

# A brief Introduction to HP series 90 TopCat calculators

Włodek Mier-Jędrzejowicz  
HPCC Mini Conf 2023

# HP series 90

- At the 2017 HPCC conference I talked about the HP-35 and brought a few for people to look at and hold.
- Today I aim to talk a bit about the HP series 90 models, and to let you hold some.

# HP Series 90 Quick History

- In 1975 HP introduced the Woodstock series 20, smaller than previous models, really handheld, named after a US comic strip.
- In 1976 they introduced the TopCat series 90, larger than previous models, with a printer built in, again named after a US comic strip. The case was made of the same yellow-grey plastic and the electronics were the same generation.

# HP Series 90 Quick History

- Just for comparison, I am showing an HP-35 and an HP-80, and the much smaller HP-29C, and also the much larger HP-97.
- The HP series 90 are not really handheld, but certainly portable, especially if you carry one in its bag as I am showing. They are ideal to use on a desktop, and lock in a drawer in the evening. Or else lock them up with a chain using the pull-out steel lug.

# HP-91 Scientific Portable Printing Calculator

- The first model was the scientific 91.
- Codename Felix, introduced March 1 1976.
- ROM had become cheaper and it was programmed to give greater accuracy.
- 16 registers, linear regression, but not programmable.

# HP-91



# HP-97 Programmable Printing Calculator

- The second model was the programmable 97.
- Codenamed Kitty Hawk, introduced 1 July 1976.
- Programs and program cards interchangeable with the HP-67, which had a related codename Hawkeye.

# HP-97 Programmable Printing Calculator

- The function set was mostly scientific but because the 97 was programmable, it could run business calculations too.
- I have a couple to show around.



## HP-92 Investor Printing Calculator

- The third model was the financial 92.
- Codenamed Bobcat, introduced a year after the HP-97, 1 July 1977.
- Not programmable but lots of built-in business functions, as can be seen because it has two shift keys.

# HP-92 Investor Printing Calculator

- Because of its extensive financial function set and its printer it is still a very useful calculator to have.
- I have a couple of these to show round too.

# HP-97S I/O Calculator

- The fourth model was the 97S with I/O.
- Introduced on 1 December 1977.
- Based on the Corvallis HP-97 model but designed by HP's Colorado division and so codenamed Ricochet – not a species of cat but a word including the letters “I” and “O” for “I/O”

## HP-97S I/O Calculator

- Uses flag settings to toggle numbers in the X register in and out via the attached box to a BCD port.
- This required redesigned electronics, and the redesigned electronics were later used in the HP-97 and (I think) the HP-92.
- I have one to show round too.

## HP-95C – the missing link

- One more TopCat model was designed but never sold – the HP-95C.
- 100 pre-production models were made and sent out to HP labs and select customers for evaluation.
- Manuals and programming application books were printed.

## HP-95C – the missing link

- It is not clear when it was supposed to be introduced but the manual front page is dated January 1977, so after the HP-97.
- Its full name was the unwieldy “HP-95C Scientific Printing Calculator with Partition Programming”.
- Does anyone know the codename?

## HP-95C – the missing link

- Instead of saving programs and data on cards, the 95C had Constant Memory, so these were saved in memory when it was turned off.
- It had four “program partitions”. Programs could GTO a step in the same program, or JUMP to a step in a different partition – hence the full name.

## HP-95C – the missing link

- It was ready to be introduced, but instead was cancelled!
- Reasons given for the cancellation vary, but in general they are that it would have been competition for the HP-97. As the 97 was already on sale, and was a way to increase sales of the HP-67, the 95C rather than the 97 was cancelled.



## HP-97S I/O Calculator

- Most of the 100 (some say 50) pre-production units were returned to HP and destroyed.
- However, a few survived. I recall Megha Shyam, who worked at HP, bringing one to a meeting and showing it – the front label was missing, but people realised what it was and were amazed.

## HP-95C – the missing link

- Megha donated that one to Dave Hicks' Museum of HP Calculators – the picture on that site shows the unit without label.

## HP-95C – the missing link

- Megha donated that one to Dave Hicks' Museum of HP Calculators – the picture on that site shows the unit without label.
- Here is one with the label!

## HP-95C – the missing link

- Megha donated that one to Dave Hicks' Museum of HP Calculators – the picture on that site shows the unit without label.
- Here is one with the label!
- Tony repaired it for me – thank you Tony.
- Please be very careful with it!!
- I am sure Nigel has an emulator!

# Thank you all

Thank you all

The End

Thank you all

The End

Really

