Advanced Audio/Video Surveillance Course

The Advanced Audio/Video Surveillance Course provides students with comprehensive theory, knowledge of advanced video surveillance concepts; High Definition Internet Protocol camera equipment and transmission systems. This course is designed to give the student a very good overall knowledge of the equipment & proper use needed to install, operate, and maintain state-of-the-art video surveillance systems during observation missions in a variety of operational environments.

Objective: Learn the fundamentals of advanced audio/video surveillance. This includes high bandwidth compression algorithms, HD and IP equipment, terminology, power, lens selection, troubleshooting, video capture, wiring, and technical surveillance operations.

Lesson Assessment: Daily classroom instruction, hands-on assessments & practical exercises will be given to demonstrate a mastery of that day's objective. Each day of class includes hands-on demonstrations by the instructor. When the instructor is confident that the objective of the demonstration is understood, the class conducts practical exercises to test their comprehension of the task. These practical exercises include equipment setup & use, analog A/V capturing, digital A/V capturing, troubleshooting, wiring, power, concealable camera applications & lens selection, utilizing techniques taught in class. The instructor also ensures that key terminology is understood by the class as it is used repeatedly in the classroom and during the practical exercises.

Prerequisites: Students of the Advanced Audio/Video Surveillance Course need to have no specific knowledge in order to attend the course. **Enrollment is restricted to individuals who are employed as law enforcement agents, investigators, or officers; members of the U.S. military; non-contract employees of the Department of Defense, Department of Homeland Security, and U.S. intelligence agencies.** Students need a willingness to learn and an attitude that fosters a good learning environment for all parties involved.

Materials: Students need note taking materials & cell phones. As the majority of learning is dependent upon having the necessary materials TSE, Inc. provides the following equipment: Student laptop computers, Vemotion software and hardware, IP camera equipment, student practical exercise supplies & survey site. In the event the students want to train on their specific HD or IP recording equipment, the students must bring that equipment to the course.

Tactical Support Equipment Inc. **4039 Barefoot Road** **Fayetteville, NC 28306** **www.tserecon.com**	For More Information Contact training@tserecon.com	**Phone: 800.889.4030** **Phone: 910.425.3360** **Fax: 910.425.3361**

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Instruction: The instruction given by TSE, Inc. is paramount to the student's successful understanding of the course objectives. A power point presentation is used as a teaching and lecture tool. This presentation progresses in a logical manner starting with an overview of Standard and High Definition video systems & terminology. Next the presentation familiarize the students with common equipment used, configuring DHCP networks, IP camera operation and setup, video encoders, mesh networks, video management systems (VMS), remote and edge recording, and finally examples for concealing cameras. Finally the instruction flows to instructor guided demonstrations & individual practical exercises.

Student Activities: Students attend a 10-day block of instruction.

Day 1: Begins with an overview of interconnecting network devices, the Open System Interconnection (OSI) model, and configuring networks using Dynamic Host Configuration Protocol (DHCP), static IP settings and port forwarding.

Day 2: Focuses on advanced video theory through classroom instruction including a detailed overview of standard definition (SD) and high definition (HD) video systems. Students receive hands-on training with a variety of IP camera equipment currently used & a practical exercise.

Day 3: Introduces video encoders for integrating analog camera feeds, body worn and vehicle borne IP solutions for mobile streaming networks.

Day 4: Progresses to learning onsite and remote recording, edge recording, and management of stored data.

Day 5: Incorporates the use of Video Management Software (VMS) to control and monitor video surveillance feeds, select recordings by event or date-time group (DTG) and manage the results.

Day 6-7: Introduces video transport systems, ad-hoc mobile networks, RF mesh networks, and cellular devices.

Day 8: Troubleshooting advanced digital video networks.

Day 9-10: Progresses to dynamic foot and vehicle surveillance exercises utilizing the systems for video and voice transmission. Students incorporate video surveillance equipment into a vehicle build and complete a variety of practical exercises demonstrating their comprehension. The last day ends with a week overview and question and answer session.

Contact: For questions concerning registration, training, and location please contact the Director of Training, Mark Conneway at (910) 425-7232 or 3360, or via email at training@tserecon.com.

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