

IOWA STATE UNIVERSITY

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**RS 11/9/52**

**Carolyn D. Heising (1952- )**

**Papers, 1970-[ongoing]**

*This collection is stored offsite. Please contact the Special Collections  
Department at least two working days in advance.*

**Descriptive summary**

creator: Heising, Carolyn D. (1952- )

title: Papers

dates: 1970-[ongoing]

extent: 42.94 linear feet (75 document boxes, 4 half-document boxes, 7 records center cartons, and 1 oversized box)

collection number: RS 11/9/52

repository: University Archives, Archives of Women In Science and Engineering, Special Collections Department, Iowa State University.

**Administrative information**

access: Open for research.

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publication rights: Consult Head, Special Collections Department

preferred citation: Carolyn D. Heising Papers, RS 11/9/52, Archives of Women In Science and Engineering, Special Collections Department, Iowa State University Library.

### Biographical note

Carolyn DeLane Heising (b. 1952) received her B.A. (1974) in Applied Physics from the University of California at San Diego and her M.S. (1975) in Nuclear Engineering and PhD (1978) in Mechanical Engineering from Stanford University.

Heising has been employed as a postdoctoral Research Associate (1978-1980) and Assistant Professor (1980-1984) in Nuclear Engineering at the Massachusetts Institute of Technology; Associate Professor (1984-1989) and Professor (1989-1993) of Industrial Engineering at Northeastern University; and Professor of Industrial and Nuclear Engineering at Iowa State University (1993- ).

Heising is a member of Tau Beta Pi, the Society of Women Engineers, the American Nuclear Society (ANS), the Professional Women in ANS Committee, and in 1987, received the Young Scholar Award from the American Association of University Women. She has obtained numerous grants and contracts totaling over 1 million dollars and has presented and published over 200 papers. She currently teaches courses and conducts research in reliability, risk analysis, quality control, and management.

### Collection description

This collection (1970-[ongoing]) contains biographical information, correspondence, research projects, class and employment information, contracting and consulting work, trips, meetings, seminars, and conferences, committee work, published materials, videotapes, audiotapes, and photographs.

The collection is arranged in the following series: **Biographical Information, 1984-[ongoing]**; **Correspondence, 1981-[ongoing]**; **Education and Employment, 1972-[ongoing]**; **Grants and Proposals/Printed Materials, 1973-[ongoing]**; **Meetings and Trips, 1980-[ongoing]**; and **Audiovisual Materials, 1970-[ongoing]**.

Series 1, **Biographical Information**, contains several resumes and a biographical sketch.

Series 2, **Correspondence**, includes for the most part, professional correspondence concerning aspects of Heising's work, but also contains letters from Massachusetts Governor, Michael Dukakis and Iowa Senator, Tom Harkin, indications of Heising's involvement with the Democratic Party.

Series 3, **Education and Employment**, documents Heising's career, beginning with her work at Stanford, the Massachusetts Institute of Technology (MIT), Northeastern University, and numerous consulting jobs. The documents include a National Science Foundation funded study, "Air Pollutants in San Diego County;" her designs for classes;

seminars; printed information concerning MIT; various job interview materials; and class records from Northeastern. Heising's consulting files include jobs with the Oak Ridge Laboratory, Telematique (France), the U.S. Air Force; VALPUC Nuclear Laboratory; Boston Edison and the U.S. Dept. of Energy. Series also contains materials from courses she taught at Iowa State University.

Series 4, **Grants and Proposals/Printed Materials**, contains articles pertaining to Heising's research interests. The topics include aspects of nuclear reactor management - probabilistic risk assessments, the application of Bayes Theorem, responses to accident sequences, nuclear safety, the financial risk of accidents, and quality control. There are also several articles and presentations relating to women in engineering.

Series 5, **Meetings and Trips**, contains information about Heising's extensive travel over the world, to the Faculty Institute at Argonne, the Conference on Nuclear Power for the Arab World, the European Conference Communication, and others. The bulk of this series, however, consists of records from the American Nuclear Society, the Professional Women in ANS (American Nuclear Society) Committee, and the Society of Women Engineers. These records include files on meetings, workshops and seminars.

The remaining series, **Audio-visual Materials**, contains videotapes of presentations and workshops; audiotapes of presentations, including Heising's thesis presentation; and numerous photographs (black and white, color, and negatives). The photographs document Heising's family, trips to Sea World and California, her high school reunion, a Safety Culture conference in Vienna, and Iowa State University.

There is also an untranscribed oral history interview with Dr. Heising in MS-379.

## Organization

The collection is arranged in the following six series:

[Series 1, Biographical Information, 1984-\[ongoing\]](#)

[Series 2, Correspondence, 1981-\[ongoing\]](#)

[Series 3, Education and Employment, 1972-\[ongoing\]](#)

[Series 4, Grants and Proposals/Printed Materials, 1973-\[ongoing\]](#)

[Series 5, Meetings and Trips, 1980-\[ongoing\]](#)

[Series 6, Audio-visual Materials, 1970-\[ongoing\]](#)



<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
46	2	Correspondence at Massachusetts Institute of Technology	1982
46	3	Correspondence at Massachusetts Institute of Technology	1983
46	4	Correspondence - research, Department of Energy	1983-1988
81	25	Northeastern job offer - correspondence	1984
81	30	Job decision between California and Massachusetts - correspondence	1984
1	4	Letter, Charles R. Heising	1985
28	3	Charles R. Heising	1985
46	5	Correspondence with Anthony Coppola	1986
81	31	Heising nomination for AAUW Recognition Award for Young Scholars - correspondence	1986
87	5	Tenure candidacy - correspondence	1986-1987
87	11	Letters of recommendation for tenure - related papers	1986-1988
1	5	Correspondence	1987
1	6	Correspondence (transparent sheets in oversized)	1987
1	8	Letter, Roger Batstone	1987
1	9	Letter, Governor Michael Dukakis	1987
28	4	Regis College	1987
46	6	Letter from Governor Michael Dukakis	1987
87	1	Letters of recommendation, promotion to full professor	1988-1989
46	7	Correspondence - American Nuclear Society	1989-1993
28	5	Interview for department head - Northeastern University	1990
28	6	News clippings	1990-1996
1	10	Letter, Vadim N. Artamkin	1992
28	7	Correspondence with Vadim N. Artamkin, Moscow	1992
46	8	Correspondence - Iowa State University	1993
85	2	Job hunting - related correspondence	1993
1	11	Letter, Senator Tom Harkin	1994
28	8	Nuclear Regulatory Commission - Senior Advisory Committee on Reactor Safeguards fellow	1994

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
84	14	Peveler, Ken - correspondence	1994
85	5	Okogbaa, Geoffrey tenure recommendation - correspondence, information	1994
85	44	Harkin, Tom - correspondence	1994
46	9	Dr. Connie Nobles	1994-1995
86	26	Engineering Department, ISU - general correspondence	1994-1995
28	9	Ardith Maney, women faculty - Iowa State University	1995
28	10	Library donation	1995
46	10	American Nuclear Society - letters for Gail de Planque	1995
86	25	Engineering Department, ISU - general correspondence	1995
28	11	Talk for archives - Iowa State University	1996
28	12	Women Industrial Engineering faculty	1996
28	13	Faculty openings - Industrial Engineering	1996
82	18	Network of Women Full Professors - correspondence related to founding of group	1996
28	14	University of Virginia application	1997
28	15	University of California, Berkeley	1997
28	16	Florida International University	1997
46	11	Correspondence - American Nuclear Society	1997
84	9	Letters of application to other schools - correspondence	1997-1998
81	29	Salamun doctoral thesis review by Heising - correspondence	1998
46	12	Advanced Design Initiative	1999
46	13	Correspondence with Dave Slaninka American Nuclear Society	1999
46	14	Nuclear Energy Institute - article	1999
46	16	University of Maryland - Nuclear Energy Department	1999
46	15	Nuclear Energy Institute - commentary	1999-2000
46	17	Correspondence at Iowa State University	2000
46	18	Electric Power Research Center Extensions	2000-2001
46	19	Correspondence at Iowa State University	2001-2002

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
82	6	University Committee on Women (UCW) - meeting minutes, information, correspondence	2001-2003
82	14	Leadership through Engineering Academic Diversity (LEAD) meetings - correspondence, information, agendas	2001-2004
82	1	Science Mathematics Engineering Technology (SMET) Conference - correspondence, information	2002
82	2	Masculinities/Femininities Conference, Texas A&M - notes, information, correspondence	2002
82	3	International Conference of Women Engineers and Scientists (ICWES) 12 - correspondence, information	2002
82	4	Society of Women Engineers (SWE) meetings - program booklets	2002
82	5	Women and Minorities Committee - correspondence, information	2002-2003
78	10	Center for International Security and Cooperation (CISAC) Fellowship - correspondence, information	2003
82	32	National Science Foundation (NSF) department-level reform of undergraduate education - correspondence	2004
77	9	ADVANCE - general correspondence	2005-2007, undated
77	3	Global Nuclear Energy Partnership (GNEP)	2006
77	5	Engineering Caucus	2006-2007
80	6	ADVANCE - correspondence	2006-2007
1	7	Book correspondence	undated

### Description of series

**Series 3      Education and Employment      1970-2007, undated**

extent:      8.88 linear feet (17 document boxes, 1 records center carton)

description: Documents Heising's career, beginning with her work at Stanford, the Massachusetts Institute of Technology (MIT), Northeastern University, and numerous consulting jobs. The documents include a National Science Foundation funded study, "Air Pollutants in San Diego County;" her designs for classes; seminars; printed information concerning MIT; various job interview materials; and class materials from Northeastern.



Heising's consulting files include jobs with the Oak Ridge Laboratory, Telematique (France), the U.S. Air Force; VALPUC Nuclear Laboratory; Boston Edison and the U.S. Dept. of Energy. Series also contains materials from courses she taught at Iowa State University.

### Container list

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
46	20	Industrial Engineering 502/503 - Advanced Engineering Economy	1970-1993
1	12	National Science Foundation Student Originated Study "Air Pollutants in San Diego County"	1972
1	13-14	"Air Pollutants in San Diego County" final report	1973
87	19	Coursework (ME 292), Stanford - Nuclear Measurements Laboratory	1974
2	2	Thermophysical Modeling Class	1974
2	3	Nuclear Reactor Theory class	1974-1975
87	18	Coursework (OR 285A term paper), Stanford - "Formulating a Mathematical Programming Model of the Nuclear Fuel Cycle"	1975
2	4	Nuclear Reactor Theory class	1975
29	1-2	Optimization - Mechanical Engineering	1975
1	15	Stanford Research (Masters of Science)	1975
2	1	Stanford Research (Masters of Science)	1975
2	6	Controlled Fusion class	1976
87	17	Coursework (OR 285B), Stanford - "Building a Demand-driven Single Period Model of the Nuclear Fuel Cycle"	1976
87	15	Coursework, Stanford - "Methodology for the Global Minimization of Concave Functions Subject to Convex Constraints" paper	1976
87	14	Coursework, Stanford - "NUCSIT - A Regional Siting Model of the Nuclear Fuel Cycle" seminar paper	1976
87	16	Coursework, Stanford - "The Desøm Nuclear Sector" paper	1976
2	5	Numerical Analysis class	1976

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
84	35	EES 232 (Stanford University), Advanced Decision Analysis - class papers by Heising	1977
3	1	Energy, Economic and Environmental Modeling class	1977
3	2	Research paper "A Comparison of Two Models of the Organization of Petroleum Exporting Countries Cartel with an Emphasis on Methodology"	1977
29	3	Massachusetts Institute of Technology	1978-1987
3	4	Massachusetts Institute of Technology reports	1979
29	4	Comparative risk study and lab work	1980
3	7	Seminar (What Is Nuclear Engineering)	1980
3	3	University of California Santa Barbara - letter after interview	1980
86	22	Summer job, 1981 - correspondence, paper regarding accident sequence identification	1980-1981
3	5-6	Summer course - Massachusetts Institute of Technology	1980-1984
3	9	Class talk - "Why Choose Nuclear Engineering as a Career"	1981
29	5	Massachusetts Institute of Technology summer course	1981
6	1-2	Consulting job Pickard, Lowe and Garrick, Inc.	1981-1982
81	16	Promoting women in nuclear science field - information	1981-1982
29	6	Massachusetts Institute of Technology	1981-1983
30	1	Summer course	1981-1984
29	7	Nuclear energy	1981-2000
29	8	Consulting	1982
3	8	Correspondence - Massachusetts Institute of Technology	1982
30	3	Energy Laboratory - Massachusetts Institute of Technology	1982
6	3	Fusion Reliability	1982
3	10	Massachusetts Institute of Technology - energy lab report	1982
46	21	Massachusetts Institute of Technology - Industrial Liaison Program Symposium	1982
46	22-23	Massachusetts Institute of Technology - Industrial Liaison Program	1982

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
86	1	Oak Ridge National Laboratory - course outline	1982
6	5	Oak Ridge National Laboratory short course	1982
30	2	Probabilistic Risk Assessment summer course	1982
6	4	Review of Stone & Webster plant model	1982
4	1	25th Anniversary - Massachusetts Institute of Technology	1983
4	2	25th Anniversary - Massachusetts Institute of Technology Book and celebration booklet	1983
4	5	Employment file	1983
4	6	G.A. Technologies interview	1983
6	7	Oak Ridge National Laboratory In-plant Reliability Data System Steering Committee	1983
6	6	Sandia National Laboratory final report	1983
6	8	Short course correspondence	1983
4	3	Summer course - Massachusetts Institute of Technology	1983
4	4	Women's Faculty Group - Massachusetts Institute of Technology	1983
30	7	Environmental Protection Agency short course - Northeastern University	1984
4	8	Foreign job opportunities	1984
4	7	Industry interviews	1984
4	9	Interview - University of Michigan	1984
4	10	Job decision	1984
4	11	Northeastern University job offer	1984
30	4	Probabilistic Risk Assessment summer course - Massachusetts Institute of Technology	1984
6	9-10	Telematique work, France	1984
30	6	Telematique work, France	1984
6	11	United States Air Force consulting report - "Chemical Warfare Decision Aid"	1984
6	12	Valduc Nuclear Laboratory (France) <i>Error Transmission in Large Complex Fault Trees Using the Direct Simulation (ESCAF) Method</i> in collaboration with Andre Laviron	1984
30	5	World Bank consulting job	1984

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
7	5	International Conference on Structural Safety and Reliability <i>Development of a Common Cause Failure Analysis Method: Inverse Stress-Strength Interference (ISSI) Technique</i>	1984-1985
7	6	American Institute of Chemical Engineers proposals	1985
7	3	Commissariat a l'Energie Atomique consulting visit	1985
7	9	Edison course	1985
7	1	ICF/World Bank presentation	1985
4	12	Northeastern University - work proposal	1985
7	8	Northeastern University summer short course	1985
7	2	Seminar on Implications of Probabilistic Risk Assessment <i>The Statistical Foundations of Probabilistic Risk Assessment (PRA)</i>	1985
4	13	Summer jobs	1985
7	7	United States Air Force consulting	1985
7	4	Visit of George Apostolakis	1985
7	10	Collaborative research Dianne Luciani	1985-1986
87	2-4	Heising dossier binder: research, teaching, and service - detailed information of career and job experiences	1985-1986
82	21	Tenure file (Northeastern University) - annual reviews	1985-1986
30	9	Advanced reliability and risk	1986
8	2	Boston Edison Fossil Group project	1986
7	11	Department of Energy Review (DOE)	1986
30	11	Human performance task group - Department of Energy	1986
30	10	Network talk	1986
4	14	Northeastern University Scholar's Day talks	1986
8	1	Technical proposal <i>Professional Services for Cost Analysis</i>	1986
82	22	Tenure file (Northeastern University) - letters supporting tenure	1986
82	23	Tenure file (Northeastern University) - resume	1986
82	20	Tenure file (Northeastern University) - teaching evaluations	1986

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
30	8	University of Lowell	1986
30	12	Department of Energy contract work	1986-1987
30	13	Introduction to reliability and risk analysis	1986-1987
8	3-4	Department of Energy contract work	1986-1988
8	7	Vermont Yankee consulting Maine Yankee protest editorials	1986-1988
30	14	Advanced reliability and risk analysis	1987
8	6	Atomic Energy of Canada - visit	1987
8	5	Brookhaven (possible contract)	1987
30	17	Department of Energy talk - Statistical Quality Control/Total Quality Control	1987
30	16	Lecture notes - Tokyo, Japan	1987
30	15	Roger Batstone - World Bank, Washington D.C.	1987
82	19	Merit review documentation (Northeastern University) - correspondence, information	1987-1988
31	1	Northeastern University	1987-1993
47	1	Iowa State University Women in Science and Engineering Program - "Road Less Traveled"	1988
87	6	Promotion case documentation for Heising - statement of candidate, resume'	1988
8	8	Thai Power Company consulting	1988
86	11-12	Merit review material (Northeastern University) - correspondence, information, photographs (6- 4x6" color prints, folder 12)	1988-1989
31	2	Promotion case	1988-1989
82	26	Merit review material (Northeastern University) - general information, correspondence	1989
82	27	Merit review material (Northeastern University) - research related information	1989
82	24	Merit review material (Northeastern University) - service related, correspondence	1989
82	25	Merit review material (Northeastern University) - teaching related	1989
8	10	Oil Rig Risk analysis	1989

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
8	9	Putnam, Hayes, and Bartlett Chemical low-level waste disposal consulting	1989
47	2	Total Quality Control - Northeastern University	1989
4	15	Northeastern University Merit review material	1990
5	1	Ames Laboratory interview	1991
47	3	Merit Review Material - Northeastern University	1991
4	16	Northeastern University Applied statistics class	1991
47	4	8 <sup>th</sup> Power Plan, Dynamics/Control & Testing	1992
31	3	Annotated outline for lesson 8	1992
31	4	Systems Approach to Process Improvement course, lesson 8 - Northeastern University	1992
5	3	Northeastern University Student guide and catalog	1992-1993
5	2	Northeastern University Women's Studies program	1992-1993
47	5-6	Women's Studies Program - Northeastern University	1992-1993
87	20-21	Course history, Northeastern University - ITS 3526 Advanced Reliability Analysis, Risk Assessment and Maintenance	1993
8	11	Electric Power Research Institute (EPRI) proposal idea	1993
47	7	Final Industrial Engineering 502/503	1993
85	32	Industrial Engineering (IE) 502/503, Flood Risk Analysis - papers	1993
31	7	Industrial Engineering 502/503	1993
31	5	Industrial Engineering 502/503 course pack	1993
31	6	Industrial Engineering 502/503 handouts	1993
48	1	Midterm Industrial Engineering 502/503	1993
5	4	Northeastern University class - Advanced Reliability Analysis, Risk Assessment and Maintenance	1993
5	5	Northeastern University class - Advanced Reliability Analysis, Risk Assessment and Maintenance	1993
31	8	Engineering college file	1993-1994
31	9	Geraldine Montag - Interim Chair	1993-1994
31	10	Iowa State University	1993-1995
86	20	Fellow application for Heising - correspondence, forms	1993-1998

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
32	7	Administrative intern	1994
81	38	American Nuclear Society (ANS) Board of Directors election, Heising nomination - information, correspondence	1994
32	3	Chala - Mechanical Engineering seminar	1994
48	2-5	Dean search committee, Iowa State University	1994
32	5	Department of Energy courtesy appointment	1994
32	6	Development of Industrial Engineering 461X - quality engineering	1994
32	2	Eric Bartlett	1994
81	3	Industrial Engineering (IE) 461, Quality Engineering - course information, notes	1994
32	8	Industrial Engineering 561X	1994
32	4	Miroslav Raudensky	1994
32	1	Nuclear Engineering/feltus application	1994
84	20	Short course approval application - information on electric utility industry, application	1994
32	9	College of Engineering - Iowa State University	1994-1995
32	10	Department head search	1994-1995
32	11	Geraldine Montag - Industrial Manufacturing Systems Engineering file	1994-1995
33	2	32 <sup>nd</sup> annual report of the Electric Power Research Center and Affiliate Research Program	1995
32	13	Dean Melsa	1995
33	4	Industrial Engineering 461	1995
33	1	National Research Council (NRC)	1995
33	3	National Science Foundation review	1995
81	10	Society of Women Engineers (SWE) - Fellow nomination for Heising	1995
32	12	Survival skills workshop - West Virginia	1995
33	6	Industrial Manufacturing Systems Engineering	1995-1996
33	5	Iowa State University	1995-1996
33	7	Pius Egbelu	1995-1996

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
48	6	Data	1995-1999
81	2	Industrial Engineering (IE) 461, Quality Engineering - quizzes, information	1996
33	9	Professional Women in American Nuclear Society	1996
33	8	Short course - American Nuclear Society	1996
84	33	Teaching evaluation results, annual report - information	1996
48	7	Mary Huba	1996-1998
84	19	Reviewed material by Heising - correspondence, information	1996-1999
33	10	Industrial Engineering 461	1997
48	8	Loyd's party	1997
48	9-10	Post tenure review	1997
84	34	Teaching evaluation results - surveys, correspondence	1997
34	1	35 <sup>th</sup> annual report of the Electric Power Research Center and Affiliate Research Program	1998
33	12	Alliant	1998
48	11	President's Task Force on Infrastructure	1998
33	11	Wisconsin Power and Light	1998
85	11	Departmental evaluation results, annual review - correspondence, information	1998-1999
34	2	Electric Power Research Center work	1998-1999
34	8	Alliant (Electric Power Research Center)	1999
34	7	Department of Energy utility working conference presentation	1999
34	9	Electric Power Research Center reports	1999
34	3	Faculty Improvement Leave	1999
34	5	Industrial Engineering 436 - Intro to Reliability Engineering	1999
49	1	Industrial Engineering 436 overheads	1999
34	6	Industrial Engineering 561	1999
84	6	Review material (performance) - forms, correspondence	1999
34	4	Vita/Department of Energy	1999



<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
34	10	Electric Power Research Center projects	1999-2000
34	11	Department of Energy	2000
49	2-3	Faculty Senate	2000-2001
49	4	Graduate College	2000-2001
49	5	Industrial and Manufacturing Systems Engineering Department - goals	2000-2001
83	29	Women's Studies proposal - correspondence, information	2000-2002
83	17	Women's Studies/Industrial Engineering (WS/IE) 325x, Women and Men in the Engineering Workplace - related articles, information	2000-2003
34	12	Becoming and Industrial Engineers, Mechanical Engineers, or Nuclear Engineers	2001
49	6	Calendar	2001
75	1	Industrial Engineering (IE) 561, Improvement of Process Analysis - course syllabus, information, transparencies	2001
50	2	Iowa State University Comm.	2001
49	7-8	Engineering Caucus	2001-2002
49	9-11	Faculty Senate	2001-2002
49	12	Faculty Senate Executive Board	2001-2002
50	1	Faculty Senate Executive Board	2001-2002
75	2-3	Industrial Engineering (IE) 537, Reliability and Safety - projects and reports	2001-2004, undated
78	4	Industrial Engineering (IE) 561, Continuous Quality Improvement - course information	2002
75	4	Industrial Engineering (IE) 561, Improvement of Process Analysis - syllabus, information	2002
50	3	Retaining Women in Early Academic Science, Mathematics, Engineering, Technology Careers	2002
77	11	Industrial Engineering (IE)/Women's Studies 325 - course proposal, information	2002-2005
82	34	Industrial Engineering (IE) 325 - project, information	2003-2004
87	36	Study of Engineering Department Women Faculty - correspondence, information	2003-2004

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
75	5	Industrial Engineering (IE) 537, Reliability and Safety - syllabus, information	2004
82	33	Industrial Engineering (IE) 561 - class information, projects	2004
75	7	Industrial Engineering (IE) 561, Continuous Quality Improvement - projects, progress reports	2004, undated
78	5	New Mexico State University visit - correspondence, information, proposal	2004-2005
87	35	Industrial Engineering (IE) 561 final project - paper, correspondence	2007
87	34	Industrial Engineering (IE) 561 final, midterm project - papers	2007
78	3	Industrial Engineering (IE) 561, Continuous Quality Improvement - project proposals	undated

### Description of series

**Series 4 Grants and Proposals/Printed Materials 1973-2008, undated**

extent: 7.44 linear feet (26 document boxes, 2 records center cartons)

description: Contains articles pertaining to Heising's research interests. The topics include aspects of nuclear reactor management - probabilistic risk assessments, the application of Bayes Theorem, responses to accident sequences, nuclear safety, the financial risk of accidents, and quality control. There are also several articles and presentations relating to women in engineering and research papers done by graduate students not otherwise cataloged with the thesis collections.

### Container list

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
9	1	National Science Foundation booklet and photographs	1973
9	2	<i>Science Bulletin</i> (Johns Hopkins)	1974
35	2-3	Papers and publication	1974-1996
9	4	<i>The Reprocessing Decision Study in Policy Making under Uncertainty</i>	1978
9	5	Electric Power Research Institute journals	1978-1979

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
83	15	<i>Science</i> journal submission - "Modeling Reprocessing Uncertainties: Energy Security and Nuclear Proliferation"	1979
9	3	<i>Small Power Reactor Report</i>	1979
35	5	<i>Women professionals in the Nuclear Industry</i>	1979-1981
9	6	Articles and papers	1979-1982
10	2	<i>A Probabilistic Assessment of Containment Inerting in BWRs</i>	1980
10	3	<i>A Survey of Methodology for the Global Minimization of Concave Functions Subject to Convex Constraints</i>	1980
81	23	Paper - "Comparative Assessment of the Economics and Proliferation Resistance of Advanced Nuclear Energy Systems"	1980
81	21	Paper - "Evaluation of Containment Inerting and Air Dilution Systems as Methods for Post-accident Hydrogen Control in BWRs," correspondence, copy of published article	1980
10	1	Paper with Andy Dykes	1980
81	22	Paper, research data - "Applying Bayes Theorem to Update the Estimate of the Reactor Core Melt Frequency after Three Mile Island"	1980
87	13	Heising publications in refereed journals, nuclear engineering related	1980-1995
86	21	Nuclear Safety Issues - papers, correspondence	1981
35	4	Papers for 22.38 material	1981
11	4	<i>A Note on the Treatment of Uncertainty in Probabilistic Risk Assessments-Safety Goals, Levels of Analysis and Expert Opinion The Statistical Foundations of Probabilistic Risk Assessment</i> - reviewers notes and correspondence	1981-1983
87	24	Risk assessment - papers, correspondence	1981-1984

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
11	2	Nuclear articles (by Heising and other authors) <i>Risk Management and Decision Rules for Light Water Reactors</i> <i>The Design of Hazardous Products Coping with Nuclear Power Risks: The Electric Utility Incentive Financial Risks of Nuclear Power Reactor Accidents Examining the Financial Risk to Utilities of Nuclear Power Plant Operation due to In-Plant Operation due to In-Plant Consequences of Reactor Accidents The Financial Risk of Nuclear Reactor Accidents to the United States Nuclear Industry and Society An Estimate of the Economy-Wide Financial Risk Associated with a Serious Nuclear Reactor Accident (5 copies) Modeling the Societal Impact of Fatal Accidents Resolving Superfund Issues: The Challenge to Engineers and Lawyers Risk Management and Decision Rules for Light Water Reactors</i>	1981-1986
10	5	<i>A Bayesian Estimation of Core Damage Frequency Incorporating Historical Data on Precursor Events</i>	1982
10	8	<i>A Method of Quantifying the Reliability of Instrumentation for Engineered Safety Features to Improve Accident Sequence Recognition in Reactor Control Rooms</i>	1982
84	37	Bayesian Estimation paper submitted to <i>Reliability Engineering</i> - paper, notes	1982
50	5	Brochures	1982
10	4	<i>Corrections of Bayesian Applications in Probabilistic Risk Assessment</i> by Shahid Ahmed	1982
10	9	<i>Development of Unavailability Expressions for One and Two Component Systems with Periodic Testing and Common Cause Failure Plant Specification of Generic Human Error Data through a Two-Stage Bayesian Approach</i>	1982
10	6	<i>Quantification of Nuclear Diversion Risks: Promises and Problems</i>	1982
10	7	Rensselaer Polytechnic Institute visit	1982
81	8	Report - "Common Cause Analysis: A Review and Extension of Existing Methods," MIT	1982

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
11	1	Articles - <i>How Safe are Man-Made Systems?</i> (3 copies) <i>Engineering Failures: Man-Made?</i> (4 copies) <i>The Nature of Ship Failures</i> <i>Engineering Failures: Man-Made?</i> <i>Reactor Safety After Three Mile Island</i>	1982-1984
10	10	Articles and journals <i>Energy Policy</i> 10, #2 <i>A Method for Improving Accident Sequence Recognition in Nuclear Power Plant Control Rooms</i> <i>In-Plant Considerations for Optimal Offsite Response to Reactor Accidents</i> (2 copies)  <i>Development of Unavailability Expressions for One-and Two-component Systems with Periodic Testing and Common-cause Failures</i> <i>Bayesian Estimation of Core Damage Frequency Incorporating Historical Data on Precursor Events</i>	1982-1984
11	8	Articles (by Heising and others), correspondence - <i>An Estimate of the Economy-Wide Financial Reactor Accident Seminar on Implications of Probabilistic Risk Assessment</i> <i>A Preliminary Estimate of the Cost to the United States of a Nuclear Power Moratorium</i> <i>Safety Goal Evaluation Report</i> <i>Costs of Nuclear Accidents</i>	1982-1986
85	36	<i>Risk Analysis Journal</i> submission - "Unified Approach for Calculating Core Melt Frequency Caused by Internal and External Initiating Events," paper, correspondence	1982-1994
11	3	Center for Advanced Engineering Study program	1983
11	5	<i>Reliability Analysis and Probabilistic Risk Assessment</i>	1983
87	31-32	Introduction to Probabilistic Risk Assessment (PRA) - papers, information	1983-1984, undated
11	9	Structural safety articles and correspondence <i>Development of a Common Cause Failure Analysis Method: The Inverse Stress- Strength Interference (ISSI) Technique</i> <i>Common Cause Failure Analysis Based on Stress-Strength Interference Theory</i>	1983-1986
11	7	Articles - <i>Standardization of Collection and Preparation of Biomedical Samples for Trace Element Analysis</i> <i>Risks and Benefits of Energy Systems</i> <i>A Comparison of Methods for Calculating System Unavailability Due to Common Cause Failures: The Beta Factor and Multiple Dependent Failure Fraction Methods</i> <i>Stimulant Fluid Experiments for Core-Concrete Thermal Attack</i>	1984

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
50	6	Pickard, Lowe, and Garrick, Inc. - visit	1984
11	6	Talk with Marty Plys	1984
35	6	Talk with Marty Plys	1984
82	10	United States Air Force (USAF) consulting, final report - "Chemical Warfare Decision"	1984
87	23	Air Force Summer Research Reports - reliability analysis, reliability warranty verification	1985
81	24	Paper - "Implications of Probabilistic Risk Assessment for Fusion Decision Making"	1985
12	1	Article, correspondence and journal <i>Risk Assessment in the Regulatory Arena: Control of Hazardous Materials</i>	1985-1986
12	3	Brookhaven National Laboratory presentation	1986
81	32	Heising lecture about Chernobyl disaster - newspaper articles	1986
35	7	Interview with WTTP radio on Department Of Energy grant	1986
87	28	<i>Journal of Hazardous Materials</i> article - "Risk Assessment in the Regulatory Arena: Control Over Hazardous Materials"	1986
12	5	Reliability Engineering articles and correspondence <i>Application of a Computerized Methodology for Performing Common Cause Failure Analysis: The Mocus-Bacfire Beta Factor (MOBB) Code An Application of the Two-Stage Bayesian Method to Estimate the Outage Rate of Oil-Fired Boilers Bayesian Methods for Predicting US Air Force System Performance</i>	1986
12	2	University of Lowell (Massachusetts) presentation	1986
12	4	Articles and correspondence <i>Symposium on Nuclear Energy: Is It Safe? Why Chernobyl Cannot Happen Here Western-Style Containments</i> (numerous copies) <i>An Application of the Two-Stage Bayesian Method to Estimate the Outage Rate of Oil-Fired Boilers</i> "Women in Academia" <i>United States Woman Engineer</i>	1986-1988
12	7	Clark University presentation	1987
12	6	Northeastern University newsletter	1987
12	8	Probabilistic Risk Assessment Use presentation	1987

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
12	9	Articles and clippings Journals and newsletters Department of Energy project/presentation	1987-1990
85	48	<i>International Journal of Reliability, Quality, and Safety Engineering</i> submission - "Bayesian Methods for Predicting U.S. Air Force System Performance," correspondence	1987-1994
50	7-8	Current research (Department of Energy) file	1988
12	10	Iowa State University Women in Science and Engineering program presentation	1988
87	8	Proposal to U.S. Department of Energy (DOE) - "Design of an Advanced Diagnostic and Computerized Control System for Nuclear Power Plants Based on Statistical Quality Control"	1988-1989
13	7	Presentation <i>The Expectations of the 'Young' Generation of Nuclear Experts Commemorative program</i>	1988-1994
50	11	"Women in the Technical Professions: Comments and Observations" - lecture	1989
12	11	<i>A Computerized Diagnostic System for Nuclear Plant Control Rooms Based on Statistical Quality Control</i>	1989
50	9-10	Department of Energy Project proposal	1989
85	46	Grenzeback/Heising article - "Ocean Ranger Oil Rig Disaster: A Risk Analysis"	1989
87	10	Pre-proposal to Environmental Protection Agency (EPA) - "Communicating Cumulative Global and Long-term Risks"	1989
87	7	Proposal draft - "System Transition Analysis Project (STAP): Risk Evaluation for Defense System Transition"	1989
87	9	Proposal to U.S. Air Force - "Computerizing Bayesian Methods for Improving System Performance"	1989
13	2	<i>Risk Based Decision Making</i>	1989
13	1	<i>What is Total Quality Control? The Japanese Way</i> authored by Diane Luciani Wetherell	1989
13	3	Articles <i>Total Quality Management: Success Stories in United States Industry</i> journals and newsletters	1989-1992
13	4	<i>Reliability Trends: Calculation versus Application: Today and Tomorrow</i>	1990

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
81	26	Paper, submission correspondence - "Implementing Total Quality Control in the Nuclear Utility Industry"	1990-1993
50	12	"Women in the Technical Field: A Decline?" - lecture at University of Florida	1991
35	8	National Science Foundation - proposal	1992
50	13	National Science Foundation Proposal - book	1992
83	2	New Hampshire Yankee proposal - correspondence, proposal	1992
36	1	Proposals to National Science Foundation (NSF)	1992
13	5	<i>Statistical Analysis of Reactor Systems for Improved Operations and Maintenance</i>	1992
13	6	Newsletter articles - <i>Total Quality Management Applied to Nuclear Power Plants</i> American Nuclear Society Fellow Nomination <i>The Expectations of the 'Young' Generation of Nuclear Experts</i>	1992-1994
36	2	American Nuclear Society - news	1992-2000
36	5	National Science Foundation - proposal	1993
36	3	Nuclear Regulatory Commission - proposal	1993
36	4	Probabilistic Safety Assessment	1993
85	33	<i>Annals of Nuclear Energy Journal</i> submission - "On a Bayesian Estimation Procedure for Determining the Average Ore Grade of a Uranium Deposit," correspondence	1993-1995
36	6	Industrial and Manufacturing Systems Engineering	1993-1997
85	30	American Nuclear Society (ANS) summary for "Model Design for a Reactor Coolant Pump System" - correspondence, summary	1994
84	21	Business process re-engineering: radical change - talk, notes, transparencies	1994
36	11	Chala's paper - Nuclear Technology	1994
36	8	Department of Energy - proposal	1994
81	33	European Nuclear Conference (ENC) speech; excerpt in ANS newsletter - speech excerpt, correspondence	1994
85	14	New Power Affiliate program appointments - correspondence, abstract	1994



<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
36	9	Nuclear Reactor Laboratory - proposal	1994
84	17	<i>Nuclear Technology</i> Journal article - "Maximum Likelihood Factor Analysis of the Reactor Coolant Pump System"	1994
85	35	<i>Nuclear Technology Journal</i> submission - "Maximum Likelihood Factor Analysis of the Reactor Coolant Pump System," paper, correspondence	1994
36	7	Review material	1994
84	29	Schechtman/Heising paper submitted to <i>International Journal of Reliability, Quality &amp; Safety Engineering</i> - paper, correspondence, information	1994
85	15	Seed Money grant - correspondence, proposal	1994
36	10	Society of Women Engineers - magazine	1994
81	27	Speech excerpt published in ANS newsletter - "Expectations of the 'Young' Generation of Nuclear Experts"	1994
85	12	EPRC/Midwest Power, Neal Smith proposal - proposal, site data, correspondence	1994-1995
36	14	Carrie Chapman Catt Center	1995
36	12-13	Chala	1995
85	13	EPRC proposal, review "Re-energizing Utility Business Processes" - correspondence, proposal	1995
84	16	Industrial Engineering Research Conference paper - "The Quality of End-Milled Holes"	1995
13	8	<i>On a Bayesian Estimation Procedure for Determining the Average Ore Grade of a Uranium Deposit</i>	1995
37	1	Review material	1995
51	1-2	Safety Culture Vienna	1995
85	21	Patel/Heising paper - "Analysis of RCA Data Based on Statistical Quality Control"	1995 circa
37	3	Education source book	1995-1996
13	9	<i>Science and Engineering Horizons</i> - women's edition	1995-1996
37	2	Women vs. men	1995-1996

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
85	34	<i>Annals of Nuclear Energy Journal</i> submission - "Statistical Analysis of the Ft. Calhoun Reactor Coolant Pump System" by Heising and Patel, correspondence	1996
84	38	Fire Hazard Analysis - rejected manuscript	1996
81	34	Mirpuri, Manoj P - thesis, transparencies for presentation with Heising	1996
13	10	<i>Reflections of a Woman Engineer</i>	1996
85	23	Carver Trust Grant - application, proposal	1996-1997
85	7	EPRC/MidAmerican Energy Power proposal - proposal, correspondence, information	1996-1997
37	4	Iowa State University - Electric Power Research Center proposals	1996-1997
85	47	Patel thesis reviews - correspondence, information	1996-1997
51	3	Entergy	1996-2000
85	22	National Science Foundation (NSF) proposal with Rand Afrikaans University, South Africa - correspondence, proposal	1997
51	4	News clippings	1997
85	6	Central Iowa Power Cooperative (CIPCO) proposal - abstract, correspondence	1997-1998
37	5	Iowa State University - Electric Power Research Center proposals	1997-1998
37	6	Omaha Public Power Districts	1998
51	6	Annual Energy Outlook	1999
51	7	Dr. Feltus presentation	1999
51	9	Faculty Improvement Leave - proposal	1999
51	11	Global warming	1999
51	12	Herbert Inhaber	1999
52	1-2	Oak Ridge National Laboratory - Marilyn Brown	1999
52	3	PECO/Amer Gen	1999
52	4	Summit on Women in Engineering - Washington, D.C.	1999
51	5	Amer Gen (PECO)	1999-2000
79	1	Articles - informational reports, not written by Heising	1999-2000

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
51	8	Energy Resources International consultants	1999-2000
51	10	Global climate change	1999-2000
37	10	37 <sup>th</sup> annual report of the Electric Power Research Center and Affiliate Research Program	2000
37	9	5 lab study	2000
52	6	Analysis on the Climate Change Technology Initiative	2000
52	5	Annual Energy Outlook	2000
52	7	Long Term Nuclear Research & Development Plan	2000
52	8	Meltdown - or Not? - For Utilities	2000
52	9	Office of Nuclear Energy, Science, and Technology - slides	2000
37	12	Paleo - climatology	2000
37	8	Revised proposal	2000
52	10	The Fiscal Year 2000 Nuclear Energy, Science, and Technology Budget Request Overview	2000
52	11	Westinghouse	2000
37	7	Women's Studies proposal	2000
37	11	Women's Studies proposal	2000
53	2-3	"Technology and the Future"	2001
53	1	National Women's Studies Association	2001
78	15	Sharma, Sumeet - "Virtual Interactive Maintenance of Power Equipment for Training Purposes" paper, presentations	2001
83	30	National Science Foundation (NSF), Women's Studies grant - application, correspondence, information	2001-2002
53	4	University Committee on Women	2001-2002
83	25	Eco-feminism and Technology - presentation, information, correspondence	2002
82	17	ADVANCE Grant, gender equity issues - information, correspondence	2002-2003
78	12	Evaluation of Root Zone Water Quality Model - report, presentation panels	2003
87	39	National Science Foundation (NSF) ADVANCE proposal - correspondence, proposal	2003-2004

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
80	14	Articles - gender-related, workplace, not by Heising	2004
79	10	Ganapathi, J.K.K. - "Customer Relationships Management (CRM) and Its Impact on Performance of Engineering Industries" paper	2004
77	6	Proliferation Resistance - paper, correspondence (with Dr. Lee)	2004
78	1	Bhardwaj, Girish - "Eliminating Hidden Factories on the Shop Floor" paper	2005
80	7	Department of Homeland Security - "Rapid Technology Application Program" paper	2005
78	16	Elmore, Royal - "Options to Address NRC Requests Regarding Generic Safety Issue 191" paper, presentation	2005
77	15	Ghosh, Mayukh - "Implementable Strategy Combining Lean and Six Sigma for Elimination on Non-value Added Time and Variation Reduction in Quality" paper	2005
77	16	Kamat, Dattaprasad - creative component proposal	2005
77	17	Kandasamy, Gnanagurparan - "Statistical Modeling and Reliability Analysis of a Web Application" paper	2005
78	8	McCorkle, Doug - "Virtual Engineering Framework" presentation	2005
81	5	Proposal, ADVANCE - correspondence, information	2005
81	4	Proposal, National Science Foundation (NSF) - ADVANCE at ISU: Comprehensive Institutional Intervention Strategy	2005
79	6	Sathyamurthy, Sathish - "Enhancing Energy Efficiency in Manufacturing Plants with a Focus on Achieving Electrical Savings" paper, presentation	2005
79	11	Venkataraman, Karthikeyan - "Energy Conservation in Industrial Lighting and Compressed Air Systems" paper	2005
79	7	Vepadharmalingam, Harisudhakar - paper and presentation based upon the use of mobile devices	2005
80	13	Articles - related to women in science, not by Heising	2005, undated
77	2	Newsletters - MIT, Lakeside, ISU Women's Studies	2005-2006
80	12	Articles - related to women in science, not by Heising	2006

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
82	36	Heising editorial column for <i>Des Moines Register</i> - nuclear and wind power	2006
77	10	Hoffman, Elizabeth - articles regarding provost appointment	2006
78	6	Jiang, Yong - preliminary Ph.D. work, presentation	2006
78	2	Loveland, Stephanie - "LNL Block-oriented Modeling to Improve Model Predictive Control" paper	2006
80	10	Magazine - "Facets for Women"	2006
78	11	Risk Reduction Calculations for Ecosystem Risk and Recovery Assessment for Contaminated Sediments - proposal, correspondence	2006
80	1	Women in Science - brochures, cards	2006-2007, undated
80	11	Articles - related to women in science, not by Heising	2007
76	3	<i>Society of Women Engineers</i> (SWE) - magazines, awards banquet program, Career Fair guide	2007
79	9	"Feminism Transforming Technoscience" paper	2008
78	9	Ali, Mohammed - "Compact Energy Absorber" paper	undated
50	4	Department of Energy - talk	undated
35	1	Society of Women Engineers - Iowa file	undated
78	7	Xu, Bo - "Multi-resolution Editing for Nurbs Curves and Surfaces" paper	undated

### Description of series

**Series 5      Meetings and Trips      1979-2007, undated**

extent:      15.36 linear feet (26 document boxes, 3 records center cartons)

description:      Contains information about Heising's extensive travel over the world, to the Faculty Institute at Argonne, the Conference on Nuclear Power for the Arab World, the European Conference Communication, and others. The bulk of this series, however, consists of records from the American Nuclear Society, the Professional Women in ANS (American Nuclear Society) Committee, and the Society of Women Engineers. These records include files on meetings, workshops and seminars.

**Container list**

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
87	12	Heising papers for conferences/presentations, related to nuclear engineering	1979-1989
27	3	Advisory Committee on Reactor Safeguards Committee	1980
17	1	American Nuclear Society (ANS) - meeting	1980
27	2	Faculty Institute at Argonne	1980
27	1	Sandia Laboratories - trip	1980
27	7	Human Factors meeting	1981
86	7	Italian Conference presentation - "Nuclear Technology in Developing Countries" paper, information	1981
27	6	Japan - trip	1981
27	8	Naval Nuclear Power School - trip	1981
86	21	Probabilistic Risk Assessment (PRA) topical meeting, Long Island - papers, correspondence	1981
27	4	Sandia Laboratories - meeting	1981
27	5	Welding and Testing Technology Exhibition and Conference Energy conference	1981
17	2-3	American Nuclear Society - meeting	1981-1982
86	6	Arab Energy Conference - paper "Nuclear Power and the Arab World"	1981-1982
81	17	Arab Energy Conference, Abu Dabi - correspondence, paper	1981-1982
82	11	American Nuclear Society (ANS) meeting, Detroit - correspondence, information	1981-1983
38	1-2	Women in engineering	1981-2000
17	8	American Nuclear Society - meeting	1982
17	5	American Nuclear Society - paper review	1982
17	4	American Nuclear Society - presentation	1982
86	2	American Nuclear Society (ANS), Northeastern section - notes by Heising (as chairman)	1982
17	13	American Nuclear Society Meeting Nuclear Reactor Safety Division Program Committee - meeting	1982
27	10	Conference on Nuclear Power for Arab World	1982

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
86	4	Indian Point Nuclear Plant - presentation outline	1982
14	1	Massachusetts Institute of Technology Symposium, Industrial Liaison Program Symposium	1982
17	6-7	Northeastern Section American Nuclear Society - meeting	1982
86	3	Nuclear Engineering Education for the Disadvantaged (NEED) - correspondence regarding funding, proposal, information	1982
27	14	Nuclear Engineering Education for the Disadvantaged Committee	1982
53	5	Nuclear Technology Workshop	1982
27	13	Nuclear workshop	1982
81	15	Presentation, Chicago - Thermal Reactor Safety	1982
81	18	Presentation, MIT - "Reactor Safety and Three Mile Island"	1982
27	11	Probability Risk Assessment conference	1982
86	5	Reactor Safety and Three Mile Island - presentation paper, transparencies	1982
27	15	Science and Environmental Reporting Program Congress	1982
27	9	Seminar	1982
27	12	Seminar	1982
27	16	Wellesley College seminar	1982
17	10	American Nuclear Society - meeting	1983
17	11	American Nuclear Society - meeting summaries	1983
82	9	American Nuclear Society (ANS) degraded core analysis topical meeting - information	1983
17	12	American Nuclear Society Paper - review	1983
38	3	Seminar on Probabilistic Risk Assessment	1983
17	9	Society of Women Engineers (SWE) Women's Education Conference	1983
18	2	American Nuclear Society - "Professional Women in American Nuclear Society"	1984
38	11	American Nuclear Society - bylaws, rules and procedures	1984
17	14	American Nuclear Society - correspondence	1984

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18	1	American Nuclear Society - meeting	1984
38	9	American Nuclear Society - meeting talk and correspondence	1984
38	5	American Nuclear Society correspondence	1984
38	6	American Nuclear Society meeting	1984
38	8	American Nuclear Society meeting - "A Companion of Risks" talk	1984
38	10	American Nuclear Society minutes	1984
14	2	International Symposium on the Risks and Benefits of Energy Systems - travel records, agendas, photographs (3)	1984
38	7	Professional women in American Nuclear Society	1984
14	3	Thermal Nuclear Reactor Safety - meeting	1984
38	4	Valduc Laboratory, France	1984
87	25	International American Nuclear Society (ANS), San Francisco - correspondence, presentation	1984-1985
18	3-4	American Nuclear Society - meeting	1985
14	4	Nuclear Plant Aging - conference	1985
82	15	Nuclear Plant Aging Conference, San Diego - information	1985
87	26	World Bank Presentation - "Examples of PRA Results/Effects on Plant Design" transparencies	1985
18	5	Society of Women Engineers - articles, directories	1985-1986
14	5	Trip to China - reactor safety	1985-1986
86	23	China trip - correspondence, information	1985-1986, undated
38	13	Brookhaven talk - contract negotiations	1986
14	7	International Industrial Engineering Conference	1986
14	6	Network meeting	1986
38	12	Oak Ridge National Laboratory - visit	1986
18	6	Society of Women Engineers - meeting	1986
53	6	American Nuclear Society - Women's Achievement Award background information	1986-1996



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53	7	Profession Women in American Nuclear Society membership	1986-1996
18	7	American Association of University Women Award	1987
14	9	American Association of University Women Conference	1987
38	15	Atomic Energy of Canada Limited - trip	1987
84	28	International Conference on Quality Control (ICQC), Tokyo - correspondence, information	1987
15	2	International Industrial Engineering Conference	1987
38	14	Japan - trip	1987
87	27	New Technologies Safety & Health Institute Conference, Worcester, Massachusetts - correspondence, information, transparencies	1987
15	1	Quality Control/Reliability Conference	1987
14	8	Smith College panel	1987
15	6	Association of Massachusetts Institute of Technology Alumnae/Society of Women Engineers - meeting	1988
53	8	Department of Energy Seminar - Washington, D.C.	1988
15	3	Nuclear Power Forum	1988
15	5	Operations Research Society of America/The Institute of Management Sciences - meeting	1988
15	7	University of Delaware Seminar Series	1988
15	4	University of Maine/Society of Women Engineers Regional Conference	1988
18	8	American Nuclear Society - meeting	1989
15	9	European Conference on Hazard Communication - meeting	1989
15	8	Performance Evaluation Reliability and Exploitation of Computer Systems Conference	1989
54	1	American Nuclear Society	1989-1995
54	2	American Nuclear Society - budget	1989-1996
38	16	"Women in technical professions" - Society of Women Engineers talk	1990
18	9	American Nuclear Society - meeting	1990
18	10	Society of Women Engineers conference	1990

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54	3	Professional Women in American Nuclear Society	1990-1996
54	4	American Nuclear Society Eastern Regional Student Conference	1991
15	11	American Power Conference	1991
15	10	University of Florida women's program	1991
18	11	Northeastern Section American Nuclear Society - meeting	1991-1992
54	5	Professional Women n American Nuclear Society - general promotional material	1991-1996
38	17	"Nuclear Power in Russia" - talk	1992
84	8	American Nuclear Society (ANS) Women's Achievement Award - information	1992
39	6	American Nuclear Society 115 <sup>th</sup> Board of Directors meeting	1992
54	6	American Nuclear Society 115 <sup>th</sup> Board of Directors meeting June 11	1992
39	2	American Nuclear Society 116 <sup>th</sup> Board of directors meeting, Chicago, Illinois	1992
39	1	American Nuclear Society 128 <sup>th</sup> Board of directors meeting	1992
19	2	American Nuclear Society Board of Directors	1992
39	4	American Nuclear Society business	1992
39	5	American Nuclear Society meeting	1992
19	1	American Nuclear Society News	1992
85	42	Colloquium - "Total Quality Management Applied to Nuclear Power Plants" presentation	1992
15	12	International Conference on Design and Safety of Advanced Nuclear Power	1992
54	7	Minutes of the 114 <sup>th</sup> and 115 <sup>th</sup> Board of Directors meetings	1992
39	3	Probabilistic Risk Assessment topical, Boston, Massachusetts	1992
19	5	American Nuclear Society - newsletter	1992-1993
39	7	Correspondence with other universities	1992-1993
19	3	Northeastern Section American Nuclear Society - meeting	1992-1993

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
19	4	American Nuclear Society - meeting	1993
54	10	American Nuclear Society - mentor program	1993
54	8	American Nuclear Society 117 <sup>th</sup> Board of Directors meeting, June 23-24	1993
40	1	American Nuclear Society 117 <sup>th</sup> Board of Directors meeting, San Diego, California	1993
54	9	American Nuclear Society 118 <sup>th</sup> Board of Directors meeting	1993
40	6	American Nuclear Society 118 <sup>th</sup> Board of Directors meeting, San Diego, California	1993
19	6	American Nuclear Society Board of Directors	1993
39	8	American Nuclear Society Executive Committee meeting, San Diego, California	1993
40	5	American Nuclear Society Executive Committee meeting, San Diego, California	1993
16	1	Environmental Protection Agency - chapter meeting	1993
40	2	Obninsk	1993
85	25	Research Group Meeting Notes - outlines, information	1993
39	9	Russia Conference	1993
40	3	Russia Conference - Obninsk	1993
40	4	Russian Nuclear Conference: Nizhni-Novogorod	1993
15	13	Total Quality Management - conference	1993
85	43	U.S. Navy Summer Faculty Research/Sabbatical Leave Programs - application, correspondence	1993
40	7	Ad Hoc outreach committee	1993-1994
40	8	Society of Women Engineers annual report	1993-1994
84	18	Travel plans, mid 1990s - itinerary	1993-1996
19	7	American Nuclear Society - meeting	1994
84	23	American Nuclear Society (ANS) - meetings re: short course, correspondence, information, minutes	1994
84	22	American Nuclear Society (ANS) - talks from meeting	1994
84	39	American Nuclear Society (ANS) Conference; Amelia Island, Florida - correspondence, information	1994

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
41	6-7	American Nuclear Society 120 <sup>th</sup> board of directors meeting, New Orleans, Louisiana	1994
40	11	American Nuclear Society 121 <sup>st</sup> Board of Directors meeting, New Orleans, Louisiana	1994
41	1-2	American Nuclear Society 122 <sup>nd</sup> Board of Directors meeting, Washington, D.C.	1994
41	3	American Nuclear Society Executive Committee meeting, New Orleans, Louisiana	1994
41	5	American Nuclear Society Executive Committee meeting, Oakbrook, Illinois	1994
40	9	American Nuclear Society management report	1994
40	10	American Nuclear Society meeting minutes	1994
19	9	American Nuclear Society Mission statement Professional Women in American Nuclear Society Committee	1994
55	1	American Nuclear Society News	1994
85	4	American Power Conference (APC), Chicago - correspondence, information	1994
40	13	Arms Control and Disarmament Agency	1994
41	4	Chala's paper - American Nuclear Society conference, Washington, D.C.	1994
40	17	Dr. Chong Chiu	1994
16	2	European Nuclear Conference	1994
81	20	European Nuclear Conference, Lyon - "Expectations of the 'Young' Generation of Nuclear Experts" presentation	1994
41	8	Industrial Manufacturing System Engineering Promotion and Tenure committee	1994
55	3	International Nuclear Societies Council - Lyon, France	1994
40	14	Miroslav Raudensky	1994
40	12	Pacific Nuclear Council	1994
19	8	Professional Women in American Nuclear Society Committee - correspondence	1994
19	10	Professional Women in American Nuclear Society Committee - minutes	1994

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
85	3	Romanian Nuclear Energy Association Conference, Bucharest - correspondence, information	1994
81	19	Russian Reactor Workshop, Washington, D.C. - correspondence, information	1994
85	41	Russian Workshop, Nuclear Power Post-Chernobyl - correspondence, information, presentation	1994
55	4	San Diego American Nuclear Society meeting	1994
85	31	Slovenia Conference - correspondence, information, paper/presentation	1994
85	40	Sussman/Godfrey Firm, Houston meeting - information, correspondence	1994
40	15	Texas A&M University (Sophie)	1994
85	19	Total Quality Management Applied to Nuclear Power Plants seminar, Texas A&M - correspondence, information	1994
55	5-6	Washington D.C. American Nuclear Society meeting	1994
55	8	Women In Nuclear (WIN)	1994
40	16	Women in Science, women engineers	1994
55	7	Women's Achievement Award	1994
84	15	American Nuclear Society (ANS) annual report - synopsis	1994-1995
42	1	Women In Science and Engineering	1994-1995
55	2	American Nuclear Society Women's Achievement Award	1994-1998
42	2	American Nuclear Society - general	1994-1999
42	11	American Nuclear Society	1995
55	9	American Nuclear Society	1995
55	10	American Nuclear Society - brochure	1995
84	24-25	American Nuclear Society (ANS) - meetings re: short course, correspondence, information	1995
85	39	American Nuclear Society (ANS) Conference, San Francisco - information, correspondence	1995
85	38	American Nuclear Society (ANS) International Committee - correspondence, information	1995
81	36	American Nuclear Society (ANS) International Committee membership - correspondence, information	1995

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
84	31	American Nuclear Society (ANS) meetings - ANS cyclists atomic racing public outreach program; information, photographs (2- 5x7," 1- 3x5" color)	1995
43	1	American Nuclear Society 123 <sup>rd</sup> board of directors meeting, Philadelphia, Pennsylvania	1995
42	12	American Nuclear Society 124 <sup>th</sup> board of directors meeting, Philadelphia, Pennsylvania	1995
19	12	American Nuclear Society Biographical - sketches	1995
19	11	American Nuclear Society Conference - evaluations	1995
42	10	American Nuclear Society executive committee, Chicago, Illinois	1995
56	1	American Nuclear Society Pacific University Alliance	1995
56	2	American Nuclear Society Professional Women	1995
42	3-5	American Nuclear Society University working conference	1995
42	9	Embedded topical meeting, American Nuclear Society - transactions	1995
42	8	Embedded topical, Philadelphia	1995
85	28	EPRC Banquet, seminar - Patel presentation, correspondence, itinerary	1995
85	20	Faculty Improvement Leave (FIL), foreign travel grant applications - correspondence, application	1995
81	40	Iowa State University Bioethics retreat - information	1995
85	27	Korean Conference on Probabilistic Safety Assessment - Patel/Heising presentation, correspondence, information	1995
85	26	National Science Foundation (NSF) Design & Manufacturing Grantees Conference - information	1995
85	16	Patel/Heising seminar presentation - Ft. Calhoun Reactor Coolant Pump System - abstract, seminar information	1995
56	4	Philadelphia American Nuclear Society	1995
85	37	Professional Development Coordination Committee (PDCC) Workshop - correspondence, information	1995
56	5	Quality Assurance Session 6	1995
56	6	Second American Nuclear Society Workshop on the Safety of Soviet-Designed Nuclear Power Plants	1995

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
42	6	Society of Women Engineers, regional conference - Iowa State University	1995
81	39	Symposium on Regional Integration in Nuclear Energy Conference, Brazil - submitted paper, correspondence	1995
42	7	Women, Science, and Gender conference	1995
43	2	American Nuclear Society nominating committee	1995-1996
43	3	Iowa State University committee on women	1995-1996
56	3	Good "A" Group	1995-1998
56	7	10 <sup>th</sup> Pacific Basin Nuclear Conference - Kobe, Japan	1996
56	10	American Nuclear Society	1996
56	8-9	American Nuclear Society - summer meeting	1996
44	7	American Nuclear Society 128 <sup>th</sup> board of directors meeting	1996
44	10	American Nuclear Society 132 <sup>nd</sup> board of directors meeting, Nashville, Tennessee	1996
44	8-9	American Nuclear Society board of directors meeting, Reno, Nevada	1996
43	4	American Nuclear Society executive committee	1996
43	11	American Nuclear Society International committee	1996
43	5	American Nuclear Society winter meeting, Washington, D.C.	1996
44	2	Carrie Chapman Catt Center conference	1996
84	2	Ghana Conference - information, correspondence	1996
85	29	Ghana, Africa trip - general information	1996
84	32	Institute of Industrial Engineers (IIE) Conference, Minneapolis - information	1996
84	26-27	Instrumentation and Control Conference, Penn State - correspondence, information	1996
56	11	Iowa State University/Department of Energy Risk program	1996
44	4	San Diego trip	1996
43	6	Society of Women Engineers conference, Portland, Oregon	1996

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
44	1	Society of Women Engineers, national convention and student conference	1996
44	3	Statistical Analysis of the Ft. Calhoun Reactor Coolant Pump System	1996
44	5	Texas A&M University	1996
43	9	University Committee on Women	1996
43	12	University Committee on Women retreat	1996
43	8	Women in Engineering program advocates network	1996
43	10	Women in Engineering Program Advocates Network - Denver	1996
44	6	Women In Science and Engineering program - survival strategies	1996
85	17	Electric Power Research Center (EPRC) annual meeting - correspondence, notes	1996-1997
84	7	Focus Group IV - meeting minutes, notes	1996-1997
57	1-2	129 <sup>th</sup> Board of Directors meeting, June 4-5	1997
57	3	130 <sup>th</sup> Board of Directors meeting, June 4-5	1997
57	4-5	131 <sup>st</sup> Board of Directors meeting - Albuquerque Convention Center	1997
84	11	Advisory Committee on Nuclear Reactor Safeguards (ACRS) application - correspondence	1997
84	1	Africa-USA International Conference on Manufacturing Technology, Pittsburgh - correspondence, information	1997
57	6	American Nuclear Society	1997
57	8-9	American Nuclear Society - Board of Directors retreat	1997
57	10	American Nuclear Society - June meeting	1997
57	7	American Nuclear Society - newsletter	1997
58	1	American Nuclear Society - webpage	1997
58	2	American Nuclear Society Winter meeting, Albuquerque, New Mexico	1997
58	3	Miami Industrial Engineering Research Conference/Institute of Industrial Engineers National meeting	1997



<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
85	24	Omaha Public Power District (OPPD) visit - information, correspondence	1997
58	4	Professional women	1997
58	7	University Working Conference	1997
58	5	Utility & Energy Industries Conference	1997
58	6	Utility Working Conference	1997
58	8	Women in Engineering Programs and Advocates Network Faculty Action Group	1997
84	3	Society of Women Engineers (SWE) - information	1997-1999
81	35	American Nuclear Society (ANS) Infrastructure Meeting, Chicago - correspondence, information	1998
81	37	American Nuclear Society (ANS) meeting, San Francisco - correspondence regarding presentation	1998
84	12	American Nuclear Society (ANS), Presidency of Ted Quinn - correspondence, information	1998
58	12	American Nuclear Society (Our) Response to India/Pakistani Nuclear Tests	1998
45	1	American Nuclear Society annual meeting, Nashville, Tennessee	1998
58	10	American Nuclear Society Annual meeting, Nashville, Tennessee	1998
58	11	American Nuclear Society Leadership Award	1998
59	1	American Nuclear Society Safety meeting, San Francisco, October	1998
58	9	American Power Conference	1998
59	3	Engineering Foundation	1998
59	2	Engineering Foundation Women's Conference	1998
59	4-5	European Nuclear Society	1998
59	6	High-Level Radioactive Waste Management meeting, Las Vegas	1998
59	7-8	Institute of Industrial Engineers	1998
59	9	National Security Council project	1998
59	10	Pacific Basin Nuclear Conference	1998
59	11	Professional Women in American Nuclear Society	1998

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
84	13	Ted Quinn's visit - correspondence, information	1998
60	1-3	Utility Working Conference	1998
60	4	Women's Conference, New Mexico State University	1998
84	4	Promotion and Tenure Committee - correspondence, information	1998-1999
85	9	Third World Organization for Women in Science (TWOWS) Conference, South Africa - correspondence, information	1998-1999
60	8	"Buying & Selling Nuclear Power Plants" Workshop, Oct. 25-27	1999
45	5	American Association for the Advancement of Science appointment	1999
60	6	American Nuclear Society	1999
60	7	American Nuclear Society special session	1999
45	3-4	American Nuclear Society, Long Beach	1999
60	5	American Power Conference	1999
84	5	Commission on the Advancement of Women in Science, Engineering, and Technology Department; nomination for - correspondence	1999
45	2	Commission on women and minorities	1999
81	14	Faculty Improvement Leave Committee - correspondence, information	1999
60	9	Fast Flux Test Facility (FFTF) Project	1999
61	1-2	Industrial Engineering Research Conference	1999
85	10	Iowa State University Bioethics retreat - correspondence, information, notes	1999
82	7	Massachusetts Institute of Technology (MIT) visit - correspondence, information	1999
61	3	Meeting with Jay Hakes	1999
61	4	National Academics meeting on Nuclear Power	1999
61	6	Nuclear Energy Research Advisory Committee Trip, October 17-20	1999
61	5	Nuclear Energy Research Advisory Committee Working Group	1999

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
61	7	Nuclear Energy Research Advisory Committee Workshop, December 8-10	1999
43	7	Nuclear Society of Slovenia	1999
61	8	Probabilistic Safety Assessment meeting, Washington ,D.C., Aug 22-26	1999
61	9	Respondents: Long Term Research and Development Plan Workshop	1999
87	29-30	Summit on Women in Engineering; Washington, D.C. - resource book	1999
62	2	University Program meeting	1999
62	3	Utility Working Conference, August	1999
45	6	American Nuclear Society correspondence	1999-2000
62	1	Sabbatical leave	1999-2000
62	11	American Nuclear Society - paper review, February 6-9	2000
62	13	American Nuclear Society - paper review, July 24-25	2000
62	14	American Nuclear Society - stationary for invitations	2000
62	5	American Nuclear Society Board Meeting, Washington, D.C.	2000
62	6	American Nuclear Society Globe	2000
62	8	American Nuclear Society Meeting, San Diego, June	2000
62	7	American Nuclear Society Meeting, Washington, D.C., November	2000
62	9-10	American Nuclear Society, November	2000
62	12	American Power Conference, April 10-12	2000
45	9	Annual Energy Outlook - National Energy Modeling System Conference	2000
63	1	California Deregulation Study, April 1-8	2000
45	7	Calvert Cliffs	2000
63	2	Committee of New Construction (Kyle Turner)	2000
63	3	Effects of Deregulation on Nuclear Industry in California	2000
63	4	Federal Energy Regulatory Commission	2000
63	5	Generation IV International Workshop	2000
63	6	Generation IV Workshop, May 1-3	2000

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
63	7	Human-Machine Interface Technologies, Technical Program Committee for Topical American Nuclear Society meeting	2000
63	8	Immersive Projection Technology Workshop, June 19-20	2000
63	11	International Workshop on Nuclear Power Plant Life: Management in a Changing Business World	2000
45	8	Iowa State University/Ames visit	2000
63	9	John Polcyn, Bechtel; Frederick, Maryland	2000
63	12	Nuclear Energy Research Advisory Committee, May 23-24	2000
63	10	Nuclear Engineering All Hands meeting	2000
63	13	Nuclear Regulatory Commission - Regulatory Conference	2000
64	4	Society of Women Engineers Conference, June 27-July 1	2000
64	1-3	Study for Nuclear Energy/Energy Information Administration, "Deregulation Impact on Californian Nuclear Power Plants"	2000
64	5-6	Utility Working Conference	2000
78	14	Omaha Public Power District (OPPD) visit - information, correspondence	2000, undated
62	4	Advance Design Initiative Program	2000-2002
45	10	38 <sup>th</sup> annual report of the Electric Power Research Center/Power Affiliate Research Program	2001
65	1	American Nuclear Society - meeting, Milwaukee, June	2001
65	2-3	American Nuclear Society - winter meeting	2001
83	28	Association for Women in Science (AWIS) Conference - information	2001
65	4	Joint Atomic Energy Society of Japan/American Nuclear Society Topical Meeting on Safety Goals and Safety Culture	2001
86	13	Industrial and Manufacturing Systems Engineering (IMSE) - meeting agendas, information	2001-2003
82	16	Women's Studies Faculty Meetings - correspondence, information, notes	2001-2004
75	6	ADVANCE meetings - correspondence, information	2001-2006, undated

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
65	5-6	American Association for the Advancement of Sciences Meeting, February 12-22	2002
80	9	National Memorial Institute for the Prevention of Terrorism (MIPT) - "Managing Terrorism's Consequences: Legal Issues" booklet	2002
82	13	Women in the College of Engineering subcommittee - correspondence, information	2002
86	16	Engineering Caucus - correspondence, information	2002-2003
86	15	Faculty Senate Executive Board - agendas, information	2002-2003
82	37	Faculty Senate meetings - agendas, correspondence	2002-2003
87	37	Women and Minorities Committee - information, correspondence	2002-2004
86	10	College of Engineering Academic Council - agendas, notes, information	2002-2005
76	5-6	University Committee on Women, Women in Engineering - correspondence, information	2002-2006
80	2	ADVANCE - program information, statistics, brochures	2002-2007, undated
82	12	American Men's Studies Association Conference - correspondence, information	2003
87	22	Faculty Senate Retreat - notes, information	2003
79	8	Homeland Security/Nuclear Research - correspondence, reports, information	2003
82	18	Science, Mathematics, Engineering, Technology (SMET) Women Faculty - correspondence, information	2003
81	28	Taking the Road Less Traveled Conference, Ames - program with Heising participation	2003
86	14	Faculty Senate Academic Council - agendas, notes, information	2003-2004
82	38	Promotion and Tenure Committee (P&T) - information, correspondence	2003-2004
86	24	American Nuclear Society (ANS) meetings, agendas, notes, information	2003-2005
82	30	Faculty Senate meetings - agendas	2003-2005

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
84	36	Institute for Physical Research and Technology (IPRT) - correspondence, information	2003-2005
83	24	University Committee on Women meetings/retreats - correspondence, information, agendas	2003-2005
86	17	Engineering Caucus - correspondence, information	2003-2006
82	29	Industrial and Manufacturing Systems Engineering (IMSE) Committee - agendas, notes, information	2003-2006
79	2	Personal calendars - scheduling	2003-2006
85	1	American Men's Studies Association (AMSA) Conference; Aurora, Illinois - information	2004
81	12	American Nuclear Society (ANS) Conference, Washington, D.C. - information	2004
81	13	American Nuclear Society (ANS) Development Workshop, Pittsburgh - agenda, information, correspondence	2004
81	7	Homeland Security Conference, Washington, D.C. - agenda, information	2004
85	45	Iowa Community Conference, Homeland Security - correspondence, information, "Amber Waves" program	2004
81	11	Society of Women Engineers (SWE) Conference, Milwaukee - information	2004
87	38	Women in Engineering Programs and Advocates Network (WEPAN) Conference, Albuquerque - information	2004
83	26	ADVANCE retreat, grant - correspondence, information	2004-2005
82	31	Faculty Development and Relations Council - agenda, correspondence	2004-2005
83	23	Women and Minorities Committee - correspondence, information	2004-2005
86	8-9	Faculty Senate Executive Board - minutes, agendas, information, correspondence	2004-2006
80	5	ADVANCE - group meetings, activities	2004-2007
83	21	Women's Leadership Consortium (WLC) - agendas, information	2004-2007
83	8	American Nuclear Society (ANS) annual meeting, San Diego - information	2005

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
83	35	American Nuclear Society (ANS) planning - information, correspondence, minutes	2005
83	9	American Nuclear Society (ANS) strategic plan - information	2005
83	11	American Nuclear Society (ANS) winter meeting, Washington, D.C. - program, information, correspondence	2005
81	5	Department of Homeland Security (DHS) Conference, Boston - notes, information	2005
83	12	ENC 2005 (European Nuclear Conference) - information, transparencies, correspondence	2005
83	10	Homeland Security Conference, San Diego - information	2005
83	27	Leadership through Engineering Academic Diversity (LEAD) program - correspondence, information	2005
81	9	Society of Women Engineers (SWE) Conference, Anaheim - information	2005
84	30	Technologies for Critical Incident Preparedness Conference, San Diego - information	2005
81	6	Women in Engineering Programs and Advocates Network (WEPAN) Conference, Las Vegas - information	2005
86	18	Engineering Academic Council - agendas, information	2005-2006
86	19	Engineering Caucus - correspondence, information	2005-2006
83	4	Society of Women Engineers (SWE)/Women in Academia (WIA) Conference - information, correspondence	2005-2006
83	22	Faculty Development and Administrative Relations Council (FDAR) - correspondence, information	2005-2007
83	18-19	Faculty Senate Resource and Policy Allocation Council - correspondence, information	2005-2007
83	20	University Committee on Women (UCW) - agendas, information, correspondence	2005-2007
79	3	ADVANCE - Judy Vance files, correspondence, notes	2006
83	7	American Nuclear Society (ANS) annual meeting, Reno - programs, information	2006
83	34	American Nuclear Society (ANS) meeting, Albuquerque - program, correspondence, information	2006

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
83	31	American Nuclear Society (ANS) strategic plan - information, correspondence, program	2006
83	5	Dirty bomb topical meeting, Carlsbad, NM - correspondence, information	2006
83	6	Institute of Industrial Engineers (IIE) Solutions Conference, Orlando - information, transparencies	2006
83	14	ISU Strategic Plan, 2005-2010, Budget Model Development Committee - information	2006
65	7	National Science Foundation (NSF), ADVANCE Institutional Transformation - conference agenda, correspondence, information	2006
83	3	Society of Women Engineers (SWE) National Conference, Kansas City - information	2006
83	13	Winter Bioethics Retreat - notes, information	2006
80	4	ADVANCE - program job duties, responsibilities	2006, undated
76	4	Academic Council, College of Engineering - agendas, correspondence, information	2006-2007
79	4	ADVANCE - reports, updates	2006-2007
80	3	ADVANCE - timelines	2006-2007
76	1-2	Faculty Senate Executive Board - meetings, information, correspondence	2006-2007
77	4	Industrial and Manufacturing Systems Engineering (IMSE) meetings - agendas, correspondence, information	2006-2007
77	7	ISU 150 <sup>th</sup> Anniversary Committee - correspondence, information	2006-2007
79	5	ADVANCE - personnel related information	2006-2007, undated
77	12	ADVANCE meetings - agendas, minutes	2006-2007, undated
83	32	ADVANCE Principal Investigators meeting - information, correspondence	2007
77	8	ADVANCE, National Science Foundation (NSF) Institutional Transformation 6 <sup>th</sup> Annual Principal Investigators meeting - program/booklet	2007



<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
83	33	American Nuclear Society (ANS) meeting, Boston - program, information, minutes, correspondence	2007
87	33	Society of Women Engineers (SWE) Conference - presentations, correspondence, 1 CDrom	2007
83	1	Institute of Industrial Engineers (IIE) Conference & Expo, Vancouver, B.C. - information	2008
45	11	Center for Complex Information Interpretation	undated
82	8	International Network of Women Engineers and Scientists - notes, information	undated
77	1	Security conference notes - notepads	undated

### Description of series

**Series 6      Audio-visual Materials      1970-2002, undated**

extent:      2.94 linear feet (7 document boxes)

description:      The remaining series contains videotapes of presentations and workshops; audiotapes of presentations, including Heising's thesis presentation; and numerous photographs (black and white, color, and negatives). The photographs document Heising's family, trips to Sea World and California, her high school reunion, a Safety Culture conference in Vienna, and Iowa State University.

### Container list

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
20	1	Videotape, professional talks	1980-1986
20	2	Videotape, Northeastern University, slide show of faculty	1986
20	3	Videotape, Tokyo presentation	1987
20	4	Videotape, Naval Personal Research and Development Center Colloquium	1992
21	1	Videotape, American Nuclear Society presentation	1995
21	2	Videotape, Iowa State University	1995
21	3	Videotape, American Nuclear Society	1995
21	4	Videotape, Risk Assessment presentation #1	undated
22	1	Videotape, Risk Assessment presentations #2 & 3	undated

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
22	2	Videotape, Discussion, Rio de Janeiro	undated
23	1	Audiotapes (2), presentations	1977-1988
23	2	Audiotapes (3), presentations, including thesis	1980
24	1	Black & white, color photographs - personal and family	1970-1994
24	2	Color negatives and photographs - trip to Sea World	1993
24	3	Color photographs, American Nuclear Society meeting, family	1994
24	4-6	Color photographs, safety culture conference, Vienna, Austria	1995
24	7	Color negatives and photographs, trip to California, father's birthday	1995
25	1	Color negatives and photographs, trip to California, high school reunion	1995
25	2-3	Color negatives and photographs, trip to California	1995
25	4	Color negatives and photographs, visit to San Onofre Nuclear Power Plant, southern California	1995
25	5-6	Color negatives and photographs, American Nuclear Society meeting, Philadelphia, Pennsylvania	1995
25	7	Color photographs, Iowa State University Engineering picnic	1995
25	8	Color photographs, family/Engineering picnic	1995
25	9-10	Color photographs, family/Iowa State University football	1995
25	11	Color photographs (panoramic), family/Iowa State University football	1995
26	1-8	Color negatives	1993-1995
26	9	Transparencies	undated
46	1	Christmas vacation photos (Disneyland, San Diego Zoo, Redondo Beach, San Diego, CA) See negatives 0069315-0069342	1998
77	13	National Science Foundation (NSF) Conference - photographs (23 color prints)	2002
77	14	Blueprint (copy) - under bunker coal handling equipment, ISU	1973

<b>Box</b>	<b>Folder</b>	<b>Title</b>	<b>Dates</b>
78	13	Columbia Thermal Power Plant - presentation transparencies	undated
80	8	Department of Homeland Security, Center for Domestic Preparedness; Anniston, Alabama - CD-ROM	undated
81	41	Color photographs - family and friends (20 color prints)	1997-1998, undated
83	16	Photographs, ANS newsletter (6 color prints)	1999