Apple Bug

January 1991 Edition
Volume 10/Number 1

the newsletter of Apple-Q Inc.

P.O. BOX 721, SOUTH BRISBANE, QUEENSLAND 4101

$1.50

THE BRISBANE APPLE USERS' GROUP

Apple-Q Inc. Information Page

Help Line

Apple II	Bob Godbehere	(07) 808-3892	7-9 pm & W/E
	Kelvin Saggers	(07) 800-4660	(data) Anytime
Apple IIgs	Vince Crosdale	(07) 351-3090	7-9 pm
	Dale Rodgie	(075) 78-1096	7-9 pm
Apple Macintosh	John Finch	(07) 260-5218	7-9 pm & W/E
AppleWorks	Sheryl Mann	(071) 96-7401	7-9 pm & W/E
AppleWorks (education)	Ann White	(07) 371-4067	Anytime
AppleWorks GS	Dale Rodgie	(075) 78-1096	7-9 pm
Applesoft	Graham Black	(07) 883-1525	1-6 pm
	Vince Crosdale	(07) 351-3090	7-9 pm
Beginners	Ann White	(07) 371-4067	Anytime
Communications	Vince Crosdale	(07) 351-3090	7-9 pm
	Kelvin Saggers	[07] 800-4660	(data) Anytime
Disk of the Month	Jeff Sellers	(07) 359-1339	7-9 pm
Educational Programs	Ann White	(07) 371-4067	Anytime
	John Aspland	(07) 368-2420	7-9 pm
	Geoff Gatt	[07] 355-5161	School hours
Machine Language (IIe, gs)	Dale Rodgie	(075) 78-1096	7-9 pm
Modems	Vince Crosdale	(07) 351-3090	7-9 pm
Software Library	Jeff Sellers	(07) 359-1339	7-9 pm & W/E

If you are free to aid other Users on any Apple related topic and would like your name added to the above list please let us know. Please only call between the times listed. W/E stands for weekend.

Executive Committee

Ann White	President	(07) 371-4067
John Finch	Vice-President	(07) 260-5218
Bob Godbehere	Secretary	(07) 808-3892
Bob Godbehere	Treasurer	(07) 808-3892
Graham Black	Registrar	(07) 883-1525
Kelvin Saggers	Editor	(07) 800-4660
Jeff Sellers	Software Librarian	(07) 359-1339
John Young	Hardcopy Librarian	(07) 372-1548

Assisting

Vince Crosdale	Immediate Past Pres	(07) 351-3090
Todd Dixon	Reseller Contact	(075) 78-1096
	or on Sat. morning	(07) 891-6299

Bulletin Board

Name:	Apple-Q Inc. BBS
On-line:	24 hours a day
Telephone:	(07) 851-1711 (Bulletin Board)
	(07) 351-3090 (Voice)
Baud Rates:	300, 1200/75, 1200 & 2400 (CCITT & Bell)
Data Specs:	8 Data bits, 1 Stop bit, No Parity, Full Duplex
Sysops:	Vince Crosdale, Graham Black

This Month

General Meeting
Sunday 20th January 1991
Hours: 11.00 am to 3.00 pm

Committee Meeting
Sunday 20th January 1991
Starts: 3.00 pm

Next Meeting

General Meeting
Sunday 17th Febuary 1991
Hours: 11.00 am to 3.00 pm

Committee Meeting
Sunday 17th Febuary 1991
Starts: 3.00 pm

All meetings are held at:
Hooper Education Centre, Kuran Street, Wavell Heights

Coming Events

January:
A demonstration of the usage of Ultramacros by Bob Godbehere with AppleWorks 2.0

Febuary:
A demonstration of the New Macintosh LC (if available]....

March:
The Apple-Q Inc Mad March Auction.....

Visitors welcome

Membership Fees

Adults/Students:	$25.00	
Corporate Membership:	$50.00	
Associate Membership:	$10.00	(BBS only)
Joining Fee:	$10.00	(first year only)

At the discretion of the Executive Committee

More Info

• The copying of Commercially produced software is not sanctioned by Apple-Q Inc. and members who do so risk expulsion from the group.
• No one is allowed behind the Trading Table counter except the Committee members and anyone appointed to work at the Trading Table.

Advertising

Classified advertising is **Free** to all Financial Members. For non-members, the charges are **$18.00** for a Half Page and **$30.00** for a Full Page. For more information, contact the Editor.

Contributions to Apple-Bug

If you would like to contribute to the Apple-Bug, please send in your article (on disk where possible) to the clubs address. Your disk will be returned. Deadline for the Apple-Bug is the General Meeting.

Copying Fees

Apple-Q Inc. has a wide selection of Public Domain, Shareware and Demonstration software available to members. We charge a copying fee so the group can obtain more software to expand the library. The copying fee for 5.25 inch disks is 50 cents a side with a minimum charge of $2.00. For the 3.5 inch disks, the fee is $3.00 per disk. See the Software Librarian at the next Meeting for a catalogue. Also see the "Disk of the Month" section for more great Public Domain software. On the inside back page you will find a software order form. This form can be filled out if you wish to order by mail or you can order and pick it up at the meeting. For mail orders, remember to add $2.00 for postage and packaging.

Meeting Format

11.00 am - 12.00 pm - Informal period including:
Trading table open.
Registration of members (new and renewals).
Disk of the Month sales. Raffle Tickets sold.
Public Domain Software available.
11.45 pm - 12.00 pm Informal question and answer time
12.00 pm - 1.00 pm - Demonstration
Invited speaker to give a **demonstration** and follow up with organized question and answer session relating to the demonstration.
1.00 pm - 4.30 pm - Lunch break & General Comp.
Lunch and Draw raffle prize and door prize.
Start of general computer time once Guest is finished.
1.30 pm - 3.00 pm - Special Interest Groups:
AppleWorks, New Users (Beginners),
Apple //GS Computers, Macintosh Computers
Trading Table, Software Library open for business.
3.00 pm - Start Committee Meeting
SIGS, Trading Table, Software & Hardcopy Libraries close.
General computer time continues.
Committee meeting starts. Members welcome.
4.30 pm - Open Day and Committee meeting ends.

Production Information

The Apple-Bug was written with AppleWorks. AppleWorks GS was used for the Page Layout and the orginal copy was printed on a LaserWriter. Apple-Bug is printed by the Hooper Education Centre. Thanks to Computer City for the use of the LaserWriter.

Editorial

by Kelvin Saggers

Welcome to the January 1991 issue of Apple-Bug and Apple-Q's tenth year as a user group. Not many other computer groups can lay claim to such a record. Apple-Q has undergone many changes over the last ten years as has the Apple computer range, some have been for the best, whilst others are best forgotten. With your continued support, and Apples active involvement in the Apple II, Mac, and user groups such as ours, Apple-Q can only go from strength to strength.

The November meeting was the first of the new format meetings and was somewhat of a disappointment as very few users seemed to want to take advantage of the new system and take the opportunity to bring their own machines along to use at the meeting and be given hands on aid with any problems they might have or just to show off their latest software.

The Macintosh LC demonstration that had been set aside for January has been postponed until February and instead a demonstration on the general usage of Ultramacros for AppleWorks will be run by Bob Godbehere at the January meeting.

Apple-Q Inc. will have another of it's world famous auctions in March. So start looking at what computer related software, hardware, and books etc. you wish to sell and fill in the Auction form in next months [February's] Newsletter. Please note only members of Apple-Q may place items up for sale or bid at the auction. New User registrations and renewals will be taken on the day.

In the next Issue [February] and at the next Open Day [January] a survey form will be made available to all members. We request that you take time to fill in the form and return it either by post to Apple-Q at the address shown on this page, or by hand at the next open day to any committee member. The survey is simply to aid us in providing a better service to our members. Constructive feedback is always welcome and need be nothing more than a few words on a scrap of paper or can be in the form of a whole disk full of ideas or comments. We cannot know what it is you want unless you tell us..... we can only guess....

Free Apple Cider

Free apple cider will be available at the January 1991 meeting to quench the thirst of Apple-Q Inc members.

Apple II Clinic

This month the article for the Apple II clinic is from a member of The Apple-Q Inc BBS, and gives a broad overview of what is available for the Apple II computer range to extend your system. Any local Apple dealer, or Apple User Group would be more than happy to help you, should you require more details on any of the products mentioned.

Expanding your Apple

by Grant Kwai

One of the great advantages of any of the Apple // range is its expandability. Most noticeably the //gs, //e and //+. To a slightly lesser extent we have the //c due to its lack of slots the other //'s possess. However, the //c has ports in which you can attach your extra devices and companies such as Applied Engineering have developed many internal devices for this machine.

So, what can I add to my Apple //? One of the first items people generally add is a second disk drive. This is almost an essential item and I sometimes wonder how I managed to get along without the disk drive for so long. Whether it is a 5.25" (13cm) or the newer 3.5"(9cm) disk drive, you'll find it an indispensable addition for your Apple. To buy a genuine Apple disk drive will set you back a pretty penny($495.00 and $545.00 for a 5.25" or 3.5" respectively), while a compatible disk drive(5.25") will cost about $269.00 depending on the brand. Due to the price difference, I purchased a compatible disk drive. I find that it is not 100% write compatible in all instances, i.e. copying the information onto the disk. However, this is only a problem for making legal backups of copy-protected software. Normal disks it will write to without trouble. The disk drive is 100% read compatible though. To alleviate this, I simply let drive 2(the compatible drive) read the disk and allow my genuine disk drive to write the information *(Ed - sounds like the drive speed needs adjusting)*.

If you elect for a 3.5" disk drive, then you'll have about 800k(Kilobytes) of storage space on disk(A 5.25" can store 140k). Therefore it can hold about 5-6 standard 5.25" disks. This means less disk swapping and you can have most, if not all, of your main programs, or data to remain on the single disk.

When you purchase a second disk drive, make sure that it will fit your machine. By that I am referring to the specific Apple // which you have. The //+ and some of the older //e's generally have a disk drive controller card in which the disk drive connector plug must be attached to. These are generally for the full height drives, not the uni drives. If however, you possess a newer uni-drive(the half height disk

drive), look at the back of it and you should see a adapter space on the top right. If you do, then you need to 'daisy chain' the second disk drive. i.e. add the second disk drive cable to your existing disk drive. If you possess a //c, then check before you buy, that it will be capable of fitting that particular machine.

For even more mass storage, you may consider a hard disk. This is a device which acts like many floppy disks. A standard hard disk will hold about 20 or 40 megabytes(1 megabyte = 1024 kilobytes) of information. That is, roughly 20,000 and 40,000 kilobytes respectively(1k is roughly 1 character). That's a lot of storage space! Of course, this comes at a price. For an internal hard drive you are looking at $1050 for a 20meg HD(Hard Drive) and for a 40 meg HD, $1350 . Applied Engineering and Applied Ingenuity have in the last couple of years produced these internal hard drive(Applied Ingenuity has now gone out of business though). I have not personally seen one, but basically what it does is allow you to have the hard drive inside the machine rather than externally. To fit in your Apple //(excluding the //c), it replaces the power supply as it comes with one of its own.

The price of a hard drive has dropped over the years while the access time(time to find and read the information) has been gradually getting lower. Now, for your average Apple SCSI(Small Computer System Interface)hard drive, the access time is around 25 milliseconds, which is very fast indeed.

Ramcards are another alternative to those who don't want to spend all that money on a hard drive. Ramcards are available for all of the Apple // range. Current ram cards have somewhere between 64k minimum to 17megs! Of course, to have 17megs you might have to sell your car to pay for it!

There are two main types of ram cards. You have your temporary storage ramcards and you have the more permanent type. A temporary storage ram card is one in which all of your information on it is lost once the power is turned off. Cards of this type include the Ramworks III(Applied Engineering), and the Zram ultra for the //c (Applied Engineering). For the //gs, there is the GS Ram(Applied Engineering). The Zram card fits inside your //c while the remaining types of cards normally fit in the auxiliary slot of your //e or //+. This means that you will have to remove your current 80column/64k card in that slot. The Ramworks III has its own 80 column firmware on the card so you will still have this capability. The first 64k is taken from the memory of your ramcard. By itself, your Apple doesn't notice the extra memory is there. That is why the card is normally packaged with some software. This allows you to 'patch' DOS to think that there are other disk drives available to you. You can have one mass storage disk drive or a number of smaller drives(in either 64k or 256k increments) depending of your ramcard size(memory wise). It will work with ProDOS, DOS 3.3, CP/M and quite

possibly other operating system, though you will need re-patch if you change operating systems.

A more permanent type of ramcard is one in which the information on it is not lost when the power is turned off. This is achieved through a battery backup device. Typically, the memory of one of these cards can remain for as long as 3 months without use. The battery is recharged when you use your machine. A card of this type is the Ramfactor (Ramkeeper for the Apple IIgs) from Applied Engineering. This means that you can have your main programs loaded onto the card and once you turn your computer on, it will automatically boot up. The time saved is dramatic. This type of card cost fractionally more than a temporary storage card, but if time is a crucial factor, then this may be of interest to you.

No matter what type of card, you will se a dramatic increase in speed. A program which is loaded and run from a ramcard will fly. The speed is faster than even a hard drive in both reading and writing of data. Programs such as Appleworks once loaded onto a ramcard require no disk accessing. This means no more waiting for Appleworks while it reads information from a disk. An unpopulated Ramworks III(ie 0k) cost $240 while a 1 meg Ramworks III cost $399. For //GS owners, a similar card for them with 1 meg of memory would cost $270. To expand the memory capacity of your ramcard, you can do so with either, 64k, 256k or even 1 meg chips (Depending on the particular card). The cost of an extra 256k of ram chips is $28.

One of the main problems with the Apple is its 1Mhz CPU speed. For quite a while now, Applied Engineering has produced a card called the 'Transwarp I'. This gave your Apple //e a 4Mhz CPU meaning in theory, your machine could run 4 times faster. Recently, the Zip Chip emerged with a 4Mhz then a 8Mhz chip. This device was different from the Transwarp in that it didn't require a slot. It simply replaced your existing 6502 or 65c02 chip. However, there have been many reported problems with this chip was has led to many people returning them for a refund. Even more recently, Applied Engineering have released the Transwarp II and Transwarp III. The Transwarp II has now been stopped due to a legal case concerning the makers of the Zip chip (See July Application; 'To be or not to be'. Note: The Transwarp III is no longer being made either. The price of the Transwarp I is $192.00

Printers would be something to think about getting as well. A printer will allow you to obtain a hard copy(ie on paper) of your data. This allows you to write letters or essays, print pictures and the likes from your Apple. Like everything else, there are many and varied types of printers. For your entry level printer, you can purchase a dot matrix 9 pin printer. Quality of this type is quite readable in Near Letter Quality(NLQ) printing. The printer does this by going over the letters (made up of dots, hence the name 'dot matrix' printer') twice and slightly offset from the first run. The average speed of this type of printer these days is around 180cps (Characters per second) in draft mode. A printer of that description can be bought new for around $350-$400 depending on where you shop.. If you want a more business quality output, then a dot matrix 24 pin printer might be of more benefit. This forms characters using 24 pins(dots) instead of 9. Quality from these are excellent. Your average speed is around 180cps in draft mode.

The main brands of printers available are from Apple-Imagewriter // ($895), Epson-many types($400+) and Star-many types($450+). There are many other brands which will work fine on an Apple, but the ones above seem to be the main brands. (For those who want even higher quality, then an ink-jet or laser printer may be a better choice.) If you want a printer, you will need to by a printer card as well(except the //c or gs You would add it to the printer port.) The cost of a printer card in normal around $110. You could also get a 'Serial Pro' card or a 'Parallel Pro' card(Made from Applied Engineering) for $220 and $160 respectively.(Note: The 'Serial Pro' and 'Parallel Pro' have other capabilities as well, hence there higher price)

For what you get, the Imagewriter from Apple is the most expensive, however some programs requires the Imagewriter to print as it will not print to anything else(e.g. Mousepaint). However, there is a device from an Australian company(Automatic Ice Co.) which allows you to make your printer compatible with the Imagewriter(Cost is $99). The disadvantage with buying an Imagewriter is that you can not use it on any other type of computer system such as an IBM or Amiga unless of course, you buy a Macintosh. That is, if you ever decide to buy another system(except Apple's), you can not take your Imagewriter printer with you. That is where a compatible printer(e.g. Epson) is of great benefit since you can use it with just about all computer systems.

A modem can be another choice. This is a small box which allows you to communicate through the phone line to other modems(See 'More on Modems, Nov/Dec '89 Applecations). The advantage of one of these is that there are a host of programs available on various BBS's (bulletin board systems. The systems you ring with your modem). Any problems you have, you can leave a message, and most of the time you will get a reply within a couple of days. You can attach your modem from a //+ to a //gs. If you are attaching a modem to a computer which has slots(except the gs), you will need to purchase a Super Serial card and cable. A super serial card from Apple will cost $140. A cable may be supplied with the modem but if not, that will cost you an extra $30. For your standard speed modem(Does up to 2400 baud), you can buy one from an Australia company called Maestro for around $399-Maestro ZXR model. It is one of the cheapest and reliable modems available.

Mice. On a //gs, they come as standard. However, if you

are one of those people who have one of the other Apple II range, then you may consider purchasing one of these. A mouse is a small 'box' with a button which allows you to move a cursor along the screen to 'point and click'. It provides a more fluent and flexible way of using your computer as it does away with a majority of your keyboard work or your joystick. With programs such as Publish It!, Multiscribe, GEOS, Dazzle Draw and games such as Arkanoid, cursor control is done with ease. No more will you have to curse because you couldn't get the cursor over the specific command you wanted. For the mouse itself, you can purchase a compatible mouse for $70. If you own a //c or /gs, then it will be a simple matter of plugging it in. If however, you possess an Apple which uses cards, then you will have to purchase the mouse as well as a special mouse card. The complete system(mouse and card) cost you $245 for the genuine Apple //e version and $130 for the //c(no card). I am unaware of any company still in existence which sells a mouse card by itself, though there may be one still out there.

Quite a few years ago now, there was another operating system which reigned supreme. It was called CP/M. In total, there was some 5000 programs available for it. Your Apple can run most of this programs on your Apple with the addition of a CP/M card. This card fits into one of the slots on your Apple, or if you have a //c, then once again, you will have to get an internal version for your machine. However, many CP/M cards seem not to be compatible with the gs though they work with a //e. There was an article done about a year ago in the Applecation magazine showing some of the CP/M card brands which were, and were not compatible. A simple CP/M card will only cost about $60.

Enhancing your Apple's sound and speech output can also be achieved. Two of the main types of sound cards are the 'Phasor' and the 'Mockingboard'. Both provide better sound for your Apple(excluding the //c since they can't take cards) making games appear more realistic. I'm not sure whether or not the Mockingboard is still in production though (*Ed - I think the Echo Card has taken it's place*). The //gs already has enhanced sound with its Ensoniq 5503 Digital Oscillator Chip (DOC) but you can enhance this even more with the Sonic blaster card or Audio Animator. The price of this increased sound is $240 for the Phasor , $210 for the Sonic Blaster and $384 for the Audio Animator. As you can see, unless enhanced sound capabilities is essential, it can get rather expensive.

With the release of ProDOS, along with it came date stamping. You will notice that whenever you 'catalog' a disk, the 'date created' and 'modified' date are printed. So that you know when you last modified the program, your Apple can use a clock to record the time and date. Most Apples, except the //gs, don't come with a clock card as standard. This can cause a hassle. of course, you can enter the time and date manually by patching it into DOS, but an easier method would be with the purchase of a clock card. Or a 'No Slot Clock' which means it fits beneath the 65c02 chip (*Ed - my No Slot Clock fits beneath a ROM chip on the IIe*). It will cost you $99. Alternatively, you can purchase the clock facility on the Zram Ultra or the Serial Pro card.

There are hundreds of other add on's you can connect up to your Apple. In fact, there are some 250+ accessories which are available for the Apple // range. Briefly, some of the other significant things you could add but were not discussed in this article are a PC transporter(Allows you to run IBM XT programs), cooling fan, Thunderscan or a MIDI interface. If any thing mentioned above seems to be of interest to you, go down to your local Apple dealer or Apple User Group and inquire about them.

Only if we support the Apple // range, will they be able to keep afloat in the very competitive world of todays computers.

Apple IIgs News
by Dale Rodgie

GS Power Supply

Applied Engineering has released a heavy duty power supply for the Apple IIgs. It is rated at 60 watts compared to 38 watts for the standard GS power supply. It works with both 120 volts (U.S.) and 220 volts (Australian) mains voltage. The Applied Engineering GS power supply comes with a one year warranty and sells for $99.00 (U.S.).

Duet Co-processor for GS

As mentioned in the November edition of Apple-Bug, a new co-processor card will be available for the Apple IIgs that allows you to run Macintosh programs. Duet will be distributed in Australia by GS Sales and Imports. Although the final price is not available for about $1,500.00 (Australian). For more information call GS Sales and Imports on (075) 52 9099.

Transwarp GS is going faster...

Due to a good Australian dollar, GS Sales and Imports have imported Applied Engineering's Transwarp GS and selling it for the remarkable price of $399.00 (Australian). No that is not a typo - the same as the U.S. price. Transwarp GS increases the clock speed of the GS to 7 MHz. With an upgrade (see August Apple-Bug) you can increase the speed up to 13 MHz or more. You can contact GS Sales and Imports on (075) 52 9099.

> *Experience is something you don't get until just after you needed it most...*

ProDOS 8 Error Codes

Prepared by Doctor Otter. Eagle River, Alaska

This is a summary of ProDOS 8 error codes. They are also known as MLI (Machine Language Interface) error codes. These codes are reported by when an error occurs. If there is no error, the C-flag is clear, and the accumulator contains $00. If there is an error, the C-flag is set, and the accumulator contains the error code that is reported. If you ever wondered what the ProDOS error codes where trying to tell you, this table will help you.

$00   **No error.**

$01   **Bad system call number.** A nonexistent command was issued.

$04   **Bad system call parameter count.** This error will occur only if the call parameter list is not properly constructed.

$25   **Interrupt vector table full.** Only four routines can be activated for interrupt processing at a time. One must be deactivated before another one may be enabled.

$26   **IO error.** This catch-all error is reported when some hardware failure prevents proper transfer of data to / from the disk drive.

$28   **No device detected/connected.** Will occur if, for example drive 2 is specified for Disk II when only one drive is connected.

$2B   **Disk write protected.** Hardware write-inhibit is enabled, write request cannot be processed.

$2E   **Disk switched:** a WRITE, FLUSH, or CLOSE operation cannot be accomplished because a disk containing an open file has been removed from its drive.

$40   **Invalid pathname** sequence. The pathname contains illegal characters.

$42   **Maximum number of files open.** The File Control Block table is full. The FCB can contain a maximum of eight entries. Thus, a maximum of (8) eight files can be open concurrently.

$43   **Invalid reference number.** The value parameter given as a reference number does not match the reference number of any currently open file.

$44   **Directory path not found.** A filename in the specified pathname (which refers to a subdirectory) does not exist. The pathname's syntax is legal.

$45   **Volume was not found.** The volume name in the specified pathname does not exist. The pathname's syntax is otherwise legal.

$46   **File not found.** The last filename of the pathname does not exist. The syntax of the pathname is legal.

$47   **Duplicate filename.** An attempt was made to create a file that already exists, or to rename a file with an already used name.

$48   **Volume full.** Overrun error has occurred. An attempt to allocate blocks on a block device during a CREATE or a WRITE operation failed due to the lack of space on the device. This error also is returned on an invalid EOF (End of File) parameter. Data is written until the disk is full, but you will always be able to close the file.

$49   **Volume Directory Full.** No more entries are left in the volume directory. In ProDOS, a volume main directory can hold no more than 51 entries. No more files can be added (using CREATE) in this directory until others are destroyed.

$4A   **Incompatible file format,** also a ProDOS directory. The file is not backward compatible with the version of ProDOS. The Storage__type is recognized, but the File Manager may not support that storage__type in a fully compatible fashion. This error is likely to occur when data written by a future version of the BFM (Block File Manager) is read back using an earlier version of the BFM.

$4B   **Unsupported storage__type.** The file is of an organization unknown to the executing File Manager. This error may be reported if the directory is tampered with by the user. This error is also returned if you attempt to set the prefix to a nondirectory file.

$4C   **End of file** encountered. This error is returned after a READ call when the file position is equal to EOF and no data can be read.

$4D   **Position out of range.** Returned when the file's position parameter is greater than current EOF.

$4E   This is the file access or **file locked** error. The file's access attribute forbids the RENAME, or DESTROY, READ or WRITE operation that was attempted. The file may be locked.

$50   The **file is open.** An attempt was made to OPEN, RENAME, or DESTROY an open file.

$51   Directory count error and or **Directory structure damaged:** The number of entries indicated in the directory header does not match the number of entries actually found in the file.

$52   **Not a ProDOS disk** or volume. The specified disk does not contain a ProDOS (or SOS) directory format.

$53   **Invalid system call** parameter. The value of one or more parameters in the parameter list is out of range.

$55   The **Volume Control Block table is full** More than eight volumes on line. The VCB table can contain a maximum of eight entries. This error occurs only if eight files, on eight volumes, are open and the ON__LINE command is requested for a device having no open files.

$56   **Bad buffer address**. The data_buffer or io_buffer specified conflicts with memory currently in use by the MLI.

$57   **Duplicate volume**. This is a warning that two or more volume directory names are the same.

$5A   **The file structure has been damaged**. The bit map disk address is impossible. The volume bit map indicates that the volume contains blocks beyond the block count for that volume.

NOTE: "SYSTEM FAILURE" errors should never occur. They indicate that the system has encountered a situation that should not have happened, and it has no available means of recovery.

Possible causes of "SYSTEM FAILURE" errors include:
- bad ram
- disk failure
- operating system bug
- unclaimed interrupt.

The King of Chicago

by Kelvin Saggers

The King of Chicago is another Cinemaware game and like most of their games has excellent graphics, it is unfortunate however that the opening 'music' is no where near their normal standard, and in my books anyway, does nothing for the game (maybe only a fault on the IIGS version, but if so I cannot understand why....).

Cinemaware has fixed up one problem and created another with this game. The game unlike Rocket Ranger does use the extra memory as a Ram drive and so the game runs much faster on a 1meg machine than one with the minimum 768K required to play the game. But the main disk is copy protected and the original disk must be in your 3.5 drive to run the game, even if you have it set up on your hard drive as directed in the instructions. I hate playing with software of any kind that requires the use of the original disks. They are too prone to damage and replacement is often costly, and a pain in the rear, if available at all.

The Game is set in the 1930's in Chicago, Al Capone has just been sent to prison and the city is there just waiting for right gangster to take control of it. As Pinky Callahan a promising young enforcer for a northside organization you figure it's time to make your move. The boss is old and can't see the opportunities you can for a killing... The problem is, do you get rid of the old man (and maybe bring the gang down on your head) , or just force him to give you control, or maybe you can get to him through his chief advisor Ben..... and if you should manage the take over the problems really start to begin.....

Unlike Rocket Ranger and Defender of the Crown, King of Chicago will just about play it's self if you let it. As the game proceeds you must make choices which change the personality of your character slightly each time you do so. The choices have to be made within a time frame or the game chooses for you. So if you wish to, just sit back and watch the movie play it's self. If however you make a choice, the game flow and character interaction changes to match it. For example if you spend up big on your girlfriend then she might be happy, but the 'boys' might think it's time for a change as they figure the money was better spent on raises or new men, and so on. How you handle the people around you and the resources at hand are key factors in the game play.

There are also a few action screens in the game, like the shootout, and whilst they play a part in the game strategy they don't I feel have as great an effect on the outcome of the game as the interaction and choices you make. For example once a month you can allocate funds for new men or pay rises or for bribes etc.

I really don't know if I liked the games interface used by King of Chicago, called Dramatron by the author, or not, but it is certainly different from most other games around and for around $US17 for the Apple IIGS version from most US mail order places at present it is not too much of a gamble to find out if you like it or not (wish mine had been that cheap).

The King of Chicago is available only in Apple IIGS and Mac 512E, Plus, and SE versions for the Apple range of computers for $US49.95.

The version that this review was based upon was written for the Apple IIGS.

ProFile Card Modification for the II GS

PROBLEM DESCRIPTION: Some ProFile Interface cards will not work properly when installed in the Apple IIGS. ProFile directory information might become damaged and cause the user not to be able to access data stored on the Apple II ProFile Harddrive.

CAUSE: There might be an incomplete ground path through the card.

CURE: If ANY ProFile Interface Card is to be installed in an Apple IIGS, check first to see that a jumper, made of 24-26 gauge multistrand wire is installed between pin 12 of IC C6 (2716 EPROM-Apple Part# 341-0299) and pin 1 of IC B4 (74LS368-Apple Part# 305-0368) on the non-component side of the board. If needed, the jumper should be installed by a knowledgeable technician to assure proper operation of the ProFile when interfaced with the Apple IIGS. To prevent damage to it remove the EPROM before soldering.

Pete Mc Donald.

Macintosh Mumblings

by John Finch
Macintosh librarian and vice-president.

Virus Update. Seen around Brisbane are the nVIR, WDEF and ADBS viruses. These viruses are detected by the public domain programs "Disinfectant" and "Gatekeeper", both of which are in the club library. None of these viruses are known to be particularly harmful - but you never can be sure. It pays to check your disks from time to time.

The latest public domain disks in the library include the Bible in a hyercard stack. There is one problem with this. It ɪs a split Stuffed file that runs to four 800 k disks! When it is joined and unstuffed it occupies over 5 Mb on my hard disk. But if you need to do rapid searches of the Bible, and have 5Mb to spare . . . .

I have been asked to give a profile of myself for the magazine - so here is a potted me:

I am a pom that has seen more summers than I like to count, and my means of earning the proverbial crust is by working as an electronics instructor for the Civil Aviation Authority. My passion for the Macintosh is only equalled by my passion for classical music. Apart from that I'm really quite a nice person! I have been a member of the club for about 4 years.

Apple Notes

ʀʏ Kelvin Saggers

Apple's Scanners that were built with the Macintosh in mind could work perfectly under ProDOS on the Apple IIe and IIgs, or GS/OS on the IIgs with a SCSI card. The trouble is that Apple have not written any scanner drivers for the Apple II range and have left it up to third party developers to do it for them [see OCR article in this issue].

Apple has released both an Animation Toolkit and a Sound Toolkit for the Apple IIgs for more information contact the Apple Programmers and Developers Association. So far NO major software house seems to be beating a path to Apples door for either, which is a pity because by all accounts both are excellent packages.

Apple Profile hard drives need a ROM update to allow them to run on an Apple IIGS. The new ROM [Apple part # 341-0299 Revision B] replaces the old existing ROM on the

interface card. The Upgrade is free from your local Apple Dealer.

AppleWorks 3.0 uses 16K more memory then older versions. So if your old files are running out of Desktop space when they ran fine on version 2.0 this is the reason. The only way out, aside from reverting back to an older version, is to either make your files smaller or purchase more memory.

Apple [USA] has announced it will form a partnership with the National Education Association [NEA], the country's largest teachers organization [Ibm have one already in place]. This will allow teachers to purchase a 'special' Apple personal computer system [which one is not as yet known] for their 'personal professional use' at home. I wonder if Apple will set up a similar system in Australia to make inroads back into the education market here.

"Anyone who uses the phrase 'Easy as taking candy from a baby' has never tried taking candy from a baby"   - R.Hood

ProSel a bargain....

Contributed By Christopher Griggs
(Rewritten from Apple B.C. News June 1989)

Glen Bredon's ProSel 16 has arrived. At US$60 for the full package (ProSel 8 plus ProSel 16) or only US$20 for registered users of ProSel 8, this is a bargain every Apple II and IIGS owner should take a look at.

First, a quick comparison of ProSel versus the Finder on the Apple IIgs. Simplistically, both are program selectors coupled with disk management utilities; but that is where the similarities end. The Finder is what Apple wants the IIgs to be; the graphic interface, the colorful custom icons the menu bars, and with the general sense of user-transparency make this Apple's vision of the future.

ProSel, on the other hand, reminds us of our Apple II ancestry. Text-based, requiring some work and a little bit of understanding on the part of the user, why should anyone prefer it to the Finder? There are two good main reasons: (1) speed and (2) an excellent utility package. These remarks could be applied equally to ProSel 8 (which is also capable of launching 16-bit programs as well) or the new ProSel 16.

ProSel 16 runs under GS/OS. The program when it is launched from bootup displays a "Main Menu Screen" that is indistinguishable (well almost) from that of ProSel 8. In three columns on the 80 column screen are listed the names of your applications. The list can be customized (even with Mouse Text if you wish) according to your tastes and needs with the built-in editor, and your menus from ProSel 8 can be imported.

An application is selected using the mouse, the keyboard arrow keys, or the initial letter of the application. Multiple screens can be set up for hard disk owners with oodles of programs on board.

Setting up the Main Screen as your selector takes some reading of the manual and relatively little effort. To add a new program to your list, you simply enter ProSel's editor <Apple-E return>, select a black space on the screen, then select the program; ProSel then automatically adds it to your Main Screen. Exit the editor and you are ready to select the name for the main screen; control returns to the ProSel Main Screen when you quit the program. May I take your order?

The "Main Menu" is a second module, that appears with a press of the ESC key or with an Apple-Key combination. The Apple-E entry into the editor was an example of this. The Main Menu is the window into the disk utilities. Table 1 below shows those 8-bit utilities that have been redesigned as 16-bit programs for ProSel 16. Some of the utilities such as Block Warden (Block Editor) and Volume Copy have not been rewritten.

Table 1

Backup/Restore:	Backup/Restore
BeachComber:	Optimizer
Cat Doctor:	Utilities
Cycler:	Exchange screens
Editor:	Editor
FindFile:	File Finder
Mr. Fixit:	Volume Repair
InfoDesk:	Information Desk

Other items on the Main Menu include Warm or Cold Shutdown, (the latter simulates a power-down, in case you wish to resize your RAMdisk), Refresh (restore) the Screen, Quit (leave ProSel), Modify Parameters, Show the Prefixes, ESC (return to Main Screen) and Help. Online Help is a new feature with PS16. A user may design his own Help files, which are simply TXT files stored in a subdirectory specified by the user. Numerous HELP file are already provided, describing various aspects of PS16, ProDOS and GS/OS.

Show Prefixes is a quick and useful feature, listing all the default ProDOS directories, the device numbers, and tokens used by ProSel to identify filetypes. PS16 and GS/OS are device-oriented, whereas PS8 and ProDOS 8 are slot/drive oriented. This is initially confusing, but before long one accepts that GS/OS assigns "device #1" to the boot volume, and that other devices are numbered according to the sequences of their drivers in the */SYSTEM/ DRIVES subdirectory. ('*' refers to the boot volume)

Modify Parameters permits the user to customize ProSel to his own preferences. Specify printer slot, lines per page, initilization string, etc.

Not having access to a hard disk, I can't vouch for Backup/Restore and Optimizer. They would appear to be even more automated and faster than before. Backup will do full volume or incremental copying These are indispensable aids to the hard disk user.

"Utilities" includes all the Cat Doctor functions, and adds a few extra, such as Compare Directories, Volume Copy, and Locate String. It loads quickly the first time called upon, and appears virtually instantaneously on a subsequent call. The function of the other 16-bit utilities is unchanged from a user viewpoint.

The third and final module of PS16 is the "Shell Mode", or "Command Line Processor". Jeff Tate would love this one, which Bredon himself admits "defies the user to do something intelligent." It is entirely possible to get your money's worth out of ProSel without ever entering Shell Mode. The reasons for it being there are twofold: (1) some people like this sort of thing, and (2) there are some circumstances wherein the user finds himself unable to return to the main screen (perhaps the PROSEL.SPECS file has been damaged). In this case, on cane almost always find his way back to Shell Mode, do a quick repair, and carry on.

Enter Shell Mode by pressing <clear> from the Main Screen. Shell Mode provides access to all the utilities plus "internal" commands resembling those of BASIC.SYSTEM

protocol) that interfere with GIF file viewing. It will work on any Apple II series machine running under ProDOS 8 (II+ requires lower case chip or 80 column card).

][GIF v1.0 -][GIF allows you to convert and display GIF- and RLE-format graphics files on Apple II series computers, and to save the converted pictures in standard Hires or Double Hires. . It will run on a][or][+ with at least 64K of memory (Hires only) , and the IIe (Revision A IIe, which can't use Double Hires), IIc, and IIgs.

Super Selector v2.9 - A professional program selector to launch ProDOS 8 system programs. Requires an Apple IIc, IIgs or enhanced IIe.

Hyper Format v2.1 - A handy disk formatting program that can check for bad blocks on the disk it formats.

SmartPort Commander - This is a hackers tool. It allows you to play with the commands available with the SmartPort for 3.5 inch disks and the Apple SCSI Card. *Warning:* some commands can wipe disks. Only use a back-up copy.

Super Hires Loader v1.01 - This program allows you to load GS pictures and display them on the Hires screen. Requires an Apple IIc, IIgs or enhanced IIe.

Text Printer - This program scans a disk and allows you to print any of the Text files on the disk to the printer. Includes a Basic Command called *Typer* that can be used in your own programs.

Apple II Virus Scanner v1.1 - This one scans for those little beasties in system files. Unlike a previous scanner programs, it scans all the system files on a disk.

GS/OS Utility Disk #7

Custom GS/OS - Custom.GS/OS is a program for the Apple IIgs that lets you customize the startup screen that appears when you boot GS/OS. As supplied by Apple, System Disks 4.0, 5.0, and 5.0.2 contain a file in the SYSTEM directory with the name START.GS.OS. In this file, among other things, are two small pictures or icons that are displayed when your IIgs is booted. At the very least you can expect to impress your friends with your computer expertise with the help of Custom.GS/OS.

VirusMD - This program detects files infected with Festering Hate and CyberAIDS viruses, healing them if you so desire. In addition, it can fix block 2 of your volume directory if it is damaged by these two types of viruses. The IIGS version will also update (or repair) block zero by installing the latest ProDOS 8 and GS/OS boot code if an older, or modified, boot block exists. The IIe version is also included.

Slide Master vd0.18 - Create professional looking slide shows with this program. A number of options are available including the time the picture is displayed on the screen and an buffered mode to increase speed. Only works with uncompressed Super Hires graphics in the same directory. Written in Australia.

View 3200 v1.2 - One feature of the GS that is not well known is that with a bit of fancy footwork, it can display pictures containing up to 3200 colours. The standard Super Hires screen is limited to just 256 colours. This program allows you to display these enhanced pictures on you GS.

3200 Pictures - What's the use having *View 3200* if you don't have the pictures, so here's a number of 3200 colour pictures to look at. The picture are: - Dream.3200, Lady2.3200, Zulu.3200, Almaden.3200, Plane.3200, Pics42.3200, Pics41.3200, Laura.3200, Lady1.3200, Kimt.3200, Jeremy.3200, House.3200, Fruit.3200. Fashion.3200, Eagle.3200, Brick.3200 & Atlantis.3200.

Bytes and Pieces...

by Kelvin Saggers

Some of the following items have be taken in part from various magazines such as A+, and Video and computer games. From their news and what's new sections. Others from new product releases, updates and news items.

Apple Warranty Extended

As from January 1990 all Apple Hardware products now have a full one year warranty. Before this Apple only offered a 90 day warranty. This change is estimated (by Apple) to add $US30 million per year to their operating expenses. The new warranty will apply to such items as Apple II, and Apple Mac computers, disk drives, printers and other related hardware items. So check your warranty card if you have purchase an Apple product since January 1990 it should be 1 year not 90 days.

Free Mac Catalog...

Educorp has a 288 page encyclopedia of software, hardware, CD-ROM products and accessories for the Apple Macintosh Computer range. To get your free copy, which includes over 7,000 program descriptions, call Educorp at (800) 843-9497 (USA).

Paintworks Gold 1.5

Owners of the new (ROM 03) Apple IIGS will find that Activisions latest version of Paintworks Gold 1.5 will not work with less than 1.5 Megabyte of RAM on their machine. The program will however work fine on the older ROM 01 machines with 1.25 Megabyte of RAM (1Meg of expansion RAM card).

It would appear that Activisions support department know of the problem, but at present have no plans to update the memory allocation routines in Paintworks Gold. After Activision had problems with Music Studio and ROM 01, you would think they would be aware of such pitfalls.

OCR program for the Apple II.

Three Beagle Bros. - Alan Bird, John Oberrick, and Rob Renstrom - have joined together in a new company called **WestCode**. Their first product is **INWORDS,** a neat optical character-reading program that works with any scanner to create AppleWorks or Text files from printed words in newsletters etc. At present most Apple II scanners only support graphic image transfer and an OCR program was long overdue.

Inwords can scan up to 3000 characters per minute (I can type about 1 per minute, once I have found the correct key on my keyboard that is - Ed.) and allows you to add carriage returns and tabs as required. The Program was designed to run on the Apple IIe and Apple IIGS and should be available in America in late 1990 for around $US129.00.

For more information read the What's New section in the October 1990 Issue of A+. Or write direct to WestCode, 11835 Carmel Mountain Road, Suite 1304-311, San Diego, CA 92128, (619) 679-9200, USA.

Apple Hypercard Version 2.0

Apple Computer will apparently offer free 'hacker upgrades' of their Hypercard version 2.0 software for users who feel they can figure out the workings of the program for themselves (according to an Industry Update in the October issue of Your Computer).

No documentation or packaging will be given, Apple dealers will copy the program files onto your disk for free, the rest is up to you. The normal package price for Hypercard version 2.0 will be around $80.00, and should be available in Australia in late 1990.

Checkmate

Checkmate Technology (Proterm) is in business again with Earl North as president under the new name of Micro Memory.Their new address is:

7655 East Gelding, #B1, Scottsdale
Arizona. 85260, 602-998-0227

Ed - Insync are the new owners of Proterm. Proterm version 2.2 is available, and Insync are working currently on version 3.0. See the October 1990 Apple-Bug.

New Systems Disk.

Apple have released a new version of the ProDOS 8 Systems Disk. The Systems Disk (Version 3.2) contains ProDOS 8 Version 1.9 and Basic.system Version 1.4.1 which fixes a problem with the end of file pointer.

ProDOS 8 v1.9 fixes two bugs one associated with loading files larger than 38k and the other with the annoying 'Program too large' error message. Also if your system has an 80column card then say good-bye to the old BYE and it's Prefix and Pathname prompts and hello to a mini selector that should have existed from day one.

Ed - GS/OS Version 5.0.2 owners should not replace the P8 file in the Systems folder with ProDOS 8 v1.9 or they will find that GS/OS will come back with an 'incorrect ProDOS version' error message. Any such changes should only be done via updates to the GS/OS system software and even then only via programs such as the Installer on the GS/OS Utility Disk, unless you know what you are doing.

The current Systems software supplied with GS/OS is Version 3.0 but each section has it's own version number which could be greater than this. To find out what version you are running under simply press the ESC key when GS/OS is booting, this will pause the system, and display the System version numbers.....

Claris

The Apple subsidiary Claris has lost whatever freedom it could ever have gained (by going public) from it's spin off from Apple in 1987, because Apple has again taken it back into the fold. It would seem that even AppleWorks is not immune from the Mac knife. The Claris Corporation is needed to promote innovative Macintosh Applications and create products to bridge the Apple Macintosh with other environments. Where the Apple II fits in this scheme is not known, obviously just an oversight .....

Apple IIe Card

The Apple Macintosh LC ($US2499) when it becomes available around February 1991 will be able to run Apple IIe software via the addition of the new Apple IIe Card which plugs into the 020 processor direct slot inside the machine. The card is said by Apple to be compatible with most of the existing Apple IIe software and is aimed at selling the Mac to the Apple II education market.

Apple recommend that their 12" RGB Monitor ($US599) be used with the Apple IIe Card ($US199.00). Graphics can be displayed in either low-resolution, high-resolution, and double high-resolution modes, in either colour or monochrome. The text display modes can be either 80 or 40 column, as normal, inverse, or mouse characters.

The 65C02 processor on the Apple IIe Card can run at the normal Apple IIe speed or at 2.04 megahertz (twice as fast). Apple soft, the system monitor, 80 column routines and diagnostics etc. are stored in write protected RAM. The card its self has 128k of RAM but can use up to 256K of the Macintosh LC RAM.

Ed - A IIgs would have been a better path or a beefed up IIe. The only costly 'plus' you get with the Mac LC is the fact you can run some of the smaller Mac applications. Apple would have better served the Apple II market with a card like the Duet, showing that Apple still supported the Apple II and still give those that wanted it a path to Mac software.

Committee Profile

Graham Black [Registrar]

Hi, I'm Graham Black. I have been with the club since the day it was formed.

I bought the first Apple][+ to come to Qld, back in 78/79. I started with the bare-bones system, 16k RAM, B&W converted TV and tape recorder. There were no Applesoft programs available at the time, so I had to learn how to write my own programs in a big hurry. I finally got fed-up with the continuing lack of software, and bought the Integer Basic Card which plugged into slot zero, just so I could run the pitiful amount of software that was available.

It didn't take long for me to realize that tapes were no good, and my first floppy disk drive and a centronics printer and another 16k RAM joined the system. A few months later I bought my second drive and the final 16k RAM to make up a 48k system (each 16k upgrade cost $150 in those days). I upgraded several times, before the //e came onto the market, and only after the //e had been out about two years, did I eventually get one.

When ProDOS first came out, I bought a copy, and after many frustrating hours of trying to figure it out, I shelved for about a year. The first of the 3.5" drives hit the market for the //e, and once again, I bought the first that hit the shops. About a week later, I bought the second one as well, as disk swapping, when backing up disks, takes forever. About the same time, I bought a 1meg RAM card for the //e, and used that as a RAM disk, and of course it was very handy with AppleWorks and the like. I also bought the first speedup card (the Speed Demon). This increased the speed of the system, the same way the Zip Chip does. The only difference being that this card cost me over $650, but it was worth it at the time.

I hung onto my //e even after I bought my //GS system a couple of years ago. And somewhere along the line, I even bought a //c, and for a while I had three systems here to play with. I now have 4 meg installed in the //GS (with another meg still to go in as soon as I can get my hands on a slot mover), the RAMkeeper (battery Backed RAM), the POWER-UP stereo card and speakers to enhance the n and of course a 65meg CMS hard disk.

In the years I have been in computers, many dollars worth of equipment has passed by, including a variety of printers, plotters, hard disks etc., and a mighty lot of software, good and bad (I even had an IBM for a while).

You might say that I have a working knowledge of Applesoft, as all my programming is done in basic, with the odd bit of machine code thrown in here and there.

Apple-BUG

by Kelvin Saggers

This is your newsletter and as such should reflect your needs and interests, but above all it should contain articles written by more than just one or two members of the group, who in the main hold other positions and already donate most of their free time to help the group function.

Club Members seem to think they have nothing to offer in the way of material for the newsletter, but they are wrong. Most would have a program, be it a game or otherwise that they know well enough to write a short review or series of articles on. Some might use a language such as AppleSoft or C and might be able to send in listings of programs they have written with a article about what it does and they might even supply a copy of the program on disk for the software library.

Very few members would not own various hardware products that they use with their Apple, for example a RAM card. They also could write a few lines on what it's like to use and any problems they might have had etc. If hardware is not your bag then maybe you have read a computer book or the like and could write a short review to let others know about it.

The list is endless and the result would be a more rounded newsletter. Computer groups like Apple-Q Inc. exist to aid their members and share information, and keep people up to date with the new releases for the their computer. But that can only work if ALL MEMBERS help to achieve those ends.....

If you wish to send an article in for the newsletter then please do so as a text file [Freewriter, Zardax, AppleWorks etc.] on either a 5.25 or 3.5 disk [they will be returned] and bring it to the meeting or either send them by mail to Apple-Q Inc. as noted on page 3, or mail direct to me:

Kelvin Saggers	OR	The Phoenix BBS
13 Bennett Drive		(07) 800-4660
Browns Plains		Apple-Q BBS
Qld 4118.		(07) 851-1711

80-Column turn on..

Whenever you turn on the Apple //e or //c 80-column card with a PR#3, the screen is cleared. This is fine for some applications or when your program begins, but if you want to leave the screen information intact you should use either of the following pokes to return to the 80column card

DOS 3.3
    POKE 54,7: POKE 55,195: CALL 1002
ProDOS
    PRINT D$;"PR#A$C307" : Rem D$=CHR$(4)
Note
    This trick connects the 80-column firmware at its warmstart address ($C07), which doesn't clear the screen.

Software Library Order Form

Name: ....

Address: ....

Suburb: .... Post Code: ....

❑ Mail order or   ❑ Pick-up order at meeting

Payment By: ❑ Bankcard   ❑ Mastercard
❑ Cheque   ❑ Money Order   ❑ Cash (pick-up)

Credit Card Number:

....

Expiry Date: ..../......... Signature: ....

Disk or Pack Name	5.25"	3.5"	Price
....	❑	❑	$.........
....	❑	❑	$.........
....	❑	❑	$.........
....	❑	❑	$.........
....	❑	❑	$.........
....	❑	❑	$.........
....	❑	❑	$.........
....	❑	❑	$.........
....	❑	❑	$.........
....	❑	❑	$.........
	Sub Total	$.........
	Post & Pack	$ 2.00
	Total Cost	$.........

New Members

Welcome to:-

#063   Helen Smith   Tarragindi

Renewals

Thank you for your continuing support:

#050	Robin Craig	Nerang
#106	John McCotter	MacGregor
#108	Stan Fitzpatrick	MtGravatt
#129	John Aspland	Caboolture
#136	Computer Network	Booval

Membership/Renewal Form

Please fill in this form, tick the appropiate boxes and send the form to **Apple-Q Inc., P.O. Box 721, South Brisbane, Queensland 4101.** Please enclose your remittance with this form.

❑ Membership Application
❑ Renewal of Membership
              Membership Number:...............................

Membership Fees

❑ **$10.00**   Joining Fee (first year only)
❑ **$25.00**   Adults, Family & Students
❑ **$10.00**   Associate Membership (BBS only)
❑ **$50.00**   Corporate Membership (Schools/Business Houses)

Member's Details

Name: ....

Street: ....

Suburb: ....

City: ....

State: .... Post Code: ....

Home Phone: (............) ....

Business Phone: (............) ....

A membership list is published every year in the Newsletter. Only your Name, Suburb and Phone number, are listed. Do you require exemption from this list?   ❑ YES   ❑ NO

System Information

❑ **Apple //**   ❑ **Apple //+**   ❑ **Apple //c**
❑ **Apple //e**   ❑ **Apple //gs**   ❑ **Apple ///**
❑ **Macintosh**   ❑ **Other:** ....

Members are reminded that the copying of commercial software is **not santioned** by the Apple-Q Inc., and that members who do so, risk expulsion from the group. I hereby declare that the above details are true and correct, and agree to abide by the Rules and Regulations of the Group.

Signed:..

For Official Use Only ━━━━━━━━━━━━━━━

Receipt Number: .... Date: ....

Status: .... Paid: $ ....

Exp. Date: ....

Apple-Bug

The Newsletter of APPLE-Q Inc. (the Brisbane Users' Group)
If not claimed within 7 days, please return to:
P.O. Box 721, South Brisbane, Queensland 4101, Australia.

Please deliver to ☞