Admiral Whitesell, thank you for joining us today.

Next to him is Rear Admiral James Downey, graduate of SUNY Albany. First sea tour was aboard the USS Hayler, which was a Spruance class, Jim? Yeah. Master’s degree in computer science from the Naval Postgraduate School, and then he pivoted and became and engineering duty officer. His portfolio of NAVSEA programs are basically a who’s who of all the important programs: include GPS integration, Tomcat integration – oh, I’m sorry, Tomahawk integration. He was OIC at the Space and Naval Warfare Systems Command; chief engineer of the CVN 21, which set him up well for his current role: program manager of DDG 1000, where he oversaw the delivery of the Zumwalt to the fleet; NAVSEA deputy commander for surface warfare; and he’s been PEO Carriers since June of 2019.

And then our last panelist is Rear Admiral Andrew Loiselle. Graduate of Assumption College, and he did in that capacity ROTC at Holy Cross, which means we have two Holy Cross ROTC guys in the room. I think that defines a mutiny, so one of you is going to have to take your shoes off. I’m not sure who wants to do that, you or Admiral Daly. Received his Pilot Wings of Gold in January of ’91. Nugget in VF-142 flying the F-14B model of the Tomcat, so we have two ghost riders on the stage. And as a former puking dog, I got to say I’m not terribly happy with that. So that’s an inside Tomcat joke. That was our sister squadron, yeah. Served at VX-9 in the testing and eval world. Transitioned to the legacy Hornet, the FA-18C. Was a department head in VFA-125, then had command of VFA-146. Graduated from nuclear power school after being selected for the carrier CO pipeline with honors. Deep draft was the Gunston Hall, LSD 44, and he had command of the George H.W. Bush, CVN 77. He was commander, Strike Group EIGHT aboard Truman. And then he was also the commander of Strike Group FOUR, which is the training strike group. He’s been the director of the Air Warfare Division, N98, since June of 2021.

So, gentlemen, thank you for being here. Let’s get right to is.

So, Air Boss, this year, 100 years of carrier aviation. The Chinese just launched their latest aircraft carrier. Hypersonics are in the mix. So a lot of folks are saying the day of the aircraft carrier is over. How do you answer that charge?

Yeah. I think when I look back over – as we look backwards over the centennial of naval aircraft carriers, we also have to look at, you know, where we’re going forwards in answering that question. So, I look at the various classes of carriers that we had, and then I – then I would pause on the newly decommissioned – a few years ago – USS Enterprise, that had 40 classes – 40 different types of aircraft over its 50-plus-year history. I look at the evolution of the Nimitz class and now the Ford class, and that same evolution of the air wing is what adds to the lethality and is the centerpiece for our maritime strategy as we go to the two
tenets that CNO talks about in his – in his orders, are maritime sea control and power projection.

That air wing of the future has already manifested – partially manifested over the last year in the past two cruises with Vinson and Abraham Lincoln. Joint Strike Fighter, with VFA-147, had a successful deployment on Vinson. You combine that with CMV-22, E-2D, Growler capabilities, the workhorse of the – of the Super Hornet on the ship, also as well as the Romeo/Sierra capabilities, and look at where they employed Vinson itself right in the heart of the first island chain and some of the capabilities that we see briefed in other channels on how that carrier was received. To make sure that it wasn’t, obviously, not a fluke, now we bring Abraham Lincoln, who is in Hawaii right now doing RIMPAC, and make sure that TACAIR integration is alive and well. Now we got VMFA-314, the Marine Corps, with their F-35 Charlie variants, too, in the same model as they use maneuver space throughout the Western Pacific to present dilemmas to our threat.

And the feedback that we’re getting there has been pretty – has been absolutely phenomenal, the way not only the legacy platforms performed but the new platforms that we had. We’ve got increases in range capability. We’re progressing in our increases of weapons capability. The maneuverability of the carrier, it’s been written about multiple times. While we talk about weapons engagement zones, you know, it’s a – it’s a worn-out argument – to me it is – when you take weapons engagement zones, and you plop the little mushrooms down on a chart and you treat them as if they’re no-penetration zones. You got to remember that targeting for the threat to target us is just as difficult as we have for targeting for them. So, they have to be able to satisfy the kill chain at the same time that we have to be able to satisfy the kill chain, and I’m pretty satisfied with some of the capabilities that we’ve got and where we’re satisfying that kill chain.

Again, Vinson, Abraham Lincoln, with our partial air wing in the future, as we move towards and the roadmap for my number-one vision statement for building a capability and capacity to win in great-power competition, those two instantiations for Vinson and Abraham Lincoln. And we’re not resting on our laurels there. Upgrades to F-35 Charlie as we go to Tech Refresh 3, Block 4. As we get service-life modification in Super Hornets to get them to 10,000 hours, brand new buy of Super Hornets Block 3s, as well as service-life modification in the Block 3s, we get it up to 10,000 hours. Growler – as we go to Growler capabilities model, Block 2, Growler. E-2D, with its Hawkeye DS E-2D system software capabilities, what’s going to be the follow-on platform? The increased logistic rings for CMV-22. I think we’re responding to the threat and we’re responding to this great-power competition environment to set ourselves up to compete exactly where the carrier was meant to go, and that’s forward.

I am not going to forget about my East Coast brethren. You look at what HST – Harry S. Truman – is doing in the Mediterranean now, under the command of
NATO and flying some pretty exciting missions in support of NATO for the aggression – the Russian aggression across Ukraine.

And then, you know, I’m not going to leave anything else – the others out. The P-8s have absolutely knocked it out of the park with their ASW capability. The Growlers, both expeditionary as well as deployed, our Growlers are – a critical unit is on the ground in Poland right now doing incredible AEA work, again, supporting the NATO effort there.

I think we’re in a good position right now. I’m not resting on our laurels. Gerald R. Ford – I know Jim Downey’s going to talk about that, but Gerald R. Ford, as she comes out and heads out to sea here this fall with her – with the partial air wing that she’s going to have, I think we’re in a good position right now – both platforms, carrier platforms, aircraft platforms, and weapons systems that Bucket’s got in the hopper for us to buy.

So, talking about the F-35’s first deployment on Vinson, I know there were some challenges with what we traditionally think of as FMC. But what you were saying to me before is, you know, to frame it that way doesn’t account for just how different the F-35 is. So talk to us about, for instance, you know, the four plane is the way that you execute that. That’s your, like, Adam, is four airplanes, and the fact if dash-1 doesn’t have a radar he still has total SA because of what the other airplanes have, things that as Gen 4 guys we just can’t even think about.

Yeah, that’s a great - refreshing me back to that. You know, you take a 30,000-foot view of the way the air wing’s going to be employed, and it’s completely different than even me as a legacy guy and you looking back too. It’s not – the air wing’s not going to be employed the same way. F-35 is a perfect exemplar of that. The way we employ that platform, it isn’t – you know, we don’t – there’s no welded wing, defensive/offensive combat spread, and then you break out into – and do some of the traditional missions that we would have done five or 10 years ago. Employing the Joint Strike Fighter as we – as they employed it as a – as a division, I’m not going to go into the specific tactics, techniques, and procedures, but the way they employed it, you know, definitely more spread out. The way information is shared amongst the platform makes up for any deficits that an individual aircraft may have.

So the way we think of mission capability and full mission capability, we have to think about it in a distributed and in a – in this case, in a full division or greater employment mode through distributed maritime ops. And again, fitting into the bigger vision of distributed maritime ops, a single platform can have degradations, but because of the information sharing that’s shared between the platform we have to think about how we’re going to define full mission capability, not platform-specific, but truly mission-specific – a different way of looking at things.
Cmdr. Carroll

So as we mentioned at the outset, this is the enterprise–manned, trained, and equipped–and the requirements at the end there with Admiral Loiselle.

So, Bucket, there’s been great hue and cry about the 2023 budget submission in a whole bunch of ways. We’ve talked about the shipbuilding plan. The commandant of the Marine Corps has been beat up pretty good for Force Design 2030. So how are you postured in terms of the budget and your requirements therein?

Andrew Loiselle

So–is this on? OK. I would say for POM 23, in the aviation portfolio, I think the thing that drew most people’s attention was the reduction in the number of F-35s across the fiscal year’s defense plan, and so while clearly that is not something that naval aviation wanted, there is some significant bills that need to be paid within the Navy writ large, so the CNO’s been very clear on what his guidance was to us in the formation of the POM, and Columbia was the number one priority and so–and then we were asked to go for–Columbia: readiness, capability, and then capacity. So the number of aircraft that I have in a given configuration fell into that last category. What does not fall into that category are the upgrades to those aircraft, i.e., the TR3 Block 4 that air boss mentioned or, down the line, into the rest of our aircraft for going after things like an infrared search and track for the Super Hornet fleet going to Block 3 configuration for the Super Hornet fleet, and so–and accompanying that is a family of weapons for each of those aircraft to bring out to the fight that are of significantly longer range than anything that we’ve had in the past.

So bottom line is, do I have everything that I want? No, absolutely not. But neither does anybody else in this budget. So there’s something for everybody to dislike in fiscal ’23. And so the CNO was very generous on his unfunded priority list and put some of the things that you didn’t see in the budget onto that last. And as you can see from some of the traffic that’s come out of Congress at this point in time, there is interest in adding to the DOD top line by the time we get the appropriations for fiscal ’23, and it’s our sincere hope that a lot of naval aviation’s priorities will be categorized within that final budget.

Cmdr. Carroll

So if you had to give a color code to your ability to meet the requirements, what color is it?

Rear Adm. Loiselle

I would go with yellow. So bottom line is we’re getting 44 strike fighters out on each of our aircraft carriers. Anybody that’s ready to deploy has all of their aircraft ready to go in time for the entire OFRP cycle. There’s none of this last-minute engagement. And as I’m sure air boss will talk to you in one of the questions later, we’ve made tremendous strides across all of our type model series in being able to get massive amounts of readiness out of the dollars that we’re given. So we’re getting much more intelligent about how to utilize the dollars that we’re given to generate the highest level of readiness. And so as far
as current configuration of our flight decks and the plan that we’ve built to get to the air wing of the future, I’m comfortable in that regard.

Cmdr. Carroll

So Admiral Downey, we’re talking about aircraft carriers. You have two principal concerns, one is getting Ford to sea and then the RCOH picture. So how are we looking currently with the re-coring of two boats that are in RCOH right now?

James Downey

We are across the portfolio very busy. At Newport News alone we have 73 and 74, of course, 73 wrapping up, and I’ll come back to it in a minute, and 74 is just starting its second year. We are also – we’re getting – we’re progressing JFK who delivers in two years, in ’24. At the end of August, the 27th of August, we do the keel laying on Enterprise, so significant work there going on on the new Enterprise. And of course we are well into the Doris Miller from the two ships procured in 2019.

I’ll hit Ford for a second and then back to GW. Portions of that team are also – have been supporting Ford throughout this last couple of years with lots of work that I’m sure we’ll talk about here in a few minutes, but that team has tried to take a lot of those lessons learned and get it back over into the shipyard onto 79 and follow. Seventy-three, GW herself, she’s at 95 percent complete, the ship overall. We are wrapping up the propulsion plant work and the topside work. So she delivers right around the beginning of the calendar year. At this point in the program – so we’re well past the refueling, we’re well past that work. At this point in the program, we get into a very lockstep approach on going to a certain state in the propulsion plants and getting the crew through their qualifications to operate the nuclear plants as they’ve been refueled. And then we go onto combat systems testing this fall and onto those evolutions and get back to the re-delivery phase here in the December to January timeframe.

So this ship, I’ll just share with the group, you can go back in time. We were going to refuel her, we were going to inactivate her, and we shifted back to refuel her. So that slid her schedule to begin with several years to the right and had a cascading impact onto Stennis as well, not only in schedule but also in the workforce, in the industrial base. So for all good reasons at the time, we took what was a toe-to-heel refueling complex overhaul program and we changed that schedule. It did that ahead of COVID, had a pretty significant impact on the shipyard – we have, I know, HHI sponsoring, to some degree here, but had a dramatic impact on the level of experience in the shipyard and put a gap in the knowledge experience from 72 to 73. So we are principally through that now. We are onto the – a very fixed five-month period of where the work is determines mainly activating the propulsion plant and the qualifications and the readiness for sea. So we’re confident she’s in the final phase; she’ll come out around the beginning of the year.
We have changed some of our processes from 73 to 74 contractually. Waterfront integration teams, fleet introduction teams, and I think the ship side of it as well is looking in the future about how we man and prepare some of these ships going into such deep maintenance. So we’ve learned a lot from 73; we need to get her wrapped up and get her back on her redelivery phase, which is where we’re headed right now.

Cmdr. Carroll

So Bucket and I did the shakedown of 73 back in 1992, so that’s making me feel a little bit old.

So let’s talk about Ford. I know we don’t want to talk any specifics about future schedules, but when do we expect that that will be a – let’s just call it a fleet asset, and what capabilities does that bring that are game changers that maybe the audience isn’t aware of?

Rear Adm. Downey

Thank you for that. So first a very intense last three years, but that’s a microcosm of coming up with a new class. So just quickly, the latter half of the ’90s was the analysis of alternatives for this new class of ships, so think ’96, ’97 plus, and then look at that as a delivery in 2017 and all the work since, so quite a long time – 20-plus years to get to delivery of the first of a class, with a Nimitz hotline, you know, right up through Bush. The point of that is these are capital assets that you’ve got to stay steady on and you’ve got to stay after, and you’ve got to keep that material and industry flow going to achieve those goals.

So I just – Asherah took a lot of folks well before the current generation to get her to 2017. She went into her initial workups post-shakedown and I came aboard three years ago as we were in the last phase of post-shakedown. As we talked about where she’s going, over the last three years, she’s one to two years ahead of where we forecasted, so over the last three years we wrapped up PSA in 18-month post-delivery test and trials. Very unique situation where the air wing embarked as well; the strike group embarked; surface combatants deployed with her. She spent out of that 18 months 250 days at sea, out for a month, in for a month. That was to wring out the C2 on board, instead of just meet the basic mission requirements of the ship and avoid that period after. Pretty intense effort there, and she finished that and ran up to 7,000 to 8,000 cats and traps over that period. When we were out about two weeks ago, she passed her 10,000th cat trap.

So from there we went on to shock trials, an effort that’s been discussed for years, and we had a four-month shock-trial period, really based upon 20 years of component design, and I think the team should be pretty proud of that effort. She ended up with 20 percent of the damage, or work, from shock trials that 71 had in the late ’80s – 20 percent. That’s industrial or man hours to fix things. Of that 20 percent, 85 percent of it was repairable by ship’s force – speaks to the design, so a very, very solid design. Came out of that and ship finished – this is the first East Coast CNO availability we’ve done in a private shipyard in a very long time, and she came out a day early, back in March. So that team from the ship CO on down,
from the other leadership on the waterfront, has really been clicking very well. She’s in a compressed workup cycle right now.

In addition to that, there are operational tests that are going on. She just came through a special trials there and she’s on track to go this fall, as the Navy’s been talking about. That’s a multi-nation event that will run over the fall. We’ve got about seven other nations with other assets out there with her, including the French and U.K. carriers, and we’ve got about three other nations on as staffs, so there’s 10 other nations planned to be out there with her.

On the specifics, that’s a very dynamic world that we see today, so I will – that’s kind of where we are with her, but the ship is doing an excellent job and the type commander’s got a really great team there, getting her ready for deployment.

Cmdr. Carroll

So let’s remind the viewers that this was ambitious, 23 new major systems on a platform. CNO has been on record as saying maybe that was too many. We have beat ourselves up about that. But let’s also either educate or remind the audience that the Ford class was not going to be green-lit if it was just an evolutionary design; it needed to be revolutionary. So this is one of the paradoxes of procurement. So again, at the end of all this, we’re going to get a pretty amazing capability. Would you agree with that?

Read Adm. Downey

Yeah, absolutely. This was a two- to three-ship evolution to get to where she is today, right, so CVNX-1 and -2, and there were decisions in the early 2000s, not unique to nuclear aircraft carriers, to we need to advance these technologies and these warfighting capabilities. So a lot of risk there. Analyzing and understanding the concurrent risk of all those efforts is probably where we were a bit off on how we could do that. I think there’s other programs that track to historical progress of change the hull, stick with the hull, change the weapons system, and propulsion plant – not all at once. But there’s different requirements and different rationale based upon the time of the day of 22 years ago versus today.

But she’s – the key systems that you all talk about and I’ve had lots of coverage overall – Dual-Band Radar; I was very successful during those post-delivery tests and trials period. EMALS and AAG, like I said, through the first two years was about 747 traps, ’17 to ’19, and now we’re at about 10,000.

The key areas to – so I think we’re through the majority of understanding how to operate the systems, commissioning them. We’ve learned a lot on operator procedures. The key phase to look for now is how we sustain those efforts. It takes some time to get feedback in the system on how a system’s performed, how we’re stimulating industry and the supply system, so our focus for her has certainly shifted over to the sustainment phase and how we keep her ready.

Cmdr. Carroll

As we handicap the threat, as I mentioned, the Chinese just launched Fujian, which has EMALS, but that’s a conventional-powered carrier, so they are going to have to refuel like every other day to power the EMALS, whereas the new
power plants on the Ford class have excess energy capacity, which powering EMALS is no big deal. In fact, that excess capacity can be used in the future for a self-defense capability that can make hypersonics maybe a moot point as well.

So Air Boss – let’s double-click on some of what Admiral Loiselle was talking about in terms of your ability to eke out a lot of readiness from the existing budget. So let’s remind everybody, when you and I were in VF-101 as instructors – you know, we celebrate how awesome the Tomcat was, but there were some lean days in terms of fly and air funding and readiness, right, where you would come back from deployment and you would give all your jets to the squadron that was about to go. I remember when we were at the RAG we had 50 airplanes; only two were up, and they were being used in the tactics space. So how are we looking now in terms of, you know, taking care of aviators during the turnaround and also giving maintainers what they need to do their job without working weekends and late hours?

Vice Adm. Whitesell

Yeah, that’s a great question. When we – two years ago – two-and-a-half years ago when we started the Naval Sustainment strategy, aviation performed a plan which was the precursor to Get Real Get Better, starting that process to understand, you know, where we were in the sustainment piece, the supply piece, the flight hour, the consumable parts, the depot-level repairables. The C2 structure was critical and essentially seven pillars for us that came together under a C2 with the air bosses, the supported commander, the one responsible to the CNO, and that was the catalyst for us to drive mission capability and set numbers.

The most significant thing that occurred for us early last year was with the vice chief to understand and be able to set, for the mathematical problem, what the north stars were for every aircraft, and then translate that NSSA Perform to Plan process into every platform as we institute those platforms into the Maritime Operations Center, and then each one of those pillars functions the way it did on Super Hornet/Growler to get us initially to 341 Super Hornets. The new number is 360, and two weeks ago we hit 372 mission-capable Super Hornets. And that’s now moving through a transformation sustainment team across every one of the platforms. What it’s doing is it’s efficiently using that flight-hour program which has five pedals that I have to push: the flight-hour money, the depot-level repairables, the consumable piece contracts, and then contract air support. And I have to play those – play each one of those pedals.

When it comes down to the maintainability side, industry has stepped up magnificently over the last two years with the Reliability Control Boards. We’re getting what we’re paying for, and the time-on-wing is more than it was. You and I would walk out the CSDCs, IMUs, man up a couple different Tomcats before we would ever get airborne. That’s not the case anymore. You go out to an airplane, you man it up, we’re going to fly it. And industry has risen to the occasion with the transparency piece of what’s the reliability and the time-on-wing side of the house. And that’s translated into a time where we were given a
significant amount of flight hours per year. We couldn’t burn the flight hours. People would come back to us – appropriately – and say you don’t know your business. You keep asking for more inputs. Give me more flight hours, I’ll be better. Give me more flight hours. And at the time, we could never get above a certain number – at the time 250 mission-capable Super Hornets.

Now we know our business. We know what the major drivers are to drive mission-capable platforms, and we can effectively use the flight hours that we have right now. Again, not resting on our laurels, now that we’ve set benchmarks, north stars for mission capability, we’re now going to full mission-capable aircraft with an FMC metric that was just briefed to me this week that I’ll talk to the vice chief this week just to get us – get a gauge check from him if the methodology is correct. That again – that will drive us to a lethality and a survivability piece for every single airplane, so not only advancing – as Bucket’s buying capabilities, advancing in capabilities, but now, once we have them, then we’re able to maintain them and sustain them in a sustainable and a lethal way.

So let’s – we’ve got some questions here online, and also we’ll take questions from the audience. What we ask is that you come to this area right here. We don’t have any mics, so ask the question of whomever panelist you are addressing it to, and I will have to repeat it to make sure that our viewers hear it. So if you want to queue up while I’m asking this question, that would be great.

So this is from retired Marine Colonel Paul Crocichere who is an H-53 driver who I actually worked with at the V-22 program, and so of course his question is, can you tell us how the CMV-22 did on its first deployment? Do you see the role of the CMV-22 evolving from the moving of equipment and supplies to other missions? It would also be well-suited for light medevac, airborne com relay, humanitarian assistance, or disaster relief.

Yeah, that’s exactly it. The Marine Corps and the – you know, because he’s a Marine Corps officer to the Marine Corps, I would be remiss – you know, taught our maintainers how to work on that platform, and taught our instructors and our pilots how to fly that, so we have a big debt of gratitude to the Marine Corps.

The key with MV-22 or CMV-22 – increased gas payload that is the significant difference from MV-22 is the ability, as he talked about, to do some of the medevac work. We’ve always been able to do the logistics work to include the range for that platform – the ability to bring a CMV-22 aboard a carrier at night; you know, C-2s, we’ve been reticent in the past based on the avionics that are in the platform, did not do night carrier landings on board the – on board the ship. So now a CMV-22, based on we’re still taking three on deployment with us, still with the detachment mentality, but the ability to get parts out as soon as they come to shore and get them out to the flight deck, day or night timeframe for that.
Obviously, it was built – one of the specs was to be able to take the power sections for JSF. The coms relay piece is – I’m watching what the Marine Corps, as they are already doing with some of the MV-22 for coms capability and then add future capability as the need – as the need demands, but with distributed maritime ops, longer ranges, distances between multi-carrier operations, distances from land-based areas, and the ability for CMV-22 to plop down on unimproved spaces – it is a game changer. And it proved to be a game changer for us on deployment. The medevacs were pretty big. It’s not a catapult shot that now the senior flight surgeon has got to worry about. Now we can fly somebody off – we can fly somebody off immediately for that.

You look at it and you say, well, you took three on deployment. For CODs, you always have one in Phase Maintenance, so you have about a 66 – even with the C-2, you always had about 66 percent mission capability and, sure enough, with CMV-22, our maintenance schedule for the inaugural deployment was exactly the same. We still had about 67 percent mission capability ready as we had one of the platforms in Phase Maintenance, but now we’ve moved – we’re looking at the class maintenance plan for every platform that we have.

CMV-22 is safe and efficient on its first deployment, and we’ll start looking at all those plans as we – just like we do them for every other platform.

**Cmdr. Carroll**

So if I’m the handler, am I happy to have an Osprey instead of a C-2?

**Vice Adm. Whitesell**

I think you are. The worry was a palm treed, a stuck. That is proven the reliability from Bell-Boeing. That’s proven. We didn’t have an issue with that on Vinson. We didn’t have an issue with that on Abraham Lincoln. There’s contingencies to be able to move where we’re going to put a palm-treed CMV-2 – CMV-22: the ability to get it on and off the deck in a rather rapid fashion, I don’t have to clean catapults 3 and 4 up and land a COD; now I can land it just like a helicopter. I can reposition it as soon as it offloads, or prior to on-load, I can take it back into Starboard Delta. I don’t have to set the flight deck up, especially cats 3 and 4 to be able to launch a COD off. We’re late in cycle – you know all the scenarios. We’re late in the cycle, but we’ve got to wait for the COD to detach. The flexibility for CMV-22 was good for the handler. It was scary for – you know, Vinson’s first handler was worried about it, and the fact that, you know, he had to transport it across to free up his deck multiple, you know, that was some consternation because we did have the recompression chambers on for that first deployment – or we – for that last deployment of the recompression chambers. Once we took those off, it built some hangar base space for the handler.

So I think – I have not heard any complaints from the flight deck crew or a handler on the two carriers that have deployed CMV-22. Good question.

**Cmdr. Carroll**

Yeah, if you’ve never seen how an Osprey folds, you should treat yourself to looking at that on YouTube.
OK, ground rules – hello – ground rules for questions: no speeches, ask a question. I’m going to have to repeat what you ask, so please identify who you are, and then ask your question.

Audrey Decker
Hi, thank you all for being here. I’m Audrey Decker with Inside Defense, and I have a question on – this is for any member of the panel – on the strike fighter shortfall.

In recent hearings, Congress has voiced some concern over latest projections that it won’t be – the gap won’t be filled until 2031. So I was wondering if you could talk a little bit about what the Navy is doing in the next eight to nine years to stay operationally ready.

Cmdr. Carroll
So the question is about the strike fighter – number of airplanes on flight decks. This is really your master aviation plan, Air Boss. You have done infographics about this, so what’s – or is this a – OK, OK.

Vice Adm. Whitesell
Bucket’s got the –

Rear Adm. Loiselle
That’s my world.

Vice Adm. Whitesell
All right.

Cmdr. Carroll
So over to the requirements side of the house, then.

Rear Adm. Loiselle
So, thank you. So, we’ve got several levers that we use to try and manage this number. So, Congress has very specific interests in this from both the number of aircraft that we place on our carrier decks and then then the number of air wings that we have.

So, when we testified this year, we testified that in the year of 25 – and last year we testified that was the year that we got to zero. And this year we’re not at zero and 25 anymore. We are at about the 31 range, right there. But we do that analysis every single month, because it’s literally down to the tail number of each individual aircraft and how many hours are on that aircraft, and then its projected utilization rates, depending on what we’re going to do with that aircraft. That determines when it’s going to run out of flight hours, and therefore either contribute to the strike fighter shortfall or it will go into what we call service life modification where it will go in, and it will get rehabbed, and it will get additional flight hours added to it. And then, as Air Boss mentioned earlier, capability upgrades starting very soon.

In the fall, the aircraft that we induct into that upgrade are going to come out of it as Block III Super Hornets with a 10,000-hour life flight time – full lifetime. So
they’ll go in at about 6,000 hours, and they’ll come out with about 10,000 hours total, so another 4,000 hours, which gets us between 12 and 13 years of utilization of that airframe. So that’s the rheostat we use to do this adjustment. So I’ve got that rheostat and then I’ve got new production aircraft – are the two major things that I get to control in order to manage that shortfall.

And so you could know from the ’23 budget that we lost some F-35 tails in that regard, and that was the primary driver of what changed when people say, what changed from ’22 to ’23 in your testimony, and that’s exactly what changed – is that if you cut those aircraft out across the fiscal year’s defense plan, that is a direct reduction in that year of concern in the number of strike fighters available.

So then we start looking at how else we can apply levers in order to correct that shortfall, so the biggest lever that we have available to us right now is that – you know, life modification to turn into Block II Super Hornets.

And Joe Hornbuckle has started a third SLM lineup. Three weeks ago the first Super Hornet flew out to North Island, and I was on that airplane two days ago, and it’s going through a modification – and a step modification to 7,500 hours. The outer wing panels are already off. The capacity of Fleet Readiness Center Southwest – the capacity is there, the artisans are there. It’s an MRO facility already, and so we’ll start populating the lines. As we pull legacy platforms, the old Charlie platforms that went to depot-level repairable, repairs there in North Island, now Super Hornets just stepping into those empty bays right now. St. Louis, San Antonio, and a third line has now stood up in North Island, so that’s going to help with strike fighter inventory management.

Good question.

Ms. Decker: Thank you.

Cmdr. Carroll: So let me take another online question. This is from Peter Ong.

Can you discuss the future progress of UCAVs such as the MQ-25 and the X-58 Valkyrie? What is taking so long, and how many UCAVs do the U.S. Navy intend to field? Would these UCAVs require new light carriers to be built to transport them?

So this is maybe a future air wing kind of a thing, and this I think also has an Admiral Downey component to it in terms of EMALs and the Advanced Arresting Gears’ ability to launch and land lighter platforms was part of the design intent of that, so –

Rear Adm. Loiselle: I’ll start out with where we are on the requirement side of that story. So anytime I talk about unmanned vehicles on an aircraft carrier, I talk about them in three distinct sets. The first set is something that can go into a hostile environment, a
high-threat environment, and it can stay there. It can persist in a high-threat environment.

The second set is something that can go to that high-threat environment, perform a given mission – briefly, i.e., a strike mission – and then leave and have a very high chance of coming home. And then the last set is something that is, at an attritable price point, a much smaller vehicle that might perform any number of different missions: anything from going out there with our fighter aircraft and carrying more air-to-air missile for those types of missions, or we might someday integrate that type of thing into our electronic warfare or distributed architecture that would conduct that mission. And then we might also use those same types of drones for distributed command and control network.

So as we go to the air wing of the future, we will be operating at ranges off of the aircraft carrier that vastly exceed what we are doing today. And so in order to do that, unmanned portfolio really needs to be part of that system because it’s the easiest way for us to keep a normally sized aircraft but then have all of that extra space for fuel that gets us the range that we require to be able to get out there and play with some of the aircraft that are under development right now at vastly higher ranges.

So under development right now we have the MQ-25, which is first envisioned as a tanker, and so that’s its primary role and its initial instantiation. And so we expect that to be out making its first deployment in the ’26 timeframe.

And so they are real, and there are several other things under development right now that I’m very excited about.

Cmdr. Carroll

So, again, unclassed – maybe you can’t speak to some of this – but I remember the first time I was at NAVAIR and I saw a flight deck multiple that had I think it was an X-47 on the flight deck. And I just thought of, you know, going behind the JBD and here an unmanned airplane taxis by you. That’s the brave new world, right?

So how do we intend to operate MQ-25s? Do they – are they going to be in the Case I pattern with us? Are they doing separate – or is this TBD in terms of what the mobility TACNOTE will look like?

Rear Adm. Loiselle

So we have not nailed down an exact concept of operations for exactly what we’ll do with that airframe. However, when you look – and having been an aircraft carrier guy for some time now – the number of aircraft that we refer to as tanking in anger; i.e., something happened and I really had to tank that person – is minuscule, like it might happen a couple times on a deployment, OK? So it is a predominantly a mission tanker, which is going to happen away from the aircraft carrier, and then it is also a recovery tanker. But it’s a recovery tanker for six, seven, eight, 10 cycles in a row as opposed to being integrated into the Case I
pattern on each and every event like we do with our current Super Hornet tanker fleet. So it’s going to be out there for a good bit longer.

Cmdr. Carroll

So what’s the deal –

Vice Adm. Whitesell

It’s tanking in anger – you know, I want to get to that. That was the – where you needed to do it. In Vinson’s post-cruise report they went – they had two times where they had to tank.

Cmdr. Carroll

The entire deployment.

Vice Adm. Whitesell

Yeah. The other point – remember, Precision Landing Mode and Delta Flight Path where we’re moving as we progress down to CNATRA –

Cmdr. Carroll

OK. So boarding rates are great.

Vice Adm. Whitesell

– with – the boarding rates are phenomenal. You know, the Greenie Board doesn’t mean anything – you know, virtually doesn’t mean anything anymore because the grades are up, so – I’ve never heard the tanking-in-anger statement before but it’s exactly it, and it brought up the post-cruise report where, you know, they had two events where they had – you know, they were in extremis and had to tank. So this is primarily – Bucket said it, you know, it’s primarily a mission. It’s going to extend the ranges force for the carrier, and then extremis, how we use it.

We’ve done – we’ve done the thought piece now on getting it off the carrier, getting it back. Obviously, George Herbert Walker Bush did the taxi test when we craned one aboard and did the taxi test on it. For that – now we’re talking to think about where is it going to stack. Where does it go? Does it go in starboard Delta? You know, where is it recovered at the time? You know, where are we going to park the numbers that we want to put on the carrier? Where are we going to put – and where are we going to park them?

So we’re not – you know, this is – we’re not just jumping into this uninformed today. We’ve been – we’re working towards a model.

IOC is coming up in ’25, so –

Cmdr. Carroll

Yeah, I’m thinking that would be twice a night you’d tank in anger aboard JFK in 1987, right?

So what’s the give of an MQ-25?

Rear Adm. Loiselle

The public number that we use is she can pass 15,000 pounds of gas at 500 miles away from Mom.
| Cmdr. Carroll | So as a mobility tanker, that’s a lot of gas. That’s plenty of gas. |
| Rear Adm. Loiselle | That’s a lot of gas. And that’s a long distance away from Mom, too. |
| Cmdr. Carroll | Yeah, roger. |
| Sam LaGrone, editor-in-chief of USNI News. | |
| Sam LaGrone | Hey, gentlemen, how are you today? |
| | Just one quick clarifying question. UAVs you said were under development, are those part of the NGAD program or something else? |
| Cmdr. Carroll | So let me repeat the question for the home viewers. What Sam asked is: UAVs part of NGAD or no? |
| Rear Adm. Loiselle | I would say no, OK? So when we talk about NGAD – (pronounced NJAD) – in the Navy – |
| Cmdr. Carroll | Really, is this like a GIF-JIF thing? |
| Rear Adm. Loiselle | Yeah. The Air Force says NGAD. We say NGAD. (Pronounced NJAD.) So, you know, tomato – (changes pronunciation) – tomato, all that stuff. |
| | But when we talk about the – and the reason I say no isn’t that they wouldn’t be used with NGAD; it’s that they are not exclusively for that platform. OK, there’s equal applicability in the manned-unmanned teaming concept for any small UAS to be used with any aircraft on our flight deck. It’s not limited to that one capability. |
| Mr. LaGrone | And then the larger question is how is pilot production and retention going right now? |
| Cmdr. Carroll | So the question is how is pilot production and retention going right now. |
| Vice Adm. Whitesell | Yeah, we’ve come out of the years of the physiological events and then 405 engines’ inability to get the production – or to put 405 engines in T-45s. Last month Admiral Westendorff hit rate so the production level for students – student naval aviators is – the rate is up to speed. We’re going to miss TacAir production by six to eight this year. Rotary we’re going to miss because of mission capability rates of TH-57 as TH-73, the Leonardo platform, fields its way in. So I’m not worried, now TacAir, as well as the follow-on TH-73 – I’m not worried about production coming up. |
Retention is going to be – is something we’re watching through three specific admin boards: through our Department Head Board, our Command Screen Board, as well as our Major Command Screen Board. And the first litmus test for us is in the Department Head take rate. Last year’s take rate was within a five-year norm of the take rates for an 03 – taking the Department Head bonus to move his way into the 04.

This year the rates are a little bit lower – truthfully, the rates are a little bit lower, and we’re seeing some of the platforms not get the numbers that we’d like to have for selectivity. It isn’t that I don’t have the numbers to man the seats. I’d like to be able to go to the boards and truly pick the best and most fully qualified, and we look for selectivity for that and, you know, looking for, you know, 70 to 75 percent selectivity that I can, you know, potentially not wash out, but at least I can truly, you know, have about a 20 to 25 percent ability to have folks, you know, get to go do something else for the Navy while the best stay in.

You know, some of the platforms – our bonus take rate are the – you know, we’re looking at P-8s. Those guys have a 737-type qualification that’s pretty lucrative when you’ve got 25,000 over the next five years. You’re going to be hired by the airline industry. We’re in competition right now. I think the jury is out – with a slight degradation in retention that we’re looking to arrest that. We’ve got an NDAA proposal in to raise the – to raise the pilot bonus. I’ve got a JO symposium, a list of key advisors – junior officers – that have listed some of the top five degraders for them being in the Navy, and we’re working on the – we’re working on some of those right now, which could be an alternate career path. Let them go do something – let them go do something different other than – and get off the golden career path for coming in.

I know it’s kind of a vague answer right now. It’s actually been pretty good. COVID was – if there’s one thing good that came out of it, COVID was pretty good. Our retention rates was up, our department head take rate numbers were up, so my first litmus test was satisfied.

Now that we’re coming out of COVID-19 and the airline industry is picking back up, now we’re going back to the same disclaimer. I’m not – I’m not completely worried about it. This is my fourth sine wave of 37 years in – hiring and furlough, hiring and furlough. This is the fourth time that I’ve seen a hiring climb, and it’s just a – it’s always a matter of time before the other F word, the furlough word comes in – comes in afterwards right now. And the JOs are smart; they understand that, and they understand the value of what they are doing for their country by staying in.

So Admiral Loiselle, were you a T-2A4 guy or a T-45 guy as a flight student?
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<tr>
<th>Cmdr. Carroll</th>
<th>So do you remember what boats you went to?</th>
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<tr>
<td>Rear Adm. Loiselle</td>
<td>I was Lexington.</td>
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<tr>
<td>Cmdr. Carroll</td>
<td>Lexington, OK. So we had a dedicated CVT back in those days.</td>
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<tr>
<td>Rear Adm. Loiselle</td>
<td>Yeah, I’m only marginally younger than the Air Boss. (Laughter.)</td>
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<tr>
<td>Cmdr. Carroll</td>
<td>He’s marginally younger than me.</td>
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So we’re – T-45 has its shelf life, right? We’re trying to assess right now when that turns into a pumpkin, and I know one of the years in play is as late as 2035 because it’s a metal jet, you can do SIDLUMS easier, let’s say, than you can with a composite airplane.

So the next generation airplane may or may not have to go to the boat, which is to say we may be winging tactical aviators without having them ever see the boat till they get to the RAG. Air Boss, your thoughts on this.

Vice Adm. Whitesell | Yes, so we went back and looked at the data because as soon as this was being populated, obviously the retired crowd saw heresy, and the pitchforks, and burning – |

Cmdr. Carroll | That surprises me. |

Vice Adm. Whitesell | It surprises you, doesn’t it? So we went back over the last 10 years of the data, and we saw an average of 16 to 19 percent disqual rate, and the statement you and I have talked about where the boat has separated, you know, the carrier guys from – CQ was the – CQ was the orange and white in CNATRA. That was the litmus test you had to pass to get to the – to get to the FRS. Now that we’ve moved PLM and Delta Flight Path into the start of the syllabus. It’s always been at the start of the syllabus in the FRS for JSF, but now we made – you know, I was at an old-guy decision, OK? You’d better learn how to land the plane manually in the FRS first. There’s no need – the X-47 landed by itself. MQ-25 is going to land by itself. The same math principles and computing capability is built into Precision Landing Mode. So we gave it to the students at VFA-101 and – oh, it’s old school, isn’t it, VFA-101 – VFA-106 and 122 – and we saw that it is no longer – carrier qualification is no longer the – you know, the disclaimer for moving from gray FRS airplanes into the fleet. We’re down to the 4 percent – 4 percent disqual rate. And again, two tanking-in-anger evolutions on Vinson’s deployment. |

Cmdr. Carroll | Well, so I was at a holiday party this year, and I was talking to some current Super Hornet JOs. And I was trying to engage them on ball-flying techniques. |
And they looked at me, like, what are you even talking about? (Laughs.) Engage PLM. Point flight path marker. Land. So all of the sugar calls we used to give pilots and, you know – I don’t know how much you needed about getting in a Tomcat, but I flew with some guys that were basically voice-activated autopilots, right? So the Tomcat was hard to land, Super Hornet not so much, F-35 even less so. So the idea that you don’t see the boat until the RAG is viable. You’re not hazarding safety of flight, and you’re comfortable with that, that might be the outcome.

Vice Adm. Whitesell

It might be. We started with 30 – you know, we’ve got a test case with 30 pilots that we transitioned directly from an intran, I think five more still remain to transition from CNATRA right to the FRS. Well, this late summer, early fall, the first non-CNATRA CQers will go CQ in the FRS, and they’re going to be our – they’re our canaries in the coal mine on where we go. It’s reversible, got time left on T-45. This is the perfect time to do this because we can make – we can make informed, safe, tactical decisions on where we’re going with carrier qualifications, FCOPs. I mean, the trickle down – efficiency, safety, money savings – and still make tactically relevant aviators is – just this is the right time to do it.

Cmdr. Carroll

So but when you do finally make a decision, among the options is an airplane that can’t go to the boat. So no launch bar, not a carrier qualified or carrier –

Vice Adm. Whitesell

Can’t go completely there because E-2D I don’t have – you know, the E-2D pilots still go to the boat as well as we still – with our French partners, they still depend on us to train their TacAir pilots. So I’m not backing out of the agreement we have with the French, nor am I backing out of the – you know, being able to train E-2D pilots because they still go to the boat in CNATRA. They’re not waived.

Cmdr. Carroll

OK.

Vice Adm. Whitesell

They still go.

Cmdr. Carroll

OK. Well, I see we’re out of time. This has gone all too fast.

Let me thank Huntington Ingalls Industries for supporting this panel. Again, this our first MSD here in our home field of the Jack C. Taylor Conference Center.

So thank the audience who is here in person. Thanks to the audience on YouTube, and thanks very much to our three panelists who have come from, in some cases, San Diego. Kenny, it’s good to see you, my good friend, and Admiral Downey and Loiselle, thank you very much for your time.

Thanks, everybody. (Applause.)