Gun Trucks for Force Protection

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Executive Summary

• 31 five ton Gun Trucks are in Iraq and saving lives
  – More are needed
A Gun Truck crew survived a recent Improvised Explosive Device (IED) attack

Armor has been removed and mounted on a new truck that’s back on the road

“Sir,
I was the driver of the 5 Ton that was struck by the IED. I had six other soldiers in that vehicle at the time of the incident. All seven are breathing today …..”
A lighter weight troop carrier version of the armored box has also protected soldiers’ lives

At the request of the HASC, the troop carrier boxes were produced by the Army using a modified LLNL design and Stryker steel

“Here is one of the pictures from the VBIED 30 Nov 04. There were 14 soldiers in the back and all walked away to include the folks in the cab, the car was a 4 door sedan packed and it pulled along side the truck.”
Comparison of 5-Ton Gun Trucks & M1114 Up-Armored HMMWV for Convoy Escort

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<th>Characteristic</th>
<th>5-ton Gun Truck</th>
<th>M1114</th>
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<td>Armor Protection</td>
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<td>Repairability</td>
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<td>Flexibility</td>
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The most effective convoy escort is with both types of vehicles.
5-ton gun trucks are being produced in the field from armor plate and scrap metal.
Gun Truck Design Approach

- Start with the 5+ years of experience in Viet Nam
- Use modern, low-cost and readily available armor to survive IED attack
- Get prototypes in field ASAP and collect feedback from users
Gun Truck Project Timeline

HASC Call for support

Field prototype. ONS for 28 kits.

IED attack

Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar

2003 Design, build, & test prototype

2004 Build & field 30 kits

2005

DARPA
A Gun Truck needs several crew-served weapons

- Reasons for multiple guns (Viet Nam lessons learned)
  - Greater firepower
  - Redundancy when weapons malfunction
  - Repel simultaneous attacks from multiple directions
- Gun Truck companies have had difficulty obtaining multiple crew-served weapons
The armored box and ballistic windows stop all frags from typical IED.

Testing performed at Aberdeen Test Center, Army Developmental Test Command.
5-ton Gun Truck Protection Against IEDs

Frags from IEDs do not reach gunner
There are 31 LLNL/DARPA Gun Trucks performing missions in Iraq.

Feedback from field has been very positive.
Many DoD organizations provided critical support to the 5-ton gun truck kit development and fielding

- **U.S. Army Developmental Test Command, Aberdeen Test Center**
  - Ballistic testing
  - Road testing
  - Gun mount design

- **Army Research Lab**
  - Armor materials and performance
  - RPG defeat
  - Lessons learned from ASK

- **USMC**
  - Albany GA Logistics Base (initial M923 cab armor design)

- **Tank & Automotive Command**
  - Shipment of kits to field
Summary: $40K Per Gun Truck Kit
Just Add Troops and Guns

• Gunners and crew have excellent IED survivability.
• Provides convoy security, troop transport, and perimeter and checkpoint security.
• Gun Crew has high Situational Awareness while protected.
• Easy in-field installation and repair.
• Total kit weight does not exceed vehicle capacity.
• Easy to produce kits in quantity.
• Survivability and firepower far exceed M1114.