



Inventory of Hitachi Global Storage Technologies collection on IBM hard disk storage, 1955-1992

The following inventory was provided by the donor.

Collection Overview

Hard Disk Drive History, 1955-1991

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- Box 5: Hard Disk Drive history, 1981-1983
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- Box 7: Hard Disk Drive history, 1988-1991

HDD Technology, 1965-1992

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Magnetic Tape Technology, 1970-1990

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Optical Storage Technology, 1960-1990

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Acronyms

- RAMP IBM Random Access Memory Program
- ITL Interdivisional Technical Liaison
- DAS Direct Access Storage
- DASD DAS Drive
- AMRT IBM Advanced Magnetic Recording Technology Organization

CTC IBM Corporate Technical Committee
EP&T IBM Corporate Engineering, Programming and Technology Organization
TRB IBM Corporate Technical Review Board
MRI IBM Magnetic Recording Institute
SAC IBM Corporate Science Advisory Committee
CSL IBM Compact Storage Lab
SPD System Product Division
Gbps Gigabits per Square Inch
Mbps Megabits per square inch

Detailed Box List

Box 1: Hard Disk Drive history, 1955-1967

1955 RAMAC
1957 305 RAMAC System, RAMAC Interviews
1958 RAMAC Organization, Mechanical Memory Catalog
1962 RAMP File Technology
1964 File Strategy
1965 RAMP Conference
1966 RAMP Technology Conferences
1967 RAMP Technology Open House, Storage Products, Technical Strategy, Video Buffer

Box 2: Hard Disk Drive history, 1968-1971

1968 Recording Materials Study, Video Tape Loop Buffer, Magnetic Recording ITL
1969 Magnetic Recording ITL, Fixed Head File
1970 2311 File, Sealed HDA, Magnetic Recording ITL, DAS Strategy, ECC Code, Storage Hierarchy White Paper, Storage Products Review, AMRT Program
1971 AMRT review by CTC, AMRT and DASD Strategy. AMRT Internal Review, DAS Technology Review

Box 3: Hard Disk Drive history, 1972-1976

1972 DAS Technology and Product Strategies, Redroof Program Review, Apollo Disk File Proposal, 3340 ECC, Large Memory Proposal, Magnetic Recording Strategy, Storage Control Manual, Storage Enhancement Study
1973 Apollo and Winchester Programs, Review of Disk File Development, Enhanced Magnetic Recording Review
1974 3310 and 4331 Program Review, Apollo Product Technology
1975 Magnetic Recording Study
1976 DAS Technology

Box 4: Hard Disk Drive history, 1977-1980

1977 Gap-Filler Tech. in Storage Systems, 3370 ECC
1978 Magnetic Recording Research, Ferrite Head Study, Storage Systems Overview

- 1979 DAS Review, 3370 and 3880 Publication, Research Storage Programs, CTC Review
- 1980 Prognosis of Magnetic Recording, DAS Tech. Strategy 1980-1990, Magnetic Recording Environment Study, 3380 DAS System Product and Technology, DASD Technology Study, Advanced DAS Technology, DASD Report to CTC, EP&T Review

Box 5: Hard Disk Drive history, 1981-1983

- 1981 DASD Technology Study, CTC Review, DAS Technology Review, Frontier Technology Review, DASD Tech. Strategy, 3375 Product Description and Technology,
- 1982 Coding and Error Control Symposium, Frontier Tech. Strategy, DAS Product and Tech. Review, Magnetic Recording at Yorktown, SAC Report, Magnetic Storage System Environment, Storage Management Technology and Strategy
- 1983 MRI Strategy and Operating Plan, Storage Systems and Technology, Report on Data Density Limits, DASD Technology 10 year Outlook, DASD Technology and Strategy, MRI Strategy and Operating Plan, MRI Presentation, Manufacturing Research, MRI Program Review, Research Preliminary Environment Strategy and Plan

Box 6: Hard Disk Drive history, 1984-1987, Bubbles Technology, Film Library Technology

- 1984 DASD Technology Study, MRI Strategy and Plans, TRB Presentation, DASD Innovation Brochure
 - 1985 Gigabit Task Force, DASD Plan, DASD Technology. Competitive Assessment of the US Disk Storage Industry, Storage Environment, MRI Strategy and Plan, Principles of Magnetic Recording
 - 1986 Volumetric Density Study, Prototyping Strategy, MRI and Research 1985 Review and 1986 Direction, DASD Technology Roadmap., SPD Technology Roadmap, Storage Subsystem Performance Requirements - a 10 year outlook, Science in Magnetism, MRI presentation to the TRB, CSL, CSL Annual Report and Board Meeting, DASD Technology 10-Year Outlook, Proposal for CSL
 - 1987 CSL Strategy, Areal Density Potential of Perpendicular Recording, TRB Presentation, DASD Technology Assessment, DASD Technology, 10 Year Technology Outlook
- Bubbles Technology, 1970-1992
Bubbles vs Apollo
- Film Library Technology, 1964-1968
Photo Digital Storage

Box 7: Hard Disk Drive history, 1988-1991

- 1988 Low-End DASD, 500 Mbps Demo, Magnetic Recording has room for Growth, DASD Strategy Task Force Report, Proposed 2.5 Prototype, Low-End Storage Technology Strategy, Comparison of Perpendicular and Longitudinal Recording, 10-Year Outlook

- 1989 Gbps Areal Density Demo, Competitive Technology Report, Magnetic and Optical Recording, Low End Storage Products Strategy, Ultra-High Density Storage Symposium, Competitive Technology Review, Leading Edge Consumer Products Technology
- 1990 Research Storage Operating Plans, History of Disk File Development at Hursley, Storage Technology 10-Year Outlook
- 1991 Seminar on Magnetic Recording

Box 8 and 9: HDD Technology, 1965-1992

HDD Head Technology

- Inductive Film Heads, MR Heads, Dual Element Heads, Sliders, Tape Heads

Box 10: HDD Technology, 1965-1992

HDD Magnetic Media Technology

- Disk Lubrication, Disk Substrates, Disk Recording Materials, Particulate Disk, Magnetic Particles, Thin Film Disk, Disk Media Strategies, Head / Media Interface, Slider and Suspension Design, HDI History

Flexible Disk Storage

- Metal Foil Disk, Disk Packs, Bernoulli Single Disk DASD

Box 11: HDD Technology, 1965-1992

HDD Servo Technology

- Sector Servos, Buried Servo, Actuators, Digital Servos, MR Servos

HDD Recording Technology

- Contact Recording, Recording Theory, Early Computer Simulations, Perpendicular Recording Media and Early Component Designs

Box 12: HDD Technology, 1965-1992

HDD Recording Technology (continued)

HDD Channel Technology

- Advanced Channels, Frequency Modulation, Channel Simulations, Count Key Data Study, PRML, AC Bias Channel, Codes, Error Rates, Error Recovery

Box 13: Magnetic Tape Technology, 1970-1990

- High Density Tape Storage, High Density Storage in Cartridges, Chrome Dioxide, Tape Heads, MR Heads, Channels, Rotary Head Tape Systems, Libraries

Box 14: Optical Storage Technology, 1960-1990

- Magneto-Optical (MO) Storage Components and Systems, Video Disks, Write Once, Re-Writeable MO Storage, Phase Change, MO and Phase Change Media, Storage Strategies, Density Limits, Hierarchies