

Archives Collection No. 101  
The MITRE Corporation  
Title: Whirlwind I Computer Log Books  
Depositor: MITRE Library  
Restrictions: MITRE Personnel

Project Whirlwind was sponsored by the Special Devices Center of the Office of Naval Research under Contract N5 ori 60. The original objective of the project was the development of a device that would simulate airplanes in flight. As the project progressed, other applications of the computer evolved.

Whirlwind I was of the high-speed electronic digital type, in which quantities were represented as discrete numbers and complex problems were solved by the repeated use of fundamental arithmetic and logical operations. The basic elements of the computer were the control, input and output, electrostatic storage and the arithmetic element.

The arithmetic element of Whirlwind I was a parallel digit type with pulsed accumulator, a high speed carry, combined shift and carry for multiplication, and higher repetition frequency for the multiplication operation. The arithmetic element consisted of three registers; an accumulator (AC) or adding unit, which held the result of an arithmetic operation; an A-Register (AR) which received the number from the main bus and held the multiplicand during multiplication; and a B-Register, (BR) an auxiliary register which held the multiplier during multiplication.

Testing of the complete A-Register was begun on December 15, 1948 along with the B-Register and Program Registers (PR). Log Books were kept from that date until 11 June 1952. The Log Books eventually broadened in range to reflect the daily operation of the computer.

The Whirlwind I Computer was leased to the Wolf Research and Development Corporation, West Concord, Massachusetts, under Navy Lease Contract Nonr-2956(00) in 1963.

The Whirlwind I Log Books were transferred from Lincoln Laboratory Division VI to the MITRE Corporation on January 5, 1959 and were placed in the custody of the MITRE Library pending the creation of Archives. These Logs were typed on bond paper and stored in ring binders. The whereabouts of the original hand-written log entries is unknown.

MITRE's copies of the Whirlwind Log Books were water-damaged at some point, probably prior to the 1959 transfer date. Damage was so severe that the decision was made, with corporate approval, to photocopy the Log Books and then destroy the original water-damaged ones. Photocopying was done on archival quality perma-life bond paper.

The material in this collection is unclassified and dates from 1948 to 1952.

Reference:

AC-6 Whirlwind I

Processing Date: 27 March 1981

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**ARCHIVES INVENTORY**

SUBJECT	IDENTIFICATION	DATE	TITLE	AUTHOR	CLS.	COPY NO.
		12/15/48 thru 6/11/52	WHIRLWIND I COMPUTER LOG BOOKS			