

**Enjoy reading the September issue of the HP-39/40g newsletter!**

In this issue we will talk about:

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## Letter from the editor.

I was a little worried when making this issue, because summer (for those living on the northern part of the world) months means that there is no much activity in the calculators communities. Still there are quite some projects announced for the HP-39/40g. So if you want to read what there is coming to your HP-39/40g the next couple of months scroll down till you see Upcoming programs. You may have noticed that this monthly newsletter is bigger than normal. That is because we have a very excellent and long interview with Colin Croft. Does he need an introduction? I don't think so. Producer of tons of quality math applets and maintainer of [the HP HOME view](#). And as last we have also a new topic in this monthly hp newsletter called "program of the month". This to reward programmers for their hard work. Program of the month don't have to be necessarily assembly games. But can be everything! From HP-Basic math programs to Assembly miscellaneous programs.

Enjoy reading the September issue!

## Program of the month.

This month the program of the month is HP-Doom Preview II. Before you go crazy it's only a demo. But it's definitely a demo you have to check out. Greyscale, awesome weapons (unfortunately they don't work for the moment) and a big level. All you can do is walk around in the level and check out the enemies. Pretty boring? Maybe, but use your imagination for once.

The demo should have been very hard to port because of the greyscale "engine" that the HP-40g unlike the HP-49g doesn't support. HP-Poska must have rewritten whole that part without any knowledge of the program engine. You have done a great job! You can download it on this address: <http://hposka.free.fr/>. With only a size of 19 KB. It will probably never get deleted from your calculator.

### Specs

*System:* HP-48gx, HP-49g and now the HP-39/40g.

*Size on calculator:* 19 KB

*Porter:* HP-Poska ([hposka@free.fr](mailto:hposka@free.fr))

*Download where:* <http://hposka.free.fr/>

## Upcoming programs.

Programmers are not very active in summer months. They are away on vacation, make a dollar or two or it's just too damn hot to sit behind there computers. Still there are quite some programs in development.

Decent information on how to program your HP-39/40g calculator in Sys-rpl/Assembly is quite hard to find and if you found something it's very limited. Luckily for us **Jordi Hidalgo** is writing a **book on how to program the HP-39(+)/40g in Sys-rpl/Assembly**. He will teach us everything he knows! If you got a topic that can be interesting for his book write him an email at [johil@tv3mail.com](mailto:johil@tv3mail.com). So here is your change, ask everything what you wanted to know.

If you asked yourself where those new sys-rpl tutorials are from Michaël De Coninck then ask no longer. Those are still in development...But I PROMISE that they will be released before October this year. I only hope that Jordi Hidalgo works a little bit faster than me...

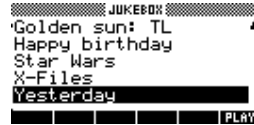
Brett Mackenzie is working on an **improved filer** for the HP-39/40g.

The sources from **HP-Pokémon** (HP-49g/Assembly) will be released in September. So if you want to make a HP-Pokémon game. Here is your chance. The sources from the level editor will also be released. I will most likely provide a link to it in the next issue of the HP-39/40g monthly newsletter.

**Carmageddon** is coming to your HP-39/40g only a little different. The game will be a snake clone where the snake is replaced with a car and the things you have to catch will be innocent people. Of course when you hit them they'll leave a nice trail of blood. Sick? Maybe, but that is how we like it.

A more constructing game will be **SimCity 2003**. Does somebody not know this game? When does “the sims” come☺?

Michaël De Coninck is working on **jukebox**. A program that contains all songs that are made for the HP-38/39/40g + more! Made in Sys-rpl.



You are working on another project. Shouldn't you first release who wants to be a € millionaire? and Enslaver?

Well **who wants to be a €millionaire?** is finished, but there is still a bug in it. Sometimes it just reset your memory. If you still want it. You can mail me at the normal address ([ndco232@tiscalinet.be](mailto:ndco232@tiscalinet.be)) and I will give it to you...

And **Enslaver?** Well Enslaver will be a little bigger (=better) than first thought. Cut scenes, (movie) music, bosses and different endings...



Alan Lark will come with new **versions of HP-Piano and Quick Draw**. The first one will include Sys-rpl support and real-time input (so you can “play” and record with the mouse or possible a QWERTY keyboard). The last will include a high score table and hopefully a different button to shoot.

Not everything has to do with games. Soon available for the HP-39/40g: **Simult 3x3/2x2**. A math program that solves 3x3 and 2x2 systems of simultaneous linear equations.



## Interview with Colin Croft.

Interview	
Michaël	How old are you, and what of education do you have?
Colin	I'm 43 years old and I have degrees in Mathematics, Education and Computing. I've taught Mathematics in various schools for too many years now, as well as occasionally teaching Computing Studies. I've been teaching at my current school, St Hilda's Anglican School for Girls, for 15 years.
Michaël	Where do you live?
Colin	I live in Perth, Western Australia. I've visited other cities in Australia for fun and for mathematics conferences but I've never found anywhere as nice as Perth. It has the ideal combination of size and climate. Through my work with HP, I've also visited schools in the United States, India, Malaysia, Singapore and Thailand.
Michaël	What calculators do you own?
Colin	I have about a dozen or so HP38Gs and HP39Gs that I use when I am doing training sessions for other teachers. I also have an HP49, a couple of HP48s, an HP9G, an HP9S, an HP10BII, and a couple of HP30Ss including a pre-production model or two of many of these. Of the non-HP brands I have a TI83+, a Casio CFX9850GB Plus, a Casio FX-2 and a few other assorted simple scientifics that I've picked up. I know this sounds like I'm maintaining a museum but it's not been a conscious decision to do so – I just accumulate them when I'm asked to do work for HP and they don't ask for the machine back afterwards! It's not as if I can <u>force</u> them to take the calculator back afterwards is it? ☺
Michaël	99% of the teachers are only familiar with TI-83(+)'s. Why did you choose HP?
Colin	Well, you say 99% but that is only true in the US. In Western Australia the market share of HP calculators is closer to 40%! The reason for this was partly in HPs marketing and partly due to the superiority of the machine. When our state's education system moved to graphical calculators the competition was between HP and Casio. For some reason TI just were not interested. I never found out why – they certainly made their presence known in some of the other states. Casio and HP ended up sharing the state roughly evenly with the other brands making up the leftover.
Michaël	What was the first program you ever wrote?
Colin	I started programming in 1975 when I was only 15 years old and most computers were main-frames at universities. I can't remember what my first program was but this was the days of punched cards and Miniwaft Fortran. We would produce a pack of punch cards to perform some trivial program, then wait for them to come back from the computer at the local university. Generally the result would be a collection of error messages! If you mean what was my first program on the HP38G then, apart from a few test programs, it was the "Time Series" aplet. I had no access to a cable or the ADK so the whole thing was done by hand on the calculator. It took AGES to type in and debug!
Michaël	What do you use your calculator for the most?
Colin	I don't know that there's any one thing. As a mathematics teacher I am teaching many classes at once and so I tend to use most of the capabilities most of the time.
Michaël	How did you get into programming calculators?
Colin	We had a number of reps visit our school to demonstrate their machines. The HP rep particularly impressed us with his commitment to after-sales support but the main selling point for us was undoubtedly the aplets. The ability to easily download additional teaching aplets from the web, and particularly the ability to transfer them to our students' machines by infra-red, was very attractive even though the number of aplets available then was a bit limited. When I saw how easy it was to program on the HP38G I began to produce my own aplets and to make them available on a web site. That was what originally brought me to the attention of HP. Diana Byrne, the head of the Elsie project that produced the HP38G (now with TI), visited Perth in the mid-90s and came to our school to see what we were doing with the calculators. She encouraged my involvement and over the years I've done many, many sessions of professional development for

	<p>teachers on HPs behalf, both here in Australia and overseas. Over time I became more involved with the 38G and its successor the 39G. The culmination of this was taking a year off teaching in 2000 to be part of the Enterprise project team that developed the HP39G. In the Enterprise project it was my primary job, in consultation with others, to write the Functionality Specifications document, which laid out exactly what changes were to be made to the HP38G to upgrade it to the HP39G. I don't want to imply that I made the decision as to exactly what happened – the priorities as to what changes were to be made were decided in general terms at various meetings of many team members. But once it had been decided what the changes were then my job, with suggestions from others, was to work out the detail work on what screens should look like and exactly how behaviours should change. This was then given to the programming team to implement. You'd be amazed at the arguments that went on over some of the changes, particularly the layout of the keyboard and the new behaviour of the MODES view regarding angle settings. During that year I also travelled extensively for HP, spending about 3 months in various hotel rooms altogether! We were trying to promote the introduction of graphical calculators in a number of countries such as India and I was sent over to demonstrate as a classroom teacher how it had been done in Western Australia and how the calculator could be used to enhance the teaching of mathematics.</p>
<p>Michaël</p>	<p>Are there any programmers you admire?</p>
<p>Colin</p>	<p>I have a huge amount of respect for the original programming team that produced the HP38G. Their vision was amazing and the result was a really powerful yet easy to use machine. I had the opportunity to meet some of them when I went to the US for the launch of the HP39G and it was really interesting to talk to them. The Enterprise team were all totally professional but I particularly admired Jean-Yves Avenard for his expertise in programming and GT Springer for his ability to see the simplest but most effective way to do things. Although I'm a reasonable programmer, my expertise is more with designing an easy user interface and writing support material than it is with programming and GT made some really excellent suggestions that I stole for the Functionality Specifications. To give an example, GT was the one who suggested how to implement the GOTO button in the PLOT view. The problem was that there was no room for it on the menu bar of the PLOT view and we had been looking at all sorts of awkward methods to add it when GT pointed out how we could remove the need for the (X,Y) button that used to appear on the HP38G in the GOTO position by simply changing the behaviour of the MENU button from a double toggle to a triple toggle. Simple but elegant.</p>
<p>Michaël</p>	<p>Do you have any plans for future programs? (HP-39/40g and other calcs)</p>
<p>Colin</p>	<p>I've found in recent years that it's becoming quite hard to come up with new ideas for aplets. Most of my ideas now come from students or teachers making remarks like "Why is it so hard to do this or that on the calculator?". This was what provoked the Grouped Data aplet. It will also be interesting to see what differences the new HP39G+ makes. Maintaining my web site takes a lot of time, as does filling out questionnaires! ;-) I have a number of projects that I'm hoping to contribute to with HPs new range but I'm a bit limited on what I can say about those.</p>
<p>Michaël</p>	<p>What do you see for the future of the HP community?</p>
<p>Colin</p>	<p>If you'd asked this 18 months ago I would have been very pessimistic. It was disappointing to see HP drop the ball in 2000 when it closed ACO in Melbourne, Australia and largely withdrew from the calculator market. The final straw was when it removed even what limited support for its calculators had been on its web site up to then. My answer now is immensely more optimistic, mainly due to the influence of another Perth resident, Tony Jones. Tony joined HP back in about 1996 or 1997 and is now the World Product Manager. About 18 months ago he proposed a "roadmap" for recovery that involved the development of an amazing number of new models in an incredibly short time. The first of those was the HP9S and HP9G and they are now being followed by the HP39G+, the HP48GII and the HP49G+ as well as a variety of other models in the scientific and financial ranges. I'm hoping that these new models will be successful because if they are then I know that Tony has some really fascinating plans for even more innovative things.</p>