

THE BROOKINGS INSTITUTION
PRESENT MEETS FUTURE: EVOLVING DEFENSE PARADIGMS
Washington, D.C.
Thursday, March 15, 2012

PARTICIPANTS:

Opening Remarks:

LIEUTENANT GENERAL CHRISTOPHER D. MILLER
Deputy Chief of Staff for Strategic Plans
and Programs
U.S. Air Force

PANEL 1: CONSTRAINED BUDGETS AND INTERNATIONAL PARTNERING PLANS:

Moderator:

PETER W. SINGER
Senior Fellow and Director, 21st Century
Defense Initiative
The Brookings Institution

Panelists:

COMMANDER MIKE HANNAN (USN)
Federal Executive Fellow, Atlantic Council
“Punching Above Their Weight: How Four Small
European Navies Can Support American Strategic Rebalance”

CAPTAIN SCOTT CLENDENIN (USCG)
Federal Executive Fellow, The Brookings Institution
“Networking Maritime Security in Central America: How to Better Link With the
Region’s Maritime Security Services in Combined Operations at Sea”

LIEUTENANT COLONEL ARTHUR “DWIGHT” DAVIS (USAF)
National Defense Fellow for Special Operations And Low Intensity Conflict,
Naval Postgraduate School
“The Regional SOF Headquarters: Franchising the NATO Model as a Hedge in
Lean Times”

PANEL 2: PUSHING BOUNDARIES -- ENGAGING CHINA OUTSIDE OF ASIA:

Moderator:

KENNETH LIEBERTHAL
Senior Fellow and Director, John L. Thornton
China Center
The Brookings Institution

Panelists:

LIEUTENANT COMMANDER AUDRY OXLEY (USN)
Federal Executive Fellow, The Brookings Institution
“Dragon Training: Collaboration Between the USN
and PLA(N) in the Western Hemisphere”

LIEUTENANT COLONEL EDUARDO ABISELLAN (USMC)
Federal Executive Fellow, The Brookings Institution
“China in the Middle East: The Emerging CENTCOM Challenge”

Lunchtime Keynote:

MAJOR GENERAL FHR HOWES OBE
Head of British Defense Staff (USA) and Defense Attaché
British Embassy, Washington

PANEL 3: TERRORISM AND COUNTERINSURGENCY BEYOND 2012:

Moderator:

NOAH SHACHTMAN
Nonresident Fellow
The Brookings Institution

Panelists:

LIEUTENANT COLONEL KRYSTAL MURPHY (USAF)
Air Force Fellow, Argonne National Laboratory
“Bioterror Bedlam: A (Much Needed) Framework
for Risk Assessment, Planning and Prioritizing”

RANDALL BLAKE (National Counterterrorism Center)
Federal Executive Fellow, The Brookings Institution
“Next Chapter of Global Jihad: New Realities Trumping Old 9/11 Paradigms”

COLONEL ERIK GOEPNER (USAF)
Military Fellow, Center for Strategic and
International Studies
“Battered Spouse Syndrome: How to Better Understand Afghan Behavior”

PANEL 4: OPPORTUNITIES WITHIN DOD IN AN AGE OF AUSTERITY:

Moderator:

MICHAEL O'HANLON
Senior Fellow and Director of Research, Foreign Policy
The Brookings Institution

Panelists:

COLONEL LOURDES DUVALL (USAF)
Federal Executive Fellow, The Brookings Institution
"Be Quick, Be Useable, Be on Time: Lessons in
Agile Delivery of Analytic Tools"

COLONEL KARL GINGRICH (USA)
Federal Executive Fellow, The Brookings Institution
"Making It Personnel: The Need for Military
Compensation Reform"

COLONEL DAVID TRYBULA (USA)
Army Fellow, Institute for Defense Analyses
"Big Five Lessons for Today and Tomorrow"

* * * * *

P R O C E E D I N G S

MR. SINGER: Hello. I'm Peter Singer. I direct the 21st Century Defense Initiative here at Brookings. And I'm delighted to welcome all of you to the 2012 Military and Federal Fellow Research Symposium.

Like a number of other think tanks and universities around the nation whose members will be represented at this symposium today, Brookings not only carries out its own research, but also hosts the Federal Executive Fellows Program, which is made up of officers and officials from all of the services and several government agencies. It was from this military and government fellows program that the concept of this symposium sprung several years ago.

Those of us who were involved in hosting these programs saw how the officers involved weren't just serving as a valuable bridge between their home services and the policy and academic worlds, but they were also conducting their own top-flight independent research on issues faced by the national security community. And it was because of the experience and expertise that they brought to the table that they were often focusing on important topics that were either under-researched or they were bringing new perspectives to old debates. That is, they were often bringing the best of both worlds to complex issues. And so this symposium series was created to provide a platform for that kind of research.

The theme of this year's symposium is "Present Meets Future: Evolving Defense Paradigms." And I think it shows very well the value of that kind of approach of allowing officers to conduct independent research on what they believe will be emerging topic areas of importance. Today we're going to enjoy panel discussions on the latest research in areas like international engagement strategy, China's rising global influence, terrorism, counterinsurgency, and Department of Defense reforms.

Now, what is striking is that while each one of these topics encompass core policy questions today, the fellows researching these topics decided to start on their journey almost 10 months ago. That is, those of us who work in both D.C., but also in academic can attest, it is all too rare to get the opportunity to discuss timely issues, but from the perspective of in-depth research.

It's with that in mind that I have to emphasize for all of you, but particularly for the media joining us here today, that the research and the policy recommendations and statements made by those gathered here today are not about espousing official policy. Rather, it's a research symposium intended to provide a greater awareness of the research work that these leaders are producing on cutting-edge issues; importantly, cutting-edge issues that both the research world, but also the bureaucracy is finding a challenging time dealing with today. That's what makes it such an exciting event.

And it's been an honor for those of us here at Brookings to see this program come together and we very much appreciate all of you joining us today. And with that, I'm especially honored to welcome our opening speaker, who will help us set the scene for this event.

Lieutenant General Christopher Miller's career very much exemplifies the diversity of experiences and expertise that we ask of our top officers in the U.S. military today. He entered Air Force service as a graduate of the Air Force Academy in 1980, subsequently earning a degree in international relations from Oxford. His staff assignments include two previous tours at Air Force Headquarters, International Affairs, and as a policy advisor to the U.S. ambassador to NATO.

His operational assignments include two wing commands, serving as a senior Air Force commander in Afghanistan, and command of America's only B-2 wing at

Whiteman Air Force Base. He currently serves as deputy chief of staff for strategic plans and programs at Headquarters Air Force here in Washington. In his position he leads the development integration of the Air Force's long-range plans in the 5-year, \$635 billion Air Force Future Years Defense Program.

General, we're delighted to welcome you here today. (Applause)

LIEUTENANT GENERAL MILLER: Good morning, ladies and gentlemen. And thank you, Pete, for that kind introduction.

It is a real pleasure to be here and, in a way, the title of this symposium is actually sort of what my job is, bringing the present and the future together with the near-term program. That's clearly something that we're living in the present and doing it every day, trying to make the best of the resources we have to meet the jobs that we are assigned as an Air Force and as a Department of Defense. And then you don't do that without looking out ahead to the future, which is sort of the other half of the job. So it's a real pleasure to be here and kind of talk about what's in my job jar, but really to focus on warming up the discussion for you, for the fellows who are going to present and the group of folks who are here to talk about some important issues.

There are a couple of things about DOD that I think make this a timely topic at any time, but particularly as we approach a transition point. One is, by nature, a big institution is difficult to change. And so when we're thinking about progressing into the future, little things done early can have a big effect, but they have to be done and they have to be done intentionally.

And second, DOD has another sort of a disincentive to change and that is we've been very successful for a long time. And so it's sometimes hard to break out of current-day constructs, current-day ways of thinking about the problem, and to move forward. And so if you're here as a fellow either presenting or with your fellow fellows, or

if you're a young officer who's just getting ready to start down the road toward these kinds of things, I've got some good news and some bad news for you. The bad news is by virtue of being a fellow, you're a designated change agent. The worst news is sometimes being the tip of the spear means you're first contact with things that are hard to change. But the good news is it means you have an opportunity to make a difference and to help take a bite out of some problems that are central to the future prosperity and survival of our nation.

And I did not do my homework to figure out how to change slides, but I guess we got it figured out.

So my perspective this morning as I open things up is going to be from an Air Force perspective because that's the job I'm in right now, but I'll try to relate it to the larger DOD and national perspective where it's appropriate. If you kind of look at the evolution of our defense complex, and particularly the Air Force part of it, since the end of the Second World War, we've gone through some very distinct phases: end of the war, containment and collective security was clearly one of them, things that we all know well because they've been in the vernacular for a long time that was associated with the Cold War.

And this line here is an interesting sort of way of capturing the relationship between technology and capability and the resources that it takes to field that technology. Because that's the procurement for Air Force weapons systems over time, the number of platforms that we bought at particular eras as we go through this last half-century-plus.

So the end of that inflection point with the end of the Cold War, we sort of moved into an era of regional operations and stability. We as an Air Force focused on what we call global reach and global power. We saw technology bring us precision strike

and integrate that into things like Desert Storm and post-Desert Storm operations. 9-11 brought us another inflection point into what we call overseas contingency operations, characterized by continuing nuclear deterrence, which has been a strategic theme throughout, but a great increase in our need to surveil the battle space to understand what it is that's happening not only in the battle space, but in the wider world; continued focus on building partnerships and outside of formal alliances, much more so than in the time previous.

And so if you look at the time period we're approaching now -- this is not a DOD term, this is my term for what we are approaching now -- we have been focused on the low end of the conflict spectrum. We have been continuing some pieces of the high end of the conflict spectrum. But we are now approaching a time where we're trying to rebalance the way we approach things. We're facing some challenges out here in terms of continuing to be able to operate in an anti-access denial environment; continue to have high-end combat forces, but without losing the low-end capabilities we have. We need to continue to have the tools that have given us success over the last couple of decades.

The importance of space and cyber is clear. We still need to be able to operate across the planet, and so right-size lift is one of the components of this. All of which, from an Air Force perspective -- and we'll come back to this -- adds up to global vigilance, reach, and power to do these sorts of things that are part of the evolving DOD strategy.

This is a very busy chart. It's not my intent to walk through every single one of these things or to try to tell you that they are in priority order or that they're even necessarily all accurate. But I think it is accurate to say that globalization is a continuing trend. It will not slow down. It brings with it a proliferation of capabilities. It brings with it

the visibility or and the existence of rising extremism, at least in the near term.

Cyberspace, incredibly prevalent in most of the developed world; increasingly prevalent in the developing world. It is a domain and an area that we cannot afford not to think about a lot.

If you look at the impact to demographics, increasing populations, increasing urbanization; manpower shortages that are in pockets throughout the world, but, nevertheless, significant; you look at things like supply and demand, the U.S. role as a superpower changing over time; China as a strategic challenge and a strategic partner; Russia continuing to evolve; and I could go down the list on the left, what does that imply for us? And you can kind of see the implications on the right, all of which, from a U.S. DOD standpoint, require us to relook at some of the basic assumptions we have about how we prepare for war, how we prosecute and sustain peace, where we operate routinely, and so on.

I think it's safe to say that not only are individual things on either side of this chart important, but one of the most difficult pieces of this is understanding which of those connecting lines makes a difference. And the research that you as fellows have been doing has a lot to do with what those connections are and what direction things are moving along those connections.

As a programmer I have to talk about resources for a couple of minutes. So, I think it is important for us to remember that there are macroeconomic trends that will affect our careers, your careers, probably for as long as you're wearing a uniform for the military fellows. And they're different from what we've seen in the past.

From '66 to 2016, all of this is based on OMB numbers. You can see the increase in mandatory; relatively constant, actually slightly decreasing non-defense expenditures; a decreasing percentage of federal outlays for national defense. But it's

really pretty striking when you look at the percentage that we've devoted to defense as a graphic percentage: '66 at 44 percent down to a projected 15 percent in 2016. That affects the choices we can make.

And it's seen most clearly here where you can see the projection of the federal debt. And so while threat has always modulated the level of resources available to defense, there are constraints on that modulation that may change historical patterns somewhat.

And when we look at historical patterns, it's interesting to note that defense outlays are cyclical. That is no surprise, and you can see it's related to the threats. This chart includes spending on operations, so in this particular case it includes overseas contingency operation funding.

The point I would make here is that we're on a path; we were on a path, with the '12 budget to a 24 percent reduction. We are now about on this 29 percent reduction. A further reduction would still only bring us down to a historical average, above the periodic low. But why that's still a concern has to do with this chart.

And what this shows, I won't walk through it in a great deal of detail, but there are two conclusions that are important. One is operations and maintenance. What it costs us to do business has been growing as a percentage of what we spend on defense. The second is procurement, although it has not radically decreased, it is definitely less than it has been at many periods in our history as a service, while what we've spent to sort of grow our seed corn has been relatively constant.

If you're thinking about the rise in personnel costs, this chart may surprise you a little bit because it shows military personnel spending as a percentage relatively level. However, what you have to remember is that in-strength here was about twice what it is here. And so this economic picture, this division of the pie, is likely to be a

feature of any solution that we think about for any military problem for a good while to come, although, like Secretary Panetta says, fiscal security and national security do not have to be opposites of each other.

One of the things that I think regardless of your service, and this has got an Air Force symbol on it because I'm an Air Force guy, but the United States has thought globally about military presence and the use of military force to maintain peace and stability for a very long time. That isn't unlikely to change. How we do it, though, and the complexity of the environment we're operating in is, in fact, not decreasing. And if you look at the Joint Force missions that the secretary of defense just indicated in his January strategy are important to us, it's a pretty broad list of things, which I notice in your research topics you're touching on quite a few of these.

Again, I'm not going to take the time to go through in detail each of these missions because we could spend a lot of time on every single one of them. What I think is important, though, is if you look at how they relate to each other.

We are still operating over the full spectrum. We are still operating over the entire planet. But exactly how we do that within that decreasing resource pie that we talked about is really kind of the key issue of our day, I think, in some respects, and not only how we do it today, but, most importantly, how we think about doing it into the future. When I look at aviation, space and, to a lesser extent, cyber-related programs, the timeline for developing a significant capability is in the decade-plus timeframe. So things that we are thinking about now will not come to fruition until the mid-'20s most likely, which means that all of these missions and the capabilities that we need to do them, for the most part we need to envision what those capabilities are today so that we can get the appropriate start or put the appropriate resources against the existing technologies and doctrines and capabilities.

And that kind of goes back to what I was talking about with doctrine and people. DOD is a big organization. The business of keeping expertise, developing expertise, training people to think about problems in a way that allows them to solve them, we've seen over the last 10 years the development of a counterinsurgency capability across the services that we did not have when we started in Iraq and Afghanistan. Maintaining that expertise is not going to be easy, neither is evolving it into the kinds of challenges that we'll have to apply those same people against in the future.

So this is a -- it's a pretty large set of challenges and there's not yet, because of the nature of our defense requirements, a way to say we are not going to do many of the things that are there.

So as I mentioned, from an Air Force perspective only, global vigilance, reach, and power. What does that mean?

Global vigilance over the last 10 years, you've seen the building of numerous remotely piloted aircraft platforms to provide the kinds of ISR that we need in the environment we've been flying in. That is not necessarily transferrable into the area of denial, anti-access environment.

So how do we keep that capability? How do we keep the kind of capability that's let us put precise munitions against well-identified targets and translate that into a larger conflict, higher intensity conflict spectrum? How do we in a world where the routine alliances are decreasing somewhat, how do we continue to have the throughput we need to get people to where they're going?

And for us, the Air Force has divided up our job jar into about 12 core functions. I am not going to go through how all of these play together. What I am going to say is that the network of relationships between those core functions and what you can call a system of systems in getting to mission accomplishment in any particular task is

critical.

So, for example, global precision attack doesn't happen unless you have the ISR to identify the targets, the command and control to put the assets against the targets. It does not happen unless you have the reach to get the platforms to where they need to operate from. All of that basically gets to-- we as an Air Force have to maintain superiority in airspace and cyber so that we can operate. And I know as I've looked at the topics that are going to be discussed today, there are a great number of looks at how do we become more agile? How do we, for example, keep our acquisition processes on track to stay even with this kind of a demand, to evolve the capabilities we have today against the evolving capabilities of tomorrow?

So I would say just as a way of warming up the discussion a little bit for you, some of the things that I think about as we go forward as an Air Force are on this list. We have seen a lot of evolution in our capabilities over the last 10 years to do counterinsurgency warfare, to do precise application of force, to do stability operations to provide assistance through prevention reconstruction teams, those kinds of things. What of those lessons do we need to propagate? What things do we need to put on the shelf? What things do we need to decide were not profitable for us?

We talk a lot about whole of government, about coalition operations. I would argue that those things happen because real people work with their peers in those organizations, build real relationships that allow those things to happen and allow systems that naturally will not necessarily jive to come together to accomplish common purposes. And I'll talk a little bit about that in just a minute.

We need to look at how we connect operations and domains. For example, we talk about cross-domain capability: airspace, cyber, undersea, surface of the sea. The actual application of that cross-domain capability in a high-tech, speed-of-

light world is a different kind of challenge from what it was in Vietnam, what it was in World War II, where communications were done by voice and planning was done by paper.

So it is a conceptually different challenge when you look at, for example, in the F-35's case, people think of the F-35 as a low-observable platform and that as being one of its key characteristics. But I would argue that one of its other key characteristics is sensor capability and the ability to plug into a network. How do we leverage that? And not in grand strategic terms, but how do you make that operationally relevant across that joint and coalition team?

How do we decrease what we call the OODA loop, the observe, orient, decide, and act loop? And that's an acquisition thing. It's a geostrategic thing. It's a training thing. Our world is moving faster, as you all well know because you're a part of it, and the agility of our processes will directly affect our ability to succeed.

I would argue that we have rising expectations in the form of a very well-informed and very well-aware population across the world that is connected. And so we have seen a great increase in the standards of performance for the individual soldier, sailor, airman, and Marine in conflict, and those standards require risk management, require a great deal of training. And how they play out in the low end of the conflict spectrum versus the high end of the conflict spectrum are likely to be two different things. So, in a way, we have made it look easy for a long time, and propagating that in a world of advancing challenges is not going to be either easy or cheap.

As I mentioned, we have the challenge of resource constraints, which may or may not work into a reduced level of resources for DOD in the future. But we have to be aware of, just like that aircraft procurement line that I showed you, regardless of how capable individual platforms become in the future -- ships, aircraft-- they can't be

more than one place at one time. So our abilities to engage with partners and allies, our ability to have routine presence in under downward pressure as we go forward. So what does that imply for our strategies?

And finally, the shape of the force. We design our forces over time to meet the challenges we expect them to face. Deciding what those challenges are going to look like in 15 to 20 years and having the right mix of force prepared to go and take on those challenges may or may not change the shape of the force from what we see today. And that is an issue that we're all going to have to face as we go forward.

And I think, you know, sort of my bottom line is the capability to be a force for good in the world that the U.S. armed forces have tried to be for a very long time, to be an influencer, to have capability to solve the problems that are out there, like assisting when Japan had an earthquake and a tsunami, like being able to engage in Libya, those things are not a birthright. They're earned. And they're earned in an environment where the resources are under pressure and the challenges are increasing. And so, as I mentioned, as fellows you have the privilege of taking a year to think about those things and to add a contribution to the body of knowledge.

But not only what you're producing as fellows as research is important, the last thing I'd leave with you, and I believe this very firmly -- again, this is an Air Force graphic; you could have the same thing for any service of any nation -- but it boils down to the business we're in is fundamentally about people working together to do a mission. And it's not just people within the military services, which is why the fellowship is a uniquely valuable thing because it gives you an opportunity to connect with your partners in thought; it gives you an opportunity to connect with a larger community outside the Department of Defense. We cannot be insular within any service or within the Department of Defense and do our jobs because we are fundamentally connected to the

people of this nation.

And so this fellowship, I'm hoping that you've seen that as you've gone through the year, is really a tremendous opportunity for you to be that conduit and to contribute both internal to the defense debate and as a citizen and a representative. So I hope you'll continue to do that. I hope that the dialogue you have today as part of this symposium is outstanding. And when you go back to your service or to your organization, I hope that you'll take not only what you've been able to contribute as a fellow in research, but also the linkages that you will find as you go through the next 10, 15 years, or however long you stay in your organization. You'll find those connections to be incredibly important in solving the problems that we cannot envision right now.

So with that, I hope this has been a useful warm-up to you as you get ready to go, and I look forward to taking a couple questions. (Applause)

MR. SINGER: So we've got time for a couple of questions. Wait for the mike to come, stand, please identify yourself. And one last reminder: questions end with a question mark. So please raise your hand if you want to ask a question. Right there.

MR. GRINDSTAFF: General, there's talk about a new Stealth Bomber --

MR. SINGER: Can you introduce yourself?

MR. GRINDSTAFF: Oh, Hugh Grindstaff, THIS for Diplomats. There's talk about a new Stealth Bomber, the possibility?

LIEUTENANT GENERAL MILLER: Yes. The secretary of defense last year decided that the nation needed a new bomber and his direction was that we would press on to develop that. It's on the kind of timeline that I mentioned; it's a decade or so. And we have direction to move out with that and to do it as efficiently as we can with some particular parameters that the secretary gave us.

MR. GRINDSTAFF: Thank you.

MR. HUMPHREY: Peter Humphrey. I'm an intelligence analyst. Can you shed some light on the Global Hawk diminution? Is it that our system, satellite systems and lower elevation drones are just so good that we no longer need Global Hawk or what's going on there?

LIEUTENANT GENERAL MILLER: No. We had three key factors that played into the Global Hawk decision. One was the aggregate amount of high-altitude ISR that the joint team needed to have changed from the time that the Global Hawk was initially put into production to augment and then replace the U-2. The second aspect was the U-2 has capability that is still more than adequate to do the job we need. And third, when \$487 billion comes out of DOD's top line over the FYDP, we had to make some very difficult choices about things that we could and could not keep. And so, in general, if we had the capability to do the job we needed and could do that less expensively, we chose for the less expensive option.

MR. HUMPHREY: Do they get mothballed or scrapped or what happens?

LIEUTENANT GENERAL MILLER: That's still being decided.

MR. SINGER: Right there.

MR. COBER: Stanley Cober. Clausewitz defined war as the continuation of politics by other means. In Libya, we used military force, but did we achieve a political objective? We created a political space, but did we acquire any influence to affect the shaping of that political space? If not, are we fulfilling that definition of war?

LIEUTENANT GENERAL MILLER: Sir, that's a great question. What I would tell you, though, and it's not to evade the question, but from our perspective as military professionals we're the instrument, we're not the policymakers. Our job -- and

really one of the things I was trying to portray is that when we're thinking about preparing a force to fight over the timetable that we have to think about, we have to be prepared not only to do those kinds of operations or to do the counterinsurgency operation or to fight a high-intensity war with a state actor, we have to be prepared to do it in combination with other things. And so I think what I would say is the instrument did what was asked of it and the political and sort of macro considerations that follow is not in my job jar.

MR. SINGER: We've got time for one last question because the next -- right here.

MR. MARQUEZ: Thank you, General. Ricardo Marquez, GAO. To dovetail with the question on Global Hawk, can you describe some of your efforts to collaborate with the Navy perhaps on decisions that you make in the Air Force with resources and programs? Global Hawk and Air Force impacts what the Navy's going to be doing. Does the Air-Sea Battle Office set a precedent for cooperation? How deep will it go?

LIEUTENANT GENERAL MILLER: Yeah. That's a great question and it gets to something that I didn't have time to talk about, but there are a couple of important things. There is cooperation and collaboration on the operational level that drives a lot of things. Air-Sea Battle and the intent of the Air Force and the Navy is part of a larger joint operational access concept to do at the detail level better comparisons of capabilities so that we can synergize, that is important and that's underway and we'll have some, I think, very productive downstream implications.

In terms of making the sort of macro decisions about capabilities, there's an established process between the Joint Requirements Oversight Council and DOD's resource allocation process where we all build -- the services all build their individual programs, as you know, and before those programs get turned into the DOD program

and the President's budget, there's a pretty close head-to-head comparison of what capabilities each of the services brings to the table.

And so the short answer is yes, those tradeoffs were looked at and I think that will only get better as we continue to find ways to connect earlier in the process and not so much at the macro level, although we can't stop connecting at the macro level.

MR. SINGER: So, General, we very much want to thank you both for joining us today, setting the scene for the following panels -- you couldn't have done a better job -- and, more importantly, just for your service to the nation. Please join me in a round of applause. (Applause)

LIEUTENANT GENERAL MILLER: Thank you. My pleasure.

MR. SINGER: And let's have our -- to keep things rolling, let's have our next panel please come up here on stage.

So, we've met with some mission success, we are close to being on time. We'll see if the moderator of this panel can stick to that.

The topics that our panelists are presenting today are perhaps more timely than many of them anticipated when they first chose them several months ago, that is, all of them started out in the fall and then in January we get the defense strategic guidance that emphasized the need for greater engagement and partnering to help deal with both emerging strategic challenges but also budget constraints.

And the President laid out that, one, there would be a "rebalance" to the Asia-Pacific region, two, that a "smart defense approach" to our NATO and European allies to "pool, share, and specialize capabilities as needed to meet 21st century challenges" and, lastly, three, "building partnership capacity elsewhere in the world is important to sharing the costs and responsibilities of global leadership" and so the

guidance directed, “new partnerships with a growing number of nations, including those in Latin America and Africa”.

The guidance identified the challenges in the priorities. That’s not the hard part. The hard part is now the “how” and that’s where these three fellows’ work comes in.

First, we’ll hear from Commander Mike Hannan with the U.S. Navy, who’s a Federal Executive Fellow at the Atlantic Council. He’ll be speaking on evolving U.S. maritime partnerships, how we can work with NATO and other European navies to support strategic rebalance.

He’s a 1991 graduate of the Naval Academy and a graduate of the War College. He’s served in a variety of Naval intelligence assignments, participated in operations in Somalia, Support Democracy in Haiti, Desert Fox and southern watch strikes in Iraq, and most recently a senior intelligence officer aboard the Eisenhower in support of ground forces in Afghanistan.

He also served as a naval attaché in Germany.

Then we’ll hear from Captain Scott Clendenin, U.S. Coast Guard, who’s a Federal Executive Fellow with us at Brookings. He’s going to be speaking on networking maritime security in Central America, how better to link with the region’s maritime security services and combined operations at sea.

He is a 1990 graduate of the Coast Guard Academy as well as a graduate of the Joint Military Intelligence College and the Naval War College. He’s served five tours at sea on cutters commanding three of them. He spent much of his time conducting operations in the Caribbean and Eastern Pacific, extensive operational work with Latin America partner nations, and ashore he’s served in a variety of positions in Coast Guard intelligence as well as serving as the Coast Guard attaché to the Dominican

Republic.

And, finally, we'll hear from Colonel Select Arthur "Dwight" Davis, who's National Defense Fellow for Special Operations and Low Intensity Conflict in the Naval Post Graduate School. He'll be speaking about Regional SOF Headquarters, franchising the NATO model as a hedge in lean times.

He's a '91 graduate of Auburn University and a Graduate of the Air War College. He's a master navigator with close to 4,000 hours of flight time and he's served in a variety of airframes from the T-34 to the C-130 and all its variants.

He's commanded two squadrons and in these tours he's served in a variety of operations including Operation Deny Flight, Deliberate Force, Joint Venture in Bosnia, Enduring Freedom in Iraq, and it's notable to his topic that most of his aviation background has been in special operations, including most recently commanding the 551 Special Operation Squadron at Cannon Air Force Base.

Finally, he gets a special prize for being the fellow who flew the farthest to join us.

So, with that, I'll turn it over to our panel.

COMMANDER HANNAN: Good morning. Actually, I'll have to just start out really quickly to follow up something that Peter said earlier. My talk here will be exactly my opinions, they're not policy; I don't speak for the Department of the Navy or the Department of Defense.

The United States plans a realignment of defense priorities following a decade of combat in the Middle East and the emergence of growing powers in the Indian Ocean and Asian regions. Based on the President's new defense strategy guidance with a shift in priorities to the Pacific and the Persian Gulf, the United States must evolve its international partnerships in order to further our national interests.

We must call on historic allies and partners, especially those in Europe, to assume more of the burden as security producers.

Former Secretary of Defense Gates made this point very clear in his farewell address to NATO last year challenging our allies to improve their own defense capabilities and those of the alliance.

With the United States forced to take on additional security responsibilities in Asia and the Middle East, Washington will look to its European allies to take a leading role in managing certain crises and contingency operations, especially in the European periphery.

The United States should strengthen bilateral efforts with specific European nations who can be leaders for security development, not only within the alliance but also using external frameworks. But to whom should the United States look as enhanced maritime partners?

Several European navies have unique strengths, modern capabilities or historic relationships with depth beyond that of the United States Navy. The recent Libya conflict revealed the curse of both national interests and defense shortfalls within Europe, therefore to identify partners who could be valuable maritime security providers, the U.S. must identify who is both capable and willing to operate and if that country's leadership will make the required defense investments.

I argue that four small European navies, three NATO allies, and one Partnership for Peace member are prime candidates to provide unique aspects of maritime security, which support the new U.S. defense strategy, these being Norway, Sweden, Denmark, and the Netherlands.

These nations have signaled willingness to lean forward on security matters even through policy declaration, operational commitment, or defense

investments. I'll talk about my recommendations for specific capabilities or regional relationships in which the U.S. should encourage these nations to focus defense efforts and evolve into collaborative security providers.

I've grouped Norway and Sweden together first in my discussion and secondly I'll touch on Denmark and the Netherlands, this is due to their regional or functional strengths that factor in the calculus and you'll see where they can operate as leaders in a particular field. So, first Norway and Sweden.

These two nations have extensive capabilities in mission sets where the United States Navy must expand maritime collaboration, operations in the Arctic, littoral warfare confined in shallow waters, and amphibious operations for humanitarian or peacekeeping efforts.

The Arctic High North region is Norway's declared number one foreign policy priority. That nation has proactively engaged Russia as well as China on various Arctic concerns ranging from search and rescue to maritime sea claim delineation.

The United States seeks to ensure access to the growing availability of High North waterways due to climate change while maintaining national security needs. Search and rescue as well as advancing intelligence, surveillance and reconnaissance capabilities are areas for direct military coordination with Norway and Sweden in the Arctic.

Norway especially can act as an interlocutor to help shape Russian policies in the High North due to their own extensive bilateral efforts with Moscow on this issue. Norway has also focused investments on satellite coverage for communications and maritime domain awareness in the High North.

Data sharing with Russia and China, experienced by Norway and Sweden, already encounter piracy operations in the Middle East and the Gulf of Aden

region can be a model for cooperation in the Arctic.

Both Norway and Sweden have extensive experience in NATO and EU exercise operations involving mine counter measures and in-shore warfare. These nations can be significant leading partners with fellow allies in mine clearance should a contingency arise, not only in traditional NATO areas, but also in crisis choke points such as the Strait of Hormuz.

Additionally, Norway and Sweden can host training efforts for mine hunting for militaries outside of Europe, specifically the Gulf Cooperation Council Nations or Asian partners. Both Norway and Sweden have the facilities and expert cadres to build partnership capacity in these war-fighting skills.

Over all literal warfare is a skill set well known to the Swedish and Norwegian navies. Activities that constrain in shallow waters, involving modern stealth corvettes such as the Norwegian Skjold or Swedish Visby class ships can support the U.S. Navy's own evolving literal combat ship program and provide training to NATO or nations outside of Europe.

The Baltic and North Sea regions offer unique training grounds for exercising a wide spectrum of literal operations ranging from high intensity naval combat to ISR and even maritime domain awareness.

The U.S. Navy has a gap in capabilities that may reduce its ability to establish and maintain sea control in a hostile environment in literal regions. Norway and Sweden have the knowledge and skills to operate in this environment and may help mitigate our own shortfalls.

The Swedish and Norwegian militaries also have a history of close partnerships in Asia, especially in undersea warfare. Sweden has an extensive track record of working closely with Singapore since the 1970s. These ties include the sale

and production of modern submarines, associated crew training, and undersea research and development.

Norway produces military technical cooperation with Malaysia as well as seamanship training with Indonesia. These existing relationships could be expanded in collaboration with the U.S. Navy, not only to continue improvements in those existing partnerships, but also to expand to other Southeast Asian nations, such as the Philippines or Vietnam.

Finally, with defense rebalance, the U.S. should seek leading nations to increase engagement in Africa. Norway and Sweden have long experience on the continent either as part of the United Nations or EU peacekeeping operations, as well as humanitarian assistance and disaster response efforts.

Additionally, Norway conducts search and rescue coordination with Angola and both Norway and Sweden are involved with their own bilateral partnership programs to help develop coastal maritime capabilities for several West African nations.

Norway and Sweden have decided to expand their own amphibious forces for partnership and humanitarian missions in Africa.

The U.S. should look to engage with these two nations to help them transition to an active leadership role in the Africa Partnership Station effort and other AFRICOM engagement activities.

Finally, shifting to Denmark and the Netherlands, these two nations have highly developed naval platforms with advanced air warfare capabilities benefitting the expansion of sea-based ballistic missile defense as part of the European phased adaptive approach.

Three frigates from Denmark and four frigates from the Netherlands share the latest generation SMART-L long-range surveillance radar and the APAR

phased array radar systems. Initial studies conducted with the United States concluded that with certain modifications, these radar systems could conduct ballistic missile defense tracking in intercept missions.

The Netherlands and Denmark each are pursuing investments of around 250 millions Euros for the required technology upgrades.

Enhancing the Afloat BMD network with Denmark and the Netherlands would establish a burden-sharing foothold for European missile defense. The Danes and the Dutch combined could provide seven BMD capable platforms, nearly twice the number that the U.S. Navy seeks to homeport in Rota, Spain.

These two nations could participate early on within the EPA framework as a beta test for eventual European coverage of a NATO layered missile defense system. I would argue that the U.S. Navy should move forward to integrate these navies into the sensor-to-shooter process at the earliest point and exercise a U.S., Dutch, and Danish command and control architecture.

Finally, employing the Danish and Dutch frigates into EPAA would be a critical enabler for the U.S. Navy freeing the Rota-based American ships for other missions or to provide BMD support in the Middle East.

Additionally, Denmark and the Netherlands could train and exercise with other navies facing a ballistic missile threat, potentially GCC nations or Asian partners. These efforts would provide additional resources for the United States as requirements for BMD continue to expand globally.

In conclusion, implementation of these recommendations would require significant diplomatic engagement by the United States clearly beyond the traditional military-to-military relationships. The U.S. government must heed the charge from Secretary Gates and challenge select nations to become active security producers.

Norway, Sweden, Denmark, and the Netherlands are prime candidates where the return on investment can be quite vivid. Enhanced and interoperable forward partnerships led by Europeans, expanding the freedom of maneuver for the United States Navy, and supporting our rebalanced posture across the oceans. Thank you.

CAPTAIN CLENDENIN: Good morning. My paper forwards some recommendations specifically, as Peter mentioned, in regards to maritime engagement in Central America.

Instead of looking outwards at our partners, I actually looked internally to the way we're organized as a government to conduct that engagement and I forward that we can build a more robust network between our security assistance functions and our maritime operations.

This has been a -- this fellowship has been a great experience and throughout it I've attended several events and discussions on Central America and I think everyone here is aware of the concerns about impunity and the growing violence in the region.

There are efforts underway with partner nations that I believe, in my personal opinion, deserve cautious optimism.

Right now, in a sea change that I've seen over the past 20 years, there is universal recognition in the region by our partners that there's no one nation that can solve these problems in this region alone.

Additionally, there are some regional initiatives that, in fact, the State Department and international organizations are working with Central American partners on security including, you may be aware, of SICA, which is the Central American Integration System, which is coming together with regional security strategies for all the Central American nations.

Security assistance has made clear progress throughout the decades. I have personally witnessed that and it's hard to visit any of those countries and not have people come up and talk to you about all the training they've had from the U.S. And we've also seen a lot of leadership from the region; the Colombians have stepped up, and are reaching out to their neighbors and have actually implemented a maritime law enforcement academy where they invite neighboring nations to come train with them on maritime issues.

SOUTHCOM AOR, as Peter alluded to, is an economy of Force Theater with limited U.S. assets and there's a lot of mission. I think everyone here is aware that the large trafficking and maritime threat issues we have in the region, these organizations are networked, they're agile, they're able to turn their tactics on a dime based on any indication that the international law enforcement community is on to them, and they're using tactics anywhere from high-speed boats that do 40 knots at night across fishing banks to very highly concealed compartments on freighters and fishing vessels, and now as you've seen in the news, they even have fully submersible submarines that smuggle multi-ton loads of cocaine up the isthmus.

They don't just keep their cargo to drugs, they also have movement of money, trafficking in persons, whatever it takes to make a buck for them.

Now, I'm going to describe both maritime operations and security assistance in a very brief form for those of you who may not be fully aware the way we're organized there. All maritime operations are conducted through a center called the Joint Interagency Task Force South. It is a subordinate command of SOUTHCOM. It is a DoD command. Because it's DoD it focuses on detection and monitoring and then hands off the law enforcement case to other partner agencies.

It is the gold standard in joint interagency activity. It is studied -- they

have thousands of visits of academics and government agencies to come down and see how they work because it has such a reputation for multiple law enforcement agencies, DoD, intelligence assets to all come together and focus on the regional maritime threats in the area.

I don't want to detail -- belabor it anymore, but there is an excellent NDU article if you are interested in this called "Joint Interagency Task Force South: The Best Known and Least Understood Interagency Success".

So, then we turn to -- well, let me just describe one thing. I wanted to put in a quick sea story. Just last week, Northland detected, as was reported by our count out to Congress -- detected a smuggling vessel down in the Caribbean under -- they were under JIATF South Tack On and the smuggling vessel was moving very fast. We launched a helicopter, we intercepted, they did not stop with warning shots, and a rifleman delivered precision fire into the engines and stopped the boat.

The Northland's boarding team recovered 1,600 kilos of pure, uncut cocaine at a street value of \$42 million. That happens on a routine basis under the Tack On of JIATF South.

My report then describes security assistance functions, and I'm going to - - this is a highly complex system but I'll summarize it to say that Congress appropriates the money and then there's two conduits for that money, it either goes to the Pentagon or to the State Department. They manage the funding for all the security assistance.

Security assistants are things like education, training, when we give them equipment, when we sell military equipment to them, they're managed by either the Pentagon or the State Department, and then they go down to work with the co-COM, which would be SOUTHCOM, or the country teams. And actually the country teams do the focus of the planning and the resource allocation for that engagement.

Now, the system, like I said, is bureaucratic and it is cumbersome, and that came out in the interviews. In a May, 2011 report, Congressional Research Service indicated that their members were concerned with fragmented management, unclear reporting chains, and duplicative and overlapping agendas.

I don't think some of the people I interviewed would disagree with that, but I will say, based on interviewing all of those people, we have very passionate folks that really enjoy their mission in those programs and by and large they cooperate very well within the security assistance organizations to deliver seamless assistance to the foreign policy -- to our foreign partners. And I really was inspired by the way they work through what is a very large system to deliver that assistance.

So, what I described is an excellent and successful foreign engagement program that is very well networked. I described an operation -- Joint Interagency Operations regime that is very well networked. What came out in my interviews, however, is the two are not interlinked in any robust fashion. And so, consequently, I recommend in my paper that these two need to be linked to better drive security assistance towards operational objectives and for both programs to inform each other.

This is my personal opinion; it's not based on interviews. When I spoke with the JIATF staff and other folks, they were very quick to point out that SOUTHCOM, our boss, does security assistance, we do operations. They were very good at staying on point throughout that. My personal opinion is: why do we do business that way? Why are the two not linked? And can they feed each other in a network?

So, I turned to look to see what network would work. How could we network these to better work together? And I looked at a variety of models, but I came across some discussion that we've had along with some of my colleagues about Afghanistan and out of curiosity, out of personal interest, I began to read about efforts in

Afghanistan. And I came across an article by General McChrystal in *Foreign Policy*, "It Takes a Network", and then began to learn how he organized in JSOC and then ISAF over in Afghanistan.

Probably a lot of you have heard this story. To summarize it, he flew back from Mosul to Headquarters. He looked -- there was an hour -- he essentially drew an hourglass for his staff and he says, I've been thinking about this as our problem. We have Special Operations Forces on the ground in Mosul who know, they have the ground truth of what's going on. We have Headquarters very well informed from D.C. and know what's going on in the country. But we have an hourglass form. We need to figure out how to network those two so both groups of information are shared.

He then turned to his ISAF and it was a similar problem set for him. He had multiple agencies. He had intelligence, Special Operations Forces, security assistance, USAID, and he realized, as he says in his article, he needed to pool those efforts together and he had to create a network.

Now, the leadership required for this type of network is not the same as a lot of leaders would lead, it's not a directive military form of leadership, it's a lot of consensus and team-building and moving a large group towards objectives.

JIATF South does that every day and what I'm merely suggesting is that now they pull security assistance representatives forward into the fold so that there's communication, clearly, between security assistance and operations.

I think security assistance could benefit from seeing the daily battle rhythm and the discussions that take place with operations and it would be good for JIATF to have a very clear daily dialogue with security assistance organizations.

So, at the end of my report, I collected, through all the interviews, a lot of things that were suggestions that people had thought about in various parts of the various

staffs that were good ideas that were essentially put in what we call the "too hard locker" just because it was very difficult to link those two organizations. I present those in my paper.

And then in the form of vignettes at the end of my paper I run through both operational and security assistance activities and explain how the merger, better communication between those two organizations, would enrich the efforts we're making with our foreign partners.

Now, as Peter mentioned, this is -- as I said, it is an economy of force theater and the number of USS that's available to JIATF South in the out years, right now, does not look good. In fact, our Commandant just testified to Congress that despite the best efforts of our crews right now, much of our cutters -- we call our ships cutters -- are in excess of 40 years old and we're only achieving 70 percent of our programmed hours and 50 percent of the time they're sailing with casualties, mechanical casualties.

Additionally, in the Naval ships, such as the Perry class frigates, which are critical to JIATF South mission and our hemispheric security, are leaving the service.

So, we have an excellent maritime ops and security assistance organizations that I believe would be enriched by better networking, especially in this time of constrained resources, and it's my firm belief that there would be many benefits if we do look at networking the two organizations.

So, I look forward to any questions. Thanks.

LIEUTENANT COLONEL DAVIS: Again, Peter, thank you, and, yes, I did travel from California. I'm not used to wearing a tie, and it is very, very early for us from NPS.

So, with that, I'll go right into it. You heard General Miller talk about a lot of things, the big one being the budget, and that's kind of where my journey started, and

then I started looking out for, how can we increase our burden sharing? And we've used that term, we've heard that term, and if you go back and look at NATO for the past 60 years, you're going to see burden sharing as a theme that runs through it, but it's never had teeth.

Former Joint Chief Admiral Michael Mullen said in 2010 that the single biggest threat to our national security is our debt, and you know the numbers, \$500 million, and if sequestration happens it could go for another \$500. That's doable, but we've got to find new and better ways to do it, and as stated before, I'm a special operator by trade. For us, you know, we don't have the highest tech toys. It looks like it, but the aircraft that I flew was made in 1969, the same year I was, and it's pretty darn good. Spectre gunship does it every night and they've managed to make it work with technology that the computers on the aircraft are an average of 20, 25 years old, and it works.

NATO is kind of going along that, but we know what our defense policy has been and we know where it's going.

The current QDR emphasize a wide range of strategies and capabilities adopted by today's adversaries. Okay, we're currently looking at revising that QDR, but I don't see that being much of a change, but we're no longer shaping our strategies to revolve around high concentration of boots on the ground, we're no longer sizing forces to conduct large and protracted stability operations, we're not going to do that anymore.

The distributed nature of these threats require the ability to surveil, strike, punish from afar, insert small network ground forces, according to Paul Davis and Peter Wilson out of the Joint Forces Quarterly article that recently was released.

So, essentially, it's a call to develop innovative, low-cost, and small footprint approaches to achieve our security objectives, sharing and pooling resources.

So, let's look at the European model, and talking to some of my NATO brethren over there, you know, he talks about doing business in NATO kind of like the bar scene out of the *Star Wars* movie, you know, ugly but effective at times, but inherently misconstrued on most cases of being a collective. So, NATO has become more of an organizer of collectives vice being a true collective, and I've got a feeling that that's going to be changing very, very soon.

We know that NATO has been increasingly involved in out of area operations defined as beyond the European borders. Libya is the latest example. And we're looking at an alliance that is now more capable of being a producer of defense rather than a consumer of it, and so a relook is underway.

Secretary Gates, once again mentioned before, when he was leaving as the Secretary of Defense and he gave his last address to NATO, I won't say chastised, but he did very poignantly mention that during the Cold War we underwrote 50 percent of the Defense budget for the NATO countries essentially by being part of the alliance. Today we're up to 75 percent. I don't think that we'll be able to sustain that, and he pretty much came right out and said that.

So, in Chicago this summer for the summit, I would say, again, this Transatlantic bargain, this bargain that has been in place for 60 years, is going to undergo a redux, some change is going to happen, and the Secretary General, Anders Fogh Rasmussen, his Smart Defense Initiative is exactly where that's going to start. And while there's been that Smart Defense, that burden sharing, that collective defense strategy out there for years, I think teeth are going to grow this time because ultimately none of the NATO partners have -- well, with the exception of a few -- have made the 2 percent GDP defense push and a lot of them are not going to with the austerity measures that are in place.

So, there's got to be a way that we can make this work because, again, they understand, it's stated out in the Lisbon Summit in the New Strategic Initiative that to secure their defense they have to go out of area to stop the threat before it reaches their shores.

A good example of this is the recently flagged NATO Special Operations Headquarters. As early as 1995, NATO realized that, while they had many nations that were capable of soft -- or doing soft like missions or had a capable special operations force, they did not routinely work together, had disparate C-2 and little coordinated and interoperable action.

In 2006 at the Riga Summit, essentially the nations adopted what is called the NATO Soft Transformation Initiative to come up with a way to create an entity that can take this special operations-like capability from amongst the different nations and bring it together to be able to provide command and control, training, standardization, and interoperability.

The U.S. stepped in and said that they would be the framework nation. What does that mean? We underwrite it. We pay approximately, right now, 87 percent of the operating costs and provide a majority of the manpower to this headquarters. It's 150 personnel strong. In 2010 it was actually reflagged from the NATO Soft Coordination Center to the NATO Special Operations Headquarters, put under Lieutenant General Kisner who was the former SOCE commander, he did it as a dual hat role, not as a completely separate command structure, and it's growing.

Their mission set that NATO special operations kind of glom onto is direct action, military assistance, that's a bit one, and humanitarian assistance missions. They have a core build and deployable C-2 architecture as well as a premier training and standardization function and just of note, before they came to existence, there was no

interoperability regulation, what they call STANAGS that defined what Special Operations Forces in Europe do.

Those now exist. There are about nine to twelve, depending on how you count them up, penultimate on how we do things in a special operations community amongst the different nations, understanding that a lot of them have caveats to do what and not to do what type of mission.

So, back to the bar scene. How do we fix that? And that's what they're going to discuss in Chicago this summer, but special operations command is going forward and trying to, again, provide them with assets. This is an organization that has no organic assets and, again, 150 personnel. We're about to change that by looking at providing them with some aviation capability to build an air warfare center, to give them that primary enabler for Special Operations Forces which is (inaudible) and possibly fixed wing assets to provide an initial training capability to, again, build their capacity to defend themselves with the U.S. as a supporting rather than supported role.

So, where can we take this? Kind of started digging around and figuring out, okay, this is a good idea. There's some things that may or may not work and it's been highly criticized at times. Some of the nations haven't really provided what they've said they were going to do, but I believe that if we provide it they will come.

But I started looking at the Pacific, and that was back in November is, you know, we could take this and we could put it somewhere else as a bolster to our normal theater special operations command, that interagency, that international body that can take a look at what other SOF exist in the region, pull them together, standardize, interoperability, that being the key.

But there is no NATO in Asia. And I started digging into ASEAN and the ASEAN Regional Forum. That's the closest thing we can come up with and we've all

heard of the ASEAN way of doing business that emphasizes the culture of non-interference, equality, and sovereignty, consensus building, and quiet negotiation, which if you take a look at NATO and United Nations, that is completely opposite of the Western way of doing business, but it works.

And so I started digging into it and saying, okay, the ASEAN Regional Forum, that gives that civilian type of control over any type of military entity, however, they haven't stated it as such, but I believe that going forward, unlike NATO, which was formed based on the Soviet threat, there is no definable existential threat to Asia right now. Some people want to talk about China, but I don't believe that they should be looking at that, they should be looking at the threats of WMD proliferation, food security, piracy, and essentially securing the global commons for commerce, because that is the true engine of our commerce today.

That's a nebulous threat when you take a look at transnational terrorists and crime, and why should special operations be involved. They're uniquely suited to these tasks of providing, you know, that forward presence, that 911 force, that ability to buy space and time for decision makers to decide if we need to bring that over the horizon, boots on the ground presence, or can they handle it, more appropriately doing it through special -- by, with, and through Special Operations Forces already existing in the theater.

And if they're not there, we build them. And I provide a good example, and take a look at JSOTF Philippines. Back in 2002, Operation Enduring Freedom Philippines, we established a forward presence in the southern Philippine area going after the Abu Sayyaf, Jemaah Islamiyah, and the Moro Islamic Liberation Front, the MILF. That's an economy of force effort that exists today and they've done -- the Armed Forces Philippines, under the tutelage of U.S. Special Operations and some conventional assets,

have done a good job of cleaning out their area. Not unlike, kind of, the ISAF construct we see in Afghanistan, we're providing trainers and then allowing them to go forward to contact with the enemy in its economy of force effort. Less than 500 people and \$50 million a year.

Think about how little that would have cost and how less that manpower would have been if we would have been able to bring a construct that involved Australia, New Zealand, Singapore, Malaysia, any of the other nations already there in theater, but to do that, we'd have to provide that C-2, that command and control architecture, that interoperability.

Right now it's being run by the Theater Special Operations Command. If you're not familiar with those, those are the organizations that present Special Operations Forces to the combatant commander. Well, right now SOCOM is doing a relook of how those TSOCs work and they've mostly been doing the -- we call it the indirect role, providing that presence to do the partner nation capacity building and other types of missions in the area, not necessarily direct action.

That TSOC role will always be there as a requirement, that direct action line, but with a regional special operations headquarters in the Pacific, or in the Caribbean and South America, Africa, you now have the ability for the U.S. to take that supporting role to provide the interoperability, to provide the command -- you know, initially the assets and the training, and if we need to go it alone, we've got the TSOC, we've got the COCOM, we can go forward with the boots on the ground, but if we want to operate as truly part of a coalition, special operations buy you that space and that time.

They're already there, that's your persistent presence. Today we've got operators in 100 countries that have been doing this. Special operations forces are regionally oriented; they're usually more mature as far as in service, they've got the

language skills.

So, they are the force that should provide that forward, permanent presence, whether rotational or forward-based, to buy us that space in time to continue engagement to show that the U.S. is still part of the regional security construct, especially in these lean times. And I look forward to your questions.

MR. SINGER: Thank you. Three great presentations. I'll kick us off with a question for each of you and then open it up to the audience here and I'll lay them all three out so you have time to think, at least the latter two will have time to think.

Scott, you lay out a great program. Can you go into specifics of how this lack of coordination right now might be expressing itself to the detriment of current operations? Maybe crystallize the impact that it's having and then in turn how you see, if we get better coordination following this network model, how that kind of example would be solved.

Mike, you lay out a plan that I think makes a great deal of sense from the U.S. perspective and we would gain a great deal from it, and this actually, in part, applies to Dwight's presentation as well, you know, you site Gate's speech, which was applauded here in the U.S. but it landed very differently in Europe, it landed with a -- I don't know whether the phrase is thud or dud.

And so what is your sense of the European buy in to your plan? Why would they want to join on in their own time of budget austerity? What would they get out of it, in particular if it comes with added costs?

And then, in part, Dwight, that question could be asked to you, but I think it can be asked in a different way, which is, the difference of the NATO model is, while we may be cantankerous about who's, you know, sharing what burden, there's not the kind of, fortunately enough, internal regional tensions in Europe now that you might have in

these other areas, specifically in Southeast Asia, that is, we've solved the border disputes in Europe versus the kind of cooperation -- and so, you know, the militaries within NATO, it's not just that we can share communications and information in a way that certainly isn't possible with other allies, but between those allies, they're not sharing information, but more importantly, they might not even trust each other.

You know, I'm thinking of, yes, the U.S. is cooperating with Philippines but there's a number of disputes that it touches upon in South China Sea with a number of other neighbors there. So, how do you work around those kinds of tensions within that structure?

CAPTAIN CLENDENIN: Well, thank you, Peter. I've been thinking about how to respond. I obviously don't -- I want to be careful not to embarrass particular programs, but there are efficiencies within the system that folks are aware of. But I'll describe from personal experience some of the things I've seen where I think we could get some efficiency.

I made a port call early on in my last ship in a partner nation and saw the Secretary of the Navy. We had some plan engagement. And as I sat down he said, Scott, I think it's terrific that you arrived just when we have a coast guard law enforcement training team on the other side of the base here. I had no idea. It just wasn't linked.

We also, late at night, will often be pursuing suspects. Our area of operations is shared with territorial seas, so we'll be pursuing a go fast -- a suspect vessel, very high rate of speed, towards that country and we needed to begin to talk with them and then understand how they were going to react. Of course, there's always use of force concerns, blue on blue concerns, and during my tour I realized that we had standard protocol but we weren't training to it. We had it and both sides needed better

training and coordination on that.

And out of initiative I reached out to JIATF South, to someone who had also had embassy experience. We coordinated an ad hoc operation and I learned about the bureaucracy, because it took a long time to get the Leahy Act requirements and everything done, but we eventually set up operations, very short duration, we call them Pass X's because it's where forces just happen to be passing, where we would work with foreign forces and it took very little time out of operations and we would actually conduct an exercise. We also brought Special Operations Forces that did training with units in conjunction with that, so we actually had security assistance people conducting the training with the foreign force.

And we actually netted some narcotic seizures because of that because we had more conductive communications.

These efforts are moving forward, but, again, they're ad hoc, and I'm just proposing that we formalize more regular communications between the operators and security assistance because our strategy is to engage with partners and I believe that should be a part of what we do with our ships.

COMMANDER HANNAN: Peter, that was a great question. Yeah, exactly, you know, kind of the reception over in Europe from a lot of news outlets was that it did kind of ring pretty sour, but I think in my research and looking at European countries and who would be those entities that might actually take a lead, and that's why I kind of focused on, you know, the three Nordic countries and then the Netherlands. I think they did it. I think in looking at, especially the Nordics, they're already looking at -- they're already conducting either investments or engagements in Africa. The Norwegians are moving, you know, way out front within the Arctic Council on High North Policy.

So, I think we can -- if the United States can articulate and maybe a little

bit of arm twisting because it's going to have to be a political decision in the end.

But I think that these candidates would be able to take a lead in security development and I think that's something where the United States can go to these countries and say, look, you're already engaged in these regions or you're already taking on these functions, let's help you to transition to that kind of leadership role, you know, whether it's their own bilateral building partnership capacity aspects or if it's within NATO in some sort of NATO framework.

So, security development is one aspect. Another one is defense industry. I mean, there's the capabilities -- if they're talking about enhancing their own defense angles or exporting some of those capabilities to other countries, you know, it's a business aspect as well, I think, and if you're looking at jobs, lean times, that might be an avenue that they may want to approach as well.

And then if you look at those four countries that I discussed, the only one that's stuck in the Euro mess right now is the Netherlands; the Nordics are good and in discussions, statements from the Norwegian Defense Minister recently, they're pretty -- they're being pretty aggressive with what they're looking at as far as future defense investments.

So, I think those are kind of the talking points the U.S. government could use and keying on where those countries are already engaged and then helping them to kind of take that lead position. But it's going to be a whole government approach. We're going to have to -- and I kind of touched on that. It can't just be the normal mill-to-mill kind of thing. You know, we talk to our counterparts in uniform and, you know, and they want to do stuff, but it's getting their parliaments, it's getting the civilian politicians to understand that this is in their interest, and that's where I think it can be kind of an open aperture and make it a wider scope where the U.S. can touch to these countries and

push them forward.

LIEUTENANT COLONEL DAVIS: Yes, Peter, the Gates speech, when I read it, it was kind of eye opening that he would actually come right out and say what we've been feeling for a long time. If you're on your way out you can go ahead and drop those -- you know, you can pull the pin on that hand grenade and toss it out, but it was right on the mark.

As far as NATO itself, you know, when you talk about out of area operations, my focus was not so much on the NATO response force, it was really looking internally at special operations. Of the 28 countries, you can -- depending on how you look at their internal security forces and special operations, 26 of them have what they call a special operations force. But most of it is designed to be internal, it's counterterrorism and we understand that the borders are secured, but they're very fluid, so a lot of things can move around Europe without really much impediment with the whole EU construct.

So, NATO, in itself, is looking at the U.S. reducing our force presence, they're going to be more and more, you know, the quote I like is we're no longer going to be the quartermaster of joint action. We're going to have to, you know, pull back, but in the area of Special Operations Forces, I look at, well, they're used to doing this type of thing, so if you're taking a look at -- like, I keep mentioning that bar scene, it's not so much the case with special operations. By nature, we're trained that way and we've worked with NATO partners. You know, as recently as last year when I was out at Cannon Air Force Base, and in fact, he's actually a student at Naval Post Graduate School now, I worked with a -- Norwegian SOF Forces had come out and we were doing exercises with them out on the Melrose Range, and I've worked with them every year for the past three years.

So, we're used to that type of relationship.

Going back to, okay, so why are we doing this? With SOF, it was, you know, you go back to -- I think the earliest real example is the Olympics in Athens. Counterterrorism is a big deal and we know we have the Olympics coming up in England, but before we started looking deeply into a smart defense initiative with SOF, specifically, you had different counterterrorism forces, special operations, running around trying to protect everybody at the Olympics, but they weren't talking to each other. They were not even talking to the command posts that they had set up there in Athens. They were going back to their regional governments.

And maybe that information would flow, and maybe it wouldn't. A lot of it is intelligence driven. So, to get around this, we do have -- it's called BISES, they've developed an internal network amongst the nations that are part of the NATO SOF Coordination Center and even beyond, where they can share this intelligence. It even reaches down into ISAF in Afghanistan.

So, there is that culture now coming forward of greater intelligence sharing, greater interoperability training, and then you've got to ask, well, the borders are secure. They -- NATO made the decision to go into Libya because they saw it as a possible -- you know, you had a humanitarian, mostly, driven factor there in my mind. But with the colonial ties that a lot of the countries in Europe have, they still have interests in, let's say, the Pansa Hel, Northern Africa. They went into Sudan in 2005 to 2007.

A lot of it is, you know, before deploying your forces to avoid that threat coming forward. We have piracy missions in the Gulf of Aden protecting, you know, financial interests moving through the Suez. We've got, you know, operations on the Horn of Africa, again, looking for those transnational terrorists that can move across

borders. Once you hit -- once they hit Europe, they can almost move with impunity because of the nature of the European Union in that border.

MR. SINGER: Let me crystallize it, though. The question is not how do you get Norwegian and American SOF to work together, or to get Norwegian and British SOF to work together, because there's a shared vision of threat, there's 40 years of working together, there's an ability to share communication and the like. What I'm referring to is the challenge as you franchise it, that you will move into regions where the local SOF will be from states that actually have tensions between them.

So, if we're thinking about franchising this in Southeast Asia, well, we've got border disputes, unclear border disputes, from pretty much everyone who touches the South China Sea. So, the ability of, yes, the U.S. can work well with, say, Philippine or Indonesia, but there may be other, you know, once you drop Australia into the bucket or the tensions between Vietnam or the like, that's what I'm getting at, is the idea of, yes, NATO -- it's not always perfect, but NATO has figured out how to work together.

But how do you take it when it's from states with very, very different interests, particularly when you've got a number of these that might involve internal security challenges, that is, I imagine Philippines not so psyched by having, you know, seven different SOF states operating inside its borders or maybe we, you know, use the example of Indonesia or the like?

Or Latin America would be another great example. We've got states there with Bolivia, Venezuela, that certainly are not getting along well.

LIEUTENANT COLONEL DAVIS: Right, Peter. You know, when I started, again, looking at this, that was one of the things that kind of was rattling around and with some of the critiques I got from the folks that I had, you know, batted this around with at Naval postgraduate school, and really the only answer I can provide is the U.S.

has become an excellent bridging function with a lot of these nations.

You mentioned, we work well with -- our Special Operations Forces work well with a lot of these countries. They may not play well together, but if you come in from the light of, if we're going to franchise this and truly make it work, we have to be all in. And in the latest dialogues, you know, with the East Asian Summit that happened back in November that President Obama attended or, you know, this past fall, and then going forward with a lot of the dialogue, again, that ASEAN way, I'm not suggesting that that's a NATO or that it's going to function anything like NATO. But I am suggesting that with those small, discreet, Special Operations Forces, if you take it in terms of using the U.S. as, again, the quartermaster and the trainer and you work through that third party construct. You know, we've been running this hub-and-spoke system out there forever with a lot of bilateral and some multilateral with, you know, pretty much everybody that's in that region and that's part of ASEAN. But, you know, I started to map out how all that works and it was just this convoluted chart that I could barely comprehend myself much less any of my readers.

But I said, you know, we could make it work and we could make it work in South America. Again, you work the bilateral piece to eventually get to the multilateral piece. It's a long process. It's not something that -- it's not a fast-food restaurant that I can throw up tomorrow, but I think that I could build something that can capitalize on those habitual relationships we have with member nations to eventually work the piece. Because what we offer is -- and that's what NATO SOF headquarters is working toward -- is they each get a benefit because those forces will come home and propagate from within so they can assure their own security in addition to, over time, a habitual relationship with other nations they might not normally work with, to work toward that collective defense. And I'm not saying we're building a security community in Asia with

just some special operators, but we're getting, I think, the toehold. Does that kind of make sense?

MR. SINGER: Gotcha. Let's open it up to the floor. Again, please raise your hand, identify yourself.

MR. LLOYD: Good morning. I'm Mr. Lloyd from Baltimore. My question is about Southeast Asia. Many of you have touched so much about Southeast Asia. Now, with this fluid relationship and boundary between the Philippines and Malaysia, especially in the south, and there is so much piracy going on, human smuggling, trafficking of arms and high powered weapons. And with the presence of the U.S. forces, especially there in the Southern Philippines, and with the growing sort of disturbances of the Muslim insurgent movement, you have made mention of the MILF and the Abu Sayyaf, and with the presence of the U.S. forces there right now, in the part of the U.S. Navy and the Air Force, do you have any plans to increase forces in the Southern Philippines? And, if so, when and how great the forces would be? Thank you.

LIEUTENANT COLONOL DAVIS: Okay, I know of no plans and, again, I've been living in the academic environment for a year, so I'm giving you everything that I've read, okay. I know of no plans to increase nor would I see any plan why they would. And this is, again, my opinion, it's not that of the Department of Defense. This is just somebody who's spent a lot of time reading books and current events.

I can't see a reason why we would want to increase our footprint. Again, there are problems, and I recently read that while the Armed Forces Philippines did just recently take out a pretty high-powered individual in Abu Sayyaf, the overall operation was completely conducted by them. The U.S. still provides some intelligence-sharing operational capabilities in terms of, you know, from teaching guys how to do battlefield medicine to sniper training, but we're not part of any of their operations. It's not our

charter. We're there as a training organization. There's no need for us to increase it because our number of trainers is about right sized. That's been about the number for the past five, six years.

So, my reason for bringing that in as a case was simply because that is a good example of a low footprint, low signature effort and, again, we're not -- we are supporting, not the supported force in the area.

Does that kind of answer your question?

SPEAKER: That's good.

MS. O'DONNELL: Thank you. Clara O'Donnell, visiting fellow at Brookings. I had a question for Mike Hannan, and it was, is there a particular reason why you didn't choose to explore options for enhancing cooperation with Britain and France in light of their quite large maritime forces? And I was wondering, are there any areas where you think it could be worth exploring the U.S. strengthening its ties with those two countries?

COMMANDER HANNAN: Sure, yeah. I did -- I started looking at that but then I kind of focused on really what are kind of the I guess you could classify it as lower end capabilities. I think if you're talking about Britain and France, you're definitely looking in -- approaching more the higher end, the higher end warfare, something that's going to involve a lot more research and development, something that approaches kind of what we see with air-sea battle and obviously precision strike, those kind of operations.

I think something, especially in either defense realignment or just if you're looking at fiscal priorities, you know, what's going to make it above and below the cut line. And I think that, in my opinion, the U.S. Navy needs to focus on, obviously, we'll continue the relationships that we have with some of our significant partners and allies such as Britain and France. But, okay, what are some capabilities at that lower end of

the spectrum that we may have to kind of franchise out or look to other players to kind of take that leading role?

And that, kind of, was the focus of my research, whether you're talking about regions like the High North or Africa, or even increasing some functional capabilities, whether it's amphibious operations or humanitarian assistance, you know, disaster response kind of things. So, that's where I kind of -- that's how I scoped my research. And looking at it is, you know, the U.S. Navy is going to continue on that high end of the spectrum, obviously with allies like Britain and France. So, okay, of areas that we most likely would probably have to look at for divestiture, who would be, you know, nations that could step up and kind of take the lead on that and that are already either willing or they're already kind of along those lines in taking those approaches currently?

MR. SINGER: Right here in the middle. Yeah, could we get him the mic? Yeah, go ahead and yell it out.

SPEAKER: This question's for Mike. I'm Mike (inaudible). I'm an Army fellow at the Army (inaudible) Policy Institute. And some of the selections that you made were for the European navies to actually monitor the North Seas, Indonesia, Angola, are kind of interesting selections.

So, with those selections, did you -- how much was actually thought of? Because there are actually oil, rare earth minerals and all kinds of interesting stuff that are there. Did that actually play out in some of those selections? Because that is a national security issue, not only in this country, but it would be a national security issue for those countries as well, as they need access to oil and (inaudible 1:00:13) minerals.

CAPTAIN CLENDENIN: Yeah, I think you kind of answered it right there. I mean, those are bilateral activities that those countries are already doing, you know, that's just what I've kind of looked at either individually or if you look at especially the

Nordic countries that are part of NORDEFECO, the Nordic Defense Cooperative. So, that's areas where they're already engaged.

Sure, I'm pretty confident that they're looking at their own interest, whether it's something from resources or, you know, maintaining the global commons. I mean, especially where they're looking at building up, you know, easy enforcement or some sort of Coast Guard-like capabilities in those West Africa countries exactly.

And I think that's kind of the crux. These countries are looking at that and they're saying, hey, this is in our interest. I mean, it mirrors a lot of what the U.S. Navy is trying to do for how we maintain and try to guaranty the safety of the global commons, so that's definitely an avenue of approach that -- where we need, as the U.S., need to then lean into those countries and say, hey, you're already working on these activities, let's assist you and then you can kind of transition into that leadership role.

MR. SINGER: Let's do one last question before break. Back there.

MR. WINTERS: Steve Winters, local researcher. I'd like to ask Lieutenant Colonel Davis how the current rethink of the COIN strategy, especially as it was promoted by David Kilcullen in Afghanistan, has impacted on the future planned use of special operations forces.

LIEUTENANT COLONEL DAVIS: Well, David Kilcullen came out and spoke at Naval postgraduate school last fall and I was fortunate enough to have kind of skimmed through the book and then listened to him speak and, yes, the COIN strategy. And, frankly, I'll be honest with you, I'm in the Defense Analysis Department, Irregular Warfare, Unconventional Warfare Information Operations, that's what we do. And some of the great thinkers are part of that.

But this whole counterinsurgency strategy thing, we're kind of going away from that. There's a shift toward more of, you know, irregular war -- well, what is

regular war? As of today, I mean, what is regular war and then what is unconventional?

So, there's a blurring of lines there and I believe that if you take a look at what's going on in the QDR right now, what the strategists are really thinking of, is we're going away from, okay, how did the insurgency begin? And there's some excellent work out there by Dr. Gordon McCormick that talks about countering this, but it's from a model that I don't believe exists now because of the transnational nature of the threat. And the fact that we're shifting away from intervention in weak and failing states, in my opinion, that will be a shift away. So, a counterinsurgency strategy won't necessarily be kind of an encompassing piece of work.

I believe we're now past that. Again, my opinion, but I think you're going to see that's where more of our doctrine and our thought process is going. Anybody else got something on that?

MR. SINGER: Well, again, thank you to our three panelists. I think you can see it's three very interesting and fruitful lines of research and we're all -- I think you've given us just enough to make us want to actually read, not skim, as a friend of Dave Kilcullen's, I'm glad he got a book sale from you, but kind of disappointed that you didn't read it.

No, so hopefully we'll all promise to actually read your papers because it's some real interesting research. So, please join me in a round of applause.

(Applause)

We've got time for a break. We're going to start up the next panel at 11:25, so please join us in here then. Sorry, 10:25.

(Applause)

MR. LIEBERTHAL: Can we begin please? One of the major developments in the international system, especially over the past decade, and especially

since the global financial crisis unfolded in late 2008, is the movement of China to top table in the global economy. Now the second ranked GDP in the world with investments and trade around the world.

We are seeing now the manifestations of China's decision in the 1990's to engage in annual double digit increases in its real defense expenditures. And its diplomacy has also become not only regional, but global. So the issue of how to both adapt to and shape China's initiatives around the world is now front and center for the United States as we move forward in the defense arena in our financial and economic policies and in our diplomacy.

I'm delighted today to have a panel that really focuses on the security side of this very large issue. And we're going to focus on the security side, not in Asia, but rather in the Middle East and Latin America, recognizing that China's reach is substantial and that we need to think in broader terms about the overall mix of initiatives we'll take to shape the future here.

We have two terrific fellows to speak to this issue. First, I want to introduce them in order of rank, but then they will speak in order of gender. I am from the older generation that says ladies first, so we'll proceed that way. But first by way of introduction, Lieutenant Colonel Eduardo Abisellan who is with the U.S. Marine Corps.

He graduated from The Military College of South Carolina, The Citadel in 1990 with a Bachelor of Arts degree in Political Science which was what my own degree was in. So I think he's a terrific guy. He's also a graduate of the U.S. Army Field Artillery Officer basic and advanced courses, which I did not graduate from, The Naval Command and Staff College in Newport and the Joint Forces Staff College in Norfolk.

He has a Master's degree in National Security and Strategic Studies also from the Naval War College. He served in the Marine Corps for over 20 years now as an

artillery officer, has a vast array of operational experience from the Pacific region to the Arabian Peninsula and Afghanistan. I won't go through his various assignments, but that is the broad background he brings to this discussion, and he'll be talking about a Middle East dimension to dealing with China.

And then Lieutenant Commander Audry Oxley, U.S. Navy. She attended Tulane University where she completed also, a Master of Arts and Political Science, and with a concentration in International Relations. She also holds a Master's degree from Louisiana State University in Public Administration.

In March of '02 she reported to the Aegis cruiser USS Yorktown as a first lieutenant. She's been assigned to command the Destroyer Squadron Six in October 2003 where she served as training officer and future operations officer. I mention that because while there and very pertinent to our presentation today, she participated in the planning of Panamax.

Panamax is a layered defense exercise, multilateral design to increase multinational operability and protection of the Panama Canal, and several other joint exercises. By the way, I should have mentioned for those who don't know, I'm Kenneth Lieberthal. I'm director of the John L. Thornton China Center at the Brookings Institution, which is why I do not have a background in the Marine Corps and artillery.

Having introduced our two speakers, let me ask Audry Oxley to begin, and then directly afterward Eduardo will pick up and then we'll open this for discussion. Audry, please?

LIEUTENANT COMMANDER OXLEY: Good morning. Thanks to all of you for coming out to spend a few moments of your day listening to the research military and federal fellows have been conducting at Brookings this past fall and spring. During my fellowship at Brookings, I've chosen to research the topic of peaceful military

engagement with China. Specifically the Chinese Navy, the PLAN. Today I'd like to explore an initiative to begin that collaboration not in the Eastern Pacific where tensions are high and rising, but here in the Western Hemisphere.

In the Americas, there are also stresses and imbalances that could be addressed by interaction between the military services of Latin America, the United States, and China. Any effort that leads to greater predictability, transparency, and even reciprocity between services would mitigate the dangers inherent in miscalculation or miscommunication.

Successful cooperative efforts with the PLAN in the Americas could lead to other avenues for greater regional and global security and save the Gulf of Aden or off the Horn of Africa. At a meeting between U.S. Ambassador to China, Gary Locke and Chinese Defense Minister, Liang Guanglie in February of this year, Liang indicated that China is ready to renew its efforts to advance bilateral military to military ties which are currently under suspension with the U.S.

He said that the development of smooth military ties between China and the U.S. is of great significance to improve strategic mutual trust, safeguard shared security interests, manage and control crisis, and prevent risks between the two countries. Ambassador Locke responded that the world has come to rely on the leadership of both China and the U.S. to respond to natural disasters, terrorist activities, piracy, and other matters.

He added that improved communications and exchanges between the two nations would help to avoid misunderstandings and miscalculations. Clearly at the highest political levels of both countries, there is both a recognition of the benefits of military cooperation and a desire to pursue such an engagement. I realize that's a lot of ground to cover in just a few minutes, so I'm going to very briefly address a few areas of

my research.

The rise of China globally and its influence in Latin America, the rise of anti-American populism in Latin America, and risks it poses to traditional U.S. military engagement within the hemisphere, how an invitation to China to engage in the maritime exercise Panamax could offer policy makers both diplomatic and military options that would lead to the kind of trust and transparency that are the components of durable relationships.

And finally, I will briefly touch on implementation and phasing of this plan, the rise of China globally, and its influence in Latin America. Over the past two decades, the industrialization of China has reordered the allocation of capital and resources across the globe. Factor in an urbanization rate that this year only passed 50 percent, a burgeoning middle class, and China's requirement for resources becomes obvious.

To fully grasp the magnitude of China's global economic expansion, we need only consider the South African futurist Clem Sunter's comparison. In the 19th century, England put its population of 30 million through an industrial revolution by drawing resources from its global network of colonies.

In the 20th century, the U.S. put 130 million people through an industrial revolution by utilizing its own natural resources. Today, China's putting 1.3 billion people through an industrial revolution and it has neither colonies nor natural resources other than coal. It's almost impossible to overstate the rise of Chinese economic power and influence in Latin America.

Travelers to any country in Latin America see the hand of China wherever they look. Computer manufacturing in Mexico, mining interests throughout the Andes from Columbia to Chile, petroleum exploration and production from Argentina to the Caribbean, Chinese internet backbone, cell phone, and satellite systems everywhere.

As China became the world's number one exporter, Chinese vehicles, clothing, and electronics became ubiquitous in marketplaces throughout Latin America. Economists predict that by 2015, China will replace the European Union as Latin America's number two trading partner. China has also begun to merge militarily in the region obviating slowly and cautiously.

In terms of arms sales, China has sold hardware or donated non-lethal equipment to Argentina, Bolivia, Ecuador, Venezuela, Colombia, Paraguay, and Peru. In 2010, Peru and China conducted a bilateral humanitarian exercise, the first such bilateral exercise conducted between China and a Latin America country. It included the gift of a \$300 million field hospital.

And in November of 2011, the Peruvian and Chinese government signed formal accords for arms and training, while Brazil and China have also signed agreements vowing to strengthen and deepen military ties. The Peace Ark, China's hospital ship, made its first humanitarian voyage into the Caribbean last year. Perhaps a strategic decision, perhaps not.

Nonetheless, the Chinese have yet again proven a logistically capable of expanding beyond the Pacific and Indian Ocean. Even the most moderate Latin countries, Colombia, Chile, Peru, and Uruguay have sent students to China's defense studies institutes, the Army Command College, the Navy Command School, the Naval Research Institute.

Although it should be noted that these numbers are significantly smaller than the over 5,000 Latin Americans that participate in American defense colleges, it becomes clear that Latin America is open to alternatives to traditional Pan-American solidarity in the hemisphere. Meanwhile, a new leftist populous coalition has emerged under the leadership of Venezuela's Hugo Chavez, that seeks to undermine every effort

of the U.S. in the region.

Chavez and his allies in Ecuador, Bolivia, Nicaragua, and Cuba continue their efforts to put Latin America onto a different path through the creation of CELAC, The Community of Latin American and Caribbean States, just last December. Among these new leftists, reconciliation of differences with the U.S. through greater regional integration and political cooperation is no longer the preferred course of action.

Compound this with China's economic and albeit limited military expansion into the region, and we must find a new way for the U.S. to remain relevant. On the other side of the globe in the Eastern Pacific, similar stresses and imbalances are building. China's claim to the natural resources of the South China Sea and the reaction of other nations of the region, almost certainly played a role in America's realignment of forces into the region known as The Strategic Pivot.

Incidents involving Japanese and even Vietnamese vessels have created a caldron in which any miscalculation could result in conflict in the region. The question the policy makers must ask themselves is whether exploratory U.S. signs of collaboration in the Americas could produce, if not a relationship, then at least a dialog that would open windows that would illuminate the path to regional and global security.

How an invitation to China to engage in this hemisphere could offer policy makers both diplomatic and military options that would lead to the kind of trust and transparency that are components of a durable relationship. Together, the U.S. Southern Command and the U.S. Navy have the ability to offer policy makers a unique opportunity to address both challenges.

I'm proposing a China-U.S. mil to mil engagement in the Western Hemisphere at the maritime exercise Panamax. For those of you unfamiliar with Panamax, it's a multinational exercise designed to protect the approaches to the Panama

Canal. Approximately 17 nations and 3,500 personnel participate in this exercise.

The following considerations must be evaluated in order to begin planning for eventual cooperation with the PLAN. Current statutory and regulatory prohibitions on the military engagement between the U.S. and China must be followed, the expectations of all parties and goals and benefits of contact and collaboration identified. The purpose of engagement is to meet head on the future challenge of China's growing presence in this hemisphere.

Clearly, both economic and military ties between China and Latin America will continue to develop. Bilateral memorandums of understanding will continue to be signed between China and Latin American nations. Arms deals will be made, followed by training missions. Will the U.S. be a spectator to these developments, or a participant?

And what happens if things go wrong? Say China feels the need to introduce military forces in to protect an asset, or rescue a group of its own citizens as happened recently in Libya. Isn't it better to begin that dialog now, to establish operating norms in an environment that promotes a global good such as the defense of the canal, than wake up in 10 years and realize that military to military relationships between the Chinese and Latin American nations have been built without us?

I don't believe the Pacific is the appropriate venue to re-establish maritime engagement. The area is simply too tense and unforgiving to missteps and miscommunications, nor has it been particularly fruitful in fostering reciprocity in the past. I'm sure at this point most of you are asking yourself, what in the world is there to gain by this type of engagement?

Well for starters, the waters off of the Panama Canal offer a softer environment for establishing rules and norms of engagement. This environment might

allow the U.S. and China to engage in a way that would build transferable skills, trust, and transparency across component commands.

The military to military relationship between China and the U.S. lags far behind economic and diplomatic dialogue. The skills developed through interaction here would certainly be transferable to the Pacific where tensions and flashpoints are the greatest.

During my investigation into this proposal with Latin American military personnel, the majority were supportive of this approach. Latins feel that their involvement in advance at this level elevates their contribution to the global affairs.

It offers the place at the table they have long felt was denied to them. How better for the U.S. to address their longstanding feelings of American hegemony over Latin America? It supports our current foreign and economic policy towards Latin America, which encourages open global trade.

A willingness of the U.S. to engage with China in this hemisphere would also seem to allocate the U.S. a few bargaining chips in Asia where the Chinese complain bitterly about U.S. hegemony and encirclement, two allegations China has recently levied against the strategic guidance issued in January. The planning and phasing of this operation would start with the phase zero, which requires diplomatic buy-in.

China's obstacles to resuming full military to military engagements which are continued U.S. arms sales to Taiwan, reconnaissance of the Chinese mainland, received U.S. interference in territorial sovereignty issues, and military reporting requirements that are levied only at the Chinese must be addressed.

Phase one would include observer status, which would allow time to address practical problems such as language, enforce the acceptance of international norms, rules, exercise safety procedures, and address issues such as access to

publications and other materials, just to name a few.

Phase two would be the final phase. It would require full participation, planning, staffing, logistics, the whole kitten caboodle required for execution of an exercise. In closing I'd like to acknowledge that this process will take time. Years in fact. And I have no grand illusions that it will be accepted overnight, nor implemented quickly, if at all.

MR. LIEBERTHAL: Thank you very much. Colonel?

LIEUTENANT COLONEL ABISELLAN: Good morning. Thank you, Ken, for the introduction and for Brookings for establishing this venue for military fellows. I have to say that at this hour, I'm the only thing keeping you from a delicious box lunch. So I'll be brief. I may not be brilliant, but I'll certainly be gone. My area of research originally started with exploring the recent pivot of U.S. policy and strategy towards Asia-Pacific and what that could mean for U.S. military.

However, the more I explored the possible reactions to the pivot, my research and intuition led me back -- actually, pulled me back to the Middle East. The region's vast energy wealth is both a global center of gravity, and a critical vulnerability of Asia-Pacific to include China's. As the U.S. pivots to Asia-Pacific, it will find that the Gulf States and China have already pivoted towards each other.

Moreover in the Middle East, China through its energy strategy, one that is heavily based on trade and infrastructure investment has already achieved influence parity with the U.S. and has become the best next alternative to the U.S. in the region.

In the Middle East, China could further leverage its influence into an effective anti-access and area denial strategy through other means, and from this point forward, I'll just say A2AD. Those means are soft power investment, String of Pearl Strategy, and by leveraging rogue states. I'll cover these three points briefly and then

wrap up with a recommended way ahead.

Point number one, soft power investment. China energy needs engender relations with the Gulf States. In the Middle East, China might be able to achieve its goals more subtly through the indirect approach, than in Asia Pacific. And in military terms, it's to attack when an attack is not expected. A flank instead of an opponent's main lines or at the operational and strategic level, a different theater of war.

The attack, metaphorically speaking, is to erode U.S. influence through soft power in order to offset a lack of hard power capability to achieve the same objective. The U.S. Energy Information Administration expects China to import about 72 percent of its crude oil by 2035. China out of necessity has developed closer ties with the Persian Gulf states in order to satisfy its voracious energy appetite.

In 2010, China imported nearly 4.8 million barrels per day of crude oil of which over 2.2 million, 47 percent came from the Middle East. China purchases oil from all parties regardless of political affiliation. Its primary concern has been and remains to fuel its growing economy, and ensure sufficient markets are available to sustain future energy demands, and economic growth.

The Chinese do not challenge the ruined status quo on issues such as democracy or human rights. It is both a friend and an ally to competing nations in the region. The Gulf monarchs on one side of the Gulf, and Iran on the other. China is in essence playing both sides of the field in order to maximize and diversify its energy security position. As a result, it is becoming more and more embroiled in the regions politics.

The Chinese through trade, investment, and non-intrusive policies stand to be a better friend, ally, and benefactor than the U.S., at least under the current governmental structures in the region. However, if an Arab spring-like movement should

take root within the Gulf States, Chinese support of authority and regimes and monarchies could become a serious liability.

Both the U.S. and China walk a fine line between friendship with the established ruling class, and the population represented by its authoritarian rulers. China leans towards authoritarian regimes without upsetting the status quo. The U.S. engages non-democratic regimes with an eye towards reform and promoting democracy.

The challenge herein is in maintaining equilibrium between U.S. interests and democratic ideology with that of the less intrusive Chinese view of the world. As China strengthens its economic ties to the region in order to safeguard its oil supplies, it must also concurrently build military capacity to do the same.

Possessing a strong military capability is important, but it does not guarantee success in achieving one's goals. National interests are often best served by complementary multidimensional strategies that incorporate all elements of national power. And this leads me to my second point, China's use of regional allies in the String of Pearls.

As China strengthens its economic ties to the region in order to safeguard its oil supplies, they must also concurrently build military capacity to do the same. The U.S. Department of Defense and other observers believe that the near-term focus of China's military modernization effort -- including its naval modernization effort -- has been to develop military options for addressing the situation with Taiwan.

Other goals are asserting or defending territorial claims in the South China Sea, enforcing China's view that it has legal right to regulate foreign military activities in its 200 mile maritime exclusive economic zone, protecting China sea lines of communications including those running through the Indian ocean to the Persian Gulf, displacing U.S. influence in the Pacific, and lastly, asserting China's status as a major world power.

The logical progression of a continental power rising is contingent on its ability to project military power beyond its shores. China's naval buildup thus far, has been primarily focused on its ability to project power in the near seas and support a conflict over Taiwan. However, it will take decades more for China to build a Blue-water naval capability that can sortie and sustain itself beyond the near seas, and enforce the Chinese communists' party's will.

In the interim, China can through carefully crafted alliances, achieve a measure of localized maritime superiority by establishing land bases along the littoral and in close proximity to its sea lines of communications. It can then employ its state of the art A2AD battle network to constrain the U.S. military's ability to maneuver in the air, sea, undersea, space, and cyber space operating domains.

Advanced A2AD capabilities may enable China to achieve dominance in the straits of Taiwan, pursue and gain localized superiority in the South China Sea, Indian Ocean, and eventually project power by allegedly following the so called String of Pearl Strategy. Building close ties along the sea lanes from the Middle East to the South China Sea in order to protect China's energy interest and sea lanes.

In the near-term, China could exploit the deteriorating diplomatic relationship between the U.S. and Pakistan to strengthen its position and possibly set the conditions for its first Ford Garrison in the so called String of Pearls. The Chinese have invested heavily in the Pakistani port of Gwadar, a Blue-water port on the Pakistani-Balochistan province with access to the Arabian Sea and Indian Ocean.

And within close proximity to the strategic choke point of the Straits of Hormuz. The port of Gwadar could easily serve as a Ford Naval base in which to station ships, submarines, maritime interdiction and surveillance aircraft, anti-ship ballistic missiles, and a host of other military capabilities.

This would give the Chinese a strategic location from which to eventually sortie naval assets from with the support of land-based aircraft. The military applications of the Port of Gwadar can serve multiple strategic roles. For Pakistan, it can provide a means to strengthen its position against India, alleviating the potential for disruption of commerce and or naval activity from the Port of Karachi in the event of conflict.

China on the other hand, would have a means to monitor and track Gulf shipping if it doesn't already, and theoretically, allow it to link its A2AD capability to that of Iran's already formidable Chinese based A2AD defenses. This could in theory, geographically extend China's A2AD network and alleviate Chinese concerns over a critical portion of its sea lines of communications from the Middle East.

Iran's continued pursuit of nuclear weapons and strong anti-access air denial capabilities present China the fulcrum from which to further leverage U.S. concessions in the Middle East albeit and directly.

And this leads me to my final point, leveraging rogue states. Chinese mistrust of U.S. intentions in the Middle East and the broader Asia-Pacific region may lead it to continue to deal with rogue states as a means to counter U.S. influence and regional hegemony. China's continued support of Iran is already counter to U.S. and regional interest, yet it affords China significant leverage in negotiating with the U.S.

In conjunction with China's strong economic efforts in Iran, Chinese military ties and weapons sales may also serve a means to geographically extend China's A2AD battle network in the region by proxy. Iran's anti-ship cruise missiles arsenal consists of a wide array of missiles, many of which were imported from China or derived from Chinese missiles.

China, in a time of conflict over Taiwan, could leverage Iran's A2AD capabilities to mitigate U.S. Naval supremacy and ability to deny China any or all sea-

born imports. Oil would probably be a prime U.S. target. Therefore, China's ability to extend its A2AD network by proxy could help it to mitigate a critical vulnerability. It's ability to protect its sea lines of communications and oil supplies from the Middle East.

In this manner, China may be able to effectively protect the segment from the Gulf through the Straits of Hormuz and Arabian Sea, to the Port of Gwadar in Pakistan. From Pakistan, overland routes could be secured to enable the flow of oil for military and economic necessities.

In conclusion, as China's military modernization efforts continue, it must in the interim and out of self-reliance, find ways to offset its lack of force projection capabilities to protect its energy sources and sea lines of communications.

As illustrated through soft power, the use of regional partners such as Pakistan and rogue states, Iran, China could limit U.S. influence, gain concessions, and achieve future positional advantage in the region. If not careful, the U.S. might find itself increasingly hindered from within the Gulf.

Therefore, the U.S. should maintain a military advantage and position of strength in the Persian Gulf region despite 10 years of conflict and war. Moreover, the U.S. should develop, test, and implement operational concepts to confront the grown A2AD threat and thus mitigate the potential for China to extend its anti-access network by proxy in the Middle East.

As the U.S. shifts to the Asia-Pacific region, it should do so from a position of strength and that strength is already resident in the Persian Gulf region. Thank you for your time and for your attention.

MR. LIEBERTHAL: Thank you very much for two very interesting presentations. Let me make, if I can, a broad comment, invite either or both of our speakers to respond to that if they wish, and then open it up for a Q & A from the

audience. The broad comment is as follows: as you look at U.S.-China relations, two things are quite clear I believe.

One is that our relationship is wide range and mature and quite capable of dealing with the problems that we encounter day to day, month to month, and even year to year. We have a lot of experience in dealing with Taiwan, with North Korea, with you name it.

And our folks on both sides of the table know each other, we know the issues, we know the red lines, and we are quite effective at preventing tensions in any one area from lapping over to the rest of the relationship and making the entire relationship too difficult to manage. So in the short-term, if you will, we're pretty good.

At the same time, as we have flushed out this capability on both sides, distrust about long-term intentions toward each other has grown, and that distrust is very corrosive. The Chinese on the whole are quite convinced as a first principle that the U.S. is number one, who will do everything it can to slow down or disrupt China's rise so that China will not displace us as -- so number two will not become number one. All right.

And once they apply that framework -- that analytical framework, almost anything we do can be interpreted as contributing to that pernicious goal. Even things that you can point to that seem to be obviously designed to enhance China's role in the international arena in a constructive fashion, you know.

And they're interpreted as, well, that just shows how tricky the U.S. is in concealing its ultimate objective which -- once you get into a conspiracy theory like that it's very hard to find any evidence that can't be explained away. And that of course produces Chinese thinking that is quite defensive. How do we prevent the U.S. from doing us the kind of harm that we know they seek to do over the long run? All right.

And the U.S. seeing that kind of thinking on the Chinese side has a

tendency to say, well gee, if they're making that assumption about us, they must be planning to reduce our capabilities. That's the logical consequence, and therefore we better toughen our stance toward them, right? And you get into a self-fulfilling prophecy that's very difficult to break out of.

I raise that because we've got two very different approaches represented in the two panelists that I think reflect differences in the broad strategic immunity in the United States. On the one hand, Commander Oxley premised her approach on, how do we begin to build greater strategic trust between the U.S. and China? In other words, to her, I hope I'm not misinterpreting you, the future is contingent. It can be changed, it can be shaped.

And there is an opportunity here if we do it right, and she has a very creative approach to doing that, but if we do it right, to end up with a normal, big power relationship between the U.S. and China. We're never going to love each other, especially as long as they have the kind of authoritarian political system they have.

But we can get along together, cooperate where we can, try to limit conflict where we can't cooperate, and avoid major cost to both sides as we move forward. I think Colonel Abisellan's presentation makes a different assumption. The assumption is the Chinese are out to get us wherever they can. It is driven by the logic of their dependence on resources to continue their development, and to maintain their security.

That dependence inevitably will produce political and military consequences that inevitably are highly adverse to U.S. interest and so we better get in now or since we're already there, we better take measures anticipating that inevitable Chinese future so that we can stop them.

And of course the result of that will be quite legitimate confirmation of the

distrust that each side has towards the other, right? I mean the distrust is warranted. It will produce a very costly future for each side. But if the assumption is correct, those costs are necessary and appropriate, right?

So that to me is the underlying issue I'd say. I mean your two presentations as I heard them really, maybe even inadvertently highlighted beautifully the, probably biggest single strategic issue the United States faces in trying to figure out how we deal with China going forward. Let me stop there. Do either of you want to comment on that, or do you want to -- please?

LIEUTENANT COMMANDER OXLEY: I'd just like to say, I think you're absolutely right, Ken.

MR. LIEBERTHAL: Okay, you can stop right there. Thank you very much.

LIEUTENANT COMMANDER OXLEY: That's -- you know what? The difference between the presentation that Ed and I just gave really, I think, comes down to a lack of transparency that we just don't know what the future with China holds. A public statement given by them versus a military action given in the South China Sea don't necessarily -- one doesn't necessarily lead to an expectation of what you said isn't what you did.

So you're right, I'm the eternal optimist. I think that this really -- we can shape the future. I think attacking mistrust, miscommunication through engagement, bringing a human element into it shapes that relationship to go forward. So I'll just -- I'll leave it at that.

MR. LIEBERTHAL: Good, thank you. Ed, do you want to --

LIEUTENANT COLONEL ABISELLAN: Thanks, Ken. It is two very different approaches and I do believe that due to China's lack of transparency, that we

have a concern and it's an unsettling concern. However, I also don't think that cooperation is something that on the mil to mil side is something that China wants to do.

When we -- when the U.S. sells weapons to Taiwan, that's a big thorn in the side of the Chinese. So I believe that it's better to be able to bargain from a position of strength. You know that you've got the capability. You know that you can mitigate potentially, the threats that they are developing. If you look at Taiwan itself, our big concern now within the DOD is anti-access air denial.

We're thinking, you know, and I believe it was in 1996 when the last conflict or tensions arose between China and Taiwan, when the U.S. sent two carriers to the region, that's when the Chinese learned, oh we can't do anything about that, so what do we do? And then from that point on, they've been working on anti-access air denial to push the capability of the U.S. to project power further away.

The strength of the U.S. has been to project power, and through carriers it's been naval aircraft that can close the distance and attack targets inland. So I think it's best to be able to position yourself from a position of strength so that you can hopefully down the road, leverage that into military to military cooperation or open other channels to build that strategic trust.

MR. LIEBERTHAL: Thank you very much. One comment I would make and then open it up, is that we always talk about transparency in China. My experience over many years is that transparency is helpful, but by no means resolves the issues. I think the U.S. government overall is about as transparent as anyone out there when you take into account, you know, congressional testimony and a whole array of sources of information about what we're doing in the security sphere.

And yet countries around the world debate like crazy what our real intentions are and what we're going to do. So, you know, the world is complicated and

the assumptions you bring to the table tend to structure it the way you make sense out of a complicated reality. So transparency is better than no transparency, but I suspect a highly transparent PLA would still have us having this conversation up here.

With that, let me open the floor. Please -- we have roving mics, yes? So when you're recognized, please wait for a mic and identify yourself by name and affiliation and then feel free to direct a question to an individual panelist or to the panel as a whole, okay? First question, back there. Yes?

MR. WENDERS: Steve Wenders, local researcher. I'd like to focus on this question of The String of Pearls and that particular base, Gwadar. According to what I've read, there's no evidence that Gwadar is being fitted out as a military base that would be -- where you could actually use it as a naval base.

It doesn't have the right depths of the water and so forth and so on. So I would assume that any suggestions along those lines are very much a projection into the future. I spent a lot of time at the U.S. base at Subic, so I think I have a good idea of what a really excellent base would be from a military standpoint, and too bad we lost it.

But anyway, so -- and also there's a lot of question of whether the whole concept of The String of Pearls is even coming from China at all, or whether that's an interpretation of Chinese intentions for people outside of China. So I just wondered if you could comment on that.

LIEUTENANT COLONEL ABISELLAN: Sure. And this is all -- this is not what the outcome is or could be, but this is more an exploration of what the art of the possible is. That's why I'm here in a think tank exploring the options. And you're right, the Chinese by default could see the handwriting on the wall and turn it by -- be co-opted themselves and to further take in that String of Pearls strategy which by the way, was a report that was done I believe in 2005 by Booz Allen Hamilton to the

Department of Defense and take and run with it.

But it is a means and a way where China in conjunction with the other three things that I've talked about, soft power, allies, and leveraging rogue states, could leverage it to extend geographically its anti-access air denial capability, and that's the only point I was trying to make. Thanks.

MR. LIEBERTHAL: Yes, sir? Could we get a mic up here, please?

Thank you.

MR. SLOAN: Stuart Sloan, American-Jewish International Relations Institute. I was struck by your comment that the Lieutenant Commander made about -- Lieutenant Colonel, excuse me, that 72 percent of China's petroleum is imported. Contrast that with the growing independence of the United States in reducing its imports of foreign oil.

And I was wondering whether or not there is an analogy that can be made between China today, and its reliance upon overseas natural resources, and Japan pre World War Two, and are there any lessons that can be drawn from that? It seems to me that what you're describing is a China that is extremely vulnerable and doing things to try to reduce its vulnerability at the same time we are becoming less vulnerable.

LIEUTENANT COLONEL ABISELLAN: That's a great point. The projection that the -- the 72 percent projection was out to 2035, so that's what the U.S. Energy Information Agency projects. The point that I was trying to make is that there are many centers of gravity and energy is one center of gravity. I mean you can peel this back along governmental economic military.

And specifically, the Middle East is one center of gravity for China with regards to its energy policy. It's got others: Africa, Latin America, so I was trying to keep it focused on a global center of gravity. The Middle East supports not only China, but

Asia-Pacific. Treaty allies like South Korea, Japan, the Philippines, are heavily dependent on Middle Eastern oil.

So the impact is -- it's a competition for resources within Asia-Pacific, and by us maintaining -- the U.S. maintaining a position of strength, not only are you safeguarding that, but you're also assisting treaty allies down the road. Even if we're not depending on the oil, there is still a strategic necessity for us to do so.

MR. LIEBERTHAL: Yes? Over here. You're going to have to wait to get the mic up here. Let me recognize someone else and then we'll come back to you, Jonathan. Just for travel time for microphones. Yes, sir?

MR. Marquez: Good day. Ricardo Marquez, GAO. Regarding the issue of transparency and the divergence between rhetoric and action, did your research uncover any issues regarding civilian control of the military in China giving the issues of trying to discern what their intentions are? That's come up every now and then, but what did you discover in terms of your research? To both participants.

LIEUTENANT COMMANDER OXLEY: I attended a briefing that Chris Young, who's at National Defense University did over at Johns Hopkins talking about the PLAN and their influence on the CPC, and his thought was that, yes there is an influence, but that civil military relationship is still developing today.

So while there may be some PLAN inputs in buying assets or where to spend money from the larger government budget, it's a -- I just think -- there's just not a lot of information known about it. But the Navy certainly has an ability to influence where those decisions are made.

MR. LIEBERTHAL: Let me elaborate on that just a bit if I could, because I've spent my life studying how China's governed. So there is civilian leadership of the military that is effective. It's party leadership, not government. The government has no

control over the military in China. The party controls both the government and the military.

The problem with the party -- party leadership means basically, if the top of the party, Standing Committee of the Politburo, through the party's military commission, tells the military to do something, it will do it. So you don't have a rogue military kind of problem as Japan had, you know, before World War Two.

But the supervision of the military by civilians is very, very thin. So in China compared to us, Hu Jintao, the president and the head of the party is also the head of the military, The National Command Authority, in our terminology, right? But he doesn't have a national security council to integrate military and other issues, and he doesn't have an OSD.

He and one other person are the only two civilians on the military commission of the party, which is effectively the joint chief's command center in China, and everyone else is uniforms, okay? So it is very difficult to exercise to the level of civilian supervision and comprehensiveness of it that we have in our military. Okay. Jonathan?

MR. POLLACK: Thank you. Jonathan Pollack from the John L. Thornton Center here at Brookings. I want to compliment both speakers for the clarity with which they presented their views, but I want to push them both a bit, and I'll start with Ed. You seem to -- I mean in a perfect world we'll always be in a position of strength.

This afternoon we're going to have a discussion here at this meeting about how the United States weighs its options under more constrained budgetary circumstances. So if I could put it very boldly, you give great emphasis to the question about the possibility of a conflict over Taiwan as the basis for China's military modernization or much of it.

From your point of view as an officer, how much of your wager about the future are you prepared to put against that specific contingency relative to what we do globally? So that's my modest question to you.

For Audry, you present the possibility, an intriguing one, of a much more inclusive strategy and I think the point I would highlight, whether you look to what China does in Latin America, or for that matter what China does in a lot of other regions, there's a lot of overlap here between states that China cooperates with and states that the United States cooperates with.

So in a funny kind of way, you're sort of leaping over the argument, whatever the intrinsic liabilities and potential limitations because we are in a world where China has, if you will, gone global. So do you think an inclusive strategy really is the way we can go ahead, as opposed to having something that is a very autonomous strategy, which maybe I -- historically we'd like to have but even as we have lots of allies too? So in any event, my compliments to both of you and I appreciate your answers.

LIEUTENANT COLONEL ABISELLAN: Thank you. With regard to Taiwan, I got that statement as a Department of Defense piece on what is likely the rational for China's current modernization. But do I think that that is from a global perspective the most likely thing to happen? Absolutely not.

I think it's the least likely, and that's why I focused on what China's most likely actions are and where they can gain, and where they could gain would be to -- enforcing or protecting sea lines of communications, displacing U.S. influence, and asserting itself as a major world power.

I think it could do that without having to confront the U.S. and the Middle East through soft power, through its String of Pearls strategy, and by leveraging rogue states. So it can do that by proxy in the Middle East and set itself up down the road in

the eventuality -- unlikely eventuality that there will be a conflict over Taiwan.

LIEUTENANT COMMANDER OXLEY: Thank you, Jonathan. I want to bring back a point that Scott mentioned earlier, that the Coast Guard and the Navy, our capacity for assets in Central and South America are declining. As capital assets get older, we will retire the Perry class frigates and as the age of the Coast Guard cutter continues to diminish, our presence in the Western Hemisphere from a maritime perspective is going to get smaller.

We just don't have the number of assets and we're not building ships as fast. And the pivot is pushing us away from this hemisphere. So my worry is that the traditional maritime role that we have had in this hemisphere, the Latin-Americans are going to look elsewhere.

They are going to want to practice their warrior skills. They want to go to sea. They want to have the ability to flex their muscle, and if we're not there, somebody else is going to come in and fill that void that -- where we're at. So what I would really like to do is say, the Navy can remain relevant in the Western Hemisphere by inviting the Chinese to do this.

That having a capacity to work globally and a -- for the defense of something that nobody really, I think, perceives as a bad thing. Everybody wants the Panama Canal to stay open. Everybody wants commerce to continue to flow. And China has invested interest in that as well. They are the number two user of the Panama Canal.

The locks will be widened by 2014 and commerce will continue to grow whether or not it's -- that commerce is coming to the U.S. or it's traveling from -- more soy from Argentina going to China, or more copper from Chile, you know, going to another part of the world that militarily the U.S. -- we can't forget to look within our own

hemisphere.

That from a foreign policy standpoint, we've really had this -- our view of the world has been in the Middle East and now it's going to Asia. My worry that is in 10 years, the Latin-Americans will have found another partner, and hemispherically there's a security problem that we may not be addressing and may not wake up to that until it's too late.

MR. LIEBERTHAL: Yes, sir? Well, here you are. No, you got a mic.

SPEAKER: Anyway, as most you probably remember from the previous discussion. And mine is kind of -- I like this. We've got the indirect approach and the direct approach. Navy, Marine Corps, that's kind of neat. Just had to get that out there because I'm from the, you know, Curt LeMay School of Diplomacy. Anyway --

MR. LIEBERTHAL: The Game Over School of Diplomacy.

SPEAKER: Anyway, you mentioned that, you know, obviously going forward, 74 percent or something like, you know, of their energy is going to come from the area. What I kind of want to ask and that's just an opinion obviously, is you said as they develop this reinforcing rogue nations, String of Pearls strategy, any and all of the above, I'm going to come back to the Middle East still being a provider of a majority of their oil, true statement.

And if you're going to play Iran against the rest of the region, primarily if you're looking at Shia versus Sunni lines, does not China possibly affect their own security in terms of economic growth when it comes to, you know, any type of a hiccup in the region and oil prices spike? Their economy as I understand it, again I'm not an expert on that, looks like it's kind of in that area that we're living in right now.

Where very little perturbation can cause a lot of pain. So do they not in themselves risk possibly driving -- you know, especially if they enable a nuclear Iran to

spike an arms race which does threaten the Straits of Hormuz, which does drive the price of oil up, which will hurt them as well? I just look for your insight on that. Thank you.

LIEUTENANT COLONEL ABISELLAN: I guess that's my lane. Hey, just let me clarify the quote. It's the EIA expects China to import about 72 percent of its crude oil by 2035. That doesn't mean it's all going to come from the Middle East. The preponderance of it is going to come from the Middle East.

Right now they import 47 percent from the Middle East, the Persian Gulf area and the rest from other regions. As I stated earlier, China walks a fine line between being a friend to the Gulf States and courting Iran, and I think the number is something like 21 point something billion worth of investment and heavily energy infrastructure investments with Iran.

So they're in -- they've got a reason not to let this thing go south. But at the same time, it's leveraging power against the U.S. Its potential concessions against not selling weapons to Taiwan, for example. So they're going to walk that line for as long as they can to limit U.S. influence and hegemony in the region and hopefully get something out of it. And that's the approach that I was taking.

MR. LIEBERTHAL: China has a problem in the Middle East in, let me just take the simplest version of it, the Saudis hate the Iranians and vice versa. And those are the two largest sources of Chinese oil out of the Middle East. They've been largely embarrassed by what's happened during the course of the Arab Spring, and then in Syria they've been very uncertain on how to deal with Iran.

They want to be on the side of anti-nuclear but don't want to walk away from their \$21 billion worth of investment and so forth. It sounds to me like you on balance are reasonably optimistic -- and let me add finally that the Chinese do not have a good record of dealing with their own Muslim population in their own northwest, and that's

been noticed in the areas we're talking about.

It sounds like you on balance are fairly optimistic about their political capacity to handle these contradictions effectively and I'm not clear why.

LIEUTENANT COLONEL ABISELLAN: I would also add that, you know, it could lead to even greater tensions in the region because I think the Chinese have offered Saudi Arabia nuclear technology down the road. And that could lead to, obviously, you know, an instate that we don't want for the region.

MR. LIEBERTHAL: All right. In back there, please?

MS. WIN: Thank you. I'm Jeanie Win with Voice of Vietnamese Americans. Thank you for the presentation. I would like to ask Director Lieberthal and both of the panelists your ideas about if the U.S. should ratify the UNCLOS? Why and why it hasn't been ratified. I understand that it's been on the table for a long, long time and it's been back on the table of Congress and the Senate, and it hasn't been discussed. Thank you.

MR. LIEBERTHAL: I'm sorry, I missed -- if the U.S. should what?

MS. WIN: Should or should not ratify the UNCLOS. The United Nations Conventions on the Law of the Sea.

MR. LIEBERTHAL: Oh, should we ratify UNCLOS?

MS. WIN: Should or we should not. Yeah.

MR. LIEBERTHAL: Okay.

MS. WIN: Thank you.

MR. LIBERTHAL: Thank you. Any thoughts?

LIEUTENANT COLONEL ABISELLAN: I will defer to my Navy counterpart. (Laughter) Navy?

LIEUTENANT COMMANDER OXLEY: And the Navy counterpart will

decline to answer.

MR. LIEBERTHAL: You know I'm not in the military chain of command. I can take a shot at this. The big -- you know, we've signed UNCLOS and by signing it effectively what we have done as a country is commit to follow it even though we haven't ratified it. The problem with ratifying it is it won't get two votes on Capitol Hill.

So it's just objectively not politically doable. Would it be better if we did it? I think it would be because we find ourselves in the somewhat peculiar position, especially in the South China Sea, at being a champion of UNCLOS and the only country involved in the disputes there that has not ratified UNCLOS.

So it just, kind of doesn't serve us well to be in that anomalous position, but I think the reality is, politically on Capitol Hill there is not a prayer that you could muster the necessary votes to get it through the senate. Other questions? Yes, sir.

MR. On: Thank you. Mike On, Army fellow from Army Environmental Policy Institute. Question for you, Eduardo. When you're discussing policies and particularly oil for transportation, and our policies toward the Middle East, had you given some thought to perhaps we should emphasize more renewable and alternative energy research rather than trying to say what we need to do in the Middle East?

Because I know China itself in 2010 announced that they're going to go spend \$738 billion in research in renewable energy. So it seems like they're looking at alternatives rather than the Middle East. And I just -- your thoughts about what we should be doing.

LIEUTENANT COLONEL ABISELLAN: Right, that's a great point. And to be honest with you, it's not just China. It's also Saudi Arabia. Saudi Arabia consumes more energy itself than most countries in the area. Concerning renewable resources, the data and what I'm referring to is like the World Energy Outlook report and U.S. Energy

Information Administration.

The projection is that China's going to continue to need crude oil and import crude oil. Most of its going to be from imports either from the Middle East, Latin-America, or Africa. That's a great statement on renewable resources, but getting from here to where they want to be and weaning themselves off of the amounts that they are projected to need, is a different story.

I mean, we haven't done it and we're at the cusp of an alternative energy revolution with, you know -- alternative energy plays here in the United States, but we're not there yet. And the projection is with the United States that within the next 10 years, we could be certainly on the natural gas side of the house, self sufficient.

So I just don't see China -- based on the information and data that's out there, getting to where they need to be and not having to rely on imports from those three critical regions, the Middle East, Latin America, and Africa of which Middle East is the greatest volume that's providing their crude oil.

MR. LIEBERTHAL: Thank you. Back here?

MR. Ballard: Mike Ballard the Air Force fellow from the Atlantic Council. We highlighted sort of, your two opposing approaches to dealing with China. I'm curious, your thoughts: are they mutually exclusive or is there a danger in trying to pursue both those lines at the same time?

Can we hedge our bets by bolstering our position, our influence in the Middle East, while at the same time trying to engage China and shape that future, or do we sort of undermine both those strategies by trying to do both at once?

MR. LIEBERTHAL: Let me just gloss that slightly. We obviously are going to pursue both. So your question really is: can you pursue both without one simply undermining the other? Is there a way to square the circle?

LIEUTENANT COMMANDER OXLEY: Yeah, I think there are opportunities and avenues for that to happen. I can't give you five of them off the top of my head, but I'm optimistic and I'm hopeful that we have bold leadership and we are willing to maintain a position of trying new things and seeking new alternatives for perhaps lessons that we've learned that haven't worked so well.

I think there's a lot of diplomatic legwork to be done by pursuing them together. I think -- and a lot of my research that I've found -- the largest objection to stopping the mil to mil engagement was our sale of weapons to Taiwan, and primarily because the Chinese felt, wow you -- it's the manner in which we told them and there really wasn't a clear idea of why we would continue to arm Taiwan.

So I think we would have to be very careful in the way that we spun in and the way that we try to pursue those goals together. But yeah, I'm optimistic that you could do it.

LIEUTENANT COLONEL ABISELLAN: And just to add on, I think that a strong position in the Middle East transcends the region and has the ability to compliment our efforts in Asia-Pacific, because oil is Asia-Pacific's critical vulnerability. It's not only China that's dependent on it. It's India, it's South Korea, it's Japan, Malaysia, Australia, et cetera. So it's got the ability to impact significantly into Asia-Pacific.

MR. LIEBERTHAL: Thank you. This will have to be the last question because of time constraints. Back here. Yes?

SPEAKER: Thank you. I'm Leon from Winthrop University, Wisconsin. I'd like to ask a question of Commander Oxley. It seems to me your discussion would center on either the U.S. or the People's Republic of China being a regional hegemony in the area.

I'm wondering if there was a possibility of the U.S. supporting buildups by

some of the regional leaders like Brazil or Columbia or Chile, perhaps obviating the need for looking outside the region for another supporter.

LIEUTENANT COMMANDER OXLEY: Yeah, those are actually underway right now. We would -- the Navy is pushing Brazil to take a larger role in the region. I don't know -- I think the problem that you have is that Latin America is never going to act regionally. There are too many problems individually with the countries working together from a political standpoint.

I don't think most of the other Latin America countries will allow Brazil to become the overall global leader there. So I think it would be great -- I think it all comes down to a matter of assets and defense budgets as well too. What sort of assets do those Latin-American countries want and need, and what are they capable of buying?

And then where do they go to increase their training? They've always come to us, to the U.S. My fear is that eventually they are going to look elsewhere, and we just don't have the ability to influence that relationship anymore.

MR. LIEBERTHAL: I'm afraid our time is now up. One logistical announcement first, which is that lunch awaits you outside the side doors in the hallway out there. You can get your lunch, bring it back in here. We reconvene at 12:45 for the next panel.

I want to thank both of our speakers for really doing a remarkable job of teeing up just a fascinating discussion. So thank you very much.

(Applause)

MR. SINGER: While our keynote speaker just suggested that I should introduce him by just saying British general. I didn't think that would do justice to what he brings to the table at this event. We couldn't be more delighted than to welcome Major General "Buster" Howes. It's not often that we get such a wonderful fit of both timing to

speaker and event.

For this audience, I don't have to speak to how there is no closer ally to the U.S. than Great Britain to the extent that they're even willing to go to bad basketball games with our senior leaders. (Laughter) We just are waiting for what will happen to President Obama on his next visit.

But the timing of a senior leadership visit makes this noteworthy, but also to host Major General Howes for the first time at Brookings. But what I think what's even more noteworthy is the discussion we're soon to enjoy and so appropriate to this gathering of officers in this event, a discussion on lessons learned in leadership, to which General Howes brings an incredible perspective and experience.

He was commissioned in the Royal Marines in 1982. Initially he served as a troop commander in 42 Commando RM, deploying for the first time on operations in Northern Ireland. Subsequent postings and commands include training a recruit troop, mount leader, appointment to the 2nd U.S. Marine Division as a regimental operations officer during the first Gulf War, Commando Training Wing, 42 Commando RM for the second Gulf War, 3 Commando Brigade, a planner in UNPROFOR in Bosnia, a strategist in the Naval Staff Directorate, chief in joint coordination effects for ISAF in Afghanistan, director of naval staff, head of overseas operations in MOD, commandant general Royal Marines, and command of Operation Atalanta, which is the EU counter-piracy operations for the last 15 months, before currently assuming his position as head of British defense staff USA and defense attaché.

It's this long distinguished career and wide range of experiences really does make us all look forward to it and we very much are thankful for you joining and look forward to your remarks. (Applause)

MAJOR GENERAL HOWES: It's a great pleasure and privilege to be

here today. I am conscious of the U.S.-U.K. love-in which has just taken place on our screens. I just was at Andrews Air Force Base seeing the prime minister away this morning with the Union flags everywhere, so I shall try not to derail this *entemps cordial* by my remarks.

Marine, at least where I come from, is not actually a noun, but an acronym for "Muscles are required, intelligence not essential." (Laughter) So you may not get vast insight from me today, but I will do my best.

Peter, when he invited me to come and give some remarks, he -- I said, well, I'll bring some pictures, PowerPoints. And he said, oh, no. And I said, well, I hope they'll add something. Well, there's a good saying that power corrupts and PowerPoint corrupts absolutely because my PowerPoint done corrupted. (Laughter) So I will -- fortunately, I have sort of another version of this presentation which I've given in the past. So forgive me if what I'm trying to say and the images are a bit incoherent, and I will sort of muddle through and use them where relevant, but you may have to bear with me a little bit.

We've got 40 minutes, I think, and I'll try and leave a good 10 minutes at the end for questions.

We all know what good looks like and this man's image will be better known to you than it is to me and the 20th Maine at Little Round Top at Gettysburg. "At that crisis, I ordered the bayonet. The word was enough." The knightliest of knights, a man who was wounded 6 times and took part in 20 battles; a man who spoke English, Greek, Latin, Spanish, German, French, Italian, Arabic, Hebrew, and Syriac fluently.

And we can recognize when things go wrong what bad looks like. This is Baha Mousa, a young 26-year-old receptionist, who, on the 14th of September 2003, was taken into custody by the Queen's Lancashire Regiment in Iraq after the Battle of Danny

Boy. Two days later, he was dead in custody having sustained 93 different traumas. There are 230,000 Google sites which appear if you Baha Mousa into a search engine.

Kennedy said of Churchill that he was a man who mobilized the English language and led us into battle. There is more written about leadership than almost any other subject, but it doesn't tend to get one much closer to the essence of it.

I wanted to talk a little bit about leadership in an ethical context, and ethics is a set of moral principles from "ethos," the Greek. Morals -- the study of right and wrong, the coda by which good and bad is judged in human behavior.

Too often, though, in operations we have to judge between wrong and wrong. We make very, very difficult time-sensitive decisions with inadequate information where you make a judgment between A and B, and somewhere down the pipe maybe just a matter of minutes, sometimes a matter of months, because you chose B in that first binary judgment you end up with a decision between X and Y and you have no choice but to make Y. So the linkage between those decisions, the whole imperative of thinking to the finish and being able to conceptualize the third, fourth, and fifth order implications of what you do are pretty key.

Now, when Peter and I talked about what I might speak about today, I was slightly ambivalent about whether this subject would sit comfortably within the topics, the other topics you've discussed. And I suspect that, you know, understanding or speaking about the implications of British defense policy or European defense policy would have been more in the vein of some of the other narratives.

But I have been struck in the last couple of weeks, months, January/February, and more recently -- and I made no comment whatsoever about the context of it because it is clearly *sub judice*, but as a piece of context; and I don't have this slide -- George Packer, "News from the Wars," *New Yorker*, 13th of March 2012:

The massacre in Afghanistan is making a lot of people write history today. It is the sort of instant that immediately symbolizes extreme violence and futility and the inevitable end of a war effort. It's already in the books. After this, it's impossible to imagine any kind of honorable and satisfactory conclusion to the decade of American involvement in Afghanistan. We already know that the Panjwai killings will have a prominent place in accounts of the Afghan war, like My Lai in South Vietnam and Abu Ghraib and Haditha in Iraq. And just as those atrocities stained everyone who had anything to do with those wars, Panjwai will be a blight on every soldier and civilian and policymaker who left any fingerprints on the Afghan war, no matter how good their intentions, no matter how hard they tried to make it come out right.

You could construe those as rather histrionic words and time will tell, journalism being the first rough draft of history and all of that. But the point nevertheless, I think, has a grain of truth in it. In campaign analysis we always try and look for the campaign fulcrum, good or bad. It's a very hard thing to deduce. You know, obviously, there's a bit of magic dust about it and very often you can only see it retrospectively. And this may or may not be, but it will have, at a time when the narrative, when the public perception is very finely poised, this and other acts like it -- however they take place -- are important.

It's a sort of toxic strategy to task linkage. We talk about the strategic corporal. But good and bad, so often that is an absolutely brilliant thing, the ability of boys and girls to make their own judgments and to do brave, courageous, complex, difficult things with a minimum of direction. But when the train runs off the rails, the obverse applies.

And if you just take imagery on its own, you know, it's quite interesting to think about the images. And this is not about America. I contextualize that very carefully.

I start off with a very difficult example from my own nation. There are examples of coalition actors in the last 10, 20, 30, 40 years from every country. We all have this challenge.

And you could say, well, there's nothing you can do about it. The fact is that shit happens and it'll happen. But it seems to me that the strategic impact on campaigns of these sort of occurrences demand the leaders bear down and think and think and think on this issue. Because if you can reduce the instance, however small, by 15 percent, you're having a major bearing on your campaigns.

So very briefly -- and I'm watching the clock and I am going to run out of time -- the why, the way, and the whence. Why is it important? I've probably given you an insight on that. How one might go about breeding leaders, training, educating people, and then where does this sort of intestinal fortitude, the energy, insight, persistence, and stamina come from?

In the past, we've tended to focus in a rather sterile manner when we've covered ethics with men and women quite often at staff colleges, middle seniority individuals, and we persist on teaching them Augustinian theory, *jus ad bellum*, *jus in bello*, when actually they know the difference between right and wrong. I mean, they wouldn't be majors, you know, and commanders and colonels if they didn't. And we don't get beyond that. And for too long in Britain we sort of fixated on a theoretical conversation which really assisted nobody.

There was a great quote by William Johnson: What is a great school for? You are not engaged so much in acquiring knowledge as in making mental efforts under criticism. A certain amount of knowledge you can with average faculties acquire, but you go to a great school not so much for knowledge as for arts and habits, the habit of attention, for the art of expression, for the art of assuming at a moment's notice a new

intellectual position, for the art of entering quickly into another person's thoughts, for the habit of submitting to censure and refutation, for the art of indicating assent and dissent in graduated terms, for the habit of regarding minute points of accuracy, for the art of working out what is possible in a given time, for taste, for discrimination, for mental courage and mental soberness, and above all you go to a great school for self-knowledge.

And when you are working in a complex, shifting, difficult, ambiguous moral environment self-knowledge is quite close to being the key. If you haven't spent the time to think and examine and ruminate to work out who you are and what you stand for, when you're really, really under pressure don't be surprised if your references are blurred. So this tends to be the dialect and it's not a useful one.

So why? Well, uncertainty absolutely continues to characterize what we do. This is a quote from the Second Gulf War, but it still applies: During 2003, when I was with the United States -- wrong, 2003, when I was part of the 2nd MEF, we attacked into Southern Iraq at the start of the Gulf War.

These were the assets, the intelligence assets, which were looking at a piece of ground which was not particularly large, which was as flat as a billiard table.

Three days after we had attacked, we then had to secure a small settlement, Um Kayal, because it controlled the water supply to Basra and they were very worried about cholera and a serious illness, and we had to do it fast. And we were told that it was a sort of -- it was a concrete facility. There were no maps. There were on air photographs of this. So I sent some people in and they drew this map on the wall having spent 36 hours rekeying the location. There were 37,000 people living around this facility. We did a combined arms assault at battalion minus level to break in, in order to seize this facility. Uncertainty still applies.

You all know Krulak's quotation. I'm not going to labor that.

And our conception of war is this because this is a kind of known quantity. You know, war is a very, very difficult thing to depict and we tend to get our imagery from films because it just -- when you're in it, it's just a mess and a muddle and it's an empty battlefield and nothing goes on most of the time. So trying to get the right images, the real images, is almost impossible. But that is actually the reality now: a complex, congested, cluttered, contested, connected, and constrained environment. Rupert Smith's "war amongst the people."

The other challenge, this was a recruiting poster when I joined the Royal Marines in -- and this one came out in 1986 -- '85. And the inference was that the Royal Marines have been involved in operations every year, in fact, since the start of the Second World War, and have lost men who have fought and died against the Queen's enemies since that time, except in 1968, when apparently we sat on a beach with a young lady in a bikini with a ridiculous hat. (Laughter)

In 1968, the Royal Marines took a holiday. And when I joined 42 Commando, we then went straight off to Iraq. And my ops officer, John Bailey, said there are two speeds in this unit, boss: flat out and stop, and stop is Christmas Day. So you have that challenge.

This isn't going to run, which is a pity. Have you seen this video before? Okay, this guy is sitting on the top of an elephant and he's sitting there and you're sitting now on the back of the elephant with him. And you're looking at the pampas grass and you have no idea what the context is, and a tiger comes out the grass like a missile. Look it up, Google it. And he comes shooting out of the grass somewhere in the middle of this thing and comes right at him with its mouth open about a yard. And there's a metaphor for the challenges that strike you in complex environments. It's a good one

because they blindside you and sometimes have absolutely no preamble.

And if you've got a bamboo cane in your hand, top tip: You need to have thought a little bit about what you're going to do with a bamboo cane before the tiger's coming at you because it's a bit late. So this is the environment. This is the environment. And I've talked a lot around the world and to staff colleges about catalyzing that interest in thinking about these issues.

You know, when you're hanging on by your fingertips it doesn't do to wave your arms around. So if you've got the baton and you're the conductor, you kind of need to have rehearsed a bit. And what I sometimes do -- and I don't know if the slide's here because I'm -- oh, it is here, but the sound isn't, so you're lucky. What I usually do is I walk into the audience and I give this to somebody and attach to Blake's image with God and his pair of dividers and other kinds of (inaudible). I give it to somebody completely randomly because you never know when you're going to be in a leadership role and there you are, it's you. You (inaudible) so you're safe. (Laughter)

And William Blake is the best known when you do this in a British environment (inaudible) a lot of you who say it should be our national anthem. I wouldn't be beheaded for saying that.

And I get them to conduct, which is a rather trivial game, but it makes the point. And it's really, really interesting to see how people will respond to the individual who's suddenly in the leadership role. And I did this in a group of people, there were 700 of them and about 150 of them were Muslims and they sang their hearts out and the guy then took a bow at the end. And recently I did it with about 120 and nobody would sing. So it tells us quite a lot about the internal Greek dynamics as well, the followship that's involved. But you're safe.

That's not going to run either. This is about Zack and inside Zack's

helmet. And it's about a young man who has this bun of paper inside his helmet, like a Bible, and the notion that you have to think before you're in contact. Every time the Army wants you to know something, they give you a piece of paper and you put it inside your helmet. And his last point is: But I have yet to meet anybody who went in action and in contact takes off their goddamn helmet to find out what they're supposed to do next. So it's sort of -- it's a variation on a theme.

As a leader, when things go wrong, time slows down. And, you know, anger in the voice is kind of the death rattle of reason. And in the few instances where I have been at the point of decision directly as in a tactical environment where people are dying around me, it's a sort of crystallizing thing. And I suspect a lot of you have been in a similar situation where suddenly everybody is looking at you. And the tendency over time, if you're involved in managing things where there is a time dimension to it, is to become risk-adverse.

When I was a young platoon commander, I wasn't a very good map reader. I just wasn't. It's something you learn through experience. And so I used to always put my best map reader to lead the platoon. And so the guys who, like me, weren't as good as they should have been never got the chance to learn because I didn't want to get lost because I knew my company commander would be pissed off with me.

"For the common soldier at least war has to feel the spiritual texture of a ghostly form. There is no clarity. Everything -- the old rules are no longer binding, the old truths no longer true." That's perhaps a more up-to-date one.

So why? You'll be well familiar with this. This happens to be an American example, 1968, William Calley. I put this up because I'm going to put an English -- a British example up in a minute. When Charlie Company went into My Lai in 1968, they had been in Vietnam for three months. They had been launched on an

operation where they were expecting to meet the enemy symmetrically, if you like, and he didn't deign to do so. And several of their company were wounded and injured whilst they were patrolling and they couldn't respond. It was a hidden enemy. He never shaped up. You know, it was like clutching smoke. And their inability to apply -- to control their environment built up inside them.

William Calley was 24. He was of below-average intellect. He was short, unpopular, unfit, nervous, excitable, and too gung-ho. He was always trying to impress his superiors, but his company commander, Medina, used to ridicule him in public in front of his troops. The average age of those in his company was 20. Hugh Thompson, who was the helicopter pilot, was the only man in the entire sort of undertaking, who managed to, in the confusion, maintain his moral compass.

Olaf Schmid here on the left was a British bomb disposal expert, who, after his third tour in Afghanistan, was blown up and killed. And the IED threat in Afghanistan, in Iraq, which surely will be a model of things for the future, if the entire NATO forces in Iraq -- wrong, in Afghanistan can be bogged down by men with -- using fertilizer and very simple triggering devices in an urban environment to such spectacular effect, we have to assume that this will be at least part of the war of the future. And this inability of soldiers to control a threat which they can't see and which is incredibly difficult to respond to applies massive psychological pressures on them.

Herrick 10 -- we call each rotation of soldiers in Afghanistan a Herrick, so Herrick 10, this was one -- had an unparalleled IED threat. Across the task force area of operations there is an IED explosion every 16 patrols. And in Sangin, which you will now be well familiar with because the United States Marine Corps did a relief in place with us, one in six patrols will suffer an IED casualty. So you're patrolling between one and nine times a day for six months and you have a one-in-six chance of being blown up by

something you can't see and can only really respond to.

So there are some examples. Deepcut was a training establishment in Britain, so it doesn't always happen on operations. Rwanda, Romeo Dallaire's book; Srebrenica, which was a classic example of first decision. You know, Thomas Karremans, a Dutchman, squaring up to Ratko Mladic; 9,000 young men were put to the sword, the largest massacre in Europe since the Second World War. You know, was it just Karremans? No, of course, it wasn't. There's a whole systemic aspect to what transpired.

This was Dachau. I won't go into this example now, but it's a very instructive one. U.S. forces coming across Dachau, having fought their way through Europe, appalled by what they saw summarily executed all the guards, which seems to be actually quite a reasonable judgment and Patton supported it and destroyed all the evidence. But the guards weren't the guards and the blokes who done it had all disappeared. And when they were subsequently rounded up, they were all exonerated because of this judgment.

Let me go back to that one. This is a bit of analysis I did some years ago as to why things went wrong and why discipline breaks down. And it makes no allowance for a sort of mental state, but if you take these ellipses and you take the outer one as the way you would wish your people to be -- in other words, a disciplined, happy, well-led, well-motivated group of people -- and then the center one as being something which has gone badly wrong, either collectively -- and this was through the prism of the First World War and 92 French divisions mutinying in the trenches after the Nivelle Offensive -- and you take the arrows as causal factors, one of the biggest ones is loss of faith in or failure of commander leadership.

Sometimes there were weird things, you know, a specific catalyst or

tipping point which can take you from good to terrible in a very short space of time. But some of those you will recognize. Fear is an obvious one. Compromise, locus of control, exhaustion, lack of dialogue with authorities, lack of support to or from family or from nation, unjust cause are things to be considered.

So I want to touch on this business. So what about the leadership bit?

Well, back into what you think about and asking some quite difficult questions.

How am I doing for time? Another five?

MR. SINGER: Yeah, sure. Take as long as you need.

MAJOR GENERAL HOWES: Bob Geldof is probably a slightly odd example to quote, but is a man who kind of tells it as it is and stands up for what he believes. What do you stand for? When one asks these questions people sort of get restive and -- particularly a British audience because we don't -- we're terribly buttoned-up and stiff upper lipped and we don't do emotion in public, and you'll army officers all starting to wriggle in their seats and sort of examine their boots. Aung San Suu Kyi, what will you fight for? And there was a whole -- I remember a huge debate going on during the Bosnian crisis and people were much more prepared to fight than to die. So, you know, what you will die for?

And you can look at this existentially. I mean, very, very few people go to war anticipating that for the Afghan cause or for protecting hearth and home, for protecting the children of America from a 9-11, they will lose a limb or two limbs or four limbs or their lives. And so when you actually look at them in the eye and say what will you die for, they sort of look at you and think, well, that's a pretty strange question.

How many of you have got children? Keep your hands up if you'd die for them. You know that. You haven't even hesitated. You absolutely know that in a visceral -- you don't even have to question it. So if you know on the right-hand side that

you'd die for your kids and so would I, why can't you, by a process of careful thought and exploration, understand what other things you'd die for?

I think part of this process of discovery is about having multiple lenses. When you're trying to do complex problem-solving as a leader, you know, we have this notion of tag team. You know, you bring a lot of people in to examine something. And you're back, if you like, full circle to Joshua Chamberlain and why he was such a visionary and brilliant man. And it was because he had that ability to look around and beyond and sideways and could see the third, fourth, fifth, sixth -- probably in Greek or in Sanskrit -- solution to the problem he was examining. And he had the moral authority and the confidence to be a bit alternative.

And one of the criticisms of all education, particularly education in Britain and military education, is we stuff it so full of things that we think are mainstream. You know, when you go to university you read history in Britain. At the age of 19 you'll get 2 lectures a week. And at the end of three years you have to go to pass a moderately rigorous set of exams to get your degree.

At the age of 37, 38, you go to staff college and every single waking hour is scheduled because you can't be trusted to take time off and do your own study. Now, how often do you get to depart from the mainstream of what the military has decided is important for you to learn? Not often.

Okay, we're fully frozen now.

Okay, I'm going to wind up, and this has been a horribly incoherent presentation, I fear. A couple of things, a couple of very quick points.

To lead in difficult circumstances, you know, the business of being sort of interesting and interested, trust -- trust -- which is the fundament of all this, could be described as an equation, which is credibility plus reliability plus intimacy. And the

credibility bit is you can do what you say you'll do, so you're a professional. You are expert in your role. Reliability is you do do what you say you'll do, so you deliver. Intimacy is being accessible, it is being understood, it is engaging, it is being compared to take risk and to look foolish and not to guard your reputation as the most important thing that you have as you get older and more senior and bolder and more like a caricature of a general.

And all this is divided by perceptions of self interest. Perceptions of self interest. And when you engage with people to understand those who are struggling, who may have issues within your midst, so that you can mitigate the risks of individual people doing incredibly damaging things, you have to -- you genuinely have to engage.

Definition of a bore is a man who when you ask him how he is, tells you. How are you?

SPEAKER: Very well.

MAJOR GENERAL HOWES: Very well. I walk around this entire room, I could engage (inaudible) company of men for three years shaking their hands and asking them how they are, and (inaudible) they just say very well, thank you. (Laughter) Your whole life could be (inaudible). You could have met today with absolute disaster (inaudible) and you'd still tell me things are great.

I broke my pelvis three years ago in a ridiculous accident and flat-lined twice. And eventually I came back to work and I caught myself doing exactly the same thing. How are you? I'm absolutely fine. It took me -- by that stage I was walking again because otherwise they would have had to queue. I'd have been in a wheelchair.

But getting beyond that and the burn model, you get behind ritual and cliché, facts and information, opinions and judgment, beliefs and values to emotions and rapport, and at that point you get engagement, and at that point you get behavioral shifts.

So if you've thought through what you stand for and how you are, the only chance you then have of really communicating in the way that Chamberlain did is if you get beyond that.

Now, it's complex. There are 18 ranks between me and a private infantryman in the Royal Marines. So you've got to -- you know, it's about personal power, not positional power, so you have to take a badge off. But then he's sort of sitting there looking at you, you look very old for a private soldier. (Laughter) And you sit down and you try and find a really informal environment. And I have to say your senior officers are brilliant at it. It comes from your traditions of citizen soldiery, the Minutemen, the fact that there is a contract. And you call it -- you're very respectful and you listen well, things that military people aren't great at. You're issued with two ears and one mouth and the trick is to use them in that ratio. (Laughter) But, you know, that business of engagement, not dominating a conversation and allowing people to express themselves so you understand is a very complex and extremely sophisticated thing.

I guess the last point I'll make is that if you write something down, you have a 70 percent better chance of doing it. It's part of the sort of neuro-linguistic programming thing. So I would invite all of you as practitioners -- and I don't know whether anything I've said has touched a chord in its rather, I'm afraid, higgledy-piggledy way -- get ahold of a piece of A4 -- I don't know what you call it in America -- a big bit of paper you can fold in your pocket, and write down, find some model which starts to explicitly bound what it is you stand for and how you are, particularly under pressure. What are the things you're bad at? What are the things you're good at? What are the things you want to be better at from a really holistic sort of perspective?

And if you can then put this into, you know, a good -- a vision statement, Martin Luther King said a vision is a target that beckons, and it should be realizable,

imaginable. You should be able to pitch it quickly. And you can use that as a contract.

And I used it a lot working in dynamic headquarters. When I was charging around and chasing pirates in the Indian Ocean, I had 27 nations working for me and they did an average tour length of 4 months and there were 137 people. It was really hard to keep track of them. So every so often I'd come bouncing back into the headquarters and say hello, you, this is me. And I would put this thing up and it would explicitly say not what I am, but at least what I aspired to be so that a Spanish officer whose cultural background is completely different to me, who may be very, very deferential and frightened of, you know, a bloke who's 18 ranks above him, goes, okay, this guy's not all that bothered about that.

And, you know, he says, you know, surprise is the pith and marrow of war and a leader is a leader in hope, and, and, and. And you have now explicitly said who you are. And if you lose your temper when you say that actually calmness in the face of adversity is key, he can say, well, hang on a minute, you haven't lived up to your part of the deal. And he's right.

Transmission ends. (Applause)

How are we for time?

MR. SINGER: We've got about 15 minutes for questions. I'm sure we're going to have a lot of them. (Laughter) Many comments because this was a very --

MAJOR GENERAL HOWES: Me, me, me, me, me.

MR. SINGER: Yes. So I'm going to let you direct the Q&A. Just to remind folks to wait for the mike after he calls on you.

MAJOR GENERAL HOWES: Okay.

SPEAKER: I would urge you to add one more slide to the presentation. Right after what would you die for, what would you kill for? There's sort of, in the human

race, a common list of things we would kill for, to defend our families or whatnot. But when you go beyond the common list, when you're willing to kill for your party, your Baath Party, your Communist Party, your scripture, your cartoons of your prophet, those define the national security threats. So equally important to what would you die for is what would you kill for because those are going to define the horizons or the frontiers in which you're going to be fighting.

MAJOR GENERAL HOWES: Yeah, ideologies, the ideology that drives people. Have you been to -- this is an aside, but I was in Berlin and I think Tom Cruise made a film of it and the scene where Stauffenberg was executed was actually where he was executed. And there's an amazingly powerful sculpture in that courtyard which wasn't (inaudible), but a bronze figure with his hands -- a very tall bronze figure and his hands were secured with barbed wire. And he -- (inaudible) you can hear me. (Laughter) And there were two steps in front of him, bronze steps. And the small -- the first one is shallow. It's a small step. The next one is bigger. And the metaphor is resistance.

So I completely accept your point, but I know that if I had been born in Belfast when I was born, I'd have joined the IRA because that was a crack. You know, I ended up by joining the Royal Marines Commandos because I was looking for a challenge, but in Belfast there was no way around it unless you were very clever and I am not.

If I had grown up in Germany in the 1920s, would I have been a Nazi? And if my whole family was on the line not to be -- and I knew a fellow very well whose father was part of the Stauffenberg plot. He was the head of police in Berlin. He was hanged on a meat hook at Plotzensee and he had five children and a son and a wife, and they escaped with five minutes to spare in a donkey cart with a bucket of honey. That

was it.

So I completely take your point. But as individual actors breaking out of ideologies takes superhuman courage and I think understanding, you know, people act collectively, but also individually. Trying to understand that dynamic is important to the point that I'm making.

Sir?

MR. COBER: Stanley Cober. What makes an order legal or illegal? What would, in an order, incline you to disobey the order as illegal?

MAJOR GENERAL HOWES: Well, I could give you -- that's a very good question. I could give you, you know, the legitimacy proportionality. I mean, there are -- you can go back into Augustinian philosophy which is basically underpins military law. I mean, as a Brit he says, this is a lawful order. And if you go into the -- but that doesn't really help you. Your backs are inside Zack's helmet, aren't you? You know, the moment where you're given an order, you somehow -- can't hear me? Can you hear me now?

At the moment, you know, you're given that order, you know, what do you do? I mean, a lot of it comes back down to the fact that have you thought about this and does it feel right? But not doing it or finding a different way, I mean, is it a question of action or inaction? Probably not because there are lots of options.

You know, if you were sitting on a road and there are people around you being killed by sniper fire and every two seconds another man is shot because you're hiding behind a stone curb which is six inches high, and they're all around you in the buildings, and you have the option of bringing an air strike in on those buildings, you could drop 'Faye' on it, you could drop something really chunky and then you could neutralize the problem, but you know that there are, I don't know, five snipers, but all the

buildings are occupied by, you know, families, what do you do? Is that legal or -- you know, lawful or unlawful?

You will have options. And I don't think -- I mean, you're probably right when it boils down to judgments. I mean, I think in a way it's more interesting to examine it not from the point of view of the order, but more from the judgment because very often people aren't acting with orders. The most difficult thing -- they have, you know, overall intent and the most difficult thing is that, you know, when the undertaking starts, that slide I put up of the helicopter assault, we had an 89-page operations order with very, very detailed synchronization and all the rest of it. It was the largest helicopter assault in Vietnam. And 12 -- 11 minutes into that, a helicopter crashed and 12 men were dead: 4 U.S. Marines, 8 Royal Marines. And the whole thing was then re-cocked in short notice.

I think it was Eisenhower who said that, counter-intuitively, the important thing is not the plan, but the planning and the collective intuition which grows from that undertaking. And then when the thing is running, it's kind of running, so, you know, in the contested, connected, congested, constrained, blah environment, once, you know, you set people off and tell them to go forth and do what it is you're trying to achieve and then they kind of make their judgments in the moment, and particularly in an urban environment, which brings you full circle back to education. Because at the end of the day, it's the individual who judges, not somebody like me, who by sort of fiat and, you know, complex machinery says this is what you should do. And he then looks all the back up the chain and says that's unlawful, I'm not doing it.

Ma'am, yes?

MS. O'DONNELL: I was just wondering if you -- thank you. Clara O'Donnell, visiting fellow at Brookings.

I was just wondering if the challenges that you raised regarding leading

troops, if you believe they become more complex when one is trying to lead troops from various countries together. And as part of that answer, I was wondering to what extent do you think that the British and French armed forces might encounter challenges from a cultural level as they try to work increasingly closely together.

MAJOR GENERAL HOWES: She's English. Did you understand that?

(Laughter) It was about -- did you get that? Did you get her question? I think I got her question. It was about the extra level of complexity of coalition forces when the troops who are cooperating have different cultures.

(SPEAKER AWAY FROM THE PODIUM/MICROPHONE)

SPEAKER: English and French.

MAJOR GENERAL HOWES: English and French, thank you for sharpening me up on the specifics. (Laughter)

I'll come back to the specifics. I mean, I think -- let me just -- we're all prisoners of our experience. Bosnia was an interesting experience in that the secretary-general of the United Nations at the time was an Egyptian Copt, Boutros-Ghali, and his special advisor, Yasushi Akashi, was Japanese. So there are two quite interesting layers, both very bright men. So they had a certain cultural lens and then they were looking into a mélange of sort of ethnic, cultural, tribal tensions within Bosnia-Herzegovina, and a whole raft of different nations all trying to come to a conclusion and to find the moral courage to do some difficult things, which were quite a step change from what we had done before that and Europe lacking leadership to sort of grasp the nettle. And the prism that you were trying to see this through was so -- had so many notes in it, so many flaws, that I'm sure that compounded the problem.

To come back to the specifics of what you said, see, that's the challenge, undoubtedly. You know, there's this sort of whole veneer of potential distortion. Is what

I'm saying to you what you're hearing? We both come from the same country, but you're a woman and I'm a man and I'm about twice your age and, and, and, and, and. But all things being equal, you're understanding me better than the ladies and gentlemen from America just because we're British, perhaps.

As far as the, you know -- I can quote the prime minister yesterday, who had lunch with -- I happened to be at lunch with your secretary of state in the State Department. And he said it was about 1812, everywhere we went we bumped into 1812, usually humorously-ish. (Laughter) And I was thinking that was actually not that long ago really. It isn't, is it? I mean, it's 3 -- it's not 3 generations if you measure a generation by 10 years, but it's 3 lots of 70-year-old men who burned the White House down. And he was asked about why the British weren't making more of 1812, and the real reason is because we're sort of running around doing the Olympics and we have the Queen's Diamond Jubilee, so those are the two things we're doing this year. And actually we'd rather celebrate the start of a friendship rather than the beginning of a war, so 1815.

But Prime Minister Cameron gave a different reason. He said, well, we're coming up to the 200th anniversary of the Battle of Waterloo when we stuffed the French, and we'd much rather celebrate that. (Laughter) So I got slightly higher level of coverage on that.

I mean, a sensible, serious answer, globalization I guess helps. There's a cultural convergence all over. But at the end of the day, it boils down to national interest, doesn't it? You know, if we are cooperating and have coincident, clear interests, then we'll find a way to accommodate and compromise and work well together. And where we don't, we won't.

I'm not sure I've answered your question very well.

MR. SINGER: One last question.

MAJOR GENERAL HOWES: The gentleman right at the back.

SPEAKER: Thank you.

MAJOR GENERAL HOWES: Since I have a microphone.

SPEAKER: Sir, I had a question about seeing the elephant, which I think was a phrase of the American Civil War. You had either seen the elephant or you hadn't. Maybe it's seeing the tiger jumping out at you.

Just from listening to you and as a veteran it sounds like you know what you're talking about. So do you have any advice for policymakers or those of us in the room that maybe don't have the same visceral experience as you, especially making decisions that send people to make life-altering decisions?

MAJOR GENERAL HOWES: I guess I would return to the rather busy diagram I put together when I was at staff college some years ago, that bull's-eye thing. You know, this is a complex, multifactorial issue. And the buttons that you press with people, they're nonlinear. They're not necessarily predictable. And they're not like steel, when you take a piece of steel and you can sort of -- you can stress it to failure in a predictable manner in an engineering context, you know, and, all things being equal, the piece of steel will fail at the same point each time. People aren't like that.

And when policy decisions are made, particularly in the way that people's lives are managed -- and this takes in the sort of holistic bit -- there's a great generosity of spirit amongst the American people in the way that the military is looked after. I had the huge privilege of meeting your commander in chief yesterday, the President, in the White House. And I stuck my hand out and he looked at me and he said thank you for your service, which I understand is quite a standard salutation for servicemen in address, but I wasn't expecting it from him. So I looked at him back and said, well, thank you for

yours. (Laughter) And I don't know whether he thought I was being rude or otherwise. I hope not because it was meant.

So for policymakers I think it's the recognition that when you make judgments, particularly in times of austerity you decide to trim something, you adjust something, you always have to keep a very careful eye on the fact that what you're doing in terms of goodwill support the downstream implication of something which seems actually quite logical and trivial, whether it's in an operational context or whether it's in a supporting the family context, can have very, very uncertain consequences. So you're back to understanding the sophistication of what makes people tick, and it's not always obvious, and you can push people.

And then just doing the analysis, you know, understanding what tour length does, doing the rigorous assessment on the -- taking the trouble on the basis of the very significant amount of experience we have, regrettably, in the last decade and a half to really try to understand what affects what. So that, you know, one can reduce the 1 percent, 0.1 percent, 0.0001 percent chance of people acting in a way that all of us would rather they didn't to something less than that.

MR. SINGER: Well, before I introduced the general he asked me not to oversell him and I think you can see that I definitely did not oversell him. I undersold the remarks. You can see how rapt this audience is. We want to thank you again, so please join me in a round of applause. (Applause)

MR. SHACHTMAN: Hey guys, if I can ask you to take your seats? I used to be a musician and we always knew the worst slot of the night was right after the star attraction and I feel like that's happening right now. I thought that was a really remarkable presentation by the General.

You know, we've covered a lot of big topics today; the U.S.'s future

relationship with China, the nature of ethics in wartime, the future of our NATO alliances. So luckily we've got -- this panel is about some really small, minor topics like the future of the Afghan War, decision making going forward in any future combat operations, the capability of Al-Qaeda and every other terrorist group, and whether they're ever going to acquire weapons of mass destruction. So pretty small topics; I figure the whole panel should take like -- what do you think guys? Like three, four minutes tops and then we can get out of here? Okay, that joke went over well.

So my name is Noah Shachtman. I'm a non resident Fellow at the Brookings Institution and here to sort through those issues we've got a great panel. We've got, starting to my immediate left, Lieutenant Colonel Krystal Murphy, who is an Air Force Fellow at Argonne National Laboratory. She's an Air Force Bioenvironmental Engineer, and as part of that mission she's deployed in support of both Operation Iraqi Freedom and Operation Enduring Freedom. She's also served at U.S. Strategic Commands Center for Combating Weapons of Mass Destruction.

To her left is Colonel Erik Goepner. Am I pronouncing that right? Good. He is a Military Fellow at CSIS. He is an Air Force Security Forces Officer with 18 years of experience. In 2010 he commanding a provincial reconstruction team in Zabol, Afghanistan; very unusual for an Air Force Officer. And led a squadron in 2007 responsible for detentions operations at Camp Bucca in Iraq.

And finally at the end of the table, we've got Randy Blake, Federal Executive Fellow here at the Brookings Institution. He's got 25 years of experience in the intelligence community and most recently he served at the National Counter Terrorism Center. Before that he served in leadership positions at the Defense Intelligence Agency and at U.S. European Command.

So I'd like to ask Colonel Goepner to start out, who's got a very

interesting presentation I think on Afghanistan and then we'll go to Randy and then to Krystal and they'll present for about 10 minutes each and then we'll stop for questions.

COLONEL GOEPNER: Good afternoon everybody. So this all started back in 2009 as we were preparing to go to Zabol in Southern Afghanistan. The research, the midway point, was battered spouse syndrome, which you may be seeing in your handout today and we're just going to kind of do a little tactical deception role right by that. And I want to start off with giving you a non controversial proposition.

And it's basically this idea that there is an enduring argument against counter-insurgency. And the enduring argument has essentially nothing to do with today's budgetary woes and it has nothing to do with wary eyes towards China or the pivot that we're doing currently.

The argument is that successfully countering insurgency, in weak and failed states, which is where we typically have conducted COIN, it's where we are more than likely to continue conducting COIN in the future, is an almost impossible venture. That's my premise.

This difficulty is driven in part by the high rate of mental disorders that are common to the populations of weak and failed states. Said another way, the main effort in COIN is the host nation government, and the host nation's security force, and the population whose allegiance they're seeking, both of those groups are beset by high rates of mental disorder; is what I'm going to seek to sort of establish for your consideration today.

Just as mental disorders have a deleterious effect on the individual level, once a population has a high enough rate of mental disorder; it's going to have a similarly deleterious effect on the society writ large. And central to my argument is that a nexus exists between weak and failed states, insurgencies, and the prevalence of mental

disorders. And so just a quick background on weak and failed states.

Back in 1994, kind of the study began in earnest Political Instability Task Force funded interestingly enough by the CIA. That work is continued today by the Fund for Peace, by *Foreign Policy Magazine*, George Mason University, and now the Center for Systemic Peace who kind of keeps the broadest set of data; their data goes back to 1995. And what they're looking at is a broad array of security, political, economic, and social factors that speak to a government's legitimacy and a government's effectiveness.

And what they do is they essentially give you a grade of all of the nations and they put you in one of six categories. The easiest, or best category if you will, are those states with little to no fragility, which would be the United States plus an additional 41 states currently.

You slide all of the way down to sort of the butt end of weak and failed states, those that are extremely fragile. There are eight currently in that category; Afghanistan would be one, Chad, Somalia, that type of thing.

So my first point is that insurgencies tend to take place in weak and failed states. So there's eight states currently listed as extremely fragile, seven of those eight are at war. If you do a study back over the last 10 years of all extremely fragile states, they were at war 64 percent of the time. If you go to the second category, kind of the fifth worse category, they were only at war 15 percent of the time and you keep stepping down until you get to countries like us at low to no fragility and they're only at war two percent of the time.

The 2009 authors concluded their report by saying if you're a weak and failed state that is synonymous with nearly perpetual warfare, if that makes sense to you. And then at the regional level that was kind of affirmed by (inaudible). They did a study of 25 years in Africa, 1970 to 1995, and they found that failed states were at war 60

percent of the time. And then they did it in the reverse and they found that of all wars that had taken place in Africa in that two and a half decades, 70 percent took place in weak and failed states.

So the idea is the majority of insurgencies do occur in weak and failed state and then kind of the duh light is if we're going to do COIN in the future, we're bound to do it in weak and failed states. So my second point, and potentially what's more provocative, is this idea that weak and failed states are home to really high rates of mental disorder. And I'm way out of my league here in terms of as a security law enforcement guy, but I've read some really good articles.

The mental disorders that I want to kind of focus on are Post Traumatic Stress Disorder and major depressive disorder, and I'll refer to them just as PTSD and depression, but when I do I'm trying to fall in line with the American Psychiatric Association's definition. And you can check it out in the diagnostic and statistical manual for mental disorders. So just like the military; they do a great job of codifying everything and so you can kind of check out the way they define those things.

A quick caveat, if you have PTSD or you have depression, those are considered highly, what they call co-morbid, mental disorders. If you have one of them, the chance is you're going to have another mental disorder as well.

For those who have PTSD, 30 to 50 percent of you will end up having major depressive disorder as well. So you get the idea of if you have one you can often times have the other.

In terms of causation, there is some debate but generally, PTSD and depression are caused by exposure to traumatic events. Though usually referred to three factors, the severity of the trauma, the cumulative nature of the trauma, and then how long since the last traumatic exposure until today. And those are the three variables

they usually look at.

For PTSD, the number one driver of whether you will or won't get it is the severity of trauma. For men, it's typically combat, for women it's typically rape. When you go to depression, it's the cumulative trauma that tends to be the primary driver. So you look at APA and a number of different peer reviewed articles and you'll come away with the idea that about five percent of the world's population currently has PTSD.

The Journal of the American Medical Association did a great med analysis where they take 181 studies of PTSD and or depression and basically they -- not reduce -- but they take all of the numbers and they give you a sense of what the literature suggests the rates are today.

So for PTSD and a weak and failed state, 30.6 percent tend to have PTSD. Depression rates almost identical, 30.8 percent; so you go from 5 percent up to 30.6 percent PTSD rate at a weak and failed state. And then they went another step and they said okay, let's look at those weak and failed states that also have high, what they call terror rates. And there's really cool work being done by the University of North Carolina; data goes all of the way back to 1976 called a political terror scale.

And basically they said when you get to a certain level of political terror, your PTSD rate jumps from 30.6 percent to 53.4 percent of the population. You may want to place a wager on the likelihood that Afghanistan or Iraq has been on that list much; Iraq since 1983, without exception, Afghanistan began the list in 1979, came off of the list twice, once in 1990, once in 2003. So the medical experts in their peer review journals suggest to us that more than one in two Iraqis, more than one in two Afghans, has PTSD today, you know, medically diagnosed if they were able to see a doctor, PTSD.

The impact of a mental disorder is kind of like a no brainer. As a military

guy, if I have enough men and women in my unit with PTSD, we're declared combat ineffective. If I'm overseeing an office where everybody has depression, I don't expect a lot of ingenuity, a lot of effort, a lot of self starting, job performance is going to suffer. That's kind of just the lay person's assumption.

The APA does it a little more precisely and they say if you've got PTSD or major depressive disorder, you have an array of cognitive and behavioral symptoms that impair your social, occupational, or other area of functioning. A large body of literature also suggests if you have either of those you also have impaired learning and memory processes as well.

Potentially though, the most difficult piece is something called learned helplessness and if anybody's interested, it's a really great body of work that began in the '70s. Martin Seligman kind of spearheaded that effort and it's back when we weren't limited in how we treated animals. So they did some really crazy stuff to dogs and then they did less crazy stuff to human beings. And what they found out is you can teach people by experience to be helpless.

And the idea is that after you have enough exposure to uncontrollable events, the person no longer perceives themselves as having control over future outcomes so they no longer give an effort. Their learning is impaired, voluntary initiation of activity decreases, and their interest levels decrease.

And so having spent a good amount of time in Zabol Province, Southern Afghanistan, that for me was the number one piece that resonated; that was the group of people I saw, was a group of people that had learned how to become helpless. They could tell you every problem, ad nauseam, and then when you'd start to war game and what if on how to solve them, every answer was it's impossible, it's impossible, it's impossible.

Remission, which is kind of the medical term for curing somebody for depression, remission rates are not positive at all. The med analysis that looked at 34 cases, or 34 studies of depression, found that basically 38 percent are likely to be cured, if you will, of depression. For PTSD, the results are more ambiguous.

They did a med analysis of 55 studies on PTSD remission rates and they find that you can expect about a 56 percent remission rate. And so the point there is if somebody's got major depressive disorder or PTSD, they have a basically one in three to a one in two chance of actually being cured, if you will, from that impairment.

And so kind of closing up here with my recommendations, you know, if it's true that the average Afghan suffers from a mental disorder, and the average Iraqi suffers from a mental disorder, and the average person of a weak and failed state suffers from a mental disorder to such a significant portion where it's one in two of the population.

You really have to scratch your head and ask what are the reasonable chances of achieving stability, or moreover, achieving the U.S. objectives in that country. You know, so I can just kind of borrow from a princess bride. Never mess with a Sicilian when death is on the line. You guys remember that; okay.

Actually, that was the second oldest. The oldest is never start a land war in Asia, but that's incorrectly been identified. It should be the idea of do not conduct counter-insurgency anywhere unless you absolutely have to because the chances are you're going to be doing it in a weak and failed state and there's not a lot of reason to suspect that that's going to turn out well from the America -- from our objective's perspective.

The second recommendation is this idea that if we're going to do counter-insurgency, we have to include a psychological estimate in our old plan. And I

don't mean this from a benevolent kind way, I mean this from an ass kicking America wants to achieve its national security objectives way. Every gain we achieve and then leave behind a traumatized mental disordered population, you can see how that's like a house on sand; it's just -- it's going to collapse is the idea.

So we need to take that into account in our planning factors and to the extent we can, we need to bring forward mental health capability, just like we do a lot of our other capabilities to seek to restore the population, not just to be kind, but to achieve U.S. objectives.

And then the third and kind of most obvious recommendation is somebody well beyond my skill set needs to investigate this, hopefully from the academic world, the medical world, and confirm or deny my central preposition, which is weak and failed states are beset with mental disorders and that does not bode well for us achieving the U.S. objectives there. Thanks.

MR. SHACHTMAN: Thanks, Colonel. Now we're going to shift from over there to really all over the world and radicals here too, with Randy Blake's presentation.

MR. BLAKE: This already has a feel of a really depressing panel. And I suspect I'm not going to help that feeling anymore. Although, I do have to say The Princess Bride is a classic.

Okay, last September Al Qaeda in the Arabian Peninsula and *Inspire* Magazine had this quote, tenth anniversary, "There was a world before 9/11 and another one drastically different after 9/11." 9/11 has left a permanent scar on the American psyche and will live long after in the hearts of all Americans, of every American. Yet the only constant is change and no one issue dominates forever.

And my research is focused much less on the post 9/11 decade, but on

outlining a series of new realities that had already begun to take shape in late 2008 and 2009 well before Osama Bin Laden's death and are dominating the violent terrorism landscape today.

So what am I talking about? I'm talking about three paradigms. The first -- and with obvious overlap. The first is what's been described as a world on wi-fi, which is the fundamental impact of the merging of globalization with the technological revolution underway.

Now to be clear, I'm not talking about the onset of the internet in the early 1980s, or the post Cold War emergence of globalization as a dominant theme, or in particular, I'm not simply talking about propaganda videos that have been on the web for years now. I'm talking about developments in the last three to four years and that are on the horizon that have had a big impact on the way we live and the way terrorists do business and on our security.

There's nothing subtle about what's unfolding around us. The British Technologist Ben Hammersley called it a revolution, easily on par with the Renaissance with the Enlightenment. The scope and scale is enormous. In 2003 less than one billion devices connected to the internet. By 2010 that number was over 12 billion and we're headed to 25 billion in 2015.

What matters most about this is not whether we call it revolution but how we use it. We now live online predominantly in what has been called digital silos or filter bubbles. And think about this in your own life with those that are most like us and reinforce our own views and biases.

In this new form of online tribalism, connected networks are rivaling physical hierarchies and speeding up terrorist recruitment and transformation from radicalization, to mobilization, to action. Overseas travel and communications with

organization terrorists group, which are a key vulnerability, are no longer a prerequisite meaning that more and more extremist activity is occurring locally. And I'm here to repeat that. More and more extremist activity is occurring locally.

American born and now D.C.'s Anwar al-Auloqi is a good example of this and the best one so far, of redefining this dynamic intersection between the message, the messenger, the new media, and operations. According to a January analysis by the Muslim Public Affairs Council, of 28 plots since Barak Obama was elected President, al-Auloqi has played an inspirational or an operational role in 18 of them.

Online violent jihadist opinion leaders only have to be believable to be effective. And let me give you one example. In 2008, an 18 year old Fairfax, Virginia resident named Zachary Chesser became interested in Islam and obsessed with extremist online content.

By the time of his arrest two years later in 2010, he had threatened the creators of South Park's sitcom for their portrayal of the Prophet Muhammad, had posted personal Facebook information of some of their supporters, and had tried to travel to Somalia to join the Al Shabaab.

In those two short years, Chesser had been directly involved with three YouTube channels, two Twitter accounts, his Facebook blog, his Facebook profile, one blog, six forums, and two websites. His sites had hundreds of hits, which he monitored on a monthly basis. This increased transparency and sharing online is providing expanded operational options for surveillance and for targeting.

In August of 2009 another fast tracker, Collen LaRose, or better known as Jihad Jane, was on her way from Philadelphia to Europe as part of a terrorist sale that had coalesced online with a plan to kill Lars Vilks, a Swedish cartoonist for his drawing of the Prophet Muhammad. While there, LaRose joined Vilks' online community and

attempted to track his movements on the internet.

But 2009 already seems like a long time ago in the technological revolution that's underway and that it's changing the way we think about privacy and the way terrorists think about surveillance. And just one of what could be many examples of today, several companies have developed apps that analyze your Facebook and Twitter networks to see if any friends or friends of friends are nearby. This new generation of apps broadcast your location at all times to friends and often, in many cases, to people you don't even know.

In 2011, Rezwan Ferdaus, a 26 year old Massachusetts man with a Bachelor's Degree in Physics, tried unsuccessfully to put together an attack on the U.S. Capital and the Pentagon by using remote controlled unman aircraft. The ones he was looking at were nearly six feet long with a wingspan of four feet.

And we tend to think of drones in military, and certainly in this audience, in terms of predators and reapers but it's time to think again. How about your own personal surveillance drone the size of a pizza box or even smaller that you can operate with your iphone, one that could be used by the paparazzi to spy on celebrities or by others to spy on cheating spouses or wandering teenagers with a 40 minute hover period that could prove very effective for terrorists in an updated Collen LaRose scenario?

The FAA projects that 30,000 drones could be in our nation's sky by 2020. It's also remarkable that global jihadists employing the far enemy strategy to defeat the U.S. Military politically and economically have not today put themselves near the top of the information warfare cyber operators list. But that may be changing. In June of 2011, Al Qaeda Core, for the first time, went to some length to encourage individuals to conduct cyber attacks on the West.

The second key paradigm ship, which is related to the first in this new

chapter of global jihad, is the new normal of the increased threat of homegrown violent extremism here in the U.S. A small handful of extremists, unmoved by planned U.S. military withdrawals from Iraq and Afghanistan are attempting to fight overseas wars at home. Many came of age in the post 9/11 America and are also dealing with more localized grievances here.

That same study that I mentioned earlier noted that 54 percent of all incidents and plots by Muslim terrorists against the United States since 9/11 have occurred since early 2009. Another researcher noted back in December that out of the 18 attacks that have directly targeted the U.S. Military Force that's here in the United States, 14 of those have occurred since 2007.

A decade after 9/11, something in the American extremist calculation has changed. And going on assuming that high probability low consequence attacks will continue in an increasingly tech enabled world is a risky bet. In this new chapter of global jihad, the glide path from radicalization, to mobilization, to action is changing and it's unclear whether the end of the wars or the death of celebrity ideologues, like al-Auloqi, will move us from what -- since 2009 has become the new normal.

Effective strategies that treat the tech revolution like a revolution, active community engagement, local and federal law enforcement efforts, and moving the broader national discussion beyond the 9/11 scar that *Inspire* referred to are some of the key ways of dealing with the challenges of these two paradigms.

The third one, which I'll hit much more briefly, is the issue of changing dynamics overseas that are impacting that threat. The first is the hollowing out of the Al Qaeda core leadership, which goes way beyond Osama Bin Laden. This increased under President Bush and then went onto new heights under a new President in 2009, moving the group closer to operational dismantlement and strategic defeat.

It's occurring at the same time that there's an increasingly vertical global jihadist movement operating more like network communities of interest. They're gradually replacing this more center of gravity hierarchical focused structure dominated by Al Qaeda core for almost 25 years now. But unlike Al Qaeda core, which has engaged almost all -- completely in terrorism and survival, the affiliates and allies have a lot more on their plates and are becoming increasingly diverse, and that's key, while dealing with an array of local and regional activities to include terrorism, insurgency, criminal enterprises, humanitarian and government issues.

The second is the post war conflicts in Iraq and Afghanistan. Ari Gardy already pointed out the affect there, of countries in which, if you were born there or live there, born after 1979, you've seen 10,000 days of war.

A generation of extremists, though, raised in that war have been preparing to move from wars to alternatively hot and cold ethnic and sectarian conflicts in which neighboring states are playing an often unhelpful self-interest role. Our withdrawal is robbing the Al Qaeda -- the global jihadist of the currency of a key pillar of their strategy, but also providing openings for them. If you think war is messy, wait until you see what peace looks like.

The third is the Arab Awakening which is haltingly moving toward a potentially irreversible shift from subjects to citizens, with an uneven pace in trajectory. It represents a challenge to Al Qaeda core's message on how to obtain and exercise power. Islamist prominence in governance with a distinctively nationalist pedigree is providing a viable alternative to Al Qaeda's grand goal and relegating the group to a near turn future as a quasi opposition as troublemaking party in exile.

But unique opportunities are also there and the history of modern global jihad is littered with examples of prison releases, producing new terrorist leaders. The

developments of factionalism within disinfected Islamists could include the emergence of new extremist groupings, some linking with existing ones to include Al Qaeda.

A potential for terrorist acquisition of conventional and non-conventional weapon stocks is alerting Yemen, Libya and Syria in particular, provide opportunities for affiliates to make gains and establish (inaudible)

So keeping the pressure up on Al Qaeda core, treating the affiliates and allies in terms of local and regional issues is a strategy prescription intent on affectively trying to deglobalize the global jihad. This is true whether we're talking about a post war conflict of the Arab Awakening, where negotiations even while fighting and new governance coalitions pose a significant challenge to Al Qaeda's increasingly out of date my way or the highway vision. Thank you.

MR. SHACHTMAN: Thanks, Randy. And now for our last bit of good news, we've got Lieutenant Colonel Murphy and her presentation on bioterror bedlam.

LIEUTENANT COLONEL MURPHY: Thank you. And personally I think a personal surveillance drone for my soon to be teenagers would be a very handy thing to have. Good afternoon, everyone. I'm going to submit to you this afternoon that the answer to the problem of bioterror bedlam lies in elephants and cheese. And if that made no sense to you, that's a good thing, but hopefully I have your attention.

I chose to call this bioterror bedlam, even though those are somewhat, you know, terror and bedlam are somewhat synonymous, not because it is, but because when it comes to discussing the prospect of bioterror, there is absolute bedlam as far as what the analysts think might or should happen.

Over the past 20 years, there have been several assessments with a different tag line on the front. Some of them say risk, some of them say threat, some of them say vulnerability, and often those terms are used interchangeably. But they have

reached sometimes wildly different conclusions, everything from, and not I'm paraphrasing here, I'm surprised we haven't seen more of it to it may or may not be a concern in the future. So at the beginning, I'll do something that I loathe to do which is start with a definition. But while I'm talking about biothreats, to me, threats, I'm going to be using the same way that the Air Force does, which is the round construct, threat is a function of intense and capability.

So with that, I'm going to go back to those studies and point out to you that those analysts have reached very different conclusions about the factors involved in threat, as well. And some have asserted that it is impossible to know intent, impossible to discern it, therefore, we should turn to capabilities assessment as a surrogate to get at what is the bioterror threat.

Interestingly, this year's Counter Proliferation Review Committee's report to Congress concluded that because it is relatively easy to hide an offensive biological program, that we should make a better effort at assessing intent as our surrogate for a threat analysis. So we've come full circle at least on our opinions.

This reminds me a little bit of the Indian parable about the six blind men and the elephant, hence elephants, which is, some of you may recall the six blind men examined an elephant, but each of them examines a different portion of the animal through touch, and, of course, come to wildly different conclusions about what an elephant looks like and what it is. So none of them, by themselves, could paint the complete picture. And, in fact, what they really needed to do was assemble a composite, and even then, because they were only using really one sense, probably shouldn't have quite the complete picture.

But that's the best analogy I could think of. And I would submit to you that like a living being, the elephant, a bioterror attack is actually a complex system, and

a systems approach and a systems analysis really is indicated for getting at that -- unraveling that mystery of how likely is it that we might face this.

Now, these two main pieces, intent and capability, are themselves huge, multi faceted issues. We have about six minutes left, so I'm going to dwell mostly on the capability piece, which, in my opinion, is probably the least understood of those. But I will foot stomp a couple of things about threat, excuse me, intent, and that is, when looking at intent or looking at potential for a bioterror attack, what we need to do is examine in the context of what a potential adversary's objectives are. Those objectives will drive the targeting strategy, and then the next question is: what weapon, biologic agent or otherwise, might suit an effective attack on that target.

Sometimes we tend to divorce the study of WMD or counter proliferation from counter terror, absolutely have got to put together that analysis of how beliefs drive behavior and then what I'm going to talk about here, the capability or the biology piece of that. One more conclusion from that parable of the elephant and one more thing I need to point out to you about a lot of these assessments that have happened over the past 20 years is, they've attempted to take the rare number of past cases of bioterror or biocrime, dissect those, and detect overarching principals from which maybe they can imply to forecast the future.

This is a very valid approach, it's absolutely necessary. But if you're going to complete the picture like we would at any good scientific enterprise, you need to use both inductive, which is what this is, and deductive reasoning.

Inductive is like this, use past cases, build upon that to develop a working theory. The ying and yang of that is, once you have a theory, you need some way to test that theory. And so what I'm going to propose to you in the next few minutes is a deductive framework from which to do some thought experiments.

An important aside on this is my other foot stomp is that, in our case, our elephant is growing and changing at the rate of about 400 percent per year. That's a rate of change in the biologic sciences since 1982. If you believe Rob Carlson, the famed biohacker, that actually outpaces anything in the information technology sector. So a very, very rapid change and the very thing we're trying to -- that's some of the danger in looking at past cases. Science isn't the same anymore. Okay.

So capability; and this is where cheese comes into the equation. When trying to assess a low probability high consequence event, the aviation safety and medical communities borrowed something known as a swiss cheese model. It was developed by a gentleman named James Reason. And the thought goes something like this.

That for those events there are several layers of safeguards in place, catastrophic accidents will only occur if holes in all of those layers happen to line up and complete a pathway. But if you take that visual model and apply it to what is required to develop and deliver a biological agent, the same theory, or same principle applies. You have to line up all of the holes, and if you're an adversary, rather than trying to prevent them from happening you're trying to line them up as fast as you can.

And so you're going to take the path of least resistance to the cheese, or the biggest holes in each slice, more than likely. So our layers in this case are working backwards from the target, the pathway we're going to deliver the agents may be or may be not having to stabilize it so we can get it to the target, amplification or how we grow it, and if ultimately how we acquired it in the first place.

The pathway tends to be the least understood and the most controversial so I'll start there. The holes in this layer of cheese; there are five of them, five ways to get a poison or a biological agent to the human body.

I'm going to generalize this since this is so short a time. Three of those are really viable if your objective is a mass casualty attack. It's an important caveat. If your objective is merely economics or disruption, you don't really have to succeed at getting it into somebody's body.

The biggest hole in this layer is actually the ingestion route, food and water poisoning; that is the easiest pull off. And here I'd like to do a few myth busting statements. This seems to be a perception that inhalation pathway, or the privacy of aerosols is absolutely necessary, and not necessarily the case.

An interesting corollary to that is that an airborne attack is hard to pull off. And I'll reserve some of this for answers if you are interested, but I think our own experience proved that wrong way back in 1966. I'd also like to suggest to you that from here and forever we ban the term weaponization with regard to a biological agent.

Normally that refers to the stabilization layer of cheese that would be required if you were going to pull off an airborne attack. And if you're going to contaminate a food and water source with a naturally occurring bacteria that you can keep at body temperature to get it there, like the Rajneeshees did in 1986, you don't have to stabilize very much at all. So the easiest way to get through that layer is just not do it.

Finally, amplification is the growing of the agent. In general, bacteria are easier to grow than viruses. And this one you can also completely circumvent if you're able to acquire your agent in a sufficient quantity from a failed state or a supplier. And there is some concern with the advent of using Botox for cosmetic procedures; that you might just be able to go buy that off of the black market somewhere.

Okay, finally acquisition. There is an excellence in the U-paper that lists the five acquisition pathways for biologic. The first is to harvest it from nature, the second is to steal it or acquire it from a research center, the third is buy it from a culture

collection, the fourth is to modify one pathogen into another one, and there are examples of all four of these in past cases. The fifth, thankfully, we have not seen yet, which is to completely chemically synthesize a virus. But a few years ago, Wimmer, et al, proved that you can do this without even a natural template when they synthesized the Polio virus.

Personally, I'm going to add a couple more. Six; get it from a failed government program. And touching on current events, Egypt, Libya, Syria, were all fought to have at least completed some R&D work into offensive biologics. Where might that expertise and material end up? And on that note, we're still concerned about talent and material from the former Soviet Union, Iraq, and to a certain extent South Africa.

The other is depending on your definition of terror, or terrorism, if you are state sponsored or a special ops agent for a state, then you probably have no problem at all acquiring one of these weapons. I will conclude by saying, of course, the fastest way to line up the holes in the cheese is if you have expert who can do it for you. And it's pretty well documented that Al Qaeda recognized this and sought to do it and -- which has led several very prominent biologists and USMRID alumni to say we are less concerned about terrorists becoming biologists than biologists becoming terrorists. And with the transition of Al Qaeda to recruiting and radicalizing in local terrorism, that is becoming a greater and greater risk.

So in this flying ten minutes or so that we've had, hopefully you've concluded, like I did, that to get at the picture of the elephant you absolutely have to use an inner disciplinary approach, a very complex system, and as far as capability is concerned, you're hoping we race through the cheese faster than the bad guys. Thanks very much.

MR. SHACHTMAN: Thanks. I think I'm now going to retreat to my

secure, hermetically sealed bubble. I want to start opening up for questions, but I'll take moderator's prerogative and ask the first one and ask that of Colonel Goepner. So you talked about, you know, a major chunk, maybe half, of Afghanistan being traumatized, PTSD, depression, both, and you talked about well, you know, we should take that into account the next time we decide to stage a large scale counter insurgency.

But I'd like to ask about the current large scale operation we're in and there's a lot of debate right now about whether we should be pulling out of there sooner or later. So what does your sort of psychological look at Afghanistan tell you about how we should precede in the next, you know, 12, 24 months and beyond? Let's start with the easy questions.

COLONEL GOEPNER: Yeah, I was going to try and say something funny and then I realized it's probably the last thing I should do; we're talking about Afghanistan. I'm a huge believer and I don't mean this in a jingoistic way, but I'm a huge believer that whatever counter insurgency we're fighting, to the extent that Americans are 24/7 with the host nation, exponentially increases our chances of success.

There's behaviors that each of us have grown up with that we can't identify but they end up being best practices for how a stable functioning society does things. And we probably can't enumerate them but they come out.

We saw a lot of evidence during our time in Zabol, just funny things, you know, we'd come around the corner and the police checkpoint would be 100 yards up the road and they'd be doing like their equivalent of the Department of Transportation, you know, one dude had a shovel and six dudes were just kind of sitting there staring at it. And then as soon as they saw the Americans they'd get right back to business doing their checkpoint type of stuff.

We'd see that with the day laborers that were being hired through the

government through ISAF funding. Any time an American presence came around productivity increased and good behavior seemed to follow. And I understand that the idea of us being 24/7 with our Afghan brothers is certainly under criticism right now because of all of the shootings from Afghan security forces back onto ISAF, but that really is the number one ingredient.

MR. SHACHTMAN: And just to put you on the spot. So does that mean those ISAF forces should come home sooner, later, or is that the wrong question to ask?

COLONEL GOEPNER: Yeah, I've become deeply ambivalent. I'm a huge believer that we can win everything. There's absolutely no doubt. The people that say that it's not a military solution, I think are -- that's a foolish thing to say. Everybody has a breaking point and so the military always can help you find your breaking point and you will soon comply thereafter. But that's obviously not the way we're going to fight this. I got that part. But I'm deeply ambivalent.

I think where I sit right now is I don't think it's going to get any better. I keep hearing gains are being made but they're reversible and they're fragile. I think I've heard that, you know, for the last four years or so. So I'm very comfortable with the President's, you know, glide slope to 2014 where we go into an advisory role only.

MR. SHACHTMAN: Okay. With that I'm going to open it up for questions. Just wait for the microphone and please make it a question, not a declaration. So have a question mark at the end of your statement. Start here with the blue shirt.

MR. PENISTON: Hi, Brad Peniston with Armed Forces Journal. A question for you, Mr. Goepner. I'm struck by this new lens of looking at counter insurgency doctrine and two possible responses; one is holy cow, we need to rethink everything. And the other one is well; we learned everything we know about counter insurgency doctrine in such places so no big deal. Either one of those correct?

COLONEL GOEPNER: Can you just sort of rephrase that question; go through it one more time for me?

MR. PENISTON: Yes; I'm sorry. If everything we know about counter insurgency was learned in a place where most of the population is traumatized, as you described, do we need to change the way we do anything, or should we just be more reluctant to do it?

COLONEL GOEPNER: I think the second is the big takeaway, which is, be much more reluctant to do it. And I'm not trying to necessarily cast stones, but I think you've heard some really funny things from high leaders over the last 10 or 12 years about these things. I think we heard democracy was messy; that's how we approached the Iraq, you know, Civil War. General, I can't remember if it was Shinseki or who it was, but got marginalized, you know, for saying we're going to need 350,000 basically constables to pass it by Iraq and that was considered a ridiculous comment.

I think it's been born out more or less. So don't do it and if you're going to do it you better bring some mental health capability or better rethink two different things; one is how soon we release sovereignty back to that nation. With Afghanistan we gave sovereignty back to the nation very quickly and I think we did it way too fast. The joint-doctrine talks about the fact that if a government is still weak and failed, it may not be the right time to give them, you know, their own sort of power back if you will. And I think we may have erred in that.

And then the other part is we -- I need to be careful of how I say this. We may need to rethink how we look at the use of force in conducting operations, counter insurgency operations. We have taken a very specific view on the use of force and COIN and that may -- we may years from now want to look back and say you know what, military by definition, war, is kind of a disgusting thing. So when we go to war it may have

to be a little more disgusting than we've tried to make it.

MR. SHACHTMAN: Okay; just to the right, my right I guess.

MS. DANIELS: Thank you very much. My name is Samara Daniels and this is a question for Krystal. I was trying to visualize, you know, a sort of map of what you were saying. And I think the weakness in so many of these analysis is, you know, you can get the right facts and you can, you know, but do you have the right story.

And I'm wondering to what extent you think different institutions get the right story because there are only a couple of narratives that are sort of, you know, gain currency?

And I'm wondering if, you know, you think it will be possible to sort of expand the, you know, these perspectives, that is, you know, I don't -- the bottom line, I don't think you can get to where, you know, a good analysis, unless you really get, you know, good history. And then I'm wondering what you think of that, my hypothesis.

LIEUTENANT COLONEL MURPHY: I guess first let me make sure I clearly understand your hypothesis. You know --

MS. DANIELS: (Off mic)

LIEUTENANT COLONEL MURPHY: Mm-hmm.

MS. DANIELS: -- you know, and cheese is one dimensional; that is, if you look at it. And I see the holes and stuff and I think that, you know, if you're going to deal with complexity you have to get the complexity and --

LIEUTENANT COLONEL MURPHY: That's right.

MS. DANIELS: -- complexity that -- find the right solution and problem. And I'm just wondering, you know, how that can occur in institutions? It's an organizational issue I think that I'm asking more than anything else to get at this issue of complexity.

LIEUTENANT COLONEL MURPHY: Okay. Well first, again, hopefully I clarified that I was only talking a very small piece, which is how to get at the capability piece. The intent piece I deliberately glossed over largely because I'm sitting with two other gentlemen who are talking, you know, how terrorists might be thinking and what they're doing.

Absolutely; I think our current structure is a real challenge. Again we, at least in DOD, tend to separate counter proliferation from counter terror. And there is a seam there. We definitely collaborate, we definitely understand we need to inform each other, but as busy, especially as the counter terror community is, sometimes that's more challenging than we'd like it to be.

But absolutely; the cheese is just one piece to get at intent it really takes several disciplines, folks who are smart about, again, all of the factors of the ideology of the potential actor.

So in the case of the Al Qaeda, somebody who understands the particular ideological background, that particular -- is long, somebody that understands the culture, the study of how they have adapted and franchised themselves since then, and any -- to predict what is it they want to do. And the context of will they select a biological or not is wrapped up in that. Does it suit their ends?

There's a really good book by a gentleman named Adam Dolnik, they got at understanding terrorist innovation and he gets at who might innovate or be driven to use a weapon of mass destruction and why might they make those choices.

Some of them get at if you are becoming desperate to reestablish your credibility or your aura of omnipotence, it might become more attractive to you, might. But you definitely then need someone like Doctor Post who understands the behavior and psychology that might help unravel that piece. So absolutely it requires a lot of folks

who have an interdisciplinary approach.

I think some institutions and academia are very well set up to do that. There are some folks at the national labs -- Livermore is a good example of that -- that can do some of those. And some folks in our IC that have been organized to look at that a little bit more. I'm not sure I answered your question.

MR. SHACHTMAN: Let's go right in the middle there.

CAPTAIN TABON: Thanks. Captain Cindy Tabon from the Navy Staff and this is addressed to Colonel Goepner. So you argue the counter insurgency is generally not a good approach for the many reasons that you've cited, but what do you see as the alternative then in a situation with a weak and failed state, an ineffective government, and a high percentage of population with PTSD and or major depressive disorder? Which is a circumstance that we seem to think we will be finding ourselves dealing with in the near and long term.

COLONEL GOEPNER: I don't know if this is going to be at all satisfactory. I have two thoughts. You know, one I think historically we have dramatically underestimated the costs of counter insurgency. We've done ourselves a disservice to call them small wars and so I think that's part of it. I think the other part, and I want to be careful because I'm not trying to advocate a foreign policy that's unkind to people, but this idea of being -- policemen, this idea of we're going to take care of every weak and failed state, from a benevolence perspective we may want to do that through NGOs, through churches, synagogues, that type of thing. That's great. As a national security priority, I don't buy into that.

Then there's a segment that says okay, don't do it out of benevolence, just do it because that's where the terrorists are going to go. And my response to that is we're always going to have weak and failed states. We always have, we always will.

The management of that is not to go in and restore a weak and failed state. The management is probably some combination of regional pressure and some degree of counter terrorism is my guess, but we're not going to do away from it.

You know, remember like when we declared war on poverty, I think one of our Presidents did that, it's a great ambition but you're never going to get there. So that's my thoughts on that.

MR. SHACHTMAN: Okay, in the back.

MR. DILLION: Ken Dillion, former State Department Intelligence Analyst. On the question of biodefense or bioterrorism, there are some very good reasons to think that the FBI got the wrong man in the anthrax mailings case. I wonder what you think of that and what you think should be done about that.

MR. SHACHTMAN: Oh, I'll take this one; fine. Right, there are some reasons and there are some reasons to think that they got the right guy, and this is in the 2001 anthrax attacks. You know, my guess after studying the anthrax attacks as closely as any reporter, I think, is you know, if I had to bet 10 bucks I'd say the guy they were after at the end was probably the guy that did it if I was a member of a jury in the -- I'd probably have to vote not guilty and, you know, I don't know that there's evidence beyond a reasonable doubt.

But I do think that there's a larger question, which actually I was going to pose to you, which is, you know, by building out all of these biodefense labs and by spreading around, you know potentially lethal stuff all over the country and by training thousands of people how to deal with it, if the real concern is biologists who become terrorists, haven't we trained a huge cadre of biologists to pull off such an attack in the name of preventing one?

LIEUTENANT COLONEL MURPHY: The answer is absolutely. And

that's not an answer I would like to give. Before I elaborate though, I want to elaborate on Noah's answer and why I pointed to him. If you are not familiar with the Wired Magazine Noah wrote, a really great piece on the -- anthrax attacks in Wired, I think which has now been a year and a half or so, but it is a really great analysis and all of the forensics that went into that. And by the way, one of the authors I read pointed out that the technology to do those forensics didn't exist at the time of the attacks, to go back to how fast the science has changed.

As far as training, our potential adversary is absolutely we did. Al Qaeda is the front man for their anthrax program, graduated from I think one of the Cal State schools. It is absolutely a problem and it overlaps with another strategic problem, unfortunately that we have, which is I think America, you know, states lagging a little bit in science, technology, engineering, and math.

Where I am currently working, 80 percent of the post -- appointees at the laboratory are not United States citizens. A lot of the research that is going on there is in the biologic sciences and in physics. But that's a tough problem and what I'd offer to you is there absolutely needs to be a better connection between the defense and security sector and academia.

I think there, right now, there's a pretty large gap there. All of this, of course, is my opinion, my personal opinion, not that of the service or DOD, but I'd also offer to you that the New York Police Department has a really innovated program called Project Shield where they partner with businesses downtown to try to prevent terrorism and harden them as targets. So I'd say there needs to be a project shield between defense and security and the academic world when it gets to biologics and getting at ethics and codes of behavior and those types of things; how to prevent the human piece of that.

MR. SHACHTMAN: Okay; we've got time for one last question.

MR. HUMPHREY: Peter Humphrey; I'm an intel analyst. I think we might have to embrace profound political incorrectness and not allow Muslims to be working in those laboratories. Doctor -- Colonel Goepner, I'm wondering if -- you send some murderers to psychiatric hospitals, you send most of them to prison. You really don't care as long as they're neutralized.

As we meet these situations out in the field, I really don't care whether the guy is motivated by his craziness, his ideology, his view of the afterlife, his economic situation, I don't care. I want him neutralized. So why criticize COIN? That's just a method of neutralization of bad people. Whether they're bad for psychological reasons or moral failings or what not, it's the same material.

COLONEL GOEPNER: Yeah, I wasn't taking the vantage point of neutralizing or the bad guys, I was taking the vantage point of the good guys. This is the government we're working with. I mean what would you expect from your government if one and two had major depression or PTSD? My assumption is you wouldn't expect a whole lot and that's essentially my argument. Is that's what you have in the Afghan security force and the Afghan government. And then moreover, that's what you have with the Afghan population that's in the midst of this tug of war that the government's trying to get their allegiance, you know, separate them from the insurgent, come over to the government side. And all of them are beset with mental disorder. So the idea that Afghanistan is going to emerge with a degree of stability in the next decade, I don't understand how that's a feasible suggestion. It has nothing to do with the bad guys. Those guys I'm all about marginalize however you want to.

MR. SHACHTMAN: Okay. Let's give a round of applause for our panelists.

(Applause)

MR. O'HANLON: I'm Mike O'Hanlon at Brookings and delighted to see so many of you still here. Noah was talking about an hour ago about how it was hard to follow such a great act at lunch. I think it's hard -- it's a testament to the quality of our panelists and their topics and what they're about to say, but it's hard to go at 3 o'clock after a long day when there's also an NCAA basketball tournament in the works. And by now most of you have figured out that even though Peter and I had said that the room next door was going to have a keg of beer and games up all day, whatever you needed, that was a lie to induce you to come but you stayed anyway. We appreciate that.

It reminds me a little bit of also the time I once was asked to give a speech at the Air Force Academy, and it turned out it was the same time as a football game, Air Force against UNLV, and the winner was going to go to a ballgame. And so I complained a little bit about this to my sponsors about why they would think of putting me in that kind of a time slot, and they said oh, don't worry, there'll be a few hundred students there; we made them come. And so I'm thinking great, nice way to get your audience on your side. (Laughter)

Thankfully today my job is much easier. I just have to introduce three outstanding panelists, and they have excellent topics on a general subject that we all know is hugely important because of the age of austerity we're living in and because of the tough choices that are going to be before the Department of Defense. We only have about an hour left today, and so I'm going to be pretty brief in introducing everyone, and two of the three are colleagues here that Peter Singer and I are delighted to have with us here at Brookings this year.

Lourdes Duvall who is an Air Force intelligence officer who has served in a wide array of Air Force jobs having to do with intelligence, including some very

operational jobs with special operators but also planning jobs and thinking-ahead jobs, and so she really has the full gamut of skills and experiences that allow her to take on her topic today, which has to do with agility and synthesis and rapid effective response in Air Force and DoD intelligence operations.

Carl Gingrich I've had the good fortune of knowing now for, I guess, about three years, because I used to take briefings from him over in Kabul when he was with the MNSTC-I Command. And he's also a longstanding Army operations officer and systems analyst and has had a number of important jobs within the Army, including helping prepare its POM, including working on base closures, including a number of other such subjects, and just has been a great joy to have here at Brookings -- and a very sharp critical mind on defense, compensation, and personnel issues, which is what he's going to be speaking about today.

Dave Trybula is another expert Army economist and systems analyst, and he has a topic that -- he'll be the last speaker today, and we had to save a pretty exciting one for the end, and we certainly did, which is a thoughtful perspective on the Army's Big Five. They're of course the famous 1980s modernization programs that have still constituted the core of major Army weaponry and equipment with a lot of lessons, probably most of them good but a number of hiccups and problems along the way that I know Dave's going to explain as we try to think about a period of Army acquisition and DoD acquisition, which, shall we politely say, is slightly more complex and trouble perhaps today than it might have been in the glory days of the Big Five, although I guess he'll speak for himself in a minute about whether that's the right way to begin the argument.

So, without further ado, let me turn things over and we'll work from your right to left, over to Lourdes.

COLONEL DUVALL: Okay, great. Thank you so much, Michael.

Well, good afternoon, and thanks for all of you that have stuck around for this.

This last part and this panel are looking more internal to the Department of Defense, so the aspect that I'm going to look at is that over the decade we've seen a lot of effort has been put into making defense processes more agile, predominantly for the ability to react to urgent warfare needs. You've seen that from statements from Secretary Gates when he was there. You've seen it in QDR language and even language that's coming out from our current chairman. And there certainly are parts of the Department of Defense that have shown great agility in different aspects of this, particularly for developing and fielding needs that are needed urgently in the combat operations that we have ongoing.

When I use the term "agile," and for the presentation, I'm really looking at kind of an intense focus on user needs -- you know, how do you get something out there that's actually usable and is going to satisfy what's needed out there; also, having a time dimension to that, realizing that you need to get something out there quickly. It might not be the perfect solution, but sometimes an 80 percent is better than the 100 percent.

And also this idea of incremental and proven capabilities, that there's this send it out -- their learn, adapt, and improve cycle. Almost as the general mentioned, there are oodles of concepts being employed in development where you have to kind of sometimes see how things are working in order to improve and adapt upon them.

My fear is that as our existing combat warfare commitments begin to decline and as budgets begin to tighten, we might actually see also a declining urgency for this type of agility in the Department, and I argue in my paper that as this urgency is potentially declining, the actual importance of us as a department of maintaining this kind

of agility is actually growing and expanding for a number of external factors outside of combat operations. So, what I chose to look at is to see if there are some lessons that we can take from some fantastic things that have been done in this area of agility over the past decade, and even historically, and see if we can maybe not risk losing those lessons and use those to actually expand agile into more missionary, as I'm an intelligence officer, as mentioned, and I actually think intelligence operations are one of those areas that could really benefit and has benefited quite a bit from an agile approach and want to see that actually expanded.

So, what I did was look at historical cases of organizations that have been known for their agile approaches. You know, the Clarence "Kelley" Johnson Lockheed Skunk Works and some of the innovative things that they've done for the intelligence community and for the Air Force -- Air Force Big Safari Program, you know, and those types of historical organizations that just embody an agile culture.

I also looked at commercial examples of companies -- Cisco, Unisys, Ericsson, and some other large companies -- who have recently transitioned from kind of traditional, serial, big, heavy acquisition processes to more agile processes and in their minds successfully have done that.

And then potentially most novel as I looked at three military and intelligence community case studies that are contemporary where there's been some great success out there and tried to glean some lessons learned from those experiences to see if we could capture those and see what kinds of things they offer for the Defense Department as we decide, you know, do we need to do agile? My answer's yes. And then how do we do agile in order some of the challenges that we have in doing that?

And what I came up with -- and it's funny that General Miller mentioned it this morning -- is that it's likely going to require some institutional adaptations, and that's

not normally very easy to do in a successful institution to do that. But I'm going to talk and focus my talk on three of those what I am calling institutional adaptations that are really going to be pre-conditions -- like, we shouldn't even think about going down this road if we're not willing to commit to these three institutional adaptations. So, we'll be happy to talk in any greater detail about what I think the drivers are of why we need to be more agile. Just in summary, it's the pace and uncertainty of technological change, the rapid advancements of data sources and data volumes that we're seeing in the world, and all of these have kind of exponential trajectories, not just, you know, linear, and the wide range not only in capability but also in the character of the type of conflicts and adversaries that we're likely to see in the future. And I think that these three kind of factors converge in some interesting ways to make it so adaptability isn't going to be just kind of a nice thing to aspire for but actually a requisite, you know, for our Department in the future for certain critical mission areas.

So, these three critical adaptations, you know, given that I think that, you know, the world is driving us in that direction. The first is entirely different thinking from traditional ways that we have thought about how user collaboration needs to happen throughout the development process, and I'll talk in more depth about each of these when we introduce them.

Second is creating mechanisms to easily bring together multifunctional teams, and it was interesting that Krystal talked a bit about, you know, needing more multidisciplinary expertise, and this is just a follow-on to that, you know. Unfunctional stovepipes have really no role in being agile, and I'll expand on that.

And, finally, a need to show consistency between what is being voiced as being important agility and adaptability and what we actually measure and incentivize within the Department.

So, I'll briefly go through each of these three what I consider the major adaptations that need to take place, and then I'll leave it up to questions if anybody wants to know more about the cases I looked at or some of the factors about why I think agile is important.

So, first, insisting upon user collaboration development. And for those of you that normally wear a uniform, you're probably pretty familiar with this -- in more traditional defense programs, organizations representing the user spend an awful lot of time up front defining and coordinating what the big requirements are for a system. And that's really the crux of the user involvement, this up-front requirement definition vetting approval process. And once those requirements are documented, there's basically a hand-off then to the acquisition community, who then, you know, develops a solution for us. And the acquisition organizations normally serve as a proxy for the end user. Basically, until then, you know, there's operation test and evaluation and then the user gets this end product.

In contrast, and this is a very sharp contrast, agile approaches require user involvement for the entire development process. You know, there is really no hand-off here. The good news is there's a whole spectrum of how successful efforts have done this. There are some great cases. One of the studies that I did about co-locating developers with actual users in the operational space, and this is a technique that works extremely well when there is a high level of requirement uncertainty, you're dealing with a new technology, or you're dealing with a really novel and evolving operational environment where you need to have changes happening at a really fast pace. And it also is really good if you've got a specialized capability that's being out there.

You can also identify a consistent group of users that's going to participate in the development effort. You know, now with modern technology that can be

by video teleconference or others, but they have to be part of the team -- and a consistent group, not just a, you know, hey, I have to send Joe to a meeting kind of thing. But these are people that are actually in the development and are able to look at prototypes as they come out and provide valuable feedback so that the development effort stays on track.

You can do something like the Big Safari model, which is bringing really high-quality experts into your program office. They're able to bring their unique recent operational expertise as well as tap into the community that they just left in order to make sure that there is a tight connection between what the developers are doing and what the operational, you know, organizations in the evolving situation need.

So, you know, the issue really isn't the how right now; it's really the bigger, more macro question of changing the mindset about a commitment to continuous user involvement.

And when you talk about users -- I just want to bring up one more piece about this -- the continuous user involvement is something that, you know, we've seen in combat an awful lot, and one aspect of that -- the lead user -- we really see in combat and urgent needs quite a bit. But it exists in other areas. A lead user is somebody who sees that there might be substantial benefit to them if a solution to their need is fixed, and these folks then have a high, high motivation to innovate. You saw them in World War II with the hedge cutters. You saw them with U.S. troops putting armor improvised onto their light Humvees. I cite a case of -- in the intelligence, Air Force intelligence, of a mission management tool that didn't exist that was badly needed in order to let analysts kind of spend more time doing analysis.

So, you know, having a culture that not just encourages people to do that but seeks out, you know, who are the leaders out there and then has an open mind to

bring users into the solution front. That's very different thinking than our traditional acquisition process is now where the user's role is seen as defining requirements, and then solution set is really handed over to the acquisition personnel. Lead user concept has a wealth of academic literature behind it. It's been use in medicine thinking, a whole bunch of industrial examples in addition to defense examples, and a cultural change in how we engage users I think is really needed if we want to say that we want to do and become more agile.

So, some questions I think leaders need to ask -- and, again, most of these questions are outside of the acquisition community, even though most of these topics are talked about only in the acquisition community -- are: How are users -- how is my community involved in system development? And that's a commitment. What is the pacing of delivery of the first workable copy so we can provide some feedback? And if the answer is seven years, which is actually the average for a major information technology system, unfortunately, in the Department of Defense, that's too long. So, you know, how do we change that, and what needs to be done to make that quicker? And do we have mechanisms to seek out and identify lead users and bring them into the solution set? So, again, a pre-condition, I think, to expanding agile is thinking differently about users.

The second, I contend, is figuring out mechanisms to do cross-functional, quick teaming on programs, and this is really fluid, because almost every program has a different depth and level of which functions need to be involved and the duration of the teaming and things like that, and, again, for our institution that many of us are familiar with, sometimes that level of flexibility in assignments and teaming comes a bit difficult to us.

So, in traditional DoD processes, again, functions -- such as user

requirements, testing, security accreditation, operability testing, training -- they all have their functional organizations, and most of them in a traditional process have kind of their turn in the cycle. So, somebody gets done with their part of the program, they hand it over to somebody else, they get their turn, and you can really stay in your functional stovepipe for the most part, you know, as a program progresses.

Agile is an entirely different ball of wax. So, if you do agile, you really need to do tighter collaboration across functional boundaries. So, there's different thinking about how functional stakeholders really need to be involved in these processes. And again, without getting in too much detail, one of the programs I saw had just a fantastic, different way of thinking about the role of training and trainers, which I thought was really innovative. They actually saw the trainers as kind of the bellwether for the problems that the, you know, end user would have. Since they were on the phone call end of problems that the users were having with the current system, you know, they were able to alert developers early to things that probably needed to get changed before the user even asked for them to be changed just through the questions that the, you know, operators were asking about -- functions and things that were confusing to them or analytic problems that weren't being answered, you know, by the current configuration. So, not thinking of training as an entirely separate enterprise but, rather, thinking of training as feeding development in a very iterative way I think is pretty innovative but also one of the kinds of things that agile really requires.

So, with user involvement there's a whole variety of ways to do this. You know, many organizations will maintain the existing kind of functional boundaries but have found ways to cross-matrix, for periods of time, individuals to the right offices. You could expand offices already comprised of multifunctional teams -- you know, Big Safari-like organizations that have figured out how to bring together experts to do that. I think

the biggest risk -- and some people have said it's happened with organizations such as JIEEDO -- is that if you make an organization too big and have too diverse a portfolio, you actually sort of defeat the purpose and make them less agile. So, the right sizing of an organization is really important.

You can also create a new organization kind of from scratch in the commercial world -- Ericsson actually did this -- where it's built from the ground up to do this kind of agile staffing, you know, of an organization -- allow people to quickly move to different programs as needed and that kind of thing. And I know in times of budget cuts, kind of that last one, creating new organizations is probably thought of as the least preferred. There's really not a lot of people out there to say yes -- you know, cut my budget and create a new organization.

But, I'll tell you, the academic research out there from people like Professor Christianson of Harvard Business School and folks that have looked about, you know, innervation within industry -- creating that new organization might actually be the preferred option. And I'll just give you a quick rundown as to why.

So, in the academic research about having a successful organization that has embedded processes and values and then bringing in a disruptive change -- you know, entirely different processes and values that are at odds with what the current organization has. Sometimes rolling off or spinning off a new organization to allow it to compete separately for resources and create its own value and process structure is actually much more productive than trying to embed or kind of have this co-equal status within an existing organization, particularly when an organization has been successful, like the Department of Defense, relying on its existing processes and values. That mismatch can be very detrimental to having that new process actually get the ability to take root and to compete for resources. So, although that might not be kind of what

people want to hear in this environment, there's an awful lot of literature and business and governmental research out there that says, you know, if that process value mismatch is so great, it might not be even possible to be able to do the new process value look like agility if you don't do something radically different. And if you keep it within the same organization, the CEO, the very top, you know, has to buy into it to make sure that the resources and all the measurements are aligned well to let it survive.

The last thing I'll discuss, and the final challenge, which really flows from that, is matching the intent of being agile with appropriate measures and incentives. So, you know, right now, there's a lot of value -- process compliance on functional expertise and making sure that all the functions have their, you know, appropriate look and role in the process; detailed, up-front analysis and cost estimates no matter how much in the future they happen to be off but the fact that you spent the time to do detailed analysis up front -- all those things are extremely valued in our defense processes today.

Agile, on the other hand, places more value on speed of delivery, usability, adaptability, actual use of whatever is being created. It also values cross-functional teaming and team effort versus individual performance or individual functional excellence. These are very different things for organizations to figure out how do you measure and incentivize.

I thought it was really interesting, too, to hear General Petraeus talk about risk in his advice when he was asked, you know, what one piece of advice would you give to acquisition professionals? And then when he was USCENTCOM commander he said never, ever underestimate how important speed is. And I think, for agile, what that does is it really kind of turns a risk proposition on its head, because right now we separate fairly clearly, you know, the folks in combat -- they're doing that; the people who are procuring are doing that.

What agile and rapid delivery and those kinds of things did was actually try to mate the risk of the user of not having a capability with the risk of a process either being delayed or paced by some decision or inaction, and leaders forced that timing to happen so that the risk of the process was often made through exceptions and things like that so we could minimize the risk, you know, to the user, the war fighter, because it was so important.

What agile does is it tries to institutionalize that and make it so that not just for urgencies and not just for, you know, combat but all the time, linking that risk to how much a solution is good enough to get out there so that we can continue to grow versus how much time to we need to make sure we've got the process perfect and who's bearing the risk in that situation.

So, questions, I think, that need to be asked really are:

How much is that mismatch between metrics and incentives and behavior?

If it's big, how do we change those?

Can it be done within existing organizations, and how do we start rewarding for the things that we say are important?

How quickly are things fielded to the war fighter?

How much use and usability is happening from capabilities we provide?

How do we reward quick failures that we learn from, you know, versus having these monumental failures after numbers of years? It's better to have the quick-learning experiences and then move on.

And then, finally, how do we weigh risk properly in all these cases?

So, just to wrap up, I think most of us can agree that the primary driver behind the most recent focus on useful capabilities was troops in harm's way. You know,

in the past '50s and '60s you can definitely see cold war was an impetus for a lot of organizational changes and adaptations and rapid delivery efforts. But currently, as the urgency for these processes declines and we focus on how do we tighten our budgets, I'm afraid that we might miss an opportunity to learn from these decades of experience that we have and do an agile in organizations doing just the things that I described in terms of user collaboration and multifunctional teaming and the right measures. And I would argue the importance that agile is growing for the Department, and although change will be difficult, it's going to be needed.

I think the good news, sort of the silver lining in all of this is that we have practitioners that have done this, some for decades in the case of Big Safari, some for 9, 10 years in terms of most of those organizations and capabilities that have been responding to the current fights. And we have a number of users, you know, a huge percentage, actually, of our armed forces that have only experienced this kind of responsiveness, and they're going to continue to demand it, you know, as they become more senior. So, the values, the beginning of those culture changes, have already taken root, and we have people we can learn from. It's just a question of how much we want to acknowledge that and then embrace the change.

Thank you.

MR. O'HANLON: Thank you very much for a very sophisticated analysis.

And now we're going to turn to military compensation. About the only hot-button issue that Karl doesn't touch, by the way, in this -- I've had the pleasure of reading the paper in draft form -- is maybe dropping the Army football team. So, you could argue that he left out the low-hanging fruit, but you could also argue that he's gone for even bigger fish.

And so we look forward to hearing you as well.

COLONEL GINGRICH: Thanks, Mike, and thanks for moderating this panel. We do appreciate it.

Okay, on to a non-controversial topic, so let's just get after it. National debt exceeds \$15 trillion as of a couple of months ago. Mandatory programs, such as entitlements and obligations on the debt, are largely responsible for that. However, defense spending over the last decade, as Mike can attest to, has grown exponentially as well. The 2013 budget by DoD is attempting to save or reduce spending by \$487 billion. That's now over being discussed on the Hill. They face a potential additional 5 to \$600 billion -- \$500 billion, depending on sequestration comes out.

So, how do you adapt to that type of fiscal environment? Well, you do what you heard today, burden sharing. You adjust your strategy. You decommission frigates. What I chose to do is take an internal look and try and do some internal reforms that can generate some savings, if you will, some efficiencies so you can afford more strategies.

What I'm here to tell you today is that as evidenced by the release of the 2013 defense budget, DoD is trying to do both -- adjust strategy and do some internal reforms. However, I don't think DoD has gone far enough, and I also think that the context has changed so much today that Congress really needs to participate in this discussion and take DoD at its word and start to pass some of these into legislation, some of these military reforms.

What do I mean by a change in context? Just in a general sense, a hundred years ago military pay was nominal. It was not competitive with the civil sector at the time. Skill transference was not there between military and civilian. Congress offset this low pay by establishing a generous retirement plan to recognize that commitment of the retirees. And then health care was based on the single soldier at a

remote outpost. It wasn't based on the family member or the retiree after he left military service. That's some significant change in the context. That's what I think DoD is trying to address. I think we need to go a little bit farther.

Okay, military compensation. Three primary components -- cash compensation, non-cash benefits, and deferred benefits. And I'll go through each one of those.

What the Department seeks to do is to provide competitive pay and benefits but in a fiscally responsible manner, and I think we're getting out of balance in that equation these days. But one thing -- don't just tell me I'm looking for efficiencies, because I'll be the first one to tell you that an efficiency has to have no effect on the effectiveness of military compensation, okay? You can be efficient to a certain point, but the primary metric in a time of austerity in anything we do has to be effectiveness, okay? I think we can gain some efficiencies and still maintain a level of effectiveness in everything we do. In fact, I think there's about 101 to \$112 billion worth of military compensation reforms out there. I think DoD is a subset below that, and I won't bother to put a figure on it.

So, in my opinion I think -- you'll hear my recommendations -- slow our cash compensation growth, okay? Slow it, not stop it. Reduce the value of non-cash and deferred benefits by transferring some of those costs to our retirees. And I'll get to some more details.

And, more importantly, everything that we have to do needs to maintain the nation's commitment to the all-volunteer force. We have been busy over the last decade -- or two decades. We can't let people go out and lead the service without continuing that commitment.

Okay, cash compensation. We're structured a little bit differently, our

military compensation. If you go to a civilian, they have -- about 82 percent of their compensation is in cash, 18 in benefits. If you go to a civilian federal government employee, about 67 percent cash, 33 in benefits. Military, 49 percent cash, 51 percent non-cash and deferred benefits. So, you can see the balance. So, that gives us a little bit of difficulties as we make comparisons across the transom, if you will.

Okay, of the three components, cash compensation -- biggest one is basic pay. That's what I'm going to focus on. Do I think there's some opportunity for reforms, larger reforms on how we pay our people and bonuses and things like that? Absolutely. Can we get there in the near term and start to save a hundred billion dollars over 10 years? No, we can't. And so what I chose is those quick wins, something that we can do today and immediately start to gain some of the savings. So keep that in mind as well.

Okay, our cash compensation -- every year we get a pay raise mandated by law, tied to the ECI. Back in the 1990s they talked about civilian pay parody and how we were way out of parody with civilian pay. I will tell you that no longer exists. Over the last 11 years I think all but two years Congress has passed an above-ECI pay raise for us, and that's ECI plus a half percent, sometimes 1 percent, sometimes 1.5 percent. So, Congress has been very good for the military, and basically what happens is now that is inverse, and now I'll show you a couple of sources that think military pay is beyond what it needs to be when compared to civilians.

Okay, I'm not going to talk about -- before I go into that, I'm not going to talk about housing allowance, another one of those things that is too prickly that we need to study a little bit longer because of all the privatization we've done on our bases in the amount of capital investment that we made there. If we try to undo some of our BAH, and the way we do housing is just -- you can't do that in a quick win, but I think it's out

there for a more long-term reform.

Okay, now whether or not military cash compensation is adequate. Some hard truths first. Civilian compensation levels ought not to be the ultimate arbiter of how much you pay a military person. Ought to give us a sense, but it should not be explicitly tied to that. There are no exact comparisons for what we do, okay? That's one of the hard truths.

And then finally the last one is our pay is largely commensurate with civilian sector compensation. For instance, CNA corporation in 2008, using just regular military compensation -- that's pay, housing, and subsistence -- found that the average enlisted person averaged \$4700 more than a comparable civilian; officers, 11,500. When we start to bring in some of our other benefits, that changes to \$13,400 and \$24,900 as a pay parody, and we getting more pay than our civilian counterparts.

In 2007, Congressional Budget Office found the same thing. We are in excess of the 70th percentile of commensurate civilians. That's the goal -- 70th percentile. The Rand Corporation in 2011 found that we were above 75 just in RMC. If you add in some of our benefits, we're probably over the 80th percentile. So, we're starting to get out of balance.

So, how can we get after that? Well, my recommendation is you take the ECI, as long it's positive, and subtract off a half percent. What that does is that gradually brings that percentile down over time. Guys and girls still get a pay raise; however, they are losing buying power over time, but psychologically it's like no pay raise. Or, what DoD has proposed is do nothing for the next two years, which I have extreme heartburn with. If you postpone anything in the United States that has to do with the budget for two years, you have to fight for it the next two years to get it back, and so that's why I take -- I question that.

What they're saying is in FY13 give us an ECI, don't do anything in '14 right now, and then in FY15 take it down to a half percent and then 1 percent in FY16. I think that's a little too aggressive. I think my approach is a little less aggressive, but immediately start savings and we can save about \$17 billion over the next decade using my recommendation.

Non-cash benefits. Military personnel receive approximately 20 percent of our compensation in the form of non-cash benefits, the largest of which is health care. I'm going to talk about health care for both retirees, although when you talk retiree health care, it's actually a deferred benefit. I'm going to talk to them together, because it's a little bit more simple. And I'm also going to talk about installation benefits. Those are the two largest non-cash benefits that we receive, health care being about 9 percent of the DoD budget. So, we're talking about a huge amount of savings.

I won't get into great details about the defense health program that's available out there in my paper and many other papers.

A little bit of history: We've had health care in the military since 1799. If you go back and you take a look at the law, there's actually to provide adequate medical support to service members assigned to wilderness outposts. It's not very wilderness outside anymore, so, again, a context change. What we saw was families started to move to the base, retirees started to get seen on a space-available basis, and now we have Tricare, which provides nine different world-class health care programs for the military. But that comes at great cost, and what mandatory programs are doing to the federal budget we're seeing health care and military compensation do to the DoD budget. That's why we have to get after this.

Department requested \$52.8 billion in 2012 for military health care and \$48.7 billion in FY13 with about \$1.8 billion of savings around the edges there. That's

9 percent of the budget, like I said. If projections from 2012 growth were to be carried forward, CBO projects by 2030 that could exceed \$92 billion. So, you can see that's quite a bit of resources out there.

Why are we seeing that? Medical inflation, expansion of benefits, growth of covered population, pharmaceutical costs.

Medical inflation -- we all live it every day; your families live it; your extended family. 4.9 percent annual inflation of health care costs since 1960. That's a lot.

Congress continues to expand our benefits. They roll back any changes to catastrophic co-pays, things like that. They've been very generous with us. In fact, I'll give you a quick stat. Back in 1996 we paid 27 percent of our health care costs; 2006 we're down to paying 12 percent of our health care costs, and that's across -- and that's primarily for our retirees. Today they pay \$520 annually, whereas a typical civilian family, according to Kaiser Health, pays \$4200 for family health care. So, you can see we're kind of out of balance there. Tricare for Life, which is a benefit that doesn't cost anything as of today for Medicare-eligible retirees -- those costs have -- that program alone has contributed 48 percent to the growth of our health care costs from 2000 to 2005, and that's for Medicare-eligible retirees. So, you can see the balance.

We've increased the number of beneficiaries -- 9.6 million beneficiaries today, again, Congress adjusting who is a beneficiary. They tried to kick it to 26 years old as long as a child or a dependent is in college. So, you can see it just continues to increase that.

And then, finally, pharmaceutical costs -- \$1.6 billion in 2000; \$7.5 billion in 2009. Why? Because we like to go to Target, CVS, and we like to buy our pharmaceuticals through the most expensive means available, retail. It's more

convenient. It's not that we use the most expensive; it's convenient. It's just very expensive.

Now, DoD has requested changes -- 2007, '08, '09, '11, and '12. However, Congress has been very averse to accepting any of them. So, we're trying again in 2013. My recommendation -- and I'll really summarize what I do across all of these. Under 65 retiree, Tricare, is basically you increase the cost burden to the retiree, move it up to about 50 percent of what the common family is paying. So, go from about \$520 over a series of years to about \$2,000 a year. You increase the co-pay's catastrophic cost, et cetera, and then you index future growth so that we don't have to go back to Congress every year and ask for an increase. You tie it in law to an index so that it automatically goes up every year. And I think that's doable. I think it saves somewhere between 30 and \$40 billion a year. Still looking at the details at DoD. I don't think they go as far as what I was recommending. Still doing a little bit of research there.

Tricare for Life? Again, increase the cost. That's a free good right now. Zero is the cost for that. And it's really a supplemental to Medicare Part B. So, we need to put some costs associated with that, kind of push down that while the retirees go to possibly some other means. That could save \$33 billion over the year.

And then pharmaceuticals -- increase the pace, okay? Just try to do the pay structure where it pushes people away from retail over into our medical treatment facilities or mail order. We can mail order 90-day supplies much cheaper than a retail. So, there are options out there aren't really affecting what you get; it's just how you get it.

Okay, let's talk about installation real quickly. Defense Commissary Agency I think we can do away with. It's not a common core task for the United States military. It's long outlived the context with which it was brought on. There's not a whole lot of money there, but, frankly, there's not a whole lot there in military compensation for

the entire force. You only shop at the commissary when you're close to the commissary, okay? Not all of our people are close to the commissary. We all probably have four or five supermarkets. Even in some of our more remote bases, we probably have four or five different opportunities as opposed to the commissary.

Post and base exchange -- I would say eliminate those. Again, not a very high-cost savings; however, it's not a core competency for us.

Restructure the way we do child care, and there are details in my paper about that.

And then stateside schools. Get rid of them. We're running 64 schools in CONUS and U.S. territories for about 28,000 people. We could actually give the local community \$12,000 for each one of our students and save \$39,000 per student.

That is, none of these on installation benefits are in DoD's 2013 budget request. In fact, they request an additional \$50 million to repair and upkeep some of the worst kept schools stateside. I just think that's -- and most of them are probably redundant with local services.

Okay, last one, deferred benefits. And deferred benefits, just like non-cash, is considered less efficient because of the value you place on it. It's not something I'm going to get from year one when I was a second lieutenant; it's something I'm going to get if I serve 20 years. So, it's kind of difficult. How do you value that? How do you model that? And that's my biggest problem. DoD has requested a commission to look at retirement alternatives, okay? They have not recommended anything. They are looking at alternatives, which I think is good, because we can't model. We don't have sophisticated enough tools to model what will happen if we drastically change the retirement system.

The other thing I would say is that according to the Principal Deputy

Under Secretary of Defense for Personnel and Readiness -- she stated that the retirement system is neither unaffordable nor spiraling out of control. That was a couple of months ago. I actually sat in on that subcommittee hearing over on the Hill. So, there's no immediate change. And I know Mike has some ideas on this; I have some ideas on this. But right now I say we don't change the retirement benefit till we have those sophisticated tools and we can have a conversation about how best to do this.

Some of you may have seen the Defense Business Board, what they put out. I take great -- I have questions about the way that was rolled out and the data that they provided in there. I have some very big concerns. I have some very big concerns about going to a 401(k) system. I just don't think that's the right thing to do. I think there's something we can do in between that would still allow us to maintain our commitment to the force and our retirees and still be competitive.

Okay, I won't go into a whole lot more details on the retirement. I'll allow that to hold over to questions. But I do like how DoD did not affect retirement. However, I think they're abrogating their leadership on this issue by going to a BRAC-like commission. That's where I take issue with it. If you can make the hard decisions on pay, on health care, why can't you do it on retirement? And so I take some issue there.

Okay, in closing, DoD self-proclaimed modest changes to military compensation or just that -- modest. I think we can go from modest to robust, not radical, and still garner additional savings and meet our commitment to the all-volunteer force. And I think Mike probably said it the best, and I captured some of his testimony prep here, making modest changes in military compensation, especially for retirees.

That's your assessment of the 2013 budget.

But targeting military compensation for only one-ninth of overall spending cuts, even though it constitutes one-third of the defense budget, I think we have some

more work we can do there.

Thanks.

MR. O'HANLON: Karl, thanks for an amazing and very, very informative presentation -- very provocative, too. I will look forward to discussion on that. But first, Dave, I look forward very much to hearing about Army acquisition.

COLONEL TRYBULA: Let me start by thanking Brookings, Michael, and my fellow panelists for this opportunity and each of you for persevering through what's been a very full day, and please take my remarks as my own, not representing the Army or anyone else. And what I'd like to do is really set the stage with a quote from Senator McCain when General Dempsey was sitting for his confirmation hearing to be the chief of staff for the Army almost a year ago.

"I am deeply concerned by the Army's inability to manage successfully its major defense acquisition programs; most prominently, the future combat system. With the arguable exception of Stryker, the Army has not successfully brought a major system from research and development through full production since the so-called 'big five,' the Abrahams tank, Bradley fighting vehicle, Patriot missile, and Black Hawk and Apache helicopters in the late 1970s and early 1980s."

The Army, indeed the Department of Defense, is repeatedly assailed by Congress and the press for a succession of less than stellar major acquisition programs. In many cases, these have been outright failures. A common thread behind this discourse is desire for the success that fashioned the Army's Big Five. The desire is the basis for my research. We will begin with what I call the legend of the Big Five, followed by an examination of the history behind the legend with a foundation in actual events, which you then turn to understanding the environment during the Big Five and juxtapose it with today's environment, and then the salient points to be filtered through the

environmental changes to produce lessons learned and recommendation for today's acquisitions and future acquisitions. The expectation is to use the Big Five to create a framework for future successes.

So, the legend of the Big Five. America's preeminent ground combat capability is the result of the now famous Big Five acquisition that produced the Abrams main battle tank, the Bradley fighting vehicle, the Apache attack helicopter, the Black Hawk utility helicopter, and the Patriot Air Defense Missile System. The overmatch and excellence of these systems was first proven in 1991 in the hundred of hours of ground combat in the first Gulf war that resoundly defeated a numerically superior Iraqi army. The Army's leadership developed the Big Five systems in the 1970s and '80s in response to the Soviet horde that threatened Western Europe with technologically superior weapon systems in numbers far greater than the U.S. or NATO could supply. Each of the Big Five systems was developed to be a leap forward technologically that would integrate seamlessly with the other Big Five systems to provide superior capabilities. These capabilities would be more than sufficient to overcome the Soviet advantage in numbers. The leadership in acquisition management of these programs successfully got it done through post-Vietnam downsizing and increased oversight. The result was more capability delivered before it was needed and produced in greater numbers than originally planned, all within the Army's budget. The battle-proven capability of the Big Five systems that are the mainstay of today's combat formations demonstrates the success of these programs. Clearly, the Big Five acquisition is the gold standard.

Now, the history. Like most legends, the legend of the Big Five has its roots in actual events but also grows grander as memories of missteps, challenges, and problems fade in light of final successes that continue to appear and reinforce our greatness. The belief in the purity in the origins of the Big Five belies the fact that three

of these programs were built on the top of failed programs. The Advanced Attack Helicopter program, which became the Apache, was a follow-on to the failed Cheyenne helicopter; the Bradley was built on the failed Mechanized Infantry Combat Vehicle-65 program; and the M1 followed on two failed efforts, the MBT-70 and the XM803 -- while easily forgotten decades after the acquisition, cost growth was also a significant factor.

Nunn-McCurdy did not exist at the time of the Big Five. If it had, according to the historical data reported to Congress in the quarterly Select Acquisition Reports, all five of the Big Five programs would have had Nunn-McCurdy breaches and would have required termination or SECDEV certification in re-baseline.

Even after development, there were significant concerns about these systems. After source selection, the Abrams went through a mandatory competition with Germany's Leopard 2 tank. The live fire tests of the Bradley compelled its own congressional hearings and required extensive efforts, including the personal involvement of the chairman of the Joint Chiefs of Staff, Admiral Crowe, to avoid a congressional cancellation of the program in 1986 and resulted in a book and an HBO movie that many of you may know, *The Pentagon Wars*.

Each of the Big Five was a significant step forward, but this was through the integration of available technology, not through revolutionary technological advances. The integration of dozens of recent technologies made the results extraordinary when compared to the systems -- to those that they were replacing. But they were evolutionary, not revolutionary, technological advances.

The Big Five also were not produced as the optimal systems. They had planned upgrades that were ready in design when full production started. It is critical to understand that there was both a compelling need to get the systems to the field and a recognition that they needed to incorporate the ability to upgrade in the future. Apache

Longbow, a variance of the Black Hawk, the M1A1 are all excellent examples.

This superficial dash through the history of the Big Five is no way intended to diminish the success that these programs became and continue to be. It is intended, however, to shed light on the faded memories of the programs' reality and to reinforce that each had its own struggles, which under a different environment may not have led to success. So, what are the environmental changes?

I know this will surprise everyone, but I'd like to suggest that the 1970s and '80s are different than the 2010s. Understanding how the environment had changed is important in determining both what lessons are applicable today and the corresponding recommendations. I'd like to highlight five critical environmental variables and describe how they have changed, or not, over the last 30 to 40 years.

The first is the threat. During the development and production of the Big Five, the threat was clearly understood as a massive Soviet conventional attack in Europe. This threat was clearly defined and compelling. Today, while the existence of a threat is undeniable in terms of conventional ground forces, it is not currently clearly defined in a compelling manner that supports the determination or the justification of specific requirements.

The second environmental variable is fiscal. The Big Five were developed at the end of the Vietnam war and the years immediately following. Using fiscal year 2012 constant dollars to take inflation out, the Army's research and development budget fluctuated between \$8.5 billion and \$6.5 billion in the '70s. From its nadir of \$6.5 billion in '76 it rose until it reached \$9.6 billion in '92 before steadily diminishing to 6.7 in 1999. From 1999 till 2004 there were steadily increases until it leveled off at about \$12 billion a year. This year it's 9.7 billion, which exceeds each and every year during the development of the Big Five.

Next is the industrial base and competition. The Department of Defense made a conscious decision in 1993 at Secretary Perry's famous last supper to promote consolidation, which is preceded so that there are now only a few companies able to compete for any of the Army's major acquisition programs. While the argument can be made that the competition was traded for health and viability, the byproducts are greater risk aversion and co-dependence.

Then we have the acquisition process. At the start of the big Five, the acquisition process was loosely structured and essentially service run with the Secretary of Defense approval required to initiate a program and for production. Over the years, the process was formalized with the introduction of milestone reviews, standardization, and integration with the PPBE process. Goldwater-Nichols created the separate acquisition executives that pulled the service chiefs out of the acquisition process. The result remains a linear process with more oversight and bureaucratic requirements.

The final environmental variable is government expertise. During the development of the Big Five, the Army possessed incredible in-house expertise. Before the Request for Proposals went out for the M1 prototypes, army engineers understood the tradeoffs. Within the sphere of feasible, it had actually done the calculations and simulations, so they can understand things like the tradeoff between the width of a track on speed and maneuverability as components of mobility. Today, the in-house expertise is diminished to the point where we have several examples over the last two decades of key performance parameters for systems having thresholds which, when taken together for the system, are simply infeasible.

So, what lessons could we learn? With this understanding of the environmental changes that have occurred since the big Five, we can summarize a few things. First, leadership matters. It must be able to prioritize and focus. The ability to

gain buy-in from OSD, the Joint Staff, and Congress is critical. Feedback mechanisms can create flexibility to overcome the environmental changes that will happen. Expertise, within both government and industry, to include understanding the art and science of the feasible is critical. Finally -- and this will surprise you -- evolutionary is far easier than revolutionary change.

Now, recommendations. So, these lessons suggest five recommendations for the Big Five. First, lead -- actively, continuously, and throughout. Continuity of leadership at all levels is important. The ability to maintain continuity at the most senior levels, given the changes from Goldwater-Nichols, mandates conscious forethought and redundancy at senior levels.

While prioritization and focus could be included under leadership, they are important enough to warrant their own recommendation. Prioritization and focus must be more than PowerPoint or simply decreed in a memo. They must be followed with the application of resources and senior leaders' time.

The next recommendation is to create flexibility and overcome linearity in the acquisition process with feedback mechanisms. Might sound familiar from something earlier. This means the integration of users and engineers throughout the process, as well as continuously reevaluating assumptions and their implications.

Next, one of the reasons for the challenge of maintaining expertise is that until the 1960s acquisition programs fell right on top of each other. Lately there have been significant gaps in programs. Eliminating these gaps through heel-to-toe programs is one way to increase expertise and maintain it.

Finally, strategic communications must be compelling, pervasive, and updated regularly. These recommendations are purposely broad. Success requires a holistic approach and a detailed list as others are prescribed in the past are easy to be

cherry picked or may solve specific problems being examined but are likely to resolve other challenges or fail the test of time.

I look forward to your questions.

MR. O'HANLON: That's excellent, David.

I'm just going to begin with one question for you and then open it up to the crowd. We've got about 15 minutes to go. I just want to ask, specifically to bring back to where you began with Senator McCain's quote, and maybe this is something you'd rather not say in so many words -- and I appreciate your being as tough on your own service as you've already been -- but I'm going to see if I can ask you to be even more blunt. Do you basically think the Senator was correct, and to the extent programs like the future combat system, Comanche and Crusader, failed that they were actually handled worse than the Big Five, and which of those five lessons that you just recited did they least take stock of? In other words, what does of the Army -- of all these logical things that you said, what did the Army most get wrong and most need to quickly learn and adapt to so it won't make the same mistakes in the next 5 to 10 years?

COLONEL TRYBULA: I think, first of all, the Army does not do a good job of enumerating successes. Since the Big Five, you've had Stryker, you've had MORS, you've had Avenger you've had HIMARS and Lakota, not to mention evolutionary upgrades in terms of every one of the Big Five systems has gone through an upgrade program, which has been a major acquisition program, as well as the Chinook. I mean, the F model, the Chinook is nothing like what was built in the '60s. And so I think that in terms of major acquisition programs, the Army doesn't take enough credit for what it has done and where it has been successful. That said, okay -- and Kiowa Warrior is another one of those successes -- how many of those were really developmental programs? I think that gets at the crux of the problem and where those failures are really coming out.

And I think it's important when you look at things -- and PARC I think has done a great job, starting to be able to differentiate when they look at why programs fail, differentiate between problems in the origin of the program versus bad management of the program. And so if you start fundamentally flawed with an infeasible solution, you can't get there. And I think in at least one of the cases that you mention there, Michael, that's a real issue. The program management -- I think we continue to work through issues of how do you lead the program and maintain that continuity, and I think that's a challenge that we still need to overcome.

MR. O'HANLON: Excellent. Now, in light of the time what I think I'm going to do is just take one round of questions. So, I'm going to take three and then we're just going to down the -- that'll probably take us right till 3 o'clock. So we probably just have time for one round, and I see three hands so I'm just going to go with the three of you.

In the far back, and then after that we'll take them all together. Please make notes, and then we'll just have a concluding round of answers.

SPEAKER: Thank you. I had a question for Colonel Trybula. On the issue of the Big Five programs, I mean, they're still be looked upon as the model programs. Even General Crowley said we should do it like the Abrams, do the new common vehicle like we did the Abrams. But would you agree that maybe the problem is that those five programs were conceived and developed when we had a threat that we understood and now we don't really know what the threat is and that just makes it really difficult to plan for new systems?

MR. O'HANLON: Now we'll go here to the gentleman in the white shirt and then back to --

MR. DEDDA: Michael Dedda with the Bureau of Economic Analysis.

My question is for Mr. Gingrich. Did I say that right?

COLONEL GINGRICH: Gingrich. Close enough.

MR. DEDDA: Well, I have two questions. The first one is how would per diem rates be affected in this situation of across all branches? And also what's your recommendation for that? And my second question is how would the reservist pay be affected as well and your recommendations for that?

Thank you.

MR. O'HANLON: And in the back.

MR. GRICE: Hugh Grice, THIS for Diplomats. Did you mention the MRAP? Because that was somewhat of a success story in a way, right or not?

MR. O'HANLON: Okay, and then if there is a question also on intelligence or intelligence reform, we'll add that to the list as well if anybody has that or, if not, going once, going twice, any other questions? Those were all so admirably concise we could even add a fourth to the list if anybody else wants to have the last question of the day. Okay, we'll go here and then we'll ask everyone to speak.

MS. BLUMBERG: Hi, Katie Blumberg from the Marine Corps. I was just wondering, Colonel Gingrich, what is it that you took into consideration that DoD didn't when they studied closing commentaries and exchanges? They've studied it four times recently, most recently in 2006, and where were they lacking when they decided not to close them?

MR. O'HANLON: And I guess I will ask one question for Lourdes also to add to the list, which is going to be how do we make sure -- and I realize that you were talking a lot about IT and certain technology solutions, but how do we make sure that in the effort to be fast we don't just get to the wrong answer faster? It's sort of a broader, philosophical question, but we know that, for example, looking back on the wars in

Afghanistan and Iraq, we made a lot of mistakes, especially in the early years, which we may or may not ever fully recover from. And I'm not blaming DoD. We certainly share responsibility here in the broader academic and policy worlds, too. But if the whole focus is on accelerated decision making and we start with a bad concept of the problem, how do we make sure that this effort to be efficient, agile, you know, Apple-like, whatever else, doesn't just get us into, you know, making mistakes because we're -- you know, haste can make waste as well as make good solutions.

I think we'll go down the row and start with you, David.

COLONEL TRYBULA: The question about threat definition is a great question, and threat's definitely much harder to define today, but I would ask you very simply do you want DoD to propose spending billions of dollars on a program without a compelling case for that program. And that needs to be -- you need to have a compelling case, given the environment that there is today. If you can't make that compelling case, you're going to have problems, and there's a real question of whether or not that money should be spent if you can't make that compelling case. And so I think there's a lot of work that needs to be done in defining that, and then also being able to take that message to stakeholders and make sure that they understand it. And if they don't buy into it, then that's feedback to go back and say were we right, were we wrong and then iterate on that and move on to what really is compelling; what do we need.

In terms of the MRAP, I didn't mention any of the successes in response to the ONS or the JUONS programs from the Rapid Fielding Initiatives to the Rapid Equipping. I was trying to stay with what were Army major major defense acquisition program that came up in the selected acquisition reports. And certainly there are lessons to be learned, but I think that environment's even different and are those successes repeatable in peacetime. I think there are lessons to be gained from there, absolutely.

MR. O'HANLON: Thank you.

Karl, over to you.

COLONEL GINGRICH: Okay. Per diem. Really, outside of what I was looking at. I think per diem really falls into the O&M category as opposed to a specific military compensation. So, I really didn't look at that, okay? Although I think O&M, you know, has its own set of efficiencies that we can all look at. But what per diem does kick into mind is really our basic allowance for housing, which kind of follows the same pattern of well, we take a look back over the previous year how much it cost us for housing, and then we establish a BAH rate, and then every one of the landlords goes and looks up what the BAH rate is and then charges us rent at the BAH rate. So, you see that, you know, per diem also has a little bit of that self-licking ice cream cone, you know, philosophy behind it.

Your question on reservists -- again, reservists are -- you know, we're one force, but our compensation systems are fairly unique. However, what I am talking about really will affect both. As you control pay growth over time, that will be reflected in the pay tables of our National Guard and reservists across all of the different forces. So, they will naturally see their pay compensation grow at a slower rate. That has second- and third-order effects on their retirement, because their retirement is based on your final base pay, and so that's another reason why we want to control that pay compensation because of the second- and third-order effect it has for retirement.

And then, finally, health care really -- because they primarily receive their health care while they're on a mobilized status and their family and their dependents are also served there, minimal impact there. However, when they become retirees, they would fall into -- just like every other retiree, we don't differentiate, so they would, you know, be affected by the same changes that I'm requesting or recommending with

enrollment fees, co-pays, catastrophic pays, et cetera.

Commissary closings. Not a core competency for us, okay? If you take a look back, it tells me in my family I save \$4400 if I use the commissary. But military -- not everybody uses the commissary, yet everybody gets credit for it within their compensation. So, it's kind of hard to value that benefit and the people who don't use it and the people who use it. I also have issues because GAO has issues with it that the commissary says they're going to save us 30 percent over a local store. Well, they think that's overstated. They also think the PX savings is overstated by about one-third of what they say. The other thing is there's been no independent analysis of who goes to the commissary. The commissary has self-reported about a 90 percent utilization rate. Well, what does that mean? Does that -- the active duty guys and gals living on post go there 90 percent of the time or what? And they don't differentiate between which population they're serving, whether it's active duty or reservists, and one of my points that I made was that was retirees and their dependents now exceed active duty personnel and their dependents, so how much of that benefit is going to them as opposed to the active force? Those are my issues with the commissary, the PX, and similarly with the schooling system.

Thanks.

MR. O'HANLON: Hey, Lourdes, over to you.

COLONEL DUVALL: No, that was a great question, and I probably didn't cover this very well. You know, what I'm proposing is not this kind of one-size-fits-all, you know, transition the entire Department of Defense into this, you know, agile, lean, kind of Microsoft or Apple or Cisco. But I think that there are certain mission capability areas and even kind of subsets within that. For example, if you want to think of -- you know, something I'm familiar with, (inaudible) intelligence systems, for example, analytic

systems. You know, tons of thought -- systems engineering, lots of more deliver process need to happen when you're laying down the initial infrastructure and the standards, because you -- you know, this is global enterprises and you can't just really make random quick decisions and let every, you know, operator have their own, you know, preferences -- I prefer this or that. But when you come to a layer of the analytics of the, you know, how does somebody who's working problem set A need to visualize, sort, query information versus somebody with a problem set B? We have a lot of trouble now with deliver processes making that kind of discrimination and tailoring and rapid adjustments. And if all of a sudden problem set A transition to a new conflict with a different coalition partner or sharing need, that even makes our existing system go into more spasms, because if it hadn't planned early, you know, now you're trying to figure out, you know, how do I accommodate this. So, I don't think this is a one-size-fits-all. There are certainly certain, you know, risk calculations that are going to have to be made when you have high interdependence, mission assurance, reliability, those kinds of factors where you're going to have to really continue to see things more deliberately and do all that proper coordination to make sure that you've laid down good bones, you know, and your good infrastructure and foundation.

What I'm really arguing is that for the interface for the users out there and for certain tailoring in specialized mission areas and, you know, as we evolve and be able to say that, you know, there's new technologies that could be potentially spun in that we hadn't thought about two years ago or three years ago. You know, there need to be on ramps for that kind of enervation that I think we're really lacking with our current processes. So, for some systems there's going to be a hybrid approach. For certain areas I think you are going to be able to just say hey, agile's the way. And then there really are going to be some cases, because of security aspects or others, where you're

really going to, you know, want to stick to our existing processes. But, you know, my argument is that we risk going to what we know, which are existing traditional processes overweighing those when I argue there are some factors in play where we need to keep our mind open and actually, you know, kind of look at our different mission areas and say, you know, where are more of these agile approaches probably more suited and how do we accommodate those, and I think that's kind of what you were talking about, you know, how do you take the lessons from some of these -- not all of them good -- you know, of where we -- you know, we were fast and we met the need, but, man, was that expensive, you know, or it was expensive and we did it fast but we didn't meet the need, you know? So, how do you make that work? Again, I'm not sure if that's the, you know, most comprehensive view, but I do think that this is not a one-size-fits-all. The whole Department has to move this way. But certain critical mission areas -- cyber, intel, some other ones I think -- we're really going to risk some relevance if we don't transition some of our capabilities down to this kind of route.

MR. O'HANLON: That's great.

I just want to say on behalf of all of us at Brookings -- and I want to really congratulate the excellent event but thank all of you for being here. I want to congratulate and say how much I admire this forum that Brendon and Peter and especially all of the FEFs here at Brookings and those of you from around town and around the country who have come and participated and have made this just an outstanding event. So, thanks to all of you, hats off to all of you and to the crowd as well. Best wishes.

* * * * *

CERTIFICATE OF NOTARY PUBLIC

I, Carleton J. Anderson, III do hereby certify that the forgoing electronic file when originally transmitted was reduced to text at my direction; that said transcript is a true record of the proceedings therein referenced; that I am neither counsel for, related to, nor employed by any of the parties to the action in which these proceedings were taken; and, furthermore, that I am neither a relative or employee of any attorney or counsel employed by the parties hereto, nor financially or otherwise interested in the outcome of this action.

Carleton J. Anderson, III

(Signature and Seal on File)

Notary Public in and for the Commonwealth of Virginia

Commission No. 351998

Expires: November 30, 2012