#### **CYBER DEFENSE DEMONSTRATION**

A key feature for the showcase will be a Cyber Defense Demonstration. Under the Virginia Public Private Partnership, and led by Dr. Barry Horowitz, Munster Professor and Chair of the Systems and Information Engineering Department at the University of Virginia, and in coordination with the Virginia State Police cyber attacks will be demonstrated that exploit vulnerabilities in 2 state police cruisers causing problematic behavior that could prevent Troopers from carrying out their duties. In addition, there will be a demonstration of solutions for identifying a cyber attack as the cause of an incident and of solutions that can deflect cyber attacks. The demonstrations will highlight the opportunities for immediate solutions that police forces can start to use to reduce the risks of attack on their cars and to permit police, at the scene of an incident, to identify cases where a cyber attack is the likely cause. Research needs will be discussed related to permitting more advanced capabilities that can deflect cyber attacks on cars.

Registration		
Conference Registration		\$199
Student Registration		\$50
Spoi	nsor	
		¢500
Bronze - (1 Free Registrar		\$500
Silver - (2 Free Registrant	s, Booth, & Logo)	\$1000
Showcase Booth		\$150

Register at VUS.Virginia.Gov/Registration



Commercial success of UMS requires the integration of cyber security technology in UMS design, production, and applications; a successful UMS ecosystem will drive a vibrant supporting cyber security industry. The commercial success of the one drives the commercial success of the other creating new business opportunities for both small and large firms and explosive job growth. Virginia can harness this dynamic by enabling the formation and evolution of a state-wide integrated technology ecosystem based on UMS and cyber security technology. This ecosystem must be not only a center of business and industry; it must also be a place of invention and innovation.



#### **UAS ACADEMY DEMONSTRATION**

UAS Academy provides teachers and industry professionals with Land, Air, and Sea Robotics (LASR) curriculum and immersive, engaging teambased educational lab kits and laboratory equipment required for the innovation and exploration of unmanned autonomous systems research and development.

# THE COMMONWEALTH OF VIRGINIA CYBER SECURITY - UNMANNED SYSTEMS TECHNOLOGY SHOWCASE



### TECHNOLOGY SHOWCASE

"When it comes to unmanned technology, there's no better place to look than Virginia. We are and will continue to be the leader in advanced technology industries"

- Gov. Terry McAuliffe

The Commonwealth of Virginia Cyber
Security - Unmanned Systems Technology
Showcase will bring together the cyber
security and Unmanned Systems (UMS)
communities, academia, entreprenueurs,
federal labs, and industry to explore the
interdependence, barriers, and
opportunities in this rapidly emerging
space.

#### **29-30 SEPTEMBER 2015**

Location:

Chesterfield Enterprise Solutions Center (CESC) 11751 Meadowville Lane Chester. VA 23836

**VUS.Virginia.Gov** 

## CHALLENGES AT THE INTERSECTION OF CYBER SECURITY AND UNMANNED SYSTEMS

**Stakeholder and Policy Perspectives** 

Regulators, standards organizations, and other policy stakeholders of UMS will provide their perspectives on the issues and challenges associated with cyber security and the deployment of UMS regulations and standards.

Technology and Services Users'
Perspective

Organizations that will rely on the services and information provided by UMS will provide perspectives on their needs and cyber security considerations.

Industry Perspective on UMS and Cyber Security

Firms involved in the design, manufacture, and operation of UMS or subsystems will provide their perspectives on current and emerging challenges at the intersection of UMS and cyber security.

### The role of the Academic Community in the Cyber Security & UMS Industry

The role of the academic community in providing the research, technologies, and the skilled technical and professional workforce of the future for the Cyber-UMS industry will be discussed.

Federal Laboratories as Resources for Cyber- UMS Technology

The role of federal agencies and laboratories in providing the research, technologies, and intellectual content required to meet the future needs of the Cyber-UMS industry will be discussed.

#### **SOLUTIONS**

Utilization of Federal Resources for Technology Commercialization

The mechanisms for working with federal agencies and laboratories to access funding, partnerships, and technology transfer opportunities will be discussed and demystified.

### Utilization of Private Sector Angel and Venture Funding for Entrepreneurial Ventures

A thriving innovation environment requires both established firms and an environment to nurture the new ideas and technologies created by the entrepreneurial sector. The sources and mechanisms for securing private sector funding for entrepreneurial ventures will be described.

# Formation of an "Industrial Collaborative" to explore the creation of an integrated UMS & Cyber Security Ecosystem

The panelists will provide the thought seed for a discussion of next steps in creating an integrated cyber security / unmanned systems innovation environment that brings together users, manufacturers, technologists, and entrepreneurs to tackle the cyber challenges of the future and to create a thriving UMS industry.

#### "Birds of a Feather" Breakout Sessions

- -Forming a Cyber/UMS Collaborative
- -Research
- -Technology Transfer



#### **SPEAKERS**

#### **Governor Terry McAuliffe**

Karen Jackson - *Secretary of Technology* Dr. Philip Singerman - *Associate Director, NIST* 

Jandria Alexander - *Aerospace Corp.*Dr. Barry Horowitz - *UVA*Jonathan Oliver - *Aerospace Corp.*Robin Menke - *VCU*Richard Carlson - *Aurora Flight Sciences*John Lamb - *Huntington Ingalls Industries*Dr. Arthur P. Molella - *Smithsonian Museum* 

Dr. Rob Griesbach - Chair FLC-MA
Rich Antcliff - NASA
Tom Weithman - CIT

Jean Peters - Golden Seeds Angel Network
Conner Trebour - WealthForge
Dr. Honeyeh Zube - NIST























