

2006 Navy League Sea-Air-Space Exposition

TRANSCRIPT

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Panelists: VADM Evan M. Chanick, Jr. USN, Director, Force Structure, Resources and Assessment J8, JS
LTGEN Emerson N. Gardner, Jr. USMC, Deputy Commandant for Programs and Resources
VADM Lewis W. Crenshaw, Jr., USN, Deputy Chief of Naval Operations for Resources, Requirements and Assessments

Richard Macke (Navy League Vice President for Sea Services): ... And you've heard this if you were here this morning and you made the lunch, you've heard this pitch twice but you're going to hear it every time you come to a seminar or a lunch. We have in the back of the room little yellow cards. There are plenty of them back there. And we would like to have people sign up if you're not a member of the Navy League, if you're not active duty. If you're active duty, you can sign up your spouses and I will hand each of these gentlemen one so they can sign their spouses up. We are obviously looking for more members, for more support because the whole purpose of the Navy League is to, is to educate and support the young men and women who are out there doing our deeds for us on a day-to-day basis. And the more members we've got, the better we can provide that support. So if you're not a member, please give it special consideration and if you've got a card and you want to hand it to me with money, I'll take it. One other comment for those that were there, here this morning, you noticed that we had three naval aviators and a naval aviator moderator. For those that are here today, we have three naval aviators and naval aviator moderator. Aviation has taken over. And with that, I'm not going to go into any long winded introductions. We're going with Admiral Chanik and then over to General Gardner and then to Admiral Crenshaw who will give you a status of where we are on the QDR. And I know it's a subject that has a lot of interest. I'm sure they'll be a lot of questions. So we'll say everything to get to the, cut to the chase at the end of the presentations when we do the, when we do the Q&A. Thank you. Admiral Chanik.

Vice Admiral Chanik: Thank you Admiral. Well good afternoon and I am looking forward to the session here. I hope it's a question and answer and not an interrogation as these lights might indicate out here later on. But it really is a pleasure to be here. Certainly appreciate the invitation from the Navy League and once again it looks like another fantastic sea, air space exposition, walking through the displays down there in the A, B, can C halls. Some great industry displays and ideas and thoughts out there. You know I'm very impressed with what industry is putting out there and certainly what the Navy League puts out in this particular forum. As you probably saw in your programs, Ryan Henry, the Principal Deputy under Secretary of Defense for Policy was also supposed to be here today. He and I spoke this morning. We were at another meeting engagement. Unfortunately, he has to go, he's arriving on the hill right about now. So he sends his regrets as a retired naval aviator. He certainly would have liked to have been here also and if he had an option, would have. But I'll go ahead and pass along some of his

comments and kind of set the background for this. And what I intend to do today is give you some background on the QDR, part of what Mr. Henry was going to say and part of what I'll say from my perspective on the joint staff working as the J8 there. To provide some background and then let General Gardner and General Crenshaw talk about the implications in particular to the Marine Corps and the Navy. And they've assured me as we walked on the stage that they'd be able to answer any question you have, so I'm going to be relax and enjoy this as time goes on here.

Vice Admiral Chanik: So with that let me go ahead and start and the next slide please. And talk a little bit about the QDR. Many of you have seen some aspects of this but it's a summary of the QDR report and some of the effort that went through the QDR. And as you were probably well aware this is the third QDR since the bottom up review in the 1993 timeframe. But it was a little bit different in that it was delivered at the same time the budget was delivered to Congress in February of this year. That it was also done by our senior leaders, very much involved, Deputy Secretary of Defense was specifically running most of the meetings, starting in summer time, early summer of last year and spent and the upper leadership, four stars, the vice chiefs, the undersecretaries of the OSD and of the services were involved in multiple meetings and thousands of hours to go through this. So it was definitely led by the senior leadership. And unique in that it was the first time we've conducted it during a war. So it's a wartime QDR as you see in this slide and here we are at about the fourth and while it was conducted in the fourth year of that particular war. And as all QDRs, it has agenda or a dictate that says take a look at the future for the next twenty years or so and the capabilities you see that you might need in that timeframe. So besides looking at the current environment that we're in, we're also projecting out to that plus twenty years, recognizing that it's difficult to do that once you get beyond five, six, seven years, the intelligence communities are reluctant at best to predict what might be there in the future. Nonetheless, we all look at there and as programmers have to do that. Two real imperatives came out of that review. And again you can see that the slide in that third bullet, it's looking at reorienting the capabilities that the joint force has today. And that's been a, that's nothing earth shattering because as you are well aware, Department of Defense works hard in assessment continually. And this was an event that is another assessment event to take a look at what we need to do to shape our forces, to answer the future, the potential future that's out there. So one of the twin imperatives that was to continue to reorient some of our capabilities to what we see asymmetric and irregular warfare. And I'll talk to that in a few moments too. But the second part of that was the recognition that as we make our forces more agile, more responsive and more flexible, then we have to do the same thing with our management and governance and oversight inside the building, inside the building and looking through that. So we've got to get the enterprise agile enough to support that reorientation and help enable it. And the last thing is we recognize that this is, the QDR is not a, it comes out and it's a single event and it guides everything for the next four years. It is part of the continuum of transformation. It is one more event that we continue to assess and will continue that over the years to come. And it's one that's been based on a lot of operational experience. Slide please.

Vice Admiral Chanik: Part of that operational experience, which you see some of the bullets up on that slide there but we certainly recognize that from now until and as we continue through this long war, that we're going to be in a period of uncertainty and unpredictability. About the only thing we can tell you today is that ten years from now we probably won't be engaged where we

are today but perhaps we will be in some other part of the world because we believe it's going to be that unpredictable. And of our lessons learned in the last four years as we set up for the QDR, certainly what's going on now in Iraq and Afghanistan was influential in the deliberations as are, as is the recognition that when we talk about a global war on terror, that's outside Iraq and Afghanistan. And that requires certain capabilities to be able to do that too when we look at war, with terrorist organizations that aren't part of nation states but will operate inside perhaps those nation states that that requires some capabilities that we had not historically in a traditional sense taken a look at. The third part was humanitarian issues. And you can see some of the examples up there from the tsunami to the Pakistani earthquake. Certainly have impacted some of our thoughts, recognizing that the military capabilities will be called upon to address some of those issues when they come as it might for operations in support of civil authorities. Katrina was a good example. When we talk about defending the homeland and we talk about consequence management in the homeland, Katrina is not a bad example. Where we have seventy thousand troops involved in support of that, about fifty thousand guard reserve and about twenty thousand active duty. That might be a good example of some of the things, capabilities wise it might be communication, emergency response, etc. that we'll need to have in our kit bag to address other consequence management issues that might occur in that uncertain future. So those four things in particular experiences helped shape some of the QDR thinking. And the lessons learned from those were the fact and I talked about already that we believe we live in a period of uncertainty and unpredictability. And that's going to be true for the next twenty years or so. We also believe that the United States alone cannot address all the things it needs to address. That we need to build partnership capacity and work with coalitions, work with allies to accomplish the things that we need to accomplish. That the indirect approach working with our allies and coalition partners is certainly the way to go. We need to anticipate the events and hopefully dampen them down before they become brush fires or full fledged wars. And we need to have unity of effort. And that unity of effort is certainly inside the government to do better working in our own interagencies and that unity of effort between ourselves, our coalition partners, and our allies. So with that slide please.

Vice Admiral Chanik : We'll talk a little bit about some of the strategy. The strategy really hasn't changed that the United States wants to employ. We still talk about a sure, in a sense of assuring our friends and allies that we're dependable and robust partner. That we will have capabilities to dissuade any potential adversaries that might want to impact ourselves or our partners. That if we can't dissuade, that we're ready to deter. And if that fails too we're ready to defeat it, a time and a place of our choosing. Historically and if you look at that chart, if you look in the security challenge, the four quadrants there in the lower left quadrant the traditional is where we've been very, very good. We are probably the most capable force in the world at addressing those traditional things. And I know you can't read that necessarily in the back, but what it says is that states employing military forces in well known forms of military competition and conflict is what constitutes that traditional box. In this environment that we see ourselves going to in the future, we recognize that we're going to need to be able to work more in those other quadrants. The upper right quadrant is catastrophic. 9/11 would be a good example of that. Going back in history, Pearl Harbor might be another good example of that. But we believe, the QDR believes that as we look at that future, that the potential for catastrophic is certainly there. And we need to have capabilities to address that. Disrupter, disruptive in the lower right quadrant. You can look at technology. An example might be stealth and stealth

technology applied to aircraft, applied to surface vehicles etc. But certainly in the aircraft world, that if we had not had that technology and if had come, if it came out from another peer competitor, that would have changed a lot of how we shaped our forces over the last fifteen years or so. So we need to continue to work and be able to address challenges in that disruptive quadrant. And then lastly upper left, the irregular, part of what we are doing now in the counter insurgency operations in Iraq and Afghanistan. We see, if we look at the future, that those three quadrants will need more capabilities than we have historically had in the past. And consequently, that's some of the things I'll talk to you here in a moment. Bottom line in the, as you see on the chart up there, we want to make sure that joint force has capability for the combatant commanders, that it provides options for the President. And what the QDR did was look through those four capability focus areas, defeating terrorist networks, defending the homeland in-depth, preventing the acquisition or use of weapons of mass destruction, and shaping countries at cross, strategic crossroads. Look through those four focal points if you will to talk and operationalize what the joint force of the future might need in terms of capabilities. Slide please.

Vice Admiral Chanik : And this is sort of a pictorial that it's, it's a chart that again it's the same as you saw in left side but it puts those four focus lenses in there. And you can see the arrow and the vector that talks about shifting our weight. Is that exactly where we are today in terms of joint force capabilities? Who knows? It's an artist depiction. But the bottom line is we think the vector needs to move up towards that right and gather more capabilities in those other three quadrants. Not at the expense of losing what we do in the traditional, cause we still see that requirement there. But expanding and/or reshaping some of those capabilities so we can work in those particular areas. Slide please.

Vice Admiral Chanik: So that kind of is a background. Let me talk just about a couple things. Again on a wide basis, before we go to the Marine Corps and the Navy and talk about what it mean in particular to them. But as we talk about defeating terrorist networks, the chart talks about where we think we are, what kind of end state we'd like and then the method to get to that victory. And we recognized right away when we talk about defeating terrorist networks that it's obvious that the value of sharing ideas, cultures, and technology with our coalition partners is critical in reaching the desired end state here. And some of the capabilities, next slide.

Vice Admiral Chanik : Are represented in this particular slide. They talk about more capabilities in the world of human intelligence in terms of how we can collect and how well we work with that information. Talking about language and cultural awareness. An increased rule of special operations forces, in particular for defeating terrorist networks. Persistent surveillance and you'll find that that is a capability set that really blends in through all four of these particular focus areas. And general purpose forces, multi-purpose forces that can do more, have more skill sets in the area of what you would call irregular warfare or lower end, soft type of work. Slide please.

Vice Admiral Chanik : We recognize that defending the homeland in depth is exactly that. You start overseas with that and then layer defenses so you can protect the homeland. We recognize that we as any other nation are at risk from outside our borders and inside our borders. And that's especially true today with loose knit terrorist organizations that can move freely throughout

the world. So some of the means to achieve the end state there are represented in the next slide and those capabilities.

Vice Admiral Chanik: They tend to look at air and maritime dominance as an enduring capability. That's certainly helpful as you work at defending the homeland in depth. Deterrents in depth, which we are and tailored deterrence, which we are working to put more definition to that. But to tailored deterrence, can you deter a terrorist? We think you can. And working on capabilities to do that. We also take a look at interconnecting communications for capabilities to help in homeland defense and certainly work very, very closely with the Coast Guard on the maritime side with the Coast Guard for that maritime domain awareness. Again, an area that where the partner capacity is certainly important. Slide please.

Vice Admiral Chanik : Probably one of the more disconcerting challenges, at least personally, I think we face is the production and potential use of weapons of mass destruction. This is an area and we recognize that day in a world with globalization, global connectivity, with nations that can, that have the ability to build weapons of mass destruction that the terrorist organizations can, they have the potential of acquiring those. And they certainly have stated that they would use them if they acquire them. So we feel that it's particularly important to work with capabilities in that area. Slide please.

Vice Admiral Chanik: And you'll, these look familiar in terms of defeating terrorist organizations and they are, but that human intelligence once again, language, cultural skills, persistent surveillance is certainly key. And then there are some unique niche capabilities that exist and that might be in terms of segregating, rendering safe weapons of mass destruction and using some lethal and non-lethal means to take care of that. Slide please.

Vice Admiral Chanik: And last the focus lens was shaping countries, the choices of countries at strategic crossroads. Recognize that as we use all elements of national power, diplomatic, military, industrial and economic, that all of those are important. That we try to shape nations and their choices when they're at strategic crossroads. And this is all part about partnering once again. And it's part about being ready that if the shaping efforts don't work that we can answer and deter, dissuade, dissuade, deter and defeat if required. So this goes back a little bit to that traditional quadrant and emphasizes some of those capabilities that exist there. And the slide please for those capabilities.

Vice Admiral Chanik: Again you'll see security cooperation in there. You'll see persistent surveillance and you'll see more of what you see, what we've traditionally called those capabilities for major contingency operations that exist there. So slide please.

Vice Admiral Chanik: So talk that talks a little bit about the, next slide please. About structuring the joint force and looking at the capabilities you desire from that joint force. The other thing the QDR came out with was the fact that unity of effort and I talked about that in the earlier slide certainly needs to be there. That all the capabilities of the government need to interact in a thoughtful, deliberate manner. That we need to work very closely and capably with our interagency partners and with our coalition allies and partners. And there's a listing of some

of the ideas up there that I won't go through. But unity of effort came out in multiple times as we went through the QDR deliberations and report itself. Slide.

Vice Admiral Chanik : That second imperative I talked about I think it was the second slide talked about the, shaping the defense enterprise in the twenty-first century force. And there is a recognition that how we do governance, how we do management, how we do execution of the force is an imperative and needs to become better and more flexible and more agile just as we make the force more agile and more flexible. And this is something that (AT&L) Acquisition Technology Logistics, Mr. Kreig has got as one of this primary projects and is working it hard. Deputy Secretary of Defense is, recognizes this too and is all over making this occur. And the last part of that talks about human capital. I think I'm sure perhaps General Gardner and Admiral Crenshaw will talk on that. But for all the services, we talk in total force at how best to use our active component, our reserve component and recognize that our reserve component has, is shifting from a strategic component, strategic reserve component to a operational reserve component. And we'll see that as we work through this human capital strategy for the twenty-first century. It doesn't just apply to the military side of the house. It also applies to our civilians and our contractors that are part of that force that enable and achieve the effects that we desire out there. Slide please.

Vice Admiral Chanik : Last part is the QDR also came out with a refined force planning construct. Many of you are familiar with what 2001 QDR came out, the 1421 strategy or force planning construct is the correct way to say that. This is very similar to that although it is refined. You can see the categories now are the one, the homeland defense is still there. The four is better defined and better described as the war on terror/irregular warfare. And the last part the 2/1 are the conventional campaigns. But we talk a little bit different about it now, on the left side, we talk about steady-state and surge operations, recognizing that each one of those three categories, sometimes called the Michelin man there, that each one of those has a steady-state component and potentially a surge component as you get into those unpredictable operations. We still kept the same force planning construct. It talks about two, having the capability to do two major combat operations near simultaneous. But recognize that a level of effort of an irregular campaign for example what we have if you combine Iraq, Afghanistan now that if we have an enduring level of effort that is of the numbers that we currently have employed that that can also represent the same level of effort that a major combat operation is. So that too still exists but it, one of those two might be a large scale, irregular campaign, very, very similar to what we have going in Iraq and Afghanistan now. Slide please.

Admiral Chanik: So, I'll close it up with just a little bit of a way ahead. QDR report came out the sixth of February. QDR efforts didn't end on that day. They are still ongoing. The Deputy is leading implementation. There are still his advisory working group still meets once to twice a week. Once again, four star level, vice chiefs, undersecretaries, doing that to implement a hundred plus action items that came out of that QDR. And it goes on. There's eight execution road maps. There's other on a smaller scale road maps but eight large road maps that have been assigned co-chairs typically undersecretary level plus a three star level to lead and execute certain road maps. Road maps talking about governance. Road maps talking about authorities. Road maps on tag, track, and locate. But a grand total of about eight of those. Irregular warfare happens to be one of those. So those efforts continue and will continue as we impact the palm

'08 build and then continue on to make sure that the implementation of the QDR becomes a fact and occurs on as rapid a pace as we possibly can. And with that I'll go ahead and turn it over to General Gardner to talk a little bit about, since you have the general background now and look across the joint force on some of the impacts to the Marine Corps.

LT General Gardner: Thanks Drake, thank everyone for coming this afternoon and the opportunity to speak to you. I'm Deputy Commandant for Programs and Resources. But I had responsibility to manage the Marine Corps Fifth Station for the QDR effort for the year prior to I took over, I took over this job last August from General Magnus. So been talking about QDR for some time and where it is.

LT General Gardner: First point I'd like to make is I think the QDR is a point in time on the highway of life. It is part of a continuum. It was conducted by an administration that's been in place for five years and has three years to run. And one of the hallmarks of this administration of course has been the stability of its leadership, particularly within OSD. So there, one of the comments you hear about the QDR is not a lot of dramatic change in things in there. So there is a lot of confirmation. There's a lot of aspects of the QDR I think to note is it's not only what the QDR talks about changing, it's also what the QDR doesn't talk about changing. And I think that point of view from the Marine Corps we see the QDR as a validation of the way we do business. We are a task organized, modular, scalable, agile force that has adapted to the current war that we're fighting. That has always been engaged on traditional and irregular fronts. We wrote the small wars manual. The, so there's a validation and a, and a substantiation of the way we're doing business. Many of the changes that you see mandated and directed by the QDR with regard to more attention to cultural affairs, language training, greater use of general purpose forces and irregular warfare. We have already taken those steps before the QDR had already begun. We'd already established our Center for Advanced Operational Cultural Learning in Quantico in '04. It's up fully in '05. Is in up in operating concern is to operate programs to get our forces that are more culturally attuned and able to operate in the irregular battlefield that we see. There are, as with any assessment, the QDR does take a look at it, does make some rudder checks, does make some adjustments on the overall course. And I think that's proper. The main one for us of course is the establishment of a special operations command component. Marine Corps forces MARSOC has, as it's abbreviated is established. As we all know the services formed components for SOCOM back in the eighties. The Marine Corps was not part of that effort at that time and now we are. Took a look at the capabilities on there. What SOCOM is the task it has before it now and into the future and we need to increase its capacity and also its capability in certain areas. What the Marine Corps is going to bring to SOCOM with its MARSOC is a forward presence element. The things that we've been doing with MUSOCs (sp) and a Maritime Special Purpose Forces out there constantly deployed, we are not going to make a formal part of special operations command. We're also bringing to them a foreign military training capability. Once again this is an aspect that the Marine Corps stood up prior to QDR and now we are actually transferring it to the combatant commander. We were doing foreign military training. We trained forces in Georgia for several years now. Staff NCO core established one in Romania. Now those will be part of the overall SOCOM coordinated effort. But the number of elements as evidence of our belief that the way the Marine Corps operates and our philosophy is now really one of the themes in the QDR. Just take a look at the other services. There's a lot of discussion in the other services and what is directed. The QDR directs

them to do. But if you take a look at what they're actually doing, they're going to end up looking a lot like the Marine Corps. We're talking about modularity in the Army. The Marine Corps is modular. We do transfer forces in. They fall in on their equipment, where they leave the equipment in place or bring another force in. It's the same equipment. The force goes ahead and operates. The Air Force has established air expeditionary forces that look a lot like Marine aircraft wings. We are, so that is to the charge about the change that the, the QDR brings. What's it mean for the Marine Corps? What's the implications of it? I think that's the main theme. The other substantiation is basically establishes the force strength of the Marine Corps at a hundred seventy-five thousand active, thirty-nine thousand reserve. It establishes and says the word used is stabilizes. So with that force structure that's noted up there. Now it puts up there a timeline of FY '11 and we'll see how that goes. Commandants testified that we think that at a hundred and eighty thousand that we have, with what we have on the plate today fighting this war, that's about right. And but we'll have to see where we are. We do have a plan to get down to a hundred and seventy-five thousand as directed by the QDR, but of course that's conditionally based and has to be and that's in accordance with the Secretary's guidance. We are the executive directorate, the executive agency if you will for the non-lethal, joint non-lethal weapons. We see that there are some enhance wares, these in the past have been simple things, pepper gas, bean bags, kind of used at a tactical level. There may be some broader uses for non-lethal weapons in the future. That could be more useful in an operational level that could help us in securing WMD sites and giving some tools to general purpose forces until more technical expertise could get on the, get to the battle space to take care of the issue. I think I'll just leave it at that. And just kind of give an outline of where we are and turn it over to my com padre here Admiral Lew Crenshaw.

Vice Admiral Crenshaw: Thanks Emo. Well it is great to get out of the Pentagon for a little bit. And usually the one time I'm able to get out is to go to a hearing. So this is, this is kind of a welcome break. But it's also great to have the great support of the Navy League and you can bet that I've got all of my folks coming over here to take a look and walk around and see and touch and feel some of the things that we're actually developing. And I think it's a great venue for us to get together. And I really appreciate the opportunity to talk a little bit about QDR and what we did. The QDR cell in the Navy was organized under the N8 umbrella this year as it was in the past. And it was headed up initially by Admiral Pat Walsh who then went on to take command of the Fifth Fleet. So we know that the ideas and thoughts that he was part of developing have gone with him over there. And we are right on the leading edge. He was ably assisted by Admiral Dan Davenport who has been migrated from helping on the cell and now he's up in our analysis shop in the NA1 Division helping shape the future for us and doing some groundbreaking work in some things that we haven't really done a very well job, a very good job of, of modeling and that is global war on terror. It's a very interesting business. It's pretty simple to model how many, how many missiles you need to defend your ship against certain things and how you array it and you run mathematical models and you're able to determine with a fair degree of precision statistically what your chances of success are and how one compares to the next. It's a different thing when you try to predict the behaviors of countries, the behaviors of individuals and the behavior of non-state entities. Try to throw those in a model, you've got your hands full. And there's a very exciting field that I think you could be very proud of your Navy is at the forefront of is we're developing this and really doing a lot of out of the box thinking on how we go there. We're looking at all kinds of tools that we may be able to use and

believe it or not the gaming industry may be one of the great resources that we could use when you think about, you know, the games are out there like SIMS or Civilization, those types of games are all things that try to predict human behavior and try to predict interactions. And that's what we're about. So I'm excited about what we're doing there. And the QDR of course validated our work that we had been doing early on in that area. I think from my perspective as I sit back and watched the QDR and we streak showed you the chart we referred to as the Michelin man, we had been, we had been thinking along those lines for quite some time. The, our thinking has changed over the years, particularly in the post-9/11 environment where we had gone from being really focused on major conflict and focusing on the two piece to really and saying that we would build our forces to be able to fight those major conflicts. And then everything else that falls out of that would be a lesser included evil. And as our thinking matured on this and we started looking at how things are going to be shaped in the future, we began to realize that maybe that wasn't necessarily so. Maybe there were some very unique capabilities that we were going to need in the long war that may not necessarily fall in that category of being a lesser included capability. And so we began to think about that and quite frankly I think the QDR represents an extension of some of that thinking that we had done as well as the other services along those lines. One of the things that I think really stands out is how well the results of the QDR and the direction that the QDR takes melds in with the strengths that the naval force bring to the joint table. Two that are particularly important to me are the sea basing aspects of what your naval force brings. I typically refer to that in the hearings that I've had is one of the asymmetric advantages that we have in the United States. That very few if any country has the ability to generate sea bases. Sea bases from as small as one destroyer off the coast or one LPD conducting some sort of relief operation all the way up to combinations of expeditionary striking groups and expeditionary striking forces and carrier striking groups. So very exciting that the direction that we're headed I think fits very well. The other piece about the QDR I think that also is really important is there's a lot of emphasis on talking about shaping the choices of partner nations and you only do that by being there. And one of the very great advantages of the naval force I think is that we are there. We are present in the global commons. It's where we are. That's what we do. We go to sea and we deploy and we go out and we make contact. And we, even as we speak, several multi-national or multi-lateral and bilateral exercises going on with the United States Navy and other countries. And we share this common language of the sea and also we share the economic interests that the sea contain for us. Very important that we never lose sight of the fact that the United States is a maritime nation and we must remain a maritime power in order to maintain that moniker as a maritime nation. So I'm excited about the things that I see our Navy doing, we're doing and then some of the things as we begin to shape ourselves in, as the QDRs come out. To answer the challenge that shows up in the force planning construct of the Michelin man looking both at homeland defense and at the global war on terror as well as the major conflicts.

Vice Admiral Crenshaw: And I think, I just have a series of just bullets that I wanted to bring out about some of the implications that that had for us. Of course I think one of the big ones for us is talking about the procurement of additional LCSs. LCS was a product of the post-9/11 environment where we realize that we were going to have to take the fight out away from the homeland and fight for and have the global war on terror be out forward at a distance from our homeland. And we begin to think about how we were going to be able to distribute our forces rather than these large conglomerations of expeditionary groups and carrier groups. And we

thought that we were, we saw a need to be more distributed and out there. And the LCS of course was the perfect example of that. The LCS is really a ideal platform both for the long war in terms of the modules that it brings to it. And we're putting a lot of emphasis right now on developing our first three of ASW mine warfare and ASUW modules for the LCS so that it will be able to be a real game changer for us in that global war in the long, in the NCO arena. But it also has a lot of applicability operating as a smaller sea base that allows us to go to many places quickly. One of the things that we've done as we begin to try to analyze the war on terror is three terms have come out that we begin to talk about. Things that are important in the global war on terror. And my N81 Division sort of coined this phrase, a little light lots in the global war. We need to be able to engage these countries on their level. Some of the countries that we will engaging don't have large navies if any navies. And it's rather intimidating to have an Aegis cruiser or an Early Bird destroyer pull up and try to really establish a rapport and operate with these countries. On the other hand, if we're able to have a smaller scalable platform that we can, we can use as a base of operations for smaller boats and other engagement activities, we're, it makes us more relevant to that particular country that we might be dealing with. So I'm excited about how the LCS is going to blend into our, not only our overall big war, major conflict stuff but how applicable this platform's going to be in the Phase 0 operations as we shape the choices of nations at crossroads and as we engage our partners across the globe. And take those people that are on the fence and engage them and have them be on our side of the fence. It's going to be an interesting time because this is not a ship like we've had before. We will obviously be developing a completely different training track. The sailors that are going to be on these ships will be completely different from any type of sailor that we've known before. It'll be really generalists in many sense and being able to do a large number of tasks and be able to, with that we're able to reduce the manning that we have on these ships. So exciting time for LCS and it brings two really great attributes that we think we need not only in the big war but in the long war as well, space and speed. I can do a lot if I've just got the space to be able to put things in it and move things around. And have the speed to go from one place to another very quickly. So LCS is going to be great. Also one of the things that we were tasked with doing with, was improving our integrated defenses against a short intermediate and cruise missiles and long-range missiles as well as cruise missiles. And of course this is a joint effort but your Navy is playing a key role in this. Even as we speak now we have I think eight ships that have the long-range search and track capability. And they are performing various missions today in that, excuse me, that arena. And we have a fledgling engagement capability as well. And that will be growing along. But there's even more as we look forward in the work that we're doing on CGX and some other platforms that we will use that will be key in our, in this integrated defense system that we're building. And we ought not to lose sight of the cruise missile piece either. There are things that we're doing right there as well as we've developing our NFCA system and other missiles that we're developing as particularly the SM6 and other systems that will play a key role in this. So I think that is shaping our choices. And we've been very successful as you know in our engagements so far, certainly in the ballistic missile arena. The Riverine capability is something that's sort of flows from our LCS. Remember talking about the number of, being able to engage nations at their level and the Riverine capability is something that we're excited about. It's not a new capability to the United States Navy. We used to do it all the time. And plenty of Riverine sailors around. I served with them. I was always excited when I got to talk to one of these Riverine sailors because they had some great sea stories to tell. And so this is really just, really reviving part of our heritage of the past that we had, we had as we became very

focused on major conflict, we sort of lost sight of that and put our investments in other areas in the marine, it was an area that the Marine Corps began to pick up for us. And of course they're doing a great job there today. But there are other things that they need to be doing and we're going to begin to take over some of that mission from them in the form of Riverine forces. In fact, we're beginning to form up our first squadron right now. The initial goal is to have three squadrons of around two hundred and twenty sailors a piece. And these squadrons will be deployable and able to operate in the brown water environments that we see going to be so vital in fighting the long war. We intend to spiral into this capability first by relieving the marines next year in the Haditha Dam area. And then establishing that capability and then spiral in as we spend more time on that mission to get back up to a full spectrum full capability unit. I'll also mention here is delivering precision guided conventional warheads from Trident submarines. And we're certainly on track to do that. I think there are some policy issues that we'll have to work through there but we're certainly marching down that path. Next please.

Vice Admiral Crenshaw: Increasing maritime domain awareness is really important to us. As I mentioned, it's where we live. And I'm always amazed as I go around there are, there are scores of organizations and entities that maintain data on what's going on, on the seas. Not only of course some of the obvious ones, the United States Navy and the Coast Guard. But there are other agencies and entities involved in that. The insurance industry is very interested about what's going on, on the high seas, where things are going, what they're carrying, those kinds of things. Our customs agency here in the United States as well as other international agencies. Just a variety of agencies. And there's a lot of information out there. But one of the problems that we have in this maritime domain awareness arena is trying to bring all of that information together. Somewhere out there somebody knows something about almost everything that's out there on the sea. And the challenge that we face is not necessarily a technology, technological one but it's overcoming some of the policy barriers and some of the international policy barriers that we have to deal with. And we're working very hard to do that. Some law enforcement information can't be shared with military. Some military information can't be shared. Some proprietary information can't be shared. And so we're really working to try to bring all that together and have a central repository where that information sits. This is all about the thousand ship navy that the CNO talks about and our ability to be connected and share that information. That all these ships out here have on a particular contact of interest. And it's about enhancing our partners' capacities overseas to give them some of these capabilities to allow them to control their own territorial waters. And in doing so, share that information with the international community. So very important for us. We're doing some things in net centric warfare. You've, we're as we are, are aligning the CNO staff to put more emphasis in the force net and in the networks and IT area. And more to follow on that probably here in the next few months. The carrier question was or in QDR said that we should maintain eleven strike groups. And strike a balance to improve affordability in the shipbuilding industry. And that certainly gets to the 3-13 plan of which the eleven carriers is part of that. And we put a lot of work in looking specifically at that Michelin man and figuring out what capabilities we need...in the past and put that together to develop the number, which is one that allows us to meet those requirements. And there are some areas where there is some risk that we've assumed. And it also allows us to produce a plan that in my view is affordable. And you've seen the number thirteen point four billion is the average investment that we're going to have to make in order to realize that number. And my challenge as the Navy's Chief Resources Officer is figure out how to strike

that right balance between the things we need to procure, you know manpower and our readiness accounts and insure that we continue to have the right emphasis in our R&D accounts. And that's sort of how I, how I view things as we go about trying to finance our navy of the future is to try to strike the balance amongst those. And try to, and retain our ability to purchase the things that we need in the future. And that depends on a lot of things. Depends on our ability to control our manpower costs. Depends on our ability to understand and control our readiness costs as we go along and understand the business side of the Navy as well as the war fighting side of the Navy. It depends on us getting the best value for the things that we buy. And controlling the cost and being realistic and having a process in place that allows us to look at the cost of things we're buying, understand why sometimes things are costing more and try to jump in early and make some course corrections in what's going on to avoid cost increases and things. So very key piece of the QDR in my view was that sentence. Next please.

Vice Admiral Crenshaw: Also there was a restructuring of the J-UCAS program that came out and we continue to be focused on delivering a J-UCAS that can fly on and off an aircraft carrier. And I continue to press down that avenue very, very unique environment, having to fly in as those of you who have flown around carriers know and trying to come up with the right balance. It is all about speed and how beefy you want your landing gear to be versus how much stress you can take. And there's going to be some challenges for us ahead there but I think we've got the right program in place to be able to do that. And we'll move forward from there. Here's that word again about building partner capacity. And we are putting a lot of things into place to do that not only in the LCS, in Riverine, but in the standup of our naval expeditionary combat command, which will encompass a variety of capabilities that we have typically had spread out around in the naval coastal warfare and the CB battalions. And we're looking and we'll be standing up new maritime civil affairs organization with focus on dealing with people in the civil affairs arena in a maritime context, which is something that's been lacking here and we're going to fill in that niche. So this command will be able to pull all those together in a coherent fashion and that's really all about shaping the partners' capacity that we have here. And I think I have about one more slide.

Vice Admiral Crenshaw: Enhancing our soft insertion capabilities as our first SSGN comes on line and we've got another one scheduled for delivery here in a month or two I think. And then we've got a couple of more coming in or certainly things that we're doing. A special ops command is developing the ASDS system and we're helping them out as they've encountered some technical problems there. And we're helping out here to get that on track. And then of course one that's been of great interest as I've been over on the hill is this getting to a steady-state production of two attack submarines by 2012. And this will be a challenge for us. This gets back to the discussion I had, I mentioned about affording the 3-13 plan. That depends on us setting some cost goals on some ships. And then having the discipline to make progress in those goals. I've put into place in the innate organization several organizations, sub-organizations, naval capabilities board that we're got stood up and something called a resources requirements review board that we've got that are going to take a look at these systems like we've never done before. And really literally have a dashboard of these projects and have an instrument scan if you will as every day goes by, we're going to take a look and see how things are going. And look at trends and see if we need to intervene early rather than waiting when this catastrophic problems. We want to make those early course corrections. We want half degree corrections,

not ten degree corrections. Like we're along side not like we're out steaming by ourselves. So we're going to pay a lot of attention to that. We've invested money in it. We've been able to drive out a little over two hundred and sixty million dollars of the cost of DDX, the first DDX and at least two hundred million dollars of that is going to recur through the entire class. We're going to continue to hack away at that. One of the things that is very critical for me to be able to buy those two submarines in FY '12 is that they cost about two billion dollars a piece, not two and a half billion dollars a piece. And I've invested money both this year and in the future years in ways to cut costs out of that system. And we're working with the requirements community and we're working with the industry to achieve those goals. And we are, we are I think tracking along right now. We've got the right procedures in place I think to do that. And so I'm confident that we'll be able to do a much better job than we have in the past of tracking the cost of the things that we're buying by putting in place some of these structures that allow us to look very closely at the capabilities that we're asking for. And really begin to take a hard look at the difference between wants and needs and how we do things. That said, building advanced war ships capable of surviving in a very, very demanding environment with a very, very tough enemy is an expensive business. And we shouldn't kid ourselves to think that we're going to get by on the cheap. We don't want to do that. We want to make sure that we deliver the right capabilities for the right amount of money for what the nation needs. And that's what we're all about and making sure we're making those right trades. So with that, I think, that gives us some time for some questions. And I'll get off the stage.

Moderator: First off I want to thank all of you and we have for you, I'll just leave them here but, these are so hot off the press, they're actually warm. I mean they were delivered yesterday. So these are the first copies of the History of the Navy League of the United States. And they've been signed by our president, John Panneton. Okay, questions please. There are mikes in the aisles. Please say who you are and fire away. This is what I call cutting to the chase. You've heard the party line. Now it's time to cut to the chase. Nobody wants to cut. There we go, go ahead.

Question from Audience: Joe Gasline (sp) from the British Embassy. Thank you for that fascinating breakdown of the process and the product. It struck me that inevitably when you talk about shifting your weight and moving up and right into new areas of irregular and the like. The focus is always on the equipment side that needs to accompany that. But equally important is training. Training was mentioned in two or three context, language and the like. But it strikes me that to accompany that concept there needs to be a joined up and joint approach to training in order to prepare people to operate in what, for most cases, will be a new dimension.

Vice Admiral Chanik: Yes sir. I think you hit the nail on the head. We recognize that. The slides may not have talked to it too well. We haven't talked specifically about joint training but we certainly have talked about training to those new skill sets. And recognize that that's an expenditure of resources that will occur very specifically inside a special operations command as they bring up their numbers. One thing we didn't say or I didn't say here is the fact that one of the outcomes of the QDR is that the special operations force since '0, I think it's '01 is going to increase by almost fifty percent and in this '07 to '11 timeframe by about thirty percent. Lots of training involved in that. We also recognize across the force with the Army and the Marine Corps as they develop some of the skill sets that can do what you might call lower end soft that

there's certainly investments there in some of those training things. You heard Lew talk a little bit about the sailors of the future who will be required to have multiple skills as they man those platforms of the future, LCS, DDX, etc. So there's no doubt in our mind that we all have to look at training very, very carefully. It's part of that human capital strategy.

One of the last slides that went up there is training is most definitely embedded into that in a very, very large degree. I wrote down three notes here on the subject. Number one is, in the Riverine piece we are relying on our joint partner here, the Marine Corps for our training for our first spiral as we come in. Actually the training will be done down in Lejeune using the Marine forces that are down there and their equipment and their facilities. And when we move over next year to take over that mission, we will fall in on their equipment. And so very much a joint effort there. The second thing I wrote down is recognizing that we're going to have some real challenges as we develop this twenty-first century work force. We have been about, in the process of the Navy as part of our realignment and reorganization looking at how our manpower and training and education enterprise fits in with the whole arrangement and how we're training and have strengthened the way we're doing that and actually realign the reporting relationships here. And I think that's going to put us in good stead. And the final thing I wrote down was as I mentioned this notion of being a generalist. When we were talking about a DDX that only has a hundred and twenty so sailors on there, they're going to have to be able to do a lot of different things. And we are right now devising the new training pipelines that these sailors will have to go through in order to be able deliver in that arena. So it's an interesting and exciting time. And I think it'll be interesting to see in five years.

You know I have my, I have my father-in-law's Blue Jackets Manual from World War II. Now I always go to the back and you look at all those ratings. They were back in the Blue Jackets Manual. And I don't even, I don't even recognize half of them today. But what they used to have. And now I think about just when I was a midshipman memorizing the ratings of the Navy as you had to do. And then I look at how many we have today and how many have consolidated and how many have gone away and how many have changed. I just wonder in ten years when I look back, you know, what we're going to have. I mean we may have, you know, above water specialist, underwater specialists, hard to say exactly what we're going to have in this new environment. There may be, you know, data management specialists as opposed to a hands-on specialist. Who knows exactly how we're going to do that? But it's something that we're going to have to look at. And I predict, you know, the Blue Jackets Manual ten years, you know, Emo and I will, from the retirement home will be able to look at it and not recognize most of the ratings in there. What do you think Emo? I'm probably already there. I would just say two aspects here. First off to the jointness of the training, just to pile on there. I'd say maybe we didn't hit on it well enough and it's not in there but there have been a lot of concrete moves made in that direction. If you think to the BRAC last year on JSF, I mean a joint training base was mandated to be established down at Eglin Air Force base at all JSF, the first cadre of JSF guys are going through are going to do that. You know we have the efforts of joint forces command that is, working on, you know, kind of a joint national training capability. There's a lot of jointness involved in preparing our troops that are going to the war back and forth. A lot of sharing of lessons learned and assets and resources in preparing the forces to go forward. They go through a stage in Kuwait before they go in a country where they, where they then work up further together.

As far as the importance of training going on, in the business we're in, which has been stated in the past as making marines and winning battles, we, I mean training is at the centerpiece of that. We've never been, we've never been ones to man equipment. We've always focused on equipping the man. And Distributed Operations is a concept that we have now embraced. We're talking about pushing capabilities down to a lower level, having battalions do what divisions used to. Having platoons and squads do what companies and even sometimes battalions used to. Putting joint tactical air controllers down at the squad and platoon level. That's all based on getting training done. And so we're very focused on that. And it's sort of a hidden cost and it's when we talk equipment and you come to these sort of symposia that are focused on equipment, it's sort of a cost that gets lost out there. It's much higher O&M costs for us that have to be considered. There's the time it takes to train. This means you have people that you have to focus on doing that. But the payoff is enormous. There, we have lots of anecdotes about the value of training and pushing training and pushing capabilities down to these bright young women, young men and women at a much lower level than we'd ever done before.

Moderator: That was an excellent question Admiral thank you. That Blue Jacket Manual, that's the one I was issued when I joined. Anything else? It's a ripe subject. I'm sure there's got to be. I can't see. If you get near a mike, I can, I wonder why Bill was doing this, this morning and now I understand why. Let's see, okay.

Question from Audience: Bob Ravitz, National Vice President of the Navy League. Admiral Crenshaw you seemed to indicate that the thousand ship navy concept of the CNO, which is a new concept to many of us, involves not only military ships but perhaps the civilian ships and other types of ships as well. I wonder if you could elaborate on what you see, how you see this thousand ship concept impacting our industries and our Navy?

Vice Admiral Chanik: I think the thousand ship concept is one that I really applaud the CNO for developing because you know it really codifies something we've all known as sailors. And that is, you know, sometimes we share this common bond in the sea and it's always easy when a couple of COs get together outside the bounds of all the political and other considerations, to get together and say listen, we're going to do this. Let's have an exercise, you know. And they do great. And so this common bond that we share and it's not really, I guess it's a common environment, almost a common enemy sometimes of the sea is one that can be a very powerful unifying equation, which I think is unlike anything else you see in the other services. It's a common language that we speak. And it's a common danger that is faced. And so it engenders a certain camaraderie I think that you don't see elsewhere. And really the thousand ship navy is about taking advantage of that and trying to take the best that everyone has to offer.

One of the things that I think you find as we think about the United States Navy, we sometimes tend to forget that not everybody's organized that way. And for instance if you're looking at some of the countries on the Caspian Sea or the Black Sea and you talk to them and you mention Navy, that brings up a different connotation than I mean, there's navy. There's the border patrol who's also looks like a navy. There's customs that also looks like a navy. There's a Coast Guard element that also kind of looks like that. And so trying to, I think it's not only a traditional navy thing I think is what I was, the point I was trying to make. It's about dealing

with the, all of the maritime organizations that are out there and taking advantage of the great synergies that we get and the great bond that we share. It's really, you know, I sort of like the joint analogy I used to use. It's amazing how really joint we are when you get lieutenant commanders and lieutenant colonels and captains from the various services and you get them together. They will just water your eyes. It's only when us big guys get involved sometimes it, things begin to get a little mixed up. And we've done a much better job of that since we've, since we've begun, embarked I guess on this joint journey so that even the senior people like us know and realize the values. We've been there now and done that. And so it's more of a natural occurrence to us. So the same thing is true I think with the international community. You know we've always been there and we've worked and shared some information. But I think the thousand ship navy sort of codifies that and it captures I think the type of leverage that we can get from those relationships that we build. And really is I think a nice rallying cry for us to be able to sit down and share information with one another on a professional scale. Really that's not necessarily encumbered by political boundaries and those kinds of things.

I think where one of the real keys to the thousand ship navy is going to be managing the communications, interoperability amongst the various coalition partners. Can you talk to that? We certainly, that's certainly something that we've been wrestling with in trying to figure out which systems that we need to go to, Centrics has been one that's been very successful with us. And I think it's the MNIS, Multi-National Information System is where we're going and that's going to be a place where we will invest sooner than later. We had a prototype in Navy O R when I was a deputy over there that was really, really paid a lot of dividends with, you could sit at your computer terminal and type something and it would come out in six different languages and the other terminal is just trying to bridge that common barrier of language. And then to try to then share information as well. So I think that's got to be a key piece. It's a focus of the investments that we're certainly going to make and you can't have a thousand ship navy if you can't, if all one thousand ships can't talk to one another. So I mean that's nirvana to me. Is to be able to talk to everybody. Sort of when my wife asks me to fix her computer and I turn it on and it all comes up in Japanese.

Moderator: Yes sir? This is, I don't envy this job Bill. This is hard up here seeing out there.

Question from Audience: Hi I'm Phil Shutler (sp) and I want to applaud the Navy to turning toward Riverine warfare. This is one of the great transformations in thinking on the part of the Navy and I applaud it very highly. To look toward the shore seriously and to go to shore seriously is really a big change. I can believe that you'll fall in on the boats that the marines have at Camp Lejeune. But I wonder if you will fall in on the concept that the Marines have brought to fighting as a joint force, particularly the timing of the joint force.

Vice Admiral Chanik: Over the years, they have worked out the ten-minute response time from air to be over a target when we requested till it's on the ground. That means basing, positioning of bases ashore, positioning of sources of supply, and positioning of command systems that make it happen. To see if this will happen inside the Navy is to wonder if they will take up the joint strike fighter in the vertical takeoff and landing for them, for example. To pick up the AH1 JAH1J derivatives, what are they now, Emo the--? Whiskies. The Y or MRZ or whatever, AH1Z.

LT General Emerson: Yes sir. To take up those derivatives and the forms of organization that the Marine Corps brings to fighting once you get ashore and once you get to the timing of a joint force. Now you can easily say, oh well. We'll turn to the marines for that. But they won't be there with the Marine Riverine force unless they're built into it. So the question is, where does that interface lie for the future?

Vice Admiral Chanik: Thanks Emo. This reminds me of a hearing. They ask me all the questions. What's up with that? There's no question that as we begin to refine the concept of the Riverine force as we spiral into the next thing that we've realized that they're going to need support. They're going to need the command and control support. They'll probably need air support. They'll need logistics support. You know you stole my thunder a little bit when I was going to answer, you know, the Navy is already invested in the VSTOL joint strike fighter. Our marine partners are heavily invested there. And one of the things about this new type long war that we've been in is we've been looking and we realize it is a joint thing is this notion that it really is going to be a joint effort. And I think you're going to find as we're distributed around the globe, there will be very few places where we won't have some sort of tac air, be it Marine or Air Force or Navy being provided, not necessarily from our own organic forces. And so I think that part of the answer is we need to worry less about us providing the specific capability in the form of a tickle platform and worrying more about whether or not the capability is there in the joint force and how we're going to leverage it and use it. Now if that means that as we are doing certain operations in the Riverine force that we have a sea base nearby that is operating VSTOL JSF then so be it. Or if that means that we're operating somewhere and part of this will be supported by an air bridge from the Air Force, then that's what it'll be. It'll be the smartest thing we need to do. So I would say we know that it's part of the concept of ops that we're developing and bringing forth and talking about it. We need to be realistic about what things we're going to expect this Riverine force to do. And remember that the Riverine force primarily is not about projecting huge amounts of force ashore. It's about providing that presence and force in the, in the brown water and possibly green water areas. If we're going to get to the point where we're projecting large amounts of forces ashore, then we need to go to the joint, the part of that joint force that best delivers that. I in many cases that would be the Marine Corps being supported by the Navy. Emo, I don't know if you have any thoughts on that?

LT General Emerson: I would say, you know, we're talking about packages. I think General Sattler is the, about packaging and when the Navy jumps in to Haditha Dam mission up there. It's not like we're going to carve them out. They're going to be up there by ourselves. They're going to be inside a marine area of operations, which we have now with that Anbar province. And you know we're going to provide all those things they need to do it. So it's all, they're joining in to the overall capability if you will. I think within Riverine ops in there, we still see it as our mission to go do those offensive things from this capability. So we see us partnering up with them and being more, as actually participating in and going in there. As far as how we actually work it out with tactics, techniques and procedures about, you know, maybe we make some packages. Maybe we think more as we talk about Distributed Ops and small forces out there, we're talking Distributed Ops with naval forces out in the littoral regions. We handle littoral combat ships that have modules on there. Maybe we have, you know, Riverine-type modules, more brown water kind of modules. Maybe we base some tac platforms, attack

helicopters if you will on LCSs you know supported using these modules and some small Riverine forces could operate as a mini sea base from there. So we're wide open to this. We're looking for the help in, I think we're in this together.

Moderator: Yes sir, go ahead.

Question from the Audience: First I want to, I have a question but I want to make a comment first based on the last question and I don't want to characterize the last question, but just building on it. It seems to me that we have separate services for a couple of reasons. One nobody wants to wear a purple uniform. They're not very attractive. You look like Barney, right. And the other thing is that the services have certain core competencies. Now that sounds kind of fundamental but in the rush to transform I think every once in a while we got to go back to basics and say well why do we have a Marine Corps? Why do we have an Army? And why do we have a Navy and a Coast Guard and an Air Force? And my opinion and I'm not going to ask the panel to comment because it's too political. In fact when I asked how's Cartwright about this, he said I was challenging his jointness if he answered it. So you can imagine what his answer was. It wasn't stated. But it seems to me that even though the, all the services need to become lighter, more agile, more soft-like, more marine-like that it's a big mistake to try to change the Army and make it into a Marine Corps or in some degrees take the Navy and give it Marine missions or as General Gardner alluded to, you know, take the Air Force and turn it into a Marine expeditionary force. Doesn't make a lot of sense to me. Why not, if we need more Marine-like capability, why don't we just buy more marines? So the, that, so I won't ask-- Say that then me. That, I'm not going to ask you to comment on that. But my question is much simpler than my statement. For Admiral Chanik, the QDR chart and I know it's not your chart, at least I don't think you made that chart. The part that said disruptive and it had the little bubbles in. And under disruptive it said, what we're going to do there is shape choices. It seems to me that the shape choices is really about the balance of all four boxes. And what belongs in this disruptive is all about preventing or maybe even better, preempting surprise, preempting strategic surprise. That's why we care about disruptive. It's not really all about shaping choices. Shaping choices I would think is about all four of them. Your thoughts? Well good to see you. I don't know if Emo has a big enough wallet over here for some of those things. We'll see. I, two things I guess and General Cartwright certainly probably had good advice there. When you look across a joint force, I think powers that be that folks recognize that each service has core competencies. No if, no ands, no buts. Everybody recognizes that. It's on the seams where it gets to be an interesting debate. And how much overlap do you do on that? How, what's sufficiency per service, etc. And that's a challenge. And nobody has good answers for that. We work with it all the time to do our best cuts at it. We recognize and you'll hear probably talked about more often that the services are becoming interdependent because we can't necessarily put all the capabilities we want to have and call them organic capabilities, budgets just aren't big enough to do that. Going back to the generalist question too, I think you know one of the underlying theme that Riverine forces or whatever Distributed Operations, it's very important that those units, Riverine, platoons, whatever have the capability to communicate so that they can get the desired effects that they require in their operation. And who delivers those effects is sort of irrelevant. You know I say that, that you can, each situation is different. But that's, that's the thinking at the, at the joint force level. Your last observation there is a very pertinent observation. You know as you look at concepts, it's very hard to visually depict those comments. And nothing really fits in

one particular box. There's a lot of overlap in that. And in that disruptive area, you're exactly right. The desire is that we don't get surprised. That we work in those areas. Part of that is helping shape countries at strategic crossroads. Part of it's the R&D on technology. Part of it is that persistent intelligence so you kind of have indicators I&W of what's coming out there. That's all part of it. That disruptive quadrant is probably that security challenge is probably the hardest one to describe and the hardest one to look for specific examples on. I used the stealth technology as one. But it really is about making ourselves as aware as involved as possible so we don't get those strategic surprises in the future. Glad to see you here. At great risk here I'll, let me just I will comment on that just a minute. And I think you make a great point. And there's been a lot of discussion about risk over the last few months as we talk about, we can do this but this is manageable risk. This is acceptable. This is high risk types of things. And one of the things that I use when I look at where we can develop trade space if you will particularly in cases where there's overlap and stuff is I look and find out, hey what capabilities are unique to the United States Navy? And those are areas where we can't afford to take much risk if any risk at all. And so this notion that the services have still maintain certain core competencies I think is right on the target. And it's something that we're certainly mindful of as we look at, okay where am I going to pay the next bill from. And I can tell you that those capabilities that are uniquely naval are not high on my list. Because if we don't do it, then it's not going to get done. And that's not something that I'm willing to usually it's not something that I'm willing to give up. So that helps us shape our choices as we think about risk and where the next dollar comes from.

Moderator: Yes sir.

Question from Audience: Good afternoon gentlemen. I'm Admiral Tom Marfiac (sp) retired former naval person and I'm here to ask, make one observation and then I'd like to ask a question. You know in the QDR, which I read with great interest. I think it's a fabulous piece of work. And you had it up on your slide. You said that one of the things we wanted to create was a foreign area officer core that would help us achieve cultural awareness and educational balance for the future. I was a detailer when we created the first FAO corps. It lasted about six weeks and then we killed it because all of the weird people crawled out from underneath the rocks and wanted to be FAOs. And so we learned from that experience. And since then we have been, shall we say very circumspect about letting intelligent people near books and things like that. Because sometimes it has an adverse effect on the Corps. So I just want to make the observation that if we do this, that if we want to have people like Emo up there on the stage, we should not restrict them only to regional expertise. Because our most important thing is building leaders for the future who can think on a broader basis. And so that takes education which is hard to do when you're fighting a war. We're having trouble filling our war college quotas. Having trouble doing other things. We should make the effort to think outside that four, five, ten-year window. Because that's where we want to have people who can do that on a long-term basis. Enough of my speech, my question. I feel a little bit like the gentleman was watching Ross Perot talk about his aunt down in the basement. We could hear her crying but nobody ever talked about her. The issue that hasn't come up in this excellent discussion on the QDR has been what about the supplementals? What happens if they stop? You know all of the services, my Army colleagues, my Air Force friends are all talking about the demands of continuing the present conflict. Whether it's tankers, number of F18s struts we're going through, treads for tanks. You name it. We're going through usage rate six, seven, eight times what equipment had been originally

forecast to last. So therefore the question becomes one of, how do you paint the boxcars when the train is moving? How do you transfer, you recapitalize your force while at the same time you are fighting a war? I think it comes down to the question that Lew and Emo have to address is, what about blue and support of green dollars? Are there enough of those? When you talk about setting up twenty-six hundred marines in MARSOC, is that funded or not funded? Is the Navy going to pay the Marine Corps for boats we're going to take over or is it just going to be usual grip and grab? There are those kinds of questions that come to mind which haven't been addressed. I know it's been an excellent presentation, a great discussion. I thought you were getting off too easy so I figured I'd throw a couple out there.

Vice Admiral Chanik: Thanks Tom. I went first last time, your turn. Emo's in the middle. You're stuck. You're bracketed. Yes sir.

LT General Emerson: Thank you for coming up here and posing this question. The-- that's not what he wrote by the way. He indicated you're educated anyway. Well we did pick twenty-five homestead scholars last week. And actually three marines among them. So we're getting there. The, as far as financing this, specifically to the issue on MARSOC. MARSOC was, is fully financed. The twenty-six hundred marines, we are directed to do that within our hundred and seventy-five thousand baseline. In other words, those twenty-six hundred people. So right now, we're at a hundred and eighty thousand. So we have to figure out if we go back down a hundred and seventy-five thousand, what gets squeezed out. We have convened a capability assessment group under Major General Steve Johnson, who just returned from being the force commander in Iraq. He's chairing this group. It's a ninety-day study. It's due out early June. It's talking about what would a hundred and seventy-five thousand Marine Corps look like with a MARSOC in it. And also what would a hundred and eighty thousand Marine Corps look like with a MARSOC unit. But it's fully financed and it's done that. Now did that come with a top line increase to the Marine Corps? I would say it didn't come with a top line increase due to Department of the Navy. And there was some shifting of funds and movement around and there was some, we are taking some risk in the pricing and costing of B22s and ultimately some of that money ended up in this MARSOC pot. But right now on paper, we are fully financed and looking to maintain that. So we're embracing the MARSOC concept and intend to carry it forward. As you state, supplementals are critical to our health. We are getting on the order of four and five times our procurement Marine Corps PMC dollars in supplementals than we get in our baseline budget. And we need that to address the bathtub of readiness. We've kind of fallen into and pushing so much equipment forward. And we've testified to that and I'm confident we'll get that money to fill that bathtub back up and get back on the plane that we need to be. I think we do have some blue and support of green challenges that are, that we will have to address. And Lew and I are actually scheduled to meet here at 17:30 and talk about some fiscal guidance here for Palm '08. But you know it's not about, to me it's not about, it's not about a specific percentage of, you know, eighty-five, fifteen, you know, eighty, twenty, Lew or whatever. It's about the capabilities delivered and what we have to do to comply with the QDR and the strategic planning guidance that goes behind it. Okay and so I think we'll, you know, we'll work through that and we'll, I'm going to have to take some risks in certain areas and we're going to manage them at the time. But some flexibility in there, some uses for platforms like the, like I mentioned about LCS, getting in those areas. Changing the CONOPs as best we can to address some of these things. We talk about and we need more littoral presence. We got the greatest littoral force in

the world with our amphibious ships. They don't always have to steam around three ships altogether. You know with all these two thousand marines out there. We can kind of split them up. Get them out there engaged. We've done that before. We can, we can take some approaches to doing that and get through that. But in the end, we're in a cycle right now where we think we've tipped over as far as dollars coming on there. We're at a peak and maybe even past the peak. And do we see as many dollars in the near years as we have this year and the past couple years? No. So we're going to have to take that on. We need to make our case. We need the support of people like this to get our top line increase. The country's going to fight a long war. It's got to pay for it. You know, that's the bottom line. And we need people to talk about that and think about that. You know my daughter is trained as a mediator sometimes when I, when I, she asks how things went at the office and I talk about well, we did this. We did that. Talking to the marine state. And she says, it sounds like you guys, you don't need a consult or anything, you need a marriage counselor to, because it's always about money. But and I've been in the Pentagon a few years now, off and on and in my honest opinion, the relationship between the Navy and Marine Corps has never been stronger. We have, we have got a very open dialogue. There's not a meeting that I have that Emo doesn't sit in on or one of his reps. And we talk very frankly about where the money needs to go. One of the reasons why, you know, when I think of JSF I don't think of VSTOL or CTOL or anything. It's of course all of the marine aviation is purchased by me. So, you know, I see is as, it's naval aviation. It's not, it's not Marine or Navy aviation. And you know we make trades all the time. And have to, have to think about how we do that. So I think we have a, we have as strong as we've ever been. We're clearer now than we ever been about our expeditionary requirements. And as we've come together in the maritime pre-positioning future force and agreeing on exactly what we need, there are very few things that we disagree about. And we are in those areas, we're working our way forward on.

So I'm really, you know, a lot of that is due to I think the great leadership of the Commandant and the CNO. It helps that I think they were classmates and, you know, that, they say as in any ship organization, those of us in the Navy know that the ship assumes the character of the skipper. And I think that's certainly the case in the Navy/Marine Corps team. I really think we're very strong. And I don't think we have any secrets, do we Emo? So, I wrote down just a couple of notes. You know in terms of supplemental, if you look at how much the Navy has benefited or we've received supplementals, it's been a relatively modest account compared to the, to the level of investment or percentages that the Marine Corps have. And I've tried very hard over the last few years since I've been here long enough now to do that to try to keep a clean split between baseline requirements and cost of war requirements. But you know as we get into this notion of this is a long war and we're in it for the long haul, things are changing. And the things that we are doing as a United States Navy are changing. Just a few days ago, we reached a milestone where we have as many sailors in the CENTCOM AOR with boots on ground, on the ground as we have as sailors at sea. And the things that we're doing are changing. And we're taking up some of these missions in the long war and pulling our share of the low. We're guarding down. So we've I think Admiral Hunt here if he hasn't taken over is getting ready to take over command of JTF HO (sp). We're assuming responsibility or have already assumed Harry Harris I believe a couple of days ago took command of operations down at GITMO. We are really changing the character of some of the things that we're doing. And that's because we are at war. And we're in it for the long haul. And you do what you have to do

when you do that. And that's what we signed up to do. Where the President needs us is where we go. So as we begin to shift these missions, what I worry about is the demands on the system don't let up elsewhere. So if we're going to be expected to have as many sailors at sea and still continue to have as many sailors on the ground, then that dog as my daddy used to say, that dog won't hunt. And so just like when I hear a lot of budget talk about well if we're going to cut budgets, we're going to have to decide what we're not going to do. There are going to be some things we need to re-wicker here how we think about things. Are the number of steaming days that we've been traditionally using really right in the long war? Or are some of those days better used in port being engaged with those countries, trying to shape their choices. And those are some questions we're going to have to wrestle with. I mean I see a lot of pressure every day on our OMN accounts and try to, try to be very clear about what's baseline OMN and what is cost of war OMN so that if one day that goes away, I'll be able to know what it is we're going to have to do. But as it goes away, I can't, I can't continue doing everything. I can't just stop the supplemental and declare victory here. We're going to have to take a look at how we're going to reabsorb those new missions that we got. The other thing that I think that we have to do is really think about some of the things that we need to do in resetting our own force. You hear a lot about the Army and the Marine Corps and resetting the force. We have our own issues. We are flying a lot of hours on some fairly old airplanes. We're steaming extra days on these ships. And so, you know, at some point that's going to also come back to us and we're trying to capture that as well. And make sure that we properly account for the types of extra stress that are getting put on the force. So it's a complex issue. I worry about it. But I also, I think it's much more of a problem for Emo in terms of the percentage of the budget that they get for us. Lew I do need to warn you. I've watched Emo negotiate gulf bets. He's tricky. Yes sir. I have a question over here. The QDR addressed the global war on terror and specifically maritime domain awareness. I hear Navy leadership talk proudly, consistently that Navy is the away team, the first line of defense. I often read in the press about an off duty cop who makes an arrest not on his normal beat. So what is the joint force or the naval forces done to modify their behavior, their CONOPs, their training to do maritime domain awareness not just in the Persian Gulf, the Horn of Africa or on the ground in Iraq? I'll talk a little bit about it and then probably Lew. But a good example is what Commander of the Naval Forces Europe, Admiral Ulrich is doing now, specifically off the west coast of Africa. He has worked inside the Mediterranean and the west coast of Africa to look at exactly what you're talking about, maritime domain awareness...probably ten times as much as what they've seen in the past by utilizing these other things. So the Navy is doing a lot of efforts to increase that maritime domain awareness. The other thing they've done is worked very closely with the Coast Guard, talking about in close now to our shore lines to get mutually supporting operation centers so that we can better understand what's happening on our coast lines too. So there's a very close operation with the Coast Guard, Department of Homeland Security to work that particular issue. And Admiral Ulrich quite frankly is working real hard on the international front to, in doing some great work to better develop the picture. And I know Admiral Fallen (sp) out if PAYCOM (sp) is looking at that and I'm sure, although I don't know it personally, is starting to replicate some of the work from Admiral Ulrich. So those efforts are going on. And Lew may be able to add to that. Yes, thanks Rick. You know you find joint forces in the strangest places. When I was the Deputy Commander at NAVYOR, I was really surprised to find out that members of the Puerto Rican National Guard were actually embarked on ships, providing the embark security for our MSC ships as we went away. Now that's joint partnership. I was really impressed. They liked the mission. And it was, it was one that

impressed me as these guys are going to come away with a very different impression I think of the Navy. They all want to join the Navy when they see that we have showers and hot chow every night. But you know it's amazing. The Coast Guard deploys to the Fifth Fleet AOR with us even today. There's our joint partner right there working away with us. The Air Force every day is flying UAVs supporting us. And so in many unseen ways I think you see that the global nature and the joint nature of what we're doing in this, in the long war. We've got special operators doing all manner of things that I guess we can't talk about. But certainly real joint forces there. And so I think it's a new mindset. And it's one that I think sometimes we forget that the joint nature of some of the operations that we're doing because we just don't necessarily see all those pieces. But they're there. And we can, we can rarely now do something, have some sort of request for forces that is just specific to a service. It's usually a group of capabilities. And as we look at more capabilities focused ways of thinking about things, more and more we don't get from the COCOMs (sp) I want a seal platoon or I want a destroyer. We've got, we get, I want this particular capability. And then we can decide here working with the joint staff on what platform best delivers that capability, not a specific platform. And it's about capabilities. We've probably got about two more. Yes sir. Adam Seagram (sp) Northrop Grumman Analysis Center, amidst all my question, I guess I'll take another one that was not part of the discussion and perhaps taking the QDR from another point of, an angle. The President in the State of the Union talked about the need to end our addiction to oil. DOD's the largest single consumer in the world of oil products. And I mean oil has real impact. Let's talk strategic right now. I think Iran's greatest deterrence against the potential impact, attack would be the impact of hundred dollar plus oil around the world per barrel. Or if we looked at DOD, the fiscal cost always for cutting down steaming days or what happened in procurement. Each of the past Decembers of cutting procurement due to fuel costs and for the Navy for the 3-13 one of the challenges for keeping O&M costs in check are going to be fuel costs and the potential of their rise in the future. Notable in the QDR despite the fact that the SECDEF (sp) had a few snowflakes here and there on energy in December, no discussion of energy really in any serious way. In what way is energy being talked about sort of post-QDR? There's some rumors about it. There was Secretary England about two weeks, three weeks ago promised Congress there would be something release two weeks ago that is yet to be released on energy or energy efficiency. Where do you see energy and energy impacts on the Navy/Marine Corps team and where is DOD taking us? I'll let Lew and Emo talk about Navy/Marine Corps team but just kind of just a general comment from a joint force side of the house and as I look back and think about the QDR report itself, I cannot recall any specific passage that talks to energy in particular. However on the procurement side of the house, as you look at AT&L and their work there and you look at the research side and I wish I had numbers but I do not, there are and, you know, if we had an NRL rep here we'd probably be able to a little bit about that too. But there's no doubt that the services are looking at those things in terms of what we can do better to become less dependent upon oil and looking at alternative energy sources. And looking at efficiencies on those sources that we utilize now, if it's oil burning, whatever. It becomes as we go through the Defense Acquisition Boards and DABs that come up, it is a discussion, but it's not personal opinion, quite at the level it needs to be because we need to continue chasing these things. And I think we are, I'm not familiar with what Secretary was going to release or is releasing off the top of my head. But those conversations are becoming more and more prevalent and certainly are as we look at the acquisition side of the house. So steps are being made and they're, I don't have the specifics that I'd like to have but we're certainly aware of that and you're exactly right. We

see it on the O&M side of the house when we've got to pay for those increased fuel bills and they are not inconsequential. Well I think fuel economy awareness is part of our next missionary mindset. I think we recognize that. We can't operate in the kind of you know ex-missionary manner, Distributed Ops manner. We're going to operate if we've got to depend on long, supply trains or literally fuel lines running out there. You know one of the outcomes of the current war we've got is we're up armoring our Humvees. So we got vehicles that originally designed to weigh in the eight thousand pound region and now weigh upwards of fourteen thousand pounds. Not only is that hard on the vehicles themselves, the suspensions and everything, we have to go back in and back engineer that but also on the fuel. We are looking to get out of the Humvee business. We want, we are developing the joint light tactical vehicle in cooperation with the Army, our Marine Corps War Fighting Lab down in Quantico. You know hybrid fuel, some of the new fuel technologies is part of that development. But it's, I guess what I'm saying is we recognize the importance of that to the way we're talking about doing business. And we've just had a discussion yesterday on overall, taking an operational look at logistics and a strategic look at logistics that you look at it as that would be a consideration, kind of a cross cutting consideration when you're looking at equipment and conceptual lay down of how are you going to support yourselves out there. So I mean I think it's a valid point. It's important, something we got to take forward and I think we are doing it. Whether we're doing enough, we're kind of small potatoes in the overall, I mean nobody's going to change the, their factory line up in Detroit based on our ordering vehicles, but we're doing what we can and we are working with the Army. Yeah, we've got investment in alternate energy sources. Of course, the question always comes up, why aren't we making more nuclear ships? LCS? No plans for that right now. But you know the, it's a balance and as we look LCS and other and DDX and other ships, you know we're engineering in as much as we can about efficiencies of the, of the fuel we have with the new haul designs and reducing resistance through the water and more streamlined sail forms, excuse me. And also things like going to all electric ships and having more energy efficient use of the energy we have. And I don't think we can rule out the importance, you know I got a question the other day about if we're shifting to this long war and global war, why do we really need to have, spend all our money on such a big navy and all these big ships? And the answer is, we have to protect, you know, our commerce as well. The most of the oil that comes around to this country comes over the sea. And we have to make sure that those sea lanes are secure and unthreatened. And that gets also to the piece about making sure that where that oil is coming from is also those places are secure and unthreatened. And it's not only about just the Middle East, there's all areas of the world, Gulf of Guinea is very important to us, Black Sea, Caspian Sea area are all things that are very important for us to and change the stability in those areas. And have free flow through the various choke points and have oil carriers not being worried about the threat of piracy as they come near various coastal waters. So all of those things I think play in to fuel efficiency and things we're doing. I think could we do more? Probably. But and is the price of oil putting pressure on my accounts? Most definitely. But so far it hasn't changed radically the way that we are building and doing things. Maybe when it's a hundred and fifty bucks a barrel it might. I don't know Bill I think if you'd put an A1G and an LCS, you could probably get a hundred and twenty-five knots out of it. I, that was a great question I think and 8:30 tomorrow morning the Chief of Navy Research is going to be right here talking and I'd hit him with it. There you go.

Moderator: Anybody else?

Question from audience: Yes sir, Dave Van Son (sp) with CEI Government Services. Just a quick question Admiral Crenshaw. The CNO has put the marker down to thirteen billion for the SCN account. How are you going to do that?

Vice Admiral Crenshaw: Thanks Dave.

Audience Member: You're welcome.

Vice Admiral Crenshaw: You're my pal.

Audience Member: Yes sir. Well I'm glad you feel like a hearing.

Vice Admiral Crenshaw: Well there's a couple of things about the thirteen point four billion dollar number in '05 dollars. First of all we don't get there immediately. We ramp up to it. And it's a target about which we will oscillate as we look at billing the number. We get to about three thirteen, ships in the year 2012. You know people forget that United States Navy as we speak has I forget the exact number but it's between thirty-eight and forty ships already on order. And we have about that same number that is projected in the fit up. We got a lot of heat last year because we only had four ships in the budget. But that was a year that we transitioning into the, into a lot of new haul forms. And we lost sight of the fact that we had all those other ships on contract. So it's somewhere, you know, it's in excess of eighty-five or so ships, either on contract or due to be put on contract, which is a fairly substantial number. I look at the ability to have the thirteen point four billion dollars in a fairly pragmatic way. And it shapes how I look at things when they come to me. If you look at the budget, the program of record, the money's there. The challenge that I have is to make sure that that money doesn't migrate around. Now I can't control what happens to the top line. If it goes down, then they don't, they don't check with Lew Crenshaw when they say, we're thinking about dropping the top line, what do you think Lew? So that's not one that I worry too much about. I worry about, I worry about probably four things. I worry about if you look at the amount of money that we have growth in our procurement accounts and you look at our budget projections that money is there in the procurement accounts. But that money is also there because we say that we will have not a lot of growth in our manpower account and that our operation and maintenance accounts will be fairly stable over the next year. In fact, it shows a slight decrease in real dollars over the, over the fit up. It shows a shift in investment from research and development into procurement. And so every time I look at the manpower account and I look at the execution and I look at the budget and I look at the program, I figure out what am I going to do, what is John Harvey going to have to do to keep that account relatively in control.

And over the past few years, one of the things that we've done as we've taken ships out and become more efficient is the manpower numbers have gone down. And so we've tried to manage that very carefully, very carefully crafted glide slope that is synchronized with the requirements that we have and I think we've done a pretty and as well as keeping faith with our people. And I think we've done a pretty good job at that. And we're going to continue to pressurize and look at that every year and figure out where we need to go. That's not to say next year we may take a big cut, we may not. I just, we just have to look and see where that goes. I

also worry about the OMN accounts and keeping those numbers right. Now there's a lot of money buried in the OMN accounts. My good friend Admiral Hancock can tell you that buried in the OMN accounts there are a lot of lines and trying to get at some of the extra money or some of the slack that may be in those accounts is very, very difficult from my perspective at the, at the op NAV level. But there are people who know a lot about those accounts. And they rest in what's referred to now as the naval enterprises. Those, the surface, the subsurface and navy aviation enterprises for instance where we have the leaders of the those enterprises or the, or the type commanders assisted by essentially if you look kind of like your COO which is the systems commanders and financed by their resource sponsors, which is sort of me. And those people who are in on spending those dollars have a pretty good insight on where they are. And that's why we've involved them very heavily both last year and they are very heavily involved this year in helping us look at how to control those OMN costs. I mean it makes sense to have the people who are actually spending the dollars telling you where we can conserve dollars as opposed to just having, you know, your banker sending you a note saying, okay I've cut your, I've cut your account by X dollars and, but you know I have to buy groceries. Well that's too bad. You'll have to figure it out. Now it's better if the bank were to come to you and say where do you want me to take this cut? Because you're the one that spends the money. So we've been doing that a lot. The third piece that I worry about is actually keeping the, keeping the R&D dollars coming down so that I can take that investment I've made over the past few years and actually buy things with it. To the extent that programs slide, that generally means I have to put money back into R&D so keeping them on schedule is very important. And I also realize that I can't mortgage the future by just taking all the money out of the account. There's a balance here. So I worry about that balance and I worry about making sure that as we look at how programs are doing that they don't slide out of control.

The other piece that I worry about is buying the most for the money that's there and to prevent the costs from creeping on the things that I see I need to buy. And that's why we've set some very definite cost caps, two hundred and twenty million on LCS, two million or two hundred and twenty million on LCS, two billion on Virginia class submarines and two billion or less on DDX because my ability to finance that plan depends on my ability to be able to find those, drive those costs out of those platforms and to prevent them from growing in cost. So I worry a lot about doing that. Now some of that is my own fault. Some of that is caused by me moving things around to pay bills and that's why we've worked very hard to be stable in our requirement and not change from year to year on how many ships that we say we're going to buy. Because every time I take a ship and move it to the right a year, it costs money. You take a ship, it costs two billion dollars and let's just take a theoretical ship and something I've done in the past by the way is if I take a ship in '07 and move it to '08 to free up money in '07, the ship costs let's just say two hundred million dollars more cause I slid it to the right a year. And then if I decide I want to move it back to the left, guess what? It costs me another two hundred million dollars. So I can't do that. I can't keep changing. And so we are working very hard to be stable in the requirement and not change those numbers around. And by not changing those numbers, I will get better value for my dollars. The other piece of that is controlling the cost of the things I'm buying. So it's a simple system. I only need to keep my manpower costs under control, keep my OMN costs under control, not change the cost of building things and keep my requirements stable. The only variable that's, I don't have a lot of control of is the top line. You can help us there. And, you know, Bob's your uncle.

Moderator: No hell for a climber Lew. That puts us I think right on time. First I would like to and sincerely thank our audience for participation and for what I thought were some extremely good questions and I really appreciate that. And obviously our panel for some great presentations and some pretty frank and open answers. And I don't think they really dodged anything so I'll give them credit for that one. Thank you all very much.