



HISTORY OF SIGNALLING IN 100 OBJECTS ROCKEX—OFF LINE CYPHER EQUIPMENT



ROCKEX was originally designed and made in a joint venture between the Canadians and USA at the request of the British Government. It first entered service in 1943, but this was an earlier model of the equipment. After WW2 a redesigned model was used to pass Top Secret traffic between the UK and Canada, but in 1955, it was authorised for passing NATO COSMIC Secret traffic.

Rockex or BID/08 series was in use within the British Army until the late 1960s, but used by Other Government Departments (ODG) into the 1970s. Rockex was an automated One Time Tape system which provided High Grade cryptograms covering up to Top Secret. It operated on a family of One Time 6 unit Code Tapes which would run parallel to a plain text 5 Unit Murray code tape. The outcome from the Plain text tape run against the One Time Tape provided a cryptogram of 5 letter groups already punched onto a 5 unit tape, or hard copy if desired. It was mainly used at higher HQs and each HQ would hold a number of unique One Time tapes compatible only with other HQs. The system provided a very fast cryptogram compared to other High Grade systems in use at the time.

The One Time Tape principle was similar to that used in the One Time Pad cipher system. Although quite large the Rockex was very versatile device. When encrypting or decrypting the drop arm lever enabled the user to be very precise (down to individual letter) to stop or start the encrypting/decrypting process at any time.

One Time Tapes were issued in the same format as One Time Pads (normally in Editions of 2, 5 or 10) thereby ensuring that any station not in the specific Edition could not decrypt the message. It was replaced by on line equipments such as the BID 610 and BID 700 equipments. The Royal Signals Museum holds a ROCKEX machine on display as shown.

