



Night Vision Training Day Program

The Ottawa Marriott
November 6, 2008

The first three training sessions have been developed for those who are new to night vision goggles and those interested in refresher training.

Time: 0830 – 0930

Title: Introduction to Night Vision Goggles (NVG)

Instructing Company: Night Flight Concepts

Summary: The lecture will cover the different components and functions of the Aviator Night Vision Goggle (NVG), describe the operational sequence of the NVG, and apply proper focus procedures of the NVG. Topics addressed will include the following:

- NVG Monocular Components
- NVG Operational Sequence
- NVG Nomenclature and Functions
- NVG Focus Procedures
- VTB Simulation

Time: 1000 – 1110

Title: Comprehensive Night Vision Goggle Test, Evaluation and Maintenance

Instructing Company: Hoffman Engineering/Night Flight Concepts

Summary: Development and implementation of an NVG program requires periodic calibration and test of NVGs. Hoffman Engineering provides test equipment to evaluate the complete night vision device system. Hoffman has developed technological standards and evaluation methods to determine and assess proper NVG function. This seminar will address operation of the Hoffman ANV-20/20 for pre-mission calibration of NVGs and the Hoffman 126A test set for portable field assessment of NVG function and system health. The seminar will be followed by a hands-on demonstration of the Hoffman 126A Test Set and the Hoffman ANV-20/20.

The second half of the lecture will provide a high level overview of the maintenance of NVGs. This review will cover the necessity of a 180-day service inspection and the importance of having it completed. In addition, Night Flight Concepts will address how to train operators to conduct preventative maintenance checks and services on NVGs. This lecture will also cover the importance of proper NVG care and cleaning procedures in normal and adverse environmental conditions. (30 Minutes)

The following sessions are advanced night vision goggle training for experienced night vision goggle users and those who attended the first three initial sessions

Time: 1115 – 1215

Title: Introduction to Cockpit Compatible Lighting for NVGs.

Instructing Company: REB Tech

Summary: In this high level lecture, REB Tech will address the critical issues to be considered when converting a cockpit to NVG compatible lighting configurations. REB Tech will review the terminology and requirements for a compatible cockpit. This review will include FAA and military requirements for cockpit compatibility. The challenges of an incompatible cockpit will also be addressed in this presentation. The importance of a deep technical understanding and knowledge base for converting cockpits will be addressed. REB Tech will provide hands-on instruction using a real cockpit panel for illustration purposes.

Time: 1315 – 1415

Title: Development of a Comprehensive NVG Training Program

Instructing Company: Night Flight Concepts

Summary: This lecture will focus on a high level overview of the requirements for developing a comprehensive NVG training program. Topics to be covered include the following:

- NVG Initial Qualification Training
- NVG Recurrent Training
- NVG Continuation Training
- Additional NVG Training

Time: 1420 – 1520

Title: Virtual Night Environments for NVG Training

Instructing Company: Night Readiness LLC

Summary: Night Readiness LLC provides high fidelity, state-of-the-art Night Vision Goggle (NVG) training systems to military and law enforcement agencies, emergency medical air services and other public use civilian customers. Our chief personnel have deep roots and extensive experience in USAF Special Operations training and research and development for advanced sensor simulation.

Our premier product is the **Virtual Terrain Board™ (VTB)**. The VTB provides an immersive Virtual Night Environment for students in the classroom. Each student uses NVGs to observe the effects of terrain contrast and illumination, lunar position, shadows and a wide range of conditions unique to NVG assisted flight. As in actual flight, students are able to simultaneously look under the NVGs to see the normal, unaided night view.

The VTB offers the flexibility to quickly add and customize scenes, environments and features for each customer's unique training requirements. The system will be demonstrated to attendees, and the full range of capabilities discussed. NVGs will be provided.

Time: 1525 – 1625

Title: Advanced Applications of NVGs

Instructing Company: Night Flight Concepts

Summary: This lecture will focus on the capabilities and limitations of Night Vision Goggles (NVG) in different mission configurations while acting as an aircrew member. At the completion of this lesson the student will possess a working knowledge on recognizing the safety and tactical advantage in the effective use of NVGs while acting as an aircrew member. Topics to be covered include the following:

- NVG Limitations and Capabilities
- Obstacles: See and Avoid
- Use of Searchlights with NVGs
- NVGs in the Urban Environment
- Airborne Law Enforcement NVG Applications:
 - Vehicle Pursuits at Night
 - High Risk Traffic Stops
 - Conducting Foot Pursuits w/ NVGs
 - Conducting SAR w/ NVGs