

March 1990 Edition

# Apple Bug

the newsletter of Apple-QLD Inc.

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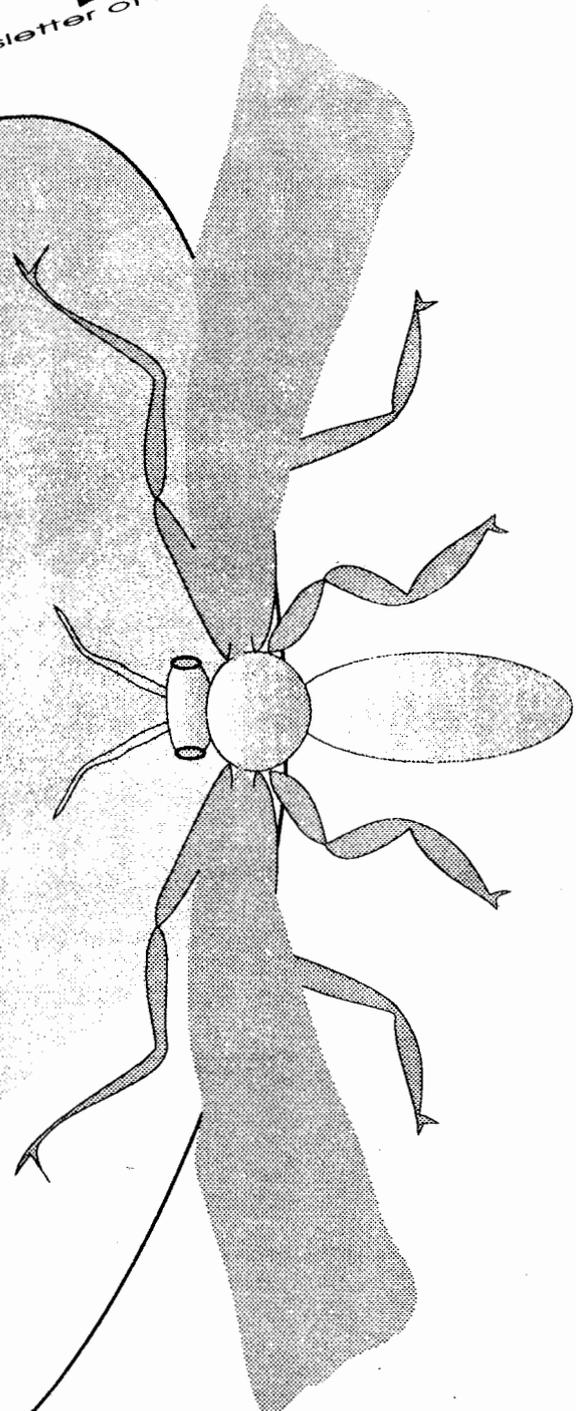
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• Includes a full Disk of the Month Liftout

\$1.50

THE BRISBANE APPLE USERS' GROUP

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



# Apple-Q Inc. Information Page

## This Month...

### General Meeting

Sunday 18th March 1990  
Hours: 11.00 am to 4.30 pm

### Committee Meeting

Monday 19th March 1990  
Starts: 7.00 pm

## Next Month...

### General Meeting

Sunday 15th April 1990  
Hours: 11.00 am to 4.30 pm

### Committee Meeting

Monday 16th April 1990  
Starts: 7.00 pm

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

## Coming Events...

### March:

**Rob Neary**, from **Ramware**, will be back for another demonstration with education software and he will demonstrate the CD-ROM drive.

### April:

**Build your own Hard Drive.** We will show you how and how to manage your Hard Drive.

### May:

We are still planning an demonstration for May. Keep reading the Apple-Bug details.

## Membership Fees

### Joining Fee:

**Adults:** \$10.00 (add to Membership Fee when first joining)

**Students:** \$5.00 (under 21 years & on production of Student Card)

### Annual Subscriptions:

**Adults/Students:** \$25.00

**Corporate Membership:** \$50.00

**Associate Membership:** \$10.00 (BBS only)

*At the discretion of the Executive Committee*

## Contributions to Apple-Bug

We are always looking for articles for publication in Apple-Bug. You can send your article to **The Editor, P.O. Box 6375, Gold Coast Mail Centre, Qld. 4217** or hand it to a Committee Member during the General Meeting. If possible, send the article on disk. The disk will either be posted back to you or handed to you at the next meeting. The deadline is the Committee Meeting following the General Meeting. Disk contributions can be accepted on:

**Apple II** - Dos 3.3, CP/M, Apple Pascal & Prodos Text files. Also Appleworks and Zardax files.

**Mac** - Text file on a 400K or 800K disk (also MacPaint pictures). Other word processing files can be translated.

## Executive Committee

Vince Crosdale	President	(07) 351-3090
John Finch	Vice-President	(07) 260-5218
Bob Godbehere	Secretary	(07) 808-3892
Bernie Benson	Treasurer	(07) 345-1545
Ann White	Registrar	(07) 371-4067
Dale Rodgie	Editor	(075) 38-6942
Sheryl Mann	Software Librarian	(071) 96-7401

## Bulletin Board - 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

## 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.

## 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.
- Application for membership or Renewal of membership and all other mail, should be sent to **Apple-Q Inc., P.O. Box 721, South Brisbane, Queensland 4101**. Articles for Apple-Bug can be sent to **Editor, P.O. Box 6375, Gold Coast Mail Centre, Bundall, Queensland 4217**.
- 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 on (075) 38-6942 (after hours).

## Production Information

The Apple-Bug was written with AppleWorks. AppleWorks GS was used for the Page Layout and the original copy was printed on a LaserWriter.

# Editorial

by Dale Rodgie and Bernie Benson

The response was good for the double February edition of the Apple-Bug. Though, as you can imagine, there was a lot of work that went into it. Well this month I welcome Anthony Rich to the Apple-Bug team. Anthony will be writing monthly articles on the technical side of the Apple IIgs. The first in this series starts in this edition. Anthony has had experience in the repair of all Apple models and now he shares this knowledge with us. If you have any technical questions, you can write to Anthony at the address at the end of his article. Thanks Anthony for these excellent articles.

This edition also contains two articles from Cedric Webster. Cedric has written a number of articles for the Apple-Bug. This month he looks at two Apple IIgs programs called Geometry and World Geograph. Thanks Cedric for the work you put into these articles.

There is always room in the Apple-Bug for more articles from members. You can send the article to me on either disk or paper. Of course I prefer disk. Information on disk formats and my postal address are listed on the Information Page.

## Auction

Last month we had another great auction. Here are the results:

	Feb '90	Mar '89
Sales Recorded	\$1019.00	\$1171.20
Lots Sold	71	90

A number of transactions were also concluded after the Auction. Many thanks to the members who offered items and to those who snapped them up. At this time we plan to continue the Auction on an annual basis and your comments and suggestions in improving the day would be appreciated.

In submitting your comments please remember the following:

- Minimum lot reserve price \$5.00 (if your item is not worth \$5.00 add something to it)
- Minimum commission charged to seller is 50 cents.
- Prior registration of your items with the convener helps relieve the pressure put on everyone on the Auction day (auction items are presented in order of receipt).
- See you next year!

## AppleWorks S.I.G.

Unfortunately there was not sufficient time to present the

## Apple-Q Inc. 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.

**12.00 pm - 12.30 pm - Lunch**

The Trading table, etc continues during this period.

**12.30 pm - 2.00 pm - Demonstration**

Invited speaker to give **demonstration** and follow up with organised question and answer session relating to the demonstration.

**2.00 pm - 2.30 pm - Afternoon tea break**

Draw raffle prize and door prize.

**2.30 pm - 4.00 pm - Special Interest Group meetings:**

- Communications
- Appleworks
- New Users (Beginners)
- Apple // Computers
- Apple //GS Computers
- Macintosh Computers

**4.00 pm - 4.30 pm - Open for Business**

Trading Table, Software Library etc. open for business.

**4.30 pm - Close the day.**

AppleWorks SIG due to the Auction so the paper prepared on the Word Processor and Data Base modules will be looked at this month. If time permits I will try to add something further to what is already prepared.

## Apple IIgs S.I.G.

The Apple IIgs SIG is back on this month. We will be looking at the new copy programs SpeedySmith and Photonix on this month's GS Disk of the Month. Any member is welcome to demonstrate a GS program at the SIG. Contact Dale Rodgie to arrange a demonstration.

## Other S.I.G.'s

There are many proficient Apple users out there and one or more of you must be able to run a S.I.G. for a meeting or two. How about some offers - contact Bernie Benson if you are interested. You choose the subject we will advertise it for you. Bernie can be contacted on (07) 345-1545.

# Apple News

## Cheap Mac Drives

Sheridan Electronics are selling cheap 400K internal Mac drives. One member picked one up for \$22.00 just before

Christmas. Used with a universal controller card, you can use them on a Apple IIe. The address for Sheridan Electronics is 164 Redfern Street, Redfern, Sydney - phone (02) 699-5922 or (02) 699-6912.

## Appleworks GS Upgrade

The new version of Appleworks GS is now available in Australia. Dataflow has sent all registered users a letter informing of the version 1.1 upgrade. The cost of the upgrade is \$39.95, however, you can save \$5.00 if you upgrade quickly as Dataflow has a special price.

The new version displays a Super Hires graphic while loading (better than the empty desktop) and the program's code is smaller and faster. It comes complete with System Disk version 5.02 and Appleworks GS requires at least System Disk version 5.0.

## AppleWorks 3.0 Network Version

Clarix Corporation recently announced the availability of an AppleShare-compatible network version of AppleWorks 3.0. AppleWorks 3.0 Network offers all the features in the non-networked version of the product, including spell checking, additional word processor formatting and tab options, horizontal scrolling in multiple record layout, up to

twenty report formats for each data base file, and twenty-six new spreadsheet functions.

AppleWorks 3.0 Network supports up to 50 users who can all network resources and can share data files with other users.

The AppleShare network requires a file server consisting for a hard disk-equipped Macintosh Plus, SE or Macintosh II-series computer, and AppleShare File Server software (version 2.0 or later). Each user can work at an Apple IIgs or an enhanced Apple IIe. The IIgs must be running Apple IIgs workstation software or GS/OS System Software 5.0 or later. Each IIe must be equipped with at least 128K or RAM (256K recommended) and an Apple Workstation Card.

AppleWorks 3.0 Network has a suggested list price of \$1616.00 (US). Clarix in the States planned to ship this new last month. For more information contact the Australian distributor, Dataflow on (02) 331-6153.

[reprinted from AppleWorks Forum - February 1990 edition - newsletter of the National AppleWorks Users Group]

## Disk of the Month

Here are another two disks that made the Disk of the Month Hall of Fame. Firstly we have the first AppleWorks Utility Disk for AppleWorks 3.0 only. It contains two patch programs and some fantastic Ultramacros.

For the Apple IIgs we have the third GS/OS Utility Disk. This disk boots into SpeedySmith, however if you hold down the 'P' key while booting, it will run Prodos. it contains two fast copy programs, a virus checker, Inits, CDA's and NDA's.

To order, see Sheryl or Dale at the Software Library Table at the General Meeting or fill in the order form on the Disk of the Month Liftout in this edition. Let's see whats available this month:

### AppleWorks Utility Disk #3

*All the programs on this disk require AppleWorks 3.0. Contact Dataflow if you have not upgraded to AppleWorks 3.0.*

**Dogpaw** - Dogpaw is a powerful added-ProDOS-command program which provides an easy and convenient method of displaying and/or printing text files from the BASIC environment. This version supports AppleWorks 3.0 word processor files.

**Columnist** - Columnist is a text file post-processor which takes any TXT (ASCII text) or AWP (Appleworks Word Processor) file and converts it into a new file in which the text is formatted in two or three columns on each page. This version also supports AppleWorks 3.0 word processor files.

**AW.3.0.Patcher** - AW 3.0 Patcher is a freeware patch program to help fix some of the little problems in AppleWorks v3.0. Patches include: AWP Ctrl-codes, Tab Ruler in Header/Footer, ADB Print more than 1 copy, ASP Delete more than 255 rows, Delete Default Printer, Text to ADB import, ADB/ASP OA-Right Arrow lock up & Saving to a

locked file.

**AW.3.0.RAM.Patch** - This program installs a patch to AppleWorks 3.0 so that AppleWorks does not take over emulated RAMdisks on an Apple IIe or IIc.

**Macro.Reference** - Organizing your macro sets becomes even more important with UltraMacros 3.1 and later. With the capacity to build endless sets instantly available as TaskFiles, the need for some reference system becomes plain. Though not a complete library system, the Macro.Reference.Kit will enable you to store your macro sets in a manner that is easily referenced for future adjustments or modifications, as well as learning situations with new users.

**Filecard.Macros** - Using the familiar AppleWorks FileCard interface, this group of files for UltraMacros is designed to permit you to easily build a FileCard menu system(s) that suits your own needs. Think of it...a personalized startup menu, accomplishing a half dozen different possible startup routines for you at the press of a key, without having to remember which macro command is for which task! These macros require Ultramacros version 3.0 or later.

**Change.Date** - This file contains two macros to convert dates. One to convert from MM/DD/YY to YY.MM.DD and the second converts back to the former. These macros require Ultramacros version 3.0 or later.

**Age.Macros** - These macros calculate a time interval (age) between an end date and a beginning date or column of dates and print out that interval in the form YEARS/MONTHS. These macros require Ultramacros version 3.0 or later.

### GS/OS Utility Disk #3

**Catelem** - This is a file selector and text file reader. Written by the same author as SpeedySmith.

**ShrinkIt v2.1** - Required to unshrink Nucleus and Photonix.

**Nucleus** - The best display is sight and sound on the GS. This is a demo of what the GS really can do.

**SpeedySmith** - SpeedySmith together with Photonix are the

fastest 3.5 inch disk copy programs I have ever seen. Requires 1.25 meg. and a Apple 3.5 drive Three version of this program appear on this disk. The full graphics version is in French.

**Photonix** - Photonix is the second production of FTA (Free Tool Association), following NUCLEUS. This new copier on GS combines both speed (in copy) and power thru new options, all this along with an agreeable look.

**Apple.RX** - This program is "virus medicine". It will read your system files (and any other types you specify) and create a data file that contains information on these files. At any time, you can run it in check mode and it will report any of se files that have been altered.

**DeskPic.Init** - DeskPic is a initialization file that displays a picture in place of the standard light blue background.

**BrkCursor** - BrkCursor is a small program that lets you see if a desktop program you're running on your Apple //gs has crashed. With BrkCursor installed, the mouse cursor will turn into a X shape (which is red in 320 mode, and changes between red and blue in 640 mode, depending on where it is onscreen).

**ShowPic.4.27** - ShowPic is a New Desk Accessory that

will allow you to view any type of IIGS Super HiRes Graphic, allow you to save that graphic, and do some simple colour conversions.

**Shutdown** - This is a very simple NDA written to do a cold restart of your GS. When invoked, all it does is perform a GS/OS OSShutdown call that invalidates the Memory Manager power-up byte. For those of you that don't know what that will accomplish, it makes the machine think that it has just been turned on, so that it reinitializes the RAMdisk to the current size stored in the Control Panel and then goes through the normal bootup sequence.

**PrintScreen.CDA** - Print Screen CDA dumps your text screen to the printer. Print Screen CDA will work only with the 40 or 80 column text screen, not with any graphics screen. It is designed to be used with an Apple Imagewriter printer.

**Diskwitch** - All those disk utilities that you could have wished for in one CDA. Catalog disks, rename and delete files etc. Copy option not available in this version.

**IW2.DA** - This CDA allows you to send control codes to an ImageWriter II Printer connected to the slot 1 port of the GS. This version supports a large number of codes that I think are most useful in immediate mode.

## Letters

The Secretary  
Apple-Q Inc.  
Brisbane Users Group  
Brisbane

Dear Sir

I wish to raise an important issue which I believe could benefit all Club members. At present the Club seems to operate on two levels, one in which the Committee participates and the other in which the members participate.

I have been involved in many organizations and without .ception members have been kept advised of the Committee's activities. I find it most unsatisfactory that the Committee can operate without letting members know of decisions taken which affect their activities within the Club.

I now formally request that the minutes of all Committee meetings be published in full in the monthly newsletter. This will have the added benefit of providing material for publication. Unless I am mistaken once members become more acquainted with the Clubs affairs further correspondence will follow. I also request that correspondence be made available for perusal at Open Days. The Club operates only for the benefit of all financial members.

Due to the proximity of the Open Day and the Committee meetings, I am precluded from attending any Committee meeting, nor should that be a requirement for finding out how the Club is being administered.

Another aspect which has troubled me for some time is the apparent disproportion of funds expended on Bulletin Board facilities. My objection is no doubt based upon my complete

lack of interest in that aspect of computing. However, the lack of printed material available for borrowing emphasizes this imbalance.

Adding to my annoyance at the large expenditure on the BBS, is the fact that persons other than full Apple-Q members are able to avail themselves of Club facilities. I am sure many Club members would like to declare their interest in a limited range of Club activities and thereby pay a reduced membership fee. I request that the membership structure be amended to require that any user of Club facilities be a full member. This would also produce additional revenue for the club.

I would be pleased for my letter to be published as I am sure that the two matters I have raised will evoke a degree of discussion within the Club, both for and against.

It would also be advantageous to all members, if Apple-Bug could contain details on a regular basis of specials and discounts available from Apple Dealers. This could extend to dealers Queensland wide.

I await your reply, after the matters raised in my letter have been deliberated by your Committee.

Regards

Peter Rabaa  
Membership No. 176

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Mr. Peter Rabaa  
Chapel Hill Q 4069

Dear Peter

Thank you for your letter dated 18 February, 1990. In line

with your request, the letter was duly noted in the inwards correspondence and placed on the table for discussion at our last Committee meeting, which was held on the night of 19 February, 1990. I now take the opportunity to reply to your letter on behalf of the Committee of Apple-Q Inc.

As you have raised a number of issues in your letter, I will outline them in order of presentation, along with our reply to each.

1. The minutes of all Committee meetings be published in full in the monthly newsletter.

The Committee of Apple-Q Inc. is broken into a number of titles. If we treat each title as being equivalent to a department in a large organization, I feel the analogy will bear some meaning.

Each member of the Committee performs a specific task in the overall operation of the Club. Each person has his/her responsibilities towards the continued operation of the Club, and each person operates as an individual in this capacity for the majority of each month. For two days a month, these being the Open Day and the monthly Committee meeting on the Monday night immediately following the Open Day, the Committee comes together as a whole to firstly operate the monthly Open Day, and secondly to formally conduct the Clubs affairs.

If we go back to the analogy of a large organization, then the similarities begin to show. An individual in these organizations performs as a part of a group when operating with other members of the organization, but is largely acting as an individual, making decisions based upon his/her judgment for the majority of the time. It is only in certain circumstances that this person approaches either a senior colleague, or another person for advice on a situation.

The Committee of Apple-Q is the same. Each person is fully aware of his/her responsibilities towards the operation of the Club, and makes decisions based upon this knowledge. In certain situations, consultation with another member of the Committee may be necessary to arrive at a suitable agreement. Therefore, depending upon the amount of business each person conducts on behalf of Apple-Q Inc., this reflects directly upon the amount that person then brings for presentation to the remainder of the Committee at the Committee meeting.

As you may well appreciate, this sometimes involves rather substantial reports from various members of the Committee. This, along with the standard monthly reports that are presented to the Committee (including the Treasurer's report, inward and outward correspondence, etc.) combines to become a rather substantial document in its own right when compiled as the minutes of the Committee meeting. For example, at the last Committee meeting, the Treasurer presented his report of the Clubs financial affairs, including the Open Day auction. This document alone totalled 9 A4 pages. The correspondence for the previous month, entered into a foolscap mail book, summarized to one line per letter, totalled approximately 1.5 pages. As you may well appreciate, this soon becomes a rather large document.

The Committee deliberated on this matter, and came to the decision that the minutes of all Committee meetings will not be published in Apple-Bug each month. This decision was based upon the knowledge of the size of the document with which we are dealing, along with the feeling that members would much rather read news and views based upon their computers rather than wade through each months Committee minutes. We appreciate your point about this supplying us with additional material for publication, but, at the current time the Editor has an abundance of material for editions well in advance, and the inclusion of the minutes would only force us to delay articles much more worthy of publication.

Please let me make one observation with regards to the decision not to publish the minutes of the Committee meetings. It may be thought that the Committees decision reflects back that the Committee has something to hide from the members with respect to the internal workings of the Club. This could not be further from the truth, and I would invite any person that so wishes to request to view the minutes of the Committee meetings at any Open Day. It is felt that better value for money for the members can be achieved by presenting them with a newsletter containing articles and news, rather than the majority being taken up by the Club's business.

2. Correspondence be made available for perusal at Open Days.

All mail received by the Club is available for perusal upon request at any of the monthly Open Days. The Secretary carries this material with him to both the Open Day and the Committee meetings. However, material of a confidential nature is not available for perusal by the Club members. This is a standard practice of many organizations. I must also state here that magazines received by the Club are not available on the Open Day as they are presented to the Hardware Librarian for registration at the Committee meeting following the Open Day.

3. 'I am precluded from attending the Committee meeting.'

This was neither a request nor statement on its own in your letter, however I wish to use it to remind all members that the Committee meetings following the monthly Open Days are open to any member of the Club that wishes to attend. Details of these meetings are published on the inside cover of Apple-Bug each month.

4. The apparent disproportion of funds expended on Bulletin Board facilities.

To answer this, I will consult the latest report as presented by the Treasurer at the last Committee meeting. I think it sufficient to present a selection of the Clubs expenditures without further comment. Please note that all expenditures are year to date figures from September, 1989.

Materials purchased for resale to members (this includes disks, ribbons, books, etc.)	\$3174.63
Public Domain Software	\$399.00

Blank media for P.D. Software	\$602.69
Monthly Newsletter - Apple-Bug	\$1207.03
Computer Equipment for P.D. Library	\$1300.00
BBS Expenses	\$103.88

I would like it to be noted at this point, that the formation of the BBS service and purchase of equipment for this purpose was a decision made by a previous Committee in approximately mid 1986, with its only major upgrade in this period being the purchase of a new hard drive system. The funds for this upgrade were raised through the sale of existing equipment, and the balance attained through fund raising activities being undertaken for that specific purpose. This was advertised in the Editorial section of the August 1988 edition of Apple-Bug and subsequent editions until the funds were attained.

The lack of printed material available for borrowing emphasizes this imbalance.

The Club currently subscribes to three different magazines which are published on a monthly basis. These are InCider/A+, A2-Central and the National Appleworks Users Group in the U.S. Along with these, the Club receives monthly newsletters from other User Groups within Australia and also HAUS, the newsletter of the Honolulu Apple Users Society. In addition to our regular arrivals, we also have a large range of printed material available for borrowing by any member attending the monthly Open Day. These magazines may be perused, upon request, in our lockup located in the rear storeroom of the Hooper Education Centre. Consultation with the Hardware Librarian over the usage of the Club library revealed that approximately four to five members of the Club avail themselves of this facility on a regular basis.

5. Person other than full Apple-Q members are able to avail themselves of Club facilities.

As this statement was connected to your discussion on the BBS, the Committee felt that you were referencing the \$10.00 Associate membership of Apple-Q Inc. available to persons using the BBS. This form of membership is written into the Constitution of Apple-Q Inc. If I may quote from the Constitution, paragraph 4(1)(a) states :

*"Associate membership shall be available to any person who wishes to obtain User Access only to the Apple-Q Bulletin Board System. Bulletin Board facilities available to members with User Access will be determined by the Management Committee, from time to time, in the form of a By-Law of the Association. Associate members shall not have voting rights."*

To add to this, Associate members of Apple-Q Inc. are restricted to the use of the BBS only. They do not receive our monthly newsletter, nor may they avail themselves of any of the services which we offer to Ordinary (or to use your phrase, full Apple-Q Inc.) members during the month or at Open Days.

I should also like to mention that the Constitution of the Club is a large document in its own right, and reproduction and circulation to all members would involve a rather large expense. However, a copy of the Constitution of the Club is available for perusal upon request at any of the Open Days.

6. That the membership structure be amended to require that any user of club facilities be a full member.

The membership structure of Apple-Q Inc. was amended to reflect our Incorporation on October 21, 1987. The Committee undertook a review of the membership fees in April, 1989 and the May edition of Apple-Bug carried an article outlining the effects of that review. The changes undertaken at that time were a deletion of the Student membership and an increase in the Adult membership from \$20 p.a. to \$25 p.a. This was necessary to account for the rising operating costs of the club in the areas of the newsletter and the purchase of goods for resale to club members. It is the policy of the current Committee to try to maintain a stable membership fee structure for as long a period as possible, and as a review was undertaken under 12 months ago, it was felt another review in such a short time span would seem unreasonable to the majority of members. The Committee feels that there is nothing wrong with the current fee structure of the Club, being comparable to other major User Groups around the nation, and when it is considered that it costs approximately \$1.25 per copy of the newsletter per month, it represents good value.

In relation to the \$10.00 Associate membership available to BBS users, as no other service other than the BBS is available to this form of membership, then an increase in fees equivalent to Ordinary member status was felt to be unreasonable.

7. That Apple-Bug contain details on a regular basis of specials and discounts available from Apple Dealers, perhaps Queensland wide.

On this point, the Committee is in complete agreement with you. Informing the members of where they may acquire a good deal is always something that we are trying to achieve. However, for this to be done, the information must be available to ourselves. In the past we have run advertisements from Computer City offering items on special, and are more than happy to continue to do so in the future. As all members of the Committee are committed to full time jobs, it is beyond their ability, nor should it be expected of them, to 'run around town' seeking the best deals for members on the Apple range of products. We do, however ask dealers to advise us when they have offers and specials available in the Apple line. With regards to Queensland wide, if any of our country members are prepared to approach a retailer in their district in relation to this matter, and the material is forwarded to us, we will be only too pleased to publish it.

In conclusion, I hope that the above discussion has answered all of the matters raised in your letter. As my reply is being published in the magazine along with your letter, I would also like to invite any other members of the Club to

offer their thoughts on the matters raised.

Please do not hesitate to contact us if you have any further queries.

Yours faithfully

Vince Crosdale  
President Apple-Q Inc.  
on behalf of the Apple-Q Inc. Management Committee.

---

Terri Taylor  
7A Elizabeth Street  
Kenilworth  
Queensland 4574

Phone (071) 460-413 (after hours)

Dear Sir/Madam

I am interested in purchasing an Apple IIe computer with 128K Enhanced monitor and printer. A member of your group may be able to help out.

I can be contacted at the above address.

Yours faithfully

Mrs. Terri Talyor

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## Macintosh Mumbblings

by *John Finch*

### Backdrop

Do you all know about the ability of the Mac to display a picture in place of the standard grey desktop background? How it happens is this: the grey desktop is just a grey "picture" that the system draws on the screen to give you a visual image of the screen. This "picture" can easily be replaced with a genuine picture.

The work is done by a small program that runs at startup time and stays resident whilst your programs are running. This is an INIT program called "Backdrop". Of course it does take up some memory, but if you have a Mac plus or better, you have enough memory for most operations without the loss of the 23 Kbytes that it uses worrying you. (1 Million less 23 is not much of a loss!). This figure may vary according to the picture used.

The program itself only take up 3Kb of disk space; plus the 22Kb for the picture itself, so you could even run this on a floppy based system unless space was very tight.

The pictures can be created many ways. The best being a scanned image, but any MacPaint picture of the correct size will do. You can duplicate your company logo - or have a scanned picture of your wife, dog, girlfriend, car: the possibilities are endless. Another way of getting pictures is from screen dumps when using a program, a "Command-Shift-3". This creates a picture of your screen that the screen maker program will be able to convert. Once you have your image in a MacPaint format you can create the startup screen with a number of programs. SuperPaint has a Startup screen option, as well as several public domain programs. You simply run your MacPaint format file through the conversation program and name the result "Startup screen" and put it in your System Folder together with the INIT "Backdrop" and reboot your system.

In order to offer a collection of pre-packed startup screens ready made I am making a collection and putting it on a club

disk together with the necessary INIT and conversion programs. The pictures I have so far collected include: scans of a couple of pretty girls, a picture of a gas nebulae, some bamboo, a tiger and a startup picture from a game. Plus more - and the list is growing.

### Adobe Type Manager

Another programs I have been experimenting with is the "Adobe Type Manager". This program allows you to create scale fonts of any size; well any reasonable size - I have not tried creating fonts bigger than 127, as that is the limit set in my word processor, but the true limit may be higher. Strangely enough the User Guide does not mention a limit - so perhaps there is not one, but if you need to print letters larger than 120 point you would be doing something rather extra ordinary, so probably not using a word processor anyway. These fonts are scaleable because they use PostScript for technology.

This program and its files do take up a lot of disk space, so I doubt if using this from a floppy is practical - or even possible. However, for the hard disk users it is really great. The bonus is, that if you do use a lot of larger fonts your system will already be enlarged with these big fonts. You can streamline your system so that you only have the size 12 installed. The idea is that all sizes are scaled from the one basic font. This does not, of course, work with any font, but only those that Adobe supply, but the choice is adequate and more are available.

It is the ease of changing size that makes this package so attractive. You type something out in size 12 and find it does not quite fit into the space - change it to size 11 or 13. If you have a heading you want a bit more emphasis - change it to bold. But the most impressive results from this program is if you are using outline/shadow. The shadow, especially in the larger fonts, really is a shadow - or so it looks.

Unfortunately the way we get this stuff to page in the magazine prohibits my giving you any examples, but if you are interested in buying this program I will give you a demo. The program costs around \$165 from Computer City.

# Disk of the Month Catalogue

A complete catalogue of all the Apple-II Disk of the Month disks and some great package deals.

We have been offering these Disks of the Month for just over a year now. However, the one thing members keep calling for is a complete catalogue. So here it is! This liftout is not just a catalogue - we are also offering disk packages at a discount price for a limited time only! Below you will see all our disks listed with a brief description of each disk's contents. Due to lack of space, not all the detail can be included. Check past issues of Apple-Bug for more details. All disks are available on both 5.25 and 3.5 inch formats except where indicated. Use the order form on the back page to order the disks listed in this catalogue.

## Apple IIe, IIc disks

### Terc Basic Enhancements

Terc Basic adds new commands to Applesoft. Terc comes with its own full-screen editor, so that you can easily edit your programs. You then compile your program and run it. Using Terc Basic, you can add Text and Hires windows, improved GET commands, labeled subroutines, local variables, debugging commands...the list goes on.

### Davex Utility Disk

Davex is a shell or command processor. In this shell, you can handle files, type Appleworks (WP) and text files and launch programs. You can also change any of its commands - eg. "CAT" to "DIR" or just "D". It can also convert Appleworks word processor files into

text without the hassle of using Appleworks. In most cases, when you quit from a program launched from Davex, you will return back to the Davex shell. You can even write your own commands.

### Extended Command Processor 8

ECP8 is an operating system shell and program selector for use with ProDOS. It is very much like Davex and includes over 44 commands. You can also create Batch programs. ECP8 includes extensive documentation and the source code is included on the 3.5 inch disk.

### Modem Utility Disk #1

**Talk is Cheap** - Comms software package. Has Binary II works on the GS.  
**Kermit** - Comms and file transfer program. Transfer between computers.  
**BLU** - BLU is a Binary II utility. It allows you to make Binary II files.  
**TEX** - This one removes line feeds and carriage returns from text files.  
**Disk Disintegrator Deluxe** - Compact files or entire disks. It also contains other disk utilities.  
**Freewriter** - This is a text file editor.

### Modem Utility Disk #2

**ShrinkIT v2.02** - Utility program for achieving disks and files. Also other disk utilities. Excellent program!  
**File Attribute Zapper II** - Easily change the primary type, auxiliary type, and access bits of any ProDOS file.  
**ProTerm Start** - Alternative to the PROTERM.SYSTEM file on ProTerm disk to make ProTerm boot faster.

**ATP-Pro** - Comms program - includes: macros, on-line Help.

### Appleworks Utility Disk #1

**SuperPatch** - This program has up to 30 different patches for Appleworks version 2.0 or 2.1. It is all menu driven.  
**An Appleworks Utility** - It allows you to lock, unlock, catalog, etc. Appleworks files.  
**Templates** - The second side of this contains a number of templates for Appleworks.

### Appleworks Utility Disk #2

**Listworks** - List of information in multiple columns on your printer.  
**RepairWorks** - Repairs word processor, spreadsheet and data base files.  
**Templates & Tips** - 3 templates also.

### Appleworks Templates

**ADB.Fixer** - The Data Base Repair Kit will help you recover damaged data base files. Instructions and a sample damaged data base are included.  
**Templates** - 32 Business and personal templates are also included.

### Appleworks/Prodos Utilities Disk

**SEG.PR Editor** - Customize the Appleworks printer commands.  
**Columnist** - Converts Appleworks or text files into columns.  
**Mousetext Demo** - Use Mousetext in your own Appleworks documents.  
**ShrinkIt** - Shrinkit compacts files or disks into an archival file. Use a file interface similar to the GS.

### Prodos Pot-Pourri

**Cyberfind** - Virus checker that looks for CyberAids and Festering Hate.  
**Font Editor** - This is a font editor for GS, Superfonts and Publish It! fonts.  
**System Setup** - Runs programs found in a certain directory on boot-up.  
**Chameleon** - Converts files between the four major operating systems.  
**Dogpaw** - Displays text files and Appleworks word processor files on the screen.  
**Windows** - This is a front end for Dogpaw. Also program launcher.  
**File Chopper** - Chops large text files into a manageable size.  
**Fontrix to Multiscribe** - Converts fonts from Fontrix to Multiscribe IIe.  
**TEX** - Version 2.01 of the program that appeared on the "Modem Utilities #1".  
**Type Changer** - Changes the file type of a file. Just select type from a menu.

### Apple II Technical Notes

If you are into programming your Apple II series computer, this is the disk for you! On the 3.5 inch disk is 141 technical notes covering many subjects. They have been compressed by a program called BLU (also on disk). Pascal, Filetypes, Apple IIGS and GS/OS technical notes are available only on the 3.5 inch disk.

### Technical Notes Update #1

New Apple II Technical Notes released since the last disk. Notes are compressed by ShrinkIT (on disk). Apple IIGS notes only on 3.5 inch disk.

## AkroCAD

Computer Aided Design program. AkroCAD was written to introduce the vocabulary and mechanics, found in most CAD systems, in schools. The AkroCAD diskette and this text is all that is needed, to learn the basic concepts of CAD. **Two 5.25 inch or one 3.5 inch disk set for \$8.00.**

## Publish It! Utilities/Templates

**Templates** - 3 Publish It! templates.  
**Font.Scanner** - This program scans all the fonts & displays the font info.  
**Font.Editor** - 8-Bit IIGS Font Editor - designed to let you create & edit fonts.  
**Change Font Filetype** - Changes font filetype so they can be used with Publish It!  
**Fonts** - 4 font GS families to edit.

## Apple II Games Disk

**Wheel of Fortune** - Hires game from TV with sound effects & instructions.  
**Uno** - This is a text version of the card game. Includes instructions.  
**LifeLike** - Based on the game called Life. Hires game with instructions.  
**Master Mind** - Mouse required for this Mousetext version of Master Mind.  
**Sollitare** - This Hires game is based on Patience (loosely) with instructions.  
**National Debt** - Appleworks required. Balance the U.S. budget. Information is included to help you.  
**Shark School** - Educational game - simple drill and practice in arithmetic.

*Remember to check out each Apple-Bug for more Disks of the Month! Check out the specials on page four!*

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## Dos 3.3 disks

*Note: Dos 3.3 disks are only available on 5.25 inch disks.*

### Dos 3.3 Utilities Disk

**Graphics Grabber** - Converts Hires pictures into Printshop Graphics.  
**Printshop Modifier** - Patch for Printshop for an Auto Ice printer card.  
**Syntax Checker** - Checks for syntax errors in your Applesoft Basic programs.  
**Applesoft Prettylist** - Displays an Basic listing in an easy to read form.  
**Disk Details** - Displays a sector map showing all used sectors.  
**Disa-65C02** - Disassembles sections of memory. Also works well in Prodos.  
**Disk Master** - Catalogue your disks, making programs easier to find.  
**Power Kez** - Adds macros to Basic. You can create your own macros.  
**Disk Editor 2.0** - Modify Dos 3.3, edit disk sectors, search for strings or bytes.  
**Reconstruct VTOC** - Saves damaged disks.  
**Remember II** - Dos 3.3 Comms program.  
**CP/Muffin** - Convert files from CP/M to Dos 3.3.  
**Also includes** - Menu Writer, Diversi Copy, Dogflight (game), Disk Compare, Track Adder, Sector Adder, Dos-Purge, Disk Map, Disk Catalog Printer and Track & Sector Display Patch.

### Hires Doodle

**Hires Doodle** - Hi-Res Doodle is a graphics system that allows you to make drawings on the screen and then paint them with a variety of colours.  
**Hires Pictures** - 22 Hires pictures are also included on the disk.

## Dos 3.3 Games Disk

**Acey Deucey** - Hires card game. Bet against the computer - you start with \$50.  
**Anti-Gravity** - Arcade style game that uses joystick or keyboard. Not for GS.  
**Artillery** - Hires simulation of applied physics. Try and destroy the tank.  
**Checkers** - Text version, computer is 'X' and you are 'O'. Beat your Apple.  
**Minature Golf** - Hires golf game. There are ten holes and sound effects.  
**Planet Of The Robots** - Text adventure game - in the future.  
**Hires Puzzler** - Use arrow keys and 'A' and 'Z' keys to arrange the picture.  
**Hires Graphics** - 9 Hires pictures are also included on this disk to use with Hires Puzzler.

## Apple IIGS disks

*Note: Apple IIGS disks are only available on 3.5 inch disks.*

### Apple IIGS Games Disk #1

**Bounce It** - Based on the old Brick-out game. Great graphics and sound.  
**F1 Race** - Drive this formula one car past those slower cars. Good.  
**Shanghai** - Demonstration version. Remove two matching tiles to win.  
**Mastermind** - Here is the GS version of that old game.  
**Othello** - Another old game now available for the GS.  
**Towers of Hanoi** - Move a set of blocks from one pole to the other.

### Apple IIGS Games Disk #2

**As the Link Turns** - Ever wanted to shoot a Mac but could not afford it...  
**Solitaire** - This is the GS version of the

card game. It is a great game.  
**GS Backgammon** - Another popular board game for your GS.

### Apple IIGS Games Disk #3

**Copy Killers** - Collect the disks and avoid the pirates and the virus.  
**Crystal Guest** - Demo version. Play up to the fifth level.  
**Dazzler GS** - Score board for a word game.  
**Fill Maze** - A 3D demo and game. Instructions on screen.  
**Four in a Row** - Get a row of four to win. Play against the computer.  
**Music Game** - Kids game - remember the tune.  
**Video Poker** - The old game of poker is now available on your GS.  
**Yahtzee** - This is the familiar dice game for the Apple IIGS.

### Mines of Moria

The game of MORIA is a single player dungeon simulation. A player may choose from a number of races and classes when creating their character, and then 'run' that character over a period of days, weeks, even months. Requires at least 1 megabyte to play.

### GS/OS Utilities Disk #1

**Diced** - Icon editor - change the size of icons without losing the image, etc.  
**Back Rest** - Back-up your Control Panel settings and restore them.  
**Install DA** - Load DA's into desktop.  
**CDA's** - Nifty List, Massa & Mangler.  
**NDA's** - Master.NDA, Meltdown II, Membar, Screen Saver, Show Text, Analog Clock, Enigma & Font Viewer.  
**Desktop Fix** - Change the colour of

the GS Finders desktop.

**Font Doctor** - Font editor. Modify the fonts used by many GS programs.

**Font Invert** - Like reading up side down? Well this one is for you.

**Type Face** - This one displays fonts on the screen.

**Init's** - Animated Watch & Install ROM CDA's

**Mac Trans GS** - Convert Macintosh files from a 400K Mac disk to Prodos.

**Animation Displayer** - Displays Paintworks Plus animation files.

### GS/OS Utility Disk #2

**Vaccine II** - This is a virus checking program. Instructions included.

**DeArc v1.2** - Extract archived files compressed by 'ARC'.

**DigiPack GS** - DigiPack GS is a disk packing and unpacking program.

**Doctor Daily** - Virus detector. Automatically checks for viruses.

**Fixer** - Desktop based text file utility.

**Funkeys** - Add macros to your GS.

**IconEd** - Icon editor - features 'tear-off' the colour menu.

**SHRConvert v2.1** - Latest version. Includes converting to a GIF file.

**Program Icons** - 33 new icon files.

**Also includes** - LaunchBox, Line Edit Fix, P8 CDA Loader, Switch Control Panel, PrintBuf, SloSpeed, Squirt 16 & UtilityWorks GS.

### CheapPaint

CheapPaint is a paint program with all the features normally expected from today's commercial paint programs, however it allows you the freedom of 256 colours on the screen at one time. You can create any of the 4096 different colours

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that the computer can display. CheapPaint can also colour cycle and includes full documentation and comes on a bootable GS/OS disk and requires an Apple IIGS with 768K or more.

### GS Desk Accessories Disk

**Install DA** - Install CDA's and NDA's after your GS is booted.

**DA Select** - Deactivate any CDA, NDA or Init file, so it will not load on boot-up.

**CDA's** - 23 of the best CDA's.

**NDA's** - 28 of the best NDA's.

### JumpStart Disk

**JumpStart** - is a program launching program. You can build and maintain a program selection menu so that you can quickly launch your programs.

**MouseTrap.CDA** - Use the keyboard in place of the mouse - GS programs only.

**Alarm Clock** - Reminds you of your appointments also monitor blanking.

**Desk Colour NDA** - Change the desktop colour in most applications.

**Area Codes CDA** - STD codes for USA and Canada.

### Digitized Sounds - Sound Effects

**Noize.S16** - Noize is a slide show for sound files. Just click on it from the Finder and it will play all the sounds on the disk.

**Sound Files** - 23 sound effects digitized sounds are on this disk.

### Digitized Sounds - Theme Songs 1

**Noize.S16** - Noize is a slide show for sound files.

**Sounds** - Addams, Batman, Beverly.Hills, Flintstones, Superman & Pink.Panther.

### Digitized Sounds - Theme Songs 2

**Noize.S16** - Noize is a slide show for sound files.

**Sounds** - 4 theme songs.

**Animal Sounds** - 8 animal sounds.

### Digitized Sounds - Music.Sounds

**Noize.S16** - Noize is a slide show for sound files.

**Sounds** - 12 musical sounds.

### Digitized Sounds - Phrases #1

**Noize.S16** - Noize is a slide show for sound files.

**Sounds** - 12 way out phrases.

### Digitized Sounds - Phrases #2

**Noize.S16** - Noize is a slide show for sound files.

**Sounds** - another 20 way out phrases.

### Music Construction Set Songs

**MCS Fix** - This program fixes a bug in Music Construction Set.

**Rock Songs** - 50 songs.

**Classical Songs** - 19 songs.

**Show.tunes** - 24 songs.

**Christmas Music** - 41 songs.

**Other Songs** - 31 songs.

*Requires Music Construction Set.*

### Music Studio Songs #1

There are 87 songs on this disk - volume A to L.

*Requires Music Studio.*

The graphics on the six Apple IIGS Graphic Disks contain pictures stored in the Apple Preferred Format. The pictures are sorted into sublects.

### Music Studio Songs #2

There are 79 songs on this disk - volume M to Z.

*Requires Music Studio.*

### Apple IIGS Graphics #1

**Cartoons** - 11 pictures.

**Sesame Street** - 3 pictures.

**Toys** - 3 pictures.

**Program Pictures** - 25 pictures.

### Apple IIGS Graphics #2

**Girls, Girls, Girls** - 14 pictures.

**Cars** - 9 pictures.

**Outer Space** - 4 pictures.

**Planes** - 5 pictures.

**Planets** - 4 pictures..

### Apple IIGS Graphics #3

**Animals** - 16 pictures.

**Flowers** - 4 pictures.

**Landscapes** - 10 pictures.

### Apple IIGS Graphics #4

**Film and TV** - 24 pictures.

**Famous People** - 5 pictures.

**Music** - 5 pictures.

**Product Logos** - 5 pictures.

**Fantasy** - 4 pictures.

### Apple IIGS Graphics #5

**Art** - 17 pictures.

**Clip Art 320** - 4 pictures.

**Digitized Pictures** - 16 pictures.

### Apple IIGS Graphics #6

**Apple IIGs** - 6 pictures.

**Assorted** - 3 pictures.

**Closeups** - 3 pictures.

**Faces** - 13 pictures.  
**History** - 3 pictures.  
**Money** - 4 pictures.

### Discount Packs

Check the discount price table for prices.

#### Prodos Shells Pack

This pack includes Davex Utility Disk and Extended Command Processor 8.  
**2 disk set**

#### Modem Utility Pack

This pack contains both the Modem Utility Disks containing 10 programs.  
**2 disk set**

#### Appleworks Pack

This pack contains the Appleworks Utility Disks 1 & 2, the Appleworks Templates Disk and the Appleworks/Prodos Utility Disk.  
**4 disk set**

#### Technical Notes Pack

This pack contains the Apple II Technical Notes Disk and the Technical Notes Update #1.  
**2 disk set**

#### Dos 3.3 Pack

This pack contains the Dos 3.3 Utilities Disk, Hires Doodle and the Dos 3.3 Games Disk.  
**3 disk set (5.25 inch only)**

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Remember to check out each Apple-Bug for more disks!

#### Apple IIGS Games Pack

This pack contains all three Apple IIGS Games Disks plus Mines of Moria.  
**4 disk set (3.5 inch only)**

#### GS/OS Utilities Pack

This pack contains both the GS/OS Utility Disks.  
**2 disk set (3.5 inch only)**

#### Digitized Sounds Pack

All six Digitized Sound Disks are included in this pack.  
**6 disk set (3.5 inch only)**

#### Music Studio Songs Pack

Both volumes of the Music Studio Song Disks are included in this pack.  
**2 disk set (3.5 inch only)**

#### Apple IIGS Graphics Pack

Six disks packed with GS graphics are included in this pack.  
**6 disk set (3.5 inch only)**

### Disk Pack Prices

Prices for 5.25 inch Disks:

	with disk	without disk
<b>2 disks</b>	\$8.00	\$6.00
<b>3 disks</b>	\$9.00	\$6.00
<b>4 disks</b>	\$12.00	\$8.00

Prices for 3.5 inch Disks:

	with disk	without disk
<b>2 disks</b>	\$14.00	\$8.00
<b>4 disks</b>	\$24.00	\$12.00
<b>6 disks</b>	\$36.00	\$18.00

These prices are for Disk Packs only.

### How to Order!

You can order any these disks or disk packs by ordering at the General Meeting or use the Software Library Order Form below. You can also use the form to pre-order the disks and pick them up at the meeting - no waiting! Also other public domain disks and the Eamon Games Disks can be ordered using the order form. Remember that the prices listed below are for **disk packs** only. The normal disks prices are \$5.00 with a disk and \$4.00 without a disk for 5.25 inch disks. For 3.5 inch disks the prices are \$8.00 with the disk and \$5.00 without the disk.

If you are posting the order form, send it to Apple-Q Inc., P.O. Box 721, South Brisbane 4101.

Another copy of this order form will be sent (or given) to you with the disks you ordered.

The prices offered for the Disk Packs listed on this page are for a limited time only.

In the following months you will see some more great Public Domain software in the Apple-Bug. Among them is the Appleworks Utility Disk #3.

### 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
.....	<input type="checkbox"/>	<input type="checkbox"/>	\$.....
.....	<input type="checkbox"/>	<input type="checkbox"/>	\$.....
.....	<input type="checkbox"/>	<input type="checkbox"/>	\$.....
.....	<input type="checkbox"/>	<input type="checkbox"/>	\$.....
.....	<input type="checkbox"/>	<input type="checkbox"/>	\$.....
.....	<input type="checkbox"/>	<input type="checkbox"/>	\$.....
.....	<input type="checkbox"/>	<input type="checkbox"/>	\$.....
.....	<input type="checkbox"/>	<input type="checkbox"/>	\$.....
.....	<input type="checkbox"/>	<input type="checkbox"/>	\$.....
.....	<input type="checkbox"/>	<input type="checkbox"/>	\$.....

Sub Total \$.....  
 Post & Pack \$ 2.00  
 Total Cost \$.....

# Publish It! Review

by David Pettinger

Publish It is a desktop publishing program by Timeworks. The Program requires 128K of Ram and is designed to run on the IIc, IIgs, or an enhanced IIe. The program can be operated under either mouse or joystick control. Like many other Apple II programs around now, the user interface is styled on the Macintosh. Such familiar Mac items as pull down menus, icons, scroll bars and dialog boxes are used throughout the program making it easy to use.

The word processing features of Publish It are as good as the more expensive dedicated wordprocessors you can search and replace cut and paste, tab, line and paragraph indent, page number, centre, text align and justify. Included in the package are six fonts that range from 9 to 72 points. The font styles include regular features such as bold, italic, underlined, shadow etc. If you are a good typist you could find the wordprocessor rather slow, in fact it is quite easy to lose characters if you type too fast. The text is in fact being displayed on a graphics page, this makes it slow and is compounded by the fact that working in full size mode shows only half the page to you. Also the screen redraws itself continuously if you need lengthy scrolling sessions.

It is probably much easier to do the using your favourite wordprocessor. Publish It will accept Appleworks, Bank Street Writer or any standard ASCII text file.

## W.Y.G.I.E.T.F.

Many of you by now will be familiar with the term WYSIWYG (what you see is what you get) but with this program its more "what you get is easy to fix". Every feature that you select, be it type style, column width or moving pixels in a graphic, is displayed on the screen in any of four viewing mode. They are full size, half size, double size or size to fit. This latter feature will be familiar to Mac users as it displays the full page on the screen. The program offer powerful text and graphics editing facilities.

Imagine if you can having to work out the right amount of text to fit in a column, how to make it flow into another column, and make text wrap around graphics, then calculating it all again after changes have been made by moving things between pages. Well this program will do all that automatically.

One of the delightful features of this package is the fact that it will support other printers besides Imagewriter. There is also a laser option available. The quality of the printout is another good feature of this program, it uses a special high density print, together with a user selectable double strike action to give excellent results.

Turning our attention now to the graphics mode of the

program, it comes with a library of 200 graphics images, you can also get graphics from other sources of standard or double high res images, such as Dazzle Draw. But the major disappointment is that you can not use the very popular program such as Printshop and Newsroom. Although I have read somewhere that Timeworks may include this in a future revision. For the creative individual there is a graphics toolbox which is also very Mac like, you can draw circles line and boxes, and use the fill features with 24 inbuilt patterns. On the point of the graphics images supplied with the program it can take a little time to locate the particular image that you need at there is not index for the graphics, however they are arranged in alphabetical order. You simply select the graphic that you want size it with the cropping box, and press the return key.

Picking and placing graphics is easier than taking photographs. As I have mentioned budding artist can use Dazzle Draw to create their own images, or you can use a scanning system such as Computer Eyes or Thunderscan unit and save the file with Dazzle Draw format.

The Publish It program treats all but text as an object. That is to say such things as a thin line between text columns, or a line around text. Even a spot for a graphics image is called an object. You can delete them pick them up move them between pages, and front to back. Objects on a page are layered so you can place them in front of or behind another. They can also be resized by using the "show specifications" option this offers precision to thousands of an inch if needed.

The program have a couple of advanced features in desktop publishing. The first is called Kerning and is to do with altering the space between character, the other is Leading and that lets you decrease space between lines. These features will allow you to squeeze your text and make a little bit of room if you are stuck for space. In practice though the object manipulation and resizing will probably get you out of most difficulties.

## Documentation

This is excellent and well written and contains many full screen printouts along with clearly written step by step type operating instructions. Other sections include desktops publishing, and a good quickstart tutorial to help you complete your first one page spectacular.

In conclusion I can only say that overall Publish It is a very impressive software package, containing many good features, such as the fact that Appleworks files can be directly imported and all the special things like bolding and underlining etc are also accepted.

The package comes with four unprotected double sided 5.25 disks. They contain the program, sample files, artwork and fonts.

EDITOR: Reprinted from Applesauce - August edition.

## Price Drop on 3.5 inch Disks

We are now selling 3.5 inch disk for just \$20.00 a box. Six dollars a box saving from last year.

# GS Workings: March 1990 Edition

by *Anthony Rich*

After Dale's hints for some articles to come forth from members of the group for the newsletter, I thought I'd put in my bit to start a new series.

I've thought back about how many questions I've been asked about (technical?) problems with the Apple II gs and its software.

Hence the name of this article : GS Workings.

Each month, I attempt to answer some technical questions put forward by members of the group. If you feel that you have solved a problem that other people might also be experiencing, or have another approach to one that I have solved, then please, also send in a letter to share your experience with others.

And don't all you hackers out there just skip this article either, because I'm sure that sooner or later, you'll miss something you've been wanting to know too. After all, isn't the sharing of information and computer experiences what user groups are all about?

## Now for the first problem.....

New GS owners, buying for an educational solution for their children, often find themselves a little out of pocket money once they've paid for their computer, and usually start out with reasonably cheap ( though not necessarily nasty ) educational software. There's nothing at all wrong with this, but the software they usually wind up with is something from the early days of the GS.

You must remember here that as the GS had only just been released on the market at the time this software was written, the programmers didn't have access to all the information that they do now. Hence you find some of these earlier programs don't support some simple things that we now see in virtually all programs. A prime example of this is the speed software switch for the GS.

One program that suffers from this particular complaint is Kid Talk from First Byte. Do you have this program? Have you ever noticed that sometimes the speech seems to echo, making it very hard to understand? Try going to the control

panel and setting the system speed to FAST. Notice the improvement?

Why is it so? Kid Talk, and also the Speech Interface unit from TML Pascal, use the same Tool file written by First Byte, TOOL052. Unfortunately, this Tool does not sense the speed of the GS, nor does it cater for it. So if the system speed is set to slow, you'll find that there are gaps between the bursts of speech (maybe only a few milliseconds) while the GS is catching up to the GS's Ensoniq DOC. This may sound very technical to the uninitiated, and it is, but this is what creates the echo effect, hence garbling the speech.

You may also find that some interrupt-driven animation programs (from the beginnings of the GS era) suffer jerky animation, or leave things out. This is due to the same problem. Because the system speed is set to slow, the GS doesn't have time to draw a complete frame when the software's interrupt routine tells the GS to draw another frame. This, of course, means something gets left out.

Although this is not true of Cartooners, run any Cartooners sequence on your normal GS at 2.6MHz, then run the same sequence on a GS with a 6.8MHz Transwarp. Sure, it may be slightly faster, but it's a whole lot smoother, isn't it?

## A Call To Old Hands.....

So if you have experienced, or solved, problems with other programs, write to me. I'm sure there are other people out there who need to know what you know. We can all help each other out.

When you do write to me, please send your membership number, whether or not you are on the BBS, and your postal address. Your query may be too involved to be published, so I'll need to answer you some other way.

**Postal Address:** Anthony Rich  
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# Geometry for the Apple IIgs

by *Cedric Webster*

Once there lived an Indian Chief, who had three wives and they all required new bedding. The third wife was slight, a mere six stone and the chief quickly shot a deer, whose skin provided her with an ideal mat. The second wife was bigger, around nine stone and she was accommodated on a buffalo skin. The first wife was a large woman, some fifteen stone

and it took the chief some adept trading to obtain a hippopotamus hide to satisfy her needs. Resting from his labors, the chief noticed that the squaw on the hippopotamus equalled the sum of the squaws on the other two hides, a fact that had been observed by ancient Egyptians while pyramid building and later more clearly defined by a gent named Pythagoras.

All this nonsense leads me to some comments on GEOMETRY as seen by Broderbund, which I have recently received from my USA cousin. This comes with a simple manual and three disks, Disk 1 is a simple version of the Finder, Disk 2 is part 1 (lessons 1 to 5) and Disk 3 part 2

(lessons 6 to 10). Each part, or each lesson can be used separately and consists of clear diagrams, many with animation and text, with a cunning page turning click on a "dog eared" turnout to move to the next, or preceding page. From the menu or green radio buttons one can select definitions, demonstrations, interactive diagrams, proof of theorems etc. There is really a lot of learning packed into these disks, with all work clearly set out and one can proceed at one's own pace, going back to clear up any points not quite clear on the first demonstration. The Times type selected is particularly readable, the graphics excellent and the whole screen easy to read and well set out. The menu enables one to select Tutorial, Problems only or Hint, which gives one a clue to the correct answer, reference only and the correct solution so that there are several optional ways of learning. Also the program can be configured to use classic or simple geometry. Any page can be printed at a touch and one could easily print one's own Geometry text book! I had to copy disk 2 and 3 as separate modules to my hard disk, and cannot access one from the other, without returning to the finder, or in my case Jumpstart. This is probably not much of a disadvantage as one would normally work on either the first or last parts of the lessons. However for revision I found it a slight hitch, possibly further manual reading will provide an answer to this.

Take an example, the Pythagorean Theorem crudely stated

above. Select Chapter 6, Right triangles and click on the dog ear to turn to page 9. Here the theorem is stated, but by using the Americanism of "legs" for sides as we usually call them, they rather spoil my analogy. However the graphics make it clear and if you desire proof you can click on the green button, or if you prefer a graphic proof, click to next page, where all is revealed. Should you wish to print this out this is easily done.

This program is heavily copy protected, understandable in an application such as this, where a programmer has put a lot of work into a project and hopes to get some reward for his efforts, but no backup disks are supplied. I feel that any copy protected program should provide backup as part of the package, particularly when it takes some time, as well as the \$20 dollars or so to obtain a factory backup. Another annoying feature is that the copy protection is such that, while it can be copied to hard disk, some features are lost, and it requires the original disk to boot, which removes some of the advantages of speed and ease of operation of a hard disk. Nevertheless, this is an excellent program which demonstrates the

graphic capabilities of the GS and the use of a computer for teaching. It is reasonably priced and should be used in all high schools and in the library of anyone wishing to learn or just polish up on the fascinating study of lines, angles, circles, triangles and polygons.

## World Geograph for the Apple IIGs

by Cedric Webster

This magnificent electronic atlas is an example of how an educational program should look. The super highres maps are colourful, extremely well drawn and contain quite good detail, the interactive database most comprehensive and the whole is easy to use. We are now getting some excellent applications for the IIGS and this one really makes good use of its graphic capabilities. It requires 768K, but really one can do little with less than the 1.25 supplied with new GS's these days, and we can expect that this will be the minimum for new programs. You would have difficulty in using this without either two 3.5 disks or a hard disk, and this option is becoming more desirable each week! This application comes from MECC, is copy protected, but they do sensibly provide backup disks as part of the package. It can be copied to hard disk, tho requires insertion of the original disk during loading. This seems to be a necessary irritation to protect the efforts of programmers and to encourage them to continue their good work. The program is rather expensive, but has obviously required a lot of database entry and research. There are two manuals, but my USA cousin supplied only the users manual, probably in interest of economy of air freight. The version containing the Teachers manual is dearer but would be probably a worthwhile cost, and I understand there are now available a number of templates or worksheets, which provide ideas and

timesaving setups for individual and classroom use. There is also a useful quick reference card supplied.

When you first boot from the finder, you get a world globe from which you can select menu items or click on continents or countries to zoom in on for information, either in map, database or bar chart graphic form. In the database there are some 55 categories, with provision to add a couple of your own, and 177 countries are included. so that the range of information is quite comprehensive. There is an amazing amount of data including Death and Birth rates, exports and imports, TVs per head, Newspapers published, Average income, % over 60 & under 15 etc incorporated in this program, all of which is linked to and can be selected from and used with the maps. One hopes economical updates will be provided annually to keep pace with constant changes in all important data. It may all be printed out, together with the maps but if you wish to do this make sure you have plenty of paper, as it is claimed that it would take a stack of paper around 3 inches high to print out all possible data! When you save a report, you can print the whole report, or each individual screen can be printed at any time by using OA-P from the keyboard. Printing quality, in full colour or black & white, of the maps, raw data, graphs or databases is excellent and provision is made for date, page no. and title to be added to a report, so that it would be a first class vehicle for school projects, or an adult thesis or research report.

The database cannot be edited, which is rather a pity as I would like to customize it somewhat. For instance Ausl is the abbreviation for Australia, and Aust for Austria. While this may be acceptable or even usual with global usage, it is a

constant irritation to an Aussie! Also when one comes to printing databases I found a case for editing categories, where the headings were "Temperature, Average January" and "Temperature, Average July" the printed columns were unnecessarily wide for 2 figures with one decimal (say five characters). One could narrow the columns with OA-<, but this made the headings meaningless, whereas if I could have edited them to "Av.Jan.Temp" & "Av.Jul.Temp", I could also have fitted "Av.rainfall" and perhaps "Capital City" on the same printed sheet. I could have added a category to my own specifications, by using a command not on the keysheet, probably to allow access only to teachers (and pupils who read the manual!). However there seemed to be no way to copy the original data to my own category, other than printing out the original and manually entering the figures to the new category. If I find a solution to this I will comment later, and possibly this will be corrected in a later version. Some of the commands such as Opt,OA,Click (to zoom out from a map) are unusual, and there is a full range of OA Letter commands, clearly displayed on the prompt card, but they are easy to learn anyway eg OA-E for English units of measurement (one can display data in English or Metric units), OA G for display Graphs, OA-M for display Maps etc.

There are 21 regional maps, which you can see by zooming in, first from global map to continent (regional) level and then to country, and 177 countries are covered. The menu items are somewhat different, but well thought out, easy to

use and almost all have keyboard shortcuts. Theme Map, selected from the Maps menu displays world or continent maps coloured to show Altitudes, climatic zones, average temperatures with a key available on pressing OA-K (what else?). This key may be printed or not by selecting print key from Printer options. Selecting World Quartiles shows the globe coloured according to upper, 2nd, 3rd and lower quartiles of the various data available, which is an unusual and speedy way to compare the data from various countries.

The Search function is comprehensive and "plain English".

I liked the Locate Nation which shows a scrolling, alphabetical list of the 177 nations. Select the required nation and the map screen flashes in black to white for a second or two so that you can find its position, however I found it a bit hard to see small islands with my tired eyes. Compare is used with regional or continental maps. One can select Australia Pacific Region and compare in tabular or bar graph form population, average income, production per head, energy use etc. of Australia, New Zealand and Papua New Guinea. Again all this may be printed, either as individual screens, or as a complete report, with page no, date and headings, accompanied by full colour maps

The only improvement I could suggest is some means to edit databases. All in all this is a superb application and despite the high price, I recommend it to any GS owner with even a passing interest in the world in which we live.

## Animate by Broderbund

If you have an Apple //e and want to get a grasp of animation and how it works, then has Broderbund ever got a program for you. Within the graphics limits of the Apple //e - and those limits exist - they have produced a program called Animate which will allow you to make cartoons that will knock your socks off and impress your friends mightily, but when you have finished you will still be lock into the graphics capability of the Apple //e and that capability is no longer on the cutting edge of computer graphics. Acceptable, yes but not a mindblowing resolutions in more colours than you can count.

Animate is a professional package. It is the very program Broderbund animators and designers use for producing animation in their top-of-the-line games. As these are some of

the best graphics images to be seen on the Apple II you can see you will be working in excellent company. The package will allow you to use; double hi-res colour; up to sixteen characters in each screen; preview and edit features at every level; include sound and text; print scenes in colour or black and white animation sequences can be transported over to other programs.

If you use the images supplied of the animation library disk the result will be extremely professional. The package also includes a booklet called "The Art of Animation" which is a simple guide to the art of animation, and a comprehensive book of instructions. Animate is distributed by Imagineering at \$119.00.

**EDITOR:** Reprinted from the Townsville Apple User's Group Newsletter - March 1987 edition.

## Prosel Utilities

by David Greenland

Prosel is a disk based utility program with various utility programs contained within it. It can launch other programs (Copy II Plus & Locksmith v6) as well as another copy program simply called COPY which is very handy to have. In the utilities directory of this program there are programs to

backup files disks and hard disks, programs to restore these and even a program to recover deleted files. There is a Fast-find file utility, good, if you know the approximate name or whereabouts of the file you are looking for.

There is an Info-desk file that allows you to catalog any slot/drive on line and this program lets you either print the catalog to the screen, to the printer, or it lets you view the blocks used by the files on that disk, and even a bit map that shows you where the files on that disk are stored. That in itself is excellent value.

Those are just some of the utilities that come with the Prosel disk, but the beauty of the program is it is a launcher program for ProDOS, similar to the old Dos 3.3 menu programs that everyone used. I know when ProDOS first appeared on the screen I had trouble finding programs and wading around through ProDOS directories. This program, although a few years late arriving on the Australian scene will be a godsend to most ProDOS programmers. No more keeping track of your favorite programs buried deep in ProDOS directories.

To use the program, simply boot the disk. Some of the utility programs are listed on screen ready to run. By selecting 'add' to add a program you are in business. Enter the name of the program, where Prosel can find it, and the

name of the startup file and away you go. Follow this procedure for as many programs as will fit on the selector and then select the Prosel Editor to tidy up the screen display, It's that simple.

This program is great for people with hard disks who would normally have to either wade through pathnames or if they had a GS they would launch the finder, all that to run Copy II Plus, a ProDOS 8 program - HARDLY. Prosel does have trouble with GS/OS but other than that it is the best utility package around for ProDOS. I strongly recommend it....

**EDITOR:** Reprinted from the Townsville Apple User's Group Newsletter - March 1989 edition.

## Introduction To Assembly Language Programming

by Charles R. Smith

### What is Assembler and Machine Language?

Most of us have some familiarity with BASIC, with its English-like commands such as 'PRINT', 'INPUT' and 'FOR .. NEXT'. There are other high-level languages, like Fortran and Pascal, which similarly are formed of English like commands. The Apple's central processing unit (CPU) cannot understand such English commands, but instead the CPU must 'interpret' the commands or 'translate' them into a form which it can understand. When running a program in BASIC, the Apple takes each line of the program and interprets it into a machine language form which for the CPU. Once interpreted, the CPU then executes the line. Applesoft is therefore called a 'BASIC Interpreter' or is an 'interpreted BASIC'.

The opposite of the high-level, structured languages are assembler and machine language. The terms 'assembly language' and 'machine language' are often used interchangeably, although there is a difference. Programming in machine language is accomplished when hexadecimal or binary data is loaded into the computer byte-by-byte (eg. entering the Monitor by CALL -151 and inputting '300: A9 0A ...'). When computers were in their infancy, this was the only option available. This form of programming can only be intelligible to people who think like a computer. To we lesser mortals, writing a program in machine language is the ultimate exercise in frustration. (An aside: when Steve Wozniak and Steve Jobs first built an Apple I computer, they took it to parties and entered hundreds of hex codes by hand just to load in a program to demonstrate this first Apple's ability. Allegedly, DOS was first written this way!)

Enter Assemblers. An assembler is simply a tool which allows a person to write a program using somewhat more intelligible commands, and then the assembler program converts ("assembles") the English-like commands into the

corresponding machine-language code.

While there is a definite and significant difference between 'assembly' language and 'machine' language, the two terms are often used interchangeably. Throughout this article, such interchangeability shall be used.

### Why Program in Machine Language?

If assembly language is tougher than BASIC, why bother being a glutton for punishment? Is there something to be said for such an arcane language? Consider these three reasons: speed, flexibility and memory management.

The most prominent benefit of a machine language program can be seen anytime you play a commercially-produced, arcade style game. Such games are invariably written on an assembler (the people at Southwestern Data Systems tell me that the games from Sirius are written on Merlin). The execution speed of a machine language program is much faster than a corresponding BASIC program - arcade quality games simply cannot be written in BASIC. Even BASIC which has been compiled into machine language (by Applesoft compilers such as TASC or Speedstar) is still slower and more memory-hungry than an equivalent program written in assembler. The advantage of speed can be used in other situations which will significantly enhance the Apple's capability. Sorting, matrix operations and disk utilities are but a few reasons to use the speed of machine language.

The second reason to program in machine language is the increased flexibility which it offers. The commands in Applesoft can be enhanced by the use of short machine language routines hidden away in memory. Print formatting functions, sound generation, sorting, string handling and swapping, decimal to hex conversions, garbage collection and memory clearance, and array operations are but some of the more commonly used subroutines. While such machine language enhancements are available commercially, they can also be had at a very low cost, as they are listed in such publications as Nibble and Call-APPLE.

The third advantage relates to memory management. Machine language programs are more efficient in their consumption of memory than are their BASIC counterparts. Because of this, it is possible to have several machine language routines residing in memory concurrently, thereby

enhancing Applesoft while at the same time avoiding a significant reduction in the memory available to the user.

```
0303 - 88          2 LOOP DEY
0304 - D0 FD      3      BNE LOOP
0306 - 4C 00 03  4      JMP TONE
```

## What is Needed to Get Started

To begin programming in assembler/ machine language, it is not necessary to purchase any software tools. A good book, however, can be invaluable. Once your interest is sparked, you may develop a sudden urge to purchase an assembler. Other machine language utilities are helpful.

There are three different levels of sophistication at which you may enter machine language programming:

- 1) machine language using the Monitor
- 2) assembly language using the Mini-Assembler
- 3) assembly language using an assembler.

Let's look at each of these in order.

## Machine Language using the Monitor

Although not the most flexible approach to machine language, this is the cheapest route to go, and it forms a good starting place. The way to begin is to exit Applesoft and get into the Monitor by means of the command:

```
]CALL -151
```

which yields the '\*' prompt.

From here we can enter a program by giving the starting address and the hexadecimal data. Try the following:

```
*300:AD 30 C0 88 D0 FD 4C 00 30 <return>
```

where you entered the number 300, a colon, then 9 sets of hexadecimal data. Be sure that you do not leave a space between the colon and the first number. At the end of the line, enter a <carriage return>. Up to 85 hexadecimal numbers can be entered at once this way.

What this program does is toggle the speaker by addressing its memory location (AD 30 C0), counting downwards from 255 to 0 (88 D0 FD) and then jumping back to the start (4C 00 30). In other words, this short routine keeps a constant tone going on the speaker until you hit <RESET> to get out of it. To start this program once you have typed in the above line, simply go to location \$300 and do what's there by the command:

```
*300G <return>
```

You have just entered your first machine language program (this program example is courtesy of SC Macro Assembler).

Now go on to greater things. Grab an assembly/machine language listing and enter it into your computer. If you are entering an assembly listing, you will see the hex code in the left hand columns. For example, the above program looks like:

```
0300 - AD 30 C0 1 TONE LDA $C030
```

Remember to save your work on disk. This is done with the BSAVE command. It is necessary to specify the starting address and length parameters using the 'A\$\_\_\_\_' and 'L\$\_\_\_\_' commands. If a program went from 0300 to 0320, it would be (hex) 20 or (decimal) 32 bytes long. Therefore it would be saved by the command:

```
*BSAVE MYPROGRAM, A$300, L$20
```

where A\$ is the starting address in hexadecimal and L\$ is the length in hex. It could also be saved by the command:

```
*BSAVE MYPROGRAM, A768, L32
```

where A is the starting address in decimal (768=300 hex) and L is the length in bytes.

To check a program listing, enter the start and end address, separated by a period. For the short TONE program above, enter:

```
*300.308 <return>
```

If you want to see the disassembled code, enter the starting address and "L" to list 20 commands. To see this program, enter:

```
*300L <return>
```

(To make the entry and correction of machine language programs, one of the disks from the International Apple Core (Disk 25, Machine Language Utilities) contains a utility to facilitate this process. It is called BEU (for Binary Entry Utility) and will locate itself either on a 16K RAM card or in the Apple's 48K RAM.)

## Programming with the Mini-assembler

In the original Apple II machine was a monitor function entitled the "Mini-Assembler". Its job was to facilitate entry of machine code into the computer. When Applesoft was developed for the Apple II Plus, this function (along with STEP and TRACE in the Monitor ROM) were deleted. That is the bad news. Now for the good news. If you have a 16K RAM card, loading Integer BASIC upon booting up the DOS 3.3 SYSTEM MASTER disk will load the Mini-Assembler into your machine. This can be accessed by entering Integer with the command:

```
]INT
```

which yields the '>' prompt. Then enter:

```
>CALL -151
```

to get the monitor '\*' prompt. Then go to the Mini-Assembler with the command:

```
*F666G
```

which yields the exclamation (!) prompt.

The Mini-Assembler is still available to the owner of a 48K Apple II Plus, as it has been modified and included on the IAC Disk #25. Instructions for its use are given in an accompanying file, while more complete instructions are given in the APPLE II REFERENCE MANUAL. Apple IIe owners can access the Mini-Assembler through Integer BASIC.

## Assembler

Once you've gotten your feet wet by gaining access to the Monitor and entering a hex listing, you will realize the fact that there has to be a better way. Obtaining an assembler is that way. There are at least ten commercially available editor/assemblers, and the perfect one is probably still to be written. Buying an assembler is like obtaining any other software, as the amount of money to be spent and the configuration of your machine will be controlling factors. Several assemblers are reviewed in this issue. A public domain assembler called MASM is included in the IAC's special Machine Language Utility disk.

## Other Aids

Other types of aids are also worthy of consideration. A disassembler is a handy tool which will permit you to take machine language (hexadecimal) code and re-convert it into an assembler source listing. From there, you can edit, alter and re-assemble the code to make it function in a different manner or at a new memory location. A disassembler is available in the Apple's monitor and is able to disassemble to the screen, using the

```
*XXXX L <return>
```

command, where XXXX is the memory location at which to begin disassembly. A public domain disassembler is included on the machine language disk, and some very good assemblers are included with some assembler as part of the package (eg. Merlin and Lisa). Others are available as a stand-alone product (such as DISASM from RAK-WARE).

Debuggers are for those who are very serious - they permit step and trace functions and a host of other advanced features. Two examples of commercial products are Bug Byter and Munch-a-Bug. BEU on the machine language disk also contains debug routines.

There is even a new product which will turn your machine into a 'visible' Apple as it shows you on the Hi-Res screen how your Apple works, displaying the instructions, registers, flags and memory locations as it executes a program one step at a time.

And where would we be without books? A variety are available, each one for a slightly different reader. There are some general references on programming the 6502 microprocessors, several good books specifically written for Apple 6502 machine language (reviewed in this issue), and books which serve as a road-map or atlas to the Apple's internals (also reviewed here). Much is written in the monthly magazines, and there is even a monthly publication on machine language programming. But the best starting place is the APPLE II REFERENCE MANUAL, which lists the opcodes available on the 6502 and some important internal routines.

When all is said and done, a person who knows a few BASIC commands can easily find their way around machine language. There is a certain joy in entering, debugging and running a program, be it in BASIC, assembler or whatever. And isn't that joy a big reason for owning an Apple?  
**EDITOR:** Reprinted from THE MAPLE ORCHARD.

## Ram Expansion

RamFactor is a RAM expansion card from Applied Engineering. This board was designed for the Apple II, II+, or IIe computers and comes in four memory sizes from 256K to 1Mb. The package includes a disk and manual. The board can be put in any slot apart from slot 3. The card can be used as a RAMDisk and to do so you simply push it in, copy any programs you may want there and work with it as a super fast drive.

The card also includes software that can customize

AppleWorks to let it run on an Apple II+. The disk has a utility which patches the AppleWorks program and allows it to run on a II+ with a Videx or similar 80 column card. The programs allows the autoloading into memory of the AppleWorks PROGRAM disk, 5,100 lines in the word processor (normally 2,250), 5,100 records in the data base (normally 1,350), and multiple disk file saving capability.

The card is available from Powertech Pty Ltd, P.O. Box 143, Killara. Phone (02) 439 5488.

**EDITOR:** Reprinted from the Townsville Apple User's Group Newsletter - May 1987.

## Notice to Members

Next month we will be publishing the list of the members names and phone numbers. We publish this list so if a member has a problem, he can contact another member in his area. Your address will not be printed. If you want your name to be excluded from this list, contact the Registrar by the Committee Meeting - Monday 19th March 1990.

# Apple-Bug

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