

#### Land Systems South Africa



## Enhancing Convoy Security by means of Rapid Deployable Weapons

#### Gerrie van der Merwe



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#### Logistical Support Chain as Target

- Lessons learned during OIF
- Total dependence on Ammunition, Food and Fuel
- Unprotected, Isolated and Highly Vulnerable











#### Rules of Engagement since OIF

- Asymmetrical Warfare No clear Battle Lines
- Battle moved from Open Spaces to Long Distance Engagements
- Off-road, Mine Protected, Ballistic Protection
- Logistical Vehicles were not Prepared for their new Role









#### Rapid Procurement supporting Crew Survivability

- New Procurement Programs of TCC
- Protection:
  - Armored Cabs
  - Add-on Armor
  - Bar Armor
  - Supporting Sub-systems
- Crew Protection against:
  - Small Arms
  - Shell Splinters
  - Anti-tank Mines
  - RGPs and IEDs
- All solutions proved to be Reasonable
  Effective















#### Protection influenced the Doctrine

- Crew Isolation during Self Defensive Role
- Compromising of Situational Awareness
- Cab encapsulation Blast protection, no use of Personal Weapons









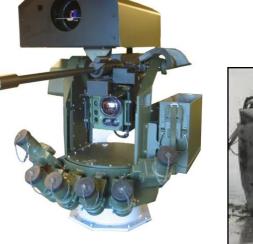
#### New dimension of Attack

- Threat moved away from Direct Attack
- Terrain variety Close Terrain, Built-up Areas
- New Engagement Profiles and Posing Force not Identifiable
- New Advanced and Expensive Equipment Required
- Avoidance of IED attacks: Situational Awareness
- **Exposed Soldiers in Biggest Danger**













#### The Re-action of the Coalition Forces

- Operations Reactivity vs Situational Awareness
- US ' Long Terms Armor Strategy / MRAP / Up-Armor
- TCC's following similar Strategies













#### When the going gets tuff...

- Key element: How to Fight its way out of the Situation
- OIF Reports: Support and Sustainment: Under-Armed
- Success of coordinated use of crew-served Weapons
- Reliance on support vehicles during Single Track Convoy
- New role for Logisticians in Prevention of Attacks
- Integration of Emerging Technologies







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#### New Emerging Technologies

- Users are Evaluating and Integrating new Technologies
  - Distributed Battle Space
  - Increases Situational Awareness
  - Survivability
  - Effective Combat Responsiveness
- Final Result: Protection of the Soldier
- RWS for Self Protection
- Interconnectivity relay of SA Information between Vehicles











#### Any Suitable Solutions?

- CROWS-2: Choice of the US Army Not Ideally suited:
  - Cost, Size and Weight Impact
- The Suitable Solution: Compact, Light and Affordable
- Capable of:
  - Rapid Deployment
  - Interoperability
  - Flexible Response







#### Capable of: Rapid Deployment

- Technical Support in Base
- Preparation of Support Vehicles (Tactical / Strategic Roles)
- In Theatre:
  - Convoy Driving
  - Road Block Support
  - Escorting
  - Self Defense Role: Logistical Trucks, Light Support and Secondary Weapon
- Vehicles get prepared at short notice











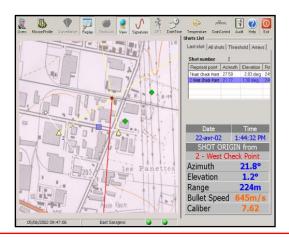
#### Capable of: Interoperability

- Rapid and Coordinated Response
- Shot Detectors Counter Measures
- Various Technologies and Sensors available











#### Capable of: Flexible Response

- Logistician not primarily a gunner
- Technology compatible with younger soldier
  - Video Interfaces
  - Play station Controls
- Rapid Target Designation











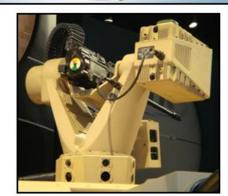
### Various Recently Launched Products

- Various Weapons / Payloads
- Different Applications
- One common Goal: Protect the Operator















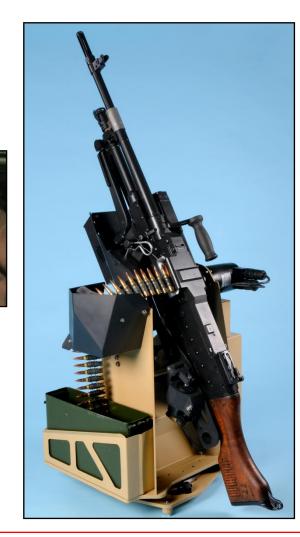


### The BAE Systems' Solution

- Launched in 2010
- Multi-purpose application (Defensive / Offensive)
- Fully Operational from Under Cover
- Intuitive MMI

Interoperability with other Sensors







### Shaping the way towards Convoy Security

- Key Development Criteria
  - Low Cost
  - Low Weight
  - Simple to Use
- Shaping this simple solution proved to offer:
  - Rapid Deployment
  - Interoperability
  - Flexible Response











# Another Unique (Non ITAR) solution from South Africa



Protecting Those Who Protect Us

Thank you for your Attention





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