

Vice Admiral William J. Galinis  
Commander, Naval Sea Systems Command

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**DWG:** Good afternoon everyone. Welcome to this session of the Defense Writers Group. We're honored to have today Vice Admiral William Galinis, the Commander of Naval Sea Systems Command. Sir, thank you very much for joining us. We've got one hour. It's all questions and answers. It's on the record. And there will be a transcript but it won't go out for a day or so onto our web site if anyone wants to see it later. So those of you who are on the call have the initial advantage for news cycles.

Admiral, I think there are going to be all kinds of different questions. I'm almost sure that elevators on aircraft carriers will come up and many other topics no doubt, but you're fairly new to this job and I thought I'd just start by asking you to talk to us a little bit about what some of your priorities are and what some of the sort of front burner issues are that you're dealing with.

**Vice Admiral Galinis:** Thanks for that, David.

For the team here, I've been in the job now for about four months. As I came into the job what I would tell you, we kind of set three mission priorities for ourselves. Some of these really are kind of leveraging off some of the work that's already going on. So this may sound a little bit familiar to the team here.

Of the three priorities, the first one, on time delivery of ships, submarines and systems. We want the ships and submarines, we want them complete, we need the right level of quality, and that's both in new construction and repair. And we can talk a little bit more in detail about either one of those areas, but I'll just tell you particularly in the repair area, a couple of things we're working on is getting after the planning piece. Making sure that we have that done right so that includes both what we refer to as the class maintenance plan work, it refers to the modernization work that comes in to upgrade the combat capability, and it also refers to the fleet maintenance and repair work that the fleet brings in. So those three elements

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make up the basic work package, but getting that right. So that's number one.

The second area is in the procurement piece, making sure that we have the material, especially the long lead material, that that's available for the yards when they get started. Once we get into execution it's really about minimizing the unplanned work that we drag into the availability. That's probably, frankly from my perspective is one of the key drivers if not the number one driver in terms of getting ships out on time.

If you've got a good plan, you've got the material, and you've got the right resources and you execute we generally do okay. It's when we start finding things that we didn't plan for or we start adding new work that really kind of makes it challenging.

So those are just a couple of key areas, but that's the number one priority is the on-time delivery of ships, submarines and systems. Again, combat ready, complete when they come out of the new construction yards, when they come out of the repair yards, that's really what we're looking for.

The second area is kind of a transformation of our digital capability. I'm going to break this into kind of three different areas, if you will. The first is to really kind of strengthen our cyber security efforts. A couple of different elements to this, the first being really kind of getting after the cyber protection systems that we put on our platforms. Again, I think we've made some really good progress in that over the last couple of years with some boundary defense mechanisms and things like that, but to really kind of strengthen that piece of it.

The other part of that is just kind of how we handle critical information, and specifically we have our classified information. That's kind of, you've got requisite firewalls and what not. We handle a lot of information in the unclassified environment. We generally refer to this as critical unclassified information. A lot of it is open source and what not, but it is important. It contains a lot of our design information that we transfer between design houses and shipyards and everything like that. Even though our systems that we use have the right cyber protections on there, we do need to be careful on how that information gets handled. So in the cyber area it's kind of those two particular things. There are some other things but those are the big areas.

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The second major component of the digital transformation area is what I'll refer to as our digital engineering capability. This is everything from the digital design tools that we use at our warfare centers here at headquarters with industry to kind of execute the designs that we do, to things like building digital twins. It can be a piece of equipment on board a ship. Right now we're actually building digital twins of our four naval shipyards under the SIOP program, our Shipyard Infrastructure and Optimization Program. I can talk more about that in a little bit.

But again, kind of a digital model of how a system, of how a piece of equipment actually works. So that's another key part of it.

The other element of it is kind of the personnel piece and how do we train people to use these and to really kind of take advantage of these digital engineering tools that we have. So that's the second part.

The third part, really kind of our business processes. There's a lot of work going on right now to kind of recapitalize some of our IT systems. Frankly, I think we'll all agree it's almost an area that you're never done at the pace at which technology is evolving today. And so it's everything from the hardware that we have on our desktop or laptop computers to the networks that we use to the actual applications that we run on those systems.

Then the other part of that really is kind of how we handle data. So a lot of work going on right now to kind of take the data that we have and use it to better manage the command in the case of NAVSEA better, some of the field activities. And even really start to get into maybe some predictive analysis and what not with some of the data we have, and I'll use kind of maintenance availability as a potential example. We've got a lot of performance data based on historical performance of different availabilities on ship classes and what not, and we start to use that in a more predictive manner to really kind of get after some of the challenges we have.

Those are the three areas in the digital transformation effort. Again, the cyber security piece or digital engineering tools and then our business processes.

Then really the third part of this is really kind of our team

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piece. It really focuses on the people. It's all about building the team to compete and win, so what does that win piece mean? It means getting those ships designed, developed, built and delivered on time and then maintained on time as well.

I talk to the team about two particular areas on that. One is kind of building the technical competence. So that's being good at what you do. Whether you're an engineer, you're a finance manager, you're a contract specialist, you work in HR, you work in quality assurance, whatever that might be, understand your job, be the best that you can be in that particular job.

The second part is kind of the leadership development piece, and how are we developing leaders and kind of that talent management effort to kind of continue to rebuild our bench, if you will, as people kind of advance and move on and what not.

So kind of combine those two elements. The technical competence piece, the leadership competence piece. That's kind of what we're looking for. We need people who are technically competent that can lead teams and solve problems and drive issues to closure. So that's really what we're doing there.

Then underlying all of that is really kind of building that team based on trust and fairness and what not. So anyway, Dave, thanks for that question but that's kind of in a nutshell the three areas that we're really focused on, and a lot of things kind of branch off of those particular areas.

**DWG:** Very good, Admiral. Thank you.

Yasmin Tadjdeh of National Defense Magazine, do you have a question?

**DWG:** I do, thank you. Thank you so much, Admiral for doing this.

Last month the Pentagon announced awards for 5G experimentation and testing at five different military test sites including Naval Base San Diego for 5G enabled smart [inaudible]. How do you see 5G benefiting the Navy? What kind of efficiencies can it create? And on the other side of the coin, are there any particular Navy specific challenges that face you guys when it comes to implementation of 5G?

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**Vice Admiral Galinis:** First off I think absolutely, and not just in the operational area, and I'm not really going to talk to the operational piece, but kind of what we do in the design, in the maintenance area. And one of the things that we're really doing, we've got a couple of shipyards that are actually kind of embarking on this path, how they bring digital capability into the shipyard. So this is, think craftsmen and technicians and mechanics and supervisors out working on ships, building ships, fixing ships, in the shipyards. They need that reachback. Either the work specs, they need that reachback to drawings or tech manuals or whatever it might be, and they're working off of kind of either a laptop or an iPad or some type of tablet type computer, and having that 5G network capability, if you will, and a wireless configuration, to be able to access that information from anyplace in the shipyard without having to go back to an office or having to stop and make a phone call to somebody back in the office or whatever. That's almost transformational from my perspective.

We're pushing more and more of that into our shipyards, both new construction and repair, around the country. Both in the public and the private sector. As we continue to do that and learn more about that, I think that will be a big advantage for us.

**DWG:** Are there any particular challenges for the Navy in implementing 5G that you can think of?

**Vice Admiral Galinis:** I think as we bring on the right hardware, we'll just need to kind of continue to pursue that.

One of the things we need to look at is sometimes, and this is especially true on some of our larger ships, maybe on some of the submarines, but we're finding ways to kind of work through this. Sometimes we get down in some areas of the ship and you don't have access to that 5G network. So there's ways that we can work around that. But that can be a little bit of an inhibitor for us. But I think we're finding ways to come through that as well.

**DWG:** Gina Harkins of Military.com. Are you on and do you have a question?

**DWG:** I am, thank you. Admiral, thank you for your time today.

I wanted to ask about the Light Amphibious Warships. There's been a lot of emphasis on these from the Marine Corps side

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especially, but I wanted to get your perspective on how fast you're hoping you might be able to build these things and what they're going to be able to bring to the fleet.

**Vice Admiral Galinis:** I would say the Light Amphibious Warship as most folks know on this call, you know, a new concept, new design, new operational concepts. I think the goal is to do this -- I don't have the exact timeline with me but I do believe it's within the next couple of years. And the reason I say that is, again, the initial concept here is to kind of leverage a lot of the work done in commercial industry, you know, trying to incorporate commercial practices as best we can.

The other thing that's interesting about this and I think we're still kind of coming through the concept development phase in terms of the size and some of the real operational requirements needed for this platform, but it's a little bit smaller than some of our more traditional amphibious ships like the LPDs and the LHAs that we have right now. So what that does for us really is opens up the aperture in terms of the yards that would have an opportunity to build this type of platform.

So as we continue to evolve this concept, I can easily see a little bit of an expanded part of our industrial base in terms of the shipyards and everything like that, that would be able to build this platform.

**DWG:** Kind of an unrelated topic, but I'm wondering if you're looking at any new effort to assess how to better prevent or treat ship fires in the wake of the devastating fire in the amphib.

**Vice Admiral Galinis:** Great question. That's something we're always looking at. After that fire what we did -- let me just kind of back up a little bit. I think most folks on the call are probably familiar with a Miami fire that we had several years ago. So out of that fire -- that was the submarine that caught fire at the Portsmouth Naval Shipyard up in New Hampshire. Out of that fire was a new set of requirements. We refer to it as our 8010 manual which is the firefighting requirements document that we have for ships in industrial activities. And we've incorporated those requirements into the ships both in the public and the private sector.

We continue to evaluate ourselves. One of the requirements for

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ships once they go into a shipyard, into an industrial availability, is to run a major fire drill within I think it's the first 30 days after they start the availability. And what that really does is to kind of test not just the ship's force and the shipyard's response, but also external organizations that would support that effort.

That was one of the big things that came out of the Miami fire. We continue to do that today.

Then as they stay in the shipyard they're required to do these largescale drills on an annual basis. We do the smaller fire drills much more frequently but the larger drills where we bring in outside organizations are done on an annual basis, so that's one thing that we continue to do.

The other thing that we're looking at is to make sure that as we go through and execute one of these industrial availabilities that we don't disassemble too many of the fixed firefighting systems at the same time. If that makes sense. So we don't get to a point where there's no fire protection on the ship. I'm not saying that was a cause or factored into the Bonhomme Richard fire, but it was something that as we started looking at this we did notice that in some cases, especially in some of the availabilities that are much more intrusive, where we take more of the ship apart, that sometimes we may get ourselves in a situation that we're disabling more of the fixed, the installed systems.

Now what we typically do to counter that is we will install temporary fire systems on board the ship. That's a requirement in any of our contracts or even in the private sector or the public yards. But invariably, you'll find times where some of those temporary systems may not be as effective as the installed fixed firefighting systems that the ship has. So that's another thing that we're looking closely at to ensure that we don't go down that path.

**DWG:** USNI News, Megan Eckstein, are you there? Do you have a question?

**DWG:** Yes, thank you very much.

Admiral, I wanted to ask about unmanned. I understand that Project Overmatch is being handled by Admiral Small, but I just

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was curious what that means for NAVSEA. Obviously PEO USC [inaudible] unmanned ships, but I wondered for the engineering directorate and the fiber directorate and other folks that fall under your command kind of what Project Overmatch means and how you're looking at unmanned and networks going forward.

**Vice Admiral Galinis:** Great question. Within NAVSEA 05, within our engineering directorate here at NAVSEA we have warfare integration branch as you well know, and that will be the group that we'll rely on. And they're already doing this, working with Admiral Moton in the unmanned, small and unmanned surface combatant programs that he's got up there.

So as we start to kind of evolve this, working with Admiral Small and what he's doing out at NAVWAR, that will be the group really kind of within our engineering directorate responsible for the tech authority of the warfare systems integration piece that will play into, and as we integrate that part of it into project overmatch and bring in the unmanned platforms. You can imagine the level of integration required to start to bring all these different disparate systems together. So that will probably be a vague area that we'll focus on working with those two parts of our organization. PEO Unmanned and Small Surface Combatants, and then NAVWAR.

**DWG:** Thanks, and just a quick follow-up.

I guess more broadly with unmanned, have you started considering what that means for maintenance needs and what yards might be able to participate? Or is it too early to be having those conversations?

**Vice Admiral Galinis:** I wouldn't say it's too early. I can't say we've gotten to the level of detail in terms of what yards will need to participate or have an opportunity to participate. One of the things that we're working closely again with Admiral Moton and his team up there is really kind of on the reliability piece. And as you can imagine, unmanned systems, without having someone on the ship, we're looking for a high level of reliability on these ships. So that's one thing that we're working on.

I think as we get further into the program and start to kind of build the details on the maintenance plan, we talk about the systems being unmanned and that's true. They'll operate in an

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unmanned condition. But clearly there's going to be resources in terms of personnel required to maintain and take care of these platforms. We haven't gotten too far into that yet, but we are starting to think about that. Again, it's not too early to start kind of talking about those kind of things.

**DWG:** Seapower Magazine, Richard Burgess, are you on and do you have a question?

**DWG:** Yes, thank you.

With the new frigate being designed, the Navy's pushing to make it very lethal as far as the combat systems and weapon systems it's putting aboard. But as a new ship are you pushing any new efforts to making maintenance on that ship in the future easier on the crew and easier on the shipyards? Thank you.

**Vice Admiral Galinis:** Great question. I can't say there's any specific efforts on that. We're really leveraging the foreign design that was brought in.

I will tell you, in some areas they're looking at, they're changing some of the equipment that's made here in the U.S. and what not so they'll be part of that. That will help us from a logistics and a supply train perspective in terms of parts and everything like that. So that's an ongoing effort. That's something we are looking at now, is how do we -- the logistics tail that plays in there. That's something as you well know kind of on the Virginia program we've got some challenges with some of the material lines and parts and everything that we're working on right now.

I would say we're kind of leveraging some of these lessons learned from other programs and applying those to the work that they're doing on the frigate program.

**DWG:** As a follow-up, are there any new initiatives like coatings for the hull or things like that that will make maintenance easier and cheaper? Any efforts in that regard?

**Vice Admiral Galinis:** In terms of applicability on frigate, I think we're still looking at that but you're right. We've made some I'll say pretty significant advances in terms of coating systems and we've done that really on all the ships in the fleet right now. I would say just in general terms we've got to the

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point where tanks for example, which typically has been one of our drivers, especially in maintenance availabilities for getting ships out on time, we're to the point now where the ten-year coating systems that we use, the high solid coatings and what not are very reliable if they're applied correctly. So again, the right surface prep and the right environmental when you apply them. A lot of that technology and a lot of those lessons learned are in fact being rolled to the frigate program.

**DWG:** Aidan Quigley, Inside Defense? Are you on and do you have a question?

**DWG:** Hi. Thank you for doing this.

My question is on the unmanned [inaudible] vessel in the ConOps. I'm wondering when do you expect those to be finalized? And once they are finalized how will that help kind of guide the testing and exercises moving forward?

**Vice Admiral Galinis:** Unfortunately I don't really have a good answer for you on that. I'm not really working the concept of operations piece of this so I apologize. I just don't have a real good timeline for you on that one.

**DWG:** No problem. I'll ask another quick question.

The Navy's goal in 2020 was to reduce maintenance delays by 80 percent in FY20 and then eliminate the delays by the end of FY21. I'm wondering if you achieved the 2020 part and if you think 2021, eliminating maintenance delays is a feasible goal.

**Vice Admiral Galinis:** Great question. What we did last year was, I mentioned right up front about the on-time delivery of ships. The first part of that is getting the planning right. So one of the things we did there as get after how are we planning the availabilities. We went back, we did a fairly detailed analysis on avail duration. Are we planning the duration of the availabilities correctly up front? What we found is that we were not doing that and we had a lot of data, again, that kind of showed us that again, after we went through and did the analysis. We frankly kind of reset the avail duration for avails going forward, so that's going to help us tremendously I think in terms of days of maintenance delay.

The numbers for last year, from FY19 to 20, we actually did

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decrease the days of maintenance delay by over 80 percent. So from over 7,000 days of maintenance delay in '19 to about 1100 days of maintenance delay in FY20.

Like I said, we adjusted the duration of the availability in some cases so we changed the baseline. That number is actually, instead of 80 percent it's actually closer to 40 percent if we went with the original baseline. And I know I'm throwing a lot of numbers at you. Overall, we absolutely made a significant improvement in FY20 compared to FY19. When we got the planning right, that reduction was 80 percent or so; going to the old way we planned the availabilities it was only a 40 percent reduction. I hope that makes sense. I didn't mean to throw too many numbers at you, but yes.

Then going forward what I would tell you is we're not going to get to zero in '21. I'll just tell you that right up front. We understand why that's not going to be. There are I'll say a half dozen ships in particular and that will just go long. Again, the way we calculate the days maintenance delay is back to the original end date for that particular availability. Those ships are already past that date so we're already going to include those days maintenance delay in '21.

I hope that makes sense. I know it's a little bit complicated there.

**DWG:** That was very helpful. Do you have an example of what those ships are that did go over? This is my last question.

**Vice Admiral Galinis:** We're working through the cruiser mod program, so some of our Aegis cruisers that we've had in vey extended maintenance availabilities to go through the upgrades to these cruisers, those are a big -- there's four of those right now that are in execution that are contributing to that. There was a ship in Norfolk, the Oscar Austin that had the fire from a few years ago, we're still tracking her back to her original end date. But again, we're not going to make the goal we set for ourselves but we understand the discreet drivers behind that.

That's not to say there won't be other ships that are out there. We continue to manage that.

What I would tell you for the team here, overall, right now, and this is actually interesting in that it's the same for both the

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public and the private sector. We've got about 67 percent of our avails are tracking to an on-time delivery. They're tracking to their plan. That's up from less than 50 percent last year. Again, I think we're moving the needle in the right direction, but there's still a lot of work to do there.

**DWG:** Janes, Mike Fabey, have you got a question?

**DWG:** I do, thank you very much. Thank you for doing this, sir. I really appreciate it.

I'm just curious on the new single phased delivery for Kennedy. You're adding in the modification for F-35s. I'm just wondering if you have an idea of what the cost will be for that and if you know if that will get it near above the cost cap. In other words how that all figures into that. If you have an idea right now or do you have an idea how long it will take to figure that out. Thank you.

**Vice Admiral Galinis:** I don't have that number with me but we can certainly get that for you from the program office, from the PEO.

I'll tell you what, though, let me just say going to a single phase delivery is absolutely the right thing to do. And back to the first priority that I talked about, that on-time completion. On-time completion of combat ready ships. I'll just tell you in today's environment we can't assume, if you will, that a ship is going to deliver out of a new construction yard and have an abundance of time when she gets to home port to kind of finish work that maybe we didn't get done in construction. We have got to deliver these ships complete, coming out of the building yards. So the change in strategy to the single delivery on the Kennedy was the absolute right thing to do and we'll get you the numbers there. I just don't have those. I apologize.

**DWG:** A quick follow-up on what you just said. I'm curious, initially the whole idea of going to a [inaudible] was to cut out cost that was associated with putting in systems and having to rip them out because they had already become obsolete. What kind of steps can you do to mitigate that, to make sure that the cost and time delays don't take place then.

**Vice Admiral Galinis:** What we try to do is get those systems -- that's a great question and we're actually having an active

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ongoing discussion right now specifically in the C4I area with our friends out at NAVWAR on this because that's kind of the area we see kind of the biggest change in terms of technology.

One of the things you really try to do is as you build the ship do you have the right footprint, if you will, in terms of space, weight, power, cooling, all those elements that really support a particular cabinet or a particular combat system of that's the case. So I think what they're working on right now is getting that work done and maybe resequencing some of that work. If you get the foundations and the cabinets installed first, then you bring in the ancillary equipment kind of at a later time, so we try to mitigate some of that.

Some of these changes and software changes which are frankly from a shipbuilding perspective a little bit to accommodate, but again, trying to get to that right level of technical maturity if you will when you deliver the ship. That will continue to be something we're going to have to continue to focus on, especially for large ships like aircraft carriers that have such a long build duration.

The other thing we do is again, how do we upgrade ships in the future? You deliver the ship with the systems complete, installed and complete, and then you plan for kind of like a mini modernization period after the ship delivers, but you deliver that ship with basic full-up capability at ship delivery. It may not have the most current technology but it's got the basic technology to go and execute its mission at delivery.

**DWG:** Wall Street Journal, Michael Gordon. Do you have a question?

**DWG:** No, I don't. Thank you.

**DWG:** [Yar Surbu] of Federal News Network, do you?

**DWG:** I do. Admiral, thanks for doing this.

I wanted to go back to the workforce piece of the digital transformation project that you talked about earlier. Do you have a sense yet for exactly what your skills gaps in those areas might be? I mean in terms of numbers of people, types of skills you need? And is that primarily going to be a hiring effort of a rescaling, upscaling of the existing workforce kind of thing?

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**Vice Admiral Galinis:** Great question. We're always looking for good cyber engineers, and I will tell you where we have some of that capability at least on the NAVSEA level out at some of our warfare centers. One of the things that we did here in NAVSEA recently was we actually stood up a digital engineering office within the organization. So we're trying to pull the resources that we have across this command and kind of consolidate them under one organization.

Good cyber engineers are hard to come by so it will be a combination of things. It will be kind of a continued training effort for some of the folks that we have on board as we continue to bring those along. And again, as I said, we've got some really good capability at some of our warfare centers that we're leveraging. But then there will also be kind of continuing to look to hire people going forward.

The third part of that really is kind of outsourcing some of that work and contracting for that where we need to. So that's kind of some of the, probably some of the high-end talent that maybe we don't need 100 percent of the time but we do need to have that kind of available to us to reach out and get. So there's that three-phased approach. So it's a training of the folks that we have, it's hiring new people along the line, and then outsourcing and reaching out to the contractors to help us where we need that.

**DWG:** Then kind of on the blue collar side of the workforce, you guys have hired I think it's over 9,000 people in the past couple of years in the organic industrial base and I think there's been a big focus on getting those people framed and more skilled and competent, and I'm just wondering the extent to which COVID has had an impact on that, the need for social distancing and everything.

**Vice Admiral Galinis:** I can tell you probably not a lot in the training area. We've been able to do that. I think you're exactly right. I don't have the exact numbers but we're almost at about 38,000 people across the four different shipyards. So we've kind of met our hiring goals. Now we need to maintain that.

The training efforts that are ongoing really have not been impacted significantly by COVID. We've seen more of that impact

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actually on the ship repair side and in ship construction as well out in the shipyard. That's really where we've seen the biggest work impact.

But what I would say, even then it's kind of stabilized a little bit over the last couple of months. Again, like the rest of the country, as we start to see the increase in positive cases being reported and what not, we're watching the workforce pretty close. So hopefully that gets to your question there.

**DWG:** Paul McLeary of Breaking Defense, are you on? Do you want to ask a question?

The next questioner doesn't have a microphone. It's Dmitry Kirsanov from TASS and he's asked me to ask his question.

He'd like you if you would, Admiral, to talk a little bit about the Columbia Class submarine and specifically tell us if you can whether the plan is still to have the first boat on patrol in 2031.

**Vice Admiral Galinis:** The program is on plan. We are seeing some challenges as we come through the final part for the design and get into construction a little bit, but I think the two shipyards involved -- General Dynamics and Newport News -- are doing a pretty good job with the program office to keep that on plan.

**DWG:** Sylvie Lanteaume of Agence France-Presse. I see you're on, do you have a question by any chance?

Okay, how about Caitlin Kenney of Stars and Stripes?

People are having trouble with their mute buttons? What's going on here? It's okay not to have a question, but if you can tell me so that's great.

Jeff Seldin, Voice of America?

**DWG:** Thank you. I don't have a question, though.

**DWG:** Tony Capaccio, Bloomberg News?

**DWG:** I'm on the phone. I do have a question. Admiral, thanks for doing this.

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I have a Columbia question. I wanted to go back to that. Generally, the \$9 billion contract kind of raised to high relief in the public's eye the importance of this program. So generally, at this point what are your current concerns about the industrial base? And what actions are being taken to shore it up? How many companies are considered critical at this point? A couple of years ago it was 324. What is that number today?

**Vice Admiral Galinis:** I think right now what I would tell you, I think the program's up to about 350, Tony. And I think, I want to say it's somewhere, five to ten percent or so is where we think we're somewhat challenged in one phase or another to be able to meet the demand.

I think that's a key part of it. The other thing, the team has done a pretty good job and I think we're on plan right now and they've done a pretty good job of doing that, but again, kind of pushing into completing the design and getting into construction. When you look at new ship construction programs in general, that's always kind of a challenge point to get that design completed and get into construction. Then you're building the first vessel and you're going to have production issues along the way. Then the next phase is when you start to activate systems, bring the submarine on-line and then get it delivered to the fleet, so that will really be our next challenge.

So there's that piece. There's the design and construction piece. The supplier base is something we continue to watch pretty closely. I think within Team Sub, so that's the Columbia program PEO as well as -- PEO Submarines I think has done a pretty good job reaching out and working with their supply base through the shipyards to really kind of get a good understanding of where their risks are. So I give them kudos for that. So that's one, kind of knowing where your problems are and then kind of getting after it to go address those.

**DWG:** I need to push a little bit. What skills or [materials] within the supplier base are at the greatest risk to Columbia? And are there trends in some of the supplier base performance that are posing more risk to Columbia than others?

**Vice Admiral Galinis:** That's another good question. I'd probably have to take a look on the specifics there.

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What I would tell you writ large across the enterprise, not just specific to the Columbia program but across the enterprise what we're concerned with, welding, getting the right welding skills, getting the right NDT skills. You can imagine that's a big part of shipbuilding and that's not just for Columbia, that's kind of across the enterprise. I'm seeing some challenges there. Then you're always looking for good electricians, mechanics, and now I'm talking about within the shipyard. But those are some of the trades that I'll just tell you again, across the enterprise that we're somewhat challenged with.

**DWG:** All right. I'll have a follow-up question on a separate subject if I can ask.

**DWG:** We'll come back to you Tony if we have time.

[Inaudible], Aviation Week. Are you on and do you have a question?

**DWG:** Yes I do, thanks.

So now that former Secretary Esper is no longer in his position is the Navy still going to continue with Battle Force 2045? And if so, is it realistic for the Navy to build that many ships in that short amount of time?

**Vice Admiral Galinis:** Are we still going to pursue Battle Force 2045? I think right now the force structure plan, I want to say it's [inaudible] at the White House. I don't see any change to that right now. We'll have to see how things kind of play out over the next several weeks here, but I don't see any change to that.

The underlying analytics and the requirements I think remain sound. And how we meet those requirements, maybe that's a topic for further discussion.

In terms of the industrial base ability to kind of build those ships, I think there are some capacity challenges out there as we've kind of touched on some of the other questions, right? So especially when we start talking maybe going to three Virginia's a year and what it takes to transition from two to three per year. There's some capacity issues. Not just within the shipyard but in the supply base as well.

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As I mentioned on some of the unmanned vessels, frankly, the size of those vessels actually opens the aperture a little bit to maybe some of the ship [inaudible] we've got to work with, some of the small and mid-tier yards that we could probably bring into the mix. So there's some capacity we can bring into that.

I think there are some things we have to go work on to be able to meet that and we've got to get going. And whether or not that eventually is the plan or not, I don't have enough information at this point to really tell you.

**DWG:** Caitlin Kinney, Admiral, actually has a question, a related question from Stars and Stripes. I'm just going to read it because her mike's out.

What is the Navy's plan to balance the new Battle Force 2045 plan to 500-plus ships when shipyards are already struggling just to keep up with current maintenance schedules? Can the Navy build and maintain that many ships by 2045? In a way, it's the same question but put a different way.

**Vice Admiral Galinis:** That is a good question and I'll tell you, it's probably one of my top focus areas. It really kind of falls inside of that first priority, it's really kind of the capacity issue.

We've got maintenance capacity issues within some of our repair yards and capacity issues kind of in some phases of our new construction yards that we have to get after. So we're looking at ways working with industry on how we get after that.

Again, I don't see them as insurmountable, but we really need to kind of look at how we're doing business. And one of the ways is kind of finishing ships on time. That in itself will free up capacity so it kind of goes back to the things that we talked about. I'm talking on the maintenance side now. Some of the things I talked about up front. So if you get ships through the shipyards on the plan that you initially envisioned, that in itself will free up capacity so we're continuing to do that.

There are shipyards out there that we have not fully tapped into. So there's an opportunity to kind of bring other shipyards into the mix, if you will, on the maintenance side.

Similar in the public sector. Again for submarines in

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particular, we're looking at our submarine maintenance capacity and how are we doing inside the public yards and then how much of that work do we really need to kind of push out to the private sector? And our private sector submarine yards are interested in that type of work.

What we need to do is to kind of show kind of a good requirement and then what the workload would look like for that to get after that.

So it's a great question. I think capacity is something we do have to work on in both the new construction and the private sector side. I think there's opportunities for us to get after that.

**DWG:** Defense One, Brad Peniston are you on? Or Marcus?

Let's go to a second round. Tony, you asked for a question so why don't you go first.

**DWG:** You talked about the ship deliveries on time. Can you bring us up to speed on the Block 4 delivery with Virginia Class? We reported back in February that they were averaging like 10.5 months late to the schedules. Some as late as 15 months.

What have you done to try to buy back some of that schedule? I understand you're allowing Huntington to move modules to EB to finish if they're having problems.

**Vice Admiral Galinis:** There's some of that work going on, but again that's probably one I'd need to take a look up, Tony. I don't have the details on that. I think you're spot on in terms of the way you outlined your question and addressed that. We are schedule challenged on that program. Let me get back with you on that one if I could please.

**DWG:** Others who would like to ask a question, can you kind of limit it to one without a follow-up? But fire away if anybody wants to.

**DWG:** Sir, this is Megan Eckstein again.

I wanted to go back to the ship maintenance performance comment that you made earlier. You said that 67 percent are tracking on time right now. I just wondered what factors you're looking at

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that are increasing that number and what factors are keeping that from being 100 percent and kind of what's going to determine how the rest of this year looks other than COVID obviously.

**Vice Admiral Galinis:** Good question.

There's a couple of things. Number one, I kind of mentioned the cruiser mod program, so those are ones that are kind of not on plan right now. That's kind of in that 33 percent. And we understand kind of where we are with that. We're in the process right now working with Navy leadership and with the shipyards to I'll say re-baseline that program. So that's number one. That's a big part of it.

The other ones that we've got tracking out there, for ships that are in execution right now, as I mentioned, one of the big things is to really look at how we are managing change once a ship gets into the shipyard and starts the availability. That becomes one of the principal drivers that drive availabilities long. It's almost kind of a case by case, ship by ship explanation in terms of how we're doing this.

What I will tell you is that I think over the last several years, you're familiar with the organization called SURFMEPP that does a lot of our class maintenance plan work. I think they've done a really good job of building and stabilizing the class maintenance plan. And that's kind of what we refer to as directed work. We're trying to push more work, more maintenance work into that directed work category, if you will. What that does is it really provides a pretty stable baseline in terms of requirements and planning for a larger percentage of the work that we're doing in availability.

The second thing that we're doing is really kind of getting after the material procurement piece and that's another area that has caused us to go long in some availabilities where either we didn't order the material on time or we ordered it and for whatever reason the lead times were longer than anticipated. But the bottom line is we just didn't have the material available to us. We've stood up a material group in the surface side and we're doing the same thing for the public sector side to really kind of get after the material piece of that. So those are just a couple of things we're doing to mitigate, to continue to push the availability and get these ships out on time.

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**DWG:** Admiral you mentioned that COVID had had some impact on the ship repair side. How much impact? Could you talk about that a little?

**Vice Admiral Galinis:** It did. What I would tell you right now, in the private sector what we really do is we look closely at our production workforce. For the public sector yards, so these are naval shipyards, overall about 90 percent of the workforce is checking in every day. It's a little bit lower for the production trades, so these are the folks out in the shipyard. That number's about 88 percent. That compares to normally somewhere I'll say between 92 and 94, 95 percent on any given day. You never get 100 percent of your team coming in every day. People are on vacation, they're off at training, they're taking sick leave or health and wellness leave or whatever it might be. So you never get to that 100 percent. Normally, depending on the yards and what not, you'll be in that 92 to 94 percent. So we're four to five percent probably down from where we'd like to be on the production trades even at this point. That's the private sector.

It does vary, obviously, from yard to yard. You can kind of look at how the COVID numbers are going across the country.

Probably our best yard is Portsmouth and Pearl and then the two bigger yards in Norfolk and Puget are probably the ones where we might be even a little bit below the numbers I just stated.

On the private sector side for our surface ship avails, same type of thing. They're in the mid 80s to low 90s and it varies again across the yards, across the different parts of the country. But that has had an impact as well on availability.

**DWG:** Richard, Defense Daily, are you able to unmute and ask your question? Otherwise I can do it for you.

**DWG:** Going back to frigate. We've heard the National Security Advisor talk about building more frigates and former Acting Secretary of the Navy Modly said you'd need a second shipbuilder to get [inaudible]. So [inaudible] shipyard [inaudible]? What's the timeline on that?

**Vice Admiral Galinis:** I apologize --

**DWG:** I've got it written down here It was a little bit unclear,

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Richard. But he's asking whether the Navy's exploring opening another shipyard to [inaudible] production at some point after the initial ten. What's the timeline of a decision on that?

**Vice Admiral Galinis:** I'm not aware of any active efforts right now to do that. I think right now the focus is really on, we've got the program on contract. We need to get through the detailed design. We need to get into construction on the first [slug] of ships. Once we get going I think probably, and this is further down the road, we'll determine whether or not we need a second source for those ships.

**DWG:** Any other questions?

Hearing none, Admiral, you've been most generous with your time. Thank you so much. You have a very interesting and complicated job, keeping a lot of balls in the air it sounds like.

**Vice Admiral Galinis:** Yeah. I'm very lucky. I've got a great team and they enjoy doing what they're doing.

**DWG:** Any closing remarks?

**Vice Admiral Galinis:** I think, again, from where I sit our biggest challenge is the on-time delivery of ships and submarines and really, I probably spend a lot of my time on the maintenance side, principally on the public side if you kind of wanted to get into that. But that's really where I spend a lot of my time.

There are some really good initiatives that the team has put in place. We are seeing the trends improve. But I will tell you there's still work to go. The other thing I would offer to our industry partners and the companies that we work with, just how valuable our industrial base is across the country. I didn't really talk too much about it but I do see kind of one of my jobs is kind of an advocate working with Secretary Geurts and his team, kind of an advocate for industry. So we work very closely with them kind of in terms of the contracts that we let and what works and where we can do better and stuff like that, and we'll continue to do that.

Unless there's more questions, again, I appreciate the opportunity to spend a few minutes with everybody this afternoon.

**DWG:** Thank you so much, Admiral.

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Next week we have General Wilsbach, the Pacific Air Command Commander, so I hope some of you will be with us on Wednesday, the 18<sup>th</sup>.

Thank you very much. That's it.

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