

Ballistic Missile Defense Overview



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Missile Defense Agency



Ballistic Missile Proliferation

Threat

- Growing
- Unpredictable
- Anti-ship ballistic missiles threaten flow of commerce
- Threatens regional stability

2010 Ballistic Missile Force Levels Not Including U.S., China, Russia or NATO

<u>Missile Range</u>	<u>Quantity</u>
300-1,000 km	5,000-5,500
2,000-3,000 km	500-700
3,000-5,500 km	<40
> 5,500 km	0-10
Totals	5,550-6,250



North Korean Taepo Dong-2, April 2009



Iranian Salvo Launch, 28 June 2011



Iranian SRBM, 20 August 2010

Sources: NASIC, Ballistic and Cruise Missile Threat, 2009; DIA, Iran's Military Power, Statement before the Senate Armed Services Committee, 14 APR 10; DIA, Annual Threat Assessment 2008; MSIC, e-mail, RE: Unclassified Force Level Numbers, 7 February 2011; DNI, Unclassified Report to Congress on the Acquisition of Technology Relating to Weapons of Mass Destruction and Advanced Conventional Munitions, Covering 1 JAN to 31 DEC 29, FARS News Agency. Open Source Center (OSC), Iranian TV shows footage of "under ground launch silos" IAP20110627950192, 27 June 2011



U.S. Regional Missile Defense Capacity

– Available Globally By 2018 –



- **Aegis Ballistic Missile Defense**

- **Ships** > 30
- **Missiles** > 300



- **Terminal High Altitude Area Defense (THAAD)**

- **Batteries** 6
- **Interceptors** > 200



- **AN/TPY-2 Radars** 11



- **Command, Control, Battle Management and Communications (C2BMC)**



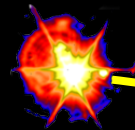
Regional Ballistic Missile Defense



Precision Tracking Space System
2020



Defense Support Program



SM-3

Terminal High Altitude Area Defense
2011

Aegis Ballistic Missile Defense
Standard Missile-3
2006

Defended Area

Patriot Advanced Capability-3
2002



TPY-2 Radar
2007

SCUD 300-1,000km

No Dong 1,000-3,000km

Command, Control, Battle Management and Communications

NMCC

STRATCOM

NORTHCOM



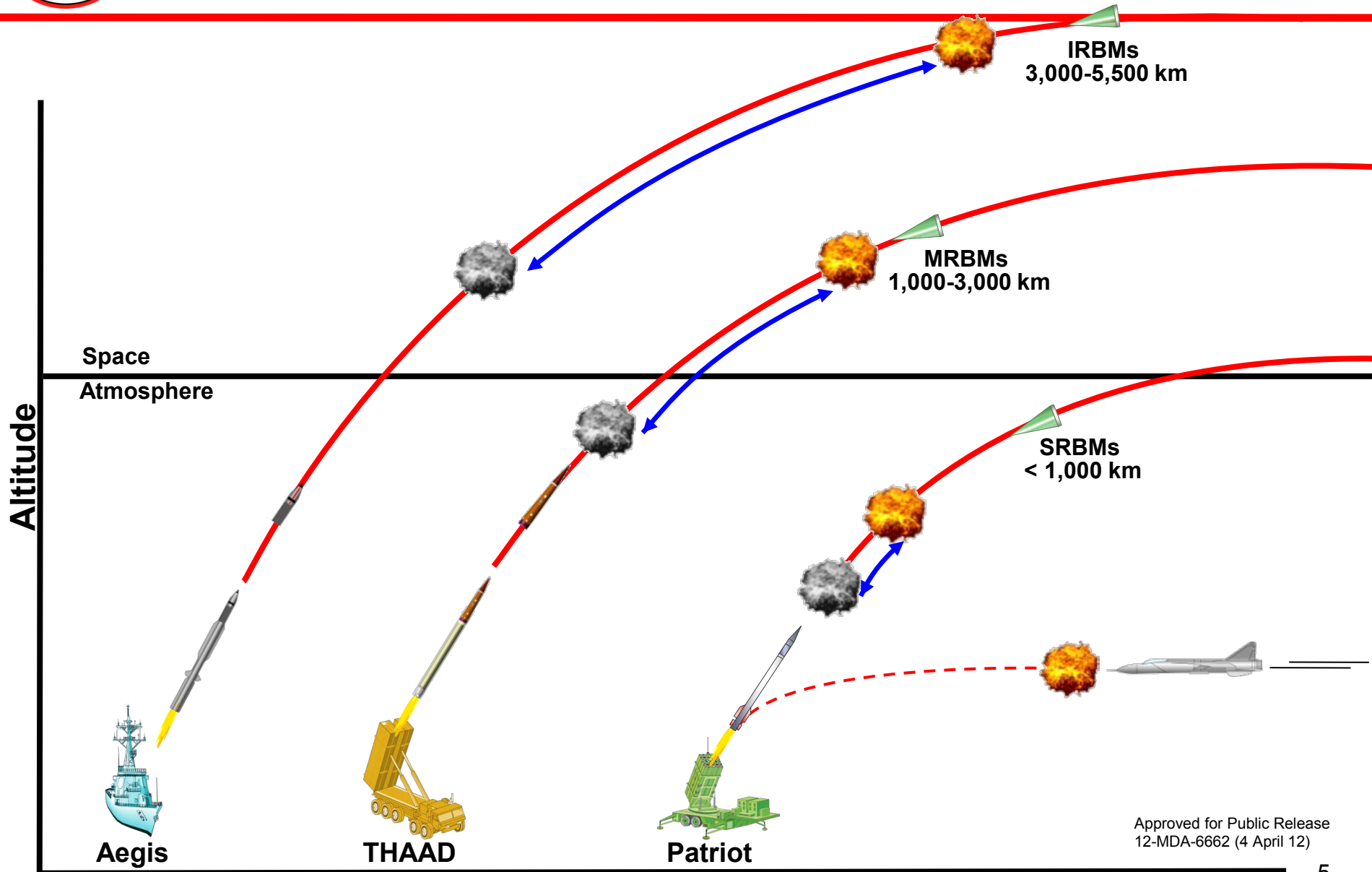
PACOM

EUCOM

CENTCOM



Missile Defense Battle Space





Terminal High Altitude Area Defense (THAAD)

Key System Attributes

- Endo- and exoatmospheric engagements
- Shoot-Look-Shoot capability
- Hit-to-Kill
- Wide area coverage
- Long-range, high-accuracy radar

Key System Components

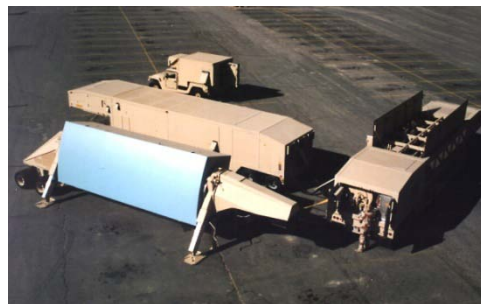
Interceptor



Launcher



Radar*



THAAD Fire Control and Communications (TFCC)



THAAD: 9 of 9 Intercepts

- Two simultaneous intercepts in October 2011

***Also can function as a forward-based radar**



Advantages Of Tracking And Destroying Ballistic Missiles From The Side

