Camp Doha, Kuwait
July 1991

$40.3M Total Loss: $23.3M in Vehicles, $14.7M in Munitions; $2.3M in Facilities. Three killed while clearing the area; 49 others injured. Chain reaction to fire in M992 ammunition carrier vehicle loaded with 155mm projectiles.

Why Bother? The Genesis of IM

Data extracted from Center for Naval Analyses study, "A Historical Perspective of Insensitive Munitions and Their Estimated Contribution to CV Safety", CRM 90-260 / March 1991

Ship		Fatalities	Injured	Ship Damage ($M)	Aircraft Damaged/ Destroyed	Aircraft Damage ($M)	IM Savings: Lives Saved	IM Savings: Injuries Averted	IM Savings: FY02 ($M)
Oriskany	Actual	44	156	7.6	3/3	3.4	44	106	40.4
	IM Est.	0	50	3	0/0	0			
Forrestal	Actual	134	161	72.1	43/21	110	74	141	825.3
	IM Est.	60	20	5	2/6	6.6			
Enterprise	Actual	28	343	56.2	17/15	70	28	323	529.2
	IM Est.	0	20	3.5	1/1	4.7			
Nimitz	Actual	14	48	5	9/3	73.4	2	7	0.8
	IM Est.	12	41	4.5	9/3	73.4			
							148	**577**	**1,395.7**

IM can save lives and resources.

USS Oriskany (1966)

USS Forrestal (1967)

USS Enterprise (1969)

USS Nimitz (1981)

Mission at Risk: Survivability Problem.

Enemies Have Capabilities and Intentions to Destroy Munitions / Weapons / Supplies at Insertion Points

+

Lucrative Targets

Space & Resource Constraints plus Operational Efficiencies Lead to High Density of Munitions / Weapons / Supplies. These nodes are vulnerable to attack and accidents.

=

Potential Loss of Critical DoD Resources

Artillery and Mortar IM Explosive Efforts

- IM Performance
- Lethality Performance
- US Industrial Base Impacts
- Recurring Costs
- Logistics Impacts
- Transferability to Other Applications

IM Explosive
50mm Shaped Charge Jet Impact (SCJI)

May 4th, 2007
(1220-area, Picatinny)

Test Set-up with 50mm SCJ

OSX-CAN

3 “Large” Pieces
NO Detonation
PASS

IV

MCX-8-t2

4 “Large” Pieces
NO Detonation
PASS

IV