

Joint Non-lethal Warning Munitions (JNLWM) Qualification and Fielding

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- **Purpose**
 - Type Classify JNLWM for Joint Services.
- **Joint Services Interest**
 - US Navy
 - US Army
 - US Coast Guard
- **Capability**
 - Deliver non-lethal, clear, unambiguous warning signals to 100, 200, 300 meters.

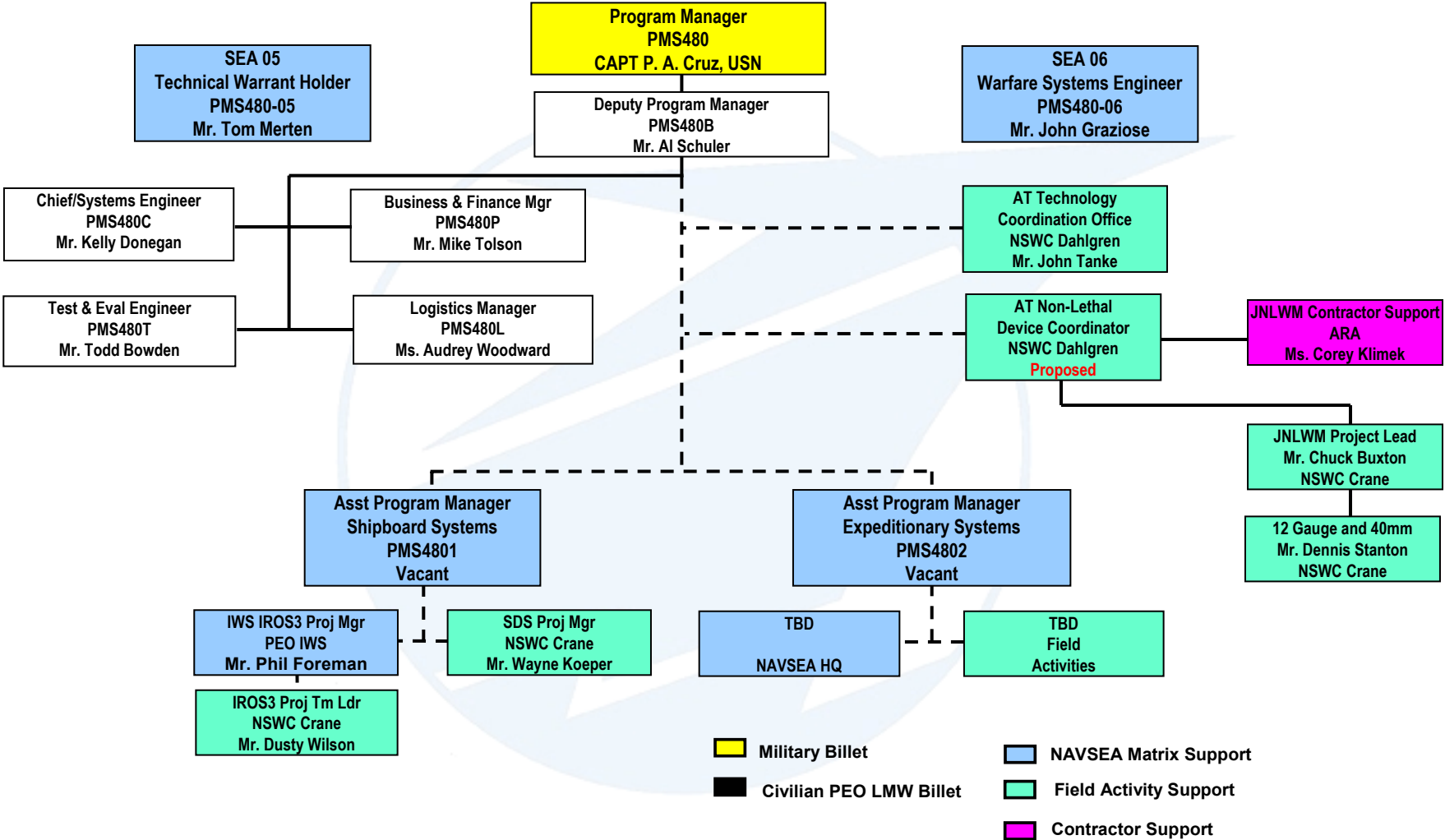


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- **Program Sponsor**
 - **Joint Non-Lethal Weapons Directorate**
- **Program Manager**
 - **PMS-480 Anti-Terrorism Afloat**
- **Project Lead**
 - **NSWC Crane Small Arms Ammunition Branch**



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- Military Billet
- NAVSEA Matrix Support
- Civilian PEO LMW Billet
- Field Activity Support
- Contractor Support



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JNLWM Joint Service Team

<u>Name</u>	<u>Organization</u>	<u>Phone</u>
CAPT Cruz	PMS480 (AT-A)	(202) 781-0519
John Graziose	SEA061T	(202) 781-2052
Joe Coleman	SEA061T1	(202) 781-3452
Corey Klimek	ARA	(703) 329-0200
Jeff Edwards	NSWC Crane	(812) 854-2289
Chuck Buxton	NSWC Crane	(812) 854-5416
Dennis Stanton	NSWC Crane	(812) 854-4159
CAPT Hubbard	CFFC	(757) 836-6348
Dan Piepgrass	CFFC	(757) 836-7765
Steve Boyle	JNLWD	(703) 432-0905
Bo Barbour	USA	(757) 788-3072
Neal Armstrong	USCG / JNLWD	(202) 267-2572

- **12-Gauge Warning Cartridges**
 - Type I 100M range
 - Type II 200M range
- **3-inch Cases**
 - Shotgun magazine capacity 4 rounds.
- **Interim Fix**
 - 12-gauge flash-bang (birdscare) cartridges



- **40mm Warning Cartridges**
 - Type I 100M range
 - Type II 200M range
 - Type III 300M range



Warning Munitions Launchers

- **12-Gauge Shotguns**
 - Mossberg 500
 - Remington 870P
- **40mm Launchers**



M79



M203 and M203A1

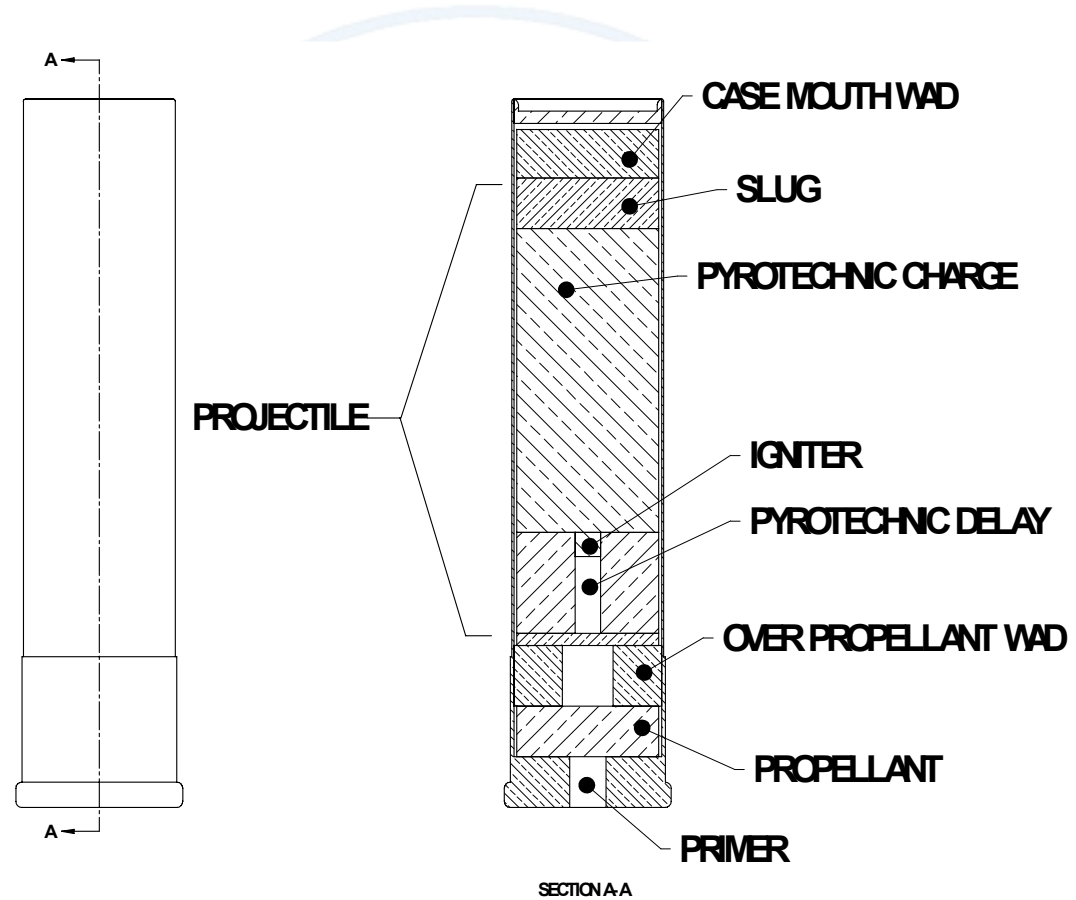


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Energetic Materials

- **Percussion primer.**
- **Smokeless propellant.**
- **Pyrotechnic delay.**
- **Igniter.**
- **Pyrotechnic burst charge.**

12-Gauge Projectile

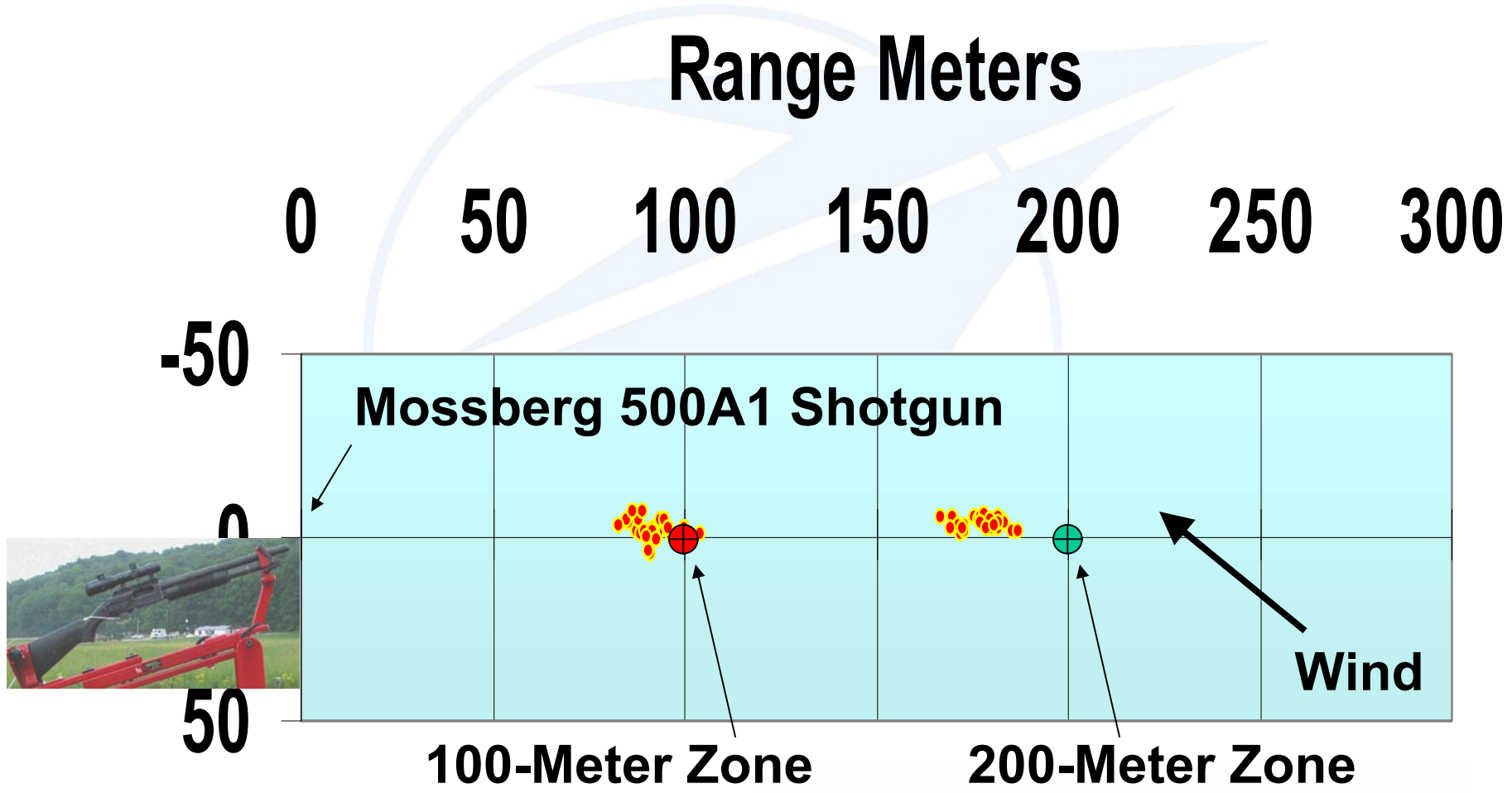


Downrange Airburst Outputs

- **Flash**
- **Bang**
- **Smoke**
- **Human Effects reviews to determine:**
 - **Outputs are effective.**
 - **Risks are acceptable.**



12-Gauge Airbursts Dispersion



12-Gauge Ballistics

	Flight Time	Mean Range	Muzzle Velocity
Type I	0.8 sec	93 meters	169 mps
Type II	2.1 sec	183 meters	165 mps

Preliminary Data Dec 04

mps = meters per second

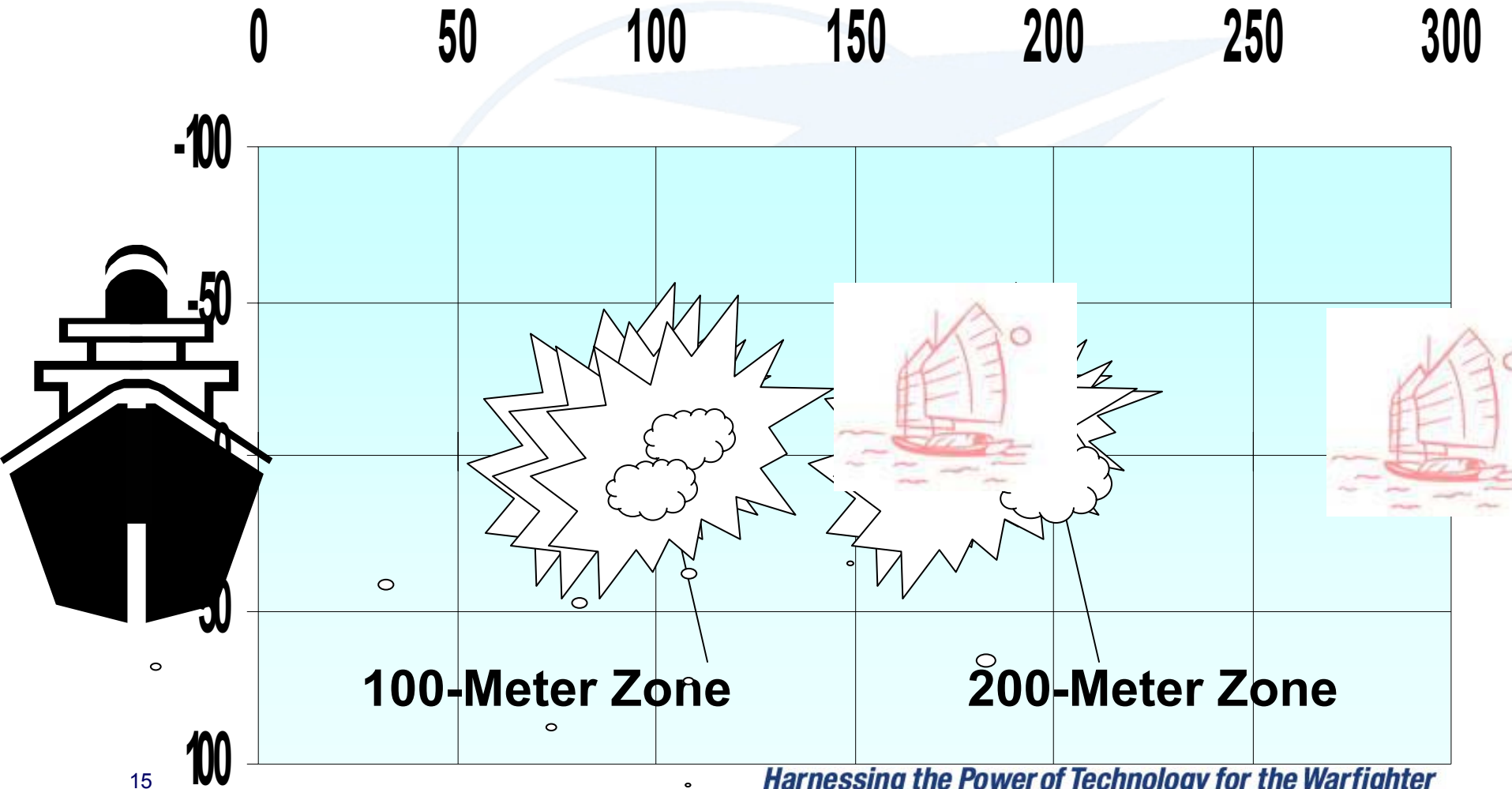


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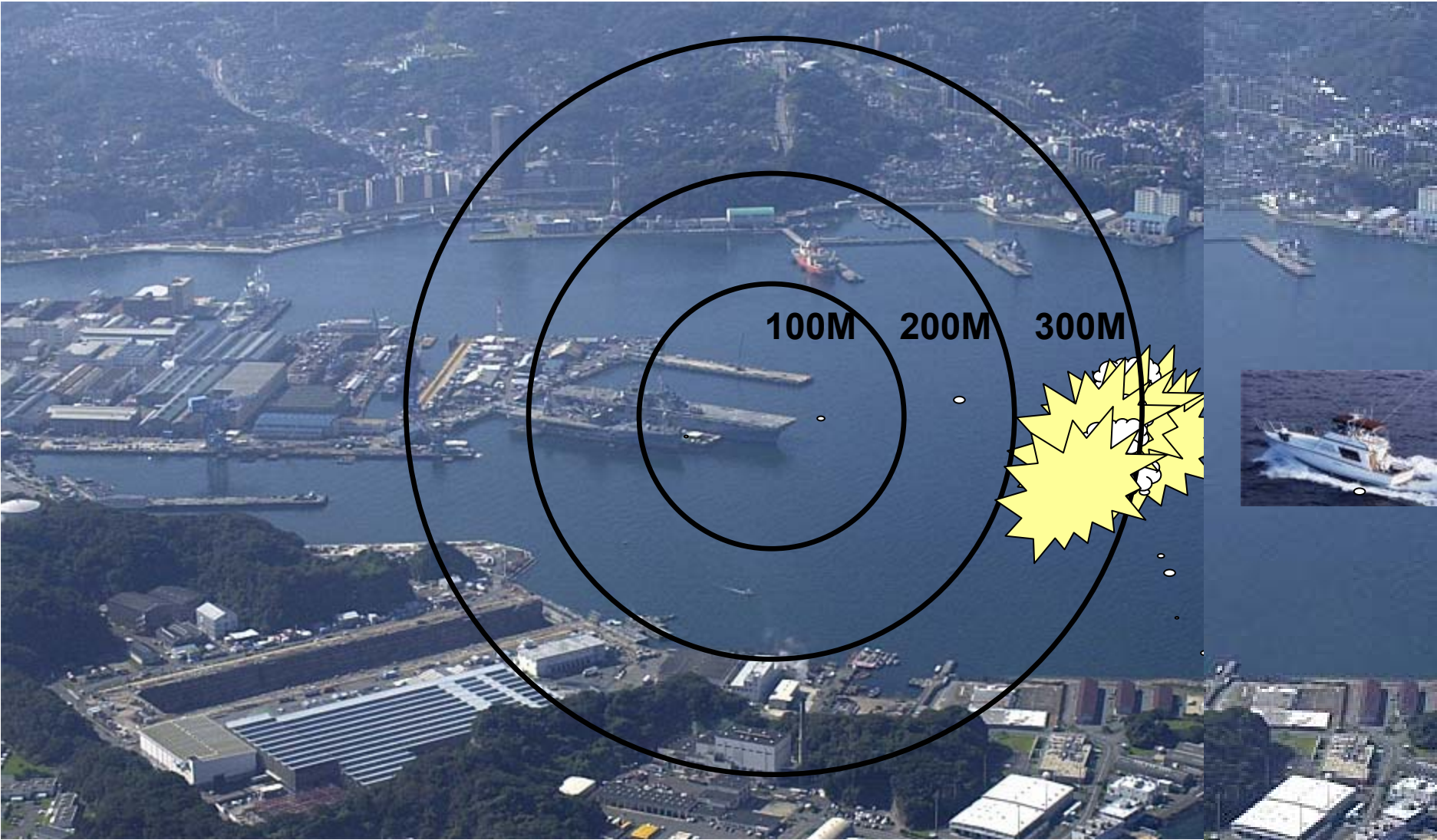
Employment and Tactics

- **Force Protection / Mobile Security.**
 - Airbursts in front of approaching vessel.
 - Desired effect. Approaching vessel halts or changes course.
- **Patrol and Interdiction.**
 - Airbursts ahead of fleeing vessel.
 - Desired effect. Fleeing vessel halts.

Force Protection Application



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Warning Munitions Schedule

- **Qualification Tests**
 - June - October 2005.
- **Fielding**
 - 12-gauge March 2006.
 - 40mm June 2006.



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Question / Comments

