The Navy's Gerald R. Ford-class aircraft carrier is continuing to face challenges as the lead ship moves into post-delivery test and trials. Designed to replace the service's current Nimitz-class ships, the new platform has faced a litany of issues that have delayed the program since the USS Gerald Ford, CVN-78, was ordered in fiscal year 2008. The carrier uses the same form as the Nimitz-class for the hull but incorporates new systems so it can generate more aircraft sorties per day with a smaller crew. The first four ships in the class include the Ford, John F. Kennedy (CVN-79), Enterprise (CVN-80) and Doris Miller (CVN-81).

Robert Behler, the Pentagon's director of operational test and evaluation, said in his fiscal year 2019 annual report that the carriers are continuing to experience problems with systems such as the catapults, arresting gear, weapons elevators and radar. Newport News Shipbuilding, a division of Huntington Ingalls Industries, is the prime contractor for the program. MABE WE SHOULD MISBUBISHI TO BUILD OUR CARRIERS APPERENTLY WE CAN'T DO ANYTHING RIGHT IN THIS COUNTRY.

"Reliability of these critical subsystems poses the most significant risk to the CVN-78 [initial operational test and evaluation] timeline," Behler said in the report.

The Navy's schedule for the program is "aggressive" and continues to slip, the report stated. Planned ship availability was extended, pushing initial operational testing to fiscal year 2022 and first deployment to fiscal year 2023. GREAT FUCKING JOB NAVY

In July 2018, the ship entered post-shakedown availability after eight independent steaming events at sea. The service needed additional time to work on repairs, leading it to extend the phase by three months to October 2019.

William Couch, a spokesperson for Naval Sea Systems Command, said the ship "continues to progress in a series of rigorous test events to demonstrate the effectiveness of the ship's combat system in self-defense." YEAH THAT'S WHAT I WOULD SAY

The carrier is slated to finish ship self-defense testing in 2023.

"To date, the Navy has conducted more test events on USS Gerald R. Ford than on any previous aircraft carrier," he said in an emailed statement. "Compared to Nimitz-class ships, USS Gerald R. Ford is equipped with significant updates to its integrated combat system." THAT'S GREAT TO BAD THEY DON'T WORK

During post-delivery test and trials, the service is certifying fuel systems, conducting aircraft compatibility testing, exercising the flight deck and testing the on-board combat systems, he said. Combat system ship qualification trials are scheduled for 2021 and additional developmental and operational evaluations will continue over the next 15 months.

So far, the service has conducted one of the four planned self-defense ship operational tests, according to the DOT&E report.

"If the Navy does not conduct all of the remaining events, testing will not be adequate to assess the operational effectiveness of the CVN-78 combat system," it said. DON'T WORRY BE HAPPY

As the Navy works to fix issues outlined by Behler, General Atomics Electromagnetic Systems Group is working on the ship's advanced arresting gear. In October, high-cycle testing was conducted on a system that is identical to the one on the carrier, according to a company news release.

"Arresting aircraft at a high rate over a sustained period on the same wire is an aggressive test and shows the ability of the system to withstand extreme conditions," Scott Forney, president of GA-EMS, said in the January announcement. "The Ford has the capability for an even higher operational tempo than demonstrated at the test site."

The system has completed over 5,000 arrestments at Joint Base McGuire-Dix-Lakehurst, New Jersey, and 747 arrestments with CVN-78 during initial sea trials.

Behler's report also put particular focus on the SLQ-32(V)6 shipboard electronic warfare system, the SPY-3 multi-function radar and the cooperative engagement capability. During a developmental test, the radar and cooperative engagement capability "failed to maintain detections and tracks for one of the threat surrogates in the multi-target raid," while the SLQ-32(V)6 showed poor performance in developmental testing. WELL WHAT THE FUCK WERE YOU EXPECTING?

"These deficiencies and limitations reduce the overall self-defense capability of the ship," the report said. THIS GUY IS A FUCKING GENUIS

Couch said the SPY-3 radar has performed well in multiple scenarios.

"The SPY-3 MFR successfully demonstrated firm track range against different targets and environments," he said. "This included own-ship missile acquisition, mid-course guidance support and interrupted continuous-wave illumination."

Additionally, the weapons elevators are continuing to present problems. In January 2019, former Navy Secretary Richard Spencer announced that he had promised President Donald Trump his resignation if the elevators were not completed by the time post-shakedown availability maintenance work was completed. Spencer was forced to resign in November due to an unrelated matter. UNRELATED MY ASS

Now, the service predicts that it will have the elevators done before the end of 2021, Capt. Ron Rutan, CVN-78 class program manager, said in January at the Surface Navy Association's annual symposium in Arlington, Virginia. The service has installed all 11 elevators and certified four. Spencer had predicted that the systems would all be ready before the carrier reaches initial operating capability. I BET THEY WILL STILL BE TRYING TO CERTIFY THEM WHEH THE SHIP IS DECOMMISIONED.

"We've done 5,000 cycles with no issues," Rutan said. "It's been a challenge getting these things through, but we get it done and we get it done right."

Rutan expressed confidence that the Navy will be able to get all elevators completed in accordance with the new timeline. EXPRESSING CONFIDENCE IS BULLSHIT RESULTS COUNT

"I believe we're going to get done before May of next year," he said. "I think we'll be able to get it accelerated from there ... but there's a lot of risk." AND I THINK YOU ARE FULL OF SHIT

The service needs to continue working on the electronic surveillance system as well, the DOT&E report said. THANKS FOR THE INFORMATIVE UPDATE

"In developmental testing on [a self-defense test ship], the SLQ-32(V)6 electronic surveillance system demonstrated poor performance that prompted the Navy to delay additional operational tests until those problems could be corrected," the report stated. MORE GREAT NEWS

Behler included multiple recommendations for fixing these issues. For instance, the Navy should fund the remaining self-defense test ship events, which are the tests that helped unearth issues with the systems. Additionally, the service should implement required software updates. LET SOMEONE ELSE PAY FOR YOUR FUCK UPS

"As applicable, the Navy should utilize the lessons learned from CVN-78 to inform design modifications for CVN-79 and future carriers," Behler said. WHO THE FUCK CARES WHAT YOU THINK

Service leadership is pushing forward to solve these problems. In January, Acting Navy Secretary Thomas Modly held a "Make Ford Ready" leadership summit to discuss plans for the aircraft carrier outlined in a December memo. Service leaders briefed about 50 stakeholders on the ship's progress, according to a news release. AND WHAT CHANGED

Modly plans to receive a monthly status update on the work from the chief of naval operations and the assistant secretary of the Navy for research, development and acquisition.

The December memo detailed the Navy's schedule goals including: completing combat systems testing and certification by the third quarter of fiscal year 2021; completing aircraft compatibility testing for all aircraft planned for deployment by the second quarter of fiscal year 2020; and delivering parts needed for deployment by the second quarter of fiscal year 2022. ANY SIDE BETS

"My expectation is that we will work with diligence and speed to accelerate each deadline if possible," Modly said in the memo. "The Ford is just the first ship of this new class. It must set the standard for those that will follow."

Rutan said the carrier's problems are not unusual. Since CVN-78 was commissioned in 2017, it has completed 747 aircraft launches and 747 recoveries, he noted.

"If you don't have any problems in your program, you're not taking on enough risk," he said. "We pushed the envelope and we've done a very good job doing so."

Moving forward, Rutan said he expected there to be more cooperation among those working on the ship.

"We're more aligned collectively and we know the pathway we're going," he said. "The attention is there. The priorities are there. All is outlined there in the secretary's" memo.

Throughout the ship's development, lawmakers have been watching for cost overruns. In a February report titled, "Navy Ford (CVN-78) Class Aircraft Carrier Program: Background and Issues for Congress," the Congressional Research Service noted that estimated procurement costs of CVN-78, CVN-79 and CVN-80 have grown by 24.7 percent, 23.2 percent and 15.1 percent, respectively, since the fiscal year 2008 budget request was submitted. Some of the main sources of risk include the electromagnetic launch system, the advanced arresting gear and the dual-band radar. To lower costs, the Navy opted to award Newport News Shipbuilding a two-carrier contract last year. The decision is expected to save the service about \$4 billion, according to presentation slides from Capt. Philip Malone, future aircraft carriers program manager, at the Surface Navy Association conference. SAVE THE NAVY FOUR BILLION DOLLARS YOU ARE FULL OF SHIT

The contract "further improves on CVN-79 efforts to frontload as much work as possible to the earliest phases of construction, where work is both predictable and more cost efficient," the slides said.

Moving forward, the service plans on using these issues to learn about the maintenance process for the ship, said Capt. Charles Ehnes, the Navy's in-service aircraft carrier program manager. It does not plan on having a separate program office for Ford-class carrier maintenance.

There are "going to be a lot of lessons learned as you proceed forward," he said. "We have what we think are the correct engineered periodicities of various pieces of equipment." However, "things will evolve over time," he added. YOU MEAN FUCKED UP FOREVER

## **EVEN THE SHITTERS DON'T WORK**

The Norfolk-based USS Gerald R. Ford and USS George H.W. Bush were both built with a new toilet and sewage system that's similar to what is used on commercial aircraft, but increased in scale to accommodate more than 4,000 people, the report said. CARRIERS ARE NOT NEW THEY HAVE BEEN BUILDING THEM FOR YEARS

But there's been unexpected and frequent clogging of the system, causing the Navy to determine it needs to acid flush each aircraft carrier's sewage system "on a regular basis." ARE YOU SHITTING ME

"According to fleet maintenance officials, while each acid flush costs about \$400,000, the Navy has yet to determine how often and for how many ships this action will need to be repeated, making the full cost impact difficult to quantify," the report said. JUST FUCKING GREAT HOW ABOUT YOU SUE THE DESIGNERS AND BUILDERS

Both ships were built at Newport News Shipbuilding, which also recently christened the future aircraft carrier USS John F. Kennedy. Shelby Oakley, a director in GAO's Contracting and National Security Acquisitions team, said the Kennedy has the same system.

"The issue is not with water pressure because the system is a pressurized vacuum system. The issue, essentially, is that the pipes are too narrow and when there are a bunch of sailors flushing the toilet at the same time, like in the morning, the vacuum pressure doesn't work as effectively," Oakley wrote in an email to The Virginian-Pilot.

"Waste builds up because it isn't sucked down and then you need the acid wash."

Billions in unexpected costs

The cost issues with the clogged toilets were included in a report that focused on how the Navy could save money by paying attention to future maintenance concerns when designing and building ships.

LAST TIME I LOOKED THE NAVY DOES NOT DESIGN OR BUILD SHIPS