## Testimony of John S. Bay

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Good morning Chairman Kline and Mr. Hanna.

I am pleased to have this opportunity to address the role of institutions of higher education in fostering job creation and growth. I am currently the Vice President and Chief Scientist of Assured Information Security, Inc., or AIS, in Rome, New York. I have been in this position since December of 2009. Prior to joining AIS, I served for eight years as a senior executive with the Department of Defense, first with the Defense Advanced Research Projects Agency (DARPA), and more recently, as Chief Scientist of the Air Force Research Laboratory Information Directorate. Prior to government service, I was a Professor of Electrical and Computer Engineering at Virginia Tech, and an Engineering Fellow at the Raytheon Company. It is with these multiple perspectives that I offer my observations on the relationships between private employers, higher education, and job growth.

AIS, Inc. is a small business founded in 2001 to conduct research and development on computer network security issues and methods, national infrastructure protection, law enforcement technology support, and related areas of research. Over the past ten years, AIS, Inc. has expanded the scope of its R&D portfolio and has repeatedly demonstrated success in the development of unique cyber capabilities, as well as the associated infrastructure that enables effective and controlled use of cyber capabilities to achieve national objectives.

AIS, Inc. is currently headquartered at 245 Hill Road in the Griffiss Business and Technology Park (GBTP), and has operating locations in Chantilly, VA., Fairborn, OH, and Portland, OR. We have 110 employees, and are proud to have sustained annual growth rates of over 25% in each of the past two years. This year, we are in the process of filling 28 new positions for scientists and

engineers in the Rome location alone, and we project similar growth in coming years, allowing us to grow into a new facility at Griffiss in November of this year.

Our primary customers are the science and technology acquisition offices of the Department of Defense, the intelligence community, and both local and national law enforcement agencies. This government-focused high technology business requires that our staff be highly educated and cleared. Over 50% of our staff hold or are pursuing Masters or Doctorate degrees in computer science, engineering, mathematics, or related fields, and 85% hold Top Secret security clearances.

To maintain our growth, AIS, Inc. aggressively recruits new graduates at the bachelors, masters and PhD level with high academic grades, an inquisitive nature, and a predisposition to action. We first screen candidates for the necessary academic and professional credentials, then focus on finding within that group those individuals who exhibit a passion for the technology and a drive to make a difference. We work on cutting edge problems that may have no solution; we seek employees that can solve a problem that has never been solved before.

We recruit all over the Northeast and Mid-Atlantic regions, but find that our highest success rate is with institutions in New York State. Our founder and President, Charles Green, is a graduate of SUNY-IT, the institution hosting this field hearing today. Joining SUNY-IT among our most fertile recruiting grounds are Clarkson University and Binghamton University.

To a great extent, the education of our employees is only beginning when they join the company. AIS, Inc. strongly encourages continuing graduate education, and pays 100% of the costs of our employees earning graduate degrees. We maximize the value of this policy by forming enduring partnerships with the institutions from whom we recruit. With SUNY-IT, for example, three of the senior management of AIS Inc., including myself and Charles Green, serve on advisory boards for academic programs in cyber technology, computer science, and electrical and computer engineering, as well as for President Wolf Yeigh directly. AIS Inc. has worked together with President Yeigh and his faculty on joint proposals for educational programs and research laboratories that serve to simultaneously educate the SUNY-IT students on emerging technology problems of national importance, as well as infuse our government-funded research programs with well-prepared faculty and graduates with practical experience.

We have different but similarly-motivated collaborative arrangements with Clarkson University, Binghamton University, Utica College, Syracuse University, and Hamilton College, and we are negotiating more such agreements with Cornell University and more distant institutions such as the University of Maryland and Penn State University. At some of these institutions, our staff members serve as adjunct faculty or formal advisors; at others the collaboration is less structured. In this manner, we seek to ensure that new graduates meet our workforce

requirements by working with universities to ensure that graduates do not "leave" school to enter the workforce, but, rather, continue their educations as part of a broader research environment. It is our goal and strategy to guarantee that the college graduates we hire meet our needs by being part of that education. With institutions with which we maintain this bilateral relationship, our success and satisfaction rate is higher than with institutions from which we simply "harvest" graduates. It is a formula that succeeds for us and one that we would recommend to others.

I appreciate the opportunity to address this committee and welcome your questions.