CONTENTS

ware Developer's conference or a week on the Gold

Coast!

OCTOBER 1989

FEATURES		The Mac-compatible Z-88 not just a Pipedream.	76
PC integration Integrating PCs in a network is a proven approach to increasing productivity – but, if you really want your office to click, improved communications is also needed between users and the software.	18	FOR USERS	
Why EDI? There is only one reason to implement Electronic Data Interchange in your business: increased profita- bility.	22	User Groups User Groups are the biggest source of information for computer users of all levels of experience – our National Listing gives meeting and contact details.	85
Hello World! Part 3 The implications of X.400 electronic mail and X.500 electronic directory standards for 'ordinary' users are only just being realised.	28	Assembling QuickBasic – Part 6 It's not all routine	96
ISDN and beyond Telecom is freely hyping its new ISDN service, but what will it offer for business users?	34	National BBS Listing On-line, off-line, amendments, and new systems	100
Communications for business Electronic communications is the most efficient method of handling information – whether you are an accountant, journalist, merchant or zoologist, it can put your business on- line to increased productivity.	38	New Products Build your own '386 or order a custom built database, convert unused memory to EMS or clean your mouse, hush that noisy fan or control a process	110
Laplink III Here's a solution to the problem of transferring great	47	Your Amstrad Get into the ball game!	120
quantities of data between standalone PCs. John Hepworth reports Reach out and telex someone	50	Your Atari ARCing and bombs	124
No other method of communication can yet come close to matching the features of that old stand-by, telex.	30	IBM Underground C libraries for standard debugged routines	127
Fax for business Fax machines have established themselves as a commercial necessity – integrating them with a PC makes a productivity bonus.	54	Your Apple IIGS Malcolm T. Elliot went all the way Microbee File	130
Gateway to the world	58	Accounting for budgets	
A modem is your PC's gateway to the world – Mark Cheeseman defines the jargon and describes the features to suit your needs.		Your Mac From here to Timbuktu	136
On-line to the world On-line services combine the massive data storage capabilities of mainframes with PC applications.	68	Rural Ram Handicapping for secretaries	138
Your Computer/Commodore Amiga Software Competition	74	Your IBM Texts for C	140
Win a trip to North America for the next Amiga Software Developer's conference or a week on the Gold		Cursory Glance	146

Great moments in technology #253!

YOUR APPLE IIGS



Big fun and games

WO ARCADE GAMES, a fabulous learn to type program and a IIGS system that beats them all form this month's column. The games are both new to Australia, although they have been available in the USA since 1987, showing how far behind we often are with IIGS software.

Mind you, this will not always be the case as the IIGS numbers increase in Australia. This must happen given the increasing availability of third-party peripherals and the quality of the latest IIGS software. Next month I will be reviewing Medley, the latest IIGS desk top publishing program, as well as some state-of-the-art games that aren't even available in Australia. But for now, a look at a IIGS system that is simply awesome...

A big IIGS

THE COMBINATION of a no frills computer, single floppy and a monochrome screen is becoming less and less useful in these days of all singing and dancing, memory-hungry software. Also, users are themselves becoming more demanding as computers take their place in the 'can't live without' category. The IIGS in its basic form is already fairly sophisticated, making it suitable for most tasks required by the home or professional user, and it can be easily expanded as the needs arise.

But I haven't seen a IIGS system quite as expanded as that being operated by the marketing manager of Domino Computers, Malcolm T. Elliot. Many readers around Australia will probably remember him as a radio/TV personality, and it's his links with this industry that necessitate the large system he uses at home.

Elliot upgraded from a fully blown IIe to a IIGS only recently, and decided to go the whole hog. Realising that life can't be any fun without a hard disk, he bought two (twice the fun). The drives, both made by CMS, are also partitioned, in effect giving four hard disks, driven from two CMS SCSI cards. The total storage is 103Mb, made up from 43 and a 60Mb drives. Naturally, the system also has a 3½ inch and 5¼ inch drive for versatility.

To complement the external storage, the system also has a 2Mb extension RAM

card, with 512K set aside for a RAM disk. The GS/OS desktop looks very busy with a total of seven disk icons to choose from! An ImageWriter printer with a Thunderscan scanner, and a joy stick complete the system, giving operating power that is the stuff of dreams.

The main purpose of all this hardware is to support AppleWorks, and now, AppleWorks GS. For over three years, Elliot has been documenting world events on a daily basis. Each night, entries concerning deaths of notable people and miscellaneous events of importance are written into an AppleWorks word processor file. Each file is named by the day, in a subdirectory of the month, in another subdirectory of the year.

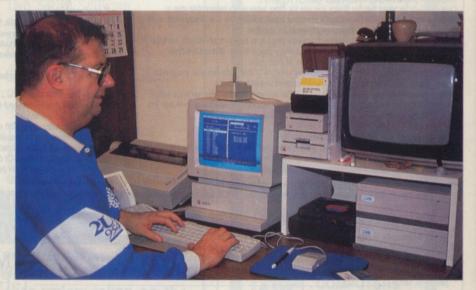
The information is then available for distribution to radio stations who present it in the form of 'On this day, x years ago...' The amount of stored data, and the need for quick retrieval makes a hard disk essential, and watching Elliot whiz through his system to obtain a specific file is an event not to be missed.

Because the desktop, finder and

launcher system of GS/OS is too slow, Elliot instead uses Ezidrive 1.5 (available from Quality Computers, 15102 Charleboix Ave, Grosse Pointe, MI 48230 for SUS100) to launch a selected program and to manage his system. Although I enjoy the graphics interface of the IIGS, I must admit that a text-based launcher and manager is much faster, and makes the IIGS comparable in speed with an IBM AT running in turbo mode.

After seeing this system and watching it work, I can only repeat earlier comments I have made – the IIGS is quite a machine. Given the right software and hardware combinations, the IIGS can be as sophisticated as any other computer on the market. Elliot, whilst acknowledging the superior capabilities of the Mac, finds the IIGS meets all his needs, is in colour and is far more affordable. But, like any complex system, conflicts occur, probably caused by non-standard software, and he occasionally has to power off to get the system back on the rails.

Unfortunately, not all software can be used from a hard disk, as the following re-



Malcolm T. Elliot upgraded his IIGS and went all the way – two CMS hard drives, giving a total storage of 103Mb, a 3½ inch and 5¼ inch drive for versatility. The system also has a 2Mb extension RAM card, with 512K set aside for a RAM disk, an ImageWriter printer, a Thunderscan scanner and a joy stick.

views will show. I'll keep complaining about this until common sense prevails and software writers make appropriate allowances. When you expand your disk storage to 103Mb, it is frustrating to not be able to use it, particularly for software such as a typing program, which is likely to be in regular use.

Learn to Type

LEARN TO TYPE programs have been around since personal computers became all the rage, and Mavis Beacon Teaches Typing is one of the more recent of these. I originally learnt to touch type with a program called MasterType, in which correct typing would shoot various nasties to prevent annihilation. This sort of program is probably not as ordered as more conventional tutor programs, but my survival instinct seemed to promote speedy typing.

Mavis Beacon is a true IIGS program, with a lot of excellent graphics, and falls roughly into the category of a tutor program. There is however a game section, so all tastes are catered for. As well, a comprehensive help menu is provided, including a demonstration of each section of the program.

The program is presented in modules; the classroom, workshop and the arcade game. Like most typing programs, you log on once, and running scores are kept of your progress. The initial log on process allows selection of your perceived typing ability, the time you want to spend at each session, and your goal in words per minute (wpm).

I logged as an intermediate typist, with a goal of 40wpm (well, why not?) and ran through each module. The classroom shows a keyboard with two hands over it, and a screen with running text. The fingers move over the keyboard as you type each letter, thereby illustrating the correct fingering. Beeps and buzzes highlight mistakes, and the session ends with comments on how well things went.

The workshop includes a timer, a metronome and various bar graphs along with a range of exercises of the 'type beneath the text' variety. The game requires keeping up with a red car, by typing under a flying text line. Unfortunately, the text is very hard to read, and I kept bombing out on that one. After spending several very entertaining hours with the program, I can honestly say that this is the most comprehensive typing program I have ever seen. It seems to be able to understand exactly what you need in the way of practice — almost as though there really is a Mavis Beacon looking at you through the screen.

The exercises are entertaining, varied and very thorough. The graphics are first class, and the whole feel of the program makes you want to use it. Its versatility is almost awesome, and I get the impression that no matter how long the program is used, it will come up with new drills and new comments on your status. The review program was supplied by Computer Spectrum of Wollongong, and should be available from most Apple dealers.

And when you have done your typing practice for the night, why not get some target practice. Here are two games that can sort the men from the boys.



Sea Strike has lots of hidden surprises, and the game is action all the way. The increasing difficulty of each phase ensures that the game will remain a challenge for all but the most proficient players.

Cavern Cobra

THIS GAME from PBI Software has been available in the States since 1987, and is only now being distributed by Questor for Australian consumption, at a price of \$79.00. The package comprises a single, copy protected 3½ inch disk and a 3-page manual all packaged in a rather smart plastic case. The program features support for the MDIdeas SuperSonic Stereo card, although the sound effects are quite amazing anyway.

However, you will need at least 768K of RAM to run the program. The game is deceptive in its apparent simplicity, and requires you, the pilot of a heavily armed helicopter called Cavern Cobra, to run the gauntlet of a barrage of ground-based and flying nasties as you proceed to search and destroy the World's Most Dangerous Terrorist. The helicopter is controlled by the mouse, and can move at very fast speeds, making continual crashing part of the learning process.

The idea is to try and find a helipad that will take you underground from level one down through various levels until you get to where the WMDT lives. On the way you

can score points, more fuel, armour, bombs and so forth, providing the balloons, ICBMs, gunners and heat seeking missiles don't get you first. This program is IIGS specific, and uses the graphics and sound capabilities to the full. The keyboard is used to launch a range of bombs, and the combination of mouse and keyboard makes a powerful 'control panel' for the helicopter. A joystick is not even recognised by the program, which is unusual in a game of this sort.

Sea Strike

THIS PBI Software game also dates back to 1987, and like Cavern Cobra, supports the MDIdeas Supersonic stereo card, although again the sound is amazing enough without it. The game requires a 512K system, and is supplied on a single 3½ inch disk with a rather brief but adequate manual. The RRP of the game is \$66, and, as usual, the copy protection doesn't allow it to run from a hard disk.

The game kicks off with a rather drawly voice exclaiming 'Alert, alert – enemy approaching...' after which all kinds of warlike missiles commence raining down. The idea is to defend a convoy of three ships as they sail slowly (too slowly for me) across the screen. The defence is provided by a heavily armed helicopter, code named Sea Strike, that is controlled by the mouse. The game ends either when all ships are destroyed, or you have lost all your helicopters.

If one or more ships make it, the next level is reached. The remaining ships start out again, but now there is a higher concentration of descending firepower. The game has various difficulty levels, selectable from a pull down menu, and the default is referred to as 'standard.' The only easier level is novice, with three more levels that increase the action accordingly. The fun comes when the screen blacks out!

There are lots of hidden surprises, and the game is action all the way. Because of the incrementing difficulty as each phase is reached, the game should remain a challenge for all but the most proficient players. Scores are stored on the disk, along with the player's name to give proof of one's expertise. Also, a game can be stored for future resumption if bed time is reached before the enemy wins.

If you are into arcade games, this one is for you. It is simple in concept (no brains required – just aggression), but has challenges that never seem to stop. Oh yes, the 'immolation' capability of the helicopter is your last resort in many cases.