Hello George,

Thank you for taking the time to explain your perspective. It is most helpful. I will share it among the community. Of course, I know this, but coming from you will help others to also understand. I know that my reaction to a collection of silver spoons is similar the typical persons reaction would be to a calculator collection. We can do only what we can do.

$X <> Y$,

Richard

Richard,

Thank you for your email below.

In response, I can share with you that your situation is not unique, in that our museum is approached a few times per year - with a very similar circumstance such as yours. We have been offered donations of artifacts and literature by very serious collectors in the areas of mechanical calculators, typewriters, slide rules, microcomputers, electronic calculators, etc. Most of these collections are quite extensive and their potential donors do not wish to break them up. They want some institution to take everything, more or less. They cannot imagine breaking up the collection as it is, in their mind - and rightly so - a full narrative of the importance of a specific technology and/or era that they have a special fascination with. In almost every case, the family/children/siblings, etc. do not share in that passion and have no interest in continuing the curation of the collection. In just about every case we have had to say no as the collections involve scores, sometimes hundreds of boxes of literature and/or artifacts. We already have two warehouses full of artifacts and a very, very large collection of books, manuals, software and sales literature. We are a nonprofit institution with a relatively tiny yearly budget and simply cannot accept more donations with the exception of truly rare and unusual historic and/or representative items that we do not already have.

Our museum has been around since 1990 and has seen the interests of our visitors dramatically shift as the baby boomers age. Gone are the days when a 30 year old visitor got all excited by a keypunch machine, or a slide rule, or a typewriter, or a vacuum tube flip flop, or an HP 35, or an Apple II… Most visitors to our museum who are under 40 have had NO personal usage exposure to many of the technologies that you or I are old enough to remember using, again - personally. I grew up with slide rules and punch cards and teletypes and IBM mainframes and PDP 8 computers and programmable calculators, etc. - in my youth. A 25 (35…45..) year old, even with an advanced Computer Science degree views such technologies as interesting - but of no personal intellectual memory/experience.

I remember visiting a small private automobile museum a few years ago in the Midwest. They had dozens of carburetors on display of various makes spanning decades of time. The signage for the exhibit was simply a listing of the manufacturers and their dates with no explanations of the fundamentals of what a carburetor was used for. The assumption was that the visitors would know the obvious - so why explain it. I stood and watched the reactions of visitors to that display and noticed that those old enough to have personally experienced life with a carburetor would stop and reminisce, remember and enjoy some personal nostalgia. Younger visitors simply walked on by. Most probably a display of 3 or so carburetors with a clear sign explaining what these items were and how they worked - would have been more effective. But the display was made by the founder of the museum, decades earlier and was not updated to reflect the understanding of the modern visitor.

I fully comprehend your personal passion, dedication and intellectual rigor regarding the history and importance of the programmable calculator. You are, off course <u>correct</u> in emphasizing the importance of the programmable calculator era as being crucial to the development of the personal computer.

We are, unfortunately - for the circumstances stated above, not in a position to accept any of your items as a donation. We already have a huge programmable calculator collection and all of the PCs you mention as well as several Newtons.

I admire your dedication and curatorial skills - and wish you my very best towards the proper disposition of your collection.

Best,

George

George KeremedjievDirector
American Computer & Robotics Museum
Bozeman, MT
www.compustory.com

On Jun 6, 2017, at 1:04 PM, Richard J. Nelson <rjnelsoncf@cox.net> wrote:

Hello George,

First a question. **What role do you believe did/does the programmable calculator play in the development of the modern "PC?"**

As an active User Community organizer of the HP User community for 44 years (since the beginning) with the announcement of the HP-65A calculator, I believe that the first true personal computer "PC" was in in early 1974. This is based on all the "requirements" of being a computer - Running a stored program, Off line storage of data, Personal in size and purchase, etc.

This man is using the smallest "computer" ever made...
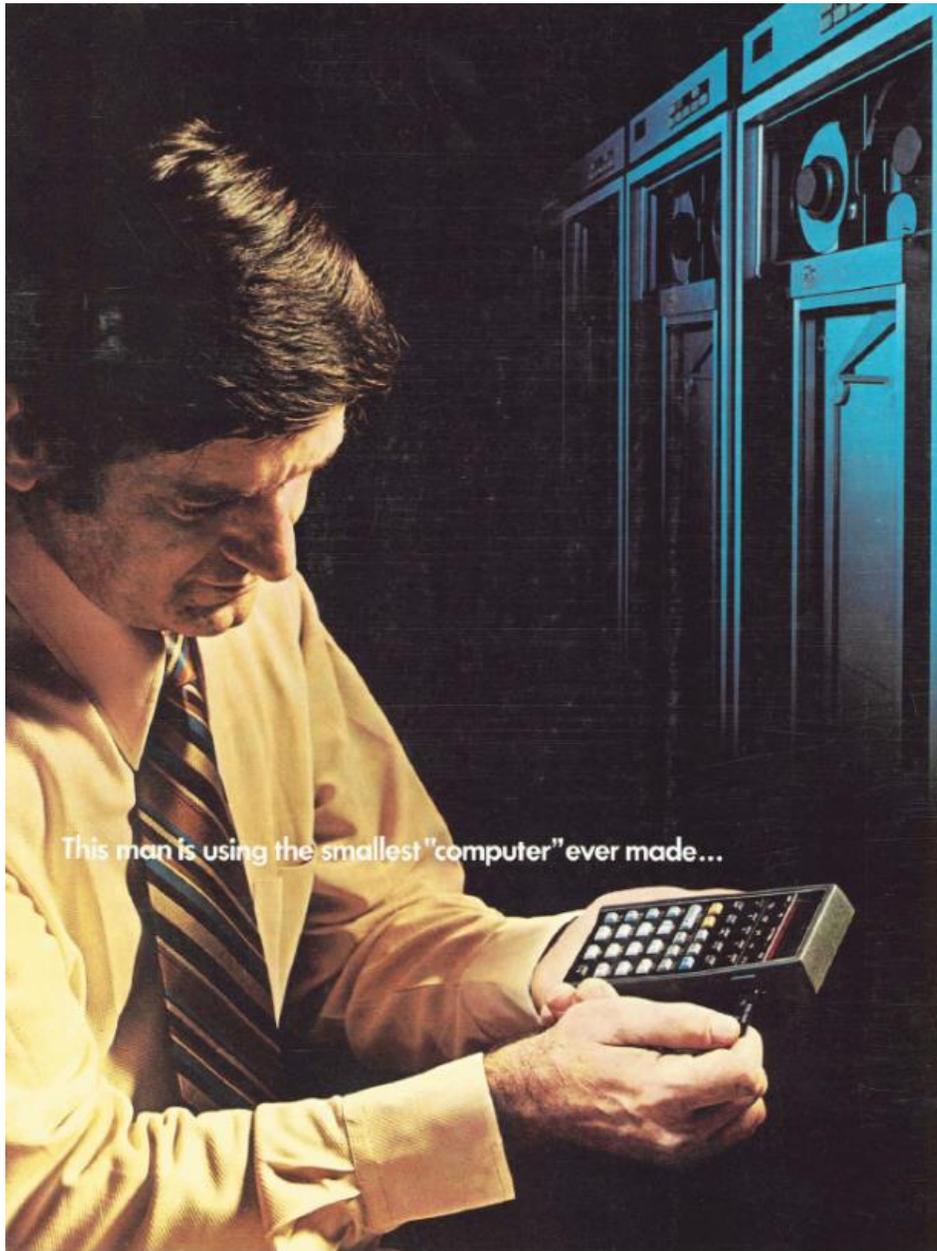
 All too often programmable calculators are dismissed in the PC world because they are *just calculators*.

I won't go into all of the leading edge contributions programmable calculators have made. Volumes have been written on this subject.

The true PC today is the smartphone.

Because of my role in the HP calculator user community I have amassed the world's largest collection of (HP mostly) literature. See the attached article. The article is dated 2009 and the space has since grown. The Fig. 2 couches and chair are gone and replaced with more stacks of shelves.

I retired ten years ago and I am now at the point when I must think of reducing my life's activities to the point of liquidation. Some time ago, I discovered that no museum wanted any of my hardware – I am not a serious collector but I have some unusual machines – so I have decided to start selling them.

The next question is my unique literature collection. No one has the space or interest for it. I have discussed this with most other "museums" during the last 7 years or so,

What do you think?

Here is a critical point to make for the development of computers. I seldom see it mentioned. Computers have rapidly advanced because of computers. In other words the current generation could not have been possible without using the previous generation to design it. Now we must get ready for AI, which will change everything.

One last point. I have a few older computers. A few details of one (the Newton) are also attached. I also have in original boxes.

1. VIC 20
2. TI 99/4
3. Timex PC
4. TRS 80 Model 100 complete.

I will be willing to donate them, but I cannot spend the funds to ship them.
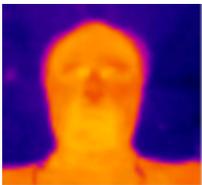
What do you think?

X < > Y,

Richard

P.S. Another aspect of calculators (and user groups) has been described by the embedded systems folks. See:

http://www.embeddedcomponents.com/blogs/2007/04/community-software-development-for-embedded-devices/#comments and scroll to the top.

What do you think?

Richard J. Nelson

Richard Nelson Consulting
Technical Editor *HP Solve*

Email: rjnelsoncf@cox.net, hpsolve@hp.com
Wired phone: (480) 584-4453 Listen to end and speak loudly or I won't pick up.
Mobile phone: (949) 296-5406
Skype Name: Calcfan
Physical Address:
Fountain of the Sun
8344 E. Desert Trail
Mesa, AZ 85208-4737

HHC Conferences may be found at: http://hhuc.us
The photos, articles, and reports on these historical sites are especially nice.
Please note: Because I correspond with many people both in and outside of HP, I treat my correspondence as public domain. If you have something you would like to be kept confidential, please indicate what it is. I will otherwise assume that I may publish email related to calculators in *HP Solve*. If you correspond with me you must specifically tell me if anything you say should be kept confidential. Because *HP Solve* has a worldwide readership I would also like to know where you live; Country and city. **Update:** *HP Solve* is no longer active.

About the Author

Richard J. Nelson is a Mesa AZ retired EE who spends most of his time recreational writing on electronic, physics, USB microscope, and DIY related projects. Richards's first electronics experience was building projects with the CK722 and 2N107 transistors in the mid 1950s. An amateur radio project was to convert a WWII SCR-522 aircraft VHF radio for 2M use. Richards's diverse career interests included doing failure analysis on Sky Lab door timers, and transmitting a radio signal around the earth from a 1 KW Philippine amateur radio station (DU1DBT), he built which continues to operate today. Richard was a junior engineering team member that developed quartz tuning fork watch crystals. Tuning forks revolutionized the quartz watch industry. He measured the temperature rise of a biomedical implant using classical methods when others working for years failed using exotic and expensive methods. His five US and three foreign patents are for biomedical implant inventions.

Richard J. Nelson

In terms of published articles, Richard has written extensively on HP calculators and calculator development since June 1974. He has edited and published five newsletters related to HP calculators and is the founder of PPC. He proposed, managed, and published the one man-century effort PPC ROM. His most recent calculator newsletter articles were for HPs calculator newsletter, *HP Solve,* as author and editor. Richard started an international annual conference dedicated to calculators called the Hewlett-Packard Handheld Conference, HHC, in September 1979, which continues to this day. HP will host HHC 2016 in Ft. Collins CO. HHC 2015 was held in Nashville TN. See hhuc.us for details and a list of these 44 conferences.

Because Richard was an active HP User Group organizer from the very beginning of the advanced Calculator era, he has assembled the world's largest collection of HP calculator literature, brochures, books, articles, and manuals.

Richard enjoys all aspects of a DIY project from an idea to design, construction, measurement, testing, photographing, and its complete technical documentation. You will find his articles on HP's website, the website of the Microscopy Society of Southern California, Circuit Specialists, and the HHC website.