The story of PPC

When Yugoslavia finally connected to the Internet in early 1996, and when I found information retrieval machines like *Altavista* , it occurred to me to look for people I once knew (at least through letters) and see who they were. radio since we lost contact ... who knows, maybe one of those friends will look for me one day. Some I found, some I didn't, and what surprised me the most was that a magnificent organization like the PPC Club had simply disappeared, leaving almost no trace of it. Believing that the story of that Club deserves to be told, I will dedicate a part of my *website to* it ...

In 1974, *Hewlett-Packard* produced the first programmable universal pocket computer called the HP-65. Thanks to a decent memory and a symbolic programming language that enabled program branching and loops, the HP-65 has become an ideal computer for any engineer or scientist who has needs for calculations to be performed outside the office or laboratory; even the high price of $ 795 could not prevent the new calculator from entering the professional market.

If you want to sell a computer, you must also offer customers a way to get the programs they need. Realizing this simple fact, *Hewlett-Packard* formed the UPL (*User Program Library*). The Statute of the Library was quite simple: everyone who submitted an acceptable program received four programs of their choice; non-programming members can get any programs they need at a minimal cost. The prices were really minimal - they covered the costs of copying, postage and magnetic cards, which means that HP did not make money on software for pocket computers; this kind of ignoring part of the earnings nowadays sounds incredible, but you should know that in 1974 the personal computer market did not exist, and the manufacturers were just looking for ways that lead to maximum earnings.

A program library is not enough to satisfy the interest of a computer owner - magazines are needed to answer questions, describe various applications, publish short programs and tricks ... This is how the *HP Key Notes* magazine was published three times a year until mid-1983. when longtime (very successful) editor *Henry Horn* retired; HP was so taken aback by this withdrawal that it simply shut down the magazine. Although a lot of money was obviously invested in *Key Notes* (it was given free of charge to all owners of PDAs carrying an HP sticker), *Hewlett-Packard* realized that about thirty pages of information a year could not satisfy professionals; therefore, maximum support was given to *Richard Nelson* , who founded an independent club and, in June 1974, began publishing a magazine called *65 Notes* .

Richard Nelson then worked as an electrical engineer in the development facilities of STATEK. He wanted to share the knowledge about pocket programmable computers that

he acquired with others, he gathered a few friends and that is how the club was created. As *Hewlett-Packard* later began producing upgraded computers, which were given the designations 67 and 97, the name *HP65 Club* was replaced by *PPC Club* , and *65 Notes* inherited the *PPC Journal* . PPC is a name, not an abbreviation - those three letters officially mean nothing, and unofficially PPC is an abbreviation of *Personal Programming Center* .

Unfortunately, there are no *issues* of *65 Notes* in my library (I went to sixth grade in 1974 and was fascinated by my first (non-programmable) calculator called the *Melcor SC-635*), so I can't describe its appearance. ; knowing the *PPC Journal* , I suppose it was about thirty pages of densely typed text, reduced to fit two columns on each page; images are published only if they are strictly in function of the text. The main feature of all Nelson's magazines is the desire to place as much information as possible in as little space as possible - any aesthetic is sacrificed without reservation.

The PPC Journal published articles by club members who did not seek or receive any monetary satisfaction for their work - an annual membership fee of $ 25 ($ 37 for us in Europe) covered only the publication of ten issues of the magazine, each with 32 pages.

Richard Nelson was an unusual editor: he believed that **no one** had the right to change a single letter of someone else's text - the editor should decide if a text is suitable for publication and, if so, publish **it exactly** as the author wrote it. The editor of the PPC journal, therefore, did not change the titles and add subheadings, or even correct grammatical or spelling errors: the text would simply be typed and published. PPC members whose mother tongue is not English have repeatedly asked Richard to proofread their texts, but they have read in various editorials that "PPC members are much more bothered by mistakes that would result from reformulating some parts of the text than some misspelled words." . PPC was thus a magazine written and edited by the members themselves.

100 working hours per week

Although he did not edit texts, Richard had to invest a lot of work in order for the magazine to be published more or less regularly. This meant that in addition to the usual 40-hour work week at STATEK, PPC needed to devote more and more time - this time began to exceed 60 hours per week without still providing any material compensation: the editorial work was also done on a voluntary basis. . Couldn't someone have been found to take over at least the technical job? He could, but Richard Nelson didn't want him.

Richard, in addition to his enormous organizational ability and enthusiasm, also had some strange traits that ultimately ruined both him and the PPC. He believed, above all, in total amateurism, that is. he vehemently refused to devote at least one single page in the magazine to any advertisement. For him, amateurism meant that the editor had to do all

the work himself, including gluing envelopes and carrying them to the post office - he thought that holding everything in his hands would best feel the wishes and needs of the members. However, when the number of members exceeded 5,000 and the membership fee reached $ 100,000, Richard concluded that the job exceeded the capabilities of one employee and decided to leave STATEK and become a consultant who would mainly deal with the PPC club and to whom the club would pay a certain salary. Since money was not a problem for PPC at the time (although the club was independent of *Hewlett-Packard* , I have no doubt that HP strongly helped PPC by providing it with the necessary equipment), *Mary Hambleton* was also hired to answer the phone. invitations and kept records of membership. In addition, a business space called *PPC Clubhouse* was rented - various generations of *Hewlett-Packard* computers were exhibited there and, on Friday evenings, regular meetings of local club members were held. The answering machine allowed members from all over the world to call the PPC and listen to three-minute newsletters that summarized all the important things that had happened in the computer world the day before - the BBC before the BBC?

The early 1980s represented the golden age of the PPC club: *Hewlett-Packard* launched the still-very popular today programmable calculator HP-41C, which instantly won over many American professionals. The HP-41C was a closed machine: the programmer could only use the functions described in the user manual while "hacker commands" of the PEEK and POKE type simply did not exist. The computer was not on the market for two months when some users noticed that the operating system had several bugs that opened a "window to internal registers" for the most skilled - that's how synthetic programming was created , that is. use the undocumented capabilities of the HP-41C. It goes without saying that the PPC coordinated this work and that new discoveries, new questions and answers to them appeared on the pages of the Journal from month to month.

It is difficult to argue that users have completely independently discovered the entire internal structure of the computer and deciphered all the sinter commands - perhaps *Hewlett-Packard* unofficially provided PPC with part of the project documentation. HP has always been proud of the fact that its products behave **exactly** as described in the instructions for use, which means that synthetic programming (which led beginners to trouble that often ended in loss of memory content) was a potential inconvenience. Synthetic programming, on the other hand, was an outstanding advertisement that made many hackers buy the HP-41C. *Hewlett-Packard* finally chose the Solomonic compromise: all letters relating to non-standard techniques were forwarded to the PPC, which in this way recruited new members - the number of members was slowly approaching 10,000. In various other countries, PPC branches were established that had no special obligations to the parent club - each branch organized its own actions and published its own magazines, with the most interesting articles being obligatorily transferred to the PPC journal. The highlight of all the activities was PPC ROM.

PPC ROM

After getting to know their computer to the extreme, the members of the PPC club came up with the idea to gather their best programs into one ROM that would later be of interest to the widest circle of users. *Hewlett-Packard* agreed to press the prepared programs into silicon and thus produce a module that could be built into any free HP-41C port; the condition was to gather 1000 interested people, which was not a special problem for PPC - the ROM, together with the documentation, cost only $ 75.

This largely unique project began in 1979 and ended in 1981: it produced 8 kilobytes of miraculously optimized code that, in addition to the tools needed for synthetic programming, included several standard mathematical routines, peripheral control programs, and general-purpose routines. It is interesting that none of the several thousand programmers who participated in the preparation of the program and writing the 500-page long manual received a single dollar - all the work was done with enthusiasm. PPC ROM has shown that even in America, not every job is measured solely in dollars - there were several thousand people who spent hours and hours of their free time believing that they were doing work that needed to be done ...

The appearance of PPC ROM, however, had to lead to some changes in the organization of the PPC club, whose existence was threatened by excessive amateurism: magazines were chronically late for several months, while in the phase of completing the documentation for PPC ROM Journal did not appear for almost half a year. Organizational changes were also dictated by U.S. tax laws, which stimulate people to form corporations: as soon as the club wanted to sell PPC ROM to new members who did not participate in the original project, taxes became so high that PPC had to become a corporation.

The corporation must meet certain administrative requirements, so Richard Nelson had to form a board of directors: he retained the position of president of the corporation, while he offered the position of chairman of the board of directors to *Emmett Ingram* ; the board of directors had three more members and a treasurer. The PPC has tried to fight for tax exemption which should be the right of all so-called *non-profit public benefit* corporations; the taxman, however, felt that an organization dealing only with computers from one manufacturer did not deserve similar benefits, so Richard Nelson, although he knew that he would provoke the displeasure of a significant part of members, decided to deal with another computer - he chose model 59 from *Texas Instruments* .

There was a rivalry between the owners of the TI-59 and the HP-41C that is somewhat reminiscent of domestic intolerance between the Spectrumists and the Commodores - since PPC members were mostly serious people, the rivalry did not grow into some abstract hatred, but many HP-41C owners considered that TI-59 is a bad computer to which no attention should be paid (the opposite is true, of course). Since the members did not have a TI-59 and, therefore, could not write programs for it, Richard Nelson, in agreement with a similar club of TI59 owners, transferred several articles from the *TI PPC Notes* magazine each month . I have to reluctantly admit the articles because in that way they published several of my programs for TI-59, few people read them, but they won important tax breaks. As soon as it received them, PPC slowly returned to *Hewlett-*

Packard computers - with the introduction of the new HP-75 in mid-1982, two independent publications were launched: the *PPC Calculator Journal* , which wrote about the HP-41C, and *PPC Computer Journal* , which dealt with *Hewlett-Packard* 's basic computers and especially the model 75.

Each of these changes appears to have been preceded by severe conflicts between Richard Nelson and the rest of the board. Richard, in addition, strongly opposed the board's constant demands that PPC improve its financial situation by accepting some advertisements. Conflicts are distracting people from their core business: the *PPC Journal* was getting weaker, and what was worthwhile was of interest to only a fraction of subscribers, as it was written exclusively about new *Hewlett-Packard* modules and peripherals that few owned. In the first six issues that came out in 1984, the owner of an ordinary HP-41C had nothing to read.

And then it happened: the traditional "letter to members" that arrived with the PPC magazine from April 1984 was not signed (until then, Richard finished every letter with *Happy Programming*). The whole thing happened again in May, so that the June PPC magazine would inform the members about, as it was said at the time, administrative changes: Richard Nelson resigned!

Personal insult

The decline in the quality of the *PPC Journal* seems to have begun to disperse members: in the first three months of 1984, some 1,500 members did not renew their subscriptions. The club's financial security was thus shaken (though not yet shaken), prompting the board of directors to request a detailed financial report and a plan to exit the crisis from Richard. This request was accompanied by an invitation to an emergency meeting of the board, which will be held on April 21. Richard understood this request and this invitation as a personal insult - until that moment, all meetings of the board of directors were scheduled on his initiative, and since he suffered from chronic fatigue, he seemed much more nervous than he might have needed. He wrote a short letter in which he resigned from the position of the President of the PPC and "completely leaves the management of the corporation to the board of directors".

Along with this letter, he sent a memorandum in which he made several recommendations: most of the space is dedicated to actions that should be taken if the board decides to dissolve the club, which means that Richard secretly believed that PPC could not exist without him. Emmet Ingram, the chairman of the board who was immediately elected President of the PPC, did not think of anything like this: *David E. White* was elected the new editor of the Journal , and Tom Hooper was entrusted with overseeing the club premises. , the regular telephone bulletin was supplemented with the "news" that Richard Nelson was on vacation ... In short, the Board of Directors undertook everything to continue the work of the PPC without Richard Nelson, and the information about his resignation was not communicated to the members.

As the Journal continued to be published, it had to be supplemented with editorials, which Richard Nelson was obliged to finish with *Happy Programming* and sign with his own handwriting. Solomon's solution was found - the April and May editorials were unsigned. PPC members were intelligent enough to understand what was going on; after all, it is not said in vain that computer lovers are born gossips. As rumors spread to the end of the world (in Yugoslavia it was already said in April that the PPC was falling apart) and all sympathies were usually on Richard's side, the board decided to "come out": the June letter to members began short notice of, as it was said, personnel changes, while along with the August *PPC Calculator Journal an* extensive (7 piled pages) letter with many facts was sent to the members.

The facts in the letter boil down to the following: Richard Nelson submitted an unexpected and unprovoked resignation. The corporation elected a new President and offered Richard to remain a paid PPC employee, who would edit the magazine, but he refused with disgust. The board of directors, therefore, had to "fire" Richard Nelson and remove him from the club premises. However, Richard continued to attend meetings of local club members and sharply criticized the leadership of Emmett Ingram, which "has already ruined the PPC", as well as the work of Tom Hooper, "who turned the club premises into a branch of his company". In order to stop such discussions, Emmett Ingram hired an (un) armed guard whose duty is to prevent Richard Nelson from entering the club premises and attending meetings.

Such announcements could hardly be liked by the members who followed Richard's work for a whole decade, and Richard himself was on the verge of nerves, so, not wanting to sue in court, he finally left the PPC as, as he said in his farewell letter, difficult a disappointed man who has invested ten years of his life in an organization that treats him like a bandit after all.

In September 1984, I decided not to extend the PPC club membership fee: I was chronically dissatisfied with the Journal, I did not like the board's actions, and I did not believe in any PPC prosperity without Richard Nelson. I was, finally, convinced that the *PPC Calculator Journal* and the *PPC Computer Journal* would be merged into one publication, which would mainly deal with the new *Hewlett-Packard* HP-75 and HP-71 computers, which I did not intend to procure. It really didn't take long to unite, but the new *PPC Journal* didn't follow my predictions: the articles were mostly about the HP-41C and were taken from older PPC editions. The reason? The most active members of the PPC club, who wrote a good part of the Journal in previous years, decided to leave PPC, together with Richard Nelson, and found a new club. That club was published in October 1984 as the first issue of a magazine called the *CHHU Chronicle* .

CHHU and PPC

CHHU stands for *Club of Hewlet-Packard Hendheld Users* ; the name is pronounced as *chew* or, according to Vuk's spelling, Chu. The club was formed on August 27, 1984 at 9

and 20 a.m. when *Hewlett-Packard* stated that he "does not object to the use of the company name within the name of the magazine." HP has done something more - every new customer of HP-41, HP-71 or HP-75 received a card with the address of CHHU written on it, with a few notes about the work of this club. Thanks to this propaganda and the support of hundreds of former members of the PPC, CHHU gathered 1,100 members from about thirty countries during its first year of operation.

CHHU was very similar to PPC: a magazine consisting of 32 pages of densely packed information was published ten times a year; the two editions were double, so the member for his $ 25 (even the membership fee was the same as PPC's) got some 400 pages of text which means that a thousand words cost 3.70 cents (*This* is known for the fact that the price of a thousand words does not exceed dollar, while in the computer world the record is held by *Byte,* whose thousand words cost 1.06 cents; the new PPC Journal is relatively expensive because a thousand words cost 9.65 cents).

The number of pages, the number of words and the price are not, of course, the primary factors that determine the success of a magazine - it is important what is written on those pages. CHHU, according to several numbers I managed to come up with, overtook the old Richard Club with new leadership by several lengths - while PPC fell on repeating old articles and rewriting PPC ROM documentation, CHHU acquired the original *Hewlett-Packard* project documentation for the HP-71B, researched the ROM of the new computer and started writing LEX files with useful routines that could be built into a future ROM module, continued to develop machine programs for the HP-41 and, in general, restored PPC quality from "golden days". This quality, unfortunately, was not enough for commercial survival ...

Although the PPC always insisted on terms like *10,000 active members* , a good portion of the membership was essentially passive - people who, not having the knowledge and time to participate in the preparation of the magazine, were simply its subscribers. Since $ 25 a year is an acceptable amount even for us, many Americans extended their membership almost automatically - they may not have read the magazine, but they saw that there was a lot of text in it that would be extremely useful at some point, which is reason enough to fill out a check once a year. Such more than passive members probably did not pay attention to the decline in quality, and especially they were not interested in personnel changes - the management of corporations, after all, is changing every day in America. Such owners of *Hewlett-Packard* computers might have joined CHHU, if they had known about it and that the membership did not require some effort, which includes writing a few letters, filling out an extensive questionnaire, making additional checks ... CHHU would probably in a few years took over the membership of the PPC, but after a year the PPC still had many passive and few active members, while CHHU's few hundred active members simply had no time to write.

Agony ...

It turned out that the club with 1000 members and an annual membership fee of 25 dollars could not support its owner and editor - Richard Nelson got into serious financial trouble at the beginning of 1986. The letter to the members sent with the January issue of the magazine simply radiates despair: Richard could not pay the rent, so he had to move to a smaller house with his family, the funds dropped below $ 500, which is not enough even for the next issue of the magazine. were regularly late ... The proposals for overcoming the crisis presented in that letter were a bit ridiculous: Richard asked the members to extend the subscription in advance, not to address the payments to CHHU but to him personally (taxes are not paid on gifts), yes they give the club pens, paper and other consumables, and even old and unnecessary calculators that CHHU might be able to sell, to urgently start working on routines for the first CHHU ROM module for HP-71B that would eventually bring a lot of money ...

After the January issue, CHHU didn't advertise for eight months - I thought it failed. In early November 1986, a "pink letter" arrived claiming that CHHU still existed, but was on the verge of collapse - no new members (which is not surprising if the March *Chronicle* comes out in December), all the money was spent, Richard did not he can support himself and his family more ... Thirty-seven most loyal founding members of CHHU held a conference in Washington on September 27 to find a life-saving cure for CHHU. After the financial report, the conference participants decided to hold a small *brainstorming* session that did not provide a magic formula for overcoming the crisis, but resulted in a number of useful tips: increase membership fees, sell documents that were distributed free of charge, accept a number of ads, sell lists of members to other corporations that are gladly advertised in the mail, acceptance of *Hewlett-Packard* 's donations, the formation of a BBS to replace telephone newsletters, begging for money from members ...

Richard Nelson, however, still could not bear the very thought of abandoning amateurism or forming an elitist group whose membership fees would be high, so he chose the last and worst from a group of good advice: he asked each member to send $ 20 to raise money. of $ 20,000, which would allow him to survive next year. Richard honestly said that he has entered the age of 46, that he has no property, health insurance or chances for retirement, that his strength is running out and that if he has to look for another regular job, he will regret dismissing CHHU. It goes without saying that sending a letter like this to subscribers is a kind of business suicide: it is quite unbelievable that someone will subscribe to a magazine which, by its own admission, has just stopped publishing. We have already seen, however, that Richard Nelson is an unusual editor who, not paying attention to the consequences, always told the membership the complete truth about everything, including the financial situation. Although this kind of philosophy turned out to be bad (it ruined CHHU), one cannot help but appreciate it.

Why was the financial situation so bad? Richard Nelson never knew how to do business with money, but PPC still somehow survived, because bookkeeping was somehow kept. Considering that he was "rushed" from PPC because of amateur financial business, Richard tried to show himself and the world that complete amateurism is the only right

way to run a club: money is spent uncontrollably and practically without any records, and private funds of the editor they are not separated from the club. In that way, the funds that were supposed to "endure" 10 issues of the magazine were spent in a few months, so the magazine could only be issued if money came from new members. And there were fewer and fewer new members for the reason that Richard Nelson himself saw something like this: the more expensive a computer is, the more its owners want to get more out of it. A customer who set aside $ 800 for the HP-65 back in 1974 is willing to invest a lot of time and some money to make this investment worthwhile. Later, PDAs became so cheap that people bought them as toasters, and who else would join the club of toaster owners?

... and the end of CHHU

I don't know how many CHHU members responded to Richard's appeal, but I received the final letter, dated February 1987. Richard informs members, former members and anyone interested that 1837 members cannot support the club, magazine and editor of that magazine and that he was forced to look for another job with regret and shut down CHHU - the latest issue of the magazine was announced (which would consist of all the remaining material worth publishing) and the promised distribution of old issues and other materials would last "until stocks run out" . Richard Nelson ended the letter with the usual *Happy Programming* and a puzzling order in which it says X <> Y - this is one of the instructions of the HP-41C that exchanges the contents of registers X and Y; I still do not understand the symbolism of that end.

What happened after February 1987? Unfortunately, I don't know: the PPC magazine stopped publishing a long time ago. In early 1991, there was a PPC BBS, run by *David White* , but when I try to call their number today, no one answers. For a long time, I didn't even know what happened to Richard Nelson, but the Internet helped me find him - he got a job at EDUCalc, a company specializing in small computers and related equipment. That's probably how the last page of the book about the golden amateur days of pocket computers was written ...

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Post Scriptum ... February 1999.

During 1998, Jake Schwartz , once one of the most active members of the PPC Club, worked to switch the complete production of PPC, CHHU and other related clubs dealing with *Hewlett-Packard* PDAs into electronic form. This is how The PPC CD-ROM Set was created, which currently consists of two CD-ROMs on which, in *Adobe* PDF format, all 14 years of the PPC *Journal* , all three years of the CHHU *Chronicle* , complete *HP Key Notes* , are relevant. articles from HP publications ... plus, of course, indexes of all that by authors, topics, etc. A fascinating amount of material distributed at a price that only covers the duplication of the medium. Given the fact that the duplication freely, they that these

CDs are interested can I [contact](#) so that we set about copying.

If you're interested in *digesting the* story of the end of PPC, there's not much new to add: the last *PPC Journal* came out in May 1987, although you'll find two more *Journals* in the collection that were prepared but never published. *Richard Nelson* moved to *Educalc* , but at the beginning of 1998 that company also went bankrupt, so he lost his job again ...