

LINCOLN TX-0 AND TX-2 COMPUTER

ARCHIVES COLLECTION NO. 31

31

TX-0 and TX-2 Computer
Lincoln Laboratory
Division VI

Archives Collection No. 31

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Designed and built at the M.I.T. Lincoln Laboratory, by Group 63 - Advance Development the TX-0 and TX-2 experimental digital computers were constructed to check transistor circuitry and magnetic core memory. TX-2 was a research tool in scientific computations, data-handling, and real-time problems.

The Lincoln TX-2 computer was a general-purpose binary parallel machine with a code of 64 single-address instructions, and 64 index registers. The design provided for a random-access memory of 260,000 36-bit words. The instruction code includes the usual arithmetic and logic operations executed at a peak rate of 160,000 36-bit additions per second, with several interesting variants.

Collection Dates: August 1955 - October 1958

AC#31 contains 20 reports, and is arranged in chronological order. The reports in this collection are Unclassified.

References: Archives Collection No. 9 - M.I.T. Lincoln Laboratory Group Leaders Meetings
Archives Collection No. 20 - Magnetic Materials Studies
Archives Collection No. 22 - Lincoln Steering Committee Minutes of Meeting
Archives Collection No. 24 - Division VI - Lincoln Laboratory Biweekly Reports

* MITRE does not have jurisdiction over this project. It is cleared for corporation use, but Lincoln Laboratory Archives must handle any public dissemination.

April 1965

ARCHIVES INVENTORY

| SUBJECT | IDENTIFICATION | DATE | TITLE | AUTHOR | CLS. | COPY NO. |
|---------|----------------|-----------|---|--|------|----------|
| | 6M-3820 | 10 Aug 55 | EMAR: An Experimental Memory Address Register | W. A. Clark | U | |
| | 6M-3820 S#1 | 4 Nov 55 | A Raster Control Switch for EMAR | H. P. Peterson | U | |
| | 6M-4309 | 2 May 56 | Thyratron D-C Power Supplies for TX-0 Computer and Display Development Laboratory | S. T. Coffin | U | |
| | 6M-4571 | 5 Sep 56 | Transistor Logic in TX-0 | R. C. Jeffrey | U | |
| | 6M-4713 | 25 Sep 56 | Lincoln TX-2 Computer | K. H. Olsen W. A. Clark | U | |
| | 6M-4561 | 22 Oct 56 | TX-0 Circuitry | J. R. Fadiman | U | |
| | 6M-4789 | 20 Nov 56 | A Functional Description of the TX-0 Computer | J. T. Gilmore H. P. Peterson | U | |
| | 6M-4968 | 1 Apr 57 | The Lincoln TX-Z Computer | W. A. Clark - J. M. Frankovitch - H. P. Peterson - J. W. Forgie - R.L. Best K. H. Olsen | | |
| | 6M-5097 | 10 Apr 57 | TX-0 Direct Input Utility System | J. T. Gilmore | U | |
| | 6M-5199 | 3 Sep 57 | A Two Transistor Flip-Flop for the TX-2 Computer | R. A. Hughes | U | |
| | 6M-5295 | 15 Oct 57 | ARC-1 Clock Pulse Generator | J. H. Teele | U | |
| | 6M-5590 | 13 Mar 58 | TX-2 Gated Pulse Amplifier | L. Neumann | U | |
| | 6M-5651 | 15 Apr 58 | Plug-In Unit Testing | D. F. O'Brien | U | |

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| SUBJECT | IDENTIFICATION | DATE | TITLE | AUTHOR | CLS. | COPY NO. |
|---------|----------------|-----------|---|---------------------------------|------|----------|
| | 6M-5661 | 21 Apr 58 | Toggle Switch Storage System TX-2 | L. Newmann | U | |
| | 6M-5701 | 16 May 58 | A Computer Integrated Rapid Access, Magnetic Tape System with Fixed Address | R. L. Best T. C. Stockebrand | U | |
| | 6M-5649 | 2 Jun 58 | Remote Display I | H. E. Zieman | U | |
| | 6M-5780 | 23 Jul 58 | Some Examples of TX-2 Programming | H. P. Peterson | U | |
| | 6D-2631 | 1 Oct 58 | A Discussion of the Circuitry Used in the Lincoln TX-2 Computer | J. R. Fadiman | U | |
| | 6M-4789-1 | 3 Oct 58 | A Functional Description of the TX-0 Computer | J. T. Gilmore H. P. Peterson | U | |
| | 6M-5097-1 | 3 Oct 58 | TX-0 Direct Input Utility System | J. T. Gilmore | U | |