***** EINSTEIN USERS DATA-BASE *****
3 Mayfield Avenue, Scarborough North Yorkshire YO12 6DF

Dear Einstein Owner,

A very important software package has just been launched and I want you to be one of the first to know all about it so that you'll be able to act today and reap the benefits from it.

You will have noticed that the Amstrad computers have been a runaway success. Every computer shop is selling Amstrad; every newsagent has Amstrad magazines and there is an amazing variety of Amstrad software - Amstrad software for business; Amstrad software for games; Amstrad software for education and serious users. Their range of software is amazingly wide, quality is generally high and prices are usually far lower than for other computers.

Your EINSTEIN hardware is better in almost every way than the Amstrad. The quality of the EINSTEIN machine is super and there is no way that I would want to part exchange mine towards a new Amstrad. But where is all the software for EINEY ? Do you have all the software you want? We've got great hardware but without software support we are sunk.

*** NOW EVERYTHING HAS CHANGED ***

Dramatically, almost overnight we have entered into a whole new ball game. Welsh computer consultants have created a disc based utility which enables the Einstein computer to run many of the Amstrad configured C/PM programs. At a single stroke more software has become available than we'd ever dreamed about. There is just so much Amstrad software available, at very reasonable prices to do just about any job you'd wish.

The new disc based utility includes a copy of C/PM 2.2 - all properly supplied and licensed by Digital Research. The disc also includes the Amstrad / Tatung emulator program which is the bit which actually runs the C/PM 2.2 Amstrad programs through the EINSTEIN hardware. It comes complete with instructions showing you how to run it on either a single or double drive Einstein - using it is very easy. Don't forget that this is a DISC-BASED utility, there is no 'black box' hardware like the Spectrum Emulater, everything comes on disc and you use the programs very easily without any need for special interfaces, no special ROMS or anything else is required.

It ought to cost £34.95 but I can send it to you for only £29.95

Besides saving yourself a fiver there are other good reasons for purchasing this software straight away through our user group. With the software you'll get an initial list of programs which will run through the emulator. Then, for the next six months we'll keep you fully in the picture by sending you copies of the EINSTRAD REVIEW, a news-letter with updated lists of software, user hints and tips and lots of feedback from other committed EINSTEINERS. With that sort of backup you can stick with the EINSTEIN / Amstrad combination for as long as you wish.

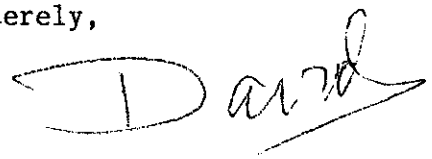
YOU SHOULD ACT STRAIGHT AWAY. Tatung themselves are already preparing to announce a 75% price rise on this software. We expect that we ourselves will have to raise prices on October 1st. so the £29.95 special offer must be taken up straight away. It costs absolutely nothing to use the freepost envelope TODAY to get your copy, and of course the backup service I have mentioned is definitely yours also. But I have even better news.

The software is certainly worth £34.95 - at the special price of £29.95 it's a real bargain - include the free subscription to EINSTRAD REVIEW and it is just daft to let the chance slip by. BUT I MIGHT EVEN BE ABLE TO GET YOUR DISK FOR ONLY £19.95. A mistake was made in the original deal and I have jumped in to get some copies of this utility at a price of £19.95. I must join the queue along

with the trade dealers - some of whom just want copies for themselves whilst others will be passing the copies along to their own favoured customers. I want you to benefit if possible so although I don't know yet how many I can pass on at £19.95 they will be allocated definitely on a 'first come first served' basis. So send me your £29.95 but perhaps you will be one of the 'early birds' to get a £10.00 refund when you receive your disc.

Here at the Einstein User Database we want to see the EINSTEIN computer prosper long into the future - remember we ourselves rely a great deal on using EINSTEIN in our own business and we are totally committed to Einey. Now a fresh lease of life has been added with this new capability of the Einstein. You can be there. Write me - right now before you miss out on the deal of the decade.

Yours sincerely,



David Martin

P.S. This is what our Welsh experts say about their newest brain-child :

AMTAT is a CP/M based program that allows the Einstein range of microcomputers to read the Amstrad PCW8256 / PCW8512 and CPC6128 (system and data format diskettes). This utility opens the door to a vast range of low cost CP/M software available on the Amstrad 3" disk format.

The EMULATOR utility also allows many Amstrad configured C/PM programs to run directly on your Einstein microcomputer. The EMULATOR mimics the Amstrad screen text format. This allows many Amstrad configured programs to run directly on the Einstein micros.

The AMTAT and EMULATOR programs are supplied with a full version of the C/PM 2.2 operating system. This complete system will be available at a normal recommended price of £34.95.

AMTAT and EMULATOR are AVIALABLE NOW

Needless to say you must conform to the rules on software copying as laid down by your software house/supplier.

A.C.C. Computer Services
8 Water Street
Aberystwyth

There you have it friends.... straight from the manufacturers themselves. Through Einstein User Database YOU can have this fantastic new system AND our backup for only £29.95. I look forward to hearing from you .....

To reserve your own copy please send your green order form straight away to Scarborough in the freepost envelope.

HOW TO RECOVER AN ERASED FILE:

This information is specially for those who erased a file by ACCIDENT. Firstly have you noticed that when you SAVE a file (say on the wordprocessor) it takes ages and ages to grind through it all and write it to disc. But when you ERASE a file, whoooosh, that's it, thanks a million, it's gone, in an instant. If you have noticed this little quirk then you are half way to understanding this little lot.

When you save a file the computer does two separate jobs; firstly it writes the name of the file into the DIRECTORY and secondly it then writes the file onto the disc. Having read the above article you're now an expert on discology (all additional info is welcome from any real experts out there) and you know full well that the DIRECTORY is always kept on the same place of the disc - otherwise poor old Albert would go berserk looking for a directory every time you did a 'DIR'. When Albert writes the file name into the directory he must first of all have a file name to write and there must be a free space for him to write it into because the directory will only hold 80 entries (fairly generous I would imagine because I have never seen the error message 'NO DIRECTORY SPACE LEFT'). What Albert doesn't tell you, because you don't need to know is WHERE on the disc he is going to put the file itself. Albert puts the file wherever he can find space, he doesn't need a huge wide space to do it, if necessary he'll break the file up into little bits and scatter it all over the disc. First of all he looks for 'virgin' space previously untouched by his predations but if he cannot find any 'virgin' space he'll pick out chunks of disc which have been used in the past but which are now 'erased' and therefore 'available'. (Albert prefers an available 'virgin bit') Of course he leaves a careful trail (starting from the Directory entry) of locations and addresses so that when YOU the mere user needs the file again he can run rund the disc and collect it all up. One of the little secrets that programs like DISCMOD (Disc modification available from Kuma - or the C/PM Utilities under similar names or the super-doopah DU86) will reveal is the actual start of the files as indicated by the Directory listing - once you know that then you have the capacity to start hacking about with the contents of the files because you can change the contents of the disc. But what we are about to do is FAR, FAR SIMPLER.

The above is what happens when Albert saves a file. When he ERASES a file he's an idle little tyke - he only does as much erasing as he needs to. So, when you say 'ERASE LETTER6' to your wordprocessor (or ERA LETTER6.UFT if you're using DOS commands direct) Albert very quickly erases the entry in the DIRECTORY for LETTER6. Albert doesn't bother running all around the disc erasing the whole file - why should he? If you can't find the start of the file it's as good as erased and you certainly cannot find a file starting point without being pointed to it by the directory. So when you erase a file you only erase the directory entry and not the actual file. I'll say it again because it is important 'When you erase a file you only erase the directory entry and not the actual file'.

I'll say it yet again because it is really important for you to grasp WHEN YOU ERASE A FILE YOU ONLY ERASE THE DIRECTORY ENTRY AND NOT THE ACTUAL FILE.

Right, let's crack along. The steps to follow are these, first we take the disc with the erased files on it and we read the Directory tracks into Einsteins memory; second we view the memory on screen and identify the files we want to recover; third we modify the memory by changing a few characters here and there; fourthly we write the revised directory back onto the disc thus replacing the old unwanted directory; fifth we call up the 'erased' files in the normal manner. Just a word of caution, I suggest you make a backup copy of a disc and experiment with that rather than play around with a valuable data disc and secondly, do read all this article before you start work on the disc - this is not to suggest there is anything clever about what we are going to do, it's just common-sense caution.

All this work will be done in MOS, so get into MOS by typing MOS and enter or by turning on Einey WITHOUT a disc in the drive. We'll be using FOUR separate MOS commands - you've already met the R (READ) and W (WRITE) commands, the two new ones will by T for TABULATE on page 12 and M for MODIFY on page 10. You're in MOS and you've got the duff disc in the drive. Type R8000 99F8 002 and enter. Notice that this is slightly different to the system track details mentioned in the above section on 'DISC NO SECTOR ERRORS'. What has now happened is that Einey has read from the disk those tracks where the DIRECTORY is stored. The 'duff' directory is now inside Einey but we need to see it so enter T8000 99f8 and press enter. A screen full of data will now appear and given about a minute it will work its way through the whole directory. The BREAK key will pause the upward scrolling and the ESC key will kill the scroll for good. Assuming you do it once for a 'look see' and second for real, enter the T command (T8000 99F8 plus enter) all over again and this time kill it as soon as she appears on screen. You've seen Directory listings before but this is the raw unsanitized stuff which shows every file that exists on disc and most of the files which have EVER existed. The screen now look something like:

(SAMPLE screen display only - yours will have YOUR files on it obviously):

```
8000 e5 46 52 45 44 20 20 20 eFRED
8008 20 55 46 54 00 00 00 01  UFT....
8010 01 00 00 00 00 00 00 00 ........
8018 00 00 00 00 00 00 00 00 ........
8020 00 4a 45 4e 59 20 20 00 .JENNY
8028 20 55 46 54 00 00 00 01  UFT....
8030 02 00 00 00 00 00 00 00 ........
8038 00 00 00 00 00 00 00 00 ........
8040 00 50 41 55 4c 20 20 20 .PAUL
8048 20 55 46 54 00 00 00 01  UFT....
8050 03 00 00 00 00  etc. etc.
```

This listing would carry on right through all the numbers up to 99F8 (By the way the directory might extend to 99FF but 99F8 works and I'll stick with what I know). Now we must move onto the next step which is to identify the files we have erased and which we want to recover. We do this 'by hand' rather than by computer. Notice that JENNY and FRED are prededed by a full stop and this indicates that they are alive and kicking and really do exist in the directory (test it before and after by checking DIR when in DOS but don't do it half way through the operation). The file called FRED.UFT is a standard Kuma Wdpro file which has been erased... note the 'e' instead of a full stop just before the name. To identify the files you wish to unerase make a note of the number on the far left hand side of the screen... if I want to unerase the FRED file then the number I need is 8000. It's easy when there is only one to do but paper comes in handy if you are going to have to go through the whole directory screenful after screenful. When you have noted all your changes 'kill' the display by pressing ESC.

Now we get to the M for MODIFY command shown on page 10 of the manual. You'll probably have twigged that the numbers shown above are all HEXADECIMAL numbers - the numbers 46 52 45 44 on the first line are the HEX numbers for the word 'FRED' and what we need to do is to change the HEX numbers which represent the 'e' before FRED to the hex numbers which would turn it into a full stop. So type M8000 followed by enter (if you were doing some more it could be M8080 and enter.) Immediately on screen you'll see the two digits E5 appear. OVERTYPE these two digits by typing 00 (zero and a zero) followed by a full stop. The fullstop signifies that is the end of the M for MODIFY command. You have now changed the direcory so that the directory inside Einsteins memory which used to say that FRED was erased now says that FRED is alive and exists in the directory. Great, but it is no use until you have written the new directory back onto the disc and by doing that you will overwrite all the old unwanted directory. The command is W8000 99f8 002 and enter. Notice that you need the 002 for this one. You'll see the disc light come on and the new directory will be written in place of the old. At this point I always turn off at the main switch and re-power up. I know I'm terribly cautious but I once wrote a directory onto the wrong disc and it makes the whole disc useless and I wouldn't wish it to happen to anybody. When you power up again, you'll come up in DOS and if you do a 'DIR' you'll see that the directory will contain the file or files which were previously erased. Just test things by actually using the file - call it up into the wordpro or run it or whatever.

I cannot work out (looking at page 12) why the numbers need to be 8000 99F8 002 --- it's the 002 I don't understand, it doesn't seem to tie up with the manual BUT IT WORKS so what the hell. Another point to bear in mind is that this method will only recover a file if the bits of file scattered around the disc have not been written over. If you accidentally erase a file and IMMEDIATELY take steps to recover it then you'll get it back. If you write other files onto the disc and then a few days later have a go at getting it back then you can ALWAYS get the directory listing back but you might find that some bits of the