THE GRUNT PRESS

(and other wrestling holds)

ISSUE NO. 13

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COMPANY CONFIDENTIAL

Here is the inaugural issue of the Baxter GP. As before all contributers
are welcome, people with money are Family, and complainers are ignored.

(«Gee, typewriters are nothing like WordStar»)

From the mouse maze of Leo Binkowski:

    After I cleaned the spider webs of my GRUNT PRESS disk, it
occured to me that it's been about 3 months since the depletion
of Roosevelt and the subsequent suspension of the GP, but it's
back, and better than ever.

    I have plenty of good news for all of the employees of the
Baxter centre. First off, I am now in charge of the games
library, so that if anyone wishes to borrow any of the home games
that we have, they are welcome to do so. The only catch is that
they must be returned as soon as I ask for them, but I guarantee
the use for a minimum of three days, and if there are no other
takers, you may keep it for as long as you wish. At the back of
this issue is a list of all of the equipment available for
general use, along with the status of each machine.

    A further service would be that if you have any suggestions
in the way of games we could buy, pass them along, and John will
probably consider it.

    Also, there is a growing library of Apple games which have
not as yet all been catalogued. If you have access or own an
Apple, and wish to get some nifty software to use, try out, or
even (ahem) copy, drop me a line and I'll see if I can get it.

    Next, for all of the Games programmers, I have also been
given the dubious task of keeping all of the disks that are
submitted as finished, so that we have plenty of backups in case
of machine crash, accidental erasure, or accidents period. The
only requirement is that you put a date on the disk, and if that
is not done, I will put one on. This is for purely reference
purposes only, as people ask me for the latest version of a
certain game, only there are usually five copies of that game,
all with no date.

    Now, if all of you wonder what I'm doing besides all of
this, I have just finished ROULETTE with Ken, and was working on
spectra conversions for a bunch of games. Now, I am doing the
official HOME NABU version of PAC MAN. I say official according
to Chris Wallace, who claims to have gleened to rights to the
game.

    Quite a mouthful. Until next issue, GROK!

FROM THE PROGRAM LIBRARY:
(Hidden deep in the recesses of Baxter)

Not too well hidden, I hope. The CORVUS appears to have
survived this trip nicely, unlike our move to Roosevelt.
Keep your fingers crossed! It's been awhile since we've seen
an issue of the GP, so some of the news may be pretty old
(like Boots and Whips).

The backups now travel between Baxter and Richmond Road. I'm
trying to maintain the same schedule: in Monday morning, out
Tuesday afternoon, in Wednesday afternoon, out Friday

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morning. The sign will be posted beside Tracy's desk to let you know when they're here. The backup box will be left in the Games department, on the brown bookcase about halfway down the aisle. As usual, you're responsible for backing up your own diskettes. Also, when your project is finished (or finished except for rare changes) the diskettes should be transferred from the offsite boxes to the Archives (permanent storage at Richmond Road). Please give them to me, indicating that they're supposed to go in the Archives. If you need one back to update you simply let me know.

It seems that there have been a few major problems with unauthorized people getting games demonstration disks. To solve this a new system is being implemented. Anyone wishing to use the demo diskettes will have to direct their request through the library. The request must be in writing (forms available from the library) and will require three signatures: Jim Storm, Yves Dupont and Anna Dupont. Obviously, this is going to take three to four days, so requests should be made early. Permission is granted for use of the disks only, not for making copies.

Note: I will be on holidays from June 10th to June 17th, inclusive. Everything will still be available of course, and I'll make provisions for offsite backups, diskettes (I'll try - no guarantees), etc. while I'm gone.

                                                    * Kathleen *

From somewhere on Eric's desk;

     The second paragraph has been brought to you on behalf of the MSS group (Micro Systems Software) by me. If you don't want to read the boring stuff, skip to the fourth paragraph. It has been written by the General Manager and acting coach of the NABU softball team.
     A great number of things have happened since the last issue. There are the changes in the poeple making up our group. Ian Perryman has left to go back to Waterloo to learn some more. Sef Haisz has moved on, possibly to earn some more. We have also welcomed two new people who you probably all ready know, Indy Singh and Tom Willis.
     We have kept our noses to the grindstone (we're the ones with the small noses) and have completed a number of projects. A demo program exists (courtesy of Dean Silverman) to help new programmers get started using the video and audio chip using IOS calls. Field service diagnostics have also been produced for Ron Sures by Dean. Ian gave us an improved DEBUG, (mostly cosmetic changes Dave), and a paper reviewing the usage of IOS. Dave Allan has put together a BIOS for the floppy disk, and Mark has done work on the Disk Interface to the Segment Handler. Leo Mes has been looking after design and chasing down the administrative end of the disk project. Norm has done a great deal of work on

coding standards, as well as fixing bugs and updating IOS. I have finished joining DEBUG and CABLESIM, and finished an application which can be used in testing IOS called IOSLOAD. Tom has taken a prototype autodialler card for the NPC, and after much frustration, some due to mistakes in the cards' construction, Tom has successfully got the long distance feeling. Indy has been trying to keep us organized, and going to all the meetings that Sef Haisz and John Allen used to go to. This is all the news I can think of at the moment. It is possible that I have missed some things, and will be reminded when the GRUNT PRESS gets distributed.

Aside from the serious stuff, I want to thank all those who came out to play softball. Despite the excellent organization, and inspiring leadership that has prevailed, our team has a 1 and 1 record. The season opener was well attended. Twenty two players helped bring us a victory over the troops from Bynamics. Special thanks should also go to Shelly McQuillen, for tactfully pointing out errors in the field, as well as keeping score, and keeping up with the changes in the batting order. Our second game was a disappointment. Thirteen players showed up for the NABU team and we went down to defeat at the hands of Dynalogic. Our next game is on Monday June 15 ,6:00 pm against HP, at the Kanata ball field.

FROM Quality Assurance: Part No. 9*&#%$@#! Revision Level 9#!

And that's just a hint of better things to come (we're assigning part numbers to all of you)!

Seriously, we have been working hard trying to get applications through QA to go on the main menu (or at least in a working version for the magic carpet) to make an appearance at the NCTA. Thanks to the tremendous efforts of the content group, we should all be able to meet the deadlines.

Due to popular demand, we are (finally) changing the headline for Network News! (not a moment too soon, you say?). Thanks go out to Jane, Tanya and Leo for their untiring efforts and undying devotion to QA's mottled version of Gred and Scred.

Finally, (just to drive you games people nuts) we have a new (and witnessed) high score for Mania. Hold your breath, 1,211,000 - by Jackie Scott, friend of Steve Seal. Steve witnessed the score in total exasperation. We have no cause to doubt Steve's honesty, however if anyone has any information......

(Note: that high score has been beaten a long time ago by yours truly the Led. Try 8,559,950 on for size...the reason for stopping was boredom. Jamie Edwards has achieved 11,000,000. I personally don't play the game any more. /Led.)

From the desk of Todd MacNaught:

READ ALL ABOUT IT! READ ALL ABOUT IT!

There is now a new SMALL but FUNCTIONAL "C" Library available for all you "C" programmers out there progamming applications for the CABLE. It is a cut down version of the AZTEC library "SOFTLIBC" without DEVICE HANDLERS OR FLOATING POINT routines called "SMALLIBC.REL".

This means that routines such as GETC, PUTC, SCANF, PRINTF, OPEN, CLOSE, TAN, SIN, etc, are no longer available. However, you will agree that they are totally unnecessary! Should you need a routine such as GETC to get a keypress a call like CDEVIO(0,1) will satisfy your request.

This reminds me that I should tell you about the "C" VIDEO, AUDIO, DOS, BOS, and CPM interface. Routines are included in the SMALLIBC.REL library to allow you to do any calls to these IOS IO HANDLERS. The entry points are all listed in the symbol table below. Here are some examples of how you would use them:

ASSEMBLER	C
N.DEVRDY 0,1	CDEVRDY (0,1);
N.DEVIO 0,1	CDEVIO (0,1);
PCALL VTABRD,0	CVTABRD (0);
CPMCALL 9,MSG	CPM (9,&MSG);
PCALL 8,88H,SEARCHBLOCK	DOS (0x88,&SEARCHBLOCK);
PCALL CRBEG	CCRBEG ();
PCALL AUDIOWR,7,3FH	CAUDWR (7,0x3f);
PCALL SPMOVE,(Y),(X),(SP)	CSPMOVE (Y,X,SP);
PCALL VSPRIST,(VSPRIAD)	CVSPRIST (VSPRIAD);
PCALL VFILL,4000H,0,0	CVFILL (0x4000,0,0);

NOTE that this new library will cut your current "C" programs down to about 1/2 to 1/3 their size!! QUITE THE SPACE SAVINGS HUH?

A link command could look like this:

        L80 CPROG,M80FILE,TXTCHAR,SMALLIBC/S,NLINKTAB,CPROG/N/Y/E

Another thing for all you regular "C" programmers, the statment #include "libc.h" is no longer required at the top of every one of your C modules. It won't hurt to have it there of course, but if you remove it your program size will decrease by approximatly 1 1/2 kilobytes as all it does is define common buffers for cpm device handlers and IO re-routing. NOTE that this include statment is still a must if you have to use the standard AZTEC C library because there modules are all assembled with it and leaving it out will cause the linker to produce a LOADING ERROR.

So if you don't require any CPM FILE HANDLERS you should use SMALLIBC instead of SOFTLIBC!!.

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One more thing I should tell you about is the fact of which I'm sure you know that C passes paramaters on the stack in a FIFO fashion. But you want paramaters to be passed in the BC,DE, and HL registers like you've always done. Well I've included two routines in the library which will help you out. In fact the entire IOS interface is dependant on these routines. The routines are called SAVE and RESTORE. You see C programmers have another problem. When an assembler subroutine is called from C, The BC, IX, and IY registers must always be saved and restore to there original state before returning to the C mainline. SO.....

What SAVE does is first of all save BC,IX, and IY in temporary variables and copy the paramaters passed on the stack into BC, DE, and HL. SAVE always assumes THREE paramaters have been passed on the stack so BC,DE, AND HL always contain the last three words put on the stack. In other words if no paramaters are passed to an assembler routine and the assembler routine calls SAVE the contents of the BC, DE, and HL registers are destoyed after of course having saved BC,IX and IY in temporary variables.

RESTORE, you guessed it is the routine which restores BC, IX and IY registers.

a sample assmebler module could be:

```
                    .Z80
        CVFILL::
                CALL   SAVE##              ;to save regs  and  get
                                           ;parms from stack
                CALL VFILL##               ;with parms in BC,DE,HL
                JP   RESTORE##             ;to restore BC,IX,IY
                      END
```

NOTE: SAVE IS NOT A NESTABLE SUBROUTINE LIKE CRBEG
         DON'T CALL IT TWICE IN A ROW OR THE TEMPORARY
         VARIABLES CONTAINING THE ORIGINAL COPIES OF BC,
         IX,AND IY WILL BE REPLACED WITH THE NEW VALUES
         AND C WILL DO FUNNY THINGS TO YOU. This is not
         really a big problem as to produce efficient code
         this routine need only be called once anyway.

So NOW all you OLD MAIDS (Z80 progammers), you no longer have any excuse not to use C for all high level logic, because it is fast,efficient, and easily interfaced. TRY IT! you'll love the language. (I do and so do many others at NABU). A lot of full- sized OPERATING SYSTEMS are written entirely in "C".

```
.????  ????     .????  ????      .????  ????
.ASAVE 063C     .BEGIN 06AA      .CHL   06DD
.EM    04B7     .DV    05A7      .EQ    04BF
.FALSE 062E     .GE    04C9      .GT    04E5
.JMP   0470     .LE    04CA      .LS    054A
.LT    04E4     .ML    04FE      .MOVE  0633
.NE    0516     .NG    061E      .NT    0520
.OR    0528     .RESTO 0680      .RM    05BA
.RS    0530     .SAVE  0664      .SB    055A
.SWT   0449     .TRUE  0628      .UD    0563
.UE    056B     .UF    056A      .UG    0579
.UL    0578     .UM    05E4      .UR    0585
.XR    059D     .ZSAV  0685      ADDRES 06E7
BADFD_ 06C8     BLOCKM 0492      BOOT_  06DA
CAUDRD 08D2     CAUDWR 08DE      CCHADR 070A
CCLKAT 093D     CCLKPR 08E7      CCLKRV 094A
CCLOSE 0893     CCRBEG 0957      CCREGW 090E
CCREND 0960     CDEVID 0929      CDEVRD 0917
CDOWNS 08AE     CDUMBT 08C9      CFASTR 08F9
CFASTW 0905     CFILLA 08B7      CFSTD8 0713
CFSTDU 071C     CFSTL8 0725      CFSTLD 072E
CGETMS 0737     CGETPA 0740      CGOTOX 0701
CHOINI 08F0     CLEAR_ 049F      CLINKI 0749
CLPATR 0758     CPM_   06EF      CPUTCH 089C
CPUTMS 0761     CPUTPA 076A      CROOT_ 06B1
CRPATR 0773     CSETMS 077C      CSPCOL 0785
CSPMAR 078E     CSPMOV 0797      CSPNAM 07A0
CUPSCR 08A5     CVATRI 07A9      CVBLKF 07B2
CVBLKO 07BB     CVCOLR 07C4      CVFILL 07CD
CVMOVD 07D6     CVMOVI 07DF      CVNAME 07E8
CVPTRN 07F1     CVRAMR 07FA      CVRAMW 0806
CVREGR 080F     CVREGW 081B      CVRMDS 0824
CVRMDU 082D     CVRML8 0836      CVRMLD 083F
CVSETS 0848     CVSETT 0851      CVSPRI 085A
CVSTAT 0863     CVSTG1 086F      CVSTG2 0878
CVTABR 0881     CWINDO 06DE      CXYLOC 088A
?OS_   06F8     EXIT_  06BF      FREE_  022C
?ETMEM 010D     INDEX_ 0402      ISDIGI 0388
?SLOWE 039A     ISSPAC 03AC      ISUPPE 03C3
?DRECO 01E7     NOPER_ 06D1      RESTOR 0999
?INDEX 0426     RSVSTK 0377      SAVE   0975
?BRK_  034D     SETTOP 0341      TOLOWE 03D5
?DUPPE 03EB


?UDIOR 08D6     -AUDIOW 08E2     -CHADR  070E
?LKPRM 08EB     -CLOSEW 0897     -CRBEG  095B
?REGWR 0912     -CREND  0964     -DOWNSC 08B2
?UMBT  08CD-    -FASTD8 0717     -FASTDU 0720
?ASTL8 0729     -FASTLD 0732     -FASTRD 08FD
?ASTWR 0909     -FILLAR 08BB     -GETMSG 073B
?ETPAT 0744     -GOTOXY 0705     -HOINIT 08F4
?NKTB  074D     -LPATRN 075C     -MAIN_  06B7
?UTCHA 08A0     -PUTMSG 0765     -PUTPAT 076E
?PATRN 0777     -SETMSG 0780     -SPCOLR 0769
?PMARK 0792     -SPMOVE 079B     -SPNAME 07A4
?PSCRO 08A9     -VATRIS 07AD     -VBLKOF 07B6
?LKON  07BF     -VCOLRS 07C8     -VFILL  07D1
?MOVD  07DA     -VMOVI  07E3     -VNAMES 07EC
?TRNS  07F5     -VRAMD8 0828     -VRAMDU 0831
?RAML8 083A     -VRAMLD 0843     -VRAMRD 07FE
?RAMWR 080A     -VREGRD 0813     -VREGWR 081F
?ETG1  0873     -VSETG2 087C     -VSETSP 084C
?ETTX  0855     -VSPRIS 085E     -VSTATR 0867
?TABRD 0885     -WINDOW 08C4     -XYLOC  088E
```

BOOTS & WHIPS:

The following additions and changes have been made to the library since the last edition of the GRUNT PRESS:

Last Issue: #12   January 28, 1983

23/02/83	ADDED	COMOTOHEX.COM	Creates HEX files from COM files.
22/02/83	ADDED	AUDED.COM AUDED.DOC	Develop sounds on audio chip.
07/04/83	UPDATED	IOLOC.EHO	Version control identifier UM111 added.
07/04/83	CHANGED	LINKTAB.MAC	Name changed from NLINKTAB.MHO; 4 BOS routines added.
13/04/83	ADDED	DEMO.MAC DEMO2.MAC DEMO.MAC DEMO.COM	Demonstration for new programmers – intro to programming in assembly language for the NPC.
02/05/83	ADDED	MENUDRIV.C MENUSLCT.C	Allows user to manipulate cursor and select options on a menu
02/05/83	ADDED	MENUF1.C MENUF2.C	Examples for MENUDRIV.C and MENUSLCT.C

See LIBRARY.DIR on the CORVUS for a complete listing of library software.

GAMES DEPT. HARDWARE LIST

last update MAY 15 1983

Machine	Status
ATARI 400	8K, no problems
ATARI 2600 (VCS)	faulty reset and select switches.
BALLY VIDEOCADE	no controllers, exposed power supply

SPACE PANIC
TURBO
VENTURE

INTELLIVISION

ASTROSMASH
BACKGAMMON
BASEBALL (MAJOR LEAGUE)
BOXING
HORSE RACING
NASL SOCCER
NBA BASKETBALL
NFL FOOTBALL
NHL HOCKEY
PGA GOLF
PITFALL!
POKER/BLACKJACK
ROULETTE
SKIING
SNAFU
SPACE ARMADA
STAR STRIKE
TENNIS

VIC-20

VIC AVENGERS

SPACE PANIC
                              TURBO
                              VENTURE

INTELLIVISION

                              ASTROSMASH
                              BACKGAMMON
                              BASEBALL (MAJOR LEAGUE)
                              BOXING
                              HORSE RACING
                              NASL SOCCER
                              NBA BASKETBALL
                              NFL FOOTBALL
                              NHL HOCKEY
                              PGA GOLF
                              PITFALL!
                              POKER/BLACKJACK
                              ROULETTE
                              SKIING
                              SNAFU
                              SPACE ARMADA
                              STAR STRIKE
                              TENNIS

VIC-20

                              VIC AVENGERS