



Missile Defense Briefing Report: No. 342

December 30, 2015 **Richard M. Harrison**

Related Categories: Islamic Extremism; Missile Defense; Terrorism; Israel; North Korea; Russia

[EDITOR'S NOTE: Thank you for your support and readership of the Missile Defense Briefing Report. Beginning with our next issue, we will transition to a more broadly themed Defense Technology Monitor, which will maintain a focus on missile defense but also incorporate coverage of topics such as cybersecurity, space warfare, directed energy weapons, and other emerging technology weapon systems. We look forward to keeping you informed in these new arenas.]

ISRAEL READIES AIR BASED DEFENSE FOR EXPORT...

The civilian airliners of NATO member states may be a lot safer in the near future, thanks to MUSIC. The Israeli-developed Multi Spectral Infrared Countermeasures (MUSIC), already deployed on commercial civilian Israeli aircraft, protects the planes against surface-to-air and shoulder-launched rockets using laser technology in combination with early warning systems. The system recently passed a NATO certification proficiency test conducted by the Israel Defense Ministry, the Spanish Air Force, and NATO's Air Forces Armaments Group, although it is not yet clear when the system will be cleared for export to NATO states. (Tel Aviv *Israel Hayom*, November 24, 2015)

...AND ADDS NEW CAPABILITIES

Even as Russia deploys advanced air defenses in neighboring Syria, Israel is beefing up its own missile defense capabilities. The Israeli military has successfully completed a test of its new Barak 8 missile defense system, according to media reports. The Barak can be deployed on either sea-based or land-based platforms, giving it greater versatility than the Russian S-400 system - albeit with a more limited range of approximately 150 kilometers. Reportedly, the system can track and destroy simultaneously launched UAVs, jets, missiles and rockets. The system will likely be used to counter threats from Lebanon's Hezbollah militia. (*Times of Israel*, November 26, 2015)

HARNESSING LEFT OF LAUNCH

When conceiving of ways to destroy enemy missiles, defense planners have traditionally focused on the "kinetic kill" of the incoming threat. More and more, however, new technologies offer ways to disable a threat before it is even launched. These "left of launch" capabilities include cyber attacks and other electronic warfare methods that can disable enemy command and control to prevent launch and take navigation and radar systems offline, making guidance to target impossible. The use of such capabilities, however, is hampered by a number of factors - from incomplete integration into kinetic systems to a lack of testing - that have limited their utility for missile defense, at least so far. (*Breaking Defense*, December 4, 2015)

RUSSIA ADDS TO ARCTIC ARSENAL

In the near future, Russia will have no less than six military bases in Arctic region, and the Kremlin plans to eventually construct an additional seven in the mineral rich region. This burgeoning deployment includes significant missile defense capabilities; a spokesman for the Russian General Staff has confirmed that "over the past year, two S-400 regiments have been deployed in the Novaya Zemlya archipelago and in the Yakutian town of Tiksi." The systems are said to be on 24 hour alert, and controlled by the Russian military's United Strategic Command for the Arctic region. (RT, December 8, 2015)

PYONGYANG GIVES AMERICA'S ASIAN SHIELD A BOOST

North Korea's recent announcement of a "no sail" zone in the sea between the Korean Peninsula and Japan is propelling authorities in Tokyo toward acquisition of still greater missile defense technologies. That was the message delivered by Defense Minister Gen Nakatani to reporters in Hawaii, when he announced that his government was considering the deployment of the U.S. THAAD system as part of plans to counter the DPRK's military moves, which are expected to include an imminent ballistic missile test. (Bloomberg, November 24, 2015)