

BACKGROUND

It's no longer enough to simply "do things right". Defence and security organizations are under intense pressure to do more with less. They need new capabilities to get more value and performance from their operations, processes and people to achieve organization goals. Developing an effective night vision capability is an increasingly essential component of any operations strategy for land, sea or air.

ABOUT THE NVG CBT

NVIO" Night Vision Goggle (NVG) Computer-Based Training (CBT) is a blended training system that integrates self-paced courseware and practice in advanced synthetic environments. It was designed to help optimize NVG training support programs for operators and maintainers. It is an essential tool to help users build and maintain the critical foundation of knowledge concerning NVG handling required to respond to operational challenges.

- Knowledge is imparted through self-paced, interactive CBT modules following the latest Instructional Systems Design methodologies.
- Learning content is accessible via the internet, 24/7 reducing reliance on expensive equipment that is logistically challenging to schedule around operations.
- The learning program features training on system capabilities and limitations, operational concepts and requirements, equipment parts familiarization and NVG operations and maintenance procedures.

OPTIMIZE THE VALUE OF YOUR NIGHT VISION PROGRAM

NVIO NVG CBT is a flexible, advanced blended e-Learning solution for NIVS programs that reduces time and resources required to achieve competency.

Harness the benefits of an e-Learning solution

- Save money with reduced travel, trainer & service costs
- Deliver consistent **FAA-approved content** across the organization
- Extend Training Reach
- Deliver the right content, at the right time, in the right amount
- Keep learners motivated and engaged
- Capitalize on strengths and cost savings of "blending" classrooms with e-Learning



NVIO NVG CBT uses advanced modelling and simulation to illustrate key learning concepts.



NVIO NVG CBT provides a cost-effective, efficient way to train any time, from anywhere.

NVIO CBT CONTENT OVERVIEW

The 3D-enabled NVG Computer-based Training features self-paced, interactive instruction on system capabilities and limitations, operational concepts, equipment parts familiarization and NVG operations and maintenance procedures.

COURSE HIGHLIGHTS

LEARNING OUTCOMES

Introduction to Night Vision Goggles (NVGs)

At the completion of this lesson the student will be able to employ the night vision goggle (NVG) while performing duties as an aircrew member and/or maintainer.

- Normal, Abnormal, and Emergency Operations of NVG Equipment
- Limitations and Capabilities
- Operational Sequence of the NVG
- NVG Nomenclature, Functions, and Pre-Operational Inspections
- NVG Operational Checks and Focus Procedures

Night Vision Orientation

At the completion of this lesson the student will be able to manage the effects of visual limitations during night flight while performing duties as an aircrew member.

- · Anatomy of the Eye
- Common Visual Deficiencies
- Factors Affecting Dark Adaptation
- Protection of Night Vision
- Night Flight Hazards and Limitations
- Self-imposed Stresses
- Effects of Lighting on Night Vision
- Cues to Estimate Distance and Depth Perception
- Visual Illusions
- Physiological Effects of NVGs

NVG/Night Terrain Interpretation

At the completion of this lesson the student will be able to interpret the terrain during night flight while performing duties as an aircrew member.

- Sources of Ambient Light
- · Restrictions to Visibility at Night
- · Cues for Visual Recognition at Night
- Factors Affecting NVG/Night Terrain Interpretation
- NVG Navigation/Situation Awareness Cues

NVG/Night Flight Planning

At the completion of this lesson the student will be able to conduct NVG/Night flight planning while performing duties as an aircrew member.

- NVG/Night Flight Planning Considerations
- NVG/Night Lighting Considerations
- Risk Management and Mitigation

BENEFITS

- Train operators to standard faster. Operators and maintainers use 3D virtual equipment to "learn by doing" procedures using 3D models and animations of NVGs show equipment parts, issues and procedures in context for faster comprehension.
- Enhance Job Performance. Improve individual performance with this
 effective Job Aid enabling Just-In-Time (JIT) training and operational
 support for all individuals involved in an NVIS program.
- Deliver training when and where needed. Deliver self-paced instruction that can be accessed from home, the classroom or in the field.
- Increase operation readiness. Fewer operator errors or equipment malfunctions help prevent unscheduled downtime and missed mission objectives.
- Decrease operation costs. Reduce NVG equipment breakage costs due to improper handling during training and operations. Reduce time and costs of operation downtime by training on location.

- Increase mission safety and performance. Help ensure proper calibration and use of NVGs. Capture and share the know-how from civil and military NVG experts gathered over years of experience in the lab and in the field.
- Enhanced operator health. Ensure proper calibration and use of NVGs, reducing risks to operators including, stress and fatigue.
- Overcome training barriers. Easily Localized CBT provides a safe, intuitive way to train on complex systems across language and cultural barriers quickly and easily.



NVIO systems is a premier line of night vision training products to provide emergency medical, defense, aerospace and security sectors with enhanced situational awareness, resulting in greater safety and performance.