary Francis at last. His map and solution to **THE BLUE CRITICAL** will prove invaluable to many readers. Here we go!

How about some passwords? You should play the games through really and find these out yourself but we won't tell your friends that you cheated. In **WHEELIN'ND** the password is **IMANTHEHONKEDUAL**. In **STARQUAKE** there are a number of passwords for the various levels - TRIANO - ARTIC - DELTA - KIRMS - ARDON - QUARE - WHOLE - SAJCO - ATARI - PENTA - CRASH - ZAP - MENIS - COBIL - GAIKO - BACON. When do they think all these up? Finally from Michael, the password for **PHARAOH'S CURSE** is **SINOTOP**. Get those games out again and see how far you can get this time!

William Soter of Rome appears to be an Adventurer who has discovered some interesting secrets. If you have the original 'break4' version of **PRICE OF MAGIC** (and haven't known the cheat thing away out of frustration?) you can gain a big advantage when you die, just enter **RESTORE** and when the Level6 screen appears simply type in the wrong code 3 times for the game to restart from where you died, only now you will have 240 treasure points and retain your equipment! If you are having problems getting powered in **GAUNTLET** try taking a look at the food before you pick it up. If it has a **SQUARE** on it then it is fine but a **TRIANGLE** indicates poison!

Here's one more with **F15 STRIKE EAGLE** can happily fly along without any fuel by turning the F15 into a sort of glider with power (and power) powers!). If you realize that you have mis-managed your fuel and have run out, just press A and from there on you can happily fly along on fuel air! On a totally different tack try this one in **CRYSTAL BARRER**. When you start the game, hold down the FIRE button and press CLASH. You will become invulnerable! These tips come from Nicholas Harrington of Newport Pagnell who also sent in a couple of SE tips. The password for the 2nd level in **PREDATOR 011** is **EMOLA CRY** ... Yes, I know Nick, it WAS the name of the American tankier that dropped one on our oriental adventures to WW2! It's also the title of one of my favourite CMD numbered tracks in **R-TYPE 011**, when prompted to **SCORE 0008**, press HELP and type ME then press UP-ARROW to activate the cheat mode. Function Keys 1-4 give invulnerability, ability to fly through walls, 99 credits or mouse control respectively!

ATARI On the option screen enter 00001111 then press SPACE to activate the cheat mode.

Thanks to the Cable News contribution to the Atari World

magazine for the Atari World

The Dark Crystal

THE MAP AND SOLUTION FROM GARRY FRANCIS

Some hints first, see if you can complete the game without checking out the full solution.

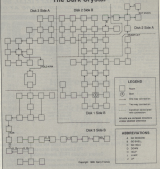
If you're using a printed copy of the game, then you don't always need to finish it anyway! Get an original copy, as the documentation has some valuable background info. After reading the background info try and see the movie for the video. Only then will you be adequately prepared to solve the game!

There are lots of hints hidden within the game, but knowing that they exist is finding them is not necessarily easy. In particular, make sure that you:

- (1) Talk to Uss before he dies to find out what the ritual is!
- (2) Study the spiral under the moss to find the answer to the riddle!
- (3) Listen or talk to the leech to see what it's talking about!
- (4) Examine the hieroglyphics in the ruins to find out about two objects you need, a special ability of Gira, & a place you need to go and a symbol you need to enter it.
- (5) Examine the statues in the valley of the stones to find you're one of the above objects!
- (6) Use that object to correctly identify the shard.

In the early parts of the game, you may be attacked by the Guardians at random intervals. If this happens, either move away immediately (N, E, S, W, RUN/ESCAPE) or drop one of the snake skulls at it. (You'll find these in the pouch under the Double shell). You can also prevent the attacks happening in the first place, as each skull is prevented by the appearance of a crystal ball. If you fill the ball by stopping a goblet on it, the attack will not occur!

The Dark Crystal



THE MAP ▲ THE SOLUTION ▼

The following solution includes the steps necessary to find the hints, but once known, the game can be solved without them. In fact, even though the game covers 3 disk sides, it can be solved in only 60 moves!

- LOOK - W - W - W - N - TALK URSS - S - E - E - E - E - GET SMALLE - N - W - W - DIS - GET FLUTE - N - N - CUT LILY - E - LISTEN BROOK - GET PEBBLES - N - (Insert Disk 2, Side A) - N - SET - N - (Insert Disk 2, Side B) - GET MOSS - SPIRAL SPIRAL - S - (Insert Disk 2, Side A) - S - E - GET BLIND - S - (Insert Disk 1, Side B) - E - E - N - N - FLIRT LILY - (Insert Disk 2, Side A) - N - E - LOOK - LOOK - LOOK - LOOK - HELP - YES - DAY MOON - LOOK SHARD - PLAY FLUTE - GET BLUE - GO WINDOW - S - W - HELP - (Insert Disk 1, Side B) - TURN SHELL - GET POUCH - GO SHELL - W - W - W - RIDE LANDSTINGERS - W - W - W - (Insert Disk 2, Side A) - W - W - S - S - W - JUMP - HOLD RINA - E - SEND PHOTO - THROUGH GATE - LOOK - UNLOCK GATE - OPEN GATE - S - (Insert Disk 2, Side B) - W - S - W - LOOK - S - MOVE - GO HOLE - UP - WRITE ALPHABET - E - S - W - E - E - GO CURTAIN - N - S - W - GET SCYPTER - S - E - E - USE HOOK - E - W - E - JUMP - NO - FIX CRYSTAL - KISS RINA.

LOTS OF HELP NEEDED

Quite a lot of appeals this time for specific games. Can you help with any of these?

Michael Wood who gave us a lot of tips would like some to help in return. **ESCAPE FROM TRAAM** has been fixed and he would also like the password for the first 2 of **SAVAGE ISLAND**.

Why don't you just complete Part 1, Michael? Andrew C. Thompson would appreciate 1 Map of **CHIMERA**, information on the full version of **DESMOND'S DUNGEON** help with Level 11 of **DESMOND'S DUNGEON** and also the start code for **SAVAGE ISLAND PL2**. Can we help Escrow Blackwell progress through **DRUM** (Harbort)?

Dean Chadwick would like to be made beyond Level 2 of Red Kat's **CRUMBLE'S CRISIS** (what's James Gilbert just waste to share with **JET SET WILLY**). James Gilbert is having character problems in **S.P.A.T.** (what's **ACE OF ACES**), is proving a pain for Andrew Filly. After each game ends he is returned to the State Space to learn his cause of death, etc. Is there any way of returning the game without having to re-enter the solution loading one?

That's a whole lot to work on but we have 'em all - adventure, puzzle, flight etc, anything you fancy. Please send any answers, hints or tips to **THE TIPSTER, NEW ATARI USER, P.O. BOX 34, STAFFORD, ST16 1BR** so I can publish your response in these pages - that way a few other punters might benefit if they are experiencing similar problems, but were afraid to ask.

A TIPSTER EXCLUSIVE!

Every reader sending in NEW ideas, tips, cheats, maps etc. to **THE TIPSTER** will receive an EXCLUSIVE TIPSTER badge!

There is no other way you can get one of these badges so get writing now. Share your discoveries with all your fellow Atarists.



K-TYPE

K-Type is game designed to help you improve your skills in touch typing. It is an alphabetical version of "space invaders". Letters drop from the top of the screen and must be "sopped" before they hit the ground. Each letter caught remains the player's with 10 points. A wrong letter typed subtracts 50 points from the score. Each letter falls faster the preceding one. If a letter hits the ground before a key is typed then the game ends.

You will probably find it quite difficult at first especially if you need to look at the keys rather than the screen but after a while you will begin to remember where each of the keys are. Try out to use just one finger for each letter. If you rest your fingers on the keys ASDF for the left hand and JKL; for the right you will find that the right fingers will reach for the appropriate keys almost naturally. Remember the object is not to get the highest score but to improve your typing skills. If you stick at it you should find a noticeable improvement. Good luck.

Thanks any day to Calman Newton who suggested improvements from a reviewer point of view.



Improve your typing skills with this challenging typing tutor by Gareth Martin

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01 1 000 *****
02 0 000 0 0-TYPE 0
03 0 000 0 00 0
04 0 000 0 Gareth Martin 0
05 0 000 0 *****
06 7 000 0 000 01000 0000 - 000000 00 0
07 0 000 *****
08 0 000
09 70 0000 000,01000 000,01000 000,000
10000 000,000,0000 00,01000 011000,000
101000
11 00 0070 0000
12 70 000 00 00-007000 00
13 000 000 00 0000000 101 00
14 010 0010000 100
15 000 0000 0
16 000 00 000 0000 0000 100
17 000 000 000 0 0
18 000 0000 0
19 000 0000 100
20 000 0000 1,0,0,000,000,000,000,000,000
21 000 0000 0,0,0,000,000,000,000,000,000
22 010 0000 000
23 000 0000 000,0000000 101,010000 00,
010000 000,01010000 010,010000 000,1
24 000 0000 000,0000000 1010
25 000 0000 000,000000 0000,000000 10,
000000 0000,00
26 000 00000 0,001,10,0010000 1,000,00,1
01000 0000 00 1000000 00
27 000 00000 0,100,10,00000 0000 00 0000
001 00
28 000 00000 0,001,10,100000 0010 0000
001 00
29 000 00000 0,000,00,000000 0000 0000
0000 00
30 000 00000 0,100,10,1010000 1,00,10,00
01000 0000 00 1000000 00
31 000 00000 0,0,0,0100000 1,0,0,0

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TALES OF JOLLY JACK

Welcome to the Black Lamp. The Black Lamp being the story of Jack - Jolly Jack the Justice hero of this medieval mission of daring and romance. His courageous crusade through ratic landscapes and Gothic interiors, the audacious quest to rid a kingdom of evil - where the reward for success is the hand of a Princess and the price of failure is death! And to begin the elegantly worded and highly enjoyable story of BLACK LAMP, a game starts off which should be well known to anyone who's purchased an ill Super Famicom recently. There's a whole lot

more to read in the super time booklet accompanying the welcome 8-bit conversion by AGI Corp. It tells of Jack's quest to prove his worth to the King so that he can marry the Royal Highness Princess Oriole, a daring exploration of a vast kingdom in an effort to return a missing set of magic lamps to their rightful place in the loomn capovers. The lamps are scattered by and wide throughout the kingdom of Almond, but the black lamp is special - it is guarded closely by that most fearsome of enemies, the Dragon! A superb piece of music welcomes you to the last paced arcade adventure, and is soon followed by the feel in a series of heavily talented levels. Scenes are a mixture of indoor and outdoor settings inside scenes consist of individual elements which flip for replacement when necessary whereas outdoor locations

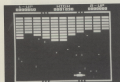


scroll horizontally as Jack passes through them. Indoor scenes may contain such features as chases, battles, foodies, items and platforms for Jack to negotiate. Possible exits may be left or right, up, down or even in and out from your current position - rearranging the vast complex won't be easy, but you are allowed to persist!

Jack must avoid or fight a variety of monsters on his travels but to help him there are various bonus objects and food parcels to collect along the way. Thanks to the skills

of Montecarlo, Jack has five lives which are governed by his level of remaining energy. Subsequent games become progressively more difficult and no two are ever identical as the positioning of items, bonuses and bonus objects is completely random. Perhaps it's a little too late in Alan's history for BLACK LAMP to become a massive shot hit but it certainly deserves a great deal of support for it is truly an enthralling product, worthy of the highest possible accolades. I highly recommend it.

Title: BLACK LAMP
Publisher: AGI Corp.
Price: \$19.99 on cassette
Pages: 1
Control: Joystick
Reviewed by: Paul Dixon



The balls, the ball and the ball - three essential ingredients of a game concept that is central as old as Atari itself. First introduced in 8-bit form on the VIC, Breakout reinvented commercially unrestricted and imagine released that decade conversion of Ataridoc - a game-acted second best of 1987 by PAGE 5 releases. Some two years later, Ataridoc have now decided to provide Alan games with CRACKUP - a budget priced version of precisely the same thing - well, almost. In something of a break from tra-

dition, the use of paddle control is no longer included as an option. Ball news for the half-dozen players who actually own them! For those lesser Ataridoc who might be wondering what the game is all about, Breakout - or should I say Crack-Up - is all to do with trapping screens of bricks! A tiny ball takes care of the actual destruction as it bounces around the screen, colliding with the bricks and rebounding off at three pre-set angles. Your job is to manipulate a ball across the fourth, open boundary so as to prevent the

BALLS BRICKS AND BATS

ball from bouncing out of play.

Naturally it's not quite as easy as it sounds, with variations in speed, indestructible bricks and a variety of wall configurations to contend with. Added interest is provided by a series of symbolic capsules that frequently float towards you after a brick has been eliminated. Catch the appropriate symbol and you may find yourself with an extra life, a loss-scoped ball or indeed any one of seven special goodies that players of Ataridoc will be familiar with. A full 8-bit mode is included, all though unfortunately there isn't an about game facility so if you make the wrong selection, you will have to wait for each of your five lives to deplete (and later swapping the control over if you don't already have one plugged into port 2).

Graphics are generally

pleasant without being anything spectacular, a scrolling viewpoint forming the background scenery and the bricks brightly painted in a wide range of colours. Sound effects are also well-realized, providing your monitor with the ability to turn down the volume.

Although not outstanding in any respect, Crack-Up is a reasonable budget offering that should certainly appeal to anyone looking for an up-to-date version of Breakout, especially if they don't want to spend a lot more money for the somewhat superior quality of Ataridoc.

Title: CRACK UP
Publisher: Ataridoc Software
Price: \$1.99 on cassette
Pages: 1/2
Control: Joystick
Reviewed by: Paul Dixon

SPORTS IN SPACE

What do you get if you cross a sports simulation with a lights-craft and a lunar landscape? The answer, it seems, is CYGNUS II, a game that leaves more than a passing resemblance to the all-stars in Atari's Aster Events - perhaps not entirely surprising when you learn that Atari were originally to have released the game until a decision was made to pass it on to Atari.

As the galaxy's most renowned fighting ace, your aim is to defeat the evil Emperor of Cygnus who apparently has plans to launch an offensive

against the Earth, using it as a stepping stone to eventual galactic supremacy. To accomplish this dangerous task you must first attack a city complex on the planet Alpha Omega, then disable the industrial plant on Gamma Cygnus and the power station on Beta Cygnus before a final assault on the imperial planet of Cygnus II and ultimately, the Emperor's palace. Flying ferociously across a series of thirty-two levels - over four locations - you must deal the distances, avoid mines and meet importantly of all, attempts to conserve your extremely limited supply of fuel.

From the screen shot above you will see that the background graphics are very impressive, consisting of a superbly designed 'Cygnus' landscape in the same artistic style as those featured in Aster Events, (shooting in the lower portion of the screen



gives a feeling of distance, whilst forward movement is suggested by energy losses which grow in size as you approach them in your fighter craft.

Despite of the pretty scenery it hard to say that Cygnus II doesn't score highly when it comes to the playability department. Such is the ridiculous fuel consumption of your ship that you can hardly afford to shoot at any enemies and are forced to concentrate solely on steering if through the energy losses which marginally increase

your supplies. Trouble is, the quantity of incoming enemies is so great that they're almost impossible to avoid, and if it's no time of it before you run out of fuel and have to start the game again from scratch. There are no second chances. Overall, Cygnus II suffers from looking much better of first sight than it actually plays. It seems as though nothing much has changed when it comes to Atari's pricing policy - if you want a top quality game then you're going to have to pay for it!

Title: CYGNUS II
Publisher: Atari Corp.
Price: \$1.99 on cassette
Players: 1
Control: Joystick
Reviewed by: Paul Swan



BACK IN THE WILD WEST

The wild west is of its old dear. Authors, authors, have taken over a town and taken the deeds of the famous lawbreaker's exploits. Now reason, or county Sheriff, is to return the deed and bring the baddest to justice. Well, that's all according to the plot of GUNFIRE-It's only-well! For once, it goes to read the few lines of text printed on the cassette entry as you may otherwise fail to notice that the game requires a joystick plugged into the second cartridge port - not the first. A confusing anomaly!

Incidentally, the Sheriff's job is to patrol the various streets and public buildings of the nameless town in the hope of capturing deeds or badguys. If you uncover a deed - or indeed a yellow brick, which is apparently the same thing - you are rewarded with a cash bonus and informed of the number remaining to be found. Stumble across a badde and you have to be lightning quick on the trigger in order to transform him into an IRP-enveloped grove hybrid before he does the same to you! You can only carry six bullets simultaneously

but additional's bullets can be obtained from the Sheriff's office when required. The Doc is the man to visit if you want an extra life - but only if you have amassed at least 1000 to pay for one!

Graphics are designed to give the appearance of a cheap, dominated by a large red curtain that is used to reveal the various locations in a central portion of the screen. Underneath is a 'telegram' pane where messages are displayed informing you of the whereabouts of baddees and of the number of deeds remaining to be found.

Although the background scenery is reasonably decent in three colours - red, blue and yellow, the Sheriff himself is poorly defined and animated. As for the sound, it's badly of the appalling nature that we've grown to associate with the Atlanta Software songs. Competing Gunfighter is

quite into consuming due to the frustratingly slow rate of movement of the Sheriff, but so far so challenging. Even when you have collected all twenty deeds, the game simply continues with an unappealing 'you've saved the town' message and a further set of deeds to collect. Hardly much of an incentive to continue playing.

Honestly can't find anything very positive to say about Gunfighter. Although young children may enjoy exposing the various buildings, I think that anyone hoping for long term entertainment would be quite disappointed.

Title: GUNFIRE
Publisher: Atlanta Software
Price: \$1.99 on cassette
Players: 1
Control: Joystick
Reviewed by: Paul Swan

SOMETHING RATHER UNIQUE

Unique is a word that can rarely be applied to computer games nowadays but I'm tempted to use it to describe the new Atari Corp. release by Morthie Corp., creator of Twilight Zone and Crystal Baller. **SINGSTAR** could be described as a sort of cross between golf and pinball, with control throughout being repeated via an arrow shaped pointer which is "locked" to make selections - as if using a mouse.

Over a course of ten screens, your objective is to shoot a small ball over several raised targets in the least number of

shots. You have command over the direction, power and electrical charge of the ball - the latter selection is necessary because each screen contains a number of static charges, and applying the laws of physics you are required to decide how best to utilize each screen's individual layout. Initially you may offer a variety of parameters - these include the level of charge, your height, method of scoring and the number of points to use.

Click the "play game" option and the screen changes to the Singstar game comprising of goals, slopes, friction banks, auction tubes and over ten other special features. After placing the ball in the starting zone, you will be prompted to take a shot. This involves moving the arrow to a point you wish the ball to travel through before selecting the desired power level. If it then a case of



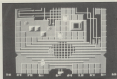
watching, finger crossed, to see if you made the right choice!

There are ten screens to a course and new courses may be loaded from cassette - an additional one is included after the main program ends if you don't fancy any of those provided simply flip over the tape and you'll find the Singstar Constitution list, a separate program that you can use to construct and save as many new courses as desired. Subject to certain limits of quantity you can use any of the game elements and choose the colour from a grid of 256. You can also load a

previously stored course for editing. The instructions suggest the possibility of saving screens to disk but it appears that this option has in fact been removed from the program itself - a pity.

There is no music to Singstar that is impossible to down anything in a short review. Graphics and sound are both excellent and playability is another of Atari's great strengths. If you're looking for something a bit different that requires skill and judgement rather than super fast reflexes then you need look no further than Singstar - it's great!

Title: SINGSTAR
Publisher: Atari Corp.
Price: £7.99 on cassette
Players: 1/2
Control: Joystick
Reviewed by: Paul Ryan



It really is pleasing to confirm the reality of Atari's new-found commitment to 8-bit products. Yes, there really is a healthy new range of software to back up the printers and Atari enthusiasts everywhere should be salting oil to their cores awaiting new games. **SPACE HAWK** is the first release produced for Atari by Avanti Developments, who were also responsible for the excellent Tiger Attack reviewed in issue 28. Apart from cosmetic differences, the two games are virtually quite similar.

The main card folks of Space Hawk are gathering strength to launch an attack on the big winks of Intertec. It appears that you are the only one with sufficient wit and courage to tackle the intricate defence systems of the Probe Mothership and to destroy the mutant guardian who protects the fleet of space craft.

Whenever the word "Mothership" comes up in a game description it's usually a signal to prepare for a tedious chase and Space Hawk is no exception to the rule. If you're another

TOP NOTCH SHOOT 'EM UP

vertically scrolling 'ty over the Mothership chasing everything in sight" type of game and, in common with Thunderfox, Miss Force, Jelly-Head and various other shoot 'em ups in the same mould, is definitely not intended for the absolute beginner. One false move and an alien craft will transform you into a puff of space dust, quicker than it takes to look around an Atari Games Centre! If you're lucky, the debris of a dying fighter craft may score behind a power pill which may be used to your advantage. Simply fly over the capsule and you can obtain, among a variety of goodies, an increase in shield strength or an additional life. Once you reach the Mothership's command centre you must aim a cannon ball of laser fire at the mutant guardian to ultimately win the battle - or at least, that's what it says on the packaging!

Space Hawk is presented with all the graphical expertise that was prevalent in Tiger Attack - smooth vertical scrolling, well-defined power and health scoring. The distinctive style of programming extends not only to the graphical aspects but to the musical effects as well.

If you're not convinced with originality and can afford the higher price of Atari's software you will undoubtedly be pleased with the purchase of Space Hawk. It's a straightforward, uncomplicated but unquestionably top-notch shoot 'em up.

Title: SPACE HAWK
Publisher: Atari Corp.
Price: £3.99 cassette
Players: 1/2
Control: Joystick
Reviewed by: Paul Ryan

SUNARO



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ATARI

Mark Hutchinson's RANDOM NOTES

APOLOGIES ...

First of all I want to apologise to all those people who use tapes. My trusty 800, bought way back around 1980, has been dead for a couple of years and I really cannot see myself replacing it now. So, please do not send me tapes, I cannot handle them. I am quite willing to let you have some examples or realises to help explain programming techniques if you send me a disk, but not commercial stuff. Please do not ask!

I still get quite a lot of letters from readers asking for help but the content has changed dramatically from the time when I was writing the 'First Steps' column. At that time I was helping out beginners to AT&T Basic, now I am being asked about commercial software. Any software items I have for the 8-bit I have had for some years. For instance, I use STAMPMASTER PLUS and nothing else. I am very happy with it so it does all I ever want it to do in word processing. I have no idea about other word processors. I never have time to use a spreadsheet, a camera package etc, believe it or not, so I have need of a database. Much so I hate to disappoint all those people who are looking for enlightenment I only can state that you would receive help with Basic programming. I must also add that I am completely unable a soldering iron but I know very little these days about electronic circuitry, so nothing technical please.

Having made one apology I will just as happily make another for the past couple of weeks I have been in the north of England, all thoughts of writing gone from my head. Some people have had to wait a little while longer for an answer but if you have e-mailed on LAL you will get a reply.

AND AGAIN!

Ah well, third time lucky, I have to say sorry for my replies about the 80801 drive. Never having tried one (my 800 and 1000 are still going strong!) I had supposed that the advertisement was correct and it was just wrong usage that caused the problem, but it seems that the supplied DOS does not do all it should.

Mitch Intellikon writes to me a few days ago to say that he had purchased MPDOS to try with his new SE. Maybe you remember Mitch's letter in issue 88? He was advised to get DOS SE which has not been seen over here (yet has been selling for about two years) but to try MPDOS if he could find it. After formatting a disk he found it to have 1000 sectors! Has anyone been able to use this disk drive as advertised? If so, do please write and let us know. I totally agree with Mitch that, if this drive and its associated DOS does not do what is advertised then proceedings should be taken against the advertiser. Perhaps the advertiser would care to give his comments to us as well so that I can tell users where they are going wrong.

Is this another AT&T cock-up? Am I then becoming disillusioned with the Telematic dynasty? When was the last time you heard from Jack? When was the last time you heard from AS&S UK ever? Is it all a nightmare?

MORE THAN GAMES

For (in my humble opinion) the best (printed) AT&T magazine going, why is it that the IT section is comprised mainly of games reviews? I am the first to admit that I do not program on my IT but many people do. If you do not believe me then just look at the amount of material in the PAGE 4 SE Public Domain collection. In the last issue there were 23 pages in this section and the only item of interest to me was a two page article on BASIC. I have read other magazines that have programming articles with long listings, no commenting and working on the intricate parts of the computer that most readers don't but there can many different levels of programmer, and I have yet to see an article for the person who has bought the IT as their first ever computer.

So my stated the biggest error AGP made was to bring out a computer without a built-in Basic, but think, the Basic could be on a chip which could be upgraded and could be installed in or out of use. This option is still totally feasible via the cartridge slot, but to make any sense of having a single standard SE Basic AGP would have to supply the cartridges of need to be sold and release a new 806. Don't hold your breath!

THE SHOWS

I had heard certain complaints that the London AT&T shows had been taken over by the 16-bit vendors so I made a point of noting the availability of 8-bit articles at the last show. I only found five stands with 8-bit items (not counting stands such as PAGE 4). Some of these stands even had VCR items. I was really surprised at the low price (compared to the last, admittedly, they was mostly for the SE). Hopefully the number will increase at the alternative show in November, but how many people will come to the Midlands from the South? Will you be there to support PAGE 4 Publishing and other 8-bit retailers? We cannot print all letters but we would like to have your opinion on this matter.

Well, that is it for now. Hopefully by the end of the summer things will have brightened up on the computer scene.

ADDENDUM

Just as I finished this article a letter arrived from Jim Carter to say that he was SUPERDOS 3.5 which can be configured to the 8081 (he also recommends SPARTANOS 3 for the moment). Cherry Boulton's letter did not go into the 'Black Hole', letters from Tony Garbett and A.L. Mervin (like to hear from you again Jeffrey) go to the Editor for reasons given above.

Write to me, Mark Hutchinson, at:
1 Hollymount, Finaghy, Belfast, BT10 9GL

HEAD IN THE CLOUDS

THE SUBLOGIC STORY

The scene is the University of Illinois, sometime in the early 1970's. A young student called Bruce Artwick is studying for a degree in computer engineering, and his friend, Stu Holmstrom, is pursuing a course in marketing. Stu is paying his way through university by working on a flying instructor at the university airport, and, in one of those serendipitous twists of fate, eventually teaches Bruce to fly.

At this time Bruce was developing a microprocessor based 3D graphics package as part of his Master's thesis. Although Bruce's final aim in the thesis, his tool were firmly on the ground as he planned to further develop the package into a saleable product, and with Stu's help, to market it.

By 1977 Bruce had the package ready, and together they produced and sold it from a cottage owned by Stu's family. Sublogic was in business! One small snag - this was 12 years ago and the home-computer hadn't really yet been invented. Bruce's package was designed to run on the MM000 microprocessor, then just beginning to appear in household name parts like, so sales were very low in comparison to today's levels. However, the situation was to change shortly after with the arrival of the 6502 chip, the basis of many home computer models.

Given the two friends' passion for flying it seemed only natural that Bruce's talent in 3D graphics manipulation should be channelled into a flight simulation program. In 1979 they launched Flight Simulator for an exciting new microcomputer called the Apple II, which amazingly offered graphics in FOUR colours (including black). The Apple II

was a great success and it soon became apparent that a new market for software was emerging, and Bruce and Stu had a unique product to offer. John Monson and the fledgling Sublogic company began taking an extra staff to handle the volume and to develop new products.

TAKE OFF!

By 1980 Sublogic had a staff of seven full time employees, and Bruce was maintaining a brand new project. A little known company called Microsoft had called him to convert his simulator to run on an as yet unknown machine called the IBM Personal Computer, for which Microsoft were producing the operating system. They thought it would make an excellent demonstration of the machine's graphics capabilities, and agreed to market the new version under licence from Sublogic, along with their other IBM PC products.

The IBM PC was an instant runaway success, and Bruce's beachhead now being marketed on the Microsoft Flight Simulator became a huge seller. Not only did it capture hearts for its revolutionary 3D graphics, but it became the standard test of IBM compatibility on the dozens of different copycat clone PCs which flooded the market created by IBM. It was great publicity for IBM and Microsoft, but nobody really noticed Sublogic, who were the real brains behind it.

At around this time true home computers were appearing in quantity. Atari's original 400 and 800 machines were selling well, along with several others, and Sublogic pitched in to capitalise on this new market. They pushed these machines to the limit by bringing out an improved version of Flight Simulator for them, named (in a bath of inspired originality) Flight Simulator II (FSII). It was this program running on a 485 Atari 400 which led to my hapless addition to flight simulation programs, and later writing for Page 4. The program impressed me so much I felt I had to tell the Atari world about it, and my first ever magazine article, a review of FSII, was published in issue 21.

In typically innovative fashion Sublogic had designed FSII to use an extensible database of 3D scenery. The basic program was packaged with scenery data covering wide areas around New York, Chicago, Seattle, and Los Angeles. In 1980 they began releasing separate scenery disks to supplement this, with six disks covering the western half of the USA appearing in several computer formats including Atari 8-bit. Regrettably, I've never seen Atari versions on sale in the UK, and they're not easy to find in the USA even. Another six covering the Eastern half of the USA were planned, but I suspect they never materialised in Atari 8-bit format.



Dr. Monson - Chairman of Sublogic and former flying instructor

HIGH SPEED CRUISE

Also in 1983 Sublogic produced a brand new simulator - jet. This was launched on the IBM PC as a 'fun' flight simulator in contrast to the obsessive completeness of IS2, and was more of a game than a serious simulation program. It portrayed two aircraft types, the lead based F-16 Fighting Falcon and the center based F-18 Hornet. Jet was designed to be compatible with the scenery disks, which meant you could now explore the vast areas they depicted (cruising at 3000 knots instead of the leisurely 100 knots of the Cosmos or Piper light aircraft simulated in the earlier products. Although this program subsequently appeared on other computers, it never made it onto the Atari 8-bit machines.

One year later Sublogic launched another blockbuster product, their best yet. It was the third generation of Flight Simulation, designed to run on the Motorola 68000 microprocessor as found in the new generations of personal computers such as the Atari ST, Apple Macintosh, and Commodore Amiga. The increase in processing and graphics power of these machines enabled Sublogic to take a giant stride forward in terms of realism. Strangely though, they continued calling the new product Flight Simulation II even though it was far superior to previous versions. (See review in Issue 28.) Its extraordinary

capabilities, particularly in the graphics area, have clinched many on ST sets and helped boost the popularity of the machine in its early days.

Simultaneously, a specialised scenery design team headed by Mike Woodley and including Jerry Larve (enhanced beyond producing much improved scenery disks. The first of these were two so called 31AR disks, which did get released on the 8-bit Atari's. They covered part of Japan and the San Francisco area of California, and provided much greater detail than earlier disks. They included significantly more 3D features such as mountains, bridges, and buildings than before. (see review in Issue 28.) The San Francisco area scenery was further refined and incorporated into the ST version of IS2, taking pride of place as its leading default and demo flight.

A NEW LAUNCH

In 1986 Bruce and I decided that Sublogic needed to grow in new directions, and launched an associated company called Artisoft Corporation. This was to deal in simulation software which didn't have to comply with Sublogic's strict standards of innovation and realism, and could therefore be developed at lower cost and sold into the lower price market. In 1987 they released 'Up Perspective', a World War II submarine simulation, and 'Thunderdagger', a helicopter combat simulator - but again not in Atari format. True so, they sold over one million dollars worth of software in their first year.

More recently, Sublogic themselves have launched new products for the ST. These include four expert new scenery disks covering most new areas in the north and eastern USA, Japan, and Europe. Yes, you can now even fly round the UK and land at airports in

southern England! Also, three years after the original IBM version appeared, they've converted Jet onto the ST. Reviews of some of these products appear elsewhere in this issue.

CLIMBING TO NEW HEIGHTS

Flight Simulator III is now out on the IBM PC. This is really IS2 reworked for the PC, plus a few improvements such as additional aircraft types for you to fly (broken down in addition to the 'overcast' skies of IS2), the ability to leave smoke trails in the sky (as in the original Atari 8-bit version), and a night sky which includes stars - an recognisable constellation.

Total. There are rumours that there's an ST version in the offing, but at time of writing, Sublogic had's confirmed or denied this. If it's true and I can get my hands on a copy, you'll be the first to know!

Sublogic also intend to release a complete control yoke (plus rudder pedals) for use with their flight simulators. Now that really will be something, provided they make it look and feel realistic, and the software reacts realistically to it, of course. I don't doubt it will though, as Sublogic have an enviable reputation for quality and realism in their products.

Sublogic have come a long way since those early days at the university. Today, with around twenty five different versions of Flight Simulator behind them with combined sales of well over a million copies, they have much to be proud of, but it's not over yet - the project continues! Their dream is to create a flight simulator which is indistinguishable from the real thing, but turning dreams into reality can become a nightmare - especially in the hallowed world of home computing. Initially, they've been swamped king-of-homes-computer flight simulators, however there are now other companies occupying at their heels, particularly Spectrum Robotics and Digital Integration with their incredible F16 simulator. Rumour has it that Microsoft too can about to launch a spectacular new simulator for the ST. So Sublogic had better watch out.

But who can predict what the future will bring? If hardware development continues at its present breakneck pace I'm sure they'll by then be hard to fully exploit it, and eventually come close to realising their dream. Just think what they could do with a transparent, 68050, or 68450 based computer if these superquips ever get into widespread use!

Sublogic software has probably given me, along with many thousands of other Atari users, more pleasure than any other piece of software I own. Like flight simulators from the world over I've spent countless enjoyable hours with my head in the cockpit and fingers on the keys, exploring the simulated world Sublogic have created. I wish them every success in pursuit of their dream. I hope they find it.

by John S Davison

Flight Simulator II

SCENERY DISKS

There are now five scenery disks available as accessories for the ST version of Flight Simulator II and (as well as several available on the IBM), they're generally of the high quality seen in the San Francisco area included on the original FSII disk, and most of these introduce some unique new features. The main improvements are in two areas: there's now a 'generic' background which shows a post-forest post-office or hotel rather than the plain green of the other cities, and there's more 3D detail than before in the shape of buildings, bridges, and areas of special interest. The basic scenery is well covered, with most main roads, railways, rivers, lakes, and coastlines depicted so accurately you can actually identify them if you have suitably detailed maps. I find the Cotton Wood Area of the FSII disk for this. It's available at good discounts for 40-50% although the direction of the greatest growth works opposite, there aren't many well defined hills and mountain ranges, which is a great pity as I enjoy flying amongst the mountains.

All are supplied in the usual fashion, packaging containing a disk, a set of instruction maps for the areas covered, and a set of pre-printed 42 pages containing instructions on how to use the disk, plus plans and details of each airfield covered. The postcard folder pages with their maps are supplied, so you can fit all your scenery material together in a three-ring 42 binder, also available from Sublogic if required.

DISK 7
WASHINGTON TO MIAMI

This disk covers a FMSI area, from just below New York to the north, through every state on the east coast of the USA and right down to Key West at the extremity of the Florida Keys! It even covers the Bahamas, so you can put in some over-water flying hours. You can also do some really long flights, for example from Boston to the north (included on the original FSII disk), down through New York, then coast over onto this new disk and continue on down into Florida.

The area is split into four separate sections, each covered by its own map. There are full airports to visit in all, lots of towns with instrument Landing System equipped runways, and seven with ATIS radio communications. There are masses of VOR and NDB radio navigation beacons, far too many to read in full, so navigation is easy - even out in the Bahamas. In a bonus the documentation contains approach plates for ten major airports, allowing you to fly real instrument approach patterns just as in real life!

Detailed scenery showing buildings and other 3D structures is limited to several localized areas. In Washington DC you can see most of the famous landmarks including the White House, Capitol, Washington Museum, Lincoln Memorial, the Pentagon, and others. At Cape Canaveral you see the Shuttle on the launch pad, the Shuttle landing strip, the massive Vehicle Assembly Building, and a row of launch gantry towers. Finally there's Miami, represented by a few skyscrapers.

Overall, this is a terrific disk with enough in it to keep you busy for months!



reviewed by
John S Davison

DISK 11
LAKE HURON AND DETROIT

Once more a large area is covered, this time in the Great Lakes region and extending well up into Canada. It joins the Disk 7 area in the north west and its south east corner almost joins the north west corner of the New York area supplied on the original FSII disk, so again there's scope for very long flights. There are 84 new airfields, but this time only two are ILS and NDB equipped. VOR beacons are plentiful, but there are no NDBs this time.

Special 3D scenery details include Detroit's Ambassador bridge especially attractive at night, the massive buildings of the Renaissance Center, and Tiger Stadium. Pittsburgh has several interesting bridges and buildings, but the best view has to be the Niagara Falls. Detailed points can be made flying up the Niagara Canyon below the level of the surrounding land, THROUGH the Rainbow Bridge, past the American Falls and up and over the Horseshoe Falls, passing the Maysan tower as you climb away! Another interesting challenge is visiting the Love Jet at Johnsons, whose airport neither straddles a river nor runs north-south.

Other new features on this disk include other aircraft. You'll find gliders soaring in several locations and a lot of balloons (still near Canal Lake in Ohio). They don't actually move, but it's good to see you're not alone in the sky.

This is another good disk, it's worth buying just for the Niagara Falls scenery, but has much more to offer besides.

DISK 9

CHICAGO, ST. LOUIS, CINCINNATI

This isn't only just been released, and it caters to fans if it includes some overlooking of an area covered by the basic 152 package, namely the Chicago area. This includes 23 airfields, seen (like as many as the original and updated over a month wide area). Chicago now has nine recognizable landmark buildings, including the latter Plaster-on-ice which also right next to the runway at King Field. Eight airfields have ILS, twelve have ATIS, and ten have a new feature called YXZ (the Visual Approach Slope Indicator). This is a system of enhanced runway approach lights, which change colour if you deviate from the correct approach path - a great help if your landing skills aren't what they could be!

The St. Louis area has 16 airfields, seven with ILS, five with ATIS, and seven with VOR. St. Louis itself has a few buildings and the Kansas Gateway Arch, which you can fly through if you like to feel dangerous! The Cincinnati area has 12 airfields, none of which have ILS, ATIS, or VOR. Cincinnati itself has very few buildings, but Westport Stadium is shown.

All major rivers on this disk are represented by coloured surfaces rather than vector lines. Some are very detailed and can be followed for long distances, for instance the Mississippi, Ohio, and Illinois rivers. There are many lakes too, from the gigantic Lake Michigan down to numerous lakes. There are various 3D mountains and mountain chains in the Allegheny region, but they're not so well defined as they might be. Don't fly into them though, they're VERY solid!

This disk goes with Disk 11 on the north coast and Disk 7 on the south coast, making it very easy to cross these two-disk areas to another. The whole engine is peppered with audio beacons to help you navigate, including both VORs and NDBs. For some reason buildings have omitted to print many of the 152's frequency details on the area map, so you have to find them by trial and error - very tedious! There is also a data log too - just try finding an airport field and you'll see what I mean! VOR again: this is a super disk, with lots for you to explore.



JAPAN

This is probably the least attractive of the disks, unless you happen to live in Japan! It covers the Tokyo/Nagoya/Osaka area, but has only 14 airfields, seven of which are equipped with ILS. There are audio beacons aplenty, but VORs and NDBs, and the package comes complete with eight instrument approach charts, at aish 10.

Tokyo is covered in some detail, highlights including Tokyo Tower, the Prince grounds, and the Shinjuku 'bullet train' network. Geographic detail includes many rivers, lakes and mountains, including the magnificent snow-capped Mt. Fuji whose cone bulk dominates the landscape for miles around.

This disk isn't such good value as the others. Don't make it your first serious disk purchase, as you may be disappointed.



WESTERN EUROPE

As long as you can fly from UK airfields! This disk covers three major areas, plus a little challenge. The UK is covered south of a line between Birmingham and Norwich, with 21 airfields included. You can fly over the rest of the UK (including Scotland, Ireland, and Wales, but there's very little to see. Northern France is also covered, again with 21 airfields, as is south west Germany with 14 airfields. Once more there are lots of VORs for navigation, but no NDBs for some reason. In all there are just three ILS equipped airports and only two with ATIS - in all areas, I thought.

There are special zones of interest in all three main areas. London has many of the well known tourist attractions, like the House of Parliament and Tower Bridge. Further afield there's Poles 100 km to the north of 30 landmarks, such as Saint-Cassier, Air de Tignes, Eiffel Tower, and many others, while Strasbourg attractions include three mountains south of the city. Over the border in Germany there are four cities with 50 details, these being Munich, Mannheim, Stuttgart, and Frankfurt. All have buildings of some description, while five of them have detailed mountain scenery. It's also possible to fly to Helsinki in Finland. There's just one airport beyond there, and it's a flying field with nothing much to see on the way. There's also a little beyond there, and it's a flying field with nothing much to see on the way. There's also a little beyond there, and it's a flying field with nothing much to see on the way. There's also a little beyond there, and it's a flying field with nothing much to see on the way. There's also a little beyond there, and it's a flying field with nothing much to see on the way.

There are a few things on my copy of this disk. The best-humored VOR is about 40 miles from where it should be and one of certain 152 view modes causes it to be automatically transported back to Portland, the disk's 'default' airport. Also, certain sections of roads seem to be missing in places, something as it happens in the area where I live! In summary, the disk is good value and you should have fun if you're trying to pinpoint areas of personal interest, like the location of your own home, for instance.

If your interest in 152 is flagging, trying one or more of these disks has a sure way to revitalize it. There's a disk to explore you'll be kept busy for months, even if you use the last 16 in your exploration vehicle. And don't forget you can also use them with Sablin's 7 on the program if you want to explore these areas further. Overall, I'd rate Disk 7 as being the best value, as they'll see first.

They may sound expensive at nearly £20 each, but you can get them cheaper if you shop around. Whatever the price you pay, I think you'll agree they're worth every penny when you discover the additional interest and enjoyment they bring to your Sablin's flight simulator.



SUBLOGIC AVAILABILITY

The Summary Disk and other Sablogic products should be available from your local dealer but two companies who specialise and sell good stocks are STAA/ASA (P.O. Box 8, Hampden, MA 01030, U.S.A., Telephone 01 508 531 1100) and COMPRES AVIATION (18 Clearing Woods, Boreham, Essex, Saffron Walden, Essex, UK, Telephone 021 360 1151).

Most of the Summary Disk and the Flight Simulator program are available for the UK but not necessarily available in Hong Kong. Please call us if you no longer stock these products for the UK.

SABLOGIC Headquarters can be contacted at First Floor, 30 Piccadilly, London W1, Telephone 0694 728420.

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See PAGE 6 magazine Issue 27 page 28 for further details of this super program. Tape version has all the facilities and fun of the disk version except that the number of horse distances is fixed.

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ST NEWS

Infogrames seem to have a busy schedule ahead despite, it seems, now working from France once again (that's where all the bits is coming from) with the launch of their PocketLab label which will bring you budget price (that means 29.99) versions of the Infogrames hits like **CAPERS**, **BLADE**, **EVIL**, **STYL CRASH**, **MAGNANIMUS**, **PHENIX** and **TURBO GI**. For some reason these games will only be available on double sided disks despite being originally issued as single sided disks. New releases from Infogrames include **NORTH AND SOUTH** a game based on the American Civil War and combining strategy, tactics and arcade, **DORATHIEN** has been under development for over a year by a programming team of five people so it should be good. It is a role playing game based on a far planet where a strange island is growing at an alarming rate, the helpful adventures must discover the secrets of a new domain on the planet. Demand replication on the success of *Orbital Pursuit* with the release of **PECTONANT**, the computer version of the popular board game. Of course there's no stopping Mandrake who in their many guises now seem to have grabbed a large share of the games market, **BANDBY WORDS** is a new unique computer game in which players conduct peaceful, direct actions to bring about a better world. **WAR, no Waiting!** **ACTION FIGHTER** is based on the Sega arcade game, four tough actions battling over land and sea. We are going to run out of room so here's just a list of others to look out for in the coming months under the Mandrake, Mandrake or Hatched labels - **SPYNT CAR RACER**, **POWER OF BABES**, **BANDBY ISLANDS**, **ORBITAL GAME**, **RICH DANGEROUS**, **DISPOSABLE**, **RAY FACE**, **EPICURE**, **QUARTZ**, **IDENTITY**, **MIDWINTER** and **CONTACT**. Well, any room for another publisher's staff on the shelves? Popular favorites can have even more fun with the release by Electronic Arts of **POPULAR: THE PROMISED LANDS** which has data for the new worlds. Activision also keep busy with **CONSTRUCTURE** if planned for December and **ALIENED REACT** in which you have to collect the mystical spirit balls from your dazed opponents. Not sure what category that fits into! Also due are **SUPER MANDRAGON** and **STRANGE DICE**. Activision also have a flight simulator planned called **BOMBER**. Could be interesting. Time to go, look out for reviews of many of these games as (ST) they come in.

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BORODINO and ARMADA

TWO CLASSIC WARGAMES FROM ATARI

Borodino is the first of a completely new concept in wargaming. The idea is to recreate what it would be like to be the historic commander of an army, playing only the role of one man (and not making decisions for anyone else in the army) and communicating with his subordinates in the same way as his historical counterpart: lighting written orders, sending messages, asking questions and so on.*

This was Dr. Peter Tuscara's objective when he set out to produce *Borodino*, which recreates the major confrontations between the French and the Russians when Czar Alexander II's Russian army fought a last stand against Napoleon in 1812 to prevent the fall of Moscow. Dr. Tuscara has succeeded admirably.

You can choose to play Napoleon, with 131,000 men (including 26,000 cavalry and 583 guns), or Kutuzov, with 120,000 men (including 17,000 cavalry, 7,000 Cossacks, 30,000 volunteers and 840 pieces of artillery). Or you can play a two-player version - even by mail if you wish - you can just the state disks with the score game!

But whichever way you choose to play if you are restricted to the capabilities of the one character you have chosen.

Although you can look in any direction you can only see what Napoleon (assuming you are playing him) would see - a couple of miles at 3-D landscape with the units scattered across it. You can only send messages out in real time - your messages have to ride across the battlefield to deliver the messages, which may be misunderstood or ignored, or indeed never arrive! The only other information you get is reports and requests from your generals and colonels - which, when wrong, too late for you to see - (and like real life!)

You enter your commands in English using a generalised subroutines-style pointer. Sample commands are: **HEY ORDER YOUR ARTILLERY TO MOVE 1/2 MILE EAST. DAVOULT ORDER 2 INFANTRY DIVISIONS TO DEFEND THE WOOD 1 MILE NORTH OF YOU. ENGINEERBELL THE ENGINE**

CANNERY 1 MILE NORTH OF YOU FOR 30 MINUTES. MONTBRUN, AT 3.30 AM GIVE SUPPORT TO MEY AND DAVOULT. DURING FORM AN ATTACK LINE FROM THE NORTH FLANK TO THE POINT BEING LINKED WITH MEY.

These, and many others, are all clearly explained in the detailed 84-page manual which comes with the game. You also get a laminated map showing the battlefield. One side shows the main moves which occurred in the actual battle, the other side is for you to record your current battle, using the specially provided pen.

To help you in your planning you can see the moves at a telescope to request detailed information about anything in sight. Once you have entered a list of orders the computer spends time on these orders simulating the next quarter of an hour of the battle. Total messages flash up to indicate the current phase, **PLANNING, MOVING, FIGHTING**, etc., then the 3-D view is redrawn.

The manual tells us that "the battle is fought to extremely detailed rules, similar to tabletop wargames rules." But in the spirit of the game, you, as Napoleon, just get to see the result!

Fortunately, for those who need a little more help, the game provides some "clue" modes which allow you to see all messages between the lesser generals (you and the enemy) and to view the battlefield from any position.

Armada is virtually identical in concept. It is 1568 and you get to play Lord Howard with 12 ships or the Duke of Medinax with 22 ships (the Spanish *Armada* of 97 ships (three were more than the smallest ones are not implemented). This is a little later - half an hour of battle takes 1 to 2 minutes; screen redrawing is 5 to 10 seconds rather than 30 to 45 seconds in order to show these lands) and there are lots of new commands which relate to sea battles: **SIGNAL DRABE, ORDER 4 SHIPS TO SAIL TO PLYMOUTH, CAPTAIN MOVE ALONGSIDE THE BRITISH, SIGNAL HARRISON TO SAIL IN DOUBLE ORBIT, FORMATION, SIGNAL DRAGE TO SEND DOWN THE INEMY TO THE SOUTHLAND.**



Above - *Armada*. Top - *Borodino*

SIGNAL HARRISON, AT 1.30 PM TODAY ADOPT CRABAPPLE TACTICS. SIGNAL FROBBER TO BLOCKADE PLYMOUTH. And so on!

Armada looks for five days (as opposed to *Borodino*'s one) but there are **SAVE** facilities plus an optional one day battle for you to taste an.

- **GAMEPLAY** - excellent range of commands and parser - a well thought out and presented job.
- **GRAPHICS** - good 3-D representation of the terrain and the armies or fleets - the only animation is an optional view of the constant fire - they clouds of what when they hit.
- **SOUND** - None.
- **VERDICT** - If you are not a serious wargamer you may find it rather too slow and complex. But for those who want to play a REAL wargame, you won't get one much more accurate than this.

Title: **BORODINO and ARMADA**
Publisher: **ATARI**
Price: **£29.99 each**
Reviews: **John Scrimsey**

ARCHIPELAGOS

exploring the land of a thousand islands

Archipelagos is quite a difficult game to review; people seem to either love it or hate it. It claims to be "completely new", "without violence" and to "defy classification", but really I cannot really agree with all of that. Anyone who has played *Sentinel* is bound to get a feeling of déjà vu with the game mechanics, like *Sentinel* and *Time* it is set in a slow dimensional scrolling landscape, which is done very well, but suffers in comparison to that all the land is flat. Floating at country square with the mouse will move you to there, pointing at open pools makes them empty and for you to see-way mechanisms of *Sentinel*.

Each of the 5,000 landscapes is a group of islands (ARCHIPELAGO); a sea surrounding islands, a group of islands - mostly you know that) which you need to join together using the F1 key to build new land. Once they are joined you can destroy lots of big rocks and then beat your prime objective - the Obelisk (Don't forget!) It gets you an overhead map of the whole archipelago so that you can plot your attack. Most of the maps are random groups of islands, getting progressively harder as you go along, but about twenty are detailed maps of Europe, UK, the Lagunes Islands, etc. which are rather nice. To prevent you in your attempts to destroy the Obelisks there are a number of scrolls after you. A few of these spiral up and down and move slowly towards you,

covering the land with blood which delays you at the slightest touch (Hey! I thought this was non-violent!). The Trees only grow when they reach the bottom of their spiral, so they are not too hard to avoid.

Neurotransmitters wander circles and destroy the ground, usually in the most inconvenient places but fortunately they are fairly slow and dumb so you can lead them out to sea to waste time once you get the basics of it.

Blood eggs hatch out to claps of lightning and either destroy their island or cover it in blood - since you are not facing against a time limit I usually sit out or see what they have finished doing their thing then carry on with the game.

Lost Souls are little white birds that wander at random - if they touch you, you die. There are the dead-end of your mission if they come quite fast and give no warning of their presence. I found that a little frustration - a proximity alarm to give you some warning of their presence would have been much kinder.

Personally I found there wasn't enough challenge in the game. I got up to level 35 with only a couple of failures - usually caused by stopping to think on the main screen instead of the overhead map which poses the game for you. I never really felt that I was getting enough adrenaline up to make it worthwhile from an action point of view, and there doesn't seem to be much mental challenge either - you just wander round until you find all the rocks. I heard someone say that it gets quite hard around level 4000, but I can't see myself bothering to play that far! Fortunately you can always restart at any level up to the highest one you have ever reached with your master disk. (Though this also means that anyone in the family can access the levels you have reached, and that your disk is liable to viruses since you have to keep the original master unprotected.)



'I found there wasn't enough challenge in the game'

You need to use the F1 key constantly to build new land - there must be a better way, surely they could have achieved this with the mouse - or at least let you choose which key you want to use!

The supposed lack of violence is also a little frustrating - I would dearly have loved to be able to destroy one little 10x10! Neurotransmitter after he had destroyed my land bridge for the fifth time! You are surrounded by deadly enemies and all you can do is run from them!

- **SIGHT & SOUND** - Excellent. The trees make for often-looking landscapes, but may get a little tedious after you have cracked the first couple of thousand! Superb eric music - probably the best part of the game!
- **GAMEPLAY** - Mostly praised, but I don't think they have managed to achieve quite the right balance of difficulty and interest.
- **VERDICT** - Some people love it - but probably best to try before you buy - you have to be addicted to play more than a few levels.



Title: **ARCHIPELAGOS**
Publisher: **LOGOTRON**
Price: **£39.95**
Reviewer: **John Sweeney**

4 Bringing it All Together

In this, the final part of our beginner's guide to MIDI, we take a look at voice-editing and music scoring software, and at setting up your own low cost home recording studio.

One of the most fascinating aspects of using a synthesizer is the production of your own unique sounds via customized voice patches. While it's true that most instruments you buy today have dozens (sometimes hundreds) of perfectly good pre-set sounds, there's nothing quite like inventing your own. To do this you have to be able to program the usual generating components of your synthesizer. Inexpensive home keyboards often have no facilities for doing this, so you're stuck with the pre-sets - something to bear in mind when buying one. Once again the low cost Yamaha PSX-600 home keyboard/synthesizer we've used as our example in this series demonstrates its great value by providing such facilities, although they're limited compared with more upscale instruments.

Depending on the synthesizer you could have to set a HUNDRED or more parameters to define that unique sound, each one input as a numeric value via fiddly little pushbuttons and minuscule LED/LCD display on the synth's front panel. Trying to program the sound you want this way can soon reduce you to a bone-eyed, gibbering wreck! So... let the ST do the hard work!

VOICE PATCH EDITORS

There are dozens of voice patch editors available for the ST, priced from around £12 for public domain programs to around £100 for top class professional quality software. They all work on a similar principle, using MIDI's system file native facilities. They can upload the parameters of an existing sound from your synth, display them on your computer screen, change them, and download them to the synth again for immediate playing. Or you can start from scratch and just download a complete set of brand new parameters. Some synths, such as the Roland MT-32, can ONLY be programmed this way, forcing us to front panel editing facilities.

Better yet, some software will display certain parameters in graphical form, displaying the 'shape' of the sound concerned.



One of several excellent public domain voice patch editors - this one for the Caste - others are available for Sonoma's and other synths

John S Davison concludes this beginners guide to the world of Midi with a look at some additional software and suggestions for audio recording of your newly composed masterpieces

You modify the sound by following its shape - much easier than working with streams of numbers. If you're really stuck for ideas some programs will even randomize parameter values for you, in the hope of hitting on a usable sound by chance!

Once you've produced an acceptable patch you'll want to be able to use it whenever you wish, and this means finding somewhere to store it. Most synths have battery powered long-term memory banks for this purpose, but you'll soon fill these, and the RAMdisk storage used by some synths tends to be very costly. Again, the solution lies with the computer. Most patch editors also include a library facility, allowing patches to be stored on disk, often grouping similar sounds together for convenience of later retrieval.

Patch editors are usually designed to work with specific makes and models of synthesizer. This dependency could be inconvenient as it means you could have to buy a new patch editor if you buy a new synth. However, 'universal' editors (such as Mike Rosenthal's MIDIMON, £79) capable of handling a range of instruments from different manufacturers have recently appeared - worth thinking about if you plan to expand your MIDI system in the future. Some of the best editors may be found in the Steinberg Synthesizer range of software. They're expensive at around £100 a time, but are superb quality products.

Regrettably, I've seen no voice editing or library software for the PSX-600, not even public domain material. Editing kit's difficult on the PSX-600 but even 9 parameters to manipulate, but a voice library on disk would be very useful. If you know of anything, perhaps something you've written yourself, please write to the back of Page 51 and I'll publish it.

BE YOUR OWN MUSIC PUBLISHER

After spending blood over your ST and MIDI keyboard for weeks you eventually produce a musical masterpiece (you think!). It's a very good idea to want other people to hear it or even perform it themselves, aren't you? So why don't you have your masterpiece (as printed form or sheet music, or record if you can) made tape that anyone can play on their Walkman or ghettoBlower?

By far the easiest way to produce sheet music is to use a sequencer with built-in music printing facilities, or which interfaces to a separate score printing program. Remember that most sequencers use their own unique file format, so you can't just take any old sequencer file and expect it to work with any score printing program. You usually have to use programs from the same manufacturer, although some will read files from other systems. This uneasy situation could change in future with the advent of the MIDI file standard, which is designed to make files interchangeable between MIDI-based programs from different manufacturers.

Like sequencers, score printing programs range from the cheap and cheerful to professional level music publishing systems. The cheapest music printing facility I've seen is that contained in ArtVision's Music Studio. This is little more than a printer dump of what you see on the screen with no control over how it's printed, but at around £25 for the whole package you can't really grumble.

Midrange packages include Hybrid Arts' EZ-Score or around £150, which is designed to complement their EZ-Track sequencer. It gives much more control over the printing, but has limited score handling. Dr. T's Copyist series of packages (from around £80) are also worth a look.

At the top end of the market are programs such as Steinberg's Master Score and C-Lab's Notator, but we're talking serious money here on these and several featured products appear. However, they give the computer/sequencer complete control over virtually all aspects of the printed output, and the results are superb - just like the sheet music you buy in the shops. Master Score is really a companion for Steinberg's own Pro-24 and Pro-12 sequencers, while Notator is a combined sequencer and score printing package.

They're large, you'll also need a suitable printer. The minimum is usually an Epson compatible graphics capable dot matrix printer, although individual score printing packages may provide drivers for other types.

BECOME A RECORDING STAR!

The best way of showing off your masterpiece is to record it onto cassette. To do this you'll need to add a few items to your MIDI setup, in effect turning it into a mini recording studio. Now don't get alarmed about the cost, as you may already own the items needed!

Obviously, you'll need a cassette recorder. It doesn't have to be an expensive multi-track 'party-animal' job, an ordinary domestic stereo machine will do. For best results it should have line inputs, so you can record directly from your synth without the need to use microphones. The P11-880 has stereo line outputs originally designed to connect to an external amplification system, but is suitable for use with recording gear too. In any case I just connected these directly to my hi-fi cassette deck's line inputs with ordinary phono leads - and bingo - instant recording studio! Now, when you fire up the MIDI sequencer on your ST to playback your masterpiece you'll find you can record the glorious sounds you've created. There's real sounds this time, not MIDI data, so you can play them back on any cassette machine.

If you play the tape back through a decent hi-fi system you'll get a pleasant surprise. It sounds GREAT! The secret lies in that humble home keyboard like the P11-880 can't really do its full sonic potential through its built-in amplification facilities, so the next addition to your studio should be a separate amplification system. If you can position your hi-fi near to your ST and synths then the problem is solved - just connect the synth's outputs to the Aux In on your hi-fi. Check that they match electrically first, though.

If you can't use your hi-fi consider buying a pair of powered hi-fi speakers, available for around £180 from companies like Wharfedale or Geneveres. These are good quality bookshelf speakers containing built-in amplifiers, and make ideal home studio monitors. If you can't afford any of these options, then by listening on a pair of good quality headphones. Again, if you've only heard your home keyboard play through its built-in speakers the improvement in sound quality will astound you.

If you add more sound sources to your setup, such as expander modules, samplers, or drum machines, you'll need to combine their outputs for recording purposes, requiring an audio mixer of some description. Very simple four channel mixers cost from around £20 from Tandy's, but you could pay hundreds of pounds for one with lots of channels and additional recording facilities, such as tone equalisation and sound positioning.

The touch you make on your synths can be improved further, notably by judicious use of special effects such as reverbification and echo, so you might want to add an effects processor. Tandy's, Akai, and others can supply these from around £150 for a box capable of producing several different effects.

The final item you might include is that multi-track cassette recorder, particularly if you intend adding the sound of other instruments or singers to your own efforts, but that's a whole new ballpark and beyond the scope of our beginner's guide to MIDI.



Expensive a combined score program and sequencer that can record and play back as well as printing top-quality scores - but at a price!

That's here on the sky's the limit. You start climbing out of the amateur arena and into the world of the professional musician. Many of the famous bands you hear today produce their music using the same basic tools and techniques we've looked at in this series of articles. A surprising number of them originally started with a simple home hi-fi recording studio, and many still do much of their work on their music at home. This saves thousands of pounds in professional studio hire fees and gives the musician a level of freedom undreamed of just a few years ago.

This revolution was largely brought about by MIDI, mixed and stirred by the arrival of the ST with its built-in MIDI ports. Now, the ST user can really join this revolution and follow in the footsteps of today's music stars. Who knows where they might lead you?



JET

By
 by
 by

A s an avid user of Sublogic's legendary Flight Simulator II (FS2) I was really excited by the prospect of flying jet, their latest simulator for the ST. But let me say straight away that let's not get us too excited: there are certain crucial similarities, it can use FS2's scenery disks, and it has a similar two-plotter or mode using two interlinked ST's, but otherwise the products are as different as they could be.

In places you're in the cockpit of either a land-based F16 Fighting Falcon or a carrier-based F14B Hornet. You're given a choice of missions to track, ranging through practice, daylighting, ground target strike or combined mission involving daylighting and ground attack, and low flight, which allows you to explore the scenery of let's say the world annihilated by enemy action.

After selecting your aircraft, mission type, and difficulty level you're taken to an armaments screen to choose a weapon load appropriate to the mission. Choices include short and long range air-to-air missiles, air-to-ground missiles, bombs, and cannon shells. Then, depending on the mission chosen, you'll find yourself sitting in the cockpit of an F16 or F14B located either on an airfield or on the catapult deck of a Minotaur class aircraft carrier.

Most of the screen is occupied by your outside view, and unlike FS2, jet's instrumentation isn't authentic and has been cut to a minimum. Primary flight information is displayed in thin strips on the four edges of the screen. There are also various warning lights, a few secondary instruments, and rudimentary radio navigation aids to guide you back to your base.

Additional information may be toggled on and off the screen, including map and radar windows, and an altitude indicator. This is projected as a 'head-up display' on



the windshield, providing vital pitch and bank information aerial during a daylight.

Control may be any mix of mouse, joystick, or keyboard. Primary flight controls are rather insensitive, making accurate control difficult. Flight behaviour isn't too convincing either, particularly during landings. This is probably a blessing in disguise though, as it makes landing easier - and you need all the help you can get when landing the F14B back on the aircraft carrier's deck!

LETHAL MIGS

If you choose daylighting you'll meet some rather aggressive MIG-21 and MIG-23 aircraft soon after takeoff. They're graphically well portrayed and each type is clearly identifiable at close range. They manoeuvre nimbly, and it takes skill to beat them. You're helped in this by the tracking/boxes and ranging circle projected onto your head-up display by the aircraft's attack system.

There's a problem though. Sublogic seem to have made things too difficult, on even at the easiest levels the MIGs fly far too many modes at you. The only defence is violent manoeuvring - there's no shield, flares, or other countermeasures you can use. All too often you get blasted out of the sky, although if you're quick you might get the chance to eject. In this case you see yourself floating to earth on a parachute, where you're rescued and given another aircraft to fly.

Ground attack in the F16 has you taking out enemy ground targets, including a

power station, bridge, docks, and such like. In F14B mode your targets are Soviet ships, missile cruisers of the Soviet navy. Again, you're helped by targeting cues projected onto your head-up display. Enemy targets are guarded by surface-to-air missiles, and once more these seem to be overdone somewhat, as you spend almost all your time avoiding missiles rather than attacking the enemy. For me this rather spoiled the action. Ground scenery consists of flat areas plus occasional pyramidal shaped mountains. There's also the odd road, river, and airfield, plus the targets mentioned above. All are shown in 3D colour filled graphics where appropriate. In the F14B missions the sea is featureless except for your carrier, the enemy vessels, and waves ruled with white parallel lines (representing waves).

HIDE ON A MISSILE!

It has many of the view facilities of FS2 plus a few unique ones. You can get a 360 degree view from the cockpit in 45 degree sections, plus vertical views up and down. There are also quarter plane views from the side and behind your aircraft, central tower and tracking views, and a good option which instantly fixes the viewpoint at the location of your aircraft at that moment AND LEAVES IT THERE. It's as if a video camera has been set up to record your progress - you watch yourself streak away into the distance, and can even see yourself daylighting with the enemy! In combat you can look the view on a MIG so you can always see him, and you can even get the missile's eye view of an attack - as if you were riding on the missile!

SADLY DISAPPOINTING

Overall I found Jet disappointing, with my main criticisms aimed at its insensitive controls, unrealistic flight behaviour, and inaccuracies on the part of the enemy. It may have been good when first launched on the IBM PC in 1985, and it still has some nice features, but it can't really compete with the likes of Falcon and F16 Combat Pilot.

Title:	JET
Publisher:	Sublogic
Price:	£39.95
Reviewer:	John S Davison

PERSONAL NIGHTMARE

A HORROR STORY IN YOUR OWN FRONT ROOM

Lots of games these days claim to be Graphics Adventures, though most, like *Level 9* and *Magnetic Scrolls*, are really first adventures with a few pictures to enhance the atmosphere. The main exception to this have been the Sierra games (*King's Quest*, *Space Quest*, etc.) and the Mileage game (*Disintegrated*, *Shadowgate*, *Deja Vu*). Now a new contemporary branch into the genre with a new style of graphics-adventure - the result, *Personal Nightmare*. The plot is grotesque, you will die lots of horrible deaths (accompanied by suitably grotesque graphics) and you will have to do some pretty nasty things yourself if you want to win the game.

It is a large game with over 100 fully painted locations and a cast of around a dozen characters who wander on and off screens living their own lives while you try to work out what is going on. The main action takes place in a large window which shows the current scene. Some useful commands (TAKE, OPEN, EXAMINE, LOOK IN, etc.) are listed down the side for you to invoke with the mouse. In place of these commands and most of items in the view you can build up sentences and then ENTER them with the mouse's right button. You can also use the mouse to open up windows showing your inventory and the screen contents, and move items around - all very conveniently. As well as

this you can type in commands in the traditional manner in actions not covered by the icons.

The game starts in the village pub. You have come here to investigate a rather worrying letter from your mother. There is a bulletin board outside the pub and you become even more suspicious. Your questions and searching soon reveal that all is not well in the quiet little village of Tynham. Cows - numerous - abound of missing girls and children. You have four days to discover all the secrets of this strange place - if you can survive the night! There is death on every side - vampires, hell-hounds, ghosts, demons - you name it they've got it - and all beautifully animated. If first - you can still type some initials after the animation has started - you don't always have to die! If you can survive, and if you can find enough evidence to convince the local policeman of what is going on, and if you can persuade him not to throw YOU into jail, and if you can find all the clues and artifacts necessary to rid the world of the evil presence behind all this, then you might just live long enough to see the final excellent graphic sequence! Save frequently!

On the negative side, there are a few minor bugs (though nothing that will stop you finishing the game - and they do have a new release planned for the near future), the game isn't fantastic - the graphics are definitely on the graphics, the implementation is not quite perfect in that to be able to see the best thing it typed as well as the response to it, and few minutes to stored and get

back to try again after one of the nasty deaths is a little too long for my liking, and the bottom half of the map appears to be painted back to itself! The pictures do take a few seconds to load, but at least you get half a dozen rooms on each load (it is nothing like as bad as Sierra) - the price we have to pay if we want this quality of graphics with the current technology.



PERSONAL NIGHTMARE: THE NEW STYLE OF GRAPHICS AND SOUND EFFECTS. APPARENTLY, 'SHADOW' IT WAS, WAS KILLED BY AN OLD FLOW TO THE TOWER.

There is a wide variety of problems for you to solve. On the simpler side there is the standard stuff, like making sure you have looked everywhere and found everything, and then putting what you find to their obvious use. But there are lots of more difficult problems as well, some can raise logical puzzles; others are to do with being in the right place at the right time (unfortunately the WALL command is rather inadequate at its working out how to avoid inevitable death). As long as you have the patience you will certainly get your mother's work out of this one! **Footnote:** There is a particularly nasty bug if you get gametied. When you return the game you must ALWAYS replace the game disks (or immediately after a SAVE) - if you will, have problems contact *Horrorware*.

- **GAMEPLAY:** As long as you accept the limitations, then most of it is very good - I suspect the *Print* columns in the magazines will be busy with this one - it is a hard one to finish!
- **GRAPHICS:** Excellent - five disks full of pictures - but not recommended for the very young!
- **SOUNDS:** Lots of nice little effects which add to the atmosphere.
- **VERDICT:** A little frustrating at times, but overall a very enjoyable experience. Watch out for the *Movie* factor in *Evilra*, *Madness of the Dark* later this year!



Title: PERSONAL NIGHTMARE
Publisher: HORRORWARE
Price: £29.99
Reviewer: John Sweeney

WICKED

Even so often a game comes along which is different enough from the rest that it immediately grabs your attention. Wicked from Electric Dreams, is a game which has this quality. The game is based on the ancient myth of good against evil. You are a more mortal who is transformed into a star of ley as you now serve the great Sun God.

The game itself is basically a single screen shoot 'em up which involves considerably more thought than many other games of this type. When you begin the game the 'Eye of Infinity' looks on as you select your battleground against the evil forces in one of the twelve great constellations of the Universe (the Zodiac star signs). Once you have been transported to the constellation of your choice a map of the stars unfolds before

you, on which key stars of the system are highlighted. It is at these points that your fight against the dark forces truly begins...

Upon entering a screen a number of good and evil points can be seen, each of which is creating good and evil 'growth' respectively. The main aim of the game is to smother all of the evil points with good growth, thus winning the system because no more evil growth can be created. To hinder you in your task of slaying evil are the guardians, who are sent by the forces from the land of Ponderemonium. During daytime, when the Sun God is visible in the centre of the screen, you have the power to destroy the evil guardians. At night, when the Sun is visible, your shots are rendered

harmless against him. Each day and night throughout the game the central face (Sun or Moon) opens to reveal a 'lotus card', which in turn creates a crystal sent from either the land of good or evil. These crystals have the ability to give you special powers, but which can work against you in terms of presentation.

'Wicked' is superb. Graphics are beautifully done and all animation is slick and in some cases quite amusing! Sound is also of high quality, the sampled spot effects are excellent and add greatly to the 'spacey' feel of the game. My only minor quibble is that the background music could have been a little better.

FACTS

Title: **WICKED**
Publisher: **Electric Dreams**
Price: **£19.99**
Developer: **John Denton (p)**

SIGHT & SOUND

Graphics are crisp, colourful and loaded to great effect. Sampled spot effects are wonderful, but the background tone lets the side screen slightly.

GAMEPLAY

Totally, totally addictive. It's the sort of game you'll dream the place and end up realising you've been playing for hours!

VERDICT

Wicked is one of those games I have reviewed in quiet awe. It's definitely worth buying.

FACTS

Title: **KULT - The Temple of Flying Saucers**
Publisher: **EMI Interscopic**
Price: **£24.95**
Reviewer: **Duncan Rowboth**

SIGHT & SOUND

Good sampled and digitalised music and spot effects, the graphics are more pleasing and well defined, a glossy 'out of colour'.

GAMEPLAY

Initially difficult to pick up but once the controls are mastered exceptionally playable and addictive.

VERDICT

If you like the adventure, Michael Moorcock or science fiction get it!



The graphics adventure is produced by the same people who produced Captain Blood and Purple Lotus Day and it shows the same excellent art-work and strange ideologies or plot.

Your role as one of the out-cast mutants, (the powered warriors) is to go and rescue your girl friend (spite named Patti) from the clutches of the evil forces in the temple. In order to infiltrate their organisation you have to prove yourself worthy by finding five skulls each protected by some fairly mind bending puzzles. Surprisingly you don't get stuck on this top and apart from the skulls also trying to gain their skulls you have a mental

KULT THE TEMPLE OF FLYING SAUCERS

to your mentor who appears at a festival and offers clues and advice in strange phony-to speech bubbles.

Many of the problems need some form of special equipment to succeed in, for instance a goblet is handy in the 'leins' encounter; the last one of these is given to you by the Master of ceremonies but from then you are on your own. The atmosphere surrounding the game is dark and gross and the graphics is like that found on the cover of magazines such as Amazing Stories. Control is by icons along the side of the action screen and decisions are activated by touching various nerve cells on the brain icon, the postage stamps with literature which conveys more of the slightly black humour. The

game can be saved by rest and enter and easily do with all the multiple choice genre of adventures since the game is saved the approval will drop off until that occurs though there is an indication that is most surprising and even when every visible option has left you in a state of false learning development it becomes apparent that a small part of the excellent pictures has not been explored and more options spring to light.

When speech is offered a sort of squawky gobble emits from the pocket and since these often obviously speak a direct or longer it is helpful that written versions of the words also appear. Most of the problems are solvable but I still cannot escape the first room and this can not tell you if there is or is not a log finish.

ENTERPRISE

The latest release on the Atari "Action Games" label is a game of strategy and action. It has you firing around the galaxy to different planets in search of the super heavy atomic nuclei which help keep the power of Sol's atomic layer in operation.

You search the galaxy, which is experiencing war conditions, to locate mining colonies capable of finding the vital substances you need. Once located you must help those colonies by re-arming and resupplying them as necessary. Throughout your mission you will encounter many enemy craft, who, as you would expect, try to do everything in their power to destroy you. Your view of the proceedings throughout the game is from inside your hyperspace equipped spacecraft, which is capable of hovering great distances in a very short time.

These "wings",

however, are one of my major complaints about the game. When you activate the hyper drive, although the special effects which follow are extremely impressive, it just takes too long.

Overall the game is very colorful and a tough challenge. If tested seriously it would take a long time to complete, but there is a game game feature. This complexity would make the game absolutely superb if it were not spoilt by a number of factors. One is the "over-saturation" of some graphics such as the stars mentioned above. Another is the stupid number of stars which attack you. There are loads of them, and they all move so fast it is practically impossible to destroy them without suffering considerable damage to yourself. I also feel that the scenes



planets could be much better. The way they are presented makes you feel almost dizzy as you try to locate a mining colony or a hostile spacecraft which is meticulously testing circuits out of you. Graphically the game is of a fairly reasonable standard, with presentation very pleasing to the eye and colour used to good effect. Sound, on the other hand, is not of good quality. The monotonous tune repeats over and over on the title screen and adds no "atmosphere" to the game. Enterprise is supplied with a very comprehensive instruction manual and an exciting and well written novel by Graham Wayne.

FACTS

Title: **ENTERPRISE**
Publisher: **Atari**
Price: **£19.99**
Reviewer: **John Bonson (J)**

SIGHT & SOUND

Graphically the game is presented in a fairly high standard with some very impressive moments found, however, it is not very good.

GAMEPLAY

Very complex but a great game has been spoilt by the presence of too many details.

VERDICT

Overall the game falls into that medium category which is neither good nor bad.

FACTS

Title: **STAR RAIDERS**
Publisher: **Atari**
Price: **£14.99**
Reviewer: **Donovan Swaffish**

SIGHT & SOUND

The graphics are adequate and at times large and effective while the sound effects are strong but do not really complement the fast pace inherent.

GAMEPLAY

The whole game runs smoothly and well, things happen at recognizable speeds and it is enjoyable to play but not very addictive.

VERDICT

A sentimental journey that does not really mean the stars or rockets - still very playable but obsolete for the results of the technology.



The average 30000 independent robots from deep space have come to plunder the solar system and destroy humans life-forms. Only the Star Raiders have the technology and skill to destroy these intruders.

This game has been about on the Atari Atari for many a long year and was a favourite then, just how it will measure up on the biggest machines is an interesting thought. The gameplay will remind readers of another classic game, Star Trek, in so far as the object is to clear sectors of stars within a time limit while protecting space stations.

Suits often the game shows it's age and although the

STAR RAIDERS

16-bit technology has been written for it has not been used to it's full advantage.

difference between the classic and the old Star Trek games is that once the sectors have been found on the screen the actual battles take place on screen as an arcade shoot 'em up as opposed to the two dimensional map the system feels complicated owing to the fact that the menu is a little vague and makes play sound for more complex than it actually is. In fact once the game has been played for a little time then it becomes almost second nature as to which buttons to press and which screens to use.

The advanced 80 features do not seem to have been used a great deal and apart from reasonable sound effects

the game feels to be a port from the eight bit. There is a level based entry to the game which gives different types and amounts of enemies and also a loading time limit, and various grades of success that give the success of your battle differing tones according to number of enemy killed or which level of play.

The game is most entertaining and can consume for an hour or so and it is a decision why it was such a hit on the original Atari machines but unfortunately the theme has been done better since. Either the new version of Star Trek which has better looking fight situations or even Star Fleet Battles with better tactical appeal although better graphics could be better alternatives. Having said that I enjoyed playing the game and it spoiled off memories of earlier ages.

STARBREAKER

You get to become one of the elite band of planet destroyers and guardian of the hemisphere in this Atari shoot 'em up. The action takes place on two levels, the first of which is a defender like set up wherein the small fighter craft has to blast its way across a horizontal plane—landscape looking for the enemies to various bases so that it may tend to start the second part of the game.

The first stage is a smooth scrolling first piece of arcade action that will be familiar to all, with smart bombs and tail fin missiles. The graphics and spot effects at the level are adequate and the games are well paced and nicely controlled, although sometimes a little finicky about "hot spots". The enemy space craft are swift and devious and it makes a strong tie game.

The second part is more like

Impossible Mission as the on-board strategies through various underground levels.

teaching computer files for more energy or credits and paying for these with credits earned by his kill points. The eventual aim is to destroy a giant space doom and cut the base after defeating the set default.

The effects in the second level is entertaining and very cartoony, even the evil aliens have a slight cutesy rating. The games are big and the action to run or fly is almost always available. It is imperative to remember where you're going (you may be punished to keep up stocks of all necessary equipment, it is also necessary to become adept of quick take offs to avoid being blown away in the destruction of the base.



There is an eight bit conversion feel to the game but for all that it evokes a feeling of entertainment and sports some originality within an old genre. I found the game becoming quite addictive and it made my left finger become quite stiff and sore after a while. The loading screens and the initial sight of the Starbreaker going to battle are most effective and show up the science fiction background of the game well. It is not often that two fairly classic games are merged into a game that needs some logic and skill with all the speed of a good arcade shoot 'em up. It is good to know that Atari can produce such games.

FACTS

Title: **STARBREAKER**
Publisher: **ATARI (HOME)**
Price: **\$14.99**
Developer: **Damon Howard**

SIGHT & SOUND

Good spot sound effects although the loading screen is average. Graphics are substantial, exciting adding greatly to the enjoyment of the game.

GAMEPLAY

Fast and furious, all the elements of an smooth scrolling and a most enjoyable experience, not too difficult either.

VERDICT

A good example of old ideas with a twist of fast and probably appealing to nostalgic arcade fans.

FACTS

Title: **WEIRD DREAMS**
Publisher: **Bombard**
Price: **\$14.99**
Reviewer: **Damon Howard**

SIGHT & SOUND

Heavily new effects, with some quality graphics, the spot effects are to the point and the soundtrack outstanding.

GAMEPLAY

Difficult to play and will take time to master. Some clues show an intent to be early on would be helpful otherwise slow and uninteresting.

VERDICT

I feel this to be a game that would appeal to PlayStation, albeit because it fully represents it; possibly a more complete, longer or bigger game.



I first became disenchanted with this game through Saturday morning TV where it played a vital part in the children's competition on that head or something arena. At that time it looked graphically pretty, although somewhat horrendous, but nonetheless fairly straightforward to play. On playing the (E) version I find the same strange graphics which seem akin to impressionism or a Salvador Dalí painting with a ring plot that does not help the understanding of the game. It seems that the player is trapped in a nightmare and the only way to live is to play out of the screens in the dream and then defeat the final

monster. All this is done technically well and with a zest for the subject that suits the

theme. Unfortunately nothing actually explores the topic that need to be undergone to make anything happen. It took the numerous loadings to realize that the first screen is merely a device to enter the world of nightmare and state not need any action other than a well timed jump-in to a Condo flea market.

Subsequent screens are linked through a list of Miras and going through one never leads to a new encounter, thus it seems that a minimum of five different scenarios are possible via the closing light. While this does not sound so bad believe me they are difficult. I still do not know how to combat the word in the first game

although I can not deny that it very well. On some screens the means to defeat the enemies are possibly obvious, for example catch the fish that fly through the air to hit the fisher island monster, or pick up a garden stick to fence with the man eating plants.

The sprites are big and well formed, even the action is very smooth although there is a gap in closing screens owing to the complexity of a screen and the need to load each frame also. The protection comes from quoting a word from the accompanying Howled and in the main this works well although the pages do have a large number of paragraphs so a great deal of scrolling is necessary.

This is a fairly surreal game that contains some humor but despite all it does not look a little something.

WEIRD DREAMS

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TOTAL ECLIPSE

For reasons too complex to explain, from the tail of the Pharaoh's bull a shrine to Ra, the Sun God, into the jaws of a giant geyser. He then placed a curse onto - or, perhaps stopping the sun's rays shining on it during daylight hours would be totally destroyed, so for nothing has happened, but at 10 o'clock today, 26th October 1993, a total eclipse of the sun will be visible from Egypt. Hence the name: destruction of the bloom, which in turn will cause unspeakably scary things to happen to the Earth. Someone must break the curse by destroying the shrine.

You've just loaded your clipboard up before you set to the parchment. Equipped only with a gun, torch, compass, bottle of water, and a watchdog which tells you if it's already 6 o'clock, you have just two hours to save the world!

The Pharaoh was a cunning old devil - he made the route through the pyramid to the shrine a wally tough one. You have to negotiate a complex multi-level maze of chambers, corridors, and pits, with the way frequently blocked by massive stone barriers, deadly, untidy thurmees, and sticky a deadly traps. He must have employed some pretty slick engineers too, judging by the way some of those stone doors, barriers, and traps operate, and by the presence of what seems to be ancient Egyptian responsive technology.

The program uses Incentive's Perspective 3D graphics system. This gives a first person subjective viewpoint of your surroundings, allows you free movement in three dimensions through those surroundings,



and provides a greater feeling of personal involvement. The 3D graphics aren't particularly detailed, but the frame through which you view them is - it's filled with lots of tiny animated teletextoids. You have two hours of real time to find the shrine, but a sophisticated game facility means you don't have to complete the quest on one sitting. Succeeded and you're honoured by a rather nice fire-wire display. Fail and you'll witness the moon's rapid but spectacular demise, presumably caused by the Pharaoh's ancient Egyptian supermega particle beam project! I never knew ancient history could provide such fun!

FACTS

Title: **TOTAL ECLIPSE**
Publisher: **Mosa Studios**
Price: **£24.95**
Developer: **John S. Davison**

SIGHT & SOUND

Visuals rate 4½ points for using first-person subjective viewpoint, good atmospheric music and scripted sound effects

GAMEPLAY

There's something here for everyone - arcade adventure, puzzle solving, and even some shooting for the bigger boppers!

VERDICT

An absorbing game built on a strong premise, but with enough variety and challenge to hold your interest for some time

NO MORE NOON SH

FACTS

Title: **QUEST FOR THE TIME-BIRD**
Publisher: **Infogrames**
Price: **£24.95**
Developer: **Damocis Research**

SIGHT & SOUND

Graphically stimulating action and excellent eye-candy, mostly catches racing from light effects and concludes in a fully ordinary

GAMEPLAY

Very smooth, but it takes time for various screens to load. Options are all pre-planned and the feeling is one of isolation rather than determination

VERDICT

Wonderful! Quality comp, a touch heavy and sometimes difficult to load but better for this in good



It's time to don your Gothic sword and wield some graphic lasers. The game is based on a popular French comic book which does not seem to have made it a very cool here - most's the pity, and is on two discs, even though some is able to fit the ill-fated Postage on the Wind. The task is fairly simple as stated, recover a magic book and discover the time-lord in order to stop the resurrection of the ultimately evil wizard, of which is repeatedly detailed in the story of the game in wonderful pictures. The player ultimately controls four characters although only two, Gargon the retired knight and the robustly proportioned

QUEST FOR THE TIME-BIRD

Rowena daughter of the witch Maria set off on the quest. Control is by

clicking on the various characters which opens up the numerous option boxes either of possessions or speech. The system will be recognizable to those who played the Postage on the Wind games although the whole management is better. The travel to different levels is handled by a map screen which is controlled by an old man with a fuzzy pointer but on the whole it works well. Surprisingly this is not so much a hack and slash adventure but one more suited to diplomacy and correct choice of multiple selection dialogue boxes. Death can come easily but it is in fact possible to finish the game with only one survivor,

not that it will threaten even style but it was quite acceptable for the job in hand. One annoying note is that the game is supplied on double-sided discs, this is not immediately noticeable and it is not until that mag machines stop in mid event that there is a hint of one problem, which can prove frustrating to those with single-sided drives. Fortunately it does to load from disc A and therefore even those with reformatted 1 mag discs may have problems.

The great feature of the game is the superb comic book-art work. The whole experience feels like playing in a good quality comic with great looking the game feature and, I suspect, offering a taste of the interaction for those who actually know and love what I believe to be a producer French comic trip.

BATTLETECH

THE CRESCENT HAWK'S INCEPTION

In the beginning was BattleTech - a fairly primitive little wargame which involved two players simulating a fight between two giant robots. Four or five years later you will now find shelves full of FASA Corporation's extremely successful and popular BattleTech board game material in your local games shop - based on all of war games coming BattleTech, CityTech, AeroTech, etc. plus RPG manuals such as MechWarrior, with many associated accessories, detailed manuals of the five Houses which are warring over the galaxy over 1000 years in the future, a regular magazine (BattleTechology) devoted entirely to BattleTech and its spin-offs, and even a manual detailing all the regimental point schemes for your mecha-tilted.

Now at last, thanks to Infocom and Westwood Associates, you can play BattleTech on your PC. Enough information is provided in the manual to get the game, and you can enjoy the game without having played any other BattleTech games.

You can learn Youngblood, 18 years old and just about to start your training as a BattleTech operator. A BattleMech is a giant robot - 10 to 12 metres tall and weighing 20 to 30 tons, bristling with lasers, missile launchers and guns. You sit inside and control it!

There are three main phases to the game. In the first phase you undertake a number of training missions and learn how to

manoeuvre and fight in your first BattleMech. A large window shows a Mech's eye view of the local terrain and the enemy. You use the mouse to select menu options from another window. These allow you to direct your movements and target each of your weapons on an enemy block or person. You can dynamically tailor the game options to allow you to see all the 'Mechs moving and firing, together with short cutscenes in a small window showing some of the battle action in close-up, or you can suppress all or any of that and just see the results. In between the training missions you can explore the city and spend your money - if wise with it - you will need some armour and weapons if you hope to survive phase two!

Your training is abruptly cut short by an enemy attack on the planet. In the second part of the game you will need to use your newly acquired skills for real to survive in this non-hostile world. You have to explore the whole planet (fortunately the game keeps a very nice map of it all for you) to find friends, weapons, and BattleMechs. With enough money you can get your 'Mechs modified to include more weapons and weapons and make you and your friends a really lethal battle force. Your prime objective is to find a hidden five-tonne cache of BattleMechs and spare parts.

When you finally enter the cache the third phase begins - solving the puzzles of the cache to finally win over the BattleMechs. This is an addition to the game, requiring you to explore a large underground complex and find all the right codes to open the doors, plus solve a few other little puzzles as well. (Again, the computer is very friendly and makes a map for you!) The whole game is mouse driven, and very easy to play. As well as all the fighting, you will need to explore thoroughly in order to acquire a few artifacts that you need and to visit some friends, without

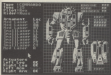


'a complete departure for Infocom'

them you will never succeed - but don't fret everyone. There is lots of text to enhance the storyline, plus the occasional decision to make - usually in the form of a question to which you reply by pointing of either YES or NO with the mouse.

You will also need lots of money and there are plenty of ways to acquire this: you can fight in the arena, or wonder around the countryside attempting an enemy 'Mech, or bragging what you can if you have the right skills, or you can invest it in the local equivalent of the stock exchange!

- **GAMEPLAY** - Excellent - once you get used to the controls you can have some superb fights - if both you and the enemy are the various units in the endgame, with plenty of variety along the way.
- **GRAPHICS** - scrolling landscape, animated flight screens, graphical status reports on your 'Mech - lots of good stuff.
- **SOUND** - minimal, but adequate.
- **VERDICT** - a complete departure for Infocom - good fun - well worth having a look at.



Title: **BATTLETECH**
Publisher: **Infocom**
Price: **£24.99**
Reviewer: **John Sweeney**

THE ROUNDUP

With so many ST games being released it is impossible to review them all so here John Davison (jr) and Damon Howarth present a roundup of all the others reviewed for review since the last issue for:

CRACKED

ATARI

Price £19.95

Cracked is a different sort of game in as far as it is a cut-throat gallery type of strategy. The player plays a 50-dimensional array of eggs both actual procedures on-line different screens. A bonus system involving egg throwing at a rate for appears of both random intervals and a 0.05 grid for.

The game is basically light weight and intended for fun, and to some it seems addictive. There is no plot as such and it feels like a day of the far. The graphics are fun and there are several sound effects along the way, limited but enjoyable.

SIGHT & SOUND: Not good at all when it comes to graphics. The coffee can was good and the transitions between the standard target are amusing.

VERDICT: Very easy to understand, great mechanics, catch being eggs and enjoy your bit, everything is simple, well implemented and great fun. Not a game for prolonged play but one to come back to regularly. A pleasing change from action games, with nothing to match after about 200 or thereabouts.

GO-MOKU/RENJU

Atari

Price £14.99

Mokuro is an ancient classic board game, sometimes known in the West as Five-in-a-Row. It's played on a long board laid board with counters, and a great fun to play if you enjoy the style of game.

SIGHT AND SOUND: As with Backgammon there is no sound and the graphics are very simple in appearance, being just black on white. However it is presented fully and is by no means offensive to the eye.

VERDICT: A very good implementation of an old classic. Whether the presentation could be a little more interesting. Overall it's good, but could be better.

SAVAGE

Frederic/Microprose Price £19.95

An arcade style action game in three stages, where you play the war of the muscle bound warrior 'Savage' on a mission to rescue his brother from the clutches of evil. It's one of those very addictive games with plenty of replaying.

SIGHT AND SOUND: Graphics are of very high quality. They are large, colourful and very well animated. Sound is also good, consisting of a suitable background tune along with some obvious spot effects from time to time.

VERDICT: Very good. A nicely presented and

crackable game with some very nice touches. One of those which requires just one more go.

SILKWORM VIRGIN GAMES

Price £19.99



A short run up to two worlds the player controls a helicopter and a plane in a heli-copter for scoring game, trying to blow up a number of enemy and game pieces on the way. The end of each level has a special difficulty one machine to destroy and there are eight or more like helicopters to hit on each level to win an achievement. The game is well controlled and the playing time is a wonderment to see. Not too fast and it is a great game for one player to control both machines with one joystick.

SIGHT & SOUND: Good effects and strong tunes run through the game - the graphics are top, both and smooth, everything adds to good effect.

VERDICT: Not bad, nice, never seemed to take a breath and the player needs to take a moment, a good arcade conversion. A great short run up especially if you had a mode to help you. Definitely a little better than the other worth getting.

BACKGAMMON

Atari

Price £14.99

A classic conversion of the classic board game which allows you to play at several different levels of difficulty. Highly addictive and very, very playable either against the computer or against another player.

SIGHT AND SOUND: Your average board game does not make a lot of sense, and neither does this computer version. Add to the realism/successful graphics are good and more than adequate for what is needed.

VERDICT: I love the board game, and the com-

puter version is good for when there is nobody else about to play. An excellent reproduction of one of the oldest games of all and others.

DOMINATOR

System 3

Price £24.99

A vertical omnidirectional shooter, most fun on game which is difficult to get into. Gameplay is very intense although it has the annoying habit of sending you back to the beginning of the level when you die.

SIGHT AND SOUND: The music on the title screen is a great simple melody, drums and powerful guitars pump out a really fun. The graphics are also impressive although they could be better in detail, or could be exciting.

VERDICT: Not a great game, sounds good, but (DOMINATOR) seems to be more exciting for me to see it as a support game. However if you like the style of game there isn't really doubt that one better. Personally I prefer the great fun up style of Defender.

GIANTS

US Gold

Price £29.99

A collection containing four games on its single sided disc. Other than Giant 1, F40 and Starfighter. These are all consistent arcade conversions with all the US Gold trademarks. Features of Giant 1 if you have a console connected to the printer (and since the software assumes the printer is on) it is both color monitor and makes up the game play. Most of these games will be available in the real CD come book. The set represents good value if your collection is short of some of these classics.

SIGHT & SOUND: Generally good. Giant 1 and Starfighter were well on both ends. F40 is disappointing a little.

VERDICT: Nice to see a collection of several games, if you are short of space or a three than it is well worth it for the excellent Good value for money.

FINAL LEGACY

Atari

Price £19.95

For another Atari classic, a game of multiple wargames. There is a lot going on in this game, it is your task to place up opposing forces and then make them. It's 200 your job to stop enemy forces falling on to your cities with the help of the sea base. All this is accomplished from the main screen which is both the play into a variety of sub-games. The price is not

but sometimes it's what's left only people ought the imagination.

SIGHT & SOUND: Graphics are well coloured but sounds, nothing special and the sound is limited to just effects, again possibly in-virtue of conversion.

VERDICT: The game isn't particularly although plenty want on, the mobile protection section but the Maze Command protocols could be looking 'flat'. There is nothing that a poor about it but nothing to see it alone mediocre, try before buying.

04

TEMPEST

Atari Price

£14.99



A straight conversion of the ancient arcade game which uses a colour vector graphics screen.

SIGHT AND SOUND: The entire screen is lit and the graphics do not fade it looks in any way. The sound is in the quite normal (16KHz) fill and does nothing to enhance the game's it.

VERDICT: Very often it's a bad move to convert a game of this type to a home computer, and the particular version of Tempest is proof of this. I loved the original, but the version boxed me a little as the magic ingredients which made the arcade machine so special seems to be missing.

05

SKYFOX II

Electronic Arts

Price £9.99

Space age 'through the cockpit' shoot 'em up. You perform different missions to destroy the evil forces, but the best organised, not the most playable game.

SIGHT AND SOUND: (Originally the game has a very 'stuffy' appearance and doesn't flow, it's the 3D's capabilities, the sound is also decidedly unimpressive.

VERDICT: The original wasn't much good and the sequel makes no major improvements whatsoever. Presentation poor and gameplay is dull. Even though it's a low cost release I cannot really say that it's value for money.

06

BATTLE CHESS

Electronic Arts £24.95

John S Davison discovers a new way to play an old game

Do you think chess games are boring and couldn't possibly interest you? If so, take a look at Battle Chess and there's a good chance you'll change your mind after seeing it in action.

You probably wouldn't offer your opinion if you saw the game in its two dimensional graphics mode. This displays a very ordinary looking 2D chess board and pieces, with which you can play straight, gimmickless games of chess. Choosing the 3D option, however, should do the trick as it transports you into a completely different world of chess. The board takes on the appearance of a veined marble slab and the chess pieces become exquisitely detailed three dimensional medieval characters - and they're a few squares in size for you.

Choice of graphics mode is made from the game's option menu, which are normally hidden from view. However, when the menu are activated two characters with wings of ether descend from the top of the screen, unveiling fancy tooltiped menus as they go. Most of the usual computer chess game options are here, for example board setup, skill level setting, game load/save, etc., making the program suitable for use both by beginners or more expert players.

After indicating your move using the mouse some rather interesting things start to happen. The selected piece comes to life and walks to the chosen destination square, using some of the best animation and sampled sound effects I've met in a long while. Each type of chess piece has its own style (and sound) of moving, for instance the knight stomps and rattles along in his armour, banging past anyone in his path. And the way the Queen seductively sweeps her haars as she glides across the board is a minor masterpiece of animation!

The real fun starts when the destination square is already occupied by another piece and has to be captured. The two opponents position themselves in the disputed square and battle it out using whatever weapons, magic, or other brute force they have at their disposal. Each combination of two pieces results in a different type of fight so you get to see a wide variety of superbly animated action sequences. Most of them are amusing to watch, some gloriously so, but one or two are somewhat on the gay side. The sampled battle sounds are good too, although again some are rather too blood-curdling for my liking. The outcome of each battle is never in doubt - the opposing piece always wins, or you'd expect.

Overall, Battle Chess is an entertaining and enjoyable game, but unfortunately the animated movement and battle sequences slow down the real chess action and play havoc with your concentration. They could also become tedious once the initial impact wears off, but you'll have great fun until it does, though!

GAMEPLAY: The standard game of chess with the added options of two played with connected 56k or via a modem and a rather expensive phone call.

SIGHT & SOUND: Superb animation of the chess pieces bringing a whole new dimension to the game. Sound is mostly sampled and used to excellent effect.

VERDICT: Because of it's 'non-standard' animation I think this one is more likely to appeal to the newcomer to chess rather than the serious or experienced player, who'd be better off buying something like COE's superb Colours II.

THE STOS COLUMN

Peter Hickman brings you the first of your contributions plus a Scrolly Message Editor and Slide Show all of which can be typed in with STOS Basic

In the last issue I did not have a chance to outline the general content of this STOS series, so at the moment this column does not have a fixed format, in some issues I will fill three or four pages with a tutorial, while other issues will contain programs with a small breakdown of such as everybody can study and learn from them.

A small problem will be the length of the programs published, I have written lots of programs that are far too long to include

in this issue, so I intend to put them into the STOS 3 PD library together with quite a few other banks and fonts. Now this is nice but let's face it, a whole set of disks filled with all these things would be very hefty, and this is where you come in. What I would like you to do is send me (my address is at the end of the article) all your sprites, music, fonts, games, serious programs, even animated cartoons and I will try to include some of them in this STOS column, the rest will be organized onto separate disks and then put into the STOS 3 library for everybody to study, use, and experiment with. Any programs that you wish to donate for the STOS column/ disks do not have to be heavily commented or accompanied with an instruction manual, the size of War and Peace, for all of the short programs I decide to include in the column I will do a line-by-line breakdown, so other STOS users can learn how to make more efficient use of the commands available within the current version of STOS, of course what would be nice is an upgrade to STOS which allowed PASCAL like procedures and dynamic data structures (more on this subject next issue).

STOS 3.0 RELEASES

STOS 3.0 is a major release and includes many improvements over the previous version. It is available for purchase from the STOS 3 PD library.

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A REDEFINED KEYPAD

New to this issue's programs, the first of which is a contribution from Laurence Myers of Glascenter. His program is a small listing (see PROGRAM 1) which uses the XKEYS 'REPTBL' call to modify the layout of the numeric keypad (see FIG. 1) to make typing in those memory banks really easy.

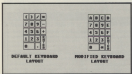
- Enter the listing as follows:
- Load the 'MPDATA.ACF' necessary from your STOS backup disk.
 - Enter PROGRAM 1 ignoring the REML statements if you wish.
 - Line 1170 causes a error which is fortunately trapped by the program and is invisible to the user, but even so you should change it from:


```
to 101 to 13:memBank = 1
```

 to:


```
to 101 to 13:memBank = 0
```
 - Save the modified version of the program back onto your own disk.

```
10 GOTO 5000:100
11 DEFINT I=1:DEFSTR S$(256)
12 FOR I=0 TO 255:PRINT I;:NEXT I: *****
13 FOR I=0 TO 255:PRINT I;:NEXT I: *****
14 END:1000:100
15 END:5000:100
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Laurence Myers redefined keypad program

KEYPAD - HOW IT WORKS

LINE 38 dimension's a numeric array. The array is 32 longword big and if my old 'A' level computer science teacher was to be believed there are 2 words in a longword and 2 bytes in a word, giving space for 128 bytes of information.

LINE 39 finds the starting address of the array.

LINE 40-49 read in the data and FORD it one byte at a time into the memory occupied by the numeric array BUSH.

LINE 42-72 contain the keyboard definition data.

LINE 74 calls XKEY routine number 16, the top command passes the address of the BUSH array (contained in the BUSHM variable), it also passes two -1 parameters to the routine these tell it not to redifine the shifted or caps locked keyboard layouts.

LINE 1072 calls XKEY 24, this restores the default keyboard layout.

The subject of redifining the keyboard layout is far to long, not to mention complicated for this column to cover to any depth but if you would like some more information on this subject I can recommend a book called **A TALE OF INTERALS** by ARACUN ERM 0-916418-44-1, it does contain a few errors, but is still one of the better books available for the AT.

SCROLLY RELIEF

Wow, that's the verbiage spill out of the way now for the light relief. The next program here **PROGRAM 26** is a simple no-frills scrolly demo that uses no options or anything fancy, it doesn't even alter the default colour palette, I have included this demo in the column this month because the one I had been working on grew out of all proportion and once the memory banks had been filled it took up the best part of 500k!!

HOW IT WORKS

LINE 110-140 define the variables that the text is stored in.

LINE 170-210 create a striped screen by drawing eight lines (columns 8 - 15) of the top of the screen. They are then gobbled into TEMPS using the SCREEN command and copied onto the rest of the screen.

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980 *****
990 *****
```

Listing 2 - Scrolly Text Messages

continued overleaf

Try playing with the STOP command in line 200.

LINE 230 uses the STOP command to cycle colours 8-15. I have described this as "stupid" because the command isn't flexible enough. A real improvement would have been made if the command allowed you to cycle various colours out of sequence, for example cycling colours 8, 10, 11, 14 is impossible. The routine I wrote to cycle colours using FLASH is much more flexible (see last issue).

LINE 270 defines the scrolling area.

LINEs 300-390 point the text in the variable NEXT1 and make it "stagger", this is a simple effect which can be seen in quite a few Atari II/II+ basic games. The effect is achieved by positioning the cursor at the bottom of the screen and using the SCROLL UP command, this creates a new line at the bottom of the screen and pushes one off the top. The SCROLL DOWN command is then used to do the opposite.

LINE 390 moves the text off the screen quickly.

LINEs 420-480 point a single character at the far right of the screen and scrolls it pixels left, the next character is then pointed and is once again scrolled left.

LINE 490 is the end of the repeat loop and makes sure the text is pointed from the beginning over and over again. The logic behind the UNTIL FALSE command is quite simple and is easily explained without going into binary mathematics, the statement is a short version of saying UNTIL FALSE=TRUE and because FALSE is a reserved word and doesn't change its value FALSE can never equal TRUE!

A QUICKIE SLIDE SHOW

The last program (see PROGRAM 3) is one that was written by a friend of mine who wishes to remain anonymous but goes by the name of Gong the frog, it was written as a bet in two minutes flat! It not probably explains the dappy way it was put together, still it's quite functional. It is in fact a slide show and can be very handy, especially if saved as an accessory. I use it quite a lot when programming in TTOS because I can never remember what I have called the picture files I may be currently using.

HOW IT WORKS

LINEs 70-90 move a temporary screen and means any junk on the current physical screen.

LINEs 110-200 make up the main loop, the file search specification is put into the variable SPICE and then the program jumps to the loading routine. This is repeated separately for SID, P1 and P2 pictures.

LINEs 260-290 open a window and set the size which drive they would like the picture to occupy.

LINEs 310-340 set up the two cursors and windows which will contain the drive A or

```
10 rem *****
20 open "A:"
30 rem "
40 open "          0,100,100#0
50 open "          0,100,100#0
60 open "          0,100,100#0
70 *****
80 *****
90 *****
100 *****
110 *****
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B selection.

LINEs 390-510 wait for the left mouse button to be pressed in one of the spots. **LINEs 550-510** get the names of the pictures to load using the DR DRIVE and the DR NEXT1 command.

LINEs 540-590 clear memory bank B and load a picture into it.

LINE 600 fades the physical screen colours to black.

LINEs 620-630 copies the picture in bank B into the physical screen and fades all the colours to those stored in bank B.

LINE 640 - if a key is pressed this line pauses until another keypress is detected thus keeping the picture on the screen.

NEXT TIME

So that's all for this issue, and if all goes well next time I will be bringing you a full report on the SRS support given by Microbit of the PC show, a few more listings than this month (well at least I gave your fingers a rest), perhaps a TTOS game, and if I can get hold of a copy I will do a quick comparison between TTOS and it's now running mate AMOS (yes I know it's an AMIGA package but I promise to have a disinction both after playing with the little beauty).

Oh before I give you my address I would just like to thank Lawrence Meyers and Neil Matheson for being the first people to write to me. Please remember that I cannot guarantee the immediate return of your disks unless you include a SAE.

Write to Peter Dickinson, at
36 CLEVELY ESTATE,
WORMHOLT ROAD,
LONDON W12 0LX

See inside front cover for
READERS OFFERS
on STOS BASIC and
other STOS accessories

JEFF MINNTER'S
Supports

GRID RUNNER

Some forms of combat are adapted in the antennae. One track is the Vindicator. In Vindicator, players exchange and buttons to alter the behaviour of several coloured balls on a display screen. By moving one ball to intersect another, they set a trigger point. An antler displays the location of the other player's ball. One player's ball is shot towards the other's ball.

Grid Runner

The track is made of 100 squares. The Vindicator, green, moves off the screen at the top. The other balls are black, red, blue, yellow, and purple. Each ball has a number on it. The number is the ball's score. The Vindicator's score is the sum of the scores of the other balls. The Vindicator's score is the sum of the scores of the other balls. The Vindicator's score is the sum of the scores of the other balls.

HINTS FROM THE
STARFIGHTER'S
MANUAL.....

1. The most important thing to remember is to always keep your eyes on the enemy. 2. Always keep your eyes on the enemy. 3. Always keep your eyes on the enemy. 4. Always keep your eyes on the enemy. 5. Always keep your eyes on the enemy. 6. Always keep your eyes on the enemy. 7. Always keep your eyes on the enemy. 8. Always keep your eyes on the enemy. 9. Always keep your eyes on the enemy. 10. Always keep your eyes on the enemy.

£9.95

from your retailer or direct from



40 MAGNET PLAYERS! 100% COMPLETE! 100% COMPLETE! 100% COMPLETE!

Supports
Grid Runner

A BLAST AND A HALF!



ANDES ATTACK

ANDES ATTACK (PUBLISHED BY BENTLEY & BENTLEY) is a game of strategy and tactics for two players.

In this game you are charged with protecting the attacking forces and your own forces. You must use the help of the ANDES - a powerful force of attacking and defending units - to protect your own forces. You must use the help of the ANDES - a powerful force of attacking and defending units - to protect your own forces.

The ANDES is a powerful force of attacking and defending units. You must use the help of the ANDES - a powerful force of attacking and defending units - to protect your own forces.

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The ANDES is a powerful force of attacking and defending units. You must use the help of the ANDES - a powerful force of attacking and defending units - to protect your own forces.

£9.95

© 1984 by Bentley & Bentley
"A Blast and a Half"
"Newly Published!"

ANDES ATTACK
DEFEND OR DIE!

STOS II ... The Accessories

When STOS was launched many add-ons were promised, and owing to the language's phenomenal success they are now ready. The three items which I have had the joy of combining into my STOS system are the Compiler, Sprites 480 and STOS Maestro. Each of these are compatible with the system and in the case of the Maestro and Compiler need certain installation programs to be run to ensure that everything goes smoothly.

ADDING SPRITES ...

Perhaps the least impressive package both in packaging and content is the Sprites 600. This single disk comes in a booklet type cover with a plastic coded instruction sheet. The disk is simply what it claims to be and gives the owner access to several well drawn and animated sprites covering subjects as varied as Poodles to Dragons and submarines to spacebirds. They prove useful to people like me who either talent or laziness creates converting sprites almost impossible. Since they are created in STOS format they slot into the sprite banks with no problem and so the demo provided in STOS II may be listed to obtain other hints on its construction. What's more the sprites can even be edited in the editor provided with the language. On the whole a very handy package that can save creation time.

ADDING SOUND ...

Maestro is a sound sampler package and the smaller edition of Maestro Plus which contains the hardware needed to extract and save samples. Sadly I did not receive a cartridge with the review copy and so cannot comment on that side of the software. It was noticeable that no dealers or companies were willing to comment on the compatibility of other cartridges to Maestro. It was surprisingly difficult for me to make arrangements with Maestro to buy the optional add-on as well as fact the situation became so complex I gave up trying to buy it. These problems aside, the software is truly remarkable. It is run as a stand alone program but includes an extension to STOS basic to enable the programmer to insert samples into their own creations with no real difficulty. The

Damon Howarth tries out the first extensions to STOS allowing you to add sprites and sound and to compile the programs

Maestro manual also includes full instructions on this and even explains the assembly language routines for those who wish to write machine code programs. Maestro also claims to be compatible with other languages that are capable of calling assembly routines from Basic, thus making Maestro of potential interest to users of Post and GEN Basic.

In the STOS tradition of borrowing parts of good games, Maestro allows the importation of sampled files from other sources on disk. For example I transferred the whole of the Snowman sample from a demonstration disk and was readily able to tinker with it. One of the features of the software is this ability to take a piece of music or noise and feed it into events and when to make sounds that were never dreamed of by the composer.

The editing of any sample is most user friendly. The system shows both where in memory a sample lies and how much memory is used by the sample. This can be altered by clicking left and right markers to change any one of the representative bar and the sound waves then appear within this pattern. A magnify command allows very detailed study of very short pieces of sample and if enough time, patience and listening is expended spectacular bits of sound may be created and saved. My favourite example eventually took up approximately 2600, included several calls for help and a redrafted passage taken from the sample disk supplied, leaving the samples to disk is just as well thought out and simple and works through an easy menu system. I also managed to add some sampled cracks and cogs as suggested in Zulu but more of that with the compiler.

The Maestro disk has a most amusing demo of a drum kit whereas up to thirty two keys may be defined as samples of

various pitch, tempo and style and played through a drum kit. The supplied STOS basic written drum demo is, as always, fully flexible and eminently modifiable with. To do this of course STOS Basic must be present and here had the extensions installed added in it (available on the Maestro disk). Sadly the other demo needed the sampler cartridge attached and so I can offer no comment on them save saying that there is a phaser effect and a sort of light show effect available to its moderately imported sound. It is also possible to set direct sampling of various volume rates and speeds. If you were to buy this ability I would advise purchase of the Plus version but if you already own sampler hardware then the Maestro software will be compatible with complex you have made to that system.

COMPILE IT

Next on offer is the STOS Compiler. This piece of software contains an update for STOS users since it works on STOS 1.4 and includes the updating software. The new update makes floating point arithmetic at single precision and certain mathematical operations much faster. Especially helpful on the trigonometric functions such as SIN and COS. At this point it is necessary to explain that I reviewed all these on a two drive 1040 and I understand from friends with half megabyte 128k that memory is tight and several demo features cannot be found without a one megabyte drive. The manuals for all these products do explain this and the compiler especially has programs in it to maximise half megabyte memory.

The compiler disk comes complete with a run disk necessary and a formatter for disks. The compiler has to be installed on

SORCEROR LORD

PS2/Microsoft £24.99

John Sweeney knows a thing or two about war games so he was delighted to be able to try a new one - but not for long!

an accuracy and needs the whole folder of functions available in either the active drive or the BAM disk. The Item disk certainly is one of the best of its kind and is most friendly to set up though it seems that this is not practical on STOS.

The compiler will turn any version 2, 4 or converted 2, 3 STOS Basic programs into machine readable code, even the accessories and games on the original set. Indeed it is now possible to run the sprite designer and music writer from desktop to produce ITOS compatible sprites and sounds. This enables I29 owners to have more development space. The compiled versions are normally a great deal more compact than the run time versions and if compiled on GEM and saved on PASC, are unavailable to prying eyes if you distribute them to friends or software companies.

The compiler will compile to Basic allowing the machine language to be run and the original program to be edited although compiling to GEM loses this option. The original compilers may be done from any combination of memory and disk - those memory-to-memory up to disk-to-disk.

Obviously the more memory options are used the quicker the compilation but compiling to disk is not of all memory intensive and although slower is certainly feasible. To activate the compiler it is only necessary to enter the accessory menu and press the appropriate function key. This sets up the relevant files and puts the user into the very helpful front end, there so long as no bugs lurk in the Basic the compilation is complete. Having said that the compiler is very fast and, if nothing else, will learn an old and good programming practice. Even the demo games on the STOS-disk written by the creator fit-in well though up compilation errors which is why the compiler to basic is used first. The system needs module type programming, defined arrays and careful data statements but the produced code is normally very fast and a sense of achievement surrounds a successfully written and compiled PASC.

Once again there is nothing that can be criticised too much, even type of machine in the ST range is covered but that that in itself is an achievement. Personally I felt the system needed a minimum of two drives although a one meg memory with ram disk would be an efficient. Programs that benefit most are those that rely on calculations. Not a lot can speed up through drives sprites but try to compile and then play Bulet, it then lives up to its name. All in all these three pieces of software are masters of their kind and certainly the compiler is an indispensable aid to any STOS user. Mine is here and certainly useful while the sprites are like having two of soup in the cupboard for those days when making your own are impracticable.

Also this nice packaging - map, player's guide, reference card, Claims to be a Fantasy Warcraft Simulation - The game where strategy is a reality! Load the game and it may appear. Lots of identical items, representing the Bloodlord's forces, start moving round the screen in the accompaniment of a sound like a Basic machine in need of a service. As it moves off the edge of the screen the view shifts to a different section of the map. (The board covers an entire section but doesn't scroll.) One of the enemy reaches a little distance and there is a truncated shield indicating a battle sounds more like a stone in your back lounge!

After a couple of minutes of this it switches to Combat Mode. Data briefly flashes up at the top and bottom of the screen - I saw strong a magical attack each side has succeeded in casting, number of troops, and number of shields. I have game pieces which don't fit FOR control for how long data is displayed? Next is the Alliance Phase. Some of my leader's mobilise and various of my units get reinforcements.

Whenever Phase 4 I get a chance to do something, keyboard only! As I move the cursor onto my castle and mouse I get their status - number of sides and warriors, leader's characteristics (strength and loyalty), fatigue and remaining movement points. (The documentation is incomplete at this point as it fails to mention that the SELECT key is R, DIRECT is J, War Status is W, and View Map Unit is Shift is S)

To I mean a few guys around, I can also look at an overall view of the world (shown in the hours which make the board up - that one ROT shows on the actual playing board), and pick up or drop troops in garrisons. I told the computer I have finished this phase. After my Combat Phase which looks just like the computer's it's back to his movement phase again - more game jacking, but basically much faster and quieter now that I've turned off the noise!

If you can imagine all your old castles or his HQ better time now and to be gets your HQ (then you win. That's it. Not a lot for £25)

I managed to win the Emperor's level after three or four goes. Didn't try advanced, and gave up on Expert - it is extremely difficult and doesn't appear to give you anything like enough information or what is happening. The average player is likely to be frustrated by the unfriendly operators, the lack of instruction and the difficulty of entering the level sequence is likely to be put off by the lack of information.

This is basically a very ordinary wargame - if you were playing this as a board game then you would wonder whether by moving also and looking up the result on a Combat Resolution table (CRT) choosing the appropriate part of the table for the type of troops (what are the numbers and two types - warrior and rider), the type of terrain and the relative size of the troops, modified by the dice, shows, the leadership and fatigue factors and the enemy level. The enemy level is determined in some way from your leader's strategy factor plus the distance to eight nearest Stone-Rings (how Ring, a die throw?) and how many Stone Rings you hold!

In this version the computer throws all the dice events, keeps all the CRT's and modifier tables secret, and doesn't even show the results up long enough! With so many variables it is impossible to divine what is going on, especially when so many other details are also involved. What is the terrain type or effect on battle of being in a Stone Ring or a Castle? What happens if there are multiple leaders present? What happens to movement points and battle strength when you combine different nations under a single leader? And so on... And when one of the Magic Spells advertised in the box? I don't think the fact that your leader's strategy factor acts as a CRT modifier is sufficient to justify all the references to strategy and magic in the descriptions of the game!

THE STOS ADD-ONS

SPRITES 600	£14.95	STOS MAESTRO	£24.95
STOS MAESTRO PLUS	£69.95	STOS COMPILER	£19.95

Published by Mandarin Software

PAGE 6

Adventures

THE JADE STONE

from Marlin Games

A beautifully illustrated text and graphics adventure by Linda Wright in which you play Amoro, the beautiful daughter of Lord Selenus of Mutari engaged to Amorton, a man that your father does not approve of. In an attempt to impress him, Amorton announces that he will sail out the evil sorcerer Mafakura, however young Amorton is soon captured and sent to your father. You learn that only The Jade Stone is magical enough to overcome the evil Mafakura and so you must search for The Stone and rescue both your father and sweetheart.

An UNUSUAL and enchanting adventure with nearly 800 surprises - features include VOICED, COPIES, EXAMINE ALL, SAVE/SAVE/RESTORE and SHOWNEXT-DIP

The JADE STONE is just \$9.95

DOMES OF SHA Tri-Pack

from River Software

Three text only adventures from Jack Locksley, a highly regarded writer of descriptive adventures

DOMES OF SHA is River Software's most successful adventure to date. Set in a far corner of the galaxy, an event was taking place that would not only affect the tiny planet of Oshala, but would not even begin. The surviving people knew that they must move or die but the Cold Fear had prevented them from going. Somebody must be strong enough to lead the people of SHA to safety.

HAMMER OF GRIMMOLD is set in a land of dwarves where Grimbold, mightiest of the Dwarf Kings, is deeply troubled. His fabled hammer, a symbol of health and fertility, has been stolen bringing misery to the land. The noble Grimbold is charged with recovering the Hammer of Grimbold but must first subvert the Hooded Men, decelerate the Gigantic One and finally overcome both, the evil one.

A range of quality adventures from some of the smaller software houses that are now bringing their long heralded talents to the ST



Linda Wright has been writing adventures on other machines for many years. She's highly regarded in the Adventure and text genre for her games *Point Dead* (reviewed in C&A) and other magazines. Her most recent game, *The Jade Stone* (ST) is being distributed by more writers. Linda brings a refreshing new approach to many other adventures.

MUTANT is a maze down to death adventure. Twenty years ago, on one of the South Sea Islands, the bombs were tested. The small islands were returned to the lush paradises it once was and small villages have sprung up around the coast but oil is not well. However, as something leaks in the mountains, no one has seen it and survived but those have heard its hideous cry. Now the Mountain's last hope of having it down and destroying this creature before it is too late.

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