NEWSLETTER OF SYDTRUG INC.
SYDNEY TRS-80/MS-DOS USERS' GROUP
P.O. BOX 75, PANANIA 2213

CONTENTS

MEETING ARRANGEMENTS

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*                                                         *
*   Meetings will be held on SECOND and FOURTH Saturday   *
*   afternoons each month commencing at 1:00 P.M. at the  *
*      1st Sefton Scout Hall, 2 Waldron Road, SEFTON      *
*                                                         *
*           Meetings this month will be held on           *
*                13th and 20th of April                   *
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WHO'S WHO

President	Denis J. PAGETT	772-4848
Vice President	Errol ROSSER	796-7646
Secretary	Bruce RAMSAY	580-2217
Treasurer	Gordon SYMONDS	744-1901
Public Officer	Tom FOLEY	389-6157
TRUG-86 Sysop	Errol ROSSER	796-7646
Hardware Co-ordinator	Errol ROSSER	796-7646
Newsletter Editor	John MERCER	579-2915

Closing Dates for May 1991 Newsletter:

Hard Copy only   — 6th April 1991 —

On Disk   — 13th April 1991 —
or Via Bulletin Board

SYDTRUG Bulletin Board

TRUG-86, the MS-DOS/TRS-80 Bulletin Board, (02) 790-5681

For full details see the Services page overleaf.

BANKCARD and MASTERCARD

We have the facility to charge your membership fees, or renewal fees to either MASTERCARD or BANKCARD. Additionally, purchases made on your behalf by the club may also be charged to your credit card. If you wish to use this service, please quote your card number, type of card, expiry date of card, and SIGN your request.

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**          NEW  P.O.  BOX  ADDRESS                      **
**                                                        **
**     Exchange Newsletter Editors and all Members        **
**                    PLEASE NOTE                         **
**                                                        **
**   Due to problems associated with access to our former **
** P.O. Box at Bankstown, it has been cancelled, and your **
** committee have arranged for a new Box at PANANIA.       **
**                                                        **
**   This is much more readily accessible and, therefore, **
** much more convenient. While a redirection order has    **
** been implemented for the old box for a limited time,   **
** all readers should note that mail should now be        **
** directed to our New Post Office Box Address which is:   **
**                 SYDTRUG Inc.                           **
**                 P.O. Box 75                            **
**                 PANANIA NSW  2213                      **
**                 AUSTRALIA                              **
**          This is to take effect IMMEDIATELY            **
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Services Provided by SYDTRUG Inc. for MEMBERS

Our NEWSLETTER ("SYDTRUG News")

. Distributed on a regular basis, includes group business information along with software and hardware articles and information from local and overseas sources. Contributions from members are always welcome.

COST: Included in your membership fee. Back issues available at $2.00 ea including postage (within Australia).

Other NEWSLETTERS

We receive numerous exchange newsletters from similar groups both locally and from overseas. See the resume which appears regularly in our own newsletter. Copies are available for borrowing from our Sefton meetings. You can also borrow by mail if you drop us a line including outgoing postage, as for back issues of "SYDTRUG News" shown above, one magazine at a time for one month.

DISKS

The committee have located a new source of disks at new low prices. These prices are conditional upon purchasing in lots of 100. At this time the committee is not prepared to outlay group funds in purchasing bulk stocks of disks on members' behalf. However, if any member, or group of members acting cooperatively, wish to pay in advance for 100 or multiples of 100 of the same type and size of disk, the committee will arrange to purchase them on the members' behalf. Any member wishing to purchase less than 100 disks of any one type and size may pay in advance and, when orders have been received for 100 of the same type and size, the committee will arrange to purchase them. The new prices are as follows:

            5.25 DS DD (360K) 0.50 each
            5.25 DS HD (1.2M) 1.00 each
            3.50 DS DD (720K) 1.00 each
            3.50 DS HD (1.4M) 1.90 each

LIBRARY

We maintain a library of interesting books, mainly at present on TRS-80 matters, along with most issues of "80-MICRO". There are a number of other magazines available as well as copies of some local computer magazines. These are available for borrowing from the group for one month at a time.

FABRIC RIBBON RE-INKING

Most printer ribbons can be reinked quite successfully, so long as they have not been thrashed. There needs to be a reasonable fabric base to absorb the ink. NOTE: Fabric ribbons only, We cannot reink carbon film ribbons.

COST: At $2.00 per ribbon plus postage, this is a viable alternative to continually purchasing new ribbons. If given to re-inker person at meeting they will normally be ready at the same meeting of the next month. By mail, send them to the Group P.O. Box in a padded jiffy bag. Before you mail it, get it weighed and pop postage value of stamps into the bag before you seal it so that we can return it.

As from 1-7-91 this service will be free to members, but postage and packing charges will still apply where applicable.

SIGs (Special Interest Groups)

On the second meeting of the month we often have either hardware or software tutorials. If you can present an area of interest or can suggest something that you might like to learn about, please contact a committee member.

SOFTWARE

MS-DOS Public Domain/Trial Ware Disks

We have an ever increasing range of MS-DOS Public Domain and Trial Ware disks from a number of sources. Watch the newsletter for details.

COST: Until 30-6-91 - $3.00 per disk (360K), from 1-7-91 - $5.00 per disk, plus postage and packing as follows:

  1 - 5 disks: Within Australia: $2.00
                 Overseas Airmail: $5.00

  6 - 10 disks: Within Australia: $4.00
                 Overseas Airmail: $10.00

TRS-80 Public Domain

A huge range of TRS-80 Public Domain Software is available for Mod 1/Sys 80 along with Mod III, 4/4P. See our catalogue disks for details, if you don't have them write and ask, including $8.00 to cover disks and P/P. Be sure to let us know what format you require the disks written in.

COST: Until 30-6-91 - $2.00 per disk, from 1-7-91 - $3.00 per disk, plus postage and packing as for MS-DOS disks above.

BULLETIN BOARD

Our MS-DOS/TRS-80 BBS called TRUG-86, now up and running on (02) 790-5861, is still in the process of development. So please bear with us if it does not yet have all the bells and whistles which you may expect. All members of SYDTRUG Inc. who have paid for bulletin board access will have access, while limited access is available to visitors.

After 1-7-91 all financial members will have access to the bulletin board at no extra charge.

Initially your password is your membership number, so it would be a good idea to log on and change your password to one which only you know.

The following formats are available:-

CCITT   V21 (300/300), V22 (1200/1200)
        V23 (1200/75) and V22 bis (2400/2400)
BELL   103 (300 FULL Duplex), 212 (1200/1200)
        2400 (2400 FULL Duplex)

All formats utilise 8 DATA bits, 1 STOP bit and NO Parity

You should set your Modem and/or software for "Originate", except for V23 (1200/75) which should be set for VIATEL or 1200 Receive/75 Transmit.

COST: Until 30-6-91 a $15 per year fee applies, after 1-7-91 all members will get access for no extra charge.

ADVERTISEMENTS

Members may place "For Sale", "Exchange", or "Wanted" advertisements in "SYDTRUG News" There is no charge, but inclusion is dependent upon space being available. The editor reserves the right to amend as thought fit.

DISCLAIMER

MEMBERSHIP FEES for 1991-1992

Presented to those members attending the Group meeting held on
9th March 1991

Dear Members,

The new financial year fast approaches and the time has
arrived for us to discuss with the members the membership fees for
the year 1st July 1991 to 30th June 1992.

Fee History:
Last increase in fees 1/7/89 which only increased by $5-00.
The increase before that was approximately in 1982.

In the good old days, when TRS-80 computers were King and our
membership rose to 300+, the group had a very healthy bank balance.

The operating surplus that the group acquired when our mem-
bership was 300+ has been used over the years to cover the deficit
between membership fees and operating costs when our membership
diminished.

All financial members have benefitted by the group not increas-
ing fees. To keep fees at a minimum we need more members. The
committee have made a determined effort to attract new members to
the group.

The time has arrived when we DO NOT HAVE ENOUGH FUNDS to
cover us to the end of the financial year. A major effort by ALL
MEMBERS to each recruit at least two (2) people to join the group
would really be appreciated.

Listed below are details of where SYDTRUG Inc. money is
spent. The list shows:

1. What has been spent so far this financial year.
2. The projected expenditure till the end of the financial year.
3. An estimate of the funds needed for the group to remain opera-
tional for the period 1/7/91 to 30/6/92.

Please take note that the details below are NOT the treasurer's
report. If you require accurate details then feel free to discuss
with the treasurer.

Expenses this year	1/7/90- 9/3/91	9/3/91- 30/6/91	Total 90/91	Estimated 1991-92
Printing Newsletter	$912.00	$441.00	$1,356.00	$1,500.00
Posting Newsletter	549.31	260.00	809.31	1,000.00
Paper etc.	266.00	30.00	296.00	330.00
Rental of Hall	400.00	200.00	600.00	700.00
P.O. Box 75 PANANIA	95.00		95.00	95.00
P.O. Box 223 BANKSTOWN	150.00		150.00	
Redirection Notice	30.00		30.00	
Bulletin Boards				
TRUG-86	872.40		872.40	200.00
CLUB-80	279.91		279.91	
Telephone Accounts	225.00	46.00	271.00	190.00
Consumables:				
Disks, PD and Catalogue	400.00		400.00	200.00
Catalogue Disk Labels	495.60		495.60	
Bank Fees:				
FDT FID M/C B/C	90.01	39.99	130.00	150.00

Sundries:
Public Liability etc. ($298.75)
Prepaid envelopes
Misc. Postage Enquiries, replies etc.
Diskette mailers
Phone Calls
Petty Cash
Advertising in "Trading Post"

| Total Sundries | $1,306.47 | $150.00 | $1,456.47 | $1,300.00 |

We need $1,166.99 to carry us through to 30/6/91 but our current
bank balance of $486.05 leaves us $680.94 short of requirements.
This is equal to 15.1 members.

Estimated funds required for 1991/92: $5,665.00

We have 145 financial members as at 9th March 1991 and we
also have 18 unfinancial members.

If membership stays at 145, each member's share would be $39.07.
If membership drops to 130, each member's share would be $43.58.

If membership drops to 120, each member's share would be $47.21.
If membership drops to 100, each member's share would be $56.65.

The Committee has discussed the fees for 91/92 and regret
having to increase the fees but, the recommendations are as fol-
lows:

Membership Fees for 1/7/91 to 30/6/92 be set at:

1. Joining Fee $20.00 (once only)

2. Single Membership $45.00 (per year or part thereof)

3. Family Membership $55.00 (per year or part thereof)

4. Overseas Members   As Single Membership (in $AUS)

The committee also recommend that the price of the TRS-80 and
MS-DOS software diskettes be increased:

1. TRS-80 Software diskettes $3.00 each, effective from 1/7/91

2. MS-DOS Software diskettes $5.00 each, effective from 1/7/91

In view of the increase in fees, the committee recommend that:

1. All members be given FREE access to the bulletin board. If you
don't have a modem, one of your friends may have one on their
computer. Use their computer system to access your bulletin
board.
2. All members can have FREE ribbon reinking (only their own rib-
bons). If ribbons are to be posted back then postage still
applies.

NOTE:
With family membership (meaning family living at the same
address), the group will provide a number of membership badges but
only one newsletter and one bulletin board access per family.

Family membership includes husband, wife, son(s), daughter(s),
brother(s), sister(s) living at the same address.

The increase may at first appear excessive but, when you real-
ise that this is only 87 cents per week and consider what the group
has to offer, it is an extremely cheap investment.

In concluding:
As you are all aware, the committee members also have to pay
the same fees. On behalf of the committee, I thank you for your
support and know that you understand the difficulty we had in
arriving at these recommendations. If this group is to continue as
a first class computer group then these decisions have to be made.

Denis PAGETT
President, SYDTRUG Inc.

Addendum to the above letter, 9th March 1991

At the General Meeting held on Saturday 9th March 1991 the
members in attendance moved a motion, the vote being unanimous, in
favour of accepting all the committee recommendations as detailed
above.

A additional motion was moved, seconded, and subsequently
passed, "That new members joining between 1/1/92 and 30/6/92
only pay the $20-00 joining fee and $25-00 single membership or
$30-00 family membership".

It is regrettable that for some members the increase in annual
fees for 1991/1992 may be substantial (For a majority of members
the increase is only $5-00).

Belonging to a group as good as this is cheap at 87 cents per
week. What else can you purchase for that amount.

Anyone anticipating that they may have difficulty in paying the
amount in one payment, please contact either myself or the trea-
surer to make suitable arrangements so that you may have the fees
paid up by the 30th June 1991. For this reason the renewal notices
are being sent to you with this newsletter.

An early renewal would be appreciated as it eases the trea-
surer's work towards the end of the financial year, and gives an
early indication of the members continuing for the following year.

Arrange to have your fabric ribbons re-inked for free (except for Post & Packing), access the Bulletin Board (even from your friend's computer + modem) and download some software.

From our library, borrow some of the exchange newsletters (from other computer user groups) or back issues of "SYDTRUG News".

Purchase from the group some MS-DOS or TRS-80 Public Domain/Shareware/Trialware software before the price increases.

SYDTRUG Inc. (which is all the members, and includes YOU) has been going from strength to strength as the year passes, and the committee is looking forward to the group expanding and being able to support all the members needs, especially those who don't and/or can't attend meetings.

Members who attend meetings, are aware that everyone plays an important part in the success of the group and to each other. (Yes, I mean you and you!).

Yes, just because some of our members are not seen, they most certainly are not forgotten. Please correct me if I am wrong.

Belonging to this group supports excellent skill mix, resources and a common interest in computers where most, if not all your problems can be solved.

If there is anything that the group can do to help you, please drop the committee a line and we will see how we can be of assistance.

Please note that your membership fees are to be paid no later than 30th June 1991.

The committee look forward to your continued membership. (May your computer keep operating, your data remain uncorrupted by having a backup saved safely to disk).

For those not wishing to renew their membership:
In the unlikely event that you do not wish to renew your membership for the forthcoming financial year 1/7/91 to 30/6/92 then it is required by our rules (Rules of Incorporation under Association) that a letter of resignation be submitted prior to 30/6/91 otherwise your membership fees keep accruing till a resignation form is submitted. Outstanding fees can be recovered under the legal system.

Denis PAGETT
President, SYDTRUG Inc.

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CATASTROPHIC LOSS

by Charlie BIGGAR

[Reprinted from the Newsletter of the National Capital Tandy Computer Users Group, P.O. Box 2826, FAIRFAX VIRGINIA 22031, November 1990]

Recently several articles have appeared in the press about the aftermath of catastrophic losses of PCs, and the implications of such losses to consumers. It's a point worth pondering, if you have any significant investment in software - as most of the packages have become.

Imagine a scenario in which your home is burglarised. In the process of the burglary, your PC is stolen - but you have backups of your hard disk stored safely in another location (perhaps at work, perhaps with a relative). Your insurance company reimburses you for the cost of the CPU, the hard drive, the monitor - but do they cover the software ? If you are honest and tell them that you have backups of the hard drive, they may well say No - you've only really lost the manuals, so we'll cover you for them only. But what if the manufacturer of the software is unwilling to sell manuals only ?

Even if your manuals are stolen, and no backups exist, an insurance company may or may not agree that you owned the software and hence were covered for it. Did you declare the software on the policy ? Have you been paying premiums on the value of the software ? What was the serial number of your copy of Lotus ?

Recent articles in both Lotus Magazine and PC Magazine have discussed this issue (and, incidentally, inspired this column). Different manufacturers have VERY different attitudes regarding

this issue ... one indicated that a copy of the police/fire department report and a cheque for $25 would gain you a new set of docs - or even new disks. Another indicated that there was no responsibility on their behalf, so why should they ? An exec was quoted as commenting once that, if you bought a Chevy and wrapped it around a fire hydrant on the way home, you wouldn't expect GM to buy you a new Chevy, would you ? Software has the dubious status of being (in my mind anyway) somewhere between tangible property and intangible. After all, you can't look at the program normally, and you usually aren't even running it from your original disks - you're running a copy of it on your hard drive. But then again, if it's intangible, then why can't you type in 'dbase <enter>' on the keyboard of any PC in the US, and boot up dBASE ? Even though our normal senses don't reveal it, there is a certain amount of property out there which can indeed be read, if you have the proper reader. You wouldn't say that a book is not tangible property just because your grandfather needs his magnifying glass to read it, would you ? And, if that's the case, then what's the difference between his magnifying glass and your disk drive ? Both are merely tools to enable you to read something you normally couldn't.

Maybe the best bet is to store your hard drive backups somewhere 'off-site', and keep an older release's manuals there too ....

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Pilot's Tools

Review of SYDMIS 002

by Peter EATON - M096

I have never had a great deal of success with Public Domain Software, with the exception of PC Write which was my word processor of choice until I managed a copy of WordPerfect 4.2. However, being a private pilot of no real renown, I thought I would try buy[ing] the disk 'Pilots Tools' when I saw it in "SYDTRUG News".

What did I want from a 'flight preparation' program ? Hopefully it was going to take the time consuming part out of preparing a flight plan, giving me the Heading, Ground Speed, Distance, Time Intervals of the legs of a flight, and maybe give some endurance details for the flight plan.

The usual method of compiling a plan is draw a line on the WAC map, measure the distance between towns, or nav aides, use a protractor to get the track, add or subtract the magnetic variation to get the Magnetic Track. Then the wind speed and direction are used on a manual calculator to give the heading you would steer the aircraft to allow for drift. The ground speed is also read off, and that speed is used to calculate the Time Interval between towns. These times are then used to calculate fuel requirements and endurance. They are also used to give an idea of how you are going whilst flying, as flight services need to know where you are within two minutes of your planned times. I mean if you calculated it was going to take 112 minutes to fly from Bourke to Birdsville, and you weren't there after 130 minutes, you are more than likely in a lot of trouble, especially if you still don't have Birdsville NDB on the dial.

So now to the disk. It has three different programs in archived form, plus the program to un-archive the programs. There are two GW-Basic programs, NAVGAT32.BAS and FLITPLAN.BAS, along with a BasicA program, NAVPROG7.BAS. The fourth program is an .EXE file, PREFLITE.

To try them out, I entered a simple little flight we all do at some time in Sydney, Hoxton Park to Bankstown. A flight of some 6 Nautical Miles and a heading of close enough to 090 degrees, if you discount GAAP Procedures which complicate things somewhat. Quite frankly none of the programs gave me a really accurate flight, with headings from 077 to 284 degrees, but the distances weren't that bad at 6 to 7 N Miles. One program wouldn't let me get anywhere because I couldn't get terrain clearance, or top of climb. It was a case of 'CTRL-BREAK' at this point.

The next step was maybe something a bit more substantial, Hoxton Park to Goulburn, a distance of 77.5 NM at a Magnetic Heading of 213 degrees. In a Cessna 172 at 65% power and 96 Knots, a wind of 180 deg. and 10 Knots gives a Heading of 210 degrees and a Ground Speed of 88 Knots which all gives a flight time (ETI) of 53 Minutes. That's what I wanted the computer to give me.

At this stage I will give a pretty lengthy run down on what I got from each program.

PC-FLY (Flitpln2).

The first thing I realised is that these programs are written for North America, where everywhere has a VOR (Omni-range). They exist in Australia, but the more common Nav Aide is the antiquated NDB (Non Directional Beacon).

This program presents a menu, and I press 1 for a new flight. It then asks me for 'estimated ground speed'. That's one of the things I want you to tell me, thinks I. The next request is for the departure point, so I puts HOX. Fine, next it want's to know the location, and that's where it all falls apart, because HOX hasn't got a VOR, or an NDB for that matter. At that point I goes to the Menu again, and go for the 'Instruction' number. Once again, a dead loss, so I enter one of the plans supplied with the program.

I find out here that the program will print an FAA (American) flight plan, but they are a fair bit different to ours, although Dick Smith is fast converting our ways. I really didn't fancy going on with this program, as it didn't do anything I really wanted, in fact I couldn't tell it where Goulburn or Hoxton Park was.

NavGator 3.2

This looked interesting, but had a separate program to store locations, NAVDTA11.BAS. I 'runs' this program, enter the position of HOX and GLB, it saves it and I 'runs' the main program, NAVGAT32.BAS".

It asks me for the Departure Point, HOX, shows it to me and asks me (Y or N), then asks for the Destination. Everything fine so far, even asks for any 'way-points'. It then asks for an aircraft type from the Menu, which you can add to, and I choose my trusty C172, asks for the winds at HOX and GLB. 180/10 is entered, and off it goes - calculating. The answers come up, but they are not all that correct. The distance, times, fuel aren't bad, but the headings - wow! One of the Menu choices is 'Reverse Order' or return flight, so I enter that. Once again it needs the winds, but 'what's this', things don't look all that bad here.

```
Dist - TC    - MC    - MH    - GS   - ETA  - Fuel
74.2 - 224.5 - 212.5 - 208.3 - 88.6 - 50.2 - 7.5gal
```

Now that is pretty acceptable for a VFR flight, but not for an IFR one. I will leave this program at that, but remember, to get that result I am doing the return trip as the forward trip, i.e. reverse direction.

There doesn't seem to be any hard copy facility in this program, but it does do way points and you could always do a screen dump.

NAVPROGseven.

This is the largest program in the bunch, and has a 'BAT' file to run the thing under BASICA. It took me the best part of an afternoon to get the program to run, as it needs a data disk to be in drive B: and the program disk in A:. I had the program in a sub directory, NAVPROG, and the computer kept asking for the program disk to be inserted in drive A: and press any key to continue. After many tries, and editing the 'BAT' file with EDLIN, I decided to do what the program really asked, and got rid of the sub directory. Amazing ... it worked. If you have a hard drive, which I don't, some knowledge of path's greater than mine may be necessary to get this one up and running.

Once again the position data for HOX and GLB were entered into the data files, and then I accepted 'Automatic Route Preparation' from the Menu. It seems you must have a printer 'ON' for this program, but the result was most encouraging.

NAVPROGseven Automatic Route Preparation

```
      Depart: HOX        Dest: GLB
      Great circle dist:    77.3 nm
                        nm         TC
      1   HOX  A      77.3        314
      2   GLB  A
                      ----
                      77.3
```

The distance is almost bang on, but the True Course is a 'mile out', even if you do the reciprocal.

Next I do the 'Flight Planning' entry from the menu, but the results were not startling.

		IDENT		DIST	MC/TC	MH	GS	ETE	ETA
CHECKPOINT		ID/fac	FREQ	rem/leg	deg	deg	kts	h:mm	:mm
Hoxton Park	HOX			77.3 314.3	308.9	101			
1 Elev: 135 A				77.3 314.3				0:46	:46
Goulburn	GLB			CLOSE FLIGHT PLAN WITH SYD FSS					
Elev: 2141 A									

plus a lot of other stuff including climb information, descent position from a cruise altitude of 6000ft, and some fuel calculations. Unfortunately, the headings and time are nowhere in the ballpark. Once again I leave the program there.

PREFLITE.

This is the .EXE program on the disk, and is probably the most helpful. I does a pretty good 'Weight and Balance Sheet' but you need the aircraft manual for the entries, but it certainly is easier than doing all those graphs and additions.

Now back to the flight to Goulburn. Once again I select from a Menu the 'Great Circle Route' and follow the instructions to enter data below the Equator as a negative value, and it comes up with:

distance = 80 nm   Initial Heading = 213 degrees.

The distance is two miles out, but the track is right on. Back to the Menu, and select 'Wind Correction Angle/Ground Speed'. It asks for the wind, but in reverse order to what I am used to, i.e. direction, then speed, but who would be flying in a wind of 180Kts ? Enter the TAS of 96, and :

Ground Speed = 87 kts Wind Correction Angle = 4 deg.left

Some mental work is required here as Heading = Track + or - Correction Angle (213 - 4 = 209). Now that is not too bad, and I would be happy with that as it is only the width of a pencil mark on the manual computer.

This program also does fuel calculations, optimum altitude, density calculations, and others which are all handy to have when planning a flight.

Conclusion

I feel that the last program is the most accurate and helpful, but I really don't feel that any of them are an advantage over the manual method of planning. Once you have done a few plans, it really becomes easy to manipulate the Nav Computer, and a simple flight plan for a VFR flight in a light aircraft would take the same amount of time as sitting down at the PC. Life in Australia is different to that in the USA, especially when it comes to flying a light plane. I know there is a commercially available Australian written program, and there may even be a Public Domain one which is more suited to our purposes. It is possible that the algorithms which do the calculations in these programs could be modified for our latitudes, but I am not a professor of mathematics, so I won't be the one doing it.

Still, 'PREFLITE' on a lap top would be a pretty handy thing to have along on a flight away for the weekend, or for that matter, up to the Birdsville races. Any takers ?

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Editor's Note:

Well done, Peter! We have been waiting for someone to review one of our disks of public domain or user supported software.

You are now entitled to a free disk of your choice from our collection.

This offer is, of course, available to any member who presents a reasonable review of one of our disks of software. So, how about it folks! Let's see a few more reviews published in "SYDTRUG News". They not only get the reviewer a free disk, they also let the membership at large know what the software is all about.

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Turbo 6.7 MHz Speed-Up Kit
[For Model 4/4P]

by Uncredited

[Reprinted from "Nibbles & Scribbles", a newsletter published by AniteK Software Products, P.O. Box 361136, MELBOURNE FLORIDA 32936, UNITED STATES of AMERICA, Phone 1-407-259-9397, Fall '90]

Doubles TRS-80 Processing Speed

Programs Run Lightning Fast

Are you tired of waiting for your computer to finish running your programs? Would you like your programs to finish running in less than half the time as before? If so, keep reading. We have just broken the 2X speed barrier with our new Turbo Speed-Up Kit for the non-gate-array TRS-80 4s and 4Ps. This amazing new speed-up kit will actually enable your computer to run at over twice the processing through-put speed of its original so-called "4 MHz" speed (the fastest that your computer is able to run without a speed-up kit). The chart below shows the bench test results that prove this.

The new Turbo Speed-Up Kit is a breeze to install. The kit consists of just three chips that easily replace three socketed chips on your mother board - the CPU chip, the clock generator chip, and the data base buffer chip. There is no cutting, soldering or modifying the mother board required to install the kit in standard, 6.7 MHz, configuration. Just plug in the three chips and begin processing at lightning fast speeds.

For computers with slower RAM chips and/or other board components, the new Turbo Speed-Up Kit also allows the user the option of running at 6.1 MHz or at 5.1 MHz by just connecting one jumper wire to the clock generator chip.

To prove the dramatic increase in processing through-put speed of the new Turbo Speed-Up Kit, we ran a memory test program that read and verified 4480 K of memory on a non-gate-array Model 4 at five different speed configurations and then compared the results. The first entry in the chart below is the result with the new Turbo Speed-Up Kit installed running at 6.7 MHz. The next two entries are the results with the Turbo Speed-Up Kit jumpered for 6.1 MHz and 5.1 MHz, respectively. The last two entries are the results with the computer running in its original "fast" and "slow" speeds, without the Speed-Up Kit installed. The first column is the running time of each test, in seconds. The second column is the relative processing speed as compared with the normal "4 MHz" speed of the computer. As shown by the chart, AniteK's new Turbo Speed-Up Kit gave the computer over twice the processing speed (202%) it had at its fastest speed without a speed-up kit.

Processor Speed	Running Time	Benchmark Comparative Speed
"Turbo" 6.7 MHz	55 sec	202%
"Turbo" 6.1 MHz	61 sec	182%
"Turbo" 5.1 MHz	70 sec	159%
normal 4.0 MHz	111 sec	100%
normal 2.0 MHz	176 sec	63%

As you can see by the chart, the test took less than half the time to complete with the new Turbo Speed-Up Kit installed that it did at the fastest speed possible without a speed-up kit. What this means to you is that you don't have to wait so long for your programs to run any more. For example, if you have a very long document that takes 2 minutes to spell check, it will now take only one minute. If you have a spread sheet that takes 60 seconds to calculate, it will now take only 30 seconds. In fact any program that takes some measurable time to complete some internal processing, will now take half the amount of time as before. This means hours of your valuable time saved each week. This means real dollars and cents back in your pocket.

The no-worry, no-hassle, 100% customer satisfaction, money-back guarantee:

Try the new Turbo Speed-Up Kit in your computer for 30 days. If you don't see real processing speed increases of up to twice what you were seeing before, or if for any reason you decide to change your mind, just return the kit within 30 days in the same condition you received it, and your money will be quickly and cheerfully refunded, even the shipping charges, no questions asked. The Turbo

Speed-Up Kit also comes with free technical support and is covered by a 90-day fix or replace warrantee [Sic].

Special Introductory price: only $45.00!

Your ticket to the fast lane in computer processing is only a phone call away. For more information, or to order your new Turbo Speed-Up Kit, call us at 1-407-259-9397. But hurry - this is a special introductory offer - prices and terms are only guaranteed through October 31, 1990. The Turbo Speed-Up Kit works with TRS-80 models 26-1067, 26-1068, 26-1069 and 26-1080. CPU speed-up kits do not decrease the access time of mechanical devices such as printers, floppy drives and hard drives.

Other Speed-Up Bargains for TRS-80s

In addition to the new 6.7 MHz Turbo Speed-Up Kit, we are also offering two other speed-up options for your TRS-80: the 6.3 MHz Speed-Up Kit for the gate-array Model 4 and 4P and the 5.1 MHz Speed-Up Kit for the non-gate-array Model 4 and 4P. Both these kits increase the processing through-put speed of their respective TRS-80s a little over 50%. Either kit is a fantastic buy at only $35 and comes with a 30 day money-back guarantee, a 90 day warrantee [Sic], and free technical support.

Shipping and handling charges to Australia: $6, plus $6 for each item over $50, plus $3 for each item under $50. For elsewhere, contact AniteK.

["SYDTRUG News" Editor's Note:
The newsletter from which this article has been reprinted, was forwarded to me by AniteK in response to a request for information on another product. Although the covering letter was dated December 17, 1990 there was no mention of any change in prices so they may still apply. I would certainly recommend that, if you are contemplating purchasing this product on the basis of the money back guarantee including shipping charge, you should obtain an undertaking in writing from them that this would also apply to items shipped to Australia. I am NOT suggesting that they would not include Australia in this guarantee, but it would seem prudent to get the facts clearly established beforehand rather than risk recriminations later, as the shipping charges to Australia are three times the charges to the U.S.A.

If any reader has installed one of these kits, or should install one in the future, we would dearly like some information on how it all worked out.

Please Note all prices quoted are in American Dollars.]

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"FORTH,
TRS-80 Model 4P, Tandy 102"

by James CAMERON - SYDTRUG Inc.

This article is for the few SYDTRUG members who indicated on their membership forms that they were interested in the FORTH language. If you know nothing of FORTH, then it's about time you did; but this article will be of little use, as it's really a history of my interest in FORTH. It's not my intention to convince you that FORTH is the "way to go"; I'll leave that to others.

I use a TRS-80 Model 4P and a Tandy 102. I have two Model Is gathering dust in a cupboard, but I intend to bring those back into service someday. (Has anyone got an EPROM programmer?)

I started becoming interested in FORTH while I was still at school, when I saw the 1982(?) BYTE magazine series of articles on FORTH.

I wrote an interpretive FORTH in that year without any reference to other implementations or standards. I just used those articles in BYTE. It did not compile addresses like most FORTHs, but rather stored definitions in original text form which were reinterpreted when they were invoked. This meant that;

a. decompiling definitions was simple.

b. new definitions of previously used words took effect immediately,

c. words did not have to exist to be used,

d. execution was slow,

e. the implementation of control structures, such as if-else-then, do-loop and begin-until, was particularly difficult.

This first FORTH of mine was written on my old trusty Model I under LDOS using the old editor assembler development package from Tandy. I soon lost interest due to its inflexibility, and returned to machine code and BASIC for a few years.

Around 1985, I decided to revisit that old FORTH/CMD file that I found on one of my old diskettes. By this time I was a VAX programmer, and had spent much time delving into all sorts of esoteric data structures. I had become familiar with Balanced Binary Trees (sort of like the Animal program recently mentioned in SYDTRUG news, but with all the branches holding a roughly equal weight of attached nodes). Since these trees were great for searching lists of words, I thought I'd correct the old interpretive FORTH's problem of not being able to find words quickly. I also had this wonderful idea of saving only the pointers to words rather than the words themselves. I reverse-engineered the balanced binary tree routines that I had found on my VAX at work, and rewrote them in Z-80 machine code. I had just begun to get my tokenised FORTH environment working nicely when ....

I came across a book in Dymock's Pocket & Technical Bookshop (George St., Sydney), called "Starting FORTH" written by Leo Brodie. It corrected many of my delusions about FORTH. I didn't need balanced binary trees; just a simple backward linked list. I was very embarrassed. From this book, and a copy of the FORTH-83 standard document that I obtained from the Forth Interest Group, I rebuilt my FORTH; again.

As it stands now, my FORTH is very close to the FORTH-83 standard. It differs in what I feel are minor areas; such as the results of division of negative numbers. Additional features are LS-DOS interface words and text file source support (i.e. I use TED to create source for compilation, rather than the FORTH standard 1024 byte blocks).

In the past year, I purchased a copy of HARTforth from MISOSYS. This FORTH is based on a prior standard; FORTH-79, and is quite interesting. It uses a direct threaded implementation, which means that the code field address of each word contains the actual code to be executed, rather than a pointer to the code. My FORTH was soon modified to use this technique; which resulted in double the execution speed; and a few long nights coping with the other internal changes caused by reallocation of processor registers.

I found it particularly novel to compare my code with code written by someone else for essentially identical functions. Sometimes I was at a loss to explain the original author's reasoning behind some of his code; but then again I find some of my code is equally insane. FORTH is very good for this sort of reverse-engineering and comparison, since the code is broken up into very small modules.

In January 1991, I received an electronic mail message from a colleague in the United States, who once owned a Tandy 100. He had found a copy of a FORTH for the Tandy 100 which would run on my Tandy 102. It was an implementation of fig-FORTH; which was originally put together by the Forth Interest Group.

The FORTH came as a text file containing the machine code in a format to be read by a BASIC program; numbers separated by commas. The documentation provided a short and inefficient loading program that POKEd the program into memory.

According to the source code also provided, the FORTH assumes the presence of something called CDOS which is used with a "CHIPMUNK"(?) disk drive. This is a bit rough for me, since I don't have such a thing. Luckily, the interface to this CDOS is through an SVC table provided by the Tandy 102 ROM. The CDOS routines are evidently an option that is loaded into memory somehow, since they are not present in the ROM. I've been able to supply my own routines which translate the CDOS sector read/write request into an RS-232 based protocol. The 4P accepts these request packets and translates them into disk I/O requests under LS-DOS. In effect, the 4P's disks are acting for the 102.

I also recently obtained a copy of F83 for CP/M systems. F83 is an '83 standard FORTH system written by Henry Laxen & Michael Perry (?). They also wrote an MS-DOS version. It has been interesting to see that all the other FORTHs that I have explored seem to have a common ancestry. Mine doesn't. I didn't use someone else's FORTH to build my FORTH; and I haven't come across anyone else who has done the same.

Rather than clutter up either the newsletter or the bulletin board, I'll only provide source code to those who ask. I don't think I have provided these files to anyone else in Australia yet, though at least one copy of the FORTH environment has found its way into America. Here is a list of things that I've written or obtained which may be of interest;

a. Client/Server file transfer utilities, for file transfer between 4P and 102. Server runs as a basic program on 102. Client runs as a FORTH program on 4P. Client accepts file transfer requests in a similar manner to KERMIT, and also supports downline loading of machine code.

b. CDOS to LS-DOS disk access protocol translator. Consists of a machine language module on 102, (which translates CDOS disk requests into RS-232), and a FORTH module on the 4P, (which translates RS-232 requests into LS-DOS requests).

c. FORTH environment for TRS-80 4, 4P (LS-DOS), 3 or 1 (LDOS), consisting of machine language kernel, FORTH source code, and utility words.

d. Communication line driver for TRS-80 4, 4P or 3, supporting 256 byte input and output buffering, XON/XOFF protocol, output suppression mode, application flag characters, and pass-through mode. Currently assembled for a fixed origin in high memory. Originally written to replace the existing drivers used on CHIP-80; but I never got around to it.

e. Balanced Binary Tree manipulation routines written in machine code; along with a useful utility for sorting files; which uses 750 bytes of memory for the program, 6 bytes of binary tree overhead per record, plus the records themselves.

f. A version of TED/CMD reassembled for X'9000' so as to coexist with my FORTH, with additional features such as fast write-and-exit key.

g. fig-FORTH for Tandy 102, which is apparently public domain,

h. F83 for CP/M, also public domain,

i. I can also obtain F83 for MS-DOS if anyone is interested.

Wanted (i.e. your turn) :

a. Loan of an EPROM programmer,

b. References to articles or documentation on replacing the Model I ROMs with EPROMs,

c. Another Tandy 102, if less than $200 (she says).

d. Pointers to documentation on Tandy 102 ROM entry points.

e. Pointers to or documentation concerning the Tandy 102 option ROM socket.

Thanks in advance.

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New Members

We wish to extend a warm welcome to the following new members of our group. We hope that they will find their membership rewarding. Interaction between members enables us to improve our utilisation of our machines, as it often saves us having to "reinvent the wheel". What presents a problem to you now, may very well have been overcome already by another member, and if you ask, you may well find the answer for which you are looking.

John V. HARRISON	- GUILDFORD NSW	(02) 632-6821
Tony HERNANDEZ	- DARGAN Via BELL NSW	(063) 55-2704
Ernest W. HOOKEY	- SEFTON NSW	(02) 649-5324
Andrew McKENZIE	- OYSTER BAY NSW	(02) 528-9899
Peter WINTER	- WINMALEE NSW	

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NEW DISK DEAL

See the Services Page for details of a new deal your committee have organised for floppy disks for members. It now includes HD and 3.5 disks.

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STAR NX-10
PRINTER MODE UTILITY

by Shawn SYNSTRA - (047) 51-3941

One fine day, while I was strolling through the exchange news-letters, I found a routine for setting printer modes for my printer (Star NX-10), in TRSTIMES (Volume 2 No. 2 to be exact). Unfortunately, well for me anyway, it was for a Model 4. It used supervisor calls, special screen functions etc. so I felt that con-version would be too cumbersome and wouldn't achieve what I wanted. So I wrote my own.

This programme is designed to run under ND86/90 using the PSF option. This means that the programme may be loaded from any-where (BASIC, MINI-DOS etc), making it reasonably useful. If used under any other DOS the ORG will have to change so it will load in ordinary user RAM (I don't know of any equivalent to the PSF option).

Upon loading, the programme opens a 'window' on the screen. The window is scrolled with the arrow keys. Use the relevant alphanumeric keys to turn a function on or off. Number keys are reserved for functions that don't require switching. Otherwise, lower case turns a function on and upper case turns a function off. If you are unsure whether you have just turned the function on or off, hold the key down and the bottom graphic line of the window will show it.

After the programme loads, it saves the small portion of the screen in RAM straight after the programme so the screen may be restored upon exit. Remember this when customizing so the pro-gramme doesn't flow past 51FFH if used as a PSF. By the way, the NX-10 is reasonably Epson compatible so most people shouldn't need to put in too much effort to adapt it.

A suggestion was made in the original article for it to be an interrupt driven routine, but is there enough RAM to put it in ? If you would like a copy, see me at the meeting or contact me.

```
;NX/ASM
;Mod I/Sys 80 (check printer routine)
;NewDos86/90 version (set PSF=Y)
;change ORG for ND80
;May be loaded from DOS or BASIC
;Written by Shawn Synstra
X        EQU     27        ;equate for <ESC>
         ORG     4D00H     ;change here if not ND86/90
START1   LD      B,8       ;Start screen store
         LD      DE,STORE
         LD      HL,3C88H-52
LOOPA    PUSH    BC
         PUSH    DE
         LD      DE,52
         ADD     HL,DE
         POP     DE
         LD      BC,12
         LDIR
         POP     BC
         DJNZ    LOOPA
         LD      HL,3C88H       ;draw border
         LD      (HL),188
         INC     HL
         LD      B,10
LOOPB    LD      (HL),140
         INC     HL
         DJNZ    LOOPB
         LD      (HL),188
BOTLIN   LD      HL,3E48H       ;bottom line
         LD      B,12
LOOPB2   LD      (HL),131
         INC     HL
         DJNZ    LOOPB2
         CALL    DRAWIN
MAINLP   CALL    0049H     ;Wait for keypress
         CP      '*'
         JP      Z,EXIT
         CP      91        ;Up arrow
         JP      Z,MOVUP
         CP      10        ;Down arrow
         JP      Z,MOVDN
         CP      '1'       ;reset all modes
         JP      Z,RESET
         CP      '2'       ;test print
         JP      Z,TEST
         SUB     65
         CP      12        ;12 FNs available - change to suit
         JP      C,TOFF    ;turn off routine
```

```
         SUB     32
         CP      12        ; change as above
         JP      C,TON     ;turn on routine
         JP      MAINLP
EXIT     LD      B,8       ;Exit routine - restore screen
         LD      HL,STORE
         LD      DE,3C88H-52
EXLPA    PUSH    BC
         PUSH    HL
         LD      HL,52
         ADD     HL,DE
         EX      DE,HL
         POP     HL
         LD      BC,12
         LDIR
         POP     BC
         DJNZ    EXLPA
         RET               ;Back from whence you came!
MOVUP    LD      A,(PAGE)         ;Scroll up
         OR      A
         JP      Z,MAINLP
         DEC     A
         LD      (PAGE),A
         CALL    DRAWIN
         JP      MAINLP
MOVDN    LD      A,(PAGE)         ;Scroll down
         CP      14        ;scrollable lines - change to suit
         JP      Z,MAINLP
         INC     A
         LD      (PAGE),A
         CALL    DRAWIN
         JP      MAINLP
DRAWIN   LD      A,(PAGE)         ;Draws window (except
         LD      L,A       ; top & bottom border)
         LD      H,0
         ADD     HL,HL     ;*2
         PUSH    HL
         ADD     HL,HL     ;*4
         ADD     HL,HL     ;*8
         POP     DE
         ADD     HL,DE     ;*8+*2=*10
         LD      DE,WTEXT         ;now add offset
         ADD     HL,DE     ;HL now has source of text
         LD      DE,3C88H+64
         LD      C,6
DRWLP0   LD      A,191
         LD      (DE),A
         INC     DE
         LD      B,10
DRWLP1   LD      A,(HL)
         LD      (DE),A
         INC     DE
         INC     HL
         DJNZ    DRWLP1
         LD      A,191
         LD      (DE),A
         PUSH    HL
         LD      HL,53
         ADD     HL,DE
         EX      DE,HL
         POP     HL
         DEC     C
         JR      NZ,DRWLP0
         RET
TOFF     LD      HL,664FH         ;Turn function off
         LD      (3E4FH),HL
         LD      (3E4EH),HL
         LD      L,A
         LD      H,0
         ADD     HL,HL
         LD      DE,TABLE1
         ADD     HL,DE
         LD      E,(HL)
         INC     HL
         LD      D,(HL)
         EX      DE,HL
         LD      B,(HL)    ;skip turn on code
TFLP1    INC     HL
         DJNZ    TFLP1
         INC     HL
         LD      B,(HL)
         INC     HL
TFLP2    LD      C,(HL)
         CALL    PRINT
         INC     HL
         DJNZ    TFLP2
TFLP3    LD      A,(15359)
         OR      A
```

```
            JR      NZ,TFLP3
            JP      BOTLIN
TON         LD      HL,6E4FH        ;turn function on
            LD      (3E49H),HL
            LD      L,A
            LD      H,0
            ADD     HL,HL
            LD      DE,TABLE1
            ADD     HL,DE
            LD      E,(HL)
            INC     HL
            LD      D,(HL)
            EX      DE,HL
            LD      B,(HL)
            INC     HL
            JP      TFLP2
RESET       LD      C,X             ;resets all codes
            CALL    PRINT
            LD      C,'3'
            CALL    PRINT
            JP      MAINLP
TEST        LD      HL,TMESS        ;test print message
            LD      B,19
            JP      TFLP2
PRINT       PUSH    HL              ;--Print routine--
            LD      HL,37E8H        ;has to be changed
PRTLP       LD      A,(HL)          ;to suit interface
            CP      63
            JR      NZ,PRTLP
            LD      (HL),C
            POP     HL
            RET                     ;End of print routine
WTEXT       DM      'Star NX-10'    ;Window text
            DM      'Setup util'    ;Remember to keep same
            DM      'by VEGSOFT'    ;   width throughout!!!
            DM      '1991 v1.0 '
            DW      8383H,8383H,8383H,8383H,8383H
                                    Horizontal bar
;
            DM      '*)Any Exit'
            DM      'a)Expanded'
            DM      'b)Compress'
            DM      'c)Elite   '
            DM      'd)Italic  '
            DM      'e)NLQ     '
            DM      'f)Bold    '
            DM      'g)U/line  '
            DM      'h)Super Sc'
            DM      'i)Sub Scrp'
            DM      'j)Dubl hi '
            DM      'k)Quad hi '
            DM      '1)Emphasiz'
            DM      '1)Reset   '
            DM      '2)Test prt'
TMESS       DM      'test VEGSOFT! test',0DH
;                           test print message
TABLE1      DW      EXPAND,COMP,ELITE,ITAL,NLQ,BOLD
;                           look-up table
            DW      ULINE,SUPSCR,SUBSCR,DUBLHI,QUADHI
            DW      EMPH
EXPAND      DB      3,X,'W',1,3,X,'W',0   ;table coded as
COMP        DB      1,15,1,18             ;   follows:
ELITE       DB      2,X,'M',2,X,'P'       ;1st byte is
ITAL        DB      2,X,'4',2,X,'5'       ; length of on code
NLQ         DB      3,X,'x',1,3,X,'x',0   ;followed by on code
BOLD        DB      2,X,'G',2,X,'H'       ;Next byte is
ULINE       DB      3,X,'-',1,3,X,'-',0   ; length of off code
SUPSCR      DB      3,X,'S',0,2,X,'T'     ;followed by off
SUBSCR      DB      3,X,'S',1,2,X,'T'     ;  code
DUBLHI      DB      3,X,'h',1,3,X,'h',0
QUADHI      DB      3,X,'h',2,3,X,'h',0   ;X is equated at
EMPH        DB      2,X,'E',2,X,'F'       ; start to escape.
PAGE        DB      0                     ;window position
STORE       EQU     $                     ;takes up 60H bytes
            END     START1
```

Here is an alternate print routine for System 80 interfaces that only use port 0FDH (Part number X-4010). The programme should also be able to work on the Model III if you use the following routine, if you replace port 0FDH with 0F8H.

```
PRINT       IN      A,(0FDH)
            CP      63
            JR      NZ,PRINT
            LD      A,C
            OUT     (0FDH),A
            RET
```

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INCOME:

Members' Subscriptions:		
New: Joining Fees	120.00	
Membership Fees	150.00	

		270.00
Members' Purchases:		
Public Domain Software Disks		
MS-DOS	18.00	
TRS-80	4.00	
Blank Disks	24.00	
Ribbon Reinking	8.00	
Provision for Postage	4.05	

		58.05

		328.05
Additional Income:		
Security Deposit on Model III		300.00

TOTAL INCOME		**$628.05**
		======

EXPENDITURE:

Newsletter Expenses:		
Printing	110.25	
Postage	64.56	

		174.81
Bulletin Board Costs:		
TRUG-86:		
Adjust Rental		7.48-
Consumables		29.85
Meeting Rental		50.00
Bank and Goverment Fees		28.17
Sundry Expenses:		
Public Risk Insurance	298.75	
Freight Model III	39.00	
Petty Cash Reimbursement:		
Postage	53.15	
Committee Expenses	10.50	
Christmas Party	23.37	

		424.77

TOTAL EXPENDITURE		**$708.12**
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TRS-80 MODEL 4s STILL REQUIRED !

by Ivan KENNEDY - SYDTRUG Inc.

Gee, it's quite a while since I sat down to write an article for "SYDTRUG News". I almost feel guilty. This is mainly the result of lack of time from the sheer pressure of work. At this time of the year (from December to March) it's been go, go, go ! So much for the Holiday Season ???

In fact, my 4Ps have also been flat out, preparing copy for research grant proposals and so on. There's also been an insistent editor pressing me for a book chapter. And camera-ready copy for the second edition of another book required in the UK. The Allwrite fonts provided by Lee Rice, including a Greek character font, have really been useful. In many cases, blocks of text prepared earlier have found their way into the new documents, making it all easier. And of course the unlimited features of Allwrite and other handy aspects of LS-DOS, coupled with laser printing using the down-loaded fonts, have made it all possible.

Any hitches ? Well, in the days before Christmas Eve, my Hard Drive (Misosys) faltered. Taking no chances and because of urgent need for some material most easily handled from the hard drive (I do back-up the sub-Disks on the hard drive, however) I telephoned Roy Soltoff (7 am Friday, Sydney time). Seconds later, he calmly took my order for a replacement THB 80 I/O bus adaptor card and a Xebec 1421 hard drive controller card and offered to accept payment by Mastercard later when I had renewed a card cancelled the week before when lost.

As it turned out that evening, the problem was not serious, being no more than a broken connection at the edge connector - solved by removing the connector from the ribbon cable and reseating it an inch (2.54 cm) further down the cable. The symptoms were a successful boot-up from the floppy drive with sysgening but a frozen cursor as soon as control should have been passed to drive 0 on the hard drive. The hard drive went through its normal start-up when turned on but failed to activate its green access light.

I wasn't concerned when the parts soon arrived by express delivery, since I planned in any case to build up a second hard drive. The faulty connection is hardly a reflection on the reliability of the equipment, since I disconnect the hard drive twice each day, shuttling it between two 4Ps 12 Kilometres or so apart. I have found that I don't need to boot these computers, provided they've been left on. When reconnected to the hard drive, they just carry on with whatever configuration was stored in memory when they were last used. (One of the computer scientists at work was amazed when I recently told him I successfully ran a portable hard drive in this way, though no doubt these precision instruments are probably more robust now than in the early days and the automatic head-parking probably helps.)

This week, I am taking a few days' vacation. The first day involved a relaxing trip with my wife out to Chris Townsend's heli-copter training school at Hoxton Park to look at a Model 4 that had been advertised six months ago in the Trading Post. I had tele-phoned then but hadn't found time to follow up. Apparently, the M4 hadn't been used for several years since they had purchased an MS-DOS based portable (Toshiba), and wouldn't boot up when they tried it out. Earlier, it had been used with a swag of Model III business software worth a $1000 or more at the time and with SuperScripsit.

My suspicion that the problem would be in drive 0 turned out to be correct. The case still carried intact all the warranty seals and the unit was clean, dustless internally and in good condition. (No doubt the strict rules required to keep a helicopter in the air extended to always keeping a cover on the M4 in a clean place. This was not the case with an earlier M4 I bought, but it's still func-tioning). A quick swap of the original full-height drives allowed disk access and the Tandy logo appeared on the video screen, although drive 1 now could not be accessed. I substituted an origi-nal half-height drive from one of my 4Ps (I've now removed six of these for replacement with double-sided drives) and found that the machine now functioned perfectly, including directory access to drive 1. I also attached my 40 megabyte hard drive through the input-output bus, booted it up and ran some programs from the hard drive. These all ran without problems and the owners were no doubt amazed at the transformation of their 1983 product. For $190, I soon purchased my sixth 4/4P (one 4P was stolen and a second 4 transferred to a friend). I consider the deal was fair, tak-ing into account my role in locating the problem. Tandy would have charged more than it was worth. The company was probably glad of the space released. Much of this time, my good wife had discussed more interesting family matters with Mrs Townsend, not really hav-ing much interest, characteristically for most wives, in the state of health of a computer.

(By the way, if you're looking for training to 'fly a helicopter and to survive', you could well go to the Townsend's school. The operation is obviously geared for efficiency, in pleasant surround-ings and the staff have impressive, internationally-recognised cre-dentials. But you should realise that you will need a healthy bank balance to acquire the valuable asset of a pilot's licence.)

So why would anyone continue to buy these 'obsolete' machines ? That's easy. Because they can still do a job, accepting certain limitations, mainly to do with graphics although the current status there is not at all bad. My research group can use this one to run a technical database (probably using Little Brother from Misosys - because it also runs on MS-DOS). It can also be used for theses, etc., with Allwrite or LeScript as word processors. The latter program is worth considering now for straightforward tasks since it has some advanced features and it's still being developed. However, it lacks the ultimate formatting power of Allwrite (the most effective, efficient word processor, in my opinion, and that includes Word and WordPerfect that I also use on 286 and 386 machines). Allwrite's quality of proportional text is as good as, or superior to, that of these MS-DOS programs, in comparisons that I have done at work. LeScript is also available for MS-DOS com-puters (Allwrite can only be run on these by using PC4 or PC3, the Model 4 and Model III software emulators from HyperSoft), but it is not as adept as Allwrite at driving the latest laser and inkjet printers. Allwrite is expected soon to be capable of providing fully scaleable fonts (as in PostScript) and a large number of public domain fonts are available in the File Cabinet (CN80).

The cost of achieving this with the newly-acquired machine needs to be considered, of course. It will require $400 to equip this Model 4 (non-gate-array, 128K) with a new 20 meg Seagate drive (ST506 interface) (using the parts I bought at Christmas and a hard drive from David ALWAN). That doesn't count the labour involved. I'll probably upgrade the floppy drives (for say, $140) to include two reconditioned 80 trackers (720K), one 3.5" and a 5.25". These are needed to back-up files from the hard drive. There's plenty of space in the Model 4 cabinet to install the adaptor card and the Xebec controller card as well as the hard drive plus three half-height floppies. (I'll be seeking advice at tomorrow's March meeting of SYDTRUG Inc. about the best arrangement of the compo-nents).

An RS-232 card is also required for this very early model 4. I could use one of the two serial outputs using a second XLR8er card I have, but at $22 for a new RS-232 card from Sydtrug, this won't be necessary or even break the bank. I'll probably add a $99US Grafyx Solution HiRes board later too (I have 3 of these). Not counting the HiRes card, the total cost would be $750.

Some might question the wisdom of this, when a new MS-DOS compatible (8086) such as an Amstrad could be bought for $750. But that wouldn't have a hard drive nor could it be equipped with soft-ware at anything like the same price. Software for this TRS-80 machine will require a tenth the expenditure of that for an MS-DOS machine and that's legal too. In my opinion, costs of servicing are also likely to be much less (again, not costing my own labour). And to change from the 4s would involve sacrificing years of technical know-how on making a good computer perform.

It's perfectly obvious that some of the Z-80 computers still have value. I've noticed that used 4/4Ps are now selling for less in Sydney than in the United States, where demand is remaining high and they've even been asking $US300-400 for used stock models. Indeed, Tandy in the USA may still be selling new Model 4Ds for as much as the MS-DOS machines. It had substantial numbers still in stock about a year ago, including some still in assembly. This con-tinued demand must result from requirements in schools, reluctant to dispense with software. Imagine what an upgraded Model 4 might look like now, if Tandy had continued its development after 1985!

Amazingly, more new professional quality software is now being written for the Model 4 than at any time since 1985, as a glance at Computer News 80 will show. The work of Lee Rice and Gary Shanafelt with LaserJet and DeskJet printers is quite out-standing, providing utilities for handling fonts rare on any other computers. There are now 15 disks of public domain fonts for these printers available from CN80's File Cabinet. David Goben has recently published a new spreadsheet program (BCX) that looks to be the best ever, on top of his earlier BusyCalc designed to replace VisiCalc. Ultima (apparently like an enhanced version of Profile 4+) was recently released as the most capable database program yet for the Model 4. None of these items cost more than about $100 and most are available for much less.

Apart from his work in providing extended memory, now up to 8 megabytes, AniteK's Peter Ray is looking at building a new TRX-280 board for the Model 4/4P (and III) that would provide AT grade performance (10/15 mHz, 4 megabytes RAM), even allowing slots for MS-DOS half-cards to be run (e.g. scanners, mouse cards, colour monitors, hard drives) but still running all the old familiar Model 4 and Model III software. Of course, Roy Soltoff and Misosys continue to provide sterling support to LS-DOS based systems, periodically bringing out valuable and well-behaved enhancements to the software and the hardware.

Even the NEWDOS operating system, that old perennial beloved by some, is still being upgraded by Warwick Sands. NewDos90 is selling to enthusiasts at a steady rate in the USA. (We were delighted to have Warwick visit us recently at Sydtrug - I don't recall hearing a more spontaneous round of applause than when our president introduced him to the members. That's fair recognition of his contribution and he is typical of the sturdy, practical characters who have spontaneously enhanced the TRS-80 computers without any encouragement from Tandy other than the hardware).

When you compare what has happened with Apple IIe and Commodore 64/128K computers, there's a tremendous contrast. Hard drives and laser-printing simply haven't happened with these competitors. When all is said and done, it's performance in computing and the standard of the printed output that matters and the Model 4 has outlasted and outperformed these other computers in a quite remarkable fashion.

And the story is not yet over. How can you explain this phenomenon ? In my opinion it is mainly because of the reliability and professional quality output from the computers. This is only partly a result of the practical hardware that Tandy designed. Perhaps more important has been the quality of the software that was written. It's not very fancy, but tremendously effective and efficient. In other words, we're talking about success based on demonstrated productivity. And that's an everlasting quality. Forget about your gimmicks, time-consuming games a la Amiga, and lurid colour graphics (judging by what I've glimpsed lately on the screens of some of the MS-DOS machines) and you're left with a 'work horse' in your Model 4 that can do all the practical tasks that the average person would reasonably require.

Let me know if you've any Model 4s or 4Ps that you'd like to sell at a price I can justify paying, or that you would simply like to donate to a worthy cause. We can make good use of 'em and probably will be five years from now.

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Exchange Newsletters

Some of what is included in our library. These newsletters may be borrowed by members. Members attending meetings at Sefton should see our Librarian. Other members may apply to our P.O. Box. Postage will, of course, be charged for those forwarded by mail.

November 1990

"Adelaide Micro User News"
  Newsletter of the Adelaide Micro User Group
  G.P.O. Box 214, ADELAIDE S.A. 5001

Windows, Is it Just a New Toy ? - Some favourable comment on Windows 3:
Do You Want Windows ? - Reprinted from "The Voice of FCUG":
Use of a MEMDISK on Model 4/4P - Reprinted from TRSLINK via Bits & Bytes:
Backups On Model 4 Using MEMDISK - How to simplify, and speed up, the BACKUP operation on a two drive Model 4 or 4P:
Why More Drives ? - Reprinted from "Bits & Bytes":
What's in a Name ? - Semi-humorous, reprinted from NCTCUG newsletter:
&, &H, VAL - About MicroSoft BASIC:
ZAP Fear, Not Disks - About the risk of magnetically corrupting floppy disks:
Speaking Mathematically - About the inherent inaccuracy of some of the mathematical functions:
Model 4 USR CALLs - About a less commonly used method of invoking machine language routines on the Model 4.

"MICROBITS"
  Newsletter of New Zealand TRS-80 Users Group,
  P.O. Box 19000, Auckland 7, New Zealand

[C Tutorial] - Chapter 5 - Functions and variables.

"Canberra Micro-80"
  Newsletter of the Canberra Micro-80 Users Group
  18 Callabonna Street, KALEEN ACT 2617

4 Corner - For the Model 4 owner and others:
Hooked on Tools - About PC TOOLS version 6:
Public Domain Software - Some MS-DOS disks available to their members.

"The Voice of FCUG"
  Newsletter of The Fairfield County Computer Users Group
  10 Richlee Road, NORWALK CT 06851, US of A

Novice Nook # 28 - Mainly for MS-DOS machine users with only one disk drive:
A Little Disk Test Please - An MS-DOS BASIC program which is claimed to test a hard disk:
Bill's Bumblings No. 57 - About MS-DOS Debug:
Expanz! Disk Expander Card - Said to improve the capacity and speed of access of both floppy and hard disks on MS-DOS machines:
Friendly Computer and DOS Glossary - HIT to Interleave.

"HAWTUG NEWS"
  Newsletter of the Hawaii TRS-80 User Group,
  366 Elelupe Road, HONOLULU HAWAII 96821

The Top 15 Hit Parade - Someone's list of the most popular programs during August 1990:
Better Working Word Publisher - Brief overview of a low priced word processor from Spinnaker.

"Thuggery"
  Newsletter of The Hobart Users Group
  P.O. Box 420, MOONAH TASMANIA 7009

Presidents Page - Strictly local content:
15 Years of Microcomputing - Apparently reprinted from BYTE magazine:
Bringing Home a Laptop - One owners experience with a Renard 1200 laptop:
Notice of Special General Meeting - Strictly local content:
Happenings - Strictly local content:
People News - Strictly local content:
What is a TSR - The history and technology of terminate and stay resident software. Apparently a reprint, but no source credited.

"Bits & Bytes"
  Newsletter of the TRS-80 System 80 Computer Group
  41 Montclair Street, Aspley Qld. 4034

Review of Model 4 P/D Software - Review of two of their P/D disks:
Music On the Computer - Some brief words on a specific program:
Power Supplies For Disk Drives - Some figures on power requirements for various disk drives:
More on Macros and ND90 - More on the development for NewDos90:
Plus other items of local interest and some reprints.

"NATGUG News"
  Newsletter of the National Amstrad, Tandy & General User Group
  11 Elizabeth Road, SUTTON COLDFIELD ENGLAND B73 5AR

Editorial Jottings - Strictly local content:
Check Your Own Drives First - Reprinted from "Bits & Bytes":
Knagg's Knotes - Mainly comments on a previous issue of the newsletter:
LS-DOS 6.3.1 - Reprinted from "SYDTRUG News":
P.R.O. Notes - Mainly local content:
A TRS-80 Museum - A suggestion for a museum:
P/D Software for Handling MS-DOS Disks on Model 4 CP/M - Not very encouraging:
"ABORT, RETRY, IGNORE" - Reprinted from "SYDTRUG News":
The Cheap Shrill of Hard Disks - Reprinted from "SYDTRUG News":
Berts Ravings - Reprinted from "THUGGERY":
Computerphobes Anonymous - Reprinted from "SYDTRUG News":
A Mouse With a Byte - Reprinted from "SYDTRUG News":
40 Meg Hard Drive - Reprinted from "Bits & Bytes":
MEMSCANNER - Reprinted from "Bits & Bytes":
A Warm Start for Model 4 BASIC - How to recover a BASIC program after an accidental return to the DOS:
Model 4 Keyboards - Some comments on changing individual keys on the Model 4 keyboard.

"National Capital Tandy Computer Users Group"
   Newsletter of the National Capital Tandy Computer Users Group
   P.O. Box 2826, FAIRFAX VIRGINIA. 22031, US of A

The President's Column - About catastrophic losses (as in fire or burglary):
Talented Keystrokes Called Macros - Reprinted from "The Voice of FCUG":
The Cache Stash - Reprinted from "The Voice of FCUG":
Central Point PC Tools Deluxe Version 6 - Reprinted from "The Voice of FCUG":
Flight Simulator 4.0 - An overview of the program from Microsoft:
Publish It! - An overview of a lower priced desktop publishing package:
More Hard Disk Adventures - Reprinted from "The Interface":
Computer Forensics - Discussion of a new way of making a living in the computer world:
Simple Laptop/MS-DOS Transfer System - A routine for transferring Text and BASIC files between a Model 100/102/200 laptop computer and an MS-DOS computer without the need for a communications program in either computer.

"The Interface"
   Newsletter of The San Gabriel Valley Tandy Users Group
   P.O. Box 6818, BURBANK CA 91510, US of A

The content is strictly of local interest.

"WNYTUG News"
   Newsletter of Western New York Tandy Users Group
   80 Lockwood Ave., Buffalo NY 14220, US of A

A Glance at 1990 Electronics - About computerised communications, etc. etc.:
Voice Controlled Computer Release - The central idea may be good but the manufacturer is trying to lock customers into a closed supply situation:
An Unlikely Critic of Computers - The animator of "Conquests of Camelot" doesn't have a good word for personal computers:
UK Hackers Extort Banks - A news item:
Computer Aided Design - Some interesting thoughts:
Talking Chess Game is a Smart Alek - An interesting new idea.

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For Sale

1 only Model 4 with 2 x 40 trK ss drives & Clustered Arrow Keys
Price - $350-00

1 only Model 4P with 2 x 40 trK ds drives & XLR8er board
Price - $400-00

1 only Model 4P gate array
   with Alpha Tech memory board and 1 Meg of memory,
   1 x 40 trK ds drive, 1 x 80 trK ds drive. These drives are
   switchable between 0 and 1 or 0 and 3. Plus external drive
   connection.
Price - $475-00

1 only Model 4P gate array
Price - $375-00

1 only Gemini 10X 80 column printer
Price - $100-00

1 only BMC BX-80 80 column printer
Price - $100-00

Prices subject to negotiation

Denis PAGETT - (02) 772-4848

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Worth Repeating

When nations talk about reducing armies, every nation wants the last sword.   -- Frank J. Markey

Prayer of Thanksgiving: O Thou who has given us so much, mercifully grant us one more thing -- a grateful heart.
               -- George Herbert

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MS-DOS USER SUPPORTED SOFTWARE

The next group of SYDTRUG Inc. MS-DOS software to be released for MS-DOS compatible computers is listed below. The software includes a selection of public domain and shareware/trial software. This software is available to members only.

Members may order the disks either by contacting the Secretary and placing your order by phone or by writing to the Secretary of SYDTRUG Inc. via the group's postal address.

      SYDTRUG Inc. MS-DOS SOFTWARE
      P.O. Box 75
      PANANIA NSW 2213 AUSTRALIA

The Secretary's phone number is listed on the front cover of this newsletter. A catalogue disk listing the complete MS-DOS software library is available from the secretary.

A fee of $3 ($5 after 1-7-91) per disk will be charged plus postage and packaging where applicable. This fee is to cover the cost of the disk medium and the cost that SYDTRUG Inc. had to outlay to obtain the software library. Members will have the option of picking the order up at a SYDTRUG Inc. meeting (provided the order is placed 5 days in advance) or having the disks posted to them in a disk mailer box.

The additional cost of postage and packaging will vary depending on the destination as shown:

1 - 5 disks:	Within Australia:	$2.00
	Overseas Airmail:	$5.00
6 - 10 disks:	Within Australia:	$4.00
	Overseas Airmail:	$10.00

Many of the disks have their files archived to save space on the disk. If the files on the disk are archived, then, if there is sufficient space, the disk will include a program to dearchive the files. Most, but not all, of the disks contain documentation files for the programs.

DISCLAIMER

COMMUNICATIONS PROGRAM

PC-TALK Version 2.0
PC-TALK is a communications program for IBM Personal Computers and compatibles. A full documentation file is included.

SYDCOM-008   Cost $3   (1 Disk)

GAMES PROGRAMS

PC - JIGSAW V2.0
PC-JIGSAW is an educational game of skill and intelligence. It starts out by drawing an image on the screen and then it shuffles around the pieces. The object of the game is to assemble the pieces to match the original image on the screen. PC-JIGSAW 2 features: Keyboard or mouse support, easy menu operation, 5 Levels of difficulty, print option, music, score-keeping, includes a few jigsaw puzzles. This program works with all of the major PC graphics cards.

SYDGME-008   Cost $3   (1 Disk)

VGA JIGSAW PUZZLE v1.6
VGA JIGSAW is a Fun game of skill and intelligence. It starts out by drawing a puzzle on the screen and then it shuffles around the pieces. The object of the game is to assemble the pieces to match the original puzzle on the screen.

VGA JIGSAW features: Keyboard, mouse, joystick support, easy menu operation, 4 Levels of difficulty, music, score-keeping, includes a few jigsaw puzzles. This program works only with VGA graphic display. It requires IBM AT or compatible with 384K memory.

SYDGME-009   Cost $3   (1 Disk)

MAGIC CRAYON v1.0

MAGIC CRAYON is a collection of three colorful and fun games for children 3 to 10 years old. A creative and challenging experience for young children who like to explore and experiment with color and and shapes. It encourages hands-on, active, artistic, exploration.

MAGIC CRAYON features: Three different Games, two levels of difficulty, menu operation, on-line help, mouse support, score-keeping and great color graphics. It requires IBM PC or compatible EGA or VGA graphics, a mouse and 256K of memory.

SYDGME-010   Cost $3   (1 Disk)

GENERAL PROGRAMS

Hotboot/Insults

This disk contains a couple of practical joke files that are fun for the PC user and PC victim. Hotboot is by far the most "fun" PC practical joke disk around. This hotboot file is a public domain version, if you think this is great get the "real" program from Left-handed Software, you won't be disappointed. Insults can randomly generate 22 million insults on the unsuspecting PC user, not for the weak stomached.

The disk also contains the music record cataloguing program RECORDS.ARC.

SYDMIS-004   Cost $3   (1 Disk)

SNAP Version 2.02

SNAP! is a documentation and development system for dBASE II, dBASE III, dBASE III+, Clipper and Foxbase systems. Version 2.02 of SNAP! is a significant upgrade from version 1.73, the last version that was widely distributed. Major new features include:

    Full support of procedures. Procedures are now treated just
    like programs.
    Action diagrams to illuminate program structure.
    Support for macro substitution in source code.
    40% faster operation.
    Support for Clipper and Foxbase index files.
    Preparation of PLINK86 LNK files for Clipper.
    Preparation of MAKE files for Clipper applications.
    Preparation of batch files to back up a dBASE system.
    Context flags are now included in the cross-reference report.
    More documentation options (e.g. spaces instead of tabs for
    indenting)
    Better documentation, including an index and table of contents.

SYDMIS-005   Cost $3   (1 Disk)

INSTA-CALC V2.5

Insta-calc is a memory resident spreadsheet. Ver 2.5. Documentation files are provided on the disk and a program (Printdoc.Com) is provided to print the program documentation. HARDDISK.BAT is provided to install the INSTA.COM program on a hard disk.

SYDMIS-006   Cost $3   (1 Disk)

QUBECALC Version 3.01

QUBECALC is a spreadsheet with many advanced features. Some of these are so unique it would be hard to find them collected anywhere else at any price. However, the special power of QUBECALC is in its being a true three-dimensional spreadsheet. As opposed to some two-dimensional spreadsheets which let you link cells of multiple spreadsheets together, it lets you look at your data in more ways than you ever imagined possible.

Documentation files and a setup program and hard disk installation batch file are supplied.

SYDMIS-007   Cost $3   (1 Disk)

GENEALOGY ON DISPLAY R5 v3.2

This is a 2 disk set containing a BASIC Genealogy program. Disk 1 contains the main program files and Disk 2 contains the Notes On Display program. Notes on Display is an extension of the Genealogy on Display program. This program enhances and organizes the search for your ancestral past by allowing you to save notes upon each new find.

Requires BASIC interpreter program.

SYDMIS-008   Cost $6   (2 Disks)

NEW YORK EDIT Version 1.2b

The New York Edit program is actually called ME (short for Macro Editor) which is written by Marc Adler. This version of ME is a Shareware version of a commercial product. It's a fully working version of the commercial product which is not crippled in any way. It comes with on-line documentation, help files, and several macros. Some of the files are archived and a de-archiving program is included (ARCE).

SYDMIS-009   Cost $3   (1 Disk)

UTILITY PROGRAMS

Utilities No: 4

This disk contains various arced Public Domain Utilities including Animator, Ask, DBDir, DOS-help, PCUTl, Epson printer utilities and patch listing for DOS 3.1 and DOS 3.2.

ANIMATOR by Steve Johnson was published in Compute! magazine, August, 1985. This feature-packed utility makes it a breeze to create your own short cartoons or animation sequences on the computer screen. This version is for the IBM PC with BASICa and color/graphics adapter, or Enhanced Model PCjr with Cartridge BASIC. "Animator" works much like a cartoonist's sketchpad, letting you draw a series of similar images which are then displayed in rapid sequence to create the illusion of movement. Your finished cartoons can be saved on disk or tape and reloaded for viewing later.

ASK is a utility program which allows the user to set the BATCH environment ERRORLEVELS interactively.

EPSONUTL contains various utility programs to configure FX and MX compatible printers.

PCUTIL is a COM program which allows the user to toggle the NUM Lock, Caps Lock keys and switch between colour and mono-chrome displays from within a program.

DBDIR is a .COM program to display database files in the current directory. It simulates the dBASEIII DIR command displaying not only the filename, but # Records, Last Update, Size, Memo(Y/N), Record Length, Number of Fields and Version. It will also display dBASEII information.

SYDUIL-026   Cost $3   (1 Disk)

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For Sale

TRS-80 Model 4 - 128K Gate Array
Line Printer VII (132 column)
TRSDOS 6.2
SuperScripsit, TK Solver, Montezuma CP/M, Dotwriter

Asking Price $400

Gordon ASTILL
P.O. Box 336
INVERELL NSW 2360
(067) 22-1641

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Worth Repeating

Life is the art of drawing without an eraser.   -- John Christian

The longer one lives, the less importance one attaches to things, and the less importance to importance.   -- Jean Rostand

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SYDTRUG Inc.
TRS-80 P/D Software

For the benefit of those readers who have not yet obtained the catalogue disks, it is intended that a listing of the files contained in the various TRS-80 Public domain disks will be published in "SYDTRUG News" over an extended period. The plan is, to present a number of disks each month, so that eventually all the disks will have been listed.

It should be noted that the **CATALOGUE** disks carry a minimum system which enables the user to insert them in the machine and then press the reset button. Then you just follow the instructions which appear on the screen. However, the disks which contain the P/D software **DO NOT** have any system. It is expected that the user will provide their own system.

The layout of the list should be as follows: Where a number of separate files relate to the same program, the principal file name will be lined up with the left margin while the names of the subsidiary files will be indented. Hopefully this will help to make the lists a little clearer. Your editor has, however, not actually worked with any of these disks so it is quite possible that errors have found their way into the compilation. If any reader is aware of any such errors please pass a message along and it will be noted in a later issue.

Unfortunately, in a great many instances, there is no indication of which machine or operating system is applicable to the particular files. Again, any positive feedback from members would be greatly appreciated, and will be noted in later issues.

PDGAME20 :	Games
ART/BAS	Graphics demo (requires printer)
BIOPLOT/BAS	Biorhythm plotting program
BIORHYTM/BAS	Biorhythm calculations
CONCNTR3/BAS	Variation of concentration game
CRUNCH/BAS	Word crunch game
DOODLE/BAS	Drawing board
HARMONY/BAS	Music composer
INVADERS/BAS	Word guess game
LIGHTPEN/BAS	Graphics drawing program
MINDBOG/BAS	Word game
NIGHTFLT/BAS	Fly a plane by instruments
SAUCERS/BAS	Get the flying saucers
SAUCERS2/BAS	Variation of SAUCERS with earth shields
SNAKE/BAS	Graphics demo
TCTCT/BAS	Tic-tac-toe
TREKIII4/BAS	Star Trek Variation
WMTELL/BAS	Figure out William Tell's likes & dislikes
XWINGL2/BAS	Level II version of XWING/BAS

PDGAME21 :	Games
BEEWARY/BAS	
BOWLING/BAS	Play 9 pin on the TRS-80 screen
BSIIIFS/BAS	Do battle on a 9 x 9 grid
DEFEND/BAS	Space invader variation
DRIVING/BAS	Take your computer for a test drive
DUNGEON2/BAS	Can you escape the dungeon
ERODE/BAS	Variation of BREAKOUT arcade game
FULLBACK/BAS	Football variation
GALLERY/BAS	TRS-80 becomes a shooting gallery
KALAH/BAS	Remove the beans game
PLAYBCAL/BAS	Playboy calendar
POEM/BAS	Computer-generated poems
WUMPUS/BAS	Find the hidden wumpus

PDGAME22 :	Games
AIRRAID/BAS	Survive the air raid
BOWLING2/BAS	Bowl against the computer or a friend
BOXIN/BAS	Box in the computer
CAPTURE/BAS	Game of tag between you and the computer
CONCNTR2/BAS	Game of concentration
FUNGUS/BAS	It's the Fungus vs. the Moldmen
MAZES/BAS	Find your way thru the changing maze
MENTALST/BAS	The computer will mystify by reading minds
NIM/BAS	Remove the sticks game
ORBIT3/BAS	Try and dock at the space station
STARWAR2/BAS	Star Wars variation
STRPDICE/BAS	Play dice, the stakes your clothes
TICTAC/BAS	Old favorite, Tic-Tac-Toe
TOMB/BAS	Find your way through the endless tomb

PDGAME19 :	Games
HUNTPECK/BAS	Memory Game
HUSTLE/BAS	Run over the objects for points
ILLUSION/BAS	5 different mind boggling illusions
MONSTER/BAS	Chase game
SPEEDWAY/BAS	Drive around a curved track
TREKE/BAS	Star Trek variation (Strategy)
TREKF/BAS	Star Trek variation (Real Time)
TREKG/BAS	Star Trek variations (Senerios)
TREKH/BAS	Star Trek variation
TREKI/BAS	Star Trek variation

PDGAME23 :	Games
BACCARAT/BAS	Play this card game in a Las Vegas casino
BOOTHILL/BAS	Arcade Western shoot out
CARRACE/BAS	Cross-country auto race
CRAPS/BAS	Dice game
CRAPS2/BAS	Variation of familiar dice game
ICEBREAK/BAS	Strip poker without the cards
KRESCUE/BAS	Knight to the Rescue: save the princess
LANDER/BAS	Pilot your ship to one of nine planets
OTHELLO/BAS	Reverse your opponents positions to win
PRESSUPS/BAS	Checker puzzle
SHOOTSHP/BAS	Sink the computer's fleet
STARPILT/BAS	Pilot your own starship
STRCONC/BAS	Strip concentration
TENNIS/BAS	Pong style video tennis

PDGAME24 :	Games
BCKGMMON/BAS	Play backgammon against the computer
BIOCLNDR/BAS	Produces a briorhythm calendar
BLACKJCK/BAS	Computerized 21 card game
CRIBAGE/BAS	Play cribbage on the TRS-80
DICEROLL/BAS	Lay your money down then roll the die
MONOPOLY/BAS	Have your TRS-80 sit in on a monopoly game
POKERIII/BAS	Play 5 card draw with the computer
SCRAMBLE/BAS	2 player word game
STUDPOKE/BAS	Play stud poker with the computer
TIAR/BAS	Solve the mystery of the missing Tiar
TIAR/INS	Instructions for TIAR/BAS
YAHTZEE/BAS	Play this familiar dice game against others

PDGAME25 :	Games
AIRPLANE/BAS	Become an airline captain
BACKGAMN/BAS	Play backgammon with your TRS-80
BREAKOUT/BAS	Paddle and brick Game
DARTS2/BAS	Shoot darts on the TRS-80 screen
DIVEBOMB/BAS	Become a Dive Bomber
ECHO/BAS	Find the limits of your memory
HORSE/BAS	Become a computerized jockey
LUNAR3/BAS	Lunar lander variation
LUNAR4/BAS	Lunar lander variation
POKERII/BAS	Five-card draw poker
ROULETTE/BAS	Play this Montecarlo game
SLOT2/BAS	The slot machine has the odds in its favour
TRADERS/ABS	Manage a trading post
VALKYRIE/BAS	Mythology adventure game
WHELFORT/BAS	The Wheel of Fortune

PDGAME26 :	GAMES
BITGUESS/BAS	Number guessing game
CARDSHRP/BAS	Card sharps seldom lose
CIRCLE/BAS	Graphics demo
CRAPS3/BAS	Familiar dice gambler
CUBES/BAS	Strategy game
DONUT/BAS	Business simulation of a donut shop
FROGRACE/BAS	Not exactly frogs from Calaveras County
HORSERAC/BAS	The sport of kings comes to your home
JUMBLE/BAS	Solve the JUMBLE puzzles from the newspapers
KENO/BAS	Casino lotto game
ROULETE/BAS	The roulette wheel spins
SPCRAFT/BAS	Fly your spacecraft through storms
SUBATTAK/BAS	You are the commander of an experimental sub
TEAMS/BAS	Professional football team names game
TOWERS/BAS	Towers of Hanoi Game
WHOAMI/BAS	Bible characters guessing game

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Financial Members

NAME	SUBURB	STATE	PHONE	BBS	COMPUTER	PRINT	STORE	MODEM	INTERESTS
Maurice ABBOTT	MONTMORENCY	VIC	(03) 439-1619		A		B	B	ABCD FGH K PQRST
Albert L. ALBRECHT	NOUMEA NEW CALEDONIA			Y	A D	A	B		D FG
David ALWAN	GUILDFORD	NSW	(02) 632-1727	Y	L		ABCD		AB
Leif ANDERSEN	REVESBY	NSW	(02) 772-2532	Y	J	C	AB		
Leon AROUSTIAN	GREEN VALLEY	NSW	(02) 607-4637		B	L	B D		CD FGH
Gordon P. ASTILL	INVERELL	NSW	(067) 22-1641	Y	E	L	BCD	A	ABCDE G PQ T
Robert N. BALGARNIE	INVERELL	NSW	(067) 23-2351	Y	DE	L	B D	AB	DEF
Robert J. BARNES	ROSELANDS	NSW	(02) 759-5673	Y	A DE J	L	ABC E	BCD	ABCD	A C E G PQ
Rayner G. BARTA	MAROUBRA	NSW	(02) 314-1023	Y	L	C	BC	A C	CDEFGH K NPQR TUW
Patrick BAUM	EMU RIDGE	ACT	(06) 253-1726	Y	B	A	B	C	
Roslyn M. BEAUMONT	WERRINGTON	NSW	(02) 623-7089		B	C	AB		CDEFGH L P TUW
Leslie J. BECKHOUSE	GUILDFORD	NSW	(02) 632-7089			L	B D	BCD	CDEFG P T
Francis E. BENNETT	WEST PENNANT HILLS	NSW	(02) 484-3673	Y	D	C	B		CDEFGH K NP T
Geoffrey G. BENSON	BATHURST	NSW	(063) 31-3038	Y	E	L	F	B D	CD G
Algis BIZYS	PADSTOW	NSW	(02) 77-9966	Y	B E	L	A	BC	A	CDEF
Raymond BLACK	CARLTON	NSW	(02) 588-1409	Y	A E	L	AB	F	BCD	L
Jim BROWN-SARRE	WODONGA	VIC	(060) 24-1994						
Gary K. BRYCE	LETHBRIDGE PARK	NSW	(02) 628-5058	Y	AB E	L	A	BCD	ABCD	A CD G JK PQ S U
James CAMERON	EPPING	NSW	(02) 868-4189	Y	A E		C	B	B	K MN Q S
Evan CAMPAIN	ENGADINE	NSW	(02) 520-0991	Y	A DE		B	A	D FG P
Michael CHAPMAN	PENRITH	NSW	(047) 36-6123	Y	B	L	B	ABCD	A	CDEFG T
Kel CHRISTENSEN	WYONGAH	NSW	(043) 92-6641						
Michael COOPER	SURRY HILLS	NSW	(02) 331-7136	Y	A E	L	A	B D	ABC	C G K PQ
Gary COSTA	QUAKERS HILL	NSW	(02) 626-5703			L	C	A C	BC E T
*Gary COULTHART	SEFTON	NSW	(02) 644-9503			L	B D		CDEFGH TUW
Trevor M. CRAIG	GLEBE	NSW							
*Jennifer CUTHILL	STANMORE	NSW	(02) 560-7940		H	C		H	D F H P T W
Lawrence J. DANGERFIELD	BEACON HILL	NSW	(02) 451-2342	Y	E	L	BCD	A	C
Domenico DELVECCHIO	TOONGABBIE	NSW	(02) 636-9463	Y	L		C	CD FG
Karl H. DOLLAK	BROADMEADOW	NSW	(049) 61-4517	Y	A E	L	C E	ABCD	A	CD FG
Brett P. DRISCOLL	CHELTENHAM	VIC	(03) 583-8252		B	L	BCD	D FG P
Peter EATON	PENRITH	NSW	(047) 21-4715		L	B	B	D FG P
Owen E. EDMUNDS	FRENCHS FOREST	NSW	(02) 451 0758		B E	L	B D	B	
Malcolm D. ELLIOTT	TAMWORTH	NSW	(067) 66-7946	Y	A	L	ABCD	C	H M T
*Barry ELPHICK	FRENCHS FOREST	NSW	(02) 452-3351						
Benny FICI	RUSE	NSW	(046) 26-8167		A	C	B	A	CD FG P W
Robert J. FLANAGAN	SWANSEA	NSW	(049) 71-3370		E	E	B	DEFG
Tomas D. FOLEY	BONDI JUNCTION	NSW	(02) 389-6157	Y	E	C	B	CDEF K P
John Kevin FORMBY	HORNSBY HEIGHTS	NSW	(02) 477-4496	Y	E	C	B	A	CD G JK P U
Victor W. GADD	SUNSHINE V/MORISSET	NSW	(049) 73-2271		A	E J	BC	B	CD FG P T
*Allan G. GATES	CHIPPING NORTON	NSW	(02) 602-8864		L	B D	EFG T W
Steve S. GAUCI	SEVEN HILLS	NSW	(02) 621-6501		E	A	B	CD F
Phillip N. GILLMAN	SEVEN HILLS	NSW	(02) 674-5138	Y	B	C	AB	ABCD	G P U
William T. GRIFFITHS	TALLANGATTA	VIC	(060) 71-2449		A	E J	B E	AB	DEF M P
Frank HANRAHAN	WENDOUREE	VIC	(053) 39-1147						
Marianne A. HARRINGTON	APPIN	NSW	(046) 31-1158		E	C	B	D H T W
*John V. HARRISON	GUILDFORD	NSW	(02) 632-6821		L	B	B D	EF
Darrell R. HEGARTY	MARRICKVILLE	NSW	(02) 560-9681						
Gordon W. HERBERTSON	WHITE ROCK	QLD	(070) 54-6500		L	B	B D	D GH W
Agnes HERD	SLACKS CREEK	QLD							
*Antonio HERNANDEZ	DARGAN Via BELL	NSW	(063) 55-2704		E	E	B	D FGH
David John HEYES	LANE COVE	NSW	(02) 427-5254		B DE	L	ABC	A CD P R T
Andrew J. HICKMAN	GUILDFORD	NSW	(02) 681-1049	Y	B	L	B D	ABCD	A CD FGH K P T
Graham F. HILDER	TAMWORTH	NSW	(067) 66-2496	Y	A E	L	BC	BCD	ABCD	BCD FGH K P T
*Ernest W. HOOKEY	SEFTON	NSW	(02) 644-5824						
Garry HOWARTH	NARWEE	NSW	(02) 53-0623	Y	B E	L	AB D	AB D	ABC K P TU
David N. HURTADO	BOWRAVILLE	NSW	(065) 64-4033		B	L	BC	AB D	D G U
Robert JARRETT	VAUCLUSE	NSW	(02) 371-8539	Y	A E	L	B F	BCD	D	A E K
Steven JOBSON	GRIFFITH	NSW	(069) 62-6661		D	C	B	D P
Kenneth C. JONES	SANS SOUCI	NSW	(02) 529-6244		L	B	BCD	DEF
Brian KEEGAN	BANKSTOWN	NSW	(02) 646-3448	Y	DE	L	BCD	ABCD	
Suzanne KEEGAN	BLACKTOWN	NSW	(02) 671-7135	Y	D	D	BCD	AB	EFGH TUW
Damian KELLY	MILLBROOK	VIC	(053) 34-0415	Y	E	B E	B D	C	CD G JK PQ
Ivan Robert KENNEDY	NORTH RYDE	NSW	(02) 888-7120	Y	E K	B E	B D	D FG Q
Gary K. KILMINSTER	PENRITH	NSW	(047) 33-4020		E	B	H W
Clem R. KLAUSEN	EASTWOOD	NSW	(02) 85-6591	Y	AB	L	B	BCD	ABC	FG PQ
Roy K. LANGE	DAPTO	NSW	(042) 61-6250		A	BC	AB	CD
*Roger A. LAWES	CHIPPING NORTON	NSW	(02) 600-9270	Y	L	B	BCD	H T
Wayne R. LEFFLER	GYMEA BAY	NSW	(02) 540-1664	Y	B	L	B	B D	AB	DEFG
Trevor J. LEWIS	MUSWELLBROOK	NSW	(065) 43-3571		E	B	B	P
Keva L. LLOYD	SEA LAKE	VIC	(050) 70-1211	Y				
John L. LONG	KELMSCOTT	WA	(09) 390-5300		B		B	D G P
*Bill LOUEY	CAMPSIE	NSW	(02) 718-0009		L	B	BCD	G M PQR
George E. LUMB	CARLINGFORD	NSW	(02) 871-5581	Y	A E	B E	B E	D	D J P
Robert W. LUTHER	EASTWOOD	NSW	(02) 85-4770	Y	E	B	B	AB	BCD
Gary W. LYNCH	MILLTHORPE	NSW	(063) 66-3215	Y	A	J	BC	B	D	B K P
Gilbert Thomas LYON	NEUTRAL BAY	NSW	(02) 953-6932	Y	A	F	C	AB	A	A CDEFG P
Bernard E. MADIGAN	ERMINGTON	NSW	(02) 638-6228		B	B E	AB	C E P
Philip MARTYN	SPRINGWOOD	NSW	(047) 51-4658		A E	C	AB	A CD H K PQR TUW
Ralph J. MASTERS	DHARRUK	NSW	(02) 625-4415		AB D	L	C	AB D	BC P TUW
Gregory MAYO	TAMWORTH	NSW	(067) 65-6957	Y	B	L	B	B D	ABCD	CD G P S U
William D. McDOUGALL	SANS SOUCI	NSW	(02) 529-8322	Y	A E	L	B	B D	C	C G NP
Wayne J. McILLHATTON	MERRYLANDS	NSW	(02) 681-1315	Y	A	L	B	B D	B	CD G Q T
*Andrew McKENZIE	OYSTER BAY	NSW	(02) 528-8899		L	BCD	B	A CD GH TUW
Paul Kevin McLEOD	ROSEMEADOW	NSW	(046) 25-4523	Y	B	L	ABCD	AB	C GH PR TUW
Christopher McRAE	WEST PYMBLE	NSW	(02) 498-5075	Y	A DE	L	A	B D	ABCD	ABCD F K PQR TU

Continued overleaf

Legend

Hardware				Interests/Expertese	
Computers	Printers	Storage	Modem	Hardware	Programming
A = Model I	A = C.Itoh/Compat	A = Cassette	A = V.21	A = Design	J = JCL/Batch
B = System 80	B = Epsom/Compat	B = 5.25 Floppy	B = V.23	B = Repair	K = Assembly
C = Genie	C = Tandy LP/DMP/DWP	C = 3.5 Floppy	C = V.22		L = PostScript
D = Model III	D = IBM/Compatible	D = Hard Disk	D = V.22bis	Applications	M = Fortran
E = Model 4/4P	E = Daisywheel	E = Tape Cart.	E = 9600bps		N = Cobol
F = Model II	F = Laser Printer	F = Optical		C = Utilities	P = BASIC
G = Model 12		G = CD-ROM		D = W/Processors	Q = C
H = Model 16		H = 8in Floppy		E = Business	R = Pascal
J = CoCo 2 or 3				F = Spreadsheets	S = Forth
K = Model 100/200				G = Databases	
L = MS-DOS				H = Educational	Games

Items underlined represent changes since the last published Membership List
Entries preceded by an asterisk (*) are New Members since the last published list
This Membership List supersedes all previous lists

T = Graphics
U = Text Adv.
W = Educational

NAME	SUBURB	STATE	PHONE	BBS	COMPUTER	PRINT	STORE	MODEM	INTERESTS
John MERCER	MORTDALE	NSW	(02) 579-2915	Y	E	C	B		D P
Geoffrey R. MEREDITH	SOUTH GRAFTON	NSW							
Dieter MIRBACH	NORTH RYDE	NSW	(02) 878-1979	A			AB		
Terence MURPHY	BIRKDALE	NZ	+64-9-43-7951	Y	B E	AB	B	ABCD	ABCD K
Maureen NAPIER	PEAK HILL	NSW	(068) 69-3262		E	C	B	AB	EFG
Graham T. O'CONNOR	LAKEMBA	NSW	(02) 759-9398	Y	AB	L A	B D	A	CD GH
Denis J. PAGETT	PANANIA	NSW	(02) 772-4848	Y	AB DE	L A DEF	BCDE G	D	D FGH L TUW
John PEARCE	ARTARMON	NSW	(02) 419-6727	Y	E	L B	B D	C	DE G W
Barry C. PEARSON	PADSTOW	NSW	(02) 772-4434		E	L BC	BCD	B	
Richard A. PHILLIPS	DAPTO	NSW	(042) 61-3960		B	L D	B D		P
Harry R. PLACING	THE ENTRANCE	NSW	(043) 32-2434	Y	A E	L C	ABCD	A CD	D K P
Neil P.G. PORTER	CONISTON	NSW	(042) 29-7996		B	L B	AB D	A	CDEFGHJ PQR TUW
Roger M. POWELL	LEUMEAH	NSW	(046) 27-2838	Y	A D	L B	BCD	A	E P
Sydney W. RACE	KINGSGROVE	NSW	(02) 50-6238		A		A		
John O. RALPHS	FAIRFIELD	NSW	(02) 726-9859	Y	B		B		
Bruce A. RAMSAY	PENSHURST	NSW	(02) 580-2217	Y	BC E	L	ABCDE	C	ABCDEFGH P
Robert Lytton REED	MARRICKVILLE	NSW	(02) 558-2668	AB E		A C	B D		D F K PQ
*Phillip REILLY	ARMIDALE	NSW	(067) 72-4119	A		C	A		AB DEFG P T
Russell W. RICHTER	MALANDA	QLD	(070) 96-6244		D		B		D FGH P TU
Jason ROFE	PADDINGTON	NSW	(02) 331-6907	Y		L D	BCDE	B	B E
Errol G. ROSSER	CONDELL PARK	NSW	(02) 796-7646	Y	AB D	L A C F	ABCDE G	ABCD	ABC GHJKL PQ S W
Bengt Olof RUBENSSON	HILLERSDORP	SWEDEN	+46-370-82446	Y	A		B		
John W. RUFUS	BLAXLAND	NSW	(047) 39-2744		B				
Warwick S. SANDS	SHAILER PARK	QLD	(07) 801-2715	Y	B E	L C	BCD		C G JK P
Gilbert SANTA ANA	MARAYONG	NSW	(02) 626-8558		B	L	BC		DEF P TUW
Kevin SHIEL	WEST RYDE	NSW	(02) 888-5604		B	L	CD		
Edward SIKE	NARWEE	NSW	(02) 533-3130						
Olaf H. SKARSHOLT	TITIRANGI	NZ	+64-9-817-8698	Y	E	L B	ABCD		BCDEFGHJ PQ W
Neil SMITH	BLAXLAND	NSW	(047) 39-2709		E	BC E	B	A	DE G
Michael P. SMYTH	NORTH RYDE	NSW	(02) 878-2439		B	F AB		AB D K
Denise Kay SNOW	NORTHMEAD	NSW	(02) 639-2982	Y	E	B	B E	C	DEF TUW
David SOLOMONS	KANAHOOKA	NSW	(042) 61-4506	Y			B		D GH T W
Scott STEAD	LAKEMBA	NSW	(02) 759-0336		B	C	B		B K P
Stanley J. STEWART	PEAKHURST	NSW	(02) 534-2160		D	C	AB		K P U
David SUTTON	PADSTOW HEIGHTS	NSW	(02) 771-5482	Y	B D	L BC	ABCD	ABC	CD G P W
Gordon E. SYMONDS	BURWOOD	NSW	(02) 744-1901	Y	A E J	C	AB		D F
Eddie SYNSTRA	FAULCONBRIDGE	NSW	(047) 51-3941	Y	AB	AB	B	A	ABCDEFGH K P TU
Phillip THIRD	ILLAWONG	NSW	(02) 543-6867	Y		L	D F	BCDE	CDEFGHJ T W
*Bryan J. THOMPSON	RYDE	NSW	(02) 809-5272		F		H		P T
*Eric J. TOMES	FRENCHS FOREST	NSW	(02) 452-5124		H	B E	B D	H A C	CD FG PQR U
Rob WALKER	PORT DOUGLAS	QLD	(070) 99-5903	B		B		B	
Bruce R. WALL	HAY	NSW	(069) 93-1488		E	L CD	BCD	AB	CDE J P
*Stephen WARNER	MOUNT MARTHA	VIC	(059) 74-2504		D	C			D F H T W
Derek Boyd WATSON	KUPANG NTT INDONESIA			Y		L B	BCD		D F PQ
Rodney WATTS	MACQUARIE FIELDS	NSW	(02) 605-5057	Y	DE	B	B	ABC	D FGH P
Mostyn WEBB	ANNANDALE	NSW	(02) 560-6862		D	L C	AB		
Bruce M. WEBSTER	SEFTON	NSW	(02) 644-5925		B	L	BCD		D F P R
Alex WELLNER	BONDI	NSW	(02) 30-5291	Y	D		B	A	C G P
Ernest W.F. WHITE	ASHFIELD	NSW	(02) 799-2679	Y	DE	C	B	A	DEFG
Richard WHITE	WARRAWEE	NSW	(02) 489-4769		E	L BC E	B D		D F
Peter WIGNELL	ROSELANDS	NSW	(02) 759-8024	Y		L	BCD	A CD	CDEFG J P R
Frederick WILLIAMS	FAIRLIGHT	NSW	(02) 949-3186						
Mark WILLIAMS	EAGLE VALE	NSW	(046) 28-2622	Y	E	D	B	AB	CDE GHJ P T W
Richard WILLIAMS	HEBERSHAM	NSW	(02) 832-3309						
Alexander WILON	OBERON	NSW	(063) 35-5229		D	L	C E	BCD	CD FGH T W
Glen Garry WILSON	ROCKHAMPTON	QLD	(079) 27-3194	Y	A	L	BCD	A CD	AB G P
*Peter WINTER	WINMALEE	NSW			A		A		
John S. WRIGHT	OATLEY	NSW	(02) 570-1086	Y	A D		C		
Leonard James YATES	WESTLEIGH	NSW	(02) 484-2749	Y	E	L B	B D	AB	CD HJK P R
Alex ZUI	FAIRFIELD	NSW	(02) 727-8440	Y	B	L	BCD	CD	A C G JKL PQRSTU

Unfinancial Members

NAME	SUBURB	STATE
John ARCHIBALD	NARRABEEN	NSW
Peter CAMPBELL	DHARRUK	NSW
Patrick B. CLARK	EARLWOOD	NSW
Kevin DILLON	SYDNEY SOUTH	NSW
Rowan C. EVANS	??	
Christine HARPER	ARMIDALE	NSW
Leonard H. PEARMAN	WENTWORTHVILLE	NSW
Walter ROSSER	PARRAMATTA	NSW

NAME	SUBURB	STATE
Maurice William TAYLOR	??	
Craig TOLLIS	BRIGHTON-LE-SANDS	NSW
Adrian TRY	PUNCHBOWL	NSW
James TUMETH	MILLER	NSW
Adalbert WEISS	INVERELL	NSW
Terry WHITTLEY	ARMIDALE	NSW
Alan WILSON	GRANVILLE	NSW
Peter WYATT	KENSINGTON	NSW

Total number of financial members is 146 - Total number of unfinancial members is 16

Legend

Hardware				Interests/Expertese	
Computers	Printers	Storage	Modem	Hardware	Programming
A = Model I	A = C.Itoh/Compat	A = Cassette	A = V.21	A = Design	J = JCL/Batch
B = System 80	B = Epsom/Compat	B = 5.25 Floppy	B = V.23	B = Repair	K = Assembly
C = Genie	C = Tandy LP/DMP/DWP	C = 3.5 Floppy	C = V.22		L = PostScript
D = Model III	D = IBM/Compatible	D = Hard Disk	D = V.22bis	Applications	M = Fortran
E = Model 4/4P	E = Daisywheel	E = Tape Cart.	E = 9600bps		N = Cobol
F = Model II	F = Laser Printer	F = Optical		C = Utilities	P = BASIC
G = Model 12		G = CD-ROM		D = W/Processors	Q = C
H = Model 16		H = 8in Floppy		E = Business	R = Pascal
J = CoCo 2 or 3				F = Spreadsheets	S = Forth
K = Model 100/200				G = Databases	
L = MS-DOS				H = Educational	Games

Items underlined represent changes since the last published Membership List
Entries preceded by an asterisk (*) are New Members since the last published list
This Membership List supersedes all previous lists.

T = Graphics
U = Text Adv.
W = Educational

Members, please check your entry in the above list carefully. If you find any errors or items with which you are not happy please advise a member of the committee promptly so that the necessary corrections can be made.

SYDTRUG Inc.

The Sydney TRS-80 / MS-DOS Users Group

Payment of Annual Membership Fees for 1991/1992

Family Name : _____   Membership No. : _____

Given Name(s) : _____

Preferred Name : _____

Telephone No. Home : _____   Work : _____

Residential Address

Street : _____

  : _____

Suburb : _____

State : _____

Post Code : _____

Postal Address

Street : _____

  : _____

Suburb : _____

State : _____

Post Code : _____

Please fill in details of your computer equipment and interests on the back of this form
so that the Group may be better able to support you.

Payment Details

Group Membership Fee $ 45.00

I enclose Cash/Cheque/Money Order for $____.____

or

Please CHARGE my BANKCARD ☐   MASTERCARD ☐

Name on Card : _____   Card EXPIRY Date. ___/___

No. : _____   with the amount of $____.____

Signature : _____   Date ___/___/___

Cheques should be crossed and made payable to "SYDTRUG Inc.".
CHARGE CARD payments MUST BE SIGNED and should be returned in a sealed envelope.
This completed form should be returned to :

The Secretary, SYDTRUG Inc., P.O. Box 75, PANANIA NSW 2213, Australia

---

Office Use Only :

Date Received   ___/___/___   Badge Issued ☐ Init : _____ Mail/Hand

Receipt No. : _____   ___/___/___

Membership No. Checked: ☐

      Init. : _____   Members Database: Updated/Added   ___/___/___

           Bulletin Board(s) : Updated/Added   ___/___/___

SYDTRUG Inc. *The Sydney TRS-80 / MS-DOS Users Group*

Member's Computer System(s) Details

Please enter the details of your computer equipment on this questionaire.
This is not mandatory, but will enable us to determine the services best suited to your needs / interests.
Use [1] to indicate your Primary (most used) System and [X] for any other equipment that you use / own.

Tandy 8 bit Computers & Compatibles

Model I	☐	Model 4	☐	Model II	☐	Coco 2	☐	Model 100	☐
System 80	☐	Model 4P	☐	Model 12	☐	Coco 3	☐	Model 200	☐
Genie	☐			Model 16	☐				
Model III	☐	Other _____							

Storage

Cassette ☐	Drives	8"		5 1/4"		3 1/2"	Hard Disk _____ Megs
Cartridge ☐	Sides	SS ☐ DS ☐		SS ☐ DS ☐		SS ☐ DS ☐	
	Density	SD ☐ DD ☐		SD ☐ DD ☐		SD ☐ DD ☐	
	Tracks	77 ☐ 80 ☐		40 ☐ 80 ☐		40 ☐ 80 ☐	

Operating System

Level I ☐	TRS-DOS 2.x ☐	NewDOS 80 ☐	LDOS 5.x ☐	CPM ☐	OS-9 ☐
Level II ☐	TRS-DOS 1.3 ☐		TRS-DOS 6.x ☐	UNIX ☐	

MS-DOS based Computers

Brand		Type		Memory	Style		Monitor			
IBM	☐	PC	☐	_____K	Laptop	☐	Mono	☐	VGA Type	
Tandy	☐	XT	☐	_____K	Portable	☐	Hercules	☐	Mono	☐
Amstrad	☐	AT	☐	_____K	Desktop	☐	CGA	☐	Colour	☐
Commodore	☐	386	☐	_____K	Tower	☐	EGA	☐	Super	☐
_____		486	☐	_____K	Mini-Tower	☐				
		_____		_____K	_____					

Storage

Disk Drives

5 1/4"		3 1/2"		Hard Disk _____ Megs			
180K	☐	720K	☐	MFM	☐	ESDI	☐
360K	☐	1.44M	☐	RLL	☐	SCSI	☐
720K	☐	2.88M	☐	IDE	☐	CD-ROM	☐
1.2M	☐						

Cartridge ____ Megs Optical ____ Megs

Tape Drives

Cassette _____ Megs
Cartridge _____ Megs
Other _____
_____ Megs

Printer

Dot Matrix		Daisy Wheel		Laser	
C.Itoh & compatible	Model _____	Tandy DWP	Model _____	Postscript	Model _____
Epson & compatible	Model _____	NEC	Model _____	HP	Model _____
Tandy LP / DMP	Model _____	Qume	Model _____	TI	Model _____
IBM & compatible	Model _____	Other _____		Epson	Model _____
InkJet	Model _____			Brother	Model _____
Other _____				Brother	Model _____
				Other _____	

Modem

V21 ☐   V23 ☐   V22 ☐   V22bis ☐   V32 ☐   Trail Blazer ☐   Hayes Compatible ☐   Other _____

Interests and/or Expertise

Hardware		Applications		Programming				Games	
Design	☐	Utilities	☐	JCL/Batch	☐	Basic	☐	Graphics	☐
Repair	☐	Word Processors	☐	Assembly	☐	C	☐	Text Adv.	☐
		Business	☐	PostScript	☐	Pascal	☐	Educational	☐
		Spread Sheets	☐	Fortran	☐	Forth	☐		
		Databases	☐	Cobol	☐				
		Educational	☐						

Other _____

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