



Optimizing Situational Awareness Through Innovative Force Tracking Technologies and Techniques

Marriott Crystal Gateway
Arlington, VA

August 2-4, 2005

Pre-Conference Workshops
August 2, 2005

**“Build confidence
and enhance situational awareness
on the battlefield.”**



Maintaining a sustained secure military posture, maximizing the use of technology and keeping troops out of harm's way.

Featuring Updates, Executive Briefings and Case Studies from Leading Military and Civilian Experts

Major General Amos Yadin
Defense Attaché
Israeli Army

Brigadier General Michael Ennis
Director of Human Intelligence
Defense Intelligence Agency
US Army

Air Commodore Chris Nickols CBE RAF
Director, Air Warfare Centre
UK Royal Air Force

Colonel Charles Jones USMCR
Judge Advocate Division, Headquarters
US Marine Corps

Colonel Lou Durkac
Assistant Director of Requirements
Air Combat Command
US Air Force

Colonel Ed Martin
Joint Task Force IED Chief of Staff, VCAS' Office
US Army

Captain Barbara Bell
Program Manager
Air Traffic Control and Combat ID Systems
Combat ID Capabilities Organization
US Navy

John Yuhas
Oversight Executive
Office of Secretary of Defense

George Gibbs
Systems Engineer, Marine Expeditionary Rifle Squad
US Marine Corps

Daniel Schwartz
Lead Engineer, Fort Monmouth
US Army

Dr Robin Keese
US Army Research
Development and Engineering Command
US Army

Terry Pudas
Acting Director, Force Transformation
Department of Defense

Larry H. Burger
Director, Futures Warfare Center
US Army Space and Missile Defense Command
US Army

Shaun Wilson
Principal
Aerospace Concepts Pty Ltd, Australia

Addressing Key Issues Including:

- Emphasizing the capabilities of Combat ID environment
- Capitalizing on initiatives and advancements in on-going technology
- Maximizing developments in integration, execution, interoperability and information sharing
- Enabling industry to promulgate issues in Combat ID
- Leveraging advancements in joint warfighting developments

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DAY ONE | PRE-CONFERENCE MASTER CLASS

9:00 - 12:00

Pre-Conference Master Class A

Exploring some of the Technological Challenges and Developments in Combat ID

Fratricide not only occurs when aircraft accidentally mis-targeted blue forces on the ground. There have been several incidences of ground forces mistaking blue-forces in combat. Some of the challenges to approaching forces occur in the fog of war and heat of battle. Confusion, is often compounded by situational awareness difficulties. In built up areas, or especially in case of urban conflict, the importance of accurate identification of both sides involved, is essential in order to minimize or eliminate incidences of fratricide.

By Attending This Master Class You Will:

- Gain a thorough understanding of the operational and technological intricacies of COMBAT ID
- Maximize on the benefits of experts and skilled artisans in the field of COMBAT ID technology and operating systems
- Acquire additional knowledge on COMBAT ID protocols of the present and future
- Experience an opportunity to question the experts
- Engage in interactive sessions and pertinent discussions on COMBAT ID

About Your Master Class Leader:

George Gibbs is a Systems Engineer, with extensive knowledge in the field of Combat ID and related disciplines, such as "Behind the Wall Technology". He is currently employed with Marines Systems Command as the PM with the Marine Expeditionary Rifle Squad. He trained as a Chemical Engineer at West Virginia Tech in 1973. He has had several positions in the private chemical manufacturing industry. In 1983, he started with the Government at Naval Surface Warfare Center, Dahlgren. He developed a new chemical over-garment. In 1985, he moved to the Marine Corps. It was here that he was appointed Principal Engineer for Ground Weapons in 1999. George has spoken on a number of occasions and recently gave a widely acclaimed and well received presentation at a major defense conference in Washington DC.

12:00 Luncheon

1:00 - 4:00

Pre-Conference Master Class B

Legal Ramifications of Fratricide – History, Case Law and Fall-Out

Living as we do in a litigious era, accidents, no matter how blameless they appear, open up the door to litigants to seek remedies and sanctions from the courts. Incidences of fratricide involving military aircraft and personnel are always investigated thoroughly. Where blame is established, appropriate sanctions and remedies are imposed. "Where responsibility for fratricide is established, sanctions are often but not always imposed." Reason: While someone may be responsible for a fratricide incident, his actions may or may not be criminal in nature and, even if criminal, may or may not be sanctioned, just as everyone caught speeding does not receive a ticket. Also, the cause may be poor judgment that does not rise to the level of criminal conduct; in other words, not every instance of bad judgment in the military is a criminal offense. And again, even if not criminal in nature, it may or may not be sanctioned (poor judgment that is not criminal can still be administratively sanctioned) Sanctions may not be imposed, for example, in the following case: a USAF aircraft bombs a marine convoy by accident. Both the USAF pilots and the marine FAC on the ground are at fault. The USAF, however, does not sanction the pilots; the USMC may consider this factor and, in fairness to the marine FAC, decide not to sanction him since the USAF decided not to sanction the pilots.

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By Attending This Master Class You Will:

- Gain sound grounding as to the approaches taken by the military legal authorities in cases of fratricide
- Examine some recent cases of fratricide
- Discuss issues surrounding the fall-out from errors in blue-force tracking
- Undertake two way feedback and exchange of occurrences from participants engaged in managing the legal aspects of fratricide.

Colonel Charles Jones, USMCR

Judge Advocate Division, Headquarters

US Marine Corps

About Your Master-Class Leader

Colonel Charles Jones is a Judge Advocate in the Marine Corps Reserve. He was a regular officer from 1981-1992 and has been active in the Reserves since 1993. He has been a military prosecutor and defense counsel and has extensive knowledge concerning officer discipline. In 2004 he was called to active duty at US Marine Corps Forces Pacific to organize and to analyze numerous fratricide case investigations from Iraq in 2003 sent to MARFORPAC from US Central Command for lessons learned. He will provide an overview of fratricide and discuss three notable cases.

DAY TWO | WEDNESDAY, AUGUST 3, 2005

8:00 Opening Remarks from Conference Chair
Fratricide – A Disruptive Occurrence in Military Operations

8:15

Keynote Briefing

Legal Ramifications of Fratricide

A number of campaigns have been carried out as joint ventures. More and more operations will be shared amongst coalition partners in the future. There are significant challenges faced by partners, as each nation leverages individual operating techniques.

- Examining the coalition challenge
- Considering aspects of interoperability
- Reviewing concepts of information-sharing
- Lessons learned from coalition operations

Colonel Charles A. Jones USMCR

Judge Advocate Division, Headquarters

US Marine Corps

9:15

Panel Discussion

Following up on the briefing of "Legal Ramifications of Fratricide"

Moderator:

Brigadier General Michael Ennis

Director of Human Intelligence, Defense Intelligence Agency

US Army

Panel:

Colonel Lou Durkac

Assistant Director of Requirements, Air Combat Command

US Air Force

Air Commodore Nickols CBE RAF,

Commandant, Air Warfare Centre

UK Royal Air Force

Shaun Wilson

Principal

Aerospace Concepts Pty Limited, Australia

Colonel Charles Jones USMCR

Judge Advocate Division, Headquarters

US Marine Corps

Daniel Schwartz

Lead Engineer, Fort Monmouth

US Army

10:30 Networking Break

11:00 Keynote Briefing

Coalition Perspectives

A number of campaigns have been carried out as joint ventures. More and more operations will be shared amongst coalition partners in the future. There are significant challenges faced by partners, as each nation leverages individual operating techniques.

- Examining the coalition challenge
- Considering aspects of interoperability
- Reviewing concepts of information-sharing
- Lessons learned from coalition operations

Air Commodore Chris Nickols CBE RAF

Commandant, Air Warfare Centre

UK Royal Air Force

12:00 Luncheon

1:40 Case Study

Integrating Naval Combat ID

- Examining Combat ID efforts within the Navy
- Examining enterprise solution needed to link operational, acquisition and resource communities
- Articulating a coherent Navy CID vision
- Building a CID road map
- Overseeing the execution of the CID road map

Captain Barbara Bell

Program Manager

Air Traffic Control and Combat ID Systems

Combat ID capabilities Organization

US Navy

2:20

The Role of Drones in the Reduction of Incidences of Fratricide

Drones are widely used in modern air forces. These are engaged in a variety of roles which were previously executed by manned aircraft. Among the gains to be accrued from the use of drones is the significant reduction in risks of air-to-air casualties from fratricide.

- Examining the efficiency of drones in operational environment
- Considering the elimination of fratricide by use of drones
- Balancing drones versus manned craft in missions
- Lessons learned from on-going operations in a hostile environment

Major General Amos Yadin

Defense Attaché

Israeli Army

3:35 Briefing

Reducing Incidences of Fratricide

- Leadership: Who's in charge of the programs, funding and research and design
- Industries' current status in the development of technologies
- Aims and objectives of fratricide reduction
- Management of command, control and communications initiatives in the battlefield arena
- Synchronization and joint inter-operability amongst all US Forces
- Cost effective solutions for equipping the Forces

Colonel Ed Martin

Joint Task Force IDE Chief of Staff

Office of VCAS

US Army

4:20 Closing Remarks from the Conference Chair

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8:30 Opening Remarks from Conference Chair

8:40

Preventing Fratricide

- Defining the military case for improved simulation training
- Refining the techniques in land, sea and air armaments recognition
- Leveraging initiatives in 'all arms training'
- Lessons learned

Terry Pudas

Acting Director, Force Transformation

Department of Defense

9:35

Flexible Display Technology – Protecting the Foot Soldier

The foot soldier is exceptionally vulnerable to mishaps and incidences of fratricide. Simple, cheap, effective identification such as highly visible clothing patches have proven to be effective in the reducing fratricide. Night-vision goggles and other infrared applications add to the safeguarding of the foot soldiers' operating environment.

- Examining applications of flexible display technology
- Considering 'integrated with computation' technology
- Reviewing body-worn displays
- Examining contributions in situational awareness
- Lessons learned from evaluations in the field

Dr Robin Keesee

US Army Research, Development and Engineering Command

US Army

10:20 Networking Break

10:50

Characterisation of Combat ID Technologies

Technology is a key component of effective Combat ID. But which technology is most suited to the demanding environment of modern, complex warfighting? And what about Human-Systems Integration (HSI) and implementation?

- Identification of 25 current and future CID technologies
- Technical characterisation of each
- Consideration of HSI advantages and disadvantages and the likely impact on situational awareness
- Assessment of technological maturity and implementation issues

Shaun Wilson

Principal

Aerospace Concepts Pty Ltd, Australia

11:45 Luncheon

1:00 Round Table Discussion

Technological, Tactical and Protocols Present and Future

This round table will allow attendees the opportunity to discuss successes and failures within the sphere of IFF and related protocols for combat safety. Your table will be given 45 minutes to discuss your thoughts on this matter. We will reconvene and each table will nominate a representative to sum up their table's discussion and field a question to the entire group.

2:10

Communications Security and Information Integration in Combat ID

A secure, free from compromise, integrated communications base is essential in all military operations.

- Considering cryptographically secure measures
- Authenticating commands and instructions
- Integrating land, air and sea communications
- Recounting lessons learned

John Yuhas

Oversight Executive

Office of Secretary of Defense

www.marcusevansdefense.com

2:55

Space-based Communications in Combat ID

The advent, improvements and ever-evolving technology in space-based communications are significant force multipliers in the commanders' fighting arsenal. Space-based provide real-time reliable communications to troops on the ground and airborne forces, in peacetime and combat.

- Optimizing space-based situational awareness communications
- Integrating space with land-based communications
- Achieving real-time information feeds
- Maintaining superior, real-time connectivity

Larry H Burger

Director, Fututres Warfare Center, US Army Space and Missile Defense Command

US Army

3:45

Safe Targeting – The Bigger Picture

- Considering sensor integrations
- Examining Combat ID on the battlefield
- Examining open-field and urban terrain
- Comparing Combat ID with target ID
- Maximizing new capabilities to be exploited

George Gibbs

Systems Engineer, Marine Expeditionary Rifle Squad

US Marine Corps

4:30 Closing Remarks from Conference Chair and Conclusion of Combat ID Conference 2005

WHO SHOULD ATTEND

- Military Chiefs: 06-010
- Senior Executive Staff (SES)
- Acquisition Directors
- Managers, Systems Integration
- Policy Analysts
- Program Analysts
- Project Managers R & D
- IT Systems Designers
- Software Engineers
- Software Acquisitions
- Systems Integrators
- Chief Information Officers
- Director of Security Informations
- Information Systems Managers
- Systems Engineers
- Business Development
- Academics and researchers
- Technology Scientists
- Avionics Engineers

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- Air Force Wideband Gapfiller Satellite System (WGS),
- Milstar Medium Data Rate (MDR) EHF payloads,
- Polar EHF Low Data Rate (LDR) EHF payloads,
- 11 Navy UHF Follow-on spacecraft,
- NASA Tracking and Data Relay Satellite System (TDRSS)
- GPS I and IIF
- NRO Relay System, and
- Advanced transformational technologies – lasercom, phased array antennas, and digital signal processing.

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A limited amount of exhibition space is available at the conference. Sponsorship opportunities covering luncheon, evening functions, and documentation also exist. For further details, contact Chip Heflin, General Manager Sponsorship at 312-894-6382 or chiph@marcusevansch.com.

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