

ELECTRONIC DELAY STORAGE AUTOMATIC CALCULATOR

EDSAC



Replica Project

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

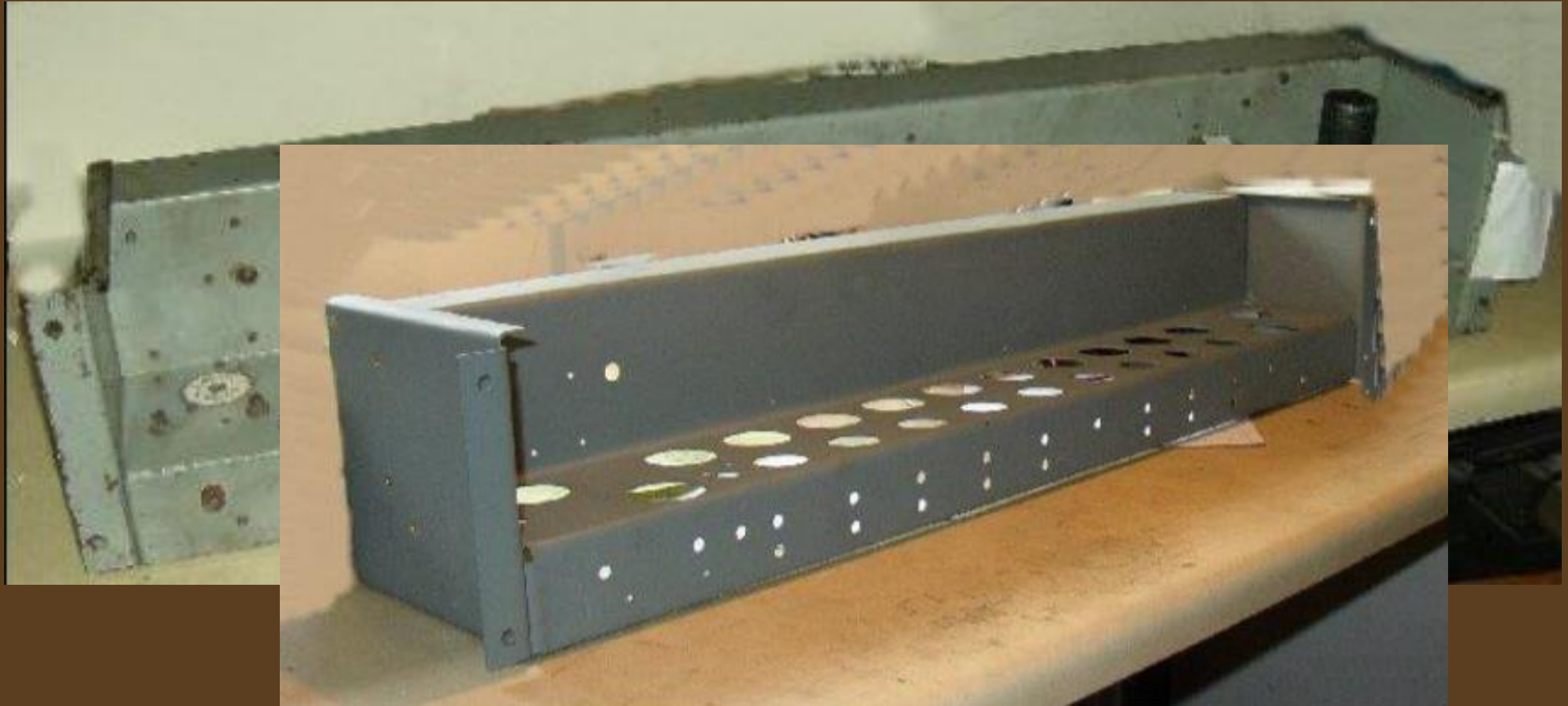
Running the Project

- 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!

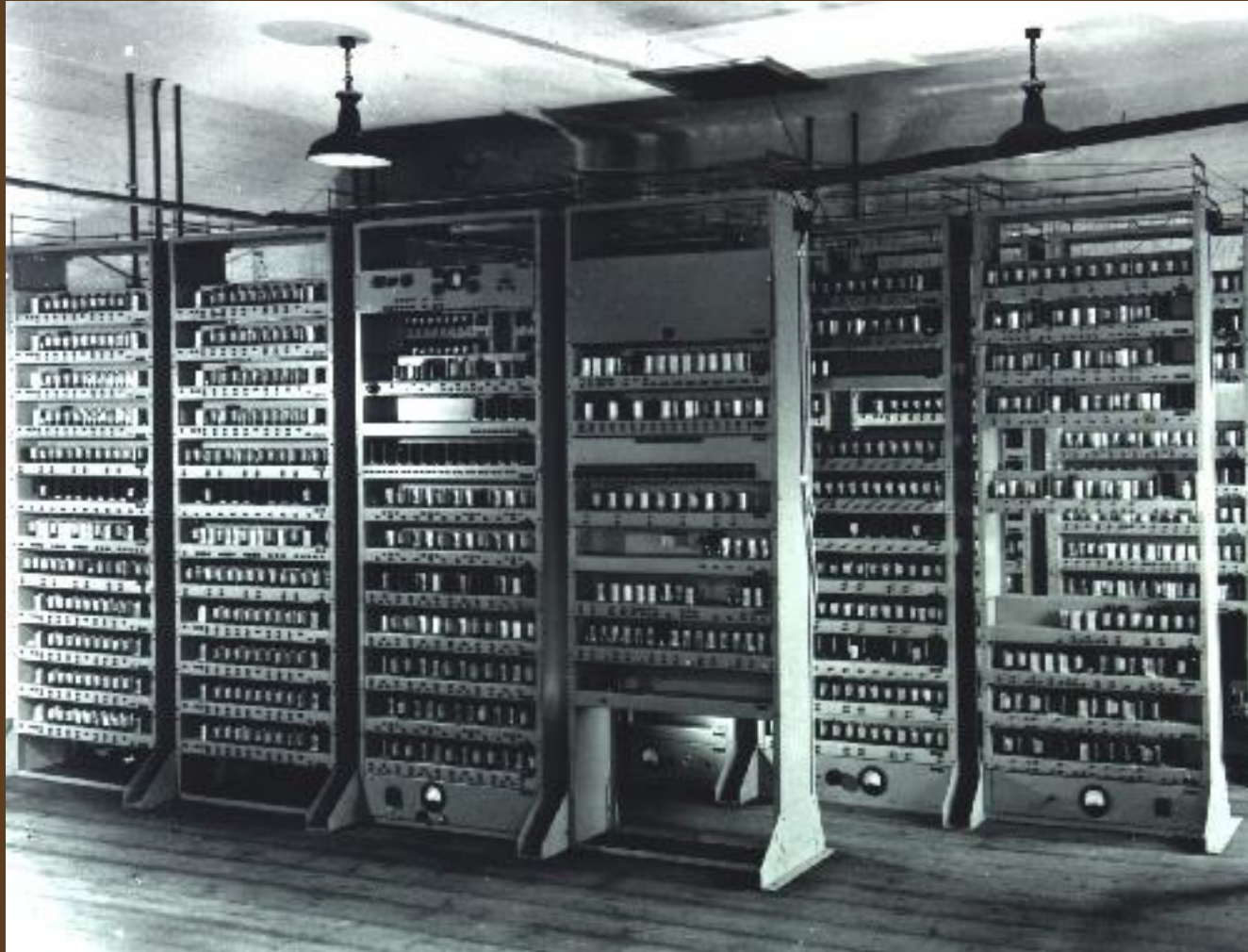
Remaining Artifacts



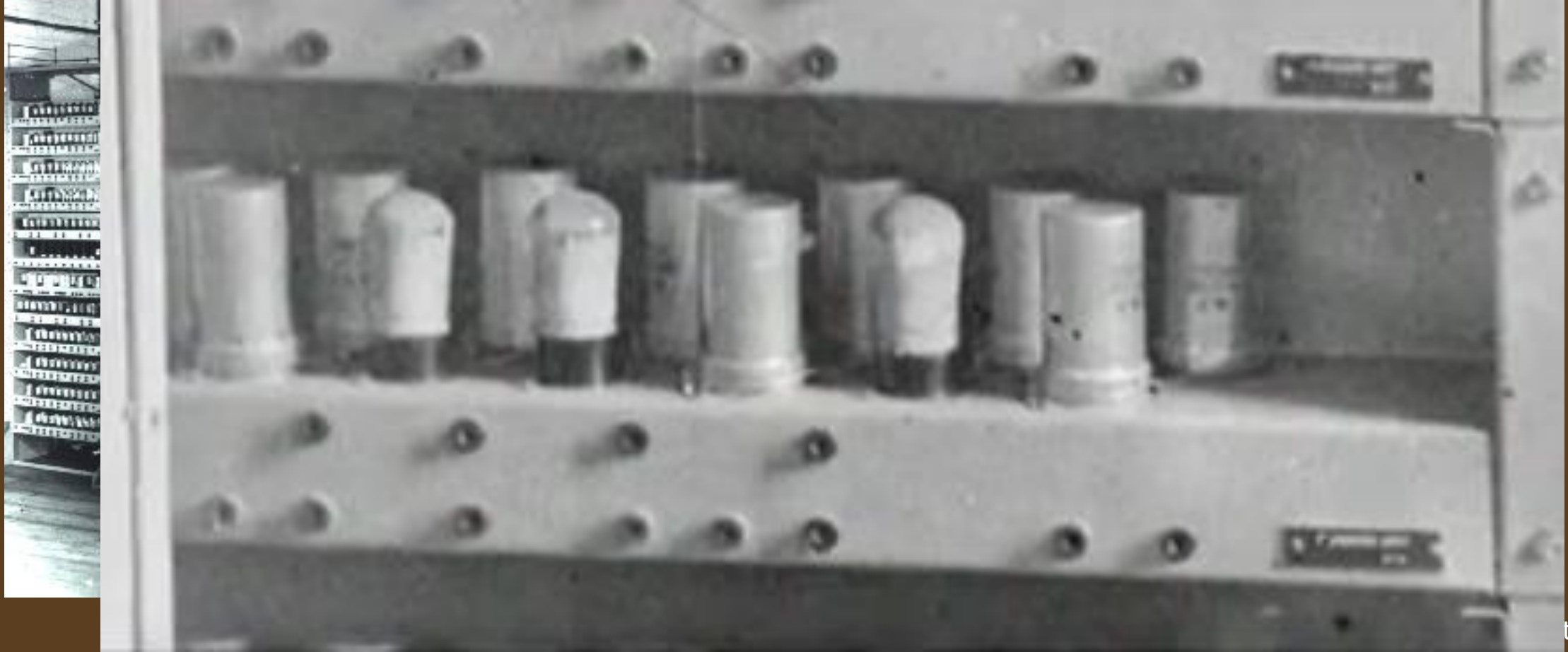
Remaining Artifacts



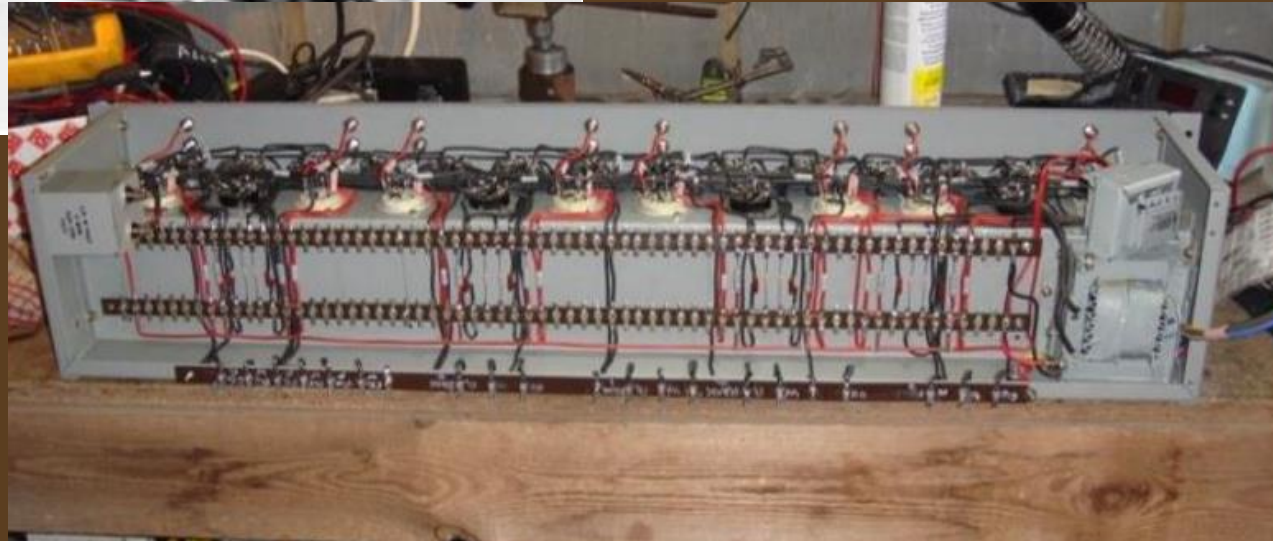
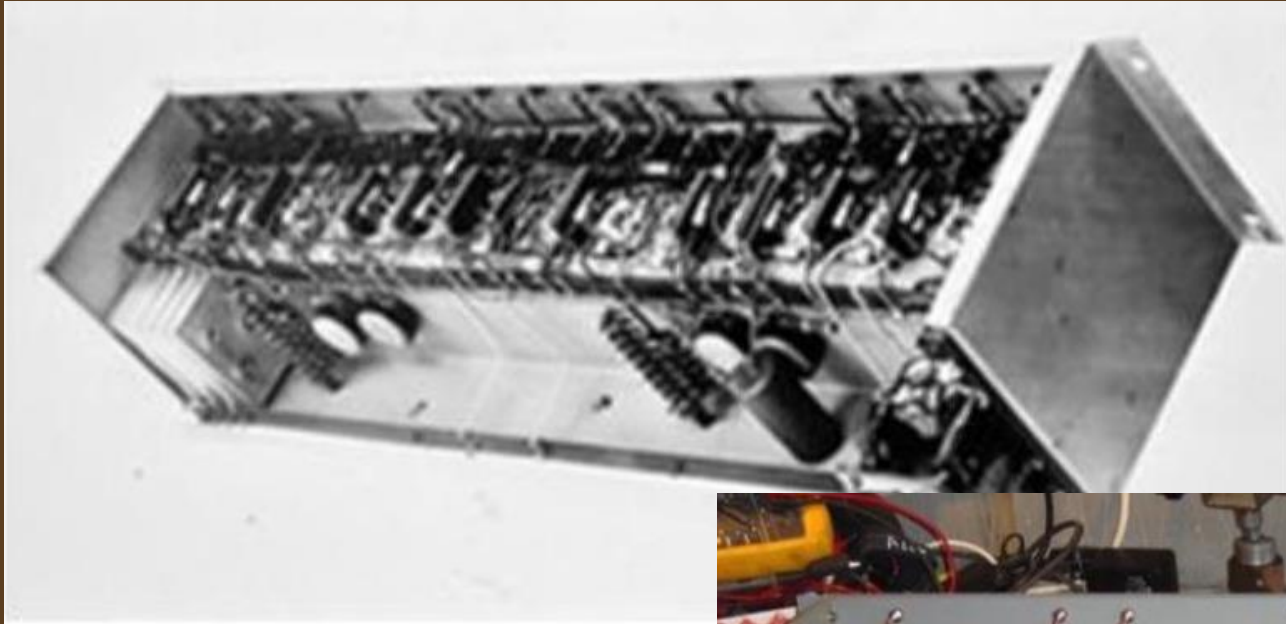
Information from Original Images



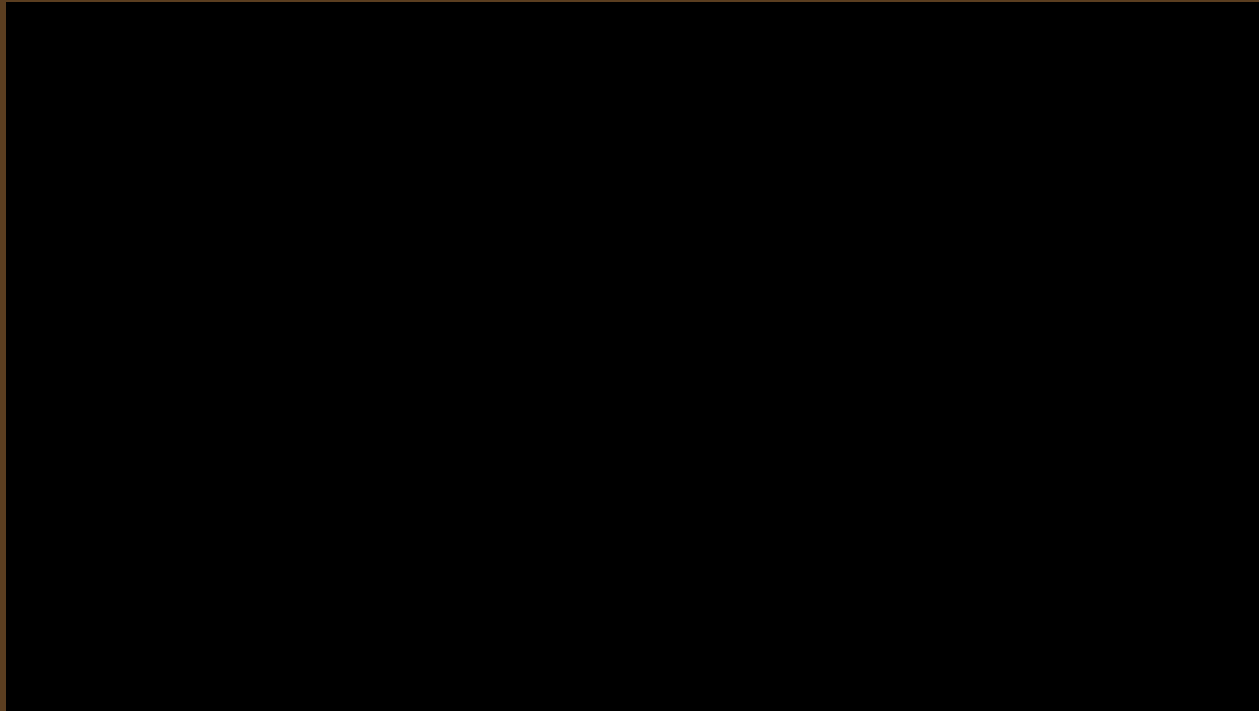
Information from Original Images



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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- Kevin Murrell
 - The Howard Wolowitz of the EDSAC board!

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- 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