

# TPUG Newsletter

Views and News of Toronto PET Users Group

c/o John Easton, 258 Lake Promenade, Etobicoke, Ontario, M8W 1B3 phone (416) 251-1511

Fall - 2017

## From Management

### Changes

2017 has been a year of change for TPUG. Back at the annual meeting in February the membership voted to officially dissolve the corporation and adopt a new and vastly simplified constitution. Highlights of the new constitution:

- the board of directors has been replaced with a management committee of five members
- each seat has a two year term
- three seats will expire in odd years (2019, 2021, etc.), two in even years
- the offices of the management committee are: chairperson, secretary, treasurer, and two members without title
- TPUG's annual general meeting will continue to be held in February each year

The members that were elected to the new committee are:

Ian Colquhoun  
Ernie Chorny  
Leif Bloomquist  
Frank Michielli  
Stewart Russell

I would like to extend a sincere thank you to all of the long time board members that kept TPUG running for all these years. Your stalwart dedication to the club is appreciated by all of us. And don't fear, there are more than enough jobs that we still need your help with!

### Meetings

2017 has also seen a resurgence in the popularity of our monthly chapter meetings. Not only has attendance been consistently higher than we've seen in recent times, but we've had several members give some fantastic demos. One month was dedicated to our namesake - the PET. We enjoyed several Amiga-centric presentations, and we witnessed the resurrection of Habitat, aka NeoHabitat. If you live in the GTA and you have not made the trek out to one of our monthly meetings, you really should!

### Newsletter

You caught us. It looks as if 2017 is going to be another year that we only manage to get one newsletter out to you. The management committee has been considering making a change to the way we deliver the newsletter to hopefully make it easier for us to put together and so that the content makes it to you in a more timely fashion. We are considering moving to an online version. Instead of leveraging the website only for meeting announcements and the like, we start publishing articles in more of a blog style.

This means two things. First, there would no longer be a print version of the newsletter. Secondly, there would only be the one option for membership dues - \$10 CAD.

What do you think? We would really like to receive your thoughts about this change. Drop us an email at [info@tpug.ca](mailto:info@tpug.ca) and let us know, good or no good.

**continued on page 4**

## Membership Information

Website: [www.tpug.ca](http://www.tpug.ca)  
e-mail: [info@tpug.ca](mailto:info@tpug.ca)

Membership Rates 2018  
\$10 per year

## Management Committee

Ian Colquhoun  
Ernie Chorny  
Leif Bloomquist  
Frank Michielli  
Stewart Russell

## Librarians

Head Librarian	Greg VanLaer
Amiga	Ernie Chorny
C128	Tom Luff
CP/M	Ernie Chorny
GEOS	Joe Palumbo
C64	Joe Palumbo
C64 Education	Greg VanLaer
Comal	Ernie Chorny
Plus/4	Ernie Chorny
Vic 20	Ernie Chorny
PET/CBM/SuperPET	John Easton

## Support

Store	Frank Michielli
Telephone	John Easton
Disk Orders	Librarians
Member Records	Ian Colquhoun
Meetings	Leif Bloomquist
	Ernie Chorny
Shows	Tom Luff
	Ernie Chorny
Webmaster	Ian Colquhoun

## Newsletter

Editor John Easton (416) 251-1511  
[jeaston@rogers.com](mailto:jeaston@rogers.com)

## Meeting Schedule

Westside and Amiga West: Third Thursday of the month (except summer) at Alderwood United Church, 44 Delma Drive. Delma Drive is just west of and parallel to Browns Line, south of the Queen Elizabeth Highway, north of Horner Avenue. From the west, exit QEW at Evans Avenue, east on Evans to next stoplight, south on Gair to Delma Drive. From the north or east, follow signs from QEW or Hwy. 427 to Browns Line, exit right to Evans Avenue, turn south on Gair (first stoplight) to Delma.

### Contact

Leif Bloomquist — 416-737-2328 — [leif@schemafactor.com](mailto:leif@schemafactor.com)  
or  
Ernie Chorny — 905-279-2730 — [chorny@bell.net](mailto:chorny@bell.net)



## From your Editor...

Apologies if things look a little different in this edition and perhaps not quite as polished. I felt we needed to get this newsletter out as quick as possible and it is my first go at using a proper desktop publishing tool. All complaints can be addressed to me... they may or may not be considered!

Your stand-in editor,  
Ian

***TPUG Newsletter is published (sometimes) twice yearly by the Toronto PET Users Group (TPUG). TPUG is a volunteer non-profit club dedicated to the service and support of owners and users of Commodore computers.***

***All rights to material published in TPUG Newsletter are reserved by TPUG, and no material may be reprinted without written permission, except where specifically stated. When reprinting is authorized, please credit TPUG Newsletter, the issue date, and the author.***

***Articles, letters, tips, questions, art, etc. are welcome. Send hardcopy or disks "Attn: TPUG Newsletter", or use Internet e-mail.***

***Advertisements are also welcome. Member's small ads are free. Commercial ads are \$100 per page with a \$10 minimum.***

**Notice to new owners of SuperPet and CBM 8296 machines**

TPUG has copies of the Waterloo LANGUAGE DISKS (3 in 4040 format) as supplied with the SuperPet on original purchase.

TPUG has the EXECUDESK disk (8050 format) as supplied with the CBM 8296 on original purchase.

These disks are an integral part of the operating systems of the above machines and since Commodore insisted on referring owners of these machines to TPUG for service, we have added these somewhat proprietary (and also virtually unobtainable) disks to our library - all part of the TPUG mandate of service to our members.

We also will attempt to search out copies of original program disks to replace corrupted disks. In this category you will find such programs as VISICALC, WordPro, and PaperClip.

**TPUG AGM**

Take notice that the Annual General Meeting of TPUG will be held in conjunction with the regular February 15th 2018 meeting, only earlier—7:00 p.m. This is your opportunity to discuss club issues and to contribute to the organization as desired.

Typical items covered at an Annual Meeting are, but not limited to: quorum, minutes of the previous meeting, reports on activities within the club, new business, nominations of officers and election of officers.

If you are unable to attend, and wish your proxy vote counted, please ensure that your assigned proxy is in the hands of the Board prior to the meeting. E-mail to Ian Colquhoun <icolquhoun@gmail.com> will be considered a legitimate means of submitting a proxy to the Board.

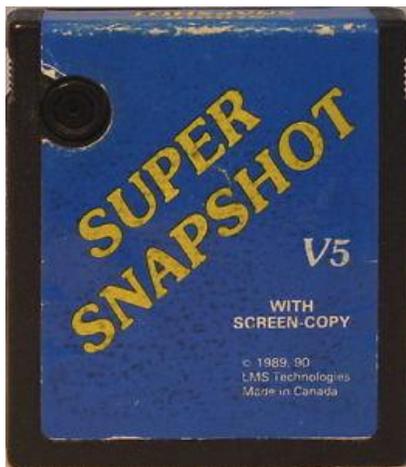
**Typical Proxy Voting Format**

This will allow ..... to vote on my behalf on all matters at the Annual Meeting of TPUG held 15 February 2018.

Name ..... TPUG Member # .....

Signature ..... Date .....

Come prepared to volunteer or at least ... vote



**JP. PBM Products by Mail is the NEW Manufacturer of Super Snapshot Cartridge V5.22 - NOW SHIPPING**

\*CURRENT Commodore Club MEMBERS SAVE \$5 MORE off the regular price before freight and taxes.

Mail Cheque/M.O. to:  
 JP PBM Products by Mail  
 BOX 60515 JANE/WILSON P/O  
 DOWNSVIEW, ONTARIO  
 CANADA M3L 1B0

SSv5.22 Cartridge	\$ 74.95
*C= Club members (-\$5)	\$ _____
32K RAM add \$19	+\$ _____
subtotal	\$ _____
+10% Freight (15% USA)	\$ _____

All Prices Are Cdn. Funds  
 US Funds at par  
 Send \$2 for a catalogue  
 on disk (1541 format)

Subtotal	\$ _____
Canadians add GST/HST	+\$ _____
TOTAL(CDN. FUNDS)	\$ _____

**Visit JPPBM.COM for full product listings and PayPal ordering information.**

## cont'd From Management

### World of Commodore

Due to a scheduling mixup, the show this year is a week later than usual. Join us on December 9 and 10 for another great lineup of demonstrations, exhibits, and vendors!

Syd & Bryan – A dual stick joystick interface for the C64 with a game demo

Syd Bolton – An UNAIRED Pilot for Bits & Bytes

J r mie Marsin – Sydney Hunter and The Sacred Tribe: A new game for the Commodore 64

David Zvekic – DizzyTorrent: A BitTorrent Client for the 68k Amiga

Francois Leveille – The PLAIN truth about the Commodore 64 PLA

Leif Bloomquist – Multiplayer Roguelike game for the Commodore 64 (and others!)

Kevin Casteels – Centronian BBS and Sysoping in 2017

Zbigniew Stachniak – Annals of Digital Archaeology

Keep an eye on [www.tpug.ca](http://www.tpug.ca) for the final schedule as the date gets closer and any other info about the show you might be looking for. See you all at the Admiral Inn at Erin Mills Parkway and the QEW in Mississauga real soon!

P.S. Save Ian's and Golan's sanity and purchase your WoC admission and TPUG 2018 memberships with Paypal on [www.tpug.ca](http://www.tpug.ca) now!

Ian Colquhoun



**Do you have your TPUG CD Library disk yet?  
Just \$20.00 (plus any applicable taxes)**

<b>TPUG</b>
Toronto PET Users Group Complete Disk Library 2009
Amiga — C64 — VIC20 — COMAL — PET — SuperPet — GEOS — B128 — C128 — CP/M — Educational Software Plus Catalogs, Emulators, Tools, and Historical Photos
<a href="http://www.tpug.ca">www.tpug.ca</a>

## New Product: Ultimate-64

From: <http://www.1541ultimate.net/>  
July 12, 2017

It's time to announce the upcoming new "Ultimate-64" board!

In order to sustain the love for the Commodore 64, with failing machines, power supplies and flaky old connectors, I proudly present a new main board for your beloved C64 case.

What is it?! This board is a hardware implementation (FPGA) of the entire C64, and it includes the Ultimate-II+ as well. An ALL IN ONE solution!

QUMA (Questions you may ask):

Project

Why?!

Just because the Commodore 64 is AWESOME!

What does the introduction of the Ultimate 64 mean for the established Ultimate-II+ product? Not much. The Ultimate-II+ will be continued, alongside of the Ultimate 64.

How compatible is the Ultimate 64 actually? At this point it is "pretty good". Just like with the Ultimate-II+, software updates are used to fix issues.

"Pretty good", sounds like it's not 100%. Why sell a product that is not 100%?

100% is an awful number. To reach this, more feedback from the community is needed, especially from other C64 experts that can help pinpoint the issues. Without exposure in the field, it is virtually impossible to make it perfect, as different people look at different things.

How far are you really? Have you ever made it to run any demos?

I started the project some years ago, but never designed production-ready hardware for it. Some months ago, I picked up the pieces and merged it with the latest Ultimate-II+ code. This combination was prototyped on a product from Technolution B.V. (the company I work for); a product that uses an Altera (=Intel) FPGA and has DVI output as well as USB ports. Using a USB keyboard, I managed to type on this "thing" and load some demos from the 'Ultimate' drive. Many demos and games seemed to work flawlessly. From there, I decided I should first create the hardware platform with all the required I/O, such that I could do better tests. The result of this is shown in the 3D model above.

So, it will still take some time before the Ultimate 64 is ready to be sent to customers?

Yes. As per today, July 12, the purchase order for some prototypes was sent to the manufacturer. After the summer holiday I will do some initial testing and probably start up a larger production run after the initial mistakes have been fixed. I expect the board to be ready for sale in Q4 this year.

Does it come with a case?

No. This product will be a bare motherboard, which you can place in an existing C64 case, OR in a newly manufactured case from Individual Computers.

What power supply do I need for this board?

The power supply that I'll include with the product, will be a simple 12V DC adapter.



If this is just emulation, I will just run an emulator on the PC....

No, no, no! First of all, this is not an "emulation!" It is

an implementation. The FPGA implements the logic gates that make up a C64. So no, you won't! How dare you! Besides, you won't be able to attach any peripherals to your emulator, would you?

Oh okay, so I can attach any C64 peripheral?

That's the idea. See the section of I/O and controls for more information.

I own a 1541 Ultimate-II, or an Ultimate-II+... This

## Ultimate-64 cont'd...

new product, does that mean that no more software updates will come out for my unit? No. In fact, the Ultimate-II+ inside of the Ultimate-64 is based on the same code. Updates for the U-II+ will automatically merge into the Ultimate 64 and vice versa.

### Audio

Your emulated SID is "okay", but I still like the real thing. Tell me I can use real SID chips? The board supports both 6581 as well as 8580 chips. The voltage for these chips is set by jumpers, as well as the external filter components.

Jumpers? Why not software controlled? There is no need for software control, because you can not switch chips on the fly under software control anyway.

As the SID is analog, I am wondering: Is the output of the real SID chip available when using HDMI? The output of the SID is digitized on the board and the digital samples are merged with the video into the HDMI stream. So, yes!

Nice that I can put a real SID chip in there, but do I really need to? No, you don't. The machine will run fine without. The FPGA version of the SID will then generate the audio output. So you can switch between the "real" analog and the FPGA SID.

### Video

What resolution does the HDMI output use? The output resolution is 720 x 576 at 50 Hz (for the PAL version), also noted as 576p50. This is a standard resolution that all HDMI capable screens are supposed to support, according to the CEA-861 standard. However, to meet the exact timing of a C64, the timing parameters of this video mode are slightly modified. I have not come across screens that do not accept the generated HDMI signal.

What are the frame delays of the digital HDMI

port? None. There is no frame buffer, so there is no need to worry. Some screens, tho, especially non-gaming screens may introduce some latency. I observed this with a 4K screen that actually resampled the output to just 30Hz. I am pretty sure TVs do not have this problem.

So if there is no frame buffer, does that mean that scrollers and such are perfectly smooth? Yes! If your TV renders the image at the speed it is sent over the HDMI link, your scroller and game will be perfectly smooth.

Does the Ultimate 64 support both PAL and HDMI output at the same time? Yes. PAL and HDMI are both generated at the same time.

About the PAL output, does it support separated Luma and Chroma, as in S-Video? Yes, it does. Both signals are available on the 8-pin DIN connector, as well as a combined composite signal. You may need a specialty cable to get the signals out, just like on an original C64.

You mentioned 576p... that seems like about twice the number of lines needed. What do you do with the other lines? The Ultimate 64 outputs a dimmer version of the previous line just below the main video line. So every line is drawn twice. The dim line gives an awesome CRT effect!

But, I live in Canada.. Will this work on my set? All modern screens support 576p for PAL as well as 480p for NTSC.

For timing compatibility with my tapes and such, I assume I need to have an NTSC version.. Will you make an NTSC version at all? Yes. NTSC will be implemented in the near future as well.

### Cartridges

Does the Ultimate 64 support external cartridges? Yes, the cartridge port is fully supported.

So I can insert an Ultimate-II+ module and have an

## Ultimate-64 cont'd...

awesome system? :-)

You could, but you don't need to. The Ultimate-II+ is fully integrated into the Ultimate-64 board.

Oh, but how is this possible? You mentioned I can use external carts?

You could see it as a port extender. Obviously, you cannot use the same features of the expanded port at the same time. But, you can, for example, use the REU from the build-in Ultimate-II+ function, together with an external music cartridge, or utility cartridge that allows some registers at \$DF00. And of course, when you turn off all cartridge emulation features of the Ultimate-II+, the cartridge port is free to use.

I/O and controls

Is the tape port supported?

Yes.

How do I connect the Ultimate-II+ tape adapter then?

You don't need to. The emulated tape drive automatically 'connects' to the tape pins when playing TAP files.

How about the User Port? On the picture it seems that the User port is no more.. Boo hoo!

You're right, the User Port is no longer available at the original position. However, all signals from the User Port are available from a pin-header on the board. It is therefore possible to create an extension cable that brings out the user port.

So, as the Ultimate-II+ is integrated, it comes with the emulated floppy drive, correct?

Yes, that is correct.

And, I don't need to connect an external IEC cable to make use of this drive?

No, that is no longer required, because it is all inside of one chip.

Does the board have Ethernet?

Yes, just like the Ultimate-II+, the Ultimate 64 will also have an Ethernet port. Even more so, the plan is to release a version with WiFi as well at a modest higher price.

Buttons? The Ultimate-II+ had buttons, but they seem to have gotten lost.. How do I...?

Relax.. There is still one button, in the place of the original power switch. This momentary switch is used to turn on the power and get into the Ultimate menu. Reset and freeze are implemented by holding the button and/or hitting the RESTORE key. You can turn off the machine from a menu option, or hold the button for 4 seconds..

Gideon's Logic Architectures



## World of Commodore 2017

Saturday December 9 – Sunday December 10, 2017

Vendor setup @ 8:00am

Doors open @ 10:00am

Toronto, Ontario, Canada



The Toronto PET Users Group (TPUG) is pleased to announce the World of Commodore! TPUG would like everyone to join us for a weekend of all things Commodore!

- Information about and displays of a variety of Commodore computers
- Demonstrations of new hardware and software projects using Commodore equipment
- Screenings of Commodore-related videos
- Vendors selling the latest hardware and

software available for Commodore computers as well as classic hardware, accessories, applications, games and much more

- The always popular freebie table! Please feel free to drop off any items you no longer want and help yourself to some goodies. You never know what you'll find!

Check out the [presentations page](#) for details on this and other talks.



## New Releases for the VIC-20

Courtesy of the VIC-20 Denial Forums — <http://sleepingelephant.com/denial/>

Name: NinjaTerm

Author: The Sharp Ninja (Payton Byrd)

Released: September 2, 2017

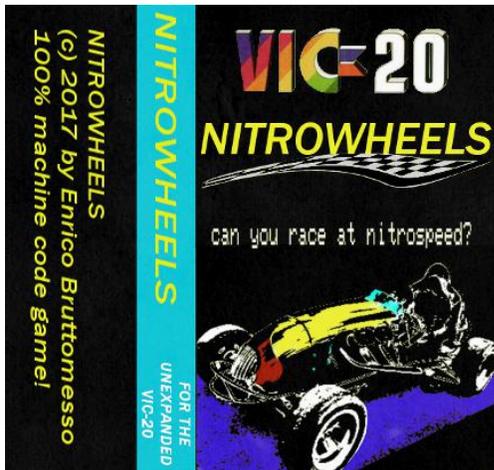
Genre: Communications

Requirements: VIC-20 16k+

Description: Communications terminal to get your VIC 20 online. Works with any userport modem, including WIFI modems and tcpser.

Project Site and Downloads:

<https://sharpninja.github.io/NinjaTerm/>



Name: NitroWheels

Author: Enrico Bruttomesso (Idxstx)

Released: September 19, 2017

Genre: Racing

Requirements: unexpanded VIC-20 (PAL)

Description: A racing game where you drive one of those race cars sketched by you on the exercise book when you were a kid. "Can you race at nitrospeed?"

Download (UPDATED version with smoother gameplay + difficulty levels):

NitroWheels zip archive (all formats):

<http://www.nonsolo8bit.it/upload/nitrowheels-r3.zip>

NitroWheels tap format:

<http://www.nonsolo8bit.it/upload/nitrowheels-r3.tap>

NitroWheels d64 format:

<http://www.nonsolo8bit.it/upload/nitrowheels-r3.d64>

NitroWheels prg format:

<http://www.nonsolo8bit.it/upload/nitrowheels-r3.prg>



Name: 2 Horror Games ( Haunt / It Came from the Grave)

Author: Jeff Daniels

Released: September 30, 2017

Requirements: unexpanded VIC, joystick recommended (required for one program), keyboard control (WASD).

Description: A collection of Halloween themed games.

Download:

<http://www.sleepingelephant.com/denial/2horrorgames/index.html>

**2 HORROR GAMES**  
FOR YOUR COMMODORE VIC 20



## Amiga News

### New Amiga 500 Cases

It looks like the folks at a1200.net are working on another product to keep our old Amigas looking as good as when they were new. In a follow-up to their hugely successful Kickstarter campaigns for new replacement Amiga 1200 cases and keycaps, their website is hinting at a new campaign for new replacement Amiga 500 cases. We'll let you know when they make a formal announcement.

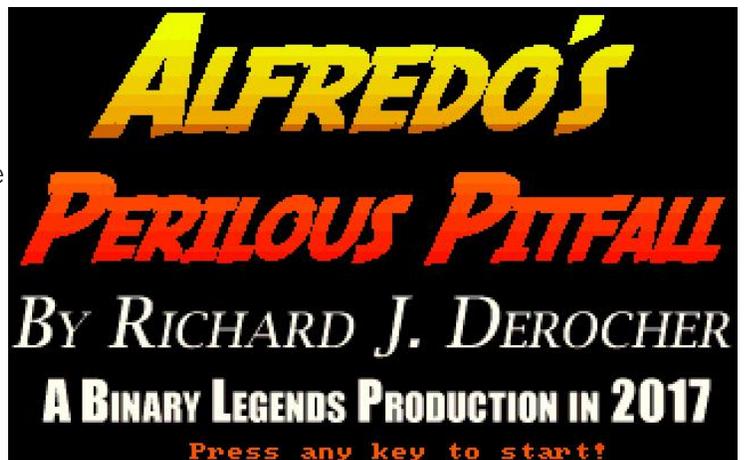
See <https://www.a1200.net> for more information.

### ALFREDO'S PERILOUS PITFALL (AMIGA VERSION) BY RICHARD J. DEROCHER A BINARY LEGENDS PRODUCTION IN 2017

Download the ADF image from Aminet:  
<http://aminet.net/pix/anim/alfredo.adf>

For those of you not familiar with Alfredo - he is a stick figure that was the star of little animation "demos" on the Softdisk Publishing line of disk magazines back in the 1980's.

Alfredo originally debuted in Alfredo's Lost Cause by Matthew Heeschen. This first Alfredo adventure was published in 1985 on Softdisk for the Apple II. Mike Nuzzo would go on to create several more Alfredo adventures / animations that would also be published on the Softdisk magazine.

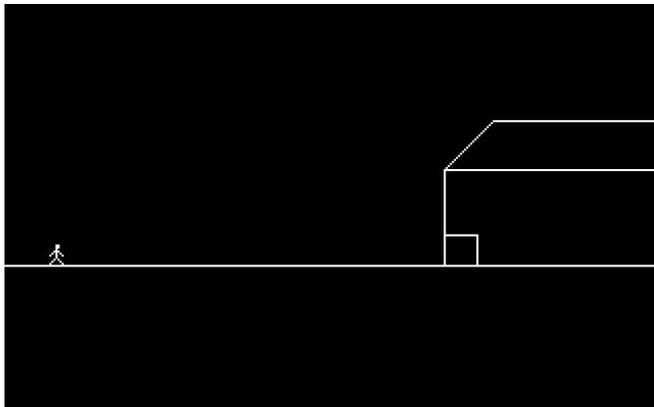


Some of the Alfredo adventures were ported to the Commodore 64 for the Loadstar magazine as well as for MS-DOS machines for the Big Blue Disk magazine.

Back in the year 2000, I programmed two original Alfredo animations for the Commodore 64 - The Return of Alfredo and Alfredo's Perilous Pitfall. They were both published on Loadstar which was still being published at the time.

Now thanks to AMOS, Alfredo makes his Amiga debut in this port of my C64 original.

This project was started back in 2012. I wanted to learn AMOS and I figured that this would be a fun little project for my first AMOS program. This was something that I would pick up once in awhile and do some coding on and then put away for months... But now I finally got around to wrapping it up.



When I coded Alfredo's Perilous Pitfall, I tried to imitate the style of the original Alfredo adventures, so it has VERY basic 8-bit vector style graphics.

Enjoy this little animation. Also included on this disk is the AMOS source code if you want to look at it, modify it, or maybe learn from it.

Note: The mouse pointer does not disappear, as while testing, I found that using AMOS's HIDE command would cause a GURU on one of the lift scenes. My guess is that since I used a hardware sprite for the lift it may have caused some kind of conflict? Anyways, I am too lazy to try to figure it out at the

## Amiga News cont'd...

moment, so just move the mouse pointer off the corner of the screen, if it is in your way. :-)

If you have any questions or comments, you can email me at:  
rickyderocher@yahoo.com

Visit the Binary Legends website for more info on our other releases - you can also download the C64 original of Alfredo's Perilous Pitfall.  
www.binarylegends.net

### New Amiga RPG

Wish there was more new games to play on your Amiga? You're in luck. Heroes of Gorluth, an exciting new action RPG platform game is now available for preorder! With high quality graphics and sound, the exciting story will unfold as you explore 5+ worlds and more than 15 levels interacting with non-player characters and engaging in numerous battles. Think you're up to the task? The price is 15 Euros (approximately \$23 Canadian) for both the boxed CD-ROM and digital download and release is scheduled for December 2018.

See <http://hog.amiworx.de> for more information.

Note: Heroes of Gorluth is a follow-up to Tales of Gorluth II which is also available as a digital download for 4.12 Euros (approximately \$6.25 Canadian) from Phenix Noir Recordings' website.

See <http://shop.phenix-noir.de/#!/Tales-of-Gorluth-II-DIGITAL-DOWNLOAD/p/96528705> for more information.

### AmigaOS 3.1 Update (WOW!)

Hyperion, the current keepers of the AmigaOS, are working on an update to the venerable AmigaOS 3.1. The update will include lots of bug fixes and plenty of new features as well. Some of the additions include:

- Fast File System with native 64-bit support for NSD, TD64 and direct SCSI, long filenames and resizable media support
- CrossDOS with native 64-bit support for NSD, TD64 and direct SCSI support, long filenames and resizable media support, new mfm.device
- Format, DiskCopy and HDToolbox with 64-bit support based on NSD, TD64 and direct SCSI support
- C:Mount for large media, direct SCSI support and resizable removable media
- Working soft links for the RAM disk and Fast File System
- Shell tools with long filename support, softlinks and large media support
- Math libraries that reconfigure themselves when an FPU becomes available after loading
- New DIR command with nicely formatted output
- New Workbench that also copies links
- CPU command with 68060 support
- exec.library that no longer fails on 68060 CPUs
- SetPatch, without NSDPatch and RomUpdates (not needed anymore)
- Intuition with off-screen window dragging
- Added V45 layers.library, V45 execute command, and V46 Shell

Very exciting indeed! We will definitely keep everyone know when the new version is released.

# Images from World of Commodore 2016

- credit Paul Quirk



TORONTO PET USERS GROUP  
C/O JOHN EASTON  
258 LAKE PROMENADE  
ETOBICOKE, ONTARIO M8W 1B3

— Fall 2017 —

**[www.tpug.ca](http://www.tpug.ca)**