

## Glimpse at the Courses and Instructors

**Providing Survey and Mapping Services for Public Improvement Projects:** This course identifies the surveying and mapping tasks & final products necessary for Public Improvement Projects. The course will focus on the requirements defined in Florida Administrative Code (F.A.C.) 61G17-6 that Municipality's rely on for successful projects. It will also identify the dependency of the codes on one another.

### **Preparing Subdivision Plats for Successful Municipal Review and Approval:**

This course relates to the preparation of subdivision plats as defined in Chapter 177 F.S. in that it instructs and informs the attendee how to successfully pass the review process by the local governing body and or bodies. The course will focus on the details that most commonly cause failure during the review process. The instructor will present how the plat review process works in his municipality.

**Instructor Profile: Joe Stokes** is a Professional Surveyor and Mapper in Florida. Mr. Stokes has been surveying for 31 years. He resides and practices in Central Florida. He has been the Orlando City Surveyor for the past nine years. He has a broad range of surveying and mapping experience. Mr. Stokes is a member of the Florida Surveying and Mapping Society (FSMS) and served as the surveyors in government committee chairman for the past three years. Mr. Stokes writes the surveyors in government articles published in the Florida Surveyor. He has held several offices on the Central Florida Chapter Board including President and is currently serving as a Director. He is also a member of the American Congress on Surveying and Mapping.

**Overview of NGS Blue Booking Procedures and FGDC Positional Accuracy Standards:** This course relates to the "Practice of surveying and mapping" as defined in Chapter 472 F.S. in that it instructs and informs the attendee regarding procedures and requirements for submission of survey projects to the National Geodetic Survey (NGS). The course will focus on definition and future of the National Spatial Reference System (NSRS), details of the Blue Booking process, and spatial data accuracy standards.

**Instructor Profile: Ms. Renee Shields** is a geodesist in the Geodetic Services Division of the National Geodetic Survey. She received a bachelor's degree in Mathematics from the University of Massachusetts/Boston in 1976. Ms. Shields has been with NGS since 1980, and was involved with geodetic adjustments for the North American Datum of 1983. After publication of the NAD 83 (1986), her primary responsibilities included the integration of new Global Positioning System (GPS) projects into the National Spatial Reference System. This included assisting with development of the constrained adjustment guidelines, and primary responsibility for the High Accuracy Reference Networks adjustments and the state-wide readjustment of several states. Ms. Shields participated on an NGS technical support team for the Romanian Institute of Geodesy, Photogrammetry and Cartography. She has been involved in GPS and Geoid Height analysis, as well as ADJUST workshops, and support for the NGS Web Site group. Renee currently provides support for outreach and National Height Modernization activities, and manages NGS' Federal grant and cooperative agreement activities.

### **Accuracy Assessment of LiDAR (Light Detection And Ranging) Digital Terrain Model Data:**

This course relates to the "Practice of surveying and mapping" as defined in Chapter 472 F.S. in that it instructs and informs the attendee regarding the accuracy assessment and reporting of topographic information, derived through LiDAR technology, in terms of the minimum technical standards for surveying and mapping (472.027), MTS. The course will focus on LiDAR technology, how it is used to develop digital terrain models, accuracy expectations of this technology, accuracy analysis of LiDAR digital terrain models, and certification of digital terrain models to minimum technical standards for surveying and mapping.

**Instructor Profile: Chris O'Neill** is a Certified Photogrammetrist and a licensed Professional Surveyor and Mapper in the State of Florida. Mr. O'Neill earned his B.S. degree in Mapping and Land Information Science and his M.S. degree in Geodetic Science, specializing in photogrammetry and remote sensing, from the Ohio State University College of Civil Engineering. He resides and practices photogrammetric mapping and surveying in central Florida with Woolpert LLP. Mr. O'Neill is a member of the Florida Surveying and Mapping Society (FSMS) and the American Society for Photogrammetry & Remote Sensing (ASPRS).

**Development & Implementation of a Fleet Safety Program:** This course relates to the development and implementation of a “Fleet Safety Program. The course will focus on the implementation of a fleet safety program for land surveyors, mappers, and employees as defined by FS 472.005. Course Objectives: To understand the legal aspects of negligent entrustment, and proper driver selection. To have a basic understanding of the foundations of a comprehensive fleet safety program. To become aware of factors which relate to hiring competent drivers. To be informed of and develop a basic understanding of the technical skills required for driving through proper driver training. To understand the importance of post accident investigations.

**Instructor Profile:** **Patrick O’Neal** is a Loss Control Consultant with Fireman’s Fund Insurance Company. He has a BS in Risk Management from The Florida State University College of Business. He is a Chartered Property & Casualty Underwriter and holds the Associate in Risk Management designation (ARM). Patrick’s field of expertise is driver behavior and defensive driving safety. He is certified by the National Safety Council (NSC) as a defensive driving instructor. Over his 17 year insurance career he has consulted with thousands of companies to improve their driver selection and hiring processes. He has also coached drivers in “hands on” skills and driving performance training. For more information please visit Fireman’s Fund’s web site [www.firemansfund.com](http://www.firemansfund.com).

**Business Planning for the Storm:** This course relates to the development and implementation of a “Business Catastrophe Plan”. The course will focus on the implementation of property protection from hurricanes and other catastrophes as well as insurance coverage’s to replace lost income for land surveying and mapping firms and their employees as defined by FS 472.005.

**Instructor Profiles:** **Patrick O’Neal** – See above. **Bart Gunter** is a Florida licensed insurance professional with the insurance firm of Rogers, Gunter, Vaughn Insurance. He is the manager of the FSMS endorsed insurance program written through Fireman’s Fund Insurance Company. Bart is a Certified Insurance Counselor, a graduate of The University of Florida, and a partner in RGVI.

**Swamp and Overflowed Lands Seminar:** This course is designed to inform the surveying community about the current and past issues regarding this controversial act and those that followed. Handouts concerning GLO decisions and Supreme Court rulings will be included. 1. Swamp Lands Act of 1850. 2. Federal Responsibility under 1850 Act. 3. State Checks on Selections. 4. Political Fall Out of Swamp and Overflow Selections. 5. Role of the Railroads in Swamp and Overflowed Lands. 6. Directions Issued by Surveyors General and GLO. 7. Swamp and Overflowed Lands and other Grants.

**Instructor Profile:** **Dr. Joe Knetsch** performs historical research for the Division of State Lands. He investigates navigable waterways, superfund sites, land changes, roads and whatever else is needed for the Division and the legal staff. Dr. Knetsch has published over 150 articles and given over 170 presentations on the history of Florida. He has also edited two books and is the author of a text on the history of Florida surveying.

**Remote Sensing:** This course will provide a description of remote sensing theory and describe modern remote sensing systems relevant to the practice of surveying. Systems will include aerial photography, multispectral scanners, Radar, Lidar and hyperspectral scanner.

**Instructor Profile:** **Dr. Scot E. Smith** received his Ph.D. from the University of Michigan in 1982. He has been at University of Florida since 1989. Before coming to Florida, Scot was at Kodak and before that, he was a professor at Ohio State. Dr. Smith became a registered surveyor and mapper in Florida in 1995. His expertise is in remote sensing and geographic information systems. Current research activities are a wildlife habitat-mapping project of Florida for the US Fish and Wildlife Department, site analysis in Sinai, Egypt and a study of the impact of a new dam on the Danube River in Hungary. Scot has a new project funded by NATO to investigate the use of zeolites for treating wastewater in Hungary.

**Close Range Photogrammetry Workshop:** This course provides hands-on instruction in the use of photogrammetric measurements to determine coordinates and/or dimensions of features. The course relates directly to the practice of Surveying and Mapping in that it involves the act of measuring photographs for the purpose of determining the facts of size and shape.

Each attendee will be supplied with an educational version of photogrammetric adjustment software and sample data files on a CD ROM. After an introduction and presentation of fundamental photogrammetric concepts, attendees will make hands-on measurements and compute an analytical solution using the provided software. Interactive instruction in trouble shooting techniques and interpretation of results will be provided.

**Class Requirement:** Attendees should bring a laptop computer with a CD reader and AutoCad installed. The version should be able to bring digital image files in as a backdrop. A basic level of knowledge in the use of AutoCad will be assumed.

**Instructor Profile: Dr. Bon Dewitt** received his Ph.D. degree from the University of Wisconsin at Madison in 1989. His specialties include Photogrammetry, Digital Mapping, Remote Sensing, and Surveying. He is licensed as a Professional Surveyor and Mapper in the State of Florida. At present, Bon is an Associate Professor and the Director of the Geomatics Program at the University of Florida where he has worked since 1988. He conducts research and teaches courses in many of the various aspects of Geomatics. He is currently the secretary/treasurer for the Florida Region of the American Society for Photogrammetry and Remote Sensing and has been a member of ASPRS since 1980. In 1996, he received a Merit Award from ASPRS (National) and in 1997 he was coauthor of a paper which won the Intergraph Award for the best scientific paper in spatial data standards. He is coauthor with Paul R. Wolf, of the textbook "Elements of Photogrammetry - With Applications in GIS," published in 2000 by McGraw-Hill. Occasionally he works as a private Photogrammetric consultant, principally in the area of forensic photography.

**Chapter 177, Plat Law:** The material presented at this seminar will focus on Florida Statutes Chapter 177, Part I, Platting. Plat Law was enacted in the legislature in 1971 and has been amended on several occasions since then. A major rewrite to the Law was effective in July 1998, with some minor modifications in 1999. This seminar will cover those sets of changes, along with a review of the long standing requirements set forth in the Law.

**Florida Laws Affecting Surveying and Mapping Combined with 61G17-6 Minimum Technical Standards for Surveyors and Mappers:** This course relates to the "Practice of surveying and mapping" as defined in Chapter 472 F.S. in that it instructs and informs the attendee regarding Florida laws affecting the practice of surveying and mapping combined with Florida's minimum technical standards (MTS) as set forth in Florida Administrative Code 61G17-6. The course is designed to be a combined course of the above two subjects as set forth in Florida Administrative Code 61G17-5.0031. The public must be able to rely on the survey product produced by a surveyor and mapper. In meeting this objective, surveyors and mappers must consider Florida laws and achieve minimum standards of accuracy, completeness, and quality. The course includes instructions on those laws and the practical application of MTS in meeting that objective.

**Instructor Profile: Gail Oliver** is a Florida Professional Surveyor and Mapper (#4564) with over 24 years of experience. Ms. Oliver is a graduate of the First Coast Technical Institute with a Diploma in Drafting and Design – Cartography. She has been County Surveyor for St. Johns County since 1995. Her duties as County Surveyor include overseeing the Surveying and GIS Divisions. Ms. Oliver served as a member of the DBPR Regulatory Board for Surveyors and Mappers from 1994 to 2001. Ms. Oliver is a member of the Florida Surveying and Mapping Society (FSMS), the National Society of Professional Surveyors (NSPS), and is President of the National Association of County Surveyors (NACS.)

**GPS-Derived Heights - Part 1: Development and Description of NGS Guidelines** is seminar on heights and height systems and their relationships, development, description, and application of NGS GPS-derived ellipsoid height guidelines, and basic procedures for estimating GPS-derived orthometric heights.

**GPS-Derived Heights - Part 2: Planning and Evaluating a GPS Vertical Survey** is a brief review of NGS GPS-derived ellipsoid height guidelines, development of a sample project following NGS' GPS-derived ellipsoid height guidelines, discussion of base line processing and analysis of repeat base line results, discussion of adjustment procedures and analysis of results, and procedures for estimating project GPS-derived orthometric heights.

**Instructor Profile: Clifton Middleton, Geodesist,** is the Texas State Geodetic Advisor and is employed by the National Geodetic Survey (NGS), NOAA. The Geodetic Advisor program in Texas is made possible through funding from NGS and a consortium including the Harris-Galveston Coastal Subsidence District, the City of Houston and the Harris County Flood Control District. He began his surveying career in the US Army and is a graduate of the US Army Artillery Surveyor School in Ft. Sill, Oklahoma and the Topographic Surveyor School at Ft. Belvoir, Virginia. He later completed Surveying curriculum at Old Dominion University in Norfolk, Virginia and served on the Survey Department Advisory Board at ODU from 1997 to 2003.

After military service he began on a Coastal Field Photogrammetry Party with NGS in 1976 as a Rodman and progressed through the ranks to recorder, observer, computer, sub-party Chief and Party Chief in 1988. In 1990 he was appointed Senior Field Cartographer and directed all Field Cartographic activities for NGS. In 1997 he was appointed Federal Base Network (FBN) Project Director and directed the completion of the High Accuracy Reference Network (HARN) Surveys and The Federal Base Network Surveys. He moved to the Houston area in September, 2003 and resides in Seabrook. His office is located at the Harris-Galveston Coastal Subsidence District at 1660 West Bay Area Boulevard in Friendswood.

He has had involvement in a variety of unique and innovative projects including the PACRIM survey in 1992 – The first comprehensive GPS survey of US possessions/territories in the Pacific Rim, The Romanian GPS Survey in 1994 in support of land privatization, Hurricane Mitch recovery efforts in Honduras and Nicaragua, GPS mapping of coral atolls in the Northwest Hawaiian Islands, Seagrass Mapping in the Florida Keys and North Carolina. He has received 2 Society of American Military Engineers KARO Awards.

**Employee & Labor Law Issues:** This course relates to the “practice of surveying and mapping” as defined in Chapter 472, Florida Statutes, as the course will cover employment related matters pertinent to running a surveying and mapping firm. The course will focus on the unique problems facing the surveying profession in terms of employees and staffing of crews. The course will include discussions of pertinent employment law, recent changes in the wage and hour rules promulgated under the Fair Labor Standards Act, discrimination issues, and workers’ compensation matters. The instructor will also provide some practical suggestions for matters which should be included in employment contracts with all employees and useful information for dealing with personnel matters.

**Litigation and the Surveyor:** This course relates to the “practice of surveying & mapping” as defined in Chapter 472, Florida Statutes, as the course will cover litigation and liability matters for surveying and mapping professionals. We will begin with an introduction to the litigation process and possible alternatives for dispute resolution. Then, the course will focus on some of the controversial issues recently involved in court cases such as the economic loss rule and the statute of limitations. We also will discuss some issues related to liability insurance coverage, and liability of corporate officers, directors, and shareholders in a surveying and mapping firm. In addition, suggestions for reducing liability exposure will be covered.

**Instructor Profile: Claire A. Duchemin** is a member of The Florida Bar and has been in the private practice of law for twenty-four years. She earned her undergraduate degree, magna cum laude, in 1977 and her law degree, with high honors, in 1980 from Florida State University. For the past twenty years, she has been involved in representing surveyors, mappers, engineers, and other design professionals in a variety of legal matters. She previously served as counsel to the Florida Engineering Society, and for the past six years, has represented the Florida Surveying and Mapping Society. She also taught for two years at the Florida State University College of Law. Ms. Duchemin has been involved in litigation at all levels of the state and federal court systems. She is a certified circuit court mediator in Florida, and she is a member of The Florida Bar and the American Bar Association.