**News release from the Computer Conservation Society.**

Photos here: http://picasaweb.google.com/stephencfleming/EDSAC?authkey=Gv1sRgCLm9lK_0tMPzDw#
Please credit as indicated.

**NEWS RELEASE**
EDSAC, the forerunner of general purpose computing, is to be recreated
Plans for visitors to The National Museum of Computing to see the recreation of world-famous 1940's stored-program computer

13 January 2011

A working replica of the first fully operational stored-program computer has been commissioned by the Computer Conservation Society (CCS) in recognition of the achievements of the pioneering computer scientists at Cambridge University in the 1940s, to inform the general public about Britain's illustrious computer heritage and to inspire future students of engineering and computing. The CCS, a special interest group of the BCS, the Chartered Institute for IT, has a 20-year track record in successfully recreating pioneering computers.
The Electronic Delay Storage Automatic Calculator (EDSAC) was a general purpose research tool at Cambridge University and also led directly to the first business computer. It is planned to recreate EDSAC in full public view at The National Museum of Computing at Bletchley Park. The project, which is expected to take three to four years, is being funded by a consortium led by computing entrepreneur, Hermann Hauser.
David Hartley, Chairman of CCS and a former president of the BCS, said: "The EDSAC was a brilliant achievement that laid the foundations for general purpose computing and introduced programming methods adopted worldwide and still in use. By recreating EDSAC where the public can watch the process, we aim to enthuse a new generation of computer science and engineering students with the genius of those post-war pioneers at Cambridge University."

EDSAC was originally built by a team led by the late Professor Sir Maurice Wilkes, then Director of the Mathematical Laboratory at Cambridge University and now widely regarded as the 'father' of British computing. Wilkes' objective was to produce a practical and reliable computer using proven hardware and imaginative software programming techniques.
Professor Andrew Hopper, Head of the Computer Laboratory at Cambridge University, said: "EDSAC set computing standards for academia and commerce. It was so successful that in the nine years following 1949 it was used by Cambridge University researchers in studies such as genetics, meteorology and X-ray crystallography and even helped two researchers win Nobel prizes. EDSAC also led directly to the first commercially applied computer, the LEO, that broke new ground by enabling the catering company J Lyons & Co Ltd to perform payroll calculations in 1953."

Kevin Murrell, a director and trustee of The National Museum of Computing, said: "Recreating a fully-functioning EDSAC computer is quite a challenge, but our experience in rebuilding the Colossus computer gives us confidence and insight. The project is fortunate in having the advice and support of Chris Burton who managed the reconstruction of the Manchester Baby, another CCS project. Professor Martin Campbell-Kelly, computer historian at the University of Warwick, will provide an historical and academic perspective for the recreation of EDSAC."

The recreation will be as authentic as possible and true to the spirit and technology of the time. Occupying a floor area of 20 square metres, the replica EDSAC is planned to be a highly visible display. The original had over 3000 electronic tubes (or "valves") used for logic, mercury-filled tubes for memory, data input via paper tape and output on a teleprinter. Only the mercury-filled tubes are expected not to be recreated – in compliance with modern safety requirements – and will be substituted with a similar delay line storage technology.
Initial planning work is underway and the post for Project Manager of the EDSAC recreation will be advertised shortly.

**Notes to Editors**

1 EDSAC facts

• EDSAC was based on the ideas of John von Neumann and others who in 1945 suggested that the future of computing lay in computers which could store sets of instructions (programs) as well as data.
• EDSAC was over two metres high and occupied a ground area of four metres by five metres.
• Its 3000+ vacuum tubes used as logic were arranged on 12 racks.
• Mercury-filled tubes acted as memory
• It performed 650 instructions per second.
• EDSAC ran its first program on 6 May 1949 and soon began nine years of regular service ending in July 1958 when it was dismantled to enable the re-use of precious space. By then it had been superseded by the faster, more reliable and much larger EDSAC 2.

2 Sir Maurice Wilkes

Sir Maurice Wilkes, the designer and creator of EDSAC and now widely regarded as the 'father' of British Computing, died in November 2010 at the age of 97. He continued to take a great interest in computing and was the first President of BCS and a great supporter of CCS right up until his death.

3 About the Computer Conservation Society

Founded in 1989, the Computer Conservation Society (CCS) is a joint venture between the BCS, The Chartered Institute for IT, the Science Museum and the Museum of Science and Industry in Manchester. The primary mission of CCS is to preserve historic computers, develop awareness of the history of computing, and encourage research. CCS runs many specialised working groups, organises a public lecture series, and publishes a regular bulletin Resurrection.

Other CCS restoration and rebuild projects include a replica of the Turing Bombe and a rebuild of Colossus Mark II at Bletchley Park, the Manchester Small-Scale Electronic Machine in the Manchester Museum of Science and Industry and the restored Pegasus in the Science Museum in London. The last is currently the world's oldest working computer, but likely to be superseded by the 1951 Harwell Dekatron Computer, currently a CCS restoration project at The National Museum of Computing.

4 About The National Museum of Computing

The National Museum of Computing at Bletchley Park, an independent charity, houses the largest collection of functional historic computers in Europe, including a rebuilt Colossus, the world's first electronic computer. The Museum complements the Bletchley Park Trust's story of code breaking up to the Colossus and allows visitors to follow the development of computing from the ultra-secret pioneering efforts of the 1940s through the mainframes of the 1960s and 1970s, and the rise of personal computing in the 1980s. For more information, see www.tnmoc.org

Media Contacts
Stephen Fleming
Palam Communications for CCS
+44 (0) 1635 299116
sfleming@palam.co.uk