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**UPDATE ON NAVY AND MARINE CORPS
READINESS IN THE PACIFIC IN THE
AFTERMATH OF RECENT MISHAPS**

JOINT HEARING

BEFORE THE

SUBCOMMITTEE ON SEAPOWER AND
PROJECTION FORCES

MEETING JOINTLY WITH THE

SUBCOMMITTEE ON READINESS

OF THE

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HOUSE OF REPRESENTATIVES

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UPDATE ON NAVY AND MARINE CORPS READINESS IN THE PACIFIC IN THE AFTERMATH OF RECENT MISHAPS

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
SUBCOMMITTEE ON SEAPOWER AND PROJECTION FORCES,
MEETING JOINTLY WITH THE SUBCOMMITTEE ON READINESS,
Washington, DC, Wednesday, February 5, 2020.

The subcommittees met, pursuant to call, at 2:31 p.m., in room 2118, Rayburn House Office Building, Hon. Joe Courtney (chairman of the Subcommittee on Seapower and Projection Forces) presiding.

OPENING STATEMENT OF HON. JOE COURTNEY, A REPRESENTATIVE FROM CONNECTICUT, CHAIRMAN, SUBCOMMITTEE ON SEAPOWER AND PROJECTION FORCES

Mr. COURTNEY. Good afternoon, everyone. Today's joint subcommittee hearing of Seapower and Projection Forces and the Readiness Subcommittee is actually the fifth in a continuation of joint subcommittee oversight since 2017 that have specifically examined maritime mishaps in the Pacific and the underlying systemic readiness issues that were a major contributory cause of those catastrophic events.

Since the gut-wrenching losses of 17 sailors from the USS *Fitzgerald* and the USS *John McCain* in June, the latter in June 2017, these subcommittees have been the public forum to review and act on the Navy's Comprehensive Review, Strategic Readiness Review, and the Government Accountability Office, GAO's, studies on the manning, training, and operational shortcomings.

As the USS *Fitzgerald* returns to sea this week for the first time since the collision, today's hearing is an opportunity for the Navy to provide an update to Congress and the Nation on how they have addressed these issues and how they have implemented the reforms needed to prevent them from happening again.

Today's hearing also follows a tragic Marine Corps aviation mishap in 2018. This accident, in which an FA-18 Hornet [jet] and a KC-130H [extended-range tanker] collided in mid-air, has striking similarities to the earlier collision between aircraft in the same two squadrons that took place in 2017. Like the ship collisions in 2017 which exposed serious shortfalls in certifications of key operational training and navigation, seamanship, and engineering, this incident has revealed inadequate flight hours, night-time training, and equipment maintenance that were, at a minimum, contributory causes to the mid-air collision. The most recent mishap killed 5 of the 6 air crewmen involved, and our thoughts and prayers are with

the families of these Marines just as they remain with the families of the 17 sailors killed in the 2 ship collisions.

I know that our sailors and Marines that are forward deployed to Japan represent some of our best and brightest. Each of us recognize the role these men and women play in being the tip of the spear in one of the most active regions in the world. These men and women in uniform deal with longer hours, less time at home, higher operational tempos, and complex multinational strategies. Therefore, it is imperative that both the Navy and Marine Corps get this right and balance these high operational desires with requisite readiness systems and needs. The services owe deep analysis and critical examination of their readiness issues, whether it be training, maintenance, or proficiency, and Congress owes diligent and persistent oversight.

The Navy has recognized that it is challenged by widespread institutional readiness issues. It is now proactive towards accepting responsibility and executing solutions at all leadership levels. They have established new governing bodies and have made notable progress in correcting the nearly 100 issues identified by the Comprehensive Review, the Strategic Readiness Review, and multiple GAO reports.

These corrections aren't superficial. They represent large, systemic, and deep programmatic changes across manning, training, budgeting, and operations. While I look forward to the Navy's update today on the progress, I am also encouraged by the Marine Corps appointment of an independent Consolidated Disposition Authority that will have broad authority in investigating command climate, training, and material readiness.

As the Marine Corps grapples with these complex problems, I urge them to learn from the Navy's initial incidents and subsequent actions. Both these readiness reforms and Congress' oversight are iterative processes. It is my sincere hope that through continued oversight, further hearings, and robust dialogue with the services, we can continue to eliminate these readiness difficulties, ensuring that our service members come home safely.

And I now would yield to my colleague, the ranking member of Seapower, Mr. Wittman.

[The prepared statement of Mr. Courtney can be found in the Appendix on page 41.]

STATEMENT OF HON. ROBERT J. WITTMAN, A REPRESENTATIVE FROM VIRGINIA, RANKING MEMBER, SUBCOMMITTEE ON SEAPOWER AND PROJECTION FORCES

Mr. WITTMAN. Well, I want to thank Chairman Courtney for yielding, and I want to also thank him for having an enduring interest in our naval forces readiness. Joe, thank you so much for that focus and that determination to make sure we get to the root of these things, and to make sure that changes are made so they are long-lasting.

You know, I am particularly heartbroken over the loss of life associated with Navy surface forces and Marine Corps aviation forces. All were tragic. All were preventable. All have several common threads underlying the principal issues. In the end, the lack of senior leadership, inattention to the apparent problems facing

the respective units, and an inability of the operators to discern the dangers they were in all contributed to the same tragic results.

The Marine Corps is particularly troubling. The KC-130J collision with the Hornet aircraft at night over the sea of Japan was an accident waiting to happen. Months earlier, the squadron commander wrote to his superiors and indicated, quotes: Everyone believes us to be underresourced and undermanned.

The III MEF [Marine Expeditionary Force] commanding general, Lieutenant General Clardy, responded to the accident and indicated the Marine Corps, in his words, had a chronic history of unconstrained tasking and underresourcing, creating a culture of complacency.

He went on to further indicate that his Marine aircraft wing faced significant challenges in manning, maintaining, and training its squadrons. The conclusion of this accident rings particularly close to the heart as they are eerily similar to the same outcomes associated with the *McCain/Fitzgerald* collisions.

In those two efforts, the Secretary of Navy's Readiness Review concluded, leaders in organizations began to lose sight of what right looked like and to accept these altered conditions and reduced readiness standards as the new normal. In this review, the report further concluded that, over time, the Navy's must-do, wartime culture was adopted for peacetime, as long-term readiness and capability were sacrificed for immediate mission accomplishment.

What I thought was a defining, seminal moment for the Secretary of the Navy, a moment that I understood included an assessment of the Marine Corps, was instead somewhat fleeting, and lessons learned still not fully adopted. We can do better, and we must do better.

For the surface forces, we need to adopt a more rigorous accessions training evolution, similar to that of the merchant marine. We need to ensure more junior officer seamanship training. Our enlisted training needs to be systematically reviewed to eliminate outdated training. And our sailors, I think, are the most perceptive measures of that. They know what they need, and we want to make sure that it is modern and keeping with today's challenges.

Our afloat manning needs to be significantly improved. Our basing and maintenance processes need to be aligned, including modernizing facilities. We need to step out of our comfort zones and ensure the manning, training, and equipping of our forces is maximized for both efficiency and effort.

As to the Marine Corps, I think that we need to do some deep soul-searching and ensure that we have the right readiness at the right time. This balance is difficult to achieve, but we should never sacrifice the safety of our Marines upon whose backs our Nation is carried.

Again, I appreciate the chairman for having this important hearing, and I yield back the balance of my time.

[The prepared statement of Mr. Wittman can be found in the Appendix on page 43.]

Mr. COURTNEY. Thank you, Mr. Wittman.

And, again, you have been part of the prior four briefings and hearings we had as many of the other members here today.

Again, the Readiness Subcommittee is, again, our colleagues here today and yield to the chairman of the subcommittee, Mr. Garamendi, from California.

STATEMENT OF HON. JOHN GARAMENDI, A REPRESENTATIVE FROM CALIFORNIA, CHAIRMAN, SUBCOMMITTEE ON READINESS

Mr. GARAMENDI. I thank you, Mr. Courtney. I am going to shorten my remarks and ask that it be put into the record. Much of what I would say you have already said, both you and your ranking member. But I do want to thank you and the work of the staff, this being our committees working together over the past 2 years on the issues before us today.

And I want to also state that we continue to honor and remember the 17 sailors and 6 Marines who died in the tragic surface ship and aviation collisions in 2017 and 2018. Our thoughts remain with their loved ones and their friends.

Just a quick thing, there are three things we need to do here. First, we need to be absolutely certain that these things don't happen again. Preventable accidents, got to get on top of that.

Second, that the decisions made by senior personnel, senior command, be wise decisions, as has already been stated by my two colleagues.

And, finally, that we continue our oversight.

I ought to also just very quickly thank two organizations—the Government Accountability Office and ProPublica—for bringing to light many of the issues that were hidden, were not obvious. Both of them have done an enormous service to the men and women in uniform as well as to the general public, and certainly to us.

With that, I yield back, and ask that my full comments be in the record.

[The prepared statement of Mr. Garamendi can be found in the Appendix on page 45.]

Mr. COURTNEY. No objection. Thank you, John.

I now yield to the ranking member, Mr. Lamborn, from Colorado, on Readiness.

STATEMENT OF HON. DOUG LAMBORN, A REPRESENTATIVE FROM COLORADO, RANKING MEMBER, SUBCOMMITTEE ON READINESS

Mr. LAMBORN. Thank you, Chairman Courtney. I would like to thank you and Ranking Member Wittman for your continued collaboration with Chairman Garamendi and me on these critical issues.

Many factors contribute to military readiness, but it seems to me that it really comes down to the basics—have we given our men and women in uniform the right training and equipment for the jobs we ask them to do, and is that equipment properly maintained? With all of the technical advancements in modern warfare, we still have to focus on blocking and tackling.

Last week, the four of us up here who have just spoken embarked on the USS *Eisenhower*, and I was impressed by the discipline required by our sailors and aviators to safely conduct carrier operations. The flight deck is a dangerous place with moving

aircraft and heavy equipment and flammable liquids everywhere, and the ship is powered by a nuclear power plant. There is good reason we have such high standards.

So that brings me to the purpose of this hearing and the thing that concerns me the most. When we are moving so fast that we lose focus on the fundamentals, it has real-world consequences that are borne by our service members and their families. The common threads in the challenges confronting our surface fleet and aviation forces are culture and a focus on short-term operational outputs.

It is concerning to me that the 2017 surface warfare mishaps in the Western Pacific were at the very tip of the spear for our Navy. The Marine Corps F/A-18D squadron that experienced the December 2018 mishap was scheduled to participate in a large military exercise that was canceled right before the mishap. It is unclear to me that the unit was prepared for an operation on that scale.

So, as we proceed today, I would ask our witnesses to highlight where their services are focused on changing culture and thoughts they have on how to effectively measure that progress. Thank you, Mr. Chairman, and I yield back.

[The prepared statement of Mr. Lamborn can be found in the Appendix on page 47.]

Mr. COURTNEY. Thank you, Mr. Lamborn.

And now, again, it is my honor to introduce our witnesses here today. Vice Admiral—sorry—Vice Admiral Richard Brown, who is no stranger to this committee. Again, you actually joined us about a year or so ago on this very issue and again, our commander of Pacific Fleet.

And you are joined here today by Lieutenant General Steven Rudder of the U.S. Marine Corps, Deputy Commandant for Aviation from the United States Marine Headquarters.

Again, you have been with us over the years at budget hearings and many others.

So thank you to both of you for joining us.

And, again, Mr.—Admiral Brown, you are going to lead off, so the floor is yours.

**STATEMENT OF VADM RICHARD A. BROWN, USN,
COMMANDER, NAVAL SURFACE FORCES, U.S. PACIFIC FLEET**

Admiral BROWN. Thank you, sir. Chairman Courtney, Ranking Member Wittman, Chairman Garamendi, and Ranking Member Lamborn, and distinguished members of the Seapower and Projection Forces and Readiness Subcommittees. On behalf of the United States Navy, thank you for the opportunity to join you to discuss the readiness of our surface forces.

My east coast counterpart, Rear Admiral Roy Kitchener, and I have the authorities, the responsibilities, and more importantly, the accountability for the generation of ready surface forces. Our number one priority is current readiness, and we are directly responsible to the four-star fleet commanders for the manning, training, and equipping of the surface force.

Bottom line, the surface type commanders provide combat-ready ships and battle-minded crews to our numbered fleet commanders. During my testimony today I want to reinforce that the Navy has moved and is continuing to move with urgency to ensure the fund-

ing, policies, and sustainable processes required for long-term success are in place. I have three specific highlights.

First, there is one unified standard for ensuring readiness. Our manning, training, and equipping objectives are unambiguous. We only deploy ships that have the required manning, are fully certified, and have the necessary material readiness in place. Commanders at all levels embrace the standards and their responsibility for attaining such.

My job, as a surface type commander, is to help our commanding officers attain these standards and, where necessary, break down barriers. Should an unusual or urgent case that requires a deviation arise, that approval authority resides solely with the four-star fleet commanders.

Second, in response to the Strategic Readiness Review and the Comprehensive Review findings, we implemented compliance measures to break the normalization of deviance and impose risk management. We undertook measures to enhance the development, assessment, and sustainment of proficiency. Concurrently, we reestablished firebreaks by more effectively balancing maintenance, training, and operations.

The culture of excellence we are forging today embodies the standards as the minimum rather than the goal. While not declaring mission complete, over the last 2 years, the pace of enhancements and their initial results are cause for optimism.

Lastly, we are the premier surface force in the world, second to none, that controls the seas and provides the Nation with combat naval power when and where needed. Type commanders and resource sponsors are committed to providing our surface force with the manning, the training, and the equipment needed to own the fight. While combat readiness remains my highest priority, we will continue to enhance mariner and warfighting skills training, we will deliver warfighting capabilities essential to the future fight, and we will initiate actions to prepare individuals and watch teams to fight and win.

Remaining the world's premier surface force requires collaboration at all levels. Although we have made significant progress that paves the way for long-term success, our efforts will not cease. Never being satisfied with past successes fosters an unrelenting drive to improve. That is the hallmark of premier organizations. With the continued support of Congress and our commitment to excellence, I am confident in the Navy's ability to deploy combat-ready ships with battle-minded crews when called upon to do so.

I thank you for the opportunity to appear before you today and greatly appreciate your continued support. I look forward to your questions and the opportunity to discuss the specific actions we are taking to strengthen our surface Navy. Thank you.

[The prepared statement of Admiral Brown can be found in the Appendix on page 48.]

Mr. COURTNEY. Great. Thank you, Admiral.
And, General Rudder, the floor is yours.

**STATEMENT OF LTGEN STEVEN R. RUDDER, USMC, DEPUTY
COMMANDANT FOR AVIATION, UNITED STATES MARINE
HEADQUARTERS**

General RUDDER. Thank you. Good afternoon, Chairman Courtney, Ranking Member Wittman, Chairman Garamendi, and Ranking Member Lamborn, all the members of the committee, and your staff behind you. Thank you for the opportunity to appear here today.

As you are aware, the Marine Corps title 10 [10 U.S.C. 8063] responsibility is to be the Nation's expeditionary force in readiness. We are charged and expected to always be the most ready when the Nation is least ready.

This responsibility is at the very core and identity of the Marines. As Deputy Commandant for Aviation, my focus continues to be readiness for combat, as I have told you for the past 3 years, and with your help, we are making progress. We are still modernizing, and most importantly, we are focusing on the maintainer, those Marines and sailors who work on our aircraft.

As a testament to congressional support and our efforts, Marine aviation readiness has continued to improve since November of 2017. It continues to be our primary effort, especially with our TACAIR [tactical air] community and as evident by the MC80 [mission-capable 80 percent] focus of last year. So, again, thank you for that support.

In 2019, Marine aviation executed 78 operations. We were part of 88 major security cooperation events with partners and allies, participated in 170 major exercises. Today, there are over 19,000 aviation Marines forward stationed, 17,000 forward deployed, totaling 19 percent of Active Duty force forward engaged in 60 countries around the world.

Our achievements, however, have not come without their share of tragedy and hard lessons learned. On December 6, 2018, the naval aviation community absorbed a devastating loss when a Marine F/A-18D Hornet from VMFA-242 [Marine All-Weather Fighter Attack Squadron 242] collided with a KC-130J from VMGR-152 [Marine Aerial Refueler Transport Squadron 152] during a training event over the Pacific Ocean 50 miles off the coast of Japan.

Both squadrons were based out of Iwakuni on mainland Japan on the 12th Marine Air Group, 1st Marine Air Wing, III MEF. Six Marines were lost. All these Marines served their country with honor, and they will never be forgotten.

We cannot change what has happened. What we can do is use this tragedy to grow and change our organization, make these operations and all operations safer. Such initiatives will be the legacy of these six Marines.

On September 23rd, 2019, the Assistant Commandant of the Marine Corps appointed a Consolidated Disposition Authority to further review the findings of the command investigation into this mishap. The CDA, as we call it, is an independent senior commander who will provide a comprehensive review of the investigation and all the facts surrounding it.

The CDA may order a range of actions to include further investigation and/or administrative or disciplinary actions in accordance with the Uniform Code of Military Justice. However, I can assure

you that, upon completion of the CDA, our first priority will be to inform all the families of our lost Marines on the relevant results of our findings and provide transparency.

We still have much work to do to ensure that our aviation Marines and sailors are among the best trained and equipped forces in the world. I am confident that we are headed in the right direction, and with your continued support, we will achieve our aims.

I am here today to inform you of the steps we have taken so far to increase our readiness levels and to make our operation safety. I look forward to your questions.

[The prepared statement of General Rudder can be found in the Appendix on page 59.]

Mr. COURTNEY. Thank you to both of you. And again I just want to ask a couple quick questions and open it up to other members.

Admiral Brown, last time you testified, it was sort of at the, you know, sort of the early stages of implementing some of the changes from the different reviews, some of which were done internally by the Navy, some of which Congress actually codified. I think it was the 2018 NDAA [National Defense Authorizing Act] that Senator McCain advocated very strongly for.

And you actually cited a couple examples of where, you know, this problem of folks at the lower levels, you know, being concerned about readiness problems, not sort of making its way up the food chain and that the decisionmakers, you know, never had the opportunity to, you know, pull the safety break, as Admiral Richardson described it when he testified before this committee.

And, again, I think you cited some specific examples of how that change is already starting to occur with a couple of instances. It has been about a year or so, and I was just wondering if you could sort of update us in terms of, you know, again, whether or not that sort of extra sort of safety catch or safety break is still working the way I think everybody was hoping for?

Admiral BROWN. Yes, sir. I believe so. And I will give you a couple of examples here in a minute. The real thing that we did and I talked about in—it was June of 2018—is that—and then CNO [Chief of Naval Operations] Richardson was here testifying at the same time—is, we established the necessary firebreaks between force generation and force employment.

It was a true statement that, back in 2016 and 2017, we were evaluating operations over basically everything else, especially in the FDNF [Forward Deployed Naval Forces] world. The firebreaks weren't there. So we have codified, through instruction and through directives, to put those firebreaks in place.

Two things, the first one is the integrated readiness instruction that was signed off by the Chief of Naval Operations, and that lists what the minimum training standards are for each particular operation. As you can imagine, if we are sending a ship up to fleet week in San Diego or in San Francisco, the training requirements would not be as robustly needed as a ship that was getting forward deployed as part of a rotational force.

The second thing is, my ADCOM, administrative command, voice is now very large, where perhaps it was not the case in years past.

So there is an insatiable demand for naval forces across all the combatant commanders. We are the most visible presence of the

United States. Whenever we are not somewhere, that creates a sucking vacuum that then is filled in by somebody else. That said, not everything that we do is national tasking or phase zero tasking. So there must be a balance between that insatiable demand for forces and the maintenance and the training and the certification.

When there are discussions about using ships that are not fully certified, that is when my voice gets very loud and the four-stars listen now. And I will give you an example, is a destroyer was being talked about being used for a particular mission in FDNF. She was not basic phase complete, and we raised the red flag, and the discussion stopped. So that is very promising.

Mr. COURTNEY. General Rudder, again, you described the Consolidated Disposition Authority review in your—or the new review that is going to be taking place, and again I appreciate the fact that the families are going to get the first look at it when it is available. Can you give us some idea of the timing of, you know, roughly, you know, when you think that is going to be complete? And obviously our committee will want to, at some point, also have an opportunity to sink our teeth in it, and again that is the Marine Corps plan.

General RUDDER. I don't have the precise analysis. They are, you know, as we speak, locked in a room still going through the final phases of this thing, but I envision in the next few months that we will have something presented to the Commandant for his decision.

Mr. COURTNEY. Mr. Wittman.

Mr. WITTMAN. Thank you, Mr. Chairman. I appreciate the witnesses joining us today.

Admiral Brown, I understand the Navy has a requirement for its surface ships to be at 95 percent of required manning, and then within each of the specialty areas on board the ship to be at 92 percent of required manning to make sure that the full complement is on board the ship. It appears, though, that looking at the quarterly report showing deficiencies to Congress, it appears to me that there are still issues with basic and intermediate training. So the manning needs there and the skill sets necessary to meet that, not just the 95 percent overall but the 92 percent, are still pretty deficient.

My wife is a schoolteacher. This is her 40th year of teaching school, and her school system requires that she give her students a grade as they are in the classroom and doing things and determining whether or not they are meeting expectations or not. Give me the Navy's grade on where you are with these requirements for the surface fleet and give me a little reason why you believe that grade is a just grade.

Admiral BROWN. Yes, sir. I would give us a B-minus.

Mr. WITTMAN. Okay.

Admiral BROWN. C-plus to a B-minus, for a couple of reasons. The first is the resource sponsor does a pretty good job of buying to what the requirement is. We buy about 98 percent of the requirement. That establishes our billets authorized. But if we wanted all the ships to be at 92 percent fit and 95 percent filled throughout their entire cycle, the 36-month cycle of the OFRP [Optimized Fleet Response Plan], we would actually have to buy 120

percent of the requirement to account for the friction. That is the reason why I give us a B-minus or a C-plus, is that we have done a very good job over the last couple of years, about paying for the total ownership cost of manpower, but we really haven't bought any—all of it. Because it is a balance, you know. We have to balance the portfolio across the—across all the things that we need to do.

That said, we strive in the Pacific Fleet—and I have been meeting this since the middle of last year—is to get the ships to 92, 95 at the beginning of the advanced phase of training. That is the Surface Warfare Advanced Tactical Training. Then we keep the ships there through the integrated phase of training and through the deployment.

And then we do not allow them to degrade very significantly while they are in sustainment. That is what gets me to the B. And we were not doing that back in 2016 and 2017.

That said, the last point I will make is I have actually done a study on what is the required fit to have the right number of watch standards in place when they are in the basic phase, and that is about 88 percent. So, if a ship is running at about 88 percent fit, they are usually around 92 percent fill, and they have the right people in place for the most part during the basic phase.

Mr. WITTMAN. I appreciate you pointing that out. If you look at the different measures about where the Navy is and how many sailors it is short to get to the 120 so you can meet 95 and 92, somewhere between 6,000, maybe even the upper end of 9,000 sailors. So, obviously, we have to be able to get to that point if we are going to get where we need to be with the Navy.

You talk a lot about the training aspects of that. And listen, there has been some significant advances in officer training. The problem, though, is, what are we doing on the enlisted side. You know, when our sailors get out of basic training and go to C School, as they call it, and the training that they get there, it still seems the schoolhouse training is somewhat insufficient. If you look at training on more modern teaching aids, more modern systems, and as you see in the *McCain* and *Fitzgerald* collision, you have sailors that moved from one ship to another, dissimilar systems. You know we have lots of surface ships out there, and as we modernize them, unfortunately there are different systems on board. So, you think you know a navigation system, you get to a different ship, and it is very, very different. So, give me a reflection on where we are with enlisted training, what you are doing to make sure there is a modern training regime here, that the schoolhouse training is where it needs to be. I understand when they get to the fleet, they can learn those ship systems, but you got to go to the fleet with that basic understanding that comes from the schoolhouse training.

Admiral BROWN. Yes, sir, I agree. And we are doing it, we are achieving that through our Ready, Relevant Learning processes. We are delivering modernized training as we take individual rates and we transition them from the old way that we would do A-School and C-School to now Ready, Relevant Learning, and the real goal is to, number one, modernize the training delivery so it is not death by PowerPoints.

Mr. WITTMAN. Right.

Admiral BROWN. Number two is to give the right training at the right time. And the example that I will use is Aegis FC [Fire Controlmen] training. We would literally give a master-level degree of training to Aegis Fire Controlmen that would take anywhere up to a year to 18 months. And by the time that they get to the ship, they may only have a year and a half left on their contract. That really wasn't the right thing. What we need to do is give them the training that they need for that first sea tour. And then when we say, hey, that sailor is really sharp and committed for another sea tour or the rest of that sea tour, then we will give them the additional training.

We are doing that through STAVE, which is the Surface Training and Advanced Virtual Environment, where we are actually modernizing the delivery methods. I am very excited about this. The surface force actually led the way, beginning in 2013, when we developed the quartermaster training continuum. That was the genesis for Ready, Relevant Learning.

Mr. WITTMAN. Very good. Thank you, Mr. Chairman. I would like to come back in the next round and ask some more questions. Thanks.

Mr. COURTNEY. Thank you, Mr. Wittman.

Mr. Garamendi.

Mr. GARAMENDI. Thank you, Mr. Chairman. Where do we start here? Let's talk about rest periods. One of the problems that was noted was an insufficient amount of rest. I noticed when I try to take a delayed flight out of Dulles, chances are that the crew isn't going to meet the rest requirements, and then they got to go find another crew. So, gentlemen, if you will talk about that, the circadian rhythm, how that fits into it, what you are doing about that.

Admiral BROWN. Yes, sir, from the surface force perspective, that was one of the first things that we went after. In November of 2017, a circadian rhythm watch bill rotation instruction was put out and codified for the surface force. Circadian watch bill rotations is more about shipboard routine than it is actually about the number of watch sections that you have. The example that I use is: If a particular watch section is in port and starboard—so you stand watch for 6 hours, and then you are off for 6 hours—typically the OS's [operations specialists] in combat are in that section. If you run a shipwide evolution in the morning, you crush the mid-watch folks. So, it is more about shipboard routine.

So general quarters training we would do in the afternoon when those mid-watch folks are already on watch.

We are actually tracking and monitoring our progress over the last 2 years of how we have implemented that in the force. We do that through the ATG [Afloat Training Group] training. There is actually crew endurance checklists that are now filled out by the crew and the ATG trainers, and that actually goes into our training system, and it feeds into the score that the ship receives for the basic phase of training.

The other way that we are monitoring this is through the Afloat Bridge Resource Management workshops with the post major command CO [commanding officer] mentors, who are specifically trained in fatigue management by my human factors engineers that are embedded on my staff.

The other way, there is another pulse point that happens twice in a cycle which are through the afloat safety surveys, where they are actually measuring crew fatigue. So, we are moving in the right direction. I am not calling mission complete because I just sent out a tasker to both coasts where I want to go start asking very detailed, deep questions to the ships to make sure we have this right.

Mr. GARAMENDI. General. General Rudder.

General RUDDER. We have got several instructions that talk about sleep and rest, and, you know, we have rules on what rest—uninterrupted rest is required before you can plan, brief, and fly a mission. Where it gets a little bit more nondescriptive is when you desynchronize your day and night schedules. So, for those extended periods, which as they call it in the CNAF [Commander, Naval Air Forces] manual, it talks about having 4 weeks to desync yourself, synchronize yourself into a night schedule. We do this for combat operations where in some cases, if you were flying in OAR [Operation Atlantic Resolve], you are flying in OEF [Operation Enduring Freedom], then—and you were on a night page, as we call it, night schedule, you would be flying nights for 6 months straight, potentially. And then it would take you a while to kind of get your body in there.

For the lesser exercises, where you are—if you are going to do one night mission, then you can come off a day schedule, if you will, and fly that one night mission. Where it gets a little more complicated is, how many night missions are you going to do that gets you into a desynchronization period? This all goes back to our flight surgeon, the commanding officer, and as we lead into an exercise, how long does he give his aircrew a time to synchronize themselves into that night schedule and how they do that? And that is really when you get into the 3 or 4 days as the exercise—3 or 4 or 5 days as the exercise was in this particular event that we are talking about today, giving 2 or 3 days in there was right on the edge of what the flight surgeon and the commanding officer thought they needed for those particular aircrew to sync themselves into a night schedule.

Mr. GARAMENDI. There is also the question related to this is the amount of training and specifically for night flying, and apparently that was lacking in the 2018 situation. So, there was a question of not—insufficient rest as well as insufficient training for night refueling. Is that the case? And you have solved that problem?

General RUDDER. The qualifications that—so, for the qualifications for that particular crew to go out that—to do that mission, they had met the qualifications to do that mission—the qualifications to do that. You could make a case, because of their low flight hours in the 3 or 4 months preceding that, they were not as proficient to do the missions as they should. So, yes, they were not as proficient. Were they qualified for tanking, and had they flown night, and were they qualified to fly night mission? And if you look at the data, they were qualified but not as proficient as we would like to see.

Mr. GARAMENDI. So, proficiency comes with training hours—flight hours and the like. It was thought at the time that there were insufficient training, insufficient hours of flight. Have you re-

solved that issue? Are you providing sufficient training in the air, in training facilities, and the like?

General RUDDER. So, broadly speaking, within the F-18 community, their flight time has increased dramatically as long—as well as their readiness. For this particular squadron, 242, up through 2017, they actually, although they lagged in some cases behind in the numbers of hours per pilot, their readiness was at the same level as those nondeployed units back in the States.

We tend to take the squadron that was in OIF—OIR [Operation Inherent Resolve], excuse me, off the table because they were flying two or three times the amount of hours, and they skew the data sometimes in our real readiness. In that particular squadron, what we saw in 2018 is, they were behind, sometimes ahead, as they went through 2018, but as they deployed to Australia before they went into this exercise, that is where we saw a dip in the hours. So ProPublica, as their data suggests, is correct. I mean, leading into the flight that they took there for the preceding 3 or 4 months and what the commanding officer was worried about, are those months where they were in Australia, trying to get back from Australia. That is when they had a dip in readiness and a dip in hours.

Mr. GARAMENDI. One quick question for both of you is that it appears as though the commanding officer, certainly with regard to the Marine Corps problem, or accident, indicated through the—up to the chain of command that there were problems, and that those problems were serious, that they needed attention, and the chain of command did not provide the necessary time to correct the problems. Could you both speak to that issue and give us some indication whether this remains a problem? In other words, the chain of command not paying attention to information coming from lower down the command? Admiral Brown, why don't you start, and we will give General Rudder a short break.

Admiral BROWN. Yes, sir. It is a great question, and one of the things that we did in response to the tragedy of 2017 is directly opened up the communication from our commanding officers directly to me as their type commander. They do that with a 90-day letter that they send me 3 months after they take command, and that letter comes to me, comes straight into my inbox. It is not chopped by their commodores. It is not chopped by their strike group commanders. It comes straight to me. I typically answer that letter within 72 hours, but I staff it all out. Because the commanding officers, at first there was a little trepidation: Is this going to be a micromanagement tool? They figured it out. This was a barrier removal tool. Because they identify in these letters specific things that are holding them back from doing their job as the CO, and when I get it, I send it out to my staff, but not only do I send it out to the staff, sometimes I send it up to the OPNAV [Office of the Chief of Naval Operations] staff. I have sent it over to Tom Moore at NAVSEA [Naval Sea Systems Command] to get after issues.

The other thing that we have instituted—and that has been very effective, and the COs love that now.

The other thing that we have instituted was phase transition briefs. So, when a ship is coming out of the maintenance phase, the commanding officer actually comes over and briefs to me their

readiness to start the basic phase: This is what the basic phase looks like; here is my manpower concerns, I am missing these people.

And I have all my N-codes around, and I can look right at my N1, my personnel captain, and say: Go fix that right now for that CO.

Then we do that when they go into the SWATT [Surface Warfare Advanced Tactical Training] training and then when they go into COMPTUEX [Composite Training Unit Exercise], and then there is an actual formal brief that goes up to Admiral Aquilino or Admiral Grady from 2nd or 3rd Fleet on the readiness for the entire strike group to transition to the next phase. That is how we have gotten after it, sir.

Mr. GARAMENDI. General Rudder.

General RUDDER. We have been watching F-18 and TACAIR and all the readiness through all the airframes since 2017. So, you know, prior to this, this wasn't the first time that TACAIR and especially the F-18 community, the commanders, you know, raised their hands: I need, you know, X, Y, and Z.

And as an example, for the overseas elements and for the maintenance side of things was the manpower piece. We knew early on, back in 2016 and 2017, from some of the other events that occurred, that we needed to change the manpower policy or ask for an exception to manpower policy. That policy is such that, when you send an unaccompanied Marine to Okinawa or Iwakuni to work on airplanes, he is a 2-year Marine. That means he is only going to be in that organization for 2 years, and then he comes back. We asked for an exception to policy to make that a 3-year. At the end of 2 years, they get their designations, and when you have 30 lance corporals go in, to get their designations 2 years later, and they leave, and 30 new lance corporals come into that same organization. Even for our married Marines, accompanied Marines, if you will, it is a 3-year tour. So, you have this constant flux of manpower. So, we have been trying to get—you know, we changed the policy to 3 years, so now at least you get a year out of that Marine after he gets his designations in the maintenance department.

We have also—if you want to reenlist and you want to reenlist under the—what we call the readiness kicker for reenlistment, we will give you \$20,000 to stay in that organization for another 2 years. We have had some success in overseas billets on people extending on that. I can't speak to the exact risk management situations that all the commanders talked about, leading up to this event because that is what the CDA is looking at, but I can tell you that all the things, the policies and procedures, were in place to assess that risk before they did this mission.

Mr. GARAMENDI. I yield back.

Mr. COURTNEY. Thank you, Mr. Garamendi.

Mr. Lamborn.

Mr. LAMBORN. Okay. Let's see what hasn't been already covered here.

General Rudder, on the day of the December 2018 mishap, the pilot had flown 13.1 hours in the previous 90 days, which is 47 short of the 60 required to be current. And in your written testi-

mony, you said that there has been some increase, some 2 percent for F-18—F/A-18 pilots and 6 percent for F-35 pilot training flight hours. So that is good to have an improvement, but it seems like there is still room for a lot more improvement. Is the Marine Corps currently able to generate enough sorties to meet the flight hour currency requirement for pilots?

General RUDDER. Yeah. We were, you know, in 2016, you know, we were down around 9 hours per pilot, and then 2017, we were 13. Then we went up to 15.9, almost 16 in 2018. In 2019, we just kind of held state sitting around the 16, 17 mark. So, broadly speaking, our hours have come a long way. For this particular event, those 90 days preceding when you see that 90 days, that is where, I guess, the data suggests, data shows, that the readiness was not where it should have been when that squadron, and the hours were not where they should have been.

Mr. LAMBORN. Is that where Australia was involved?

General RUDDER. That is where the Australia event and trying to get back and typhoon season. Just a litany of things that happened in there.

Mr. LAMBORN. But, going forward, do we have the hours—the sorties to provide the requisite number of hours?

General RUDDER. Yeah. So in—I will speak broadly for the F-18, then I will kind of come back to what we are trying to do there—is for, in the F-18 community, a lot because of the MC80 effort, a lot because of what the naval enterprise has done for Super Hornets and Legacy Hornets and F-35, we were able to get to 80 percent seven different times in 2018, and we were able to fly those sorties and increase our mission-essential task completion rates out in the fleet and continue in a stride of combat operations and carrier operations and continued deployments.

So, the answer is we are not there yet. We are not satisfied by any means. For 242 proper—they are still in the crawl phase. I will tell you today they were 10 out of 12 airplanes, and they have been kind of looking pretty good lately. So, we are rebuilding that squadron if you will. And our endeavor is, at the end of this year, we are going to transition that squadron to an F-35 squadron. So we will—we will—we are currently flowing and at the end of this year, our goal is to have two F-35 squadrons in Iwakuni with the brand-new high-lot airplanes with a whole new refreshed crew, U.S.-trained, sent forward, and what III MEF is doing in the meantime is for their readiness or for their readiness contract, if you will, is their training exercises are going to be based upon readiness. And that will be the focal point, institutionalizing that, much like the carrier air wing does before they go on, and the Air Force does in some cases, for Red Flag and Northern Edge [exercises]. We got a lot of initiatives that are in the works.

Mr. LAMBORN. Okay. Thank you for explaining that.

And, Admiral, I have a question for you. And I know this is an older study. The DOD [Department of Defense] Inspector General [IG] released an assessment that focused on the records for a dozen destroyers from 2013 to 2018. But I guess the report just recently came out. And for the Optimized Fleet Response Plan, OFRP, they found that, quote, for 9 of the 12 destroyers, commanding officers reported training deficiencies such as the inability to be certified or

maintain proficiency in mission areas such as electronic warfare or undersea warfare. So, do you—and I know we have touched on training already, but to just go even further into this, do you agree with that assessment, and what changes will you be making in response to that?

Admiral BROWN. So, I do agree with that assessment because the DOD IG report looked at the same readiness metrics that the SECNAV [Secretary of the Navy] Readiness Review and the Comprehensive Review looked at, August of 2012, I think it was, until April of 2018. So, we had already started moving out with urgency. It was in January of 2018 that we stood up the RROC, the Readiness and Review Oversight Council. That is where we took the 117 recommendations. We pared it down to 111. There were a number that were duplicative. And then we moved out on those things.

So those training deficiencies that were identified in the DOD IG report were the same training deficiencies and problems identified, and we have already moved out to correct that. So, 2 years later now, I am not calling mission complete, but if you look at our enhancements and the initial results, it is very promising, and I believe we are continuing on the right path.

Mr. LAMBORN. Now, going forward, how confident are you that those changes that have been instituted will endure?

Admiral BROWN. Sir, we do not deploy ships that are not fully certified anymore. And if we chose to do that, that would—the four-star fleet commander would be the decider. I will give you an example of, there was a ship—and I won't go into great operational details—but a ship did not complete one portion of a certification, and it was a very—it was—they did all the training, but weather prevented the actual shooting of the gun, and we went to the four-star fleet commander and said: It is unlikely that that ship is going to have to do that mission set, and we recommend that the ship go on the patrol on time. Admiral Aquilino approved that. It had to go through him. We have institutionalized that, where before that decision was made at a much lower level, back in 2016 and 2017. That—and then we—and here is the plan of how we are going to get that final small certification done. That is a sea change in the way that we were doing business.

Mr. LAMBORN. Okay. Thank you. Mr. Chairman, I yield back.

Mr. COURTNEY. Great. Thank you, Admiral. That is the desired effect I think everyone was working towards. So, I appreciate that.

Mr. Langevin.

Mr. LANGEVIN. Thank you, Mr. Chairman, and I want to thank our witnesses for your testimony today. Both Mr. Garamendi and Mr. Lamborn touched on a lot of what I was going to bring up, but I want to be clear—and first of all, my thoughts and prayers are with the service members whose lives were lost and with their families. We owe it to them to make sure that we prevent these things from ever happening in the future.

I just want to be clear in that when there were deficiencies reported on the Defense Readiness Reporting System, it appears that the commanding officer of the Hornet squadron consistently mesaged deficiencies in training, manning, and maintenance. Yet they were still tasked to conduct missions that exceeded their capacity.

How is it that that happened, and are you confident that we are going to be able to fix this?

General RUDDER. Yes, Congressman. I think that is the—if I were to kind of capture the three lines of effort [LOEs] to be able to address that is for the tasking. One is now that the operational commanders all the way up look at the operational tasking and make sure that readiness is built into that. So, we don't have back-to-back exercises.

In some cases, because of what countries, everybody wants to work with—as the Admiral said, everyone wants to welcome the Marines and sailors out there, but we have to manage that and be selfish, if you will, to make sure that we are building in readiness, so that our crews can train for the high-end fight. That is LOE number one for III MEF right now.

LOE number two is the maintenance focus. One, get the right manpower out there. Make sure they have the right training. And then we have this new program that we put into place out there called a maintenance capacity model that gives—you put in the type of maintenance Marines that you have in a particular squadron, and out the other end it spits out what you can fly with that squadron within the realm of the amount of maintenance and qualifications and numbers of maintenance personnel you have on the flight line.

And then, finally, they put in kind of a standardization and—standardization and compliance model. What that really does is go back to the drawing board, do spot checks, and they have done it with every squadron in the Pacific right now on maintenance, safety, and operations to make sure that within naval aviation, the policies, the procedures, and all the things we hold dear to our heart, that typically are the ones that we skimp on in some cases to make the mission happy—are complied to in all cases. Those are the three LOEs that I am confident that the III MEF commanders put into place that is in effect today.

Mr. LANGEVIN. Well, we are going to be following this closely. Thank you. I yield back.

Mr. COURTNEY. Thank you, Mr. Langevin.

Mr. Wilson.

Mr. WILSON. Thank you, Mr. Chairman.

And Admiral Brown and General Rudder, thank you so much for your dedicated service to our country. We note your dedication and how much it means to all of us, your service.

With the tragic events of 2017 and 2018, which has spurred, of course, these hearings, gives us an opportunity to improve readiness for our world-class military. I sadly visited the USS *Fitzgerald* in Japan and saw where the sailors were tragically killed, and I appreciate your efforts to make sure that such a gruesome event never happens again.

And in line with that, General Rudder, in last year's committee report accompanying the NDAA, I included language on mitigating risks related to mid-air collisions and terrain crashes. The committee encouraged the Navy and Marine Corps to consider a collision awareness system that can leverage existing infrastructure and air combat maneuvering instrumentation systems that would

allow range training officers and pilots to receive notification if an imminent mid-air or terrain crash is assessed.

We also directed the Navy to analyze the cost and feasibility of building out such a collision awareness system on air combat maneuvering instrumentation, ACMI, equipment on combat aircraft. What are your thoughts on improved capabilities to avoid such aircraft mishaps and on leveraging ACMI equipment toward that end? General Rudder.

General RUDDER. Yeah, if I am thinking about the air-ground collision avoidance system that I think we were referencing in that report, for the F-35, we are writing it in. And for the F-18, we are writing it in. We did get some marks last year in those particular funding we put in for that, but we are reattacking it this year. But that is—and that is if you depart controlled flight with an airplane, the logic of that airplane will right you—will right that airplane to give you time to recover. Or if you are in a G-LOC [G-force induced loss of consciousness], if you are pulling Gs and you black out, it gives it logic to be able to do that.

On the other piece of that, for our V-22s, for CC-RAM [Common Configuration-Readiness and Modernization], much like we have a collision avoidance system in a KC-130, we are putting that in our V-22s as well as we run them through the retrofit line up in Boeing in Philadelphia.

Mr. WILSON. Well, I am glad to hear the effort is being made.

And, Admiral Brown, the National Defense Strategy relies on forward-deployed fleets. With regard to problems plaguing the navigational and radar systems aboard the USS *Fitzgerald* and *McCain*, I was deeply concerned about the vulnerabilities of these systems to jamming and interference from China. As we pivot toward a focus on great power competition, we know that China is investing in technologies that attack our cyber, navigational, and GPS [Global Position System] systems. How is the Navy protecting these systems from attack?

Admiral BROWN. Yes, sir. We have a very robust and sophisticated methodology to prevent the ships from being susceptible to cyberattacks. And primarily it is to ensure that the programs that you are operating have the correct security patches installed as designated by NAVWAR [Naval Information Warfare Systems Command], and they understand what the vulnerabilities are, they build those security patches, and as long as the ships do their job—and I track this at my level—we are then protected from cyberattacks from outside.

Mr. WILSON. And that is encouraging because the capabilities, as we see, of near-peer competitors around the world, we have got to be prepared. And, also, Admiral, inherent to fleet readiness is the friction between force generation and operations. In your testimony, you mentioned the Forward Deployed Naval Forces Japan units following a tiered Optimized Fleet Response Plan while implementing Strategic Readiness Review [SRR] and Comprehensive Review [CR] maintenance and training improvements. What is the greatest risk associated with these maintenance and training schedules, and what is the command doing to mitigate the risk?

Admiral BROWN. So, one of the results of the SRR and the CR is, we actually developed an OFRP Japan schedule that lays in

two—out of the 3-year period, lays in two significant maintenance periods. One of them is called a SIA, which is a ship incremental availability. It is kind of like a super CMAV, which is our continuous maintenance availabilities, and then there is a selective restricted availability that would last 3 to 6 months.

Based on—and those are now written into the ship schedule, where before operations would often trump the maintenance requirement, and that maintenance would keep getting deferred. So then, if you have a ship that has been over in the FDNF force for 10 or 12 years, and it is not getting the maintenance that it is required to do, it is really not a capable platform anymore. So, we have inculcated that into the schedules now.

Mr. WILSON. As a grateful military dad, I appreciate what you are doing for readiness and safety. Thank you very much.

Mr. COURTNEY. Thank you, Mr. Wilson.

Mr. Golden.

Mr. GOLDEN. Thank you, Mr. Chair.

General Rudder, I was going to—there has been a lot of questions asked of both of you already, and I appreciate it very much. I think it has been an important conversation. I did have a secondary question I was going to ask you about in light of the Commandant's Planning Guidance [CPG] and looking forward to hearing from you about how you think the Marine Corps Aviation is going to need to adapt to meet that guidance, but I think obviously out of respect for the importance of this subject, we could put that off until another day. But maybe we could schedule a date, just hear your thoughts on that. Maybe something the committee might be interested in as well.

But I thought, in light of the lessons learned that you have already shared, some of the steps that you shared with us, that have been taken to try and implement some of the fixes, just a straightforward question: How might you rate the current readiness of Marine All-Weather Fighter Attack Squadron 242 today?

General RUDDER. They are still not up to where they should be. And we have been taking this year to rebuild them, to work on the manpower, to work on the jets. I think when I was looking at them in the past few weeks and today, they were up around 80 percent, which is really good. So, it is good to see that. We are taking a lot of different steps to try to put material in the hands of the Marines. We have got another—we had a lot of visits out there. The maintenance capacity model that I talked about is in play, and we are trying to get them some more Marines out there to kind of get them to where they should be, so they can, you know, get back up on step. But we have still got a lot of work to do.

And back to your question, just a general comment on the Commandant CPG, on this subject in the Pacific is, he has put out a lot of direction and guidance in forms of written documentation out to the fleet, and he is trying to change the mind-set of the United States Marine Corps that III MEF is where—III MEF, the Pacific is where we need to send our best and brightest, and III MEF is his focus. When he gets up in the morning, he thinks about that theater and how we can get the right capabilities out there with the right readiness.

Mr. GOLDEN. Thank you very much for your efforts and the frank response and, again, look forward to finding time to talk more about that. I had no doubt that you would find a way to work that into your response a little bit. So thank you, sir.

Mr. COURTNEY. Great. Thank you, Mr. Golden.

Mr. Conaway.

Mr. CONAWAY. [Off mic] The NDAA 2019, 2019 NDAA required specialists, ships, [off mic] and can you tell me how many of those have been planned and executed? [Off mic]

Admiral BROWN. Sir, I don't know the exact number. I know that since that NDAA came out, all the INSURVs [Board of Inspection and Survey inspections] that we have done have been short notice or minimal notice INSURVs. I will have to take that for the record and get you the exact number. But since that—or since that law came out, all our INSURVs are short notice or minimal notice.

[The information referred to can be found in the Appendix on page 71.]

Mr. CONAWAY. [Off mic] General Rudder, I understand refueling to be a rather complicated issue, and it seems odd to me—I know you can't talk about specifics on the accident—that a forward-deployed “fight tonight” unit that you have a pilot who only had one daytime refueling trying to do it at night when the requirement is six daytime. So, the evaluation, where should that training be done, refueling? Should it be done forward deployed, or should it be done as part of normal aviation training? Again, I am a novice at this when it comes to understanding why we have a pilot that inexperienced doing something like that at night.

General RUDDER. Yeah. So, as we look at, you know, the aerial refueling history of that particular pilot, as the command investigation brings out, is that, you know, the first time he tanked at night was over the 365-day mark, and then the first time he did the day was in that same area.

But throughout the year of that year leading up to December, he had tanked day 11 times, and inside those 11 times I don't have the numbers of plugs he did on and off the plug, but he was certainly day qualified, per all the indications that he had done. And then his last tanking was just a few weeks before he did the night tanking.

So, if you look—and then he flew night, he flew a night mission. He was not very—right, again, proficiency. I am not going to try to dance around this proficiency thing. Qualification, yes. Proficient, not where we would like a Marine aviator to be. But in that environment, with the lead as a tanker instructor, he was qualified to go up there and tank. And during this, he actually successfully tanked and would have, you know—and got off there. It is the post tanking is where we saw the issue.

Mr. CONAWAY. Well, I might have misunderstood the briefing document. It read as if that was his very first refueling ever, and that was not the case. He had done that earlier. Okay, that makes sense.

You had mentioned changing from a 2-year to 3-year unaccompanied tour, but you also talked about married maintenance guys. Would you have the stress on the families that moving from a 2 to 3? They would have an accompanied tour in Japan with the

maintenance guys versus a 2-year unaccompanied? Was the unaccompanied/accompanied simply the fact that the unaccompanied doesn't have a spouse that would move?

General RUDDER. That is correct. I mean, by the joint travel regulations, you kind of fit into those policy bins. But now with unaccompanied, without spouse, first-termers, where we used to do 2 years, we are now doing 3 years with those particular ones.

Mr. CONAWAY. This would be a young maintenance operator who has a spouse and they wouldn't go? I mean, there is stress on the families that we are concerned about, obviously. Three years away from home versus 2 years away from home is a different deal. Is that given a consideration, the stress on marriages that would occur?

General RUDDER. Yeah. Well, if you are accompanied with spouse, with dog, with kids, you are going for 3 years, yeah. That has been the standard. That hasn't changed. But, you know, back to your point, I think it is stressful. You know, to forward deploy Navy, Marine, Army, and Air Force, and, you know, with my counterparts, with the manpower models that we do, we do our moving, our summer move period and off-cycle move period, you are picking up the dog, the cat, the kids, the family, and you are being sent to Japan to buy cars, to get the license, and go into this environment for 3 years.

Now, I will tell you that some people go kicking and screaming, and when they get there, they don't want to leave. But there is stress on the families. There is stress on the force when you put a family forward on a regular basis. And this churns. I mean, as we speak today, there is somebody picking up and going to Japan or going to Korea or going to other places around the world.

So, I would say that, for the families, God bless them all, because our families do a very good job and our spouses and the kids and the dog. They are troopers.

Mr. CONAWAY. I appreciate that.

And, Admiral, if you would get us the information on the specifics of those no-notice inspections.

Admiral BROWN. Yes.

Mr. CONAWAY. Thank you, Chairman.

Mr. COURTNEY. Thank you, Mr. Conaway.

Mrs. Luria.

Mrs. LURIA. Thank you.

And, Admiral Brown, I wanted to start out by following up with a similar question that I asked Admiral Aquilino last year when we were talking about a similar topic. And since you gave Mr. Wittman a grade earlier on the manning, fit, and fill, I was wondering if you could give us a letter grade on where you think we are with the combat effectiveness of the surface Navy.

Admiral BROWN. I will give us an A right now in the combat effectiveness. You know, we not only went after the recommendations that were in the SRR and the CR, but we really went after making sure we were providing the right training at the right time and building that combat effectiveness.

Mrs. LURIA. So, I will just quote. In 2018, a comprehensive test of seamanship skills of 164 junior surface warfare officers was conducted, and you said the results were sobering. Of the 164 officers

assessed, only 27 completed with no concerns, 108 with some, 29 had significant concerns, and that was 18 months ago.

In February 2019, in the 1-year report from the Readiness Council, the concluding paragraph said: "One year in, it would be naive to believe we are close to completing work. However, due to the efforts of many professionals around the fleet, we are currently safe to operate and a more effective Navy than we were a year ago."

Does that assessment in February of 2019 of safe to operate align with the description that you just gave of an A?

Admiral BROWN. Yes, ma'am, I believe it does. And one of the things that we did right off the bat is we did ready-for-sea assessments primarily in the FDNF Japan forces. That program was so good, we took it to the entire fleet. And then the ready-for-sea assessment was so good we actually wrote it into the Surface Force Training and Readiness Manual.

So, the ships, the maritime warfare training that we are giving, the navigation seamanship training changes that we have made have had significantly positive impacts, I believe, into the fleet.

Mrs. LURIA. So, seamanship and navigation is one area. I read recently that at the SNA [Surface Navy Association] Symposium in another article here from U.S. Naval Institute News says that you are doing a review to look closely at that skills training provided to officers for combat effectiveness and warfighting.

Admiral BROWN. That is correct.

Mrs. LURIA. Can you comment on that?

Admiral BROWN. So the rigor that we put behind navigation, seamanship, and ship handling was so good, in my opinion, that we needed to bring it to the maritime warfare training to ensure that we were preparing our officers, whether they were ensigns or department heads all the way up to our warfare commanders, that we actually had the maritime warfare training correct for the future fight.

Rear Admiral Scott Robinson, who is the commander of the Surface and Mine Warfare Development Center, is leading that study for me. So, we are putting the same rigor behind that training that we put behind the navigation and seamanship training.

Mrs. LURIA. So, you have talked a lot about the renewed focus on specialty officer training, and I think I read that there are 361 additional hours of training that will eventually be available for these officers. How much of that training is being conducted at sea?

Admiral BROWN. So, the majority of that training is being conducted in our state-of-the-art navigation and seamanship training facilities.

Mrs. LURIA. And in Norfolk, Virginia, that facility will come online in fiscal year—

Admiral BROWN. So, I have a navigation and seamanship trainer that is already there. We have updated that to provide bridge and CIC [combat information center] integration training.

Mrs. LURIA. And does that apply to all baselines and classes of ships?

Admiral BROWN. Yes, it does. So, you can load in whatever ship that you are serving on into that trainer. So, if you are serving on an LPD [amphibious transport dock], you have an LPD that is loaded into the trainer.

Mrs. LURIA. So that would assume that every LPD or every DDG [guided-missile destroyer] or every cruiser had the same configuration on their bridge.

Admiral BROWN. Well, but see, for the officer training, as you remember, the officers give orders. And so, what we are really training the officers in how to stand the junior officer of the deck or the officer of the deck watch. We do——

Mrs. LURIA. That includes using a radar scope.

Admiral BROWN. Absolutely. So, the radar emulators, if you look at that, it is an ARPA [Automatic Radar Plotting Aid] and it is representative of the ARPA that are on our surface ships. The SPS-73 [type of ARPA], for example, is a——

Mrs. LURIA. That same baseline exists across all ships that people are being trained on, because if I recall, going back to the recommendations from these reports, is that one of the things that has been problematic is there is not consistency across——

Admiral BROWN. Right.

Mrs. LURIA [continuing]. Single classes of ships for that type of equipment. You get an operator who comes in who may have been familiar with a similar but not the same, and you get this inconsistency in training. So how are we addressing that?

Admiral BROWN. We are actually addressing that. For example, by the end of this year, every ship will be operating on VMS [Voyage Management System] 9.3 or 9.4. That is a significant change. The variances between 9.3 and 9.4 is really just now the operating system. One is operating on Windows 10. The other one is operating on Windows 7 or XP. So that is a significant change, where throughout the entire fleet, we had 9.0, 9.1, 9.1.2.

The other thing is we put on a tertiary radar, a commercial off-the-shelf radar. So, every single ship has the exact same commercial off-the-shelf radar in their pilot house, where before ship A might have a Furuno, ship B might have a Raytheon.

So, although, you know, a pilot house on a DDG would look different than a pilot house on a cruiser, what you really want to have is the same similar systems so that you are not relearning the navigation system.

Mrs. LURIA. I know that we are out of time here and, hopefully, we will have a second round. Does that apply to steering systems as well?

Admiral BROWN. Well, within the class of ship, it does. So, we are upgrading all the DDGs, and all those DDGs will have the same integrated bridge navigation system as they get through their midlife upgrade.

Mr. COURTNEY. Great. Thank you. We will, hopefully, get another round.

Mr. Scott.

Mr. SCOTT. Thank you, Mr. Chairman.

General, I think it was Congressman Golden that asked you about what the current status was of VMFA-242, and I couldn't hear the answer on the percentage. What percent did you assess them at?

General RUDDER. For the readiness today, there were 10 out of 12 up jets, which is pretty good. Their manpower, they are still a few short of some qualifications that we are working on right now.

But if I look at the manpower, they are getting back to where they should be as a normal squadron.

Where we still need some work to do is make sure that we can get to where they can train to their mission-essential task list for an F-18 squadron, which includes, you know, eight of the missions, certainly at least 70 percent of those missions to get them into what we would call a T2 [readiness rating] environment.

Mr. SCOTT. Okay. But you gave him a specific number of 70 percent or 80 percent. I just couldn't hear exactly what number.

General RUDDER. Yeah. They were at an 80 percent.

Mr. SCOTT. Eighty percent, okay. Thank you.

I want to read something to you. I had this marked as well. But in our notes, it says that the pilot did not have the requisite six daytime contacts with the fuel drogue before performing night refueling. He had only performed one daytime contact. And you said that is not accurate, he had actually 11 contacts.

General RUDDER. So, what the investigation focused on is his initial nighttime X. His initial nighttime X was 517 days before this mission.

Mr. SCOTT. Okay.

General RUDDER. And on that, it was said in his qualification that he only had one plug, where the F-18 T&R [training and readiness] says you are supposed to have six. Now, depending upon where you go, sometimes your instructor goes: Hey, that is the best plug I have ever seen; you are qualified.

In this case, that is what he did, you know, over 500 days ago before that.

So, if you take that, because that plug was out of the 365-day window—you have to be inside a year window—it really is interesting, but, again, if we look at the qualification required for him to go up and do this plug a year later, he had the requisite day plugs—like I say, 11 times on tankers—before he went back into the night environment, so with an instructor lead. So, technically, he was qualified to go ahead and plug on that airplane at night.

Mr. SCOTT. So, the 13.1 hours that he had in the last 90 days, is that consistent with that unit? Did all of the pilots have around the same flight time?

Admiral BROWN. Yeah. I think he was probably at the low end of that, but they were all around that same area. I think because of the Australian piece, those 90 days in there, that unit was really—but there are a couple, a couple other ones that were lower and a couple that were higher.

Mr. SCOTT. Okay. So, the commanding officer would have been a lieutenant colonel?

General RUDDER. Yes.

Mr. SCOTT. Okay. And just reading through the notes here, it says that inoperative locator beacons in the ejection seat. And so, as I read through this, it looks like he had requested them from the supply chain, had not been able to get the locator beacons, and so he bought a commercial version of it and then was ordered not to use those. Is that accurate?

General RUDDER. There are two things there. One is the locator beacon and the CSEL [Combat Survivor/Evader Locator] radio that are in the normal kit for TACAIR and really the CSELS for all

aviation, but for the locator beacon that is referenced as not being operable, it was operable, but there is a longstanding complaint when you eject and you get in a chute, you release your seat pan. In the seat pan is where your URT-140 [type of CSEL] is. That begins emitting at that particular time. The problem with that is, when you hit the water, the procedure is—and it was executed by the backseater in this case—is to get in your raft—I will get to the CSEL radio in a minute—and then pull your URT-140 out of the water. It does not emit when it is underwater, and that has been the complaint that people have given.

Mr. SCOTT. If I may, it says: An inoperative location beacon inside the ejection seat, this had previously been identified. The commanding officer had purchased civilian beacons for the air crew, but was ordered to stop using them during the inspection just weeks ago.

Did the Marine Corps supply them with non-civilian beacons to replace the ones that were inoperative?

General RUDDER. The one that is in the seat, the URT-140, that beacon itself is T-6, T-45, all of the F-18s, Harrier; that is a standard NAVAIR [Naval Air Systems Command]-approved beacon. So that is in the ejection seat itself.

So now the beacon you are talking about, there was a purchase of kind of a fisherman's or a camper beacon off the shelf, a COTS [commercial off-the-shelf] solution, if you will, off-the-shelf system that was in that particular organization. And that still had to be turned on. But those were, in fact, taken away during an inspection, during one of their maintenance inspections, as unauthorized gear.

Mr. SCOTT. My time has expired. My question is, if I may, Mr. Chairman, it seems that the commanding officer was expressing concerns about the readiness, and if the Marine Corps is not getting the commanding officer the parts that he needs to bring his readiness up, I am not sure that taking it out on the commanding officer is necessarily where the blame needs to be laid.

But I certainly respect both of you, and thank you for your time.

Mr. COURTNEY. Thank you, Mr. Scott. And I think, again, that is one of those questions that the command investigation, we are going to be looking at when the time comes.

Mr. Kim.

Mr. KIM. Hi. Thank you so much for coming. This question is for Admiral Brown. So, as I was going through some of the details about the incidents, you know, it became clear that, you know, not just the concerns about the personnel on board, but just about mission-critical equipment that was on board.

For instance, I was learning about the SPY-1 radar array, that there was some damage done to that. Something like that could potentially render these types of vessels, you know, mission kill. The concern that was kind of raised was it looked like we didn't necessarily have spares on hand, and that some of these had to be re-commissioned from sort of new vessels and others to be able to backfill that.

So, I guess I am a little concerned about the shortage that I was learning about and wanted to kind of hear your thoughts on what

the Navy's plans are with regards to these shortages like with SPY-1 radars.

Admiral BROWN. Yes, sir. You bring up a really valid point. A very expensive piece of equipment, a SPY-1 radar array, complicated to make and very expensive. So, we don't necessarily have a large, you know, off-the-shelf spare program for something like that.

So, what we did in the *Fitzgerald* case, because her array was damaged, is we took it from a new construction ship. And then the organization is able to supply that radar to the new construction ship at the right time when that ship needs that array. And that is how we handled that particular repair.

Mr. KIM. Now, my understanding is, though, that, you know, if you don't have these spares and if we are moving forward, and there are additional problems going forward, whether—hopefully, not these types of incidents but other types of damage that can be done, is that something that could render a ship decommissioned or mission kill if there is not a spare available?

Admiral BROWN. For that particular array, it could, but there are four arrays on a ship, and there are things that you can do. I mean, sometimes there are casualties that occur in the natural operation of the ship that could potentially bring a portion of the array down, and we have tactics, techniques, and procedures to combat that.

Mr. KIM. Okay.

Admiral BROWN. And where we are still able to fight the ship.

Mr. KIM. Sure. So, from what I gather from what you have said so far, is there sort of a plan in place to have sort of battle spares for something like a SPY-1, or is that now in the works right now?

Admiral BROWN. I would have to—I am going to have to take that for the record, because I am going to have to go back to the program office and actually get the data on what their plan is. I don't have that information off the top of my head.

[The information referred to can be found in the Appendix on page 71.]

Mr. KIM. We will work with you to get that. I appreciate your thoughts today. Thank you so much.

I yield back.

Mr. COURTNEY. Thank you, Mr. Kim.

Mr. Bergman.

Mr. BERGMAN. Thank you, Mr. Chairman.

Thanks to both of you for being here.

And, Admiral Brown, it was noted in a 2017 GAO report that crew size reductions were contributing to readiness and safety issues. In your testimony on page 5, you note that there are now significantly more sailors on ships than during that time. You know, it seems like—wearing an old hat here, it seems like for decades we have been trying to reduce the crew complement on ships to make it more warfighting and not have as many sailors aboard, you know, if we had overkill.

How has this increase now in the manning level affected the operations from the logistics support standpoint, and how does that impact our growth in seabasing?

Admiral BROWN. Well, as you can imagine, if there are more people on board the ship to do more work, that means there is less stress on the individual sailor to do that type of work. For example, on a DDG, there are 25 more sailors on board a DDG today than there were in 2012. And by 2023, there will be a total increase of 45 sailors.

So, we have a command called NAVMAC [Navy Manpower Analysis Center] that does the studies on, hey, what is the right manning that is required on the ship. One of the things that we did differently this time when we looked at DDG manning is we actually looked at the in-port workload and how did that drive the manning. Actually, the in-port workload is what drove the increase from 8 sailors, an additional 8 sailors that we put on in 2019 that is going to now bring us up to an additional 45 sailors by 2023.

The other thing that we did when they did the work study is, out of a standard workweek, we reduced the available hours for work from 70 to 67. So that then in itself feeds into the equation that determines the required number of sailors on a ship.

Mr. BERGMAN. Are we doing anything with simulation, you know, crew coordination and all that, to see how the crew functioning is, you know, using simulation as opposed to, you know, actual ship time?

Admiral BROWN. Well, we actually did—no, we didn't do—we are not doing simulation for crew work. What we did do, though, there was a study that was run out of Naval Postgraduate School where we took one DDG and we used that as the control ship, and then we took another DDG, and during the basic phase of training, we manned them up to a much higher level. And what we wanted to see, was there a difference in performance between the two ships.

There really wasn't a marked difference in the performance of the two ships, but, as you can expect, if one ship has more sailors, those sailors said: Well, we were less tired than the other sailors.

It was really kind of a subjective thing.

I am going to go—I am going to redo that study. There were some control issues, and I wasn't really happy with the way that we did certain things. And a schedule got delayed, and we didn't adjust for that schedule delay. So, I think that there might be something there.

Mr. BERGMAN. Okay, thank you.

General Rudder, you know, as we bring new aircraft platforms into the fleet, are the maintenance challenges—you know, we always talk about going from legacy systems to the next-gen systems and that how do we ensure that our maintainers are ready to go, know what they are doing.

You talked before about the first-termers, getting them up to speed with their certifications, et cetera, et cetera. And as an example, you know, for the CH-53K we have got coming online here in a couple years, can you describe how that kind of a platform was designed with readiness and safety in mind?

Are there features in making it easier to maintain, more survivable, overall more efficient, maybe overall—again, going back to the simulation piece and training, how we are doing bringing new platforms online, using the K as an example?

General RUDDER. The K is a very interesting example because it was designed from the ground up with the maintainer in mind so that, in the field or on a ship, they can replace and work on components, and they were in the area. So, you know, one of the things we did to make sure that that continues to be furthered is what we would call the log [logistics] demo.

So, as they are testing the developmental test work at Pax [Paxtuxent] River and the Marines are kind of assessing and watching what is going on there, we have a 53-K sitting in a hangar down in New River. And that log demo, all those Marines are doing is taking it apart and putting it back together and modifying the manuals as they go along to make sure that, if there are little things that need to happen, a latch or an access panel or something of that nature, it gets put in. So, in that regard to the maintenance side, it is being designed to be maintainer-friendly, Marine-friendly, to be worked in the field.

For survivability, we have probably shot more ordnance at this airplane and the components than probably any other airplane from NAVAIR. And right now, at the highest survivability rates, as far as being able to take a caliber round of various different types of ordnance, this aircraft has fared very well. And if you look at it, you know, the size of it, it can take quite an extensive amount of damage before it has to land or it sustains damage that makes it unflyable. So, we are pretty happy with the way that aspect of it is going.

Mr. BERGMAN. Thank you.

Mr. Chairman, I yield back.

Mr. COURTNEY. Thank you, Mr. Bergman.

Mr. Vela.

Mr. VELA. Yes. Admiral Brown, the *Fitzgerald* incident hit home for the people that I represent because back in the summer of 2017, I attended Gunner Mate 1st Class Noe Hernandez's funeral, and shortly thereafter visited Yokosuka, where both the *Fitzgerald* and *McCain* were, and visited with the rescue crew that was there during the *Fitzgerald* incident. Shortly after his death, his wife said this: When the hero dies, nobody ever remembers him. The families remember. They pay the price.

So let me start by asking, now that you have been at the helm of Surface Forces for nearly 2 years, what can we tell Mrs. Hernandez today that what has been done in 2019 to ensure that ships can effectively balance their risks between readiness and operating safely at sea?

Admiral BROWN. Sir, that is a great question. And the answer to that is we put risk management at the right level now. We had junior officers assuming risk that really wasn't their risk to assume. It is really the fleet commander's risk. And so we have inculcated the processes.

We have memorialized the processes through instructions and directives, and we have created the firebreaks between force generation and force employment. But if there is any risk that must be taken, that risk now resides at the right place. And that is how I believe, going forward, is our best effort to prevent a *John S. McCain* or a *USS Fitzgerald* event happening in the future.

Mr. VELA. In 2019, how many ships went to sea with certification waivers?

Admiral BROWN. None.

Mr. VELA. And how many ships did not go to sea on time because they were not ready?

Admiral BROWN. There were a handful that we delayed, whether it was because of a maintenance issue where they didn't have the proper maintenance equipment redundancy or because they were going to get shorted in training.

So, for example, I will use the DDG that was in the yards in Hawaii. We are challenged with the workforce in Hawaii, and we had three major CNO [Chief of Naval Operations] Availabilities happening at the same time. Perhaps, you know, 5 or 6 years ago, we would have pushed that ship out and shortened that ship's basic phase of training cycle and kind of put that on the backs of the crew. We did not do that this time. We shifted that ship to a different strike group.

That is an example of how we are not doing business the old ways and that we are actually delaying ships from performing missions if they are not ready to perform those missions.

Mr. VELA. So, what has been done to mitigate the administrative burden placed on ships at sea so that they can focus on operating at sea safely?

Admiral BROWN. So, as part of the SRR, I was tasked or the Navy was tasked to look at the various inspection certifications and assist visits that we do on ships. I not only took part in that, I led that for the surface force from my headquarters.

We had an overall reduction of 30 percent of intrusive inspection, certification, and assist visits, for the most part that were duplicative in nature. In other words, the ship went through that same inspection 3 months earlier under somebody else's command authority and then was having the same stuff looked at. That produced a lot of time savings that we were then able to give back to the CO of the ship to focus on other things.

So there has been an across the board, from a DDG or CG [guided-missile cruiser], LSD [landing ship, dock], LPD, a 30 percent reduction. We inculcated that in the rewrite of the Surface Force Readiness Manual to the Surface Force Training and Readiness Manual. So now that is memorialized, and we don't allow that mission growth. Although I led that, that was approved by the two fleet commanders at their fleet review board.

Mr. VELA. So, in your view, what value has the Naval Surface Group Western Pacific provided, and how have you attempted to minimize the burdensome reporting requirements?

Admiral BROWN. So, a huge impact on the readiness of our forward-deployed forces. Naval Surface Group Western Pacific is my executive agent in Japan, and I have empowered that commanding officer, who is a sequential major commander, so he is a post major command captain, I have empowered him to make decisions. And because of the tyranny of the international dateline and time zones, he does not have to call home to me.

He knows what my priorities are, he knows what my standards are, and he is able to make decisions. He is in an ADCON role, administrative control role. He is not in the operational chain of com-

mand, but his voice is very loud as he is working with DESRON 15 [Destroyer Squadron 15] and CTF 70 [Commander, Task Force 70] in the work-up of their ships. His voice is very loud, because it has got my voice behind it.

Mr. VELA. Thank you, Admiral.

Mr. COURTNEY. Thank you, Mr. Vela.

Mr. Gallagher.

Mr. GALLAGHER. Thank you, gentlemen, for being here.

Lieutenant General Rudder, just to follow up on some questions from my colleagues, so I thought the issue with the night refueling qualification was not that the captain in this case hadn't performed—well, that he had not performed night refueling qualifications, but there was a glitch in the system that showed that he had, correct?

General RUDDER. That is correct.

Mr. GALLAGHER. And has that glitch been fixed? And I apologize if I missed this earlier.

General RUDDER. No, you didn't, and thank you for the question. The glitch was as a result of discovering the system was what we call chaining events. That means it was saying, by doing these particular numbers in a T&R syllabus, it was saying that you are qualified to do a higher level number further down the syllabus, if that makes any sense.

We took that out in 2016 after kind of a like mishap with tanking, and they fixed it, but because of a technical issue with that, the icon that represents chaining was not put into the right area. So, if you were to have that on the schedule, it was still chaining daytime events saying you are qualified for nighttime events.

Mr. GALLAGHER. Which is a bad thing. So, can we say now that we no longer have that problem with chaining and icon?

General RUDDER. We did. We went back to our training command, and they reviewed all the icons within all the T&Rs for all the airplanes to do that.

Mr. GALLAGHER. So, you feel like we fixed that basic glitch?

General RUDDER. We have fixed that basic—

Mr. GALLAGHER. And on the location beacon, so you are saying that the problem isn't that the beacons don't work. It is that they don't work underwater. So, in Captain Smith's case, he was able to take his radio, get it onto the raft and transmit, but in Captain Resilard's case, he could not, being physically impaired, and, therefore, his location beacon was insufficient to help him get rescued, correct?

General RUDDER. His location beacon, the URT-140, was underwater and that is the known deficiency. It does not transmit through the water to provide that.

Mr. GALLAGHER. Well, in light of that deficiency, why not support a COTS alternative for a location beacon, even though it is not SOP [standard operating procedure] right now?

General RUDDER. Yeah. In preparing for this, we went through all the different COTS solutions that are out there and what the program office, what they have authorized and not authorized. And I can't give you a great answer on that.

I know that we just approved, NAVAIR has just approved the use of a beacon, a physical strobe beacon that is saltwater-acti-

vated, and they are being fielded out there right now. So whether you are incapacitated or you can't do the functions it requires—because you have the beacon that is underneath your seat, but you also have your CSEL radio, which allows you to broadcast emergency messages as well. But on top of that now, when you go in the water you have a salt-activated beacon, which at least gives you a strobe, and I think that would have helped.

Mr. GALLAGHER. So, would it be fair to say we are still in the process of making a change that would correct the beacon problem?

General RUDDER. We are. They are still looking at different antennas. And I will offer, one of the things you will hear is that there are some airframes that have a beacon that works when it goes in the water. The F-35, actually, when we designed that seat, when that beacon goes in the water actually floats for a number of minutes to transmit. It is a very tighter ability to transmit a grid or location of the downed survivor to the joint recovery centers.

Mr. GALLAGHER. Okay. So, the initial probe that I believe was led by Colonel Schoolfield, if I am saying that name correctly, put heavy blame on the command climate in the squadron. I think the term “gross unprofessionalism” was used. But it also drew what I think subsequently we have come to believe is a spurious correlation between that and Ambien use. In one case, there was a reference to a case of adultery that had actually nothing to do with the crash. But the report remains the only thing out there publicly.

Are we going to correct the record if, indeed, there were inaccuracies or spurious correlations in that report?

General RUDDER. I think that is what the Consolidated Disposition Authority is. So, when we look at all the facts surrounding this particular event, much like they did with the *McCain* event, then, you know, Admiral Richardson and Admiral Moran, they pulled that up. So, when you say “correct,” I can't say for sure what is going to be the final disposition, but to your point, all that is being pulled up. And, again, as we speak, in a locked room at a destination not to be named, they are looking at all those facts that you are bringing up.

Mr. GALLAGHER. And I am running out of time. I will get to it in the second round, hopefully. I think we have to weigh this. I know there are reasons for why we keep the safety review or the consolidated review confidential to encourage candor, but I wonder if we shouldn't consider publishing a lot of it and weighing the needs of candor versus the needs or the duty we have to the families to really get this out in the open, as painful as that may be. So, I just throw that out there.

Mr. COURTNEY. Thank you, Mr. Gallagher. I mean, I can say that I am sure I speak for Mr. Garamendi, that these joint hearings are going to continue when that additional report is released, and we are going to look exactly at the questions that you identified.

So, I think we have done the first round. We still have some members that are here. I am going to ask one question, and then I yield in the same order that we went through earlier.

Admiral Brown, when we, you know, did the 2018 National Defense Authorization Act codification of the collision repair, you know, language recommendations, one of the things that I know

Admiral Richardson himself sort of wrestled with was whether maybe it was time to just sort of get rid of the Inouye Amendment once and for all and just eliminate that carveout for the Pacific in terms of, you know, who decides to task a ship versus who decides in terms of whether a ship is ready.

Last year I asked Admirals Aquilino and Grady to explain how readiness for deployment would be judged uniformly across the Pacific and Atlantic Fleet. They described how, under the new policies and procedures, there would be more of a joint effort to determine the readiness of ships to deploy and a willingness to halt the processes if there were shortfalls.

So, from your perspective, has that continued to occur in the years since, and are you confident that there is both a unified standard across the fleet and a willingness to raise the flag if manning, training, and equipment readiness is not where it should be? Because, again, the committee sort of ended up in sort of a neutral position. It didn't sort of, you know, codify the Inouye Amendment, but it didn't repeal it either, and it sort of left it sort of in the hands of the Navy for now. And, again, I think for a lot of us, it was kind of a short leash, you know, that we were sort of kind of settled on when we did the final disposition of the legislation.

Admiral BROWN. So, I am very confident that the policies and the procedures are in place, that we are operating both fleets to one standard. There is only one standard. But we allow the two commanders to enforce that standard and ensure those standards are met for their fleets.

The example that I like to use is, even if we go back to World War II, you know Admiral Nimitz spent the majority of his time on readiness. He allowed a number of fleet commanders, Spruance and Halsey, to actually fight the war and do the tactics, but he spent most of his energy on building readiness.

I think that is important for a fleet commander to have that capability to do. We have one Navy and we have one fight, and the standards are the same whether you are deploying from the east coast in a strike group or deploying from the west coast in a strike group. You are going to deploy at 92/95 fit/fill. You are going to deploy fully certified. And me and my counterpart are driving material readiness. The goal is to deploy CASREP [casualty report]-free, but really what we are getting after is we don't leave any redundancy on the pier.

The Strike Group 4 and Strike Group 15, who are the training strike groups that work up the carrier strike groups, they operate under the same procedures. They are always trading best practices, lessons learned. These are the things that we are seeing on the east coast. These are the things that we are seeing on the west coast.

More importantly, we are bringing that training regimen to FDNF. We have now done one advanced phase of training, SWAT, for FDNF ships. I am getting ready to do the next advanced phase of training. We had not done that before in the FDNF world. So, I am very confident that we know what the standard is. It is the same standard between the two coasts. We are training and meeting that standard.

Mr. COURTNEY. Mr. Garamendi. I am sorry, I guess we go to Mr. Gallagher since no other Republican is here, and then we will come back to you. That is our committee rules.

Mr. GALLAGHER. Are you going to hold that against me? It is rare that I get an opportunity like this.

So just to follow up, Lieutenant General Rudder—

Mr. COURTNEY. You get bonus points for staying.

Mr. GALLAGHER. I have a punch card. I get a free coffee after 10.

So, another one of the issues was that the pilots spent so much time in the water without rescue happening because we have an agreement with Japanese forces, but they are only available to help when they are actively training. And in this case, they weren't actively training, and so it took a while before we could get our allies to help us out and find the two downed pilots.

Has that glitch, for lack of a better term, been fixed? Have we had any discussions with our Japanese partners to have a better SOP for how do we get our guys in the event of a terrible accident like this?

General RUDDER. Yeah. They have had, you know, several tabletop exercises. They have got now the procedures set up to be able to interact with the Japanese counterparts. The Japanese, quite honestly, are very good at doing this, but the coordination that we had with them was not as effective as it should have been. The ability to pick up the phone and call and coordinate with the right person to do that.

The two different examples of that—and you are right, we had a pilot that was in the water way too long for various reasons. The pilot that was picked up, you are right, they were scheduled—they were on standby to launch in 2 hours, and they did that. And they sortied a bunch of aircraft and ships to do that, and 4 hours later, they picked up the survivor, the backseater. He was able to get in his raft and get his radio on and do all the things that we teach in water survival.

On the second note, I think the ability with that sea state and being where it is was just challenging for them. So, I think the coordination we have with the Japanese right now—and they are very proud of their sea—stellar efforts. I will offer that. I can't pass up an opportunity to thank our Japanese counterparts for what they do and how many people they put out to sea to try to find our pilots and survivor, but we have managed that coordination, and we have got that much more. So, now, on a regular basis, the First Marine Air Wing is doing coordination exercises with their Japanese counterparts.

Mr. GALLAGHER. Again, no one is blaming the Japanese. I think, if anything, over the last 3 years in particular, we have had a deepening partnership with them. I just think if, indeed, the status quo is still that they are only available to help if their forces are actively training, we need contingency plans for should something like this happen when they are not actively training.

Will the Consolidated Board ask the question why there was a week of around-the-clock flights ordered so soon after the President quite publicly decided to cancel training exercises in light of his attempted rapprochement with the North Korean regime?

General RUDDER. Yes, Congressman, they will explore that.

Mr. GALLAGHER. Okay. I guess the question to both of you as we kind of zoom out from the details of these incidents, I mean, in your opinion, based on everything the Navy has tried to do in the last few years, everything the Marine Corps is trying to do, do you think we are—and specifically our Marines and our sailors in INDOPACOM [United States Indo-Pacific Command], are we ready to fight tonight?

Admiral BROWN. Yes, sir.

General RUDDER. We are. I mean, fighting that particular fight, depending upon who you are talking about, has different personalities involved as far as the personality of that particular fight, but the training that we are conducting, the things that we are procuring, the readiness for our surface fleet and, quite honestly, looking at, you know, where the Army and Air Force and Marines and Navy and the coordination that is going on in PACOM right now and how we do that as an integrated fight is the best I have ever seen.

Mr. GALLAGHER. Well, thank you, gentlemen, for your candor, and I yield my extra minute to Mr. Garamendi, if he would like it.

Mr. GARAMENDI. I yield my time to Mrs. Luria.

Mrs. LURIA. Thank you, Mr. Garamendi.

So, Admiral Brown, as the commander of Naval Surface Forces, would you say that you are responsible for surface force training and readiness?

Admiral BROWN. Yes, ma'am.

Mrs. LURIA. Okay. So just a few yes/no questions. Does Surface Warfare Officer School Command work for you?

Admiral BROWN. No, they do not.

Mrs. LURIA. Does the Navy's N1 that controls manning work for you?

Admiral BROWN. No, he does not.

Mrs. LURIA. Do you write the personnel qualification standards [PQS] for watchstanders?

Admiral BROWN. Yes, I do, through SWOS [Surface Warfare Officers School].

Mrs. LURIA. Okay. And do you select surface commanding officers or screen them personally?

Admiral BROWN. If I am serving on that particular board—I can only serve 1 year and I have to take a year off, but I do personally slate all our commanding officers.

Mrs. LURIA. Okay. So, with a couple exceptions of the pieces that go into the training, so the PQS standards, you personally review them?

Admiral BROWN. Well, my N7 does, and is involved in their development or modification.

Mrs. LURIA. And so, you are responsible for the unit level training once all members of the ship are assigned and come together on a ship?

Admiral BROWN. I own the basic and the advanced phase of training. The integrated phase of training is owned by the numbered fleet commander.

Mrs. LURIA. Okay. So, you own the basic phase, the advanced phase, and then the integrated phase, it transfers over to the fleet commander?

Admiral BROWN. The numbered fleet commander, yes, ma'am.

Mrs. LURIA. So, the reason I was asking, because there are a lot of different pieces here that come together. And at an event with you in 2018, Vice Admiral Balisle said, when he was speaking of what he referred to as the seven spokes of readiness, most of them are under the control of a unique and different person and none of these people ever come together under a centralized command group who has real cognizance and knowledge of what is going on of all of those spokes.

And, you know, I recently read a testimony that Admiral Rickover gave to Congress in 1979, and, you know, as a nuke, I like to quote Admiral Rickover and refer back to, you know, his tenets of how he put together the nuclear power training program. He states that, unless you can point your finger at the one person who is responsible when something goes wrong, then you never really have anyone responsible. And we had an opportunity to kind of discuss this morning all these different pieces that come together.

So, my understanding is that you have the Readiness Reform and Oversight Council now, where you have a lot of different groups coming together to coordinate these efforts. Are you in charge of that council?

Admiral BROWN. No, that council is run by the Vice Chief of Naval Operations and the Under Secretary of the Navy, but I am a member of the board.

Mrs. LURIA. Okay. So, I go back to the first question, because you said you were responsible for the training and the readiness of surface forces, but you are not responsible for the coordinating council that brings all of these groups together.

Admiral BROWN. No, but I think that that is held at the appropriate level. It is held at the ECH [Echelon] I level, and that is who I and the two ECH II commanders, the fleet commanders, Admiral Grady and Aquilino, they also serve on the board. So, the voice from the ECH III all the way up to the ECH I is heard.

Mrs. LURIA. Okay. So the reason I brought this up in this context is, going back to the reports that we had from the Comprehensive Review, one of the recommendations was that the Navy should establish a single echelon to higher headquarters responsible for the readiness generation of all forces.

But the Strategic Readiness Review did not agree with that recommendation, and it was not done, and, instead, they recommended placing the three senior platform type commanders in Norfolk, co-located with Fleet Forces Command, which, since you are in San Diego, to my knowledge, has not also been done.

Admiral BROWN. Correct.

Mrs. LURIA. Can you speak to why the Navy has not carried out what their own recommendation to—

Admiral BROWN. So, the two reports were competing against each other. They both had different recommendations. So, the working group that was in charge of that, which was the Command and Control Working Group, studied it. And the decision was made at the ECH I level and actually was brought to CNO Richardson at the time that we were not going to do that. It was not going to provide any improvements in command and control that were necessary to prevent these incidents from happening in the future.

Mrs. LURIA. Thank you.

I yield back the remainder of my time.

Mr. COURTNEY. Great. I think we have exhausted every member who is here, in terms of questions. I know Mr. Wittman wanted to join us, but I think, you know, time is up.

Mr. GARAMENDI. Have we exhausted the witnesses?

Mr. COURTNEY. I think they are doing great. Anyway, I want to thank both the witnesses for being here. As I said, this has been sort of a multiyear project for both subcommittees. And, again, obviously with the report that is going to be issued sometime in the next 2 or 3 months, I know Mr. Garamendi and I and the staff will, you know, obviously be in close contact and we will probably do this again.

And, again, I want to thank Admiral Brown for joining us here today. You know, the spacing of these hearings on the collisions are starting to get a little bit longer, but the interest level is still sky high. So, you know, we will stay in touch and, again, on a needs basis, I guess, hopefully, we will call you back or some of your colleagues. So, thank you all for being here.

And, with that, I will adjourn the hearing.

[Whereupon, at 4:21 p.m., the subcommittees were adjourned.]

A P P E N D I X

FEBRUARY 5, 2020

PREPARED STATEMENTS SUBMITTED FOR THE RECORD

FEBRUARY 5, 2020

Opening Statement of Chairman Joseph Courtney
“Update on Navy and Marine Corps Readiness in the Pacific in the Aftermath
of Recent Mishaps”

5 FEB 2020

Good Afternoon, today’s joint subcommittee hearing is the fifth in a continuation of joint subcommittee oversight since 2017 that have specifically examined maritime mishaps in the Pacific and the underlying systemic readiness issues that were a major contributory cause of those catastrophic events. Since the gut-wrenching losses of seventeen sailors from the USS Fitzgerald and the USS John S. McCain in June 2017, these subcommittees have been the public forum to review and act on the Navy’s Comprehensive Review (CR), Strategic Readiness Review (SRR), and Government Affairs Office (GAO) studies on the manning, training, and operational shortcomings.

As the USS Fitzgerald returns to sea this week for the first time since the collisions, today’s hearing is an opportunity for the Navy to provide an update to Congress, and the nation, on how they have addressed those issues – and how they have implemented the reforms needed to prevent them from happening again.

Today’s hearing also follows a tragic Marine Corps Aviation mishap. This 2018 accident, in which an F/A-18 Hornet and KC-130 Hercules collided in mid-air, has striking similarities to an earlier collision between aircraft in the same two squadrons. Like the ship collisions in 2017, which exposed serious shortfalls in certifications of key operational training in navigation, seamanship, and engineering, this incident has revealed inadequate flight hours, nighttime training, and equipment maintenance that were, at a minimum, contributory causes of the mid-air collision.

This most recent mishap killed five of six of the aircrewman involved and our thoughts and prayers are with the families of these Marines, just as they remain with the families of the seventeen sailors killed in 2017.

I know that our sailors and Marines forward-deployed to Japan represent some of our best and brightest. Each of us recognize the role these men and women play in being the “tip of the spear” in one of the most active regions in the world. These men and women in uniform deal with longer hours, less time at home, higher operational tempos, and complex multinational strategies.

Therefore, it is imperative that the both the Navy and Marine Corps get this right and balance these higher operational desires with requisite readiness needs. The services owe deep analysis and critical examination of their readiness issues -- whether it be in training, maintenance, or proficiency. And Congress owes diligent and persistent oversight.

The Navy has recognized it is challenged by widespread institutional readiness issues and is now proactive towards accepting responsibility and executing solutions at all leadership levels. They have established new governing bodies and have made notable progress in correcting nearly 100 issues identified

by the Comprehensive Review, the Strategic Readiness Review, and multiple GAO reports. These corrections aren't superficial. They represent large systematic and deep programmatic changes across manning, training, budgeting, and operations. While I look forward to the Navy's update today on its progress, I am also encouraged by the Marine Corps' appointment of an independent Consolidated Disposition Authority that will have broad authority in investigating command climate, training, and material readiness. As the Marine Corps grapples with these complex problems, I urge them to learn from both the Navy's initial incidences and subsequent actions.

Both these readiness reforms and Congress's oversight are iterative processes. It is my sincere hope that through continued oversight, further hearings, and robust dialogue with the services, we can further eliminate these readiness difficulties ensuring our service members come home safely.

I would now like to welcome our distinguished panelists.

Vice Admiral Richard A. Brown
Commander
Naval Surface Forces
U.S. Pacific Fleet

Lieutenant General Steven R. Rudder, USMC
Deputy Commandant for Aviation
United States Marine Headquarters

Before hearing from this panel, let me offer Ranking Member Wittman an opportunity to make any opening remarks.

**Opening Remarks of the Honorable Robert J. Wittman
for the
Joint Readiness and Seapower and Projection Forces Hearing on
Update on Navy and Marine Corps Readiness in the Pacific in the Aftermath
of Recent Mishaps
February 5, 2020**

I want to thank Chairman Courtney for yielding and having an enduring interest in our naval force's readiness.

I am particularly heartbroken over the loss of life associated with the navy surface forces and the marine corps aviation forces. All were tragic, all were preventable, all have several common threads underlying the principal issues. In the end, the lack of senior leadership, inattention to the apparent problems facing the respective units and an inability of the operators to discern the dangers they were in all contributed to the same, tragic results.

The Marine Corps is particularly troubling. The KC-130J collision with a Hornet aircraft at night over the Sea of Japan was an accident waiting to happen. Months earlier, the squadron commander wrote to his superiors and indicated "everyone believes us to be under-resourced, under-manned." III MEF Commanding General Lieutenant General Clardy responded to the accident and indicated the Marine Corps' "chronic history of unconstrained tasking and under-resourcing created a culture of complacency." He went on further to indicate that his marine aircraft wing faced "significant challenges in manning, maintaining, and training its squadrons."

The conclusion of this accident rings particularly close to the heart as they are eerily similar to the same outcomes associated with the McCain and Fitzgerald collisions. In those two efforts, the Secretary of the Navy's Readiness Review concluded "leaders and organizations began to lose sight of what "right" looked like, and to accept these altered conditions and reduced readiness standards as the new normal." In this review, the report further concluded that "over time, the Navy's "must-do" wartime culture was adopted for peacetime as long-term readiness and capability were sacrificed for immediate mission accomplishment."

What I thought was a defining, seminal moment for the Secretary of the Navy, a moment that I understood included an assessment of the Marine Corps, was instead fleeting and the lessons learned not fully adopted. We can do better. We must do better.

For the surface forces, we need to adopt a more rigorous accessions training evolution similar to that of the Merchant Marine. We need to ensure more junior officer seamanship training. Our enlisted training needs to be systematically reviewed to eliminate outdated training. Our afloat manning needs to be significantly improved. Our basing and maintenance processes need to be aligned. We need to step out of our comfort zones and ensure the manning, training, and equipping of our forces is maximized for efficiency and effect.

As to the Marine Corps, I think that we need to do some deep soul searching and ensure we have the right readiness at the right time. This balance is difficult to achieve but we should never sacrifice the safety of our marines, upon whose backs our nation is carried.

Again, I appreciate the Chairman for having this important hearing and I yield back the balance of my time.

Statement of the Honorable John Garamendi
Chairman, Readiness Subcommittee
“Update on Navy and Marine Corps Readiness in the Aftermath
of Recent Mishaps”
February 5, 2020

Thank you, Chairman Courtney and Ranking Member Wittman. I look forward to continuing the joint oversight that our subcommittees have conducted over the past two and a half years on the issues before us today.

I would like to state, at the outset, that we continue to honor and remember the 17 sailors and 6 Marines who died in the tragic surface ship and aviation collisions of 2017 and 2018. Our thoughts remain with their loved ones and friends.

As the memories of these incidents fade, it is critical that we continue to talk about them for three reasons: Above all, the lives of our servicemembers are at stake. It is unacceptable for those who put everything on the line for their country to perish in preventable accidents. Second, the circumstances of these collisions call into question decisions made by senior Navy and Marine Corps leadership and by the aviation and surface communities that have resulted in a less ready military in one of our most important theaters of operation. And finally, our ongoing oversight is warranted to ensure that lasting changes – some of which must defy deeply-rooted institutional pathologies – are implemented.

I look forward to hearing how the Navy and Marine Corps are fixing the issues that contributed to these accidents, including problems with manning; training; crew rest; the material readiness of our ships and aircraft; and the design and condition of the equipment and safety gear on which our Sailors and Marines rely. As in our earlier hearings, we must also address broader issues within the Pacific area of operations and the Navy, Marine Corps, and Department of Defense writ large: overuse of the force and the tendency to prioritize investments in new weapons systems over training, maintenance, and total force readiness.

To that point, Secretary of Defense Esper testified in his confirmation hearing that the need to balance current readiness with modernization is the Pentagon’s “central challenge.” As the Department rolls out its FY21 budget, I look forward to learning how the Navy and Marine Corps plan to address this perennial tension in the coming years.

I would like to take a brief moment to recognize the work of two outside organizations. The Government Accountability Office has been ringing the alarm bell about persistently low readiness levels for years. In addition, Pro Publica’s reporting on both accidents has immeasurably advanced our and the public’s understanding of these challenges.

Since our last hearing on surface Navy readiness a year ago, Pro Publica’s investigation into the December 2018 Marine Corps aviation incident illuminated

the degree to which it echoed the circumstances of the McCain and Fitzgerald collisions. In all three instances, commanders in a stressed theater of operations received little relief despite repeatedly warning their superiors of a lack of training and faulty equipment. In addition, as part of an effort to measure sailors' confidence in the Navy's reforms following the 2017 collisions, Pro-Publica's follow-up reporting revealed insufficient training, widespread exhaustion, and an absence of confidence in Navy leadership that persist to this day. Finally, both of Pro Publica's reports on these incidents found evidence that the Navy and Marine Corps' internal investigations placed blame almost exclusively on junior officers rather than the senior leaders who were for years alerted to the readiness problems within their formations.

We have much to discuss. Thank you to our witnesses, Vice Admiral Brown and Lieutenant General Rudder, for joining us today. This committee will continue to partner with you to protect our servicemembers and ensure that we are building a ready force.

With that I yield back.

Ranking Member Lamborn Statement

Thank you, Chairman Courtney. I would like to thank you and Ranking Member Wittman for your continued collaboration with Chairman Garamendi and I on these critical issues.

Many factors contribute to military readiness, but it seems to me that it really comes down to the basics. Have we given our men and women in uniform the right training and equipment for the jobs we ask them to do, and is that equipment properly maintained? With all the technical advancements in modern warfare, we still have focus on blocking and tackling.

Last week as we embarked on the U.S.S. Eisenhower, I was struck by the discipline required by our sailors and aviators to safely conduct carrier operations. The deck is a very dangerous place with moving aircraft and heavy equipment everywhere, and the ship is powered by a nuclear power plant. There is a good reason we have such high standards.

That brings me to the purpose of this hearing and the thing that concerns me the most. When we are moving so fast that we lose focus on the fundamentals, it has real world consequences that are born by our service members and their families. The common threads in the challenges confronting our surface fleet and aviation forces are culture and focus on short-term operational outputs.

It is concerning to me that the 2017 surface warfare mishaps in the Western Pacific were at the very tip of the spear for our Navy. The Marine Corps F/A-18D Squadron that experienced the December 2018 mishap was scheduled to participate in a large military exercise that was cancelled right before the mishap. It is unclear to me that the unit was prepared for an operation of that scale.

As we proceed today, I would ask our witnesses to highlight where their services are focused on changing culture and thoughts they have on how to effectively measure that progress.

Thank you, Mr. Chairman, I yield back.

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THE HOUSE ARMED SERVICES COMMITTEE
SUBCOMMITTEES ON SEAPOWER AND READINESS

STATEMENT OF
VICE ADMIRAL RICHARD BROWN
COMMANDER NAVAL SURFACE FORCES

BEFORE THE
SUBCOMMITTEES ON SEAPOWER AND READINESS
HOUSE ARMED SERVICES COMMITTEE
ON
UNIT READINESS IN THE PACIFIC FLEET

FEBRUARY 05, 2020

NOT FOR PUBLICATION UNTIL RELEASED BY
THE HOUSE ARMED SERVICES COMMITTEE
SUBCOMMITTEES ON SEAPOWER AND READINESS

Chairman Garamendi, Chairman Courtney, Ranking Members Lamborn and Wittman, and distinguished members of the subcommittees, thank you for the opportunity to update you on Surface Warfare's continued readiness improvements. Our Navy's commitment to the Strategic Readiness Review (SRR) and Comprehensive Review (CR) findings positions our Surface Force manned, trained, and equipped for success. These readiness enhancements, coupled with state-of-the-art technologies, warfighting proficiency, and a culture of excellence will continue to ensure we remain the world's premier Surface Force. On behalf of Navy Sailors, Civilians, and families serving around the world, thank you for the investments you have made in forging our readiness. Your support enables the reliable resources needed in order to control the seas and provide the nation with combat naval power when and where needed.

Battlespace Summary

America is a maritime nation whose national interests require that we operate forward. Our National Security Strategy (NSS) and National Defense Strategy (NDS) highlight the reemergence of great power competition, which requires us to control the seas. In peacetime, our Navy provides stability, homeland defense, protection of sea lanes, and conflict deterrence on the high seas. When deterrence fails however, our Navy's forward presence ensures the ability to promptly conduct decisive combat operations and defeat any enemy. We go to sea to safeguard the rights and freedoms of other sea-going nations. We control the seas, because if we do not, someone else will.

Both the threats for which our Navy must be prepared and the battlespaces in which we will fight are changing. Our adversaries and operating environments are increasingly lethal and disruptive. Adapting to this reality, we are responding with urgency to sustain our advantage in maritime competition. Our national interests demand a Navy with the capability, proficiency, and confidence to be lethal at a moment's notice. Hence, as the lead Surface Force Type Commander, my principal objective is to transform and sustain the readiness cultivated via implementation of SRR, CR, and other objectives into the lethality needed to win the fight against any maritime adversary.

Premier naval forces understand the simultaneous need to command the seas today while preparing for victory at sea tomorrow. As such, we are committed to both fighting with the 'Navy the Nation Has' and building the 'Navy the Nation Needs.' Our ability to 'Own Tomorrow's Fight Today' requires both readiness and modernization. We must build and sustain a lethal force through balanced investments that holistically enhance both capability and capacity. To ensure combat effectiveness within any battlespace, the Navy must grow in size, lethality, and networking, and remain fully integrated with Marine Corps doctrine and combat capabilities.

We are the world's premier Navy, second to none, that controls the seas and provides the nation with combat naval power when and where needed. The initiatives and policies implemented within our Navy and Surface Force since 2017 are not an end unto themselves. Instead, they are a cornerstone of Type Commander efforts to man, train, and equip our Surface Force; and integral to the Surface Navy's generation of combat ready-ships and battle-minded crews. This focus will endure.

Readiness State of Play

The tragic events of 2017 generated critical lessons that have been embraced across all operational and administrative chains of command. Barriers have been removed that could impede timely, effective, and sustainable implementation of SRR/CR objectives. When and where necessary, SRR/CR objectives (and their supporting requirements) produced funding prioritization in support of decisive action. Commanding Officers (COs) and their crews are well educated on both the specific areas in which our Navy slowly deviated from established norms, and the fundamental process improvements that have been undertaken. Most importantly, the policy, procedural, and budgetary mechanisms needed to sustain this progress are in place. Our Navy's operations in 2020 are safer and more effective than in 2017, and have been incrementally refined since the 2019 update provided to the House Armed Services Committee (HASC) - Seapower and Readiness Sub-committees. We broke the "normalization of deviation" that plagued 2017 operations, and implemented the foundational changes needed to strengthen our Navy's culture.

With the utmost urgency, we undertook decisive measures to enhance the development, assessment, and sustainment of proficiency at both individual and watch team levels. Concurrently, we reestablished "firebreaks" by more effectively balancing maintenance, training, and operations pursuant to maximizing both operational readiness and safety. The Secretary of the Navy (SECNAV) and Chief of Naval Operations (CNO) employed a three-tier process for achieving a Navy and Surface Force culture of excellence, defined by a dedicated oversight body comprised of military and civilian leaders, and predicated upon the outcomes resultant from holistic implementation of SRR/CR/Fleet/Type Commander (TYCOM) initiatives.

Tier 1 efforts successfully validated safety of operations by leveraging SRR/CR findings to make readiness and risk management assessments of Surface Force units, immediately implement requisite corrective measures, and ensure compliance and accountability at all chain of command levels. Tier 2 actions span an indefinite period in which the Navy conducts more effective operations subject to enhanced Force Development, Force Generation, Force Employment and risk mitigation mechanisms, rigorously reevaluates early results to determine if further refinements are required. This period compiles "run-time" subject to processes and standards that develop a culture compliant with practices foundational to safe and effective operations at sea. Tier 3 efforts further raise the bar for fleet readiness, by forging standards that enable long-term success and excellence.

In the pursuit of a culture of operational excellence, a culture of compliance was initially required in order to change behavior and risk management decision processes that had deteriorated over time. That culture of compliance, however, was insufficient for our Navy to win decisively during high-end conflict. The culture of operational excellence borne by combat ready-ships with battle-minded crews embodies standards as the minimum baseline, rather than the goal. While it values processes, it focuses more on outcomes and employs a command-centric, trust-based methodology. Most importantly, a culture of operational excellence equips our COs and crews with the tools, training, experience, toughness, and competitive boldness needed to fight and win; it also empowers them and holds them accountable.

While diligent efforts across all chains of command enhance readiness, crews who exhibit toughness, competence, and confidence to transform readiness into lethality are achieving a culture of operational excellence. The passion and precision with which our Surface Forces are driving, fighting, managing, and commanding their ships since 2017 places our Navy on a steady glide slope toward a culture of operational excellence. To forge this progress, we are continuing investments in the professional development of our officer and enlisted personnel, improving the material readiness of our warfighting platforms, and conducting more challenging training and assessments of our watch teams. Witnessing this unyielding commitment from their leadership, our personnel are further inspired to prevail in combat against any potential foe.

The following topic areas address noteworthy accomplishments within Navy's efforts to implement SRR/CR findings, rebuild warfighting readiness, and forge lethality.

Aligning Surface Force Generation and Surface Force Employment: The Optimized Fleet Response Plan (OFRP) readiness production process remains the cornerstone of the Navy's force generation framework. As the OFRP strives to ensure the best balance of ready naval forces pursuant to Combatant Commander demands and foster the best posture against emerging threats and new mission requirements, alignment between Type Commander and Numbered Fleet Commanders has notably increased in order to better manage risk. The following systematic processes increase unit-level readiness and foster an enhanced balance of friction between force generation and operations between the Surface Type Commanders and the Numbered Fleet Commanders.

- Surface Force Type Commanders strive to deploy ships that bear all of the following attributes: all Basic Phase certifications complete, manning at or above 92% Fit and 95% Fill thresholds, and no active equipment Casualty Reports (CASREPs). If situations arise that may require operational employment of a ship that has not completed Basic Phase Tier 1 and Tier 2 training, the applicable Type Commander and Numbered Fleet Commander are employing deliberate scheduling, by mutually evaluating the proposed mission against the readiness of all potential assets. If necessary, 4-star Fleet Commanders will make these operational decisions.

- Ready for Sea Assessments (RFSAs), originally utilized to validate "safety for operations" across Forward Deployed Naval Forces-Japan (FDFN-J) units, subsequently extended to all ships worldwide. The Surface Force Training and Readiness Manual (SFTRM) incorporated the RFSA agenda as the readiness requirement for ships exiting the OFRP Maintenance Phase prior to commencement of Basic Phase training underway events.

- In accordance with SRR/CR requirements, Navy defined FDFN-J maintenance periods, training allocations, and operational scheduling procedures. Specifically, FDFN-J ships undergo a 17-week Selected Restricted Availability (SRA) and a 10-week Selected Incremental Availability (SIA) within each OFRP cycle. Following maintenance, FDFN-J ships will be afforded an 18-week training period following maintenance periods totaling 6-months or greater, and a 10-week training period following maintenance periods totaling less than 6-months.

- 90-Day CO Readiness Reports to TYCOMs provide a means of CO communication of readiness concerns directly to the TYCOM within 90 days of command assumption, thus spearheading immediate and tailored TYCOM-level action.

Surface Force Manning: As Navy force structure increases, end-strength increases will also be required. Pursuant to manning today's force structure, the Navy continues to aggressively manage available inventory to ensure deployed forces meet Fit/Fill requirements, while minimizing risk within our non-deployed forces. Effectiveness involves a combination of distributable inventory and Type Commander manning actions. Gaps in mid-grade to senior enlisted ranks remain the most challenging due to the time required to cultivate these experience levels. While overall inventory is increasing, funded billet growth is also increasing, thus masking gains made in improved manning at the unit level for a greater portion of the OFRP cycle. Bottom line, there are more Sailors on our ships today than there were in 2017. Specific initiatives involving manpower allocations and/or manning increases taken in response to SRR/CR findings include:

- Transformation of Navy's Fleet Manpower Requirements Determination (FMRD) process, allowing for more refined manpower requirements analysis and providing a more accurate demand signal for the Fleet.
- Transition from a wartime Condition I/III (at-sea) manpower model to an operational model now including in-port (Cond V) workload, thus accounting for the holistic workload demands levied upon our Sailors while at sea or in-port across all surface ships.
- Reassessment of the Navy's Operational Afloat Workweek (OAW) (previously called Navy Standard Workweek), resulting in an 81 hour workweek, with a decrease to the Productive Availability Factor (PAF) (productive time available for watchstanding, maintenance and other activities) from 70 to 67 hours/week.
- Revalidation of the independent modeling capabilities that supplement the FMRD and forecast manpower requirements and personnel needs according to future force structure plans. This ensures accurate future manpower programming within each annual programming and budgeting cycle, as well as cost estimates beyond the Future Years Defense Program (FYDP), including the 30-year shipbuilding plan estimates.
- FDNF manning is prioritized (constant 92/95 Fit/Fill) relative to other manning requirements, and specific mechanisms to support such have been implemented. These include: changes to overseas tour lengths for accompanied and unaccompanied first-term enlistees, refinement of overseas duty and sea duty screening procedures, and enhancement of Overseas Tour Extension Incentives Program (OTEIP) initiatives.
- Establishment of Embedded Mental Health (EMH) teams within Fleet Concentration Areas (FCAs). EMH teams include: Psychiatrists, Licensed Clinical Social Workers, Clinical Psychologists, Mental Health Nurse Practitioners, and Behavioral Health Technicians. EMH teams provide a shipboard mental health resource that facilitates both intervention and prevention in order to de-incentivize mental illness, destigmatize mental health help-seeking, foster return to duty, and enhance readiness.

Commensurate with Navy's dedication to enhancing fatigue management aboard our ships, the impact of the manpower/manning enhancements will be evaluated over time for their impact upon both operational effectiveness and workload management. If additional manpower requirements are necessary to optimally support one or both of these objectives, they will be considered on an annual basis.

Surface Force Training and Assessment: Spearheaded by Surface Warfare investments, our Navy continues to emphasize Fleet Training Wholeness (FTW). Modernized Unit and Strike Group training consisting of three pillars define FTW: enhanced targets, appropriately developed and supported ranges, and Live Virtual Constructive (LVC) integration. LVC enables training within a contested environment by consolidating

underway ships and aircraft operating on "live" ranges, integrated with "virtual" assets (pier-side ship participants and air-wing simulators), and augmented with "constructive" synthetic scenario entities.

Concurrently, our Surface Force is broadening the use of instructor led, immersive virtual reality training as part of our Surface Training Advanced Virtual Environment (STAVE) Program. STAVE couples modernized, instructor-led, individual training with virtual training devices, hands-on labs, and distributed, networked classrooms. Future STAVE efforts will expand this training to ships underway and pier-side. STAVE training and assessment results continue to illustrate effectiveness and efficiency of this training concept relative to traditional methods. In short, STAVE prepares watch teams to own tomorrow's fight today, by cultivating personnel who bear experience, assessment, and confidence within the most demanding tactical environments.

Additional policies and facilities that have enhanced Fleet training include:

- Fleet-wide SFTRM implementation ensured elimination of the inefficient Block Phase Training within the Basic Phase, emphasizing the Train to Certify (T2C) concept, and returning valuable training time for the CO to use on needed enhancements. The T2C concept, which dedicates Afloat Training Group resources exclusively to watchstander training (vice Training Teams) until certification is achieved within each warfare area, promotes greater efficiency and faster results. Collectively, these enhancements foster earlier certification within each warfare area.
- Surface Warfare Advanced Tactical Training (SWATT) exercises are structured to incorporate emerging threats and to practice Tactics, Techniques, and Procedures (TTPs). Additionally, SWATTs have been extended to FDNF forces as a primary means of enhancing Integrated Phase training and Strike Group warfighting effectiveness.
- Leveraging Congressional investments made in response to SRR/CR findings, facilities improvements spearheading Bridge and Combat Information Center (CIC) integration have been (and continue to be) implemented. Shore-side Navigation, Seamanship, and Shiphandling Trainers (NSSTs) received rudimentary Bridge/CIC integration capabilities across all Fleet Concentration Areas (FCAs) within 12 months of funding receipt, thus becoming Modified-NSST (M-NSSTs). Full Bridge/CIC integration is on-track for delivery to each FCA by FY-22, via Integrated-NSSTs (I-NSSTs). Maritime Skills Training Centers (MSTCs), containing the highest concentration of officer, enlisted, and watch team resources and the multiple high-fidelity simulators maximizing Bridge/CIC integration are on track for delivery in San Diego by FY-21 and Norfolk by FY-22.
- Summer 2019 establishment of the Junior Officer of the Deck (JOOD) Course in Norfolk, San Diego, and Newport yielded a profound Navigation, Seamanship, and Shiphandling (NSS) enhancement at junior officer levels. The high quality curriculum, dedicated instructor interaction, and repetition frequency on high density shipping and in-extremis maneuvering scenarios facilitated 462 graduates in 2019 (with no shipboard experience). This cohort outperformed the officers with 1-2 years shipboard experience tested during 2018 Fleet Officer of the Deck (OOD) Competency Checks. Specifically, JOOD course graduates yielded an increase from 16% to 21% in officers bearing "No Deficiencies" and a decrease from 18% to 2% in officers bearing "Significant Deficiencies."
- NSS assessments at all milestone levels ensure sustainment of mariner skills proficiency. Go/No-Go assessments resulted in attrition of officers at the Department Head, Command, and Major Command levels who were unable to demonstrate the requisite NSS proficiency standards. Specifically, seven prospective Commanding Officer and three

prospective Major Commanders were removed from their respective command pipeline training based on Go/No-Go assessment performance.

- Afloat COs and their respective Bridge/CIC watch teams consistently cite Bridge Resource Management Workshops with post-Major Command CO mentors and Strategic Sealift Officer (SSOs) as invaluable in enhancing NSS proficiency at individual and Bridge/CIC team levels.

- The Surface Force reduced Inspections, Certifications, and Assist Visits (ICAVs) by approximately 30% per ship class. Such is the cumulative result of dedicated ICAV reduction measures and the elimination of Block Phase Training across the Basic Phase.

- Increased Surface Warfare Officers School (SWOS) milestone curriculum, simulators, and simulator instructors bear U.S. Coast Guard certifications. Additionally, the Surface Force progressively adopted maritime industry Standards of Training, Certification, and Watchkeeping (STCW) into Surface Warfare Officer (SWO) and enlisted training where such elements aligned to Surface Warfare core competencies.

- Two years of run-time exists under the contents of a revised NSST instruction, which defines the requirements for Navigation Assessments conducted by Immediate Superiors in Command (ISICs). These Navigation "check-rides" increased in scope to include evaluation of Bridge/CIC integration and watch team performance during simulator scenarios involving high-density shipping and in-extremis maneuvering.

- In support of cultivating toughness and warfighting excellence under stress, Basic Phase training now culminates with a Final Battle Problem that flexes all warfighting expertise across multiple mission areas for an extended period. The complexity and duration of this scenario commands not only tactical expertise, but also effective personnel rotation and stress/fatigue management, as combat operations would involve.

Surface Force Maintenance and Modernization: "Performance to Plan" (P2P) initiatives implemented by Type Commanders are paying dividends with respect to completion of depot maintenance on time and in full. P2P-Surface efforts are fostering noteworthy improvements in maintenance timeliness, without de-scoping work packages or deferring maintenance requirements. These efforts facilitate accomplishment of previously deferred maintenance actions, decompressing training, improving risk management, and enhancing force generation efficiency. Our main objective remains improvement of predictability and stability throughout the maintenance planning and execution processes. We are ensuring comprehensive definitions of maintenance requirements throughout our ships' life cycles. Concurrently, we are forging project milestone adherence, including timely procurement of long-lead time material. Since P2P implementation, progress on these collective fronts improved our ability to eliminate/minimize burdensome approval processes in situations in which new or growth work arose. Tank and engine intake repairs stand as the most noteworthy examples of this progress. While the aforementioned processes enhanced material management, the following material enhancements also forge warfighting readiness and effective risk management:

- While ensuring that current readiness remains the top TYCOM priority, aggressive Surface Force efforts are spearheading advancements in weapons, networks, sensors, and platforms. These vital capabilities include: Flight III DDG-51 class guided-missile destroyers; a new class of frigate (FFG(X)); a new large surface combatant; the SPY-6 Air and Missile Defense Radar; Maritime Strike Tomahawk; Naval Integrated Architecture; medium and large unmanned surface vessels; hypersonic weapons; Standard Missiles for offensive missions, and Naval Strike Missile.

- Integrated Bridge and Navigation System (IBNS) lessons learned have been collected and incorporated across all applicable surface platforms.
- Class Advisories addressing steering system configuration and casualty control across all modes of operation are disseminated and implemented across all surface ship classes.
- The ongoing installation of a standardized Commercial of the Shelf (COTS) radar as a tertiary resource, and the incorporation of a secondary Automated Information System (AIS) laptop aboard all surface ships, is enhancing NSS redundancy.

Forging Warfighting Readiness & Culture of Excellence: Over the preceding year, throughput across all milestones of SWO training and assessment continuum increased in accordance with an updated Surface Warfare Officer Requirements Document (SWORD). Additionally, the recently promulgated SWO Career Manual consolidated SWO qualification and proficiency requirements. The following actions further enhanced warfighting readiness and culture at individual and team levels:

- With the help of Congress and Navy leadership, the Surface Force made (and continues to make) substantial and lasting investments in mariner skills. While we are not declaring "mission complete," the pace of the enhancements—coupled with their initial results—are cause for optimism. FYDP investments to individual, watchteam and strike group training total \$3.7B.
- Surface Development Squadron ONE is established and dedicated to the rapid development of manned and unmanned capabilities, to include authoring of the Navy's Concept of Operations (CONOPS) for the unmanned Surface Fleet.
- The Naval Surface and Mine Warfighting Development Center (SMWDC) is steadily improving warfighting skills by increasing individual expertise and watch team proficiency. The Warfare Tactics Instructor (WTI) program produces SWOs with advanced expertise as instructors and tacticians in one of four warfighting areas: antisubmarine/surface warfare (ASW/SUW), amphibious warfare (AMW), integrated air & missile defense (IAMD), or mine warfare (MIW).
- Consistent with post-SRR/CR improvements in NSS training and assessment, the Surface Force is equally committed to forging Maritime Warfare prowess and formidability. SMWDC is leading a Maritime Warfare Officer Tactical Training (M-WOTT) Working Group, which is charged with determining the skills required for each tactical milestone within a SWO's career, and the manner in which maritime warfare proficiency can be best developed, assessed, and sustained.
- Combined Integrated Air and Missile Defense and ASW Trainers (CIAT) are in place in San Diego and Norfolk. Within those facilities, watch teams of specific AEGIS baselines train with the exact hardware, tactical software, and environmental factors they would experience within combat environments
- On Demand Trainers (ODTs), are also in place in San Diego and Norfolk, in support of continuing tactical training during maintenance availabilities and/or Combat Systems upgrades.
- The Surface Force validated Personnel Qualification Standards (PQS) for all Bridge/CIC watchstations and created PQS for several positions that did not previously exist. This review identified situations requiring requalification, which included assignment of temporary personnel and following major equipment upgrades.
- Through an emphasis upon Human Factors Engineering (HFE) expertise, the Surface Force developed several inter-related approaches to increase operational risk

awareness, measure crew perceptions and performance, and improve daily risk management at sea. Key examples include:

- In collaboration with the Naval Postgraduate School (NPS) and Navy Health Research Laboratory, the Surface Force developed a Basis for Measurement (BFM) and a data collection method that assess fatigue management effectiveness during the OFRP cycle, and proposes potential interventions to improve results. Organizational Drift Indicators (ODI) are assessed during Afloat Safety Climate Assessment Surveys (and debriefed to CO's) at two specific points during the operational cycle, and Crew Endurance policy implementation metrics are collected regularly during both internal and external assessments.
- SWOS, Navy Leadership and Ethics Center (NLEC), and the Senior Enlisted Academy (SEA) expanded curricula to include Plan, Brief, Execute, and Debrief (PBED), and applied Operational Risk Management (ORM) principles. The Surface Force developed Operational Fundamentals Behavioral Checklists (OBFCs) for assessing team performance in daily operations. Tailored to each stage of the PBED cycle, these indicators gauge team health in daily operations, recognizing and overcoming errors.
- Through dedicated adherence to Near Miss Reporting practices, the Surface Force is becoming increasingly proactive. By tailoring lessons learned for each type of ship and each phase of the operational cycle, we are directly targeting and preventing the most likely and most dangerous mishaps. Over a multi-year period culminating in 2019, a clear correlation emerged between a steady increase in Near Miss Reports, and corresponding decrease in Class A and Class B mishaps.

Conclusions

As the world's premier Navy, we must be prepared to fight on short notice. Current readiness, as defined by combat ready ships with battle-minded crews, is the imperative. As our Navy aggressively grows force structure over the next decade, current readiness must remain our primary focus. Amidst the reality of competing fiscal priorities, forging current readiness requires analytical rigor and data-driven assessment of our current procedures and their outcomes. While readiness enhancement continues with urgency, mere readiness recovery is insufficient to ensure tactical success. Instead, the transformation of readiness into lethality is paramount. In pursuit of this objective, operational and administrative chains of command are collaborating to hone our warfighting skills and field a maritime force that is manned, trained, equipped, certified, and ready to win tomorrow's fight today.

As the lead Surface Force Type Commander, I am inspired by our Navy enterprise efforts to enhance the development, assessment, and sustainment of proficiency at individual and watch team levels, and to restore the "firebreaks" between maintenance, training, and operations. As such, I am fully committed to the following near-term objectives:

- Emphasizing current readiness (across man, train, and equip pillars) as the number one Type Commander priority. Specifically, completing maintenance availabilities on time without de-scoping work packages or deferring maintenance requirements, supporting Ready Relevant Learning (RRL) initiatives, and manning ships earlier and better in the readiness cycle.
- Continuing to enhance mariner skills training. This includes previously mentioned classroom instruction, advanced simulators, and a career-long training

continuum. While we have made considerable progress, this job is never complete, as improvements need oversight and constant evaluation.

- Continuing warfighting training improvements and establishing a maritime warfare continuum that matches the NSS training and assessment continuum implemented over the preceding two years. The keys to accomplishment include: better exercise support, identification of the best junior officers as WTI candidates, and proliferating high-fidelity trainers that leverage LVC capabilities and promote Fleet Training Wholeness. This will ensure our effective employment of future sensors, weapons, and platforms.

- Ensuring alignment between the Surface Type Commanders and Surface Warfare Resource Sponsors (OPNAV N-95, N-96, N2N6) to deliver warfighting capabilities essential to the future fight, and field the most capable, experienced, and confident COs and Warfare Commanders.

Pursuant to these and other Surface Force objectives, I will ensure that all public and private members of the Surface warfare enterprise decisively remove any/all barriers that undermine current readiness. Such is a cornerstone in the timely deployment of combat-ready ships with battle-minded crews. While we build a Surface Force that stands ready to own tomorrow's fight today, we must continue to control the seas and provide the nation with combat naval power when and where needed – every day. This tenet epitomizes current readiness criticality.

Remaining the world's premier Surface Force requires collaboration at all levels. As such, budget stability is an imperative. Continuing Resolutions significantly impede the predictability of the man, train, and equip pillars upon which current readiness depends. Your continued support of our Navy, our Sailors, and our readiness, will define our ability to support U.S. interests worldwide, by ensuring the capacity, competence, and confidence to control the seas and provide the nation with combat power when and where needed.

Vice Admiral Richard A. Brown
Commander, Naval Surface Forces/Commander, Naval Surface Force, U.S. Pacific Fleet

Vice Adm. Richard A. Brown is a native of Lowell, Massachusetts. He graduated from the United States Naval Academy in 1985 with a Bachelor of Science in Mathematics. He holds a Master of Science in Operations Research from the Naval Post Graduate School and a Master of Arts in National Security and Strategic Studies from the Naval War College.

Brown's sea tours include navigator and damage control assistant aboard USS Charles F. Adams (DDG 2); flag lieutenant for Commander, Cruiser Destroyer Group 12; operations officer aboard USS O'Bannon (DD 987); operations officer aboard USS Leyte Gulf (CG 55); executive officer aboard USS Mahan (DDG 72); commanding officer aboard USS The Sullivans (DDG 68); commanding officer aboard USS Gettysburg (CG 64); and commander, Carrier Strike Group 11.

Every year he commanded a Navy ship, his crew earned the Battle Efficiency Award. In 2009, Gettysburg also earned the Arizona Memorial Trophy.

Ashore, he served as flag secretary for the Supreme Allied Commander Atlantic/Commander in Chief, United States Joint Forces Command; branch head for Surface Commander and Lieutenant Commander assignments, Navy Personnel Command, PERS 410; Strategy and Policy branch head for Office of the Chief of Naval Operations (OPNAV) N3N51W; executive assistant to the Assistant Secretary of the Navy (Manpower and Reserve Affairs); commanding officer, Surface Warfare Officers School Command and commander, Naval Service Training Command. His most recent assignment was commander, Navy Personnel Command and deputy chief of Naval Personnel.

Brown assumed the duties as commander, Naval Surface Forces/Naval Surface Force U.S. Pacific Fleet in January 2018.

His personal awards include the Legion of Merit (six awards), Defense Meritorious Service Medal, Meritorious Service Medal (two awards), Navy Commendation Medal (five awards) and Navy Achievement Medals (two awards).

Updated: 23 April 2018

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NOT PUBLIC UNTIL RELEASED BY THE
HOUSE ARMED SERVICES COMMITTEE

**STATEMENT
OF
LIEUTENANT GENERAL STEVEN R. RUDDER
DEPUTY COMMANDANT FOR AVIATION
UNITED STATES MARINE CORPS
BEFORE THE
HOUSE ARMED SERVICES COMMITTEE
SUBCOMMITTEES ON READINESS & SEAPOWER
CONCERNING
PACIFIC FLEET READINESS
ON
5 FEB 2020**

NOT PUBLIC UNTIL RELEASED BY THE
SENATE ARMED SERVICES COMMITTEE

Good afternoon Chairman Garamendi, Chairman Courtney, Ranking Member Lamborn and Ranking Member Wittman. Thank you for the opportunity to appear before you today.

As you are all aware, the Marine Corps' Title 10 responsibility is to be the nation's expeditionary force in readiness. We are charged and expected to always be the most ready when the nation is least ready. This responsibility is at the very core of our identity as Marines. As Deputy Commandant for Aviation, my focus is building readiness for combat. By modernizing the force, supporting Marine aircraft maintainers, and continuing MAGTF integration, we as a team are ensuring Marine Corps aviation is ready to fight tonight.

Marine Corps squadrons stand resilient and become healthier each day as we continue to adequately fund our readiness accounts and invest in the material condition of our aircraft to ensure that our aircrew flight hour requirements are met. Prior to FY17, the service was forced to choose between modernization and funding its readiness enabler accounts. That process changed with the enacted RAA17 budget – allowing for additional appropriations – and two subsequent budget cycles. This increase in funding afforded the service the ability to simultaneously modernize and fully fund its readiness accounts. By funding enabler accounts to the requirement, we have been better able to provide the resources necessary to continue our readiness recovery plan in line with the National Defense Strategy, increasing readiness to adequate levels by 2021 for those units forward deployed as well as for those at home. Stable, predictable funding for sustainment and aviation spares accounts is critical to our ability to increase our number of flyable aircraft.

As a testament to Congressional support and our efforts, Marine aviation readiness has continued improving since November of 2017. In 2019, Marine Aviation executed 78 operations, were part of 88 major security cooperation events with partners and allies, and

participated in 170 major exercises. Today there are over 19,000 aviation Marines forward stationed and 17,100 forward deployed, totaling 19% of the active duty force forward engaged in 60 countries around the world.

Our achievements, however, have not come without their share of tragedy and hard lessons learned. On December 6, 2018, the naval aviation community absorbed a devastating loss, when a Marine F/A-18D Hornet from Marine All-Weather Fighter Attack Squadron (VMFA(AW))-242 collided with a Marine KC-130J Super Hercules from Marine Aerial Refueler Transport Squadron (VMGR)-152, during a training event over the Pacific Ocean fifty miles off the coast of Japan. Both squadrons were based out of Iwakuni, on mainland Japan, under the Marine Aircraft Group-12 (MAG-12), 1st Marine Air Wing (I MAW), 3rd Marine Expeditionary Force (III MEF).

All these Marines served their country with honor, and they will never be forgotten. We cannot change what has happened; what we can do is use this tragedy to grow and change our organization to make these operations, and all operations, safer. Such initiatives will be the legacy of these six Marines.

On Sept 23, 2019, the Asst. Commandant of the Marine Corps appointed a Consolidated Disposition Authority (CDA) to further review this mishap, and a similar mishap from April 2016 that did not involve any casualties, along with any related matters. The CDA is an independent senior commander with the authority to initiate any investigation the CDA deems relevant and to take administrative and disciplinary actions it deems appropriate in the matter. This authority allows the CDA to follow any logical leads and adjudicate cases that result from any investigation into command climate, command culture, and command action. As the CDA review is currently an ongoing effort, it would be inappropriate to comment on particular mishap

details in order not to compromise the integrity of the review. I am here today to inform you of steps we have taken to increase our readiness levels and make our operations safer.

These steps fall into four categories: Materiel Readiness; Training; and Personnel.

MARINE AVIATION READINESS UPDATE

Materiel Readiness

Headquarters Marine Corps has made F/A-18 aircraft readiness one of its top goals as our Hornets provide the bulk of the Marine Corps' tactical aviation inventory and remain a critical asset as the institution transitions to the F-35. Improved materiel readiness within our fixed-wing community comes through: reducing maintenance and supply issues that lead to non-mission capable aircraft; reducing the number aircraft that are undergoing in-service repair; and increasing our depot throughput.

In FY17, the Marine Corps and Naval Supply Systems Command invested a total of \$1.68B into legacy F/A-18 parts, of which \$1.2B was devoted to flight surface spares. Across the entire Marine F/A-18 fleet, our overall mission capable rates have increased from an annual average of 48% in 2017 to 64% in 2019 – an increase of 16% in two years.

Programs such as the Depot Readiness Initiative (DRI), which maximizes the efficiency of the work conducted during depot operations, have increased the productivity of our Marines on the flight-line. DRI has resulted in a 70% reduction in required man-hours to return aircraft to the flight schedule upon delivery from a depot event. The result has been a more efficient use of maintenance man hours and increased touch time on additional airframes.

Today, nearly 9,600 repairable components have been returned to the F/A-18 supply system as a result of the Stricken Aircraft Reduction and Disposal Program (SARDIP), which utilizes contractors for the removal and conditioning of parts from stricken aircraft. These components are then made ready for use and then transferred to our current flight line. The program has increased the number of spare parts in our supply warehouses, helping to reduce our non-mission capable aircraft rates due to supply issues (NMCS).

Our Customer-Oriented Leveling Technique/Program Demand Level (COLT/PDL) is a new allowancing tool for consumable parts adopted from the Air Force, which will allow for us to place more parts on the shelf, improving access to consumable items for our Marine Aviation Logistics Squadrons (MALS) and subsequently our flying units. The impact translates to lower overall customer wait times for parts, which is particularly evident within our overseas squadrons. On average, wait times for consumable parts within our MAG-12 squadrons reduced by 50% from 12 days to 6 days from 2018-2019.

Finally, we have looked at ways to improve our maintenance practices on the flight line. In December 2019, we implemented a Maintenance Capacity Model (MCM), which is a management tool that leverages a more data-informed process to identify a better balance between operations and maintenance. The model analyzes current squadron practices and identifies limitations that prevent our Marines from exercising efficient forms of maintenance. Squadrons generally witness a 20%-30% increase in workforce productivity once the model is implemented. Last month, the Marine Aviation Weapons and Tactics Squadron-1 (MAWTS-1) provided a team to visit all units in 1 MAW to teach improved maintenance management techniques through the Advanced Aircraft Maintenance Officer Course (AAMOC). MAWTS-1

also sent a team to VMFA(AW)-242 to discuss analytics-based planning, which provides a better forecast for maintenance capacity when balanced against operations.

A key indicator of our success was our ability to answer the October 2018 80% directive established by our Secretary of Defense, which mandated that our TACAIR squadrons achieve an 80% mission capable rate by the end of FY19. Our efforts resulted in meeting or exceeding the goal on 7 separate occasions and monthly mission capable rates of 76% for 2 consecutive months.

Training

The truest metric of health in aviation is aircrew flight hours, because that number – which is easy to track, and which allows us to compare our combat readiness month over month and year over year - encompasses aircraft readiness, flexible logistics and responsive supply chains, and aircrew preparation. Due to our efforts and support from Congress, the average monthly flight hours for our pilots is steadily increasing. Our F/A-18 pilots have witnessed a 2% increase in flight hours per month since FY16 and our F-35 pilots have seen a 6% increase in monthly flight hours also since FY16. The increased access to flight hours translates to better training and more proficient pilots.

Next, Headquarters Marine Corps procured an additional F/A-18D simulator for MCAS Iwakuni prior to December 2018. Delivery of that simulator is scheduled for this March. Complemented by the two F/A-18C simulators that already exist on the base, our crews will have additional opportunities to maintain proficiency levels and mitigate risk, even in the event of aircraft availability shortfalls.

Personnel

Finally, with respect to personnel, the Commandant of the Marine Corps has stated that III MEF will become the Marine Corps' main focus of effort. He has directed that our best Marines be identified for assignment, either immediate or pending, to our Japan-based force. As a former Commanding General of Marine Forces Pacific (MARFORPAC), our Commandant understands the need to place III MEF as our priority tactical unit with I MAW as our priority aviation wing.

Headquarters Marine Corps has implemented a change in tour lengths for Marines going to Okinawa and Iwakuni, shifting unaccompanied tours from the conventional two years to a new length of three years. This change allows us to "grow" and retain talented young NCOs within III MEF and address some critical experience shortfalls.

Headquarters Marine Corps has implanted a stabilization plan for Japan-based units providing support for the 31st Marine Expeditionary Unit (MEU). The procedure was designed to maintain unit cohesion stabilization by ensuring that Marines in the unit do not receive orders out of the unit during preparation for deployment. The process also helps to identify those Marines who are experiencing high operational tempo in an effort to determine Marine volunteers or alternate solutions.

In the FY2018 retention guidance that was disseminated in July 2017, Marine Manpower and Reserve Affairs commenced incentives for aviation maintainers. All Corporals through Gunnery Sergeants holding current qualifications of Collateral Duty Inspector (CDI), Quality Assurance Collateral Duty Representative (CDQAR), Quality Assurance Representative (QAR), or Safe For Flight (SFF) within the Fleet Marine Forces who reenlist for 48 months, and agree to remain in a specified unit for the first 24 months (following the end of their current contract), will rate a \$20,000 "kicker" in addition to the PMOS bonus amount. This monetary package was

designed to increase maintenance capacity and retain well-needed experience within specific units. The program has been widely successful. As of January 22 of this year, 80 Marines within MAG-12 had accepted this “Kicker”, 16 of which belong to VMFA-242. Across the entire fleet, over 1,900 Marines have accepted the “Kicker” since its inception in October 2017.

We have always focused on the measureable impacts of low readiness: mission capable rates, low flight hours, and retention rates. Naval aviation is a uniquely unforgiving environment, and we train for and anticipate every variable we can control. We feel this mishap and others deeply, and we are taking direct, decisive action to make our force tougher, smarter and safer. As we look to the future, we are optimistic that we are heading in the right direction.

Lieutenant General Steven R. Rudder
Deputy Commandant for Aviation

Lieutenant General Steven R. Rudder assumed his current position as the Deputy Commandant for Aviation, Headquarters Marine Corps in July 2017. LtGen Rudder is a native of Canton, CT, and was commissioned as a Second Lieutenant in June 1984. LtGen Rudder previously served as the Director of Strategic Planning and Policy (J5), U.S. Pacific Command.

LtGen Rudder's previous assignments include: Serving in Co B, 3rd Amphibious Assault Battalion; Student, NAS Pensacola, FL, designated a Naval Aviator; HMT-303, AH-1J helicopter training; HMLA-367, Maintenance Quality Assurance

Officer and Weapons and Tactics Instructor; unit deployments to Futenma, Okinawa, and Operations DESERT SHIELD/STORM; HMM-161 (REIN), Weapons and Tactics Officer deploying with the 11th MEU(SOC) back to North Arabian Gulf; AH-1 Division Head, Marine Aviation Weapons and Tactics Squadron One; Operations Officer, HML/A-167; Future Operations Officer, deploying with the 22nd MEU(SOC) to EUCOM and CENTCOM AOR, HMM-261(REIN); Office of Net Assessment, the Office of the Secretary of Defense serving as Mr. Andrew Marshall's Military Assistant; Squadron Commander, HML/A-167 deploying to EUCOM AOR in support of Dynamic Mix; Senior Watch Officer, OIF, 3rd Marine Air Wing Tactical Command Center; J5 Lead planner for Afghanistan and Pakistan, CENTCOM, Tampa, FL; deployed to Afghanistan, Pakistan and Qatar in support of Operation ENDURING FREEDOM; Commander, Marine Air Group 26, deploying to Al Asad, Iraq, in support of Operation IRAQI FREEDOM 9.1; Branch Head of Aviation Expeditionary Enablers (APX), Headquarters Marine Corps Aviation; Legislative Assistant to the Commandant, Headquarters Marine Corps, Office of Legislative Affairs; Commanding General, 1st Marine Air Wing, Okinawa, Japan; deployed Wing to Thailand and South Korea.

LtGen Rudder holds a Bachelor of Science Degree in Business Administration from Boston University, a Masters of Military Studies Degree from the Marine Corps Command and Staff College, and a Masters of Strategic Studies from the United States Army War College.

Personal decorations include the Defense Superior Service Medal, Legion of Merit with Gold Star, Distinguished Flying Cross with Combat 'V', Defense Meritorious Service Medal with Gold Star, Meritorious Service Medal with Gold Star, Air Medal Strike Flight 4, Navy Commendation Medal with Gold Star and Combat 'V', Joint Achievement Medal and Navy Achievement Medal.

**WITNESS RESPONSES TO QUESTIONS ASKED DURING
THE HEARING**

FEBRUARY 5, 2020

RESPONSE TO QUESTION SUBMITTED BY MR. CONAWAY

Admiral BROWN. Minimum Notice MIs since Oct 1, 2019 76 planned in FY20 (53 surface, 21 submarine, 2 CVN) 23 executed thus far (7 cancelled due to operational commitments) 18 surface ship (12 CNSP, 6 CNSL) MIs executed 5 submarine (4 CSP, 1 CSL) MIs executed [See page 20.]

RESPONSE TO QUESTION SUBMITTED BY MR. KIM

Admiral BROWN. Only three SPY-1 Arrays (USS COLE, USS FITZGERALD, USS OSCAR AUSTIN), one Signal Processor Group (USS CHANCELLORSVILLE), and one Transmitter Group (USS SAMPSON) required major-damage repairs since 2000. Previous SPY-1 major-damage repairs utilized assets from the production line vice a pool of ready battle spares. Navy conducted a deep dive into options for SPY-1 Radar system battle sparing. In the long-term, the FY20-FY25 Program of Record plans for Surface Ship Modernization and Decommissioning will enable Navy to harvest components for storage and employment as spares of critical equipment for use in cases of battle damage. Many lower level components are available for immediate harvest, but others are not available until future years due to the specific upgrade/replacement schedules for each Destroyer (DDG) or Cruiser (CG). If an immediate need for a critical spare arises in the interim, Navy can obtain those components from the various ashore engineering sites. Removal of that equipment for use in cases not involving battle damage is not prudent given the operational impact of respective shore sites. [See page 26.]

QUESTIONS SUBMITTED BY MEMBERS POST HEARING

FEBRUARY 5, 2020

QUESTIONS SUBMITTED BY MR. WITTMAN

Mr. WITTMAN. Vice Admiral Brown, the Navy's November 2017 Comprehensive Review of Recent Surface Force Incidents cited several operational, training, and readiness concerns regarding the fleet's legacy surface ship radar systems. Specifically, examples of the findings stated: "... RADAR operators consistently failed to use the correct range scale or tune the RADAR to the appropriate settings..." (Sect. 3.6.1—pg. 37), and that: "... both SPS-73 and SPS-67 RADARs on forward deployed Cruisers and Destroyers are reported as consistently below operational availability thresholds for the last two years." Further noting that, "Their replacement, Next Generation Surface Search RADAR (NGSSR) has been delayed due to underfunding." (Sect. 7.2.2—pg. 84) The Review concluded with a recommended action to: "Accelerate plans to replace aging military surface search RADARs and electronic navigation systems.", and specifically, to: "Fully fund development and implementation of Next Generation Surface Search RADAR." (Sect. 7.3 [NAVSEA, 31Mar2018]) As you know, the Next Generation Surface Search Radar is being designed to improve the detection, navigation and situational awareness capabilities of your fleet, and importantly, to modernize decision support tools and watch stander workload reduction features to improve readiness and prevent future collisions.

Vice Admiral Brown, can you describe the importance of this radar modernization program to your efforts to improve the readiness of your fleet, and any steps you are taking in the interim to address the operational and training challenges cited in Comprehensive Review?

Admiral BROWN. Replacement parts for high-end electronics inherently obsolesce over time as technology matures. This results in decreased readiness as our systems age and components, that degrade or fail, become in short supply. Radar modernization is critical to combatting obsolescence. The Next Generation Surface Search Radar (NGSSR) will field the latest surface radar technology that industry can provide. NGSSR fielding keeps the Navy in line with industry technology standards and increases readiness. Before the 2017 USS FITZGERALD and USS JOHN S. McCAIN collisions, the Surface Force recognized a decrease in surface search radar operational availability, and took two steps to increase the readiness of these systems. The first was to initialize Rotating Radar Maintenance Assistance Team (MAT) visits to ships by the Navy's rotating radar experts. The goal of the Rotating Radar MAT program is to optimize radar performance and increase technical proficiency of the shipboard technicians. The second action was to accelerate the fielding of technical refreshes on older systems. These refreshes replaced some aging radar parts with newer, more reliable, and more readily available parts. Following the USS FITZGERALD and USS JOHN S. McCAIN incidents, the Surface Force implemented two additional actions to increase radar readiness. The first was to implement the Rotating Radar Improvement Program (RRIP). The RRIP requires all ships to provide monthly reports on critical radar system components and overall system performance. Navy radar engineers evaluate this data, and in turn, identify readiness drivers and conduct trend analysis. The second action was to require ships to report all navigation system casualties at a minimum of Category 3—the second highest casualty category. This ensures all operational commanders have visibility on casualties to these critical systems, and ensures energizing of the appropriate resources to repair system casualties. All of these efforts resulted in increased readiness. Driving operational availability higher is difficult as these systems age. The Navy is committed to NGSSR as soon as possible. Pursuant to Comprehensive Review (CR) findings, all of the following measures to enhance the development, assessment, and sustainment of radar operator proficiency are in place. A 2018 review of Personnel Qualification Standards (PQS) for all Bridge and Combat Information Center (CIC) watchstanders, developed specific PQS requirements for radar operator, where such formalized requirements did not previously exist. Additional Automatic Radar Plotting Aid (ARPA) training was added to the Basic Division Officer Course (BDOC) curriculum and included in the Junior Officer of the Deck (JOD) Course established in 2019. Navigation, Seamanship and Shiphandling Trainers (NSETs) in each Fleet Concentration Area (FCA) now bear integrated radar capability between the Bridge and CIC training suites. Holistic reviews of Bridge/CIC

effectiveness during Bridge Resource Management Workshops (BRMWs) and Type Commander Navigation Assessment Team visits now include Radar operator training and mentoring. Navigation Self-Assessment Groom Teams (NAV SAGTs) include Radar tuning and equipment functionality verifications as part tailored reviews for each respective ship class.

QUESTIONS SUBMITTED BY MR. KIM

Mr. KIM. Vice Admiral Brown, what are the Navy's plans to deal with the SPY-1 radars battle spare shortages in current inventory?

What plans, if any, is the Navy considering in implementing a possible SPY-1 array battle spare program? Logically, 100% of the DDG and cruisers currently in the Navy's inventory have SPY-1 radars, it would be a reasonable question to ask has the Navy considered plans to implement a battle spare program, in light of the recent incidents.

Admiral BROWN. Only three SPY-1 Arrays (USS COLE, USS FITZGERALD, USS OSCAR AUSTIN), one Signal Processor Group (USS CHANCELLORSVILLE), and one Transmitter Group (USS SAMPSON) required major-damage repairs since 2000. Previous SPY-1 major-damage repairs utilized assets from the production line vice a pool of ready battle spares. Navy conducted a deep dive into options for SPY-1 Radar system battle sparing. In the long-term, the FY20-FY25 Program of Record plans for Surface Ship Modernization and Decommissioning will enable Navy to harvest components for storage and employment as spares of critical equipment for use in cases of battle damage. Many lower level components are available for immediate harvest, but others are not available until future years due to the specific upgrade/replacement schedules for each Destroyer (DDG) or Cruiser (CG). If an immediate need for a critical spare arises in the interim, Navy can obtain those components from the various ashore engineering sites. Removal of that equipment for use in cases not involving battle damage is not prudent given the operational impact of respective shore sites.

QUESTIONS SUBMITTED BY MR. CISNEROS

Mr. CISNEROS. Is there any sort of objective test, such as a standardized written and/or practical examination SWOs take in order to qualify/requalify as an Officer of the Deck or for obtaining their SWO pin? To my knowledge, Merchant Marines take licensing exams. If there are none, I'd be concerned about the subjectivity of assessments.

Admiral BROWN. There are multiple standardized objective tests and exams required for Officer of the Deck (OOD) and Surface Warfare Officer (SWO) qualification. For example, a pre-requisite for OOD qualification is successful completion of the 9-week Basic Division Officer Course (BDOC), which includes several written exams on Navigation Fundamentals, Rules of the Road, and ship-handling. Additionally, to reduce variance and subjectivity during the assessments, the Surface Warfare Officers School Command (SWOS) developed check sheets, established grading criteria, and provided assessor training. Collectively, these measures ensure consistency and standardization in the assessment process employed at each milestone level.

Mr. CISNEROS. Since the Surface Navy has already adopted some paradigms from their counterparts in Naval Aviation such as CO/XO fleet-ups and dedicated training ships, is it worthwhile for the Surface Warfare Community to look into a NATOPs-type (The Naval Air Training and Operating Procedures Standardization) program that Aviators use, which has shown to have dramatically reduced aviation mishaps since its inception?

Admiral BROWN. The Surface Warfare Community already employs similar measures. For ship-handling, the Surface Navy utilizes the United States Coast Guard (USCG) Navigation Rules as the source document governing the operation of vessels upon the high seas and in all waters connected therewith navigable by seagoing vessels. For comprehensive governance of SWO requirements and milestones from accession through major command, the Surface Warfare community utilizes the Surface Warfare Officer Career Manual. This document spans all of the following:

- SWO Milestone Mariner Skills Assessments, Evaluations, and Competency Checks
- Surface Warfare Mariner Skills Logbook requirements
- Surface Warfare watchstanders proficiency requirements
- SWO Qualification requirements
- Surface Force Command requirements

For professional competency requirements, the Surface Warfare community utilizes Surface Warfare Officer Requirements Document (SWORD) to define SWO competencies during career progression from Division Officer through Major Command. The SWORD provides the Surface Force a broad guide of the progression of knowledge and professional skills expected at each career milestone. It establishes a commonly understood baseline requirement upon which training and the associated infrastructure can be developed, implemented, and validated to ensure the delivery of required skills. The major competencies at which SWOs develop, enhance, and sustain proficiency across multiple career milestone assignments are: Fight the Ship, Drive the Ship, Manage the Ship, and Command the Ship. The SWORD provides the specific knowledge, skills, and abilities, (KSAs) associated with each four core competencies (Drive the Ship, Fight the Ship, Manage the Ship, Command the Ship), and outlines the key means of sustaining currency across the SWO training continuum.

In defining Surface Warfare navigation, seamanship, ship-handling, engineering, damage control, material management, program management, and other requirements, Surface Warfare drew heavily upon USCG and commercial maritime industry. In recent years, the Surface Force progressively adopted elements of the merchant marine industry Standards of Certification and Watchkeeping (STCW) and USCG 3rd Mate (Unlimited) licensing requirements into SWO and enlisted training where such requirements were aligned to Surface Warfare core competencies. The breadth of SWO qualification requirements (some of which exceed STCW/USCG standards—e.g. SWO Mariner Skill Logbook documentation criteria) and the presence of specific STCW and USCG licensing requirements (some of which have no bearing upon Surface Warfare competencies—e.g. Cargo Handling), however, preclude wholesale adoption of STCW and 3rd Mate (Unlimited) licensing requirements. The Surface Warfare mariner skills assessment regime is comparable to the Navigation Skills Assessment Program (NSAP). The Maritime Institute for Technology and Graduate Studies (MiTAGS) employs NSAP, which is the assessment gold standard for assessment for the commercial marine industry.

