

Dean's Weekly Significant Activities Report

19 September 2012

The Dean's Weekly Significant Activities Report is an internal report on all activities conducted within the Departments, Centers & Staff. The Report is provided to the Dean for situation awareness, throughout the organization for shared situation awareness, and to select external organizations for outreach and communication. Portions of the Dean's Weekly Significant Activities Report are further staffed in a report to the Superintendent. POC for the report is MS Lesley Beckstrom at 938-5105.

Picture of the Week



**SAP CDT
Rogacki is at
Université
Catholique de
Lyon**

**In this photo: Cadet Rogacki and Australian
exchange student Caroline Turner at Hôtel-Dieu, a
15th century hospital in Beaune, France**

The Institute for Innovation and Development

West Point Fellows Attend the 2012 Minerva Meeting in D.C.



Dr. Luke Gerdes Presents



3rd Annual Minerva Conference, D.C.

The Minerva at West Point research team attended the 3rd Annual Minerva Research Initiative in Arlington, VA September 13th and 14th. This year's conference summarized ongoing research from a number of scholars, military entities, policy representatives and other various agencies. The Minerva leadership discussed their interest to focus on the positive and negative aspects of population influence and the shifts in population movements. The Deputy Assistant Secretary of Defense for Strategy, Daniel Chiu and Director for Basic Research, Robin Staffin addressed conference attendees about the importance of social science research, which focuses on the "human" aspects and not just technology driven research.

Dr. Luke Gerdes from the Minerva at West Point research team presented preliminary research results in a presentation titled, "Examining the Diffusion of Tacit Knowledge Among Kidnappers in the Abu Sayyaf Group." His research focused on how extremist groups learn and was presented on a panel dedicated to belief formation and influence. Other panelists included representatives from the Department of State, the U.S. Special Operations Command Interagency Task Force, and Arizona State University.



Dr. Gerdes Illustrates The ASG Data

Minerva Research Initiative and the Center for the Study of Civil-Military Operations



CSCMO, G&EnE, Amb Garvelink and Minerva Guest Lectures



Ambassador Garvelink

Ambassador William J. Garvelink, Senior Adviser, U.S. Leadership in Development from the Center for Strategic & International Studies (CSIS) and former Ambassador to the Democratic Republic of Congo, guest lectured during Dr. Makame Muhajir's African Studies course and the Center for the Study of Civil-Military Operations (CSCMO) on Tuesday, September 11th. The Ambassador spoke to cadets and faculty regarding the issues facing the Democratic Republic of Congo and what is needed to turn the country around.

Minerva at West Point Apprentices Participate in Research



**Kristine, MRI RA, Barbara, SE Asia Intern
And Robert, Africa Intern at the ANAT Training**

Barbara Autin and Robert Rasmussen spent the summer working through the Network Science Center and for the Minerva at West Point Research Initiative, <http://www.usma.edu/minerva/SitePages/WhoWeAre.aspx>.

Barbara worked with the initiative's fellow, Dr. Gerdes and research associate on the project, "Examining the Diffusion of Tacit Knowledge Among Kidnappers in the Abu Sayyaf Group."

Robert also worked alongside Minerva at West Point's fellow, Dr. Muhajir and research associate on the project, "Nationalization in Practice: Comparative Research in Ethnicity, Religion, and Society in Post-colonial Tanzania."

Department of Mathematical Sciences

Visiting Speakers Address Cadets and Faculty on Energy Security

As part of the effort to expose cadets and faculty to the importance of energy security for our Army and for our country, on Thursday and Friday, 30 and 31 August, the Department of Mathematical Sciences welcomed Mark D. Rocke, SES, and CPT Jeffrey Swinford, Commander, F/2-34 AR. Mr. Rocke is the Deputy Assistant Secretary (Strategic Integration), Office of the Assistant Secretary of the Army (Installations, Energy & Environment). CPT Swinford recently redeployed from a tour in Afghanistan as the company commander of a forward support battalion. Both spoke to both West Point cadets and faculty during three separate engagements.

Mr. Rocke discussed with the cadets the Army's strategic challenges and its objectives of regarding energy security. CPT Swinford focused on the tactical aspect by providing his first-hand experience of managing the logistical complexities of day-to-day operations at Forward Operating Bases in Iraq and Afghanistan, and how this burden is compounded when energy security measures are not established or followed.

Both began their first of three speaking engagements on the evening of Thursday, 30 August, during a MA205 evening lecture in which they introduced the yearlings to the strategic and tactical several aspects of energy security. They also emphasized the importance in the academic setting, specifically learning how to solve complex problems demanding interdisciplinary solutions.



Mr. Mark Rocke, Deputy Assistant Secretary of the Army (Strategic Integration), addresses the Class of 2015 on the strategic importance of energy security during an MA205 lecture held 30 AUG.

The following day, the visitors addressed the Class of 2016 as part of a joint MA100/MA103/MA153 lecture in Robinson Auditorium. It was here they also sought to inform plebes on energy security issues as well as its importance in the academy's course curriculum. This was of significant importance to these students because, beginning with the Class of 2016, students will be exposed to problems pertaining to energy security that will require interdisciplinary thinking, study which will include approximately 15 core courses.

In all, approximately 2,000 cadets from the Class of 2015 and 2016 (nearly half of the Corps of Cadets), were informed on a vast array of energy security issues and challenges. Overall, Mr. Roche and CPT Swinford drove home the importance of energy security with the cadets so that it will have a lasting effect on them and set the stage for their future endeavors at USMA and careers in the Army.

Mr. Roche and CPT Swinford rounded out their speaking engagements with a discussion to faculty only, which focused on informing them of energy security relations.

The Center for Leadership and Diversity in Science, Technology, Engineering, and Mathematics (CLD_STEM) conducted a Mobile Robotics workshop at Huntsville Middle School in Huntsville, AL. The workshop, held on Saturday, September 8, 2012, was set up in conjunction with the West Point Alabama State Field Force and sponsored by the Directorate of Admissions (DAD).

This workshop was a part of CLD_STEM's Mobile STEM Program, a program that travels around the country with an aim to broaden participation in STEM among disadvantaged and underrepresented minority populations. Dr.

Dr. Kendall Williams and Dr. Johann Thiel of the Department of Mathematical Sciences, conducted the one-day workshop along with the help of Cadets Dajah Davis and Eliot Knotts. The workshop consisted of approximately thirty Huntsville Middle School seventh and eighth graders. 1LT Kelson Lumpkin, DAD's Diversity Outreach Executive Officer, and LTC(R) Don Ecklin, Alabama's Field Force Coordinator assisted with the coordination and operation of the workshop.



Students constructed LEGO® MINDSTORMS® Taskbots and then programmed them to accomplish various tasks. The participants competed against one another to see which groups could program their robots to run a course with the most accuracy. In the second competition,

students were going for speed. They programmed their robots to follow a line utilizing its light sensor.

The workshop was a complete success. Not only was the workshop a positive experience for the students, it also served as a venue to promote West Point and its desire to engage students in hands-on STEM activities at a young age.



Department of English and Philosophy

Past Event

On 18 September, faculty who teach PY201 (Philosophy) met with Majors Heidi Brockmann and Michael Rosol, who are the course directors for SS202 (American Politics) and SS307 (International Relations). Majors Brockmann and Rosol presented their course objectives, themes, and lessons, with a particular focus on the ideas and theories shared between their courses and PY201. PY201 faculty will use what they learned from this discussion to better integrate the efforts of the courses by building on what cadets learn in SS202 and preparing cadets for what they will learn in SS307. Faculty also agreed to keep each other better informed about course-wide lectures and Philosophy Forum events that are of interest to faculties in both departments.

Future Events

1. The Department of English and Philosophy EN101 Composition faculty will host a visit by Dr. Kurt Spellmeyer, the director of the Rutgers University Writing Program, on Thursday 27 September. EN101 is using Dr. Spellmeyer's anthology, *The New Humanities Reader*, as a course text this year. Dr. Spellmeyer will conduct a faculty workshop, offer remarks at lunch, confer with instructors individually, and visit classes while at West Point. This marks the second year in which EN101 faculty members will benefit from a visit by Dr. Spellmeyer.
2. The Department of English and Philosophy will host a visit and performance by the Exit12 Dance Company on Friday 28 September. Exit12's artistic director is Roman Baca, a Marine Corps veteran of two tours in Iraq; the troupe specializes in modern dance interpretations of themes relating to the experiences of soldiers—and their families—during a time of war. Exit12 will perform in the Haig

Room, Jefferson Library, from 1100-1200 and participate in a dialogue with cadets, faculty, and invited guests about art and war—and about the work of cultural diplomacy. This will be the first event of the year's Creative Arts Project initiatives, and it will support the collaboration between West Point and Vassar College as part of the Mellon Foundation Liberal Arts College Program. The Mellon Foundation program encourages collaborative partnering between civilian colleges and military academies (partners include The Army War College and Dickinson College). Visiting West Point on 28 September will be approximately fifteen Vassar College students and four faculty members.

Department of Behavioral Sciences and Leadership

Completed Events

Follow BS&L on Facebook: <http://www.facebook.com/pages/West-Point-NY/Department-of-Behavioral-Sciences-Leadership/44253274507>

Cadet Development:

PL300 Speaker, COL Ed Daly.

On 15 September, the Chief of Ordnance, COL Ed Daly, served as a guest speaker for the B3 Section of PL 300. COL Daly shared his experiences on transformational leadership and expectations for our future junior officers for leading in a period of transition. **POC: MAJ Eric McKoy, BSL, x5002.**

Positive Psychology Project Speaker, Susan Cain.

On 12 September 2012, Susan Cain spoke to the cadets in the Positive Psychology Project and addressed the skill sets introverts have and what components of their personalities make them effective leaders. She is the author of the New York Times best-seller, "Quiet," and her March 2012 TED talk holds the record for the most number of views in its first month. **POC: MAJ Mike Erwin, BSL, x2178.**

Pictured below: Susan Cain speaking to the cadets in the Positive Psychology Project.

**Faculty Update.**

Dr. Don Campbell and Dr. Kathy Campbell are currently working at USAFA as part of their sabbatical and they reconnected with Cadet Connor McKowen who was at West Point on an exchange in the Fall of 2011. Dr. Kathy Campbell taught him in MG379 "Leading Teams". Dr. Kathy Campbell stated that Connor has been instrumental in their research by providing them a great deal of information on the strengths of each Academy from a cadet's perspective. **POC: Dr. Kathy Campbell, x5978.**

Pictured below: In order, Dr. Don Campbell, USAFA Cadet Connor McKowen and Dr. Kathy Campbell.

**Faculty Outreach:**

Army Marketing & Research Group Outreach.

On 17 September 2012, LTC Todd Woodruff briefed a group of senior leaders and researchers from the Army Marketing & Research Group (AMRG) and senior researchers from Cadet Command at Fort Knox, KY. LTC Woodruff provided research on alternative metrics for categorizing recruited Soldiers. LTC Woodruff discussed how Army marketing campaigns and selection of market segments shapes the distribution of enlistment motives and thereby affect the value derived from each marketing action and market segment. **POC: LTC Todd Woodruff, BSL, x1788.**

U.S Pre-Trial Services Outreach.

On 14 September 2012, at the request of the Staff Judge Advocate, MAJ Jeff Lovelace provided a one-hour interactive leadership class to U.S. Pre-trial Services, a key partner of the USMA Staff Judge Advocate in the Magistrate Court. The session covered a myriad of topics from personal development, to leader influence, and organizational leadership. The session supported the Department's continuing effort to reach out to other organizations at West Point and other strategic partners. **POC: MAJ Jeff Lovelace, BSL, x5002.**

Faculty Academic Presentation.

On 14 September 2012, Dr. Luke Gerdes made a presentation at the Minerva Initiative in Arlington, Virginia titled "Examining the Diffusion of Tacit Knowledge Among Kidnappers in the Abu Sayyaf Group." The topic deals with learning patterns among Philippine radicals. **POC: Dr. Luke Gerdes, BSL, x6457.**

Community Support.

On 11 September 2012, Dr. Morten Ender, Dr. Ericka Rovira, MAJ Steve Flanagan, CPT Jacquie Jordan, MAJ Adam Grim, MAJ Mike Erwin and MAJ Lou Nemec along with 125 cadets, staff, faculty and family members took part in a memorial run throughout campus honoring the victims of 9/11. The run began on the morning of September 11th at Reveille and continued until Retreat. Each volunteer runner carried or was part of a group carrying the American Flag. **POC: MAJ Lou Nemec, BSL, x0066.**

Pictured below: Dr. Morten Ender with Dr. Ericka Rovira and other faculty members supporting the 9/11 Memorial Run.



Department of Foreign Languages

Completed Events

Arabic. Four Arabic SAP cadets are currently in their second week of classes at Al Akhwayn University in Ifrane, Morocco.

Four Arabic SAP cadets are currently in their third week of classes at Al Qasid University in Amman, Jordan.

SAP CDT Zach Taylor completed his third week of classes in Muscat, Oman at the Center for International Learning. The Center will host a trip to a nearby village this weekend to meet with locals and learn about ancient culture in Oman.



In this photo: Cadet Zach Taylor with his host family's children, Marwan - 8yrs old, and Mana - 13 yrs old.

Arabic DCA Event: The Arabic Club will meet on Friday, 21 September, 1900 in WH5003 to view and discuss the film *The Battle of Algiers*.

Chinese. On 14 September, Major Matthew Radik and eight Chinese speaking cadets supported Colonel Michael Meese and Lieutenant Colonel Tania Chacho from the Department of Social Sciences in hosting a Chinese Delegation for lunch. The delegation was made up of members from China's Ministry of Commerce and large Chinese corporations. The following cadets supported this activity: Ruby Ahn '13, Timothy Chen '13, Austin Keeton '13, Richard Kim '14, Jeremy Madany '13, Joseph Neir '15, Charles Yu '14, and Howard Zhou '13.

French. SAP Cadets are currently in classes at their respective universities; eight at St. Cyr, two at Université Catholique de Lyon, and two at Université Catholique de Lille. Cadets at St. Cyr participated in field training the weekend of 15-16 September. They took part in exercises at the team and squad level and developed orders and plans for patrols. The focus was on planning and communicating the plan to others. They conducted drills and ceremony tasks and team sports. Next week, they will participate in the "bahautage". This is a traditional event that takes French cadets to Paris where the new class of St-cyriens

is officially inserted into the corps of the academy. This is similar to “new cadets” becoming “cadets” at West Point. Female French cadets are excluded from this rite; however, international female cadets are invited to participate.

SAP Cadets at the Université Catholique de Lille, CDTs Lewis and Smith, were hosted by the American contingent of liaison officers serving in the Rapid Reaction Force HQ at their recent hail and farewell dinner. They introduced the cadets to the group of American officers and their families. CDT Smith is joining a local football (soccer) club, which will expand his contact with the language and culture.

SAP CDTs Rogacki and Botero at Université Catholique de Lyon, have engaged in tests to refine their language placement and to measure course progress. Next week, they are taking an academic visit to Péroques, a nearby medieval village as part of their courses.



In this photo: Cadet Rogacki and Australian exchange student Caroline Turner at Hôtel-Dieu, a 15th century hospital in Beaune, France

French DCA event. The weekly French Club conversation table gathered about 15 cadets and 7 newly arrived French lieutenants from St. Cyr on 11 September 2012. At the home football game on Saturday, 16 cadets worked at 3 different vending locations around Michie Stadium.



In these photos: Left- CDT Daniel Otto serves up dippin' dots at the Army football game against Northern Illinois. Right- CDT Robert Schrack awaits customers.

German. German SAP cadets continue their immersion experiences arriving at their academic institutions in Hamburg and Munich, Germany, and Wiener-Neustadt, Austria. All cadets are settling in, getting acquainted with their institution surroundings, liaising with their social and institution sponsors, and registering for classes. Cadets will continue their academics at the beginning of October. During the course of their SAP experience, each cadet has a weekly written academic requirement relating to some cultural aspect of their time in country. This requirement is a part of the LN491 course proctored by Dr. Vazulik.

German DCA Event: German Language Club cadets and German Section OICs traveled to New York City on Saturday, 15 September, to participate in the 55th Annual German-American Steuben Parade along Central Park. The participation of the German Language Club proudly represented an over twenty-year relationship between the two groups. A small representation of 10 USMA cadets, 5 German exchange cadet/officers and 4 USMA officer staff marched at the front of the formation. Cadets met with German American societies, visiting groups from Germany, and representatives from Germany's Mission to the UN.



In this photo: Members of the German Language Club in the 55th Annual German-American Steuben Parade along Central Park.

Department of Social Sciences



The CTC briefed 71 members of the U.S. Army War College International Fellows program on Wednesday, 12 September 2012. Dr. Nelly Lahoud and Gabe Koehler-Derrick presented findings from their research on al Qaeda and the Arab Spring, and CTC Director MAJ Bryan Price provided an overview of the CTC and its mission.



On Thursday, 13 September 2012, CTC staff and faculty briefed distinguished members and CEOs of the Nuclear Electric Insurance, Ltd. Head of the Department of Social Sciences at West Point, COL Michael Meese and CTC Director MAJ Bryan Price provided an overview of the CTC's mission and structure, while several CTC faculty members presented their latest research. Dr. Nelly Lahoud and Dr. Arie Perliger presented their current research on al Qaeda and the current status of domestic right-wing terrorism in the United States. LTC Jon Brickey, the US Army Cyber Fellow at the CTC, followed with his research findings on cyberterrorism.



The CTC welcomed GEN(R) Montgomery Meigs and the Business Executives for National Security (BENS) for a brief on Friday, 14 September 2012. Following an overview of the brief from CTC Director MAJ Bryan Price, Dr. Nelly Lahoud and Dr. Arie Perliger presented findings from their latest research on al-Qaeda and the threat of right-wing terrorism within the United States.



The CTC had the pleasure of hosting GEN(R) Stanley McChrystal for a roundtable discussion on Friday, September 14, 2012. After serving as a guest lecturer in CTC Distinguished Chair GEN(R) John Abizaid's class, GEN(R) McChrystal joined the CTC staff and faculty in Buekema Library and discussed a range of contemporary issues in counterterrorism. Cadets in GEN(R) Abizaid's class were also treated to another special visitor when former President George W. Bush dropped by with USMA Superintendent LTG Huntoon.

Department of Physics and Nuclear Engineering

Completed Events

Department Major's Meeting: On 13 September, a welcome back meeting was held for cadets majoring in physics, nuclear engineering, and interdisciplinary science. The majors were presented with a

quick overview of their majors program, and saw and heard about the research available from the three Centers of Excellence and individual researchers.

Meeting:

Class Visit: On 14 September, Mr. Ken Brockman visited from the International Atomic Energy Agency (IAEA). Mr. Brockman is a West Point Grad (1972) and also a member of our ABET Advisory Board. He gave a presentation to COL Bryndol Sones' NE495 class. The two topics of discussion were Fukushima and Vogtle nuclear power station under construction in Georgia.

Research Collaboration: During 13-14 September, LTC Kraig Sheetz and LTC Lou Florence traveled to MIT Lincoln Laboratories (MIT/LL) in Lexington, MA, to meet with the leadership of the Laser Technology and Applications Group and develop the way ahead for collaborative research efforts in ultrashort pulse laser (USPL) design and high energy laser effects. Additionally, they delivered a cryogenic laser housing that CDT Cameron Prince designed and built for them as part of his PH389 project last semester. After a hands-on laboratory tour, all parties involved agreed to collaborate in two specific areas of USPL research: (1) Cryogenic cooling of Yb:KGW (our PNE femtosecond gain medium), and (2) Gain bandwidth "stacking" of spectrally adjacent gain media to increase bandwidth and decrease pulse duration. The leader of the Laser Technology and Applications Group and the director of MIT/LL are in favor of supporting West Point in this cutting-edge collaborative research. Details of the support are currently being developed.

Class Visit: On 17 September, Mr. Juan Ochoa from MIT Lincoln Labs visited Dr. Paula Fekete's PH361 class and gave a presentation.

Briefing: During 17-18 September, Mr. Rob Beimler, the proponent manager for FA52 visited the Department of Physics and Nuclear Engineering. Mr. Beimler presented a FA52 briefing and provided the opportunity for one-on-one visits.

Future Events

Visit: During 24-25 September, the Nuclear Science Engineering Research Center (NSERC) and Nuclear Engineering Program will be hosting two faculty members from US Naval Academy (Department of Mechanical Engineering), Professor Marty Nelson and Assistant Professor Millet, where they are standing up a nuclear engineering major. The faculty are coming to gather some lessons-learned from standing up our program and to get a pulse on how we currently operate and interact with the NSERC.

ORD

Gross Attendance Report
11- 18 Sep 2012

Date	CADET ABSENCES	ABSENCES	ARRIVED LATE	DEPARTED EARLY	TOTAL
18-Sep-12	85	137	45	10	192
17-Sep-12	201	336	82	18	436
14-Sep-12	281	526	43	17	586
13-Sep-12	150	284	46	7	337
12-Sep-12	221	315	70	7	392
11-Sep-12	83	142	39	3	184

Cadet Absences equals number of cadets absent 1 or more class period

Absences are the number of classes missed by the cadets that were absent

Department of Chemistry and Life Science

1. New Instructor is a Published Author!!

MAJ Ford Lannan, newly arrived C&LS instructor, had his paper entitled " Human Telomere Sequence DNA in Water-Free and High-Viscosity Solvents: G-Quadruplex Folding Governed by Kramers Rate Theory," published in "Journal of American Chemical Society." HOOAH Ford!

2. CPT Steve Tangen, Chemistry Major from Class of 2008, Visits with Our Cadets!!

CPT Steve Tangen took time out of his hectic schedule to visit with our cadets majoring in chemistry, Life science and chemical engineering. Steve is the 2012 recipient of the Nininger Award.



3. C&LS Spirit Demos Being Again!!

Last Friday, spirited members of the C&LS faculty began our football season demos again to fire up the Corps! Pictured are scenes from one of our crowd favorites, Gummi Bear Sacrifice! Thanks go to MAJ Jim Gifford and MAJ Andy Kick!!





Department of Civil and Mechanical Engineering

COMPLETED

1. **Assistant Secretary of the Army for Civil Works Visit.** The Honorable Jo-Ellen Darcy, Assistant Secretary of the Army for Civil Works visited West Point 14-15 September. During her visit, Secretary Darcy took a helicopter tour of the West Point Installation, received command, academic and admissions briefings, dined in the Cadet Mess, spent time with members of the Departments of Civil and Mechanical Engineering (C&ME) and Geography and Environmental Engineering (G&EnE), attended the Women's Volleyball and Football games, and attended the Combined Arms Tailgate. During her time with C&ME, Secretary Darcy learned about the multiple connections that currently exist between West Point and the US Army Corps of Engineers. She received an overview from COL Fred Meyer, a briefing on the role of the ERDC Engineering Fellow from LTC Steve Hart, a briefing on EV481, Water Resources Management from MAJ Christian Dietz, and briefings from Cadets Zeke Hunsberger (CE, '13), Rachel Miller (CE, '13) and Jacques Oestriech (GIS, '13) on their summer AIAD experiences and visited classes taught by Dr. Elizabeth Bristow, LTC Bret Van Poppel, and MAJ Kevin Arnett. Direct any questions to COL Fred Meyer at karl.meyer@usma.edu or x4093.



Secretary Darcy with cadets at the Combined Arms Tailgate.



Secretary Darcy with First Captain Brandon Whittington and COL Meyer

Department of Geography and Environmental Engineering

1. Faculty Scholarship: COL Michael Hendricks attended the 2012 AutoCarto International Research Symposium and the 7th GIScience Conference in Columbus Ohio 16-21 Sep 2012, where he presented on the topic "Characterizing the quality of a navigator's route". The point of contact is michael.hendricks@usma.edu.

2. Guest Lecture – Dr. Amory Lovins. On 14 September, Dr. Amory Lovins (Cofounder, Chairman and Chief Scientist of the Rocky Mountain Institute) presented a guest lecture to faculty and cadets summarizing his most recent book "Reinventing Fire". His presentation focused on how the United States could transition from fossil fuels to alternative energies while still allowing our economy to grow and while reducing our national debt. His presentation was preceded by briefs from faculty members on the West Point Energy Council, the core interdisciplinary energy initiative, and the Energy and Environmental cadet chain of command. After his talk, other faculty members briefed Dr. Lovins on energy projects within the CME, EECS, C&LS and GENE departments. Dr. Lovins is a world renowned energy expert, an absolute leader in this field, and it was tremendously exciting to host him here at West Point. POC is Dr. Marie Johnson, marie.johnson@usma.edu.



Photo: Dr. Amory Lovins listens to COL Jerry Kobylski brief the core energy interdisciplinary effort.



Photo: Cadets and faculty listen to Dr. Lovins present his extraordinary ideas regarding reinventing fire.

3. Ecological Research. On 17 September 2012, 19 Environmental Science Firsties in Ecology (EV471) collected data on coniferous tree needles on West Point. Although needles on the same tree might be expected to conform to a genetically determined size, differences in needle age, exposure to sun or shade, wind, temperature, or moisture supplied through a particular branch could influence needle length. During the lab cadet teams developed a hypothesis, determined a research design, collected data, evaluated data with statistics, and made conclusions to determine if needle length differs on a tree based upon the needles' proximity to sunlight. The Environmental Science majors are being taught field research techniques and the importance of applying the tools of science and statistics to solve ecological questions. POC is LTC Mark Smith, mark.smith@usma.edu.



Photo. Cadets Keenan Dillard (left) and Scott Obney (right) measure needle length in conifers as part of their Ecology assignment.

4. Faculty Scholarship – Presentation. On September 12th, Dr. Peter Siska presented a paper entitled: "Factor and Geostatistical Analysis of Pollen Grains: Potential for Developing Anti-Terrorist Tracking System" at the first Pollen Coalition Workshop that was organized by MITRE Corporation in McLean, VA. At the same workshop Dr. Siska was also a panelist on "Geolocation Research." The workshop was organized in collaboration with the Department of Homeland Security with the purpose to improve operation capabilities in the United States, Mexico, and South America and conduct advanced studies on the accuracy and precision of geolocation determinations for pollen grains. The point of contact is Dr. Siska at peter.siska@usma.edu.