

EMIDEC 2400 computer.

Delivery list and applications.

The development of this computer at Electric and Musical Industries Ltd. (EMI) spanned the period approximately late-1957 to mid-1962 – (see the historical note on EMI computers, given in section M1X5 of the *Our Computer Heritage* website).

The date of the delivery of the first production EMIDEC 2400 to the Ministry of Pensions is not known but is assumed to have been 1961 – (see the quotes below). According to the EMIDEC 1100 website <http://www.emidec.org.uk/> “at least five EMIDEC 2400 systems were delivered”. Although ref. 1 states that only three EMIDEC 2400’s were ever sold, it is definitely known that four were delivered (ref. 2). These were:

Customer	Approx. date of delivery	Principal application.
The Ministry of Pensions and National Insurance in Newcastle	Nov 1961	State Graduated Pension Scheme for 26 million people.
Ministry of Defence (Army), RAOC, Chilwell Depot, Nottingham	Nov 1961	The purchase and supply of motor spares, from Austin Champs to Chieftain Tanks, for the British Army worldwide.
Ministry of Defence (Army), RAOC, Donington Depot, Staffordshire	1962 - 63	Army supplies (stocks of technical stores)
Leningrad University	?	(Not known)

Regarding the first delivery, below are two relevant extracts from the EMI *Report of the Directors, Chairman's Review and Statement of Accounts*.

Firstly, for the year ending 30th June 1961: “Late in the financial year we delivered to the Ministry of Pensions the first part of the EMIDEC 2400 computer which ultimately will be carrying out the whole of the clerical work for the new State Graduated Pension Scheme. This, in fact, was a punched card to magnetic tape converter and has been used during the summer months to convert information from many millions of punched cards to magnetic tape in preparation for the main task due to begin next year”.

Secondly, for the year ending 30th June 1962: "In the year ended 30th June 1962 we delivered three of our very own large EMIDEC 2400 machines. The best known of these is the one which Queen Elizabeth the Queen Mother inaugurated for the use of the Ministry of Pensions and National Insurance. This computer will maintain twenty-six million insurance accounts, record more than thirty million contribution returns each year, while making about

eight million amendments and additions to personal data files". This installation was located at the DHSS/HMRC site at Benton Park View (aka Longbenton), Newcastle, where it was still operational in 1968/9.

Here are more details about the EMIDEC 2400 at the MOD's Chilwell Depot, Nottingham. Steve Shepherd (ref. 2) remembers that: "The input/output equipment for this computer included Creed paper tape punches and readers, Hollerith card readers and punches and two Samastronic lineprinters (made by Powers Samas). There were 17 magnetic tape decks.

"The Army's motor spares application processed 50,000 transactions per night. A secondary application was the control of Army vehicles within the UK. The machine operated on the basis of two 8-hour shifts per day, each shift having eleven staff:

- a Shift Leader

- a Console operator

- an Assistant Console operator

- a tape Librarian

- an assistant Tape Librarian

- six ladies who loaded punched cards and lineprinter paper and sorted reports for distribution after the end of the shift.

In addition, there was a day shift of six engineers and a night shift of two engineers to keep the hardware running.

"The Samastronics at Chilwell were eventually replaced by an ICL 1933 line printer. At that time ICL used four-character words and the EMIDEC had six-character words, so ICL supplied a 'Black Box' which converted the EMIDEC 6-character words into one and half ICL words".

More information on deliveries of the EMIDEC 2400 to other sites is currently being sought.

References.

1. M Campbell-Kelly, *ICL: a business and technical history*. Oxford University Press, 1989. ISBN: 0-19-853918-5.

2. E-mails from Steve Shepherd to Simon Lavington, May 2016.