

Curriculum Vitae

Steven Merrill Frank

Surveying Engineering program
Dept. of Engineering Technology &
Surveying Engineering
Box 30001, MSC 3566
Las Cruces, NM 88003

Phone: (575) 646-8171
Phone: (575) 646-2236
Fax: (575) 646-6701
Email: sfrank@nmsu.edu

Education:

Ph.D. Surveying Engineering, University of Maine (May 1994)
M.Sc. Civil Engineering (Survey Emphasis), California State University, Fresno (May 1991)
B.Sc. Surveying Engineering, California State University, Fresno (December 1989)

Professional licenses:

California Licensed Land Surveyor No. 4800 (received 1980).
New Mexico Professional Surveyor No. 13052 (received 1996).

Professional awards:

New Mexico "Surveyor of the Year" 2007

Work experience:

Promoted to Professor, August 2009, in the Surveying Engineering program.

August 2006 – present: Program Coordinator for the Surveying Engineering program within the Department of Engineering Technology and Surveying Engineering.

July 2002 – June 2006: Department Head of the Department of Surveying Engineering at New Mexico State University. This is an 80% teaching position and 20% administrative position.

July 1999 – June 2002: Associate Professor in the Department of Surveying Engineering at New Mexico State University teaching courses in Plane Surveying, USPLSS, Boundary Surveying, Land Subdivision, Ethics, and Land Information Systems

August 1994 – June 1999: Assistant Professor in the Department of Surveying Engineering at New Mexico State University teaching courses in Plane Surveying, Photogrammetry, USPLSS, Boundary Surveying, Land Subdivision, Ethics, and Land Information Systems.

August 1991 - May 1992: Employed part-time as a Teaching Assistant for the Surveying Engineering Department at the University of Maine. Taught surveying field labs.

January 1990 - May 1991: Employed part-time as a Teaching Assistant for the Surveying Engineering Department at California State University, Fresno. Taught photogrammetry lab and Introductory Computer Mapping (2 semesters each).

May 1989 - August 1989: Employed by Erio Technologies, Roseville, California. Developed file management software for the MAP/PAL/ALBANY aerotriangulation software. Performed aerotriangulation computations.

May 1988 - August 1988: Employed by Caltrans as a Student Assistant. Worked in Caltrans Photogrammetry Section, Sacramento, California. Performed aerotriangulation computations. Developed PC-orientated aerotriangulation system and file management software.

September 1986 - May 1987: Full-time student at American River Junior College in Sacramento, California.

July 1985 - August 1986: Employed as a plumbing estimator by Aable Plumbing, Rancho Cordova, California.

March 1982 - June 1985: Employed by Al Hoty Establishment, Alkhobar, Saudi Arabia. Seconded to the Arabian-American Oil Company (ARAMCO) as a Supervising Surveyor, directing 2 - 10 survey field crews performing mapping and construction surveys.

April 1980 - February 1982: Self-employed Licensed Land Surveyor performing construction and boundary surveys in Fair Oaks, California.

September 1979 - March 1980: Employed as Party Chief for John Seace, Licensed Land Surveyor, in Sacramento, California, performing construction and boundary surveys.

July 1978 - August 1979: Employed as Party Chief for Payne Surveying, Redding, California, performing boundary surveys. Projects included U. S. Forest Service contract surveys.

September 1970 - June 1978: Employed by Yolo County Department of Public Works, Woodland, California. Promoted from rodman to instrument man to party chief.

Research experience:

September 2003 – May 2007: co-PI Assistance Agreement for Training Student Land Surveyors, Bureau of Land Management, Cadastral Surveys Division.

May 1998 - September 1998: Principal Investigator Toole Army Depot Historical Records Research project. Directed and coordinated historical record research for the Toole Army Depot in Toole, Utah.

February 1997 - February 1998: Principal Investigator in the development of a continuing education course in Surveying Ethics for the National Council of Examiners for Engineers and Surveyors. The research includes developing a manual on ethics study, a casebook of surveying

ethical situations, and a pass/fail exam. Outcomes of this research include a distance education course and seminars on ethics for surveyors. This research led to the establishment of the Center for Survey Ethics Studies at NMSU.

January 1994 - June 1994: Post-doctoral Research Assistant, department of Surveying, University of Maine. Developed a mail survey questionnaire to gather information on user needs for digital geographic data for use by the Federal Geographic Data Committee to develop "framework geospatial data" for the National Information Infrastructure.

May 1992 - July 1994: Research Assistant, Department of Surveying, University of Maine. Research and publication for GIS-related doctoral dissertation.

April 1990 - May 1991: Employed part-time as a Student Assistant for the California Department of Transportation (Caltrans). Working as a software developer for total station data collector reduction package.

April 1989, January 1989, August 1988, January 1988: Employed by CSU Fresno as a research assistant and trainer for GPS survey research projects with the Los Angeles Power and Water Agency, the City of Fresno, Caltrans and the City of Visalia. Planned, collected and processed data.

Consulting experience:

April 2008: I am involved as an expert witness for an ongoing boundary dispute involving the location of an accident. The accident occurred close to the property boundary, hence the interest in the location of the boundary.

June 2006: Expert witness in a boundary dispute involving two private parking companies at the Albuquerque Airport. I prepared an exhibit showing the disputed area which was produced in court as a part of the trial.

May 1997 – May 1998: Expert witness for Sandia Pueblo, New Mexico, assisting in establishing their claim to lands resulting from poor surveys.

1996 - 2000: Pro bono consultant working with New Mexico attorney Nancy Simmons on *colonias* (illegal subdivisions) in Dona Ana County, New Mexico, at El Milagro (Hatch), Vado, and Rio Grande Estates (Fairacres).

July 1997 - December 1997: Expert witness for Duran party in *Diaz v. Duran* involving the location of property lines in Cox Subdivision No. 3, Las Cruces, New Mexico.

Refereed publications:

Frank, Steven (2007) "ABET Accreditation Criteria for Surveying/Geomatics Programs in the US," Scientia Est Potentia: Knowledge is Power, Czech Technical University, Prague, Czech Republic, pp. 37-46.

Frank, Steven (2002) "FIG Academic Membership", Surveying and Land Information Science, Vol. 62, No. 2, June 2002, pp. 91-93

Frank, Steven and Robert Prescott (2002) "NAFTA and Surveying", Surveying and Land Information Science, Vol. 62, No. 1, March 2002, pp. 33-36.

Frank, Steven (2001) "Using Matrices to Document Abet Self-study Reports", Surveying and Land Information Systems, Vol. 61, No. 4, December 2001, pp. 241-244.

Thurrow, Glen and Steven Frank. Coming to Terms with the Model Law: The Search for the Definition of Surveying in New Mexico. Surveying and LIS, Vol. 61, No. 1, March 2001.

Frank, Steven (2000) "Teaching Surveying Ethics by Distance", Surveying and LIS, Vol 60, No. 1, March 2000, pp. 19-22

Frank, Steven (2000) "BLM and NMSU – A Cooperation in Teaching", Surveying and LIS, Vol 60, No. 1, March 2000, pp. 51-54

Frank, Steven, and Knud Hermansen (1998). Case Studies: Ethical Practices for Surveyors. Las Cruces: Department of Surveying, NMSU. (Sponsored by the National Council of Examiners for Engineers and Surveyors).

Frank, Steven, Knud Hermansen, and Danny Scoccia. Professionalism and Ethics in Surveying. Las Cruces, NM: Department of Surveying, NMSU. (Sponsored by the National Council of Examiners for Engineers and Surveyors).

Frank, Steven (1997). "Cataloging Digital Geographic Data in the Information Infrastructure," in Encyclopedia of Library and Information Science, vol. 59, supp. 22, New York: Marcel Dekker, pp. 20-53.

Frank, Steven M., Michael F. Goodchild, Harlan J. Onsrud, and Jeffrey K. Pinto (1996). "User Requirements for Framework Geospatial Data." Journal of Urban and Regional Information Systems Association, Vol. 8, no. 2, pp. 38-50.

Rushton, Gerard, and Steven Frank (1995). "Sharing Spatial Data Among Social Scientists." in Sharing Geographic Information, New Brunswick, NJ: Rutgers University, Center for Urban Policy Research.

Frank, Steven (1994). "The National Spatial Data Infrastructure: Designing Navigational Strategies." Journal of Urban and Regional Information Systems Association, Vol. 6, No. 1, pp. 37-55.

Frank, Steven (1994). "Cataloging Digital Geographic Data in the Information Infrastructure: A Literature and Technology Review." Information Processing & Management, Vol. 30, No. 5, pp. 587-606.

Non-refereed publications:

Groenendiyk, Liza, Bela Markus, Steven Frank, Reifried Mansburger, Adrijana Car, James Petch, Nicolas Frunzi and Pei Linlin (2010) "Enhancing Surveying Education through e-Learning, FIG Publication No. 46, January 2010.

Frank, Steven (2005), "Guest Editorial: When Surveyors Go Bad," American Surveyor, Vol. 2, No. 4, June 2005.

Glen Thurow and Steven Frank (2001), "Coming to Terms with the Model Law: The Search for a Definition of Surveying in New Mexico", Surveying and Land Information Systems, Vol. 61, No. 1.

Frank, Steven (1999). "Education and ACSM." The ACSM Bulletin, No. 179, May/June 1999, pp. 27.

Comer, Christy S., and Steven Frank.(1998). Tooele Army Depot Installation Historical Records Report: Historic Context and Property Types. Las Cruces, NM:Human Research Systems, Inc. - New Mexico State University.

Frank, Steven (1998). "New Surveying Licensing Model Being Proposed." Benchmarks, v. 12, no.3, pp. 9.

Frank, Steven (1997). "Professionalism in Surveying." The Arizona Surveyor, March, pp. 18.

Frank, Steven M., Michael F. Goodchild, Harlan J. Onsrud, and Jeffrey K. Pinto (1995). "User Requirements for Framework GIS Data." URISA Annual Conference Proceedings, San Antonio, TX, vol.1, pp. 637-651

Frank, Steven (1995). A National Spatial Data Infrastructure as a Marketplace for Geographic Data. GIS in Business Proceedings, Gothenburg, Sweden.

Recent Presentations and Activities

"Proposed Commission 2 Work Plan 2011-2014" presented at the Commission 2 Workshop, London, England, August 26-28, 2010.

"Proposed Commission 2 Work Plan 2011-2014" presented at the FIG Congress, Sydney, Australia, April 9 – 16, 2010.

"Surveying Ethics" a two-hour seminar presented twice at the New Mexico Professional Surveyors Annual Conference, Albuquerque, NM, February 2010.

"Proposed Commission 2 Work Plan 2011-2014" presented at the FIG Regional Conference, Hanoi, Vietnam, October 17 – 21, 2009.

“Assessment of Learning Outcomes” presented at FIG Working Week, Eilat, Israel, May 4 – 8 2009.

“Surveying Student Recruitment: a U.S. Perspective” presented at the Commission 2 Workshop, Vienna, Austria, February 25 – 28, 2009.

“Fundamental Surveying Knowledge” presented at the FIG Annual Meeting, Stockholm, Sweden, June 2008.

“Learning Outcomes Assessment – Setting and Measuring Goals” to be presented at the FIG Annual Meeting, Stockholm, Sweden, June 2008.

Surveying Ethics Seminar, presented at the New Mexico Professional Surveyors Annual Meeting, Albuquerque, NM, March 2008.

Session Chair, “Spatial Information Management Toward Environmental Management of Mega Cities,” International Federation of Surveyors meeting, Valencia, Spain, February 2008.

Legal Descriptions Seminar presented at the New Mexico Professional Surveyors meeting, Ruidoso, NM, August 2007.

Surveying Ethics Seminar presented at the New Mexico Professional Surveyors meeting, Ruidoso, NM, August 2007.

“ABET Accreditation Criteria for Surveying/Geomatics Programs in the US” presented at Scientia Est Potentia: Knowledge is Power, Czech Technical University, Prague, Czech Republic, June 2007.

“Experiences Teaching Ethics” presented at the FIG Annual Meeting in Hong Kong, PRC, May 2007.

“Design of a Surveying Curriculum” presented at the FIG Annual Meeting in Hong Kong, PRC, May 2007.

Surveying Ethics Seminar, presented at the New Mexico Professional Surveyors meeting, Ruidoso, NM, August 2007.

Surveying Ethics Seminar, presented twice at Oklahoma City, Oklahoma, for the Oklahoma Society of Land Surveyors at the Annual Meeting, April 2007.

Surveying Ethics Seminar, presented at Oklahoma City, Oklahoma, for the Oklahoma Society of Land Surveyors, September, 2006.

“The Sandia Pueblo East Boundary,” presented at the CSU Fresno 40th Annual Geomatics Conference, January 2006.

Surveying Ethics seminar presented at ACSM Conference, Phoenix, AZ, April 2004.

Surveying Ethics seminar, presented at the joint New Mexico/Colorado Four Corners Workshop, Durango, Co, June 2002.

“Core Curriculum Content of US Surveying/Geomatics Programs” presented at joint ACSM/ASPRS/FIG Annual Meeting, Washington, DC, March 2002.

Guest Editor, Surveying and Land Information Science, Vol. 62, No. 1, March 2002.

“The Sandia Pueblo East Boundary,” presented at the 2000 ACSM Fall Conference, Providence, RI, September 2000.

Guest Co-editor, Surveying and Land Information Systems, Vol. 60, No. 1, March 2000,

Surveying Ethics seminar (4 hours, presented twice at the 2000 ACSM Conference, Little Rock, Arkansas.

A Cooperative Education Strategy: NMSU and BLM. North American Surveying and Mapping Teachers Conference, Purdue University, West Lafayette, IN, July 12, 1999.

Teaching Survey Ethics by Distance. North American Surveying and Mapping Teachers Conference, Purdue University, West Lafayette, IN, July 12, 1999.

Surveying Ethics. CSU Fresno Student’s Surveying Conference, Fresno, CA, January 23, 1999.

Teaching Survey Ethics by Distance. Best Practices Conference, College of Engineering, New Mexico State University, January 14, 1999.

Sandia Pueblo East Boundary. New Mexico Professional Surveyors Conference, Albuquerque, NM, March 22, 1999.

Editorial Work:

2007 – present: Editor of Surveying and Land Information Science

1997 – 2007: Education Editor/ Associate Editor for Surveying and Land Information Systems (SaLIS)

March 2002: Special issue editor, Surveying and Land Information Systems

2001 – present: member of Editorial Board and manuscript reviewer for Survey Review

March 2001: Special issue editor, Surveying and Land Information Systems

December 1999: Special issue co-editor, Surveying and Land Information Systems

Professional service:

Member of the following professional organizations:

American Society for Engineering Education (ASEE)
American Congress on Surveying and Mapping (ACSM)
American Association for Geodetic Surveyors (AAGS)
Geographic and Land Information Society (GLIS)
American Society for Photogrammetry and Remote Sensing (ASPRS)
American Society of Engineering Educators (ASEE)
Arizona Professional Land Surveyors (APLS)
California Land Surveyors Association (CLSA)
New Mexico Professional Surveyors (NMPS)
Texas Society of Professional Surveyors (TSPS)

Professional society offices held:

2009 – present: ABET ASAC Commission member
2002: Past-president of New Mexico Professional Surveyors
2001: President of NMPS
2000: President-elect of NMPS
1999: Vice -president of NMPS
2002-2005: New Mexico Governor to NSPS
1999 – 2001: New Mexico Governor to NSPS
2004: Past-president of American Association for Geodetic Surveyors
2003: President of AAGS
2002: President-elect of AAGS
2001: Vice-president of AAGS
1997 - 2000: Board member of AAGS

Professional society committees served:

2008 – 2010: Chair-elect FIG Commission 2
2002-present: US delegate to Commission 2: Professional Education of FIG
2000-2002: Reporter-editor attached to US delegation to FIG
1998- present: NMPS Surveyor of the Year Committee
1996 – present: Vice-chair NSPS Education Committee
1996 - 2001: Vice-chair ACSM Education Committee
1997 - 2002: member ACSM Communications Committee
1997 - present: member ACSM Curriculum, Accreditation and Registration (CAR) Committee

Professional related service:

2000 – 2009: ABET evaluator for Surveying programs at 7 universities
2007 – 2010: President of the New Mexico Professional Surveyors Educational Foundation.

1997 – 2005: Vice-president of the New Mexico Professional Surveyors Educational Foundation.

1997 – 2001: Board member of the New Mexico Engineering Foundation.

Academic service:

NMSU offices and committees served:

1998 – 2004: College of Engineering Senator in Faculty Senate

2000 – 2001: Chair, University Affairs Committee

2001 – 2002: Chair, Scholastic Affairs Committee

2002 – 2003: Chair, Faculty Affairs Committee

2003 – 2004: Chair, Long Range Planning Committee

1999 – 2004: Faculty Senate representative to ASNMSU Senate

2002 – 2005: Surveying Engineering Dept. representative to the Engineering Research Committee

Fall, 2000 – 2006: Surveying Engineering Dept. representative to COE Academic Advisory Council

Spring, 1999– 2006: Dept. of Surveying representative to College of Engineering ABET committee (now the COE Outcomes Assessment Committee)

Spring, 1999: Committee member for College of Engineering Dean Search Committee

Fall, 1999: Committee member for College of Engineering Associate Dean Search Committee

Fall, 1999: Committee member for College of Engineering Associate Dean for Research Search Committee

Community service:

2005 – present: Non-funded research recovering US Public Survey System survey monuments at and around the site of the New Mexico Spaceport, near Socorro, New Mexico. This involves having students search, find and survey existing monuments for educational and research purposes.

1996 – 2000: Worked with Albuquerque attorney Nancy Simmons and the Southern New Mexico Legal Services agency to help resolve surveying issues with illegal subdivisions (colonias) in Hatch, Vado, and Fairacres, NM.

1999 – 2008: Worked with the Mesilla Valley Maze organization to allow surveying student design and survey of the Mesilla Valley Maze. This work has resulted in the Mesilla Valley Maze Scholarship for Surveying Engineering majors.