#### Finding aid prepared by Patrick Lamble.

#### **Summary Listing**

- 1. Envelope labeled "Copy of ENAC patent to EECS 3117 which contains a packet of electrical diagrams for ENAC and a list of patents.
- 2. Folder labeled "TSRA Reviews" which includes John von Newman's article "Theory of Self-Reproducing Automata", as well as multiple reviews of the piece.
- 3. Folder labeled "Dick's Translation Preface Revisions" with several revisions of *A Word from the Editor of the Translation* by V. Varshavskii.
- 4. Folder labeled "Ill Prem-extra Royalties" with an invoice, ledger, and several letters concerning the royalties for *Theory of Self-Reproducing Automata*.
- 5. Folder marked "Errata" with revisions for a book.
- 6. Folder marked "Essays-Promotion" including letters between Burk and Christie Schuetz concerning distribution of pamphlet *Essays on Cellular Automata*, and a copy of the pamphlet.
- 7. Folder labeled "Permissions for Essays" contains permissions from multiple authors for use of materials in *Theory of Self-Reproducing Automata*
- 8. Folder labeled "Essays on Cellular Auto. Reviews" containing multiple reviews.
- 9. Folder labeled "Essays on Cellular Automata (contract)" with publishing and royalty contracts.
- 10. Folder titled "Royalties" contains permissions for reprints from several authors.
- 11. Folder labeled "Bobbs Merrill Reprints" with permissions for reprinting.
- 12. Folder labeled "Permissions to Reprint My Articles" which contains just that.
- 13. Folder labeled "U Illinois Prem Accounting" contains invoices and royalty statements.

- 14. Folder labeled "U Chicago-Contract" containing a contract for the publication of <u>Cause, Chance,</u> <u>and Reason: An Inquiry into the Nature of Scientific Evidence.</u>
- 15. Folder labeled "Italia Editor of UNTSRA" with letters concerning the translation of *Self-reproducing Automata* into Italian. Also contains a letter and article concerning Self-reproducing space robots and orbital automated factories.
- 16. Folder labeled "Royalties-VNTSRA Essays" with royalty invoices.
- 17. Folder labeled "CCS Vita & Bibliography" 3 copies of vita & bib.
- 18. Folder labeled "VNTSRA Administration" with letters concerning the permissions, editing, and revisions of TSRA. Also contains royalty invoices.
- 19. Folder labeled "Japanese translation of VNTSRA" with correspondence between Burks and Hidenoske Nishio.
- 20. Folder labeled "Russian Preface to VNTSRA" with thanks you letters and a copy of the preface for translation.
- 21. Folder labeled "History of Computers 1975" containing new paper and magazine articles concerning early computers as well as some letters.
- 22. Folder marked "Simulations for the IAS & idealized computer" with a <u>Users Guide for Idealized</u> <u>General-Purpose Computer and IAS computer Assemblers & Simulators</u>. Also contains exams for Burks CCS 569 class.
- 23. Folder labeled "A Small Articulated Theory Problem" with a sheet of questions labeled *Small Problem* & two pages from an unknown source.
- 24. Folder labeled "ENIAC licensing thru 11/1/68" contains licensing documents as well as court documents concerning the patenting and anti-trust suits.
- 25. Folder labeled "Computer Market Notes" with news clipping and notes by Burks concerning IBM's financials.
- 26. Folder labeled "ENIAC Licensing-Progress Reports & Related Correspondence" with legal documents concerning ENAC licensing and patents.
- 27. Folder labeled "Legal Agreements" contains legal paperwork concerning patents and as well as Burks notes about legality of patents.

- 28. Folder labeled "Randell on Turning" contains a letter form I.J. Good and two articles, *Some Future Social Repercussions of Computers & On Alan Turing and the Origins of Digital Computers.*
- 29. Folder labeled "Code Making" with xeroxed copy of <u>Bodyguard of Lies</u>, also several articles about the book and the enigma machine.
- 30. Folder labeled "Bigelow, Fall 1975" with handwritten pages concerning Bigelow.
- 31. Folder labeled "Bigelow Xeroxes and Lectures" contains letters between Bigelow and Burks.
- 32. Folder labeled "PRI going Public Stan Siegel's Advice" with lengthy legal advice & correspondence with a lawyer as well as more handwritten Burk's papers.
- 33. Folder labeled "Background Memorandum" containing two copies of said memorandum.
- 34. Folder labeled "Attachments " with ENIAC letters and articles for the 1940's, and a copy of the Assignment filled in '64 by PRI.
- 35. Folder labeled "Re-negotiations of PRI Agreement" contains letters from the law offices of Yuter & Fields.
- 36. Folder labeled "Aiken-Lawler reports on Computers" with copy of *Monte Carlo Method*, a planning division report, a copy of *Problems for the Numerical Analysis of the Future*, and two reports from the Office of Naval Research London. The first labeled *High speed Electronic Digital Computer of the Academy of Sciences of the USSR & A Second Report on German Computer Work*.
- 37. Folder labeled "Medieval Technologies" with copy of Scientific American from Aug. 1970
- 38. Folder labeled "Ancient Technology" with a single article, *Books* by Philip Morrison.
- 39. Folder labeled "Commuter History" with a letter to Burks from Zuse and an article titled *The Work of Many People.*
- 40. Folder labeled "Computer History 1976" with dozens of magazine clippings and a copy of *Engineering and Science* Jan.-Feb. 1976.
- 41. Folder labeled "History of Computers Xeroxes" with copies of the following articles: Think, Mathematical Tables and other Aids to Computation, Computers and Their Future, Electrical Engineering Jan. 54, Electrical Engineering Feb. 47, Journal of The Franklin Institute, IEEE spectrum-Jan 68 & Aug 64, Bulletin of the American Mathematical Society, The American

Mathematical Monthly Vol. 72,

- 42. Folder labeled "Misc." with pictures of historical scientists, copy of articles: *Illustrious Immigrants, The intellectual Migration, Von Neumann's First Computer Program, Note on Eckert and Mauchly's contributions to the logical design of the first stored program computer, Notes and Reflections on a recent telephone conversation with Goldstine* & a German document Zur Genealogie Programmgesteuerter.
- 43. Large brown folder labeled "Photostat ENIAC Patent" contains patent specification documents, which include a detailed physical description of ENIAC.
- 44. Long folder labeled "Burks, ENIAC Notebook First (z16) Part A" with notes and specs. For ENIAC.
- 45. Long folder labeled "Burks, ENIAC Notebook First (z16) Part B" with notes and specs. For ENIAC.
- 46. Long folder labeled "Burks, ENIAC Notebook First (z16) Part B" with notes and specs. For ENIAC. Has same label as previous folder.
- 47. Long folder labeled "Burks, ENIAC Notebook Third (z12) Part A" with notes and specs. For ENIAC.
- 48. Long folder labeled "Burks, ENIAC Notebook First (z16) Part A" with notes and specs. For ENIAC. The folder has same label as item 44.
- 49. Long folder labeled "Burks, ENIAC Notebook Second (z17)" with notes and specs. For ENIAC.
- 50. Long folder labeled "Burks, ENIAC Notebook Second (z17)" with notes and specs. For ENIAC. This folder has same label as item 49.

#### Finding aid prepared by Patrick Lamble.

#### Summary Listing

- 1. Folder labeled "Negatives & Drawings-Slides" with slides and drawings of automaton processes.
- 2. Folder labeled "Tracing to Change, Cause, Reason chap 6" with what seem to be original drafts of the slides in item 1.
- 3. Folder labeled "Yuter 1971-72" with legal documents pertaining to ENIAC and inventor contributions.
- 4. Folder labeled "Time Record" with letter to lawyer in reference to hours spent on the project.
- 5. Folder labeled "Size of Computer Industry" with articles about Honeywell and GE focused on future computer sales.
- 6. Folder labeled "Yuter 1972-1974" with letters to Yuter from Burks concerning ENIAC royalties.
- 7. Folder labeled "B-S-S ENIAC Contributions" correspondence between Glodstine, Burks, Shaw, & Yuter about development of ENIAC.
- 8. Folder labeled "BSS Contributions" with correspondence on ENIAC same as item 7.
- 9. Folder labeled "My Contributions to ENIAC" with 2 drafts of document with the same title.
- Folder labeled "My Contributions to ENIAC (memo)" with document that is the same as item
  9.

- 11. Folder labeled "Yuts-Correspondence Notes on Correspondence" hand written letters concerning ENIAC and legal issues.
- 12. Folder labeled "Royalty Calculations and Strategy Trees" with legal strategies and probable outcomes.
- 13. Folder labeled "ENIAC drawings" with a list of who had drawn the diagrams.
- 14. Folder labeled "Account Refurbishing MP" with invoices and letters concerning the refurbishing and display of ENIAC.
- 15. Folder labeled "ENIAC patent copy to Xeroxing Pages" with a diagram of ENIAC and a list of applicable patents.
- 16. Unmarked green file folder with same document as item 15.
- 17. Folder labeled "History of Computers" with a proposal to the National Science Foundation for the invention of the electronic computer.
- 18. Folder labeled "IBM New York Exhibit" with an invitation to the exhibit and correspondence with Lynn Stuller. As well as photos of the Exhibit.
- 19. Folder labeled "Slide Drawing Nurnberg" with slides.
- 20. Folder labeled "IBM Griffiths" with pictures of early computing and logical machines.
- 21. Folder labeled "Vanderslice" with correspondence tween Burks and Vanderslice.
- 22. Folder labeled "Brian Randell" with Correspondence tween Burks and Randell.
- 23. Folder labeled "Pomerene, Ware, Vanderslice" with correspondence tween Burks and Vanderslice.
- 24. Large folder containing volumes 1-4 of <u>Theory and Techniques for Design of Electronic</u> <u>Digital Computers.</u> Lectures from 8 July 1946-31 August 1946.
- 25. Folder labeled "B-G-VN Affidavit" contains affidavit concerning patentable material.
- 26. Folder labeled "VNTSRA Masters" contains master copies of transparencies of automaton.

- 27. Folder labeled "Larry Rauch Telemetering 1943-46" contains two articles pertaining to timedivision radio-telemetering systems.
- 28. Folder labeled "Johnniac Eulogy" contains a letter from Willis Ware to Burks and a copy of the JOHNNIAC Eulogy.
- 29. Folder labeled "Hybrid Computers" contains an article by Howe & Saucier titled A New Fourth Generation of Hybrid Computer Systems.
- 30. Folder labeled " de Solla Price Early Automata" with three articles: *Clockwork Before the Clock and Timekeepers Before Timekeeping, Automata and the Origins of Mechanism and Mechanistic Philosophy, & God in Black Boxes.*
- 31. Folder labeled "York on H-Bomb" with two articles. *Fissionable Materials* by Martin Sherwin & *The Debate Over the Hydrogen Bomb* by Herbert York.
- 32. Folder labeled "Rabi" with a two-part profile of I. I. Rabi from The New Yorker.
- 33. Folder labeled "Van Neumann 1945 " with <u>First Draft of a Report on the EDVAC</u> by von Neumann.
- 34. Folder labeled "IFIPS History Project- Wm. Luebbert" with information pertaining to a TV documentary and those responsible for ENIAC's invention.
- 35. Folder labeled "Collier-Babbage Theory" contains letter-requesting permission for the use of Colliers PHD thesis.
- 36. Folder labeled " "Editor, Annals of the History of Computers" with correspondence tween Galler, Burks, and the editors concerning an article in said publication.
- 37. Folder labeled "Uses of ENIAC" with a complete copy of the journal <u>Philosophical</u> <u>Transactions of the Royal Society of London</u> No. 827 Vol. 241 22 June 1948.
- 38. Folder labeled "Service Log" with an ENIAC service log from 9-27-1944 thru 1-6-1948.
- 39. Folder labeled "NARA" with *Creative uses of Logic in the Invention of the Electronic Computer* by A. Burks.
- 40. Folder labeled "References" with references for an unknown document.

- 41. Folder labeled "Peirce Evol Idealism" with *Peirce's Evolutionary Absolute Idealism (Peirce's Idealism, Logical Mechanism and the Problem of Evil)* author Burks I assume.
- 42. Folder labeled "References Temp 7/21/1997" contains the rough draft of the references document in item #40.
- 43. Folder labeled "VNSUMM.DOC" contains rough and final draft of <u>The Creation of the</u> <u>Modern Computer.</u>
- 44. Folder labeled "Introduction Word FW" with rough and final drafts of *Introduction The von Neumann Computer.* As well as figures and photos.
- 45. Unlabeled folder with document Part 1. Invention of Electronic Computing.
- 46. Folder labeled "Chapters 1 FW & Word" with two copies of *Part 1. Invention of Electronic Computing*'s chapter 1 & diagrams.
- 47. Folder labeled "Chapter 2 Word & FW" with two copies of *Part 1. Invention of Electronic Computing*'s Chapter 2 and diagrams.
- 48. Folder labeled "Chapter 3" with two copies of *Part 1. Invention of Electronic Computing's* chapter 3 and diagrams.
- 49. Folder labeled "Ch3 Word to EECS" with chapter 3 of *Part 1. Invention of Electronic Computing* and diagrams. Same as content in item #48
- 50. Folder labeled "Chapter 4 Word and FW" with three copies of chapter 4 of *Part 1. Invention of Electronic Computing* also includes diagrams.

File name: A Burks Finding Aid 13 September 2011

## Arthur Burks Finding Aid

# Finding aid prepared by Patrick Lamble.

# Summary Listing

- 1. Folder labeled "ENIAC Operating Manual & Report" with ENIAC Tec report 2 and ENIAC operating manual.
- 2. Red folder labeled "Ch. 5 Programming the ENIAC" with two copies of chapter 5 including diagrams and forward of chapter 7.
- 3. Folder labeled "Chapter 6" containing two copies of Chapter 6, diagrams, and a few pages or revisions.
- 4. Folder labeled Appendix A with a rough and final copy of the appendix and a set of diagrams.
- 5. Folder labeled "Appendix B" with several edited partial copies of Appendix B. It also includes a rough and final copy of the document and diagrams.
- 6. Folder labeled "Ch. 7 FW & Word" with a forward to chapter 7, two copies of Chapter7, & two packets of diagrams.
- 7. Folder labeled "Appendix C" with a single copy of Appendix C.
- 8. Folder labeled "VN Meeting Notes" with the official notes from the March 14, 1945 meeting with von Neumann. It also includes a letter from Burks' lawyer and two letters by Burks in regard to the meeting with von Neumann.
- 9. Folder labeled "Chapter 8" with a forward of the chapter, three copies of Chapter 8 and two packets of diagrams.
- 10. Manila folder with copy of chapter 9.
- 11. Manila folder containing Xeroxes of hand written documents by Burks. Title of work unknown.

- 12. Manila folder containing multiple 6" floppy discs.
- 13. Blue folder labeled "Into to Chinese translation of Robots & Free Minds" with an introduction to <u>Robots and Free Minds</u>, by Burks.
- 14. Large folder labeled "ENIAC Technical Reports transparencies" with a 1946 tech report in two volumes.
- 15. Folder labeled "Chapter 10 VN Theory of Automata" with two pages from chapter 7.
- 16. Folder labeled "Chapter 10 Who Took Credit" with two copies of chapter 8.
- 17. Folder labeled "CH 11 60 Million Trial" with single page.
- 18. Manila folder containing copies of chapter 5 with editing notes.
- 19. Shoe box containing 5 computer memory tapes and twelve 4" floppy discs.
- 20. Folder labeled "Items for Chuck Tutt" with many computer advertisements and user manuals.
- 21. Folder labeled "Ft. Monmouth Table" with a Review of the Military Theme Information Sciences as well as diagrams and two lists of work that was supported in whole or part by U.S. Army.
- 22. Copy of Logic of Computers Group on Backward-deterministic, Erasable, and Garden-of-Eden Automata.
- 23. Copy of Logic of Computers Group on Backward-deterministic, Erasable, and Garden-of-Eden Automata, same as item #22.
- 24. Folder not labeled with many diagrams as well as hand written notes and figures.
- 25. Folder labeled "ENIAC Information" with ENIAC wiring diagram.
- 26. Logic of Computers Group on Backward-deterministic, Erasable, and Garden-of-Eden Automata
- 27. Complete Decoding Nets: General Theory and Minimality,
- 28. Language and Automata , Automation Research: Design, Construction, Complexity, Adaptation, Sequence
- 29. Sequence Generators and Digital Computers

- 30. Computation, Behavior, and Structure in Fixed and Growing Automata
- 31. The Logical Design of an Idealized General-Purpose Computer
- 32. Folder labeled "History of Automata 1972 and 1973" with newspaper clipping and magazine articles.
- 33. Design of a Computer-Oracle by J.C. Chu
- 34. Progress Report on the Argonne-Oak Ridge Digital Computer form March 5, 1951.
- 35. Folder labeled "Theodore Taylor" with two copies of *The New Yorker* Dec. 3, 1973.
- 36. A Proposal for the Development of Graduate Instruction in Computer Science at the University of Michigan.
- 37. Folder labeled "Computer Materials from IBM" with a large poster, a history of IBM Watson labs, a research brochure, annual report, a profile of the company, and a brief history.
- 38. Folder labeled "Final Exam" contains a 335 page document form the Maryland Civil Court.
- 39. Folder labeled "Technitrol Care" with several hand written pages and *Preliminary Discussion of the Logical Design of an Electronic Computing Instrument.*
- 40. Folder labeled "Honeywell-Consulting" with several legal documents and invoices.
- 41. Folder labeled "Binger ect" with Honeywell litigation documents.
- 42. Folder labeled "PRI Assignment" with an agreement signed by Burks and several others pertaining to realities with PRI.
- 43. Folder labeled "Konrad Zuse-1948" with article written in German.
- 44. Folder labeled "Johnson-Simon-Felfman" with correspondence between Burks, Goldstine, and Simon.
- 45. Loose document concerning Arithmetic Unit for Digital Computer.
- 46. Folder labeled "ENIAC and other early computer reports" with letters between Burks and colleges.

- 47. Folder labeled "ENIAC memories" with two handwritten pages.
- 48. Folder labeled 'ENIAC History" with clippings and a copy of *The Pennsylvania Gazette*.
- 49. Second folder labeled "ENIAC History" with magazine clippings.
- 50. Folder labeled "From notebook on ENIAC history I started" with handwritten pages.
- 51. Folder labeled "Goldstine- Early History of Electronic Computers" with a document of the same name.
- 52. Folder labeled "Origins of Electronic Computers" with magazine and paper clippings as well as handwritten pages.

## Finding aid prepared by Patrick Lamble.

### Summary Listing

- 1. Folder labeled "History of Automata 1972" with several articles from *Scientific America* and a few hand written pages.
- 2. Copy of *Computing Surveys Dec. 1970*.
- 3. Folder labeled "Hurd on IBM Pioneer day at Anaheim" with letters tween Burks and Hurd and two packets of hand written pages.
- 4. Folder labeled "Van der Poel programming and logical design" with a letter from Hurd and a copy of *The Logical Principles of some Simple Computers*.
- 5. Folder labeled "Babbage Reprints" with copy of police investigation from the city of Turin in 1840.
- 6. Folder labeled "Computer Reprint Correspondence" with letters from Burks requesting papers.
- 7. Folder labeled "Smithsonian History Project" with correspondence and a pamphlet on computer science history.
- 8. Folder labeled " UN lecture notes and outline of Ch. 3" with two dozen or so hand written notes and a working outline of chapter 3.
- 9. Folder labeled "ENIAC paper" with two photo copied articles and a couple handwritten pages.
- 10. Xeroxed copy of <u>The Lengthening Shadow</u> <u>The Life of Thomas J. Watson</u>.
- 11. Page 37 of New York Times June 27, 1972.
- 12. Xeroxed copy of Vol. 2 A History of the United States Atomic Energy Commission: Atomic Shield.

- 13. Folder labeled "Computing History Notes 1970" with correspondence phone call transcriptions and several articles.
- 14. Folder labeled "Patent Pamphlets and purchase \_\_\_\_\_\_" with patent information book or patent laws and several patent slips.
- 15. Folder labeled "My ENIAC Patent talk" with a transcript of Burks lecture: "Who Invented The First General Purpose Computer?".
- 16. Folder labeled "ENIAC Lecture 1<sup>st</sup> edited edition" with a transcript of Burks April 2, 1974 lecture.
- 17. Folder labeled "Drawings for slides" with said drawings.
- 18. Folder labeled "Computer History 1970 b" with mix of articles, letters, and typed notes.
- 19. Folder labeled "Computer History 1971" with articles and typed notes.
- 20. Folder labeled "Computer History" several typed papers and notes as well as a second copy of item #12.
- 21. Unmarked folder with two articles by Burks and several articles cut from magazines.
- 22. Folder labeled "Early Computer History" with mix of Burks own work and several other articles.
- 23. Folder labeled "M.V. Wilkes" with several articles written by Wilkes.
- 24. Folder labeled "ENIAC- to 1968" with several hand written pages.
- 25. Folder labeled "History of Computers" with mix of letters, articles, and Burks handwritten and typed notes.
- 26. Folder labeled "History of Computers Misc." with letters and articles.
- 27. Folder labeled "Computer History" with mix of articles, letters, and typed notes.
- 28. Folder labeled "Computer History 1970 Notes and Memos" with mix of articles, letters, and typed notes.
- 29. Folder labeled "Goldstine-Sharpless on ENIAC" with two copies of article by Goldstine and a copy of an article by Brainerd and Sharpless both labeled "ENIAC".

- 30. Folder labeled "Computer History 1974" contains articles.
- 31. Folder labeled "Citation-Copies" with multiple copies of a letter and award given to Burks.
- 32. Folder labeled "High speed Processing Technologies" with transparencies.
- 33. Folder labeled "Pomerene Harvest" with transparencies.
- 34. Two copies of *The Research News* May-June 1986.
- 35. Folder labeled "1997 Ceremony at the American Computer Museum" with programs and pamphlets from the dedication.
- 36. Folder labeled "Loose Papers" with articles and letters that were unfiled.
- 37. Unlabeled red folder with syllabus and written notes for Burks' history of computers course.
- 38. Loose papers: ENIAC patent papers, 8 copies of Lecture notes in Computer Science, 2 copies of From ENIAC to the Stored-program Computer, 2 copies of An Architectural Theory of Functional Consciousness, 2 copies of Logic, Biology, and Automata, 3 copies of Icon, Index and Symbol, 9 copies of The invention of the universal electronic computer-how the Electronic Computer Revolution began, 4 copies of The Logical Design of an idealized general-purpose computer, 3 copies of Teleology and Logical Mechanism, 2 copies of Peirce's Evolutionary Pragmatic idealism, 4 copies of the Bibliography of Arthur Burks, 2 copies of Super Electronic Computing Machine, 2 copies of Turning's theory of Infinite Computing Machines and its Relation to the invention of Finite Electronic Computers 2 copies of Theology, intentionality, and Consciousness, 3 copies of Programming and Structure Changes in Parallel Computers. One copy of each of the following: An Early Graduate Program in Computers and Communications, Publication in Encyclopedia of Cognitive Science, Vita of Arthur Burks, and Automata Models of Self-reproduction.
- 39. VHS tape
- 40. DVD of The ENIAC Film (1946)
- 41. Shoebox full of articles.
- 42. Binder with working copy of The Natural Basis of Freedom and Morality.
- 43. Binder with working copy of Peirce's Evolutionary Pragmatic Idealism

### Finding aid prepared by Patrick Lamble.

Summary Listing

- 1. Folder listing works by Arthur Burks.
- 2. File of material from albert Lewis' files on Arthur Burks.
- 3. Pamphlets on an ENIAC display at University of Michigan; features Arthur Burks and his role in the display.