

Arthur V. Hill

March 18, 2005

Professor Arthur V. Hill
The John and Nancy Lindahl Professor for Excellence in Business Education
Curtis L. Carlson School of Management
Operations & Management Sciences Department
University of Minnesota
321 19-th Avenue South -- Room 3-140
Minneapolis, Minnesota 55455-0413 USA

Carlson School of Management office	(612) 624-4015
Operations and Management Science Department	(612) 624-7010
Operations and Management Science Department fax	(612) 624-8804
Home office and fax	(952) 942-5760
Home voice	(952) 942-5690
Cell phone	(612) 232-2542
E-mail addresses	ahill@csom.umn.edu
Web page	umn.edu/home/ahill

Education

- Cadet, United States Military Academy, West Point, 1968-1970.
- B.A., Mathematics, Indiana University, 1972. (Minor, Russian)
- M.S., Industrial Administration, Krannert Graduate School of Management, Purdue University, 1974.
- Ph.D., Management, Krannert Graduate School of Management, Purdue University, 1977. Major: Operations Management. Minor: Industrial Engineering and System Simulation.

Fields of concentration

Operations Management. Specific interests include: supply chain management, service operations management, service quality, production and inventory management, retail inventory management, decision support systems for planning and scheduling, simulation, mathematical programming, and international operations management.

Personal information

Born February 20, 1950. Detroit, Michigan. Married with four boys.

Academic positions

- September 1974 - June 1976: Graduate Instructor and Research Assistant, Krannert Graduate School of Management, Purdue University.
- June 1976 - August 1977: David Ross Thesis Grant, Krannert Graduate School of Management, Purdue University (working with Professor Whybark at Indiana University).
- September 1977 - June 1983: Assistant Professor, Department of Management Sciences, School of Management, University of Minnesota.
- June 1983 - June 1992: Associate Professor, Department of Operations and Management Sciences, Curtis L. Carlson School of Management, University of Minnesota.
- June 1985 - August 1986: Director, Operations Management Center, Curtis L. Carlson School of Management, University of Minnesota.
- August 1986 - December 1986: Visiting Associate Professor of Operations Management, School of Business, Indiana University.

- June 1992 - present: Professor, Department of Operations and Management Sciences, Curtis L. Carlson School of Management, University of Minnesota.
- June 1994 – present: Member of the graduate faculty, Center for Development of Technological Leadership, Institute of Technology, University of Minnesota.
- August 1994 - July 1995: Visiting Professor of Manufacturing Management, International Institute for Management Development (IMD), Lausanne, Switzerland.
- August 1999: Distinguished Visiting Professor, National University of Singapore.
- May 2001 – present: Associate member of the graduate faculty in Industrial Engineering, Institute of Technology, University of Minnesota. www.ie.umn.edu/faculty/index.shtml.
- January 2002 – present: Academic Director, Carlson Consulting Enterprise, Carlson School of Management, University of Minnesota.
- June 2003 – present: The John and Nancy Lindahl Professorship for Excellence in Business Education.

Academic honors

- Pi Mu Epsilon (Mathematics Honorary), 1972.
- Beta Gamma Sigma (Business Honorary), 1974.
- Certified as a Fellow of the American Production & Inventory Control Society (CFPIM), 1982.
- Minnegasco/Doelz Faculty Enrichment Award, 1987.
- Ranked number 17 of 200 researchers in “POM research productivity in U.S. business schools,” *Journal of Operations Management* in 1996. (Note: In 2001, the *Academy of Management Journal* ranked the Carlson School operations management faculty first in research for all business schools in Production/Operation Management.)
- Nominated by the Carlson School of Management for the all-university teaching award called the “Award for Outstanding Contributions to Post-Baccalaureate, Graduate, and Professional Education” in spring 1999. This recognized the best two graduate instructors among the 120 professors in the Carlson School of Management.
- Winner of the Carlson School Golden Globe Faculty MBA Teaching Award, 2002. This award recognizes the Carlson faculty member who has done the most to introduce international concepts and foster understanding of global business in the MBA program.
- Awarded the Carlson School of Management Award for Excellence in Teaching for 2001-2002 in recognition for outstanding contributions to teaching.
- Awarded The John and Nancy Lindahl Professorship for Excellence in Business Education in 2003. This is awarded to a professor who has made outstanding contributions to the Carlson School in research, teaching, and service.

Professional affiliations

- American Production Inventory Control Society (APICS)
- Association for Manufacturing Excellence (AME)
- Decision Sciences Institute (DSI)
- Institute of Industrial Engineers (IIE)
- Institute for Operations Research and the Management Sciences (INFORMS)
- Production Operations Management Society (POMS)

Research

Articles in refereed academic journals

- Hill, Arthur V., and D. Clay Whybark, “Comparing Exact Solution Procedures for the Multiple Vehicle Routing Problem,” *The Logistics and Transportation Review*, Vol. 12, No. 3, 1976.
- Mabert, Vincent A., and Arthur V. Hill, “A Combined Projection - Causal Approach for Short-Range Forecasts,” *International Journal of Production Research*, Vol. 15, No. 2, 1977.

- Chervany, Norman L., John C. Anderson, P. George Benson, Arthur V. Hill, "A Management Science Approach to a Dutch Elm Disease Sanitation Program," *Interfaces*, Vol. 10, No. 2, April 1980, pp. 108-114.
- Hill, Arthur V., and D. Clay Whybark, "CHEXPEDITE - A Computer Based Approach to the Bank Courier Problem," *Decision Sciences*, Vol. 13, No. 2, April 1982, pp. 251-265.
- Hill, Arthur V., "An Experimental Comparison of Human Schedulers and Heuristic Algorithms for the Traveling Salesman Problem," *Journal of Operations Management*, Vol. 2, No. 4, August 1982, pp. 215-223.
- Bajgier, Steve M., and Arthur V., "An Experimental Comparison of Statistical and Linear Programming Approaches to the Discriminant Problem," *Decision Sciences*, Vol. 13, No. 4, October 1982, pp. 604-618.
- Benson, P. George Benson, Arthur V. Hill, and Thomas R. Hoffmann, "Manufacturing Systems of the Future - A Delphi Study," *Production and Inventory Management Journal*, Vol. 23, No. 3, Third Quarter, 1982.
- Hill, Arthur V., J. David Naumann, and Norman L. Chervany, "SPAT and SCAT - Large Scale Computer-Based Optimization Systems for the Personnel Assignment Problem," *Decision Sciences*, Vol. 14, No. 2, April 1983, pp. 207-220.
- Hill, Arthur V., "OPT - A New Manufacturing Planning and Scheduling System," *Operations Management Review*, Vol. 1, No. 2, winter 1983. (Invited article.)
- Kalantori, Bahman, Arthur V. Hill, and Sant Arora, "An Algorithm for the Traveling Salesman Problem with Pickup and Delivery Customers," *European Journal of Operational Research*, Vol. 22, No. 3, December 1985, pp. 377-386.
- Hill, Arthur V., and Thomas E. Vollmann, "Reducing Vendor Delivery Uncertainties in a JIT Environment," *Journal of Operations Management*, Vol. 6, No. 4, August 1986, pp. 381-392.
- Raturi, Amitabh S. and Arthur V. Hill, "An Experimental Analysis of Capacity-Sensitive Setup Parameters for MRP Lotsizing," *Decision Sciences*, Vol. 19, No. 4, Fall 1988, pp. 782-800.
- Hill, Arthur V., Vincent A. Mabert, and Douglas W. Montgomery, "A Decision Support System for the Courier Vehicle Scheduling Problem," *Omega*, Vol. 16, No. 4, July 1988, pp. 333-345.
- Hill, Arthur V., Vincent Giard, and Vincent A. Mabert, "A Decision Support System for Determining Optimal Retention Stocks for Service Parts Inventories," *IIE Transactions*, Vol. 21, No. 3, September 1989, pp. 221-229.
- Hill, Arthur V., Gary D. Scudder, and Dyan L. Haugen, "The Operations Management Research Agenda for the 80's: Progress Report for Ph.D. Dissertation Research," *Operations Management Review*, Vol. 7, No. 1, 1989.
- Petroff, John N. and Arthur V. Hill, "A Framework for the Design of Lot Tracing Systems for the 1990's," *Production and Inventory Management Journal*, Vol. 32, No. 2, Second Quarter, 1991, pp. 55-61.
- Hill, Arthur V., "An Experimental Comparison of Dispatching Rules for Field Service Support," *Decision Sciences*, Vol. 23, No. 1, pp. 235-250, January/February 1992.
- Hill, Arthur V., Salvatore T. March, Christopher J. Nachtsheim, and Murali S. Shanker, "An Approximate Model for Field Service Territory Planning," *IIE Transactions*, Vol. 24, No. 1, pp. 2-10, March 1992.
- Hill, Arthur V., and W.C. Benton, "Modeling Intra-City Time-Dependent Travel Speeds for Vehicle Scheduling Problems," *The Journal of the Operational Research Society*, Vol. 43, No. 4 (April), 1992, pp. 343-351.
- Hill, Arthur V., and Inder S. Khosla, "Models for Optimal Lead Time Reduction," *Production and Operations Management*, Vol. 1, No. 2, pp. 185-197, spring 1992.
- Hill, Arthur V., and Amitabh S. Raturi, "A Model for Determining Tactical Parameters for Materials Requirements Planning Systems," *The Journal of the Operational Research Society*, Vol. 43, No. 6 (June), pp. 605-620, 1992.
- Hill, Arthur V., and Alexander Ardichvili, "Methods of Operations Management in the Market: Results of an International Research Project," *Mirovaja Ekonomika i Mezhdunarodnie Otnoshenia* (a leading journal published by the Russian Academy of Sciences in Moscow), 6, 1992. Other versions of this paper have also published in *Delovie Sviasi*, 4, 1992 (published by the Association of Entrepreneurs of Russia) and *Vestnik RTPP*, 4, 1992 (published by the Russian Chamber of Commerce).
- Chengzhong, Xiao, D. Clay Whybark, and Arthur V. Hill, "Comparing Manufacturing Practices of the Machine Tool Industry in China, Hungary, USSR, and North America," *Journal of Shanghai Institute of Mechanical Engineering*, Vol. 14, No. 2, 1992.
- Ardichvili, Alexander A., and Arthur V. Hill, "Manufacturing Practices in the Commonwealth of Independent States," *International Journal of Operations & Production Management*, Vol. 13, No. 10, 1993, pp. 60-75. Also published as a chapter in *Global Manufacturing Practices*, edited by D. Clay Whybark and Gyula Vastag, Elsevier Science Publishers, 1993.

- Hill, Arthur V., and Sum Chee Chuong, "A New Framework for Manufacturing Planning and Control Systems," *Decision Sciences*, Vol. 24, No. 4, pp. 739-760, July/August 1993.
- Chua, Richard C. H., Gary D. Scudder, and Arthur V. Hill, "Batching Policies for a Repair Shop with Limited Spares and Finite Capacity," *European Journal of Operational Research*, Vol. 66, No. 1, 1993, pp. 135-147.
- Hill, Arthur V. and W.C. Benton, "On macroscopic description of urban traffic speeds: Response," *The Journal of the Operational Research Society*, Vol. 44, No. 2 (February), 1993, pp. 209-210.
- Hill, Arthur V., Amitabh S. Raturi, and Sum Chee Chuong, "Capacity Constrained Reorder Intervals for Materials Requirements Planning Systems," *IIE Transactions*, Vol. 29, No. 11, November 1997, pp. 951-963.
- Haugen, Dyan L., and Arthur V. Hill, "Scheduling to Improve Field Service Quality," *Decision Sciences*, Vol. 30, No. 3 (Summer), 1999, pp. 783-804.
- Hays, Julie M., and Arthur V. Hill, "The Market Share Impact of Service Failures," *Production and Operations Management*, Vol. 8, No. 3 (Fall), 1999, pp. 208-220.
- Hill, Arthur V., Julie M. Hays, and Eitan Naveh, "A Model for Optimal Delivery Time Guarantees," *Journal of Service Research*, February, Vol. 2, No. 3, 2000, pp. 254-264.
- Hays, Julie M., and Arthur V. Hill. "A Preliminary Investigation of the Relationships between Employee Motivation/Vision, Service Learning, and Perceived Service Quality." *Journal of Operations Management*, Vol. 19, No. 3, 2001, pp. 335-349. (According to the *JOM* website, this article was one of the top ten requested articles in the *Journal of Operations Management* for 2001. This article was used as a "notable illustration" of the importance of behavioral theory in the call for papers for the *JOM* special issue on "Incorporating Behavioral Theory in OM Empirical Models.")
- Hays, Julie M., and Arthur V. Hill, "A Longitudinal Empirical Study of the Effect of a Service Guarantee on Employee Motivation/Vision, Service Learning, and Perceived Service Quality," *Production and Operations Management*, Vol. 10, No. 4, 2001, pp. 405-424.
- Hill, Arthur V., "Five challenges for the operations management research community," *Journal of Operations Management*, invited lead article, Vol. 20, No. 1, 2002, pp. 6-8.
- Hill, Arthur V., David A. Collier, Craig M. Froehle, John C. Goodale, Richard D. Metters, and Rohit Verma, "Research Opportunities in Service Design Research," Special Issue on Service Process Design, *Journal of Operations Management*, 2002.
- Sum, Chee-Chuong, Yang-Sang Lee, Julie M. Hays, and Arthur V. Hill, "Modeling the Effects of a Service Guarantee on Perceived Service Quality Using Alternating Conditional Expectations (ACE)," *Decision Sciences*, Vol. 33, No. 3, Summer 2002, pp. 347-383.
- Hill, Arthur V., and William J. Sawaya III, "Production Planning for Medical Devices with an Uncertain Approval Date," *IIE Transactions*, Vol. 36, No. 4, 2004. (This article was featured in an IE Journal article and in an IIE article on the IIE website, <http://shs.iienet.org/public/articles/index.cfm?Cat=212>.)
- Gupta, Diwakar, Arthur V. Hill, and Tatianna Bouzdine-Chameeva, "A pricing model for clearing end of season retail inventory," *European Journal of Operational Research*, accepted for publication July 15, 2004.
- Hays, Julie M., and Arthur V. Hill, "An Extended Longitudinal Study of the Effects of a Service Guarantee," accepted for publication by *Production and Operations Management*.

Papers under review by (or under revision for) refereed journals

- Chen, Xinlei, George John, Julie M. Hays, and Arthur V. Hill, "Learning from a Service Guarantee Quasi-Experiment," submitted to the Special Issue on Practitioner-Academic Collaborative Research, *Journal of Marketing Research*. We were invited to present this paper at the MSI conference at Yale in December 2004.
- Zhang, Weiyong, Arthur V. Hill, Roger G. Schroeder, and Kevin W. Linderman, "A Configurational Study of Six Sigma Program Design," under first review by the *Journal of Operations Management*.

Articles in refereed academic proceedings

- Hill, Arthur V., "Combining Time Series and Causal Forecasting Models: A Case Study," *Midwest American Institute for Decision Sciences Conference Proceedings*, Indianapolis, April 1975.
- Hill, Arthur V. and D. Clay Whybark, "Vehicle Scheduling with Production Requirement Constraints," *Decision Sciences Institute National Conference Proceedings*, San Francisco, November 1976.
- Hill, Arthur V. and J. Philip McKenzie, "A Computer Algorithm for the Bank Messenger Vehicle Scheduling Problem," *Institute of Industrial Engineers Systems Engineering Conference Proceedings*, Kansas City, November 1977.
- Hill, Arthur V., "A Comparison of Human Decision Makers and a Computer Algorithm for the Traveling Salesman Problem," *Decision Sciences Institute National Conference Proceedings*, New Orleans, November 1979.
- Hill, Arthur V., "Mixed Integer Programming Formulations for the Traveling Salesman and Vehicle Scheduling Problems," *Midwest Decision Sciences Institute Conference Proceedings*, Detroit, April 1981.
- Anderson, John C., Arthur V. Hill, Roger G. Schroeder, Nicholas Moropoulos, and Jayant Saraph, "A Study of Manufacturing Strategy and Performance," *Decision Sciences Institute National Conference Proceedings*, San Francisco, November 1982.
- Hill, Arthur V. and Salvatore T. March, "FAST-TECH: A Decision Support System for Field Service Planning," *Decision Sciences Institute National Conference Proceedings*, San Antonio, November 1983.
- Hill, Arthur V. and Amitabh S. Raturi, "A Model for Determining Tactical Parameters for Materials Requirements Planning Systems," *Decision Sciences Institute National Conference Proceedings*, Boston, November 1987.
- Hill, Arthur V., Gary D. Scudder and Dyan L. Haugen, "Production/Operations Management Agenda for the 80's: A Progress Report," *Decision Sciences Institute National Conference Proceedings*, Boston, November 1987.
- McDonell, Edwin D., Thomas J. Shurig, and Arthur V. Hill, "Productivity and Quality in the Branch of the Future," *Institute of Industrial Engineers National Conference Proceedings*, Orlando, May 1988.
- McDonell, Edwin D., Gary Somerville, and Arthur V. Hill, "Banking Operations Improvement," *Institute of Industrial Engineers National Conference Proceedings*, 1990.
- Hill, Arthur V., Gary E. Somerville, Barry S. Farah, Edwin McDonnell, and Jerry Swan, "A Decision Support System for Managing Check Processing Operations," *Institute of Industrial Engineers National Conference Proceedings*, San Francisco, May 1990.
- Hill, Arthur V. and Sum Chee Chuong, "A Finite Scheduling Heuristic for Discrete Manufacturing," *Decision Sciences Institute National Conference Proceedings*, San Diego, November 1990.
- Hill, Arthur V. and W.C. Benton, "Modeling Intra-City Time-Dependent Travel Speeds for Vehicle Scheduling Problems," *Decision Sciences Institute National Conference Proceedings*, San Diego, November 1990.
- Hill, Arthur V. and Dyan L. Haugen, "An Experimental Comparison of Heuristic Scheduling Procedures and Dispatching Rules for Field Service Support Systems," *Decision Sciences Institute National Conference Proceedings*, Miami, November 1991.
- Xiao, Chen Zhong, D. Clay Whybark, and Arthur V. Hill, "Comparing Manufacturing Practices in China, Hungary, Russia, and North America," *Proceedings of the Pan-Pacific Conference*, Calgary, Canada, June 1992.
- Xiao, Chen Zhong, D. Clay Whybark, and Arthur V. Hill, "Comparing Manufacturing Output and Practices in China, Hungary, USSR, and USA," *Proceedings of the Pan-Pacific Conference*, Pan-Pacific Conference XI, Bangkok, Thailand, June 1994.
- Swanson, Richard A., Arthur V. Hill, Julie M. Hays, George John, and David W. Johnson, Human Resource Development's Contribution to Strategic Service Quality Performance in Radisson Hotels Worldwide, *Academy of Human Resource Development (AHRD) 1999 Conference Proceedings*, (edited by K.P. Kuchinke, University of Illinois), pp. 380-385, 1999.
- Bouzdine-Chameeva, Tatianna, and Arthur V. Hill, "Pricing Strategy in a Clearance period," *Academy of Marketing Science 2001 Conference Proceedings*, San Diego, June 2001, pp. 89- 93. Articles are subjected to a review comparable to that for many journals.
- Sang, Lee Yang, Sum Chee Chuong, Julie M. Hays, and Arthur V. Hill, "Impact of a service guarantee on service quality," *Asia Pacific Decision Sciences 2001 Conference Proceedings*, Singapore, July 18-21, 2001.
- Scavarda, Annibal José, and Arthur V. Hill, "The Issues and the Impact of the Service Industry," *Proceedings POMS National Conference*, San Francisco, 2002.

- Zhang, Weiyong, Arthur V. Hill, and Roger G. Schroeder, "A Configurational Study of the Impact of Quality Management Practices on Firm Performance," **Proceedings of the 2004 DSI Conference**, Boston.
- Hill, Arthur V., Diwakar Gupta, and Tatiana Bouzdine-Chameeva, "Discrete-Time Models for Setting Clearance Prices in Season Retail Inventory," **EUROMA Conference Proceedings -- Operations Management as a change agent**, Vol. 1, pp. 275-282, INSEAD, Fontainebleau, France, June 27-29, 2004.

Non-refereed publications

- Anderson, John C., Arthur V. Hill, Roger G. Schroeder, and Janice I. DeGross, **Proceedings of the Materials Requirements Planning Implementation Conference**, September 1978.
- Hill, Arthur V., **TIIPS - The Integrated Implementation Planning Strategy**, Comserv Corporation, 1982. (An MRP implementation guide developed for what was the leading independent manufacturing software vendor in the United States.)
- Hill, Arthur V., Janis L. Miller, and Everett E. Adam, Jr., "Operations Management Centers," **Operations Management Review**, Vol. 5, No. 3, spring 1987.
- Hill, Arthur V., **APICS Capacity Management Reprints**, American Production and Inventory Control Society, Falls Church, Virginia, 1988. (This is a book edited by several members of the Capacity Management Committee of the APICS Curricula and Certification Council.)
- Hill, Arthur V., **APICS Capacity Management Certification Review Course Addendum**, spring 1989. (Publication requested by the APICS Curriculum and Certification Council that is now a standard part of the APICS Capacity Management Review Course.)
- Hill, Arthur V., "Creating an Operations Management Center," **Operations Management Review**, Vol. 7, No. 3-4, 1990. (Invited article.)
- Hill, Arthur V., "Operations Management," an article relating operations management and information systems technology, **The Macmillan Encyclopedia of Computers**, 1993.
- Hill, Arthur V., "Service Guarantees: The Fast Track to Service Quality," **IMD Perspectives**, Number 2, March 1995, pp. 1-4. Reprinted or excerpted in many international business publications including: Taiwan (**Commonwealth Magazine**), France (**Les Echos**), Spain (**Executive Digest**), England (**European Quality**), Switzerland (**PME Magazine**, **Le mensuel suisse pour réussir son entreprise**, No. 6, June 1996), and others. **Industry Week**, the leading manufacturing industry journal in the U.S., printed a half-page summary of this work on October 2, 1995 and the **Journal of Services Marketing** (Vol. 9, No. 3, 1995) printed a 2-page summary. The **Minnesota Management Review** (Carlson School Alumni magazine) and the **CEMBA Executive Summary** (CEMBA Alumni magazine) for the Carlson School also reprinted this article.
- Kamauff, J., S.B. Kramer, and A.V. Hill. October 1995. Gating the Benchmarking Process: A Tutorial. Working Paper No. 95-33. Richard Ivey School of Business, University of Western Ontario.
- Hill, Arthur V., "Some Observations on Business Education at the Institute for Management Development International (IMD)," **Decision Line**, March 1996, pp. 4-5, 18.
- Hill, Arthur V., "Service guarantees offer key benefits and a competitive advantage," **Innovations**, Vol. 1, Issue 7, May 1997, pp. 1-2. (This is a publication of the Midwest Gas Association written with an MGA employee.)
- Hill, Arthur V., "SPAT Questions & Answers," **Decision Line**, July 1997, Vol. 28, No. 4. This was part of a software review of the SPAT software written by Professor Hill and can be found at http://www.decisionsciences.org/Newsletter/vol28/28_4/soft.htm.
- Hill, Arthur V., Susan E. Geurs, Julie M. Hays, George John, David W. Johnson, and Richard A. Swanson, "Service Guarantees and Strategic Service Quality Performance Metrics at Radisson Hotels Worldwide," **Journal of Strategic Performance Measurement**, Vol. 2, No. 6, p. 27-31, 1998.
- Hays, Julie M. and Arthur V. Hill, "Gaining Competitive Service Value through Performance Motivation," **Journal of Strategic Performance Measurement**, October/November, Vol. 3, No. 5, pp. 36-40, 1999.
- Hays, Julie M., Arthur V. Hill, and Susan E. Geurs, "The Impact of Service Guarantees on Service Quality at Radisson Hotels Worldwide," invited chapter in **New Service Development: Creating Memorable Experiences**, edited by J.A. Fitzsimmons and M.J. Fitzsimmons, Sage Publications, pp. 264-276, 2000.
- Hill, Arthur V., and William J. Sawaya III, "A Model for Production Planning with an Uncertain Approval Date," **POMS National Conference Proceedings**, San Antonio, April 2000.
- Hill, Arthur V., and Tatianna Bouzdine-Chameeva, "A pricing Model for Clearing End of Season Retail Inventory," **Cahier de Recherche LAREMA**, Groupe ESC Bordeaux, August 2000, 28 pages.

- Bouzdine-Chameeva, Tatianna, Vincent Beurrier, and Arthur V. Hill, "A Review of Pricing Models for the Newsvendor Problem," *Cahier de Recherche LAREMA*, ESC Bordeaux, July 2000, 27 pages.
- Hill, Arthur V., and William J. Sawaya III, "A managerial summary: Production planning for medical devices with an uncertain regulatory approval date," *Industrial Engineer Magazine*, forthcoming. This is a summary of our article published in *IIE Transactions*. The *Industrial Engineer Magazine* is a publication of the Institute of Industrial Engineers and is distributed to the nearly 15,000 members of the Institute.
- Scavarda, A.J., T. Bouzdine-Chameeva, S.M. Goldstein, J.M. Hays, and A.V. Hill, "A Review of the Causal Mapping Practice and Research Literature," *Proceedings of the Second World POMS Conference*, Cancun, Mexico, April 30-May 3, 2004.

Research in process

- Scavarda, Annibal José, Tatiana Bouzdine-Chameeva, Susan Meyer Goldstein, Julie M. Hays, and Arthur V. Hill, "A Methodology for Constructing Causal Maps Using an Expert Panel," nearly ready for submission to the *JOM* special issue entitled "Innovative Data Sources for Empirically Building and Validating Theories in OM."
- Scavarda, Annibal José, Arthur V. Hill, Ram Narasimhan, Kingshuk K. Sinha, Sum Chee Chuong, and Thomas E. Vollmann, "The Ten Commandments for Supply Chain Management."
- Scavarda, Annibal José, Arthur V. Hill, James A. Fitzsimmons, Susan Meyer Goldstein, Julie M. Hays, and Ron Zemke, "The Ten Commandments for Service Management."

Research grants

- IBM grant to develop a Manufacturing Information Systems course, 1985.
- Fourth Shift commercial manufacturing control system software and video training course (valued at \$50,000).
- Minnegasco/Doelz Faculty Enrichment Award to develop research projects on Just-in-Time Manufacturing with 3M, Honeywell, and Donaldson Company, 1987.
- Minnemacs equipment grant (Apple Macintosh II/cx and printer) for development of a course on Just-in-Time Manufacturing, 1989-1990.
- International Program Development grants to travel to the USSR (1989) and Hungary (1991).
- Several summer research grants from the Carlson School of Management, Dayton-Hudson, and McKnight.
- Operations Management Center grants for "Capacity Sensitive Lot Sizing," "A Computer Model for Studying Product Proliferation Issues in a Manufacturing Environment," "Manufacturing Planning and Control Systems of the Future," and "Lead Time Reduction."
- International Program Development grants to pursue research in the Former Soviet Union, 1993.
- Quality Leadership Center for \$36,000 for a project entitled "Customer-Driven Learning Organization" research project with eight Minnesota companies, 1994.
- Radisson Hospitality Worldwide gift of \$2000 for a project entitled "Study of service guarantees at Radisson Hospitality," research project using Radisson "before" and "after" data, 1995.
- NSF Total Quality Organizations grant #9811047 for \$140,000, principal investigator, "An Examination of the Impact of Service Guarantee Strength on Service Quality and Firm Performance," with co-principle investigators Julie Hays (U. of M./OMS Ph.D. student), Professor George John (U. of M./Carlson School), Professor Dick Swanson (U. of M./School of Education), and Professor George Johnson. (U. of M./School of Education). The website for this research project can be found at legacy.csom.umn.edu/wwwpages/faculty/ahill/nsf. The NSF website for this grant is: fastlane.nsf.gov/servlet/showaward?award=9811047.
- Accepted an invitation to be a co-investigator in a grant request to the Fannie Mae Foundation for a grant to design a national project for Habitat for Humanity International to assess the economic impact of substandard housing initiatives. This grant request is for \$40,000. If successful, this grant is expected to lead to much larger grants. The principal investigator for this project is Dr. Michael Agnew, Director, McVay Social Entrepreneurship Center & Habitat for Humanity Fellows Program, Sterling College.

Presentations at research conferences (This list does *not* include presentations of proceedings papers that appear above.)

- “Operations Management in the Service Sector,” Academy of Management, 37-th Annual Conference, Orlando, August 1977.
- “Approaches to Vehicle Routing and Scheduling Problems,” Upper Midwest Chapter ORSA/TIMS, Minneapolis, November 1978.
- “Symposium on Vehicle Routing and Scheduling -- the State of the Art,” National Decision Sciences Institute Conference, Las Vegas, November 1980.
- “Strategic Planning for Banking Operations,” Institute of Industrial Engineers Fall Conference, Minneapolis, December 1980.
- “A New Mixed-Integer Goal Programming Approach to the Discriminant Problem” (with Steve M. Bajgier), National ORSA/TIMS Conference, Houston, October 1981.
- “The Future of Research in Production Planning and Control Systems,” panel discussion/presentation at the National Conference for the Operations Management Association, Phoenix, November 1985.
- “A Study of Capacity Constrained Scheduling Procedures for Material Requirements Planning Systems” (with Amitabh S. Raturi), National Decision Sciences Institute Conference, Las Vegas, November 1985.
- “Manufacturing Control Systems,” Panel discussion, National Operations Management Association Conference, Phoenix, 1985.
- “A Stochastic Model for the Capacitated MRP Problem” (with Amitabh S. Raturi), Joint ORSA/TIMS meeting, Washington, D.C., May 1988.
- “A Network Model for Simultaneously Determining Lotsizes and Schedules for Finite Capacity Discrete Parts Manufacturing,” invited presentation at the Ohio State University, November 1989.
- “Models for Optimal Lead Time Reduction,” Operations and Management Science Department Colloquium, University of Minnesota, May 1990.
- “Models for Optimal Lead Time Reduction” (with Inder S. Khosla), Production and Operations Management Society National Meeting, Washington, D.C., October 1990.
- “Research Directions in Operations Management,” Panel Member, National Decision Science Institute Meeting, San Diego, November 1990.
- “Manufacturing Practices in the Soviet Union,” presentation for the Global Manufacturing Research Group, Budapest, Hungary, June 1991.
- “Time Based Competition: A Key to Understanding Operations Strategy,” Production and Operations Management Society National Meeting, New York, New York, November 1991.
- “Research in Supply Chain Management,” Panel Member, National Decision Science Institute Meeting, Orlando, Florida, November 1996.
- “Cases in Service Operations,” Panel Member, National Decision Science Institute Meeting, San Diego, November 1997.
- “An Empirical Investigation of the Relationships between Employee Motivation and Vision, Organizational Learning, and Perceived Service Quality,” (with Julie M. Hays) AMA/INFORMS Frontiers in Services Conference, Vanderbilt University, October 1999.
- “New Issues and Opportunities in Service Design Research,” Decision Sciences Institute National Conference, Orlando, November 2000.
- “Where, when and how much can we improve customer satisfaction with service guarantees,” Xinlei Chen, George John, Julie M. Hays, and Arthur V. Hill, Midwest Marketing Conference, University of Michigan, August 2001.
- “Where, when and how much can we improve customer satisfaction with service guarantees,” George John, Julie M. Hays, and Arthur V. Hill, USC research conference, January 2002.
- “The service supply chain,” Decision Sciences Institute National Conference, San Diego, November 2002.
- “The Ten Commitments of the Service Management,” (with Annibal José Scavarda) Production and Operations Management Society (POMS) Annual Meeting, Savannah, April 2003.
- “The Ten Commitments of the Supply Chain Management,” (with Annibal José Scavarda) Production and Operations Management Society (POMS) Annual Meeting, Savannah, April 2003.
- Zhang, W., A.V. Hill, and R.G. Schroeder, “The Impact of Quality on Performance,” paper presented at the Decision Sciences Institute National conference, November 23, 2004.

- Chen, Xinlei, George John, Julie M. Hays, and Arthur V. Hill, “Learning from a Service Guarantee Quasi-Experiment,” presented at the MSI Conference for Collaborative Research at Yale University School of Management, December 11, 2004.
- Hays, J.M., and A.V. Hill, “The Effect of Service Guarantee Strength on Service Quality,” 2005 POMS Conference, Chicago, April 29-May 2, 2005.
- Hays, J.M., T. Bouzdine-Chameeva, S. Goldstein-Meyer, A.V. Hill, and A.J. Scavarda, “An application of the Collective Causal Mapping methodology to develop a framework for teaching operations management,” 2005 POMS Conference, Chicago, April 29-May 2, 2005.

Invited research-related lectures/seminars for universities and industry

- “Simulation Successes and Slips,” Association of Systems Managers Meeting, Minneapolis, January 1980.
- “Research on Field Service Support,” invited talk, School of Business, Indiana University, winter 1980.
- “Inventory/Production Control Concepts,” Twin Cities APICS Annual Spring Meeting, April 1982.
- “Manufacturing Systems of the Future,” Twin Cities MAPICS Users Group, April 1982.
- “Business Requirements Planning,” COMSERV Conference for Presidents of Small Manufacturing Companies, March 1984.
- “CHEXPEDITE: A Decision Support System for Courier Scheduling,” Check Processing Conference, Bank Administration Institute, Atlanta, April 1984.
- “Operations Management Education at the University of Minnesota,” Twin Cities APICS Small Manufacturers Special Interest Group, November 1985.
- “Simulation Techniques,” Seminars for Honeywell Industrial Engineers, Minneapolis, January 1986.
- “Just-in-Time Not Just in Japan,” University of Minnesota Executive Development Center Seminar, September 1987.
- “A Tutorial on Production Scheduling and Simulation,” Honeywell Simulation Symposium, September 1987.
- “Detailed Factory Scheduling Systems: The Promises and the Problems,” Joint Decision Sciences/Operations Management Colloquium, Carlson School of Management, December 1987.
- “Research on JIT and CIM - A Progress Report” a report to the board of directors of Minnegasco on my activities funded by the Minnegasco/Doelz Award, March 1988.
- “Manufacturing Planning and Control Systems of the Future,” invited talk for the Honeywell Corporate Systems Development Division, September 1988.
- “Decision Support Systems for Operations Management,” invited talk at the Darden School, University of Virginia, winter 1989.
- “Decision Support Systems for Operations Management,” invited talk at the University of Colorado, winter 1989.
- “Careers in Operations and Management Sciences,” invited talk for students and faculty at St. Olaf College, Northfield, Minnesota, winter 1989.
- “Operations Management,” Panel Member, Doctoral Student Consortium, National Decision Science Institute Meeting, San Diego, November 1990.
- “Heuristics for Simultaneously Determining Order Sizes and Finite Schedules for Discrete Manufacturing,” invited talk at Indiana University School of Business, January 1991.
- “International Entrepreneurship in Eastern Europe and the USSR,” Carlson School of Management Business Day Program, Panel Chair, April 1991.
- “Research in Field Service Management,” invited talk for the faculty at the Babcock School of Management, Wake Forest University, January 1992.
- “What Are the Risks and Opportunities of Doing Business in the Former Soviet Union?” Carlson School of Management Business Day Program, Panel Chair, April 1993.
- “Radisson Slavjanskaya Hotel and Business Center,” Ecole hôtelière de Lausanne (probably the best known hotel school in the world), 1995.
- Keynote speaker, “Perfect Supply Chain Management,” address given to the Guidant/Cardiac Pacemaker, Inc. Supplier Day meeting with about 200 people in attendance, July 1997.
- “Mass Customization,” ReliaStar Strategic Planning meeting, November 1998.
- “Service guarantees: The fast-track to service quality,” research presentation given to the faculty and students at National University of Singapore, August 1999.
- “Production Planning for Medical Device Manufacturing,” research presentation given to the faculty and students at National University of Singapore, August 1999.

- Keynote speaker, “Competing through Mass Customization and Service Quality,” address given at the National University of Singapore, August 1999. This was a major public event with approximately 300 executives and academics in attendance.
- Panel member, public seminar, “Supply Chain Management: Trends for the Future,” National University of Singapore, August 1999.
- Keynote speaker, “Eight dumb ways to deal with forecasting in your firm,” Annual meeting for distributors of Chart Industries (Minnesota Valley Engineering), Phoenix, Arizona, January 2000.
- “Competing through Mass Customization and Service Quality,” Institute of Industrial Engineers Twin Cities Chapter meeting, May 2000.
- “A pricing model for clearing end of season retail inventory,” presentation to the faculty and doctoral students, Department of Mechanical Engineering, University of Minnesota, March 2000.
- “Demand chain management,” annual meeting for all senior operations people at Guidant/CRM sponsored by Guidant’s VP of Manufacturing, March 2001.
- “Mass Customization,” a presentation to the senior management team of AbleNet, April 2001.
- Keynote address, “The top ten list for service quality improvement,” a presentation for the annual senior management team meeting of MarketWatch, Minneapolis, January 2002.
- “Research on Service Guarantees,” a presentation to the faculty of the Owen School, Vanderbilt University, April 2004.

Teaching

Courses taught at the University of Minnesota (*courses taught in the last three years)

- OMS 3000 Introduction to Operations Management
- OMS 3056 Production and Inventory Management
- OMS 6056 Managing Supply Chain Operations*
- OMS 8051 Management of Service Operations
- OMS 8056 Production and Inventory Management
- OMS 8057 Process Design
- OMS 8221 Inventory Theory (doctoral seminar)
- OMS 8735 Operations Forecasting and Inventory Research (doctoral seminar)*
- OMS 8850 Service Operations Management
- OMS 8850 International Operations Management
- OMS 8900 Operations Management Doctoral Seminar
- OMS 8901 Operations Management Doctoral Seminar
- MBA 5523 Operations Management - Carlson Executive MBA Program
- MBA 6504 Carlson Consulting Enterprise (12 months per year)*
- MBA 6220 Operations Management (day MBA core course)
- MBA 8025 Decision Sciences and Management Information Systems
- MBA 8065 MBA Field Project Course
- CMBA5523 Introduction to Operations Management (executive MBA)*
- DSC 3055 Introduction to Management Science (with 275 students and 6 labs)
- DSC 8231 Advanced Mathematical Programming (doctoral seminar)
- DSC 8550 Simulation Techniques (doctoral seminar)
- MOT 8113 Operations Management for Competitive Advantage (Institute of Technology)*
- MOT 8132 Quality Control and Management (Institute of Technology)

Average of recent median ratings for MBA teaching was above 6 on a 7-point scale, where 6 is “excellent.” Average of recent median teaching ratings for executive education was above 4.8 on a 5-point scale. Listed in several national publications including **Business Week** as one of the outstanding professors in the Carlson School of Management.

Graduate student advising

- Committee member and/or adviser for many master's theses, masters oral exams, and Ph.D. oral exams for students in Accounting, Computer Science, Industrial Relations, Information and Decision Science, Forest Products, Forestry, Mechanical Engineering/Industrial Engineering, Operations and Management Science, and the Masters of Technology program (MOT).
- Ph.D. Thesis Adviser, Amitabh S. Raturi, "Capacity Sensitive Lotsizing Heuristics in an MRP Environment," 1986.
- Ph.D. Thesis Co-Adviser, Richard Chua, "Determination of Batch Sizes for a Repair Shop in a Multiechelon Repairable Inventory System," 1988.
- Ph.D. Thesis Advisor, Sum Chee Chuong, "Lotsizing and Finite Scheduling Heuristics for Discrete Manufacturing," 1990.
- Ph.D. Coordinator, Operations Management Area, Management Science Department, 1987-1988.
- Ph.D. Coordinator, Operations and Management Sciences Department, 1988-1989.
- Ph.D. Thesis Advisor, Dyan L. Haugen, "Approaches for Scheduling Field Service Systems to Improve both Service Quality and Performance," 1993.
- Ph.D. Dissertation Committee Chair, Catherine Adamski, 1997.
- Ph.D. Dissertation Committee Chair, David Hollingworth, 1998.
- Ph.D. Dissertation Committee Chair, Sohail Ahmad, 1998.
- Ph.D. Thesis Advisor, Julie M. Hays, "The impact of service guarantees on service quality," 1999.
- Ph.D. Dissertation Committee Member, John Collins, Computer Science, 1998-2002.
- Ph.D. Dissertation Committee Member, Waressara Weerawat, Mechanical Engineering (Industrial Engineering), 2000-2001.
- Ph.D. oral exam committee and dissertation committee member, Maher Lahmar, Mechanical Engineering (Industrial Engineering), 2001-2003.
- Ph.D. Thesis Advisor, William Sawaya, 2001-2002.
- Ph.D. Dissertation Committee Member, Mullika Naowaruttanavanit, WCFE/HRD Department (U. of M. St. Paul Campus), 2001-2002.
- Ph.D. Thesis Committee, Xiaowen Huang, 2002-2003.
- Ph.D. Thesis Advisor, Weiyong Zhang, 2003-present.
- Ph.D. Thesis Advisor, Gerard Donald, 2003-2004.
- Ph.D. Thesis Co-Adviser, Annibal José Scavarda, Department of Industrial Engineering, PUC-Rio, Rio de Janeiro, Brazil, 2002-2004.

Executive education

- Faculty member, Modern Technical Concepts. Taught seminars on simulation, optimization, and forecasting for Honeywell and CDC scientists and engineers, summer 1985.
- Faculty member, Northern Soils Institute (North Dakota State University), International Management Program, summer 1986 and 1987. Taught Brazilian and Syrian food processing factory executives.
- Faculty member, Wits Business School Executive Development Program, summers of 1991 and 1992. Taught a three-week executive program at the University of Witwatersrand in Johannesburg, South Africa to senior executives in southern Africa.
- Faculty member, Carlson School Management, Executive Development Center programs (MEP MMI, and MBA Advantage Programs), 1991 - present. Consistently rated as one of the best teachers in the program.
- Faculty member, Institute for Management Development (IMD) in Lausanne Switzerland, August 1994 to August 1995.
- Taught in the Program for Executive Development, Managing R&D, Redefining Marketing Management, Managing Sales Relationships, Manufacturing Management, Joint Development Program, Orchestrating Winning Performance, Strategy in Action, KNPBT program, and Norsk Shell program. Also taught the IMD MBA core operations management course and the MBA service operations management elective.
- Distinguished visiting professor, National University of Singapore, August 1999. Presented a seminar to a large group of executives in Singapore.

Other teaching

- Graduate instructor, Krannert Graduate School, Purdue University, taught Statistics and Operations Management courses for undergraduate students, 1975-1976.
- Course Coordinator, Twin Cities APICS Chapter Inventory Planning Course, 1981. (Involved the creation of a series of courses offered for Twin Cities APICS members.)
- Instructor, Operations Information and Control Systems (P525), Indiana University, 1986.
- Instructor, Doctoral Seminar in Operations (P602), Indiana University, 1986.
- Volunteer Faculty member, LEAD (Leadership, Education and Development) Program for minority students, summer 1993 and summer 1994.

Teaching cases developed

*Cases Published in the **Field Service Management** book published by Professor Hill in 1992:*

- 3M Service Parts and Logistics Center.
- Digital Equipment Corporation, Strategy and Logistics.
- National Computer Systems (NCS).
- Norstan Communications, Technical Assistance Center.
- Whirlpool Corporation, Minneapolis Office.

Cases published by Professor Hill at IMD (available through the European Case Clearing House):

- POM 182 Radisson Slavjanskaya Hotel and Business Center (A) by Arthur V. Hill, Jan Kubes, and Tatianna Chameeva, 1996. This case has been used in many schools including Boston College, Cornell University, IMD, Indiana University, University of Minnesota, Rider College, Wake Forest University, University of California Berkeley, University of Guelph, and the University of Massachusetts.
- POM 182TN Teaching note for the Radisson Slavjanskaya Hotel and Business Center (A) (IMD publication).
- POM 182Video Video interview with John Norlander for the Radisson Slavjanskaya Hotel and Business Center (A) (IMD publication).
- POM 183 Radisson Slavjanskaya Hotel and Business Center (B) by Arthur V. Hill and Cecilia Bjorkegren, 1996.
- 696-007-0 The Radisson Slavjanskaya Hotel And Business Center (A) & (B) PowerPoint Presentation, 1996.
- GM 630 Overview of the European Hotel Industry - 1995 by Arthur V. Hill, Richard Goldthorpe, Jane Ho, and Robert Paquet, 1996.

Cases published as a part of the Customer-Driven Learning Organization Research Project:

- CDLO 47-01 Customer-Driven Learning at Imation Corporation.
- CDLO 47-02 Customer-Driven Learning at Carlson School of Management of the University of Minnesota.
- CDLO 47-03 Customer-Driven Learning at Diversified Pharmaceutical Services, Inc.
- CDLO 47-04 Customer-Driven Learning at Agribank, FCB.
- CDLO 47-05 Customer-Driven Learning at Norwest Bank.
- CDLO 47-06 Customer-Driven Learning at Radisson Hospitality Worldwide.
- CDLO 47-07 Customer-Driven Learning at Arctic Cat.
- CDLO 47-08 Customer-Driven Learning at Minitex Library Information Network.

Cases published through the OMS Department at the University of Minnesota:

- OMS 45-01 IDS 1994 (Business Process Re-engineering) (This case was done as a live case via teleconference from Switzerland.)
- OMS 46-01 The Field Service Division of Diversified Manufacturing, Inc. (DMI) (an earlier version was reprinted in the text *Operations Management*, by Roger Schroeder, McGraw-Hill, Fourth Edition, 1992).
- OMS 46-02 The Minnesota Pollution Control Agency - Twin Cities Area Emissions Testing Program (reprinted in a European casebook).
- OMS 46-03 Country of Music Retail Inventory Management.

- OMS 46-04 The Functional Silo Game. (This case exercise has highlighted in a CNN segment in the summer of 1994 at the Carlson School. The theme of 20-minute CNN segment was how B-schools were striving to be less “silo” oriented and more integrated in their approach to business education.)
- OMS 46-05 WESTEL Rádiótelefon Kft (US West starts a cell phone business in Hungary).
- OMS 46-06 Mass Customization: The Sticky Notes Story.
- OMS 46-07 Cereal Partners Worldwide: A General Mills - Nestlé Joint Venture (General Mills makes breakfast cereal in Europe).
- OMS 47-01 St. Martha’s Hospital: Re-engineering the Medication Delivery System. (Process mapping, error proofing, quality improvement, automation).
- OMS 47-02 The Copy Machine Problem: A Queuing Example (A very short one-page problem to illustrate the economics of queuing theory.)
- OMS 47-03 The Toy Car Company: A Materials Requirements Planning Example (Jointly authored with Professor Kate McKone).
- OMS 47-04 Customer Support at StorageTek Network Systems Group (this case was written as part of a live case for the Carlson School MEP executive program).
- OMS 48-01 The Farmer Fred Game: A Process Improvement Exercise (JIT game with toy blocks).
- OMS 50-01 The ATI Supplier Negotiation Game (with Professor Pri Shah) (purchasing context, negotiation training exercise).
- OMS 50-02 Supplier Development at Auditory Technology, Inc. (supply chain management, purchasing, strategic sourcing, medical device firm context).
- OMS 51-01 Mycereal.com: Customized Breakfast Cereal by General Mills (mass customization, internet strategy, CRM database, configurators).
- OMS 51-03 Mass Customizing AbleNet, Inc. (mass customization, product design, postponement, customizing through service, helping handicapped children).
- OMS 51-05 Retail Inventory Management Systems at Musicland (systems, inventory management, inventory theory, e-commerce strategy, location strategy, and acquisition strategy).
- OMS 52-01 Mass Customization at Lego (mass customization, organizational change, e-commerce) – written with Mark Hansen, the project manager for the successful mass customization project at Lego in Denmark. Draft.
- OMS 53-01 Lean Manufacturing at Phillips & Temro (lean manufacturing, poke yoke, just-in-time manufacturing) – written with the Director of Operations and the former President of PTI.
- OMS 53-02 The New Product Development Process at Medtronic (Design for Manufacturing, Product Teams, Gating process) – written with the Karen Maskell who is a manager at Medtronic.
- OMS 53-03 Theory of Constraints at Mid-Continent Engineering (Theory of Constraints, Throughput Accounting, contribution accounting) – written with the Director of Manufacturing, General Sales Manager, and Owner. Draft.
- OMS 53-04 Lean Manufacturing at Guidant CRM-St. Paul 2003 (Lean thinking, 5S, TPM, new product development, production control, purchasing, cross training, job rotation). This case was written with Beth Bartell, an internal consultant at Guidant. This case is currently a proprietary case for internal use at Guidant.
- OMS 53-05 Great Clips 2003 (service management, location, franchising, growth strategy, service quality). This case was developed for the 2003 Strategic Advantage executive program. The case was developed with the help of the Senior VP and VP of Operations.
- OMS 54-01 SimonDelivers.com (e-commerce, warehousing, customer service, startup strategy). This case was written with the help of the president, vice president of operations, and several other executives from the firm.
- OMS 55-01 Managing Field Inventories for CRM Medical Devices (medical device industry, managing slow moving inventories, newsvendor problem, safety stocks). This case is accompanied by a whitepaper entitled “Managing Slow Moving Inventories” and an Excel workbook slowmove.xls.
- OMS 55-02 The Donut Sales Shop (discrete newsvendor problem, stockout costs, reward systems). This case is accompanied by a whitepaper entitled “The Newsvendor Problem” and an Excel workbook newsvendor.xls.

Cases published through the Juran Center/OMS Department Six Sigma case writing initiative:

- 6S 51-04 Six Sigma at 3M (by Arthur V. Hill and Kevin Linderman; topics include organizational change, quality management program, corporate strategy).
- 6S 52-01 Six Sigma at Luther Midelfort (by Michele St. Martin, Denise Parker, Kevin Linderman, and Arthur V. Hill; the topic is Six Sigma implementation), draft version.
- 6S 52-02 Six Sigma at Mecotronic (by Santos Matos, Suri Tanzil, Kevin Linderman, and Arthur V. Hill; the topic is Six Sigma implementation), draft version.
- 6S 52-03 Six Sigma at Carlson Companies (by Christopher Gustilo, Javier Ruiz, Kevin Linderman, and Arthur V. Hill; the topic is Six Sigma implementation), draft version.
- 6S 54-02 Sustaining Six Sigma at 3M (by Kevin Linderman and Arthur V. Hill; topics include organizational change, quality management program, corporate strategy).

Cases published through the Carlson Consulting Enterprise case writing initiative:

- CCE 52-01 PricewaterhouseCoopers Internet Portal
- CCE 52-02 Northwest Airline Cargo Revenue Leakage Project
- CCE 52-03 Carlson School Enterprise Infrastructure Project
- CCE 52-04 Guidant CRM Manufacturing Vision 2010

Educational software developed for students (These are available upon request. Many of these are posted on Professor Hill's course material website.)

- ABC analysis.xls – An Excel workbook that implements numerical methods in VBA to find the optimal alpha parameter to fit a distribution by value curve to empirical distribution by value data.
- Aggregate inventory analysis.xls – An Excel workbook that finds the optimal lot sizes for a set of inventory items and compares current to optimal cycle inventory for each item and for the aggregate inventory.
- Al.xls – An Excel workbook for finding the optimal solution for a single facility or near-optimal solutions for multiple warehouses using an infinite set location approach. This workbook implements an iterative calculus-based approach written in VBA.
- CIMS – The Carlson Integrated Management Simulation. This is a simulation game for MBA students links many business functions, including marketing, finance, accounting, operations, IS, and HR. This game plays a major role in the Carlson School full-time MBA program. The Carlson School has invested many person years in this software.
- Cluster.xls – An Excel workbook that implements a variety of hierarchical cluster analysis methods (single linkage, complete linkage, average linkage, and Ward's method) based on similarity or distance data. This workbook implements an iterative approach written in VBA.
- Commonality.xls – An Excel workbook that estimates the savings from replacing two similar components with a single "robust" (universal) component.
- Confint.xls – An Excel workbook that helps the user to determine required sample sizes to achieve user-specified confidence intervals.
- Dupont.xls – An Excel workbook that implements the Dupont model to show students the sensitivity of ROI to changes in inventory investment.
- ELSP.xls – An Excel workbook to solve the economic lot scheduling problem. This workbook uses VBA to implement a Newton search to find the shadow price needed to satisfy the capacity constraint.
- EOQ.xls – An Excel workbook that implements EOQ logic for teaching purposes. This work also can be used to estimate the setup cost over carrying charge ratio from historical data.
- Forelife.xls – An Excel workbook that forecasts the remaining lifetime demand using both a finite and an infinite geometric series model. Regression is used to estimate the parameters.
- Gravity.xls – An Excel workbook for the gravity location model for locating retail stores.
- Learning.xls – An Excel workbook for both the half-life and the learning curve. Finds the optimal learning parameters to minimize the sum of the squared errors.
- Lotsizing.xls – An Excel workbook that implements several methods for lotsizing for time varying demand, including a very efficient implementation of the Wagner-Whitin algorithm.
- MDS.xls – An Excel workbook that implements a numerical procedure for multi-dimensional scaling. This workbook implements a calculus-based iterative approach written in VBA.

- Netsolver.xls – An Excel workbook that implements a minimum cost flow network optimization algorithm using VBA code.
- Newsvendor.xls – An Excel workbook that finds the optimal solution to the newsvendor (newsboy) problem assuming that demand is defined by the triangular distribution. The program allows the user to experiment with various order quantities and displays several different graphs to help evaluate the results.
- Order cycle service level tutorial.xls – An Excel workbook that exposes the folly of using an order cycle service level and argues for the user of the unit fill rate service level.
- Queue.xls – An Excel workbook with VBA code that implements exact M/M/s and approximate M/G/s queuing models.
- SCAT – Student Company Assignment Technique -- Network optimization for assigning students to interview slots. Implemented in Fortran. No longer supported.
- SG.xls – An Excel workbook that helps firms evaluate the benefits of a service guarantee on their total customer base.
- Six Sigma.xls – An Excel workbook written by Kevin Linderman (and modified slightly by me) that determines the “sigma” level for a process given the number of defects per million opportunities and given the shift in the mean.
- Slowmove.xls – An Excel workbook designed to help firms find the optimal target inventory level for slow moving items assuming Poisson distributed demand.
- SPAT.xls – Student Project Assignment Technique -- Interactive network optimization for assigning students to groups for the project team course. This workbook implements a minimum cost network optimization model and is implemented in Excel using Visual Basic Assistant (VBA).
- SS.xls – A very sophisticated Excel workbook that finds the optimal safety stock and order size in a wide variety of independent demand situations using a variety of methodologies. Implemented in Excel with supporting VBA routines.
- Staffit.xls – Interactive M/G/s queuing model with costing features to help firms determine appropriate staffing levels (“staffing fit”) for each period of the day.
- TSP.xls – An Excel workbook that implements the 2-Opt procedure for the traveling salesman problem. Implemented in Excel with VBA.
- Winters.xls – Winters’ model for forecasting with exponential smoothing -- Interactive model that finds the least squares fit for the Winters’ model and allows the students to modify all parameters and view the statistical and graphical results.

Technical notes (whitepapers developed for students) (These are available upon request. Many of these are posted on Professor Hill’s course material website.)

ABC classification analysis, Advanced planning and scheduling systems, Benchmarking, Box-Jenkins Forecasting, Business process re-engineering (draft), Cluster Analysis, The Cobb-Douglas model for predicting demand based on product attributes, Commonality, Configuration Management (rough draft), Creating a mission statement, Demand Pull Manufacturing (rough draft), Drum-Buffer-Rope, Economic Lot Scheduling Problem (ELSP), Enterprise Resources Planning (short draft), Estimating carrying cost, Estimating confidence intervals, Forecasting demand as a function of price and leadtime, Forecasting lifetime demand, Forecasting with the Winters’ model for exponential smoothing, Improving knowledge worker performance (draft), Inventory management, Learning models, Location theory, Managing inventories for slow-moving items, Managing safety stock inventory levels, Mass customization (draft version), Multi-dimensional Scaling, The newsvendor problem, Newton’s method, Notes on the error function $\text{erf}(x)$, Notes on the geometric mean, Notes on the normal distribution, Notes on the triangular distribution, Optimizing start quantities with uncertain yields (draft), Order cost estimation, Overall Equipment Effectiveness (OEE), Process improvement, Phase-out planning for medical devices with an uncertain approval date, Safety stocks with non-normal distributions, Seasonal Buying, Service Design for Manufacturing (draft), Service level metrics, Setup cost estimation and reduction, Strategy Maps, The Square Root Law for Inventories (draft), Theory of constraints, Throughput Accounting, Time based competition self assessment survey, To stock or not to stock: That is the question, The Traveling Salesman Problem, Vendor managed inventories, Warehouse Management Systems (rough draft), Why inventory reduction is still a good goal in a time of low interest rates, Weighted least squares non-linear regression, Yield management.

Books

- Hill, Arthur V., *Field Service Management: An Integrated Approach to Increasing Customer Satisfaction*, Business One Irwin, Homewood, Illinois 1992. ISBN: 155623547X.
- Hill, Arthur V., *International Operations Management* in process (and probably always will be).
- Hill, Arthur V., *The Operations Management Encyclopedia* – This encyclopedia provides extensive explanations for over 500 operations management terms. The document includes many new service management, strategic management, manufacturing management, and e-business terms not found in other dictionaries or encyclopedia. This document is provided free of charge on the POMS website (poms.org) and is now referenced by many websites such as:

mantenimientomundial.com
sls.lib.il.us/reference/workshop/business/operations.html
mba.vanderbilt.edu/walker/resourceguides/ops.htm
ie.metu.edu.tr/~ie322/links.htm
busn.ucok.edu/dhartmann/teaching.htm
datastream.net/latinamerica/mm/files/encyclopedia.pdf
www2.auckland.ac.nz/lbr/bus/ExecProg/opsman601.htm
web.iese.edu/health/PadeLilly/Biblio.htm
algonquinc.on.ca/lrc/guides/supplychain.html, geocities.com/dvachira/Journal_articles.htm
iops.tamu.edu/faculty/w-stein/index364.htm
www.ipoms.or.id/member004.php
http://www.stratejiyonetim.net
64.226.112.21/pomswebsite/EducationResources/omencyclopedia.pdf
internal.dstm.com.ar/sites/mm/files/encyclopedia.pdf
www.aaue.dk/bm/pom/omencyclopedia.pdf

Service

Editorial activities

- Associate Editor, *Decision Sciences*, December 1987-1993.
- Editorial Review Board, *Journal of Operations Management*, 1988-1992.
- Feature Editor, Research Column, *Decision Line*, 1988-1990.
- Editorial Review Board, *Production and Inventory Management Journal* (The Journal of the American Production and Inventory Control Society), January 1989-2004.
- Area Editor, *Production and Operations Management* (The Journal of the Production and Operations Management Society), January 1990-present.
- Editor-in-Chief, *Journal of Operations Management*, summer 1992 to winter 1995 (with Professor Thomas R. Hoffmann, University of Minnesota). The *JOM* is widely regarded as the leading academic operations management journal.
- Consulting Editor, *Journal of Operations Management*, 1995-2002. This was an honorary position given to past editors of the *JOM*.
- Tutorial Editor, *Journal of Operations Management*, winter 1995-winter 1997.
- Editorial Review Board, *Technology and Operations Review*, 1994-2000.
- Editorial Advisory Board, *Journal of Operations Management*, 2002-present.
- Associate Editor, *Journal of Operations Management*, 2003-present.
- Editorial Review Board, *Decision Sciences* journal, 2004-present.

Reviewing activities

- *Ad hoc* reviewer for the *Academy of Management Journal*, the *Communications of the ACM*, the *European Journal of Operational Research*, *IIE Transactions*, and *Management Science*.
- Discussant, national meetings of the Academy of Management, Institute of Industrial Engineers, ORSA/TIMS, and the Decision Sciences Institute.
- Reviewer, several National Science Foundation (NSF) proposals, including the Science and Technology Agreement with the USSR.

- Judge, Decision Sciences Institute Stan Hardy Award (3 times), National Decision Sciences Institute Teaching Award (1 time), Twin Cities APICS Manuscript Award (1 time), POMS Teaching Award (3 times).

National offices held in professional organizations

- National Steering Committee and Founding Board Member, Operations Management Association, 1981.
- Committee member, Capacity Management Committee of the Curriculum and Certification Council (certification exam committee), American Production and Inventory Control Society (APICS), 1985-1989.
- Committee member, Requirements Planning Committee of the Curriculum and Certification Council (certification exam committee), American Production and Inventory Control Society (APICS), 1989-1990.
- Member, Development Committee for Excellence in the Decision Sciences, Decision Sciences Institute, April 1988 - May 1990.
- Board of Directors, Production and Operations Management Society, 1990-1992.
- Constitution and Bylaws Committee, Production and Operations Management Society, 1990-1992.
- Nominating Committee for National Officers, Production and Operations Management Society, 1991.
- Committee member, CIRM Customers and Products Committee, APICS Curriculum and Certification Council, American Production and Inventory Control Society (APICS), January 1993 - December 1995.
- Nominating Committee for National Officers, Decision Sciences Institute, 1994-1996.
- Vice President, Production Operations Management Society, April 2000-April 2003.
- Founding Board Member, Experience Management Institute, 2003.
- Member, Decision Sciences Institute Publications Committee, April 2003-March 2005.

National conference program chair/committee positions

- Program Co-chair, Institute of Industrial Engineers, Banking and Financial Services Division, 1980.
- Program Chair, Institute of Industrial Engineers, Banking and Financial Services Division, 1981.
- Program Co-chair, Operations Management Association National Conference, October 1986.
- Program Chair, Production/Operations Management Conference Track, Decision Sciences Institute National Conference, New Orleans, November 1989.
- Co-Chair (with Gene Woolsey), Joseph Orlicky Award, Production and Operations Management Society, Washington, D.C., 1990.
- National Program Committee Member, Production and Operations Management Society National Conference, New York, 1991.
- National Program Committee Member, Production and Operations Management Society, Orlando National Conference, 1992.
- Member, Organizing Committee, Symposium on Globalization of Operations Management, Georgetown University, May 1993.
- Advisory Board, Symposium on Emerging Paradigms in Globalizing Technology, Manufacturing, and Service Operations, Goldring Institute of International Business, A.B. Freeman School of Business, Tulane University, January, 1994.
- Co-chair, Contributed Papers, Production-Operations Management Society (POMS), Annual Meeting, Miami, Florida, 1997. (This position handled all of the papers for the conference.)

Conference track and session chair leadership positions

- Committee member, Materials Requirements Planning Implementation Conference sponsored by the University of Minnesota and APICS, September 1978.
- Chair, Quality Control Session, Midwest American Institute of Decision Sciences Conference, Cincinnati, May 1978.
- Chair, Applications of Scheduling Session, Joint National ORSA/TIMS Conference, Milwaukee, October 1979.
- Chair, "New Concepts in Production Planning and Control" panel sessions, National Decision Sciences Institute Conference, Toronto, November 1984.
- Committee member, Twin Cities APICS Just-In-Time Conference, March 1984.
- Chair, "Operations Management Centers Panel," Decision Sciences Institute National Conference, Honolulu, Hawaii, November 1986.

- Chair, “Manufacturing Planning and Control,” Decision Sciences Institute National Conference session, Boston, November 1987.
- Chair, “Manufacturing Flexibility and Strategy,” Decision Sciences Institute National Conference session, Las Vegas, November 1988.
- Chair, “Research Directions for Manufacturing Planning and Control Systems,” Decision Sciences Institute National Conference session, Las Vegas, November 1988.
- Chair, “Manufacturing Research Centers in Universities,” TIMS/ORSA Conference, New York, October 1989.
- Chair, “Lot Sizing and Setup Reduction,” National Decision Science Institute Meeting, San Diego, November 1990.
- Co-Chair (with Gene Woolsey), Joseph Orlicky Award, Production and Operations Management Society, New York, 1991.
- Chair, “Production Line Buffers,” National Decision Science Institute Meeting, Miami, November 1991.
- Moderator, Research Forum for Doctoral Students in Operations Management, National Decision Science Institute Meeting, Miami, November 1991.
- Track Chair, Strategic Management Track, Production and Operations Management Society National Conference, Orlando, 1992.
- Chair, “Kanban Production Systems,” National Decision Science Institute Meeting, San Francisco, November 1992.
- Session chair, AMA/INFORMS Frontiers in Services Conference, Vanderbilt University, September 2000.
- Program track chair, service operations management, POMS National Meeting, Orlando, 2001.
- Program track chair, Innovations in Teaching, POMS National Meeting, San Francisco, April 2002.

International teaching and service activities

- Member, Board of Advisors, International Association of Students in Economics and Management (AIESEC), University of Minnesota, 1978-1981.
- Invited delegate, NSF sponsored US-USSR Science and Technology Working Group on the Application of Computers to Management, Austin, Texas, March 1979.
- Reviewer, NSF (National Science Foundation) proposal for the Science and Technology Agreement with the USSR, 1982.
- Nominee, Fulbright Senior Lecturing Award, Soviet National Institute for Management, USSR, 1981. (This program was canceled by the State Department after the nomination.)
- Instructor, International Management Program, International Management Program, NDSU, summer 1986 and 1987.
- Host, Professor Vincent Giard (University of Lyon) and his family from September to December 1987.
- Representative for the William C. Norris Institute in negotiations with the Moscow Institute of Management, Moscow, USSR, to help create the Soviet-American Management Institute (SAMAN), July and August 1989.
- Member, Founding Committee and Board of Directors, Global Manufacturing Research Group, 1990. (This is a group of researchers working together on the study of worldwide manufacturing practices.)
- Host for Professor Alexander Ardichvili from the Institute of World Economy and International Relations (Moscow, USSR) to work as a visiting professor in the Carlson School of Management from February to December 1991. Dr. Ardichvili eventually joined the Carlson School staff as the Co-Director of the Center for Entrepreneurial Studies and is now a professor at the University of Illinois (Urbana).
- Participated in the Global Manufacturing Research Group meeting in Budapest, Hungary. Involved factory tours, case preparation, and research presentations.
- Instructor, Operations Management course in the executive program at Wits Business School (The University of the Witwatersrand), a racially integrated business school in Johannesburg, South Africa, summers 1991 and 1992. Web page wits.ac.za.
- Faculty mentor, CEMBA trip to Hungary and Austria, summer 1992.
- Member, Symposium Organizing Committee, Symposium on Globalization of Operations Management, Georgetown University, May 1993.
- Advisory Board, Symposium on Emerging Paradigms in Globalizing Technology, Manufacturing, and Service Operations, Goldring Institute of International Business, A.B. Freeman School of Business, Tulane University, January, 1994.
- Member, International Graduate School of Management Program Committee, (joint Carlson School/German MBA program), 1993-1994.

- Visiting Professor, International Institute for Management Development (IMD), Lausanne, Switzerland, August 1994 - July 1995. Webpage www.imd.ch. This is one of the top three business schools in Europe – probably the most expensive in the world.
- Host, Dr. Prabhu Gupta, Group Director, Organisational Learning & Transformation, Union Bank of Switzerland, October to December 1997. We co-taught the International Operations Management Course.
- Host, Professor Sum Chee-Chuong from the National University of Singapore, December 1997 – June 1998.
- Instructor, International Operations Management course in the Carlson School for five years.
- Distinguished visiting professor, National University of Singapore, August 1999.
- Member of the MBA faculty, IBR Institute of International Business Relations GmbH, Neustadt/Wstr., Germany. This is a business school designed to bring management education to Eastern Europe and the republics of the former Soviet Union largely by means of distance education and computer-based training. The faculty for this school comes from the London Business School, INSEAD, and other outstanding European business schools. The webpage is www.ibr-network.de/about2.htm.
- Host and mentor for a doctoral student from Denmark -- Mark Hansen, Center for Industrial Production, Aalborg University, Aalborg Denmark, December 2001-March 2002. Mr. Hansen is also the Director of Mass Customization for Lego.
- Host, mentor, and Ph.D. committee member for a doctoral student from Brazil -- Annibal José Roris Rodriguez Scavarda do Carmo, Department of Industrial Engineering, Pontifícia Universidade Católica do Rio de Janeiro, May 2002-August 2003.
- Speak and read both Russian and French quite poorly.

Carlson School of Management service activities

- Member, many school, department, and university committees, including the University of Minnesota Library Committee, Recruiting, Educational Use of Microcomputers in Operations Management, Educational Use of Microcomputers in Decision Sciences, International Education, Classroom Facilities Planning, and others.
- Developer, Placement Center decision support system (SCAT) and MBA Project Team decision support system (SPAT).
- Member, Board of Directors, Operations Management Center, University of Minnesota School of Management, 1983-1987.
- Director, Operations Management Center, 1985-1986. Added five new sponsors to the Center.
- Member, Board of Advisors, International Association of Students in Economics and Management (AIESEC), 1978-1981.
- OMS Department Representative, Carlson School of Management Curriculum Committee, September 1988-September 1991. Chair, September 1990-September 1991.
- Chair, Operations and Management Science Department Recruiting Committee, 1990-1991.
- Panel Chair, "International Entrepreneurship in Eastern Europe and the USSR," Carlson School of Management Business Day Program, April 1991.
- Co-developer, "Entrepreneurship Project for the Carlson Executive MBA" (with Professors Hansen and Nantell).
- Member, search committee for the Donaldson Chair in Operations Management, 1991-1994. Co-chair, January 1993-1994.
- Member, MBA Program Task Force, 1991-1993.
- Member, MBA Functional Core Task Force, 1992-1994.
- Member, International Graduate School of Management Program Committee, 1993-1994.
- Member, MBA Oversight Committee, 1993-1994.
- Member, IMD World Competitiveness Report Review Committee, 1994-1995.
- Member, International Programs Development, small grant review committee, 1995.
- Chair, Operations and Management Science Department Recruiting Committee, 1995-1996.
- Member, Faculty Appointments and Promotion Committee (FAPC), OMS Department Representative, 1995-1998.
- Member, Minnesota Executive Program Oversight Committee, 1995-1997.
- Chair, Carlson School of Management Curriculum Committee, 1996.
- Chair, Review Committee for the Associate Dean, Carlson School of Management, 1996.
- Member, Dean's Advisory Committee (DAC), Carlson School of Management, fall 1996-Spring 1998.
- OMS Department MBA coordinator, 1996-97. (Reconstituted Operations Management Club.)
- Member, MBA Oversight Committee, 1996-1998.

- Developer, Carlson Integrated Management Simulation (CIMS), 1997-2000. This is a computer game played by all day MBAs in the Carlson School during their first semester.
- Chair, Operations and Management Science Department Recruiting Committee, 1997-1998.
- Member, Operations and Management Science Department Recruiting Committee, 1998-1999.
- Director, OMS Department Advisory Board, 1998-2001.
- Chair, Operations and Management Science Department Recruiting Committee, 2000-2001.
- Member, Carlson School MBA Program Committee (formerly the Concentrations Committee), 2002-present.
- Presented to the Carlson School Board of Overseers, April 12, 2002.
- Member, Finance Portfolio Committee, 2003-present.

Carlson Consulting Enterprise

- Director, Carlson Consulting Enterprise (formerly the Technology Solutions Enterprise), Carlson School of Management, January 2002-present. This major new program provides an experiential learning environment for day MBA students and builds the school's brand in the technology-consulting arena.
- In the 2002-2003 school year, the program employed generated revenues of over \$500,000.
- Clients include 3M, Cargill, Carlson Companies, Guidant, Medtronic, Donaldson, Ecolab, Marvin Windows, Northwest Airlines, Rimage, and other firms.
- The Executive Advisory Board includes senior executives from Best Buy, Cap Gemini Ernst & Young, Cargill, Carlson Companies, Deloitte, GE Fleet Services, IBM Global Services, Marvin Windows, Northwest Airlines, PricewaterhouseCoopers, PTRM, Fed Ex, Seagate, Walt Disney, and other leading firms.

Interviews/quotes and other media activity

- WCCO interview regarding the Executive MBA trip to Hungary and Austria, 1991.
- KUOM Radio interview, manufacturing in the Soviet Union, December 1991.
- *Skyway News* interview, manufacturing in the Soviet Union, December 1991.
- *Minnesota Management Review* interview, "Splicing U.S. and Soviet Manufacturing" (with Alexander Ardichvili), winter 1992.
- In the summer of 1994, CNN came to the Carlson School and highlighted a number of Carlson School faculty teaching the functional Silo Game case. Professor Hill wrote the case and was one of the professors shown in the CNN program. The theme of 20-minute CNN segment was how B-schools were striving to be less "silo" oriented and more integrated in their approach to business education.
- *St. Paul Pioneer Press* interview and quote in "Through mycereal.com, General Mills can make cereal to your specifications--and do a little bit of marketing, too." January 20, 2001.
- Quoted in *CityBusiness* article, "Falling hardware prices spur spending," January 11, 2002.
- Quoted in an article about ERP systems in *TechLink Magazine*, February 2002.
- Interviewed by Rita Maloney, KCCO-AM "Talking Business" (WCCO), June 13, 2002 regarding the new Carlson Consulting Enterprise.
- Featured with a picture on the front page of the Minnesota Daily (U of M student newspaper) on November 12, 2002. This story can be found on the web at mndaily.com/new_site/article.php?id=4057&year=2002.
- Interviewed again by Rita Maloney, KCCO-AM "Talkin' Business" (WCCO), November 14, 2002 regarding the new Carlson Consulting Enterprise program
- The Carlson Consulting Enterprise was featured in an article on the front page of the business section of the Star Tribune on November 22, 2002. The article was entitled "Learning by doing -- The Carlson School's Consulting Enterprise gives students an edge in the job market" and is available through the www.startribune.com paid archives.
- Interviewed by Rondah Kinchlow of Kare11 (Channel 11, Twin Cities NBC affiliate) for a news piece on e-Bay pickup stores. This was aired twice on Sunday, October 24, 2004.

Consulting experience

Provided operations management consulting, developed decision support software, and/or given speeches for many manufacturing, distribution, banking, service, and government organizations. These include: 3M Abrasive Systems Division, 3M Automotive Aftermarket Division, 3M Hardgoods and Equipment Support Division, 3M Tape

Manufacturing Division, AbleNet, Bank-One (Ohio), Cargill, Carlson Hotels, Carlson Leisure Group, Chart Industries (Minnesota Valley Engineering), CoAmerica, Comserv, Cummins Engine (Power Generation Group), Donaldson, E.A. Sween Company, Ecolab, Experience Engineering, FilmTec, First Atlanta, First Bank Systems, First Interstate, First of America (Detroit), First Maryland, Fisher Dynamics (Detroit), Gausman & Moore, GML, Grammer AG (Amberg, Germany), Guidant/CRM (formerly Cardiac Pacemaker Inc.), Honeywell Home and Building Controls, Honeywell Underseas Division, Honeywell Lucifer (Geneva, Switzerland), Hubbard Milling Company, Imation, Indiana National Bank, Institute for Management Accounting (IMA), KNPBT (Belgium), Land-O'Lakes, Lifetouch, Management Science America (MSA, North Carolina), Marigold Foods, MarketWatch, Maryland National Bank, Marvin Windows & Doors (Warroad, Minnesota), Medintell, Medtronic CRM, Minneapolis Parks Board, The Musicland Group (Sam Goody), North Carolina National Bank, Northwest Airlines Cargo, Old Kent (Michigan), Park Nicollet Medical Center, Pillsbury-Green Giant, Radisson Hospitality Worldwide, SeaFirst (Seattle), SME (Society for Manufacturing Engineers), SPX (Owatonna Tool Company), Target Corporation, Toro, Transoma/Data Sciences, Inc., United Defense (formerly FMC Northern Ordnance Division), University of Minnesota, Urban Sciences Applications, Inc. (Detroit), Watkins Products, William C. Norris Institute, and Winona Memorial Hospital (Indianapolis).

Community service

- Faculty Advisor, Truth in Business, Carlson School of Management club, 2003-present.
- Advisory Board, SF Foundation, Edina Minnesota, 1999-2001 (www.sf.org).
- Board Member, The MacLaurin Institute, University of Minnesota, 1999-2001 (www.maclaurin.org).
- Board Member, SWCHS, Chaska, Minnesota, 2000-2002.
- Long Range Planning Committee, SWCHS, 2003-present.
- Strategic Planning Committee, SWCHS, 2005-present.