

Principles of Directed Infrared Countermeasures

Professional Short Course



Course Brochure

April 2011 Update

Training@WhiteEagleAerospace.com

White Eagle Aerospace, LLC

Make Your Career SOAR

Principles of Directed Infrared Countermeasures

Fellow Aerospace Professional,

Thank you for your interest in White Eagle Aerospace! We are pleased to present you with this brochure which describes a NEW course offering recently added to WEA's portfolio of professional development courses. The *Principles of Directed Infrared Countermeasures (DIRCM)* is a professional short course taught by internationally recognized sensors and systems expert, John L. Minor. DIRCM's target audience is technicians, engineers, project managers, program managers, or any individual who needs to understand the fundamental concepts of Directed Infrared Countermeasure (DIRCM) system design, operation and performance. A comprehensive video clip library is used to enhance student learning by illustrating to the students an understanding of how these systems function in 'real world' employment.

Each DIRCM participant receives a comprehensive set of slides (both hard copy and DVD) and a pair of practical wall charts; (1) *Electromagnetic Spectrum* and (2) *Applications and Weather Effects on EO/IR/MMW Systems*.

I invite you to personally examine this brochure and learn more about the *Principles of Directed Infrared Countermeasures (DIRCM)* professional short course. Then visit our web site at www.WhiteEagleAerospace.com or contact us by e-mail or telephone to determine the date and location of our next DIRCM offering. Enroll today and let White Eagle Aerospace help make your career soar!

Best Regards,

John Terry White, President/CEO

White Eagle Aerospace, LLC

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White Eagle Aerospace Short Course

Principles of Directed Infrared Countermeasures

Target Audience

The *Principles of Directed Infrared Countermeasures (DIRCM)* short course is intended for anyone seeking further instruction with the design, integration, operation and performance of DIRCM systems. The course provides a solid understanding of the fundamental concepts of Directed Infrared Countermeasure (DIRCM) system design, operation, and performance. The course material includes the history of DIRCM development and legacy systems, IR and UV missile warning receivers, and basic missile defeat mechanisms. Emphasis is placed on understanding how operational requirements and environmental concerns drive the systems design, and how systems engineering trade-offs can affect DIRCM operational performance. Among those who will benefit from attending the FEOIR short course are:

- ✓ **Engineers**
- ✓ **Technicians**
- ✓ **Project Managers**
- ✓ **Program Managers**
- ✓ **Electronic Warfare Personal**
- ✓ **Systems Engineers**
- ✓ **Anyone new to the field of IRCM systems and technologies**

Questions regarding the DIRCM Course?

Contact WEA at 520-219-0526 or Training@WhiteEagleAerospace.com



White Eagle Aerospace Short Course

Principles of Directed Infrared Countermeasures

What You Will Learn

The *Principles of Directed Infrared Countermeasures (DIRCM)* short course will provide you with a comprehensive training experience which features an in-depth study on how optical frequency (visible, infrared, and ultraviolet) electromagnetic can be used to detect and defeat legacy and advanced man portable air defense systems (MANPADS) and other infrared missile threats to US and allied military aircraft.

- **The Electromagnetic Spectrum**
- **Blackbody Radiation Physics**
- **Atmospheric Considerations**
- **Meteorological Considerations**
- **Target & Background Signatures**
- **Infrared Systems**
- **History of Forward Looking Infrared**
- **Intelligence, Surveillance, & Reconnaissance Systems**
- **Missile Warning System Requirements**
- **Jam Lab Tests**
- **Open Air Tests**
- **Live Fire Tests**
- **Data Correlation & Analysis**
- **The Infrared Threat**
- **Infrared Missile Systems**
- **Missile Warning Receivers**
- **Directed Infrared Countermeasure Systems (DIRCM)**
- **Legacy DIRCM Systems**
- **Advanced DIRCM Concepts**
- **Test and Evaluation**
- **Increasing Jam to Signal (J/S) Requirements**
- **Laser Based DIRCM**
- **Closed Loop DIRCM**
- **Large Aircraft Infrared Countermeasures Program (LAIRM)**



Principles of Directed Infrared Countermeasures

Your Instructor

Mr. John L. Minor has over 34 years of experience with advanced military sensor systems. His career spans the military (USAF), industry, and Department of Defense sectors. As a former Air Force officer and past employee of Lockheed Martin and the Skunk Works®, Mr. Minor has developed, operated, flown, and tested numerous classified and unclassified EO/IR weapons and systems. He holds BSEE and MSEE degrees from the University of New Mexico/Air Force Institute of Technology and is a graduate of the USAF Test Pilot School. Mr. Minor has been honored with numerous awards and decorations to include the Society of Flight Test Engineers Clarence “Kelly” Johnson Award, the Civilian Meritorious Service Award, 412th Test Wing’s Senior Leader of the Year Award, the Society of Flight Test Engineers Directors and Fellow Awards, the San Fernando Valley Engineer’s Council Distinguished

Engineering Project Achievement Award, and the Engineers’ Council Distinguished Engineering Life Achievement Award for his many educational contributions to the Edwards AFB engineering community. In 2004 Mr. Minor was selected as the first civilian Technical Director in the 65+ year history of the USAF Test Pilot School and served in that position until Feb 2008 before reassignment to Hill AFB. He is currently the Chief of the Systems Engineering Division for the Ogden Air Logistics Center Engineering Directorate at Hill AFB.



Principles of Directed Infrared Countermeasures



Key Information at a Glance

Duration

2 Days; 16 instructional hours

Materials

Comprehensive set of course slides in bound form and on CD-ROM. Each participant also receives reference material, problem work sheets, visual aides and course videos. Course participants will also receive (2) practical wall charts: (1) Electromagnetic Spectrum wall chart and (2) a weather effects on EO/IR/MMW sensors wall chart.

Instructor

John L. Minor
White Eagle Aerospace, LLC
Oro Valley, Arizona

Course Fee

\$ 800

Web Site

www.WhiteEagleAerospace.com

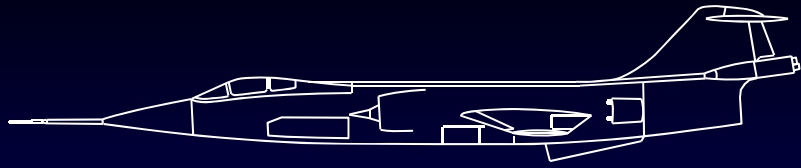
Contact Info

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Enroll in Our Next DIRCM Offering Today!



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