

TPUG NEWS

Volume 1, Number 6

President's Report

Member's Correspondence

So happy that member Marc McSwain of New Orleans got the MODEM for his PET. It took months, and the combined efforts by David Bradley, George Shirinian and myself to accomplish it, but we did it! Hope Marc enjoys his modem!

Finally got member Paul Blair from Australia sorted out regarding the BBS program he wanted. It only took a year, and the combined help of David Bradley, Ernie Chorny and the Christchurch Commodore Users Group Inc. of New Zealand! Sure hope it works!

Library news

TPUG is releasing Disks of the Month (C64, C128, Amiga) for both July and August, a previous time of hiatus! Many thanks to David Bradley, Syd Bolton, James Kokkinen, Jane Parris, Ray Widden and Adam White.

Library donations

Now that the summer doldrums are here, and the kids are complaining of 'nothing to do' . . . I have a great idea!

I'd like to urge you (or the kids) to go through your libraries, and pull out public domain programs that are not in the TPUG library. I know you have them, because I read your (news)letters!

Of late, I definitely feel that the user groups have been considering the TPUG PD library as a never-ending resource, helping themselves as a thirsty man at a cool refreshing well, and not worrying about program ecology. The only way TPUG can keep its libraries going, growing and gushing, is by the members sending their programs to TPUG, to top the well. How about it gang? Don't be shy about sending in your program. You don't have to live in a big city, or even belong to a group to be a contributor!

Many thanks to the clubs and individuals who are already heeding our *plea* regarding library submissions.

Speaking of libraries

Ray Widden, our CP/M librarian, is doing his best to make his library a BEST OF CP/M library! 128 Users, take note!

Quantum Link

TPUG IS NOW ON QLINK. I must say, from a non BBS user's viewpoint, QLINK is a pleasure to use. It is a relatively easy system to get used to. If you want to leave a message via E-mail leave it with TPUGOFFICE.

You will find me (TPUG PRES) either in the TPUG area, (CIN section) reading members' comments and questions, doing my best to direct them

to the right answer, as do Jane Parris, and David Bradley (QGuide mw is also of great help in this regard!) or in the Post Office, answering mail!

The QGuides found in the HELP room in People Connection are extremely helpful and courteous, should you need them.

Happy Tele-computing.

Apologies

To George Skinner, who did all that heavy work at the Computer Expo Show, and did not get credit! Of course, George Davis, recuperating from heart problems, could not be expected to do that kind of work! Sorry to both Georges!

Commodore's Special Deal comes to Canada Effective Aug. 21 - Oct 31, 1987

Commodore of Canada is offering, to members of registered Canadian Commodore User Groups, an 'Amiga Deal'. With the purchase of any Amiga System (computer and monitor) these members will be given the opportunity to include with their purchase one of two software packages at GREATLY reduced prices. One of these packages is a creativity package (which includes Deluxe Paint II) - a \$700.00 value for less than \$200.00. The other, the productivity package, includes Word Perfect, and is offered for less than \$400.00. If bought separately, this package would retail at over \$1400.00. These 6-item packages must be purchased at the time of the Amiga purchase, with neither alterations nor substitutions, as they are in factory sealed packages.

The Canadian Special Deal, is different in some respects to the American Special Deal. In Canada, the offer is for the purchase of ANY Amiga system (the 500, the 1000 or the 2000). Also, the Canadian Special deal is extended to certificate carrying TEACHERS.

This Special Deal is offered through your friendly Authorized Amiga Dealer, so if you are in the market for the Amiga, do bring your (active) TPUG number as proof of User Group membership. For those of you who have friends who may be interested in this deal (Christmas is coming!), new members may join TPUG on the spot, so to speak, for TPUG will be accepting memberships by phone (dealers will have the special Canadian 800 number), and immediately issuing a TPUG membership number. (By the way, your membership number is printed on the label of your Transactor magazine, along with the expiry date!)

Library news

"...with every cloud comes a silver lining." Many of us in Toronto were disappointed when David Bradley decided Florida was to be his home. David has been there since April, and as far as I know, is still awaiting his papers to allow him to work. As a result, David has had 'oodles' of time to put to-

gether some (7 so far) fine quality TPUG disks. These include: the C64 July Disk of the month (C)AAM (the 'horses' program is delightful), an adventure games disk (C)GH, a hi-res graphics disk (C)HG, and 4 music disks (C)SI, (C)SJ, (C)SK, (C)SL.

The C128 library has released two summer disks of the month. The July disk (Y)AAL was put together by James Kokkinen; the August disk (Y)AAM was by Jane Parris.

I know you will enjoy these fine disks, and I thank those responsible for their fine work.

Congratulations

To member David R. Moffatt of Pine City MN. He has sold his disk containing 4 adventure games to a software house!

Meeting Schedule

Please note, commencing September, the only meetings confirmed are the following:

C128: first Tuesday of the month, unless otherwise specified.

1987: Sept1 Oct6 Nov3 Dec1

Amiga Central: second Tuesday of the month, unless otherwise specified.

1987: Sept8 Oct13 Nov10 Dec8

C64: Fourth Tuesday of the month, unless otherwise specified.

1987: Aug25 Sept22 Oct27 Nov24 DEC15

All the above meetings commence 7:30 pm in the York Public Library, 1745 Eglinton Ave W (just east of Dufferin), in the Auditorium or Story Hour Room

Other meetings are not yet confirmed at this printing. Please phone the TPUG office (733-2933) for further details.

World of Commodore Press Release #1

TPUG is pleased to confirm its participation, in a major way, in the 1987 World of Commodore Show.

TPUG will have its usual large booth at the show. Arrangements with the show organizers are being made for some space for other user groups as well.

Plans are to unite all User groups in North America, and to set up headquarters at the nearby Constellation Hotel. Special rates have been arranged by TPUG for all User Group members, and many events, seminars and get togethers are being planned.

TPUG looks forward to being the Host User Group at this, the world's largest, annual World of Commodore Show.

Anne E. Gudz, President TPUG 1986-1987

Photographing Your Computer Screen

by Soori Sivakumaran

Most of us have seen or used one of the many graphics software packages available. Whether for creating paintings upon a pixel canvas or crisp business like charts and diagrams, these programs provide users with a powerful method of communication. However, while most of these packages allow the user to print a "hardcopy" of their on-screen efforts, something is lost in the transaction. With the colour and the screen's bright intensity gone, the overall impact of the work is somewhat dulled.

But what else can be done? You don't want to lug your computer, disk drive and monitor to every presentation, or send them along with a copy of your report. The ability to produce a transportable copy of your computer screen's image is often essential.

One method of capturing your computer screen's image is by photographing it. This way you can create slides for your presentations, or prints that you can include in a document or mail to a friend. And what you see on the screen is what you get - colourful, vibrant and alive.

While some sophisticated (i.e. expensive) equipment exists on the market for photographing computer screens, it is possible to get by quite well using some standard equipment. First of all, you will of course need a camera. This camera should have through the lens focusing and allow you to manually set the aperture and shutter speed.

To understand the technique used to capture computer screen images on film, you must first know a little about how the computer displays them. The pictures that appear on your computer's display are produced with an electron gun. The electron gun shoots a stream of electrons at the screen, which excites a phosphor coating on it resulting in the emission of light. Thus a picture is created dot by dot, line by line, until the entire screen is covered. This process is repeated many times a second; fast enough to give the illusion of a complete picture.

The main implication of all this for our task at hand is that you will have to use a slow

shutter speed. The shutter of the camera will have to remain open long enough so that the electron beam has a chance to go through the entire screen at least once. Otherwise you will end up with black streaks through your photographs at points where the electron gun had yet to reach.

To actually photograph the screen, set up the display so it looks just like you want it to appear in the photograph. Turn off the lights in the room and close the curtains. The only source of light should be from the computer screen itself. No flash is required; use of a flash would only result in unwanted glare from the monitor's glass and the black streaks mentioned above. Mount your camera on its tripod and focus it at the center of the screen. A tripod is necessary due to the long exposure time required. Normally photographs taken with shutter speeds of 1/60th of a second or slower require the use of a tripod if the effects of "camera shake" are to be avoided. If you don't have a tripod you may be able to get away with resting your camera on a table or some other firm surface.

You want to fill as much of the photograph as possible with the image of the screen, so try to get as close to it as possible while still keeping it in focus. Make sure that you carefully align the screen in your camera's viewfinder before you snap your shot - slides especially look bad if taken off center or tilted.

Whether you use slide or print film is really a matter of what you prefer. I have had success using 64 ASA Kodachrome slide film as well as both Kodak and Fuji print film (100 ASA). I found that exposures of 1/2 or 1 second gave me the best and most consistent results. While shutter speeds as fast as 1/30th of a second gave me complete pictures, some parts of the screen came out brighter than others and darker bands sometimes resulted.

To find the best aperture setting, you will have to experiment using different f-stops. The correct f-stop to use will vary on the type of film you use, the brightness of your computer screen etc. If your camera has a built in light meter (or you have a separate

hand held unit) you can use it to help you set your aperture. If your camera has automatic exposure (but lets you set the shutter speed) your pictures should come out all right as well. You may have to try using an aperture setting one f-stop above or below what your meter tells you to get a correct exposure. I found that when I used the 64 ASA Kodachrome film good results were obtained at a shutter speed of 1/2 second and an aperture setting of f/11. Generally I found that an f-stop setting between 8 and 16 inclusive gave me reasonable pictures when using the 100 ASA print film. Try experimenting with different aperture settings to see what gives you both a good exposure and rich colours.

How you set up the graphics on your screen can be almost as important as how you take the pictures. I found that when taking pictures of my Commodore-64 or VIC 20's screen that the border on the screen made the entire screen look misaligned in the photograph. If you look at your screen's border, you will probably notice that it is not even in width all the way around your screen. By making the border colour the same as the screen colour, this problem is eliminated.

I also found that text characters displayed on a 40 column screen came out quite readable and were ideal for making presentation slides.

Since the surface of your computer monitor (or television set) is curved, this results in some distortion in your photographs near the edges of the screen. This distortion is more noticeable with text than with graphics. Because of this, it is best to keep text towards the middle of the screen.

As for colours, what looks good on the screen seems to come out well on film. A guide to screen colour combinations appears on page 152 of the Commodore 64 Reference Guide.

Whether to add polish to a business presentation or some pizzazz to a school project, the ability to capture your video display on film can help make your computer more useful for you. With just a little practice, some very professional looking results are possible.

Spelling It Out

by Jim Butterfield

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If all good programmers are lazy at heart, why do I hate to take short cuts? I seem to turn my back on all the quick tricks that others use.

For example: Many users never type in full keywords. They type L Shift-O for LOAD, for example, or N Shift-E for NEXT. I always type the words out (and follow them with a space for good measure). Is it that I love typing so much? Not exactly: I have a mixture of motives.

Similarly, I type spaces between words. Where others rejoice in typing a line such as FORK=ATOMSTEPH I plod along with FOR K=A TO M STEP H. Why would I do the extra work?

The L Shift-O technique might save the user a little time, but does not save any memory. The characters you type do not go into the computer's memory. Instead, a single byte called a "token" replaces the entire keyword. When you subsequently command LIST (or L Shift-I if you prefer), you'll see the whole keyword spelled out, regardless of how you typed it in. You might save personal time and effort with this technique, but the computer program registers no difference. The program will run at the same speed no matter how you entered the words.

Spaces are a little different. If you leave out spaces, the program will save a little memory (one byte for each space omitted) and a little running time (perhaps a hundred microseconds per executed space). So you can show a technical advantage. Why do I insist on doing things the hard way?

My most urgent motive is that I write for an audience. Whether in articles for publication, or in presentations to groups, people look at my code. Many of them can't read N Shift-E and understand it as meaning NEXT. . . and why should they? It's hard enough trying to read those programmed-cursor symbols. Similarly, leaving out spaces and typing IFF=CANDY=ETHENK=0 tends to confuse and alienate a user. The alternative, IF F=C AND Y=E THEN K=0, is much more readable. . . and the run time isn't that much greater.

Perhaps you don't care if others can read your code or not. That's OK; a computer is a personal thing and you're entitled to do as you like. But think about this: I'll bet that in a month or so there will be someone very anxious to read that program of yours, and that

someone will be quite vexed if it's tangled and all crunched up. That "someone", by the way, is YOU. Isn't it annoying when you can't read your own stuff? How many times have you resolved not to write in that crunched style any more?

In terms of shortened keywords: If you're an old-timer, you might recall several early machines in which you NEVER typed a keyword. You had a specific key for PRINT, another for IF, and so on. There are not too many of those left today. It's more natural to type in the whole words. Can you really remember whether R Shift-E stands for REM (remarks), or READ, or RESTORE? Is it worth keeping track? Not for me; I have more important things to confuse me.

And if you're thinking of migrating to another machine, even just for the workplace or whatever, you'll be glad you went the conservative way. Many popular machines - including the IBM PC and the Amiga - want those keywords spelled out, and need spaces separating following words. Get in the habit now, and save yourself work.

I've pointed out that if you had the line IF J=T AND Y=0 THEN PRINT 'XX' and decided to collapse it into the almost unreadable IF-J=TANDY=0THENPRINT'XX', you'd discover an amazing thing. Although the two lines are identical, except for the omitted spaces, the second one doesn't work. It seems that Commodore machines will always reject a line of code containing the sequence TANDY. (That's for an understandable reason, of course . . . it contains the keyword TAN for "tangent", thus confusing the system).

So spell 'em out, space 'em out, and live comfortably.

There is one exception, concerning the use of GOTO. It's best to always spell GOTO as a single word. GO TO, two words, sometimes works and sometimes does not.

You probably know that a line reading GO TO 500 operates identically to one which reads GOTO 500 (or GOTO500, for that matter). But there are times when GO TO, with the space between the words, is poisoned. Examine the following lines of code:

```
100 GOTO 110           (OK)
110 GO TO 110         (OK)
120 J=2
130 IF J=2 GOTO 140   (OK)
140 IF J=2 GO TO 150  (Syntax Error)
150 IF J=2 THEN GO TO 160 (OK)
160 ON J GOTO 170,170 (OK)
```

```
170 ON J GO TO 180,180 (Syntax Error)
180 REM
```

Note that GOTO always works, but GO TO (two words) is not always dependable.

Here's another problem related to use of GOTO. You may code either:

```
800 IF R = 4 THEN 900
..or..
800 IF R = 4 GOTO 900
```

Which of the above is better? There's no clear-cut answer.

On Commodore machines, I like to use GOTO for readability. A quick scan through a program can reveal changes in program flow; just scan for the GOTO keyword. You have an easy visual (and mental) contrast with lines such as:

```
810 IF R=3 THEN C=C+1
```

. . .where no severe change in the flow is involved.

On the other hand, some early computers do not recognize IF . . . GOTO, which makes it mandatory to use IF . . . THEN. If you have such a computer, or think you'll have occasion to work on one, you might as well get into the IF/THEN habit. It's too much trouble remembering which machine uses which.

It's for this reason that some magazines which publish programs "good on a wide variety of computers" stay with the IF/THEN construction. Hampering their program structure even more is the problem that such early computers also require THEN to be followed by a line number, never by code. Thus, the line shown above as 810 would not be legal for such a system. Sigh. . . it does seem to give away much of the terseness of our Commodore Basic structures.

Here's a short program that does NOT work. You might like to try it and see if you can spot the problem. Hint: never use long variable names. . .

```
100 FOR NEATNESS=1 to 100
110 PRINT NEATNESS
120 NEXT NEATNESS
```

I rather wish the above program did work. Then I could tell you how the program points out a moral . . . the moral of this article:

'NEATNESS COUNTS'.

CalcResult Advanced

What the Manual Doesn't Tell You!

by Louis Black

CRA, by HANDIC of Sweden, is a very large and powerful 3D spreadsheet for the C-64, but it is S-L-O-W – a lumbering giant! Two versions exist, the original V1.0 (March 83) and the upgrade V2.0 (June 84). A C-128 version should now be available. In addition to the program manual, another text exists. *Applied Calc Result* by Erik Fagerland contains 25 application models, but as with the manual, the translation from Swedish is occasionally muddled.

The purpose of this article is not to review CRA, nor to teach material already covered by the manual, but rather to reveal those things left untold.

Since a computer should save you time, let's start with ways to save time. CRA is intensively disk interactive and, depending on file size, many disk operations can take from half a minute to five minutes. Short of replacing your 1541 drive here are some other ways to speed things up.

Formatting a work disk takes over 41 minutes! To save time, only use CRA to format one work disk, then use an outside fast backup utility to make several copies.

For page activities, COPY a page works about twice as fast as RENUMBER. Don't use the ALL Y/N facility to LOAD several pages of one file. LOADING the pages individually could cut load time in half.

REPLICATE a row/column works faster than COPY. To duplicate a row/column of homogeneous cells, REPLICATE a single cell, not the entire row/column.

Page files left in the WORK AREA are automatically booted to screen, resulting in faster load times and eliminating the extra step of loading from disk. Use with CAUTION!

Since speed varies inversely as the file size, keep your page files smaller and use more pages.

Inadequate disk space can be a problem. Available 1541 storage for V2.0 is only 431 blocks, since CRA must be resident on the work disk. The directory lists a series of HELP files. HELP 310-316 are in English.

Even though a disk is FORMATted for English only, HELP files 380-386 and 390-396 appear on the work disk. They contain unneeded foreign languages (Danish and Norwegian). Scratching them FREES 48 blocks.

NOT saving pages to disk, but keeping them only in the WORK AREA will double disk capacity. Do this only when the entire disk is devoted to one spreadsheet. Remember, files saved to disk cannot be corrupted. When they are only in the WORK AREA be very careful.

Save further space by keeping all MODEL templates on a separate disk, then copy to a new work disk and duplicate to as many pages as required.

CAUTION: Do not fill the disk completely. Leave blocks FREE equal to the largest anticipated page file to allow for disk activity, unless you do not intend to COPY or RENUMBER any pages. Also, leave about 90 cells free on individual pages.

To utilize maximum disk space, ADD or '+' operations occurring on page 32 can be left there if no further disk operations are anticipated.

DISK FUNCTION anomalies. Section 3.20.4 of the manual states that the write protect must be on the source disk. This is correct for double drives. However, for single drive B/U or COPY you must have it off.

In V1.0 (V2.0 was not tested) trying to B/U a work disk of several pages hangs up the drive. Using an outside B/U will be faster and surer.

Performing some disk operations after ERASE causes an ERROR #1 and temporarily hangs up the drive. To avoid this, do another operation, such as GET PAGE, first.

Before SAVEing the work area to disk, make sure that no errant pages exist, because they also will end up saved to disk. Check the CATALOGUE.

A page file will be erased if you LOAD another file to it, even though the coordinates do not overlap. You cannot overlay templates except by convoluted manoeuvring with the ADD or '+' functions.

Be sure to have the page number on

screen that you wish to LOAD to. A single LOAD to the current page will not corrupt other pages in the work area.

The DIF files facility is very useful. For example, Chartpak by Abacus recognizes DIF files, thus allowing access to many elaborate graphs that would otherwise be impossible.

CRA has no sorting facility, but there is a way. Generate a DIF file. Use a BASIC program to READ and DISPLAY it. Use a sort routine on your BASIC file, then write a new DIF file and send it back to CRA.

USER REGISTER idiosyncrasies can cause some printing headaches. CRA V2.0 has additional printer files. However, anyone using the Gemini 10X with a Cardco interface cannot use the Gemini/Epson file. You must use the MPS 801 file.

Regardless of page length selected, a page-feed will occur ten lines earlier. There is a built-in ten line bottom margin default that's not documented.

Always select a characters per line format one column wider than required. CRA V1.0 limits FORMATted printing to nine cells across regardless of the total columns used.

For keeping printouts in a 3-ring binder, set the USER file to LM 4 and 77 columns.

Values always reserve a leading space, so plan cell widths accordingly.

The USER file does not permit emphasized or condensed print, nor a change of line spacing. The Gemini 10X can circumvent these shortcomings. The inner DIP switches default to these functions in the OFF position. Reading from the back, #2 will give emphasized, #3 allows 17 characters per inch, and #5 institutes eight lines per inch (only #2 works for GRAPHS).

Achieving GRAPH hardcopies could be tricky. You can scroll the screen across to view the entire graph, but are limited to only one screen-width printout. To get a full width hardcopy, be a little devious. Set the USER file to LM 1 and print the leftmost screen of the graph. The printout will include the vertical scale and the first eight bars. Next, rewind your printed page back up to the original starting position, reformat

the GRAPH and scroll your screen over for the remainder. Reset the USER file to LM 35. If there is more header to print, continue at the sixth column. Print the second half.

There are some screen FORMAT quirks. Local COLOUR, in V2.0, doesn't remain in a formula cell on recalculation. Local right FORMAT of text cells must be done *after* the text is set.

SUMming a range of calculated values truncated to two decimals by the '\$' FORMAT could result in an error of a few pennies because the underlying MAX values are retained. Use $INT(VAL*100+0.5)/100$.

Some cautions on PAGE functions. Do not ADD pages containing IF-THEN-ELSE formulae. The result will be cumulative and incorrect. Use the '+' function, but be warned that you will lose formulae, format and repetitive characters. Only the sums will come through, hence you cannot recal-

culate a SUM PAGE achieved by the '+' function.

Adding a series of pages will not work unless they have all been SAVED in one group from the WORK AREA.

A couple of other minor annoyances exist. When editing a protected cell with F8, the cursor sticks in the first space after the original text on the input line. Use the SPACE bar to go further.

There is no direct facility to BLANK a matrix. You must COPY a blank matrix.

There is no SCRATCH PAD facility. Do your calculations in an empty cell. Remember to BLANK the cell when finished.

CRA V2.0 contains no documentation of upgrade facilities, but the HELP files are almost sufficient.

Super Hint: If the spreadsheet will receive an indeterminate number of entries, design it with data output lines at the top.

CRA lacks a few amenities. Some, such as the inability to SAVE screens with SPLIT or TITLE or CRSR position, or the lack of a CENTRE cell FORMAT are minor irritants. The ability to put the dollar sign, plus sign and parentheses in value cells would be very desirable, as would a SORT routine less cumbersome than the DIF technique. A variable screen column width facility is extremely important, but lacking.

Overall, I like this program very much. CRA has the power and size needed for extensive business projects. Once mastered, it's a pleasure to use. It is not perfect, nor is it Lotus, but for the dollars invested it's a versatile and value-packed tool.

Calc Result Advanced is distributed in North America by SCANAM, 190 Moore St., Suite 202, Hackensack, N.J. 07601, (201) 445-5260.

TPUG DISK ORDER FORM

5300 Yonge Street, Dept O1, Willowdale, Ontario, M2N 5R2
(416) 733-2933

Welcome to **TPUG**, the world's largest Commodore Users Group. One of the reasons for belonging to a club is to gain access to some of the thousands of **public domain** programs that it has in its library.

As a small thank you for sending in your order, we have reduced the price of the **FIRST** disk you purchase to **\$5.00**. The **balance** is at the regular price of \$10.00 by mail. **Every 4th disk is FREE!**

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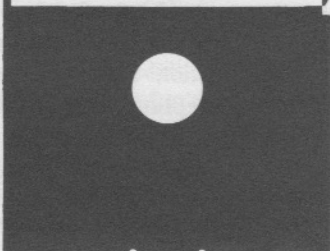
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TPUG Disk of the Month . . .
 Library Disk



TPUG, Inc.

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TPUG is the World's Largest Commodore Users Group. It was founded in Toronto in 1978 and has been serving its members since that time.

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 8 Disks Only

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\$79.95 Canadian funds. U.S. members will be charged \$79.95 Canadian on their credit cards. For U.S. cheques, please send \$59.95 U.S. funds.

SIGNATURE _____

Computers and Chess Endgames

by Vincent J. Mooney Jr.

Chess games are in three parts: the opening, the middle game and the endgame. The exact division is sometimes hard to specify and not all games have an endgame. When they do, the possibilities are very complicated. Books by such authors as Berger, Ruben Fine, Andre Cheron, Max Euwe, David Hooper and Averbakh are used to guide players and adjudicators. Starting from the 1970s, analysis by the books has been challenged and changed by computer studies.

Major credit for computer analysis of endgames belongs to Ken Thompson of Bell Laboratories, Murray Hill, New Jersey. Thompson is co-author of the Unix operating system and the C computer language. He is also the designer and programmer of Belle, a computer chess playing program that has been a winner of the World Computer Chess Championship. Thompson has 'solved' numerous endgame situations and altered for ever the endgame situation.

In November/December 1985, Thompson solved three 5-man endings (deliberately selected because they are pawnless) - King and Queen versus King and two Knights, King and Queen versus King, Knight and Bishop, and King and Queen versus King and two Bishops. He found the longest forced win (to checkmate or to a winning reduction to another endgame, whichever is earlier) is as follows: Queen versus two Bishops - 70 moves; Queen versus two Knights - 62 moves; and Queen versus Bishop and Knight - 39 moves. The Queen wins in these situations (excepting positions with an immediate mate or immediate loss of the Queen).

The concept of the longest possible win with best play on both sides is important because of the '50 move' rule in chess. The rule states that a game is a draw if in 50 consecutive moves no irreversible move has been made. An irreversible move is, for example, a Pawn move (because it cannot return to the square it moved from), a capture, or castling (the King and Rook might return to the original squares but they can't castle again). The rule prevents a player

from playing indefinitely; the draw occurs automatically in 50 moves if no irreversible move has occurred. The reader is invited to calculate the longest possible game from the initial position with no exceptions to the 50 move rule, and without using Blathy's notorious 'rigged' positions where 400-plus moves are required to mate (with no irreversible moves!).

The international chess federation (FIDE) modified the 50-move rule many years ago when (human) analysis showed that some endgames can be won but not in less than 50 moves. The general idea of the modification was that if it were shown that, say, 66 moves were required, then twice that number of moves would be allowed in play to win. The exact position had to be published by FIDE before players could claim the exception. Some specific positions for which exceptions were made included the endgames of Rook and Bishop versus Rook; certain Rook and Pawn against Bishop and Pawn positions; and the endgame of two Knights versus a Pawn (an original exception to the 50-move rule).

What Thompson has done, and no doubt will expand upon, is to 'settle' some endings and to cause, therefore, endless disputes in tournaments. The players can no longer have some positions adjudicated as a draw; the tournament director is forced to request that the players agree to a draw or continue to play. If play is resumed, the expected winner might continue for well over 100 moves (because he is human, his play is sub-optimal) as he tries for the theoretical win. This not only would exhaust both players but also cause the tournament to badly pair the other players because the game is not complete.

If the specific ending is not covered by FIDE, perhaps because it was published only a few issues ago in the International Computer Chess Association Journal, the situation becomes one of adjudicating a draw because the 50-move rule forces this. Yet one player has a won position and can't play it out! Is that fair? Many specialists feel it isn't, but no firm consensus has yet emerged for a new general rule to cover computer-solved endgames.

TPUG Adds Conference Room to Q-Link Support Center

By David Bradley and Jane Parris

Sometime in July, the TPUG conference room on QLINK opened. For those not yet on QLINK, a conference room is an area where people can meet and discuss things. Up to 23 people can be in the TPUG room at the same time and everybody is welcome to contribute to the conference.

The usual conference protocol is to enter a '?' when you have a question and an '!' when you have a comment. After you have done this, wait patiently until the person in charge (usually Jane) gives you the OK to ask or comment. This allows everybody a chance to speak, and be heard. It can get quite confusing for more...if some sort of protocol is not followed.

At the moment, we are holding weekly conferences every Thursday at 9 pm EASTERN. Topics vary, for complete details of what is happening when, go the conference schedule in the TPUG area. If you have any comments or questions about our section on QLINK, leave David Bradley (DavidBradley) or Jane Parris (JaneParris) a message online.

TPUG Unclassifieds

This space is for the use of TPUG members. Our rates are twenty-five cents per word. Send your ad with payment to TPUG HQ.

For sale: 4 Commodore CBM Model 8032 computers, each with Instrutech COMAL boards, version 2.0 with 128K. Also: 4 CBM Model 8250 dual floppy disk drives, 1 Commodore 2022 printer, 3 4023 printers and 2 8023P printers. Best offer. Phone (613)332-3182 or (613)332-1459 evenings.

For sale: 8032, 8050, 4040, C-64, 1541 and lots of software. Please call (416)446-7368.

TPUG LIBRARY ADDITIONS

Disk of the Month

Presented by David Bradley

tpug july 1987.c

This disk contains a very wide variety of programs for your 64. One program makes a mosquito noise, I know this is not a vital computer function, but it is worth the 1 block of disk space that it took up. You will also find some nice utilities. One is a program that will format disks in 9 seconds. Another will make REM statements easy to see. If you have a 1520 plotter, there is a calendar program for you! If you are into the lotto game, there is a great lotto program for you. If you like true works of art, then check out Jo-Anne Park's picture of David Williams. And there is soooooo much more! I think everybody will find something on this disk. . . I am sure of it! Good luck. . .

menu.c	prg	9
menuml	prg	1
menufile	seq	2
docfile	seq	4
mosquito	prg	1
remliter	prg	3
ron headroom	prg	37
9 sec format	prg	7
horses	prg	45
1520 calendar	prg	36
super connect 4	prg	21
network xxiii	prg	4
message	seq	1
mona wink	prg	14
headline news	prg	16
bob jogs	prg	27
commodore logo.c	prg	5
circles.c	prg	3
disk restore.c	prg	25
restore.doc	seq	15
axel f	prg	16
cslide6	prg	10
dddavidwilliams	prg	37
spike's lotto	prg	110
resonance	prg	6
mixtures	prg	5
per what v2.0	prg	16
ohm	prg	42
self help	prg	24
wind chill v	prg	3
resident clock	prg	7
president max	prg	14
e-z.seq.read	prg	7
grocery list	prg	48

BLOCKS FREE = 17

PET LIBRARY ADDITIONS

disk - TPUG.pet sept.86 (P)AAA

this disk produced by John Easton - PET Librarian

doc.boot	load and run to access next file
this disk	listing of this disk contents - SEQ format
northcastle	revised version of Northcastle Structured Basic
structured basic	- author Mike Roche, Cobourg, Ont.
+ version 1.9 +	this version supersedes that issued on Disk (P)TD
+ march 1986 +	
stb pet 3800.p	
stb pet 7000.p	
stb pet 6000.p	
stb pet 9000.p	
stbpet 3800run.p	
stbpet 6000run.p	
stbpet 7000run.p	
stbpet 9000run.p	
stb instructn.z	instructions - load and run
fast copy-all.p	revised copy-all
simple.z	sample programs illustrating the application
for next quit.z	of Northcastle Structured Basic.
restore line#.z	note : STB must be resident in memory to run.
binary search.z	
quicksort.z	
.assembler file.	
stb pet 3800 pal	PAL assembler files for stb
stb pet 6000 pal	
stb pet 7000 pal	
stb pet 9000 pal	
stb initialize	these assembler files are common to all
stb command	versions of stb pal
stb setup	
stb looping	
stb selection	

stb procedure
stb command.old
stb setup.old

----- g.jones ----	- author G.H. Jones, Don Mills, Ont.
instructions	disk cataloging programs - up to 880 titles
disk catalog	formatted for MX-80 printout in condensed
sort directory	mode.
----- d.runnion -	- author David Runnion, Astabula, Ohio
ez mail/file 1.8	mailing label and/or filing prog. with search, sort
	& file export capabilities.
r/m inv pro 1.8	keeps track of raw materials used in formulas.
s/r inv pro 1.8	keeps track of maintainance & supply items &
	provides report to accounting dept.
job cost est 1.8	use your labour codes and rates to estimate new
	jobs.
sort pet	M/L sort in high memory from Transactor Mag.
	note: above 4 titles and "phone list 3.8" make use
	of this routine.
no. of records	. . . files used with r/m inv pro 1.8 . . .
rm inventory	
r/m names	
no. of formulas	
formula names	
f-100	. . . sample formulas
f-200	
f-300	
numbers	. . . files used with s/r inv pro 1.8 . . .
sr inventory	
sample file/par	. . . sample files for use with ez mail/file 1.8
sample file/fld	
sample file	
scrambled eggs.8	c-64 game conversions
jugger-naut.8	
word finder.8	
gef'em.8	
draw & print.8	
phone list 3.8	company phone list with M/L sort, previously
	issued with basic sort.
2 blocks free.	

disk- TPUG.pet feb.87 (P)AAB

this disk produced by John Easton - PET Librarian

doc.boot	load and run to access next file
this disk	listing of this disk contents - SEQ format
-j butterfield -	- author Jim Butterfield, Toronto, Ont.
tax86.1	canadian 1986 tax prog. note - this program
	includes routines of interest to all programmers -
	in particular, the new macro language - rug (re-
	port utility generator)
copy-all	Jim's copy program - will handle REL files
change unit addr	CBM utility for use with copy-all
Education	
----- r.byers ----	- author Ron Byers, Truro, NS
teachers pi/cal	CAI authoring language - Teacher's version
pi/cal	- Student version. Note: pi/cal runs on both cbm
	and c-64.
cbm 8032 v3	change 80 col screen to 40 for pi/cal use.
pc/cal.doc	instructions for pi/cal
doc.reader	load this program to read doc file
*inst	instruction file loads thru pi/cal
*hamq1	sample cai file loads thru pi/cal
marksfile	auto-generated mark update for pi/cal
----- a.lowe ----	- author - Al Lowe, Toronto, Ont.
market survey	simple statistical package for school use
inventory	simple a/v inventory package for schools
Utility	
--- g.fontaine ---	- author - Gilbert Fontaine, Montreal, PQ
newmon-help.e	english instructions
newmon-help.f	french instructions
newmon\$1000 pet	monitor program for pet at address \$1000
newmon\$7000 pet	monitor program for pet at address \$7000
newmon.intro	load this first
----- j.bos ----	- author - John Bos, Brantford, Ont.
control chr\$	tutorial program - cbm printer output
set up80	sample 80 column menu loader
baicd480-9k	basic aid for superpet
print.dir 8050	prints directory of 8050 disks - formatted
--- j.easton ---	- author - John Easton, Toronto, Ont.
filthing.3	basic SEQ file manipulation utility. note: runs on
	cbm, c64 or c128
Music	
----- a.smith ----	- author Art Smith, Traverse City, MI
abide with me	musical interlude (40 or 80 column)

TPUG CONTACTS

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Toronto, Ontario
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Regular Member (attends meetings)	\$35.00 Cdn.
Student (full-time, attends meetings)	\$25.00 Cdn.
Associate (Canada)	\$25.00 Cdn.
Associate (U.S.)	\$25.00 U.S.
Associate (Overseas - sea mail)	\$35.00 U.S.
Associate (Overseas - air mail)	\$45.00 U.S.

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(416) 273-6300
(416) 252-8481

24 hours per day
7 days per week
The password is. . .

LAKE

Bureaucracy From Infocom Text Adventure For Commodore 128

Review by Ben Vecchio

I am convinced that Bureaucracy is a game that will drive you mad. It's no wonder it's called a 'paranoid fantasy'. I just wonder if I really survived it with all my eggs in a row, all my ducks in one basket.

You've got to be a bit tetchy in the haid to be able to think of this stuff like Douglas Adams has. And a good thing it's just a game. It *is* just a game?

Douglas Adams (author of the *Hitchhiker's Guide to the Galaxy* novel series, TV series and Infocom game) has, with the help of those nutzoz at Infocom, related to us a true life experience in the form of Bureaucracy... excuse me. . . Bureaucracy. Called Interactive Fiction Plus, Bureaucracy is a text adventure game.

But apparently a real situation led Mr. Adams to relay the problems and emotions that go along with banks and companies and how the problem is in the computer and we can't get it out, sir, without great expense and down-time on our part, so you'll have to live with it! Sorry, but my own anger at having had dealings with bureaucracies just makes me rant. (Just think about the little run-around you are given at any government facility - Labor Dept. or IRS, just to name a happy twosome).

With Infocom's new game, not only are you dealing with a bureaucracy within the game, but the computer you're working with is also part of the same insane set-up, so you really go nuts. And, as things go wrong, your blood pressure (represented in the upper display) climbs and climbs till a teensy tiny blood vessel in your brain bursts and it's all over.

Bureaucracy is a C128-only game with an 80-column monitor required. And I, for one, think it's wonderful to see more and more 128-only programs. . . ones that make use of 80 columns, even better! As such, the game is able to load, read and save nice and quickly, thank you.

Another nice thing about Bureaucracy is that it allows you to dump your text to an 80-column printer so you can slowly analyze it at a later date and find out where it was you actually did go mad.

With Bureaucracy it's easy to lose your temper, but be careful! Anything that denotes anger or upsetting will raise your blood pressure! And okay, I did lose my temper a few times - I admit it, I used a four-letter word. But I have never had a program curse right back at me. . . it was unnerving to say the least.

When you first boot up it will even tell you you don't have the right to operate the software! Then it proceeds to insult you.

The packaging comes with everything you'll

need from a "How to move into your new home" booklet from an obviously corrupt bank, to a magazine called *Popular Paranoia*, a contradictory credit card application form and more.

It all begins innocently enough when you switch jobs and cities. Then things really go wrong. The movers have never arrived, you've got no real money. The bank, itself a bureaucratic quagmire, tells you that you've already filled out a change of address form so you cannot fill out another one. The taxi company only likes to go to the airport. The food service people are snippy. Old ladies like to take pot shots at you.

When you get inside this story you'll find a world jam-packed with surprising twists, unique characters, and original, logical and hilarious puzzles. And that's what Bureaucracy is - a funny misadventure.

Sometimes Bureaucracy behaves totally illogically, unnerving in a computer but to be expected in a bureaucracy. Sometimes this game can be all too real.

Stationfall From Infocom Text Adventure For Commodore 64

Review by Ben Vecchio

At times I found it very difficult to tear myself away from Stationfall, the new Interactive Fiction game from the folks who brought you Planetfall: Infocom. And, as you may have guessed, Stationfall is the Boffoid (excellent) sequel edition.

If you enjoyed Planetfall, you'll love Stationfall. Floyd, the robot, is back to help you again (so he says, anyway). And what's real nice is that you needn't have played the first game to enjoy Stationfall - they are two separate and distinct games, except that Stationfall must chronologically come second.

Thus, since your last heroics, you've been promoted to Lieutenant First Class in the Stellar Patrol - but in the Bureaucratic Paper Forms Division. Sounds kind of dull. Your mission seems routine as well.

The adventure begins with you on the Space-ship Duffy. Your orders are to fetch a load of forms from a nearby space station for the ship's supply. These are the order forms you order for when you're out of forms (anyway, it's not important).

Before leaving, you must get a robot from the robot pool to assist you, plus a space truck to get you there and back. Once you've figured out how to make it to the space station, the adventure really begins. For when you get there, you find the entire station deserted.

And so you begin to gather clues and tools and things you'll need if you're to discover what happened to everyone and how in the meanwhile you can keep it from happening to you.

Your robot, Floyd, is more than happy to assist you, but turns out not to be very helpful. When you get to the station, you find another robot, named Plato, who doesn't know what happened either. He and Floyd team up to play and explore and become even less helpful.

You begin to explore and, as time passes, your score rises and the mystery deepens, inviting plenty of questions. Why are you threatened and attacked by the roving robot maintenance welders? Why are the autodoors working faster and faster? It just so happens that the commander's log speaks of some of this and about the mysterious breakdown of machinery throughout the station.

It seems things have been kind of odd ever since an alien space vessel was brought aboard by those guys in the science module (one of three external spheres attached to the main station; the others being the military and diplomatic modules).

Each module, including the main one, comprises many layers of decks, and you are constantly going up and down and around them in your role as detective, unravelling this mystery.

Stationfall puts you in the middle of the action and, as the main character, you determine the way the story goes. It's like writing yourself into a novel, that's how engrossing it is. The story talks back to you, the software communicating entirely in vivid, descriptive prose.

In addition to the C64 software and Infocom's newly-designed packaging, Stationfall comes complete with The Official Technical Manual: the general rules of play, how to talk to the computer, a little bit of story background, interactive playing tips for beginners, saving and loading instructions and so on. Then there's the Official Spacestation Blueprints, which are not only very convenient, but also full of flavour and interesting tidbits. However, the prints are only for the station proper, and do not cover the sub-modules, which you'll have to map yourself. Even that's fun because the game is so very involving.

In addition to the blueprints are included two standard-issue forms, plus one completion form. Forms and ID cards are what you need in order to get around in Stationfall. Some forms won't work without a validation stamp, so find one. And lastly, you get a sew-on patch that says: "Boldly going where angels fear to tread, Lieutenant First Class".

Read your forms and maps well - they will help you get through the game.

Program author Steve Meretsky's other text adventures include The Hitchhiker's Guide to the Galaxy (with Douglas Adams), Leather Goddesses of Phobos, and Planetfall.

Even though Stationfall may take you weeks or months to complete, I found myself in no rush to finish because the script is so enjoyable. Stationfall is such intriguing, fast-paced science fiction that it almost makes me feel as though I am involved in a forgotten Star Trek episode.