

**Transcript of  
House Armed Services Subcommittee on Strategic Forces Holds Hearing on Missile Defeat  
Programs**

June 7, 2017

**Witnesses:**

Navy Vice Adm. James Syring, Director, Missile Defense Agency  
Lt. Gen. James Dickinson, Commander of the U.S. Army Space and Missile Defense Command/Army  
Forces Strategic Command and Joint Functional Component Command for Integrated Missile Defense  
Barry Pike, Program Executive Officer, Missiles and Space, Redstone Arsenal, Al  
Todd Harvey, Acting Assistant Secretary of Defense for Strategy, Plans, and Capabilities

ROGERS: Good afternoon. I want to welcome everybody to our hearing this afternoon, Fiscal Year 2018  
Priorities and Posture of Missile Defense Defeat - Missile Defeat Programs and Activities.

We have an esteemed group of witnesses with us today. They're Mr. Todd Harvey, acting assistant  
secretary of defense for strategy plans and capabilities; Vice Admiral James Syring, U.S. Navy Director  
of Missile Defense Agency; Lieutenant General James Dickinson, commander, Joint Functional  
Component Command for Integrated Missile Defense, and commander of U.S. Army Space and Missile  
Defense Command, Army Strategic Forces Command; and Mr. Barry Pike, who has the best accent on  
the panel, he is program executive officer of Army Missiles and Space.

And before I get started, I would take the chairman's prerogative for a minute. For almost 37 years, Vice  
Admiral Syring has served as country in uniform. Members of the subcommittee are most familiar with  
him as director of the Missile Defense Agency, which he has led since November of 2012.

I remember the problems with the prior leadership of MDA and the devastating impact on its morale back  
in 2012. That has all changed under Admiral Syring's leadership. I think there is no better testament to his  
service and leadership than the recent ground-based mid-course defense system test against an ICBM  
class target.

With everything that's going on in the world, this success sends a powerful and unmistakable signal to  
allies and adversaries alike that we will defend ourselves from ballistic missile attack and the threat of  
attack. Admiral Syring, we thank you for your service and very much hope it's not complete yet.

With that, because we were called for votes, we're on a shorter timeline. So, I'm going to dispense with  
my opening statement and yield to my friend and colleague from Tennessee for any opening statement  
that he may have.

COOPER: Thank you, Mr. Chairman. I would like to add my praise for Admiral Syring for his wonderful  
career so far in the military. We hope it continues. But I also want to ask unanimous consent to put my  
statement in the record so that we can get on with the hearing.

ROGERS: Without objection, so ordered. All right. What I would ask so we'll have time for questions and  
then also time to go into classified section is ask each witness to try to summarize their statement in three  
or four minutes if they could. The full statement will be admitted to the record, without objection.

First, we'll start with Mr. Todd Harvey. You're recognized for a summary of your testimony.

HARVEY: Thank you, sir. Chairman Rogers, Ranking Member Cooper, members of the subcommittee, thank you for the opportunity to testify on priorities and posture missile defeat programs and activities and the defense department's continuing efforts to sustain and modernize our homeland missile defense capability so that we remain ahead of the threat while providing effective, integrated, interoperable regional missile defense capability.

The U.S. homeland is currently protected by the ground-base mid- course defense system, GMD system. Improving the capacity, reliability, and effectiveness of the GMD system is one of our highest priorities. The president's budget proposal for FY 2018 would fund the Redesigned Kill Vehicle, Long-Range Discrimination Radar. It would help lay the groundwork for a new radar in Hawaii and would continue funding for advanced discrimination sensor technology and space-based kill assessment programs.

We remain on track to complete the deployment of remaining interceptors in Alaska by the end of this year to bring the total to 44. We're also moving forward with efforts to bolster our defenses against advanced cruise missiles.

From a regional standpoint, the president's FY 2018 budget request also continues the deployment of missile defenses tailored to threats in Europe, Middle East, Asia Pacific region. And in Europe, we will continue to implement the European Phased Adaptive Approach, EPAA, and working in close collaboration with our NATO allies to develop advanced network of sensors and interceptors.

The president's budget request also supports the Aegis Ashore System and we deployed in Poland in the 2018 timeframe. NATO allies have committed to spend more than \$1 billion on NATO Ballistic Missile Defense Command and Control and immediate allies are improving their national BMD capabilities.

In Asia-Pacific, our force posture includes Aegis BMD-capable ships along with Patriot batteries deployed in Japan and South Korea, and the recent deployment of THAAD to South Korea. We've also converted the THAAD battery deployment to Guam to permit status in response to North Korean threats.

We've also maintained a robust ballistic missile defense presence in the Middle East, including land- and sea-based assets deployed in defense of our forward-located forces and those of our allies and partners. This is in addition to our efforts to build capacity of those counterparts that will contribute to their ability to defend themselves.

We must continue to look ahead, which means ensuring that our investment strategy priorities balance the needs of addressing the most dangerous threats we confront today while positioning ourselves to respond to emerging threats over the decade.

On January 27th of this year, the president directed the secretary of defense to initiate a new ballistic missile defense review to identify measures to strengthen missile defense capabilities in the face of rapidly growing missile threats. The BMDR will be informed by the administration's determination to develop state of the art missile defense system to defend the homeland and our regional interests. We expect to complete the BMDR this fall and will complement the missile defeat report mandated by the 2017 -- FY 2017 NDAA.

The Department of Defense continues to develop, procure, and field missile defense systems to protect the vital U.S. national security interest. We are determined to stay ahead of the adversaries' ballistic and cruise missile developments, seek capabilities to lower cost per intercept, and defeat emerging ballistic and cruise missile threats.

Thank you for the opportunity to appear before you today. I look forward to your questions.

ROGERS: Thank you. The chair recognizes Admiral Syring.

SYRING: Mr. Chairman, Ranking Member Cooper, thank you for the opportunity to appear today. Sir, I'll submit my written statement for the record. In lieu of an opening statement, I request permission to play the video from the test from last week.

ROGERS: We would love to see that.

SYRING: And I will narrate as this goes, sir, in the -- since it's unnarrated, and I'll give the committee an idea of what was accomplished last week.

The test was conducted on the 30th of May out in the Pacific. Here is the blue water chart that depicts the test construct. The ground-based interceptor was fired from Vandenberg Air Force Base. It was tracked by a TPY-2 on Wake Island in the SPX in the northwest pacific, giving the interceptor solution to Vandenberg to intercept a target launched from the Kwajalein Atoll in the Marshall Islands. The red indicates the target flyout and the green indicates the GBI from Vandenberg.

Here is a picture of the target lifting off from the Kwajalein Atoll in the Marshall Islands, 5,000 miles away from the coast of California. This is the longest range target that we've ever flown, the highest altitude, and the highest closing velocity for this intercept. And this intercept was done with countermeasures.

Next, you'll see a picture of the ground-based interceptor launch from Vandenberg Air Force Base out of its -- out of a test silo that is completely production representative of the actual silos at Vandenberg. This is what we test out of. The GBI is production representative of the CE-2 block 1s that will be fielded to fill out the 44 GBIs by the end of this calendar year.

What you'll see next is an on-board sensor view of the kill vehicle, which is separated from the GBI and what the kill vehicle saw in space. This is actual live data from the test. What you see in red is the warhead from the target and what you see in green is its tank that's flying alongside, because in space everything flies at the same velocity. And you see the kill vehicle focused on the red warhead and eventually dropping out the other debris in the scene.

What you see next is the kill vehicle in acquisition and terminal. And that's an actual picture of the reentry vehicle that was destructed beyond recognition. What you'll see here is another infrared picture of the target booster and the target warhead with the booster of the GBI flying by literally a second before the kill vehicle killed the target warhead.

We had four or five different sensors strewn across the pacific to validate what you just saw. That was not a simulation. That was actually live data played back from the test.

With that, sir, I stand ready for your questions.

ROGERS: Outstanding. Thank you very much. Lieutenant General Dickinson, you are recognized.

DICKINSON: Chairman Rogers, Ranking Member Cooper and other distinguished members of the subcommittee, thank you for your continued support of soldiers, civilians, and their families. This is my initial appearance before this subcommittee and it is indeed an honor to testify before you today to discuss the importance of missile defense to our nation and the need to maintain these capabilities in the face of a threat, as we all know, that continues to grow in both capacity and capability.

Today, I want to briefly summarize the missions of the organizations I represent, first, Space and Missile Defense Command or SMDC, Army Forces Strategic Command or ARSTRAT, which served as a force provider in support of our combatant commanders.

Our six lines of effort are to, number one, protect the homeland; provide combat ready space and missile defense professionals; plan, synchronize, and integrate global operations; produce or adopt leap-ahead concepts in technologies; preserve and account for the nation's critical resources; and promote and forest a positive command climate.

Our six lines of effort apply not only to missile defense but also to army space. The army has more than 4,000 military and civilian space cadre that provide continuous space-based capabilities and support to the war fighter from 22 different locations and 11 different time zones around the world.

Within SMDC-ARSTRAT, our future warfare center and technical center develop space and missile defense concepts, requirements, and doctrine, provide training to the army space cadre and missile defense operators and executes space and missile defense research and development.

I also represent the Joint Force Component Command for Integrated Missile Defense or JFCC IMD, which supports U.S. strategic command in integrating and synchronizing our global missile defense operations.

For example, today, we have approximately 300 full-time National Guard soldiers located in Colorado Springs, Colorado, Fort Greely, Alaska, and Vandenberg Air Force Base, California, who operate the ground-based missile defense system. It represents the nation's only defense against intercontinental ballistic missile attack. These trained and fully certified missile defense professionals execute a strategically important mission 24 hours a day, 7 days a week, 365 days a year. They refer to themselves as 300 soldiers protecting the 300 million.

Additionally, in support of USSTRATCOM, JFCC IMD executes the following key tasks, synchronizing operational level planning, supporting ongoing operations, integrating training exercises, test activities globally, providing recommendations on the allocation of low density/high demand missile defense resources, and advocating for future capabilities.

As reported, the missile threat continues to grow, both in terms of numbers and sophistication. We, as a nation, must maintain our current readiness posture and continue to increase our capabilities to address future threats.

Finally, I'd like to highlight the challenges we face today cannot be addressed without the dedication of our greatest asset, our people. Service members, civilians, contractors, and their families, those stationed at home as well as those globally deployed provide support to the army and joint war fighter, each and every day.

We remain committed to providing trained and ready soldiers, civilians, to operate and pursue advancements in space and missile defense capabilities for the nation. This committee's continued support of missile defense operations and the men and women who develop and deploy our systems is essential.

Again, I appreciate the opportunity to discuss our nation's missile defense capabilities and I look forward to addressing your questions. Thank you.

ROGERS: Thank you. Mr. Pike, you're recognized.

PIKE: Thank you, sir. Chairman Rogers, Ranking Member Cooper, and distinguished members of the subcommittee, I'm honored to appear before you to testify on missile defense and to thank you for your continued support of our people and our mission at Program Executive Office for Missiles and Space.

Support for war fighters and their readiness remains our number one priority. I lead the material development production, fielding and sustainment support for assigned missile and space systems for the army. This includes centralized management of army air and missile defense, long range precision fires, close combat, and aviation missile systems as well as designated space programs.

In today's complex dynamic and volatile security environment, army air and missile defense is a key strategic enabler. As such, our focus continues to be on providing war fighting solutions to the army combatant commands international partners across the operational spectrum. We accomplish this by working closely with other military departments, the Missile Defense Agency, the Army Space and Missile Defense Command, to support joint integrated air and missile defense capabilities.

Mr. Chairman, Ranking Member Cooper, and members of the subcommittee, I look forward to addressing your questions.

ROGERS: I thank the -- all the witnesses for their statements. And I'll recognize myself first for questions. Admiral Syring, we have seen at least 78 ballistic missile tests by North Korea since Kim Jong-on came to power. More than 60 of these are assessed to be successes. It appears that he has had success with solid fuel ballistic missiles including those launched by submarines and on the ground. And he may have recently shown that he can build a reentry vehicle and that can survive reentry.

In an unclassified setting, I have to ask, is this budget request allow us to remain to face comfortably ahead of the threat, and secondly, if we fully fund your request and it remains at the same level of funding, less than \$8 billion a year, of which increasing amounts or procurement in O&M, not research and development, will we continue to stay ahead of the threat or is it moving faster than we are?

SYRING: Sir, with the work of this committee and others and the support of Congress, I would -- I would not say we are comfortably ahead of the threat. I would say we are addressing the threat that we know today. And the advancements in the last six months have caused great concern to me and others in the advancement of and demonstration of technology, ballistic missiles from North Korea.

It is incumbent upon us to assume that North Korea today can range the United States with an ICBM carrying a nuclear warhead. Everything that we are doing plans for that contingency. And in addition to looking ahead to what might be developed or what is possible over the next five to ten years.

ROGERS: In an open setting, to the extent you can, would you characterize what North Korea has been doing for the last six months?

SYRING: They have been not only testing at an alarming rate in violation of international law but demonstrating technology that feeds development of longer range missiles and more capable missiles as well.

ROGERS: Can you discuss your timeline for developing and deploying the LRDR? How long will the MDA take to do that from requirement finalization to deployment?

SYRING: From the specific requirement of when LRDR was developed, it was back in 2014, and we were under contract in 20 -- late 2015, if I've got the timeline correct. And we will IOC it to the war fighter in late 2020.

ROGERS: With that, I will yield to the ranking member for his opening questions.

COOPER: Thank you, Mr. Chairman. In view of the lateness of the hearing and the large number of subcommittee members who are here, I would defer my questions for the classified portion of the hearing.

ROGERS: The chair now recognizes the gentleman from Arizona, Mr. Franks, for five minutes.

FRANKS: Thank you, Mr. Chairman. And Admiral Syring, everybody said it, but I just hope you know my name is on the list of those who honor and revere your commitment to this country and your service. Admiral Syring, has MDA completed the inventory objective for both the SM-3 1B and the 2A?

SYRING: Sir, there is -- there is not a stated inventory objective, but I know what the Navy is thinking it should be and we are not close to that.

FRANKS: When do you think this objective or this -- when do you think we could achieve that objective?

SYRING: At the production rate of -- I'll just -- Mr. Franks, I'll plan for 48 to 50 per year. It will be within the next four to five years.

FRANKS: You know, sometimes it's important for us to understand how much oversight MDA receives in the executive branch and legislative branches. Sometimes it's an enormous burden on you, but I'd like to just ask you to detail how many meetings, how many RFIs, and how much paperwork is involved at MDA for these oversight processes.

SYRING: Can I give you a qualitative answer?

FRANKS: Yes, sir.

SYRING: A lot.

FRANKS: A lot.

SYRING: Sir, we are under a tremendous amount of oversight and answer many questions from many different organizations on the development of missile defense technology and capability.

FRANKS: Well, given that it's a lot, for all of this work, how many recommendations did GAO have in its FY 2016 report?

SYRING: There were three or four, if you parse one -- so, I'll say four for the record.

FRANKS: And how many of those were validated by DOD?

SYRING: We didn't agree with three of the four.

FRANKS: Three of the four. So, how about the FY 2015 report? I'll -- I'm not going to pursue this much longer.

SYRING: I don't recall any recommendations -- specific recommendations from that report.

FRANKS: So, how much oversight would MDA have if we made the BMDS accountability report and the GAO mandate biannual and alternate it when we -- when they were submitted and how could we -- how could the agency better focus on the mission if we did that?

SYRING: Sir, I want to just start by saying that we -- given the oversight responsibility, we have actually a constructive relationship with GAO. So, I don't want to impugn GAO in any way that we work closely with them. But to answer your question directly, I think a biannual report would be more than sufficient in terms of the over -- their oversight responsibility.

FRANKS: Let me shift gears on you here. How long do you think it will be before the GMD system has operational spares to ensure we maintain 44 GBIs at all times?

SYRING: Sir, it will be post 2020 when we have a Redesigned Kill Vehicle available for procurement.

FRANKS: I know you need to pull GBIs from the ground for the RKV recapitalization of the CE-1 interceptors. Is that correct?

SYRING: That's correct, sir.

FRANKS: How many can we -- how can we ensure that we don't fall below that 44 GBIs in place in the calendar year 2018?

SYRING: Sir, in FY 2018 the department made a down payment on solving that problem with 150 million to go towards two silos and six boosters that would -- two silos -- in -- two silos additionally up in Fort Greely, and there will be a tail to that in FY 2019 and out to complete that work, but the department's taken steps to address that shortfall, where if that were funded and supported by Congress this year, and when the department funds the tail, plans will be in place to not dip below 44 for any length of time.

FRANKS: So, that means you'll start buying GBIs again to enter inventory when?

SYRING: We will -- we will buy boosters, sir, starting this year, and we will buy the silo materials starting this year as well.

FRANKS: Mr. Chairman, that's all I have. Just, again, thank you for your service.

SYRING: Thank you, sir.

ROGERS: I thank the gentleman. The chair recognizes the gentlelady from California, Mrs. Davis.

DAVIS: Thank you, Mr. Chairman, and I appreciate you all being here. This is one of the -- I've been on this subcommittee now for a few months. And so, I haven't had a chance to work with all of you.

I wonder if we could go back just to the GAO report for a second, Admiral, because we have certainly focused on improving acquisitions strategies, we have great concerns about that, as you all know. And certainly the GAO report that recently came out looking at 2016 suggested that the fact that you didn't agree with at least three of those recommendations was, you know, perhaps somewhat telling and they were looking for more agreement with that.

So could you please share with us why in fact you weren't in agreement with at least three of those? And I know that they did overlap to a certain extent. Could you speak to us a little bit about that because, you know, we're trying to figure out why not implement some of those? A lot of them had to do more with transparency, I believe, and the comments that were made were -- well, you know, we'll take a look at this, but, you know, it was a little bit of a dismissal. Help us out with that, please.

SYRING: Ma'am, let me just give the history just quickly is -- we, in the past have up to this point, have agreed with most if not all of GAO recommendations. So, it's not a matter of we've never agreed. We just felt strongly -- the department felt strongly in a couple of different areas.

One was this -- the recommendation that the Cape approve acquisition strategies. The Cape -- the Cape is a voting member on acquisition strategies to the undersecretary of defense for acquisition technology. So, their vote is heard in that forum, but the acquisition of strategy approval is the responsibility of the former -- Mr. Kendall's position in terms of approving acquisition strategies for not only me but other parts of the department and we -- the department felt that was not in the Cape's area.

The other -- the other point -- and I'll just -- the other example was on cost modeling and schedule modeling. We have a very detailed test schedule tool that we use to plan tests and to forecast tests. We also are -- use a very detailed cost model to roll up to us where I would agree with one part of their assessment is that there is more fidelity that could be applied specifically in different parts of the test, but we, I think, have done a tremendous job given the budgetary pressures, which has pressurized the test program, frankly, over the last four or five years in re-planning and conducting tests.

I would note, ma'am, that they said that we've -- in FY 2016, we delivered 100 percent of the capability that was planned. So, those are just two areas I wouldn't say of firm disagreement, ma'am, but we had other methods to get at where their recommendation was coming at.

DAVIS: So, the fact that they may have said there were challenges in meeting the test schedule, you think was perhaps...

SYRING: I recognize...

DAVIS: Yes.

SYRING: ... there are challenges every year in meeting the test schedule ...

DAVIS: Sure.

SYRING: ... and if there can be more fidelity applied to that process, we're certainly going to provide that.

DAVIS: Thank you, I appreciate that. And while we celebrate the tests that you shared with us and I think we all really do feel good about that, I also know that it was somewhat under perfect conditions, if you will -- you might want to challenge that -- but I think that it was under better conditions than perhaps we would face under a crisis.

And so, how do we really, I think, respond to the American people that are looking to see whether or not the dollars that are being spent under these endeavors compare to what we need to do in real time deployment makes sense.

SYRING: Ma'am, let me, if I can, just have a point of discussion on that and I'll then turn it over to General Dickinson, who is the war fighter responsible for the actual execution of the test, which the soldiers did.

We have to plan tests ahead of time. We have to announce tests ahead of time because of the air corridors that we go across. It was a 5,000-mile test, and we've got to clear the aircraft, we've got to clear the ships from the area. So, there has to be a notification on when the test is going to be conducted.

The scenario that we conducted was actually an exact replica of the scenario that this country would face if North Korea were to fire a ballistic missile against the United States. We have TPY-2 radars in Japan. We have our radar in Alaska. And we have a homeland defense system in Alaska as well.

So, what we did is move that scenario south and put a TPY-2 on Wake Island, a sea-based expand radar northwest of Hawaii, and shot an interceptor out of Vandenberg, which just, you know, 1,000 or 2,000 miles south, replicated what the war fighter would face in real time.

The scenario was executed by war fighters on console. And the way the information flowed after the launch of the target is exactly the same way the information would flow upon a launch of a North Korean ballistic missile. It would be detected by the overhead sensors, pass it to the radars in Japan, pass it to the radar in Alaska, develop the weapons task plan to the interceptor in Alaska to shoot an interceptor to defeat that threat.

I would actually argue the scenario that we conducted was maybe more operationally realistic than not. We only...

ROGERS: The gentelady's time has expired.

SYRING: We only fired one interceptor and the war fighter in a real world scenario will fire more than one.

ROGERS: We're going to have to try to get a classified briefing in before we get called for votes. Again, I'm trying to keep everybody on schedule. The gentleman from California, Mr. Hunter, is recognized.

HUNTER: Thank you, Mr. Chairman. So, let's go to -- let's go to Hawaii. And first, I think this is the existential threat that America faces right now, and you're dealing with it. You're doing God's work. So, let's talk about Hawaii. Let's see.

Does the program that you're talking about -- you asked for \$21 million for new Hawaii ballistic defense radar, medium-range discriminating radar, or the equivalent by 2021. Does what you're talking about -- is that what you're going to have there as opposed to just the SBX?

SYRING: Yes, sir.

HUNTER: Okay. Second question, have you looked at -- and I know other people have, so specifically MDA, have you looked at using SM-3 block IIs for the North Korean missile threat?

SYRING: Yes, sir, we have done the analysis and looked at that extensively. We have not tested it yet.

HUNTER: Can you speak to that now or we have to wait until the next hearing?

SYRING: I can speak to it, sir. There is inherent capability in the SM-3 IIA to engage longer-ranged threats in terms of what we believe the design space is. We have not tested against that longer range threat, but analysis indicates that that could add another layer of defense to Hawaii.

HUNTER: Good. In that video, where were you shooting at in the U.S.? Where was the target?

SYRING: The target was on Meck Island in the Kwajalein Atoll in the Marshall Islands and the interceptor was fired from Vandenberg in L.A.

HUNTER: No. I was saying where were you aiming the fake ICBM at in the U.S.?

SYRING: It was going towards the West Coast.

HUNTER: Towards like San Diego or Los Angeles?

SYRING: I won't say San Diego.

HUNTER: Okay. How high would it -- right. How high would it have to be for Alaska to pick that up and not the SBX?

SYRING: It would -- it would have -- if you would have translated that scenario north, that scenario would have been picked up by the Alaska radar.

HUNTER: If it would -- like San Francisco or higher or something?

SYRING: Sir, the construct that I described protects the entire continental United States.

HUNTER: Got you. Okay. So, let's go to the SBX. In 2020, it's going to have to go dry-dock, right?

SYRING: Yes, sir.

HUNTER: So, you're talking about building an actual radar on Kauai, right?

SYRING: In the -- in the state of Hawaii.

HUNTER: Okay. So, not the Pacific Missile Range Facility?

SYRING: That is one option. We haven't decided on location. There are six or seven different locations that we're looking at.

HUNTER: Does the Navy not want to do it at the Pacific Missile Range Facility?

SYRING: Sir, the navy completely understands the need for the radar and we're working closely with them on what operational restrictions would have to be in place at PMRF.

HUNTER: But you basically have to have this done by 2020?

SYRING: We do.

HUNTER: All right. Okay. So, I guess my next question is, if you do it anywhere in Hawaii, the Pacific Missile Range Facility excluded, are you going to have to go through an environmental impact study?

SYRING: Yes, potentially. Yes, sir.

HUNTER: So, an actually environmental impact study -- I'm from California. Apparently they -- you know, Camp Pendleton was basically closed down to Marine Corps assault from the ocean because of fairy shrimp in the sand where they -- where they did an assault and walked on the hardball around the actual beach then they could proceed with their assault. Do you think you have the right timeframe in mind if you have to do an EIS?

SYRING: The timeframe with an EIS would be challenging.

HUNTER: Is there any way to get around doing an EIS?

SYRING: For reasons of national security.

HUNTER: And you would do an environmental assessment?

SYRING: Correct.

HUNTER: And that comes from OSD?

SYRING: That's correct. Correct.

HUNTER: Okay. So, you could say because of national security and pressing existential threat to the United States reasons we can bypass that?

SYRING: That is my recollection of the options we have but...

HUNTER: Do you have to use an EIS if you go on PMRF?

SYRING: Let me take that for the record, sir.

HUNTER: Okay. The answer is question yes? Yes, okay. The answer is yes. We got it. Okay. The last thing is, your MILCON budget request for the radar that will be in place before the SBX has to go in the dry-dock has -- you have a date of 2021, yet you have a planned IOC date of 2023 assuming a fully installed integrated and tested system.

The question is, how does this timeframe from the initiation of MILCON to initial operational capability compare to like the LRDR?

SYRING: Very similar.

HUNTER: Okay. So, you're happy with the timeframe...

SYRING: We...

HUNTER: ... of the SBX going away, which is what you used for this test, the SBX going away and you have a medium-range radar in place on the ground in Hawaii to take its place?

SYRING: Sir, I would -- I would just offer a little different perspective. SBX, in my opinion, will not go away in 2020.

HUNTER: Okay.

SYRING: It's got to go into a dry-dock and we've got to manage that operational risk, but the decisions for SBX to go away will be both the NORTHCOM and the PACOM commander's call.

HUNTER: So, you could press that off -- they could press that off if they had to by a year or two?

SYRING: Absolutely.

HUNTER: I got you. Okay. Thank you, Mr. Chairman. Thank you.

ROGERS: The gentleman's time has expired. The chair now recognizes the gentleman from Texas, Mr. O'Rourke, for five minutes.

O'ROURKE: Thank you, Mr. Chairman. Admiral Syring, I appreciate being able to see the video. That was -- that was incredibly helpful to understand what we're talking about.

Can you talk about -- we obviously saw success in the ICBM being destroyed. Can you talk about any concerns you have with the performance that you can share in this session?

SYRING: Yes, sir. This -- in no way should the committee take away that this is the final step and we're stepping away declaring success. We have been on a journey over the last, at least, five to six years to improve the reliability of the entire system.

Sir, as you know, the system was fielded very rapidly back in the early 2000s. Without a proper system engineering cycle or production engineering cycle because of what the president deemed and correctly so that some defense now is better than no defense.

What was said back then was, we need to work to improve the system over time. And I've stated openly in this committee and others that I have reliability concerns with the system that have been systematically addressed in large part over the last, I'll say, six years, bit by bit. It's not just the interceptor. It's the entire system.

We are not there yet. We have continued work with the Redesigned Kill Vehicle. We have continued work with the reliability of the other components of the system to make it totally reliable, to give the war fighter options on shock doctrine in the future. I've been very open about that, that we are not done yet.

O'ROURKE: Let me ask you about that. The president has talked about an expanded missile defense system. You've talked about in response to one of the questions that, if I can characterize your answer, we may be keeping pace with the threats but perhaps not as quickly or as effectively as you would ideally like.

What did the president mean by expanding missile defense systems? Is this -- the video you showed us, does that satisfy his interest in expansion?

SYRING: Sir, I don't know. I have not talked to the president specifically about this, but I do know that the ballistic missile defense review that he has chartered, the secretary of defense has chartered, will look at this exact question in terms of not only the capability of the current interceptors but the capacity question, and do we need more and where do we need more.

O'ROURKE: Let me ask you this question. Forgive the ignorance in the question. I'm also new to the subcommittee. How good can we get at missile defense, not speaking technologically, but in terms of either treaty obligations or concerns about upsetting any balance or deterrence considerations that we already have?

SYRING: Sir, if I can -- if I can, I'll give you my perspective of a military officer, then I'll hand it to my policy friend, Mr. Harvey, to expand further, but I got asked that question a couple of weeks ago, about missile defense being destabilizing. And my answer to that was, the only thing provocative and destabilizing are North Korea's actions.

O'ROURKE: What about with Russia, I guess, I'm specific asking about?

SYRING: I'll let Mr. Harvey take that.

O'ROURKE: Yes.

HARVEY: So, as you know, you alluded to, I mean the Russians have expressed concerns about our missile defense capabilities. I think we have, for the past 50 years, to recognize deterrence is sort of the basis for strategic stability in terms of defense of our homeland.

In terms of defense of our forces in a regional context, I think to the extent that the Russians posed a threat to those forces, that we feel we have not just a right but an obligation to provide the defenses that we need to protect those forces, and we won't let ourselves be cowed by complaints or threats or accusations from the Russians.

O'ROURKE: Yes. And I'm not suggesting we should. I think I'm just trying to get an understanding of the parameter of how far we can take this within current considerations. It may be a question for a longer conversation. Perhaps on the same theme, how effective are Russian missile defense systems comparable to ours?

SYRING: Sir, if I could take that to the classified session...

O'ROURKE: Okay. I'll have that same question for other...

SYRING: ... I'd feel more comfortable. Thank you.

O'ROURKE: Thank you. Thank you, Mr. Chairman. I yield back.

ROGERS: The chair now recognizes the gentleman from Alabama, Mr. Brooks, for five minutes.

BROOKS: Thank you, Mr. Chairman. Admiral Syring, I understand that the missile defense agency and the DOD director of operational tests and evaluation both agree that a multiyear procurement of the SM-3 would make sense, and given common components, that adding a multiyear procurement of SM-6 may also make sense. Is that right or is that wrong?

SYRING: I agree with that assessment.

BROOKS: Why?

SYRING: The -- one, the two interceptors are manufactured in the same location. There must be synergies between the two production lines. We have proven on the Navy side -- I'll speak for the Navy --

very, very successful track record with SM-6 testing. And its technical baseline is mature enough, is absolutely supportive of a multiyear.

The SM-3-1B will go through its final intercept testing as part of Formidable Shield 2017 in the September-October timeframe and we're confident that given that test, both the SM-3 and the SM-6 will be ready for the department to certify multiyear procurement, at least that will be my recommendation.

BROOKS: Next question. Please describe the joint emergent operational needs submitted by U.S. Forces Korea Commander Brooks in February of this year. I understand it's been endorsed by Admiral Harris at Pacific Command. Is that correct or incorrect?

SYRING: That's correct, sir.

BROOKS: And what is the plan to provide this capability to the commander of U.S. Forces Korea? Will you or your successors seek a reprogramming to accomplish this effort or have you included it in your budget request for FY 2018?

SYRING: Sir, it's an emerging capability. I have just returned from Korea last night, talking about the document and potential material solutions, and I would defer that discussion, given the environment to the classified environment.

BROOKS: And this next question is for any witness who would like to pick it up. The ground-based mid-course defense system in Alaska and California is the missile defense system that protects the United States from long range ballistic missile attacks. Should the American people have confidence in its ability to defend the United States?

DICKINSON: Congressman Brooks, the American public should have absolute confidence in it. I have confidence in the soldiers that man and operate the system. I have confidence in the system itself. And I've got great confidence in the relationship we had with the material developer, Admiral Syring, and MDA in that regard, but absolute confidence.

BROOKS: Given that North Korea seems to also be advancing both their capabilities and perhaps numbers of missiles, do you have a judgment as to whether we will be ahead of the game in 2020?

DICKINSON: I think at this point we will -- given the current program of record -- and I'll defer to Admiral Syring to talk about it --and what the capabilities are that we're progressing with, I think we will likely be.

SYRING: Sir, I would -- I would answer and add that everything that this committee has supported over the last four years has been targeted towards a near term, which is now part of the program record and fielded set of capabilities, a midterm, and a far term capability, midterm defined by 2020.

Everything that we are working on and fielding is to stay ahead of the threat by 2020. Today, we're ahead. We need to stay ahead. Where I just want to put one caveat in is on capacity. And certainly, the sensor and discrimination work we've done to improve the capability of the system is on a trajectory and to a large part fielded.

Where we need to be prudent and constantly vigilant on is what is the capacity increase that we can expect from North Korea and what is our capacity needed to meet that threat. And I can assure you, sir, as part of the BMDR, all of that analysis and intelligence estimates will be -- will be balanced to come up with the recommendation from the department.

BROOKS: Well, it seems that we have protection with our facilities in Alaska and California. Do you have a judgment as to whether we need similar facilities or capabilities on the East Coast?

SYRING: Sir, that -- I will -- that will be part of the department's assessment over the next 180 days.

BROOKS: Thank you, gentlemen. Mr. Chairman, I yield back.

ROGERS: I thank the gentleman. The chair recognizes the gentleman from New Jersey, Mr. Norcross, for five minutes.

NORCROSS: Thank you, Mr. Chairman. And there's couple of items I want to follow up on for my colleagues. The SM-3 missile, been tested considerably, but it had a few issues not too long ago and I understand we got it out of the penalty box and it's now tested. Do you have any concerns about the reliability?

SYRING: No, sir, none whatsoever.

NORCROSS: So, if we were able to identify additional resources, would you support or do you need additional missiles and by what year?

SYRING: Sir, I'll give you the answer. We -- the president's budget was the best balance of resources at the time at the top line, but the answer to the multiyear question from Mr. Brooks is that my testimony is that the technical baseline for the SM-3 is stable and ready for multiyear procurement and additional procurement quantities if required.

NORCROSS: So, you're comfortable with the timeframe that has been laid out?

SYRING: Yes, sir. This will be, once again, BMDR but a department decision for FY 2019, but it would be my strong recommendation that it is ready for multiyear procurement.

NORCROSS: And we certainly understand what happens today doesn't necessarily keep us from changing tomorrow. The dry docking of the SBX, my understanding, we have always had opportunities to extend this out. Is the two-year timeframe comfortable or can we go beyond that in the event that other technical issues pop up?

SYRING: Sir, we can work with the operators and the military COF command in terms of what risk they're willing to accept and we will do underwater hole surveys and everything else to assess the life of, you know, basically how is the vessel doing. There can be -- there can be ways to not only take risk on when that dry-dock appears or is conducted with periodic maintenance that can be done during the import periods short of a full dry-dock.

NORCROSS: Do you have the resources available to you to extend that out because I'd rather have the extension and not use it?

SYRING: Sir, that would be -- that would be in 2020 and beyond, and certainly, well before then we will factor that into the president's budget request if required. It will be based on how the Hawaii radar is progressing, you know, the fielding of their Alaska radar, and I can assure you that won't be my -- that won't be my decision. It will be the combatant commander's decisions.

NORCROSS: And I'll reserve the rest for our closed session. I yield back.

ROGERS: Thank you, gentleman. The chair now recognizes the gentleman from Colorado, Mr. Lamborn, for five minutes.

LAMBORN: Thank you, Mr. Chairman. And Admiral Syring, I want to thank you for your service to our country and your great work at MDA.

SYRING: My honor.

LAMBORN: You'll be missed, but thank you for what you've done. The kinetic kill test result that you showed us earlier is both wonderful and gratifying, and I really was happy to see it.

Now, looking forward to the future, for future progress in boost phase kill, I think we have to look at directed energy. And MDA in the last few years has made some modest but steady investments in directed energy. Now, as the missile threats to our country grow and as the geopolitical situation evolves, and there are some dangers out there, I really see that we need to be stepping up our directed energy investments.

But I'm dismayed when I look at this budget that we've been -- we're cutting \$50 million in this year's request for directed energy research and development. So how do we square that with the needs that are -- and threats that are out there?

SYRING: Sir, the premise -- the premise of the budget submission at the department level with directed energy was to pull directed energy funding across the department towards common solutions and common maturation of technology. That's why we saw a reduction in the MDA budget.

That said, we owe the plan to not just the department, but we owe the plan to the Congress on how are we going to do that, to continue the development of directed energy. I agree with you 100 percent that boost phase defense and directed energy should be pursued vigorously and without delay. And I assure you, as part of the BMDR, the department will look at directed energy in depth for missile defense and assess that recommendation.

LAMBORN: Okay. Would you appreciate this committee reviewing that part of the budget and scrutinizing it very carefully?

SYRING: Sir, as you're entitled to with congressional oversight, of course.

LAMBORN: Okay. Excellent. Now, shifting gears, what can you tell us in open in hearing about the Iranian threat and our efforts in Europe with sensors and -- or radar and interceptors to deal with that threat, given the fact that we don't have an East Coast site as of yet?

SYRING: I would -- I would -- let me be very careful here. I would -- I would put in perspective first the threat piece of Iran versus North Korea. There is no comparison in terms of the amount of testing that we've seen with North Korea, both in range and capability, to what we have seen in Iran over the last six to eight months. It's night and day.

So, our priorities on focusing toward a North Korea threat have been exactly right. That said, we cannot forget about Iran and what they are capable of doing in terms of longer range space launch vehicle technology and shorter range missiles that they possess, both land based and AS -- anti-ship ballistic missiles as well.

We, as part of the BMDR, need to look both ways when we assess our capacity on where the capacity is located, both in Vandenberg and Alaska, and what a potential East Coast site could bring in terms of not only numbers but battle space to the war fighter, and (inaudible) opportunities with the right assessment capability to go along with it.

LAMBORN: Okay. Thank you very much. I appreciate your service once again, and I yield back.

ROGERS: I thank the gentleman. Admiral, to be clear, was it your best military judgment that the funding be cut on FY 2018 on directed energy?

SYRING: No, sir. That was not my best military advice.

ROGERS: Thank you. The chair recognizes the gentlelady from Hawaii, Ms. Hanabusa, for five minutes.

HANABUSA: Thank you, Mr. Chair. Admiral Syring, I just would like to get an orientation here. So, from the time -- if you can say this in open session -- from the time the ICBM was launched from Kwajalein, how long was it before the Vandenberg interceptor was launched?

SYRING: About 10 minutes.

HANABUSA: Then can you tell me where exactly did they intercept? Was it like close to Hawaii, closer to the West Coast, closer to the point?

SYRING: It was about 2,000 miles west of California but further to the north of Hawaii.

HANABUSA: And the -- when the test was done and the interception took place, was it always anticipated that that would be the route that more than likely, I assume, that a missile if launched from Korea or North Korea would take because that was the -- basically the assumption made?

SYRING: Yes, ma'am, in terms of being able to replicate the operational architecture down on the test range, which we did.

HANABUSA: Now, one of the things that also -- in your statement, you talked about the radar, I think homeland something radar for that -- I don't know what the whole acronym was for Hawaii. Now, how long would that -- assuming that that radar is in the 2018 NDAA and then appropriated accordingly, how long is it expected for that radar to actually be built?

SYRING: If the funding -- excuse me -- is authorized and appropriated, we would then immediately do the aforementioned site surveys and finalize the site and the aforementioned environmental impact study in parallel to prepare -- to prepare for a competition industry-wide for procurement of that radar.

And to answer your question, we are counting on two years for that to happen. And the reason I was hedging on the environmental study is that sometimes that can take longer than that.

HANABUSA: And though a lot of people assume that PMRF on the island of Kauai is probably the most logical place. I assume that there are criteria which may place it somewhere else and that's why your response was as your response to me. We have eight islands and I'm assuming that you're looking at more than just Kauai as a site.

SYRING: We are, yes, ma'am.

HANABUSA: The other thing is in your statement you speak to the fact that -- if I can find it -- that the Pacific architecture, the increase in defensive capabilities of GBIs for the enhanced defense of Hawaii. Now, the GBIs are the ground based interceptors. So when you say the enhanced GBIs for Hawaii's defense what exactly do you mean by that?

SYRING: There are -- I'm sorry for the acronyms and the descriptors, but we talk about the GBIs as capability enhancements. Roughly the first 20 GBIs, which are the oldest GBIs are referred to as capability enhancement 1s. Capability enhancement 2s were, for simplicity sake, comprised the next 10, and then capability enhancement 2 Block Is comprised the balance of the 44. So, the capability enhancement 2 block I, which was tested is the very latest GBI configuration, which will be fielded before the end of the year.

HANABUSA: If I recall the testimony correctly though, the 44 is Alaska and Vandenberg.

SYRING: That's correct.

HANABUSA: That's correct, right?

SYRING: Yes, ma'am.

HANABUSA: So, when you talk about the capability of GBIs for enhanced defense of Hawaii, you're talking about Hawaii being defended from those locations?

SYRING: From Alaska, yes, ma'am.

HANABUSA: And I think that's one of the things that people don't seem to realize is that some people are under the impression -- and if you could respond, I'd appreciate it -- that somehow Kauai is the best vantage point to really protect the Hawaiian islands, but in actuality it is my understanding that it may not be the best location, that it is either north of Kauai or some another location like Alaska or Vandenberg may be that would be the better location because of the -- where an ICBM would track. Would that be correct?

SYRING: For -- yes, ma'am. For GBIs at Alaska, that would not be a -- that would certainly not be a recommendation of mine -- I mean GBIs in Hawaii would not be a recommendation of mine. Now, the defense that we get from Alaska in a orthogonal or a crossing trajectory is very good in defending Hawaii today.

HANABUSA: Thank you. Thank you, very much. Mr. Chair, I yield back.

ROGERS: I thank the gentlelady. The chair now recognizes the gentlelady from Wyoming, Ms. Cheney, for five minutes.

CHENEY: Thank you very much, Mr. Chairman, and thank you as well to all of our witnesses for your service and for being here today. Admiral Searing, there has been some conversations and discussion about strategic stability, which is a crucial issue, but I think it's important to note that it's not the United States that's violating arms control treaties or talking about escalate to win, that's Russia. And isn't it also the case that we are not building missile defenses to counter Russia's strategic or theater nuclear capabilities?

SYRING: That's correct, ma'am.

CHENEY: But isn't Russia, in fact, doing that to us basically? Russia -- isn't in fact the case that Russia has got several dozen nuclear armed interceptors in their missile defense portfolio...

SYRING: Yes, ma'am.

CHENEY: ... that are particularly aimed at attempting to defeat you know, any potential U.S. nuclear attack?

SYRING: I can answer that in a classified session, yes, ma'am.

CHENEY: All right. And hasn't China also been developing ballistic missile defenses with an intent to counter our offensive weapons?

SYRING: There have been developments in that area.

CHENEY: And so, when we hear China and Russia talk about the United States upsetting strategic stability, isn't that in fact somewhat hypocritical?

SYRING: In my opinion, yes.

CHENEY: And then a question for all of the witnesses. At a May hearing at the Senate Intelligence Committee, when asked whether Russia is using active measures to undermine U.S. nuclear modernization and missile defense efforts, the director of central intelligence stated on the public record, "Yes, they are." So, I'd like to ask all of the witnesses on the record do you agree with this assessment? Let's start with you, Mr. Pike.

PIKE: I don't know that I have any firsthand knowledge of that, ma'am.

DICKINSON: Ma'am, I have not seen that or have firsthand knowledge of it.

SYRING: Ma'am, me neither at this point. I can't comment.

CHENEY: Okay. Thank you.

HARVEY: I share the position of the other panel members.

CHENEY: All right. In the event that the director of central intelligence is accurate and is correct in his assessment, wouldn't it be the case that you would agree that this is not something that we can let stand, that we can't allow the Russians to undermine our defense programs?

PIKE: Absolutely.

DICKINSON: Yes, ma'am.

SYRING: Yes.

CHENEY: Thank you. Thank you, very much. Mr. Chairman, I yield back.

ROGERS: I thank the gentlelady. The chair now recognizes the gentleman from Colorado, Mr. Coffman.

COFFMAN: Thank you, Mr. Chairman. One question I have is that this successful test that we just did, in your view -- and whoever would like to answer this -- what impact do you think it has on the North Korean regime in terms of the development of their program? Does it send them a clear signal about the intent of the U.S. -- United States in order to defeat their capability?

HARVEY: I don't think we can rely on sort of the rational reaction of Kim Jong-un and North Korean regime. That's why I think we need to continue to make improvements to our GMD system so that we can provide protection and not give him or his regime an opening to exploit weakness and use that to his advantage.

SYRING: I would just add that I think it validates that if called upon -- the war fighter called upon to operate the system in a real world scenario that I have confidence that they would do that entirely. And what message it sends to North Korea, I have no idea, but I know what message it sends to the American people and that we can defend them 24 hours a day, 7 days a week.

DICKINSON: I agree with that statement in terms of the demonstration that we have the war fighters that are prepared and trained to do that 24/7, 365, and I can't speak to what the -- what his reaction would be, but it clearly does demonstrate that we have the capability.

COFFMAN: Can you -- in this open session, can you say anything about the work we're doing with Israel in terms of missile defense? I think that there's some talk about doing a test -- doing a joint test on the arrow system?

SYRING: Yes, sir. We're close partners with Israel on development of their systems, system engineering in particular, and testing support also. And I've been intimately involved with them on David Sling and Arrow, the more -- their more recent version of Arrow- 3. And frankly, that interceptor is now up into the exo-atmosphere and it has significant range constraints within the Mediterranean. And one of the -- one of the better places to test is in Alaska from Kodiak and we plan to do that next year.

COFFMAN: Okay. So, the Arrow-3 is designed to defeat the over- the-horizon capability of the Iranians. Am I correct in that?

SYRING: Sir, it's designed to defeat the exo-atmospheric threat ballistic missile threat from Iran.

COFFMAN: Okay. Where we're at in terms of the deployment of that system?

SYRING: It is in -- it is in testing. I don't have the specific IOC thinking from the Israelis, but I can get to you that -- I can get that to you for the record.

COFFMAN: Okay. Thank you. Then what is the -- can you basically state what China's concern is with the deployment of the THAAD system in South Korea?

SYRING: Sir, I'd like to, if I can...

COFFMAN: Sure.

SYRING: ... relay that to my policy bureau.

COFFMAN: Mr. Harvey?

HARVEY: I think they've expressed a concern about the ability of the radar system to track any missiles that might be launched from China and what that says or what that exposes in terms of vulnerability of their systems. So, I think that's a concern.

COFFMAN: Thank you. Thanks, Mr. Chairman. I yield back.

ROGERS: I thank the gentleman. Before we move to the classified portion, I want to touch one topic. Admiral Syring, can you explain why we're building Aegis Ashore sites in Poland and Romania that do not meet the same requirements for housing of our sailors.

As you know -- because I met you at the Poland site on a code a couple of months ago -- in the Polish side, which is coming out of the ground. Sailors will be housed four to a room; whereas, in the Romanian side, which we just completed, it's two to a room. And by the way, that site turned out wonderful, really it's first class. Who made this decision and why?

SYRING: Sir, the timeline that I understand is former CNO directed that the site be fully capable but austere in its construction in nature for housing. And they didn't really -- they didn't have a definition of austere at the time when the budget was submitted for Romania. The unified facilities code from DOD grappled with what is the definition austere and came out with that guidance in 2013, which formed the basis for the Poland military construction request. It's not a satisfying answer, but that's the timeline.

ROGERS: Does this make sense to you and what does it mean for morale given that we're going to save less than 2 percent of the cost on this site at the Poland...

SYRING: I -- from the Navy standpoint, I can't -- I can't speak to that, but certainly the message is being sent to the sailors in Poland versus the sailors in Romania that it's different.

ROGERS: Yes. And it's inexplicable and indefensible. With that, we will recess and go into a classified setting now.