

THE GRUNT PRESS

(and other wrestling holds)

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COMPANY
CONFIDENTIAL

Lots of info in this issue. The new structure is mentioned alot, so read it and find out who is doing what!

Special welcome to all first time contributors.

NOVEMBER 15

Lets Do IT

(Nothing like a free breakfast to get you going!!)

From the penthouse suite of M. Bate:

Welcome to the Hotel Roosevelt, new home of NABU-TV's program production group. For those of you in the sauna, please stand-by, the tropical temperatures are temporary. Regretfully, you don't have the aesthetic touches of the second floor: offices bereft of furniture, no filing facilities or telephones. All this plus a picture window view of beautiful downtown Westboro featuring the Copeland Building Company's designer tar sands and gravel pit.

Bear w/us folks, our living arrangements are getting better. Watch this space for further developments.

Thanks to all programmers and support groups who busted their butts to get our games quota together for Oct. 1. Having seen games on what is billed as "state-of-the-art" Coleco system, we've definitely got a better product. Certainly our animation and games concepts are superior. Apart from Coleco's arcade licences (Donkey Kong, etc), there isn't much happening. Incidentally, we're working on obtaining cable rights to arcade games, ie. Williams Robotron. Anybody who has seen Leo's Pac-Man will appreciate the kind of quality we can produce in home arcade versions.

In case you had'nt noticed, I'm no longer director of games development. My new title is Imperial Omniscient Director of Creative Services. Watch this space for future developments, startegy, and policy papers.

From the desk of Yves Dupont:

What's happening with Content Development??

A lot of things seem to have changed lately and, probably, many people wonder about it.

First, the structure of the organization has changed. The concept and design is handled by Michael Bate for all Content packages. All development is handled by another group working with me called 'Content Implementation'. Four groups operate within this unit: Games with Chris Wallace, Education with Bill Jones, Information/Computation with Sue Gordon, and Tools (Applications) with John Shortt.

While Michael's group oversees the generation of ideas and their packaging, we develop the software and implement it. Chris Wallace and Bill Jones are also actively working with Michael Bate at the generation of content ideas.

We hope this new organization will generate a greater homogeneity of the content as well as a greater focus from people on specific tasks. Time will tell.

From the desk of Anna Dupont:

Although officially our group's name is "Program Library and Maintenance",our responsibilities currently include the following:

- A) Implementation of the AIDS Quality Assurance Program (QAP)
- B) Establishment and Maintenance of a software library and related functions
- C) Planning for post-implementation software maintenance for CATV products

Needless to say, each of the above ares will give rise to many projects and tasks. I will briefly just describe the first two (as I see them now) in order to give you a flavour of the assignments:

A) AIDS QAP includes:

- 1) Review of current software handover procedures involving the following groups:
 - Software Content Development
 - APS Development
 - QA (Operations)
 - Head End Development

2) Perform acceptance testing of software which is ready for release by AIDS (ie. Engineering)

3) Compile, gather, adapt, define (and obtain agreement on?) software development standards. This includes standards for user interface, documentation, programming, etc.

4) Monitor the adherence to these standards, and where applicable contribute to the revision of these, etc., etc.

B) Software library related tasks include:

- 1) The maintenance of a library of software for:
 - ALL applications
 - system software
 - utilities
 - tools
 - etc.
- 2) Backup/recovery procedures including offsite provisions.
- 3) Establishment of a documentation library.

And much more!

The following persons (in addition to myself) will cause all of the above to happen:

Kathleen Pickard
Francine Auger
Eric Manherz

We need your help and co-operation.

From the Mobile Desk of Bill Bourne
(Somewhere Between Richmond Road and Rosevelt St.)

Well. I've been asked to say a few words about what Software Services now does since the latest tornado of reorganization swept through the company. Well, its about the same as always, except, there are a few new faces on the scene.

First we have the Internal Operating Software Group, which is led into battle by none other than Mark "Bug Eater" Vidger. Mark is responsible for the IOS segment handling software as well as the NABU PC (Thats NABU Personal Computer) Boot ROM. Mark also sort of keeps track of the IOS overall. Norm Siemans has just joined us this week and along with Dave Allen (another consultant, no relation to John) will be working full-time over the next 6 weeks on IOS Unit and System testing. And last but by no means least, that famous young Playboy, who is still looking for somewhere to "shack-up" Warren Belkin is off and running on implementing the Main Menu Selection Program under the creative guidance of Mike Bate. (But Mike is no relation to Software Services of course, He has his own turf to cover)

The other major front in Software Services is called "Software Tools" or "Programming Environments" (Take your pick). The head honcho for this group is none other than the infamous "ED" of this rag...Trevor Pearce. Backing Trevor up are the talents of Eric Mesdag and John Harley (John is our token Co-Op student and another newcomer to the NABU sweatshop (I mean Engineering Dept.) These guys are responsible for analysing, designing and implementing all tools and support software required by applications programmers. They are also producing software to be used in production testing and field service of NABU Personal Computers. The current projects include MCP (segment handling to be ready soon, John Allen has stepped in here to help us out) Production Test Software (John Harley's baby) and a debugger to allow software development on real NABU Personal Computers using an RS-232 link to a NABU 1100 (A Trevor Pearce and Dave Allen Production, comming real soon to a NABU 1100 near you!)

But..But...But What of Kathleen Pickard, our Program Librarian, the person who keeps the act together and the show on the road? Well, day to day operations of the program library (Software storage and tracking, Documentation, Equipment inventories and maintaince) are now officially the responsibility of Anna Dupont. But since we can't afford to be without such important services for a single day, we are going to take some time to get things handed over. The end result is that Anna's

group, of which Kathleen will be a member, will be responsible for the day-to-day operation of the program library and its services and Software Services will be responsible for all tools development and long term analysis, specification and selection of anything to do with programming environments.

See? Confusion explained! Its going to be hectic going for the next few weeks while we try to get through the final stages of turning out a product. The reorganization is designed to help the process along. If it causes any problems at all, speak out! and something will be done to correct it.

From the desk of Sue Gordon:

In my first blurb in the GP I talked about the great future and empire that was to be in Information Services. Slowly but surely heads have been crowned (none rolled yet), the workers have been hired, and now a castle (basement) at 411 Roosevelt has been appropriated.

The kingdom of IS is now proclaimed:

SUE GORDON: Chief paper pusher and "how's it goin'" worrier about IS's national product - Information and computation Services.
[Manager, Information Services, Computational Services]

JOHN SHORTT - Although born yesterday, today is heading Tool Development (no, not maces and spears, but armour for sure) to allow Information Providers out there to develop services deliverable on the NABU network
[Project Manager, Tools Development]

CHUCK TREWARTHA - Visiting from a neighbouring kingdom called Mobius (mobeus) Chuck develops various software in 3 or 4 days. He is currently completing page retrieval software (he's in the fourth day) for use in Restaurant Guide and Source Cable Services. He'll be working with John above and technically helping others below in the service development side.
[Senior Programmer]

BRIAN FLEMING - A consulting lord, Brian is developing a Stock Market Summary Service and monitoring a service developed from an extract of data from The Source (a very large info kingdom in the US of A)
[Project Leader]

Working with Brian:

DOUG WIGGINS - A(nother) visitor from Mobius (see above) programming the Stock Market Summary service with BF.
[Programmer]

GORD MOAT - Designed our defences and, in his sparetime, is talking to The Source to develop the extract service.
[Programmer/Analyst]

JANE FORDHAM - A consulting lady. Jane is developing the Restaurant Guide service and Flashcards - numbers, letters. Using slave labour from The Citizen and her home fief we just might make our deadlines (emphasis on dead after several 3AM stints)
[Project Leader]

Working with Jane:

TANYA THOMPSON - Permanent court artiste, Tanya draws pictures for various services - Restaurant Guide, Flashcards - maps, clowns and buildings - demos at your bidding (by appointment only)
[Graphics Designer]

HOWIE BAKER - A temporary serf, Howie is inputting graphics (send your sympathies to P.O. Box ONO) and designing bulls and bears for Brian's & Doug's service. Birds and bees are for a later service.
[Jr. Programmer]

JAMIE EDWARD - A really temporary temporary serf, Jamie inputs graphics on a part-time basis - even when he's here! Flashcard tulips are his forte. Friday evenings are not!
[Jr. Programmer]

JUDY WOLANSKI - From a faraway kingdom, where TV's are unknown, Judy is consulting on a TV Listings service. I agreed to buy her a TV Guide but not a TV - how's she going to see the fabulous service we all envisage!?
[Sn. Analyst]

HEINZ WIGGESHOFF (Pickel) - From a really faraway kingdom, Heinz is consulting with us to creat a metric conversion service - the loan computation service - is next on his list of challenges to conquer.
[Consultant]

From the desk of Chris Wallace:

It has been a while since any of us have appeared in print in the GP. As a probable reaction to GG leaving, excitement has died down. A period of mourning ensued. But the "Golden GROG" competition is back on and enthusiasm is beginning to build once again.

Coming up quickly to their completion dates are "Astro Lander", a

Dale MacKenzie super version, "Tennis" by Ken Shimisu, "B.C. Match-Up" by you-know-who, "Wiz-Type", "circuit", and "Music II" from the boys at ARTECH. If everything goes well we could be handing over 16 games for the field trial. That's 16 down and 14 to go for January 15. New games and assignments are currently being negotiated (see C.W.).

I am pleased to announce that as of this publication date, all games are on schedule (So far there are 10 completed games in the hands of Anna Dupont (APS) and Don Sawyer (QA). Part of the accept/reject procedure for games involves them. They will be looking at documentation and playability respectively. I hear they are accepting lunch invitations and are open to suggestions.

Ken Shimisu has assumed an expanded role 'down under'. He will be responsible for software standards and training new comers in Z80 and programming procedures. He tells me that from now on he wants to be called "Mr. Shimisu" or a simple "sir" will suffice. All students will fall under Ken's technical supervision. So far everything we have hoped for from Chang, Laura and Greg has worked out well. Keep it up.

Installed 'down under' in Roosevelt, it seems that everyone is giving up their Vic Tanny memberships. Why bother using their sauna when we have one of our own right here. It is a problem that we are trying to get solved as quickly as possible, so we will all have to be patient. (Read: sweat it out!) Ditto for phones.

Games Dept. Personnel:

Director: Chris Wallace

Programmers: Dale MacKenzie
Arthur Ham
Ken Shimisu

Part-time: Greg Adams
Tim Ranger
Todd McNaught
Leo Binkowski
Chang Chow
Laura Schening

And a host of contract software houses.

Lest we forget: Welcome to Tracy O'Keefe. Tracy is already well known for her consistent good humor and efforts in getting the good shi? Roosevelt floating. Although it is diffucult to define her job, she will be helping out in many areas for the Games, Information, Education and Computation groups.

From the Desk of Bill Jones:

The educational tier of NABU is well planned and thought out

thanks to the planning of Maria Cioni, Director, Educational Product Planning. Three weeks ago I arrived to direct the implementation of the educational tier. For January we will offer 11 applications with Logo heading the list:

- Logo
- Logo demo
- Logo Tutorial
- Logo Bloc I
- Computing Literary
- Word Processing
- Typing Wiz
- Music I, II, III
- Toys + Legends

Who am I? Taught school for 13 years, 7 years as an administrator. 3 years with a private firm doing stand up training. Originally from Nova Scotia. Been here 14 years and now call Ottawa home.

From the desk of John Shortt

As some of you know I have been using the Aztec C compiler that we have for the Nabu 1100. The compiler has two big drawbacks: (1) it doesn't take advantage of Z-80 instructions, using 8080 instructions only in the code it generates and (2) it tends to hang on some simple syntax errors, sometimes without reporting the error. This can be a real nuisance so here is a list of some of the symptoms that I've found can cause this to happen:

- (a) '}' without opening '{' (same for ')' without '('),
- (b) no carriage-return on the last source line,
- (c) the construct:
 <label>: }
instead of the syntactically correct:
 <label>: ; }.

I have also found some bugs in the run-time library that I have fixed (we have the source). I will submit a new copy of the sources and library to the software library in the near future.

The good news about the C compiler is that it is fast! I did some simple timing of both it and the PL/M that we have and got the following results:

	lines of source	elapsed compile time
C	386	1:50

The C compiler is an order of magnitude faster than the PL/M compiler !

From the Roosevelt tanning spa of Trevor Pearce:

If you come to visit my new location please bring the following:

- i) a pair of sun glasses to ease the glare of the windows on the CRTs.
- ii) a hanger for your coat (there is only one hanger and it is usually full @ 8:00 am).
- iii) lots of patience, please.

The move to Roosevelt has left me in a rather unorganized state. When everything gets back to normal(?) the following projects will be on the roll:

- i) MCP - MCP is a short term solution to the problem of creating an application development environment. Ideally, MCP should provide all the functions of the NABU Personal Computer's operating system. In reality, version 1 exists which emulates a limited number of the IOS functions and has some other 'peculiarities'. Plans exist to produce version 2 which will include segment handling and more IOS functions. To help get the most complete possible version 2, please scrawl a quick note describing any updates, mods, incursions, etc. which would make MCP more usable and put the note in my in basket. I will try to incorporate as much as possible.

Status on MCP version 2: Many thanks are owed to John Allen for getting the segment handling code functional in such a short time. With luck, version 2 may be ready by the end of next week.

- ii) ZSID under MCP - ZSID may be modified to run under MCP. Please see me for a description of the procedure. John Allen has used the modified version with relatively few problems. He has found that it hangs occasionally for no apparent reason. Please note that the modified version will not disable the interrupts so any routines attached to the clock will still execute at all times (yes, even after a breakpoint and during ZSID dialogue). A further modification may be available to turn off the clock attach routines, but it is not too high on the list.

- iii) NABU PC Debugger - Dave Allen is in on contract to get a debugger working for the NABU PC. The idea is to have a small amount of code in the PC (say 128 bytes) communicating with a very intelligent debugger in an 1100. The 1100 software could then drive the PC creating a very nice programming environment. The real beauty of the system is that the debugger does not clog up PC memory and the 'infinite' resources of the 1100 can be exploited (Arr, Arr). The first version should be available by the end of next week and then all we need is the RS 232 boards to drive the PC and of course some PC's!!

iv) Production test software - Although this wont concern too many of us grunts. John Harley is putting together some test software for use in the production of NABU PC's. Of course it may be just a rumor, but PC's may be in production within the next few weeks!!

FROM the in transit desk of Arthur Ham:

%^&* (^%\$ %\$## ^& PLM %\$*(&*\$@ (&%^ %*%\$ %\$&* L80. There I'm glad I got that out of my system. After many trials and tribulations I have finally given up on PLM. It takes too long to compile the source and it produces very inefficient code. This causes me to run out of room when I tried to link my Backgammon program. Which is the cause of the second outburst, even though my program was below the B000 limit imposed by the MCP the linker will only link to about A200 due to the large number of global symbols generated by PLM. John Allen and I ended up creating a BASIC optimizer of the MAC file produced by the PLM compiler. It removes redundant loads of HL and A registers after the value had just been loaded from the register. It also removes the dummy label needed in each source file too get it to compile and all the extraneous jumps around each procedure in the source. With this "optimization" I was able to get my program to fit the linker.

Speaking of programing languages there seem to be numerous languages available on the Nabu 1100. I have seen the following:

PLM	-bleech
PASCAL	-???
FORTTRAN	- "
BASIC	- interpritive - great for quick fixes and such
	- compiled - Eric ?
MACRO	- everyones favorite

I have been told that we have the following:

'C'	
PILOT	- educational
COBOL	- any business types out there
LOGO	- coming soon ?

I have found PLM unacceptable for the above reasons are there any comments about the others from people who have tried them?

I my efforts to automate the above optimization procedure, I learn some interesting things about the submit file processing. The submit processor creates a file called \$\$\$SUB on your disk and in this file it puts the rest of the commands in the submit file with all the \$1 variables replaced. Each line in the submit file is put in a 128 byte block with the first byte containing a byte count for the number of characters in the line. The end of

the line is also marked by a null byte. The lines appear in the \$\$\$\$.SUB file in the reverse order to that of the original .SUB file. This allows the submit processor to remove lines from the file without rewriting it. Neat eh.

My compliments to Trevor and his MCP. It took only a few hours to convert my Backgammon program to run in the home Nabu environment.

If you have every had the system crash on you from Wordstar and lost 42 hours of editing, you will be glad to know that

JJJJJ	OOO	H H	N N
J	O O	H H	NN N
J	O O	HHHHH	N N N
J J	O O	H H	N NN
JJ	OOO	H H	N N
A	L	L	EEEE N N
A A	L	L	E NN N
A A	L	L	EEE N N N
AAAAAAA	L	L	E N NN
A A	LLLLL	LLLLL	EEEE N N

(large enough type John?)

has discovered a method of saving the file. When the system crashes or hangs proceed as follows:

DON'T TURN OFF 1100

~~warm~~ boot

SAVE 150 JUNK.TXT

ZSID JUNK.TXT

D7849-FFFF

M7849 xxxx 100

^C

SAVE ?? JUNK2.TXT

WSJUNK2.TXT

- save a core image

- 7849 should be the start of the text buffer and dump to find the end.

-move the text buffer down to low memory, xxxx is the address of the end of the text buffer.

- savethenewtext buffer, ?? is the number of 128 byte blocks to save.

- checkthefileand delete any junk at the end

From the unattended desk of Eric Mesdag

As you all may have noticed, I have been away for a couple of weeks. I have been told that a change is as good as a rest, so I went back to dear old Dad's farm to pick a little tobacco (guess who told me that little gem). Now that I am back, hoping to recover from farm life, the powers that be move us over to Roosevelt. I wonder if they were talking to dear old Dad.

There is some news that I want to repeat for those who aren't aware of it yet. We have a new software librarian in our midst. Her name is Kathleen Pickard. She shall be taking over the day to day operation of the library, and is the person to see about existing documentation. The software library itself will move under Anna Dupont's jurisdiction. The transition will take place shortly. Also in the works are plans to have somebody come in to do all the little things that I have been doing in the past. This person will lose screwdrivers, move the tool box around without telling anybody, poke at games boards, stare at 1100 card pages in awe, dissect games controllers, switch peripherals around when no one is looking, and call in the troops for those heavy repair jobs, and the paperwork for all of the above. What will I do then you ask. Somebody suggested programming. It would mean spending more time at my desk. Oh well, a change is as good as a rest.

FROM THE SLOWLY DISAPPEARING DESK OF WARREN BELKIN...

Well, my game Star Quest is now on hold for the next 6 weeks to 2 months. This is because I am working on a much higher priority project, the Main Menu for the Nabu Network, and things seem to be progressing well.

Now for some serious stuff, my desk!! I don't know if any of you have seen the notice pasted on it, so in case you have not, I will re-iterate it's contents here. It seems that whenever anyone needs something, they somehow obtain it from within my work space. Now, since matter cannot be created or destroyed (excluding nuclear and cafeteria substances), and since matter is disappearing from my desk, the contents of my desk are slowly being diminished. To say it simpler... stop stealing my stuff you hosers!!! If you need supplies, get them from the cabinet. This also includes chairs (he says emphatically, after losing his chair over 5 times!!!!). It may seem like a picky point, but I am getting tired of making trips to Richmond Road. There, that feels better (to have yelled at everyone). Anyway, I probably won't have any exciting news for the next two months, since I will only be doing boring stuff like menus.

From the Program Library :

In case any of you missed the introductions, the Program Library now has a Program Librarian. My name is Kathleen Pickard and I can generally be found in the basement at the new location on Roosevelt (I'd barely been here three weeks when they stuck us in a basement - is this a hint?) I'm still kind of figuring out what and where everything is, but I'll do my best to help out with any requests you may have. Hopefully it won't be too long before everything is fully geared up to support your applications.

There's just one thing I want to remind you about (or let you know about if you're a new face) and that's our offsite backup system. It operates like this :

We have two offsite backup boxes containing diskettes of material that is to be backed up. One of these boxes is always offsite at any given time. The other is either here or travelling to or from Mobius, our offsite location. The box usually goes out with new updates on Friday mornings and Tuesday evenings. When one of the boxes is in the Library there is a red sign posted on the filing cabinet nearest the entrance to the room. If you have a diskette(s) you want backed up please give me a copy of it (them) to be included in the boxes. You have two choices of how you want to do things. Your backup can be kept offsite permanently and only be brought back when you specifically request it. Or you can make two copies, one for each box, so that your diskettes are continually being brought back here. The first method is best if you do not plan to make many changes to the info on the diskette; the second provides you with the opportunity to update your diskette frequently. If you've got any questions please give me a call or come and see me.

I'm looking forward to working with all of you (believe me ,if you were stuck in a basement with all these games programmers you'd be looking forward to seeing real people too!!!!) However a bit of gossip: rumour has it that a certain programmer, who shall remain nameless, is in deep depression these days due to betrayal by one of his own creations - he can't beat me at backgammon! See you around!

Kathleen

FROM THE NEWLY ACQUIRED DESK OF GREGORY ADAMS -----

Before I even get into the swing of this I would like to thank all of the programmers in the outback. These include Ken, Tod, Arthur, Trevor (for his advice on documenting a file), Leo and lastly . Thanks people. Since I have been here each of the above mentioned people has in some way contributed to what I know. no comments on that last line please.

Just recently I re-designed the Nabu skiing course. Liking a challenge I made it more difficult to the hatred of other programmers but to the joy of Chris Wallace. Now I am awaiting an assignment and in the mean time learning new things.

Well that's all that I can think of to say except if Leo dislikes the coffee let him make his own.

He end.....le ende`
for Tod)

DOOTS and WHIMPS

The following files have been added to the library since the last
edition of the GRUNT PRESS:

Last Issue: #6 Aug 27, 1982

SEPT 3, 1982 ----- addition a compiler for 'C'
 programming language
 is now available on
 diskette at the
 CORVUS system

SEPT 7, 1982 added LINKTAB.EXA - contains all EXTERNAL
 declarations needed to access the
 entry points in LINKTAB.MHO

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