EDSAC Replica Project

• Why?
  • To understand the state of the art in 1949
  • To understand the development of the machine over its ten years of operation
  • To document the innovative software developed on the machine
  • To complete the record

• What?
  • EDSAC was developed over ten years – which version to replicate?

• Where?
  • Space, power and accessibility

• How?
  • Searching the archives
  • Raising funds
  • Sourcing components
  • Building the project team
  • Training new volunteers
Running the Project

• Leadership
  • Andrew Herbert

• Reference experts
  • Chris Burton, Bill Purvis, & Martin Campbell-Kelly

• Documentation
  • Circuit diagrams
  • Video recordings

• Stores
  • Finding components, commissioning new devices

• Accounting
  • Me - knowing little on workings, but knowing the cost of everything and the difference between a balance sheet and a profile & loss account!
Remaining Artifacts
Remaining Artifacts
Information from Original Images
Information from Original Images
Remaining Artifacts
Building the display screens
Current Status of Project

- **Construction**
  - Fetch and Decode instruction from store
  - Execute instructions
  - On target to be able to operate the machine by the end of 2017 as it was in May 1949 by running the table of squares and prime numbers

- **Gallery and Display**
  - Supporting material, leaflets and book

- **Archives and Documentation**
  - New book on EDSAC and the reconstruction
  - Online archive of all original and new information
EDSAC Veterans

• Miss Joyce Blacker
• Cambridge Research Student from 1955
  • Internal structure of stars
  • Was trusted to use EDSAC overnight, while it was working
  • On site help from EDSAC expert, Dr David Wheeler
• Married in 1957 and became Dr Joyce Wheeler
The EDSAC Board

• Sir Hermann Hauser KBE, FRS, FREng, FInstP, CPhys
• Prof Peter Robinson FBCS, CEng
• Dr David Hartley FBCS, CEng
• Prof Andy Hopper CBE, FRS, FREng, FIET
• Dr Andrew Herbert OBE, FREng, FBCS
• Kevin Murrell
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- Dr Andrew Herbert OBE, FREng, FBCS
- Kevin Murrell
  - The Howard Wolowitz of the EDSAC board!
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- Dr Andrew Herbert OBE, FREng, FBCS
- Kevin Murrell FBCS
More Information

- www.tnmoc.org/special-projects/edsac
  - Project news
  - Videos
  - Current Status

- Computer Conservation Society
  - www.computerconservationsociety.org
  - All CCS Projects
  - Membership