

**Dr. Peterson**

**Dinner at Regent Larry Walker's Residence**

Thursday, Sept. 5, 2013

**Key Messages:**

- Together, we can put programs in place to partner with you to meet the need for well-qualified engineers at WRALC. We in the University System of Georgia, along with Mercer and other Southeast regional universities, have the expertise and resources needed to supply engineering and computer science graduates. We can help solve this for you.
- We have the full scope of engineering and computer science graduates.
- One of the ways that we are helping to meet educational needs is through technology assisted learning.
- Georgia Tech's OMS CS is a good example. Complete online degree for about \$7,000.
  - Mentioned by President Obama in his speech on education on Aug. 22; featured in *New York Times* on Aug. 18.
- We offer, onsite when requested, Defense Technology Courses on Electronic Warfare, Intelligence/Surveillance/Reconnaissance (ISR), Radar Systems, Cyber Security and more.
- Over the past three years, 700 Warner Robins personnel have participated in Georgia Tech short courses.
- Our engineering support includes Weapon System Sustainment operations, R&D, and development of new war fighting capabilities.
- We have two significant bilateral agreements with Robins:
  - A Cooperative Research and Development Agreement (CRADA), in place since 1995 and extended to 2016.
  - An Educational Partnership Agreement, in place since May 2012. It provides for student access to Robins AFB personnel and equipment on problems of mutual interest, and it enables other collaborations.

- Georgia Tech has the largest engineering program in the nation (approx. 3,000 graduates each year), and the programs are ranked in the top 5. Tech is No. 1 in the nation in engineering degrees awarded to all minority students, No. 1 for degrees to women, and No. 1 for graduate degrees to Hispanics.

**Points to Include as Appropriate:**

- Georgia Tech does about \$300 million a year in defense work, \$25 million of which is at Warner Robins.
- GTRI has a long-standing and proud tradition of R&D and engineering support of Sustainment and Modernization of Military Systems under the purview of Robins AFB.
  - Our direct support at Robins AFB is currently on the order of \$25M per year
  - Based on our demonstrated ability to ramp up our GTRI workforce, we are confident that if funded to do so, we could hire enough engineers within 2 years to appreciably reduce engineering shortfalls at Robins AFB.
- Our relationship with the Air Force at Robins AFB has been cemented with an Educational Partnership Agreement and a Cooperative R&D Agreement.
  - The Educational Partnership is relatively new and still evolving.
  - The CRADA has been in place since 1995.
- We are working to maintain and strengthen our relationship by becoming an even more valued partner as budget pressures mount.
- Via the Massive Open Online Course (MOOC) format, Georgia Tech now has the ability to offer an MS Degree in Computer Science –via online instruction.
  - This provides a significant enhancement to the Air Force’s ability to attract and retain quality software maintenance personnel.
- Georgia Tech provides a high and growing level of support to the Department of Defense and the Air Force in particular.
  - We will continue and expand that support as called upon.

- A recent example of GTRI support to Robins AFB is in the industrial hygiene and safety area.
- We continue to work with a cross functional team on the development and implementation of a safety management system, providing subject matter expertise and industry reach back in addition to training as requested.

### **GTRI's OSHA Assistance at Robins AFB, GA**

GTRI has worked to develop and implement a safety management system based on ANSI Z10 (as required by AFD 90-8) at Robins AFB. As an installation with over 20,000 people and a wide variety of exposure, Robins AFB has experienced issues with OSHA and labor issues over safety performance. Our role was to help provide the framework for establishing a Robins AFB SMS and creating a sustainable safe working environment.

Working with several cross-functional teams, GTRI conducted a gap analysis of the existing safety systems at Robins AFB. Several improvement areas were identified, including the following:

- Establishment and awareness of safety and health goals
- Development and implementation of plans to achieve goals
- Consideration of safety and health when new items are purchased
- Assessment of retention or competence following safety and health training
- Tracking and correction verification of reported hazards
- Accident and near-miss investigation
- Assessment of current VPP strategy and a path ahead for a better ROI

### **Training**

Working with WR-ALC and Robins AFB safety offices we conducted 11 OSHA Training Institute courses. Over 400 military and civilian employees were trained and 18

received a certificate in Industrial Safety and Health from Georgia Tech, including Union representatives.

## **Accomplishments**

- Provided tools and resources to conduct an analysis of alternatives to determine optimal organizational structure to support occupational safety and health goals.
- Conducted a gap analysis to determine the current state of safety management on site and outline the need for a formal safety management system.
- Provided subject matter expertise on Safety Management Systems.
- Worked to develop and implement SMS framework along with timelines and milestones.
- Developed tailored and specific training on safety management systems and other occupational safety and health topics.

## **Georgia Tech's Applied Research Unit, GTRI**

- Conducts over \$300M in applied R&D for the AF, Army, Navy, Marine Corps and the U.S. Intelligence Community
- GTRI's >1,700 employees work full-time to support DoD customers, and operate 17 customer focused field sites in 10 different states, including one at WRALC.
- 30% of GTRI directly supports the Air Force, - Over \$80 M/yr for the AF with ~\$25M of that at WRALC
- With such close proximity to our main laboratories in Atlanta, GTRI's present field site at WRALC comprises only about 25 employees, most of whom are engineering and CS graduates from Mercer University.
- To meet the need for qualified software and electronics engineers at WRALC, GTRI could be contracted to hire and place 200 to 300 engineers distributed to workstations across the base as necessary.
  - Costs would be very reasonable as GT's off site overhead rate would apply.

- Recruitment would be relatively easy as GTRI's continuing educational assistance program and other GT benefits programs are attractive.
- Most engineers and CS graduates attracted to these positions would likely come from Mercer U, Southern Poly, GA Southern, UGA and other southeastern universities in AL, FL, and TN.