

# Improvised Explosive Device (IED) and Rocket Propelled Grenade (RPG) Course

Instructors: Mr. Robert Fitzgibbon and Mr. Matt Tunstall, Alion Science and Technology

## **Course Description:**

This 2 1/2 day short course provides an introduction to the nature of the Improvised Explosive Device (IED) and Rocket Propelled Grenade (RPG) threats and measures currently being employed to counter them. These weapons are among the principle ones being deployed by insurgents against US and allied forces in Iraq and Afghanistan. The course provides the historical context of their development and use, details of construction, methods of deployment, and background information pertaining to munitions and explosives. Active and defensive technological and tactical countermeasures are presented, including lessons learned in the current conflicts in Iraq and Afghanistan. Certain developmental and currently deployed countermeasure systems are discussed. A survey is given of cross border and international sources of components, and related technologies, as well as a look at trends and possible future developments.

## **Course Objective:**

The objective of this course is to inform materiel and combat developers, systems analysts, scientists, engineers, managers, and business developers about IED and RPG threats and countermeasures.

Topics include:

- IED elements and construction
- IED operational deployment and effectiveness
- Identification/Sensors
- State of the art of representative U.S. and foreign countermeasures systems
- Tactical countermeasures
- Personnel Protection/Armor
- Technology trends
- Development of RPGs
- Principal threat RPGs
- RPG countermeasures

## **About the Instructors:**

Mr. Robert Fitzgibbon is a Principal Engineer with Alion and he has 27 years in system analysis and design. He has actively worked ECM, RF and RWR programs as well as hardware modernization efforts.

Mr. Matt Tunstall is a Senior Mechanical Engineer with Alion. He holds an M.S. in Mechanical Engineering from the University of Alabama in Huntsville. He has actively supported numerous weapons systems studies and served as a member of the Systems Engineering Integration Team (SEIT) for EAADS. He is the project manager and technical lead for WSTIAC's indirect fire smart munitions system effectiveness simulation, GENESIS.

## **Security Classification:**

The course is UNCLASSIFIED, but is designated For Official Use Only (FOUO), Export Controlled and attendance is limited to U.S. citizens only.

## **Handout Material:**

Each student will receive a comprehensive notebook covering the material presented.

For additional information, contact  
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**Notice:** WSTIAC reserves the right to cancel, change the course schedule, agenda and/or instructor if required. In the event of a schedule change or cancellation, the customer will be immediately informed.