[Joel L. Morrison collection: gray literature on the origins of computerized geographic information systems].

A Finding Aid to the Collection in the Library of Congress



Geography & Map Division
Library of Congress
Washington, D.C.
2015

Contact information: http://hdl.loc.gov/loc.gmd/gmd.contact

Catalog Record: https://lccn.loc.gov/2015591098

Additional search options available at: https://hdl.loc.gov/loc.gmd/eadgmd.gm015007

Prepared by Ryan Moore

Finding aid encoded by the Library of Congress Geography & Map Division, 2015

Collection Summary

Title: [Joel L. Morrison collection: gray literature on the origins of computerized geographic information systems].
Span Dates: 1963-2001
Call No.: G70.2 coll Morrison
Creator: Morrison, Joel L. R.
Extent: 98 folders
Extent: 21 archival boxes (10.5 linear ft.)
Language: Collection material in English
Location: Geography & Map Division, Library of Congress, Washington, D.C.
LC Catalog record: https://lccn.loc.gov/2015591098
Summary: Joel L. Morrison was active in the development of geospatial data standards, bringing together diverse efforts within the United States to create the Spatial Data Transfer Standard. He compiled a large body of papers on the topic from professionals around the world. His collection of gray literature and white papers from 1963 to 2001 by cartographic and geographic experts from around the world. The papers address the development of computerized geographic information systems. Also part of the collection are materials and correspondence from his time as Professor at The Ohio State University. These include notes during the writing of his book Elements of Cartography and for Goode's World Atlas. As aslo present is correspondence and materials relating to his work as editor for Annals of the Association of American Geographers and as chairman for the American Congress of Surveying and Mapping.

Selected Search Terms

The following terms have been used to index the description of this collection in the LC Catalog. They are grouped by name of person or organization, by subject or location, and by occupation and listed alphabetically.

People
Morrison, Joel L.

Subjects
Cartography--History.
Historical geographic information systems.

Form/Genre
Manuscript maps.

Provenance

In 2011, Joel Morrison, retired Professor of Geography and Head of the Center for Mapping at Ohio State University, donated the materials.

Processing History

The collection was arranged and described by Ryan Moore in 2015, which general adheres to the arrangement created by Professor Joel Morrison.

Copyright Status

The status of copyright of the Morrison collection is governed by the Copyright Law of the United States (Title 17, U.S.C.).

Access and Restrictions

The Morrison collection is open to research. Researchers are advised to contact the Geography & Map Reading Room prior to visiting. Many collections are stored off-site and advance notice is needed to retrieve these items for research use.

Preferred Citation

Researchers wishing to cite this collection should include the following information: Container number, Morrison collection, Geography & Map Division, Library of Congress, Washington, D.C.

Biographical Note

Joel L. Morrison was active in the development of geospatial data standards, bringing together diverse efforts within the United States to create the Spatial Data Transfer Standard. He compiled a large body of papers on the topic from professionals around the world.

He received his doctorate from the University of Wisconsin in Madison in 1968 and was hired as faculty. After teaching cartography and was department chairman 16 years. He entered government service in 1984 and joined the U.S. Geological Survey in Reston, Virginia as the Senior Advisor for Geography in the National Mapping Division. In 1987, he accepted the position of Assistant Division Chief in NMD for Research. In 1995, Dr. Morrison became the Chief, Geography Division of the U.S. Bureau of the Census. In 1998, he directed the Center for Mapping at The Ohio State University in Columbus until his retirement as Professor Emeritus in 2003.

Professor Morrison served as President of the American Congress on Surveying and Mapping and as President of the International Cartographic Association.

President of the American Congress on Surveying and Mapping and chair of its Cartography Division, he was instrumental in changing to the American Cartographic Association. He was one of the organizers of the Cartography Specialty Group of the Association of American Geographers.

Professor Morrison co-authored of Elements of Cartography, the classic English-language resource in cartography. He was an associate editor and senior consultant to Goode's World Atlas. He served as editor professional journals, including Annals Map Supplement.

Scope and Content Note

Consists of white papers, gray literature, correspondence, book proofs, and instructional materials. Includes proofs and correspondence of Goode's Atlas from 1971 to 1988. Materials relating to Elements of Cartography textbook, 4th and 5th editions from 1973 to 1982. Also present, correspondence and papers relating to Professor Morrison's role as chairman of the Cartogtaphy Division in the American Congress of Surveying and Mapping from 1977-1978. Correspondence as editor of Annals Map Supplement published by the Association of American Geographers.

Arrangement of the Collection

The Collection is organized in five series

- Series I Gray Literature
- Series II Professional Papers
- Series III Goode's Atlas
- Series IV Elements of Cartography
- Series V American Congress of Surveying and Mapping; Editor of Annals Map Supplement of the Association of American Geographers

Description of Series

Container	Series
BOX 1-12	**Gray Literature 1963-2001** Papers are filed alphabetically by author. Listed below is information on title, year of creation or publication, author, and the institution or group affiliated with the author. Papers are filed in folders that are labeled using a three-letter naming convention, such as Aaa or Bbb. This system of arrangement was created by Professor Morrison.
BOX 13-18	**Correspondence as Professor and Professional 1965-1994** Correspondence is arranged chronologically and filed in six boxes. For some years, correspondence is divided between "incoming" and "outgoing" letters.
BOX 19	**Goode's Atlas 1971-1988** Correspondence is arranged chronologically.
BOX 20	**Elements of Cartography 1973-1982** Correspondence is arranged chronologically.
BOX 21	**American Congress of Surveying and Mapping Editor of various publications 1973-1982** Correspondence is arranged chronologically. Includes folders for his work as editor for Annals.

Container List

Container	Contents
BOX 1-12	**Gray Literature 1963-2001** Papers are filed alphabetically by author. Listed below is information on title, year of creation or publication, author, and the institution or group affiliated with the author. Papers are filed in folders that are labeled using a three-letter naming convention, such as Aaa or Bbb. This system of arrangement was created by Professor Morrison.
FOLDER Aaa	Everything in its Place: GPS, GIS, and Geography in the 1990s 1992 Ronald F. Abler Penn State University
FOLDER Aaa	Cartography - Que Vadis? Major General G. C. Agarwal Surveyor General of India
FOLDER Aaa	Transformations and Geographic Theory 1971 Shlomo Angel and Geoffrey M. Hyman London Centre for Environmental Studies
FOLDER Aaa	From Local GIS to Global Address Quality 1995 Antonio Morais Arnaud New University of Lisbon
FOLDER Aaa	The WWW Protoype of the Alexandria Digital Library 1995 D. Andresen, et al University of California at Santa Barbara
FOLDER Aaa	The National Atlas of the United States: Planning for a Second Edition 1985 James R. Anderson and Charles W. Beetschen U.S. Geological Survey
FOLDER Aaa	Data Uncertainty in GIS... Nils G. Andersson City of Copenhagen
FOLDER Aaa	Duality in the Quality of Notion for GIS-Data 1995 Oystein Andersen Agricultural University of Norway Department of Mapping Services
FOLDER Aaa	What Would the Theory of Reflection Have Brought for Cartography 1994 E. P. Arzhanov
FOLDER Aaa	Map Design for the User 1973 Chris Arvetis Rand McNally
FOLDER Aaa	Metacartography 1974 A. F. Aslanikashuili
FOLDER Bbb	The Minnesota Geography Exhibit: Making the "Latent Geographer" in Visitors Active 1979 Thomas J. Baerwald and Rob Britton Science Museum of Minnesota Geography Department
FOLDER Bbb	Characteristics of Cartographic Communication 1976 M. Balodis Western Australian Institute of Technology Department of Surveying
FOLDER Bbb	Communicating through Statisical Maps Olayinka Y. Balgon

Container	Contents
	University of Lagos Department of Geography
FOLDER Bbb	Standards for Digital Cartographic Data...
	MacDonald Barr
	Lincoln Institute of Land Policy
FOLDER Bbb	Large Administrative Boundary Data Sets...
	Robert Barr
	University of Manchester School of Geography
FOLDER Bbb	Perceptually Relevant Environmental Quality Measures... 1972
	Patrick J. Bartlein and Mark D. Menchik
	University of Wisconsin Geography Department
FOLDER Bbb	The FY-1997 National Spatial Data Infrastructure... 1996
	G. Barton
	N.O.A.A.
FOLDER Bbb	An In-depth Study of Automated Name Placement Systems
	Umit Basoglu
FOLDER Bbb	Basic Requirements of an Automated Mapping System 1973
	Carol Bateman
	Oxford Polytechnic
FOLDER Bbb	Results of Black for High Vrs. White for High Test
	John Beets
FOLDER Bbb	Obtention de Cartes au 1:100,000... 1984
	Francisco Gonzalez Bermejo
	Servicio Geografico del Ejercito
FOLDER Bbb	Mapping for Urban Studies
	Peter F. Bermel
	U.S. Geological Survey
FOLDER Bbb	The Federal-State Interface: A History of Joint Mapping Efforts
	Peter F. Bermel
	U.S. Geological Survey
FOLDER Bbb	Theory of Communication & Theory of the Graphic
	Jacques Bertin
FOLDER Bbb	ICA Commission on Base Maps for International Thematic Mapping 1980
	R. J. Bertrand
FOLDER Bbb	An Automatic System of Cartography 1964
	D. P. Brickmore and A. R. Boyle
FOLDER Bbb	Cartographic Data Banking
	D. P. Brickmore
FOLDER Bbb	Computer Assisted Cartography in Europe
	David P. Brickmore
	David Brickmore Associates
FOLDER Bbb	Autocartography: Not so much a Program, more a way of Life
	Stein W. Bie
	Norwegian Computing Center
FOLDER Bbb	Digital Library Use and Social Practice 1998
	Ann P. Bishop, et al
	University of Illinois, Urbana-Champaign
FOLDER Bbb	Designing and Using a Cartographic Extract...
	Amy Brishton
	U.S. Bureau of Census

Container	Contents
FOLDER Bbb	UK Research and Development in GIS... Michael Blakemore University of Durham Mountjoy Research Centre
FOLDER Bbb	Map Reading Tasks... 1975 Christopher Board London School of Economics
FOLDER Bbb	ICA Commission IV, the Future 1978 Christopher Board London School of Economics
FOLDER Bbb	The Geographer's Contribution to Evaluating Maps as Vehicles for Communicating Information Christopher Board London School of Economics
FOLDER Bbb	How can Theories of Cartographic Communication be Used to Make Maps More Effective 1977 Christopher Board London School of Economics
FOLDER Bbb	Progress in Experimental Research on Perception and Cognition for the Improvement of Cartographic Communication Christopher Board London School of Economics
FOLDER Bbb	The Need to Integrate Map Use... Christopher Board London School of Economics
FOLDER Bbb	Cartographic Communication 1980 Christopher Board London School of Economics
FOLDER Bbb	Toward a Definition of Cartography Appropriate in the Year 1987 1987 Christopher Board London School of Economics
FOLDER Bbb	The Development of Concepts of Cartographic Communication... 1982 Christopher Board London School of Economics
FOLDER Bbb	A Verbal Approach to Map Design and Map Evaluation 1972 Barbara S. Bartz
FOLDER Bbb	Military Map Design: What Does the User Need? 1973 Barbara Bartz Petchenik
FOLDER Bbb	From Place to Space... 1978 Barbara Bartz Petchenik R.R. Donelley & Sons Co.
FOLDER Bbb	The Futures of Cartography 1982 Barbara Bartz Petchenik R.R. Donelley & Sons Co.
FOLDER Bbb	What Does Research Tell Us About Children's Map-Reading Abilities? 1966 Barbara S. Bartz National Council for Geographic Education
FOLDER Bbb	Some Aspects of Dot Map Perception 1963 Barbara S. Bartz
FOLDER Bbb	The Figure-Ground Relationship: Its Role in Cartogrpahic Design Barbara S. Bartz

Container	Contents
FOLDER Bbb	Geographical Map in the Alexander World Atlas... 1977 Helmut Schulze
FOLDER Bbb2	Das Engagement der Internationalen Kartographischen... Rolf Boehme
FOLDER Bbb2	An Integrated System of Processing Geographic Names 1972 Rolf Boehme Institut fuer Angewandte Geodaese
FOLDER Bbb2	Automated Method for Developing the Cartographic Projections of the Small-scale Maps 1967 V. M. Bohinsky
FOLDER Bbb2	Computer-Assisted Map Compilation, Editing, and Finishing L.H. Borgerding, et al U.S. Geological Survey
FOLDER Bbb2	Information Technology and the Development of a Market Economy 1993 Sandor Bottka National Committee for Technological Development in Hungary
FOLDER Bbb2	Decisive Criteria for GIS Comparative Study and Evaluation Francois Bouille
FOLDER Bbb2	General Methodology of Maps Digitization and some Improvements Based upon Pattern Recoginition Francois Bouille Universite Pierre et Marie Curie
FOLDER Bbb2	Spatial Data Capture and Representation 1981 A. R. Boyle University of Saskatchewan
FOLDER Bbb2	7.5 Arc-Minute Quad Map Revision... 1988 Earl Brabb U.S. Geological Survey
FOLDER Bbb2	The Extent of Landsliding in Northern New Mexico... 1987 Earl Brabb U.S. Geological Survey
FOLDER Bbb2	Geospatial Data: The Need to Get Our Act Together 1997 Michael J. D. Brand
FOLDER Bbb2	Manipulation Process in Computer Cartography 1978 Kurt Brassel State University of New York at Buffalo Department of Geography
FOLDER Bbb2	Research Needs Related to Cartographic and Other Spatial Data Displays 1981 Kurt Brassel Universidad de Los Andes Instituto de Geografia
FOLDER Bbb2	Orthogonal Three-Dimensional Views for Thematic Mapping Kurt Brassel and Zissis Kiriakakis Universitaet Zuerich-Irchel
FOLDER Bbb2	Linking Crime and Census Information within a Crime Mapping System Kurt Brassel and Jack J. Uteno State University of New York at Buffalo Department of Geography
FOLDER Bbb2	Buffalo Crime Mapping System... 1977 Kurt Brassel, et al State University of New York at Buffalo Department of Geography
FOLDER Bbb2	Computer Mapping Basics and Workbork 1995 Frederick Broome and Timothy F. Trainor

Container	Contents
FOLDER Bbb2	Tiger Preliminary Design and Structure Overview... 1984 Frederick Broome U.S. Bureau of Census
FOLDER Bbb2	Cadastral Coordination Program of Surveys and Mapping Branch 1983 Bob Bruce Manitoba
FOLDER Bbb2	Data Digital Elevation Model Collection Systems Ernest B. Brunson and Randle W. Olsen U.S. Bureau of Census
FOLDER Bbb2	Information Ratio 1955 Reid Bryson University of Wisconsin Department of Meteorology
FOLDER Bbb2	Variances Spectra of Certain Natural Series 1960 Reid Bryson University of Wisconsin Department of Meteorology
FOLDER Bbb2	Quality Assurance for Providing Appropriate Data 1992 Felix Bucher University of Zurich Department of Geography
FOLDER Bbb2	The Philosophy of Maps 1968 W. Bunge, et al Wayne State University
FOLDER Bbb2	Log Normal Interpolation in Grain Size Analysis Heinz Burger Free University of Berlin Geological Institute
FOLDER Bbb2	Object-Oriented Map Generalization: Modeling and Cartographic Considerations 1994 Barbara P. Buttenfield U.S. Geological Survey
FOLDER Ccc	Statisical Presentation -- Of What, To Whom, and for Which Purpose? 1983 Nancy Clark Joint Statistical Meeting
FOLDER Ccc	Automated Cartographic Products Mary Clawson Defense Mapping Agency
FOLDER Ccc	The Problem of Spatial Autocorrelation 1968 Andrew D. Cliff and J. Keith Ord University of Bristol School of Economics
FOLDER Ccc	Ordinance Survey Digital Mapping 1973 D.J. Coles British Cartographic Society Annual Technical Symposium
FOLDER Ccc	Cartographic Promises of ERTS-1 1972 Alden Colvocoresses U.S. Geological Society
FOLDER Ccc	Evaluation of the First Earth Resources Technology Satellite (ERT-1) for Cartographic Application 1974 Alden Colvocoresses U.S. Geological Society
FOLDER Ccc	Mapping of Washington, D.C., and Vicinity with the Landsat4 Thematic Mapper 1984 Alden Colvocoresses U.S. Geological Society

Container	Contents
FOLDER Ccc	Digital Data Standards for Hypsography Thomas Connolly U.S. Geological Society
FOLDER Ccc	The Potential for Video Disc Technology in Cartography Daniel J. Costanzo U.S. Army Engineer Topographic Laboratories
FOLDER Ccc	Contouring a Grid 1969 W.J. Coulthard University of British Columbia Computing Centre
FOLDER Ccc	Plotting Perspective Views of Surfaces 1969 W.J. Coulthard University of British Columbia Computing Centre
FOLDER Ccc	Adding Topological Structure to PC-Based CAD Databases 1986 David J. Cowen, et al University of South Carolina Department of Geography
FOLDER Ccc	Alternative Approaches to Display of USGS Land Use/Land Cover Digital Data 1984 David J. Cowen, et al University of South Carolina Department of Geography
FOLDER Ccc	Computer Mapping Vs. GIS: Implications for Applied Geography 1986 David J. Cowen University of South Carolina Department of Geography
FOLDER Ccc	The Cumulative Frequency Nearest Neighbor Method for the Identification of Spatial Patterns 1966 Stewart R. Cowie University of Bristol Department of Geography
FOLDER Ccc	The Mathematical and Logical Procedure of the Stepwise Regression Program with Learning 1965 Richard L. Crandall University of Michigam Computing Center
FOLDER Ccc	1984 AAG Survey of Departments of Geography in the U.S. and Canada 1985 Scott Creasy and Salvatore J. Natoli Assocation of American Geographers
FOLDER Ccc	Resolution, Accuracy and Attributes: Approaches for Environmental Geographical Information Systems 1989 Ferenc Csillag, et al Hungarian Academy of Sciences Department of Geography
FOLDER Ccc	Modification of a Traditional Scheme for Summarizing Thematic Mapping Strategy David J. Cuff Temple University Department of Geography
FOLDER Ccc	Metrication in the Surveying Classroom 1980 Kenneth S. Curtis Purdue University School of Civil Engineering
FOLDER Ccc2	Research Needs Related to System Design and Economics 1981 Hugh W. Calkins SUNY Buffalo Department of Geography
FOLDER Ccc2	Creating Large Digital Data Files from Mapped Data Hugh W. Calkins SUNY Buffalo Department of Geography
FOLDER Ccc2	Multivariate Grouping Scheme: Association Analysis of East Anglian towns Lucy Carce

Container	Contents
FOLDER Ccc2	Effective Graphics Require Effort 1977 James R. Carter University of Tennessee Geography Department
FOLDER Ccc2	Collection of Definitions, Comments, Observations and Opinions Relative to Computer Graphics and Automated Cartography James R. Carter University of Tennessee Geography Department
FOLDER Ccc2	Towards the Definition of Cartogrpahy as a Profession 1986 James R. Carter University of Tennessee Geography Department
FOLDER Ccc2	Videodiscs and Surrogate Travel: The Map - Environment Interface 1987 Laurence W. Carstensen Virginia Polytechnic Institute Department of Geography
FOLDER Ccc2	Measure of Similarity for Cellular Maps 1987 Laurence W. Carstensen and Allan B. Cox Virginia Polytechnic Institute Department of Geography
FOLDER Ccc2	Towards Fuzzy Geometry 1995 Wilhelm Caspary Munich University Institute for Geodesy
FOLDER Ccc2	Perceptual Processes During the Initiation of Map Viewing 1978 Henry W. Castner Queen's University Department of Geography
FOLDER Ccc2	An Examination of Data Differentiation and Cartographic Symbolization 1976 Kang Tsung Chang
FOLDER Ccc2	Lettering Design Atlases Kang Tsung Chang
FOLDER Ccc2	Cartographic Structure and Function: A New Perspective on Map Language 1989 Jois Child SUNY Buffalo Department of Geography
FOLDER Ccc2	Analysis and Synthesis... 1984 Jois Child SUNY Buffalo Department of Geography
FOLDER Ccc2	U.S. Geological Survey Mini Image Processing System 1983 Pat Chaver U.S. Geological Survey
FOLDER Ccc2	Projection Handbook 1973 Central Intelligence Agency
FOLDER Ccc2	Paper and Network Scholarships... 1999 T. Matthew Ciolek Australian National University
FOLDER Ccc2	Orientation and Operation of Stereoscopic Plotting Instruments 1959 James L. Claff University of Wisconin
FOLDER Ccc2	Maps and Mapping Technologies of the Persian Gulf War 1991 Keith C. Clarke City University of New York
FOLDER Ccc2	One Thousand Mount Everests 1991 Keith C. Clarke City University of New York

Container	Contents
FOLDER Ccc3	Cartographic Symbolization of Uncertainty Keith C. Clarke and Paul D. Teague University of California at Santa Barbara Department of Geography
FOLDER Ddd	Analysis of Map Distributions by Nearest Neighbor Methods 1958 Michael F. Dacey University of Washington Department of Geography
FOLDER Ddd	Description of Line Patterns 1960 Michael F. Dacey University of Washington Department of Geography
FOLDER Ddd	Linguistic Aspects of Maps and Geographic Information Michael F. Dacey University of Washington Department of Geography
FOLDER Ddd	Comments on the Experimental Design of the Nearest Statistic 1958 Michael F. Dacey University of Washington Department of Geography
FOLDER Ddd	Syntax of a Triangle and Some Other Figures Michael F. Dacey Northwestern University Department of Geography
FOLDER Ddd	A Data Base for Education in the Mapping Sciences in the U.S. 1979 Richard E. Dahlberg Northern Illinois University
FOLDER Ddd	Evaluation of the U.S. System of Cartographic Education 1976 Richard E. Dahlberg Northern Illinois University
FOLDER Ddd	Nature & Role of Maps 1967 Richard E. Dahlberg Syracuse University
FOLDER Ddd	Problem Areas & Priorities for Cartographic Education in the United States 1979 Richard E. Dahlberg Northern Illinois University
FOLDER Ddd	Education Needs and Problems of the National Cartographic System 1980 Richard E. Dahlberg Northern Illinois University
FOLDER Ddd	Perspective on Communication Between the Map Using and Map Producing Communities in the United States 1980 Richard E. Dahlberg Northern Illinois University
FOLDER Ddd	Report of the First Working Meeting of ICA Commission on Continuing Education in Cartography... 1981 Richard E. Dahlberg Northern Illinois University
FOLDER Ddd	Accounting for the Geography of Population... 1992 Donald C. Dahman U.S. Bureau of Census
FOLDER Ddd	Census Bureau Honors Distinguished Cartographer 1996 Donald C. Dahman U.S. Bureau of Census
FOLDER Ddd	Automatic Measurement of Line Networks and Areas: Determination of Stream Lengths... George Dalke and Roger McCoy

Container	Contents
FOLDER Ddd	Future Role of GIS and Its Technological Development in the Process of Environmental Protection 1995 Jack Dangermond Environmental Systems Research Institute
FOLDER Ddd	The Surveying Profession in the United Kingdom 1984 Clifford Dann Royal Institution of Chartered Surveyors
FOLDER Ddd	Spatial Data Manipulation and Analysis 1981 John C. Davis Kansas Geological Survey
FOLDER Ddd	Simulating and Mapping Spatial Complexity Using Multiscale Techniques 1992 Lee De Cola U.S. Geological Survey
FOLDER Ddd	Electronic Atlas Technology in the Surveys and Mapping Branch Energy, Mines and Resources Canada Roger M. Defoe Surveys and Mapping Branch Ottawa, Ontario Canada
FOLDER Ddd	Map positioning by means of an oscilloscope reproducing selected map images imparting to a world-wide, three-axial Navstar-Chart 1986 Marie-Louise Deile
FOLDER Ddd	Models of Cartographic Communication: A Survey Alan DeLucia University of Idaho The Cart-o-graphics Laboratory
FOLDER Ddd	A Medium Resolution Population Database for Africa 1994 Uwe Deichman University of California at Santa Barbara Department of Geography
FOLDER Ddd	Cartography - Snapsot or Cinema? Robert Dennis National Ocean Survey
FOLDER Ddd	Mapping and Computers: The Green Bay Wisconsin Area Street Map 1984 Anthony R. de Souza Universtiy of Wisconsin
FOLDER Ddd	Quelques Exemples D'Analyses Geomorphometriques... 1985 Christian Depraetere Pennsylvania State University
FOLDER Ddd	Surveillance Satellite Project Experiment No. 74 1980 Eugene E. Derenyi University of New Brunswick Department of Surveying Engineering
FOLDER Ddd	A Modest Proposal: A Census Historical Chartbook 1998 Dave DesJardins
FOLDER Ddd	The Advanced Cartographic System 1969 Joseph Diello
FOLDER Ddd	The American Institute for Geographic Research 1985 Jerome E. Dobson Oak Ridge Laboratory
FOLDER Ddd	Automated Geography: Status and Prospects 1986 Jerome E. Dobson and Richard C. Durfee Oak Ridge Laboratory
FOLDER Ddd	Alternative Research Strategies and Map Reading 1979 Michael W. Dobson

Container	Contents
	University of New York at Albany Department of Geography
FOLDER Ddd	Meaning from Data: Implications for Data Analysis and Database Management Systems 1983
	James L. Dolby San Jose State University
FOLDER Ddd	An Automated System of Map Digitizing with Additional Automatical Stations
	Andreas Domaske, et al Mitteldeutsche Kartographie & Druck
FOLDER Ddd	Technology and Educatio nin a Developing Country... 1983
	David H. Douglas University of Ottawa Department of Geography
FOLDER Ddd	Approaches to and Problems in the Measurement of Geographic Space Perception 1968
	Roger M. Downs University of Bristol
FOLDER Ddd	Habitat Analysis and Modelling for Endangered Species..
	I. Downeny, et al. University of Salford Department of Geography
FOLDER Ddd	Satellite Systems for Cartography 1983
	Frederick Doyle U.S. Geological Survey
FOLDER Ddd	Geodetic Datums 1986
	Frederick Doyle U.S. Geological Survey
FOLDER Ddd	Are We One Profession, or Several? 1983
	Frederick Doyle International Society for Photogrammetry and Remote Sensing
FOLDER Ddd	The Current Status of Airborne Military Mapping in the U.S. Air Force 1972
	John A. Dutton and Robert G. Livingston U.S. Air Force
FOLDER Eee	Uncertainty Metadata and GIS Software System Design
FOLDER Eee	Automated Names Placement in a Non-Interactive Environment 1991
	J. Ronald Eastman and Hong Jiang Clark University
FOLDER Eee	Editing of Digital Cartographic Data at Rome Air Development Center 1990?
	Lee R. Ebinger and Ann M. Goulette U.S. Bureau of Census
FOLDER Eee	Automatic Thematic Mapping in the EROS Program 1972
	U.S. Air Force
FOLDER Eee	An Alogorithm to Calculate Proportional Area Transformation Factors for Digital Cartographic Databases 1972
	Dean T. Edson U.S. Geological Survey
FOLDER Eee	Towards a European Geographic Information Framework 1983
	Robert Edwards Union Carbide
FOLDER Eee	Quality Indicators for Integrated GIS Datasets 1995
	European Geographic Information Infrastructure
FOLDER Eee	Census Geographic Area Delineation... 1994?
	Manfred Ehlers and Shi Wenzhong University of Vechta, GIS and Remote Sensing

Container	Contents
FOLDER Eee	The Use of Elevation Data Bases in Computer Assisted Cartography 1984 Roy C. Ellis U.S. Bureau of Census
FOLDER Eee	A Study of Moss and Idims: The FMLIS Pilot Project Example 1986 Christian Elvhage and Peter Andersson National Land Survey of Sweden
FOLDER Eee	A Hypermedia GIS: The Massachusetts Turnpike Study 1984 Eros Data Center
FOLDER Eee	Baseline Data Needs for Environmental Assessment and Sustainable Development Stephen M. Ervin Harvard Graduate School of Design
FOLDER Eee	The Mythical Map 1994 John E. Estes United Nations Environment Programme
FOLDER Eee	Remote Sensing and GIS Integration 1994? John E. Estes and D. Wayne Mooneyhan Universities Earth Science Program
FOLDER Eee	The Implementation of an Automated Cartography System 1993 John E. Estes and Jeffrey L. Star University of California at Santa Barbara Department of Geography
FOLDER Eee	General Geomorphometry Derivatives of Altitutde and Descriptive Statistics 1989 Ian S. Evans Royal Collage of Art Experimental Cartography Unit
FOLDER Eee	1970 Ian S. Evans University of Durham Department of Cartography
FOLDER Fff	When the Call Comes 1989 James C. Fletcher NASA
FOLDER Fff	Name Placement for GRNB Computer Mapping 1983 Steven Flint University of New Mexico Institute for Applied Research Services
FOLDER Fff	Development of a Low-Cost PC-Based Image-Processing and Mapping GIS... 1990 Sten Folving, et al European Commission Institute for Remote Sensing Applications
FOLDER Fff	The Baltimore-Washington Regional Collaboratory Land Use History Research Program 1998 Timothy W. Foresman University of Maryland at Baltimore Spatial Analysis Laboratory
FOLDER Fff	Baltimore-Washington Corridor Spatial Dynamics and Human Impacts Study 1995 Timothy W. Foresman University of Maryland at Baltimore Spatial Analysis Laboratory
FOLDER Fff	Alpine Vegetation Classification Using High Resolution Aerial Imagery.. 1985 Thomas D. Frank and Scott A. Isard University of Illinois Department of Geography
FOLDER Fff	GIS Techniques in the Collection and Presentation of Data at the United States Bureau of the Census 1990 Linda M. Franz U.S. Bureau of Census
FOLDER Fff	An Expert System for Dense-Map Name Placement Herbert Freeman and Jeffrey S. Doerschler Rutgers University CAIP Center

Container	Contents
FOLDER Fff	Semiotics and Cartography Ulrich Freitag
FOLDER Fff	Developments at the Ordance Survey since 1981 1983 Simon Fraser U.K. Ordance Survey
FOLDER Fff	The New Analytical Plotter Model AP/C-3 1972 S. Jack Friedman O.M.I. Corporation of America
FOLDER Fff	Geography as an International Science... 1986 Roland J. Fuchs University of Hawaii
FOLDER Fff	The Problem of Communication between Editors and Users of Atlases H. Fullard George Philip & Son Ltd.
FOLDER Fff	Getting it on the Map... 1987 Howard T. Fisher Lab for Computer Graphics
FOLDER Fff	Introductory Manual for Synagraphic Computer Mapping 1967 Howard T. Fisher Lab for Computer Graphics
FOLDER Fff	Spatial Analysis and Mapping on the Internet 1998 Tim Foresman
FOLDER Fff	Surveying Education and the Profession in New Zealand P. B. Finn
FOLDER Fff	Statisical Analyses of Ocean Terrain and Contour Plotting Procedures 1964 Paul Switzer, et al Department of Navy
FOLDER Ggg	Spatial Data Recording and Processing for Urban Planning and Management 1973 G.M. Gaits London Department of the Environment
FOLDER Ggg	Fuzzy GIS Sasikala Ganesan Center for Mapping
FOLDER Ggg	Status Report 1995 Geographic Base Information System
FOLDER Ggg	Geoscientific Information Exchange in Austria Databases and Cooperations Gottfried Gerstbach TU Vienna
FOLDER Ggg	Automated Cartography 1968 Erwin F. O. Gigas U.S. Coast and Geodetic Survey
FOLDER Ggg	Effective Map Design 1973 C. R. Gilman U.S. Geological Survey
FOLDER Ggg	AAG Presidential Address 1999 Pat Gober American Association of Geographers
FOLDER Ggg	On Determining Cognitive Configurations of a City 1974 R. G. Golledge Ohio State University Department of Geography

Container	Contents
FOLDER Ggg	A Methodology for Reporting Uncertainty in Spatial Database Products M. F. Goodchild
FOLDER Ggg	Evaluation of Textbook Content in Photogrammetry 1977 Gordon Gracie University of Toronto Survey Science
FOLDER Ggg	An Aerial Photograph as a Map Substitute 1965 Donald R. Graff University of Wisconsin Surveys Institute
FOLDER Ggg	The Quarter Inch to One Mile Map of Great Britain 1964 D. L. Griffith and J. J. Kelly I.C.A. Technical Symposium
FOLDER Ggg	Cartography in the Third Communication Revolution 1980? Richard Groot Ottawa Surveys and Mapping Branch
FOLDER Ggg	The Development of Spatial Concepts through Tactual Graphics 1972? Paul A. Groves and J.W. Wiedel University of Maryland Deparment of Geography
FOLDER Ggg	On the Compiliation of 1:1,000,000 land-use Map of China Guo Huan-cheng Acadamia Sinica Institute of Geography
FOLDER Ggg	National Spatial Data Infrastructure 1994 Stephen. C. Guptill U.S. Geological Survey
FOLDER Ggg	The National Geographic Data System 1991 Stephen. C. Guptill U.S. Geological Survey
FOLDER Hhh	Effects on the Legibility of Maps of Increasing Information 1969 T. C. Hanby, et. Al Royal College of Art
FOLDER Hhh	Research Results in the Application of Multiquadric Equations to Surveying and Mapping Problems 1974 Rolland L. Hardy Iowa State University
FOLDER Hhh	Geodetic Applications of Multiquadric Analysis 1971 Rolland L. Hardy Iowa State University
FOLDER Hhh	Diazo Compounds in Cartographic Reproduction Erkki-Sakari Harju Finland National Board of Survey
FOLDER Hhh	Tourist Map of the United States Needs a Great Designer 1973 Joseph Denis Harrington
FOLDER Hhh	National Seminar on Ganga Basin... 1987 S. Nural Hasan Geographical Society of India
FOLDER Hhh	New Digital System for Ordnance Survey of Great Britain Peter Haywood Ordance Survey
FOLDER Hhh	Topological Structures for 4-Dimensional Geographic Information Systems N. W. J. Hazelton, et al University of Melbourne

Container	Contents
FOLDER Hhh	Cartographic Communication as Natural Language 1981 C. Grant Head Wilfrid Laurier University
FOLDER Hhh	New Dimensions in Optical Memories H. G. Heard NASA
FOLDER Hhh	Typography as a Part of Cartographic Communication 1977 Olof Hedbom, et al Librer Grafiska
FOLDER Hhh	Eye Movement Studies in Cartographic Communication... 1975 Adrian R. Hill Glasgow College of Technology
FOLDER Hhh	Towards a Measure of Cartographic Competence 1978 Adrian R. Hill and J. R. Burns Glasgow College of Technology
FOLDER Hhh	Report Surface Methodology 1966 William J. Hill and William G. Hunter
FOLDER Hhh	Some Aspects of Digitizing Hydrology and Administrative Boundaries... 1982 Christian Hoinkes Swiss Federal Institute of Technology
FOLDER Hhh	Are Cartographers Victims of ADP? Richard M. Holcombe Naval Oceanographic Office
FOLDER Hhh	Land Management Information for Urban Development... 1989 Lynn Holstein World Bank
FOLDER Hhh	Toward a Wired World... 1990 B. Ray Horn, et al U.S. International University
FOLDER Hhh	Digital Data Base of Streams and Lakes 1980 C. Robert Horn U.S. Environmental Protection Agency
FOLDER Hhh	Selected Bibliography of Remote Sensing 1968 Robert B. Hones and Virginia L. Pretence U.S. Geological Survey
FOLDER Hhh	Knowledge Bases of Automatic Extraction of Cartographic Features... Shin Yi Hsu and Linda L. Straight SUNY at Binghamton
FOLDER Hhh	On the Stable Structure, Textual Regions of Scenes and Artificial Intelligence to Image Explo Shin Yi Hsu SUNY at Binghamton
FOLDER Hhh	Nature and Classication of Cartographic Data 1975 Alun Hughes Brock University
FOLDER Hhh	Universal Kriging... C. Huijbregts and G. Matheron Centre de Morphologie
FOLDER Hhh	Short Overview of Structure, Tasks, Present Status and Future Plans... 1992 Hungarian Surveying and Mapping Agency

Container	Contents
FOLDER Hhh	Data Management and Global Change W. W. Hutchinson and Stein W. Bie Energy, Mines and Resources Canada
FOLDER Iii	Surveying Engineering Education Evolution not Revolution 1977 Sumner B. Irish Clarkson Collee of Technology
FOLDER Iii	Historical Development of Terrain Representation in American Cartography 1974 Daniel r. Irwin
FOLDER Jjj	Standardization of Map Symbology Robert P. Jacober, Jr. U.S. Air Force
FOLDER Jjj	Quality of Administrative Data Ole Jacobi
FOLDER Jjj	Least-Squares Surface Fitting with Discontinuous Functions 1968 William R. James Northwestern University Deparety of Geology
FOLDER Jjj	Fourier Series Model in Map Series William R. James
FOLDER Jjj	Data Model Concept in Statistical Mapping 1967 George F. Jenks University of Kansas
FOLDER Jjj	Viewing Points for Three-Dimensional Maps 1967 George F. Jenks and Paul V. Crawford University of Kansas
FOLDER Jjj	Optimal Data Classification for Choropleth Maps George F. Jenks University of Kansas
FOLDER Jjj	An Analysis of the Accuracy and Cost-Effectiveness of a Cropland Inventory Utilizing Remote Sensing Techniques John J. Jensen, et al University of California at Santa Barbara
FOLDER Jjj	Parallelepiped Land Cover Mapping... John J. Jensen University of Georgia
FOLDER Jjj	Use of Artificial Intelligence in the Automated Placement of Cartographic Names David S. Johnson Intergraph Corporation
FOLDER Jjj	Perception of Regions on Conventional and Rescaled Dot Maps 1984 William F. Johnson
FOLDER Jjj	Proposal for Standardization of Symbols on Thematic Maps 1964 Fernand Joly Institut Geographique National
FOLDER Jjj	Rule-Based Cartographic Name Placement with Prolog Christopher B. Jones Polytechnic of Wales
FOLDER Jjj	Rationale for the Basis of Cartographic Education 1979 D. F. Jupe
FOLDER Jjj	Combined Application of Pattern Recognition Methods... Jun Yang University of Hannover

Container	Contents
FOLDER Jjj	Automatic Data Capture of Polygon Maps from Scanned Data Jun Yang University of Hannover
FOLDER Jjj	Cartography A Definition Naftali Kadmon
FOLDER Jjj	Map Language: A Logical Graphic System 1978 Pravda Jan Czechoslovak Committee on Cartography
FOLDER Kkk	Cartography A Definition Naftali Kadmon
FOLDER Kkk	Logical Consistency Wolfgang Kainz International Institute for Aerospace Survey and Earth Sciences ITC
FOLDER Kkk	Multi-scale Databases Wolfgang Kainz University of Vienna Department of Geography
FOLDER Kkk	Coordination des Travaux dans la Production de Cartes Mauno Kajamaa, et al Institut finlandias d'arpentage
FOLDER Kkk	Developling and Trends of Computer-Assisted Cartography in China Liao Ke China Institute of Geography
FOLDER Kkk	Symposium on the Influences of the Map User on Map Design 1970 J. S. Keates University of Glasgow Department of Geography
FOLDER Kkk	Automation and Education in Cartography 1973 J. S. Keates University of Glasgow Department of Geography
FOLDER Kkk	Study of Domestic and International Business Development for U.S. Mapping... 1994 Terrence Keating
FOLDER Kkk	Hardware for automated cartography Brian Kelk Institute of Geological Sciences
FOLDER Kkk	Geographically-Based Strategy for Terrestrial-Effects Research... John A. Kelmelis U.S. Geological Survey
FOLDER Kkk	Military Survey Data Structures Study 1984 Graham Kennedy-Smith U..K. military
FOLDER Kkk	MapIt: Map Drawing on the Calcomp Plotter 1969 Robert Kern Michigan State University Computer Lab
FOLDER Kkk	Printing for Space-Age Maps Richard D. Kidwell and Robert J. Lefebvre U.S. Geological Survey
FOLDER Kkk	How Will We Work in the Year 2000 1993 Walter Kiechel
FOLDER Kkk	An Assessment of Urbanization Using Historic Satellite Photography... Kee-Tae Kim and Kenneth C. Jezek

Container	Contents
FOLDER Kkk	Role of Modeling in Policy John L. King University of California
FOLDER Kkk	Limits of Editorial Freedom in School Atlases 1964 Janusz J. Klawe University of Alberta Department of Geography
FOLDER Kkk	Developments in Thematic Mapping at the Census Bureau 1965 Robert C. Klove U.S. Bureau of Census
FOLDER Kkk	Local GIS Application in Planning of Ecological Landscape Stability System Jaromir Kolejka
FOLDER Kkk	Problems of Cartographic Development 1981 A. M. Komkov
FOLDER Kkk	Review Paperon Resources for Teaching Surveying 1977 G. Konecny Technical University Hannover
FOLDER Kkk	Contemporary Situation and Educational Background of the Future Development of GIS Czechoslovakia 1991 Milan Konecny Masaryk University Department of Geography
FOLDER Kkk	Europe in Transition: The Context of GIS 1995 Milan Konecny Masaryk University Department of Geography
FOLDER Kkk	GIS in the Czech Republic Milan Konecny Masaryk University Department of Geography
FOLDER Kkk	Global Issues and Cartography 2001 Milan Konecny Masaryk University Department of Geography
FOLDER Kkk	Prvni Ceske Vyskopisne Mapy 1986 Karla Koristky
FOLDER Kkk	Standards for Spatial Data Use: Similes Improve Our Understanding Clifford A. Kottman and Barbara P. Buttenfield SUNY Buffalo
FOLDER Kkk	Surveying and Mapping Education in Canada: Trends and Prospects Edward J. Krakiwsky University of Calgary Division of Surveying Engineering
FOLDER Kkk	Pressing Problems of Theoretical Cartography Ingrid Kretschmer
FOLDER Kkk	Comparison of Polynomial and Fourier Models in Map Analysis W. C. Krumbein
FOLDER Kkk	Development of Automated Large Scale Mapping at the Survey Department of Rijkswaterstaat 1973 K. Kubik and M. Tienstra Ministry of Transport and Waterstaat
FOLDER Kkk	SAIF: Conquering space and time 1992 H. A. Kucera and Mark Sondheim Ministry of Parks and Lands British Columbia
FOLDER Kkk	Development of a Three-Tier Metadata Documentation Scheme... 1997 Kristine M. Kuhlman, et al

Container	Contents
	UMBC Department of Geography
FOLDER Lll	World in a Box... 1996
	Francois Lampietti
FOLDER Lll	ESRI Keynote Address 1998
	Neal Lane
FOLDER Lll	Comparison of Spatial Analytic Applications of GIS
	David P. Lanter
FOLDER Lll	Tiger File Proposed Products 1987
	Robert A. LaMacchia U.S. Bureau of Census
FOLDER Lll	Conceptual Framework for Multiple Representations of Spatial Objects..
	Robert Laurini and Francoise Milleret-Raffort
FOLDER Lll	Interpolation of Point Values from Isoline Maps 1986
	David R. Legates and Cort J. Willmott University of Delaware Department of Geography
FOLDER Lll	Development of Specialized Algorithms for Digital Terrain Modeling 1981
	Gary D. Legg, et al Zycor Inc.
FOLDER Lll	Alternative Modes of GIS Provision and Their Appopriateness for Community-Based Planning 1999
	Helga Leitner, et al University of Minnesota Department of Geography
FOLDER Lll	Symap: Its Uses and Abuses 1975
	Elri Liebenberg University of South Africa Department of Geography
FOLDER Lll	Remote Sensors for Mapping: What are the Essential Characteristics?
	Donald L. Light U.S. Geological Survey
FOLDER Lll	Strategies from Improving the Accuracy and Specificity of Large-Area, Satellite-Based Land Cover Inventories 1994
	T.M. Lillesand University of Wisconsin-Madison
FOLDER Lll	Computer Technology in Cartography
	J. G. Linders
FOLDER Lll	Assessment and Prediction of a Radioecological Situation Using GIS...
	Vitaly G. Linnik Analytical Center Russia
FOLDER Lll	Case for Historical Cartographic Data Files 1977
	John H. Long Newberry Library
FOLDER Lll	Map Symbols and Lettering 1971
	Joseph Loon and P. Yoeli U.S. Army
FOLDER Lll	Continuing Education and the American Cartographic Association 1985
	Joseph Loon and Christine Reinhard Ohio State University Department of Geodetic Science and Surveying
FOLDER Lll	Geographic Names in Geography 1988
	William G. Loy University of Oregon Department of Geography

Container	Contents
FOLDER Lll	Geoscientific Maps for Land Use Planning 1977 Gerd Luettig
FOLDER Mmm	Automatic Plotting... 1967 L. A. Maercklein General Electric
FOLDER Mmm	A Map - Ink or Digits? 1972 M. H. MacLeod Ministry of Transportation and Communications Ontario
FOLDER Mmm	Choropleth and Isopleth Map Complexity: Comparison and Measurement Alan M. MacEachren Virginia Polytechnic Institute
FOLDER Mmm	Cartography of road maps... Volkmar Mair
FOLDER Mmm	Research Plan for GIS in the 1990s David J. Maguire University of Leicester
FOLDER Mmm	Data Model to Deal with Multi-Scaled Networks M. Mainguenaud and X. T. Simatic
FOLDER Mmm	Aethethic and Utilitarian Aspects of Colour in Cartography 1967 Ing. Andrzy Makowski
FOLDER Mmm	Map Librarian and the Geographer... M. ?
FOLDER Mmm	Problems in the Storage and Manipulation of Large Spatial Data Sets Duane F. Marble and Donna J. Peuquet SUNY at Buffalo
FOLDER Mmm	Integrating Cartographic and Geographic Information Systems Education 1979 Duane F. Marble SUNY at Buffalo
FOLDER Mmm	Development of a Conceptual Model of the Manual Digitizing Process Duane F. Marble and Jean P. Lauzon SUNY at Buffalo
FOLDER Mmm	Some Notes on the Establishment of a Basic Research Activity within the Topographic Division 1979 Duane F. Marble U.S. Geological Survey
FOLDER Mmm	Some Comments on the Concept of a Large-scale Digital Cartographic Data Base 1979 Duane F. Marble U.S. Geological Survey
FOLDER Mmm	Spatial Data Handling Research and Development Needs for the 1980s 1980 Duane F. Marble U.S. Geological Survey
FOLDER Mmm	Comments on the Two Million Digital Data Base Project 1980 Duane F. Marble U.S. Geological Survey
FOLDER Mmm	Geographic Information Science... 1999 David M. Mark University of Buffalo
FOLDER Mmm	Tiger System: Six Years to Success Robert W. Marx and Frederick R. Broome U.S. Bureau of Census

Container	Contents
FOLDER Mmm	Topology Based Data Structure for a Computer-Readable Map and Geographic System 1985 Robert W. Marx U.S. Bureau of Census
FOLDER Mmm	GIS in Europe: Some Recent Developments Ian Masser University of Sheffield
FOLDER Mmm	Banques de Donnes Urbaines... 1972 J. Matha City of Paris
FOLDER Mmm	Rainbow 80 - Keynote 1980 H. Mattias
FOLDER Mmm	Translations in Cartography George F. McCleary Jr. Clark University
FOLDER Mmm	NMD Marketing Plan for FY 1984 1984 M. P. McDermott
FOLDER Mmm	Panacea System... 1982 Michael J. McCullagh University of Nottingham
FOLDER Mmm	Maintenance of Geographic Structure Files at the Bureau of Census 1987 Terence McDowell, et al
FOLDER Mmm	Computer Files and Attribute Codes for USGS Digital Cartographic Applications 1978 Robert B. McEwen U.S. Geological Survey
FOLDER Mmm	USGS Digital Cartographic Data Base 1979 Robert B. McEwen and Harry r. Jacknow U.S. Geological Survey
FOLDER Mmm	Data Base/Image Representation Map-Oriented Considerations 1981 Robert B. McEwen U.S. Geological Survey
FOLDER Mmm	Digital Cartography in the U.S. Fedeal Government 1983 Robert B. McEwen U.S. Geological Survey
FOLDER Mmm	Cartographic View on Visualizing Spatial Data Quality Matthew McGranaghan University of Maine
FOLDER Mmm	Measures of Displacement and Distortion in Early Maps Thomas F. McIlwraith University of Toronto
FOLDER Mmm	High Resolution Dem Generated from Radar Data 1992 Jim McKean Pleasant Hill Engineering Center
FOLDER Mmm	U.S. Geological Survey-U.S. Bureau of the Census Cooperative Digital Mapping Project... Bruce Y. McKenzie and Robert a. LaMacchia U.S. Geological Survey
FOLDER Mmm2	Future National Mapping Division John D. McLaurin
FOLDER Mmm2	Twentieth Century American Academic Cartography Robert B. McMaster and Susanna a. McMaster Macalester College

Container	Contents
FOLDER Mmm2	University Cartographic Education in the United States... Robert B. McMaster University of Minnesota
FOLDER Mmm2	Enhancing the Legend of Choropleth Maps with Statisical Graphics 1980 Grady B. Meehan University of North Carolina
FOLDER Mmm2	Telecartography: A Proposal Standard to Define an Emerging Technology 1994 Grady B. Meehan George Mason University
FOLDER Mmm2	Necessity of Links between Education and Communication in Cartography Today 1980 Karl Heinz Meine
FOLDER Mmm2	Topics for an Approach to the Theory of Cartography: The Diffusion of Information on Cartographic Communication 1975 Karl Heinz Meine
FOLDER Mmm2	Certain Aspects of Cartographic Communication in a System of Cartography as a Science Karl Heinz Meine
FOLDER Mmm2	Automatic Production of Weather Maps 1973 P. Menmuir Meteorological Office Berskshire
FOLDER Mmm2	Spatial Accuracy Standards for Large Scale Line Maps Dean C. Merchant Ohio State University
FOLDER Mmm2	Wisconsin Remote Sensing and Mapping Science Educational Programs 1981 Robert w. Merideth Jr. University of Wisconsin-Madison
FOLDER Mmm2	Development of Automation in the Field of the Compilation of Large-Scale Maps in Czechoslovakia 1972 Miroslav Miksovsky
FOLDER Mmm2	Recognition of Handprinted Symbols for Computer-Aided Mapping System P. June Min and Brian E. Nolan IBM Corporation
FOLDER Mmm2	Computer Animated Film: A Dynamic Cartography 1973 Harold Moellering
FOLDER Mmm2	An Approach to the Real Time Cartographic Animation of Three Dimensional Objects 1978 Harold Moellering Ohio State University
FOLDER Mmm2	Challenge of Developing a Set of National Digital Cartographic Data Standards for the United States 1982 Harold Moellering Ohio State University
FOLDER Mmm2	Understanding Modern Cartography Using the Concepts of Real and Virtual Maps 1980 Harold Moellering Ohio State University
FOLDER Mmm2	Relationship Between the Extensional and Geometric Uncertainty of Spatial Objects 1995 Martien Molenaar Wageningen Agricultural University
FOLDER Mmm2	Communication Theory and Its Role in Cartography 1974 Ann Molineux Boston University

Container	Contents
FOLDER Mmm2	Cartography at the Dawn of the 21st Century Mark Monmonier and Robert B. McMaster Syracuse University
FOLDER Mmm2	Atlas Touring: Proposal for an Intelligent Visualization Support System... Mark Monmonier Syracuse University
FOLDER Mmm2	Representation of Time on U.S. Geological Survey Maps 1993 Nancy Mouat and John a. Kelmelis U.S. Geological Survey
FOLDER Mmm2	Why, What, and How of GIS Standards 1991 D. David Moyer and Bernard J. Niemann, Jr.
FOLDER Mmm2	Some Notes on Pattern Complexity in Map Design 1973 Phillip C. Muehreke University of Washington
FOLDER Mmm2	Definition, Measurement and Comparison of Map Attributes in Choroplethic Mapping J. C. Muller University of Georgia
FOLDER Mmm2	Towards an Integrated Cartographic Research Model: Suggestions and Priorities 1990 J. C. Muller University of Georgia
FOLDER Mmm2	Geography's Expanding Place in American Education Alexander B. Murphy
FOLDER Mmm2	Integrating Attribute and Space Characteristics in Choropleth Display... 1999 Alan T. Murray and Tung-Kai Shyy University of Queensland
FOLDER Nnn	Plea for the Rejection of "Rejection" 1973 Peter H. Nash, Sr. University of Waterloo
FOLDER Nnn	Economy of the Soviet Cartographical Production 1972 M. I. Nikishov and V. N. Lysiuk
FOLDER Nnn	Computer Generated Stereograms and other Cartographic Aids 1967 Arthur A. Noma Army Map Service
FOLDER Nnn	Toward Creation of a Digital Terrain Data Base Arthur A. Noma
FOLDER Nnn	Geo-ecology Data Base... M. K. Nungesser and C. J. Emerson Oak Ridge Laboratory
FOLDER Nnn	Distribution of Population in Central America... 1966 Robert E. Nunley University of Kansas
FOLDER Nnn	An Electric Cartographic-Geographic Training and Research Tool... Robert E. Nunley University of Kansas
FOLDER Nnn	Identifying "Rural" Areas Using ZIP Codes and Different Measures of Population Density 1995 Robert E. Nunley, et al University of Kansas

Container	Contents
FOLDER Nnn	Suitable Representation Schemes for Geographic Information Abstraction in Map Generalization Timothy L. Nyerges University of Washington
FOLDER Nnn	Geographic Information Abstractions... 1990 Timothy L. Nyerges University of Washington
FOLDER Nnn	Effects of Boundary Shape and the Concept of Local Convexity 1966 John D. Nystuen University of Michigan
FOLDER Ooo	Holography in Photogrammetry and Mapping Desmond O'Connor
FOLDER Ooo	National Mapping Agencies: Looking to the 21st Century J. Hugh O'Donnell Geomatics Canada
FOLDER Ooo	The Cartographic Data Bank at the Experimental Cartography Unit P. O'Grady
FOLDER Ooo	Diagrammatic representation of spatiotemporal point distributions O'Kabe
FOLDER Ooo	The Roles of Class Intervals in Map Comparisons 1969 Judy Olson University of Wisconsin
FOLDER Ooo	Visual Comparison of Maps 1968 Judy Olson University of Wisconsin
FOLDER Ooo	Quantitative Mapping: Some Theoretical Considerations 1962 Judy Olson University of Georgia
FOLDER Ooo	Rescaling Dot Maps for Enhancement 1976 Judy Olson University of Georgia
FOLDER Ooo	Visualization of the Lunar Surface 1971 Judy Olson University of Georgia
FOLDER Ooo	Cognitive Cartographic Experimentation Judy Olson Boston University
FOLDER Ooo	Spatial Theory and Human Behavior... 1967 Gunnar Olsson and Stephen Gale
FOLDER Ooo	A Storage Structure for a Multi-Scale Database... Peter can Oosterom
FOLDER Ooo	Beeldvorming 1968 Dr. F. J. Ormeling Rijksuniversiteit te Utrecht
FOLDER Ooo	Guidelines fo Beginning a Geographical Name Information File 1982 Donald Orth
FOLDER Ppp	Experiments in Environmental Digital Cartography and the Prospects for Environmental Data Bases Bruno Pasquier

Container	Contents
FOLDER Ppp	Reflexions Sur La Relation Communication Cartographique... 1977 Serge J. Paul University of Paris
FOLDER Ppp	Surveying, Computers and the Automatic production of engineering drawings V. S. Payne Hampshire County Council
FOLDER Ppp	Piecewise Approximation of Functions of Two Variables and Its Application in Topographical Data Reduction 1970 Theodosios Pavlidis Princeton University
FOLDER Ppp	A Program Implementing Piecewise Linear Approximation of Functions of Two Variables 1971 Theodosios Pavlidis Princeton University
FOLDER Ppp	An Attempt at Objective Generalization 1965 Julian Perkal Universirty of Michigan
FOLDER Ppp	On the Length of Empirical Curves 1965 Julian Perkal Universirty of Michigan
FOLDER Ppp	Some Thoughts on Optimal Mapping and Coding of Surfaces Thomas K. Pecker Simon Fraser University
FOLDER Ppp	Research Frontiers in Spatial Data Storage and Retrieval 1981 Donna J. Peuquet U.S. Geological Survey
FOLDER Ppp	Advanced Techniques for the Storage and Use of very Large, Heterogeneous Spatial Databases... 1989 Donna J. Peuquet Penn State University
FOLDER Ppp	Making Space for Time... 1999 Donna J. Peuquet Penn State University
FOLDER Ppp	Pattern Recognition VI - MANS, A Map Analysis System 1967 John L. Pfaltz University of Maryland
FOLDER Ppp	Colour Metrics in Cartography 1967 V. N. Philin
FOLDER Ppp	Legibility of Relief Maps... 1975 Richard J. Phillips University College London
FOLDER Ppp	An Investigation of Visual Clutter... 1981 Richard J. Phillips University of Nottingham
FOLDER Ppp	Etude de la Couleur en Cartographie... 1967 Felicjan Piatkowski
FOLDER Ppp	Reflections on Practical Computer-Assisted Generalization Bernd M. Powitz Hannover University

Container	Contents
FOLDER Ppp	The Standardization of symbols for tourist maps... R. Pustkowski
FOLDER Qqq	The Conceptual Design for GIS Software 1987 Liang Qizhang Academia Sinca
FOLDER Rrr	Modern Land Data Systems: A National Objective 1977 W. A. Radlinski U.S. Geological Survey
FOLDER Rrr	Standardization and Joint Use of Geographical Information Antti Raino Finnish National Land Survey
FOLDER Rrr	A Vision of the State of Ohio Basic Digital Geographic Coverage J. Raul Ramirez Ohio State University Center for Mapping
FOLDER Rrr	Semiotic and Isomorphic Dependencies Lech Ratajski
FOLDER Rrr	Methodical Basis of the Standardization of Signs on Economic 1970 Lech Ratajski Warsaw University
FOLDER Rrr	Research Structure of Theoretical Cartography 1972 Lech Ratajski Warsaw University
FOLDER Rrr	Some Aspects of the Grammar of the Map Language in Terms of Cartographic Communication 1975 Lech Ratajski Warsaw University
FOLDER Rrr	Main Characteristics of Cartographic Communication as a Part of Theoretical Cartography Lech Ratajski Warsaw University
FOLDER Rrr	Correlation between Surfaces by Spectral Methods John N. Rayner Ohio State University
FOLDER Rrr	Computer Mapping for Spatially Variable Data 1976 Torger Reve Norwegian Social Science Data Services
FOLDER Rrr	Experimental Geochemical Maps - A Case Study in Cartographic Techniques for Scientific Research 1972 D. W. Rhind, et al
FOLDER Rrr	Creation of an Environmental Information System for the European Community 1985 D. W. Rhind, et al
FOLDER Rrr	An Introduction to the Digitising and Editing of Mapped Data David Rhind
FOLDER Rrr	The Next Generation of Geographical Information Systems... 1991 David Rhind
FOLDER Rrr	Oxford Cartographic Data Bank 1967 M. Ann Richardson and J. S. Rollett
FOLDER Rrr	Conventional Map, Temporary Map, or Nonmap? 1968 P. D. Riffe

Container	Contents
FOLDER Rrr	In-Flight Calibration of the ERTS-RBV Television System Robert E. Riggins and Kam W. Wong
FOLDER Rrr	An Electronic Viewer for Multiband Imagery 1972 L. Howard Roberts
FOLDER Rrr	Potential Contribution of Cartography in Liberal Education 1963 Arthur H. Robinson University of Wisconsin
FOLDER Rrr	Cartographic Design and Psychophysics... Arthur H. Robinson and George F. McCleary, Jr. University of Wisconsin
FOLDER Rrr	Elusive Longitude 1971 Arthur H. Robinson University of Wisconsin
FOLDER Rrr	Map Design Arthur H. Robinson University of Wisconsin
FOLDER Rrr	Uniqueness of the Map 1976 Arthur H. Robinson University of Wisconsin
FOLDER Rrr	Program of Research to Aid Cartographic Design 1978 Arthur H. Robinson University of Wisconsin
FOLDER Rrr	Graphical Methods of Presenting Time Varying Ocean Temperature Margaret K. Robinson University of California, San Diego
FOLDER Rrr	Towards the Development of GIS in Malaysia...Ahmad Rodzi, et al
FOLDER Rrr	Increasing the Availability of National Mapping Products 1980 John I. Roney and Bruce C. Ogilvie U.S. Geological Survey
FOLDER Rrr	Perceptionally-based Texture Feature Extractor/Classifier for Automation in Cartography Lewis D. Rosenthal University of Maryland
FOLDER Rrr	Hereford Mappa Mundi and the Azimuthal Logarithmic Projection 1974 Lewis D. Rosenthal and John E. Lewis, Jr. University of Maryland
FOLDER Rrr	Digital Screening and Halftone Techniques for Raster Processing Richard L. Rosenthal U.S. Army
FOLDER Rrr	Simple Multispectral Photography and Additive Color Viewing 1972 D. S. Ross International Imaging Systems
FOLDER Rrr	Spatial Data Transfer Standard... 1989 Hedy J. Rossmeissl U.S. Geological Survey
FOLDER Rrr	Formalizing Behavior of Geographic Feature Types 1995 Robert D. Rugg, et al National Center for Geographic Information and Analysis
FOLDER Rrr	Feature-Based Planning Support System Robert D. Rugg

Container	Contents
FOLDER Rrr	Development of a Feature-Based Planning Support System 1989 Robert D. Rugg and Cui Weihong U.S. Geological Survey
FOLDER Rrr	Quality in Geographic Information; a multi-disciplinary viewpoint 1995 Krysia Rybaczuk University of Dublin
FOLDER Rrr	Citizen's Acid Rain Monitoring Program... Charles C. Ryerson
FOLDER Rrr	Climatology of Rime Accretion in the Green Mountains 1985 Charles C. Ryerson
FOLDER Rrr	Relief Model Design for Public Displays Charles C. Ryerson
FOLDER Rrr	Current Trends in Electronic Atlas Production 1994 Bengt Rystedt National Survey of Sweden
FOLDER Sss	Global Mapping Research 1996 Jack Shupe National Geographic Society
FOLDER Sss	Evolving Capability for Automated Production of Hydrographic Products at DMAHTC 1981 Robert E. Sinclair Defense Mapping Agency
FOLDER Sss	Mechanical Method of Constructing Equal Population Density Maps 1972 L. Skoda and C. I. Jackson University of British Columbia
FOLDER Sss	World Population Distribution: Smoothed Representations 1985 Paul B. Slater University of California at Santa Barbara
FOLDER Sss	Current Status of Preparation of Geographers-Cartographers in Leningrad State University Leonid Ye Smirnov and Takhir A. Aliyev Leningrad State University
FOLDER Sss	Developing a practical model for describing the quality of geographic information 1995 Neil Smith, et al British Ordnance Survey
FOLDER Sss	Accuracy of Block-Level Estimates of Population 1998 Bruce D. Spence, et al
FOLDER Sss	What is Geography is ? 1970 J. E. Spencer
FOLDER Sss	Data, Maps, and More... Jon Sperling U.S. Bureau of Census
FOLDER Sss	Updating TIGER with Non-Census Spatial Databases Jon Sperling U.S. Bureau of Census
FOLDER Sss	Development of a National Small-Scale Digital Cartographic Data Base 1980 Malcolm J. Stephens U.S. Geological Survey
FOLDER Sss	Strategic Planning 1990 Lowell E. Starr U.S. Geological Survey

Container	Contents
FOLDER Sss	Cartography of Non-Spherical Worlds Philip J. Stooke University of Victoria
FOLDER Sss	Control of Scale Dependency in Regional GIS Josef Strobl Salzburg University
FOLDER Sss	Development of National, Multi-Purpose Spatial Information Systems... 1991 Erik Stubkjaer University of Aalborg
FOLDER Sss	Theory of Scientific Information in Cartography 1967 V. I. Suchov
FOLDER Sss2	Mathematical Principles for Spatial Data Management 2000 Alan Saalfeld NIMA
FOLDER Sss2	Topgraphic Infrastructure for Europe: A Cultural Revolution? 1992 Francois Salge Cerco Permanent Technical Group
FOLDER Sss2	Geographic Databases Research: Overview and Future Prospects 2000 Francois Salge Institut Geographique National
FOLDER Sss2	Le development de la cartographie thematique et l'Association Cartographie Internationale 1967 Konstantin A. Salichtchev
FOLDER Sss2	History and contemporary development of cartographic generalization Konstantin A. Salichtchev
FOLDER Sss2	An operational system to check and sign vector data bases 1995 Nicolas Saporiti
FOLDER Sss2	GIS-Application in Environmental Planning and Assessment 1991 Joerg Schaller ESRI - Germany
FOLDER Sss2	Towards a Description of the Syntax of Maps 1979 Hansgeorg Schlichtmann University of Regina
FOLDER Sss2	Automap System 1968 Warren E. Schmidt Central Intelligence Agency
FOLDER Sss2	Cartographic Automatic Mapping Program... 1970 Warren E. Schmidt Central Intelligence Agency
FOLDER Sss2	Study of Digital Cartographic Data Features in Preparation for a National Standard 1983 Warren E. Schmidt Rand McNally
FOLDER Sss2	Chart Revision and Reproduction with Advanced Raster Cartographic System Jan S. Schneier Defense Mapping Agency
FOLDER Sss2	Accreditation of Surveying Programs Llewellyn T. Schofield Schofield Brothers Inc.
FOLDER Sss2	Criteria of GIS-Applications in Soil Science Heinz Peter Schrey

Container	Contents
	Geologisches Landesamt NW
FOLDER Sss2	Mapping Urban America with Automated Cartography 1973
FOLDER Sss2	Method of Constructing Classes fir Choroplethic Maps... 1967 Morton W. Scripter San Fernando Valley State College
FOLDER Sss2	Importance of Spatial Scale for Environmental Health Policy and Research Ken Sexton, et al University of Minnesota
FOLDER Sss2	Query Language for a Spatial Information System Linda G. Shapiro Virginia Polytechnic Institute
FOLDER Sss2	American Revolution: A Selective, Annotated Bibliography of 18th Century Maps in the Collections of The Library of Congress Michael H. Shelley
FOLDER Sss2	Interpolation in Symap Version 4 Contouring Program Donald S. Shepard Harvard University
FOLDER Sss2	Maps fpr the Visually Handicapped... John C. Sherman and C. William Beetschen U.S. Geologic Survey
FOLDER Sss2	Quantitative Geography: Representations, practices, and possibilities 2000 Eric Sheppard University of Minnesota
FOLDER Sss2	GIS-based environmental equity analysis in the Twin Cities 1999 Eric Sheppard, et al University of Minnesota
FOLDER Sss2	On Learning Maps 1976 Joseph Shimron
FOLDER Sss2	On Sovereignty 1989 George P. Shultz
FOLDER Ttt	Urban Function Map of Sapporo 1972 Masayoshi Takasaki and Kei Kanazawa Tokyo Ministry of Construction
FOLDER Ttt	Algorithmic Descriptions of Map Symbol Form and Pattern 1981 Richard Taketa University of Michigan
FOLDER Ttt	Possibilities de Cooperation Entre Les Geometres Engages... Jacques Tassou
FOLDER Ttt	Color Coding in Information Systems 1984 R. M. Taylor Royal Airforce
FOLDER Ttt	Empirical Derivation of Map Colour Specifications 1977 R. M. Taylor Royal Airforce
FOLDER Ttt	Perceptual Organisation and Information Management 1986 R. M. Taylor Royal Airforce
FOLDER Ttt	Some Effects of Display Format Variables on the Perception of Aircraft Spatial Orientation 1984 R. M. Taylor

Container	Contents
	Royal Airforce
FOLDER Ttt	Cartographic Problems and Solutions as Exemplified by the School Atlas Unsere Welt Walter Thauer
FOLDER Ttt	Tradition and Progress in School Atlas Cartography as exemplified by the Diercke World Atlas Walter Thauer
FOLDER Ttt	Automated Contouring of Block Models A. L. Thomas University of Edinburgh
FOLDER Ttt	Additional Comments on Weighing Values in Correlation Analysis of Arial Data Edwin N. Thomas and David L. Anderson Arizona State University
FOLDER Ttt	Individual Differences in Knowledge Acquisition from Maps 1979 Perry W. Thorndyke and Cathleen Stasz Office of Naval Research
FOLDER Ttt2	Tiger/Line File: Boone County, Missouri, 1988 1988 C. William Verity Bureau of Census
FOLDER Ttt2	Compilation and usage of anamorphotic images for the geographical analysis Vladimir S. Tikunov and Sabir Gusein-Zade Moscow State University
FOLDER Ttt2	Geographic Information System Representing Air Pollution in an Area Vladimir S. Tikunov, et al Moscow State University
FOLDER Ttt2	Urban Land Use: Remote Sensing of Groundbasin Permeability Larry R. Tinney, et al University of California at Santa Barbara
FOLDER Ttt2	Testing for Spatial Association between Groups... 1971 A. Kjostul Torgeson and Budd H. Heber Miami University
FOLDER Ttt2	Systematic Registration for Rural Cambodia... 2000 Mika-Petteri Torhonen Finnmap
FOLDER Ttt2	An Experimental Approach to Generation of Digital Landmass Data Base... 1977 R. W. Towles General Electric Company
FOLDER Ttt2	Use of Optimal Estimation for Gross-error Detection in Databases... 1990 C. C. Tscherning University of Copenhagen
FOLDER Ttt2	Creativity, Art, and Landscape 1985 Yu Fu Tuen University of Minnesota
FOLDER Ttt2	Every Silver Lining Has a Cloud... 1970 Lawrence W. Towner Newberry Library
FOLDER Ttt2	Automation in Cartogrpahy... 1970 Morris M. Thompson
FOLDER Ttt2	Proceedings of the Sorsa Colloquium 1989 Derek Thompson University of Maryland

Container	Contents
FOLDER Uuu	Isometric Method in Statisical Maps 1929 Fr. Uhorczak Institute of Geography of the Univsersity of Lwow
FOLDER Uuu	On Resources for Teaching Adjustment Urho A. Uotila Ohio State University
FOLDER Uuu	User Guide to Digital Elevation Models U.S. Geologic Survey
FOLDER Uuu	Computer Files for Digital Elevation Models 1980 U.S. Geologic Survey
FOLDER Uuu	Computer Files and Attribute Codes for Digital Lines Graphs 1977 U.S. Geologic Survey
FOLDER Uuu	National Atlas Program: Five-Year Implementation Plan 1997-2001 1996 U.S. Geologic Survey
FOLDER Uuu	Report of the NMD 2000 Strategic Pllanning Committee 1991 U.S. Geologic Survey
FOLDER Uuu	Hypsographic Digital Line Graph Analyis and Research 1988 U.S. Geologic Survey
FOLDER Uuu	Digital Cartographic Database Preliminary Description 1975 U.S. Geologic Survey
FOLDER Vvv	Geographical Information & Decision Support System George G. Van der Meulen
FOLDER Vvv	Impact of Development in the Field of Information on Cartographic Representation... 1986 E. H. Van de Waal
FOLDER Vvv	How to Use the ISBN on Cartographic Materials... 1982 E. H. Van de Waal
FOLDER Vvv	Modelling geometric accuracy in GIS Francois Vauglin
FOLDER Vvv	Type on Image Maps 1990 E. Wayne Vickers U.S. Geological Survey
FOLDER Vvv	Maps for the American People Russell L. Volsin Rand McNally
FOLDER Vvv	Perception of Automobile Driving Times and Distance in Seattle Washington 1970 Glenn W. Vanselow University of Washington
FOLDER Vvv	Results of Test Runs for the Department of Administration Portion of the NRIS Project 1976 Peter Van Demark Wisconsin State Planning Office
FOLDER Vvv	Automation of the Computation Technology... 1967 A. S. Vasmoot
FOLDER Vvv	Data interchange on industry compatible tapes 1976 M. Visvalingam, et al University of Durham
FOLDER Www	La Cote Atlantique du Bassin D'Arcachon a l'Estuaire de la Loire H. Jesse Walker Louisiana State University

Container	Contents
FOLDER Www	Bilingualism and the South African Map 1975 W.C. Watson Surveys of Pretoria
FOLDER Www	Some Conceptual and Practical Limitations of the Budak Program... 1978 Carolyn C. Weiss Canada Statistics
FOLDER Www	Attracting Business Investment to Neighborhood Markets... 1998 Robert Weissbound Brookings Institution
FOLDER Www	Documenting Progress Towards European Integration of GIS/LIS Technology... 1993 Barry Wellar University of Ottawa
FOLDER Www	National Geocoding Systems: Design of a Converter 1975 Pamela Werner and H. W. Bruck M.I.T.
FOLDER Www	Basic Concepts in Automation in Cartography 1973 P. W. Wesley Ordnance Survey
FOLDER Www	USGS Digital Elevelation Model Data Base Dennis L. White U.S. Geological Survey
FOLDER Www	Character and Representation of Maps 1975 Marvin S. White U.S. Bureau of Census
FOLDER Www	Technical Requirements and Standards for a Multi-purpose Geographic Data System 1981 Marvin S. White U.S. Bureau of Census
FOLDER Www	Measurement of Spatial Perception Rodney White University of Bristol
FOLDER Www	On the Culture Pattern of the Academic Meeting William Foote Whyte
FOLDER Www	Decentralization, Consensus, and Energy Decisions 1980 Thomas J. Wilbanks Oak Ridge National Laboratory
FOLDER Www	Is Comprehensive Analysis of Critical Interactions Possible? 1979 Thomas J. Wilbanks Oak Ridge National Laboratory
FOLDER Www	Cartographic Languages Do Exist... Mark Wiljamen
FOLDER Www	Use of SYMAP in the Determination of Volume of Accumulated Bed-load Debris T. P. Wilkinson Carleton University
FOLDER Www2	Automatic Graphic Data Entry 1973 Charles M. Williams
FOLDER Www2	Large Scale Feature Classication Project... Jesse Williams and James McDonald
FOLDER Www2	Cartography: A New Era Has Begun 1995 R. J. Williams Defence Science and Technology Organisation

Container	Contents
FOLDER Www2	Statisical Symbols for Maps... 1956 Robert L. Williams Yale University
FOLDER Www2	Consideration in Assessing th Potential Success of a Cadastral... 1989 Ian P. Williamson University of Melbourne
FOLDER Www2	GIS of High Resolution for Regional Coordination in Urban Areas Erich Wilmersdorf
FOLDER Www2	Frequency Concepts in Cartographic Design Everett A. Winegert University of Hawaii
FOLDER Www2	Applications of Optical Processing to the Communication of Cartographic Data 1975 Everett A. Winegert University of Hawaii
FOLDER Www2	Technology and Future Ground Processing Systems Bill J. Wood and Kenneth W. Ruggles Ocean Data Systems, Inc.
FOLDER Www2	Cartographic Feature Coding Bruce D. Wood and David H. Douglas University of Ottawa
FOLDER Www2	Careers in Cartography 1979 Clifford Wood and David H. Douglas Carleton University
FOLDER Www2	World Takes Shape: Fifty Influential World Maps Clifford Wood
FOLDER Www2	Experimental Cartography: The Comparative Evaluation of Mapping Methods 1978 Christopher Worth London School of Economics
FOLDER Www2	Determining a Vertical Scale for Graphical Representations of Three-Dimensional Surfaces 1978 Christopher Worth London School of Economics
FOLDER Www2	Construction of Computer Produced Views of Three-Dimensional Data 1978 Christopher Worth London School of Economics
FOLDER Www2	Some Quantitative Aspects of the Psychological Responses to Color Maps John H. Wright Central Intelligence Agency
FOLDER Www2	Lunar Terrain Analysis by Statisical Method 1972 Sherman S. C. Wu U.S. Geological Survey
FOLDER Yyy	Application of Markov Chain Theory to Spatial Analysis Laksham S. Yapa Syracuse University
FOLDER Yyy	Integration of Multi-Geoscience Data for Mineral Resources Prediction Using GIS Methodology Yang Wenjiu and Liu Xinji Center for Remote Sensing in Geology, China

Container	Contents
FOLDER Yyy	Computer Assisted Determination of the Valley and Ridge Lines of Digital Terrain Models 1982 P. Yoeli
FOLDER Yyy	Relief Representation by Contours with Computers and Plotters and Its Accuracy P. Yoeli
FOLDER Yyy	Statiscal Characterization of Altitude Matrixes by Computer 1978 Margaret Young
FOLDER Yyy	Cartographic Standards and Automated Cartography Carl E. Youngmann University of Washington
FOLDER Yyy	Comparing Age Structures by Nonparametric Classification Carl E. Youngmann University of Washington
FOLDER Yyy	Environmental Cartographic Data Entry Carl E. Youngmann University of Washington
FOLDER Yyy	Linguistic Approach to Map Description Carl E. Youngmann University of Washington
FOLDER Yyy	Syntactical Structure for Map Description Carl E. Youngmann University of Washington
FOLDER Yyy	Application of Computer Mapping Techniques to Compiling of "Natural Population Atlas of China" Liu Yue and Jin Hui
FOLDER Zzz	Propositions... 1967 I. P. Zaroutskaya
FOLDER Zzz	Applications of Expert System in Land Resources Research Zhao Wei, et al Chinese Academy of Sciences
FOLDER Zzz	Research on the Nature of Maps and Map Symbols Zhu Dun-Yao Research Institute of Surveying and Mapping, China
FOLDER Zzz	Measuring the Land... A. L. Ziegler University of Wisconain
FOLDER Zzz	Metric Photography in Aerial Photogrammetry Hartmut Ziemann Photogrammetric Research, Canada
FOLDER Zzz	Unsolicited Proposal to Perform Research and Development Related to Digital Terrain Modeling 1981 Zycor Inc. University of Wisconsin
BOX 13-18	**Correspondence as Professor and Professional 1965-1994** 52 folders

Container	Contents
	Correspondence is arranged chronologically and filed in six boxes. For some years, correspondence is divided between "incoming" and "outgoing" letters.
BOX 19	**Goode's Atlas 1971-1988** Correspondence is arranged chronologically. Rand McNally Goode's Atlas Correspondance and Manuscript Edits 1971-1972 1 folder Rand McNally Goode's Atlas Correspondence 14th Edition 1973 1 folder Rand McNally Goode's Atlas Correspondence 16th Edition 1982 2 folders
BOX 20	**Elements of Cartography 1973-1982** Correspondence is arranged chronologically. Elements of Cartography 4th Edition 1973-1976 1 folder Wiley Elements 4th Edition 1977-1980 1 folder Elements - Revision papers 4th Edition permissions 1977-1980 1 folder Design of 5th Edition 1983-1988 1 folder Internal letters between authors and editors Elements 5th Edition - Correspondence with Onno Browser 1983 1 folder Elements 5th Edition 1983-1984 1 folder
BOX 21	**American Congress of Surveying and Mapping Editor of various publications 1973-1982** Correspondence is arranged chronologically. Includes folders for his work as editor for Annals. Joel - Map Supplement Editor 1973-1976 1 folder Annals Map Supplement Mapping Sciences and Remote Sensing - article submission inquiries 1982-1984 1 folder U.S. Geological Survey publication American Congress Survey and Mapping - meeting 1981 1981 1 folder JLM - Chairman - Cartography Div. ACSM 1977-1978 1 folder