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Finding Aid

≻William A. Kneller Papers ∢

MSS-171

Size: 18 Linear Feet

Provenance: In 1996, archivist Barbara Floyd met with Dr. William A. Kneller and examined his research files. He agreed at that time to donate the collection to the Ward M. Canaday Center because the Center housed the papers of Wilhelm Eitel and the Eitel Institute. Following Dr. Kneller's death in 2002, his widow, Mrs. Olga Kneller, donated the research files to the Canaday Center.

Access: Open

Collection Summary: Collection consists of personal and professional documents, correspondence pertaining to the Eitel Institute, conference abstracts, papers, reports, geology class material and theses, geology consulting reports, and documents related to Ohio and Pennsylvania Coal.

Subjects: Education and Schools

Related Collections: Wilhelm Eitel and Eitel Institute Collections

Processing Note: None

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Completed by: Kathy Warnes, 2003; last updated: June 2014.

Biographical Timeline

1929	Born April 7 in Cleveland, Ohio
1947-1951	United States Naval Reserve
1951-1980	United States Marine Corps Reserve
1951	Graduated with honors in Geology from
	Miami University, Oxford, Ohio
1948-1951	Laboratory Assistant, Geology Department
	Miami University, Oxford, Ohio
1951	Phi Sigma Biology-Honorary
1951-	Married Olga Kanareff, July 14. The Knellers eventually had
	four children: Karinlee, Gregory John, Ellen Kay and Kirt Tihon.
1951-1953	Intelligence Officer-Second Marine Division
1953-1954	Junior in Engineering, Jet Accessory Division, Thompson Products, Euclid, Ohio
1954-1955	Teaching Fellow, Geology Department- Miami University, Oxford, Ohio
1955	M.S. in Geology, Miami University, Oxford, Ohio
1955-1958	Teaching Fellow, Geology Department, University of Michigan, Ann Arbor, Michigan
1956	Summer Exploration. Quebec Province, Canada For Cartier Mining, Ltd.
1956-1959	Instructor of Geology, Eastern Michigan University, Ypsilanti, Michigan
1957	Instructor of Field Geology, University of Michigan Summer School
1959-1961	Assistant Professor Geology, Eastern Michigan University, Ypsilanti, Michigan
1960-1961	National Science Faculty Fellow, University of Michigan
1961-1965	Assistant Professor of Geology, The University of Toledo
1962	Research Society of Sigma Xi
1963-1985	Chairman, Department of Geology, the University of Toledo
1963	Founded and organized the Department of Geology at the University of Toledo
1964	Ph.D. in Geology, University of Michigan
1964	September 1. Tenure Granted. University of Toledo.
1964-1967	Associate Professor of Geology-The University of Toledo
1965	Designed and Organized Master of Science Program at University of Toledo
1967-1989	Professor and Chairman, Department of Geology, University of Toledo
1973	Elected as Faculty Member of Phi Kappa Phi-Science Honorary
1976-1989	Director, The Eitel Institute for Silicate Research, the University of Toledo
1989-2002	Superannuate Professor of Geology, the University of Toledo
1989-2002	Professor Emeritus of Geology, the University of Toledo
1989-2002	Director Emeritus, Eitel Institute for Silicate Research
1992-2002	Adjunct Professor of Civil Engineering, the University of Toledo
2002	September. Died in Toledo.

Biographical Sketch

William A. Kneller was born on April 7, 1929, in Cleveland, Ohio. He received his A.B. in Geology from Miami University in Oxford, Ohio, in 1951, his M.S. in Geology from Miami in 1955 and his Ph.D. in Geology from the University of Michigan in 1964.

After serving as a Geology teaching fellow at both Miami University and the University of Michigan, Dr. Kneller began his teaching career as a Geology instructor at Eastern Michigan University in Ypsilanti, and was an assistant professor of Geology from 1959-1960. In September 1961, when he was appointed to the faculty of the University of Toledo, the Geology Department was part of the Geography Department, and as one of his colleagues put it, "Dr. Kneller transformed the Geology Department from a pebble to a rock." In only two years the programs were separated and developed into full-fledged courses taught by well-known scholars in the fields of Geography and Geology. In these early days, Dr. Kneller recalled that the Geology Department's annual budget was \$1,100. Even at this stage of his academic career, Dr. Kneller proved to be adept at obtaining money for the program. He recalled the necessity to put in a wet lab in the Geology Department and the lack of money for plumbing. "I told Bill Carlson [UT's president] that we really needed the wet lab and we couldn't wait until the following year to get the money for plumbing. Then he decided to give us the extra money for the plumbing."

By 1966, Dr. Kneller proposed a master's program in Geology for UT to the Ohio Board of Regents. The day the board approved the plan was "one of the happiest days ever in my career at the University," Dr. Kneller said. The Board of Regents singled out Dr. Kneller's proposal for special praise, stating that it was one of the best-prepared proposals they had reviewed.

From 1961 to 1989, Dr. Kneller built, taught in, and chaired the Department of Geology. One of his major contributions to the university occurred in 1988 when a \$1.2 million dollar gift from the Nippon Electric Glass Co. in Japan established UT's first fully endowed faculty chair in silicate science. The post began in September 1989 and was based in the Wilhelm Eitel Institute for Silicate Science and Ceramics Research.

The Eitel Institute focused on the research and study of silicates. Dr. Kneller was instrumental in founding the institute with grant money from Johns-Manville and funds that he had earned from various research consulting jobs. He and UT students and research personnel tested batches of powdery materials that Johns-Manville produced that were used to make the heat-absorbing tiles on the exteriors of the first space shuttles. This work netted about \$1200 per year. Teams of UT researchers and graduate assistants also developed new treatments for sewage sludge and a method of turning cement kiln dust and fly ash into road building materials. The Institute also studied waste solidification, reactions in hydraulic binders and low temperature ceramic coatings for industrial materials.

In his laboratory in the basement of the Bowman-Oddy building, Dr. Kneller presided over coal experiments and canned samples of Ohio coal that he and his graduate assistants and researchers classified, tested, and analyzed. The work involved measuring moisture, volatile components, ashes and impurities in the samples and a coalmine smelt.

The Eitel Institute was just one of Dr. Kneller's activities at UT. The National Science Foundation, the U.S. Department of Energy, Columbia Gas of Ohio, Exxon, France Stone Co.,

the Ohio Coal Research Laboratory Association, Toledo Edison and the Ohio and Federal Highway Administration are just a few of the organizations that sponsored his research. He published over 100 papers and articles and served as a consultant to many stone companies. He documented the effects of chert, a silica-based material, in concrete and developed non-toxic coating for various kinds of pavements. Other research areas included industrial rocks and minerals, electron microscopy of mineral surfaces and concrete petrology.

One of Dr. Kneller's more interesting science activities at the UT involved operating a seismic station for the detection of earth tremors that operated in the Department of Geology. Two seismometers monitored and recorded measurements of irregular earth movements. Dr. Kneller freely acknowledged that Toledo is in a "minor" earthquake zone, but he explained that the UT station served as an important adjunct to the seismic station at the University of Michigan in Ann Arbor because it recorded low-energy earthquake waves generated from a seismic zone near Anna, Ohio, in Shelby County. The waves could not easily be recorded at Ann Arbor because the earth's interior absorbed them, but according to Dr. Kneller, the UT station relayed information on earth movement in the area that could affect the Davis-Besse nuclear power station near Port Clinton.

Dr. Kneller enjoyed long affiliations with many professional and academic societies, including the Sigma Xi scientific honorary, which he helped start at the UT in the 1960s. He was also a member of Sigma Gamma Epsilon, a Geology honorary, and Phi Sigma, a biological science honorary. He belonged to the Geological Society of America, the Mineralogical Society of America, the Society of Economic Paleontologists and Mineralogists, the American Association for the Advancement of Science and the Electron Microscopy Society of America

Outside of UT, Dr. Kneller's professional activities included extensive consulting experience. He consulted on the reinvestigation of the condition of the subsoil at the Health Service Building site at Eastern Michigan University, and was consultant to the Citizens Mutual Insurance Company in Lansing, Michigan. He was the field geologist for the Olivier Mining Company in Northern Quebec, Canada; and consultant to the Edward C. Levy Company in Detroit, Michigan; the Homer A. Merritt Construction Company in Sandusky, Ohio; the Woodville Chemical and Lime Company in Woodville, Ohio; the Nicholson Concrete Company in Toledo; and the Tarbox-McCall Stone Company in Findlay, Ohio. A few of his other consultations included the City of Toledo; N-Viro Energy Systems; Trow Group of Rexdale, Ontario; Woodlawn Cemetery, Toledo; and Sun Refining and Marketing Company. For many years Dr. Kneller served as Research Advisor for the NSF Student Science Training Program in Scientific Research for High Ability Secondary School Students, conducted many Geology Field Camps, and directed dozens of graduate student theses. When he retired from the university in 1989, he said, "My years at the University of Toledo have been wonderful, and I've always tried to do everything in a positive way."

On July 14, 1951, Dr. Kneller married Olga Kanareff and the couple had four children: Karinlee, Gregory John, Ellen Kay and Kurt Tihon. His daughter Karinlee and his son Gregory John worked with him on geology projects.

Dr. William Kneller died in Toledo September, 2002.

Scholarships and Academic Honors and Fellowships

1955	First William Herbert & Hobbs Fellow-University of Michigan
1956	Rackham Graduate Fellow-University of Michigan (Declined)
1959	Nominated by Eastern Michigan University for Danforth Fellowship
1960	National Science Foundation Faculty Fellowship, University of Toledo
1973	Selectee, Gordon Conference on Research in Building Materials
	Tilton School, Tilton, New Hampshire
1978	U.S. Department of Energy, Oak Ridge Associated Universities
	Sponsored Institute on Coal Production, Technology and
	Utilization. Stipend Paid by USDOE. Selection for Institute
	Was based upon National Competition.
1978	Selectee, Penrose Conference on Siliceous Deposits and
	Symposium funded by Geological Society of America at
	University of British Columbia, Vancouver, Canada. This is
	An honor because only 52 participants were selected world wide
1982-	National Research Council (NRC) Commission on Physical Sciences, Mathematics and
1984	Resources, Board of Mineral and Energy Resources (BMER), member on the
	Committee on Highwalls and Approximate Original Contour, (COHAOC), funded by
	Office of Surface Mining (OSM) of the U.S. Department of Interior for the period Sept.
1004	10, 1982 to March 9, 1984.
1984	Nominated for Sigma Xi Outstanding Research Award
1985	Received the 1985 Sigma Xi Service to Science Award for 1985
1990	Won the Wilhelm H.J. Eitel Award for Excellence in Silicate Science. The award included \$1,000 Cash Prize, a medallion and a framed Citation.

Continuing Grants

From: Ohio Department of Transportation (ODOT)

Title: The Precipitate Potential of Highway Subbase Aggregates

With: Dr. Jiwan Gupta Civil Engineering Dept.

Amount: Total - \$198,516, Sponsor (ODOT) \$129,053, UT Contribution \$68,463

Grant Completed in June 1994.

Quantitative X-Ray diffraction studies in batch composites of insulation material used on the space shuttle crafts. Jointly funded by NASA-Manville-Lockheed Aircraft Corp. Since 1974 the Eitel (September 91 to December 92) Institute has generated from this grant/contract a total income of \$191,254.

History of Grantsmanship of Dr. William A. Kneller - \$1,023,471. Total Grants Funded \$1,023,471

In addition, Dr. Kneller was responsible for obtaining over \$1.9 million in gifts, for a total of over \$2.9 million of grants and gifts.

Major Consulting Assignments

1958	Swanson Associates
1962	Citizens Mutual Insurance Company
1964	Edward C. Levy Company
	Homer A. Merritt Construction Company
1965-1994	Alexander Kanareff and Associates
1966-1980	Owens-Illinois, Inc.
1967-1974	Woodville Chemical and Lime Co.
1972-1991	France Stone Company
1979-1982	N-Viro Energy Systems, Ltd.
1984	Trow Group, Ltd.
1984-1987	Woodlawn Cemetery
1986	Y & O Coal Company
1988	Sun Refining and Marketing Company
1988	Owens-Corning Fiberglas

Abbreviated List of Publications:

(Complete List in Biography File, Series 1, Box 1, Folder 9)

United States Patent 4,432,800, February 21, 1984, Kneller, W.A.
Nicholson, J.P., Beneficiating Kiln Dusts Utilized in Pozzolonic Reactions

Articles-Refereed:

Risek, R.M., and Kneller, W.A. 1993, Thermo Plasticity of Selected Ohio and Pennsylvania Coals Utilizing a Dupont Thermo Mechanical Analyzer

Kneller, W.A., Gupta, J., Borkowski, M.L. and Dollimore, D., 1993, Determination of Original Free Lime (CaO) Content of Weathered Iron and Steel Slags by Thermo Gravimetric Analysis.

Kneller, W.A. and DiCesare, J.A., 1989, Physicochemical Characterization of Selected Power Plant Fly Ashes.

Kneller, William A., 1986, Physicochemical Characterization of Coal and Coal Reactivity.

Kneller, W.A., 1981, Memorial of Wilhelm Herman Julius Eitel, May 6, 1891-July 20, 1979.

Kneller, W.A., 1979, Characterization of Ohio Coals for Exploration and Industrial Utilization.

Kneller, William A. "Uber die in der heutigen Vergletscherung der Erde als Eis gebundene Wassermasse: by Albert Bauer. Translated by William A. Kneller and Herbert Gauerke.

Major Research Reports

Gupta, J.D. and Kneller, W.A., 1993, Precipitate Potential of Highway Subase Aggregates, Ohio Dept. of Transportation Project No. 144796.

Kneller, W.A. and Zaeff, G.D., 1981, The Occurrence and Distribution of Minerals within the Pittsburgh No. 8 Coals in Southeastern Ohio: Report No. IV, Ohio Coal Research Laboratory Association.

Scope and Content Note

This collection is divided into eight series: S1. Personal and Professional Documents; S2. Correspondence 1950s-1990s-Eitel Institute Correspondence; S3. Abstracts, Conferences, Papers and Research Reports; S4. Geology Class Material and Theses; S5.Geology Consulting Reports; S6. Printed Materials; S7. Ohio and Pennsylvania Coal; S.8. Geology Material and Technical Publications. Series Two also includes Eitel Institute Correspondence and Material.

Series List

S1 Personal and Professional Documents

1950-1990, 2 Linear Feet

Arranged chronologically and by type

Divided into two subseries, Series 1, Box 1, *Personal and Professional Documents* is comprised of administrative items that Dr. Kneller dealt with as chairman of the Geology Department; biographical information about Dr. Kneller, documentation of his professional activities, salary data, and newspaper clippings detailing his career. Series 1, Box 2, *Personal and Professional Documents*, contains Arts and Sciences Council Minutes, Faculty Senate and Graduate Council Minutes, and maps and other documents from Dr. Kneller's various research trips to Europe and South America.

S2 Correspondence-1950s-1990s

1950s-1990, 3 Linear Feet

Arranged chronologically and chronologically within the folders.

Divided into three subseries. Series 2, Box 1, Correspondence- 1959-1978

Series, 2, Box 2, Correspondence, - 1979-1989

Series 2, Box 3, Correspondence, 1990-1997; Etiel Institute Correspondence, 1976-1997 and Eitel Institute Literature including brochures, circulars and research reports.

S3 Research Proposals, Abstracts, Conferences and Papers

1950s-1990s, 3 linear fee

Arranged alphabetically and by type.

Series includes paper proposals on coal and oil exploration and development written by Dr. Kneller and his colleagues.

Also included are alphabetically arranged abstracts of Geology papers written and Dr. Kneller and his colleagues.

S4 Geology Class Material and Theses

1950s-1990s

One Linear Foot

Arranged Alphabetically and by Type.

Series Four contains teaching materials from Dr. Kneller's geology classes and copies of theses written by his students

S5 Geology Consulting Reports

1950s-1990s

Two Linear Feet

Arranged Alphabetically

Series Five contains Dr. Kneller's consulting reports.

S6 Printed Material

1980s-2000

One Linear Foot

Arranged Alphabetically

Fliers about various University of Toledo activities, Micro Report, Student Affairs Newsletter, magazines and miscellaneous newspapers.

S7 Ohio and Pennsylvania Coal Material

1970s-2000

3 Linear Feet

Arranged Alphabetically.

Series 7, Box 1 has manuals and data on Ohio and Pennsylvania coals.

Series 7, Box 2 contains records from Dr. Kneller's Coal Research Recovery

Company and miscellaneous material on Ohio and Pennsylvania Coals.

Series 7, Box 3 is comprised of Ohio and Pennsylvania Coal Reports.

S8 Geology Reports and Technical Publications

1980s-2000

3 Linear Feet

Alphabetically arranged.

Contains Geology Reports and Technical Publications

Folder List

Box Folder Arrangement

		S1-Personal and Professional Documents
1	1	Academic and Administrative Reports-Geology Department
	2	Geology Department-Personnel Matters and Letters of Recommendation
	3	Geology Department-Personnel Matters and Letters of
		Recommendation
	4	William A. Kneller-Annual Report of Professional Activities 1971-1979
	5	William A. Kneller-Annual Report of Professional Activities 1980-1988
	6	William A. Kneller-Annual Report of Professional Activities 1989-1991
	7	William A. Kneller-Application for Sabbatical Leave
	8	William A. Kneller –Awards and Honors
	9	William A. Kneller-Biographical
	10	William A. Kneller-Books Reviews and Abstracts
	11	William A. Kneller-Civil Service Records
	12	William A. Kneller-Inventory of Grants
	13	William A. Kneller-Letterhead Paper
	14	William A. Kneller-Newspaper Stories
	15	William A. Kneller-Newspaper Stories
	16	William A. Kneller-Patents
	17	William A. Kneller-Personnel Forms
	18	William A. Kneller-Pictures
	19	William A. Kneller-Retirement
	20	William A. Kneller-Salary Data
	21	Theses Dr. Kneller Directed Since 1980
2	1	Arts and Sciences Council – 1984-1989
	2	Faculty Advisory Committee 1987-1988
	3	Faculty Newsletters
	4	Faculty Senates Minutes – 1984-1989
	5	Graduate Council Minutes – 1981-1984
	6	Graduate Council Minutes – 1985-1988
	7	W.A. Kneller-Brazil Trip
	8	W.A. Kneller-Japan Trip
	9	W.A. Kneller-Japan Trip
	10	W.A. Kneller-European Trip-Switzerland

- 11 Maps-United States
- 12 Maps-Army Corps of Engineers
- 13 Maps, Cards from Europe/Greece Trip-September 1988
- 14 Maps, Cards from Europe/Greece Trip-September 1988
- 15 Maps, Cards from Europe/Greece Trip-September 1988
- Maps, Cards from Europe/Greece Trip-September 1988
- 17 Maps, Cards from Europe/Greece Trip-September 1988
- 18 Travel Folders Norway and Scandinavia
- 19 British Isles and Ireland –1971
- 20 Phi Kappa Phi-University of Toledo Honorary Society
- 21 Sigma Xi-University of Toledo Chapter
- U.S. on the Moon -1969
- 23 U.S.S. South Dakota Battleship

S2. Correspondence 1950s-1990s, Eitel Institute

- 3 1 Correspondence and Documents
 - 2 Correspondence-1959
 - 3 Correspondence-January-July, 1960
 - 4 Correspondence-August-December, 1960
 - 5 Correspondence-1961
 - 6 Correspondence-January-July, 1962
 - 7 Correspondence-August-December, 1962
 - 8 Correspondence-January-July, 1963
 - 9 Correspondence-August-December, 1963
 - 10 Correspondence-January-July, 1964
 - 11 Correspondence-August-December, 1964
 - 12 Correspondence-January-July, 1965
 - 13 Correspondence-August-December, 1965
 - 14 Correspondence-January-July, 1966
 - 15 Correspondence-August-December, 1966
 - 16 Correspondence-January-July, 1967
 - 17 Correspondence-August-December, 1967
 - 18 Correspondence-January-July, 1968
 - 19 Correspondence-August-December, 1968
 - 20 Correspondence-January-July, 1969
 - 21 Correspondence-August-December, 1969
 - 22 Correspondence-1970
 - 23 Correspondence-1971
 - 24 Correspondence-January-July, 1972
 - 25 Correspondence-August-December, 1972
 - 26 Correspondence-January-July, 1973

	27	Correspondence-August-December, 1973
	28	Correspondence-1974
	29	Correspondence-January-July, 1975
	30	Correspondence-August-December, 1975
	31	Correspondence-1976
	32	Correspondence-January-July, 1977
	33	Correspondence-August-December, 1977
	34	Correspondence-January-July, 1978
	35	Correspondence-August, December, 1978
4	1	Correspondence-January-July, 1979
	2	Correspondence-august-December, 1979
	3	Correspondence-January-July, 1980
	4	Correspondence-August-December, 1980
	5	Correspondence-January-July, 1981
	6	Correspondence-August-December, 1981
	7	Correspondence-January-July, 1982
	8	Correspondence-August-December, 1982
	9	Correspondence-January-July, 1983
	10	Correspondence-August-December, 1983
	11	Correspondence-January-July, 1984
	12	Correspondence-August-December, 1984
	13	Correspondence-January-July, 1985
	14	Correspondence-August-December, 1985
	15	Correspondence-January-July, 1986
	16	Correspondence-August-December, 1986
	17	Correspondence-January-July, 1987
	18	Correspondence-August-December, 1987
	19	Correspondence January-July, 1988
	20	Correspondence August-December, 1988
	21	Correspondence January-July, 1989
	22	Correspondence August-December, 1989
5	1	Correspondence-1990
	2	Correspondence- 1991
	3	Correspondence- 1992
	4	Correspondence-1993
	5	Correspondence-1994
	6	Correspondence-1995
	7	Correspondence-1996-1997
	8	Correspondence- Miscellaneous
	9	Eitel Institute for Silicate Research

10

Wilhelm Eitel Literature

11	Wilhelm Eitel Literature
12	Eitel Institute-Newspaper Publicity
13	Eitel Institute=Tuscarora Ceramics
14	Wilhelm Hermann Julius Eitel-Biography
15	William A. Kneller- Personal Forms – Eitel Institute
16	Eitel Institute-Information Circular No. 10
17	Eitel Institute-Minutes of Conference –1969
18	Eitel Institute-Coal Analyses Reports
19	Eitel Institute-Indugas Project
20	Eitel Institute-N-Viro Energy Systems
21	Eitel Institute-N-Viro Energy Systems
22	Eitel Institute-Ohio Outline Maps
23	Eitel Institute-Resource Recovery Report
24	Eitel Institute-1980 Toledo Glass
	And Ceramic Award Symposium
25	Eitel Institute Correspondence-1976
26	Eitel Institute Correspondence- 1977
27	Eitel Institute Correspondence – 1978
28	Eitel Institute Correspondence – 1979
29	Eitel Institute Correspondence – 1980
30	Eitel Institute Correspondence – 1981
31	Eitel Institute Correspondence – 1982
32	Eitel Institute Correspondence – 1983
33	Eitel Institute Correspondence – 1984
34	Eitel Institute Correspondence – 1985
35	Eitel Institute Correspondence – 1986
36	Eitel Institute Correspondence – 1987
37	Eitel Institute Correspondence – 1988
38	Eitel Institute Correspondence – 1989
39	Eitel Institute Correspondence – 1990
40	Eitel Institute Correspondence – 1991
41	Eitel Institute Correspondence – 1992
42	Eitel Institute Correspondence – 1996-1997

S3. Research Proposals

- 6 1 Characterization of Base and Subbase Iron & Steel Slag Aggregates
 - 2 Characterization of Ohio Coals for Industrial Use
 - 3 Characterization of Selected Ohio Coals
 - 4 Characterization of Western Kentucky Tar Sands
 - 5 The Coal of Spain

- 6 Comparison of Organic-Rich Shales of Pennsylvanian Age in Indiana with New Albany Shale
- 7 Cryogenic Heat Capacity Measurements of Vitrinite
- 8 Deep Cleaning of High Sulfur Coals by Steam Comminution Using Waste Boiler Heat
- 9 Deep Cleaning of High Sulfur Coals by Steam Comminution Using Waste Boiler Heat
- Depositional Environment of the Harlem Coal Bed Pennsylvanian System in Ohio
- 11 Development of An Innocuous Coating to decrease Absorption in Aggregates
- 12 Dolomitization Kinetics in Hydrothermal Bombs
- 13 Emission Studies Laminar Combustion in High Sulfur Coals
- Evaluation of the Iowa Pore Index and Mercury Intrusion
 Porosimetry Tests for Predicting the Frost Durability of Selected Carbonate
 Rocks
- Evaluation of Utilization of Residues Waste Products as Additions to Portland Cement Clinker Final Report
- 16 Evaluation of Major Chert Burning Aggregate Sources Ohio
- 17 Evaluation of Iowa Pore Index-Predicting Frost Durability of Selected Carbonate Rocks
- 18 Research Proposal-Extraction of Chromium from Salt
- 19 Feasibility and Assessment Studies on a Plasma Beam Operating Unit
- 20 Geochemistry of Germanium in Coal
- 21 History of Coal Research
- 22 Oil Shales-Colorado
- 23 Precipitate Potential of Highway Subbase Aggregates
- 24 Reduction, Elimination or Encapsulation of Free and Hydrated Limes in RPCC Subbase Aggregates
- 25 Rheological Properties of Oil and Water Slurries of Coals of Various Rank
- 26 Research on Oil from Midwestern Shale
- 27 Some Economic and Engineering Properties of Sand in Northwestern Ohio
- 28 Stratigraphy and Paleoenvironmental Reconstruction of the Harlem and Ames Coals
- 29 Supercritical Fluid Extraction High Sulfur Coals
- 30 Synthetic Fuel and Raw Materials
- 31 Synfuels Program for a Demonstration Plant for the Production of Hydrogen from Coal
- 32 Toxicity Characteristics of Slag and RPCC Subbase Aggregates
- Use of Plasma Beam Technology in the Processing and Usage of High Sulfur Content Coals
- 7 1 Abstract-Geological Society of America
 - 2 Abstract-American Association of Petroleum Geologists

- Paper-"A Buried Biotic Assemblage from an Old Saline River Terrace at Milan, Michigan."
- 4 Paper-"A Case History-The Use of Differential Thermal Analysis in Characterising Lucas Dolomite."
- 5 Paper-"A GIS Based Transportation Program."
- 6 Paper-"A Methodology for Conducting A Transportation Survey for Person with Disabilities."
- 7 Paper-"Amount of Water Bound as Ice in the Present Glaciation."
- 8 Paper-"An Alternative Method for Analyzing Fluidity of Coal."
- 9 Paper-"Analysis of Portland Cement for Portlandite and Carbonate."
- 10 Paper-"Applications of Fixation Chemistry for Steel Slags."
- Paper-"Application of Illite Crystallinity, Organic Matter, Reflectance, and Isotopic Techniques..."
- 12 Paper-"The Application of Thermal Analysis to Carbon Black-Elastomer Systems."
- Paper-"The Application of Thermo Mechanical Analysis to Coal and Oil Shale."
- 14 Paper-"Base/Subbase Iron and Steel Slag Aggregates- Kneller."
- 15 Kneller Chapter "Brief Analysis of Erosion National Research Council."
- 16 Paper-"Catalysts-Thermal Analysis Application."
- 17 Paper-"Characterization of Base/Subbase Iron and Steel Slag Aggregate."
- Paper-"Coal-Not Just a Fuel but a Resource: Germanium and Gallium from Coal Ashes."
- 19 Paper-"Computer Methods from the Petrographic Prediction of the Coking and Blending Potential of Selected Ohio Coals."
- 20 Conferences American Institute of Professional Geologists
- 21 Conferences Geology of Industrial Mineral Conferences 1966-1968
- 22 Conferences Geology of Industrial Minerals Conferences 1969
- 23 Conferences Geology of Industrial Minerals Conferences 1970
- 24 Conferences Gordon Conferences Research and Building Materials
- 25 Conferences Miscellaneous
- 26 Conferences Miscellaneous
- 27 Paper-"Correlations Between the Chemical and Geologic Origons of Anthraxolite from the Gunflint Formation, Thunder Bay, Ontario
- 28 Paper- "Precambrian Coal or Anthraxolite: A Source for Graphite in High-Grade Schists and Gneisses."
- 29 Paper-"The Decomposition of Dolostone in Atmospheres of Carbon Dioxide."
- 30 Paper- "The Dehydration of Various Clays."
- Paper-"Determination of the Rank of Coal by Special Fluorescence Measurements on Sporinite Macerals."
- Paper-"Determination of Paleotemperatures Associated with Post-Permian Thermal Events in the Parana Basin, Brazil."
- 33 Paper-"Determination of Original Free Lime Kneller/Gupta."
- 34 Paper-"The Determination of the thermo Mechanical Properties of Ohio

- Shale." Kneller
- 35 Paper-"Determination of Original Free Lime Content of Weathered Iron and Steel Slags."
- 36 Paper- "The Discriminate Analysis for Contaminant Sources."
- 37 David Dollimore Papers
- 38 Paper- "Effect of Temperature Dependent Factors Upon Solids."
- 39 Paper-"Engineering Properties of Phosphogypsum-Based Slag Aggregate."
- 40 Paper-"Factors Controlling Economic Deposition in Jordan."
- 41 Paper-"Geochemistry and Mineralogy of Reactive Silicone Materials
- 42 Paper-"The First Thermal Analyst, Genius or Fraud?"
- Paper-"Highwall Elimination and Return to Approximate Original Contour as Required in the Surface Mining Control and Reclamation Act of 1977."
- Paper-"The Historical Significance of Silicate Science to Material Research." Kneller.
- Paper-"Influence of Dielectric Constant on Sedimentation Rate of Concentrated Suspensions of Aluminum and Magnesium Hydroxides."
- Paper- "The Influence of Pectin and the Bile, Salt/Lecithin/Cholesterol System on the Particle size of Calcium Carbonate Suspensions.
- 8 1 Paper- "Physicochemical Characterization of Medieval Mortars of France."
 - 2 Paper-"Organic Geochemistry of the Kerogen and Bitumen from the Ohio Shale by Pyrolysis-Gas Chromatolography."
 - Paper-"The Measurement of Meaningful Kenetic Parameters For Solid State Decomposition Reactions."
 - 4 Paper-"Paragenetic Relationships of Vein Pyrobitumen in the Panel Mine, Elliot Lake Uranium District, Ontario."
 - 5 Paper-"Physicochemical Characterization of Selected Power Plant Fly Ashes."
 - 6 Paper-"The Physico-Chemical Suitability of Pozzolantic Admixtures as Sanitary Landfill Liner."
 - 7 Paper-Physicochemical Characterization of Coal and Coal Reactivity-A Review.
 - 8 Paper-"Physicochemical Characterization of Selected Power Plant Fly Ashes.
 - 9 Paper-Porosity and Surface Area Size of Two Brazilian Coals."
 - Paper-"Precambrian Vein Pyrobitumen: Evidence For Petroluem Generation and Migration 2 Billion Years Ago."
 - Paper-"Precambrian Vein Pyrobituemn: Evidence for Petroleum Generation and Migration 2 GA algo.
 - 12 Paper-"Precipitate Potential of Highway Subbase Aggregates.
 - Paper-"Reevaluating Mineral Reserve Evaluation Methods-Kneller, Tank.
 - 14 Paper-"Solid Pyrobituemn in Veins, Panel Mine, Elliot Lake District, Ontario."
 - Paper-"Size, Shape and Distribution of Microscopic Pyrite in Selected Ohio Coals.

- Paper-"Stratigraphy, Sedimentology, Diagenesis, Geochemistry, and Economic Geology."
- 17 Paper-"Surface Chemical Cleaning and Passivation for Semiconductor Processing."
- Paper- "Suspension and Sediments, Part. Particle Particle Interactions in Dilute Solid-Liquid Suspensions.
- 19 Papers-Thermal Analysis-Dr. Dollimore
- 20 Paper-Thermal Analysis (TA) of Medieval Mortars from Gothic Cathedrals of France.
- 21 Paper-"Thermo Mechanical Properties (TMA) of the Ohio Shale from the Bellefontaine Outlier, Bristol Ridge, Logan County Ohio."
- Thermal Analysis (DTA) of Selected Power Plant Fly Ashes: An Abstract-William Kneller and Joseph DiCesare.
- 23 Thermal Analysis Studies of Coal Samples, Review
- Thermodynamic, Kinetic and Surface Texture Factors in the Proudction of Active Solids by Thermal Decomposition.
- 25 Kneller and Gupta-Papers-Transportation Research Board
- The Use of the Rising Temperature Technique to Establish Kinetic Parameters for Solid-State Decompositions Using a Vacuum Microbalance.

S4. Geology Class Material and Theses

- 9 1 Coal Geology 629 Articles
 - 2 Economic Geology of Non-Metallics-Geology Lab Manuals-432/635
 - 3 Geology 432/635 Manual
 - 4 Coal Geology 629-Data Tables
 - 5 Coal Geology 629-Glossary of Coal Geology and Mining Terms
 - 6 Glossary of Coal Geology and Coal Mining Terms 1976
 - 7 Coal Geology- 629-Laboratory
 - 8 Log Evaluation of Non-Metallic Mineral Deposits
 - 9 Well Log Applications in Coal Mining and Rock Mechanics
 - 10 Coal Geology 629-Lab Exercises
 - 11 Coal Geology 629-Folm & X-ray Data Sheets
 - 12 Coal Geology 629-Transparencies
 - 13 Coal Geology 629- Gasification of Coal
 - 14 The Use of Petrographic Analysis for the Prediction of Coke Stablity.
 - 15 Coal Geology 629
 - 16 Coal Geology 629-Coal Petrology and Petrography
 - 17 Coal Geology-629
 - 18 Coal Geology 629, Coal Petrology Principles
 - 19 Coal Geology 629-Field Trip, 1986
 - 20 Coal Geology 629-Lecture Notes-Dr. Kneller
 - 21 Coal Geology 161:629:01-Introduction to Fluorescence

- 22 Coal Geology 629-Class Materials
- 23 Coal Geology 629-Petrographic Characteristics of Oxidized Coal
- 24 Coal Geology 629-Log Evaluation
- 25 Coal Geology-629
- 26 Coal Geology 629-Coal Geology and Petrology
- 27 Coal Geology-Coal Mining-629
- 28 Coal Geology, Coal Mining Glossary, 629
- 29 Coal Geology 629-References & Questions on Coal
- 30 Coal Geology 629-Cyclothems
- 31 Coal Geology 629-Transparencies
- 32 Coal Geology 629-Transparencies
- 33 Coal Geology 629-Transparencies
- 34 Geology Transparencies 629
- 35 Geology Transparencies 629
- 36 Coal Geology Laboratory Outline 629:00-001 Winter 1978
- 37 Physical Geology 161-100-01
- 38 Paper Review-Organic Petrology
- 39 Student Science Training Program-Scientific Research 1979-1980
- 40 Kneller Review of Geology Textbook Physical Geology
- Thesis-Characterization of Selected Dolostones Using Rising Temperature Kinetics and Bet Surface Area Methods
- 42 Masters Thesis-Jeffrey Stevenson-Solid Veined Pyrobitumen from the Panel Mine in the Elliot Lake Uranium District, Ontario
- 43 Thesis-Ron Tipton-Core Descriptions-France Stone Company
- 44 Thesis-Hydration Studies on Cements and Related Topics
- 45 Thesis-Richard Risek
- 46 Thesis-Brian Greenwell
- Thesis-Determination of Original Free Lime Content of Selected Iron and Steel Slags by Thermo Gravimetric Analysis

S5 Geology Consulting Reports

- 10 1 Akron Brick and Block Company
 - 2 American Air Filter Company
 - 3 Anchor Hocking
 - 4 Biston-McKay Ores-Eurkea, Nevada
 - 5 Bittersweet Farms
 - 6 Bowling Green State University
 - 7 Citizens Mutual Insurance Company
 - 8 Bowser-Morner Testing Laboratories, Inc.
 - 9 Capital Tire
 - 10 City of Toledo

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Papers

- 11 Columbia Gas System Service Corporation-Correspondence & Miscellaneous
- 12 Columbia Gas System Service Corporation Budget and Contracts
- 13 Columbia Gas Service Corporation Reports
- 14 Statistics- Columbia Gas Service Corporation
- 15 Energystics
- 16 Evaluation of Shale Data-Domtar Inc., Mississauga, Ontario
- 17 Flatrock Samples
- 18 France Stone Foundation Project
- 19 France Stone Company
- 20 France Stone Company
- 21 France Stone Company
- 22 France Stone Foundation
- Geo Search, Inc.
- 24 Indiana Mineral Aggregate Association
- 25 Inland Steel
- 26 Interstate Testing and Drilling, Inc.
- 27 John W. Hawkins Reality Company
- 28 Jones and Henry Laboratories, Inc.
- 29 Monroe Quarry Project
- 30 Kelly's Island Ohio
- 31 Klopper's Stone Laboratory
- 32 Law Building University of Toledo
- 33 Maumee Valley Historical Society
- 11 1 NASA-Lewis Research Center
 - 2 National Bank Building Toledo
 - 3 National Science Foundation
 - 4 Neo-Products
 - 5 Nicholson Concrete and Supply Company
 - 6 Ohio Department of Energy
 - 7 Original TG Plot of Slag SW/O-Complete Annotation
 - 8 Owens/Corning
 - 9 Owens-Illinois Technical Center
 - 10 Paleobotany
 - 11 Pennsylvania Sedimentation of Central Appalachians
 - 12 Periodic Properties of the Elements
 - 13 Petrographic and Chemical Studies
 - 14 Process Costs and Flow Sheets, Bed Defluidization Characteristics, Stone Reactivity
 - 15 Research Foundation, University of Toledo
 - 16 Research Foundation, University of Toledo
 - 17 Research Foundation, University of Toledo
 - 18 Research Foundation, University of Toledo

- 19 Research Foundation, University of Toledo
- 20 Research Foundation, University of Toledo
- 21 Research Foundation, University of Toledo
- 22 Research Foundation, University of Toledo
- 23 Research Foundation, University of Toledo
- 24 Research Foundation, University of Toledo
- 25 Research Foundation, University of Toledo
- 26 Safety Building, City of Toledo
- 27 Swanson Associates
- 28 Technical Proposal Writing
- 29 Toledo Edison
- 30 Toledo Refinery
- 31 Toledo Water Filtration Plant
- 32 Transportation Research
- 33 Franklin Waltz-Hamlet Subdivision
- 34 Woodlawn Cemetery
- 35 Consulting-Vernon J. Wiersmat Associates
- 36 Woodville Lime and Chemical Company
- 37 X-Ray Data
- 38 Youghiogheny and Ohio Coal Company

S 6. Printed Material

- 12 1 Fliers About Various University of Toledo Activities
 - 2 Micro Report
 - 3 Newsletters Miscellaneous
 - 4 Student Affairs Newsletter 1980s
 - 5 Timeline-University of Toledo
 - 6 Scientific American
 - 7 University of Toledo Topics 1978-1985
 - 8 University of Toledo Booklet 1973-1983

S7. Ohio and Pennsylvania Coal Material

- 1 Abstract-Stratigraphy and Pale Environmental Reconstruction of the Harlem and Ames Coals (Upper Pennsylvanian Glenshaw Formation, Appalachian Basin)
 - 2 Carbonaceous and Mineral Mixtures
 - 3 Bituminous Coal Research
 - 4 Booklet "A Century and a half of Ohio's Minerals."
 - 5 Citizen Ambassador Coal Mining Technology Delegation
 - 6 Coal-What is Coal?

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Papers

7	α 1	Abstracts
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- 8 Coal Accumulation-Relationship Plants
- 9 Coal Assessment
- 10 Coal Analysis Seminar
- 11 Coal Characterization, Exploration and Regional Data Base
- 12 Coal Cleaning Program Department of Energy
- 13 Coal Correspondence
- 14 Coal Data
- 15 Coal Deposits, Resources (Terminology) U.s. and World
- 16 Coal Gasification
- 17 Coal Lithotype
- 18 Coal Liquefication
- 19 Coal Literature
- 20 Coal Manuals
- 21 Coal Papers and Booklets
- 22 Coal Proposals and Reports
- 23 Coal References on Mineral Catalysts
- 24 Coal Quality Symposium
- 25 Coal-References on Desulfuration of Coal
- 26 Coal Reports St. Louis Fuel and Iron Company
- 27 Coal Reports
- 28 Coal Research Reports
- 29 Coal Research-Foreign
- 30 Coal Research Manual
- 31 Coal Resources of the Pennsylvania Manuals and Transparencies
- 32 Coal Sample Sheets Dr. Osman Manual
- 33 Coal Science
- 34 William Kneller Coal speech May, 1979
- Coal Transparencies from coal and Coal Seam Composition as Related to Preparation and Carbon
- The Use of Dyes as an Aid to Coal Petrography
- 37 Coal Workshops-Other Locations Than the University of Toledo
- 38 Coalification: Rank
- 39 Geology of Coshocton County
- 40 The Lower Kitanning No. 5 Coal Bed in Ohio
- 14 1 Coal Resource Recovery Company
 - 2 Coal Resource Recovery Company
 - 3 Coal Resource Recovery Company
 - 4 Coal Resource Recovery Company
 - 5 Coal Resource Recovery Company
 - 6 The Characterization of Ohio Coals for Industrial Use

- 7 North Central Ohio Middle Devon Carbon Rocks
- 8 Ohio Coal Report Selected Ohio Coals
- 9 Characterization of Sulfur in Ohio Coals
- 10 Ohio Coal Thesis Timothy I. Hunt
- 11 Ohio Coal Transparencies
- 12 Ohio and Pennsylvania Coals
- 13 Ohio Mining and Reclamation Association Newsletter
- 14 Ohio Shales of Ohio
- 15 Ohio Synfuels Program
- 16 Ohio Universities Synfuels Program
- 17 Quadratic Correlation Results of 77 Physico-Chemical Properties with the TSI of Selected Ohio coals
- 18 Report Ohio's Synthetic Fuels and Exploration Methodology
- 19 Surface Coal Mining
- 20 Supercritical Desulfurization Kinetics of Illinois No. 5 Coals
- 21 Synthetic Fuels in Ohio
- 22 Uncorrected Diffractogram Showing Glassy Phase
- 23 University of Toledo Coal Workshop
- Workshop Characterization of Ohio Coals University of Toledo March 9, 1979
- 25 Minerals of Ohio Ernest H. Carlson
- 26 Properties and Recognition of Deleterious Cherts
- Ohio Public Policy Issues November 1979
 Ohio Journal of Science April Program Abstracts
- 15 1 Ohio Geological Survey
 - 2 Ohio Geological Search for Rocks
 - 3 Ohio Coal Research Associates
 - 4 Ohio Coal Research Laboratories
 - 5 Ohio Coal Research Laboratories
 - 6 Ohio Coal Research Laboratories
 - 7 Ohio Coal Research Laboratory
 - 8 Ohio Coal Research Laboratories
 - 9 Ohio Coal Research Laboratories Association
 - 10 Ohio Coal Research Laboratories Association
 - 11 Ohio Coal Research Laboratories Association
 - 12 Ohio Coal Research Laboratories Association
 - 13 Ohio Coal Research Laboratories Association
 - 14 Ohio Coal Research Laboratories
 - 15 Ohio Coal Research Laboratories
 - 16 Ohio Coal Research Laboratories Association
 - 17 Final Report for Ohio Coal Research Laboratory Association
 - 18 Ohio University Coal Data

- 19 Pittsburgh Coal Conference
- 20 Pittsburgh Coal Energy Technology Center
- 21 Pittsburgh Coal Conference
- 22 Pittsburgh Coal Mining

S8. Geology Reports and Technical Publications

- 16 1 Aerial Photographic Analysis
 - 2 American Laboratory Thermal Analysis Chromatography
 - 3 Alkalic Granities and Pegmatites of the Mount Rosa Area, El Paso and Teller Counties, Colorado
 - 4 American Laboratory-Ceramic Magazine
 - 5 Area Council for Technology
 - 6 Bituminous Test Sections on a Major Urban Freeway
 - 7 Bulletin-American Association for Petroleum Geologists
 - 8 Carnegie Yearbook 12993-1994
 - 9 Chilean Nitrate Deposits Erickson (American Scientist)
 - 10 Clays and Shales of Michigan and their Uses
 - 11 Coal Cleaning Technology
 - 12 Department of Energy Coal News
 - 13 Department of the Navy Bureau of Aeronautics Material
 - 14 The Ecology of Modern Reefs and the Paleo-ecology of Ancient Reefs
 - 15 Elementary Optics for the Military Photogrammetrist
 - 16 Elsevier Science Papers
 - 17 Energy Conservation Workshop University of Toledo
 - 18 Engineering Geology of Ancient Works
 - 19 Environmental Geology Notes 1970-1972
 - 20 Evaluation of Slag and its Potential Impact on the Aquatic Environment
 - 21 Exon Project-Coal
 - 22 Geological Society of America Abstracts
 - 23 Geology Bulletins and Pamphlets
 - 24 Geology Reports
 - 25 Field Guide Book and Conference 1980
 - 26 Geology of Loch Alpine Area
 - 27 Geology Pamphlets and Magazines
 - 28 Geology Paper-Contour Mines and ADC Highwalls
 - 29 Silicate Science by Wilhelm Eitel
 - 30 Geology Transparencies
 - 31 Statistical Program Cormat and Clay Mineralogy Bibliography
 - 32 Geology-University of Toledo
 - 33 High Purity Dolomite in Illinois Willmen 1943
 - 34 Highwall Elimination NRC Report
 - 35 International Committee for Coal and Organic Petrology

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Papers

	36	Journal of Geology
	37	Journal of Sedimentary Petrology
	38	Kaolinite
	39	Kentucky Geological Survey
	40	Use and Abuse of Statistical Methods in the Earth Sciences
17	1	Lime Kiln Dust Reports
	2	Limestone Reports
	3	Limestone Reports
	4	Limestone Sorbent Regeneration in Externally Fired Rotary Kilns
	5	Limestone Stratigraphy and Depositional Environment of Greenhorn Limestone
	6	Limestone Industries of Ontario
	7	Gravel Pit Inventory- Michigan Districts 1,2,3,4
	8	Map-Silica Sand
	9	Main Arrhenius Plots
	10	Midwest Universities Energy Consortium
	11	Mineralogie (German Geology Journal)
	12	Mineral Investigations Resource Map _MR-37
	13	National Science Foundation Summer Program
	14	Newsletter-Association for the Study of Marble and Other Stones in Antiquity
	15	Oklahoma Geological Survey
	16	Physical Properties of Carbonate Aggregate from Ohio
	17	Origin of the Chilean Nitrate Deposits
	18	Photo Geology Problems
	19	Photographic Interpretation Handbook
	20	Interpretation Manual Photographic Metrics
	21	Intelligence Orientation Handout
	22	Pressure-Birefringence Relationships in silicon Single Crystals
	23	The Reaction and Parameters of Lime
	24	Regeneration of Sulfate Limestone from FBCs
	25	Reynolds Denning – University of Michigan Geology Department
	26	Reynolds Denning-University of Michigan Geology Department
	27	Reynolds Denning – University of Michigan Geology Department
	28	Reynolds Denning – University of Michigan Geology Department
	29	Reynolds Denning – University of Michigan Geology Department
	30	Reynolds Denning – University of Michigan Geology Department
18	1	Seven Day Compressive Strengths of Cylinders
	2	Seven and Twenty -Eight Day Compressive Strength Tests of
		Cylinders
	3	Status Report of Compressive Strength Tests
	4	Seven Day Compressive Strength Test Results

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Papers

- 5 Seven Day Compressive Strength Test Results
- 6 Seven Day Compressive Strength Test Results 69-77
- 7 Results of X-Ray Diffraction Study of Hydration of Combinations of Cement Kiln Dust
- 8 Sigma Gamma Epsilon-The Compass
- 9 Silicate Articles
- 10 Society of Economic Paleontologists and Mineralogists Newsletter
- 11 Society for Organic Petrology
- 12 Society for Organic Petrology
- 13 Steel Processing Furnaces
- 14 Stone Articles
- 15 Report on Surface Area and Oxidation Rates for Carbon Blocks
- 16 Swedish Cement and Concrete Research Institute
- 17 Symposium-Michigan: It's Geology and Geological Resources
- 18 Transportation Research Record 1434
- 19 Test Diagrams (Geology)
- 20 Training Department Manual and Procedures
- 21 Training Department Manual No. 6 Map Projections
- 22 Tripoli Silica
- 23 Transportation Research Record
- 24 Twenty-Seventh Annual Field Conference-Ohio Academy of Science
- 25 Upper Rifle River Basin (Michigan) Evaluation
- 26 U.S. Naval Photographic Interpretation Manual 1953-Terrain
- 27 U.S. Naval Photographic Interpretation Center Training Manual 1953
- 28 U.s. Naval Photographic Interpretation Center Training Manual 1953-Defenses
- 29 U.S. Naval Photographic Interpretation Center Training Manual 1953-Communication
- 30 U.S. Naval Photographic Interpretation Center Training Manual Investigating Damage-Urban