Query from a Website Reader

Dear Keith:

I came across your club's web site through a hint by George Keremedjiev, Director - American Computer & Robotics Museum, Bozeman, MT[1].

Let me introduce me first: I worked for UNIVAC Switzerland from 1969 to 1978, among other projects on the UNIVAC 494 systems at UBS bank in Switzerland. In my retirement, I studied history at the Zurich University and researched the history of early computer systems in Switzerland and the ENIAC (please search the IEEE Annals of the History of Computing for my previous published articles).

I am currently researching the ATECO (Automation of Telegram Exchange with Computers Operations) project of the Swiss PTT in the early 1970s. The ATECO contract was given to the Swiss subsidiary of UNIVAC; the ATECO configuration used three UNIVAC 418-II computers working in parallel to achieve a very high reliability.

From the records of the Historical Archives of the Swiss PTT, I have learned that NASA had licensed the concept of three UNIVAC 418-II systems working in parallel for its own use in satellite communications. I am trying to find out in what context NASA used a triple UNIVAC 418-II (or possibly the military version UNIVAC 1218).

Maybe some of your members were working on UNIVAC 418 systems and might still have some information on NASA's use of the 418 systems. So, I am kindly asking you to forward my request for help to your members.

Thanks a lot for any help you can provide. Hans Neukom

Contents

[1] http://www.compustory.com/

Responses from Club Members

VIP Club President Keith Behnke

To the Board, 2/28/2017: Anyone have any ideas on this? *Keith*

VIP Club Director Ghis Devlaminck:

On 2/28: I figured you probably had looked at these, but I thought I would send them out anyway. I'm going to see if there are any old field engineers that might know something. The problem is that many of those old timers are not around anymore.

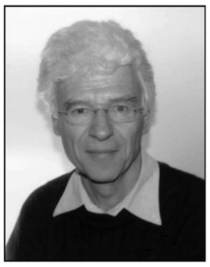
https://en.wikipedia.org/wiki/UNIVAC_418, some of the Wikipedia links don't work.

1. http://mccworkshop.com/computers/comphistory1.htm
2. https://wiki.cc.gatech.edu/folklore/index.php/Main_Page - George Gray authored items
3. http://www.mirrorservice.org/sites/www.bitsavers.org/pdf/univac/418/
4. http://ed-thelen.org/comp-hist/BRL64-u.html#UNIVAC-1218 – This has many other UNIVAC types too.
5. http://dl.acm.org/citation.cfm?doid=365719.366431

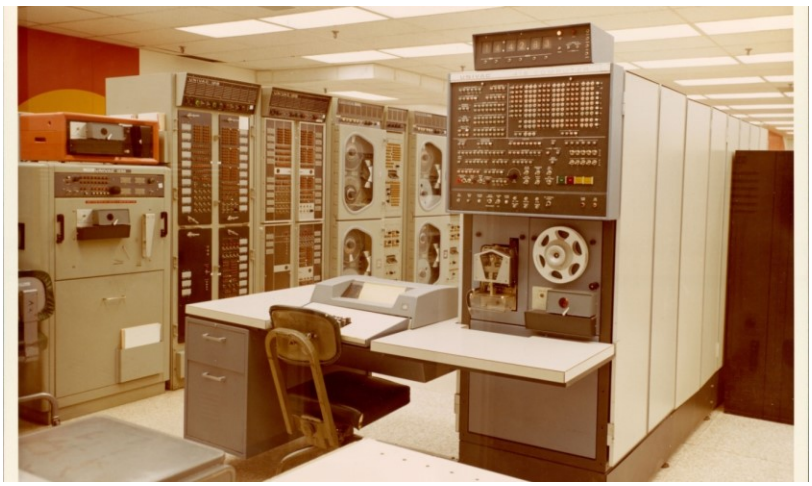
https://wiki.cc.gatech.edu/folklore/index.php/The_UNIVAC_418_Computer

http://mccworkshop.com/computers/comphistory1.htm *Ghislain Devlaminck*

VIP Club Member Emeritus Tom Turba:



On 2/28: If nothing else, it would be appropriate for a short info article in the Newsletter on "Computer Historian looking for UNIVAC 418-II Data". It would be good to have a picture of a 418-II and possibly a picture of Hans at http://ieeexplore.ieee.org/document/5070063/. {Ok Tom, here they are.}



Tom Turba

1. This is a NASA system with one 418 II and two 1218 computers - scanned by Keith Myhre, original photo at the Lawshe Memoria Museum in S St Paul, MN.

VIP Club Secretary Ben Manning:

OK. I'll throw in my 10c worth. I do not know Steve Dunn but did work on the 418 III for 4 1/2 years between 1970 - 1975. I started in England with UNIVAC at the IRDC, working 494's (commercial van of IOP/CPM), then moved on to the Joseph Lucas system in Birmingham and then moved to Blue Bell, PA, working for Dr Hans Hermans who created the RTOS on the 418 III. I worked with Hans for three years on the LEAP (Law Enforcement Application) project where we created the LPL (LEAP Processing Language) compiler -- this was an interpretive system, a lot like Java today. Not sure if he is still around, but he would be a good resource -- one of the smartest guys I've ever met and plugged into 418 III's.

Strangely enough I then went on to manage two TMR fault tolerant IR&D projects funded by NOSC in the 1980's. The first was with MIT Draper Labs as a subcontractor, working directly with Jay Lala. From what I've read NASA worked very closely with Draper labs on the TMR aspects of space borne computing and Jay was their acknowledged expert. Jay appears to be at Raytheon these days and if anyone could tell you about this project it would be him. I don't have current contact info but I'm sure Raytheon would help.

This isn't the answer you were looking for but maybe it will get you a little closer to the goal.

VIP Club Past President Lowell Benson

On 3/5: Hans: Thanks for contacting the VIP Club. We have put a note into the announcement section of our website home page [http://vipclubmn.org] - will keep it there for 6-8 weeks to see if any general browsing people respond. We will also put your message into our next newsletter, seeking feedback from our membership. In the meantime;

6. Peruse http://vipclubmn.org/Articles/EighteenBitRevB.pdf, this includes info about the 418 at the U of MT that Dr. George Keremedjiev has on display. The NASA triple system shown in this article has two 1218 computers and one 418.
7. Read through http://vipclubmn.org/cp18bit.html , it shows the lineage of this ISA family.
8. Scan through http://vipclubmn.org/Articles/AFmobileSystem.pdf for info about a variation of the 1218 computers in a special application.
9. Look at http://www.anciens-unisys.com/flash_arrow/welcome.php, this site may give you some leads.
10. http://vipclubmn.org/Articles/Circuit_Card_History.pdf has some circuit card details include component updates to PC cards of both the 418s and 1218/19.

A couple of our VIP Club board members have already copied you on their responses to your inquiry. I'm a bit slower as have been on a 3-wk vacation. If you encounter conflicts within the information that you collect, information from historian George Gray is quite accurate as he has worked with UNISYS fellow Ron Q. Smith.

We would welcome your story(s) about experiences with UNIVAC/Sperry/UNISYS equipment to add to our website anthology. Perhaps we'll generate another 18-bit history paper. {*This is the paper!*}

Danke Schoen, Merci, Gratia, Thanks - *Lowell A. Benson*, BEE U of MN 1966 - Univac 1960 to UNISYS 1994

My personal experiences with the topic:

As a computer operator from 1963 to 1966, I worked with the 1218 and 1219 computers in the St. Paul UNIVAC Military Computer Center. This included processing TRIM I assembler jobs and doing some utility package machine coding.

As with many other old timers, a name escapes me. In May 1972, I spent a day with a UNIVAC, Switzerland salesman at the University of Zagreb supporting a 1106 sales pitch. This included a technical presentation about the Sperry 1616 mini-computer as a front end to their 1106.

Investigative Feedback Messages

1. On 3/1: Hans to Ghis's message - Thanks a lot, I had already checked the three links you indicated. I am still hoping that somebody could point me more specifically to a triple Univac 418 system used by NASA. Best, ***Hans***
2. On 3/1: Hans - I figured you probably had looked at these, but I thought I would send them out anyway. I'm going to see if there are any old field engineers that might know something. The problem is that many of those old timers are not around anymore. ***Ghislain Devlaminck***
3. On 3/1: Dear Keith - Thank you for your efforts. One more thing: The Univac project manager in Switzerland was Steve Dunn, who came to Switzerland from Univac in the USA to manage the ATECO project. Do you happen to know Steve? He might still remember some important details. Best, ***Hans***
4. On 3/1: R. Q. Smith may have known Dunn, but he is not someone I am familiar with. I will ask around. I'm thinking there is a guy from Switzerland that may still work for Unisys that might know him, but I can't remember his mane. I'm thinking it's Rudy something or other. I'll see if I can dredge up anything more. ***Tom Turba***
5. On 3/6: Hi Lowell - Thanks a lot. I checked out everything and the most likely reference, that might help me in my historical research, came from Ben; his reference to Jay Lala. All I could find on the web was that he seems still to be working at Raytheon, that he is an IEEE Life Fellow and that he probably lives at Great Falls VA. So, I sent emails to Raytheon and to the IEEE and postal letters also to Raytheon and to his supposed home address. I will keep you posted if something interesting turns up. Thanks again and all the best. ***Hans***
6. On 3/15: I had Bcc'd George Gray and Ron Q. Smith on my 3/5 message to Hans. George replied: "I don't have any details of NASA's use of the 418."
7.

PostScript:

The following was posted in the Announcements section of our website, http://vipclubmn.org: It is also in the draft of our May/June 2017 newsletter issue.

"Hans Neukom is currently researching the ATECO (Automation of Telegram Exchange with Computers) project of the Swiss PTT in the early 1970s. The ATECO contract was given to the Swiss subsidiary of UNIVAC; the ATECO configuration used three UNIVAC 418-II computers working in parallel to achieve a very high reliability. If you have any experience(s) with this system of 418s or with the '418 sister' computers UNIVAC type 1218/1219, please email us a note. [3/5/2017]"

As of the posting of this article, we have had no feedback. *LABenson*