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Subcommittee on Defense
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Good morning, Chairman Inouye, Senator Cochran, other distinguished Members of the Committee. It is an honor to testify before you today on the Missile Defense Agency's support to the Ballistic Missile Defense Review (BMDR) and our $8.4 billion Fiscal Year (FY) 2011 budget request to continue our mission to develop and field an integrated, layered, Ballistic Missile Defense System (BMDS) to defend the United States, its deployed forces, allies, and friends against ballistic missiles of all ranges and in all phases of flight. This budget request reflects the strategy and policy stated in the BMDR report and the prioritized missile defense needs of our Combatant Commanders and the Services as stated in the latest US Strategic Command's (USSTRATCOM) Prioritized Capabilities List (PCL).

The Missile Defense Agency has been operating in accordance with the principles outlined in last year's Weapons System Acquisition Reform Act. This includes establishment of formal baselines for the system component managers, Service participation through the USSTRATCOM-led Warfighter Involvement Process, and increased emphasis on competition at all phases of a program's acquisition life cycle. All of these steps, I believe, will maximize the return on the taxpayer's investment dollar.

Under the oversight and direction of the Missile Defense Executive Board (MDEB), chaired by the Under Secretary of Defense for Acquisition, Technology and

Logistics (AT&L), MDA proposes a FY 2011 program that is balanced to achieve the six strategy and policy goals documented in the BMDR report:

- Defend the homeland against a limited ballistic missile attack
- Defend U.S. forces, allies, and partners against regional threats
- Deploy new systems only after effectiveness and reliability have been determined through testing under realistic conditions
- Develop new capabilities that are fiscally sustainable over the long term
- Develop flexible capabilities that can be adapted as threats change
- Expand international cooperation

Defense of the Homeland against Limited Attack

The Ground-based Midcourse Defense (GMD) system forms the foundation of our homeland missile defense against limited ICBM attack today. We continue to upgrade GMD to increase reliability and survivability and expand the ability to leverage new BMDS sensors as well as test GMD to accredit our simulations. Since the beginning of FY 2009, MDA has delivered five new GBIs, upgraded Fire Control and Command Launch Equipment software, completed construction of a second GBI missile field at Fort Greely, AK, and delivered a new silo and an additional In-Flight Interceptor Communication System Data Terminal at Vandenberg Air Force Base, CA. Additionally, we are completing the missile defense upgrades to the Upgraded Early Warning Radar (UEWR) in Thule, Greenland, and we have transferred operation of the Cobra Dane Early Warning Radar and the Beale and Fylingdales UEWRs to the Air Force. We are continuing planning and design work to upgrade the Clear, AK Early Warning Radar.

We are requesting $1.3B in FY 2011 for GMD to continue our GBI refurbishment and reliability sustainment programs to: help sustain the fleet to 2032 and support a

service life extension decision around 2027; procure an additional 5 GBIs; complete Missile Field 2 in a 14-silo configuration to accommodate a contingency deployment of eight additional GBIs; upgrade GMD Fire Control ground system software to ensure GMD leverages BMDS increased discrimination and tracking capability as sensor, data fusion and battle management network matures; and complete the installation of a second GMD command and control node at Fort Greely, AK. Additionally, we will continue operations and sustainment of the Sea-Based X-band radar (SBX) platform to prepare for transfer of the SBX operations to the U.S. Navy in 2012. Finally, we will continue development of technologies to enhance Standard Missile 3 (SM-3) variants to protect our homeland in the future by having the capability to intercept long-range ballistic missiles early in flight in the regions from which they were launched. To validate this concept, the Under Secretary of Defense (AT&L) requested the Defense Science Board independently assess the viability of developing capability for early intercept of ICBMs. Our GMD sustainment, refurbishment and test strategy gives us the flexibility to adjust to the uncertainty in the future ICBM threat. Although, we experienced a GBI vendor production break after the last procurement of GBIs in 2006, the purchase of 5 additional GBIs, and supplying “limited life” GBI components for refurbishments will sustain our production capacity until 2016 and beyond. We will conduct stockpile surveillance of GBIs by testing all limited life components as GBIs are refurbished through 2032. Data collected from future GMD flight tests, results from the aging surveillance program, and future intelligence estimates regarding the pace of ICBM growth will inform decisions on the need to procure additional GBIs.

Defense against Regional Threats

Our FY 2011 budget request balances the war fighter's needs to develop new capabilities and grow our missile defense capacity. An integrated deployment of Aegis BMD and Terminal High Altitude Area Defense (THAAD) forms an effective, layered, regional missile defense. The Aegis BMD is a mobile system, designed to defeat short- to intermediate-range missiles above the earth's atmosphere, and the THAAD is a rapidly deployable system, designed to engage short- to medium-range missiles both above and within the Earth's atmosphere. Aegis has more than twice the engagement range of THAAD. Additionally, Patriot Advanced Capability 3 can add an additional layer and point defense against Short Range Ballistic Missiles (SRBMs).

We are developing regional missile defense elements that can be adapted to the unique circumstances of each Combatant Command region. For example, we plan to deploy missile defenses in Europe in four phases as missile threats from the Middle East evolve over time. The Phase 1 capability (planned to begin deployment in 2011) will provide initial protection for southern Europe from existing short- and medium-range threats using sea-based interceptors and forward-based sensors. Phase 2 (~2015) deploys the SM-3 IB interceptor at sea and at an Aegis Ashore/land-based SM-3 site. In collaboration with OSD Policy, USSTRATCOM, the Department of State, and United States European Command (USEUCOM), we are preparing to begin negotiations with Romania to locate an Aegis Ashore/land-based SM-3 site on its territory in 2015. Phase 3 (~2018) employs SM-3 IIA on land and at sea to protect NATO from SRBM, MRBM, and IRBM threats. Poland has agreed to host this Aegis Ashore/land-based SM-3 site. The Phase 4 architecture (~2020 timeframe) features the higher velocity land-based

SM-3 IIB, a persistent sensor network, and enhanced command and control system to intercept large raids of medium- to long-range missiles from the Middle East early in flight.

Since the beginning of FY 2009, MDA has delivered 27 SM-3 Block IA interceptors and upgraded 3 additional ships (for a total today of 20 Aegis BMD ships); upgraded the USS Lake Erie with the next generation BMD fire control software that increases the number of threat missiles that can be simultaneously engaged and more effectively uses data from missile defense sensors external to the ship. We have also delivered two THAAD batteries (the first unit is planned to be operationally accepted by the Army by the end of this year). We have separately deployed one U.S.-operated X-band AN/TPY-2 radar to Israel on a contingency basis. We have also installed C2BMC hardware and software upgrades at command and control nodes at U.S. Pacific Command, USSTRATCOM, U.S. Northern Command and USEUCOM and began C2BMC installation in the U.S. Central Command.

We are requesting $1.6B for Aegis in FY 2011. We will continue the design, qualification, and testing of the SM-3 IB interceptor; manufacture 30 SM-3 IB test and production verification interceptors (we plan to procure a total of 436 Aegis SM-3 IA and IB interceptors by 2015), and upgrade 3 additional Aegis BMD engagement ships (two Aegis BMD 3.6.1 destroyers and one 4.0.1 destroyer) for a total of 23 BMD capable ships by the end of FY2011 and 38 BMD capable ships by 2015. We will continue development and testing of the Aegis BMD 4.0.1 and 5.0 fire control system to launch SM-3 IB and IA interceptors against threat missiles when they are beyond the range of the ship's own radar. We also will continue the co-development of the SM-3 IIA

interceptor with the Government of Japan to increase significantly the area defended by the Aegis BMD system with its 21-inch diameter rocket motors, two-color seeker, and increased kinetic warhead divert capability. We also will continue to design the first Aegis Ashore battery that will be installed for testing at the Pacific Missile Range Facility in 2012.

We are requesting $1.3B for THAAD in FY 2011. We plan to deliver the second THAAD battery (we plan to procure 6 batteries by 2015), add a second launcher platoon to each battery to double the firepower to 48 interceptors, procure 67 interceptors (we plan to procure a total of 431 interceptors by 2015), and complete hardware and software upgrades to the communications suite to enable THAAD to use fused data from all BMDS sensors.

We are requesting $455M for sensors in FY 2011. We plan to upgrade the AN/TPY-2 radar software to facilitate its use as a surveillance radar or as a THAAD battery fire-control radar, optimize the radar's ability to leverage assistance by external sensors, and support the contingency operations of AN/TPY-2 radars deployed in Japan and Israel. We will continue to develop a Concurrent Test, Training and Operations capability to provide operational BMDS sensors (including the UEWRs, Cobra Dane and Sea-Based X-band radars) the capability to conduct training and testing while continuing to provide on-line missile defense, upgrade AN/TPY-2 and Sea-Based X-band radar discrimination and dense track management software, and conduct ground and flight testing to support accreditation of sensor models and simulations.

We are requesting $343M for Command and Control, Battle Management and Communications (C2BMC) in FY 2011. We plan to provide automated planners to aid a

Combatant Command's deployment of BMD assets according to its concept of operations and conduct ballistic missile defense battles according to its tactics, techniques, and procedures. Furthermore, we will develop and deploy an upgraded version of our C2BMC hardware and software to provide new battle management functions that enable shoot-look-shoot tactics between layers of U.S. and international partners' missile defense assets, control multiple BMDS radars, correlate and combine sensor data from multiple sensors tracking the same threat into one system track, provide real-time awareness of the battle as it develops in accordance with a Combatant Command's concept of operations, and enable engagement coordination among BMDS elements in accordance with regional Area Air Defense Plans. Additionally, C2BMC will participate in and analyze results of ground and flight tests to support accreditation of models and simulations and support war games and exercises.

MDA played a significant role in the conduct of the Ballistic Missile Defense Review. The agency provided technical analysis and data as required by the leaders of the review to support their effort to answer the questions posed by Congress. Preliminary analytical results were then presented to the departmental leaders, including the Secretary and Chairman, who then made recommendations to the President. Although MDA provided these architecture assessments, it is important to recognize the decision to deploy the recommended European PAA architecture was not based solely on detailed performance predictions. Rather, the decision to deploy an Aegis SM-3-based architecture to Europe was based on the need for a flexible defense against an evolving threat from the Middle East. First, the previously proposed European missile defense architecture lacked a sufficient number of interceptors to

defend against the current and emerging numbers of medium-range ballistic missiles (MRBMs) being fielded by Iran. Simply put, with a notional two interceptor shot doctrine, the 10 GBI interceptors proposed for Poland would easily be overwhelmed by a raid size of 6 threat missiles launched towards European targets. Second, with the European PAA, we can deploy a missile defense capability to Europe earlier than the previous Program of Record, with GBIs in Poland and an X-Band Radar in the Czech Republic. NATO Europe is threatened by a short-range and medium-range ballistic missile threat now, so this was an important variable in the decision. Upon the completion of testing in 2011, we could begin the deployment of proven capabilities to defend against the MRBM threat. Third, by creating a re-locatable, land-based version of our most capable regional missile defense system, the Aegis Ballistic Missile Defense (BMD) system, Combatant Commanders could have the capability to adjust their missile defense architectures to address the uncertainty of future missile threats without the need to develop a new missile defense system. These systems can be deployed in any theater in a reasonably short period of time. Fourth, the increased defended areas and larger raid size capacity resulting from planned enhancements to the Aegis BMD system are expected to increase the cost-effectiveness of a European missile defense against the growing missile threat over this decade. Finally, while we currently have a limited defense system against potential Intercontinental Ballistic Missile (ICBM) threats originating in the Middle East or Northeast Asia, there is no technical reason to indicate that this system would not be further enhanced by the deployments envisioned in Phase 4 of the PAA. It is important to note that the missile defense capability needs identified in the BMDR are consistent with capability needs listed in the recently approved,

independently developed, classified USSTRATCOM missile defense Prioritized Capability List.

Proving the Ballistic Missile Defense System Works

A key tenet of the BMDR is to sufficiently test the capabilities and limitations of a missile defense system before we begin procurement, or we will "fly before we buy." As such, missile defense projects are subject to production decisions by USD (AT&L). Additionally, we use the Services' standard material release and operational certification processes that also rely on developmental and operational test data prior to formally fielding initial capability. Both THAAD and AN/TPY-2 have production decisions by USD (AT&L) and Army Material Review Boards planned for this year. We are requesting $1.1B in FY 2011 to provide targets and support to missile defense projects to test new capabilities under developmental and operational conditions, including the use of actual threat missiles, to support accrediting our models and simulations and production decisions by USD (AT&L). In collaboration with the Services' Operational Test Agencies, USSTRATCOM, and the Director, Operational Test & Evaluation, we submitted a comprehensive Integrated Master Test Plan (IMTP) in March that describes our plan through FY 2015 to conduct over 150 test events to obtain specific data necessary to accredit our models and simulations and support operational assessments. The IMTP also describes our testing to support European PAA deployment decisions. To support a Phase 1 decision in 2011, we have completed 10 Aegis BMD intercept tests of short range targets. We will conduct an Aegis BMD test against an intermediate-range ballistic missile target prior to the Phase 1 deployment. Likewise, there are system level ground tests, exercises, and simulations to test system

effectiveness and interoperability. The IMTP also describes our testing of the two-stage GBI and several GMD intercept tests against long-range targets. I concur with the January 2010 DOT&E January assessment that "if MDA can execute the IMTP as planned, successful VV&A of BMDS models and simulations should result, enabling quantitative and objective rather than subjective assessments of the BMDS capability in the future." I further agree with the DOT&E conclusion that "objective assessments of the BMDS capability are still a number of years in the future."

Our recent flight test results have been mixed. From October 2008 through today MDA achieved 5 of 7 successful hit-to-kill intercepts and a number of "firsts" in BMDS testing. In December 2008, the GMD system engaged an IRBM target launched from Kodiak Island, AK, using a GBI launched from VAFB in the most operationally realistic test to date that demonstrated our ability to fuse sensor data from five on-line sensors. Unfortunately, the target in that flight test failed to release countermeasures. In March 2009, with soldiers operating the system using tactics, techniques, and procedures developed by the U.S. Army, we conducted THAAD's first dual salvo endo-atmospheric engagement of a threat-representative separating ballistic target. The Navy conducted an intercept using an Aegis SM-2 Block IV (terminal defense) in February 2009, and we conducted an SM-3 IA intercept in July 2009. In October 2009, we supported Japan's intercept test of an SRBM using the Japanese destroyer JS MYOKO.

Although we have had three intercepts out of three previous attempts using the GMD system, our newest variant of the kill vehicle, relying on data from the Sea-Based X-band (SBX) radar, failed to intercept a target in January 2010 during a flight test to

measure GMD's performance at its maximum operational intercept range. The GBI launched successfully from VAFB and the newly designed LV-2 long-range target successfully flew for the first time out of the Reagan Test Site in the Kwajalein Atoll 7,500 km away. It was a very valuable test because we collected extensive data on the performance of the SBX and GBI, the advanced exo-atmospheric kill vehicle (EKV), and the target. We discovered new failure modes for the SBX, the EKV flew more than twice the distance it had flown in previous tests, and we collected significant new data on the EKV's ability to acquire, track, and discriminate the target. The failure investigation is expected to continue for several more months before root-cause is determined and verified. It is my intent to immediately correct any deficiency and repeat the test as soon as feasible. In contrast, the most recent attempt to conduct a THAAD test last December was of no value because of a target missile failure. The THAAD interceptor was not launched and the system was not exercised. Despite the cost of more than $40M for that test and subsequent program delays, we gained no new information on the performance of the THAAD system.

The two largest challenges to executing the U.S. missile defense program is acquiring a cost effective set of reliable targets and improving quality control. Over the past year we have initiated steps to acquire a new set of targets of all ranges, including Foreign Material Acquisitions, to verify the performance of the BMDS. Our new target acquisition strategy, initiated in FY 2009, procures targets in production lots to increase competition, quality control, reduce costs, and ensures the availability of backup targets starting in 2012. For the next three years, we must continue to rely on an intensive inspection and oversight process to motivate mission assurance.

Due to the precise nature of the operation of missile defense systems, very high standards of quality control and an enduring culture of disciplined mission assurance by the industry workforce is essential. We have had many successes in improving our prime contractor and supplier quality assurance. In each case, companies have been willing to identify shortfalls, invest in new capital assets and attain experienced leadership in changing cultures to establish the enduring discipline required to consistently deliver precision missile defense products. However, not all companies have sufficiently improved. Until we complete planned competitions, including the greater use of firm fixed price contracts, we will have to motivate greater attention by senior industry management through intensive government inspections, low award fees, the issuance of cure notices, stopping the funding of new contract scope, and documenting inadequate quality control performance to influence future contract awards by DoD.

Hedging against Threat Uncertainty

Missile defense technologies must be developed to adapt and upgrade our systems to counter future changing threats. In accordance with the PCL, we are focusing our future technologies in four areas: 1) developing more accurate and faster tracking sensors on platforms to enable early fire control solutions and intercepts; 2) developing enhanced command and control networks to link and rapidly fuse sensor data to handle large raid sizes of missile threats; 3) developing a faster, more agile version of our SM-3 interceptor to destroy long-range missiles early in flight; and 4) developing discrimination techniques to rapidly resolve Reentry Vehicles from other nearby objects. Additionally, we continue to research technologies for destroying boosting missiles with

directed energy. We are developing more mature technologies for mid-term deployment decisions around 2015 and conducting science and technology experiments for far-term (around 2020) advanced capability deployment decisions.

One of the highest priority capabilities requested by the war fighter community is a persistent and precise missile tracking capability. We are requesting $113M in FY 2011 for the Space Tracking and Surveillance System (STSS) and Near Field Infra-Red Experiment satellite operations. This space operations work will demonstrate the utility of remote missile tracking from space and reduce the risk of integrating the remote tracking data of future satellites into missile defense fire control systems. MDA launched two STSS demonstration satellites on 25 September 2009. We continue testing and operating the two demonstration satellites, including cooperative tests with other BMDS elements, and demonstrating these satellites against targets of opportunity and scheduled tests involving targets. We are also requesting $67M in FY 2011 for a new program start, the Precision Tracking Space System (PTSS), comprised of a network of remote tracking satellites, communications, and ground stations. Key attributes of the PTSS are its limited mission, uncomplicated design, lower costs, use of mature technologies, and integration with legacy data management and control systems to provide a persistent remote missile tracking capability of the areas of the earth that are of most concern for missile defense. Lessons learned from the two STSS demonstration satellites currently on orbit will inform decisions on the development of a prototype PTSS capability by the end of 2014. After validating the prototype design in ground testing in 2014, we plan to fly the first prototypes while we have industry teams compete to produce the remaining satellite constellation for initial constellation operations by 2018.

We are also requesting $112M for FY 2011for the development and testing of a remotely piloted vehicle (RPV) based missile tracking sensor system, or Airborne Infrared (ABIR) sensor system, to track large raids of ballistic missiles early in flight. We are completing an analysis of the optimum RPV platform and sensors to integrate into an effective early missile tracking system.

For FY 2011, we are requesting $52M for C2BMC enhancements to develop a net-centric, Service-oriented architecture, to rapidly fuse sensor data and provide data to distributed fire control systems to intercept enemy reentry vehicles early, optimize shoot-look-shoot opportunities, and economize the number of interceptors required to defeat a raid of threat missiles. We are pursuing enhanced C2BMC capabilities and experiments to integrate interceptor fire control systems with ABIR, STSS, and other new sensor technologies. We work closely with USSTRATCOM and the COCOMs to develop and deliver the optimum C2BMC architectures in their regions.

We are requesting $41M in FY 2011 to develop components that increase the speed of our SM-3 family of interceptors with advanced divert capability, faster boosters, and lighter kill vehicles. We are studying the use of a derivative SM-3 IB kill vehicle and derivatives of the first and second stages of the SM-3 IIA interceptor as part of the development of the SM-3 IIB long-range missile interceptor.

We are requesting $99M for FY 2011 to conduct continued research on high energy lasers. This past year we saw the significant accomplishments of the Airborne Laser Test Bed (ALTB) as it completed preparatory tests which ultimately led to two successful and historic experimental shoot-downs of a solid rocket on February 3, 2010, and a boosting, liquid-fueled, Foreign Material Acquisition (FMA) target on February 11,

2010. We are preparing for another test against an FMA, at nearly twice the distance, later this spring. We will continue to investigate multiple high energy laser technologies to characterize their performance while validating the modeling and simulation of long range directed energy beam propagation and beam control. Additionally, we are currently supporting the USD (AT&L)/Director for Development, Research and Engineering (DDR&E) comprehensive review of all DoD high energy laser programs to establish a department wide program for developing and applying high energy laser capabilities. We anticipate this review will define the ALTB's role in the future development of high energy lasers.

Develop New, Fiscally Sustainable Capabilities over the Long Term

MDA's preferred approach to developing new missile defense capabilities is to evolve and upgrade existing capabilities to leverage the cost-effectiveness of utilizing existing Service training, personnel and logistics infrastructures. The fiscal sustainability of missile defense systems is largely determined by the cost of operations and sustainment. Therefore, MDA executes "hybrid management" of projects with the designated lead Services by embedding "Service cells" in MDA joint project offices to make design and development decisions associated with Doctrine, Organization, Training, Leadership, Personnel and Facilities (DOTLPF) to assure MDA products efficiently align with Service processes and operational concepts.

MDA has established six baselines (cost, schedule, technical, test, contract, and operational baselines) to plan and manage the execution of missile defense projects. I approve the baselines of technology programs, but jointly approve with lead Service Acquisition Executives the baselines of MDA projects in product development. These

baselines not only assist in our cost-effective management of MDA projects, but also provide visibility to the MDEB and Congress on the progress of our execution. The baselines of all of our projects are established in spring and will be submitted to Congress in a Baseline Acquisition Report (BAR) in June. Finally, these baselines will form the basis for USD (AT&L) production decisions.

Expand International Missile Defense Cooperation

As stated in the BMDR and Quadrennial Defense Review (QDR), a key strategic goal is to develop the missile defense capacity of our international partners. We are currently engaged in missile defense projects, studies and analysis with over twenty countries. Our largest international partnership is with Japan. We are co-developing the SM-3 IIA missile, studying future architectures, and supporting their SM-3 IA flight test program. In Europe, we are participating in the NATO Active Layer Theater Ballistic Missile Defense (ALTBMD) command and control program and war games, continuing technology research projects with the Czech Republic, and planning for the European PAA deployments, which include the installation of Aegis Ashore sites, one each in Romania and Poland. Collaboration with Israel has grown to involve the development and deployment of the Arrow Weapon System, which is interoperable with the U.S. missile defense system. MDA has completed and the United States is now in the final negotiation of an Upper Tier Project Agreement with Israel for cooperative development of an exo-atmospheric interceptor and amending the US-Israel Arrow Weapon System Improvement Program agreement to extend the system's battle space and enhance its ability to defeat long-range ballistic missiles and countermeasures. MDA and Israel are also jointly developing the David's Sling Weapon System to defend against shorter

range threats, to include some ranges that the PAC-3 system cannot engage. Additionally, MDA is active in supporting the Combatant Commands through international symposiums, bi-lateral and multi-lateral dialogs, planning, and analysis with Allies and international partners to help them understand the benefits of integrated missile defense in their regions.

Conclusion

Missile defense is a key part of our national security strategy described in the BMDR to counter the growing threat of ballistic missile proliferation. The New START Treaty has no constraints on current and future components of the BMDS development or deployment. Article V, Section 3 of the treaty prohibits the conversion of ICBM or SLBM launchers to missile defense launchers, and vice versa, while "grandfathering" the five former ICBM silos at Vandenberg AFB already converted for Ground Based Interceptors. MDA never had a plan to convert additional ICBM silos at Vandenberg and intends to hedge against increased BMDS requirements by completing construction of Missile Field 2 at Fort Greely. Moreover, we determined that if more interceptors were to be added at Vandenberg AFB, it would be less expensive to build a new GBI missile field (which is not prohibited by the treaty). Regarding SLBM launchers, some time ago we examined the concept of launching missile defense interceptors from submarines and found it an unattractive and extremely expensive option. As the committee knows, we have a very good and significantly growing capability for sea-based missile defense on Aegis-capable ships.

Relative to the recently expired START Treaty, the New START Treaty actually reduces constraints on the development of the missile defense program. Unless they

have New-START accountable first stages (which we do not plan to use), our targets will no longer be subject to START constraints, which limited our use of air-to-surface and waterborne launches of targets which are essential for the cost-effective testing of missile defense interceptors against MRBM and IRBM targets in the Pacific area. In addition, under New START, we will no longer be limited to five space launch facilities for target launches.

MDA is working with the Combatant Commanders, Services, other DoD agencies, academia, industry and international partners to address the challenges and difficulties of managing, developing, testing and fielding new military capabilities to deter use of ballistic missiles and effectively destroy them once launched. Implementing these war fighter priorities takes time, since the production time for a missile and radar is over two years and establishing and training a unit to create and deploy a military capability takes an additional year. Our FY 2011 budget funds the war fighters' near-term priorities while building the foundation of a layered defense system with our partners and friends that can provide an adaptive, cost-effective strategy to counter ballistic missile proliferation in the future.

Thank you, Mr. Chairman. I look forward to answering your questions.