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## Guide to the Collection of Digital Equipment Corporation PDP-1 Computer Materials

### Collection number: X3602.2006

Computer History Museum  
Mountain View, California

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### Descriptive Summary

**Title:** Collection of Digital Equipment Corporation PDP-1 Computer Materials

**Dates:** 1960-1983

**Bulk Dates:** 1960-1976

**Collection number:** X3602.2006

**Collection Size:** 9 linear feet 8 boxes

**Repository:** Computer History Museum

Mountain View, CA 94043

**Abstract:** The Collection of Digital Equipment Corporation (DEC) PDP-1 Computer Materials is comprised of program listings, manuals, technical papers, promotional materials, design drawings and photographs regarding the PDP-1 digital computer spanning 1959 to 1983.

**Languages:** Languages represented in the collection: English

### Access

Collection is open for research.

### Publication Rights

The Computer History Museum can only claim physical ownership of the collection. Users are responsible for satisfying any claims of the copyright holder. Permission to copy or publish any portion of the Computer History Museum's collection must be given by the Computer History Museum.

### Preferred Citation

[Identification of Item], [Item Date], Collection of Digital Equipment Corporation PDP-1 Computer Materials, Lot X3602.2006, Box [#], Folder [#], Computer History Museum

### Provenance

The provenance is unknown for the Collection of DEC PDP-1 Computer Materials and most likely came from a variety of different sources. The nucleus of the collection was originally acquired in the 1980s and 1990s when the Computer History Museum was then known as the Computer Museum, located in Boston. The Collection is a portion of the larger artificial Company Collection. Gwen Bell, the Computer Museum's first curator arranged documents by originating institution or company. In 2005 and 2006 all the PDP-1 materials shelved as part of the "Company Collection" were given the found in collection lot number of X3602.2006 and processed.

### Biography / Administrative History

In 1960 Digital Equipment Corporation (DEC) launched its first computer, the PDP-1 (Programmed Data Processor-1). The computer cost \$120,000.00, and was 8 feet by 2 feet by 6 feet in size. The computer was designed in three and a half months by Ben Gurley. He based his

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system on the Massachusetts Institute of Technology (MIT) Lincoln Laboratory TX-0 and TX-2 computers and used DEC's initial product, a series of interconnectable circuits known as "Laboratory Modules," to create the PDP-1.

The PDP-1 was the world's first commercial interactive computer, and was used for process control, scientific research, and graphics applications, as well as to pioneer timesharing systems. The PDP-1 also made it possible for smaller businesses and laboratories to have access to much more computing power than ever before.

Though the PDP-1 was produced in relatively small quantities (just over 50) its impact was significant. For DEC, it was the first in a long line of computers that focused on interactivity and affordability. For the user, the PDP-1 represented an unprecedented freedom of human-machine interaction, spurring the creation of hacker culture at MIT, Bolt Baranek and Newman (BBN) and elsewhere. Inspired programmers created early debugging, text editing, music and game programs - including the first computer video game, Spacewar!

### **Scope and Content of Collection**

The Collection of Digital Equipment Corporation PDP-1 Computer Materials is composed of program listings, manuals, technical papers, memorandums, promotional materials, logbooks, specifications, design drawings, photographs and paper tape [software] spanning 1959 to 1976. The records are divided into eight series and total 9 linear feet, in six record cartons, one manuscript box, and one oversized box. All series are arranged alphabetically by folder title.

The first series, Program Listings, date from 1961 to 1976. Included in this series is the program listing for Spacewar!, one of the earliest, if not the earliest video game, for digital computers. The large group of program listings includes debugging programs, administrative routines, and test programs.

The second series, Technical Notes, date from 1959 to 1975. This series contains technical programming notes to all types of programs from Invisible Debugger to Expensive Typewriter. Contained in this series are technical notes for the PDP-1 by the Digital Equipment Corporation Users Society (DECUS), BBN, DEC, Itek Laboratories, and MIT.

The third series is Manuals, 1960 to 1967. The manuals cover hardware and programming topics. This series contains manuals that focus on specific components as well as ones that cover basic instructions and maintenance for the PDP-1. Included is an early Programmed Data Processor-1 Handbook (1963).

The fourth series is Miscellaneous, 1960 to 1965. Contained in this series are a small number of interoffice memoranda and promotional materials. Also included is a 1963 option and price list. Of interest is an oral history transcript of Richard Best, an engineer who worked at MIT's Lincoln Laboratory and then at Digital Equipment Corporation.

The fifth series Specifications, is a small quantity of specifications dating from 1961 to 1973. These include cable schedules, component lists, component diagrams, and wiring schematics.

The sixth series is Logbooks/ Records. This series consists of logbooks, 1962 to 1976, for the PDP-1 computers at the MIT Research Laboratory of Electronics. Information recorded here describes the programs that were run, maintenance issues, and failures. Also included is an undated maintenance log on loose paper.

The seventh series is Design Drawings, 1959 to 1968. These are oversized schematics of the PDP-1.

- Series 1. Program listings (1961 - 1976)
- Series 2. Technical Notes (1959 - 1975)
- Series 3. Manuals (1960 - 1967)
- Series 4. Miscellaneous (1960 - 1965)
- Series 5. Specifications (1961 - 1973)
- Series 6. Log Books/ Records (1962 - 1984)
- Series 7. Design drawings (oversized drawings) (1959 - 1968)

### **Indexing Terms**

Computer science. Computer architecture and design

Digital Equipment Corporation

Digital Equipment Computer Users Society

Electronic digital computers programmed instruction

Electronic digital computers

Massachusetts Institute of Technology. Dept. of Electrical Engineering and Computer Science

PDP computers

Spacewar computer game

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Time-sharing computer systems

**Related Material**

Harlan Anderson papers, X3575.2006.

DEC corporate records, X2675.2004.

PDP-1 Restoration online exhibit: <http://www.computerhistory.org/pdp-1/>

Other related research documents, software, still and moving images, and physical objects, can be found in the CHM collections database at <http://www.computerhistory.org/search/>. Use the following keywords to find these related materials in the collection:

- PDP-1
- Digital Equipment Corporation (DEC)
- Digital Computer Corporation (DCC)
- Digital Equipment Computer Users Society (DECUS)
- Spacewar

**Separated Material**

Photographs were removed from the collection. There were over 75 original photographs covering, 1960 to 1983, of the PDP-1 Computer taken of the computer in use or for marketing purposes. To view the photographs go to the CHM website at <http://archive.computerhistory.org/search/>.

Paper tapes were removed from the collection. There are 388 catalog records of various software programs punched on paper tape for the PDP-1. The cataloging was done by transcribing what was written on the paper tape and not by machine reading it to verify the actual content of the tapes. To view the paper tape catalog records go to the CHM website at <http://archive.computerhistory.org/search>.

box 1-3

**Series 1. Program listings 1961-1976**

**Series Description**

This series contains a large set of program listings, some of the types of program listings included are debuggers, administrative routines, and test programs.

102635722  
102665103  
102665168  
102665171  
102664280  
102635713  
102636256  
102664281  
102636255  
102665164  
102665170  
102665113  
102636254  
102664282  
102636251  
102665030  
102635727  
102636244  
102636247  
102636241  
102636245  
102636249  
102664283  
102652449  
102635696  
102664465  
102636250  
102636242  
102636253  
102664474  
102636252  
102652330  
102652331  
102664475  
102635748  
102664487  
102664488  
102664489  
102665163  
102665162  
102635710  
102636248  
102635747  
102635744  
102635709  
102664476  
102665059  
102652329  
102664483  
102664681  
102665031

102652338  
102650322  
102635746  
102635745  
102664473  
102664479  
102665061  
102664484  
102652334  
102652336  
102664680  
102635695  
102652332  
102635697  
102635702  
102635698  
102664485  
102664477  
102635715  
102652335  
102665066  
102635716  
102664480  
102665069  
102665147  
102665062  
102664481  
102635732  
102635712  
102635718  
102635719  
102635723  
102635725  
102650074  
102635726  
102650101  
102635728  
102635729  
102635724  
102650321  
102635721  
102635720  
102665165  
102665166  
102652337  
102635700  
102664478  
102635708  
102665167  
102635707  
102636243  
102635701  
102635714  
102636258  
102652339  
102650095  
102664482  
102652386

box 3-4

**Series 2. Technical Notes 1959-1975**

**Series Description**

This series contain technical notes concerning all types of programs.

102665106  
102652307  
102650373  
102650038  
102650039  
102650040  
102652542  
102652325  
102665058  
102650087  
102650070  
102650116  
102650135  
102650093  
102650339  
102650625  
102650372  
102650066  
102650049  
102650575  
102650622  
102650098  
102636261  
102650053  
102650331  
102650118  
102650020  
102650056  
102650083  
102650125  
102650078  
102650334  
102650112  
102650338  
102650103  
102650069  
102650119  
102650123  
102650097  
102650627  
102665104  
102650325  
102650094  
102650104  
102665052  
102650613  
102650630  
102650054  
102645676  
102650084  
102664278  
102650079

102650075  
102650102  
102650099  
102650335  
102650050  
102650052  
102664693  
102665067  
102650326  
102650107  
102650129  
102652328  
102650071  
102650072  
102650077  
102665068  
102650073  
102650031  
102650032  
102650030  
102650037  
102650027  
102650035  
102650029  
102650036  
102650033  
102650034  
102650076  
102650086  
102650314  
102650574  
102650329  
102650336  
102650045  
102650057  
102645674  
102652446  
102665095  
102650060  
102650106  
102650616  
102650092  
102665097  
102650131  
102665054  
102650619  
102665048  
102645673  
102650628  
102664689  
102650371  
102650024  
102650374  
102665112  
102665093  
102664687  
102650631  
102650085

102650096  
102650090  
102650624  
102650576  
102650629  
102650620  
102665132  
102664686  
102650042  
102645677  
102650324  
102650041  
102650046  
102650043  
102650113  
102665088  
102650316  
102650330  
102650134  
102650327  
102650080  
102650328  
102650133  
102650623  
102650115  
102650120  
102650064  
102650063  
102650025  
102650323  
102665098  
102665102  
102664262  
102664692  
102665101  
102665056  
102652326  
102665060  
102650028  
102665091  
102665090  
102664690  
102664277  
102650105  
102650111  
102650573  
102650504  
102650611  
102650121  
102650320  
102636234  
102650614  
102650317  
102665099  
102652327  
102665050  
102650081  
102650047

102650088  
102645675  
102650065  
102650082  
102650126  
102650051  
102650124  
102650091  
102650048  
102650333  
102664691  
102665100  
102636237  
102650109  
102650059  
102650026  
102650130  
102650612  
102650055  
102650058  
102650319  
102650127  
102650128  
102650062  
102650061  
102650136  
102650068  
102650626  
102636236  
102650618  
102664688  
102664682  
102664683  
102635717  
102665092  
102650617  
102650337  
102652418  
102650318  
102650117  
102650315  
102650110  
102665055  
102636259  
102665057  
102665049  
102645672  
102650021  
102650022  
102650023  
102650108  
102650044  
102650114  
102650067  
102650621  
102650132  
102665107  
102650089

102664685  
102650122

box 4-5

**Series 3. Manuals 1960-1975**

**Series Description**

This series cover hardware and programming topics. Included in this series are manuals that focus on specific components as well as manuals that cover basic instructions and maintenance for the computer.

102652387  
102652388  
102650503  
102652403  
102652389  
102652396  
102652397  
102652390  
102652391  
102652448  
102636228  
102650615  
102635758  
102650491  
102650496  
102650497  
102650500  
102650498  
102650492  
102650499  
102650493  
102650494  
102650495  
102635749  
102652398  
102652393  
102652409  
102652395  
102650502  
102652402  
102652399  
102652394  
102652404  
102636240  
102652401  
102652392  
102650501  
102652400

box 5-6

**Series 4. Miscellaneous 1959-1968**

**Series Description**

This series includes a small number of interoffice memorandums, correspondences and promotional materials.

102652406  
102652419  
102652421  
102652420  
102665109  
102665108  
102652405  
102652531  
102652422  
102652416  
102652417  
102652407  
102652408  
102650632  
102665105  
102652415  
102664938

box 6

**Series 5. Specifications 1961-1973**

**Series Description**

This series contain a small quantity of specifications that include cable schedules, components lists, component diagrams, and wiring schematics.

102652423  
102665127  
102652424  
102652426  
102652433  
102652435  
102664279  
102652447  
102665051  
102652431  
102652445  
102652427  
102652428  
102652438  
102636257  
102652439  
102665123  
102634751  
102664679  
102652436  
102652443  
102650100  
102634776  
102665047  
102652434  
102652444  
102652429  
102652432  
102652430  
102635759  
102652437

box 6

**Series 6. Log Books/ Records 1962-1984**

**Series Description**

This series consists of logbooks for the PDP-1 computers at the MIT Research Laboratory of Electronics.

102665149  
102665148  
102665027  
102665064  
102665026  
102665025  
102665029  
102665016  
102665017  
102665020  
102665018  
102665019  
102665022  
102665021  
102665028  
102665024  
102665023

box 7

**Series 7. Design drawings (oversized drawings) 1959-1968**

**Series Description**

This series contain oversized schematics of the PDP-1.

102650752  
102650751  
102650754  
102650753  
102650755  
102650749  
102650750  
102650797  
102650796  
102665128  
102665129  
102665131  
102650732  
102650862  
102650861  
102650748  
102650759  
102650747  
102650746  
102650745  
102665130  
102650744  
102650743  
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102650738  
102650740  
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102665136  
102650734  
102650857  
102650860  
102650859  
102650858  
102650856  
102650871  
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102650863  
102650870  
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102650844  
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102650782  
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102650775  
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102650773  
102650763  
102650762  
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102650772  
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102650757  
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102650866  
102650733