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Apple], //e, //c, & Mac –
the reason for it all!
(and Apple// & Lisa!)

Editorial

Peter J.Pegg



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First, an apology. I misread my diary when I was setting up **What's When** last month. I should have shown the September meeting as 15 September, and the committee meeting as 16 September. Last month's issue was delayed a little by the short week caused by the RNA show.

September should be a big month for Apple // series users with some significant new product releases. Unfortunately, we have no advance information, so we'll have to wait till next month to find out exactly what is coming out. Major Macintosh releases are scheduled for January. Despite the doom and gloom journalism from some quarters, the Apple core seems to be fairly free of worms and rot!

What's When

Sunday 15 September
Open Day at the Hooper Centre

Monday 16 September
Committee Meeting

Sunday 20 October
Open Day at the Hooper Centre

Monday 21 October
Committee Meeting

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notes

SECRETARY'S

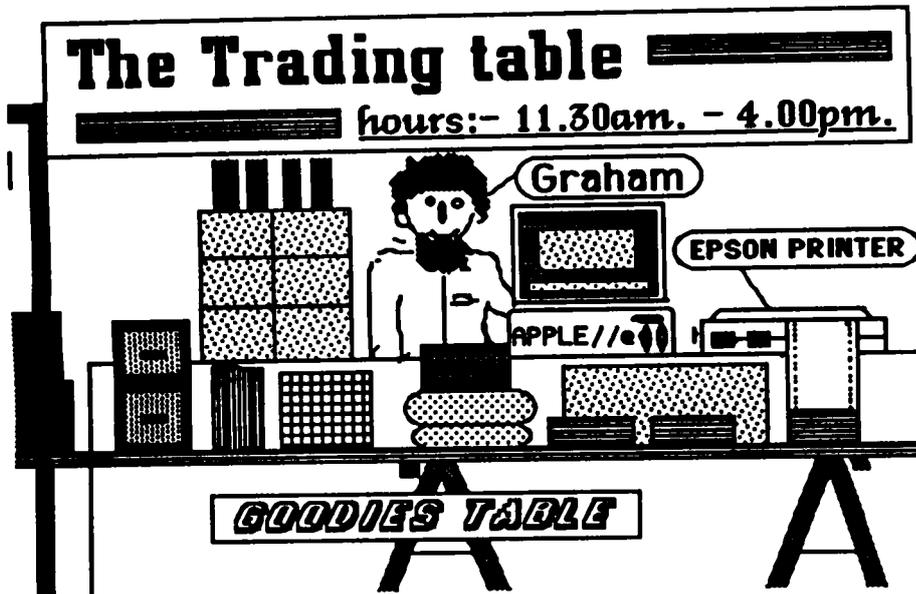
NOTES DAVID BOURNE

Since my last report we have had 20 new members, from Caboolture(2), Alexandra Headland, Newrybar, Park Ridge, Woodridge, Gympie, Daisy Hill, The Gap(3), Bracken Ridge, Toowong(2), Chapel Hill, Windsor, Robertson, Bundaberg, Tarragindi, and Middlemount. Welcome to the new members. For older members, remember to look at your mailing label before you throw it away. A renewal reminder will be printed on the label when you have less than 3 months to run on your present subscription. Membership is still \$18 per year, \$9 for students. If your membership is to expire soon return the mailing label with your payment to ensure continued club benefits. Please let me know if you change your address or if there is any problem with the delivery of your newsletter.

Only one advertisement was received from: **Oznet** (G.P.O. Box 2943, Sydney, NSW 2001) for a multiline bulletin board. I will bring this ad and earlier ones to the club meeting for your perusal. Alternately, you might write directly to the advertisers. Listing of these advertisers is for interest only. I have no particular knowledge of any of these suppliers.

This month we received a number of club newsletters/magazines. What appears to be the last newsletter from the Microcomputer Society contains a notice that the Society is to be disbanded. It seems that membership has dropped. The August issue of *AUSOM NEWS* contained articles about Zapping with Pro-DOS, transferring CP/M files with a single disk drive, viewing DOS text files, Mac (SIG) report, customising your Mac Disks (use of Redit and Fedit), and a listing of Australian bulletin boards. *Applecations* (Sydney A.U.G. magazine), August issue, contained articles about running Applesoft programs with ProDOS, Mac(SIG) news and MacInnards (part 1); reviews of Grappler+ parallel printer interface card, Arcademic - Skill - Builders, Pensate(Mac), and Penman plotter; and data for MacSurf and Omnis 2.

That's all for this month.

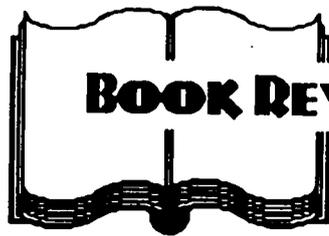


- | | | |
|----|-------|-------------------------------------|
| 0 | 525 | Single disks SS/DD |
| 1 | OZLIB | Datalife SS/DD (with library case) |
| 3 | CBITS | Control Data SS/DD (loose) |
| 4 | CBITS | Xidex SS/DD (with library case) |
| 5 | CBITS | Basic Programming. Do-it-yourself |
| 6 | CBITS | Workshops in Computer Studies. vol1 |
| 7 | CBITS | Workshops in Computer Studies. vol2 |
| 8 | CBITS | The Computer Connection by A.Wolfe |
| 11 | CBITS | Memorex 3.5" (86mm) disks |
| 15 | CBITS | Media drawer for 3.5" (86mm) disks |
| 16 | CBITS | DX-45 Disk tray (45) |
| 17 | CBITS | DX-80 Disk tray (80) |
| 18 | CBITS | Epson MX80 Ribbon cartridge |
| 20 | CBITS | Epson MX80/100 Ribbon refill |
| 21 | CBITS | MF Disk drawer lockable (100 disks) |
| 22 | CBITS | Disk tray (30 disks) |
| 23 | CBITS | Memorex library case (10 disks) |
| 30 | CBITS | Disk labels, fan-fold (1000) |
| 33 | CBITS | 6 ring binder, hard copy |
| 35 | 41478 | General cleaning pad |
| 38 | 41480 | CRT cleaning pad |
| 48 | CBITS | Disk storage binder (20) |
| 50 | MF | Keyboard cover (smoked/clear)[//e] |
| 51 | MF | Keyboard cover [//c] |
| 83 | CBITS | Disk diary (10) |

For Sale

Apple 80 column card, suit Apple //e.
\$75.00

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**DAVID BOURNE**

Apple LOGO – Activities for Exploring Turtle Graphics by Harold J. Bailey, Kathleen M. Brautigam, and Trudy H. Doran. Published by Brady Communications Company, Inc., Bowie, MD \$23.95. 242 pages.

The stated purpose of this book is to describe the use of Apple LOGO turtle graphics. Each section of the book has the parts: **Turtle trials** – hands-on steps to be performed on the computer; **Turtle Talk** – a description, overview, of the material just covered; **Turtle Truth** – a detailed example to think about and try; **Turtle Tester** – brief programming ideas to illustrate the section covered; and finally **Turtle Teaser** – a suggestion for extended activity on the theme.

Chapter one covers moving, turning (angles and headings), toggling penmode, repetition (squares, polygons etc), circles, and arcs. Saving turtle programs, listing the programs (files), editing programs, and cataloging files are the topics covered in the next Chapter. Variables within the programs, pen and background colour changes, recursion, listing variable values, conditional statements, and complex recursion examples are described in Chapter 3. Turtle drawing and plotting on graph co-ordinates is the major topic of Chapter 4. The final Chapter describes the Part-to-Whole and the Whole-to-Part approach to programming as ways to develop more complex LOGO programs and thus more intricate designs. A resource list of books and articles is included with solutions to the Turtle Testers.

The authors present their topic in a very concise and information fashion. There is plenty of feedback and encouragement to complete each exercise. The book should be read with the computer operating for the maximum benefit. In this fashion the book should be very useful for anyone wishing to learn LOGO turtle graphics.

BASIC Business Application Programming for the Apple//c by Alan J. Parker and John F. Stewart. Published by Reston Publishing Company, Inc., Reston, VA \$27.50. 307 pages.

This is a second edition, updated for the Apple//c. The aim of this book is to allow the reader to tackle simple computer applications and also to use a spreadsheet program (Visicalc). The book is designed to be read through while at the computer. The first chapter is a short introduction, dealing with computers, BASIC, and using the Apple. The next chapter starts the programming, with a page describing flow charts, before the first program which performs a single pay calculation. Statements, variables and the BASIC commands NEW, LIST, and RUN are introduced. Margin headings, flow charts, examples and program listings are used to present the material concisely. Pay, invoices, inventory are topics dealt with as examples. The INPUT, GOTO, and IF-THEN statements are covered in the next chapter on data entry.

Sequential files and ONERR are the topics of Chapter 4. Data storage, retrieval, and editing are covered here. Writing reports from sequential data files is the topic of the next chapter. With formatting the major emphasis (using SPC and TAB commands). Chapter 6 covers adding and deleting records from a file, while Chapter 7 is headed updating sequential files. Data coding is included. The next Chapter is called Using Lists and Tables with one example being a tax withholding scale. Direct access files are introduced in Chapter 9. Use and design of complex programs are covered in Chapter 10. A linear regression program listing is given as an example of a complex program to use. Inventory Update is an example of a program to design. Advanced concepts covered in Chapter 11 include screen editing of BASIC programs (ESC sequences etc), lores graphics, hires graphics, EXEC files, and output formatting. The final Chapter is a brief discussion of Viscicalc and its use.

The Appendix includes a list of BASIC commands, a short (small 25 item) SORT program for use with the book examples, a list of error messages, control commands, and some disk use information.

Overall the book presents a lot of material with a strong business emphasis. Someone starting to program, starting to program small business applications would probably find the book quite useful. Even a beginning BASIC programmer would benefit from the book, but the single theme of the examples could be tiresome and there are plenty of other beginning BASIC books.

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The material is well presented, with plenty of examples, flowcharts to give an overall feel, and program code to give the detail. Again the reader should work through the material at the computer for the maximum benefit. It looks like it should be very useful for a beginning business programmer.

The Epson Connection: APPLE by W.H. Darnell and D.B. Corner. Published by Reston Publishing Company, Inc., Reston, VA 223 pages.

This book should be of great interest to Apple II owners who have an Epson printer. The Epson MX, FX, and RX series are covered. ComRiter printers are also included. The book gives many details and helpful hints to assist the user make the Apple and Epson work together with many different programs. There are a number of Apple hints as well.

The first chapter is an introduction. This gives an outline of the book and reasons for writing it. The book is especially useful for answering questions about printer strings, e.g. ESC RS 01h. A summary of the book is included in the chapter along with further reading. Chapter 2 gives an overview of the Epson printers, while the third Chapter gives an overview of the Apple computer. The third chapter describes the Apple, additional interface cards and accessories, and some software. The fourth Chapter describes the Apple - Printer interface. Nine brands of interface card are described briefly and features to look for are discussed. Operating systems and languages are described next. Included in Chapter 5 are DOS, CP/M, Pascal, machine language, assembler, BASIC and Pascal.

Chapter 6 describes in detail the Epson printing features, e.g. character pitch, italic printing, page formatting etc. Numerous examples are given for each printer model. The seventh Chapter gives the same detail for the graphics features of the various printers.

Application programs are put into four categories depending on how they interact with the printer. Type A has predefined in-text controls (e.g. Wordstar), type B has user defined in-text controls (e.g. Applewriter II), type C has user defined set-up strings only (Visicalc), and type D allows only straight ASCII output. Set-up procedures for Wordstar, AppleWriter II (with Shift key mod), and Visicalc are given in details. Other programs are briefly mentioned. A printer setup program is given for type D programs. Printer codes and program documentation are deciphered briefly.

[continued p.10]

Wanted
Enthusiastic
EAMON Adventurers
 to write a short article on how to use
 the EAMON series. Please contact the editor

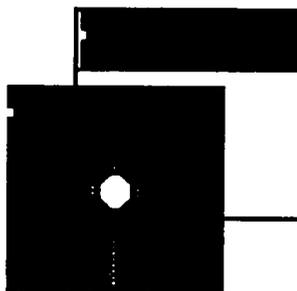
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- 2) RS232 Serial interface card and manual \$40.00
- 3) Apple //e technical reference manual x 2. \$25.00
- 4) Z80 C/PM card with Apple C/PM system disk
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- 5) Grappler printer card with manual and
 printer cable \$50.00
- 6) Atlas slim-line disk drive \$120.00

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074 581 232 or

P.O. Box 124, Longreach, Q 4730

for further information.



PSYCHIC INTERFACE???

Barry J. Greaves

Apple Computer Company have much to answer for – divorced floppy disk jockeys, and fingernails chewed right down to the Bankcard line, are but two signs that designate the households which include the Happy Hacker. But I digress, Your Honour. My case against Apple Computer Company relies heavily on the hitherto undocumented Slot #8 in the Apple][+ and //e computers. Undocumented, yes... but nonetheless present, and oftimes active (as I shall show).

Apple have tried all along to confuse the computist. In the Apple][+, we had eight Slots, cunningly numbered from #0 to #7. Then in the Apple //e, they eliminated Slot #0 – but did you notice that they doubled up on Slot#3? Through all that heavily documented rigmarole, however, they steadfastly refused to document the genuine Slot #8. I know that Slot #8 is there. I know it, because Apple have installed in that very slot their own Psychic Interface. I am sure it is a genuine Apple product, and not a Taiwanese copy – the Apple original is identifiable by the subtlety of its operation, whereas the Taiwanese version zonks out all over the place.

The Psychic Interface comes into operation in a variety of circumstances, all of them bound to raise the frustration and/or embarrassment quotient of the Apple user. Perhaps I should instance a few cases, and then others may be able to add to the list from their own experience.

Case #1 – You have written, over many sleepless or disturbed nights, that final and definitive version of the ultimate utility. You are demo-ing to a relatively illiterate friend, and the friend happens, with two keystrokes, to invoke the one last bug that you didn't find, let alone suspect. The Psychic Interface has been operating in two related modes here: never allowing the bug to surface through all your Alpha...Omega testing, yet switching on
[continued p.9]

FROM THE TECH NOTES

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Syntax error when the program is run

Applesoft requires that the first byte in the program storage area is a zero. Some machine language programs don't leave a zero there and Applesoft may react strangely. Here's how to initialize that byte, even if the program memory pointer has been changed.

```
POKE PEEK (103) + PEEK (104) * 256,0
```

Variable conflicts

Only the first two characters of an Applesoft variable name are significant. That's why the variables BACK and BALL are considered to be the same variable BA. This can cause enormous problems if you don't keep track of what variable names you are using.

Numeric comparison problems

When two numbers print as equal but an IF statement doesn't think that they are equal, then the least significant bits in the internal binary storage format of the numbers are probably different. Applesoft's PRINT statement will truncate a number that is extremely close to being an integer. For example, 3^2 and 3^3 will both print as 9 but they won't compare as equal. Printing $3^2 - 3^3$ will result in 3.7252903E09 and the expression $(3^2 = 3^3)$ will be false.

There is a formula to round Applesoft real numbers to a specified number of decimal places on page 18 of the Applesoft Reference manual and a program to limit the number of digits to the right of the decimal point on page 22 of the same manual.

[Psychic Interface cont. from p.8]

those few flawed program lines at a most difficult moment. Don't blame your friend, and don't heap the recriminations upon yourself. Apple Computer Company stand accused.

Case #2 - At last you've scrounged, 'borrowed', or whatever, the absolutely fantastic program that does everything. It loads beautifully, it works wonderfully, yet no matter what you do, it won't talk to the printer. Don't blame the early version of Auto Ice's parallel card. I know, and now you know too, where the real problem lies. The Psychic Interface has struck again. It just knows that you wanted that program to work, and it knows how to manipulate you to the full - at the end of the process, and not at the start. Sneaky!

[continued p.10]

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Chapter 9 describes business applications. Printing spreadsheets, tables, forms, labels, and charts are covered in this chapter. Scientific applications are the topic of Chapter 10. Super/sub script (for chemical symbols), designing your own characters, graphics printing/plotting are included. Professional writing applications are included in Chapter 11 with AppleWriter II and Wordstar detailed. The title of Chapter 12 is Artistic applications with Personal and Programming applications the titles of Chapter 13 and 14. This last chapter includes a program for a hi-res graphics dump with the modifications needed for a variety of interface cards. Also included is a PASCAL version.

The Appendices include the ASCII character set and control codes, Epson printer control codes, and a section on diagnostics and trouble shooting. There is a nine page index.

The book should be very useful for an Apple II owner who uses an Epson printer. Much of the trial and error associated with setting up the printer and using application programs should be reduced with this book. It should make a useful addition to the Epson printer manual.

[Psychic Interface cont. from p.9]

Case #3 – You're in a hurry. A real, big, panic of a hurry. You need the printout of the report that you've laboured over for so long, and you need it a day ahead of time. In fact, NOW. So you load the Word Processor, and it garbages the screen, the disk, and your patience. Some might blame the coffee stains on the disk; others might say it's time you cleaned the disk controller-card connectors. But I know what really happened. It was the Psychic Interface again. I know that, because of the crucial time at which the problem occurred. It had to be the Psychic Interface – otherwise it would have occurred last night, or last week, when time was not of the essence of the deal.

Enough of the cases. You could undoubtedly add a few of your own – (how about the particularly tough game that 'bombs' just when you're about to save your super top score)? I think it's time that we rose up, and made Apple Computer Company 'come clean' about this.

I do not want to lay the blame for everything that goes wrong upon this one cause – that would be unfair. The Psyc-Int (you see, I'm really on friendly terms with it, calling it by the endearing abbreviation that it's known by in the factory) is programmed to switch in only when it will cause maximum damage to the personality of the computer operator. Lurking somewhere among its binary 000's and 111's, tucked in there behind the smokescreen of hexadecimal and ASCII numbers, is a sub-routine that borrows heavily from Murphy's Law. Its on-board ROMs seem to have the uncanny ability to access the mind of the operator. At least, that's what I think. What about you?