

The Mag
Aussie Mag
for Amstrad owners

THE AMSTRAD USER

Issue No. 26 \$3.75

March 1987



- Everything you want to know about the new PC1512
- Educational software reviews + more short type-ins
- Hardware scrolling explained + utility for RS232
- Spell Checkers reviewed + heaps on Locoscript
- Full review of the VIDI - the video digitiser

FOR THE NOVICE & EXPERIENCED USER

THE AMSTRAD USER

Editorial	4
Letters - Your points of view, hints etc. to hit the Editor's desk	5
Nationwide User Groups	8
Adventurer's Attic	
This month Philip talks about Inputs and AI	10
Gossip from the UK	13
Cheat Mode - More pages of 'cheats' and tips for game players	14
Cheat Cheater - No, nothing to do with Cheat Mode, more a shuffling routine to use with Tasword 6128 and CP/M Plus	17
Educational Software - reviews of four packages	19

Serious Side

DREAM MACHINE

Launched only a few months ago the Amstrad PC1512 has already made considerable waves in the computer industry. We provide the answers to some of the questions on everybody's lips

Tip-Offs

Another three pages of handy hints plus details of a free "Life" program hidden in the bowels of LocoScript

Headers and Footers

We take you beyond simple page layout and tell you how to achieve more attractive results with page headings and automatic numbering

Spelling Checkers

A review of LocoSpell and Prospell by Ben Taylor and Don Cottrell

Three Type-ins

One: To make Wordstar text files more readable; Two: A Credit Card Calculator; Three: To print multiple copies of a document

Turning the tables on LocoScript

More on layouts - this time producing neatly ruled dividing lines

Graphics on the PCW

Part Two of Arnold Goldman's introduction to GSX graphics

Issue No. 26 March 1987

CP/M Revisited

A primer for beginners - Part 5 - from Fred Robertson-Mudie

54

Making the RS232 user friendly

A utility for Amstrad RS232 owners from Andrew Martin

55

Hardware Scrolling

Some pointers to use in your own Basic programs

56

The VIDI - Video Digitiser

A major review of this amazing piece of hardware from Rombo

59

TAU Hall of Fame

We bring you up-to-date with the latest champions

61

Gallimaufry II

Some more short programs to play around with

62

Software Reviews

Two utilities - Locksmith and Ultrabase File management

64

The Lighthouse

The final part of our text adventure from Philip Riley

69

For Tape subscribers, the programs can be found at the following approximate positions:

Side 1: LIGHTHO - 12 (15 blocks), AMSCOM - 167, SHUFFLE - 189

Side 2: KALEIDO - 12, PATTERNS - 23, DOUBLEHT - 30, SPACE - 39

All enquiries and contacts concerning this Publication should be made in the first instance by writing to The Amstrad User, Suite 1, 245 Springvale Road, Glen Waverley, Victoria 3150, Australia. Urgent matters can be phoned through on (03) 233 9661.

The Amstrad User is normally published on the first working day of each month. Reprinting of articles published in The Amstrad User is strictly forbidden without written permission. Copyright 1986 by Strategy Publications. The single copy price of \$3.75 is the recommended retail price only. The subscription rate (for Australia) is

\$37.50 for 12 issues of the magazine only, or \$80.00 for 12 issues of the magazine plus tape (for CPC range only) containing programs appearing in that issue. Postage is included in the above prices. For subscriptions to New Zealand, PNG, Solomon Islands or Vanuatu please add \$21 airmail. Other overseas prices available upon application.

Please note that whilst every effort is made to ensure the accuracy of all features and listings herein, we cannot accept any liability whatsoever for any mistakes or misprints.

Contributions are welcome from readers or other interested parties. In most

circumstances the following payments will apply to published material: Letters \$5.00, Cartoon \$5.00 and a rate of \$10.00 per page for programs, articles etc.

Contributions will not be returned unless specifically requested coupled with a suitable stamped and return addressed padded bag (for tapes or discs).

The Amstrad User is an independent Australian magazine and is not affiliated in any way with Amstrad or their Australian distributors Mitsubishi Electric AWA Pty Ltd., or any other dealer in either software or hardware.

THE AMSTRAD USER

G'day,

First the good news - the price of Tomahawk for the 464/6128 is not \$57.50 as we advertised on Page 61 last month, it is \$49.95. Some readers will be pleasantly surprised when they receive their copy with a refund. The bad news is that Jewels of Darkness is not available.

The first one is not our mistake, the second one is - sorry!

As we had guessed, our first step into selling software through your magazine has been to the benefit of readers living away from city areas. As most city dwellers are pretty well catered for, it is pleasing that we can help more remote users. Over the next few months we intend to increase the range, so be ready.

Our postie, who travels around his patch on a motor bike, is normally a happy fellow; you can tell by the flies on his teeth! But the other day he turned up with four envelopes, each with a message stamped on them saying "Return to containing copies of your magazine, each with a message stamped on them saying "Return to sender - left address". He mumbled something about not being able to do his job properly. But disappeared. They were thrown into a corner until claimed - which they are normally. But what a lot of trouble could be saved if impending moves were notified to our Subscription department.

Despite the fact that we have increased the number of pages to 72 this month there were still some items that didn't make the "cut". Most notable are the review of the mouse for PCW owners and a review of AMX Pagemaker. These (I promise) will appear in the April magazine. I hope also to have news of some more books to improve your learning curve.

See you next month,

Ed

Letters

MAILBAG



It seems that whatever computer magazine I pick up there is always 2 or 3 letters on the problem of computer software piracy.

But to me the solution seems simple! If software houses lower their prices dramatically people will buy, not copy! For instance if a game costs \$200 and is lowered to \$30 many people will prefer to buy the game. After all, Amstrad users are basically honest! A game worth \$200 may attract 5 crazy buyers at a particular shop (with luck). But the same game lowered in price to \$30 would easily attract 50 buyers!

Of course there are always dishonest people, but by protecting the software, a few dishonest may be discouraged. It seems strange that some of the most expensive software has the worst protection (take for instance some IBM games).

I appeal to the software houses, lower your prices! Student hackers can rarely afford the extraordinary prices of some otherwise brilliant software.

I would like to end by saying that I recently subscribed to TAU and it is really fantastic! Keep up the good work!

Adam Hanieh, Glen Osmond, SA.

All correspondence published in this section earns a payment of five dollars.

Letters should be addressed to The Editor, The Amstrad User, Suite 1, 245 Springvale Road, Glen Waverley, Victoria 3150.

We regret that we cannot enter into any personal correspondence.

Thank you for your assistance in our cause.

Craig Tollis, Port Macquarie, NSW

Since my last letter to you I have been getting used to the general workings of the PCW 8256 as a computer rather than as WP. One problem that I find rather frustrating is the exact contents of the many discs I have acquired. I know there are DIRs etc. but it can be a slow process to look at each disc, type in the COMmand and then wait.

I realise I'll be told to stop teaching Granny to suck eggs but I think I have come across a very quick way to produce a disc label without ANY great effort, except for a little cutting and pasting.

The procedure is as follows:-

- 1) Start up Locoscript in your usual manner.
- 2) Insert appropriate disc and signify disc change (f1 /2).
- 3) Insert paper and obtain a dump-[EXTRA] + PTR.
- 4) Repeat 2) and 3) as required up to a maximum of 3 dumps per A4 sheet. The cutting and pasting is then done in a low-tech mode (scissors and glue!). I find it useful to move the group cursor to highlight the key utility on each side of each disc. The advantages (for me) are the ease of use and the hard copy is just the right size for the disc cover.

Dr. S.J. Baxter, N. Sydney, NSW

In Amstrad User November 1986, page 34 you ran an article on WORDCOUNTER. This I believe could be a very convenient program for Locoscript users.

As suggested in the article I ran the program. I checked it on screen and later on a screen dump. I know that it was loaded as per listing.

However on running the program against an ASCII file I achieved the included screen dump. 134 lines for a count of 2 words? Has something been left out of the listing? I am not qualified to work out the problem.

R. Hempson, Bribie Island, Qld

This problem was answered in the Mailbag section of the January issue (first letter). As, it seems, a number of readers missed it, we repeat that line 110 should read:

*IF c\$ = " AND inud% THEN
wds\$=wds%+1:inud%=0 - the missing
character is underlined.*

I have been reading your magazine for a while now, as I find it informative & helpful. I am relatively a beginner at the computer Key Board as I do not have a great deal of time to study the intricacies of my machine which is a CPC 6128.

When I purchased my 6128, I thought it would be used mainly for my home records & word processing, & the occasional game, so I opted for the Green Screen Monitor. Well things as usual have turned about and it is mainly used for games. Unfortunately one loses a lot of enjoyment of the games with them only being shades of green.

My problem is that I have been trying to purchase the "MP2" Modulator which was advertised when I got my computer. I have contacted various dealers here in Victoria, and have been told that there were problems with it's use on TVs. I also contacted AWA Mitsubishi and their answer was that the orders they placed with the UK were never filled.

I still see the "MP 2" Modulator being advertised in the U.K. Amstrad User Magazine. If this unit is unsuitable for Australia, is there any way I can use my 6128 on a Monitor style Colour TV with separate RCA sockets for video and sound input?

I'm sure there are quite a few 464,664 & 6128 owners out there with a similar

problem who can't or don't want to go to the expense of purchasing a new colour Monitor, which I was quoted at around \$400 for the Amstrad unit.

I would appreciate an answer to my question, even though you may not print this in your magazine.

R. Hamilton, Melton Sth., Vic

As advised officially in the September 1986 issue (page 4), the Amstrad MP/1 and MP/2 power supply modulators were not released for sale in Australia as they were not suitable for our conditions. This means, judging by the correspondence we used to receive from people who had managed to purchase one, they don't work that well on our TVs.

I recently purchased an LP-1 Light Pen made by Trojan Products for my CPC6128.

I have a problem with the Screen Designer program included with the software. Unfortunately the print option in the program only works with a DMP-1 printer and I have a DMP-2000.

Perhaps one of your readers may be able to provide some help in this area.

D. Beltrami, Forest Hill, Vic

This is a common request - any offers from our advanced readers?

I wrote a program to display BINCO numbers using RND to generate them and an array to hold them. The array was searched and the program jumped back to try for another if the random number was already listed.

This worked, but when I tried for 100 numbers, I found that the numbers came up very slowly towards the end. The reason is clear when it is realised that there are 99 numbers waiting in the array to be rejected when the 100th is generated.

The problem is eliminated if the numbers 1-100 are each put in a separate "box", a box is selected at random, the number removed and displayed and the next number moved to the empty box and so on leaving the

last box empty. The last box is then removed. The procedure is repeated over and over with the number of boxes being reduced by one each time until the last is empty.

Using this method, the action speeds up as the end approaches. I found that the average time reduced from about 108 seconds to about 16.

Both methods are listed.

Method 1

```
10 CLS:DIM a(100)
20 FOR k=1 TO 100
30 bingoNumber=INT
  (RND*100)+1
35 IF k=1 THEN 60
40 FOR j=1 TO k-1: IF
  bingoNumber=a(j) THEN 30
50 NEXT j
60 a(k)=bingoNumber: PRINT
  bingoNumber;
70 NEXT k
80 END
```

Method 2

```
10 CLS:n=100:DIM a(100)
20 FOR k=1 TO 100:a(k)=k:
  NEXT
30 FOR k=1 TO 100
40 box=INT(RND*n)+1
50 bingoNumber=a(box): PRINT
  bingoNumber;
60 FOR j=box TO n-1:a(j)=
  a(j+1):NEXT
70 n=n-1:NEXT k
80 END
```

Arthur Pounselt, Norlane, Vic

Recently when I was reading through my old copies of THE AMSTRAD USER I found a program entitled 'Build a Sprite' by P.T. Crowe (SCAUG). I found this program in the July 1986 edition.

This program is a sprite generator that does not use the SYMBOL command but instead pokes the sprites into memory. However, this program only works in Mode 1 as it is designed to produce newsprites for the program, 'Roland on the Run'.

I have found another use for this program - I use these own sprites in my programs, but I would prefer to use these sprites in Mode 0. I would greatly appreciate it if someone could convert

the program for use in Mode 0 for me.

Peter Higgins, Black Rock, Vic

There are many people who derive much pleasure from helping others with their computing problems in general. Some, like me, are in a situation where there is no users club so we can't be helped or help others.

I'd like to construct a list of people nationwide who, like me, enjoy helping those in difficulty. This list would be similar to the one you publish which names contact people for users groups around the country. You ask for these people not to be regarded as a problem solving service. The list I wish to construct would be specifically for the purpose of problem solving.

Your magazine has grown to the stage where a task such as the one I propose might prove too costly as far as time and manpower is concerned. I'm willing to do it for nothing. I'm willing to give this magazine and

anyone else who cares to send me a SAE a list of those people who they could call on for help when the need arises.

If any readers wish to be included in this list all they have to do is send me details of their

NAME, ADDRESS, PREFERRED METHOD OF CONTACT, PREFERRED CONTACT TIMES and their AREAS OF EXPERTISE. They may also like to include any limitations they have regarding who their name is to be given to. If they send a SAE as well they will be the first to receive a copy. What I get out of it is a possible list of those in my area who could help with the formation of a users' group.

Anthony Trost, Gracemere, Qld

RAINBIRD'S ART STUDIO

Contrary to the review published in the January 1987 issue, this package will not run on a 464 or 664 even with extra ram or disc drive.

My father owns a PCW8256, and recently while using DR. Logo I discovered quite accidentally that by pressing the <SHIFT>, <EXTRA> and <PTR> keys at the same time, whatever is on the screen is dumped onto the printer. This includes text and graphics. This also seems to work when using Basic and even Locoscript. Some readers may find this handy.

David Boyle, Faulconbridge, NSW

A useful tip that many old hands know but we suspect equally as many newcomers have yet to discover.

ADVERTISING DEADLINES

Issue	Booking by	Copy by
MAY '87	13/03/87	27/03/87
JUN '87	17/04/87	01/05/87
JUL '87	15/05/87	29/05/87
AUG '87	12/06/87	30/06/87

AMSTRAD

Giltronic

AUSTRALIA

AMSTRAD

DK'Tronics Products on SPECIAL Ring us for LOW PRICES!!

New GILTRONIC Public Domain Library

Over 600 discs available - CP/M and MS-DOS programs. \$13 per disc on 5.25" discs. Add \$6 for 3" discs. Posttrade \$5 extra.

GILTRONICS is a PC-SIG registered dealer.

MAIL ORDER

54 Eulinga Avenue, Aspendale, Vic 3195
Phone: (03) 580 9839
(24 Hrs Ansaphone)

RETAIL

528a Nepean H'way, Bonbeach, Vic 3196
Phone: (03) 773 1244
Closed Mon, Tue
Wed - Fri 9.00-6.00
Sat 9.00-2.30

Bankcard/Mastercard Accepted -- Send Name and Address for current catalogue

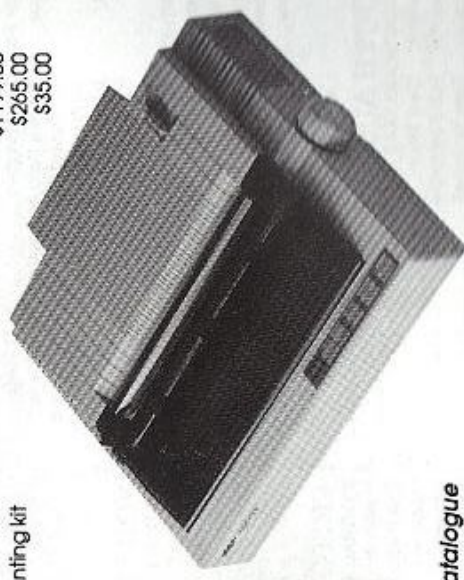
Disc Drives

5.25" 40 track Double sided 128/664 \$399.00
5.25" 80 track Double sided 128/664 \$499.00
(Double sided mode can only be accessed under CP/M+)

PC1512 Upgrades

Increase your RAM to 640k. Chips and Instructions
10 mbs Hard Disc Drive and controller \$99.00
20mbs Hard Disc Drive and controller \$699.00
20 mbs Hard Card \$999.00
360k drive and mounting kit \$1199.00
Installation extra \$265.00
\$35.00

**Star
Printer
Special
(120 CPI NLQ)
\$529.95**



ADVENTURER'S ATTIC

Some thought on INPUTs and AI

by Philip Riley

Probably the most difficult and complex part of any adventure is the PARSER. This is the part of the program that digests what you have input and tries to make sense of it.

The simplest method and the one most of the games have used up to now is the two word input, eg. GET SWORD, DROP SWORD, but now with games like The Hobbit, Lord of the Rings etc., we are seeing much more complex parsers.

With the newer games inputs like GET THE SWORD AND MOVE EAST THROUGH THE ARCHWAY are possible. You are now giving the computer two commands in one. It's all very nice, but is it really necessary? Many of these games are concentrating some much on sentence input that the game itself is suffering. Many months ago I was given a copy of The Hobbit for review. I must say that I was rather disappointed with it. The game crashed on several occasions (we did inform Melbourne House of this but I am not sure if it was corrected), and I also found it a little unexciting - or what little I saw of it before I got fed-up with it locking up on me! Still, it can be beneficial to have 'sentence input' as long as the game itself does not suffer.

One big mistake that many people make is to call this particular part of the program intelligent - it is not. It works by

word recognition. The program searches out the words you have input and checks them against its vocabulary. If it knows the word you are home and dry, but if not, the program will not 'learn' or be able to act upon it. Even the Eliza program featured some months ago (May/June 1986) is not actually intelligent. It merely looks along your input for a keyword and then picks out a random answer that matches the keyword. Artificial Intelligence (AI) on a computer as small as an Amstrad is just not feasible at the present time.

One oversight that many programmers make is probably the smallest and most frustrating for the player of the game. I am talking about not having a large enough vocabulary. For instance, when picking up an object I generally use the input GET <object name>. I have just received a copy of a new graphic adventure called AFTERSHOCK for review. Yep - you've guessed it - it will only accept TAKE <object name>. It can be annoying using a word that obviously means the same, but being told you cannot do it.

Another little annoyance can occur in the responses you are given by the program. For example, if you have a key and enter the correct command to open the door you would expect a response such as YOU UNLOCK THE DOOR WITH THE KEY. This is more helpful than just OK which some games (trying to save memory) will reply. Although in most circumstances OK will suffice, it is less than helpful

when two or more results are possible from the action.

It is so often the little things like these that make an adventure more satisfying to play. By giving as wide a vocabulary as possible and sensible answers to an input, your game will look and play a lot better. Don't worry too much about complex parsers that allow the player to input in sentences, especially if you are programming in Basic. Many of the best games I have played have just the two word input. It makes it easier for the player and programmer and leaves more memory for the rest of the game.

In closing, I would like to say that my initial response to AFTER-SHOCK is good, but for the full rundown on the program you will have to wait for the review in, hopefully, the next issue.

LOST SOULS

Following numerous requests to make this section of Adventurer's Attic much larger, the Editor has succumbed to the pressure (*this month - Ed*) and allowed me to dig out some of the tips and requests that have been building up in the pending pile. I must admit it is getting difficult to remember which has been answered and which hasn't. But even if the same ground is covered a couple of times, there always appears to be a different interpretation or method. So, feast your eyes on the next page or so.

Utter despair has inspired me to write this plea of help to you. The source of my frustration is Level Nine's Red Moon. I have a couple of questions concerning this game which could be put to the readers of TAU. These are:

1. How do you get past the room of flashing lights?
 2. What are the raisin and the tubing used for?
- Any help would be greatly appreciated. Congratulations on a great adventure column, keep up the good work.

N. Blair, Winston Hills, NSW

I need some help on Message from Andromeda (Interceptor). We have tried putting the key in the keyhole and the computer says "what do you do with that"? We have completed Jewels of Babylon, Lords of Time and Colossal Adventure.

Andrew then provides a tip for Dun Darach to provide billions of Iridi, but unfortunately it is undecipherable - can we have it again Andrew, in your best writing?
Andrew, Deagon, Qld.

In answer to James Edmundson's questions on the Hobbitt; when you leave Beorn's you must find the wood elf and be captured and placed in the Elvenking's dungeon. The most common place for him to be found is, north then east and continuing east. If you have not found him by the time you have got to the elvish clearing you must go back either directly west or back through the spider webs and over the river in the boat then continue west and look for him on the misty mountains or on or near the forest road, south of Beorn's. Once you escape and jump onto the barrel which takes you to lake town, head north to find the lonely

mountain and the dragon.

When you get captured by the goblins in the cave you 'must' have Thorin with you to prevent it turning dark otherwise there is no escape from the dark. Also make sure Eirand has examined the map. So far I have completed the adventure without the help of Beorn, but I haven't scored 100%, so when I find out about Beorn, I will let you know.

D. Brooks, Maitland, NSW

I am not sure whether I should thank you for your articles or not, as it was after reading the first Adventurer's Attic that I purchased a couple of programs and since then I have been completely hooked, but I do hope you will continue with it because I could do with some help.

I am stuck in 'Heroes of Khan' and can't get past the spider on the Pirate and am unable to find the dwarf or elf, but I can help Jason Clark who was having trouble with the troll in 'Classic Adventure'. He must throw a treasure at the troll eg. "THROW COINS" to get across the bridge and the best treasure to throw is the golden eggs as he will be able to get them back and he will need them for the troll on the other side of the bridge to come back.
Mrs. T. Moss, Launceston, TAS

Can any of the Amstrad User readers help me? I am stuck in Firebird's 'SUBSUNK' and I have a few problems:

1. In the machinery room pump area, is there any way to open the hatch which has rusted hinges?
2. When I go down the 2nd deck passage into the Deck Connecting Well, how can I stop the water gushing in so I can get to the Pump Space?

3. Is there any way to crack the safe in the First Lieutenant's Quarters?

4. How can the overflowing sink in the Wash and Bathroom Area become unclogged. I have attached the rubber sucker to the long broom as suggested in another magazine, but no luck yet.

5. Is there any way to suck away the dust at Checkpoint Charlie? I also have a few tips for this game.

1. Examine the holster and get the bullet. Load the gun with this bullet, keep the holster, and whenever you fire the gun and need a new bullet, just examine the holster again.

With a loaded gun, head to the Locker Room and fire the gun. A jar of 'Old Spies aftershave' will then be revealed, wear this and it will enable you to enter the Deep Freeze. But the jar cannot be dropped because 'it smells too nice'.

2. Do not wear the Strainer from the Galley (if you have the temptation to) because you will have to carry and wear it for the rest of the adventure, and this takes up one of the 8 Inventory places.

One last question - what exactly is the clue on the label, as stated by Tony Blakemore (issue 12)?

I have one tip for Amsoft's Classic Adventure; don't throw the bird at the snake, just type in SW (South West). If there is no response, just keep on typing it in and you will eventually pass, usually, within 8 moves.

S. Rule, Werribee, VIC

I really appreciate this part of the magazine because the hints have helped me out of a few tight spots. I hope your Andre Urankar can be of further assistance. I am lost in a few adventures at the moment, so will appreciate any help on the following:

HEROES OF KHAN: Can't find HALDIR or KHADIM. Stuck at the pirate, bat and spider.

SOULS of DARKON: Can't get going with this one. I have picked up lots of seemingly useless bits and pieces. Can't do anything at the altar of Daikon and though being told to pay the guide to lead you past the monolith, he took my money and did nothing. MORDON'S QUEST: Would have been stuck forever without the "FROG" tip (can't believe anyone would have gotten that without seeing the listing) Now can't enter the password. I can't get past an invisible barrier and have been killed by the Gladiator so often that I'm scared to go near him. I have also died from loss of air because I can't find anywhere to refill the aqualung.

ROYAL QUEST: Where can I find the flint & steel? Is there anything in the desert at the dry well? I'm stuck without the flint to light my lamp.

I really hate asking for help. it's so defeatist, but its that or the loony-bin.

Mrs. B. Glissan, Toormina, NSW

I wish to pen a reply to Stephen Snow's problem with Interceptor's "The Forest at World's End."

I have recently completed the adventure and was most disappointed with its apparent lack of lastability for it took me less than a week to complete it (actually, it took me 6 sittings, each sitting lasting for about 20 minutes). I'm still regretting parting with a good sum of money for the adventure.

Anyway, to get past the witch in her hovel Mr. Snow must first get wounded by wolves in the Forest of Sighs (which is just a wcc distance from the Enchanted Wood), and call for help. A Wood Nymph will appear and tend to your wounds. She will leave you a ring which you must wear. The ring, if worn, causes the witch some magical distress and she will vanish (after screaming) when she spies the ring. In the witch's hovel, you will find a key that opens the chest found in the volcano.

As for me, I am having trouble with level 9's brilliant (and very tough) time-travelling adventure, "Lords of Time".

I have found the diamond teardrop but cannot enter another time. Perhaps some level 9 whiz out there could help me out of this predicament. "Fairlight - a prelude" by the Edge too has me foxed. I have recovered the Book of light and made my way to the wizard's room. What should I do there? I read somewhere that you must drop the Book of Light to free the wizard; but upon doing so, the magical man turns into a wraith (or reaper). S.A. Mah, Willetton, WA

User Group Contact List

Please note that the following names are listed as contacts for new user groups and should NOT be viewed as a problem solving service. See also Nationwide User Groups list.

NSW

Chris Craven	Canowindra	(063) 44 1150
Trevor Farrell	Coolah/Mudgee area	(063) 77 1374
T.J. Webb	Glossodia	(045) 76 5291
David Higgins	Inverell	(067) 22 1857
Paul Wilson	Moruya	(044) 74 3160
Frank Humphreys	Mummulgum	(068) 64 7250
Bob Hall	Newcastle	(049) 52 6915
Stephen Gribben	Singleton	(065) 72 2732
Ken Needs	St. Ives	(02) 449 5415
Chas Fleischer	Toongabbie	(02) 831 5037
Nick Bruin Shr.	Twood Valley	(066) 78 3280

Vic

Stuart McLean	4/304 Albert St.	
	Sebastopol. 3356	
Brian Russell	Ballarat	(053) 31 2058
C. van de Winckel	Ballarat	(053) 313 983
Bruce Scikel	Bendigo	(054) 42 5608
David Carbone	Burwood	(03) 29 4135
Rod Anderson	Camperdown	(055) 93 2262
Paul Walker	Heathmont	(03) 729 8657
Terry Dovey	Horsham	(053) 82 3353
Andrew Portbury	Leongatha	(056) 62 3694
Sue Kelly	Manangatang	(050) 35 1402
Angela Evans	Mt. Evelyn	(03) 736 1852
Keith McFadden	Numurkah	(058) 62 2069
Lindsay Parker	Wandin North	(039) 64 4837
Maureen Morgan	Warrnambool	(055) 67 1140

QLD

Debbie Topo	Bribie Is and	(075) 48 1888
Sтивен Doye	Caloundra	(071) 91 3147
Mick O'Regan	Gladstone	(079) 79 2548
Kylie Telford	Goondiwindi	(078) 76 1746
	(weekend only)	
D.F. Road	Ingham	(077) 77 8576
Tim Takken	Ipswich	(07) 202 4039
Alan Laird	Maryborough	(071) 22 1982
Graeme Annabell	Rockhampton	(079) 27 4915
R.C. Watterton	Toowoomba	(076) 35 4305

SA

Lindsay Allen	Murray Bridge	(085) 32 2340
Michael Spurrer	Murray Bridge	(085) 32 6984
Mrs. S. Engler	Penola	(087) 36 6029

WA

Dave Andersen	6 Kitchener Rd	
	Merredin, 6415	
Graeme Worth	Scarborough	(09) 341 5211
P.M. Nuyens	Waroona	(095) 33 1179

TAS

Conal McClure	Scotsdale	(003) 52 2514
---------------	-----------	---------------



If your name appears in the above list, then please drop us a line (if you haven't already done so) to let us know how things are proceeding.

Gossip from the UK

* Amstrad is fitting an 'unnecessary' fan to all hard-disc models of the new PC in order to kill the rumours that the machine overheats. According to the Sunday Times version of the tale, the huge corporation ICI cancelled a £4-million order for the new Amstrad machine because of the supposed fault. This is denied - hotly - by both companies. "We are getting very irritated with this overheating rumour," said Malcolm Miller, Amstrad's sales and marketing director. "We could tell every potential corporate customer that it is a lot of nonsense, but that would take a lot of time and effort. It is easier and quicker just to fit the fan and be done with it."

Alan Sugar was blunt: "The fitting of the fan was a waste of money, but it will keep some people happy. I recommend that operators switch the fan off."

* The ageing arcade classic Donkey Kong has made it to your Amstrad Screen. Ocean can be thanked for the conversion. It will be available on tape and disc.

* Pride, best known for its tape and disc utilities and whose products have often been reviewed in your magazine, has produced The Electric Lantern Show. With it, the user can produce full-size and even poster-sized printer dumps. The disc contains 28 colour pictures; these can be edited and compressed - alternatively, your own can be altered.

* Domark is releasing another set of questions for its computer version of the trivia board game. It's called the Young Player's Edition and is aimed at children from age seven and up. It comes in two forms; either just as a new set of 3000 questions (on cassette) that adds to the original Genus edition, or as a complete game (on either cassette or disc). As yet I haven't seen it, so I don't know how relevant the questions are to Australia. A version is also available for the PCWs.

* By now, most PCW owners should know of the smash hit Tomahawk, the helicopter flight simulation. It has sold well here in the UK which is hardly surprising if you've tried it. Well, following in hot pursuit is Strike Force Harrier from Mirrorsoft which puts you in the cockpit on a death or glory mission. Get a look at it if you can. Also due for release about now is Starglider from Rainbird.

* ASL or Audiogenic Software Ltd has just finished Matrix, a comprehensive spreadsheet for CPC machines. Matrix gains over standard spreadsheets in that it can handle business presentation, database and invoices - even standard letters.

The specification shows built-in database features that allow data, such as name-and-address files, to be stored in rows across the spreadsheet and then merged along

with numerical data from the sheet into a document in the Notebook.

The Notebook features text editing facilities that make it easy to prepare address labels, standard letters and invoices.

There is a graph plotting facility that lets you convert spreadsheet data into line graphs, bar graphs, histograms or pie-charts.

It certainly sounds impressive, and at £30 on cassette and £35 on disc it needs to be. I hate to think how many dollars that's going to be when it hits your shores.

* Larger software houses seem to release games in threes just lately. Imagine, not wishing to be left out, is bringing out two sports simulations and a shoot-em-up. First on line is Konami's Golf which allows you to select a club and tee-off. Stoke or match play can be chosen with differing terrain and conditions.

Super Soccer is the other sports game from Imagine. According to the press release, it 'makes you Maradona on screen.' You are given complete control over the ball:

sharpshooting, passing, dribbling, sliding tackles and even diving headers. Other features include full team organisation and one or two players, with a tournament option for up to eight players.

Terra Cresta, a coin-op conversion, is a shoot-em-up which was pretty furious in the arcades. Homing missiles, giant monsters and a myriad of other aliens are there to be dodged or blasted.

All the games will be available on tape and disc.

* Argus Press expects to release several new games in the first quarter of 1987. Wibstars is one, in three parts, where you run a distribution company - get the goods to the customer on time or pay the consequences. *(We have this one for review - Ed)*

CHEAT MODE

Some more Tips,
Pokes and Game
busting ploys to
improve your scores.
Don't be shy - send
yours in to share with
all of us.

POKE METHODS

This is the section where we explain how to input the majority of *Cheat Mode* pokes. There are two different methods - the instructions for each poke tell you which one to use. If you have a 664 or 6128, you'll have to type 1 tape before using either.

Method 1: Make sure that you've rewound the game tape to the beginning. Now type in the poke listing then type RUN and press the 'Enter' key. (Don't use the key marked 'CTRL' or 'CONTROL', that will stop the poke from working.) Press the PLAY key on the cassette deck, and hit any key on the main keyboard - the space bar will do nicely. The tape should now start to play through in the normal way.

Method 2: For this method, you have to skip the first bit of the game program. To do that, start by rewinding the game tape to the beginning. Now type in the listing. Then type CAT, and press the 'Enter' key. Start the tape by pressing PLAY and hitting a key, and then watch the screen.

After a little while you'll get the message "Found SOMETHING block 1". It doesn't matter what the SOMETHING actually is - this will vary from one game to another. If the instructions with the poke just tell you to skip the first block you should stop the tape here. If the instructions tell you to skip several things, stop the tape when the "Found" message comes up for the last thing you're trying to skip.

Once you've stopped the tape press the ESC key, type RUN, and press the 'Enter' key. Now press PLAY on the tape deck, and hit a key on the keyboard to start the tape running.

FINDERS KEEPERS

This poke from R. Hernandez (no address supplied so please drop us a line to claim your reward) provides infinite lives on the Mastertronic game. It is entered using Method 2. Skip the first block, type it in then run.

```
1 'FINDERS KEEPERS
2 'AMSTRAD USER MAR 87
10 OPENOUT "D"
20 MEMORY 2047
30 LOAD "FK"
40 POKE 8398,0
50 CALL 2047
```

ROLAND GOES DIGGING

From M.J. McCallum of St. Agnes in SA comes a poke to provide infinite lives.

```
10 'Roland goes Digging
20 'Amstrad User Mar 87
30 MEMORY 17000
40 LOAD "", 17800
50 POKE 17978,0
60 CALL 18658
```

ELITE

Some tips from Tim Pratt of Payneham South in SA. When you shoot down an attacker, scooping up the fragments of his ship (with your fuel scoops) will give you a tonne of alloys. If the pirate has used an escape capsule, then scooping this up will give a tonne of slaves.

If you access the buying screen whilst docked, pressing any letter key will get the inventory page and save yourself pressing return 20 odd times.

GHOSTS 'N' GOBLINS

From Arun Mehra comes a nice little tip for the Elite arcade conversion. On level two when you reach the lifts, jump onto the first platform and at any point you can pull down on the joystick and stop it. You can then jump onto the next platform and repeat the procedure for all of them.

Z

Another disk poke which again gives between 1 and 255 lives. Type it in, save it onto the game disk and then run it.

```
1 'Z
2 'Amstrad User Mar 87
10 ENV 1,1,15,1,15,-1,5
20 ENV 2,1,13,1,13,-1,8
30 ENV 4,1,15,1,15,-1,6
```



```

40 ENV 5,1,14,1,14,-1,4
50 ENV 6,1,14,1,1,0,40,1,-14,1
60 ENV 7,1,15,1,15,-1,2
70 ENV 8,1,15,1,1,0,20,15,-1,6
80 ENV 9,15,1,2,5,0,150,15,-1,6
90 ENV 10,1,14,1,1,0,100,1,-14,1
100 ENT -1,1,-2,1
110 ENT -2,10,-10,1,1,100,1
120 ENT -3,6,-10,2,6,10,2
130 ENT -4,1,10,1
140 ENT -5,1,2,1
150 ENT -6,20,10,1,20,-10,1
160 ENT 9,200,-2,2,200,2,2
170 MEMORY &3FFF
180 LOAD "ZED" : MODE 1
200 INPUT "How many lives ? ",lv
210 IF lv<0 OR lv>255 THEN 200
220 POKE &A0B9,lv
230 CALL &A070

```

CONTRAPTION

Roger Payne has come up with infinite time and invulnerability for the Audiogenic platform game, making it more than easy. Enter using Method 2 to skip the first block called TAPE.

```

1 'Contraption
2 'The Amstrad User Mar 87
10 OPENOUT"D"
20 h=HIMEM:MEMORY 1999
30 CLOSEOUT
40 MODE 1:INK 0,0:BORDER 0
42 INK 1,12,24:INK 2,20,10
44 INK 3,0:SPEED INK 8,8
50 LOCATE 14,6:PEN 1
52 PRINT"contraption"
54 LOCATE 16,10:PEN 2
56 PRINT>Loading"
60 LOCATE 5,15:PEN 3
62 LOAD"!":CALL28650
64 LOAD"!":
70 POKE &5CE3,0:POKE &5CE4,0:POKE
&5CE5,0
80 POKE &5CE6,0:POKE &5CE7,0:POKE
&5CE8,0
90 ENT 1,50,-2,1,40,4,1
95 ENV 1,15,-1,6
100 ENT 2,180,-100,1
105 ENV 2,15,-1,12
110 ENT 3,5,90,1
115 ENV 3,1,0,5
120 ENT 4,220,90,1
125 ENV 4,10,-1,22
130 ENT 5,220,-99,1
135 ENV5,11,-1,20

```

```

140 ENT 6,2,100,1
145 ENV 6,1,-1,2
150 ENT 7,150,22,2
155 ENV 7,75,-1,4
160 ENT 8,150,20,1
165 ENV 8,15,-1,10
170 ENT 9,1,1,40
175 ENV9,8,-1,5
180 CALL 23700

1 'Contraption
2 'The Amstrad User Mar 87
10 OPENOUT"D"
20 h=HIMEM:MEMORY 1999
30 CLOSEOUT
40 MODE 1:INK 0,0
50 BORDER 0
60 INK 1,12,24
70 INK 2,20,10
80 INK 3,0:SPEED INK 8,8
90 LOCATE 14,6:PEN 1
100 PRINT"contraption"
110 LOCATE 16,10:PEN 2
120 PRINT>Loading"
130 LOCATE 5,15:PEN 3
140 LOAD"!":CALL 28650
150 LOAD"!":
160 POKE &5CE3,0
170 POKE &5CE4,0
180 POKE &5CE5,0
190 POKE &5CE6,0
200 POKE &5CE7,0
210 POKE &5CE8,0
220 ENT 1,50,-2,1,40,4,1
230 ENV 1,15,-1,6
240 ENT 2,180,-100,1
250 ENV 2,15,-1,12
260 ENT 3,5,90,1
270 ENV 3,1,0,5
280 ENT 4,220,90,1
290 ENV 4,10,-1,22
300 ENT 5,220,-99,1
310 ENV 5,11,-1,20
320 ENT 6,2,100,1
330 ENV 6,1,-1,2
340 ENT 7,150,22,2
350 ENV 7,75,-1,4
360 ENT 8,150,20,1
370 ENV 8,15,-1,10
380 ENT 9,1,1,40
390 ENV 9,8,-1,5
400 CALL 23700

```

TERRA COGNITA

I.A. Stevenson has come up with infinite lives for

the Codemasters budget game. Enter it using Method 2 to skip the first block called TERRA-COGNITA.

```
1 'Terra Cognita
2 'The Amstrad User Mar 87
10 OPENOUT "d":MEMORY 999
20 INK 0,26:BORDER 0
30 INK 1,0:MODE 2
40 LOAD"!",&C000
50 LOAD"!",&1000
60 POKE &19AE,0
70 LOAD"!",&20000
80 CALL 1004
```

TRAILBLAZER

Tony Hoyle has done a lovely job on the Gremlin game, making use of an intentional cheat mode and throwing in two of his own. The poke allows you to choose several sprites and types of track, as well as to have infinite time and jumps. Just type it in, and run it with the game disk in the drive.

```
1 'Trailblazer
2 'The Amstrad User Mar 87
10 MODE 2
20 PRINT"TRACK?"
25 PRINT"(0=normal, 1=curved, 2=crossed,
3=bridged)":INPUT track
30 IF track<0 OR track>3 THEN 20
40 PRINT:PRINT
42 PRINT"Sprite"
44 PRINT"(0=ball, 1=spring, 2=space
invader, 3=cube, 4=sphere,
5=helicopter, 6=thing, 7=gremlin)"
50 INPUT sprite
60 IF sprite<0 OR sprite>7 THEN 40
70 PRINT:PRINT
72 INPUT"Infinite time (Y/N)?" ,ts
74 ts=UPPER$(ts)
76 IF ts="Y" THEN it=1 ELSE IF ts="N"
THEN it=0 ELSE GOTO 70
80 PRINT:PRINT
82 INPUT"Infinite jumps (Y/N)?" ,t$
84 t$=UPPER$(t$)
86 IF t$="Y" THEN ij=1 ELSE IF t$="N"
THEN ij=0 ELSE GOTO 80
90 POKE &4000,64*track+sprite
100 MODE 2
110 PRINT"Put Trailblazer disk in drive
A then hit a key"
112 WHILE INKEY$="" :WEND
120 x=&4001
130 IF it=1 THEN RESTORE 180:GOSUB 170
140 IF ij=1 THEN RESTORE 190:GOSUB 170
150 RESTORE 200:GOSUB 170
```

```
160 x=&8000:RESTORE 210
165 GOSUB 170:CALL &8000
170 READ a$
175 IF a$<>"xx" THEN POKE
x,VAL("&"a$):x=x+1:GOTO 170 ELSE
RETURN
180 DATA 21,00,00,22,2f,22,xx
190 DATA 3e,00,32,50,23,xx
200 DATA c3,00,04,xx
210 DATA 21,00,40,11,20,03,01,00,
01,ed,b0
220 DATA 21,2f,80,3e,84,77,cd,d4,
bc,79,32
230 DATA 31,80,22,2f,80,21,00,01,
11,00,00
240 DATA 0e,41,df,2f,80,21,21,03,
22,82,01
250 DATA c3,00,01,xx
```

DOOMDARK'S REVENGE

Tony Hoyle has completed a challenge and given you control over all 128 characters in the game. Use Method 1. When you select a character in the game you'll have all 128 to choose from. And it will never go dark - an infinite daylight poke.

```
1 'Doomdark's Revenge
2 'The Amstrad User Mar 87
10 MEMORY &17FF
15 LOAD"ddl",&1800
20 POKE &1859,0
25 POKE &185A,&BE
30 x=&BE00
40 READ a$
45 IF a$<>"xx" THEN POKE
x,VAL("&"a$):x=x+1:GOTO 80
50 CALL &1800
60 DATA 3e,00,32,06,9b,21
70 DATA 1f,3e,22,9b,91,3e
80 DATA c9,32,9d,91,c3,50
90 DATA 82,xx
```

Send your "cheats" and
tips to:

Cheat Mode

The Amstrad User, Suite 1
245 Springvale Road
Glen Waverley, Vic. 3150

CHEAT CHEATER

A shuffling exercise with Tasword 6128 and CP/M Plus

from J.L. Elkhorne

So, after maintaining for a long time that home computers are also useful, the axiom got put to the test. My wife, who is a teacher-librarian, grumbled that she thought she would have to do five versions of a "fill-in-the-blanks" test to preclude copying.

"Child's play for a computer," I commented glibly. In a trice, she handed me the handwritten master list of questions to process.

Turning aside from alien zapping (what's your rating on Elite?) I considered the best way to get the job done quickly on the Sunday evening.

The hardware: Amstrad 6128, Star dot-matrix utility printer, and Seiko Silver-Reed EX43 electronic typewriter for finished copy. The software: Tasword 6128, CP/M Plus, and a hastily knocked-together BASIC shuffler.

She had already worked out the sequences for the five different versions of the test. Only afterwards, when I thought about this project, did I decide to improve on that technique.

Since time was of the essence, I did not have the opportunity to create optimum routines. Since I knew I wanted to shuffle the order of a set of master questions it seemed easier to create the master question file using CP/M's ED — one question to a line. (Starting out with a Tasword file is NOT the way to do it! If you try that, and then inspect the file using ED, you will find that each Tasword line is an ED line. A question of more than one Tasword line would hence get split in the shuffling process.)

The only limitation with this approach is the 128 character maximum line length of Tasword. Exceed that, and you will have a small problem. Fortunately, it only happened once for me. I was able to recreate the offending question, from the utility printout of the master list.

So, then — the entire process is as follows:-

1. Go to CP/M; use ED to create "master" file.
2. Return to BASIC; use the Shuffle program to create the multiple versions wanted.
3. Run Tasword, using the Ctrl-U hard rejustify to fit the questions into sensible format. I normally use 64-character lines.

I added the appropriate question numbering as each version was re-justified, and also double spacing between questions. Later, I worked out a way to double-space the version files using ED. At the time, it seemed easier to get the job done with some manual donkey-work.

It would be possible to use the block commands of Tasword to re-order a question set, but would entail many keystrokes and a lot of time waiting for Tasword to do its thing. In the case at hand, there were 42 questions.

The reader would also surmise that the entire job could be done in the BASIC environment. True, but the nice thing about programming is that there is not only one path to a goal. In this instance, two of the three tools I needed already existed. The shuffler took about 10 minutes to create.

Double-spacing the question sets using ED is done as follows: get into ED, create one empty line and save with the 1X command. This creates a library file. Then append the specific file you wish to process. Enter the following line and it is done:

```
BnM1LR[Control]Z[return]
```

That probably deserves some explanation. B puts the character pointer at the top of file; n (in my case, 42) is the number of lines to be handled; M is the macro command, and will repeat the next commands n times.

1L steps down one line from the first line; R reads the library file (an empty line, containing only a return) and writes it to the current character pointer position; Control Z terminates this edit.

Return then goes back to repeat the process until all the M's are done. It is like a FOR-NEXT loop.

As my wife had provided the question sequence lists, I used DATA statements in Shuffle. It might be easier overall to utilise random generation of the sets and both techniques are catered for in the program listing.

One final point -- I used the Tasword footer option to put an appropriate identifier on each of the versions.

```

1  '** SHUFFLE **
2  'The Amstrad User Mar 87
3  'J.L. Elkhorne
10 'Shuffling Questions
11
20 DATA 5,10,15,20,25,30,35,40,6,11,16,2
1,26,31,36,41,7,12,17,22,27,32,37,42,8,1
3,18,23,28,33,38,1,9,14,19,24,29,34,39,2
,3,4
30
40 MODE 1:PEN 1:INK 2,9,6
99
100 CLS:LOCATE 16,1:PRINT"SHUFFLE":PRINT
:PRINT
110 PRINT"Do you want:":PRINT
120 PRINT"1. Random ordering"
130 PRINT"2. Data statement"
140 PRINT:PEN 2:INPUT P
150 CLS:PEN 1:ON P GOTO 200,300
160 IF P>2 THEN 100
199
200 PRINT"this is random":PRINT
210 INPUT "How many times":it
220 DIM r(it),a(it)
230 FOR i=1 TO it:a(i)=i:NEXT i
240 FOR j=1 TO it
250 r=INT(RND*it)+1
260 IF a(r)=0 THEN 250
270 r(j)=r:a(r)=0
280 NEXT j
290 ran=-1:GOTO 2000
299
300 PRINT"This is data -":PRINT
310 PRINT"Have you entered your DATA sta
tement at Line 20? (y/n)":PRINT
320 PEN 2:INPUT p$:PEN 1
330 IF p$<>"y" THEN PRINT "Do so now and
then goto 1000":STOP
999
1000 CLS:INPUT "How many times":it:PRINT
1010 FOR j=1 TO it:READ d:num=d+num:tot
l=total+j:NEXT j:RESTORE
1020 IF num<>total THEN PRINT "Your data
statement is wrong, dummy!":STOP
1999

```

```

2000 REM get master file
2010 DIM a$(it)
2020 OPENIN "master"
2030 FOR i=1 TO it
2040 LINE INPUT #9,a$(i)
2050 PRINT a$(i)
2060 NEXT i
2070 CLOSEIN
2080
3000 CLS:INPUT "Enter number for this ve
rsion":n$:PRINT
3010 IF LEN(n$)=1 THEN file$="version"+n
$ ELSE 3000
3020 CLS:CAT:PRINT
3030 p$="":PRINT"Enter y to confirm ";;P
EN 2:PRINT file$:
3040 PEN 1:INPUT "to disc":p$
3050 IF p$<>"y" THEN STOP
3099
3100 OPENOUT file$
3110 FOR i=1 TO it
3120 IF NOT ran THEN READ d:PRINT #9,a$(
d)
3130 IF ran THEN PRINT #9,a$(r(i))
3140 NEXT i
3150 CLOSEOUT
3160
9999 END

```

**Year Disc 4 is now
available containing
the programs
appearing in Issues
21 to 24 inclusive -
plus a massive 128k
of free Public Domain
Software.**

See Page 68 for more details.



**To get your name in our
"HALL OF FAME" (see page 61) register
on the form below, or a copy, and if possible,
send a photo of the screen.**

Name _____
Address _____
Game _____ Telephone Number _____
Achieved (date) _____ Score _____
Game lasted (mins) _____
Signed _____

THIS NEXT PART MUST BE COMPLETED

Witness' Name _____
Address _____ Telephone Number _____
Occupation _____
I confirm that the above claimed score is accurate and
genuine
Signed _____

Post this form along with your tips for playing the
game to:

Amstrad Achievers, The Amstrad User, Suite 1,
245 Springvale Road, Glen Waverley, Vic 3150

Educational Software

We have looked at Amstrad software in Issue 23 which was meant to educate pre-schoolers. We look at some more plus move up to some of the packages available for older age groups. The scene has improved a bit.

CAESAR'S TRAVELS - Mirrorsoft
Educational software for the Amstrad computer range is scarce, and what is available is very substandard. *Caesar's Travels* is one of those rare exceptions, being well packaged and presented - it looks and feels as professionally done as today's entertainment software.

Caesar's Travels comes in the form of a book written by James Mercer. Aimed at an age range of 3 to 9, it suits both pre-readers (obviously accompanied with an adult) and early readers. The computer cassette contains an abbreviated form of the story, but with the added advantage of animated action.

Poor old Caesar has been kicked out into the streets for not doing his job properly: catching mice. You take on the role of this miserable cat. Via the keyboard input that

you supply, different outcomes to the story may occur. The idea is that you find a new home for yourself. Naturally you have many adventures along the way - it's not all a bed of catnips.

Only eight keys are involved. This is an excellent idea, as it will not confuse and thus put off any youngsters. The number keys from 1 to 6 are used to instruct Caesar to perform certain actions. For example, pressing 1 will cause Caesar to run and pressing 3 will make the cat jump.

Two other keys are Enter and the spacebar. Enter is needed when answering certain questions that crop up from time to time. For example, a number of objects may appear on the screen - in one case nine sausages appeared. You must count them up, then press the correct number key (9 in this case), followed by Enter. The spacebar is used to continue or start a new game.

To make things easier for a child, all the keys and their associated use are printed on a card which can easily be placed on the keyboard.

The game itself is very good - the text appearing at the top of the screen while Caesar cavorts amid relevant scenery at the bottom. Once you have instructed Caesar what course he should take, he carries out his actions graphically before the next section of text pops up.

Overall, this is an excellent way to

FREE MONEY

INTERESTED?

Join the AUSTRALIAN AMSTRAD USER CLUB and every time you buy a game from us we will give you at least 15% (20% on some games) towards the cost. For example, buy *Beach head* on disc for only \$33.50 and we will pay the other \$6 (\$39.50 total) or buy *Hardball* tape for only \$24.20 and we pay the other \$4.30! THIS SAVING APPLIES TO ALL OUR AMSTRAD SOFTWARE.

COUNT THE NUMBER OF GAMES YOU HAVE AND SEE HOW MUCH YOU COULD HAVE SAVED ALREADY!

LOOK AT THIS MONTH'S MEMBERS ONLY OFFERS:-

Buy any of the following tapes: Tubaruba, Curuss 2 chess and Airwolf for \$24.20 (each) and each purchase entitles you to :- One of the following tapes for \$4.95:

104 ANIMAL VEGETABLE MINERAL 118 ROLAND ON THE ROPES
107 TIME MAN ONE 133 XANAGRAMS
112 HARRIER ATTACK 154 EASI AMESWORD
113 SULTAN'S MAZE 196 THE GALACTIC PLAGUE
913 BRIDGE IT

PLUS

899 HUNCHBACK 197 SCREEN DESIGNER
922 MUTANT MONTY 927 ROLAND IN SPACE
957 LORDS OF MIDNIGHT 999 DRAGONS

Other offers on this month's newsletter include 'buy one get one half price' offer on Higgins snooker and pool; 3 Dimensional offer on 3D Grand prix, 3D Boxing, 3D Stunt rider. Buy 2, get one free. Details are on the monthly newsletter which is sent out to members free (who are *first in line* for the specials). So, do you want to save money on the games you buy? You do? Then become part of the best AMSTRAD mail order network- JOIN NOW AND TAKE ADVANTAGE OF THE INTRODUCTORY OFFER:- RECEIVE THRUST, ONE OF THE UK'S LEADING GAMES.....FREE

The Australian Amstrad User Clubs

Tel (02) 977 4697 for details, or turn to page 37

introduce toddlers to reading. They can see their words enacted on screen, and we all know a picture is worth a thousand words. The text appears on screen line by line, at a pace a youngster can handle. Tunes are played at various stages in the game, adding to the atmosphere and overall enjoyment.

PLAYSCHOOL - School Software

Play School, for the three-plus age group, consists of a selection of tiny games. Some are of educational use, others - well, they just pass the time of day.

When you first run the program, a few instructions appear on the screen, telling you which keys you can press, and what they do. Write them down or remember them, as no reference is made to the keys further on in the program.

You are then asked to press P to play the game. At this stage, pressing Shift-Q will set the level of difficulty. Alternatively, P will take you off to a party, where after several seconds gazing at a less-than-mouthwatering graphical cake, you are introduced to Superkid, the question master. He promptly asks for your name - you type in your name and press Enter.

On completion of all the introductory messages, you get a menu with six options. These range from simple addition problems to trying your hand at drawing. The first option is 'Counting'. A large box is drawn on screen and a number of objects appear inside. You must count them up and enter the correct number.

Superkid is watching you throughout your ordeal - his eyes occasionally blink - but for the most part, he is cold and stony. He shows either displeasure (when answering wrong) in the form of turning his mouth down, or admiration (of correct answers) by grinning broadly.

You are given three chances to answer a question correctly. After a third failure the answer is displayed and the next question in a sequence of three is displayed. A correct answer merits a point in your favour; incorrect and it's face down.

After answering the three questions, either Whizkid will choose which set of questions you will try next or you will get to choose again (this seems to be at random).

Moving down the table of choices, we come to 'Find It'. A letter or number is displayed on the screen, and the child then has to search for it. This is a good way to teach children how to associate one thing with another.

The next option, 'Paint Box', is rather a limited drawing utility. Only one colour is allowed on screen (the child can choose this colour). Movement is via the cursor keys, so I'm afraid that you are restricted to straight lines (or crooked ones at least). It may hold children's interest for a while, but when they wish to improve on their designs, they will be stuck.

Item four is 'Match Up'. Six odd-looking patterns are drawn on the screen; a further one is drawn apart from the previous six.

The child is to match the seventh object with one of the other six.

The next item is not one of the smoothest, fastest arcade-action games available on any home micro. You control a Pacman lookalike, whose sole task is to eat any stationary objects in its path.

The last but by no means least of these options is 'How Much'. This sets a fairly reasonable little addition test for your primary-school kid. A box with a number of items appears; you must type the correct number as with 'Counting'. Then another box is drawn with objects inside. Do the same action as before. Then you must add the objects from both boxes together and type this total.

On the whole, this is a well-presented package, with some nice touches, especially Superkid with his flicking eyelids and mouth movements. The options available will no doubt prove valuable teaching aids for the youngsters, and more importantly, keep them interested.

PHYSICS - School Software

Physics, like its counterpart *Chemistry*, has one thing basically incorrect with the packaging, or rather the information displayed. It is not up to HSC standard. Maybe 12 to 14-year-olds will appreciate this but not 16-year-olds - that is, if they wish to pass. Apart from that, slightly more effort has gone into *Physics*; the questions are not as ambiguous, not quite as many spelling errors, and it actually accepts many answers (if they are correct, of course).

Physics has a nine-option menu to choose from. Each option has a notes section as with *Chemistry*. They are, however, slightly more substantial. If you don't wish to read the notes, you can go straight into the question section.

There is a nice surprise awaiting those that opt for one of the sets of questions. Included with many of the questions are small diagrams related to the subject - it makes all the difference. The style of answering and marking questions is identical to those from *Chemistry*.

Again, once all the questions have been answered, there is nothing more to be gained from the package. It would have been quite simple to include extra questions that could be loaded up whenever required. In that way, the user would acquire a much broader knowledge of the topic at hand. What would have been nice was a graph showing how well you had done after answering the questions from all the topics, possibly giving you an average mark at the same instant.

Slowly but surely the educational market is coming to its senses.

CHEMISTRY - School Software

Hooray - at last someone has come up with a chemistry program aimed at 12 to 16-year-olds. That was my initial reaction. My enthusiasm was soon dampened, however, as it became clear that the program had a long way to go before reaching HSC standard.

On loading, you are presented with a menu

offering a skeleton selection of the actual chemistry course. If the packaging had said 12 to 14-year-olds, I would have agreed, but there is no conceivable way that prospective HSC candidates can even consider passing with this. Apart from that, there is a very good idea here.

Selecting one of the topics gives you the choice to either read a few notes on the subject or alternatively jump straight into the questions.

The notes are short and sweet. They cover the questions you are about to answer but go no further. For that, you will have to consult the numerous textbooks.

The question section has a wonderfully executed area, but there are many spelling errors. On occasions my answers were rejected. I presumed either I had got them wrong or my spelling was incorrect. But then the program would spew out its version of the correct answer - exactly what I had typed in!

There are ten questions to each section; you are given two chances to answer each one. If you enter the incorrect answer first time, you are given a small clue (which is generally small enough to enable you to attain the answer). A correct answer earns you 10% - if on the second attempt you manage to get it right, you are awarded 5%. At the end of the 10 questions, your overall percentage mark is shown; depending on the mark achieved, you will get the message 'very good', 'good', or 'poor but will do better next time'. Obviously you'll do better next time - the questions remain the same. This idea has the making of a good educational package. Unfortunately, on the Amstrad at least, this product is still in its early days; consequently it has several bugs, and could be further enhanced with more questions, a more comprehensive notes section and a general tidy-up. Still I must not complain too bitterly as there are so few of these educational programs around.

Note: One source of Educational software is Packtronic (02 734879) or their outlets as advertised on Page 5 of the January 1987 issue of *The Amstrad User*.

At the time of going to press, we have not been able to determine whether the software which has been reviewed so far is generally available, but we believe the School Software titles are:

Magic Maths is available on mail order through The Amstrad User and is suitable for 3 to 9 year olds by being set at any one of 10 levels of difficulty.

NOTICE

**The Amstrad User Club or
The Australian Amstrad
Professional User Club, both
of Manly in NSW, are not
connected in any way with
this publication.**

CP/M Revisited

A Primer for beginners - Part Five

from Fred Robertson-Mudie

Continuing the discussion of Public Domain CP/M 2.2 Transient Programs, this month we will look at LSWEEP.COM and its associated Document file LSWEEP.DOC.

There are many files available in the public domain with the extension LBR. These are Library programs, and are designed to allow a number of related files to be collected together to form a single file. For example, a file called ASM.LBR could be a collection of the following:

ASM.COM (A command file)
ASM.ASM (An assembly listing)
ASM.DQC (A squeezed document file)
ASM.HEX (A Hex file)

The use of a Library file to contain all these programs as a single unit is useful in that, for example, it keeps related files together, it takes up less directory space, it takes up a little less disc space and, if downloaded from a bulletin board, or otherwise copied, it only requires one operation rather than (as would be the case in our example file ASM.LBR) four. The actual compiling of Library files will be covered in a later part of this series but, for the moment, discussion will be confined to the use of LSWEEP.

LSWEEP is a utility which allows the user to either view a (viewable) file within a Library file without extracting (or uncompressing) it, and/or to extract and, if necessary, uncompress a file from the Library. The program is simple to use though, unlike NSWEEP, it requires the name of the Library file to be accessed to be entered as well. Using the above example file, ASM.LBR, the program is used as follows:

A>LSWEEP ASM.LBR <Enter>

After entering the command, along with the Library filename, the following will be displayed:

A>lsweep a.sm.lbr

LSWEEP

Ver:1.03 04-22-01
Joe Vogler

Derived from: LBR & LTYPE

COMMANDS:

- 1 - Displays this menu.
 - E - Extracts (and uncompresses) a member.
 - V - Views a (viewable) file.
 - X - Exits this program.
- Any other input skips to the next member

This is followed by information about the number of entries in ASM.LBR and details of the first entry.

The remaining entries in the Library can be displayed by hitting any other key (except ? E V or X). To view or extract a file it is simply a case of entering V or E respectively at the program prompt. Entering a ? re-displays the command menu and X will cause a return to CP/M.

If LSWEEP is entered on its own, i.e. without specifying a Library file, a short paragraph will be displayed showing the correct syntax to use for the program.

Again, a simple but very useful program, but read the document file and practice with it on a blank disc along with a couple of Library files. Nothing can possibly go wrong, but be sure to have plenty of room on the disc as some Library files can, after extracting and uncompressing the contents, quickly fill up a disc. If a disc happens to be full, a message stating this will be displayed and the file will not be extracted, but no harm can possibly be done to either the disc, the Library program or any other programs on the disc.

The only caution that needs to be exercised is to check through the contents of the Library file before extracting any files, just in case it contains a file with the same name as one already on the disc. As the files are extracted individually, either don't extract the file with the same name as the one on the disc, or rename the one on the disc. If this point is overlooked, the file already on the disc with the same name will be erased.

In addition to the common use of Library files on Bulletin Boards, there are many more public domain software programs being downloaded and copied onto Amstrad 3" discs and an increasing number of useful programs are only liable to be available in Library files in the first instance. This program is, therefore, one that is well worth having a copy of in your CP/M collection.

As a final example of the usefulness of NSWEEP (discussed last month) and LSWEEP, the Software Library (at the Canberra Amstrad User's Group) has a copy of a file called CPMNOTES.LBR. This file comprises the first six parts of this series of articles. Each part has been squeezed, using NSWEEP, and placed in this library (LBR) file and now takes up 24K instead of the original 43K, a saving of approximately 44% of disc space. It can, of course, be accessed using LSWEEP, as outlined above. If you don't have any LBR files, get a copy of this one to practice on.

Next month, Fred looks at UKM7.COM - the Public Domain communications program.

Making the Amstrad RS232 user friendly

A Utility from Andrew Martin

This program simply provides a more acceptable face to some of the commands held in the Amstrad RS232 ROM. But beware - it will not work with any other RS232.

Terminal mode as provided by the RS232 ROM is generally not very effective when used with bulletin boards as it is not Christianson protocol compatible, a standard which most boards require. Therefore it is of most use between Amstrad computer users, both of whom are using the Amstrad RS232.

The same applies to SUCK and BLOW. In addition, SUCK and BLOW are a little finicky to use and will require some practice. Unless you do not have a disc drive I recommend you use MODEM9.COM which is now widely available from user groups etc. MODEM9.COM provides Christianson compatible Terminal, Send and Receive files etc. and is suitable for use between Bulletin Boards, other computers etc.

I have not yet worked out a way to have the program send a Viatel customer number automatically - perhaps you might like to try. The Viatel menu is reached by pressing the break key twice when on Viatel. The Viatel screen that is saved only takes 2K of disc space and is therefore obviously not a screen dump. You will save the Viatel screen that was being displayed when you pressed the break key.

A word of warning. Some of the RS232 operations, in particular SUCK will not terminate until an end of file code has been received. There is no check for the break key so it is impossible to break out from it. I have resorted to picking up the phone and asking the person sending a file to go into terminal mode and send CNTR Z to get me out of this. The alternative is to switch off the computer altogether!

Finally, you might like to pretty up the menu screens, and provide single keypress entry.

```
5 CALL &BC02
10 TX=300:RX=300:HARD$(0)="OFF":HARD$(1)=
"ON":DATAB=8:PAR$(0)="NONE":PAR$(1)="EVEN
":PAR$(2)="ODD":STOPB=0
20 ON BREAK GOSUB 410
50 term=0:MODE 2:SETSIO,TX,RX,HARD,DATAB
,PAR,STOPB
55 PRINT STRING$(80,"-"):LOCATE 20,2:PRIN
T"AMSCOM SOFTWARE FOR AMSTRAD RS232":LOCA
TE 29,3:PRINT"Andrew Martin 1987":PRINT S
TRING$(80,"-"):PRINT:PRINT
60 PRINT"1.Terminal mode"
70 PRINT"2.Change parameters"
80 PRINT"3.Suck/Blow"
90 PRINT"4.Viatel"
100 PRINT"5.Load Viatel Screen"
110 PRINT:INPUT "1 to 5 ",a:IF A<1 OR A>5
```

```
THEN PRINT CHR$(7):GOTO 50
120 ON a GOSUB 140,190,320,380,430
130 GOTO 50
140 REM *****: terminal mode :*****
150 term=1
170 MODE 2:HALFDUPLEX:TERMINAL
180 RETURN
190 REM *****change params :*****
200 MODE 2:PRINT STRING$(80,"=")
210 LOCATE 30,2:PRINT CHR$(24):"Change Pa
rameters":CHR$(24):PRINT STRING$(80,"=")
220 PRINT:PRINT"1.TX=":TX:PRINT"2.RX=":RX
:PRINT"3.HARDWARE=":HARD$(HARD):PRINT"4.D
ATABITS=":DATAB:PRINT"5.PARITY=":PAR$(PAR
):PRINT"6.STOPBITS=":STOPB
230 PRINT:INPUT "CHANGE 1 TO 6 ",B:IF B=0
THEN RETURN ELSE ON b GOSUB 250,260,270,
280,290,300
240 GOTO 190
250 IF B=1 THEN INPUT"TX=":TX:RETURN
260 IF B=2 THEN INPUT"RX=":RX:RETURN
270 IF B=3 THEN INPUT"HARDWARE (0=OFF:1=O
N)":HARD:RETURN
280 IF B=4 THEN INPUT"DATABITS=(5 TO 8)",
DATAB:RETURN
290 IF B=5 THEN INPUT "PARITY=(0=NONE:1=E
VEN:2=ODD)":PAR:RETURN
300 IF B=6 THEN INPUT"STOPBITS=(1 OR 2)":
STOPB:RETURN
310 RETURN
320 REM *****: SUCK/BLOW :*****
330 MODE 2:PRINT STRING$(80,"="):LOCATE 3
0,2:PRINT CHR$(24):" SUCK/BLOW ":CHR$(24)
:PRINT STRING$(80,"=")
340 PRINT"1.SUCK":PRINT"2.BLOW":CAT:INPUT
"SELECT 1 OR 2 ",C:IF C<1 OR C>2 THEN PE
INT CHR$(7):GOTO 320
350 IF C=1 THEN PRINT:INPUT "NAME OF FILE
TO SUCK ":NAME$:PRINT"PREPARE THEN PRESS
ANY KEY ":CALL &BB18:
360 IF C=1 THEN :SUCK,@NAME$:RETURN
370 IF C=2 THEN PRINT:INPUT "NAME OF FILE
TO BLOW ":NAME$:PRINT"PREPARE THEN PRESS
ANY KEY ":CALL &BB18:BLow,@NAME$:RETURN
```

```
380 REM *****: viatel :*****
390 PRINT"Viatel data:":PRINT"Customer nu
mber <your number>":PRINT"Password <your
password>":CALL &BB18
400 :SETSIO,75,1200,0,7,1,1
404 :PRESTEL
405 IF act=3 THEN MODE 2:GOTO 60 ELSE 404
410 CALL &BC02:MODE 2:PRINT"1. Load Viate
l screen":PRINT"2. Save Viatel Screen":PR
INT"3. Return to main menu":INPUT act
420 IF act<0 OR act>3 THEN 410 ELSE ON ac
t GOTO 430,460,405
430 MODE 2:CAT:INPUT "Load screen ":as:L
OADPRESTEL,@as:MODE 0::REFRESH:CALL &BB18
:CALL &BC02:RETURN
460 PRINT"DISC READY ? (ANY KEY WHEN REA
DY)":CALL &BB18:INPUT "NAME OF FILE ":NAM
$:SAVEPRESTEL,@NAME$:CALL &BC02::REFRESH:
RETURN
470 IF term=1 THEN :FULDDUPLEX:RETURN
480 MODE 2:INK 1,26:RETURN
```


HARDWARE SCROLLING

How it can be used in Basic programs

Although colour modulators have long since ceased to be imported due to incompatibility problems, there is a legacy of users in Australia who operate this piece of equipment with a separate colour television instead of the Amstrad monitor. Most will tell you that the quality is less than adequate and the graphics in games is pitiful.

With this background in mind, we can tell you that a particular problem with Elite's Ghost and Goblins has reared its ugly head. (Don't panic - remember, we are talking about using the game through a colour TV and modulator). What happens is that the loading picture comes up in colour but when the game is started it reverts to black and white. (It works normally on a standard Amstrad system).

As the problem is caused by some clever scrolling techniques, it seems a good idea to look at scrolling in general and 'the problem' in particular.

INTRODUCTION

Vertical scrolling is very easy, and there's no real problem adding it to Basic games. This program illustrates scrolling the screen up and down.

```
10 x.coord=pos(0#):y.coord=VPOS(0#) 'stores
   cursor position
20 LOCATE 1,1 'moves cursor to top of screen
30 PRINT CHR$(11) 'moves cursor up one line,
   forcing screen to scroll down
35 WHILE INKEYS="" 'WEND 'waits for you to
   press a key
40 LOCATE 1,25 'cursor to bottom of screen
50 PRINT CHR$(10) 'moves cursor down one line
   forcing screen to scroll up
60 LOCATE x.coord,y.coord 'restores previous
   cursor position
```

This doesn't do anything very impressive, but you should be able to get the general idea from the comments on each line.

Horizontal scrolling isn't anywhere near so easy. If you want to scroll the screen sideways from Basic you'll need to use the OUT command, which sends a number to a peripheral chip. That'll be enough to put quite a lot of people off, but it isn't too difficult. The only problem is that it messes up the way Arnold writes things to the screen. This listing should give you an idea of what I mean:

10 MODE 2

```
20 FOR a=1 to 25
30 CALL &BD19 'could use FRAMT on 664/6128
40 OUT &RC00,13
50 OUT &BD00,a
60 NEXT a
70 LOCATE 1,1
80 PRINT "this should be in the top left corner"
```

As you'll see if you run this, Arnold can't cope with the changes you've made. All printing carries on as if the screen was still unscrolled. To get your screen back to normal you can either type MODE 2, or force a vertical scroll using the cursor keys.

This last point is another reason why the OUT method of horizontal scrolling doesn't work too well. Every time you force a vertical scroll using the simple method we started with, you undo any horizontal scrolling you've done using OUT.

Horizontal scrolling is much easier if you know a little machine-code. Two firmware routines make the programming very easy indeed, and they let Arnold know what you're doing so he can print to the screen properly.

NON-TECHNICAL

To start with, here's a Basic program which uses the firmware routines. You don't need to know a thing about machine-code to use them, but there's an explanation afterwards for anyone who's interested.

```
10 DATA &CD,&0B,&BC,&23,&23,&C3,&05,&BC
20 DATA &CD,&0B,&BC,&23,&23,&C3,&05,&BC
30 clearmem=HIMEM:MEMORY=(oldmem-16) 'makes
   room for machine code
40 FOR a=HIMEM+1 TO oldmem 'this loop
   'pokes in
   'the machine code
60 NEXT a
70 scrollf=HIMEM-1:scrollt=HIMEM+9
80 FOR c=1 TO 100
90 CALL &BE19 'same as 664/6128 FRAME
   command
100 CALL scrollf 'scrolls left
110 NEXT c
120 FOR c=1 to 75
130 CALL &BD19
140 CALL scrollt 'scrolls right
150 NEXT c
160 LOCATE 1,1
170 PRINT "this IS in the top left corner"
180 MEMORY oldmem 'reclaims space used for
   machine code
```


The important bits of the program are lines 10 to 70 which set up the scroll routines, and line 180 which dismantles them after you've finished with them. If you start your program with the commands in lines 10-70 and finish with the MEMORY command from line 180, you can use the commands *CALL sleft* and *CALL scrright* whenever you want to scroll the screen left or right.

BOFFINS ONLY

That's all you need to know to use the routines from Basic. If you're interested though, here's how the first routine disassembles:

```
sleft: CALL &BC0C      ;SCR-GET-LOCATION
;No entry conditions -- on exit, HL
;contains the current 'screen offset'
INC HL                ;Increases HL
INC HL                ;by two
JP &BC05              ;SCR-SET-OFFSET
;Value in HL is used as new 'screen
;offset'.
```

The second one's the same, but with DEC's instead of INC's. In other words, one increases the 'screen offset' by two and the other decreases it by two.

Clearly the screen offset is the key to horizontal scrolling - increase it by two to scroll left a fortieth of a screen's width, or decrease it by two to scroll right. It's also, incidentally, the key to vertical hardware scrolling from machine-code. Increase the offset by 80 (decimal) to scroll up one line, or decrease it similarly to scroll down. This accounts for something you'll have noticed with the Basic horizontal-scroll program: scrolling left or right by a whole screenful also scrolls the screen up or down one line.

None of this tells you what the screen offset actually is, but we'd be here all day if I tried explaining that. If you're really keen to know about such things get hold of Amsoft's CPC *Firmware Guide*, read it and inwardly digest it. Once you've done that, you'll be ready for the technical stuff that follows.

GHOSTS AND GOBLINS

Now on to that horrifying saga of colour modulators producing black-and-white pictures. This isn't a change of subject though, since it turns out that a clever scrolling technique is the culprit.

The modulator simply converts the RGB (red-green-blue) signal which most TV sets require through their antenna socket. For *Ghosts and Goblins* to mess up the modulator output, it had to be doing some very strange things with the RGB signal.

Needless to say, it was. To be precise it was moving the 'logical' screen (ie. the picture of the ghosts, goblins etc) backwards and forwards across the surface of the 'physical' screen (ie. the hard glass bit you look at). You can see this effect for yourself, with this little bit of Basic. It replaces lines 80-180 of the poked-in machine-code horizontal scroll listing, so these must be deleted before typing in the new lines.

```
80 FOR a=1 TO 50
90 CALL &BD19
100 OUT &BC00,3:OUT &BD00,5
110 CALL &BD19
120 OUT &BC00,3:OUT &BD00,&BE
```

```
130 NEXT a
140 MEMORY oldmem
```

This looks ugly, and would probably give you a headache if you stared at it for too long. If you're looking at it through a modulator, it should also look distinctly colourless. (I don't have a modulator to test this, but I'm pretty sure of it.) Now you know what *Ghosts and Goblins* does, so the next question is 'Why?'

To get a smooth continuous scroll you need to make one scrolling movement every fortieth of a second - the timing for this is handled in our scrolling programs by those CALL &BD19 statements. If there are fifty movements per second, and they each have to be at least a fortieth of the screen width, you're clearly going to scroll past a whole new screen of landscape in less than a second.

This is too fast for anything much more than reflex game-play, though Vortex's TLL did quite well using these techniques. Another notable hardware scroller was Gremlin's *Thing on a Spring*, though there were slight problems at the screen edges on this one.

For the most part games programmers use either software scrolling or what you might call 'burst' scrolling. Software scroll only works well on very small windows (eg *Rambo*, *Stainless Steel*) and causes an ugly rippling effect if used on large areas - *Boulder* and the tank stage of *Beach-Head* are cases in point.

The preferred technique is 'burst' scrolling - keeping the screen fixed until the player reaches the edge of it, and then fast-scrolling the next screen into position. Prime examples of this are *Green Beret* and *Thrust*. This is still far from perfect, and it was an attempt to improve on this that brought *Ghosts and Goblins* its problems.

THE 'SOLUTION'

The aim in *Ghosts and Goblins* was to provide a slow hardware scroll, so that the 'burst' scrolling wouldn't be so abrupt as it is in, for example, *Green Beret*. The method used involved both scrolling the screen and moving it. If you've typed in the program so far, you can get a *Ghosts and Goblins*-style scroll by altering line 100 as shown below. If you haven't, here it is in full:

```
10 DATA &CD,&0B,&BC,&23,&23,&23,&C3,&05,&BC
20 DATA &CD,&0B,&BC,&2B,&2B,&2B,&C3,&05,&BC
30 oldmem=HIMEM:MEMORY (oldmem-16)
40 FOR a=HIMEM+1 TO oldmem
50 READ b:POKE a,b
60 NEXT a
70 sleft=HIMEM+1:scrright=HIMEM+9
80 FOR a=1 TO 50
90 CALL &BD19
100 CALL sleft:OUT&BC00,3:OUT &BD00,5
110 CALL &BD19
120 OUT &BC00,3:OUT &BD00,&BE
130 NEXT a
140 MEMORY oldmem
```

The OUT commands in lines 100 and 120 move the screen left and right by an eighth of its width - you'll have seen this already if you've been typing things in and running them as you've been reading. (Note that 'moving' is not the same as 'scrolling' - I'll explain the difference in a minute.) The difference now is that 'CALL sleft' in line 100.

The CALL in line 100 scrolls the screen left by a fortieth of its width, and the OUTs move it back to the right by an eightieth: net result, a scroll/move of an eightieth to the left. A fiftieth of a second later the OUTs in line 120 move the screen to the left by an eightieth. After another fiftieth of a second line 100 scrolls/moves the screen another eightieth to the left, and so on.

If you've still got the default colours on screen you won't be able to see this happening: it just looks like a slow smooth scroll. Set the border and screen background to different colours and you'll be able to see what's happening quite clearly - the left and right edges of the screen blur where it's being moved rapidly from side to side. Here 'moving' literally means changing where the detailed picture part of Arnold's display appears on the glass tube of the monitor.

NOW YOU TRY IT

This method is a very nice way of halving the scroll speed without losing smoothness, and could usefully be applied to Basic versions of *Scramble* and similar scrolling games.

You'd need to do the timing with the EVERY command rather than using CALL &BD19 or FRAME, and make sure the scroll/move commands were on a higher timer priority than any other interrupt-driven sequence you had running.

Another good idea is to blank off the blurred columns at each side alternatively - the right-hand one at line 100 and the left-hand one at line 120. If you set these to the same colour as the border you cut the apparent screen width down a little, but the loss of that unsightly 'edge-flicker' more than makes up for this.

If you can make a decent scrolling game out of any of this, why not send it in? Make sure you keep it short under 3K if possible - and give it plenty of grab-factor. Otherwise it's up to you: knock our socks off and we'll print your program!

BUT BEAR IN MIND . . .

There are problems with this kind of technique. For one thing, OUTs like the ones in lines 100-120 bypass Arnold's firmware. In this case they work on all the machines I can find to try them on, but you can't run crying to Alan Sugar if you get compatibility problems - Amsoft advises software houses not to use them.

More seriously, it looks like Amstrad's modulators can't produce a colour TV signal out of this kind of monitor input. One (non-Elite) programmer I met put it down to the poor quality of the Amstrad units. If this is true it's not exactly surprising: after all, Amstrad keeps costs down by cutting specifications fine. Amstrad can hardly be blamed if it can't cope with *Ghosts and Goblins*.

That's certainly not to say that Elite is to blame: indeed I'd say the company has been unlucky. I don't think anyone in the industry expected this kind of problem, and other houses are just grateful it didn't happen to them.

Moral: Those who live on the cutting edge of technology will be sacrificed upon it, as Adam Osborne said. Or they get a bit of bad publicity, at any rate.

Scrolling is a fascinating subject. If you feel that you could put together a series of articles covering the more advanced aspects of CPC graphics, please drop a line to the Editor with an outline of your ideas.

CPC6128 and PCW CP/M SOFTWARE DISTRIBUTED BY MITSUBISHI ELECTRIC - AWA

For more details contact your local dealer.

	£128	PCW
Word Processing	275.00	✓
NewsWord 2 (+ Spell Check)	825.00	✓
Samindex	225.00	✓
Poolist Wordstar PCW	235.00	✓
Wordstar Deluxe	142.50	✓
MicroWord Microfile	89.50	✓
Tasword 6128	88.50	✓
Tasword 8000	60.40	✓
Tasword 8000	125.00	✓
Spelling Checker	141.50	✓
Financial Modelling	159.00	✓
SuperCalc 2	97.50	✓
Cracker 2	175.00	✓
Planner Calc	257.50	✓
Master Planner	175.00	✓
Multipan	257.50	✓
Accounts	175.00	✓
ABC	49.50	✓
Purchase Ledger	357.50	✓
Sage Popular Accounts	289.00	✓
Sage Invoicing	97.50	✓
Cash Book	695.00	✓
Accounting One	142.50	✓
Camsoft Stock Control	142.50	✓
Camsoft Invoicing	142.50	✓
* ABC, Purchase Ledger, Accounting One require second drive to operate - e.g. 6128FD-1, PCW8256FD-2, PCW8512		
Programming Languages	125.00	✓
Hisoft Devpac 80	249.00	✓
Turbo Pascal	141.50	✓
Nevada Basic	125.00	✓
Hisoft C	125.00	✓
Nevada Fortran	125.00	✓
Nevada Cobol	125.00	✓
Nevada Pilot	257.50	✓
Microprolog	149.00	✓
Pascal/MF +	249.00	✓
Mallard Basic	149.00	✓
CBasic Compiler	97.50	incl
Hisoft Pascal 4T (1155)	167.00	✓
Graphics	167.50	✓
Dr. Draw	216.00	✓
Dr. Graph	149.00	✓
Polyprint/Word Plot/Mail	142.50	✓
Polytype	698.00	✓
Database Management Systems	490.50	✓
Cambase	142.50	✓
D Base 2	331.50	✓
Sage Retrieve	79.50	✓
MicroWord/MicroFile	149.50	✓
Sage Magiciler	149.50	✓
Masterfile II	39.50	✓
Training	21.50	✓
Tutorial Guide to LocoScript	69.95	✓
Guide to Logo (190)	89.00	✓
6128 Firmware Guide	19.50	✓
CP/M Plus Handbook	24.50	✓
Easy W.P. Guide for Amstrad	88.50	✓
PCW8256/8512	79.50	✓
Step by Step to LocoScript	79.50	✓
Typing Tutor	149.50	✓
lansyst - Two Fingers to Touch	53.40	✓
lansyst - Typing Crash Course	44.50	✓
Project Planning	409.50	✓
Brainstorm	295.00	✓
Games	50.50	✓
Classic Adventure	94.50	✓
Cyrus II Chess	50.50	✓
Communications	50.50	✓
Sage Combo Pack	89.00	✓
Sage Chat Viewdata	85.50	✓
Utilities		
Catalog		
Write Hand Man		
The Knife		
The Torch		
Rotate		
Devpac Assembler (1116)		

THE VIDI VIDEO DIGITISER

Could this be the add-on of the century? Judge for yourself!

Vidi, as it's affectionately termed, is a video digitizer. In layman's terms, it's a black box that will 'grab' an image seen through a television camera or even a picture from your video recorder and store it as numbers in your Amstrad's memory. From there you can reproduce it on your monitor.

The people to thank for this ingenuity are Rombo Productions of Livingston, Scotland. The same small company - Colin Faulkner, Marcus Sharp and Keith Wilson - about 18 months ago brought out the highly successful rom board called Rombo - in my opinion the best one available.

Vidi is very similar in appearance to the Rombo. It comes in a neat black box with a length of ribbon cable allowing for easy connection to any of the CPC range. There are two through connectors: one is at the end of the ribbon cable, and the other is on the circuit board inside the Vidi. This lets you use other peripherals devices that don't have through-connectors (and we all know the guilty party concerned).

More importantly, what does it do and how?

Vidi contains its own CRT (cathode-ray tube) controller. Arnold contains an identical one.

Among the Vidi's circuitry are two banks of 8k ram (random-access memory), giving it 16k of video ram. This enables Vidi to obtain a single frame of animation from either a video tape or video camera. On completion of this grab, the Vidi ram is read into the computer's own screen ram.

Operation time for this is approximately 300 milliseconds. This gives a sequence of three pictures a second, which is more than adequate for most applications.

Software to enable the grabbing or digitizing of video pictures comes in various formats: rom, disc or cassette. The software is supplied as RSXs (resident system extensions) or rom (read-only memory) external commands, which allows users to customise their Vidi setup.

Right, let's connect up!

The edge-connector at the end of the Vidi ribbon cable is attached to the Amstrad's expansion port. Take care as it is not impossible to insert it upside-down. If you possess a romboard, plug the Vidi rom into a clear socket and switch on. Alternatively, load the software into memory - you should be ready to roll!

A cable included with the Vidi frame grabber is fitted with RCA (phono) and BNC (video) connectors. The phono end plugs into a socket on Vidi clearly marked 'video in'. Likewise the video plug goes to the 'video out' socket on your video recorder or video camera.

In case of difficulty, this next paragraph may be of some help. If, for example, you have a problem with the connections (in other words, if they don't fit), check that the Video Out is actually composite video and not RGB or modulated RF, RGB signals can be converted to composite with a suitable patch lead - this is where your dealer comes in handy! With RF signals, I'm afraid you are stuck, as Vidi cannot cope with these. Several makes of video recorder are fitted with phono sockets rather than BNC for Video Out - no problem here, for the correct cables are readily available from hi-fi shops. (Consider yourself lucky with a phono plug rather than BNC; the latter tend to lose their bits and cost a lot.)

Hopefully you are by now correctly set up and ready to play with your new toy. Let's look at the software.

You should find several new commands at your disposal. These are accessed via external commands, which are prefixed by the I symbol (this attainable by pressing Shift and @. There are a host of useful commands, the most comprehensive being IVIDEO.

Typing this command should have you staring at a mode-1 screen from your video camera or recorder. It's being continually updated, approximately three times a second. The smooth action on an ordinary television screen results from 50 scans a second, so the effect of Vidi with IVIDEO is rather

like a disco under strobelights.

At the bottom of the screen is a status line showing various parameter settings:

```
Con07 Bri07 1064 Mode 1
Ink00=00 Sav Prt
```

One of these will be highlighted with a cursor. The cursor is easily moved using a joystick or the arrow (cursor) keys.

'Con' is the first option. Con varies the contrast through a range from 0 to 15. Zero causes the greatest difference between light and dark signals. To alter values for Con and its associates, move cursor keys or joystick up or down. 'Bri' stands for Brightness. A value of zero displays much of the picture in dark, while 15 has the opposite effect.

Hardware analogue controls supplement Con and Bri: there are tiny variable resistors on the circuit board, which you adjust with a small screwdriver. However you should not need to. These controls do not actually modify the video signal, but rather the sampling width and sampling level respectively.

Television and video use 'interlaced frames' to produce an image on the screen. With this system 625 lines are displayed; the pictures are actually produced by successive scans of 312 and 313 lines, or 'odd' and 'even' frames. On the Amstrad CPCs, only 200 lines may be displayed. This problem is overcome by 'windowing' onto an area of the image produced by the video camera or recorder. This window is set by the vertical position indicator, 'Vpos'. The three digits following are the number of lines offset at the top of the picture. Moving along, we encounter 'Mode'. The modes available are 0, 1 and 2. Selecting mode 0 appears to have no effect - in fact it will display as mode 1 until either a 'Sav' or 'Prt'

command is issued. The reason for this is that Vidi is designed to

grab frames in modes 1 or 2. Thus to obtain a mode 0 image, several screens in succession must be integrated to synthesize the picture. This is done by reading 16 screens in mode 2. Each time a screen is read, the brightness control is increased. By taking note of the brightness setting, Vidi can switch on a group of pixels, hence assigning a mode 0 ink to it.

One drawback of using this method is that the required image must be perfectly still. Otherwise a blurred picture will result. Vidi was designed to work in modes 1 and 2; the mode 0 routine was included because, given the right conditions, excellent printouts can be produced. This would be easy with videotaped images.

The 'Ink' command will do the obvious: alter the colour in any ink pot. If the ink number is moved up or down, the relevant colour number will be displayed in the next box.

Moving the cursor to the box displaying the colour number lets you alter its value - a range from 0 to 26. The ink numbers reflect the mode chosen, so in mode 2 only inks 0 and 1 can be used, and in mode 1 only inks 0, 1, 2 and 3 are changeable.

'Sav' saves the screen image to either disc or tape. It is possible to save screen images in rapid succession. The filename you select will have a number following it, incremented with each successive save.

The 'Prt' command will grab a screen in the current mode and dump it to a dot-matrix printer. Epson-compatible printers and the Amstrad DMP2000 are catered for. Mode 1 and 2 screens are printed normally across the page, whereas a mode 0 image is turned 90 degrees on the page.

Pressing Escape at any time will exit you from VIDEO. All the parameters set while VIDEO was

in operation will remain intact - even upon re-entry.

The other bar-commands perform essentially the same function as features available from the VIDEO menu.

IVGRAB, as its name implies, gets a single frame using the current settings. The screen mode is not reset, thus allowing the user to use this command repeatedly without screen blanking. One thing to beware, though, is that IVGRAB works on absolute addresses; therefore the screen should not be scrolled.

Here is a list of other bar-commands at your service. Follow them with a comma and the value you wish to set them to:

ICON, x	set contrast (x ranges from 0 to 15)
BRI, x	set brightness (0 to 15)
VPOS, x	set vertical position (0, 1 or 2 only)
VMODE, x,	set grab mode (0, 1 or 2 only)
IVINK, x, y	set ink x to colour y
IVPRINT	print hard copy in current VMODE

There is one other command, IVCONVERT. With it inks 2 and 3 swap colour. Its main purpose in life is for printer or graphic routines that expect shades to be in the order 0123. As a result of its hardware configuration Vidi picks up shades in the order 0132, with 0 the darkest and 3 the lightest. Some print-dump routines cannot cope with this - thus the command IVCONVERT.

Enhancements are on the way for the Vidi software, so say the Rombo programmers.

- true colour, which will work by taking a series of frames through red, green and blue filters
- mode 0 from mode 1, thus greatly speeding up synthesis time
- series grab, enabling 6128 owners to grab a series of frames in

the extra bank of ram before saving - animation sequences may even be possible!

If that wasn't enough to whet your appetite, the hard-working Rombo team has promised to make screens compatible with Rainbird's Art Studio. This will unleash untold power to your disposal - imagine the fun you could have distorting facial images!

The most exciting is yet to come: using a smaller screen size, they hope to have Vidi producing 10 frames a second. This will give much smoother animation and will really push Arnold to his limits.

You may have gathered I am head-over-heels with Vidi. It opens up a completely new area for experimentation and enjoyment. It's a stunning new product.

GOOD NEWS

- Digitize up to three frames a second
- Colour, mode contrast under full control
- Excellent printer-dump routine included
- Well-written, easy-to-follow manual

BAD NEWS

- You will need a video recorder or camera
- Can't receive television images (RF signals)
- Takes long time to generate mode 0 screen
- Will keep you away from work



TAU HALL OF FAME

GAME	SCORE/TIME	ACHIEVER
Airwolf	1500/25 mins	Heath Corcoran
Alien 8	4 valves/no time spec.	Shannon Reynolds
Android One	9030/no time specified	Robert Baxter
Assault on Pt. Stanley	13970/19 mins	Adam Menz
Atom Smasher	940/6 mins	John Baxter
Battle for Midway	8 carriers: speed 1: level 3	Steve Alatakis
Beach Head	132500/16 mins	Anthony Eden
Bomb Jack	1235960/15 mins	John Dawson
Bruce Lee	222075/43.5 mins	Mark Davie
Chuckie Egg	415570/60 mins	Tony Barberi
Codename Mat	23370/120 mins	Brent Milner
Combat Lynx	81450/no time specified	Steve Alatakis
Commando	372300/no time specified	John Madden
Decathalon	1232800/178 mins	Dale Derksen
Defend or Die	797175/33 mins	Stephen Colley
Dragons Gold	1830/5 mins	Robert Baxter
Er-Bert	68350/21 mins	Anthony Eden
Evasive Action	1418/7 mins	Melissa Baxter
Fantastic Voyage	100%/36 mins	Matthew Schuback
Galactic Plague	150600/55 mins	Donna Watmough
Gilligan's Gold	243923/35 mins	Keith Watmough
Ghostbusters	\$48800/30 mins	Paul Schmidt
Grand Prix Rally II	59367/13.5 mins	Allan Etherington
Green Beret	521280/100 mins	Carl Allen
Harrier Attack	337600/14.5 mins	Michael Hopkirk
Haunted Hedges	466460/35 mins	Lorraine Martin
High Rise	13530/15 mins	John Baxter
Hunchback	552600/no time specified	Tony Barberi
Hunter Killer	17/67 mins	Chris Catalfamo
Jet Set Willy	54 items/14 mins	Simon Przewloka
Knight Lore	98%/44 mins	Umut Akcelik
Kong Strikes Back	284600/40 mins	Malcolm Fraser
Maze Eater	18640/8 mins	Robert Baxter
Minder	\$17749/no time specified	Steve Alatakis
Moonbuggy	160110/no time specified	A. Kippenberger
On the run	43826/29 mins	Nicholas Moger
Raid	416950/26 mins	Allan Etherington
Roland in the Caves	9748815/6 mins	Anthony Eden
Roland goes Digging	\$805.65/45 mins	David Thomas
Roland on the Ropes	1211600/275 mins	Brad McGinniss
Roland in Space	60%/40 mins	Paul Schmidt
Roland in Time	72/18 mins	Paul Azzopardi
Scout Steps Out	7737/10 mins	Robert Baxter
Sorcery	92500/15 mins	Mike Nicolai
Sorcery +	221874/no time specified	G. Falkenberg
Space Hawks	74100/5 mins	Andrew Coppens
Spannerman	58200/20 mins	Rowland Hayes
Splat	7280/45 mins	Neil Campbell
Star Commando	236980/91 mins	Glenn Preston
Survivor	223160/19.5 mins	Alex Smyth
Way of Exp. Fist	558900/66 mins	Gavern Cherry
Wild Bunch	13071/no time specified	Damien Elliott
Yie Ar Kung Fu	8112260/3 hours	Roger Hall
Zorro	99900/32 mins	Jason Scott
3-D Monster Chase	1320:7 keys/7 mins	Adam Broadway

To get your name on this list see Page 13

GALLIMAUFRY II

Another selection of short programs

Yes, another batch of short, yet, clever programs which illustrate the power and versatility of your Amstrad CPC machine.

KALEIDOSCOPE

There are virtually endless variations of patterns in this program from Alex Gough. A great deal can be user controlled; the best idea is to try different parameters yourself.

Once the pattern has been completed, the computer will beep rudely at you. Pressing N takes you to the beginning of the program; S will save the screen picture to tape or disc.

```

1 'Kaleidoscope
2 'Alex Gough
3 The Amstrad User Mar 87
4
10 MODE 1:INK 14,0:INK 15,2
20 INPUT"GRAPHICS MODE(0 1 or 3):":m
30 INPUT"OVERALL SIZE(5-30):":i:f
40 INPUT"NO. OF REPETITIONS:":i:e
50 INPUT"NO. OF SIZE INCREMENTS:":i:g
60 INPUT"NO. OF LINES PER BLOCK:":i:d
70 INPUT"LENGTH OF LINES:":i:c
80 PRINT CHR$(23);CHR$(m)
90 MODE 0:ORIGIN 320,200
100 CLS:FOR 2=1 TO e:FOR a=1 TO g
110 x=INT(RND*f)*a:y=INT(RND*f)*a
120 xx=INT(RND*f)*a:yy=INT(RND*f)*a
130 p=INT(RND*15)+1
140 FOR b=1 TO d
150 PLOT x+b*c,y+b*c,p
160 DRAW xx+b*c,yy+b*c
170 PLOT -x-b*c,y+b*c
180 DRAW -xx-b*c,yy+b*c
190 PLOT x+b*c,-y-b*c
200 DRAW xx+b*c,-yy-b*c
210 PLOT -x-b*c,-y-b*c
220 DRAW -xx-b*c,-yy-b*c
230 NEXT:NEXT:NEXT
240 SOUND 1,200,200,7
250 a$="":WHILE a$="":a$=INKEY$:WEND
260 IF LOWER$(a$)="s" THEN GOTO 290
270 IF LOWER$(a$)="n" THEN RUN
280 GOTO 100
290 SAVE"pic",b,c000,&4000
300 LOCATE 8,12:PRINT"ready"
310 FOR p=1 TO 600:NEXT:RUN

```

PATTERNS

An interesting program from P. Tunstall; its small size does it no justice. By typing in various parameters, the computer rapidly draws complex designs on the screen.

```

1 ' patterns
2 ' P P Tunstall
3 'The Amstrad User Mar 87
4
10 MODE 2:BORDER 0:INK 0,0:INK 1,13
20 PRINT"enter pattern factor (0.5)":
30 INPUT"to 4.5 for best patterns):":n
40 CLS:ORIGIN 320,200,0,639,450,0
50 FOR x=0 TO 130 STEP n:y=2.5*x
60 INK 1,(x/12),(x/10)
70 DRAW Y*COS(x),Y*SIN(x)
80 SOUND 3,(x/3.14159),0.5,15
90 NEXT x:GOTO 20

```

FAST BASIC DOUBLE HEIGHT

This is a short and fast program from Chris Bootham. It can be easily incorporated into your own programs. Just place the string you wish to appear double-height into "s\$"; the position where you wish it to be placed on the screen should be entered into the variables "x" and "y".

```

10 'Fast basic double-height
20 'Chris Bootham
30 'The Amstrad User Mar 87
40 SYMBOL AFTER 33:MODE 1
50 s$="hello readers!":x=13:y=10
60 GOSUB 70:END
70 'print string
80 FOR w=1 TO LEN(s$)
90 IF MID$(s$,w,1)=" " THEN q$="":w$=q$
:GOTO 140
100 m=(HIMEM+1)+(ASC(MID$(s$,w,1))-33)*8
110 SYMBOL 254,PEEK (m),PEEK (m),PEEK (m),PEEK (m
+1),PEEK (m+1),PEEK (m+2),PEEK (m+2),PEEK
K (m+3),PEEK (m+3)
120 SYMBOL 255,PEEK (m+4),PEEK (m+4),PEEK
K (m+5),PEEK (m+5),PEEK (m+6),PEEK (m+6)
,PEEK (m+7),PEEK (m+7)
130 q$=CHR$(254):w$=CHR$(255)
140 LOCATE (x-1)+w,y:PRINT q$
141 LOCATE (x-1)+w,y+1:PRINT w$
150 NEXT w:RETURN

```


WANDERING THROUGH SPACE

This is a lovely piece of programming from Julian Smalley. It uses colour swapping techniques to give the impression that you are seated in the cockpit of a spacecraft, watching the stars flash by while the instruments whirl.

```

10 'Wandering through Space
20 'Julian Smalley
30 'The Amstrad User Mar 87
40 MODE 0:INK 15,26:DEFINT a-z
50 DEG:INK 0,0:BORDER 0
60 FOR f=1 TO 360 STEP 6
70 p=INT(RND*(14)+1)
80 FOR z=30 TO 320 STEP INT(RND*(5)+1)+5
90 PLOT 320+z*SIN(f),250+z*COS(f),p
100 p=p+1:IF p=15 THEN p=1
110 NEXT:NEXT:FOR y=1 TO 100 STEP 2
120 MOVE 1,y
130 DRAW 640,y,0:NEXT:MOVE 1,1
140 DRAW 1,399,15:DRAW 639,399,15
150 DRAW 639,1,15:MOVE 1,1
160 DRAW 1,100,15:DRAW 639,100
170 DRAW 639,1:DRAW 1,1:MOVE 20,20
180 DRAW 20,80,15:DRAW 100,80,15
190 DRAW 100,20,15:DRAW 20,20,15:p=1
200 FOR x=24 TO 98 STEP 4:MOVE x,22
210 DRAW x,50,p:DRAW x,78,(15-p)
220 p=p+1:IF p=15 THEN p=1
230 NEXT:MOVE 120,20:DRAW 120,80,15
240 DRAW 200,80,15:DRAW 200,20,15
250 DRAW 120,20,15:p=1
260 FOR y=22 TO 78 STEP 2:MOVE 124,y
270 DRAW 160,y,p:DRAW 198,y,(15-p)
280 p=p+1:IF p=15 THEN p=1
290 NEXT:p=7:p=1
300 FOR f=1 TO 360 STEP 25.7142857
310 MOVE 260,50:DEG
320 DRAW 260+40*SIN(f),50+40*COS(f),p
330 PLOT 260+40*SIN(f),50+40*COS(f),15
340 MOVE 360,50:DEG
350 DRAW 360+40*SIN(f),50+40*COS(f),p2
360 PLOT 360+40*SIN(f),50+40*COS(f),15
370 p=p+1:IF p=15 THEN p=1
380 p2=p2+1:IF p2=15 THEN p2=1
390 NEXT:MOVE 420,20:DRAW 420,80,15
400 DRAW 480,80,15:DRAW 480,20,15
410 DRAW 420,20,15:FOR zx=1 TO 300
420 PLOT 424+INT(RND*(54)+1),22+INT(RND*(56)+1),INT(RND*(14)+1)
430 NEXT:MOVE 500,20:DRAW 500,80,15
440 DRAW 620,80,15:DRAW 620,20,15
450 DRAW 500,20,15:FOR p=1 TO 14
460 MOVE 504,50
470 DRAW 530,22+INT(RND*(56)+1),p
480 DRAW 560,22+INT(RND*(56)+1),p
490 DRAW 590,22+INT(RND*(56)+1),p
500 DRAW 618,50,p:NEXT
510 FOR f=1 TO 14:INK f,26:CALL &BD19
520 FOR d=1 TO 30:NEXT:INK f,0
530 CALL &BD19:NEXT:GOTO 510

```

We've now presented nine short programs for you to play around with. If you've got any of similar brevity let's have a look at them. They could earn you money!

SOFTWARE DISTRIBUTED BY



IMAGINEERING™

CPC464/6128 Titles

Supplier	Title	Cass	Disc
Activision	Barry McGuigan's Boxing	29.00	39.00
Activision	The Eidolon	29.00	39.00
Loricels	Fifth Axis	29.00	39.00
Activision	Ghostbusters	29.00	39.00
Activision	Hacker	29.00	39.00
Activision	Koronis Rift	29.00	39.00
Activision	Mermaid Madness	29.00	39.00
Activision	Mindshadow	29.00	-
Loricels	Pro Tennis	29.00	39.00
Activision	Rescue on Fractalus	29.00	39.00
Activision	Soccer	29.00	39.00
Activision	Championship Basketball	29.00	39.00
Electric Dreams	Allens	29.00	39.00
Electric Dreams	Spindizzy	29.00	39.00
Electric Dreams	Prodigy	29.00	39.00
Electric Dreams	Tempest	29.00	39.00

CPC6128 and PCW8256/8512 Titles

Infocom	Cut Throats	59.00
Infocom	Deaduns	59.00
Infocom	Enchanter	59.00
Infocom	Hitch Hickers Guide to the Galaxy	59.00
Infocom	Infidel	59.00
Infocom	Planetfall	59.00
Infocom	Seastacker	59.00
Infocom	Sorcerer	59.00
Infocom	Spell Breaker	59.00
Infocom	Starcross	59.00
Infocom	Suspect	59.00
Infocom	Suspended	59.00
Infocom	Wishbringer	59.00
Infocom	Witness	59.00
Infocom	Zork 1	59.00
Infocom	Zork 2	59.00
Infocom	Zork 3	59.00

For information on your nearest software dealer for the above titles, you can ring Imagineering on (02) 697 8666

SOFTWARE REVIEWS

A critical look at some more utilities

by Chris Collins

LOCKSMITH - Beebugsoft

Once again, we strike a problem with packaging. I do not believe that what I received, simply a disc in a plastic cover and a small instruction book, is the final packaging for the products. However as that was all that I was given, I can only review them as delivered. More about my thoughts on this problem at the end of this article.

Now on with the review. According to the front page of the instruction manual, LOCKSMITH is a tape and disc transfer package for the Amstrad range of personal computers. Oh no, not again. Here is another transfer package. I wonder how many more of these types of utilities the market will stand. However, putting that aside, let's have a good look at LOCKSMITH and see if it has anything that will make it stand out from the rest of the bunch.

I put the disc into the drive of my 6128 and did a quick CAT to see what was on the disc. This revealed only four programs occupying only 15k of what appeared to be a vendor format disc. DISC.BAS appeared to be rather self explanatory. LOCKRAM1.2 and VERSION1.2 seemed to fit in with the normal run of BEEBUGSOFT programs and refer to the actual LOCKSMITH files themselves. The last file was called ROMOFF. BAS and had me foxed for a long while but I believe that it has something to do with the ROM version. This was later confirmed by reading the

instruction manual.

All that seemed none too difficult. Let's type RUN"DISC and see what happens. I sat and waited and watched in spellbound amazement as the screen cleared, the disc rotated and I was presented with the Ready prompt. It must be time to dig out the manual and find out how to drive this program.

Opening the manual, we come across the introduction, which informs us with what LOCKSMITH is supposed to be able to do. Next in the book is the loading instructions. At least I had got those right.

After a bit more reading, I find that LOCKSMITH is very much related to that other BEEBUGSOFT utility that I like to rave about, DISC DEMON. The reason that they are so related is the fact that both can be accessed by RSX commands.

Aha, here it is! Type ! lock and away we go. This will bring up the main menu. This looks very similar to DISC DEMON even down to the colours, and don't some of those commands appear identical.

Now let's get down to the nitty-gritty of the package. These can be selected from the main menu, or implemented in the form of an RSX. If implemented from the main menu, all parameters will be prompted for. If instead you call the commands as an RSX, you are expected to supply all the parameters. In fact if you don't, an error code will be generated.

As with DISC DEMON, the

function keys on the numeric keypad are reset by the program. These seem to me to be a rather useful commands and include;

- :mode setting,
- :cataloguing of both drives,
- :echoing print to the printer (similar to CONTROL-P in CP/M),
- :recall of the LOCKSMITH main menu,
- :help and status.

Again BEEBUGSOFT have supplied a help command, which is called in a similar way to DISC DEMON, but with a slight twist. Very logical if you think of it. This command is very useful while you are getting to know this package.

LOCKSMITH supports five types of transfer between storage devices.

These include ;

- TAPETAPE
- TAPEDISC
- DISCDISC
- DISCCTAPE and
- BACKUP

Four of these are self evident.

The fifth (BACKUP) is a type of cloning copier. There are approximately six other commands available to help with your transferring problems.

These commands complement those listed above and include a copier for headerless tapes, and auto and manual transferring of programs on tape, something to load protected BASIC programs and a couple that give you header and status information.

Again in LOCKSMITH we have a couple of commands that appear to

be the same as the AMSDOS commands, but as with DISC DEMON they operate slightly differently. How differently is for you to read your instruction manual to find out.

Section Five in the manual deals with some solutions that may help you to get your transferred programs working properly. It is amazing the number of people who believe that all one has to do is transfer that favourite program from tape to disc and everything is hunky-dory. For those of you out there who think this is so, boy have I got news for you.

Transferring the program is usually the easiest part of the job. This chapter only skims over some of the problems that may crop up. The best way to find the answers to these problems is just to try rewriting parts of the program until they work.

Finally in the back of the manual is a COMMAND SUMMARY, listing all commands, functions and parameters necessary to get all 19 commands to work properly.

All the commands appeared to work well, although there was some trouble trying to transfer a couple of the programs that I use to test these utilities. This should not be seen in a wrong light though, as to date nothing has been able to transfer them. They have beaten everything I have tried to date!

My summary of LOCKSMITH would have to say that this is almost what one could call a complete package. LOCKSMITH and DISC DEMON appear to complement each other very well and as both are memory resident, they will allow you to leave-work on something else and then return to them to complete whatever you were doing, simply by pressing a function key.

If you don't have any utilities of this type, then by all means buy LOCKSMITH. At the same time get a copy of DISC DEMON.

Between the two of these programs, they could be almost all the utilities that you need for your Amstrad.

CONGRATULATIONS BEEBUGSOFT!!

Just a couple of final notes. In the front of the manual, there is a warning about what can happen to programs that are in memory when you invoke a couple of commands. Read it, and BEWARE!

Also, do not try loading both LOCKSMITH and DISC DEMON into memory at the same time. If you load LOCKSMITH and then load DISC DEMON, the second will wipe out the first. If you load DISC DEMON and then try to load LOCKSMITH, the cassette interface will switch on and your machine will lock up, needing to be switched off to fix the problem. You have been warned.

ULTRABASE

Ultrabase is described in the 36 page instruction manual as a general purpose file management program. On the disc it consists of five programs occupying 39k; this also includes a demonstration file. Backing up the disc is no real problem with the normal DISCKIT program.

When loading ULTRABASE, after you have been presented with a simple loading screen, you are asked to setup the maximum values for fields and records in this session of use. If you simply press ENTER, you will be given the defaults (10 and 100).

Unfortunately, these are different to what is specified in the manual.

After setting the values for records and fields, you then move onto the main menu of Ultrabase. This is where it is all supposed to start happening. A little tip at this stage that I found very useful when reviewing Ultrabase. If you press ESC at any time within Ultrabase, you will be returned to this main menu, very useful while

learning.

A problem does however arise from this main menu. None of the commands are mnemonics. For those of you that don't understand what this means is that an operation relates to its command.

For example, to LOAD a file into Ultrabase, one would use the command 'L' by itself or in combination with another key 'CTRL-L'. This probably wouldn't affect someone who used Ultrabase exclusively, but at times I use three different computers with seven different programs of this type. As the actual program is written in BASIC, I don't think that it would be all that difficult a problem to fix.

All menu options are single key inputs. Most times you will be presented with a further menu to choose from, and other times you will be given a command line to use. I personally find command lines easier to use, but menu driven systems are much easier to learn.

The main menu does cover all the commands that are necessary in any normal file management system. It does use a simple version to sort, but this is to be expected for the size of the program. However it can still sort on more than one field in a database, so it can't be all that bad.

To operate Ultrabase, you must first setup a filename on which any commands you execute can then operate. Once this is carried out, any future operations in this session will operate on the file specified. You can also change this filename at any time if you wish.

As we are trying to learn how to use Ultrabase to its best, I think that the best bet would be to use the demonstration file provided and follow the examples in the manual. This is called PEOPLE and is simply a small file of names and addresses. If you then follow the manual through the examples, Ultrabase appears very easy to

use. Nevertheless, some of the commands that carry out necessary maintenance on a file appear to be very convoluted in comparison to other programs of this type.

Another section of the manual is a reference section. This lists all the commands that are available, as they appear on the main menu, and then it goes into great depth to explain how each command works. It even gives you examples of use.

At the rear of the manual, are five appendices that will help you in the use of Ultrabase. These include tips on configuring your printer, warnings about memory, file backups, Date-of-birth formats as well as some other supplementary operations.

In summary, Ultrabase appears to be very easy to use. The menu system employed is a definite asset in this case. Some of the operations do appear very convoluted, but in use I don't know whether that would necessarily be the case. For such a recent program not to access

the extra 64k banks that are available is a fault, how much of a fault depends on the size of your databases. If they get too large, or you think that they might, you will require something like Masterfile128 or MasterfileIII. I do have a couple of misgivings about the command system but if you are a reasonably competent BASIC programmer, most of my misgivings could be fixed.

For the moment I believe that Beebugsoft have made a bad mistake with Ultrabase. It just isn't up to the standard of their utilities. In this case I believe that Beebugsoft should stick with the excellent utilities that it produces and improve them.

MY GRIPE ABOUT PACKAGING

You will note in this article that I have referred to the lousy packaging that has accompanied the programs that you have just read about. A lot of people might feel that this is a rather petty

whinge about something not very important. That is their prerogative. Be that as it may, I am given the task of reviewing a piece of software.

To me, that doesn't just apply to the program itself. The software also involves, to my way of thinking, the program itself, the instruction manual and any packaging. If any of these three parts is below par, I believe that YOU, the possible future purchaser of this software deserves to be told. It is your right to know. Okay.

The software itself may well be fantastic, the packaging absolutely great, but if the manual is written in such a way that it is impossible for the first time user to figure out how to use his new purchase, what good is it?

Maybe I'm wrong. I would be interested in hearing some viewpoints.

SCREEN GRAPHICS PACKAGE V.6

The Package is made up of a Disc containing:

- * A Drawing Generator program using screen Modes 0 and 1
- * A Character Editor and Graphics string variable producer

Also on the disc, Character set loader, Disc directory editor, Drawing program demonstration, Library of mergeable pictures and character sets.

The Drawing program is ideally suited for school children: once they have been shown how to use the program they can quickly make quality pictures by combining a series of pictures supplied on side 2 of the disc. Also, experienced computer users can use the Drawing program to produce graphics for their own programs. For example, to illustrate Adventures, as the Drawing generator has among its many features the ability to save an area of the screen in a compressed format and then merge them with another picture. A free Public Domain program allows these pictures to be loaded or merged by other programs in ALL screen modes.

6128 owners can use the enhanced version of the program. The Character Editor can be used to create Alpha-Numeric character sets, create multi-colour characters and save the U.D Chars as data or as a Basic program.

Now available Library Disc #2 - contains both Mode 0 and Mode 1 pictures to use with the Drawing program plus character set and Helpfile.

Screen Graphics Pak. V.6
Library Disc #2

* **SPECIAL** * Scr. Gr. Pak. V.6 & Library Disc #2

\$45.00 + \$2.50 Post and Packing (Disc only)
\$19.95 + \$1.50 Post and Packing
\$59.99 including post and packing

Bankcard and Visa card accepted. Dealer enquiries welcome.

**BUNYIP SOFTWARE, PO BOX 591,
MURRAY BRIDGE, SA 5253**

THE LIGHTHOUSE

A Text Adventure Game - Final Part

by Phillip Riley



For longer than anyone can remember the old lighthouse has stood on the Island of Lost

Souls just off the coast of Southern England. And for almost as long, the sound of creaking finger joints chilled the Antipodean night air as stubborn adventurers, feverishly at first but now with energy draining, were reaching the end of their depressing task - that is depressing the keys.

```

2030 IF it(19)=500 AND c=
19 THEN PRINT"It is blunt.":GOTO 160
2040 IF it(14)=500 AND c=14 THEN PRINT"I
t is a chart of a far away land.":GOTO 1
60
2050 IF it(15)=500 AND c=15 THEN PRINT"I
t is the log book of the Marie Celeste.":
GOTO 160
2060 IF it(3)=500 AND c=3 THEN PRINT"It
gives out a feeble light. Maybe some oil
would help it alittle.":GOTO 160
2070 PRINT"You see nothing unusual.":GOT
O 160
2080 IF n=260 AND c=33 THEN PRINT"You wa
lk through the doorway and into the li
ghthouse.":n=86:GOTO 450
2090 PRINT"You can't do that at the mome
nt.":GOTO 160
2100 IF n=86 AND c=33 THEN PRINT"You wal
k out of the lighthouse through the ope
n doorway.":n=260:GOTO 450
2110 GOTO 2090
2120 IF n=271 AND t4=0 AND c=32 THEN PRI
NT"You move the stones and find a box of
";it$(10);" hidden underneath.":it(10)=
271:t4=1:GOTO 1550
2130 IF n=271 AND t4=1 AND c=32 THEN PRI
NT"You move the stones but find nothing
of any use.":GOTO 160
2140 GOTO 2090
2150 IF n=313 AND c=22 AND it(21)=500 AN
D t5=0 THEN PRINT"You smash the brick wa
ll to pieces with the ";it$(21);".";Loo
king past the rubble you see a stone sta
irway that leads upwards into
light.":t5=1:GOTO 160

```

```

2160 IF n=313 AND t5=0 AND c=22 AND it(2
1)<500 THEN PRINT"You have nothing to s
mash the wall with.":GOTO 160
2170 IF (n=268 OR n=136) AND it(t)=500 A
ND (c=25 OR c=34) AND t8=0 THEN PRINT"Yo
u force the lock on the door with the ";
it$(7);". You have oned the door but y
ou have also broken the ";it$(7);".";t8=
1:it(7)=0:GOTO 2760
2180 IF (n=268 OR n=136) AND it(7)<500
AND (c=25 OR c=34) AND t8=0 THEN PRINT"Y
ou have nothing to force the lock.":GOTO
160
2190 IF (n=268 OR n=136) AND t8=1 AND (c
=25 OR c=34) THEN PRINT"The door is alre
ady open.":GOTO 160
2200 PRINT"You have nothing worth breaki
ng.":GOTO 160
2210 IF it(20)=500 AND it(19)=500 AND t6
=0 AND c=19 THEN PRINT"You sharpen the
";it$(19);" on the ";it$(20);".";t6=1:GOT
O 160
2220 IF it(20)<500 AND it(19)=500 AND c
=19 AND t6=0 THEN PRINT"You have nothing
to sharpen it on.":GOTO 160
2230 IF it(20)=500 AND it(19)<500 AND c
=19 AND t6=0 THEN PRINT"You have no razo
r.":GOTO 160
2240 IF it(20)=500 AND it(19)=500 AND c=
19 AND t6=1 THEN PRINT"It has already be
en sharpened.":GOTO 160
2250 PRINT"You have nothing to sharpen.
":GOTO 160
2260 IF it(19)=500 AND c=30 AND t6=1 AND
n=281 THEN PRINT"You chop the spiders w
eb to pieces with the ";it$(19);".";The
spiders scurry away down holes in the
walls and floor.":t6=2:GOTO 160
2270 IF it(19)<500 AND c=30 AND t6=1 AN
D n=281 THEN PRINT"You have nothing to c
ut them with.":GOTO 160
2280 IF it(19)=500 AND c=30 AND t6=1 AND
n=281 THEN PRINT"You have already cut t
he cobwebs into little pieces.":GOTO 1
60
2290 IF n=281 AND c=30 AND t1=0 AND it(1
9)=500 THEN PRINT"You try to cut the cob
webs but the razors blunt. You disturb
the spiders and they attack you. Injec
ting venom into your body with their t
eeth. You die a slow and terrible deat
h.":GOTO 1590

```



```

2300 GOTO 2090
2310 IF it(16)=500 AND c=16 AND n=222 THEN PRINT "You give the pirate ghost a "; it(16);"."; "He looks very pleased. I think he will let continue on your journey"; yp(222)=1:it(16)=0:yh=yh-1:GOTO 160
2320 IF it(16)>500 AND c=16 AND n=222 THEN PRINT "You don't have a "; it(16);"; to give.":GOTO 160
2330 IF n=222 THEN PRINT "He refuses your offer.":GOTO 160
2340 PRINT "That will not help you at all.":GOTO 160
2350 IF it(9)=500 AND s1=0 AND c=35 THEN PRINT "You drink the rum and soon you are blinddrunk. Staggering around you fall and crack your skull open.":GOTO 1590
2360 IF (s1=1 AND it(9)=500 AND c=35) OR it(9)>500 THEN PRINT "You have no rum to drink.":GOTO 160
2370 GOTO 2090
2380 IF it(4)>500 THEN 2400
2390 IF c=4 AND n=54 THEN PRINT "You throw the "; it(4); "over the giant crab and it soon becomes entangled. It soon runs for the safety of the sea. I don't think it will come back here.":s2=1:it(4)=0:GOTO 160
2400 PRINT "Throwing that won't help you.":GOTO 160
2410 IF it(5)=500 AND c=36 AND s3=0 AND n=5 THEN PRINT "You pour the weedkiller onto the seaweed the seaweed instantly shrivels up and dies.":s3=1:GOTO 160
2420 IF s3=1 AND it(5)=500 AND c=36 THEN PRINT "You don't have any.":GOTO 160
2430 GOTO 2090
2440 IF c>21 THEN PRINT "That item cannot be taken at the moment.":GOTO 160
2450 IF yh>4 THEN PRINT "You are trying to carry too much.":GOTO 160
2460 IF c=8 THEN PRINT "You are not a bottle. Try something else":GOTO 160
2470 IF c=9 AND s4=2 THEN it(8)=500:yh=yh+1:s4=1
2480 IF it(c)=n THEN PRINT "You take the "; it(c); "yh=yh+1:it(c)=500:GOTO 160
2490 c=22:GOTO 2440
2500 IF c>21 THEN PRINT "You don't have that item.":GOTO 160
2510 IF c=8 AND it(8)=500 THEN PRINT "You pour the oil away.":it(8)=0:s4=0:GOTO 160
2520 IF s4=1 AND c=9 THEN it(8)=n:yh=yh-1:s4=2
2530 IF it(c)=500 THEN PRINT "You drop the "; it(c); "yh=yh-1:it(c)=n:GOTO 160
2540 c=22:GOTO 2500
2550 PRINT "Don't be so violent.":GOTO 160
2560 PRINT "Please be more specific.":GOTO 160
2570 IF it(15)=500 AND c=15 THEN PRINT "You try to read the logbook but it has been dropped in some water and most of t

```

```

he writing is illegible. You can only make out the words
DON'T BE A GREEDY MAN.":GOTO 160
2580 PRINT "You have nothing to read.":GOTO 160
2590 IF t8=0 AND n=136 AND c=25 THEN PRINT "The door is locked.":GOTO 160
2600 PRINT "You have nothing to open.":GOTO 160
2610 PRINT "
YOU ARE CARRYING.
":o=0:FOR t=0 TO 21: IF it(t)=500 THEN PRINT it$(t):o=1
2620 NEXT:IF o=0 THEN PRINT "NOTHING."
2630 GOTO 160
2640 PRINT:PRINT "STARTING TO PANIC ARE WE":PRINT "WHAT NEXT COWARD.":bs="":GOTO 170
2650 IF n=98 THEN n=113:PRINT "You walk up the rough and uneven steps.":GOTO 450
2660 IF n=174 THEN n=164:PRINT "You walk up the stone steps.":GOTO 450
2670 IF n=313 AND t5=1 THEN n=212:PRINT "You walk up the stone steps and find yourself in daylight.":GOTO 450
2680 IF n=86 OR n=71 THEN n=n-15:PRINT "You walk up the stairs to the next level.":GOTO 450
2690 GOTO 430
2700 IF n=113 THEN n=98:PRINT "You walk down the stairs.":GOTO 450
2710 IF n=164 THEN n=174:PRINT "You walk down the uneven steps.":GOTO 450
2720 IF n=212 THEN n=313:PRINT "You walk down the steps and into the dark caverns below.":GOTO 450
2730 IF n=56 OR n=71 THEN n=n+15:PRINT "You walk down the steps to a lower level.":GOTO 450
2740 GOTO 430
2750 CLS:PRINT "SO YOU HAVE DECIDED TO GIVE UP HAVE YOU.WHAT A PATHETIC FOOL YOU ARE.":END
2760 IF n=268 THEN yp(268)=1:GOTO 160
2770 yp(136)=1:GOTO 160

```



But that's not quite the end of the story. For there are some among us who will realise their goal much more quickly

by sending \$5 now for the tape. And there are even more among us who will get the tape anyway because they have a tape subscription. Oh, how the rich live!

Alas, there will also be a few PCW owners who will buy the tape forgetting that they don't have a tape reader on their machine (you've gotta believe it!)