

# Steven Douglas Fleming

3616 Trousdale Pkwy, AHF B55, Los Angeles, CA 90089-0374, 213-740-7144, s.fleming@usc.edu

**PROFESSOR of the PRACTICE of SPATIAL SCIENCES**      **COLONEL (Retired)**  
Spatial Sciences Institute, Dornsife College of Letters, Arts and Sciences      United States Army  
University of Southern California, Los Angeles, CA

*Passion for leveraging leadership, management and innovation experience while valuing character, diversity and collaboration towards developing America's youth for the uncertain world of the 21<sup>st</sup> Century*

---

## Executive Summary (August 2016)

---

**EDUCATION:** 1 x PhD; 2 x MAs; 1 x BS; 4 x Military Colleges / Courses. ([Page 2](#))

**LEADERSHIP EXPERIENCE:** Commander; Team Leader; Senior Advisor; Group Commander; Academy Professor; Team Chief; Chair – Academy Research Council; Platoon Leader; Senior Team Advisor; Head Officer Representative; Center Director. ([Page 3](#))

**GOVERNANCE EXPERIENCE:** Deputy Department Head; Senior Staff Officer; Operations Officer, Assistant Operations Officer, and Liaison Officer; Budget and Supply Officer; Personnel Officer and Adjutant; Senior Advisory Board Member; Admissions Committee member; Academy Professor Search Committee member; College Steering Committee member; Academy Research Council (ARC) member; Faculty Council member; Math Science Goal Team member; Leadership mentor; Company Academic Counselor; Military Affairs Committee member. ([Page 6](#))

**MANAGEMENT EXPERIENCE:** Senior Staff Officer; Aide-de-Camp; Senior Faculty Mentor; Senior Academic Counselor; Senior Club Mentor. ([Page 8](#))

**ACADEMIC COURSE DEVELOPMENT AND TEACHING EXPERIENCE:** 17 x Course Developer/Director and/or Instructor; 5 x Lecturer. ([Page 9](#))

**RESEARCH LEADERSHIP & EDITORIAL PARTICIPATION EXPERIENCE:** Center Director; Advisor [Geolocation Course Development]; Center Associate Member x 2; Conference Co-Chair; Guest Editor; Academic Advisory Board member x 2; Editorial Review Board member x 2; Senior Investigator; Co-Primary Investigator (PI). ([Page 10](#))

**PUBLICATIONS, CONFERENCE PRESENTATIONS, POSTER SESSIONS, & SPEECHES:** 5 x Books/Book Chapters/Guides/Tutorials; 5 x Refereed/Invited Journals; 15 x Department of Defense (DoD) Technical Reports; 4 x Study Guides; 7 x Conference Proceedings; 8 x Other Publications; 60+ x Presentations, Poster Sessions and/or Speeches. ([Page 11](#))

**FUNDING, SCHOLARSHIPS / ACADEMIC AND MILITARY HONORS:** Funded grants for research & education exceeding \$1 million; Induction into Phi Kappa Phi and Gamma Theta Upsilon; 4 x Fully-funded degree programs; Omar Bradley Award for Leadership; 19 x Military Awards (medals). ([Page 20](#))

**SCIENTIFIC AND PROFESSIONAL SOCIETIES OF WHICH A MEMBER & OTHER VOLUNTEERISM:** 11 x Society Memberships. ([Page 20](#))

**SECURITY CLEARANCE:** Top Secret/Sensitive Compartmented Information (TS/SCI). ([Page 21](#))



# Steven Douglas Fleming

3616 Trousdale Pkwy, AHF B55, Los Angeles, CA 90089-0374, 213-740-7144, s.fleming@usc.edu

**PROFESSOR of the PRACTICE of SPATIAL SCIENCES**

Spatial Sciences Institute (SSI)  
Dornsife College of Letters, Arts and Sciences  
University of Southern California, Los Angeles, CA

**COLONEL (Retired)**

United States Army

*Passion for leveraging leadership, management and innovation experience while valuing character, diversity and collaboration towards developing America's youth for the uncertain world of the 21<sup>st</sup> Century*

---

## **DEGREES/EDUCATION WITH FIELDS, DATES, AND INSTITUTIONS**

Ph.D., Geography

Degree awarded: 2004

University of Georgia

Athens, GA 30606

Dissertation Title: Geospatial Information for Joint Military Operations in the Littoral Zone

Advisor: Dr. Roy Welch

M.A., National Security and Strategic Studies

Degree awarded: 1999

Naval War College

Newport, RI 02841

M.A., Geography *Inducted into Phi Kappa Phi*

Degree awarded: 1995

University of Georgia

Athens, GA 30606

B.S., Computer Science (concentration)

Degree awarded: 1985

United States Military Academy

West Point, NY 10996

Naval Command and Staff College, 1999

Newport, RI 02841

Army Command and General Staff College, 1994

Fort Leavenworth, KS 66027

Army Officer Advanced Course, 1989 *Awarded Omar Bradley Award for Leadership*

Fort Bliss, TX 79918

Army Officer Basic Course, 1985

Fort Bliss, TX 79918



## **LEADERSHIP EXPERIENCE**

**Commander**, Air Defense Battery, 25<sup>th</sup> Infantry Division, Schofield Barracks, HI, 1992-1993. Charged to lead a unit to "be able to fight, win and return from any conflict in defense of our nation and her allies."

- Responsible for the health and welfare of 119 soldiers.
- Responsible and accountable for over \$15 million worth of equipment.
- Required to annually budget over \$600K in support of all unit missions.
- Required to establish the administrative, logistical, and security disciplines necessary to sustain a unit to standard -- in combat and in garrison.

*Awarded Meritorious Service Medal*

*Awarded Honorable Order of Saint Barbara Medal*

**Team Leader, Senior Advisor and Senior Staff Officer**, Combined Security Transition Command – Afghanistan, and National Military Academy - Afghanistan, Kabul, Afghanistan, 2005 and 2008. Charged to develop, build and grow a new college (military academy) in a combat zone.

- Responsible for the health, welfare, guidance and performance of 25 servicemen and women. Major specific tasks assigned to the team included:
- Advisement of college President, Provost and staff/faculty on all developmental and operational requirements for the college.
- Planning and management of renovation and new construction of all facilities.
- Evaluation, hiring, professional development and assessment of all college staff and faculty (including adjunct faculty).
- Development of all departments, academic programs, courses, and assessment processes.
- Accession, integration and follow-on development of all students (cadets).
- Coordination and integration of accreditation and other upper-level, collaborative college activities with the Ministry of Defense, the Ministry of Higher Education, Kabul University and other educational institutions.
- Integration of women into the college and into the Afghan National Army (ANA).
- Management of an operating budget in excess of \$20 million in support of the specified nation building tasks and effort.
- Development and implementation of transition/commissioning plan for all graduates.
- Establishment of all administrative, logistical, and security measures required to sustain the US/allied team to standard in a combat zone.

*Awarded Joint Service Achievement Medal*

*Awarded Afghanistan Campaign Medal (x2)*

*Awarded NATO Service Medal*

*Awarded Joint Meritorious Unit Award*



***Group Commander, Training Support Task Force***, III Corps Support Mission, Fort Knox, KY, 2000. Charged to lead a unit in providing mounted maneuver training support for West Point and ROTC cadets.

- Responsible for the health, welfare, guidance and performance of 500 service men and women. Major specific tasks assigned to the team included:
- Prepare for mission through pre-deployment training and administrative pre-deployment activities.
- Deploy all equipment and servicemen and women to Fort Knox from three separate locations (Texas, Kansas and Colorado).
- Safely prepare for and conduct training for 2000 cadets and soldiers.
- Manage a training/operating budget in excess of \$750K.
- Manage all administrative functions of deployment, including major tasks of lodging, feeding, and personnel administration.

***Awarded Meritorious Service Medal***

***Academy Professor***, Department of Geography and Environmental Engineering, West Point, NY, 2004-2005/2006-2008/2009-2015. As a soldier-scholar, charged to lead, govern and manage institutional goals in support of developing future Army officers.

- Perform permanent academic faculty duties focused on mentoring junior faculty and developing and implementing the Geospatial Information Science program (GISc).
- Serve as Program Director when directed (in an acting capacity) of the Geospatial Information Science Program.
- Provide administrative, logistical and staff assistance to the department.
- Serve as the senior cadet academic program coordinator and counselor.
- Evaluate performance of junior faculty and staff personnel.
- Assist in hiring of departmental/program faculty and staff.

***Awarded Army Superior Unit Award (for being rated “Best College in America” in 2009)***

***Chief, Accreditation Team***, GEOINT (Geospatial Intelligence) Certification Program, West Point, NY, 2011. Charged with conducting a detailed program self study to support the application for and accreditation of the GEOINT Program, Geospatial Information Science Program, Department of Geography and Environmental Engineering, West Point, NY.

- Responsible for developing, coordinating and writing a detailed self study.
- Responsible for coordinating a site visit by the United States Geospatial Intelligence Foundation (USGIF) evaluation team and the USMA staff.
- Responsible for integrating accreditation certification into the USMA GISc Program.

***Program Awarded GEOINT Certification (“no program deficiencies” noted)***

**Chief, Designation Team**, Center for Academic Excellence (CAE) in Geospatial Sciences (GS) Designation Program, West Point, NY, 2015. Charged with conducting a detailed program self study to support the application for and designation of the GEOINT Program, Geospatial Information Science Program, Department of Geography and Environmental Engineering, West Point, NY.

- Responsible for developing, coordinating and writing a detailed self study.
- Responsible for coordinating with and delivering appropriate materials to the United States National Geospatial-Intelligence Agency (NGA) and United States Geologic Survey (USGS).

*Program Awarded the designation by the NGA/USGS as a CAE in GS  
("no program deficiencies" noted)*

**Platoon Leader**, Air Defense Platoon, Fort Bliss, TX, 1986-1988. Charged to lead a unit to "be able to fight, win and return from any conflict in defense of our nation and her allies."

- Responsible for the health and welfare of 40 soldiers.
- Responsible and accountable for over \$4 million worth of equipment.
- Required to establish the administrative, logistical, and security disciplines necessary to sustain a platoon to standard.

*Awarded Army Achievement Medal (x2)*

**Senior Team Leader**, Professional Military Ethic Education, USMA, 2004-2010. Charged to assist in the development of moral and ethical foundations of 125 cadets.

- Responsible for insuring effective preparation and delivery of course material to standard for eight officers/faculty members of honor, "respect for others" and ethics classes.

**Head Officer Representative**, Army Women's Tennis Team, Directorate of Intercollegiate Athletics, USMA, 2005-2014. Charged to assist head women's tennis coach in total officer development of cadets (players and managers) on the women's tennis team.

- Responsible for managing 10 officers/staff and their officer representative duties.
- Coordinate administrative support of women's tennis team.
- Travel with team during away matches.

**Director**, Summer Leaders' Experience (SLE), Department of Geography and Environmental Engineering, USMA, 2005-2014. Charged to manage departmental planning and education support of summertime, high school student seminar sessions at West Point.

- Coordinate with USMA admissions office and other USMA agencies for administrative support.
- Design and teach geospatial information science lessons during SLE.

## **GOVERNANCE EXPERIENCE**

***Deputy Department Head***, Department of Geography and Environmental Engineering, West Point, NY, 2012-2015. As a soldier-scholar, serve unit as second-in-charge of the Department of Geography and Environmental Engineering, assisting in all matters regarding governance of the same.

- Perform permanent academic faculty duties focused on mentoring junior faculty and developing and implementing the department's academic programs.
- Serve as Department Head when directed (in an acting capacity).
- Coordinate and integrate operational, administrative, logistical and staff assistance to the department.
- Hire and evaluate performance of departmental support staff
- Manage and maintain departmental infrastructure.

***Awarded Legion of Merit Medal***

***Awarded Military Outstanding Volunteer Service Medal***

***Awarded Presidential Letter of Appreciation***

***Operations Officer, Assistant Operations Officer, and Liaison Officer***, Air Defense Battalion, Fort Hood, TX, 1999-2000; Schofield Barracks, HI, 1990-1992; Fort Bliss, TX, 1988.

- Responsible for all operations of a digitized Air Defense battalion. Responsible for training, plans and the tactical operations of all assigned weapon systems and associated support equipment operated by 532 personnel stationed at both, Fort Hood, Texas and Fort Carson, Colorado.
- Responsible for planning, employment, control, and synchronization of the division's air defense assets during all exercises and operations.
- Responsible for developing the long and short-range training plans, to include training management cycles, training evaluations, gunneries, STRAC qualifications, Force XXI initiatives, and modernizations.
- Responsible for planning and executing the continuing transition of the unit to first fully digital SHORAD Divisional Air Defense Battalion in the Army.

***Awarded Army Commendation Medal***

***Budget and Supply Officer***, Department of Geography and Environmental Engineering, USMA, 2005-2015.

- Responsible for over \$700,000 of annual spending.
- Responsible for management of all operations and management purchases, lab maintenance purchases, print purchases, faculty/staff travel, and non-appropriated fund accounts.
- Responsible for management of grant and project order spending in the department.



*Personnel Officer and Adjutant*, Air Defense Battalion, Fort Bliss, TX, 1988-1990.

- Responsible for personnel management of 613 authorized soldiers and administrative operations of the unit, to include managerial supervision of the Personnel Administrative Center.
- Exercise staff responsibility for safety, legal and medical programs.
- Manage officer and soldier evaluation systems.
- Advise the commander on personnel strength issues in garrison/tactical situations.
- Advise commander in overall unit cohesion and command climate.
- Responsible for preparing personnel estimates and personnel annexes.
- Responsible for coordinating unit social functions and events.

*Awarded Army Commendation Medal*

*Senior Advisory Board Member, History of Warfare E-text Project*, USMA, 2012-2015.

*Admissions Committee member*, USMA, 2004-2005 and 2010-2014.

*Academy Professor Search Committee member*, USMA, 2013.

*National Military Academy – Afghanistan Steering Committee member*, USMA, 2007-2012.

*Academy Research Council (ARC) member*, USMA, 2005-2015.

*USMA Faculty Council member*, USMA, 2004-2015.

*Math Science Goal Team member*, USMA, 2006-2009.

*Leadership mentor*, Military Leadership Course, USMA, 2006-2015.

*Company Academic Counselor*, USMA, 2005-2007.

*Military Affairs Committee*, USC, 2015-present.

## **MANAGEMENT EXPERIENCE**

**Senior Staff Officer** (Division Staff), Air Defense, Fort Hood, TX, 2000-2001 Charged to represent the commander for all the Division air defense operations for an organization in excess of 10,000 personnel.

- Responsible for planning and implementing the transition plan for divisional air defense systems to the Digital Force.
- Act as a strategic and operational planner on the Division Planning Team (DPT).
- Prepare and publish detail written orders to all division plans.
- Assist with the evaluation of subordinate units in the organization.
- Supervise twelve soldiers and their use of assigned equipment valued at over \$3 million.

**Aide-de-Camp** to the college president (Superintendent), USMA, West Point, NY, 1997-1998.

- Responsible for the executive services to the Superintendent.
- Serve as the primary interface between USMA commander and a 1,000 member staff and faculty.
- Coordinate all interaction of commander with outside agencies to include Department of the Army staff.
- Coordinate the administrative and logistical support activities of the Superintendent's personal staff.
- Manage the Superintendent's calendar, staff actions, and correspondence.
- Coordinate and execute all travel requirements including billeting, transportation, and lodging.
- Responsible for property accountability, security and maintenance of an historic office and set of quarters, including a priceless museum collection.
- Supervise enlisted house staff, catering and visitor billeting in the GO's quarters.

### ***Awarded Meritorious Service Medal***

**Senior Faculty Mentor**, Center for Faculty Excellence (CFE), USMA, 2009-2015.

- Coordinate with CFE program goals and administration.
- Evaluate and provide feedback on rotating faculty performance in the classroom.

**Senior Academic Counselor**, Geospatial Information Science Program, Department of Geography and Environmental Engineering, USMA, 2004-2015.

**Senior Club Mentor**, Fellowship of Christian Athletes (FCA), USMA, 2004-2015.





**ACADEMIC COURSE DEVELOPMENT/DIRECTORSHIP/INSTRUCTIONAL  
EXPERIENCE**

- Course Director/Instructor, Numbers and Maps (planned), 2016
- Course Developer/Director/Instructor, Geospatial Intelligence (planned), 2016
- Course Director/Instructor, Geospatial Intelligence Tradecraft, 2015-present
- Course Director/Instructor, Remote Sensing for GIS, 2015-present
- Instructor, Concepts for Spatial Thinking, 2015
- Instructor, Thesis Advisor (x 4 students), 2015-present
- Course Developer/Director/Instructor, Military Geospatial Operations, 2007-2015
- Course Director/Instructor, Cartography, 2010-2014
- Assistant Course Developer, Geo-location Systems and Processes (classified material), National Security Agency, 2013-2014
- Course Developer/Instructor, Physical Geography, 1995-1997 and 2004-2009
- Course Director/Instructor, Remote Sensing, 2005-2010
- Course Director/Instructor, Principles of Surveying, 1995-1997
- Course Director/Instructor, Photogrammetry, 1995-1997
- Course Director/Instructor, Advanced Individual Study in Geospatial Information Science, 1995-1998 and 2009 {♦}
- Course Director/Instructor, Special Topic in Geography and Environmental Engineering, 2005-2007 {♦}
- Instructor, Geographic Information Systems, 2011-2013
- Instructor, Seminar in Environmental Science, 1996-1997
- Lecturer, Physical Geography, *GISc at USMA and the Army*, 2004-2014
- Lecturer, Environmental Geography, 2005-2007
- Lecturer, Oconee County High School, *GIS in the Workplace*, 2004
- Lecturer, University of Georgia, *Military Use of Maps*, 2003
- Lecturer, University of Georgia, *Surveying in the Military*, 2001
- Secondary Instructor, ASPRS Conference, *Use of Remote Sensing Software*, 1994

(NOTE: {♦} Course often linked to field internships that reinforced classroom learning)



## **RESEARCH LEADERSHIP, EXPERIENCE AND EDITORIAL PARTICIPATION**

**Chair**, Academy Research Council (ARC), USMA, 2010-2012. In this capacity, create and integrate activities of the West Point Institute for Innovation and Development (IID), providing assistance in the management of annual research funding totaling ~ \$22 million.

**Director**, Center for Environmental and Geographic Sciences, Department of Geography and Environmental Engineering, USMA, 2005-2015. Plan and manage interdisciplinary research across five academic disciplines averaging ~ \$250K of annual research work. Assist in manage Minerva Grant totaling ~ \$250K annually.

**Advisor, Geolocation Course Development**, National Security Agency (NSA), 2012-2014.

**Associate Member**, Center for Language, Culture and Regional Studies, Department of Foreign Languages, USMA, 2013-2015.

**Associate Member**, Center for STEM Education, Department of Physics, USMA, 2011-2015.

**Conference Co-Chair**, LiDAR Exploitation, U.S. Southern Command [USSOUTHCOM] (Conducted at West Point, NY), June 2011.

**Guest Editor**, Special Edition – *Geospatial Applications for Military and Homeland Security Operations*, International Journal of Applied Geospatial Research, 2011-2016.

**Academic Advisory Board member**, United States Geospatial Intelligence Foundation (USGIF), 2011-2015.

**Certification Governance Board (CGB) member**, United States Geospatial Intelligence Foundation (USGIF), 2016-present.

**Advisory Board member**, NGA/USGS Centers of Academic Excellence in Geospatial Science, 2014-2015.

**Editorial Review Board member**, International Journal of Applied Geospatial Research, 2009-present.

**Editorial Review Board member**, International Society of Photogrammetry and Remote Sensing, 2009-present.

**Senior Investigator**, (1) On-line Course Learning (USMA's Geospatial Science courses), 2010-present and (2) iPad Classroom and Lab Study (USMA's Geospatial Science courses), 2011-2015.

**Co-Primary Investigator (PI)**, Terrestrial Imaging (LiDAR and camera imaging systems) in coordination with the NGA, ATEC, RDECOM, Desert Research Institute (Reno, NV) and the Center for Geospatial Research (University of Georgia, Athens, GA), 2008-2015.



## **PUBLICATIONS**

### ***Books / Book Chapters / Guides / Tutorials***

Fleming, S., 2012. Final Report - Cartographic Considerations for Planned Maps in the History of Warfare (HI301/HI302) Electronic Textbook. Department of Geography and Environmental Engineering, United States Military Academy, West Point, NY.

Fleming, S., J. Brockhaus and M. Hendricks. 2009. Chapter 57 - The Role of GIS in Military Strategy, Operations and Tactics. Manual of Geographic Information Systems, ASPRS – American Society for Photogrammetry and Remote Sensing, Bethesda, MD.

Fleming, S., and N. Dieter. 2009. The iPIX Tutorial – A Guide to Collecting 360° Interactive Images, Center for Environmental and Geographical Sciences, Department of Geography and Environmental Engineering, United States Military Academy, West Point, NY.

United States Army Engineer School, 2005. SWEAT/IR Book – Infrastructure Reconnaissance. Contributions acknowledged to Infrastructure Information and Data Collection (I2DC) – A Soldier's Guide by Dacunto, P., B. Doyle, W. Epolito, S. Fleming, M. Guerrie, J. Jordano, L. Klosky, T.J. Lindberg, J. Manous, T. Trainor and R. Welch. Fort Leonard Wood, MO.

Manous, J., 2005. Contributors: P. Dacunto, B. Doyle, W. Epolito, S. Fleming, M. Guerrie, J. Jordano, L. Klosky, T.J. Lindberg, T. Trainor and R. Welch. Infrastructure Information and Data Collection (I2DC) – A Soldier's Guide. United States Military Academy, West Point, NY.

### ***Refereed / Invited Journals***

McDonald, Eric and S. Fleming. 2016. *Military geoscience for engineers: Developing digital and visual platforms of complex terrestrial terrain data to enhance development and testing of military equipment*, Proceedings from the 10<sup>th</sup> International Conference on Military Geosciences, Aviemore, Scotland (accepted; pending publication).

Fleming, S. 2016. *Military Geography Research Notes*. International Journal of Applied Geospatial Research, Volume 7, Issue 4, IGI-Global Publishing, Hershey, PA.

Fleming, S., E. McDonald and S. Bacon. 2016. *Military Test Site Characterizations - An Integrated Terrain Analysis Approach*. Military Geosciences and Desert Warfare; Advances in Military Geosciences, 273-295, Springer Science+Business Media.

Fleming, S., T. Jordan, M. Madden, E. Usery and R. Welch. 2008. *GIS Applications for Military Operations in Coastal Zones*. ISPRS - Journal of Photogrammetry and Remote Sensing, 64 (2009), 213-222, Elsevier Publishers.



Fleming, S. and T. Jordan. 2007. *Feature Identification from Commercial Satellite Images for Military and Homeland Security Operations in Coastal Zones*. Journal of Applied Remote Sensing, SPIE, Bellingham, WA.

### ***Department of Defense (DoD) Technical Reports***

Fleming, S., M. Anderson and C. Dietz. 2013. Field Technical Report – Camp Pendleton Marine Corps Base Site Characterization, Mapping and Imaging, Center for Environmental and Geographical Sciences, Department of Geography and Environmental Engineering, United States Military Academy, West Point, NY.

Fleming, S. and M. Anderson. 2012. Field Technical Report – Suriname Test Site Characterization, Mapping and Imaging, Center for Environmental and Geographical Sciences, Department of Geography and Environmental Engineering, United States Military Academy, West Point, NY.

Fleming, S. and C. Edson. 2011. Field Technical Report – Fort A. P. Hill Test Center Site Characterization, Mapping and Imaging, Center for Environmental and Geographical Sciences, Department of Geography and Environmental Engineering, United States Military Academy, West Point, NY.

Fleming, S, M. Madden, D. Leigh, P. Jackson, D. Menhart and R. Peralta. 2011. An Environmental Analysis of Western Belize for Tropical Testing of Army Material, Equipment and Systems, Center for Environmental and Geographical Sciences, Department of Geography and Environmental Engineering, United States Military Academy, West Point, NY and the Center for Remote Sensing and Mapping Science, Department of Geography, University of Georgia, Athens, GA.

Fleming, S., C. Fuhrman, T. Brown and J. Gleason. 2010. Field Technical Report – Test Site Characterization, Mapping and Imaging in Panama, Center for Environmental and Geographical Sciences, Department of Geography and Environmental Engineering, United States Military Academy, West Point, NY.

Fleming, S., T. Rayfield, H. Didier, A. Davis, R. Lennon, E. Mistr and J. Pleasants. 2010. Field Technical Report – Aberdeen Test Center Site Characterization, Mapping and Imaging, Center for Environmental and Geographical Sciences, Department of Geography and Environmental Engineering, United States Military Academy, West Point, NY.

Fleming, S., I. Irmischer, D. Roux, B. Boxler, A. Moomin, A. Paulo, M. Seese, L. Summerlin, and S. Vaughn. 2009. Field Technical Report – TRTC and YTC Test Site Characterization, Mapping and Imaging, Center for Environmental and Geographical Sciences, Department of Geography and Environmental Engineering, United States Military Academy, West Point, NY.

Fleming, S., W. Wright, J. Gerschultz, M. Hokenson, C. Pottorff and D. Whitehouse. 2009. Field Technical Report – CRTC Test Site Characterization, Mapping and Imaging,



Center for Environmental and Geographical Sciences, Department of Geography and Environmental Engineering, United States Military Academy, West Point, NY.

King, W. Chris, E. Palka, J. Juvik, R. Harmon, S. Fleming and J. Hendrickx. 2009. A Technical Analysis of Locations for Tropical Testing of Army Materiel and Opportunities for Tropical Training of Army Personnel, Department of Geography and Environmental Engineering, United States Military Academy, West Point, NY and the Environmental Sciences Division, Engineering Sciences Directorate, USARO, Research Triangle Park, NC.

Fleming, S., T. Baker, H. Didier, N. Dieter, I. Irmischer, M. Lewis, E. McAllister and L. McBride. 2008. Field Technical Report - Test Site Characterization, Mapping and Imaging, Department of Geography and Environmental Engineering, United States Military Academy, West Point, NY and GIS Cell, G3 – Operations, Yuma Proving Ground, Yuma, AZ.

Shoop, S., R. Affleck and K. Wesson. 2008. Coordination with LTC Steve Fleming and follow-on referencing in the text. CRTC Cross Country Trails Characterization Trip Report, Cold Regions Research & Engineering Laboratory, Engineer Research and Development Center, U.S. Army Corps of Engineers, Hanover, NH

King, W. Chris, Palka, E., Juvik, J., Harmon, R., Fleming, S. and Hendrickx, J. 2007. A Technical Analysis of Llano Carti, Panama, for Tropical Testing of Army Material, Equipment and Systems, Department of Geography and Environmental Engineering, United States Military Academy, West Point, NY and the Environmental Sciences Branch, Engineering and Environmental Sciences Division, USARO, Research Triangle Park, NC.

King, W. Chris, Palka, E., Juvik, J., Hendrickx, J. and Fleming, S. 2007. A Technical Analysis of Fuerte Mocomoron, Honduras, for Tropical Testing of Army Material, Equipment and Systems, Department of Geography and Environmental Engineering, United States Military Academy, West Point, NY and the Environmental Sciences Branch, Engineering and Environmental Sciences Division, USARO, Research Triangle Park, NC.

King, W. Chris, Palka, E., Fleming, S., Harmon, R., Hendrickx, J., and Juvik, J. 2006. A Technical Analysis of Cerro Tigre and Altos de Pacora, Panama, for Tropical Testing of Army Material, Equipment and Systems, Department of Geography and Environmental Engineering, United States Military Academy, West Point, NY and the Environmental Sciences Branch, Engineering and Environmental Sciences Division, USARO, Research Triangle Park, NC.

Manous, J., 2004. Contributors: Calkins, S., G. Dudevoir, S. Fleming, P. Heiney, D. Henderson, L. Klosky, D LaBranche, E. Naessens, J. Ness, N. Peckham, J. Powell, M. Shannon and B. Shoop. An Analysis of Improvised Explosive Device (IED) Employment. United States Military Academy, West Point, NY.



## ***Study Guides***

Fleming, S and Gilewitch, D., 2011. *The Army's Wartime Geographic Information Systems and Mapping Applications*. Physical Geography Student Study Guide, Tenth Edition, The McGraw-Hill Companies, Inc., New York, NY

Thompson, W. 2009. Contributing Authors and Editors: C. Fuhriman, J. Lynch, E. Palka, A. Krakaowka , F. Galgano, D. Gilewitch, J. Henderson, J. Chastain, M. Kimball, S. Fleming, L. Hummel, L. Rios, M. CuvIELLO and J. Ridgeway. Physical Geography Student Study Guide, Ninth Edition, The McGraw-Hill Companies, Inc., New York, NY.

Henderson, J., 2008. Editorial Board: M. CuvIELLO, H. Didier, S. Dunlap, B. Dunmire, S. Fleming, A. Richmond and L. Rios. Physical Geography Student Study Guide, Eight Edition, The McGraw-Hill Companies, Inc., New York, NY.

Hummel, L., 2005. Editorial Board: Dacunto, P, B. Doyle, W. Epolito, S. Fleming, D. Gilewitch, E. Larkin, C. Oxendine, M. Peguero, L. Rios and M. Senn. Physical Geography Student Study Guide, Fifth Edition, The McGraw-Hill Company, Inc., New York, NY.

## ***Conference Proceedings***

Fleming, S, M Anderson, C Dietz, M. Braun, R Cromartie, A. Kish, J Wagner. 2012, *Characterization of Soils and Landforms Critical to Testing Military Equipment*. Published in proceedings of the, 20<sup>th</sup> ARL/USMA Technical Symposium, Florham Park, NJ.

Brockhaus, J, M. Hendricks and S. Fleming. 2005. *Assessment and Evaluation on an Undergraduate GIS Curriculum*. Published in proceedings (CD-ROM) of the 2005 ESRI Educational Users Conference, San Diego, CA.

Hendricks, M., J. Brockhaus and S. Fleming. 2005. *Design and Development of an Urban Tactical Planner Database*. Published in proceedings (CD-ROM) of the 2005 ESRI Educational Users Conference, San Diego, CA.

Shannon, M, G. Sandquist, M. Hendricks, S. Fleming. 2005. *Correlation of US Nuclear Power Plant Sites and Adjacent Population Health Effects*. Published in 13<sup>th</sup> International Conference on Nuclear Engineering. Beijing, China.

Fleming, S and M. Hendricks. 2004. *NGA sponsored GIS research at the United States Military Academy*. Published in proceedings (CD-ROM) of the 2004 NGA Academic Research Symposium. Washington, DC.

Fleming, S. 1997. *GPS Applications in Golf Course Measuring and Mapping*. Published in proceedings of the 1997 ACSM-ASPRS Annual Convention, Seattle, WA.





Fleming, S. 1996. *Integrated Remote Sensing and GIS Techniques for Golf Course Measuring and Mapping*. Published in proceedings of the 1996 ACSM-ASPRS Annual Convention, Baltimore, MD.

### ***Other Publications***

Bacastow, T., S. Fleming, T. Stefanidis, and D. Bellafigliore. 2016. *GEOINT Beyond the IC: Academia, Training and Certification*, 2016 State of GEOINT Report, United States Geospatial Intelligence Foundation, Reston, VA.

Oxendine, C. and S. Fleming. 2015. *Strengthening the 'Geo' in GeoINT*, NGA Pathfinder, Vol. 13, No. 4, National Geospatial-Intelligence Agency, Springfield, VA.

Fleming, S. and T. Bacastow. 2015. *GEOINT: So What and Now What?*, 2015 State of GEOINT Report, United States Geospatial Intelligence Foundation, Reston, VA.

Brockhaus, J., M. Hendricks, S. Fleming, W. Wright and C. Edson. 2011. *Delineation of Roofing Material within an Urban Environment: Integration of WorldView-2 Imagery and Lidar Data*, Geospatial Information Science Program, Department of Geography and Environmental Engineering, United States Military Academy, West Point, NY.

Fleming, S. 2009. *Our Geography Soldiers*, Geography News, Department of Geography, University of Georgia, Athens, GA.

Batson, Douglas E. 2008. Interview with LTC Steve Fleming and follow-on referencing in the text. Registering the Human Terrain: A Valuation of Cadastre, Center for Strategic Intelligence Research, National Defense Intelligence College Press, Washington, DC.

Fleming, S. 2007. *West Point and YPG Join to Collect Geospatial Data*, Yuma Proving Ground News, Yuma Proving Ground, Yuma, AZ.

Fleming, S. 2007. *Everything I Really Needed to Know About Leading Men and Women, I Learned at Bolles*. About Bolles. The Bolles School, Jacksonville, FL.

Fleming, S. 2006. Assessment of the Enterprise Geographic Information System (EGIS) at Yuma Proving Ground (YPG), Center for Environmental and Geographic Sciences, Department of Geography and Environmental Engineering, West Point, NY.

Fleming, S. 2005. *Academy professors spend summer helping Afghan academy – Interview with Mr. Eric S. Bartelt*. The Pointer View (August 26, 2005). United States Military Academy, West Point, NY

Fleming, S. 2004. *Sharing the Knowledge – Interview with Mr. John Curran*. About Bolles (Fall/Winter 2004). The Bolles School. Jacksonville, FL.



### **CONFERENCE PRESENTATIONS / POSTER SESSIONS / SPEECHES**

Fleming, S., 2016. *Lessons Learned from Academic Programs for Centers of Academic Excellence in Geospatial Sciences* (Panelist). CAE in GS Meeting, Oak Ridge, TN.

Fleming, S., 2016. *The Digital Rucksack – Knowledge Management for Today's GEOINT Learner* (Workshop Instructor). GEOINT 2016. Orlando, FL.

Fleming, S., 2016. *Interview with GIS Café about USC's Academic Programs*. GEOINT 2016. Orlando, FL.

Fleming, S., 2016. *NGA and USGS Careers Panel at USC* (Moderator). Los Angeles, CA.

Fleming, S. and D. Murdock, 2016. *Enabling Geospatial Intelligence and Geospatial Security (Keynote Address)*. Sixth Annual Los Angeles Geospatial Summit. Los Angeles, CA.

Fleming, S., 2015. *GEOINT – It's More Than Just for the Intelligence Community*. Georgia Southern University, Statesboro, GA.

Fleming, S., 2015. *Saint Barbara's Day Ball – 2015* (Guest Speaker). United States Military Academy. West Point, NY.

Fleming, S., 2015. *GEOINT – It's More Than Just for the Intelligence Community*. 2015 Cyber Symposium, United States Coast Guard Academy. New London, CT.

Fleming, S., 2015. *Founder's Day Ball – 2015* (Guest Speaker). West Point Society of Augusta. Augusta, GA.

Fleming, S., 2015. *Founder's Day Ball – 2015* (Guest Speaker). West Point Society of the Piedmont. High Point, NC.

Fleming, S. and J. Brockhaus. 2015. *NGA-sponsored Geospatial Information Science Education Program at the United States Military Academy*. NGA Academic Research Symposium. Washington, DC.

Fleming, S., 2014. *Use of SWIVL in the Digital Classroom*. iPad Symposium, United States Military Academy. West Point, NY.

Fleming, S. and J. Brockhaus. 2014. *NGA-sponsored Geospatial Information Science Education Program at the United States Military Academy*. NGA Academic Research Symposium. Washington, DC.

Fleming, S., 2014. *Chaos Management in a Disconnected World* (Moderator). GEOINT 2014. Tampa, FL.



Fleming, S., 2014. *Optimizing Big Data & Data Management Systems for Chaos Management* (Moderator). GEOINT 2014. Tampa, FL.

Fleming, S., 2013. *GPS, GIS, and Other Cool Digital Geography*. STEM Career and College Conference - McKinley Technology High School. Washington, D.C.

Hendricks, M., J. Brockhaus, and S. Fleming. 2013. *Plebe Parent Weekend Reference and Parking Map*. 2013 ESRI Educational Users Conference – Map Gallery. San Diego, CA.

McDonald, E and S. Fleming, 2013. *Military geoscience for engineers*. 10<sup>th</sup> International Conference on Military Geosciences, Aviemore, Scotland.

Fleming, S, M Anderson, C Dietz, M. Braun, R Cromartie, A. Kish and J Wagner. 2012, *Characterization of Soils and Landforms Critical to Testing Military Equipment*. 20<sup>th</sup> ARL/USMA Technical Symposium, Florham Park, NJ.

Fleming, S. 2012. *Military Test Site Characterizations*. Yuma Proving Ground Test Director's Workshop. Yuma, AZ.

McDonald, E and S. Fleming, 2012. *Developing Science-Based Testing: Characterizing the Physical Environment with Enough Detail to Support Test Procedures*. 28<sup>th</sup> Annual National Test and Evaluation Conference, Hilton Head, SC.

Fleming, S., 2012. *Building Tighter Connections Between Geography and Geoscience Programs, Geography and Geoscience: Connection Points for Complimentary Disciplines*. Association of American Geographers – Annual Conference, New York, NY.

Fleming, S., 2011. *The Future of GEOINT Professional Development – Focus on Education*. GEOINT 2011 Symposium. San Antonio, TX.

Fleming, S., J. Brockhaus and M. Hendricks. 2011. *Geospatial Information Science Program and Admissions Processes at the United States Military Academy*. 2011 ESRI Educational Users Conference, San Diego, CA.

Fleming, S., 2011. *Military Test Site Characterizations - An Integrated Terrain Analysis Approach*. 9<sup>th</sup> International Conference on Military Geosciences, Las Vegas, NV.

Fleming, S. 2010. *Geospatial Information Science Education Program at the United States Military Academy*. Service Academy Roundtable: Advancing the Geospatial Intelligence Mission. GEOINT Conference, New Orleans, LA.

Fleming, S., J. Brockhaus and M. Hendricks. 2010. *Geospatial Information Science Program and Admissions Processes at the United States Military Academy*. 2010 ESRI Educational Users Conference. San Diego, CA.

Wright, W., M. Cuviello, S. Fleming and M. Hendricks. 2010. *Terrain Association and Land Navigation Visualization*. 2010 ESRI Educational Users Conference – Map Gallery. San Diego, CA.

Fleming, S. 2010. *Terrestrial Imaging of Military Test Centers*. SPIE Defense, Security and Sensing National Conference, Orlando, FL.

Fleming, S. 2009. *Geospatial Information Science Program and Admissions Processes at the United States Military Academy*. 2009 ESRI Educational Users Conference. San Diego, CA.

Fleming, S. 2008. *Academic Examinations Workshop*. National Military Academy Afghanistan (NMAA), Dean's Staff and Department Heads, NMAA, CSTC-A. Kabul, Afghanistan.

Fleming, S. 2007. *Feature Identification from Commercial Satellite Images for Military and Homeland Security Operations (Classified Session)*. 2007 ASPRS Annual Conference. Tampa, FL.

Fleming, S. 2007. *Leadership Lessons from High School throughout a Career in the Military*. Feature Speaker at History Day, The Bolles School. Jacksonville, FL.

Fleming, S. and J. Brockhaus. 2006. *NGA-sponsored Geospatial Information Science Education Program at the United States Military Academy*. NGA Academic Research Symposium. Washington, DC.

Fleming, S. and J. Brockhaus. 2005. *NGA-sponsored Geospatial Information Science Education Program at the United States Military Academy*. NGA Academic Research Symposium. Washington, DC.

Fleming, S. 2005. *Discussion of Leadership Lessons from Experiences in Afghanistan*. Upper School Convocation, The Bolles School. Jacksonville, FL.

Fleming, S., R. Smith and R. Wood. 2005. *Moral/Ethical Program at NMAA Seminar*. National Military Academy Afghanistan - Dean's Staff and Department Heads, NMAA, CSTC-A. Kabul, Afghanistan.

Fleming, S. 2005. *Geographic Science Laboratory Use in the Information Age* as part of the series, *Student Learning in the Information Age*. West Point, NY.

Fleming, S. 2005. *Large Scale Mapping in the Littoral Zone*. AutoCarto Symposium. Las Vegas, NV.

Fleming, S. 2005. *Use of Geospatial Data in Education*. Center for Teaching Excellence Seminar Series. West Point, NY.

Fleming, S. 2004. *Military Use of Geospatial Information*. Guest Speaker, Gamma Theta Upsilon (USMA Chapter) Fall Meeting. West Point, NY



Fleming, S, and M. Hendricks. 2004. *NGA-sponsored Geospatial Information Science Education Program at the United States Military Academy*. NGA Academic Research Symposium. Washington, DC.

Fleming, S. and M. Hendricks. 2004. *USMA's GISc Program*. Poster Session at the 2004 ESRI Educational Users Conference. San Diego, CA.

Fleming, S. 2004. *Large Scale Mapping the Coastal Zone*. Published in proceedings (CD-ROM) of the 2004 ESRI Educational Users Conference. San Diego, CA.

Fleming, S. 2004. *GIS Applications for Military Operations in the Coastal Zone*. 2004 ASPRS Annual Conference. Denver, CO.

Fleming, S and L. Usery. 2003. *NGA-sponsored Research at the University of Georgia*. NGA Academic Research Symposium. Washington, DC.

Fleming, S. 2003. *Military Use of GIS in Coastal Zones*. 2003 ESRI Educational Users Conference. San Diego, CA.

Fleming, S. 2003. *Comparative Evaluations of Remotely Sensed Data for the Development of Coastal Databases*. GeoTools03 Conference. Charleston, SC.

Welch, R. and S. Fleming. 2002. *NGA-sponsored Research at the University of Georgia*. NGA Academic Research Symposium. Washington, DC.

Welch, R, T. Jordan and S. Fleming. 2002. *GIS Applications for Military Operations in the Coastal Zone*. Project Meeting. Camp Lejeune, NC.

Welch, R, T. Jordan and S. Fleming. 2002. *Assessing the Ability of Commercial Sensors to Satisfy Mission Specific-Littoral Requirements*. National Imagery and Mapping Agency (NIMA). Washington, DC.

Fleming, S and J. Maassel. 1997. *GPS Applications in Golf Course Measuring and Mapping*. GPS/GIS '97. Annapolis, MD.

Hilsman, M., J. Brockhaus, S. Fleming and M. Hendricks. 1996. *Three dimensional terrain visualization of Gettysburg NMP*. Poster Presentation at the Association of American Geographers 92<sup>nd</sup> Annual Meeting. Charlotte, NC.





### **FUNDING, SCHOLARSHIPS, ACADEMIC AND MILITARY HONORS**

Funding grants for research/education exceeding \$1 million, 2005-present  
Induction into Phi Kappa Phi, University of Georgia Chapter, 1995  
Fully-funded Doctoral Degree Program, University of Georgia, 2001  
Fully-funded Masters Degree Program, Naval War College, 1998  
Fully-funded Masters Degree Program, University of Georgia, 1993  
Fully-funded Bachelors Program, United States Military Academy, 1985  
Omar Bradley Award for Leadership, 1989  
Legion of Merit, 2015  
Meritorious Service Medal (3 Awards), 1993/1998/2001  
Army Commendation Medal (2 Awards), 1989/1991  
Joint Service Achievement Medal, 2005  
Army Achievement Medal (2 Awards), 1985/1987  
Military Outstanding Volunteer Service Medal, 2015  
Afghanistan Campaign Medal (2 Awards), 2005/2008  
NATO (ISAF) Service Medal, 2008  
Defense Service Ribbon (2 Awards), 1991/2001  
Army Service Ribbon, 1985  
Army Superior Unit Award, 2010  
Joint Meritorious Unit Award, 2006  
Honorable Order of Saint Barbara Medal, 1992

### **SCIENTIFIC AND PROFESSIONAL SOCIETIES OF WHICH A MEMBER**

Phi Kappa Phi Honor Society, University of Georgia Chapter, 1995-present  
Gamma Theta Upsilon – National Geographical Honor Society (USMA), 2004-present  
Association of American Geographers, 1995-present  
American Society of Photogrammetry and Remote Sensing, 1995-present  
University of Georgia Alumni Association, 1995-present  
Association of Graduates (AOG) – USMA at West Point, 1985-present  
Association of the United States Army, 1985-present  
Naval War College Foundation, 1999-present  
Veteran of Foreign Wars, 2005-present  
Military Officers Association of America, 2013-present  
United States Geospatial Intelligence Foundation Academic Advisory Board, 2010-2015  
United States Geospatial Intelligence Foundation Certification Governance Board, 2016-present

### **OTHER VOLUNTEERISM**

Member, Board of Visitors, The Bolles School, Jacksonville, FL, 2004-2007  
Coach, Youth Services (Soccer, Basketball, Baseball), USMA, 1995-1998 and 2004-2010  
Coach, Youth Services (Soccer, Basketball, Baseball), Oconee County, GA 2001-2004  
Coach, YMCA (Soccer, Basketball, Baseball), Newport, RI 1998-1999  
Assistant Coach, James I. O'Neill High School Golf Team, Highland Falls, NY, 2005-2007





### **SECURITY CLEARANCE**

Security Clearance: Top Secret/Sensitive Compartmented Information (TS/SCI), 2014-present (certificates prepared for activation when needed)

