MR. BOB FIDLER: Good morning, ladies and gentlemen. Please continue eating. I’m just going
to do a quick welcome and introduction. I’m Bob Feidler. I’m with the Reserve Officers Association.
Welcome to our national headquarters of ROA. In 30 seconds, ROA is the entity that’s a nonprofit that
represents all the uniformed reserve services in the United States, and we’re very proud to do that and
to host you this morning.

It’s a particular pleasure to introduce Peter Huessy. Peter is the face of this seminar series for
the past 30 years, the Congressional breakfast series on nuclear deterrence, and what an amazing job
he’s done. Peter, I’ve been so privileged to know him over the past few years and he’s appeared on
many of our programs.

At the Defense Education Forum we do about 50 to 70 programs a year on national defense of
one kind or another, probably four or five a month. And we’d welcome all of you to join us for any of
those programs. They’re all just like the ones we’re having now. Some are a little bit longer, but we try
to have a little bit of food and some great speakers.

So with that, I’d like to introduce Peter Huessy.

(Applause).

MR. PETER HUESSY: I want to thank you all for being here today. And I want to thank in
particular Joe Connell (ph) and Jeff Morrow (ph) for urging us to do the events here as well as the
Capitol Hill Club.

I want to also thank our friends from the Russian Federation and from Great Britain who are
here today from their respective embassies; and, of course, our sponsors ROA and NDIA and AFA. It’s
appropriate that 30 years ago when I began this series the chief issue was Peacekeeper, small ICBM,
Trident, B-1, B-2 and our strategic modernization program, primarily the Peacekeeper. And that’s
appropriate that we’re in the Minuteman Rooms here at ROA.

And as you know, various things you’ve seen recently in the press about the proposals to go to
300 nuclear weapons, 400 nuclear weapons, but in particular one report to get rid of entirely the land-
based leg of the triad. For those of you interested, we did have seminar with Chris Ford and Barry
Bleichman, separate from this, under BASIC, the British American Security Information Council, and that
is available – the transcript is available from my friend Rick Northrop that does our transcripts. So let me know if that’s something you would want.

Now in terms of our schedule, before I introduce the general. Tomorrow, Larry Welch is speaking. That will be the last event before Memorial Day, and he’ll be speaking back over at the Capitol Hill Club tomorrow.

Then, as we work into June, the 6th of June will be Chris Ford and Jeff Klinger, who will talk about proliferation, North Korea and Iran. And then on the 8th of June, General Tom McInerney and Clare Lopez will talk about, particularly Iran and terrorism and the connection to nuclear issues and missile defense. On the 12th of June is Ilan Berman.

Jim Miller, who has two hats, both Michelle Flournoy’s old hat and his deputy hat, he’ll be speaking on the 13th of June. On the 14th, Jeff Sessions. And then Uzi Rubin from Israel on the 15th of June.

We have re-scheduled Marc Schneider for the 20th of June, who’s going to give us a fairly good overview of Russian strategic nuclear weapons developments. And Tom Schieber is going to do a separate one on global prompt strike, but only when the DOD report has come out.

General Chambers, again, on behalf of our sponsors and on behalf of our industry sponsors, I want to thank you for coming here today. General Chambers is the assistant chief of staff for strategic deterrence and nuclear integration at headquarters U.S. Air Force. He is responsible to the Secretary and Chief of Staff to focus on nuclear deterrence operations; advocates for and oversees the stewardship of the Air Force nuclear weapons systems; and he integrates the organizing, training and equipping of the Air Force’s nuclear mission; and engages with joint interagency partners for nuclear enterprise solutions. General Chambers, again, on behalf of our sponsors I want to thank you for coming over here to speak with us today.

Would you give a very warm welcome to Major General William Chambers?

(Applause).

GEN. WILLIAM CHAMBERS: Thanks, Peter, and thanks, all of you for getting up early to be willing to discuss some important issues that are in the public realm. And hopefully I can add to that discussion and we can have a good interaction. I do appreciate the efforts of the foundation and the association and the ROA for hosting this. It’s an important series, of what I’ve seen, of healthy discussions of issues central to the current debate at the national level.

Certainly news junkies that we are, we’ve soaked up a lot of recent dialogue in the public realm about strategic issues, issues surrounding deterrence and nuclear forces. And I couldn’t be happier, actually, to see the active and vibrant back-and-forth. It makes us all better, as all of you do, who are interested in these topics. And obviously you’re here today because of your interest and your desire to engage. That’s what this debate needs.
Let me start off by saying that for the United States Air Force nuclear deterrence is not an anachronism of the Cold War. We believe that 21st century deterrence demands credible nuclear capabilities matched to our modern strategic environment. It’s a security environment that’s been well described in the strategic guidance released by the President and the Secretary of Defense on the fifth of January.

And it’s a strategic setting where at least one, and potentially several nation-states, will possess nuclear arsenals with the capability to pose an existential threat to the United States. It’s a complex, it’s a hybrid, it’s a combination of regional dynamics with global impact. And in a world where this capability exits, our nuclear forces continue to play an important stabilizing role.

Indeed, yesterday at my alma mater, President Obama reiterated to the graduating class of 2012 at the United States Air Force Academy, that the United States is leading the world on global security, reducing our nuclear arsenal with Russia even as we maintain a strong nuclear deterrent. The dynamics of this modern security environment require us to retain some basics. First of all, deterrence in the 21st century is still all about stability, global stability, stability among major powers, stability within a region, stability to establish and enforce international normative behavior, good patterns of international relations.

And for practitioners like myself, we crave nothing more dearly than the prevention of war. It is the ultimate reason we maintain deterrent capability. As Secretary Kissinger and former national security adviser Scowcroft recently wrote in an April Washington Post piece, quote, “The overarching goal of contemporary U.S. nuclear policy must be to ensure that nuclear weapons are never used.”

Two days ago I was honored to participate in the promotion of a sharp, promising nuclear-experienced officer. He was promoted to colonel. He’ll very likely be part of the cadre of future commanders and senior leaders in our Air Force. He entered the Air Force in 1992.

In 1992 the Soviet Union had departed the world stage and the U.S. had conducted its last underground test of a nuclear weapon. It took 20 years to grow that colonel, and that growth took place entirely in the post-Cold War era. So as I may have mentioned in this forum this past fall, not only is the Cold War over, but the post-Cold War is over and a full generation has passed. Fresh thinking is, indeed, in order and your Air Force is playing an important role in that fresh thinking to ensure we have the appropriate deterrence concepts, planning and forces tailored for the security challenges of today and tomorrow.

The president remarked yesterday at our academy that, quote, “The United States has been and will always be the one indispensable nation in world affairs.” As such, we will find ourselves – we already find ourselves – in situations simultaneously conducting central deterrence, that is to prevent a power from considering harm against us; extending deterrence to protect allies and partners; and underwriting assurance, to maintain security relations and support nonproliferation. To do this we believe the nation is best served by a diversity, a variety of deterrent capabilities.
The nuclear triad is the construct whereby individually distinctive capabilities work together in a complementary synergistic way. The flexibility attribute presented by the bomber force, the responsiveness of the intercontinental ballistic missile force, and the survivability of submarine launched ballistic missiles, produce a combination that gives the United States an advantage that is still required. The Nuclear Posture Review and the recently announced strategic guidance indicate we may be able to achieve deterrence with fewer nuclear forces. And as we consider how we might do that, we believe it’s important to remember that less is not just less, less is different.

Reductions in the numbers of warheads or the number of strategic platforms are not just adaptations to the new environment, they actually can radically change the environment. As Secretary Kissinger and General Scowcroft recently indicated, the global nonproliferation trend does not bode well. Regarding numbers of weapons belonging to rising regional powers, we must be prepared, for instance, and answer the question, quote, “At what lower levels could these arsenals constitute a strategic threat?”

Perhaps it’s counterintuitive, but as we, quote, “Reduce the role of nuclear weapons in our national security strategy and urge others to do the same, we must increase our commitment to improving expertise and modernizing our forces.” With smaller arsenals we can afford less risk in either systems or personnel. So this illusionary but very logical tension between decreasing the role of nuclear weapons, while at the same time strengthening deterrence, means we must rise to the challenge of recruiting, retaining and developing the best in Airmen and in weapons systems.

Your Air Force is meeting that challenge and has a strategic commitment to provide the strong deterrent force of today and the strong deterrent force of tomorrow. Commitment to these two forces, today’s and tomorrow’s, requires both deliberate development of our Airmen and our human capital and our intellectual capital, and the continued modernization and recapitalization of our weapons systems.

So regarding the deterrent force of today, the personnel securing, maintaining, operating, modernizing the nuclear deterrent forces, are held to the highest standards. And Air Force leaders at every level have re-instilled the culture of compliance, precision and reliability. We are now growing a culture of self-critical assessment as we continue to strengthen the nuclear enterprise.

Analytical tools, such as root cause analysis, are now embedded across process improvements in our enhanced inspection program and within our logistics and sustainment programs to improve unit performance. Inspection results and reactions of our wings to exercises have all improved across the board. We’ve analyzed the career field specialties who perform nuclear deterrence operations and we’ve established new personnel processes to strengthen those career fields. We’ve improved awareness and understanding of nuclear issues across the Air Force, in formal professional military education and with the introduction of courses that now teach Airmen at the NCO level, company grade officer level and all the way through the general officer level, about current nuclear and strategic deterrence issues.
On intellectual capital, we’ve improved understanding of the linkages between central
deterrence, extended deterrence and assurance. New analytic tools, recent war games and recent
discussions with allies are just some of the sources of insights into these linkages. And for access to new
ideas and perspectives, we’re actively engaged with some of the younger academics studying
deterrence, and we’re cooperating with our own Air University colleagues to publish some fresh
deterrence insights.

Moreover, regarding our deterrent weapons systems of today, we have a plan for two decades
of sustainment and modernization to keep the Minuteman III strong and responsive through 2030. We
currently have surface life extension programs in progress for the air-launched cruise missile to ensure
its vital power projection capability through 2030. Such programs include the guidance and flight
control systems and its warhead arming components.

The B-52 continues to provide critical standoff capability and will be sustained until a
replacement capability comes online. And in case you’re worried about its lifespan, the B-52 has
recently seen some of the highest readiness rates in its 60 year history. It remains one of our most
flexible airframes and one of the least expensive to operate. During a trip to Minot about 10 days ago, I
rediscovered how our maintenance troops love to work on the B-52. As they described it, it’s like
working on an old car; plenty of room under the hood and nice simple parts to remove and replace.

(Laughter).

B-2 modernization remains a very high priority for us, and we will ensure that our long-range
direct strike asset remains capable of penetrating in an anti-access and area denial environment. We
also continue to maintain strong, ready capabilities to meet NATO deterrent commitments with the F-16
and the F-15E, and have dual-capable plans ready as the F-35 program matures. Nuclear command and
control remains a key Air Force priority and the Air Force has made significant strides in assessing and
modernizing the nation’s nuclear command and control network. We’ve established a baseline NC3
architecture, identified capability gaps, and we’re focused on a very prioritized investment strategy
concentrating on our senior leadership aircraft, our bomber fleet and multiple cryptographic
improvements.

Now that’s just a snapshot of our commitment to today’s deterrent force, but the Air Force is
also strongly committed to growing the Airmen and developing the systems for tomorrow’s deterrent
force. The Airmen of that future force will benefit from professional development through new formal
training programs and more deliberate developmental education, all designed not only to bring Airmen
up to date quickly on the current issues at stake in the nuclear enterprise, but also to foster critical
thinking necessary for this very complex 21st century strategic environment. A major intellectual and
analytical challenge lies in defining the contribution of non-nuclear capabilities and the proper
integration of defensive systems to strategic deterrence. Employing conventional and nuclear force
structures, postures and doctrines to create synergistic effects across air, space and cyber domains will
require innovation, and we’re already seeing that play out in recent war games and table top exercises.
The deterrent force of today requires modernization. But to create the strong deterrent force of tomorrow, our weapons systems require recapitalization as well. So we have a program on track for a successor to the Minuteman III, something we refer to as ground-based strategic deterrence.

Over time, our ability to hold targets at risk with the current bomber force will diminish. The nuclear capable long-range strike bomber is a national commitment to address that eventual shortfall. We remain committed to delivering a force of 80 to 100 new bombers starting in the mid-2020s.

Our analysis also indicates that in this 21st century environment, deterrence in an anti-access setting requires a follow-on to the air-launched cruise missile. That program is underway and is call the Long Range Stand-Off or LRSO, and it will be compatible with the B-2, B-52 and a future long-range strike bomber.

The Air Force has funded the B-61 gravity bomb tail kit assembly in concert with our partners in the Department of Energy and the National Nuclear Security Administration as part of the B-61 life extension program. This weapon will produce effective deterrent capability for the bomber force, particularly for extended deterrence roles, and that will happen starting later this decade. And, it will meet our commitments to NATO.

The Airmen and their weapons systems who underwrite strategic stability remain ready, flexible and responsive, and highly relevant, to our 21st century security challenges. And your Air Force is strongly committed to both that deterrent force of today and the deterrent force of tomorrow. I’d love to talk about these issues more, and I’m open to your questions.

Thank you very much.

(Applause).


GEN. CHAMBERS: Great question, Elaine. All those things you described are certainly part of the work that’s underway. We are now at a point where the initial capabilities document, which is part of the joint requirements process, that document is complete. It’s undergoing the full joint requirements vetting.

In an unclassified environment, of course, we are looking at basing modes. We are looking at affordability. We are looking at the right and the most compatible warhead. We are looking at the need to integrate this platform with the ongoing warhead modernization efforts undertaken by NNSA. It’s very important, for instance, that the development of this new ground-based strategic deterrent matches and integrates well with the timeline for the W-78-1, which will be the life-extended W-78 warhead.
So we’re early. The next phase of this material solution analysis, which is what the joint requirements guys call this phase, is an analysis of alternatives. And in that analysis of alternatives we will, in fact, wrestle with those things that you’ve described, and it will become more clear at that point. We’re early in the process. A lot of good analysis still to go.

MR. STEVE TRABER (ph): Steve Traber, Congressman Pierce’s staff. You mentioned about targets of risk and war games. At a war game that I was at several years ago, one of the most difficult decisions that we had to make with regard to the leader of the red team was deciding what the red team would regard as sufficient number of U.S. targets at risk to drive their thinking on the size of their deterrent force. I don’t know if you can talk about it in open session like this, but that can continue to be a dilemma trying to figure out what they think it would take to deter us.

GEN. CHAMBERS: A great question. A couple of key points there. First of all, yes, one of the things that this new strategic setting drives is a demand signal on the intelligence community to help us understand the mind of the adversary. Obviously, a basic deterrent principle is that deterrence is in the eye of the deterred. And so what matters to him, what he values the most, what his potential courses of action are, are all part of the demand signal we’re now placing on the intelligence community.

The targeting conundrum that you describe is, in fact, at the heart of the central stability provided by our ICBM force. And we believe that that remains valid. As I indicated, there are capabilities around the world that could put us at risk. That targeting challenge, that raising of the threshold by presenting such a conundrum, with a land-based – homeland based array of hundreds of targets, does serve deterrence in a very, very key way. And so it has played out in recent war games, particularly as people consider lower numbers, and it will continue to play out. And we are demanding of the intelligence community better insight not just on the potential central deterrent target, but also the regional adversary.

MR. JOHN ISAACS: John Isaacs, Council for a Livable World. Last week the House of Representatives voted to endorse placing a new missile defense system on the East Coast by the end of 2015. What is your view on that?

GEN. CHAMBERS: Missile defense is part of the non-nuclear capabilities that we’ve got to bring into this discussion. My personal view is that it requires considerable analysis to understand the joining together of that capability with the nuclear deterrent capability, as well as other high precision conventional needs. Missile defense is a key part – my last position was as the vice commander in Europe, of our air component in Europe.

And clearly we are now – and as you heard from the NATO summit on Monday – the alliance is committed to ballistic missile defense as a mission to protect their territory, their forces, their populations. And obviously the European Phased Adaptive Approach is central to that capability. I do not believe that it constitutes a substitute for a nuclear deterrent force, but it is clearly an important new capability that adds to our ability to present a threshold to the adversary that can deter.
MR. DALE ROBERTS (ph): Hi, General, good morning. Dale Roberts, SSP. As we move forward, the nation moves forward on modernization and recapitalization of the ICBM, my boss Admiral Benedict, has talked about modernization and recapitalization of the SLBM. Can you give us your thoughts on collaboration and cooperation between the Air Force and Navy?

GEN. CHAMBERS: That’s a great question, Dale. This is part of our mandate. Admiral Benedict and I face – the Air Force and the Navy – face the same challenge in constrained budgetary environments with our systems needing to be recapitalized or their lives extended. We face similar fiscal challenges. And so whether we had been told to do this or not, I think we would have found a way to cooperate. And we are, in fact, doing that on a number of fronts.

The arming, firing and fusing set work together. The Air Force and the Navy are cooperating in a joint effort to modernize that component. The requirement is first for the W-88, which is the warhead for the D-5 missile.

But that joint effort, which has been done in the past – actually the Air Force and the Navy has a history of working together. The warhead for the TLAM-N and the ALCM was worked on together. But our cooperative efforts have only increased. Our efforts to life extend the W-78 and the W-88 will be done in a joint manner.

The Nuclear Weapons Council has addressed how we’re going to do that and has given us clear direction. It’s direction that Admiral Benedict and I developed together, so we’re very happy with this relationship. And it’s a process.

These projects go through what the NNSA calls the Phase Six-X process. To mature technology and develop the ability to extend the life of these warheads for two different ballistic missile systems is a great effort and we hope to garner efficiencies and effectiveness from it. So we are moving out in a big way in this area.

MR. CRAIG JENKINS: Craig Jenkins, IDA. If there’s another treaty, a new START follow-on or a whole new treaty and it involves non-deployed weapons, as has been talked about often, that would require inspecting storage areas and that kind of thing. And I don’t know what detail you can go into, but what do you see as the big challenges for that for operations and personnel at a base level?

GEN. CHAMBERS: Great question. A new treaty or a new set of arms control talks that involve both deployed and non-deployed weapons, and strategic and non-strategic nuclear weapons – I think the biggest challenge is the verification regime. We are use to, in a bilateral way, monitoring our big strategic systems in an arms control regime: onsite inspections, national means, etcetera. When you go into the non-deployed category or the non-strategic category, we’ve got to work hard on the technology and the footprint of an onsite inspection team that would actually go verify numbers of smaller things out there with nuclear warheads.

And so all sorts of work is being done in the inter-agency on this subject. New technologies are being considered. Obviously those new technologies are going to have to be agreed upon between our
arms control partners. But I think the verification piece, and the resulting footprint of the onsite team that would do this verification, is going to be the biggest challenge.

MR. BAKER SPRING: Baker Spring with the Heritage Foundation. I wanted to focus still a bit on the growth of the intellectual capital. As an outside observer, my experience with regard to the debate over New START was that non-specialists focused on the nuclear issues were far behind, for example, where they were at the times of INF and START. The question is, to what extent is the Air Force, and your Navy partners for that matter, engaging particularly the Congressional community in what you’re doing in terms of growing the intellectual capital in the nuclear field?

GEN. CHAMBERS: Great question, Baker. It’s my belief – it’s my boss’ belief, General Schwartz’s belief – that if we don’t get after this intellectual capital piece, our continuing to strengthen efforts and our efforts to make sure that the deterrent force of tomorrow is strong, will not last. So we’ve got to get after this.

Putting a lot of attention on it. I am spending a lot of time on the Hill talking to staffers about this. The Air Force has found some young professionals, some of whom are in crowds like this, that really want to get after this.

We have sponsored, for instance, two very find Ph.D.s, Daryl Press and Kier Leiber from Dartmouth and Georgetown, to come to our air component headquarters around the world to speak to them about this regional deterrent problem: the really important need to actually think operationally through a potential regional adversary that has a different nuclear threshold than we’re use to thinking about. And so other young Ph.D.s, Matthew Kroenig, James Acton, some of whom are on different views with regard to deterrence, we’re very much engaged with them. Inside the Pentagon, myself and my Navy brethren are very involved with our service chiefs and our service vice chiefs and our secretaries, in very robust debate to provide good military advice to policy makers on these issues.

I can assure you that over the last year a series of Joint Chiefs of Staff forums, as well as the Chairman’s new strategic seminars, are producing four-star level discussions about issues of 21st century deterrence. And it’s very, very healthy. It has to continue.

Your point about the Congressional audience is a great one. I’m finding the need to continue to talk about these things because, as I mentioned, a generation has past. There are some principles from the Cold War that we’ve got to remember. But we do need fresh thinking, and it’s actually a great opportunity for young academics.

A couple of days ago a young lady who is pursuing her undergraduate degree from Southern Cal, her Master’s here at American, who is writing her thesis on this very subject. And no military background, but an academic interest. And that’s exactly what we need. And if we can get some of those folks with Congress, that would be very helpful.

MR. DAN GOURE: Dan Goure, Lexington Institute. Let me extend this a little bit. It’s a great subject. There is a debate – we’ve had it now for a number of years – about whether you can get
reliability in the stockpile and continue our understanding of weapons and even have the hovering ability to build new weapons without actually doing stuff. And you just mentioned 20 years since we’ve had the last test. But it seems to me we’re in the same position when it comes to theories of strategic deterrence and all the rest. A large part of that Cold War theory was not academic, although we had all that. It was really built out of interaction with the people you were trying to deter, at all kinds of levels including frankly eyeball-to-eyeball. And it seems to me one of the questions here is can we really get to 21st century deterrence if frankly what we’re relying upon is academics, some of whom don’t have any background in military affairs, and war games?

GEN. CHAMBERS: Well, I would argue that the war gaming that goes on inside the Department of Defense is pretty sophisticated war gaming. We don’t construct paper adversaries. We actually bring in people who are experts in these adversaries to give us their likely courses of action, and then we play against them.

We analyze each move. We record what we’ve learned. We plow that into doctrine and into policy in some cases.

Clearly, the expertise that we had during the Cold War, in terms of Sovietology and understanding that adversary, understanding their mindset, the things they valued, their doctrine, reached a pretty high art form during the Cold War. We’re probably not there yet with the new set of 21st century nuclear adversaries. I think we need to get there. The intelligence community is starting to recognize that.

I’m optimistic. I’m a glass half-full kind of guy with regard to the ability to teach young people how to do this, like this colonel I promoted the other day. He never – he did not spend the first 10 years of his career, like I did, every third week on alert near my airplane ready to go. But we have sent him to professional military education. He has gone to our most advanced school of aerospace studies where these things are discussed. He is a weapons school graduate, so he knows how to employ his weapons system in a multi-arms situation – combined arms situation.

I like to think that those that aren’t burdened with the Cold War legacy can actually bring fresh thinking to this. Now how do we plow that into real policy and real doctrine, that’s our job. And I can assure you that the current series of war games that we’re involved in is starting to change that thinking and develop this.

Being able to sit down and talk with our new adversaries, that’s another matter. And obviously that’s a matter of policy as to when you actually talk to some of these aspirants who either have or are about to obtain nuclear weapons and that technology.

The last point on this is the allies that need to be assured. That is very much a growth industry. And I just returned from an eye-to-eye meeting with some of our Northeast Asian allies where they need, for all the right reasons, to be more greatly assured of our capabilities. And that’s happening. I mean, just as I’m having breakfast with you, we shared some very frank discussions with these allies about what we can bring to the deterrent umbrella that they are interested in. And our understanding
of what they value and what they believe about extended deterrence is very important. It has changed since the Cold War as well.

A great question. Other questions? Peter.

MR. HUESSY: General Chambers, I don’t want to rig this scenario, but Bruce Blair is proposing that we have no more than 10 bombers and no more than 10 submarines based on three bases, two sub bases and one bomber base. And the bombers would be totally de-alerted. He also says the subs should be de-alerted and be 74 hours outside of their patrol box, however you could do that. But let’s just leave that aside.

You’re in a crisis with the Russians or the Chinese and the president of the United States is in a position where conflict may erupt, let’s say on the conventional level. What destabilizing element has been brought into the picture when an adversary could take out our entire nuclear capability without using a single nuclear weapon: underwater, the three bases I’m talking about. They don’t need to use nukes. Or, they could do it over time in contemplation of committing aggression. I don’t want to rig the scenario, but to me that is the gravest, the most dangerous implication of what would happen if the ICBM leg was eliminated.

GEN. CHAMBERS: Again, this is a wonderful aspect of the current debate, and I hope it continues. But clearly you’ve touched, Peter, on some things that are very important to the Air Force, and to the Navy for that matter. Presenting to the adversary a targeting challenge, we believe, is very central to our ability to influence his decision making.

If the prospect of taking out our deterrent capability becomes at such a low threshold that he actually considers it, deterrence has been weakened. If we as a nation actually – as a military – actually has to go through many, many steps to posture our nuclear forces, for instance to generate them or to move them to a box where they are on alert, there are extreme destabilizing aspects to that. And contrary to some of the conventional logic, keeping forces on alert, either ballistic missile forces undersea or ground-based ballistic missile forces, actually gives the president a larger menu of options and a larger amount of decision time than if he had to bring those forces over a period many days prior to when he may actually need them, posture them, on alert.

And so this is why I try to remind everybody, this is all about stability. This is all about presenting a variety of diverse capabilities to the president and keeping them in a ready, credible state. And we do that -- the Air Force does this, the Navy does this -- in an extremely effective way and at not much overall cost. When you compare the cost of the strategic deterrent forces to the entire DOD budget, it’s just not very large.

Other questions?

HARUN DOGO: Harun Dogo, Finance Committee staff, working for Chairman Baucus. One of the things you talked about was the question of SLBM and ICBM integration. You talked a little bit about
the warhead cooperation. What are the challenges in sharing a common airframe between an SLBM and an ICBM?

GEN. CHAMBERS: Well I’m not an expert on Trident missile tubes or the D-5 missile, but they do get launched from different platforms. Although there’s a lot we can share about what we’re learning about propulsion technology, for instance, diameters are different. But there is sharing of everything we’re doing in the ICBM demonstration/validation program with regard to modern technology.

Perhaps a next-gen propulsion technology, we’re sharing that information with our Navy brethren. We see – Admiral Benedict, myself, Global Strike Command Commander General Kowalski – see other cooperative efforts potential in the guidance system piece of the two ballistic missiles. Both of us need to work on that in terms of modernization. And so missile guidance sets for the two systems could share some technological lessons. But given the two very different platforms, our charter is to pursue the maximum amount of commonality. But it’s going to be very difficult to be identical in every aspect.

MR. HUESSY: Thank you, General Chambers.

GEN. CHAMBERS: Thanks, Peter.

(Applause).