



# AIR DEFENSE ARTILLERY NEWS FROM AROUND THE GLOBE – NOVEMBER 2013 –

## [HANNAFORD: FOCUSING MORE EYES IN THE SKY](#) [\(Existing Missile-Defense Assets Could Make the U.S. Homeland Safer](#)

(The Washington Times/28 November 2013)

By Peter Hannaford, board member of the Committee on the Present Danger

Next year, the North American Aerospace Defense Command will test an innovative weapon called the Joint Land Attack Cruise Missile Defense Elevated Netted Sensor System (JLENS) at the Army's Aberdeen Proving Ground, 63 air miles from the nation's capital. Integrated with existing defenses, the system would protect the capital from short-range missile threats – the rest of America? Not so much.

On September 11th 2001, we experienced the horror of terrorists in airliners. Tight domestic and international security measures minimized that threat, so what else endangers the homeland? Intercontinental ballistic missiles, for the moment, are in arsenals of countries deterred from using them by our triad of bombers, land-based missiles and submarine-launched missiles. Though several deranged pilots have aimed their private planes at the White House, modern radar, aircraft and missiles have ensured that no one has come close since a light plane crashed on the White House lawn in 1994. Nevertheless, America still faces a remaining threat: short-range ballistic missiles and cruise missiles launched from the decks of commercial ships.

Club K, a launch system disguised as an ordinary 40-foot shipping container that holds four cruise missiles, already exists. It is offered for sale by a private Russian arms company based in Moscow. Those Club K missiles are much more dangerous than they seem at first glance. Hidden among the 6 million shipping containers that come to our shores annually, Club K warheads could contain chemical- or germ-warfare agents. Even more deadly, they could have Electromagnetic Pulse (EMP) warheads.

The EMP threat to the American homeland challenges description. A large EMP warhead exploded high over the center of the United States would completely disable the entire national electrical grid. Aircraft would fall out of the sky, vehicle engines would die, communications, the Internet and computers would fry, and civilization on the continent would be set back a century.

Can we defend ourselves? In his book "Apocalypse Unknown," Mr. Peter Pry, executive director of the Congressional Task Force on National and Homeland Security, estimates we could harden our entire national electrical grid against EMP attacks for \$500 million. Congress and the electric utilities have failed to appropriate those funds, but another solution could be found at Aberdeen Proving Ground: JLENS.

*(To read the complete article, click on the hyperlinked title above.)*

## [AN ARMY IN TRANSITION AWAITS WEST POINT CADETS AS WAR ENDS, MILITARY BUDGET SHRINKS](#)

(The Washington Post/28 November 2013) By Ernesto Londono

**WEST POINT, N.Y.** — They were fourth- and fifth-graders when terror struck on September 11th 2001, and they have only hazy recollections of the day that galvanized the young men and women who filled these halls in the decade that followed. Now, the seniors at the U.S. Military Academy at West Point are poised to become the first in a generation to enter a force preparing not to fight insurgents in Iraq or Afghanistan but to confront shrinking budgets and a postwar identity crisis. In doing so, they will be taking the helm of Army units made up of combat-seasoned veterans.

Unlike the cadets that came before them, those in West Point's class of 2014 have learned about the wars in Iraq and Afghanistan as historical examples, rather than conflicts that would soon dominate their lives and careers. With graduation just months away, the students at this idyllic campus of gothic buildings on the banks of the Hudson River are wrestling with the same existential questions bedeviling Army leaders: What kind of military does the country want? And how much is it willing to spend on it?

*(To read the complete article, click on the hyperlinked title above. To view the photo gallery, click [here](#).)*



### [AIR DEFENSE ARTILLERY MUSEUM OPENS NEW CHAPTER IN HISTORY](#)

(The Lawton Constitution/27 November 2013)

Subscription required.

By Mitch Meador

**FORT SILL, Okla.** – In spite of furloughs, a government shutdown and cuts in personnel and funding, Fort Sill's Directorate of Museum Services managed to reach a major milestone with Tuesday's reopening of the U.S. Army Air Defense Artillery (ADA) Museum.

"This is a very exciting day for the Air Defense Artillery Museum," Director/Curator Jonathan Bernstein greeted the crowd. "It represents the first time that the museum is set up as a coherent museum with an intact storyline since leaving Fort Bliss, (Texas).

*(To read the complete article, click on the hyperlinked title above.)*

**See also:** *Museum Opens at Fort Sill* (Texoma's homepage.com/26 November 2013)

[http://www.texomashomepage.com/story/museum-opens-at-fort-sill/d/story/HywQ2sqkkEu\\_4xdjAxJO7g](http://www.texomashomepage.com/story/museum-opens-at-fort-sill/d/story/HywQ2sqkkEu_4xdjAxJO7g)

### [US MISSILE DEFENSE STUMBLES TOWARD UNCERTAIN THREATS](#)

(Defense News/26 November 2013) By Paul McLeary

**Washington** — While the debate continues over how soon Iran or North Korea might be able to develop an intercontinental ballistic missile (ICBM) that could strike the US mainland, the US government is forging ahead with controversial plans to beef up its domestic missile defense capabilities well before any threat has materialized.

In September, the Missile Defense Agency (MDA) announced that in addition to the two ground-based interceptor (GBI) sites it operates in Alaska and California, it has started looking at five potential locations to house a third site in the eastern US.

Inspecting a variety of sites will allow the Pentagon to begin environmental assessments if a skeptical Congress eventually reaches agreement on the project and finds the necessary funding. The Congressional Budget Office has estimated that expanding the ground-based midcourse defense system to the East Coast would cost about \$3.5 billion over the next five years.

*(To read the complete article, click on the hyperlinked title above.)*

### [PATRIOT DEFENSE SYSTEM LOOKS TO THE FUTURE](#)

(AINonline/15 November 2013) By David Donald

Late last month Raytheon announced that it had received contracts worth \$71.7 million to continue upgrading its Patriot air and missile defense system for the U.S. Army. The latest contracts, which add a modernized radar digital processor (RDP) and modern man station (MMS), highlight the continuous development that is being applied to the Patriot to keep it at the forefront of the air defense arena. The Patriot system has now conducted 2,500 search and track tests, and around 1,000 flight tests. The latest of these was a live-fire exercise undertaken last month in South Korea to demonstrate operational capability.

Both RDP and MMS are fully compatible with the Post Deployment Build-7 software that Raytheon began delivering in June this year. This software release is part of an ongoing capability enhancement that caters to new technological developments, as well as advances in threats and their countermeasures in the dynamic air defense environment.

Also included in PDB-7 is compatibility with the Patriot Advanced Capabilities-3 (PAC-3), Missile Segment Enhancement (MSE) interceptor that was also selected for the MEADS system. This weapon has yet to enter production, although a decision is expected shortly. In June this year the PAC-3 MSE undertook its seventh test, and the first, involving a multi-target engagement. Upgrading a Patriot launcher to fire PAC-3 missiles as well as PAC-2s is easily undertaken.

In U.S. Army service the Patriot system is scheduled to serve until at least 2048, and in April this year the service approved a second recertification of the PAC-2 GEM-T missile to extend its life to 45 years. The recertification program is less than 10 percent of the cost of new acquisition, and involves the replacement of some shelf-life items and a rigorous test and inspection process to ensure that there are no other faulty items.

*(To read the complete article, click on the hyperlinked title above.)*

### **OFFSET, CO-PRODUCTION DETAILS IN PLAY AS US LOOKS TO IMPROVE BID FOR TURKEY AIR DEFENSE SYSTEM**

Jane's Defence Weekly/15 November 2013) Subscription required.

By Marina Malenic

The United States is considering improving its offer to Turkey for an air defense system program after Ankara indicated it could still walk away from a \$3.4 billion deal with China, sources familiar with the issue confirmed on 14 November 2013.

Turkish Prime Minister Tayyip Erdogan said last week that he was open to fresh offers if an agreement to build an air and missile defense system with China falls through. In the meantime, Patriot missile defense system manufacturers Raytheon and Lockheed Martin are working on ways to improve the U.S. offer.

"Internal discussions about changes to the [Patriot] offer are still under way," a source familiar with the talks told IHS Jane's on 14 November.

*(To read the complete article, click on the hyperlinked title above.)*

### **ARMY AIMS TO FAST-TRACK EXPORT VERSION OF MISSILE DEFENSE C2 SYSTEM**

(Inside the Pentagon/14 November 2013) Subscription required.

By Sebastian Sprenger

The Army is looking for ways to accelerate the production of an air and missile defense command-and-control system for the international market, a move that observers say could determine the degree of international compatibility of sensors and shooters in future conflicts.

At issue is the exportability of the Integrated Air and Missile Defense (IAMD), Integrated Battle Command System (IBCS), made by Northrop Grumman. The system features an open architecture, which means domestic and foreign equipment can be incorporated into a larger network if all components follow the IBCS interface specifications set by the government. Without an accelerated schedule, IBCS would be eligible for an export evaluation in 2017, he said in an 8 November 2013 teleconference with reporters.

The functioning of command-and-control systems is traditionally considered a military secret, because these applications are foundational to all weapon systems and sensors. On the other hand, netting together a missile-defense network out of international components is considered a key prerequisite in countering the proliferation of weapons worldwide. *(To read the complete article, click on the hyperlinked title above.)*



## [2-44TH AIR DEFENSE ARTILLERY SOLDIERS TRAIN FOR DEPLOYMENT](#)

(The Fort Campbell Courier/14 November 2013)  
Article and photo by Sgt. Leejay Lockhart, 101st Sustainment Brigade, 101st Airborne Division

*At top left, Spc. Dillon Cihak, a Sentinel crewmember assigned to C Battery, 2nd Battalion, 44th Air Defense Artillery (C/2-44 ADA) Regiment, 101st Sustainment Brigade, 101st Airborne Division, uses hand and arm signals to guide a CH-47 Chinook helicopter during a sling load operation on 22 October 2013 at Fort Campbell.*



*At bottom left, a CH-47 Chinook helicopter from Company B, 6th Battalion, 101st Combat Aviation Brigade, 101st Airborne Division, lifts a humvee and a AN/MPQ-64A Sentinel radar that Soldiers from C/2-44 ADA sling loaded to the helicopter as part of the 22 October 2013 training mission at Fort Campbell. The training provided Soldiers with an opportunity to practice sling loading and moving their equipment by helicopters under realistic conditions*

**FORT CAMPBELL, Ky.** – Soldiers from the 2nd Battalion, 44th Air Defense Artillery (2-44 ADA) Regiment, 101st Sustainment Brigade, 101st Airborne Division, have been busy preparing for not one, but two separate deployments. Even as the battalion trains for an upcoming indirect fire protection mission, the Soldiers of the Sentinel radar platoon in C Battery continue to prepare themselves to scan the air for threats.

When these Soldiers deploy in support of Operation Enduring Freedom (OEF), they will do it as small teams spread throughout a number of forward operating bases in

Afghanistan. To prepare them for that experience, the unit conducted a four-day training exercise in late October (2013) where the platoon air assaulted equipment and Soldiers to a training area on the base.

Once they arrived at the designated training site, they had to secure the landing zone, move their equipment to different areas to simulate being at different forward operating bases (FOBs), react to enemy contact and then start conducting air defense operations while encountering scenarios they may well face during the deployment.

Specialist Dillon Cihak, a Sentinel crewmember and the platoon's communications representative, said the realistic training allowed the Soldiers to put what they had learned in the classroom to good use.

"We had to prepare like it was a war zone," said Cihak. "So doing this training actually prepares you for the real world stuff. Syncing everything into ... a [real] world scenario is probably the best training you can get." □

The platoon leader for the unit, 1st Lt. Mitchel B. Reed, said the operation was a culminating training event. The training also gave all the Soldiers a chance to participate in an Air Assault mission.

*(To read the complete article, click on the hyperlinked title above.)*

### [PICTURE OF CO-OPERATION](#)

(The Lawton Constitution/14 November 2013) By Malinda Rust

**LAWTON, Okla.** – For the third year in a row, the Dinges Award has gone to the Lawton-Fort Sill Co-op partnership of the 3rd Battalion, 6th Air Defense Artillery (3-6 ADA) and Arvest Bank.

The award recognizes the partnership that best demonstrates the spirit of the Co-op, named for Maj. Gen. Edward Dinges, who was the commanding general of Fort Sill at the time of the Co-op's founding in 1980.

3-6 ADA worked on multiple community projects by volunteering at the Lawton-Fort Sill Veterans' Center, the Wichita Mountains Wildlife Refuge, Lawton-Fort Sill Blood Drive, and at the Lawton Animal Shelter. The Soldiers and leaders of 3-6 ADA partnered with Comanche County Child Welfare Services to sponsor 50 foster children for Christmas; attended Cameron University basketball games, Saint Barbara's Day Ball, luncheons, and graduation ceremonies; and found time to play with their Co-op partners in two golf tournaments. They also participated in the first March Mayhem Power-Lifting Competition to encourage physical fitness, team-building and developing friendships. *(To read the complete article, click on the hyperlinked title above.)*

### [BUDGET DYSFUNCTION HURTS MILITARY](#)

(The Hill/13 November 2013)

By Maj. Gen. (Retired) Howard "Dallas" Thompson, former chief of staff for NORAD/NORTHCOM and an Air Force fighter pilot.

With our military's drawdown in Iraq complete and the combat mission in Afghanistan nearing its end, it is clearly the beginning of a new chapter at the Pentagon. New and emerging threats — totally unlike those our military has encountered in past conflicts — require authorizers and appropriators on Capitol Hill to change the way they do business, too.

Of urgent concern is that over the past two decades —especially during the past 12 years — while our attention has been diverted by counterinsurgency, our traditional, historic potential adversaries have literally "gone to school" on how America wages war. ...

While we have impressively capable systems to intercept and destroy incoming cruise missiles and unmanned aerial vehicles (UAVs), they require persistent, long-range surveillance and detection of small, stealthy targets. Currently, the military systems able to provide such "cueing" do not have the persistence or the necessary range, and their affordability in this period of budget austerity further complicates their use.

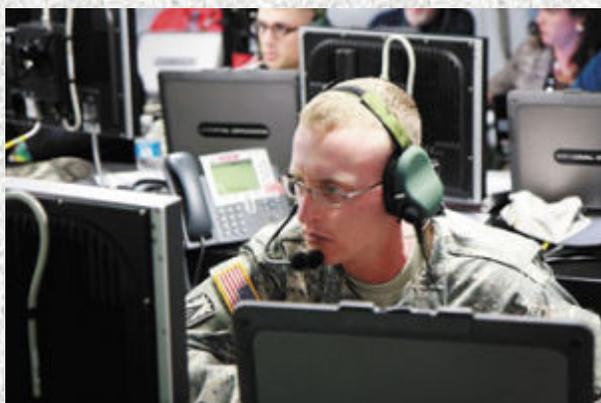
In a recent speech before the Center for Strategic and International Studies, Secretary of Defense Chuck Hagel outlined his future priorities for the Pentagon. Among them was to support deserving emerging technologies. One such emergent surveillance technology represents the most proven and potent counter-cruise missile and UAV system seen to date: the Joint Land Elevated Netted Sensor, or JLENS.

*(To read the complete article, click on the hyperlinked title above.)*

### [MISSILE DEFENSE DEMO DELIVERS SNAPSHOT OF CAPABILITIES](#)

(The Redstone Rocket/13 November 2013)

By the Program Executive Office for Missiles and Space



The Army Integrated Air and Missile Defense (IAMD) Project Office of the Program Executive Office (PEO) for Missiles and Space conducted its Army IAMD 2013 Demonstration from 22 October through 6 November 2013. The demonstration exhibited emerging capabilities of the IAMD Battle Command System (IBCS) and demonstrated user defined IBCS objectives on the path toward the Army IAMD developmental test program starting in 2014.

The demonstration showcased the current integration efforts of hardware and software from the following project offices – IBCS Engagement Operations Center and Integrated Fire Control Network Relay; the Cruise-Missile Defense System Project Office – Sentinel radar; the Counter-Rocket, Artillery

and Mortar (C-RAM) Project Office – Air Defense Airspace Management (ADAM) Cell and Ku-Band Multi-Function Radio Frequency System radar; and the Lower-Tier Project Office – Patriot Engagement Control Station (ECS) and Information Coordination Central (ICC).

The AIAMD program integrates sensors, weapons and a common mission command capability across a single, integrated fire-control network providing a high-fidelity single integrated air picture for the Army and is the Army's contribution to joint IAMD capabilities.

*(To read the complete article, click on the hyperlinked title above.)*



### **TURKEY ASKS NATO TO EXTEND PATRIOT DEPLOYMENT NEAR SYRIA BORDER**

(Defense News/13 November 2013)

By Fulya Ozerkan, Agency French-Press

*At left, U.S. soldiers stand near a Patriot missile system at a Turkish military base in Gaziantep. Turkey has asked NATO to extend the deployment of surface-to-air Patriot missiles on their home soil for another year to protect its border with Syria. (Photo by Bulent Kilic / AFP)*

**ANKARA, Turkey** – Turkey has asked NATO to extend, for another year, the deployment of surface-to-air Patriot missiles to protect its troubled border with Syria because of a continuing “serious” threat, officials said on Wednesday.

“The North Atlantic Council has regularly assessed the situation and the implementation of the Patriot mission. It is clear that the overall risks and threats to Turkey remain serious,” the official said.

Washington confirmed that Turkey has asked NATO “to continue to augment its air defense capabilities to aid in the defense of its population and territory.”

“We look forward to working through NATO to address the request,” State Department spokeswoman Jen Psaki said, adding that “we respect and value Turkey as a long-standing NATO and US ally.”

The six batteries of the US-made missiles, effective against aircraft and short-range missiles and dispatched by the Netherlands, Germany and the United States, are deployed in the southern city of Adana and the southeastern cities of Kahramanmaras and Gaziantep.

Originally used as an anti-aircraft missile, Patriots today are used to defend airspace by detecting and destroying incoming missiles. They were made famous during the 1991 Gulf War as a defense from Scuds fired on Israel and Saudi Arabia from Saddam Hussein's Iraq.

*(To read the complete article, click on the hyperlinked title above.)*

**See also:** *Turkey Asks NATO to Keep Missile Defenses near Syrian Border* (National Journal – Global Security Newswire/13 November 2013) By Global Security Newswire Staff <http://www.nationaljournal.com/global-security-newswire/turkey-asks-nato-to-keep-missile-defenses-near-syrian-border-20131113>

### **TURKEY MOVES TO KEEP AIR DEFENSE COMPETITION OPEN TO US, EUROPEAN BIDDERS**

(DefenseNews.com/13 November 2013) By Burak Ege Bekdil

**ANKARA, Turkey** — After a stunning decision to select a Chinese contender to build Turkey's first long-range air and missile-defense system, Ankara has moved to keep the competition open to European and US bidders that came second and third, respectively.

The Turkish government has asked the European and US bidders to extend the validity of their bids, a sign that the game is not yet over for these two. The fourth bidder, a Russian manufacturer, had been eliminated from the contest. *(To read the complete article, click on the hyperlinked title above.)*



### [A VISIT WITH VETERANS](#)

(Lawton Constitution/13 November 2013) Subscription required.  
By Spc. Tara Barney

**LAWTON, Okla.** – "Diamondback" soldiers and leaders assigned to Delta Battery, 3rd Battalion, 2nd Air Defense Artillery (D/3-2 ADA) Regiment, paid residents of the Lawton - Fort Sill Veterans Center a very respectful visit on Monday, 11 November 2013, Veterans' Day.

The Diamondback soldiers and leaders walked into the center, not knowing what to expect. Some of them jumped right in and began talking to the residents, while others decided to be completely entertaining and played card, board and table games with the residents.

The D/3-2 ADA Commander, Capt. James Davis, had a different plan in mind for himself and a few select soldiers. They would be visiting the "Yellow Wing," an intensive-supervision area designated for residents diagnosed with illnesses such as dementia or Alzheimer's. Most days the residents in this wing do not even get outside their rooms. The nursing staff was excited to see the soldiers there and began bringing out some of the residents to the main sitting room, where they got to visit with the soldiers and hear a little bit about their lives. Upon leaving the wing one of the nurses told the soldiers how much she appreciated the visit and that the soldiers really "brightened their day."

*(To read the complete article, click on the hyperlinked title above.)*

### [DOD ENGINEER URGES COMPETITION TO ADVANCE TECHNOLOGY](#)

(Defense-aerospace.com/12 November 2013)

Source: U.S. Department of Defense; issued 12 November 2013

While technology is doubling in advancement roughly every decade, the Defense Department (DoD) needs to ensure capable and flexible weapons systems to meet future challenges, a Pentagon official said today.

"The military, while leaner, needs to be more agile, flexible, ready and technologically advanced," Stephen Welby, the deputy assistant secretary of defense for systems engineering told the Defense Daily's Open Architecture Summit.

Open systems and standard-based components, Welby explained, will enable the department to address obsolescence. "We should be thinking about open architecture as the means to produce new capabilities and to address agility against emerging threats and ... to expand and fill in the gaps."

The deputy assistant secretary also acknowledged that many don't recognize DoD's most vital resource, as the single largest engineering organization in the world. Today, the department employs more than 99,000 uniformed and civilian engineering professionals with about 35,000 in construction trades, he added, emphasizing the right capacity of people is critical to the department's better buying power goals.

*(To read the complete article, click on the hyperlinked title above.)*

### [MEADS RADAR PERFORMS 360-DEGREE ROTATION FOR MISSILE TRACKING](#)

(Microwave & FR/11 November 2013)

By Iliza Sokol

To provide system capabilities not met by current air and missile defense (AMD) systems, the Medium Extended Air Defense System (MEADS) is being developed to meet International Common Operational Requirements. To enable coverage with no blind spots, this next-generation system incorporates netted and distributed battle management, easily transportable launchers, a Patriot Advanced Capabilities-3 (PAC-3) missile, and 360-degree radar capability.

As part of a recent demonstration, the MEADS Multifunction Fire Control Radar (MFCR) acquired and tracked a live tactical ballistic missile (TBM) for the first time. The system also was tested for its ability to intercept and destroy two simultaneous targets attacking from opposite directions.



The MEADS MFCR is a 360-deg., X-band, solid-state, active electronically steered array (AESA) radar. It can provide tracking capabilities against highly maneuverable, low-signature threats including short- and medium-range ballistic and cruise missiles and other air-breathing threats.

*(To read the complete article, click on the hyperlinked title above.)*

### **TURKEY ASKS NATO TO EXTEND PATRIOT DEPLOYMENT NEAR SYRIA BORDER**

(Reuters/13 November 2013)

**ANKARA, Turkey** – Turkey has asked NATO to extend the deployment of Patriot missile batteries sent to defend the country from a possible attack from Syria because the threat remains, a foreign ministry official said on Wednesday.

Turkey sent its request to NATO Secretary-General Anders Fogh Rasmussen and it will be reviewed by Germany, the Netherlands and the United States, which each sent two Patriot missile batteries after Ankara asked for NATO's help in beefing up security along its border with Syria.

The six missile batteries were deployed in early 2013 for one year in three southern Turkish provinces near the border. *(To read the complete article, click on the hyperlinked title above.)*

### **PASSING THE BUCK ON MISSILE DEFENSE**

(U.S. News and World Report/12 November 2013)

By Harrison Menke – a researcher with the American Foreign Policy Council in Washington, D.C.

Can the United States count on its NATO allies to share the burden of missile defense? That's the question irking more than a few watchers of Europe and defense policy within the Washington Beltway.

This past September marked the one year anniversary of the Berlin NATO conference. That meeting generated lofty goals of Alliance defense and earnest claims from NATO officials that their countries were fully committed to joint ballistic missile defense work with the United States. And yet, more than a year on, precious little of this cooperation has materialized.

After agreeing to include missile defense as a cornerstone to the NATO alliance, NATO announced several key "contributions," including the hosting of U.S. missile defense assets by Spain and Romania, among other states. But the real burdens were left to the United States.

America, for example, is being expected to foot the bill for the "Aegis Ashore" missile defense site to be located in Romania. Costs for the initiative have been skyrocketing, soaring from the early estimate of \$400 million to about \$800 million today. Spain, meanwhile, is poised to receive a handout of some \$260 million for hosting U.S. Aegis warships after it decided not to upgrade its five Aegis compatible ships to include missile defense capabilities.

Germany, the largest economy in Europe, has done a bit more. Berlin now hosts the NATO missile defense command and control center in Ramstein and funds a quarter of costs associated with the U.S.-German-Italian Medium Extended Area Defense System (MEADS). It has also supplied two short-range Patriot Advanced Capabilities-3 (PAC-3) systems to Turkey. But declining fortunes for MEADS and a moribund NATO missile defense architecture suggest a smaller role for Germany in missile defense in the future.

Poland and France, too, have shown initiative, with each opting for the development of its own missile defense system. Beyond that, however, NATO nations seem content to leave most of the heavy lifting to the United States.

Washington is thus faced with a difficult question: How far is it willing to go to keep NATO protected? If it is not, the grim warning once issued by former Defense Secretary Robert Gates, that America will lose its "appetite" for supporting an alliance whose members do not share in its risks or costs, might very well come to pass.

*(To read the complete article, click on the hyperlinked title above.)*

## [UNDER YEAR-LONG CR, ARMY CAN'T START PRODUCTION OF PATRIOT MSE MISSILE](#)

(Inside the Army – 11 November 2013) By Jen Judson

After investing funding in fiscal year 2013 to prepare the production line, the Army will be unable to begin initial production of the Patriot Advanced Capability-3 (PAC-3) Missile Segment Enhanced (MSE) missile if Congress votes to force the Pentagon to operate under a year-long continuing resolution (CR), according to Army officials.

Lt. Gen. William Phillips, the service's military deputy to the acquisition chief, told Inside the Army last month that the plan to start the production of the Patriot MSE missile would be thwarted due to the CR. The CR in place today runs until mid-January, but a full-year CR may be coming if Republicans and Democrats are unable to come to compromise on a budget this winter.

The Army planned to spend \$540 million in FY-14 for the production of the MSE missile after spending \$8 million in FY13 to set up the production line, Brig. Gen. L. Neil Thurgood, the Army's missiles and space program executive officer, said in a 5 November statement. The money spent in FY13 was used to "prime the pump" for a production line to begin operations, he noted.

The contract award was planned for January, but if the CR is not lifted and an FY14 budget is not approved then "funding does not become available," Thurgood stated, and "the program will be delayed by one year or more."

Thurgood added that "it would be speculative at this point" to estimate how a lack of production would affect the unit price of the missiles. *(To read the complete article, click on the hyperlinked title above.)*



## [MEADS DOWNS TARGETS ARRIVING FROM OPPOSITE DIRECTIONS](#)

(Jane's Missiles & Rockets/8 November 2013) Subscription required.  
By Doug Richardson

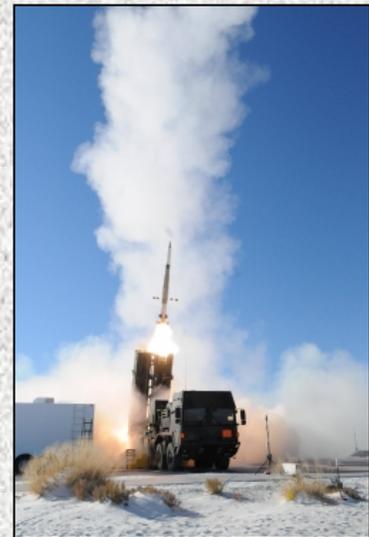
The Medium Extended Air Defense System (MEADS) intercepted and destroyed two simultaneous targets attacking from opposite directions during trial FT-2, a demonstration of its 360-degree air and missile defense (AMD) capabilities conducted at the White Sands Missile Range (WSMR), N.M., on 6 November 2013.

This was the first MEADS firing to use the system's surveillance radar, and all system elements worked as planned.

The first target, an unmanned QF-4 Phantom II drone, approached from the south on a low-level flight path intended to emulate that of an air-breathing cruise missile, while a Lance tactical ballistic missile approached from the north. The two target azimuths were more than 125 degrees apart.

"No fielded ground-mobile AMD system can intercept targets from two directions at the same time, as MEADS did today," said NATO MEADS Management Agency General Manager Gregory Kee, following the trial.

In addition to delegations from Germany, Italy and the US, the launches were also observed by a delegation from Poland. Between now and January, Poland is expected to launch a formal requirement for a medium-range surface-to-air missile system able to provide 360-degree coverage. It has already committed \$3-to-\$5 billion of future funding to the program. *(To read the complete article, click on the hyperlinked title above.)*



**Video:** A video of the intercept can be seen at <http://www.welt.de/politik/ausland/article121630980/Drohne-und-Rakete-gleichzeitig-abgeschossen.html> published by *die Welt* on 7 November 2013.

**See also:** *Dual Intercepts by MBDA Medium Extended Air Defense System* (Frontier India News Network – 11/12/2013) <http://frontierindia.net/dual-intercepts-mbda-medium-extended-air-defense-system>

## **ENGINEER CLAIMS DEFENSE CONTRACTOR RAYTHEON STOLE HIS PATENT**

(San Diego 10 News/6 November 2013)

By Mitch Blacher

A military radar system designed to protect American lives is under fire by an engineer who formerly worked for one of the country's largest defense contractors.

Nagui Mankaruse claims missile defense technology manufactured by the Raytheon Company uses his patented technology to cool electronics inside the company's radar. He claims his creation helped perfect three missile defense systems ordered by the Department of Defense, including the Firefinder, Sentinel and Terminal High-Altitude Area Defense (THAAD) radar, worth hundreds of millions of dollars

Mankaruse claims once he provided the company with a solution to a major engineering problem with his patented technology, Raytheon ran out of work for him.

Raytheon's vice president of intellectual property has responded to some of Mankaruse claims.

"To our knowledge, no Raytheon products or programs infringe or have ever infringed," Raytheon intellectual property vice president F. Kinsey Haffner wrote. Haffner also cites U.S. Authorization and consent statute writing it "grants patent infringement immunity to defense contractors," as long as it is for the public good.

*(To read the complete article, click on the hyperlinked title above.)*