

# 120-MM CARGO MORTAR BOMBS COMPLYING WITH THE MODERN BATTLEFIELD NEEDS

Presented by Ltc. (Ret.) Motti Eis

April 2001

Report Documentation Page		
Report Date 09Apr2001	Report Type N/A	Dates Covered (from to)
Title and Subtitle 120-MM Cargo Mortar Bombs-Complying with the Modern Battlefield Needs		Contract Number
		Grant Number
		Program Element Number
Author(s) Eis, Mottie		Project Number
		Task Number
		Work Unit Number
Performing Organization Name(s) and Address(es) ISRAEL MILITARY INDUSTRIES LTD. (I.M.I.) Ammunition Group		Performing Organization Report Number
Sponsoring/Monitoring Agency Name(s) and Address(es)		Sponsor/Monitor's Acronym(s)
NDIA (National Defense Industrial Association) 211 Wilson Blvd, STE. 400 Arlington, VA 22201-3061		Sponsor/Monitor's Report Number(s)
<b>Distribution/Availability</b> Approved for public releas		
Supplementary Notes Proceedings from the 36th Sponsored by NDIA	Annual Gun & Ammunitio	n Symposium & Exhibition 9-12 April 2001
Abstract		
Subject Terms		
Report Classification unclassified		Classification of this page unclassified
Classification of Abstract unclassified		Limitation of Abstract UU
Number of Pages		

г



#### **Combat Scenarios**

- Dismounted Infantry formations.
- APCs.
- Trenched posts.
- AT Squads.
- Mortar Squads.
- Small Infantry Squads.
- C<sup>3</sup> Vehicles.
- Truck convoys.
- Bridge Head in coasting operations.



#### Limitations of the current situation

The indirect artillery (155mm layout)

- Late response.
- Target registration process.

The autonomous Mortar Carriers

- Limited stowage.
- HE bombs.



### **Dual-Purpose bomblet M87**



AVERAGE PENETRATION IN RHA STEEL 105 mm

BOMBLET LETHAL RADIUS AGAINST STANDING TROOPS 9 m

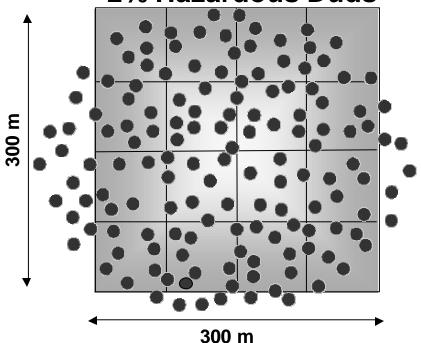
BOMBLET HE FILLER 44 g RDX Comp.



#### **Bomblet with no SD**

**Hazardous Duds After** Firing 10,000 Bomblets

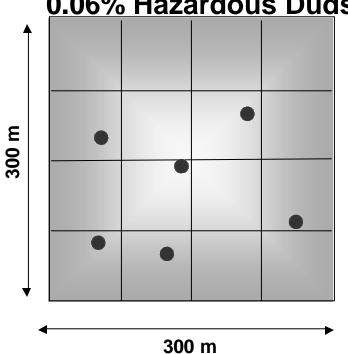
**2% Hazardous Duds** 



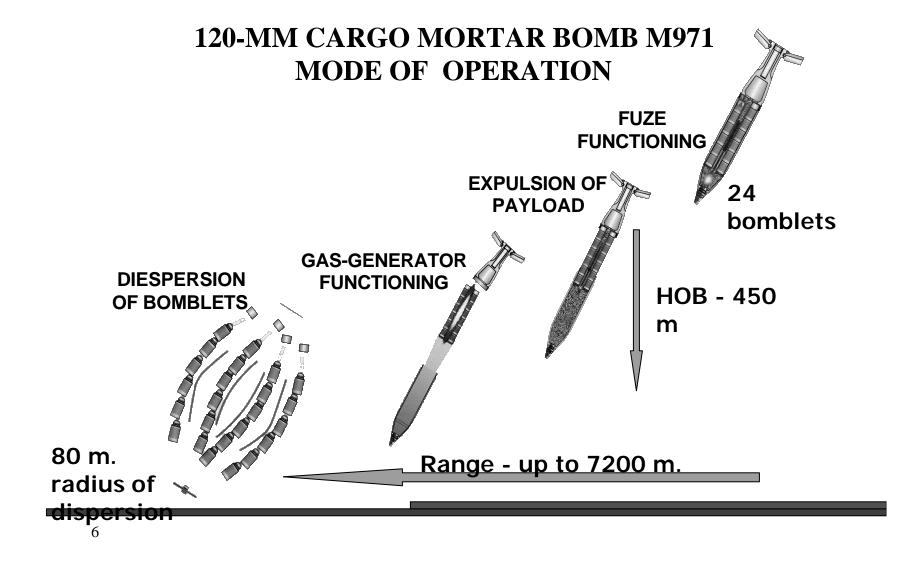
#### M87 bomblet

**Hazardous Duds After** Firing 10,000 Bomblets

0.06% Hazardous Duds

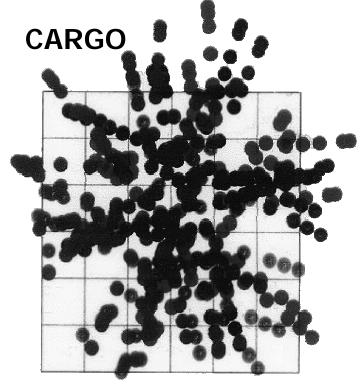








#### **DISPERSION PATTERN of 4X4 VOLLEYS**

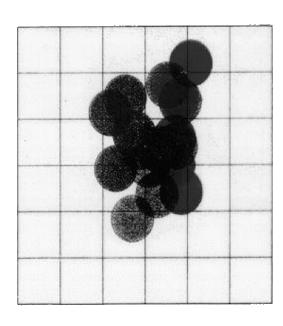


Dispersion (std dev): W = 37 m L = 37 m

Target = 300x300 m

Range = 5800 m

HE

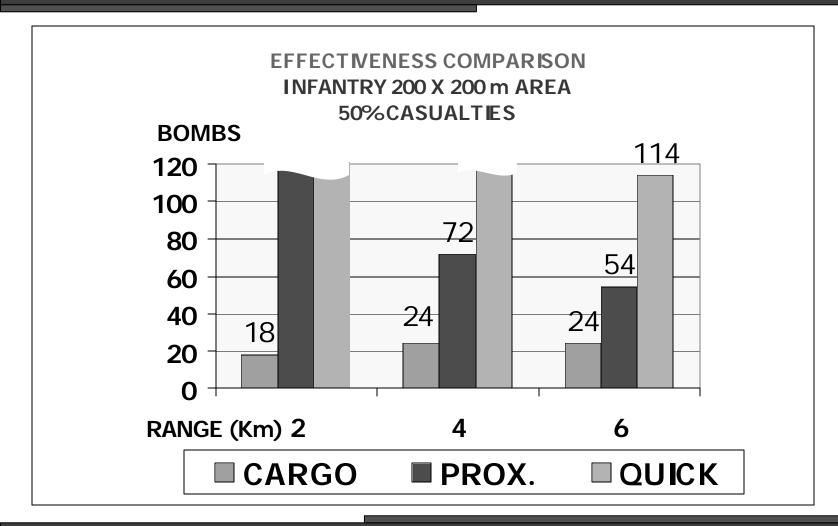


Dispersion (std dev): W = 37 m L = 37 m

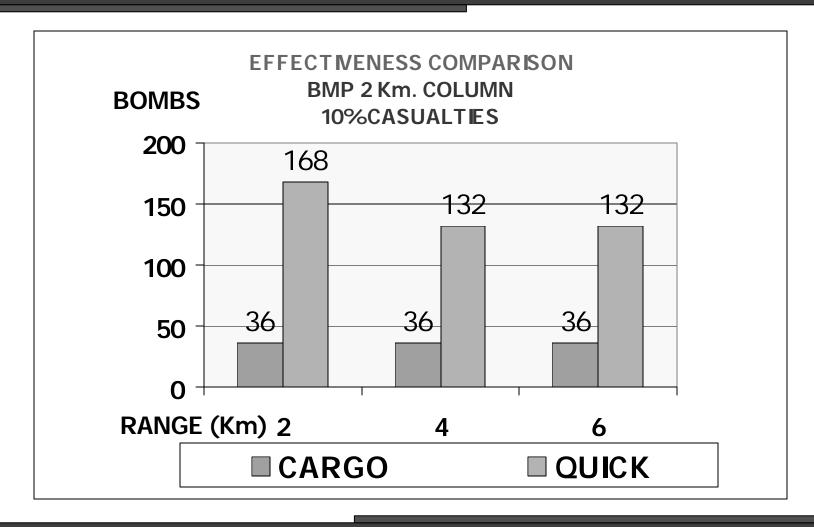
Target = 300x300 m

Range = 5800 m



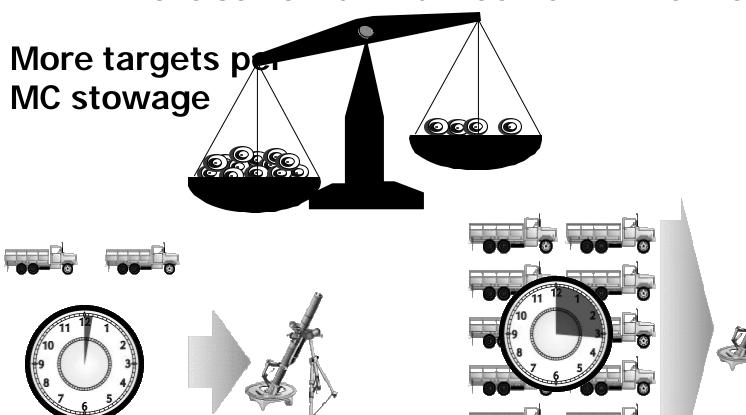








#### **ADVANTAGES USING 120-MM CARGO MORTAR BOMBS**





#### The End