

Surveying Engineering Technology Newsletter

<http://www.umaine.edu/set/svt/>

Spring 2009

ENROLLMENT: Currently there are 55 students enrolled in the program - Maine (40), New Hampshire (4), Massachusetts (4), Connecticut (2), Vermont (3), New York (1), and Rhode Island (1). Four students graduated in December 2008. Six students will graduate in May 2009. By the start of the Fall semester there will be at least ten new freshmen and seven new transfer students entering the program

GRADUATES: The following students have or are expected to graduate in 2009: Jacob Bartlett (ME), Clifford Bennett (ME), Timothy Brauer (CN), Robert Buzzell (NH), Timothy Cote (ME), Jimmy Courbron (ME), Nicholas Dutil (ME), Bradley Finnemore (VT), Samuel Glidden (ME), Robert Goodwin (NY), Matthew Holden (ME), Alexander Ogilvie (ME), Matthew Plante (ME), Nathan Winings (NH),

EMPLOYMENT: There are fourteen students graduating this year (some in December). While employment offers have fallen significantly from last year, there are still employment offers being made. If you are aware of employment opportunities, please contact one of the faculty.

SVT SCHOLARSHIPS: At the present time, the program has eleven scholarships due to the generosity of numerous firms and individuals. The number of scholarships in the program exceed all the other technology programs. The amount shown in parenthesis is the amount of principle in the scholarship. The interest on this amount provides the scholarships to the students.

- Andrew Shyka Scholarship — Colleagues and friends of Andy Shyka created this scholarship in tribute to Andy's contributions to surveying. (\$7,325)
- Carol and George Gay New England Section Scholarship — This scholarship was established by Carol Gay. Her husband, George, devoted much of his life to educating surveyors. Carol devoted considerable time to the New England Section of ACSM. (\$2,500)
- Col-East, Inc. SVT Scholarship — This scholarship was established by Col-East, Inc., a photogrammetric firm in North Adams, MA. (\$6,000)
- Ellsworth Stanley ACSM-NES Scholarship — The New England Section of the American Congress on Surveying and Mapping created this scholarship in memory of the significant and numerous contributions by Ellsworth Stanley to the surveying profession. This is the oldest scholarship in the surveying program. (\$42,403)
- Fritz Petersohn Memorial Scholarship — This scholarship was established by the friends of Fritz Petersohn in memory of his work and efforts on behalf of the surveying profession and the surveying program at the University of Maine. (\$7,935)
- Gunther Engineering Surveying Engineering Technology (SVT) Scholarship — This scholarship was funded by generous contributions from Gunther Greulich to provide financial aid to surveying students and to recognize the contribution of education to the advancement of surveying. (\$19,890)

- Plisga & Day SVT Scholarship — The Plisga and Day Scholarship was established in 2006 by the surveying consulting firm of Plisga & Day. Plisga & Day is a Bangor, Maine based land surveying firm that was founded in 1972 by Stanley J. Plisga and Richard A. Day. (\$3,500)
- Rhode Island Society of Professional Land Surveyors (RISPLS) Scholarship — This scholarship was established by the Rhode Island Society of Professional Land Surveyors in recognition of the contributions of the faculty and program to the New England region. (\$5,000)
- Robert P. Titcomb Memorial Scholarship — This scholarship was created by David Titcomb in memory of his father who was a leader in the surveying profession and a strong advocate of the surveying program at the University of Maine. (\$5,639)
- SVT Alumni Scholarship — This scholarship was established by alumni of the surveying program to help students obtain an education in the surveying profession. (\$5,500)
- Virginia and Roger Ferguson ACSM New England Scholarship — This scholarship was established by Roger Ferguson in loving memory of his late wife. Roger has been a leader in the surveying profession and a strong advocate of surveying education. (\$31,000)

RECOGNITION SCHOLARSHIP: Do you want to create a perpetual memorial to a person or firm? Please consider establishing a scholarship to insure that the name of a person or firm will live on in perpetuity and help students with their financial needs. A minimum of \$20,000 is required before a scholarship can be awarded to a student. Any amount greater than \$1,000 will start a scholarship.

PROGRAM SCHOLARSHIPS: Surveying Engineering Technology is pleased to announce the following scholarship recipients:

- ACSM – NES Ellsworth Stanley Scholarship — Timothy Brauer, Jonathan Drew, Nicholas Dutil, Nicholas Elliston, Kevin Gay, Jared Johnson, Kyle Peckham, Drew Pickering, Jeffrey Spaulding, Kymberley Turk
- Andrew Shyka Scholarship – Matthew Verrill
- Gunther Engineering Boston Surveying Engineering Technology (SVT) Scholarship — Clifford Bennett
- Fritz Petersohn Memorial Scholarship — Nathan Winings
- Rhode Island Society of Professional Land Surveyors (SVT) Scholarship — Heather Pettigrew
- Robert Titcomb Memorial Scholarship — Eric Anderson
- Virginia and Roger Ferguson ACSM New England Scholarship - Jacob Bartlett

PROFESSIONAL SOCIETY SCHOLARSHIPS: SVT students applied for and received the following scholarships from professional societies:

- A.C.S.M. Bernsten Scholarship - Tyler Rigazio
- C.A.L.S. Scholarship - Timothy Brauer
- M.S.L.S. Scholarship — Nick Acheson, Daniel Oakes, Alex Ogilvie, Richard Reinhart, & Kevin Gay
- N.H.L.A. Scholarship — Tyler Rigazio

ACSM STUDENT CHAPTER: The UMaine Student Chapter of ACSM would like to thank everyone for all their support and donations for the 2009 NSPS Surveying Student Team Competition. The SVT program was able to send five students to participate in the competition that was held on Friday, February 20, 2009 during the ASCM-MARLS-UCLS-WFPS Conference in Salt Lake City. The students who participated were Alexander Ogilvie, Andy Brown, Nate Mayo, Dan Oakes and Drew Pickering.

The competition consisted of a field exercise, a paper whose subject was “Calculating Devices & Methods for Surveyors – Past To Present”, and a poster describing one of the calculating devices mentioned in the paper. The field exercise consisted of 38 questions split up into 5 parts:

- Determining a field distance using a subtense bar and a Wild T-2 theodolite set up between two points in one of the huge indoor rooms of the conference center.
- Solving several problems that required the use of a slide rule that had A, B, C, D and trig scales.
- Solving several problems where information was given about using a steel tape to measure or lay out a horizontal distance and where temperature and slope corrections had to be applied. The use of trig tables, logarithm tables and non-electronic calculators were allowed.
- Reading several different transit verniers that were shown on pictures provided to the students.
- Solving several problems using only logarithm tables.

UMaine students determined the subtense bar distance to within a tenth of a foot of the correct distance (I believe their result was the best of the competition) and tied for fourth in the field exercise part of the competition. The paper and poster could have been better but the students who will be coming back next year now know what the judges are expecting and are anxious to compete again and do better during next year’s competition. Next year’s competition is planned for April 25-29, 2010 in Phoenix, AZ. The topic is forensic surveying related to accident scenes.

An important aspect of the student competition is to have the students meet land surveyors and vendors from around the world and also to meet other students and professors from some of the other surveying schools around the country. During this competition the UMaine students met and talked with Brent Jones of ESRI and Rich Vannozzi (formerly of UConn and now at UNH) at one of the dinner meetings. The result was the possibility of the UMaine Student Chapter sponsoring or co-sponsoring a two-day seminar at UMaine for surveyors interested in using ESRI products for land surveying purposes. Rich Vannozzi has been working with ESRI to give a surveyor’s prospective to ESRI products and will be teaching the seminar. The students are in the beginning stages of organizing this seminar and more information will be sent out as the seminar takes shape.

ACSM STUDENT THANKS: The Trip to Salt Lake City to compete in the NSPS student surveying competition for five Students and one faculty advisor cost \$6,500. The chapter

would like to thank the following for donations to make this learning experience possible:

New England Section ACSM	\$4,500.00
MALSCE	\$500.00
Penobscot Chapter MSLS	\$200.00
Rhode Island SPLS	\$200.00
Edward Wainwright (Veazie, ME)	\$75.00
Crown of Maine Chapter MSLS	\$100.00
ESRI c/o Brent Jones	\$1,000.00

Andy Shyka provided a loan of equipment and a day of training on the use of a subtense bar. Also, John Schwanda was kind enough to lend the student chapter several books and slide rules used during the competition.

Finally, many donations were made for T-Shirts that the chapter was promoting to support the trip. Donations in excess of \$500 to date have been received.

DEAN'S LIST: The following SVT students earned the honor of being recognized in the Fall 2008 Dean's list: Nicholas Acheson, Jacob Bartlett, Clifford Bennett, Robert Buzzell, Timothy Cote, Jonathan Drew, Nicholas Dutil, Sterling Hooke, Christopher Martin, Matthew Plante, Tyler Rigazio, Benjamin Robie, Henry Simpkins, and Matthew Verrill.

PRESIDENTIAL ACHIEVEMENT AWARD: The Presidential Achievement award is made just one time in a student's studies at the University of Maine. Full-time students must attain a 3.0 grade point average or better for two consecutive semesters. The student must also achieve a 3.5 grade point average or better for the most recent semester. Very few students achieve this honor. This academic year **Robert W. Buzzell (2009), Jonathan B. Drew III, Nicholas B. Dutil, and Jared S. Johnson** achieved this honor.

CAPSTONE COURSE: Fourteen students participated in the SVT 490 senior capstone class this semester. The project involved retracement of six connected parcels totaling 511 acres between I-95, Kirkland Rd., and Pushaw Stream. All work was performed on snowshoes due to the snow depth. At the students' request, all field work was performed as a group, while all deed research, survey report, survey plan, powerpoint, and final presentation were completed individually. We deeply appreciate R. & D. Sossong, E. Huisman, and A. & E. Wohlgemuth for allowing us to use their land for a "survey playground". We also appreciate the support of David Sewall of Sewall Holdings Ltd. and Ken Muir of Ames Engineering with unrecorded information from adjoining parcels.

PROGRAM SUMMARY: Currently, the SVT program offers the following surveying or survey related courses in the program:

Surveying Related Courses	
Fall Semester	Spring Semester
SVT 100 Introduction to Surveying Technology*	CET 101 Plane Surveying*

SVT 110 Instrumentation & Data Collectors*	SVT 122 AutoCAD for Surveyors II
CET 101 Plane Surveying*	SVT 201 Adjustment Computations*
SVT 121 AutoCAD for Surveyors I	CET 202 Construction Surveying*
CET 202 Construction Surveying	SVT 221 Boundary Law*
SVT 322 Writing Effective Prop. Descriptions*	SVT 331 Photogrammetry*
SVT 329 Site Planning & Subdivision Design	CET 332 Civil Engineering Technology
SVT 341 Advanced Surveying*	SVT 352 Practical Field Operations*
SVT 418 Fund, Surveying Exam Overview*	FTY 480 Applied Geographic Info. Systems
SVT 437 Practical GPS*	SVT 490 Surveying Capstone
SVT 475 Small Business Management	
MET 484 Engineering Economics	

The courses marked with an asterisk meet one time a week for 3 or 4 hours. These courses have been scheduled so that employees working full-time jobs can enroll in the course and only miss a half day of work per week.

SVT PROGRAM DONATIONS: Spillers (Russ Desjardins) donated one fixed height tripod worth about \$700. The Rhode Island Society of Professional Land Surveyors donated money to go to the RISPLS scholarship recipient. Finally, \$25,000 was provided by SEFNE to establish a trust fund for maintaining a photogrammetry lab.

SOFTWARE CHANGES: Starting in the Fall 2009 semester we will be modernizing the way we teach our CAD courses. Thanks to a generous donation by Carlson Software of 40+ licenses of their Survey, Civil, Hydrology, and GIS software, each CADD student will have the Carlson Software on their own personal laptop (Each SVT student is required to have their own laptop). The students will bring their laptops to class and will also be able to use the software anywhere on campus, 24 hours a day, 7 days a week. Advantages of this new approach are: 1) Students will be able to work on projects in their dorms, at the library, or anywhere on campus at all hours of the week and weekend; 2) Students will have control over their own laptops and will not have to worry about files being deleted or corrupted as often occurs on “public” University-owned workstations; 3) Class size will not be constrained by how many workstations are in a CADD lab. The SVT program will continue to have access to Autodesk products. While Carlson Software will be used to teach CADD, Autodesk products will also be shown.

INDUSTRIAL ADVISORY COMMITTEE: The industrial advisory committee met on 10 April 2009. Members of the committee represent every New England Society, the Maine Board of Licensure, and surveying or photogrammetry firms. The current representatives on the IAC are the following:

Representative	Organization	Representative	Organization
David Brandt, P.L.S.,P.E.	Surveyor at Large	David Hilbern, P.L.S.	RISPLS
Claire Kiedrowski	Photogrammetry	David Titcomb, P.L.S.	Prof. Licensing Board

Shep Sheppard, P.L.S.	Surveyor at Large	Joseph McNichols, P.L.S.	ACSM-NES
Andrew Tupper, P.L.S.	CALS	Dave Cook, P.L.S.	MSLS
Jason G. Racette, P.L.S.	Surveyor at Large	R. Michael White	GIS
Tim Peloquin, P.L.S.	NHLSA	A. Rich Vannozi, P.L.S.	MALSCE
Timothy Patch, P.L.S.	VSLs	Stephen Gould, P.L.S.	Surveyor at Large

The IAC advises and evaluates the SVT program. At this meeting the IAC discussed funding cuts at the University of Maine and the impact of reduced funding on the SVT program. Another issue was the reduction in the number of sections in professional communications course.

RECRUITING NEWS: Faculty were present at two open houses held at the University of Maine. An open house is where prospective students come to the University of Maine to learn more about the University of Maine and its various programs.

SVT CROWE AWARD: Congratulations to Gunther Greulich for the honor of receiving the Surveying Engineering Technology Distinguished Francis Crowe Award. The Distinguished Francis Crowe Award recognizes individuals who have made considerable engineering contributions to the surveying engineering technology program and the profession.

Gunther Gruelich is a retired licensed land surveyor and engineer in Massachusetts. He is also a certified photogrammetrist and hydrographer. His education includes Graduate Civil Engineer from the State College for Civil Engineering of West Berlin, Germany. During the Cuban missile crisis he took courses at Worcester Polytechnical Institute and became a certified fallout shelter analyst by the US Department of Defense. Gunther emigrated from West Germany in 1956 and worked for Aero Service Corp. in Tulsa, OK. From 1957 to 1965 Gunther worked for New England Survey Service in Boston. During that time he provided survey control and construction survey services on the Callahan Tunnel under Boston Harbor, certified location of 144 caissons supporting the Prudential Center, and managed design computations of the Massachusetts Turnpike extension from Newton to Boston. In 1965 Gunther became founder and principal of Boston Survey Consultants, heading its Boston division for 17 years. From 1983 till retirement Gunther headed a independent company named Gunther Engineering. During this time he developed an extensive resume in court as an expert witness in a wide variety of surveying and engineering applications. Gunther has presented, published, and/or co-authored 150 papers and books. During his professional career he was an advisor to the National Geodetic Survey (NGS/NOAA) and an invited panel member of the National Research Council of the National Academy of Sciences. Gunther's true fervor fell in his demand for higher education for surveying engineering, and he has been one of the University of Maine's most vocal and financial supporters in this effort.

Prior distinguished Francis Crowe inductees include David Cook, M.S., P.L.S. (Dec. 2003), Joseph McNichols, P.L.S. (May 2004), A. Richard Vannozi, M.S., P.L.S. (May 2006), Claire Kiedrowski (May 2008) and Dominick Auletto (Dec. 2008).

FACULTY NEWS: There are three full-time faculty and one part-time faculty (Steven Adam). The three full time faculty are Dr. Knud Hermansen, P.L.S., P.E., Esq. (Professor), Dr. Raymond Hintz, P.L.S. (Professor & Coordinator), and Mr. Carlton Brown, P.L.S., P.E. (Assistant Professor).

During this past year, Knud has been active combining his engineering and surveying licenses with his law license. He has been appointed by the Maine Superior court as a commissioner in one case and a special master in another case. He has also been a referee and arbitrator for numerous disputes as an alternative to litigation. He presented workshops for the West Virginia Board of Professional Land Surveyors, Illinois Society of Professional Land Surveyors, Maine Society of Land Surveyors, Vermont Society of Land Surveyors, Rhode Island Society of Land Surveyors, Massachusetts Association of Land Surveyors & Civil Engineers, Tennessee Association of Professional Surveyors, and the Joint Environmental Training Coordinating Committee.

Carlton was an expert witness for a case that will be going to the Massachusetts Land Court involving the legal status and location of ancient proprietor roads in a town founded in 1630. His report and plan were the result of analyzing the manuscript proprietors records written between 1650 and 1715. Carlton provided a seminar to MALSCE on Survey Math II. He has also attended the 2nd Annual Carlson Software User Conference.

Ray presented workshops for AR Highway Dept., Bentley Systems, FL DOT, FL DEP, GA Power, Great American Group MALSCE, MSLS, UNH, and WI DOT.

THOUGHTS FROM THE DIRECTOR: It has been a unique and challenging year for the School of Engineering Technology. Enrollment exceeded 450 for the first time in history. This unprecedented demand is good news and is a testament to the quality programs being offered. Unfortunately, the bad news is that University resources have not been available to respond to this demand. Our faculty have worked hard to squeeze more students into their sections. It is likely that we will soon have to elevate our entrance standards in one or more programs to manage demand and maintain quality.

Many of you have read in the news about budget cuts which seem to have become an annual tradition. This year's cuts have been exceptionally painful because they were very deep and occurred at a time when the College of Engineering had already been cut to the bone. While the School of Engineering Technology was able to avoid losing any personnel, the College of Engineering did lose 3.5 positions. These were not open positions. Quality professionals who had served the university for many years lost their jobs. It is heartbreaking and a further sign of the pain associated with this recession. We are extremely appreciative for all the strong support that we continue to receive from our alumni and industry supporters.

Finally, I would like to thank our supporters who serve on our Industrial Advisory Committees. Our faculty appreciate that the time you share with us is valuable. During our recent accreditation visit from ABET, the program evaluators commented on the high

caliber of our IAC members and the enthusiastic support they provide for our programs.
Thank you for your commitment and the direction you provide for our programs.