

COMPUTING **CPC**

WITH THE

AMSTRAD **C**

The independent magazine for Amstrad CPC users

INCORPORATING
AMTIX!

AMTIX!
Amstrad

4 smash hits from Hewson

Phantom Club

Inside Outing

Solid Gold

EVALUATIONS

AMS Stop Press
KDS 8-Bit Port

ADVENTURES

Book of the Dead
Videoworld

LISTINGS

Screen handling turbocharger
Wizard whist • Mini adventure

OUR GREAT
ANDY CAPP
CONTEST

50
prizes!





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Managing Editor:
David Macklin

Group Editor:
Alan MacLachlan

Features Editor:
Ian Sharpe

Production Editor:
Peter Gloves

Assistant Features Editor:
Robin Nixon

Associate Editor:
Robert Woodhouse

Promotions Editor:
Christopher Payne

Reviews Coordinator:
Pete Turnbull

News Editor:
Mike Cowley

Advertisement Manager:
John Seawden

Advertising Sales:
Joseph Fox
Wendy Colbourne

Tel: 0675 679668 (Ad Dept.)
0675 679666 (Customer Services)

Telex: 930071 MCMRDF G
Tele: 206071 MCMRDF G
Postal: Mailbox 61458282
Fax: 0675 679668

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A prize draw with a difference – and age is no Andy Capp. Over £500 worth of goodies are up for grabs.

New agreements mean budget games boom

A BUDGET-PRICE games boom for the CPC is on the way following a number of agreements between major software houses.

Among the big names involved in deals to release low-priced titles are Mastertronic and Activision. In another deal Piranha, AudioGraphic, Incentive and Bubble Bus have been signed by Alternative Software.

Activision's entire back catalogue - about 40 games including Lucas Film titles and the classic *007 Shootouts* - is due to be re-released.

The first batch of titles to be issued on the new Booter label will include *Edoctor* and *Ball Master*.

Activision's Paul Cousins, said: "The agreement with Mastertronic reflects their current market strength and forward planning. It further demonstrates the importance of secondary marketing opportunities".

One of the reasons given by Cousins for the increasing number of low-priced releases is the limited shelf life that popular titles have.

"The ability to recycle old games through budget labels is beneficial to all concerned", said Cousins.

To add to the ever-increasing list of CPC bargains, Alternative Software will soon be releasing *Rogue Trooper*, *Siles Force Cobra*, *Nasratta*, *Mooncrest* and *Pyrosaria*.

Firebird has also announced a range of budget-priced disc and cassette games that include such titles as *Microthefem*, *Fresh Factory* and *Rock 'n' Wrestle*.

With CPC games starting at £1.99 for cassette-based titles and £5.99 for discs, such prices may seem detrimental to the regular games market.

But Graham Graphics boss Ian Stewart said: "Despite the wealth of bargains about for the CPC we have had three record months in succession."

"There will always be a demand for high-quality full-priced software and the selling charts reflect this".

GAMES UPDATE

LATEST coin-op conversion from Firebird (01-379 8766) is *Flying Shark* - a fast-and-furious vertical scrolling shoot-'em-up licensed from Taito.

A massive hit in the arcades, the five-level game gives players the role of a lone fighter pilot tackling a ferocious enemy. Price £8.95 on cassette, £14.95 on disc.

AFTER 10 years separating the superhumans from ordinary mortals, Granada television's *The Knight Factor* has become a CPC program.

Released by TV Games (01-847 5622) it combines various tests of mental agility with joyous-smashing assault scene action. Price £3.95.

TWO games with very different themes have been announced by Magic Bytes (01-785-4282).

Parasite poses a survival challenge in a computer-controlled world reminiscent of George Orwell's 1984.

Vampire's Empire is an arcade strategy game set in the world of Count Dracula.

SCRUMPS - The Computer Edition, from Virgin Games incorporates 230 thought-provoking questions and a multitude of witty responses. As design ensures that no two games can ever be the same. Price £9.95 cassette, £14.95 disc.

SOFTWARE publisher Emerson's biggest sellers of 1987 have been collected on a New Year compilation for CPC users.

Four Smash Hits compiles *Exolon*, *Zyzzex*, *Nanarata* and *Urduim Plus*. Price £2.95 on cassette, £14.95 on disc.

Martech move into Europe

AN agreement to handle the sales and distribution in Europe of all future Martech releases has been signed by Electronic Arts.

First title to come under the new distribution umbrella is Nigel Mansell's *Grand Prix* which has been waiting for release since November.

Commenting on the deal, David Martin, Martech's managing director said: "Naturally, we are very pleased to enter into this exciting and close friendship.

"We have some tremendous products in development and are looking forward to working together with Electronic Arts in bringing them to the European marketplace".



It's a deal. John Forrest of Electronic Arts and Martech's David Martin

... and Europe hits UK

GET ready for a continental software invasion.

Games R Ltd publisher Rainbow Arts and top French software house Loriciels have designs on the CPC entertainment market here.

Rainbow Arts has signed a European licensing deal with US Gold subsidiary Top Media Holdings.

It will mean a minimum of 12 new CPC titles in as many months, the first

being *Around the World in 80 Days*.

Loriciels is the top software house in France with 350 titles on the market.

Its first releases here will be *500cc*, a redesigned motorbike racing simulation with improved game play, and a professional's adventure called *Sapiens*.

Loriciels has promised a compilation of six of France's best-selling CPC games.

Amstrad Show is bigger than ever

THE scene is set for what promises to be the most successful Amstrad Computer Show ever in the Great Hall, Alexandra Palace from February 4 to 6.

Response from exhibitors has been so enthusiastic that already extra space has been booked to cater for increased demand for stands.

The show - sixth in the series - will stage a number of exciting product launches for CPC users as well as offering a large selection of bargains.

School Software - famous for its educational packages - will have continuous demonstrations of its Maxi Maths, Maths Mania, Better Spelling, Chemistry, Geography, and Physics programs.

A team of experts will also be available to answer questions about the suitability of its educational packages.

Siron Software is marketing three new products for the CPC - Hack-it, a utility program

for hackers, Micro Design, a page makeup DTP package, and a mouse interface and software.

In addition to the launches, Siron is providing "tremendous software bargain offers".

One of the biggest attractions will undoubtedly be the Amstrad Theatre - a popular with visitors to paid shows that it has been enlarged to meet the demand.

Visitors can sit back in comfort and learn all about the latest releases for Amstrad computers, and get advice from some of the best brains in the industry.

A newcomer to the show - PD800 - will be selling registrations to public domain software. "We have attended a couple of shows in the past as visitors and were so impressed that we felt we could not miss out on this occasion", said John Bolton, PD800's director.

As at previous shows, lots of bargains will be available.

BOOST FOR PRINTERS

IMPROVED printer test output on the CPC is now possible with the release of Qualitas Plus from Seven Stars.

An upgraded version of the print enhancer gives formatting power and compatibility with a greater number of printers. Seven Stars DS8284 (349) says Qualitas Plus codes and fonts can be stored with additional memory, leaving the main section free for the host program.

One of the benefits is that on a CPC608 Qualitas Plus is now fully compatible with the popular Mini Office II suite of programs.

BARGAIN BONANZA

WHEN the Official Amstrad User Club decided to give its members a Christmas bonus it found its stocking full of bargains.

The idea was to support club members at Christmas time with a Sell-a-Thon - a massive bargain bonanza of top software and add-ons for Amstrad micros.

"We approached all our suppliers, asking them to take the opportunity to reduce their warehouse stocks in return for free advertising and we had a massive response", said Club spokesman Keith Patterson. "We're planning another Sell-a-Thon in the summer".

THE
GALLUP
CHART

TOP 20
CPC SOFTWARE

RANK	TITLE	PRICE
1	PRO SKI SIMULATOR Code Masters	1.99
2	GRAND PRIX SIMULATOR Code Masters	1.99
3	GAME SET MATCH Ocean	12.95
4	SOLID GOLD US Gold	9.99
5	DIZZY Code Masters	1.99
6	BMX SIMULATOR Code Masters	1.99
7	LIVE AMMO Ocean	9.95
8	JOE BLADE Players	1.99
9	PAPERBOY Elite	8.95
10	RENEGADE Imagine	8.95
11	WORLD CLASS LEADERBOARD Access/US Gold	9.95
12	SUPER ROBIN HOOD Code Masters	1.99
13	CRICKET INTERNATIONAL Alternative	1.99
14	SOCCER BOSS Alternative	1.99
15	INDIANA JONES US Gold	9.99
16	SIX PAK 2 Hit Pak	9.95
17	OLLIE AND LISA Firebird	1.99
18	10 PAK Guardin Graphics	9.99
19	GRID IRON Top Ten	1.99
20	TRANSMUTER Code Masters	1.99

Despite six new and one re-entry, Code Masters still retains first and second positions. Watch out for the company's new £4.99 range starting with Jet Bike Simulator reviewed in this issue of Computing with the Amstrad CPC.

It's a bank job

IAN SHARPE breaks into the CPC6128's extra ram

The Amstrad CPC6128 has 64k more memory than the CPC664/664. In this short series of articles I'll be looking at how it can be used with the Bankmanager utility program supplied on your system disc.

There are two parts to this utility, starting screens or acting as a filing system. These aren't the only possible ways of using the extra ram, but they're the ones implemented in this particular program.

I'll be leading you through the filing system aspect as this seems to cause the most confusion. If you feel in need of a tutorial on screen saving, write in and if there's enough interest we'll cover it at a later date.

Before we get on to the programming it's probably a good idea to explain what ram is, where the extra ram is located and why it is necessary to use a utility program at all. If you understand that you'll find it easier to get to grips with Bankmanager.

I always imagine the first 64k of random access memory - ram for short - as a long, narrow box divided up into a row of square pigeon holes. To identify the holes each one is given a number - its address. The first one is 0, the second is 1 and so on up to the last hole which is 65535. In the computer world 1k for 1 kilobyte is 1024 bytes, so 64k amounts to 65536 1k's

1024 individual compartments, each being one byte of memory.

You may be wondering why there is this particular number of bytes and not more. Well, your Amstrad is controlled by a Z80 microprocessor and operations such as adding numbers are performed by this chip. Normally this is all hidden from view, but behind its friendly facade the Basic interpreter is run by the Z80 to execute your Basic programs.

Whenever the Z80 performs an operation on the numbers contained in the pigeon holes - which it does many times whenever it executes a Basic instruction - it has to know the address of the byte to operate on.

The component within the chip which handles this address is only large enough to hold 65535. The significance of this odd-looking number is that the Z80 works in base two arithmetic, where each digit in a number can be 0 or 1. Addresses are held as 16 digit numbers and the maximum this can be is 16 ones, which is 65535 in base 10. Therefore, if the row were longer the Z80 would never be able to read the contents of the extra bytes.

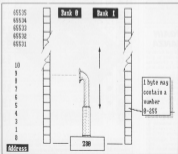
It's a bit like an architect designing a skyscraper 300 stories high when the biggest elevator available can only extend to 100 floors. Nobody is able get to the upper 100 so it is a waste of time putting them there.

So when Amstrad decided to graft an extra 64k on to the CPC6128 there was a problem. If it were tacked on to the end of the first 64k - in other words giving it an address range from 65536 onwards - the Z80 would not be able to get at it and it would have been no use at all.

I'm not going to tell you exactly what Amstrad did because it would confuse the issue. What follows isn't true in terms of what's actually going on in the hardware, but it's consistent with the way it behaves with Bankmanager and is a convenient way of visualising what's going on.

Going back to the skyscraper analogy, one answer for the client who needs 300 floors of accommodation is to build him two 100-floor buildings. If they were built close enough together they could even be serviced by the same lift.

Putting it in terms of our row of pigeon holes, rather than adding another 64k bytes to the end of the row, Amstrad put a second row parallel to the first. The second row is also numbered between 0 and 65535 and to save mixing the two rows up, the original is called bank 0 and the new one bank 1.



The Z80 microprocessor can look at either bank of ram

The 280 can be switched to look at either ram and so can deal with twice as much memory as it could before.

This presents a further problem. Apart from a few minor modifications and additions, the Basic in the CPC4128 is the same as the one supplied with the earlier CPCs. The other models didn't have the extra 64k so Basic was not written to take advantage of it. The consequence of this is that although the CPC4128 has the extra memory, Basic doesn't know it's there and can't use it.

This is where Bankmanager fits into the picture. It is a utility by you can use to communicate with the second 64k. In the context of the two 128k-floor buildings, it's as if the internal phone system in the first building were not designed to link up to the second building, so you employ your bank manager to run errands.

Bankmanager is written to cater for the storage and retrieval of strings in the extra ram. You would want to do this if you were writing a program which stored a lot of information in variables and arrays and you were running out of room. By moving the bulk of your data into the extra ram you free memory in the main bank for the program itself.

You aren't confined to storing strings - you can store numbers and whole arrays in there too - but you have to convert these into strings first which can be a bit tricky.

It's important to realise that to make use of the extra ram you have to write your programs differently to ones that don't need the extra memory. It's not just a question of slotting in a few extra commands here and there.

Because Bankmanager only deals in strings you need to know how the Amstrad stores them. Say you make an assignment of all like this:

```
all=""
```

is memory three consecutive bytes allocated to all have I, a and n in them. Well almost, because you can only put numbers in bytes so the Ascii value of each character is stored instead - 73, 87 and 110.

Ascii (pronounced asky) stands for American standard code for information exchange and it's a standard that everybody works to when representing characters as numbers. For more on Ascii values have a look at chapter 7, pages 8 to 20 in your manual and also the Basic commands Asc and Chr\$.

Actually, life is a bit more complicated than that. When Basic wants to get the contents of a string variable it



needs to know where it is and how many bytes it takes up. So when Basic looks up all it finds a short block of information that tells it the starting location and number of bytes taken up by all. Here this would be two bytes which taken together are the address of l followed by one byte containing the number three.

If this is confusing, read it again, but far every time you see byte read pigeon hole, and imagine our row of holes with a scrap of paper in each. Somewhere in the row are three consecutive holes: in the first is a piece of paper with 73 like Ascii number for l, in the next is 87 and the third hole 110. Elsewhere are another three holes where Basic knows it can look to find out where all lives and how big it is.

I've laboured that point because once you've grasped it, you have a sound basis for understanding how Bankmanager functions. It is capable of only three things - writing a string to the extra ram, getting one back and searching for a match with a specified string.

Bankmanager differs from the way Basic stores strings in that it doesn't store them by name. It can't look up all and find where it starts or how long it is. Instead it divides the extra ram up into sections of equal length known as records.

Imagine walking down the row of pigeon holes marking out every tenth one as the start of a new record. Each record stores a string and as all the records are the same length you

know where the strings are because the start positions are in multiples of 10 from address 0. The first record is numbered zero, the second one and so on up to the limit of 64k capacity.

Before starting a program you need to decide how long records are going to be. They should be the length of the longest string - if they are any shorter, the extra characters will be cut off by Bank Manager. If records are longer than they need to be, space will be wasted and you'll have fewer records available.

After allocating a record length Bankmanager uses the extra ram in much the same way as a random access disc filing system and I suggest you read Joe Priestland's articles in the November and December 1987 issues if you need information on this point.

You can tell Bankmanager to store or retrieve a string from, for example, the fifth record, if the records were 10 bytes long, Bankmanager would do a quick calculation like this: 5 records * 10 bytes/record = 40 bytes.

The -5 is there because the first record is numbered zero so the fifth is actually number four. Bankmanager would then know that to get at the required string it must start at memory location number 40 in the extra ram. It can then read out of the 10 bytes it finds there or fill them with your string.

- So that's the theory. Next time we'll put it into practice with some programming examples.

10 LINERS

WIN up to £10!

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This month's collection includes a mini mystery, an arcade game and an excellent graphics display. All merit a few minutes of your time and when you've seen them, why not have a go yourself and let us see the results? Don't forget to include a stamped, self-addressed envelope if you want your tape or disc returned.

Knight's reply by Jordi Domenech

These will grinding their dentures over Knight's Tour in the December issue will be relieved to see the answer generated by this program.

It will prompt you to input a number between 0 and 63, and this will decide the square on which the knight begins his excursion.

£10
WINNER

5	48	23	26	7	64	45	28
22	25	6	61	46	27	8	63
49	4	47	24	57	62	29	44
36	21	60	51	54	43	58	9
3	50	37	42	59	56	53	30
20	35	18	55	52	41	10	13
17	2	33	38	15	12	31	40
34	19	16	1	32	39	14	11

10 000 000000 by Jordi Domenech
20 000 1000 0000 10 000 0000 0000
30 000 0000 0000 0000 0000 0000
40 000 0000 0000 0000 0000 0000
50 000 0000 0000 0000 0000 0000
60 000 0000 0000 0000 0000 0000
70 000 0000 0000 0000 0000 0000
80 000 0000 0000 0000 0000 0000
90 000 0000 0000 0000 0000 0000
100 000 0000 0000 0000 0000 0000

11 000 0000 0000 0000 0000 0000
12 000 0000 0000 0000 0000 0000
13 000 0000 0000 0000 0000 0000
14 000 0000 0000 0000 0000 0000
15 000 0000 0000 0000 0000 0000
16 000 0000 0000 0000 0000 0000

Get it
right!

17 000 0000
18 000 0000
19 000 0000
20 000 0000

Sound programming by Alex O'Donovan

£5
WINNER

ENCOURAGED by his success in the November issue, Alex sent us a selection of his greatest hits. He's come a long way since the original offering, and even if you don't like pop, you'll be amazed at what he's managed to do in such a small program.

10 000 0000 0000 0000 0000 0000
20 000 0000 0000 0000 0000 0000
30 000 0000 0000 0000 0000 0000
40 000 0000 0000 0000 0000 0000
50 000 0000 0000 0000 0000 0000
60 000 0000 0000 0000 0000 0000
70 000 0000 0000 0000 0000 0000
80 000 0000 0000 0000 0000 0000
90 000 0000 0000 0000 0000 0000
100 000 0000 0000 0000 0000 0000

LINE	VALUE
10	0000
20	0000
30	0000
40	0000
50	0000
60	0000
70	0000
80	0000
90	0000
100	0000

Get it
right!

Road hog

by Bill Hamley

THIS is a fast-action arcade game in which the object is to maneuver your car through tricky bends without crashing into the side of the road. If you can survive for longer than a minute, Nigel Mansell will wish you!

```

10 REM Road hog by Bill Hamley
20 REM Contact: (088) 270-078 (0811),
30 088 270 078 078 078 078 078 078 078
40
50 REM (088) 270 078 078 078 078 078
60 REM (088) 270 078 078 078 078 078
70 REM (088) 270 078 078 078 078 078
80 REM (088) 270 078 078 078 078 078
90 REM (088) 270 078 078 078 078 078
100 REM (088) 270 078 078 078 078 078
110 REM (088) 270 078 078 078 078 078
120 REM (088) 270 078 078 078 078 078
130 REM (088) 270 078 078 078 078 078
140 REM (088) 270 078 078 078 078 078
150 REM (088) 270 078 078 078 078 078
160 REM (088) 270 078 078 078 078 078
170 REM (088) 270 078 078 078 078 078
180 REM (088) 270 078 078 078 078 078
190 REM (088) 270 078 078 078 078 078
200 REM (088) 270 078 078 078 078 078

```



Quick dragons

by Martin Wieges

WE have received a number of programs for creating dragon curves, but this one surely has to be the smallest and neatest. Just type the program in, run it and select a step size. You'll be amazed at how fast it runs.

```

10 PRINT "STEP SIZE" : INPUT "STEP SIZE" :
20 GOTO 100
30 PRINT "STEP SIZE" : INPUT "STEP SIZE" :
40 GOTO 100
50 PRINT "STEP SIZE" : INPUT "STEP SIZE" :
60 GOTO 100
70 PRINT "STEP SIZE" : INPUT "STEP SIZE" :
80 GOTO 100
90 PRINT "STEP SIZE" : INPUT "STEP SIZE" :
100 GOTO 100

```



STEP SIZE	STEP SIZE	STEP SIZE
10	1000	10000
20	2000	20000
30	3000	30000
40	4000	40000
50	5000	50000
60	6000	60000
70	7000	70000
80	8000	80000
90	9000	90000

Permutations

by Alan Smith

THIS clever little program will be a boon for crossword puzzle addicts: it takes a word input at the keyboard and finds all its anagrams. It

also has a certain amount of intelligence, allowing it to ignore repeated letters - so long as you enter them next to each other.

```

10 REM "PERMUTATIONS" by Alan Smith
20 REM (088) 270 078 078 078 078 078
30 REM (088) 270 078 078 078 078 078
40 REM (088) 270 078 078 078 078 078
50 REM (088) 270 078 078 078 078 078
60 REM (088) 270 078 078 078 078 078
70 REM (088) 270 078 078 078 078 078
80 REM (088) 270 078 078 078 078 078
90 REM (088) 270 078 078 078 078 078
100 REM (088) 270 078 078 078 078 078
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120 REM (088) 270 078 078 078 078 078
130 REM (088) 270 078 078 078 078 078
140 REM (088) 270 078 078 078 078 078
150 REM (088) 270 078 078 078 078 078
160 REM (088) 270 078 078 078 078 078
170 REM (088) 270 078 078 078 078 078
180 REM (088) 270 078 078 078 078 078
190 REM (088) 270 078 078 078 078 078
200 REM (088) 270 078 078 078 078 078

```

```

10 REM (088) 270 078 078 078 078 078
20 REM (088) 270 078 078 078 078 078
30 REM (088) 270 078 078 078 078 078
40 REM (088) 270 078 078 078 078 078
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170 REM (088) 270 078 078 078 078 078
180 REM (088) 270 078 078 078 078 078
190 REM (088) 270 078 078 078 078 078
200 REM (088) 270 078 078 078 078 078

```



54-43

LOCOMOTIVE Basic is quite a fast version of the language but have you ever wondered whether it could be made to go any quicker? Wander no longer! With TurboText, Basic programs which print on the screen can run up to 87 per cent faster.

When a character is printed an incredible amount of work is carried out before anything appears. Finding how many bytes make up a letter in the current mode, what the pen value is, what the byte masks are for that colour, where the shape matrix is, and calculating the character's position in the screen memory are just a few of the operations involved.

As you can imagine, this really slows things down, and forms a bottleneck in an otherwise fast system.

By replacing most of the in-built routines used to print characters with faster, more dedicated pieces of code, TurboText achieves a useful speed increase. In Mode 1 it is 44 per cent faster, in Mode 0 it's 87 per cent and in Mode 2 the figure rises to 87 per cent.

When you run Program 1 you will have two BASIC commands, I TURBO and I NORMAL. As the names suggest, I TURBO activates fast printing mode, while I NORMAL restores things to normal. To obtain the speed increase I restricted some of the facilities available, and you need to take account of this when writing programs.

In normal printing internal adjustments are made when the screen scrolls. TurboText avoids having to do the necessary calculations by clearing the screen when printing a character would cause it to roll. The text then continues from the top of the screen.

This is to avoid a crash and eat a feature of the program as don't rely on it. In Modes 0 and 1 the quick-in-place method I used can lose the first character to be printed on the newly-created screen. For this reason you may wish to keep TurboText dormant while you are typing in.

To speed things up further, transparent mode is ignored and text windows are not taken into account. All characters printed while TurboText is active will appear at their physical screen positions, that is with location 1,1 at the top left of the screen.

You may find that some control codes such as CHR\$(2) don't work. PRINT and PAPER commands will function normally except in Mode 2. Here TurboText shows some intelligence and will reverse pen and paper

Rushing into print

CHRIS NIXON knows how to turbocharge your cursor

by just using PEN0, or PEN1 to switch them back again.

Remember that although TurboText will speed up the printing of text it won't affect other aspects of your Amstrad's operation. Therefore, in worst case situations where printing is not a frequent occurrence, the overall speed improvement will be low.

The extra speed is achieved by replacing the firmware jumpblock entry TRT OUTPUT at \$B85A — through which most printing is channelled — with a jump to the TurboText routine.

This first checks whether the character is a control code. If so, it is sent to the firmware. If not, TurboText gathers all the information needed to print the character and lumps the result into the screen memory with a single subroutine.

For those of you reaching for your

disassemblers, there are two things which may cause confusion. One is that the program uses self-modifying code, the other is that I cheated in the program loop which prints in Modes 0 and 1.

Hi, DE and BC were taken up and I was going to use IX to point to the character matrix for reading the shape data. The problem is that operations involving IX and YP are relatively slow and should be avoided in speed-critical situations.

To get round this I used some illegal opcodes detailed in the April 1986 issue of Computing with the Amstrad which treat the 16 bit IX register as two 8 bit registers.

This isn't quite as fast as using normal 8 bit registers, but gives a net speed increase of 3 to 5 per cent by allowing me to keep HI, and DE free for pointing to the screen and matrix.

```

10 REM TurboText
20 REM by Chris Nixon
30 REM (1) Operating with the Amstrad
40 REM ----- ON -----
50 NUMBER 24411,1,1,1,0
60 REM 44444444 to 9999 9999 10
70 REM 11111111111111111111111111111111
80 REM 11111111111111111111111111111111
90 REM 11111111111111111111111111111111
100 REM 11111111111111111111111111111111
110 REM 11111111111111111111111111111111
120 REM 11111111111111111111111111111111
130 REM 11111111111111111111111111111111
140 REM 11111111111111111111111111111111
150 REM 11111111111111111111111111111111
160 REM 11111111111111111111111111111111
170 REM 11111111111111111111111111111111
180 REM 11111111111111111111111111111111
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200 REM 11111111111111111111111111111111
210 REM 11111111111111111111111111111111
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260 REM 11111111111111111111111111111111
270 REM 11111111111111111111111111111111
280 REM 11111111111111111111111111111111
290 REM 11111111111111111111111111111111
300 REM 11111111111111111111111111111111

```

Program 1

```

310 REM 11111111111111111111111111111111
320 REM 11111111111111111111111111111111
330 REM 11111111111111111111111111111111
340 REM 11111111111111111111111111111111
350 REM 11111111111111111111111111111111
360 REM 11111111111111111111111111111111
370 REM 11111111111111111111111111111111
380 REM 11111111111111111111111111111111
390 REM 11111111111111111111111111111111
400 REM 11111111111111111111111111111111
410 REM 11111111111111111111111111111111
420 REM 11111111111111111111111111111111
430 REM 11111111111111111111111111111111
440 REM 11111111111111111111111111111111
450 REM 11111111111111111111111111111111
460 REM 11111111111111111111111111111111
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580 REM 11111111111111111111111111111111
590 REM 11111111111111111111111111111111
600 REM 11111111111111111111111111111111

```


**ROBIN NIXON visits
one of Britain's top
software houses**

GO!ing

SINCE its formation around five years ago U.S. Gold has had tremendous success. On a recent visit to the company's Birmingham offices to see Chairman Geoff Brown and Marketing Manager Richard Tibbatt I was impressed with their efficiency and friendliness.

They share the modern, open-plan offices into which they moved last year with two other companies - Cinesoft and Greenin. There is a huge warehouse piled high with software, packaging and point-of-sale material, and in reception they have an impressive display of their awards, including gold discs and cassettes.

From the original few employees U.S. Gold has grown to employ more

than 100. They have released in excess of 250 full-priced and more than 80 budget titles. Whenever they bring out a new title they try to cover as many formats as possible including Amiga, Apple, Atari 8 bit and ST, BBC, Commodore 16/64/128, IBM, MSX and Spectrum 48/128.

In 1988 they spent nearly £1 million on advertising and their business grew by over 50 per cent. They were ranked as the 17th largest company in the UK computer market with annual sales of £4.5 million.

Since then they have gone from strength to strength with offices in Japan, America and most European countries. They hope that a recently signed agreement with the arcade giant Capcom will bring revenue of £2 million by 1990. They have also obtained the rights to market Rainbow Arts products throughout the UK and Europe.

Last September they launched the GO! label with the aim of being the UK's leading software developer and to act as the international sales arm for the U.S. Gold group. GO! is now well established and Richard told me about some of the programs you'll be seeing soon on this and other U.S. Gold labels.

California Games (EPYX)

Features six of the best West Coast sports including BMX cycling, skateboarding, surfing and trike racing. You are competing for trophies, big-name sponsors and in each pack there are prizes to be won.

Charlie Chaplin (U.S. Gold)

Here you become a movie director who has to produce an epic film starring Charlie Chaplin. In each game you have a choice of scripts, backdrops and props.

Once you've selected these you then control Charlie in a fast-moving arcade game involving capture by the badies. Scenes can be repeated or rushed and then saved to be screened later in front of your admiring fans.

Brave Stare (GO!)

A cross between the old west and space frontiers of the future. Your job as Marshal Brownson is to save the planet New Texas from outlaws and gamblers who have taken over since the discovery of precious Krypton caused a later-day gold rush.



Captain America (GO!)

In an exhilarating anti-gravity arena it's a missile threatening to blow the town apart. Only one man can prevent it - that's right, you're Captain America.

Wizard Wars (GO!)

Your aim is to become Chief Wizard by fighting horrific monsters and driving wizards with spells collected throughout time. This game combines fast-moving action with the strategy of fantasy role playing.

Outrun (U.S. Gold)

This is the conversion of Sega's hit on the PC. You must race against time through Death Valley, Desert Union Hill, Cherry Mountain and a host of other locations. The land scenes are very realistic and the car handles very much like the original. On the reverse side of the tape (on a separate cassette with other releases) you also get the complete soundtrack from the arcade machine.

for GOLD

HAVING been briefed on the games, Richard introduced me to Jerry Howells, the project manager for USG-based SSI which does contract work for U.S. Gold. When they started out most of the software was written for Apple computers, so they always bear the Apple in mind and quite often originate software using it.

They are now looking at the possibility of using 16-bit micros because of their extra speed and power but they'll still continue producing their programs on most formats.

SSI is currently working on three main projects:

- A rebel-warfare game based in Afghanistan and a tactical game involving the Napoleonic battles. Both should be available in March or April.
- A videogame covering the whole of World War II. They are still researching this and, as it's such a massive project, cannot predict when it will be available.

- **Advanced Dungeons and Dragons** - licensed in a \$1.5 million deal with American company TSR - is the biggest project they'll tackle this year. They are working in collaboration with U.S. Gold who will produce multiple-character games with high-quality arcade-type graphics. SSI intends to create at least 10 different role-playing games all of which will be released worldwide at the Chicago Consumer Electronics show in June.

U.S. Gold has been working on many other programs and we'll be reviewing them as well as those mentioned here as soon as they become available.

With all these products ready for launch, the deal with Capcom and the appeal of the GDI label, U.S. Gold is certain to continue.

through 1988 as one of the UK's top software producers.



Geoff Brown - Chairman



Richard Tibbett - Marketing Manager

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DP1

Whist Wizard

ROLAND WADDILOVE turns his hand to playing cards

WHIST is a clever simulation of the popular card game – and with a couple of tricks up its sleeve. It plays very effectively, but if you put your mind to it you could come up trumps.

The object is to win more tricks than the Airedale. You take it in turns to play a card and the player with the highest takes the trick and gets to play the next card. You must always play a card of the same suit that your opponent led with – unless you don't have one, in which case you can play anything you like.

At the start of a game one of the players selects a suit which will be used as trumps. Cards of this suit then beat any other, no matter what their value. So, if you can't follow suit and have a trump card, play it and you'll win the trick.

The first person to win five games wins the match. The program plays a strong game so here are some general strategies you can follow to improve your chances:

- If you are playing first and have some high trumps, try using these before the rest. This will force your opponent to play his trumps and, hopefully, he'll run out before you. This strategy leaves you free to play your other suits with little or no fear of being trumped.
- If you can't play a higher card than your opponent, always play your lowest in the same suit. If you don't have one, select your least useful card. An exception to this is when you are trying to trick your opponent into thinking that you only have one of a particular suit left. In this case you would play your highest card.
- When choosing trumps, if there doesn't seem to be much difference between the suits, add up the values of the cards giving 2 points for a five, 10 for a ten and so on, and then 11, 12, 13 and 14 for Jack, Queen, King and Ace. Choose the suit with the highest total – if there is no difference in the results, just pick at random.
- If you win two tricks in a row using the same suit (and it isn't trumps) don't push your luck by trying the same suit again unless you have to, or your opponent has no trumps left. The reason is that you start with nine cards in your hand and the most likely spread will be two cards from these of the suits and three cards from the fourth.
- Remember which cards have gone! All that remains is for you to type in the listing and then it's your deal! If you have any problems, preprint your typing mistakes using the checkmarks in conjunction with the checkmarks utility in the June 1987 issue.



```

100 REM ***** WHIST *****
110 REM By R.J.Waddilove
120 REM CCL Computing with the Airedale
130 REM
140 CLASSNUMBER 1001
150 GOSUB 2100:REM IntroLine
160 GOSUB 2110:REM Title
170 GOSUB 1930:REM Instructions
180 WHILE NOT answer
190 GOSUB 1910:REM Screen
200 word=word+copy1
210 WHILE word<=100 word=1
220 GOSUB 1980:REM word=1
230 GOSUB 1970:REM Screen
240 REM ***** END *****
250 REM ***** END *****
260 IF word=1 THEN GOTO 1910
270 IF word=1 THEN GOTO 1910
280 IF word=1 THEN GOTO 1910
290 IF word=1 THEN GOTO 1910
300 REM ***** END *****

```

FOUR SMASH HITS FROM HEWSON

Howson
£9.95 (tape)
£14.95 (disc)
Joystick
or keys

Hewson's Consultants have been responsible for some of the best arcade games ever released for home micros, and I suppose it was only a matter of time before they came up with a compilation.

Game number one is *Zynaps*, an *Arcade Adventure* style. *Zynaps* follows the breath-taking adventures of our hero as he escapes from an alien space station, crosses a ferocious asteroid field, and finally locates and storms the alien stronghold.

Your escape from the space station is very *Scramble*-like; flying down a long tunnel of varying widths, you must shoot down waves after waves of alien fighters.

As the game begins your armaments are limited to simple lasers. These are fine for dealing with flying targets, but useless against the mega alien waiting at the end of the level.

Your weaponry can be improved by collecting the pods dropped by disintegrating alien ships.

The extensive weapons colourful graphics, and using gameplay make *Zynaps* a cut above the ordinary top-'n'-blower.

Gradually *Exolon* is a masterpiece, and in September of last year I awarded it my highest ever *Arcade Adventure* score. I am still waiting to see something to rival it.

Vortex, an athletic young

hero, must fight his way through more than 100 screens of alien action. This epic mission must be undertaken with only a small hand blaster and a pocketful of pulse bombs.

Successful penetration of the alien defences is rewarded with greater fire power and sections of an invulnerable exoskeleton.

Many of the screens on *Exolon* require the application of both brainpower and a great deal of skill.

The exhilaration experienced on successfully out-gunning your first anti-generated rocket launcher is incredible. If you think you're the best, try your hand with *Exolon* - without the cheat mode.

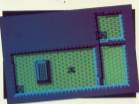
Ultimium was the original fast scrolling shoot-'em-up that spawned clones on every type of computer you could imagine.

The 16 planets in the solar system are under attack. Orbiting around each one is a super-dreadnought and these



mighty ships are draining valuable resources from each planet's core.

You are humanity's finest pilot, as such you have been selected for the task of exterminating the super-dreadnought fleet. As you emerge from hyperspace you catch your first glimpse of the alien ship - an enormous craft whose surface is covered with



installations and heavily protected by waves of fighters.

The ship's superstructure is wonderfully detailed, with extensive use of shadows and highlights. If this wasn't enough, you will be amazed by the fluidity of the animation.

The *Mantis* fighter changes direction by flipping through 180 degrees in both a vertical and horizontal plane - I could not and watch this particular routine all day.

Playing *Ultimium* requires very little thought, but you've got to fly as though your life depended upon it.

Fourth in the quarter is *Merryn*, an arcade adventure that should prove quite useful after the adrenaline-pumping excitement of the first three programs.

Merryn, the magician's apprentice is having problems. Not only is he in the midst of an invasion of werewoods, but he has also inadvertently transformed himself into a frog.

Your task is twofold - locate and destroy the werewoods, and then find the correct potion to return *Merryn* to his former glory.

The dungeon is viewed from above and initially you can see only the room you are stood in, but each new room you enter is automatically added to the display.

Apart from the obligatory monsters, the rooms also contain symbols known as floor glyphs. These come in four flavours, and will aid you with your quest.

The glyph of seeing conjures

up a map of all the rooms you have explored so far. The glyph of power sets in smart bomb fashion rapping every evil creature on the screen. The remaining two glyphs are responsible for teleporting and magic.

Merryn may not be as well known as its companions, but it is certainly not a seasonal programme that's been thrown in to fill up the tape.

Four Smash Hits From Hewson is a collection that no games fan should be without.

Joe Davis

Presentation 55%

Instructions for all of the games are provided in two neat little booklets.

Graphics 95%

My marks for *Exolon* remain unchanged - but the other games aren't too far behind either!

Sound 90%

A collection of the best tunes around.

Playability 93%

Lots of it!

Addictiveness 92%

It's quite traumatic to stop playing one superb game and load the next.

Value 90%

This is one collection that you'll just have to buy.

Overall 93%

Some of the best arcade action of all time.



CLEVER AND SMART



**Magic Bytes/
Ariolasoft**
£8.99 (tape)
£14.99 (disc)
Joystick
or keys

The brilliantly mad Dr Bacterus has been captured by a terrorist organisation. With the help of secret agents Clever and Smart it's your job to find the hideout and set him free.

You must guide Clever and Smart through a maze like town which contains a variety of familiar and not so familiar buildings. On one hand there's the post office, on the other there's the nearby house which furnishes you with nothing but a good hiding.

Initially you can't identify any of these and you have entered them; and in many cases you must be wearing the appropriate disguise to gain entry - anything from a flower outfit to a kimono.

All such disguises must be bought, their prices varying according to their usefulness.

Some objects can be put to good use, others are simply there to help you make money. Sneaking your employer's cheque book can also be lucrative, providing you can find the bank and do a reasonable copy of his signature.

A compulsive bomb-freak will leave his bombs just about anywhere, but only with three stars (small explosions) but black (normal) walls - unless you can catch him.

Below the town's surface is a network of sewers. Here the graphics are a good deal larger than on the surface, where

more detail is required.

Fans abound, and when there's talk there's cash. If you stamp on them, extra points are awarded.

The tunnels also contain telephone terminals. If you can connect the telephone cables, you can eavesdrop on calls and obtain valuable information.

The panel to the right of screen shows your bonus score, hunger rating, amount of cash, number of lives remaining and playing time. Another box provides lists of disguises and objects in your possession.

Clever and Smart is very addictive. It provides a good range of puzzles and a variety of sub-games for light relief.

What a pity the authors felt it necessary to include some potentially offensive language.

Tony Mangan

Presentation 85%

One player mode, four languages - French, English, German and bad instructions too brief!

Graphics 99%

Colourful with some nice details.

Sound 91%

Clear and snappy title music, good effects.

Playability 92%

Instantly playable...

Addictiveness 91%

...and keeps you going.

Value 91%

About right, relatively speaking.

Overall 89%

An intriguing arcade adventure containing a good deal of humour.

SLAINE

Martech
£9.99 (tape)
£14.99 (disc)
Joystick
and keys

The last piece of the village Turoggs was shattered by the death of the Star Bear, Gus Warren. The exclusive Drone who lived in Small Boy's Tower was blamed for his death, and as a punishment was imprisoned in his own fortress.

Reya - the Drone's daughter - travelled to Turoggs and under cover of darkness released her father.

The Drone knew that Reya

attacked, the idea being that they represent thoughts which have to be latched on to quickly. I didn't mind this, but I can see it annoying adventures used to more subtle systems.

In much the same way as you can manipulate Slaine, so a lizard instead you can order Slaino around and for him it becomes relevant.

Don't beat him too regularly or he'll run away, as he does whenever a fight looms. However, he knows on which side his bread is buttered and tends to drift back in a while.

Martech says the game took the programming team six months to complete. This I can well believe, as with the excep-



could destroy him by revealing his name, and not being able to kill her, accompanied her in the tower by magical means.

After several days spent regaining his powers, the Drone took his revenge. In the ensuing battle the Drone was destroyed, but not before he had laid waste to several castles and placed a terrible curse on the village.

In the scene is set for Slaine - a sorcerer-banned man sort of dude - taken from the cult came 3000 AD. His wizardry comes in the form of an ugly, disintegrable dwarf by the name of Uloo.

The game features a unique method of control which Martech call Reflex. This is a window into Slaine's mind in which appear fleeting thoughts.

You control a pointer in the form of a several hand. Before the thought disappears you must move the hand to it to influence Slaine's actions.

These options vary little what by when Slaine is being

tion of the occasional lapse in spelling there is so much attention to detail.

To a great extent the reviews will determine what happens to Slaine. I am unashamedly on its side.

Giles Gifford

Presentation 90%

Excellent.

Graphics 88%

Excellent, high quality graphics.

Sound 50%

Simple.

Playability 70%

Novel reversed hand control.

Addictiveness 95%

I simply can't take my hands off it.

Value 90%

Superb adventure value.

Overall 89%

Possibly a breakthrough in adventure design - a courageous effort.

DRILLER



Incentive
£14.95 (tape)
£17.95 (disc)
Joystick
or keys

The planet Earth has two moons, Mital and Trioupat. Mital - now abandoned - has been extensively mined by surface, and the resultant shafts have filled with gas, turning the moon into a potential bomb.

In four hours a meteor is due to strike the moon, and the resulting explosion will push Earth out of orbit, causing the death of millions. Only by sinking drilling rigs into each of 18 centers can sufficient gas be vented to avoid an explosion.

Incentive has made a big fuss about 3Descape, its solid 3D system. I am always wary of such claims, as many software houses are so wrapped up in their revolutionary 3D graphics systems that they forget about gameplay.

Driller is an exception, and the sectors are all different and fantastically difficult to explore.

To make an area safe you must site a drilling rig in such a position that it vents over half of the gas trapped beneath that sector.

Pressing D teleports a rig to a point already in front of you. Once in place a readout tells you how much gas has been released and if this is sufficient, you can move on to the next sector.

I suggest you take pot shots at every object you encounter. The gassing rate near the start should be a hint that the apparently simple backgrounds

are not what they seem - shooting the gas causes a previously invisible door to open in a nearby wall.

On a later sector you are prevented from reaching the prime drilling site by a deep trench. Becoming increasingly nervous I questioned the apparently silly positioning of a tall, narrow wall on one edge of the trench. I sprang it with the excavator and sure enough it tumbled over and bridged the gap.

Apart from the puzzles, there are laser beams to disable or avoid, and fast thinking is essential if you are to survive their attacks.

Driller is an excellent blend of good graphics and Nintendo gamesplay - I highly recommend it.

Neil Asby

Presentation 85%

Nicebits, key card, and a 3D map of Mital are all included.

Graphics 96%

I was pleasantly surprised at the speed displays were drawn.

Sound 54%

Simple laser effects and no music.

Playability 95%

Each sector provided new puzzles to be solved.

Addictiveness 85%

Mentally stimulating.

Value 80%

That's a pretty fair, but is any cassette worth £17?

Overall 85%

Good idea, good graphics - good game.

720 DEGREES

U.S. Gold
£9.99 (tape)
£14.99 (disc)
Joystick
or keys

If you've ever limited your choices on a joystick but would rather avoid broken links, this could be the game you've been looking for.

Press fire and you're off to Skate City where you must perform stunts to accumulate

points. Control of your skateboard is much easier using a joystick, especially when jumping. Once in the air, you can twist and turn to demonstrate your athleticism. After each visit a status sheet is displayed showing any awards gained.

Each park can be visited only once on each level and there are twenty levels to complete. It's not made it past the third one yet, but I keep on trying.

Apart from the fun at the start of the game, the use of sound is limited to the car-



riage. The points are needed to get tickets for the skate parks, where you can compete to gain medals and cash.

The money gained can be used to buy better equipment - skates to let you jump higher, a new board to give you more speed, pads to brash your falls, and protective helmets to allow you to be more adventurous.

As you make your way towards the parks, you must watch out for pedestrians, cyclists, swimming pools and various other hazards. Extra points can be gained by passing over certain hidden locations and you can get extra cash by picking up dollars found in the road.

Hanging around Skate City is made a fortune by collecting money - definitely not recommended. As soon as the time limit displayed on screen is exceeded, a stream of tiles begins starts to attack.

Unless you can make it to the safety of one of the parks, they mutate into all sorts of weird objects.

Once into the parks, you can display your skills on the Pump, Downhill, Skate Jump and

casualty effect. Graphically, the sprites are smooth and control is fast, particularly in Skate City. The display in the parks is not quite so good.

Skateboarding has never been this much fun. If you want a game that will keep you on your toes, look no further than 720 Degrees.

Steve Lush

Presentation 85%

This game's got all it needs.

Graphics 85%

Smooth and fast.

Sound 55%

None here at all but not much else.

Playability 95%

Easy to control but hard to master.

Addictiveness 90%

I'll be an expert one day!

Value 85%

Hours of fun for all the family.

Overall 88%

Better than breaking your neck on the real thing.

PHANTOM CLUB

Ocean
£8.95 (tape)
£14.95 (disc)
Joystick
or keys

The Phantom Club (read Justice League of America, all you DC comic fans) is a collection of superheroes who have fallen under the spell of the evil Jazg. Even his name sounds nasty.

You alone have managed to resist his influence and in the form of hottest superhero Plutus you must rise through 10 levels completing 10 tasks in the process. Done then you will goad return to the Phantom Club.

Get that? Good.

After loading, the program plays Bach's third Brandenburg Concerto. Not quite in keeping with the essence of the game, I thought, but a good tone nonetheless.

Phantom Club uses one of those classic 3D isometric layouts in the style of Ultimate's *Engineers* and the fastest part of the game is probably learning to control your character.

If you're not used to isometric devices it could take a while. For example, Left and Right turn Plutus to his left or right, and a further push or press in that direction starts him moving.

So to turn 90 degrees and get him moving requires two pushes while a 180 degree turn and move requires three. Each movement only takes him forward a couple of steps.

It can be frustrating to see him climb feebly as you try



to avoid a battle or escape through an exit. But like head, we does tread familiarly.

Plutus is endowed with the power of projectiles which causes a ball of energy to shoot from his head. Apart from fire and directional control he can also jump.

You have to use this to get out of the fire zones and it is also extremely useful in avoiding enemies.

In many ways keyboard operation would be easier than joystick control - no doubt other players would disagree - but the keys are not definable and you're stuck with the cursor keys, which I just couldn't get used to.

You press the spacebar to make Plutus jump so you can't rely on the joystick all of the time, which is a pity.

There are lots of nice graphical touches. For instance, running characters leave

footstep shadows on the floor as they move. Plutus nods his head as he breathes and when he jumps he performs a cartwheel. Movement is extremely smooth.

On one occasion, firing at a wall produced two lines of pixels where the other shouldn't



have been and on another, running Plutus close to a wall changed the wall's colour to him. Careless bugs, but not serious.

This is not an easy game. There are 500 rooms to explore and you must score 40,000 points before you get to see your first mission.

You may discover mission rooms for hints about your situation. I found the one for Antixi Major, five ranks above me, and the program locked me out, cheerfully playing back.

Disabling characters scores a measly 25 to 200 points. You can enter and re-enter a room repeatedly shooting the same character - they become undisturbed when you leave a room - but it'll take you all day to amass 40,000 points like that. If you can find and shoot a rotating sphere on a pillar you get a bonus of 10,000 or 25,000 - I only found this after mapping almost 100 rooms!

Other floating objects give

you an extra life - you start with five - or extra speed. Unfortunately, you can only score one bonus from each object.

Your energy rapidly diminishes when you touch various animated and inanimate objects. Some needles, such as spiders and robots, you can't kill because your brainstem goes over their heads and there isn't a duck control - quacker.

There are also traps in isometric-looking rooms. You'll need to draw a map (don't start a couple of squares down and on the left of the paper) and devise strategies for avoiding traps. The game really can be very useful here.

There's a save game feature too - quite rare in arcade adventures - but you can only save by finding and shooting a spinning tube on a pillar.

It could avoid a lot of repetition, especially during mapping, but the load option from the main screen doesn't work and just goes out some happy sound effects.

The review copy was a production sample and the strings assume the bugs will be sorted out by the time it hits the shelves.

Even though a couple of things niggled me, Phantom Club is still a super program and if you're a 3D fan, it is a must. Even if you're not, it's still worth trying. It'll keep you busy for ages.

Ian Waugh

Presentation 81%

Good instructions plus pause and save game features, but no definable key option.

Graphics 93%

Excellent use of the isometric format.

Sound 90%

Very, very good.

Playability 85%

Perfecting character control can take a while.

Addictiveness 88%

Very - don't start playing near bed time.

Value 82%

High disc price although it's par for the course - but it is a good game.

Overall 91%

A worthy challenge for any arcade-adventure fan.



SOLID GOLD

US Gold
£9.95 (tape)
£14.95 (disc)
Joystick
or keys

COMPLICATIONS are springing out of the woodwork like ferns sprayed by Remolot.

In *Gold* you choose to be one of four fantasy heroes with various powers. The object is to scour the depths of dungeons searching for loot, treasure and positions while avoiding attacking monsters.

It's all good, clean, wholesome fun and what is especially nice is the two-player option, which should teach you cooperation if nothing else.

Leader Board is by far the best gold simulation I've hit the CPC. Up to four people can play 16, 36, 54 or 72 holes on a choice of four courses.

There are three levels - novice, amateur and professional. At novice level you can't look or slice the ball and wind direction has no effect.

If you're an amateur you can hook and slice and at pro level the wind takes effect.

The holes are drawn with 3D perspective. You control the direction of the shot and, at the higher levels, the snap. On the green an indicator shows which way it slopes. The instructions are excellent.

Winter Games puts you and up to three other people in seven events.

In *Bobsled* you must steer your way down an icy course. It's not enough just reacting to the course as you slide down it,

you must anticipate the curves and steer against them. It's not easy.

In *Hot Dog Airside* you get to perform acrobatics at the end of a ski jump by juggling your inverted board. This is easier than *Skateboarding* - and more fun.

Now on to *Speed Skating*, where you shove like pistons left and right to move your man's legs. No, it's not a joystick fiasco, the secret is to move the pistons rhythmically, not quickly.

Ski Jump gives you the chance to make a complete fool of yourself. If you're too far forward you move the joystick



back, if your legs are bent you flex it up and if your skis are crossed you move in down.

Reminds me of a *Bob Hope* movie - a nice event once you master it.

Figure Skating is not easy - ask *Jayne Torvald*. This game gives you the chance to try a few manoeuvres with your very own JT look-alike. There are seven compulsory movements to make.

Once you get the hang of that you can try *Trap Skating*, in which you try to make three successful attempts at the seven figure skating movements. *Skating* is easier than performing.

In *The Basketball* you sit



across country and take pot shots at five targets. The gun must be loaded and the shells ejected after each shot. If you don't keep cool, your aim's sure will improve and make it harder to fire.

This is a variation all right. You've got left and right ski movements, downhill and uphill climbs and shooting.

The nice thing about all these games is that if you're playing by yourself you win all the gold. Each event has a practice option - recommended - and its own rather excellent music score, too.

There is so much to this program that the cassette version feels in four parts. It's almost worth buying a disc drive for *Amstrang* is a complete game. It's basically a helicopter simulation dressed up with comic book humour and a 180-page manual for to do it casual.

It'll take you a day to assimilate the instructions and controls (if such things are simulations made) and probably a week to fly your first mission.

Actually, controlling the helicopter is only one part of the job. You have to fly it, beat off the badies, land it, rearmage a round inside so many installations, grab the goodies, escape and fly back to base.

As *Johnny "Jimbo" Bely" McChobite* says, "If you show a mission, you can forget about the first night."

If you play this you can also forget about lunch, dinner, supper, sleep...

Coming down to Earth is soft landing we hope, *Ass of Boss* puts you in a very different outfit - that of a *Melospite*. In

Ass there is a practice option and I recommend you use it.

Missions include bombing a train and sinking a U-boat. They're fun too if you can avoid getting shot by enemy planes. There are not as many controls as *Amstrang*, but it's as difficult if not quite as complex. It suffers from the tape reading syndrome.

Solid Gold contains a super selection of programs. I had loading problems with one of the games on cassette (not to blame, kid!) and although *US Gold* will replace faulty tapes, it's a nuisance.

No so-so games here, that's how *US Gold* - more please.

Ian Mugh

Presentation 88%

Instructional/ Instructional/ Lots of them. Generally good and generally correct.

Graphics 82%

Good! Good! But some could do with a bit more room colour.

Sound 85%

Some have it, some others don't. These that do are excellent. Some use FX, too.

Playability 85%

They are all very playable.

Addictiveness 90%

They are all also very addictive. You'll keep you off the streets of Essex.

Value 85%

A class collection worth every penny.

Overall 82%

I just couldn't give it any less. Buy it now!



OUT OF THIS WORLD

Ariolasoft
£9.99 (tape)
£14.99 (disc)
Joystick
or keys

SUDDENLY, the jet plunged into a sea of flashing lights. Chuck gasped with horror — he had entered the other world. The imagination of this

fantasy on the blue sky background, they effectively disappear. A small oversight perhaps?

There were one or two other niggles. Control of the craft was not as responsive as I would have liked. Certain ships appear out of nowhere, some landing on top of your craft without a moment's warning and being a nuisance.

This would have been bad enough if the game had been



writers never ceases to amaze me.

As Chuck Harrison, pilot of the new F90-18 fighters, you are thrown into a world of weird colours and even wackier alien craft just waiting to rub you of it.

Out Of This World is a Defender derivative with pretty graphics and very good scrolling. The playing area is shallow and stretches from one end of the tube to the other.

Controls are basic — thrust and lateral. The aim is even more so. Put everything in sight, get as far as possible and don't run out of juice. You can even collect extra energy from the remains of destroyed ships. Never seen that before.

There are eight levels, each featuring a different landscape and materialize along to overcome. Moving up a level is achieved by acquiring enough points on a normal level plus earned through a special bonus section which is at a higher speed.

To someone who has waded through many games, good and precious, Out Of This World is a bit tame, though fairly enjoyable. One small criticism of the badly drawn graphics is that when the blue energy pulse

bursts so high enough to be progressing for some time, but it is annoying when it occurs just as you start and you've hardly had a chance to lay your mitts on the controls.

In short, Out Of This World is simple, addictive arcade action which doesn't stretch the grey matter. It might have been better on a budget label.

Clive Gifford

Presentation 70%

Two different key settings and clear instructions.

Graphics 75%
 Colourful, slightly weird.

Sound 60%
 Standard fare. Reasonable size tune but ordinary sound effects.

Playability 75%
 Control a little slow but firing response very responsive.

Addictiveness 85%
 Despite its faults, it had me coming back to play again.

Value 55%
 It's a bit overpriced.

Overall 72%
 Addictive, straightforward, small 'n' snitch.

JET BIKE SIMULATOR



Code Masters
£4.99 (two tapes)
Keyboard
and/or joystick

THIS is the latest simulator from the Code Masters stable, created by the Oliver twins who at the time of writing hold the first, second, fourth and twelfth positions in the Gallup Top 20.

That's quite a feat, but how does their latest program measure up?

Well, first of all it comes with new packaging. You get two cassettes, some stickers and a poster. The first cassette contains the standard game on one side and an expert version on the other. On the second tape you get 18 extra screens.

You are presented with a set of options allowing you to select a one or two player game, replay the last game — this gives an action replay as with Grand Prix Simulator, load new screens, and view the last score table.

In action it's a bit like Grand Prix Simulator but a lot smoother. You have more control over your jet bike and bumping into things is handled rather better.

There are four jet bikes, two of which can be controlled from the keyboard — or you can use a joystick for one of them. The two computer-controlled bikes can bump into each other, so can the two player's bikes, but computer bikes don't track player bikes.

This is much better than Grand Prix Simulator, as you

don't get stuck behind the others so much with little hope of overtaking.

The scenarios presented are tales, coats and docks, each of which has eight screens. However, on the standard version you can only play the first five of each scenario. If you want to see the other ones you'll have to go up to expert level, where they become available.

Great attention to detail has been paid in the graphics department — the colours blend well and designs are crystal clear.

In all, Jet Bike Simulator is excellent value considering what you get for your money, but I can't quite give it an accolade because of its similarity to Grand Prix Simulator. Nevertheless, if you like this sort of game, I recommend it.

Mike Cross

Presentation 90%

Nice presentation, typical of the Oliver twins.

Graphics 95%
 Excellent graphics, very carefully designed.

Sound 75%
 Nice tone and speech, but not outstanding.

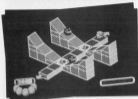
Playability 95%
 Plays well once you get used to the controls.

Addictiveness 90%
 You keep wanting to get to the next level.

Value 90%
 Nice packaging, good game, worth more.

Overall 89%
 Very good, but similar to Grand Prix Simulator.

CLASSIX 1



The Edge £9.95 (tape) £14.95 (disc) Joystick or keys

YET another completion. This one contains three edgy games, plus demo versions of two newish ones.

In *Bobby Bearing* you control a ball bearing rolling around a 3D landscape. Your task is to find Bobby's brothers and roll them home. Beware traps and traps and the black ball bearings.

Movement is very smooth — once you discover which keys do what — although there is a short delay between screens. Unfortunately it's easy to roll back and forth from one screen to another by pressing the same key and although there is a joystick option I couldn't get it to work. Instructions?

As *Brian Bluebeard* the Viking you set out to conquer Britain. Not, unfortunately, Viking Britain but Britain of the 20th century. You've been frozen in an iceberg, you see.

This amiable adventure with objects to collect and use has some "Reverse" instances. What's that? Don't ask. Men are immediately appearing again in spite of the cover photo seeing that Brian became an overnight cult figure. But that was back in 1985.

In *Paladin* you control a Berserker Class D2T Droid. You see a 3D environment, find the matter-destroying crystals and destroy them by crushing them with something heavy. The nice thing about this game is the

robots, which you can program to carry out impossible or difficult tasks.

The first demo program gives you a taste of *Shadow Scream*. You are in control of a blowaway craft and to check the surface of an interstellar land. Unfortunately you get locked out and the ship's defence systems try to stop you getting back in. Cue for a shoot-'em-up.

You have to move around an open-plan maze to find your way back into the ship. It's a fun game with an excellent soundtrack.

The second demo is *Shao Lin's Road*, the follow-up to the *Kung Fu*. Having mastered the ancient Chinese art, Lee must teach "Shao Lin's Road" meaning "Road" for the more. It hasn't really got the *Kung Fu* flavour of *Ye Ai* but the graphics are big and chunky and the music's not too bad either.

Sam Mudge

Presentation 78%

Better instructions would help.

Graphics 89%

Generally big, bright and chunky. Most.

Sound 82%

Some good pieces.

Playability 70%

A mixed bag. Some have it, some haven't.

Addictiveness 72%

Some are, some aren't.

Value 82%

Lots of play time.

Overall 74%

Some complete sets now contain 18 games or more. This is a try-before-you-buy collection.

RAMPARTS

Go! U.S. Gold £9.99 (tape) · £14.99 (disc) Joystick or keys

FOLLOWING a disagreement with the Evil One, Sir Griswold and Sir Larkin were changed into giants. Using their newfound strength the dramatic duo rampage across the country destroying castles after castle in their search for revenge.

The instructions tell you that *Ramparts* is a game of strategy, not just one of initiation of how to play. I wondered about

guards. One annoying feature is that you the projectiles pass through you without a sound, making it difficult to determine how much damage you are sustaining.

Ramparts is based on a simple idea, but is too difficult to play. Your chance of success on the first screen is directly proportional to the number of food items hidden in the landscape and this appears to be random.

Out of my first 18 games only reached level two twice. Even if you are lucky enough to get this far, you are doomed to failure because you have to continue with the energy left



for 18 minutes parading walls with no effect before finding out what I was supposed to be doing.

Each castle is constructed from a series of towers. You must build both sides of a turret, parading holes in you think and, when sufficiently completed, it will countle to the ground. You can then move on to the next one — there are seven turrets on level one.

I was most impressed by both castles and giants. The clever use of shadow and highlights gives a very solid appearance.

The game's duration is determined by the state of your energy reserves. If they fall to zero you lose your one and only life.

Inside some of the holes you've punched are bonus items which are either helpful or harmful. Portions of food will boost your energy level, but bones and skulls have the reverse effect.

The art of parading doesn't expend energy, but a great deal of damage is indicated by the tail of arrows fired by the castle

over from level one. At least if you were hit, you would stand a fighting chance.

Ramparts is a very pretty game. With a couple of modifications to the gameplay it could be a winner.

Steve Brock

Presentation 54%

Inadequate instructions.

Graphics 81%

The shading on the turrets creates a clever cylindrical effect.

Sound 78%

Very good multi-voice title tune.

Playability 67%

Level one is far too difficult.

Addictiveness 70%

Your single life is over far too quickly.

Value 88%

A touch overpriced.

Overall 74%

Should be much better if you were given a fighting chance.

RYGAR

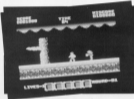
U.S. Gold
£9.99 (tape)
£14.99 (disc)
Joystick
or keys

US Gold brings yet another arcade favourite into the comfort of your living room. As Rygar - the latest form of life - you attempt to prove that you

along with the playing area is your score, 0-99999, 0-99, number of lives remaining, your firepower status and life current level.

Once you are on the tank stand you must complete the tank panel at the bottom of the screen before finishing. If you succeed, you return to the first level, but this time it is much more difficult.

You can play the game using either a joystick or user-defined



are the strongest warrior since Earth's creation four and a half billion years ago.

You travel through many areas fighting different types of alien, robotic and magic creatures. While raving through each of the 19 scrolling levels battling against these monsters, you are confronted with obstacles such as waterfalls and giant rocks.

As you move along you will find statues, pushing up from the ground - old gravestones? Each one hides a different object for which you receive bonus points, extra time or a question mark.

If you continue to fire at this you will acquire further bonus points or a 30 second shield. Occasionally you will find an extra life, but you'll have to be quick to catch it.

Each level begins with a set time limit, and whenever a timer T is collected over time increases by 20 seconds. However you cannot exceed the 99 seconds that you start with.

After each stimulus within you will have a short rest as bonuses are awarded for the number of enemies hit, and for speed time.

Displayed on the screen

keys, and unlike many other games I found control just as easy using the keyboard option.

Rygar works extremely well on the Amstrad and is no addition as the coin-op original.

John Burton

Presentation 85%

Instructions everything you would expect to find.

Graphics 90%

Very Saksman's Keybit. Nicely done with smooth scrolling.

Sound 85%

Reasonable tone playing throughout.

Playability 90%

Response well to both keyboard and joystick.

Addictiveness 95%

It's a good job it didn't cost me 25 pence a go!

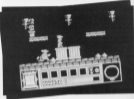
Value 85%

Above average game for an average price.

Overall 89%

Will give many hours of fun.

BASIL THE GREAT MOUSE DETECTIVE



Gremlin
£9.95 (tape)
£14.99 (disc)
Keys or
joystick/keys

In this arcade adventure you play the part of the Watt Diesel character, Basil the Great Mouse Detective. Your task is to find Basil's chummy friend, Sir Dawson, who has been kidnapped by the evil Professor Ratigan - the criminal mastermind of London's rodent underworld.

To rescue poor old Dr Dawson you must collect clues to his whereabouts in each of three scenarios - the shops and docks of London, the sewage system and finally Ratigan's den itself.

Finding the right clues can be more difficult than it seems. Apart from the five useful ones hidden in each location, there are eight red bearings left there by Professor Ratigan to throw you off the scent.

While sunnyside under old floor boards, through piles of tin cans and behind inside door jans for clues, you must try to avoid coming into contact with Ratigan's henchmen.

Each encounter tests your strength, and unless you can find a few morsels of hidden cheese, your quest is soon over. The only effective way of disposing of Ratigan's mob is to locate the mousetraps and drop them in your pursuers' path.

Game control is a hard to master, requiring dexterity with

the joystick and about a dozen extra fingers.

Being located a clue, you can pick it up and store it in one of your pockets. Only when your five pockets are full can you deduce which clues are false by pressing the T key and looking into the magnifying glass shown at the bottom of the screen.

Once you have found the five clues, a message will appear showing you the way to the next stage of the game. After several clue faults, piping I've still not managed to make my way into Ratigan's den and I guess it's time for a good while off!

Graphically, the game is well up to the standard we've come to expect of Gremlin. If you want a challenge to keep you off balanced for a week or two, look no further.

Steve Lucas

Presentation 70%

No choice of lays.

Graphics 85%

Bright and colourful.

Sound 85%

Nice tone at the start but not much else.

Playability 85%

Can you read the red bearings?

Addictiveness 90%

If only I can find that clue!

Value 70%

Reasonable.

Overall 85%

It should keep you out of mischief for a few hours.

INSIDE OUTING

The Edge
£8.95 (tape)
£14.95 (disc)
Joystick or
keys

The recently widowed Lady Crutcher has a problem. Her dearly beloved husband never did trust banks, and led the family fortune in safe places around the house. Unfortunately the wretched old coat popped off before telling anybody where.

Heaving that Lady C. had gone on holiday, and tempted by numerous stacks of ancestral toils stacked away, you sling your leg over the sill of a window carelessly left open and slip inside.

Curses, it was a lock! The window alarm shrill, the doors are locked and not pops Lady C. from behind a safe.

After heaving her predicament you decide to humour her. After all, if you find the loot, she might not miss the odd bauble or three.

Your task is to locate 12 hidden diamonds. You start in the entrance hall from which leads a stairway and doors to other rooms. Every room is realistically drawn, and just about everything in it can be either pushed, pulled, climbed over or sat/stood, depending on how big and heavy it is.

One of said near Crutcher's endearing little hobbies was a fondness for genetic engineering - there's no telling what some folk do for relaxation - and his collection of mutated

mice and domed canaries is on the loose.

A trap with one mine your enemy of a size of leviath. Luckily you can regenerate by drinking glasses of wine.

I love the way the mice switch their rooms. You soon find that the little varmints can be frozen for the duration of your stay in that particular room by dropping cheese in front of them.

Canaries, however, are a different little of kind. In different, in fact, that in a weekend and several evenings I haven't found time to do the dirty on them, though the instructions imply it can be done.

So there are only 12 game you'd expect them to be difficult to find, and so they are. I found the first by pointing back a picture to reveal a wall safe.

I won't be giving too much away if I tell you that I found the second ring on the back of a



opener which was in a room the door to which was hidden round a corner - very obvious. The third was in a suitcase area only accessible after doing a sliding block puzzle with some furniture, hotly pursued by a killer mouse.

You can only carry one object at a time so once you've located a diamond you have to take it



back to Lady C. and bingo, 1000 points are yours. Oh, her drawing table has a count of the number left to collect.

There are plenty of nice touches. After it's been playing for a while I heard a phone ringing. There's a telephone in the hall so off I went to answer it. As I entered the hall the ring got louder, just like in real life. When I picked it up I got some points.

You can't roam about, too freely because some doorways are blocked by furniture, usually in the same room as a mouse or canary, so until I find out how to deal with the birds I can't spend too long clearing paths.

Judging by the number of rooms I had to pass through to find the first three gems, the playing area is huge. At some points you might have to build piles of objects in order to climb over obstacles or reach cheese and wine on high shelves.

The attention to detail is fantastic. In one room there is a tiny pile of dinner plates on a sideboard and you can pick up individual plates. In another is a crocheted table complete with miniature balls. If you climb on to it you can push them about!

Visually this game has what Arthur Daley might term dodgy graphics. Or to put it another way, there's some delicious artwork in *AmTix!*. Actually, everything's bigger than the typical computer offering, if a little dull, but it is a steady hand, so you don't expect loud disco.

I thought a little more work could have gone into the design

of the main character, but on the whole the game looks impressive. The animation is smooth with the ability to walk behind objects nicely done.

The sound? Ah well, I suppose there wasn't much room left for sound effects - let's be charitable and call them beats.

Would I buy it? Sure thing! It doesn't have the instant gratification you get from some games, and it takes a while to get into, but get it - it's definitely it and I'm hooked.

Toby Wood

Presentation 55%

Nice standard, a save game feature and definable keys would have been nice.

Graphics 53%

Superbly detailed.

Sound 40%

Sparsely.

Playability 90%

Well thought out and nicely tuned.

Addictiveness 95%

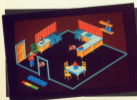
Once into it you'll keep coming back for more and more.

Value 85%

Can't compete with a top notch competition, but for a stand-alone game it's better than many.

Overall 91%

Not an average, but based on the amount of entertainment you'll get from it.



MASTERFILE III

FOR THE AMSTRAD CPC 6128 (ALSO CPC 484/664 WITH DK TRONICS 64K RAM)

FIRMLY ESTABLISHED ...

MASTERFILE III is now firmly established as THE filing system for the CPC6128. It has received rapturous reviews and we could paper the walls of our new offices with our customers' letters of appreciation.

For the benefit of newcomers to the CPC machines: MASTERFILE III is a powerful and flexible data filing and retrieval system. All "database" systems require that your data is organized into fields and records. Unlike most, MASTERFILE does not commit you to field lengths or formats, since ALL data is variable-length and optional. Files are not pre-formatted, and only used bytes are used to disc. Also, unlike the rest, MASTERFILE allows multiple user-defined ways of viewing/printing your data. And scripts in its price range, MASTERFILE offers RELATIONAL FILE options, whereby common data can be entered just once and shared by many records. Maximum field size is 240, maximum fields per record is over 50, and maximum file size is 64K. Records for 1,000 full names and addresses, for example. Only one disc drive is required. It is menu-driven throughout, and comes with detailed illustrated manual, and example files.

SO VERY VERSATILE ...

Just about ANY kind of information can be handled by MASTERFILE. You can EXPORT the data to other systems (e.g. PROTECT/MERGE and TAWORD). You can even merge your own USER BASIC to MASTERFILE for customized file processing, or build new files from other computer sources. The speed of SEARCH of MASTERFILE is second to none. Records can be sorted ascending/descending, character or signed numeric, even embedded keys such as surnames. Other functions are field-to-field calculations, and several-column label printing. We simply don't have room to list all the features; give us a call if you are still in doubt of the power of MASTERFILE III.

Name	Address	Other
Mr. J. Smith	123 Main St	London
Ms. A. Brown	456 High St	London
Mr. C. Jones	789 Park St	London
Ms. D. White	1010 Queen St	London
Mr. E. Black	1111 King St	London
Ms. F. Green	1212 Prince St	London
Mr. G. Grey	1313 Duke St	London
Ms. H. Blue	1414 Marquess St	London
Mr. I. Yellow	1515 Earl St	London
Ms. J. Purple	1616 Viscount St	London

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This is no toy thrown together in BASIC and half-tested, but real machine-coded computing power professionally constructed. We have had IBM and Apricot users beg us for a MASTERFILE for their machines — when they had seen the earlier CPC MASTERFILE. All this power is yours for ... £39.95.

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*** PCW users: be patient, MASTERFILE 8000 will be ready early in 1987 ***

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THIS month I'm going to introduce you to property lists, which are the key to understanding how Logo actually works.

Imagine you defined a procedure called `fred` (yes, him again) and then used `fred` as the name of a variable. By now you should be happy with the idea that when you use `fred` in a program Logo knows whether you're referring to the variable or the procedure by the context in which the name is used:

```
to fred [ask]
pr [ask]
end

make 'fred 4]
fred
]fred
```

At the moment you're probably thinking of two separate objects called `fred`. In a sense this is true, but there's a better way of handling this. Tucked away in memory somewhere Logo has an area labelled `fred`. Think of it as a folder with `fred` written on the cover. You open it up and inside are several pages.

At the top of each page is a heading and the first two of these are procedure and variable. On the procedure page is a single entry — `pr [hello]` — and under variable is 13. This is a hint to how Logo thinks of `fred` than two separate entities.

The individual pages are the properties associated with the name on the cover and they're known collectively as a property list. Define the procedure and variable `fred` as I have and type in:

```
[[[[[[ 'fred
```

You will see the following on the screen:

```
[.APR 42 .ASK [ASK] OR .ASK20
```

What's that supposed to mean? Well `plist` asks Logo to list all the properties associated with the name you give it. In our analogy above, `plist` opens the `fred` folder and generates a list containing all the pages therein.

You can see the result is a list because it's in square brackets. If you look closely you can see the procedure definition — it's in a list next to the label `DEF`. There's also a list showing the name of passed parameters, and the value of `fred` (the variable can be seen labelled `APV` — associated property value).

When you put a value into a variable

LOGO ON THE PHONE

IAN SHARPE continues his series with a close look at property lists



with `make` all Logo does is to look up the entry for `APV` in the appropriate property list and writes the new value to it. We can bypass the system and alter the entry ourselves with `prop` which is ideal for just property.

```
[[[[[[ 'fred .APV 13
```

```
]fred
```

That's saying "make the associated property value of `fred` 13", which is what `make 'fred 13` does, but in more friendly terms. With our file analogy, it's the difference between telling the filing clerk to alter a file and doing it yourself.

Think of a real-world object such as a tennis ball. If asked to define it we might come up with a list such as `colour — green, shape — round, weight — light` and so on. These are all properties the ball has and you could go on for a long time thinking of more.

A Logo object is also defined as a

list of properties though these are different sorts than those possessed by a tennis ball — a tennis ball doesn't have a procedure definition, and if we had a Logo object called `tennisball` it couldn't be described as being grey.

On the other hand, it is possible to give a Logo object properties which it doesn't already have and to call them anything we like. So if we wanted an object called `tennisball` we could tell Logo that this object has a property called `colour` and that, in this case, it's grey.

```
[[[[[[ 'tennisball .COLOUR grey
```

```
]tennisball
```

You'll see that Logo now has an object called `tennisball` and that in its folder is one page — `COLOUR` and on the page is the entry grey. It's also possible to write to the page which defines a procedure.

```
[[[[[[ 'tennisball .DEF [pr [being red]]
```

```
]tennisball
```

So that's how Logo can write new procedures by itself — just feed it a list of instructions and a name and it'll turn them into a public procedure just as if you'd typed it in at the keyboard.

Using this technique we can structure Logo in a way that reflects the way we think about objects in the real world. The object has a name which calls to mind a string of descriptive properties. Let's apply this new-found knowledge to a very simple telephone directory program.

CPCLM/MSA owners should have `rearsberg` from last month defined as an extra procedure and also as which

Turn to Page 201 ▶

4 From Page 29

It'll explain further on:

```
to use word
make 'word'
repeat count word
]
make 'word first word
if and (or = NO) (or = YES)
[make 'or = NO]
make 'word word count char of
make 'word of word
]
to useword
end
```

There are many ways of going about such a program. In this version I'm aiming at three things: To illustrate property lists, introduce a couple of new features — and keep it simple. I'm not going into a detailed explanation of every line, but I'll discuss the more important points.

The basic idea is that whenever you add an entry and enter the phone number, the name of the person becomes the name of an object and their number is assigned to a property TEL — for telephone number. Retrieving a number simply involves getting the value of the TEL property from the object.

When you use **make** it saves not only procedures, but also any variables

that you define as well. You've probably noticed this already. By giving an object called, say, **John** a single property called **TEL**, it is saved too.

When writing the same procedure I found an important flaw in Logo file handling. Not only can you not have a file with a name that already exists, but in CP/M 3.2 Logo you can't erase the one you don't want. This is a real nuisance and I've written the procedure so that it won't accept a name that already exists.

To avoid the program stopping with an error report if you try to use the same name twice, it checks to see if the name you type is already in the directory. **dir** outputs a list of files on the disc and **ac** converts the filenames to upper case to match those in the directory. **memberp** is then used to check if your chosen name is a member of the list. Next time you run the program you should load the latest file.

CP/M Plus users can improve this procedure so that it erases the old file first by substituting the following lines in **make**:

```
if (memberp ac name dir)
  delete file name
]
```

```
to addentry
to
or (or) ... ]
or (or ... add entry)
or (or ... last or entry)
or (or ... saved)
or (or ... end worked)
make 'choice no
if or (choice = 1) (choice > 4)
[delete word]
run (list (make choice) (choice) (choice)
  a name) (make)
]
delete word
end

to getword
to
getword
or (and their number)
make 'number no
make 'name TEL number
end

to listdir
to
getword
make 'number (word name 'TEL)
or (or (their number is) number)
or (or) a key)
write word
end
```

The complete telephone directory program

Going back to **memberp** for a moment, when I showed it to you last month I was using it like this:

```
if (member 'list 'TEL)
```

This is a bit long-winded because Logo understands **TRUE** to mean true — it's known as a system value, one that's built in. It also understands **FALSE** so we can get away with:

```
if (member 'list)
```

it will understand the **TRUE** or **FALSE** which comes out of the brackets when the expression has been tested.

Another point of interest is the error check in **delete** when you've made your choice, in particular the **if** or statement. If one of the other brackets is true, **if** sees the whole thing as being true.

Imagine a far more complex system than this simple program where we might be storing personnel records each containing dozens of different details. If we were storing everybody's telephone number in variables we'd have to think up a different variable name for the telephone number of every employee. The same goes for all the other details as well.

The other approach would be to have a list associated with each name with, say, the first item always being telephone number, the second always being age and so on. In this case you have to remember what is in which position, and having used property lists I find they provide the neatest solution, particularly for complicated problems.

Using property lists, you can have one object for each person, using his or her name as the name of the object. Each name will have a property called TEL associated with it and that's easy to set up, remember and retrieve. There will also be other properties such as **SALARY**, **AGE** and so on.

Perhaps you can experiment with the telephone directory using these ideas. Rather than write different procedures to store and retrieve each property, you'd be better having it stored two times as a general input routine where you specify the property to be added to, the other a similar output procedure.

■ There's plenty to digest for now. Next time we'll have a look at recursion and the properties of local and global variables.

AM tips



Rock 'n' Wrestle

(Firebird)

Tyone McWilliam from Alexandria took a break from a bout with his bagpipes to pass on a tip for the budget beat-'em-up. You can get a hernia just reading this!

Run to the far right hand corner of the ring and turn to face your opponent. As soon as he approaches, kick him in the stomach until his energy is depleted. Move round in front of him and if he's not facing you, wait till he turns. Grab him, lift him up and simulate a pile driver.

If all goes well, jump on him and pin him down until



he's out for the count. You may need to try this a couple of times in Lord Toff who's a wee bit meaner than the rest.

Curse of Sherwood

(Mastertronic)

Thanks go to Tony Vernon of Portsmouth for this solution.

Go right, shooting anything in your way. Take the green grass, kill the wizard and take the club. Go to the transporter ring and press Fire immediately. Shoot the yellow gate and transport back.

Get the sword where you picked up the club. Transport again. Go through the yellow door and shoot the birds.

Kill the wizard, take the silver dagger and cross. Do not drop it! Go back, transport and move right until you get to the cottage.

Enter and shoot the corner and the scrying glass. Leave, keep going left, kill the troll, kill the birds and eventually kill the werewolf. Take his fangs, go right until you come to a cottage.

Walk into the passage inside and you'll be given a

yellow bag. Leave and go right until you come to a path going up. Go up, shoot the wizard and keep moving right.

Kill the guards. Go back for the ice wand. Go right again. Shoot the river, move right and kill the dragon. Take the red bag.

Travel along the path until you come to a path going up and go up, but watch for the troll. Kill it, get the bag and open the door.

Go up and then left. Enter the hut and walk into the hermit who will give you a map.

Leave and go left. Go up into the swamp and use the map to get through it. This is quite hard.

When out of the swamp go right, down, and right again. Shoot the guards, go right and shoot more guards. Enter the castle, shoot the dragon and walk on to the star.

WELCOME to another *Amiga*, the section where you can share hints, tips, games and maps with fellow readers.

I get so much mail as the rest of the magazine put together, so I can't guarantee to use every submission, but those who make it into print are rewarded for their efforts.

A couple of months back I asked for suggestions for your favourite games over the last year or so. Thanks for all the replies, I've got a stack of postcards examined into my filing cabinet and I'll print the results in a month or two when I get round to counting them up.

There's still just time to have your say if you're quick. Being the kind soul that I am, I'll be putting the cards in a hat - when I can find someone with a head big enough - and sending some software to the lucky chap (or chapette) who's first to be picked therefore.

In the move to our plush new offices I managed to lose the Lundy address. If you're reading this *Amiga*, please write in so I can pay you for the Ghost Harkers map.

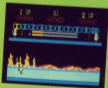
T. Henry

Mission Jupiter

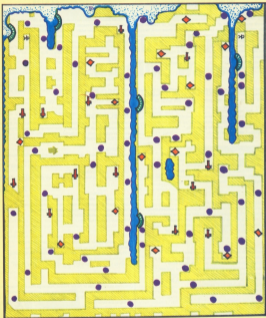
(Codemasters)

Jason Brooks did a dark deed with his disassembler. Try saying that after a Peased Grammatic Google.

Buster, here's infinite lives, fuel and bullets for the social-'em-up. Read the tips and run the poke.



10 Mission Jupiter Cheat	98 0076 00,01,01,08,11,01,00
20 3x Jason Brooks	100 0076 00,04,01,21,00,01,01
30 000001 0000010000	100 0076 00,08,01,21,00,00,00
40 7000 0000,0000 0000, 0000	100 0076 00,00,00,00,00,00,00
50 7000 0000,0000 0000,0000	100 0076 00,00,00,00,00,00,00
60 0100 00,01 00,00 00,00	100 0076 00,00,00,00,00,00,00
70 0100 00,01 00,00 00,00	100 0076 00,00,00,00,00,00,00
80 0000 00,00 00,00 00,00	100 0076 00,00,00,00,00,00,00
90 0000 00,00 00,00 00,00	100 0076 00,00,00,00,00,00,00
00 0000 00,00 00,00 00,00	100 0076 00,00,00,00,00,00,00



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| ⊗ Yourself and Princess | ⌒ Bridges |
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ADVENTURE

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As you will see, the results of the review competition are announced this month. The response was extremely good and I hope the winners are pleased with their prizes.

I have awarded a commendation to Paul Iddon who produced a good review and narrowly missed being in the first three. Although Paul will not get paid, he was a worthy effort and I will be sending him some software.

The winning entries are on page 48. As he would with a normal contribution, the editor has done some work to polish some of the rough edges, make them an appropriate size and fit the magazine's style, but changes have been kept to a minimum.

You may remember my comments about the bugs in Flashback when I reviewed it in the November issue. The author, Visual Dimensions, has written to say that the problems have been rectified and for the benefit of budding programmers, here's an edited quote from the letter:

"While working on Flashback the excellent Amiga Maxam rom was used in conjunction with the Graphic Adventure Creator. It was found that when the Amiga's memory is pushed to its limits, the small amount of ram that Maxam uses has nowhere to go and since the GAC insists on installing all roms present, some of the adventure's memory was overwritten.

"This brought about text corruption making the program unstable. Hopefully we have now corrected the minor errors and are able to provide a more reliable adventure."

I'm not sure the problems were

quite so minor as suggested, but they should now have been solved and I welcome Visual Dimension's letter in the spirit in which it was sent. I pass forward to seeing the company's next games - Cartoon Capers in Great Town, Great Long Manastous Tumrels and Big Great Whopping Dimensional Dragons.

M. Jennings has written to ask if I could put the solutions to problems in some sort of code so the answers won't be seen accidentally. I have often considered whether to make solutions harder to decipher, but when this has been done in other magazines I often had more difficulty decoding the answers than solving the problem.

Solutions would take up more space as the instructions for interpreting the code would have to be printed every month for the benefit of new readers. It's hard enough cramming everything into an issue as it is without giving up more space.

The answers would not be in plain English so there would be a greater chance of errors creeping in. This would result in yet more space being taken up with corrections.

I know how frustrating it can be to see solutions before you encounter the problem and I sympathise. When I started this column I used to phrase the answers cryptically. I have since made things more obvious because this is what the majority of those who write in wanted. However, as I move fire of seeing, this is your column. Tell me whether you want the answers and Hall of Fame in code and I will do what the majority want.

Following Stonehear Castle in the December issue, this month instead of a map there's another mini-adventure from Clive Gifford.

It's unkind to offer the seasoned campaigner much of a problem, but it's a good example of what can be achieved with a small routine and will undoubtedly be of interest to beginner

programmers and those who haven't yet tackled a commercial adventure.

We can print more of these and I'll be guided by your judgement. Please write and let me know what you think - would you like more or would you rather have a book every month?

FEEDBACK

GRAHAM Wheeler has sent help for Nicholas Marshall's problem with the Fantastic Four mentioned in November. The command Nicholas needs is *Three people hand up shaft*.

The rest of this month's Feedback is devoted to Lord of the Rings.

Bradley Taylor and K. Guy have written in to help Paul Sawye with the ferry. Turn the handle on the landing stage as the ferry moves towards you. If you run out of strength, ask Sam or Pippin to do it. Once the ferry reaches you, jump on board and turn the handle round there.

If you all run out of energy at other stages, eat the food you should have found in the cupboard at the beginning of the game.

Bradley goes on to give two further tips. You can use the ring to get past the barrow wight and if you want to use magic when you find a pale green jewel, say Elizabeth K. Guy also adds that you can get past the location east of the hedge by repeatedly trying to go in directions other than those given on screen.

M. Jennings has sent in a solution to a problem John Stevenson had in November with the Green Knight. Apparently, you can get Tom Bombadil to kill him for you.

Turn to Page 26 in

HE-LP

TORE Gøbbager from Norway has asked for help with *Asterhack*. He says he has won 34 per cent, but it sticks at the north side of the island in South Way. He has many chains in South Way and has started to get a ramp and has crossed the car, but cannot get across the stream. Can anyone assist him?

REVIEW COMPETITION RESULTS

WINNER: David Clarke for his review of *Subterrak*. Well done David. As well as having his work published and paid for, he will receive: *Stationfall*, *Leaking Horrors*, *Murder on the Atlantic*, *Killed Until Dead*, *Castle of Eagles*, *Shadows of Mordor*, *Dodgy Demons*, *Buggy*, *The Big Sledge*, *The Colour of Magic*, *VideoWorld*, *Imagination*, *Flashback*, *Mystery of Abraham Manor*, *HPH*, *Dungeons and Amethysts*, *Alchemists 'n' Everything*.

SECOND: Julian Carter with a review of *EyeTrack*. He wins the following

software: *Legions of Death*, *Demons*, *dark's Revenge*, *Top Secret*, *Black Fountain/Shangri-la*, *Deserts*, *Agecha Gold*, *Kwaki*, *Winter Wonderland*, *Navahuttah House* and *Killed Until Dead*.

THIRD: Sandra Sharkey reviewed *The Last Phirious* and has won the *Topologist* series.

COMMENDATION: Paul Miller for his review of *Kentilla*. He will receive *The Archers*, *Rock Hanson* and *Dracula*.

Now turn to Page 43 to read the reviews.

BUG HUNTER

K. GUY has pointed out that in *Lord of the Rings*, Pippin suddenly acquires two pale green eyes in the barrow night's lap. Neither of us are sure if this is a bug. Does anyone else know?

Following the solution given in the August 1987 issue and subsequent mention of a bug by Aubrey Gander in November, Graham Wheeler has written to say that he has played the *Neverending Story* and confirms an insectivorous presence. His solution avoids it and he has kindly sent a copy which will be found in the Hall of Fame.

HALL OF FAME

Neverending Story - A bug-free solution by Graham Wheeler

NE, E, Look, get Aunys, SW, S, get hors, W, N, get bransh, S, E, N, get stone, NE, W, SW, light torch, NE, E, S, E, E, E, down, light bush, down, get box, up, W, W, SW, drop box, get leather, smash box, drop stone, get food, eat food, NE, W, W, W, N, N, N, W, SW, get cage, NE, E, S, S, E, E, E, E, blow horn, drop horn, SW, get crystal, get fragment, NE, get falcor, W, W, W, SW, S, W, SE, fly South, E, up, down, S, E, drop crystal, S, S, drop fragment, look until you see the eyes blink, this S.

Lord of the Rings Part 2 - a hint sheet by T.P. Hopkins

- Find the pack horse and, when you find the white horse, get on and tell it to go South.
- Go through the old door and wait until you get a message, but don't give your ring.
- The next day, some food will be put into the packs on the pack horse. There is also a hot meal available, but be careful when looking for it.
- Go South, but don't go over the mountains or you will die. When you come to the doors (because the food from the horse before reaching the water), light the candle (if you blow it out earlier, say friend, and they will appear).
- Enter - but send Gandalf in front of you when you go up and East - and push the eagle's head in the corridor.
- Read the book in the statue room and go through the small door. Then

go East, down twice and wait for Gandalf.

● Go across the bridge to the forest and travel East when you meet an elf. Ask the tacturn elf for help at the river bank. Eat some of your food now and go to the gams.

● Knock on them to enter and go up the tree where a message awaits you. Go back to the river where you'll find a boat to take you to Part 3.

Enchanter - Part 4 of a solution by Graham Wheeler

READ the map, go to point M and type Connect 'F' to 'F' which will draw a line with a magic pencil. Baloo will appear and tell you not to release the terror. Wait and the terror will get near. Type Erase the line between 'M' and 'F'. This will stop it from reaching you.

Now enter Erase the line between 'F' and 'F' to trap the terror between F and S and type Connect 'M' to 'F' to go SE and get the Gancho scroll. Now leave the translucent room and you will receive a message saying the terror is trapped.

Make your way to the stairs near the landing and turn the Golem and Gosh aparts. Cast the Kulsid spell at the stairs and they will vanish, leaving you falling with the ornate scroll in your hand. Try to yourself - using the ornate scroll - so you will not fall to your death, then go east to confront K'bil in his lair.

He will attack, sending first a dragon (Gondar dragon), then an evil being (Gosh being) and you should attack him by casting Clench at him. He will

be banished to another plane and you will have completed the game with 400 points.

Graham has sent in a complete solution to *Sorcerer*, the next in the series, and this will be serialised over the coming months.

Mounted Mouse - Two solutions sent in by Graham Wheeler

THERE are two ways to solve this game, one of which gives you a final score of 115 per cent and one that gives you 85 per cent. In either, your torch will last for about 80 moves. If more light is needed, there is a lamp in the laboratory and matches in the bathroom.

Solution 1

E, examine clock, get watch, W, up, E, get ball, N, N, examine footprints, jump in bed, up, N, W, throw ball, get sun, E, E, grab bandage, get can, W, N, press button, get and wear windcheater, drop watch, S, S, down, S, down, W, spray can, drop can, up, get bullet, down, drop windcheater, get gun, load gun, E, N, E, give sun, get state, down, give state, E, get spanner, W, up, W, S, up, S, shoot gun, drop gun, N, W, get sandstone, E, N, up, E, loosen bolts, get head, W, down, S, E, E, enter mirror, give head - game over, horseman gives you treasure - score 115 per cent.

Solution 2

M, E, down, E, get spanner, W, up, S, W, up, N, get ball on bed, up, E, loosen bolts, get head, W, down, S, E, E, enter mirror, give head - game over, horseman gives you treasure - score 85 per cent.

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HERE are the winning entries for our review competition announced in the June 1987 issue. Each competitor had to submit a review of an adventure game and from hundreds of submissions Stan- dard chose these as the best four - see his column for details of prices.

Subsunk Firebird, £1.99 (tape)

ED LINES is the *Seafarer Gazette's* star reporter and has been sent to report on the loss of duty of a British nuclear submarine. All goes according to plan until the ship is taken over by an unknown enemy power. Being the coward he is, Ed dives under a bunk and lies low until all the really violent stuff is over. When he comes out he finds the submarine to be deserted.

Upon examining the sonar Ed discovers that the ship is on the sea bed. He must get help by sending a message to GCHQ, and quickly! And so the scene is set for you to help Ed out of his predicament.

The humour in this adventure is always apparent and, more often than not, very witty. For instance, you find a bottle of after-shave aptly named *Old Spice* (groan), and a gilly power in one of the submarine's lockers.

The puzzles are not difficult, in fact some - such as picking a lock with a paper clip - will be second nature to the seasoned adventurer. Fortunately the puzzles become slightly more devious in the later stages and would be harder still if the authors didn't keep providing outrageously obvious hints.

This is nothing to complain about, but in some cases you are provided with a clue because the puzzle is just too stupid to be completed without help or a large amount of luck. In one case you are inside a

locker when the game tells you "I don't know what to do in here! Twiddlely Hook!" You then twiddle a knob in the wall and a secret door opens. As you can see, without the giveaway hint you would have been lost as to what to do.

The parser is of a reasonable standard, recognising over 150 words. Despite this, there were a couple of occasions when I knew what was needed to complete a puzzle, but had to rack my brains to find the correct word. This is a failure on the programmer's part to realise that not everybody thinks alike.

The game was written using the Quill and uses some unusual graphics, mostly text characters arranged on the screen. Game play tends to be a little slow, often due to lengthy pauses and sound effects in the form of high pitched beeps. One slightly annoying point is in the main control room, where the game generates some beeps to represent the speaker every time you enter. After a couple of hours this becomes irritating.

Overall, *Subsunk* is a reasonable adventure which would suit the beginner, especially at £1.99. The annoying flaws are acceptable if you consider the humorous element but this is not what I would term a great adventure, especially when compared to a *Comix* 4 adventure of any of the other established publishers. But for a cheap-and-cheerful adventure you could do a lot worse.

David Clark



Spytrek Americana, £2.99 (tape)

SPYTRDKR is an Americana product written by Peter Torrance who brought us *Subsunk*, *Seafarer Gazette*, and more recently *Imagination* and *Agatha Gold*. Like all more recently *Imagination* and *Agatha Gold*. Like all more recently *Imagination* and *Agatha Gold*. Like all more recently *Imagination* and *Agatha Gold*.

The location descriptions are a fair length. In them, objects that may be examined are highlighted by the tall letters. However, I was a little disappointed by the lack of information yielded by examining certain objects. The graphics, of which there are quite a number, are of a high standard, and take full advantage of the GAC's capabilities.

The plot - which is the most original I have ever come across - goes like this: Two weeks ago one of Britain's best spies was killed trying to bring back some top-secret plans - no doubt at Russia's new SACOs. Before his death the spy managed to hide the

plans somewhere in Europe. Now Europe is a big place, so in their infinite wisdom the British government decide to call upon their super spy. This is where you fit into the picture.

The locations you visit vary a great deal, ranging from coffee, stain rooms and airports to ski resorts and restaurants. There are quite a few characters, but interaction with them and with the program as a whole is pretty limited.

Although the atmosphere is perhaps treated in the wrong way, being quite light-hearted for what I would have thought is a serious subject, I still enjoyed it a great deal. It may not be very large or have a huge vocabulary, but its problems are pleasantly logical, it contains no on-tasking and takes a £2.99 price tag - certainly no on-tasking and takes a £2.99 price tag - certainly no on-tasking and takes a £2.99 price tag.

It is not very difficult and perhaps better suited to the beginner than the experienced adventurer. Even so, it would prove light relief to the latter still toiling with *Hitchhiker's Guide to the Galaxy*.

Julian Carter



The Lost Phirious Part 3 Vidipix, £2.50 (tape)

TLP1 and 2 were among the first adventures I ever played and I thoroughly enjoyed them. I eagerly awaited the launch of TLP3. The sequel story – as it will be eventually – is written using the Quill and is text only.

The first words that appear on the screen are: "Do you want a redesigned character set?". Nice to be given the choice. The next prompt is "Do you want instructions?". I typed yes and was treated to a very detailed description of the story so far...

You take the part of a soap dealer trying to find the fabled Phirious which vanished without trace on a trip to Alpha Centauri while carrying a valuable load. In part one you visited Earth. In part two you gained enough information to point you in the right direction. This is where part three begins.

As you near the planet Palaharoon you are attacked by fighters and forced to land. The natives have been wiped out by a plague which scientific personnel are investigating. You have some coordinates for the Phirious but they are in a foreign language so you can't decipher them. What you need, among other things, is a M&P label file.

The author then proceeds to tell you what you need to do to complete part three, which I thought was good as I've played too many adventures without

really knowing what I was aiming to do.

There are also some special options which are very thoughtfully provided. Typing M&P will tell you where to start mapping. There is also a menu but typing MAZE will switch on and off a path to follow – excellent!

The game begins in the crates, which has a hole in the roof and a spiral on the floor where the ejector seat used to be, courtesy of your playfod robot Jetino. The descriptions are very atmospheric and not over-long. I found the random "What next?" messages amusing, for example "What next my little gate stopper?" and "What next my old mucker!"

The puzzles are not too difficult and quite logical. You can type the correct input to solve one and if you're not carrying a specific object then it doesn't matter. But, once you realise this, the puzzles become easier to solve. Although the game can be played from disc, the save option is to tape only which is a bit of a bummer.

With around 90 locations to explore and plenty of puzzles to solve I think this adventure really justifies the price of £2.50. Both experts and beginners would enjoy playing it and if you've played the first two parts, you just have to get this one. I'm waiting impatiently so I can't bear to be completed so I can't finally find the lost Phirious.

Sandra Sharkey



Kentilla Mastertronic, £1.99 (tape)

THIS Mastertronic game costs only £1.99 and to be honest, that is all it is worth. The entry card explains some things, but not the aim of the game. Luckily when you start playing you soon realise you must kill the evil Orko.

There are graphics, but they can be somewhat obscure. Perhaps the best feature of the adventure is the ability to look into adjacent locations which can warn you of possible doom and disaster.

The game does have some flaws, but for less than £2 you can't expect a game of the quality of Level 1's or other top adventure houses. For instance, once inside Ogeron's house, you need a secret, but when you ask for it you are told Ogeron doesn't have it – then on the next line he gives it to you.

Interaction between characters isn't that bad, being in the "Say to Ogeron Give me the sword" format. There is quite a lot of communicating to do – particularly with Elva. Elva? More on her shortly. You'll also find lots of telling to do, though killing some Unga-Mauls takes a few attempts.

The game play is basic – move and kill – and the need to type specific instructions like "unlock chest with small key" and "unlock chest with ..." becomes tedious. To complete the game with 100 per cent score you need to take every object – very thing, but this is where Elva comes in. Elva will do most of the carrying for you – she must be very strong!

You must reach Tarasaka before she dies or you'll not succeed in the end. There is a time limit to do this which is relaxed once she is free. You will meet the evil Unga-Mauls who you must kill. Some carry useful items and you'll need them all, including the Valmiria – a magic heal spell. Eat this. When you come across the talking Quang you must kill and take it to spare off the swamp monsters. The Cavrats are friendly and have a few useful items, but don't steal them; offer something magical.

To summarise, this is obviously a budget game. It has moments that make you think hard, but experienced adventurers will have no difficulties in completing it. It is ideal for novices.

The overall playability lacks something and the atmosphere found in more expensive adventures is definitely missing.

Pavel Ibbotson



Book of the Dead

CRL

£9.95 (tape)

£14.95 (disc)

ASCIENT Egypt is the setting and you have death, a falcon-headed minor godling expelled from Paradise after your father, Set, murdered Osiris.

A forgotten manuscript known as the Book of the Dead may offer a route back. It details the one method by which a mortal — which you have become — may travel to the other world after death. The book is written in fragments, on tomb walls and in the records of priests and other beings. It is your path to redemption — if you can find it.

Death can place a curse on you which manifests itself as a crippling disease, unless you can secure the aid of friendly gods, this will kill you before you can complete your quest.

You start in a marbled town and almost immediately several problems present themselves. Visiting the north and south ends you being mugged by the local drunks. Since this can happen with monotonous regularity — six times in 18 moves on one occasion — valuable time is regularly lost.

The embalmer will take your IDU, provided you can find a means of writing one, and a search for the necessary ingredi-



ents will take you out of the town. The cobra will prove easy to please if you have visited the rubbish dump, and a trip to the general causes further problems. Getting back into the town requires you to see something and once there you should see the end in sight.

The choice of colours could have been

better — at one point the bright yellow made me put my sunglasses on so I could read the text. Luckily, you can turn the graphics off.

The plot is novel and adds an interest that, so far, is not generated by the content. After several weeks of playing this two-part graphics adventure I've achieved very little and I hesitate to comment on its quality. I'm sure I have missed a lot but, deadlines being what they are, all I can say is that it isn't like it.

Presentation 65%

Standard cassette cover and insert.

Atmosphere 65%

A good plot which could have been better implemented.

Frustration factor 65%

I found problems that still puzzle me, but I couldn't find the interest to spend time on the game.

Value for money 50%

The cassette should be a couple of quid cheaper and the disc version is vastly overpriced.

Overall 61%

I haven't seen everything in offer, but so far I'm not impressed.

Videoworld

Consoft

£2.50 (tape)

WHILE watching the unpleasant events of the Great Escape, you fall asleep. You are rudely awakened by a man dabbling make-up on your face and as you look around in bewilderment, you realise that you are the star on a stage film set.

The room you find yourself in is your own, but on leaving it, your garden is very different. Plants that inhabit the pond and a strange plant prevent you from entering the shed.

The film is obviously a strange mish-mash of various other productions — Swamp is repeatedly swimming around in the pond and trying to avoid being eaten and at the end of the garden is a POW camp. Going into the camp leads to further confusion. Refugees from The Wooden Horse mingle with those from Stage to Victory.

Once you manage to make sense of the rules that govern the game, you should find your fitness on the horse, though any further action will see you on the wrong set.

The puzzle box found in one of the huts

should be easy to dispose of now and a route out of the camp is available. Further exploration, especially if you go too far, will grant you to offer an unique item and find yourself visiting other huts in the camp. Pictures found on the walls depict famous films and an intriguing statue poses a further question.

Returning to the master suite, you are now presented with a totally incongruous obstacle — a Dalek. Failure to provide the correct article here will result in your rapid demise but, once passed, most of the answers are revealed.

The format of this game is radically different from most other adventures. Movement is not by use of directional commands, but by typing in your destination or by use of entrance or exit. The only exceptions to this are the use of go and down.

It usually manages to put together the overall solution to a game after I have played it as long as this one, but I don't mind admitting that I am baffled. I found the use of theatrical terms a bit overdone sometimes, but I'm very impressed with this two-part Quillid text adventure.

Videoworld is an excellent game from, to

quote Consoft, a "one-man band". I wish Consoft every success with its efforts and hope that, if successful, the company does not lose the magic touch that is evident in this adventure. I look forward to seeing future releases.

Presentation 75%

Appropriate for the price.

Atmosphere 60%

Makes me glad I'm not in the movies.

Frustration factor 90%

The novel combined structure and format probably contributes a lot to this — unless I'm losing my touch and over-looking the obvious.

Value for money 80%

Apart from the price and content, any three-dime stuff that produces and sells a game this cheaply deserves a good mark.

Overall 66%

Consoft is a name to look out for in the future.

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ONE problem often encountered when hooking a printer up to your micro is the Amstrad's dreaded 7-bit printer port. As you may know, when you tell the printer to print, for example the letter A, a code is sent down the cable, in this case 65.

All the characters you would use in normal text, including special control codes, fall in the range 6-127. In binary arithmetic 127 is 1111111 - seven 1s. The CPC's printer port is constructed to send codes up to a maximum of seven binary digits meaning that, like it or not, 127 is the maximum value you can send.

This would be fine but for the fact that nearly all modern printers have character sets extending up to 255 which is 11111111 in binary - eight 1s. These extra characters won't correspond with the ones in the Amstrad's internal set but that doesn't stop them being useful for enhancing your text output - have a look in your printer manual for further details.

Another problem brought about by the 7-bit port is that although many printers allow you to redefine the characters, you need the full eight bits to do it. Amstrad claims that its printer interface is built to the industry standard, but if that's the case, the printer manufacturers aren't building their machines to the same standard and it's a pity Amstrad didn't run with the crowd.

Other manufacturers do and Amstrad itself did in later machines such as the PC compatibles and the GMP series of printers.

Fortunately there's an answer to the problem - the 8-bit printer port from

A little bit extra

IAN SHARPE tests the KDS 8-bit printer port



KDS. The version reviewed here is the latest model which, unlike earlier versions, is compatible with CP/M.

The port consists of a small circuit board fitted with a plug and through connector. All you have to do is push it on to the printer outlet, plug your printer lead into the board and you're almost ready to run. There's a key in the plug so you can't get it the wrong way up, and once installed it's foolproof.

To access the full eight bits from

Amstrad you need to run a six-line Basic program typed in from the instructions. You save this for whenever you need it and unlike the earlier 8-bit ports, if you don't run the program the Amstrad works in 7-bit mode as though the interface wasn't there.

To use the port under CP/M Plus you have to reconfigure your system disc - a copy I hasten to add. Under no circumstances should you attempt to alter the original disc supplied with the machine. The modification is fairly straightforward and involves SID, one of the utilities on your system disc.

Under CP/M 2.2 you also have to reconfigure, but this time it's done by typing in another Basic listing which will readily accept a CP/M 2.2 disc placed in the drive.

After you've done that, the port works as it should and there isn't much more to see. I've had it plugged into the back of my CPC for the last month without any problems, with or without the software.

To round off, unusually for a review, I'm including a monochrome screen dump. It takes advantage of the 8-bit port to give a faster, full-width dump under Amstrad and works in any screen mode. I don't know if it'll work with the old port, but it isn't a long program so there's nothing lost by having a go.

Just run KDS's initialization program followed by this one. The command installed by it is KDSUMP. As written it runs with BASIC, like my Shivas which use BASIC to start normal 8-bit dot image printing. If your printer uses BASIC, the dump will amend itself if you alter the CALL 80000 in line 106 to CALL 9000.1. Of course, this program won't work without the 8-bit port or its software.

```

10 REM Screen dump for 8-bit port
20 REM printer port
30 REM by Ian S. Sharpe
40 REM Get connecting with the Amstrad
50 REM ----- etc -----
60 CALL 80000:GOTO 10
70 FOR aa=25500 TO 8000 STEP 10
80 REM screen dump
90 FOR aa TO 10
100 PRINT aa;PRINT chr$(aa);PRINT aa;
110 PRINT aa;PRINT chr$(aa);PRINT aa;
120 REM
130 FOR aa=255 TO 254 STEP -1
140 PRINT aa;PRINT chr$(aa);PRINT aa;
150 PRINT aa;PRINT chr$(aa);PRINT aa;
160 REM
170 FOR aa=255 TO 254 STEP -1
180 PRINT aa;PRINT chr$(aa);PRINT aa;
190 PRINT aa;PRINT chr$(aa);PRINT aa;
200 REM
210 FOR aa=255 TO 254 STEP -1
220 PRINT aa;PRINT chr$(aa);PRINT aa;
230 PRINT aa;PRINT chr$(aa);PRINT aa;
240 REM
250 FOR aa=255 TO 254 STEP -1
260 PRINT aa;PRINT chr$(aa);PRINT aa;
270 PRINT aa;PRINT chr$(aa);PRINT aa;
280 REM
290 FOR aa=255 TO 254 STEP -1
300 PRINT aa;PRINT chr$(aa);PRINT aa;
310 PRINT aa;PRINT chr$(aa);PRINT aa;
320 REM
330 FOR aa=255 TO 254 STEP -1
340 PRINT aa;PRINT chr$(aa);PRINT aa;
350 PRINT aa;PRINT chr$(aa);PRINT aa;
360 REM
370 FOR aa=255 TO 254 STEP -1
380 PRINT aa;PRINT chr$(aa);PRINT aa;
390 PRINT aa;PRINT chr$(aa);PRINT aa;
400 REM
410 FOR aa=255 TO 254 STEP -1
420 PRINT aa;PRINT chr$(aa);PRINT aa;
430 PRINT aa;PRINT chr$(aa);PRINT aa;
440 REM
450 FOR aa=255 TO 254 STEP -1
460 PRINT aa;PRINT chr$(aa);PRINT aa;
470 PRINT aa;PRINT chr$(aa);PRINT aa;
480 REM
490 FOR aa=255 TO 254 STEP -1
500 PRINT aa;PRINT chr$(aa);PRINT aa;
510 PRINT aa;PRINT chr$(aa);PRINT aa;
520 REM
530 FOR aa=255 TO 254 STEP -1
540 PRINT aa;PRINT chr$(aa);PRINT aa;
550 PRINT aa;PRINT chr$(aa);PRINT aa;
560 REM
570 FOR aa=255 TO 254 STEP -1
580 PRINT aa;PRINT chr$(aa);PRINT aa;
590 PRINT aa;PRINT chr$(aa);PRINT aa;
600 REM
610 FOR aa=255 TO 254 STEP -1
620 PRINT aa;PRINT chr$(aa);PRINT aa;
630 PRINT aa;PRINT chr$(aa);PRINT aa;
640 REM
650 FOR aa=255 TO 254 STEP -1
660 PRINT aa;PRINT chr$(aa);PRINT aa;
670 PRINT aa;PRINT chr$(aa);PRINT aa;
680 REM
690 FOR aa=255 TO 254 STEP -1
700 PRINT aa;PRINT chr$(aa);PRINT aa;
710 PRINT aa;PRINT chr$(aa);PRINT aa;
720 REM
730 FOR aa=255 TO 254 STEP -1
740 PRINT aa;PRINT chr$(aa);PRINT aa;
750 PRINT aa;PRINT chr$(aa);PRINT aa;
760 REM
770 FOR aa=255 TO 254 STEP -1
780 PRINT aa;PRINT chr$(aa);PRINT aa;
790 PRINT aa;PRINT chr$(aa);PRINT aa;
800 REM
810 FOR aa=255 TO 254 STEP -1
820 PRINT aa;PRINT chr$(aa);PRINT aa;
830 PRINT aa;PRINT chr$(aa);PRINT aa;
840 REM
850 FOR aa=255 TO 254 STEP -1
860 PRINT aa;PRINT chr$(aa);PRINT aa;
870 PRINT aa;PRINT chr$(aa);PRINT aa;
880 REM
890 FOR aa=255 TO 254 STEP -1
900 PRINT aa;PRINT chr$(aa);PRINT aa;
910 PRINT aa;PRINT chr$(aa);PRINT aa;
920 REM
930 FOR aa=255 TO 254 STEP -1
940 PRINT aa;PRINT chr$(aa);PRINT aa;
950 PRINT aa;PRINT chr$(aa);PRINT aa;
960 REM
970 FOR aa=255 TO 254 STEP -1
980 PRINT aa;PRINT chr$(aa);PRINT aa;
990 PRINT aa;PRINT chr$(aa);PRINT aa;
1000 REM

```

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Another view of Renegade

I AM writing to express my disappointment at the review of *Renegade* in the November issue.

I have been told that the review copy was delivered without instructions and because of this your reviewer missed a couple of important features.

Firstly, there are two moves Mr. K can make that your reviewer didn't notice. He can walk up to a stunned opponent and proceed to take him. He can also climb on top of fallen assailants and punch them. These violent manoeuvres add little to the moral tone of the game, but a lot to the playability.

Secondly, you have the ability to pause and abort the game through the use of the escape key in the same way as *Lemmings Basic*, and also the ability to turn off the music.

Your reviewer complained about the lack of an option to define keyboard controls. The amount of memory left unused by the game is less than 32 bytes out of the 64k in the

machine, so to fit this option in I would have had to take something else out.

Since the CPC has a joystick interface as standard, and joysticks themselves are so cheap, I felt that the memory was best used for other features.

The control method is a direct conversion from the arcade machine. The best response is obtained by placing a joystick with sudden feel on a table beside the computer.

I apologise to people who find these controls difficult or impracticable to use, but in my defence I have to say that *Leisure Suit*! The system gave good control once they got used to it.

However, since all reviewers disliked the controls I am using a more normal joystick-or-keyboard

method in my current program - *Gripes*.

Your additive qualifies your reviewer expressed frustration at not being able to get past *Big Bertha*. I can only respond by saying that in my view a game should need more than just fast reactions and luck to complete.

There is a simple way to defeat *Big Bertha*, and with a little observation and thought it can be found.

Unfortunately the appearance of a pair of blood when anyone dies was removed from the production version. Due to a "bug" it is possible to get it back, I leave it to the readers among your readers to discover how. - John Greenwood, Imagine Software.

■ This is an edited version of a longer letter. We're sorry you feel aggrieved John, but it's good to get some feedback from the other side of the industry, particularly a programmer. John Batters takes some of your points, but is largely unimpressed.

The game is new in the charts so quite a few readers must have it and we throw the question open: Did *Renegade* get a fair review, and is the game too violent?

Our preproduction copy of *Gripes* is excellent - look out for it in the shops.

Endangered species?

I'M trying to locate a supplier of replacement ribbons for my Shiva CP400 printer, and order the Micro Peripherals badge. Local shops express total ignorance. The original supplier had none in stock and the assistant had no

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Chat with your CPC

EDR always seeing an *Amstrad* magazine a few years back I've been interested in computer programs that can hold conversations.

Recently I got to wondering if the pattern in something like the *Graphic Adventure Creator* could be used as a basis for such a program on the CPC? Or would it be simpler to use *Basic*?

Any information from you or your readers would be gratefully received. Maybe you could do an article on these sorts of programs at AI in general. Also while I'm here, is it possible to pick up satellite signals with my CPC or are special dishes and the like needed? - AJJ, Prest, Nottingham.

● The program you're probably thinking of was

originally called *Elio* and has appeared in several guises. A version of it is incorporated into the game *Enterprise* reviewed in the August 1983 issue, but it isn't worth £8.95 for the *Elio* element alone.

Your best bet is to get hold of a copy of the Amazing Amstrad Omnibus by Martin Fairbanks (Interface Publications) which contains a *Basic* listing. If enough people are interested, we might even do one in the magazine.

You can pick up satellite signals with your CPC, but as you will also see in the August issue, you need special equipment and software to do it. The only other way is to join *Marslink* and download weather maps.

idea fury were expected. Is this model obsolete, and if so are ribbons no longer available?

I'm sure that there must be plenty of others with these printers who need replacement ribbons. Perhaps one of your readers can help me by recommending a supplier? - Stuart Davidson, Motherwell.

● Descendants of the CP400 are still being sold, but we think the original is obsolete. The editor keeps his alive by cannibalising PCW8254 carbon ribbons and putting them in the *Shiva* class.

If you want the genuine article, try the adverts in *Personal Computer World*. If you look carefully you'll find

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several sources of supply. Not having dealt with any of them we can't recommend a particular one, but can say that the cheaper ribbons tend to be less reliable and don't seem to last as long.

On the subject of Shinwa CP400 printers, does anybody know of a source of replacement print heads?

Praise be

LAST September I bought a CPC6128 and a selection of magazines, and soon discovered that yours is the best.

After spending a lot of time playing games, I discovered that I could actually program it too. Well, sort of. You see, when I was at school all the computers were made by some American called Altair or something and I messed out on all this computer programming. Even my wife knows more than I do.

Obviously, I want to be able to make use of the full potential of the computer, so can you recommend an ideal's guide to programming the Amstrad? Also can you explain what checkpoints are and how to use them? — S.J. Towry, Oxon.

■ A few months ago we asked for suggestions for books on programming in Basic and machine code. You'll see elsewhere on this page that those interested in assembly language have a recommendation to follow.

We haven't heard from anyone who's enthusiastic about a book on Basic. Any offers? In the meantime we suggest you study our findings, particularly the shorter ones and have a go at writing your own simple routines — it's the best way to learn. Your local library should have some computing books, even ones on BBC Basic can help.

The checkmarks are to help you spot your typing mistakes when entering listings. Full details can be

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found in the June 1987 issue with some subsequent advice in the July mail pages.

In the move to our new offices we mislaid the addresses of Andrew Wyatt who wrote January's scrolling scenery 75-line, and Costas Theodoridis who supplied TITLAMP with an Amiga. Please could you both write in so we can send you your money?

Too much feed

I AM having problems with Colin Jankin's printer feed unit in the November 1987 issue. The program works fine, but the trouble is with the printer, which is a Per-Jektor 43-P1881.

It has the unforgivable habit of doing a carriage return when I forget to send a control code telling it to print with 3220s spacing.

When I came to trying the Printer program I found that each line came out in four separate sections and I just can't understand why it does this, so please can you help me? — Scott Roberts, Hawnt.

■ You have a problem which often arises with printers. The CPC is sending line feeds at the end of each line and the printer is adding its own giving double line spacing. This explains your need to set the line feed to

7720s — half the normal setting.

The cure is to read your printer manual and find out which DIP switch turns off the printer's automatic line feed. We suspect it's number three but switch layouts aren't standardised so we aren't sure. The switches are behind a clear plastic flap near the print head's resting position.

If that doesn't work, try putting a thin piece of insulating tape over the track on the CPC's printer port which corresponds to line 14. There's a diagram of the port in your CPC user guide to allow you to identify the correct one.

A good book

IN reply to your request for recommended books on programming, I've found Assembly Language Programming For The Amstrad CPC 454, 664 and 6128 to be very good. It is by A.P. and D.J. Stephenson, published by Angus Books at £7.99.

It deals with the basics very well and I am now having great fun with machine code. I hope this helps other readers.

Could you fix me up with a pen pal? — David Wood, 64 Crawford Road, Milngavie, Glasgow.

Video titling

NAVING read with interest the letters on using different

monitors with the Amstrad. I wonder if someone could help me with a similar problem? I would like to connect my Amstrad CP6128 to a video recorder in order to save films at the start of my video films.

Is there some way of converting the RGB signals from the Amstrad CP6128 into a composite video signal to feed into the video in socket of my video recorder? To avoid loss of picture quality I would like to be able to do this without using an RF converter. — I. Williams, Dyfed.

■ We don't know the answer to this one, but we're sure that one of our resourceful readers does.

Taped in listings

AM the tips on typing in listings given by David Hedges in the December issue.

I have a tape recorder and microphone connected via a feet switch permanently installed on my computer bench. For long listings I record on to tape speaking slowly, and try to match the pace of speech with my typing speed — two fingers, slow end of the indicator is given via a verbal beep.

If I find myself being out of pace upon playback I just pause via the foot switch. If the program does not work I just rewind the tape, playback the recording and read the listing to verify accuracy. — W.J. Denbury, London.

Cross with Logo

I AM 81 years of age and recently bought an Amstrad CP6128 with a DM5000 printer. My daughter being a keen Red Cross worker, I thought I would like to produce some red crosses to print round the edges of her writing paper. After many hours of experimenting I have just managed to produce them but my machine won't fit.

I would like to give others

who may be doing the Dr. Logo service in your magazine the benefit of my work so I am including it for you.
—J.J. Rutherford, Rangiora, New Zealand

```
to cross
10000 HDL 100 10000 SD
10 10 10 1011
END
```

```
01
01
to cross 1000 1000
100000 1000 10 10 10 10
10000 1000 10 10 10 10 10
10 10 10 10 10 10000 10
1000 10 10 10 10000
```

Remember the installation disks only show where the file has wrapped round and shouldn't be typed in. Logo's fill routine doesn't work because it was found to have a bug just before CP/M Plus Logo was released and it was omitted. Unfortunately, nobody told the manual writer.

The other problem you're going to encounter is sending the graphics to the printer, which is very difficult to do from Logo.

Not enough drive

RECENTLY I bought Database Manager by Allnet which runs under CP/M on my CPC6128. It is a powerful program but unfortunately my single 3in drive limits the space for data files on the disc to only 80k.

This is after defining a database and then creating all the define files which are not required once the program is set up.

The database I wish to create requires at least 320k for the data file alone. Add to this the minimum program operating files and I need a disc capacity of at least 470k if using a single drive.

Could you please produce the instructions to use two drives, or even the reverse side of the same disc when restricted to a single drive in any case?

would you not have the required capacity using the standard 3in disc.

The answer seems to be for a second drive or to use a 3in disc that would provide 410k per side. Could you please tell me if such a thing is available and if not, is there a 3.5in drive for the CPC which do the job?
—D.R. Riley, Andover.

The 3in drive can be needed for an extra 10 per cent but there isn't one available for the CPC6128 to give the sort of capacity you're after.

We don't know of a plug-in and-go 3.5in drive for the CPC, though in theory it should be possible.

Your best bet is to go for the Pace 5.25in unit reviewed in our August 1987 issue. It will give you 480k under AmigaOS and CP/M 2.0, and 800k under CP/M Plus.

Protext caps lock

I HAVE found Protext an invaluable asset, yet there is one part of the Amstrad/Protext package that really bugs me. The lack of visual clues indicating caps lock.

The caption on the top right-hand corner of the Protext display is not obvious enough. The inclusion of a red light on the caps lock key is.

I therefore decided to write a routine to change the border colour in relation to the status of caps lock.

However, the routine only works while stepping through the code in Protext's monitor. I cannot run it from Basic and do not know how to patch it to Protext and this is why I am writing to you.

Protext uses the same call (00021) to check the status of caps lock/shift lock, but I have run out of ideas as to how to change it.

Can you please give me some pointers and tell me where I'm going wrong? If you can provide a better routine that would give a similar indication of the

Blown your fuse?

I HAVE heard of three instances of the Amstrad CPC6128 colour monitor failing due to the internal fuse blowing. Perhaps other readers will be as surprised as I was to discover that there was a Fuse Holder inside the monitor.

If your guarantee has run out or you do not want your computer to be out of action for too long, you should have a spare fuse handy.

The one you need is a T24-250; I understand it is an anti-surge fuse—but I'm no electrician. To replace the dust fuse proceed as follows:

1 Unplug the monitor and disconnect it from the key-board.

2 Unplug the monitor face down on a cloth and with a Phillips screwdriver unscrew the four screws holding on the back of the monitor—note which of the two adjacent holes you remove the screws from.

3 Lift off the back. Men-

£10 Prize letter

gently tip the monitor upright. The fuse is fitted to the printed circuit board (PCB) at the base of the monitor, on the same line about 1in from the screen end of the PCB.

4 Carefully withdraw the PCB until the fuse is visible and can be removed and the new one inserted. Push the PCB in again making sure it is on its guide rails.

5 Tip the monitor on to the screen and lower the back cover nearly into position.

6 Fit the monitor back a little so that the cover fits over the back end of the PCB without meeting any resistance and put the screen face down again.

7 Insert the four screws making sure you do not over-tighten them. Reconnect to the keyboard, plug in and patch on.
—G. Mitchell, Weymouth.

status of caps lock, I would be eternally grateful.—R.M. Poole, RAF Linton.

It's simply a matter of intercepting 00021 and printing it at your routine which then jumps off to the original destination after setting the border colour. As we're short on space and many readers don't have an assembler, here is our ver-

sion in the form of a Basic listing.

If you have the rom version, just run the listing before entering Protext. Data users should add a line:

```
5 00001 4118 255
```

and run the program before running Protext.

SD address

At the November issue of Computing with the Amstrad I read about a business software package released by SD Microsystems for the CPC644128. I am very interested in this program—is it possible to give me the address of the firm?—Leo Vercammen, Antwerp, Belgium.

The address is SD Microsystems, PO Box 24, Bitchin, Herts, Tel. 0442 675186.

```
10 000 Protext caps lock
```

```
10101010
```

```
20 00001 00111100 1001
```

```
50 10 0010
```

```
30 0000 0000 1,000000
```

```
10001
```

```
40 01 000001 1001 1001
```

```
10000 0000 0000
```

```
50 000 0000
```

```
60 0010 11,11,10,10,10,
```

```
100,11,11,11,11,10,10,11,
```

```
100,10,11,11,11,10,10,11
```

```
10,10,11,11,11,10,10,11
```

```
10,10,11,11,11,10,10,11
```

```
10,10,11,11,11,10,10,11
```

```
10,10,11,11,11,10,10,11
```

```
10,10,11,11,11,10,10,11
```

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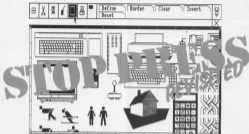
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ALLAN MITCHELL checks up on the latest version of AMS' DTP package and pronounces it fit for work

DESKTOP publishing is the latest buzz-phrase in personal computing. The information boom word processor to desktop publishing program is almost as dramatic as that from typewriter to word processor, and many CPC owners are looking for the chance to get in on the act.

In the February 1987 issue of *Computing with the Amstrad* we reviewed PageMaker, AMS' desktop publishing package. At the time we had a pre-production copy riddled with bugs which were supposed to be sorted out by the time the program hit the shops. Unfortunately, as mine of you will have found, this wasn't the case.

Now the program has been re-released — allegedly with the bugs held to rest — and renamed *Stop Press*. Features listed in the original package but not implemented are now in place and working.

The system consists of a disc and 118-page AM manual. A minimum of 128k of ram is required so if you own a CPC68084 you need an add-on ram-pack. A disc drive is also essential plus, of course, a printer.

Control is optionally by mouse, joystick, or keyboard, but as the program is produced by AMS — perhaps the leading seller of mice in the home computer field — it is not surprising

that the mouse is the best method.

The manual looks a little daunting, but is quite friendly and very readable. Much of it is written in a tutorial style so having read the introduction it is a good idea to sit at the computer and work through the earlier parts. After a short time you will find you can put the manual down and start using your own ideas to create quite adequate page layouts.

To say that either the text handling or the graphics section constitutes the heart of the package would be to do a disservice to the other part. The whole point of desktop publishing is that text and graphics may be freely mixed on the page.

Due to space limitations I'm going to have to restrict my description of *Stop Press*'s many features to a quick gallop through the major sections. I'll take it from the left of the main form menu which appears at the top of the screen when you first run the program. Moving the pointer over an icon and clicking the mouse button produces a further sub-menu to the right.

First comes filling mode. This deals with loading and saving *Stop Press* creations. These can be whole pages — a whopping 68k in total — or small areas of the screen known as cutouts.

Next along is the scissors icon signifying cut-and-paste mode. From

here you can copy, flip in either axis, rotate, scroll, or stretch any area of the screen.

Perhaps the feature which best demonstrates the power of the package is the variable stretch routine. This allows you to define a rectangular area and reproduce it into another area, stretching or compressing the image to fit. This can give some amazing effects.

The third icon — a letter A — denotes text mode. The power and versatility of the text handling will take your breath away. Sixteen fonts are supplied and another 26 are available from AMS at extra cost. And if that's not enough, you can design your own born scratch. Figure 1 gives a few examples of the fonts included on the disc.

The fonts, however, pale into insignificance.

Turn to Page 55 ▶



Figure 1. Some of the *Stop Press* fonts

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4 From Page 20

nificance when you find out what Stop Press can do with them. You can type text directly at the keyboard or load in text files from word processors. The format option allows you to control the way the text appears on the page. Centering is carried out to pixel accuracy, while justification and word-wrap behave as expected in any word processing package.

The adjust option allows you to alter the size of the characters from the default setting of 10x18 pixels to a staggering 128x64 pixels! And that is BIG. Figure 4 gives a comparison between the standard and the largest characters. Vertical and horizontal spacing may also be adjusted to allow you to position text very accurately indeed.

While all this is happening Stop Press automatically positions your text with proportional spacing giving very professional results.

A niggle here concerns the loading of text from my Amiroword word processor. Amiroword inserts a hard return at the end of each line and Stop Press seemed to act on these as if the text was loading, messing up the justification.

An extra feature compared to PageMaker is the text overflow menu. If you've defined a window and are importing text to it, it's possible there may fit too much. If this happens you'll be presented with a menu giving you several options including defining another window to take the extra. This contrasts with the old system where you'd have lost it.

The pièce de résistance is autoflow. This feature literally flows text round other items on the page and can give your work a really stylish appearance.

Under the next icon we find the graphics section, which offers a host of features to help you produce illustrations. It won't turn you into a de Vinci overnight, but with a little time and effort you can make some quite presentable sketches. These may be saved as artwork and used again later.

The paint and spray routines are

very competent and the shapes option offers circles, boxes, triangles and lines. Ellipses can be generated by applying the variable stretch option to a circle.

The font options allow you to manipulate character-sized patterns at pixel level for very accurate shape design - useful for technical drawing.

Moving to the windows icon, this section deals with the setting up, removal and clearing of text and graphics windows. The latter are restricted to the size of the screen and the former to the full page size. The graphics window is very useful for stopping your artwork spilling into adjacent areas.

The printer icon gives you options to print pages, screens, and text or graphics windows. It's very good, but don't hold your breath waiting for it - over an hour for the top-quality print option.

It has to be said that the results are



Figure 4. Standard and largest characters

well worth the wait. It is difficult to believe that such high-quality output is achieved from a humble dot matrix printer. One point of warning here: Your printer must support ESC 2 and ESC 1 graphic modes. Table 1 is a list of printers AMS says are supported; if yours doesn't appear here, check before committing yourself.

The last icon is for goodies which opens the door to several useful but unrelated features. Preview allows you to see in outline the contents of any page saved on a disc or the one currently in ram.

Gridlock can be toggled on or off and adjusted to move the cursor by a predetermined increment. This is more useful than it first appears and especially handy for laying out and lining up text with graphics.

The zoomer option allows you to load digitised pictures using video digitising equipment. I was unable to test this, but after loading the digitised

image you can manipulate it using the artwork options. These allow you to make improvements or alterations and obtain proven very entertaining.

Finally, over at the right of the screen are the quick-click window and undo text option icons. The latter is much used and the QCR offers a further 25 or so options including grid-lock on/off, zoom, erase and spray bar adjustment to name but a few.

I am not convinced that AMS has got rid of all the bugs yet. Having completed part of a page I decided to preview it before saving. When the preview cycle was completed my beautifully constructed page was returned complete with randomly distributed black speckles.

And I once had to do a complete reset after trying to save a contour on to a full disc, losing everything I had done in that session.

There may be other bugs lurking. All I can say is that such is the size of Stop Press that searching them out would take longer than I had available. Unlike some earlier versions, they aren't prominent enough to make the package a liability.

The moral is the old computer adage of saving your work frequently. However, saving little bits of data does take time, which makes frequent page saving a little tedious.

Having said that, the program generally worked quite well. AMS tells me that on the CPC464 there are certain known bugs in the disc filing system (there are - do) which are difficult to trap and can cause problems. I think these were rectified on the CPC604, so which this review was conducted, and certainly on the CPC6128.

As you might expect, a program with the power and flexibility to give you top-quality copy is, by its very nature, complicated to use. But the results are more than worth the effort required to learn to use the package.

Stop Press is undoubtedly an extremely sophisticated tool and can produce outstanding results. Newsletter or even small magazines are well within its scope and I could even go so far as to say that with patience you could produce quite competent technical drawings.

Perhaps Stop Press is a little pricey for the casual user, but if you have a regular need to produce good quality illustrated copy, I can recommend it.

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770	26280	1298	25241	1418	26180	1718	26148	1838	26116	2998	25816	3118	25788		
780	26292	1308	25252	1428	26192	1728	26160	1848	26128	3008	25824	3128	25796		
790	26304	1318	25264	1438	26204	1738	26172	1858	26140	3018	25832	3138	25804		
800	26316	1328	25275	1448	26216	1748	26184	1868	26152	3028	25840	3148	25812		
810	26328	1338	25287	1458	26228	1758	26196	1878	26164	3038	25848	3158	25820		
820	26340	1348	25298	1468	26240	1768	26208	1888	26176	3048	25856	3168	25828		
830	26352	1358	25310	1478	26252	1778	26220	1898	26188	3058	25864	3178	25836		
840	26364	1368	25321	1488	26264	1788	26232	1908	26200	3068	25872	3188	25844		
850	26376	1378	25333	1498	26276	1798	26244	1918	26212	3078	25880	3198	25852		
860	26388	1388	25344	1508	26288	1808	26256	1928	26224	3088	25888	3208	25860		
870	26400	1398	25356	1518	26300	1818	26268	1938	26236	3098	25896	3218	25868		
880	26412	1408	25367	1528	26312	1828	26280	1948	26248	3108	25904	3228	25876		
890	26424	1418	25379	1538	26324	1838	26292	1958	26260	3118	25912	3238	25884		
900	26436	1428	25390	1548	26336	1848	26304	1968	26272	3128	25920	3248	25892		
910	26448	1438	25402	1558	26348	1858	26316	1978	26284	3138	25928	3258	25900		
920	26460	1448	25413	1568	26360	1868	26328	1988	26296	3148	25936	3268	25908		
930	26472	1458	25425	1578	26372	1878	26340	1998	26308	3158	25944	3278	25916		
940	26484	1468	25436	1588	26384	1888	26352	2008	26320	3168	25952	3288	25924		
950	26496	1478	25448	1598	26396	1898	26364	2018	26332	3178	25960	3298	25932		
960	26508	1488	25459	1608	26408	1908	26376	2028	26344	3188	25968	3308	25940		
970	26520	1498	25471	1618	26420	1918	26388	2038	26356	3198	25976	3318	25948		
980	26532	1508	25482	1628											

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