

June 22, 2017

Dear Members of the Senate and House Armed Services Committees:

The Project On Government Oversight has spent 36 years investigating waste, mismanagement, and abuse in the Department of Defense's weapons acquisition system. As you consider the National Defense Authorization Act for fiscal year 2018, we urge you to preserve the requirement for full ship shock trials on the *Gerald R. Ford* aircraft carrier before its first deployment.<sup>1</sup> Waiting until deployment to test and discover problems resulted in a Littoral Combat Ship crew being stuck in Singapore for several months beyond schedule.<sup>2</sup> Waiving this requirement for the *Ford* would endanger the lives of the 4,300 sailors of the ship's complement and risk massive cost overruns in the years ahead as the Navy continues building what will continue to be an untested design.

Full ship shock trials are critical tests designed to ensure each new ship class is suitable for combat. The leadership of the Senate Armed Services Committee protested previous efforts by the Navy to delay these tests. As Senators McCain and Reed previously wrote, full ship shock trials will generate information to "validate or improve" survivability, "reducing the risk of injury to the crew and damage to or loss of a ship."<sup>3</sup> Performing these tests will also allow the Navy to learn if the ship's systems are sufficiently hardened to carry out missions under the rigors of combat conditions, and if the crew would be able to rapidly identify and fix any problems that arose during those conditions.<sup>4</sup>

It is particularly important that the *Ford* go through early shock testing because of its several new, high-risk systems, all of them critical to the carrier mission but particularly susceptible to shock and battle damage. These vulnerable, unproven systems include the highly automated A1B nuclear reactor, the EMALS catapults, the AAG arresting gear, the ultra-high 13,800-volt electrical distribution system, the dual-band radar, and the new main turbine generators.

Postponing the test to the second ship in class is fraught with risks and potential additional costs. The Navy would run the risk of sending the \$13 billion *Ford* with 4,300 crew members into a situation where a single close-proximity explosion could render it useless and vulnerable to

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<sup>1</sup> "National Defense Authorization Act for Fiscal Year 2016," Public Law 114-92, Sec. 128.  
<https://www.congress.gov/114/plaws/publ92/PLAW-114publ92.pdf> (Downloaded June 21, 2017)

<sup>2</sup> "After 9-month extended deployment to Singapore, LCS Crew 204 is back home," *Navy Times*, April 17, 2017.  
<https://www.navytimes.com/articles/after-a-9-month-extended-deployment-to-singapore-lcs-crew-204-is-back-home> (Downloaded June 21, 2017)

<sup>3</sup> Anthony Capaccio, "Senators Protest Delay in Survival Test for New Aircraft Carrier," *Bloomberg*, April 7, 2015.

<sup>4</sup> Young S. Shin and Nathan A. Schneider, "Ship Shock Trial Simulation of USS Winston S. Churchill (DDG 81): Modeling and Simulation Strategy and Surrounding Fluid Volume Effects," Naval Postgraduate School, January 2003.

being sunk. Moreover, if the tests reveal fundamental design problems when they are finally completed, the Navy would have to engage in an expensive retrofit of the *Kennedy* and the *Ford*. In fact, by the time the deferred tests would take place, construction of the third-in-class ship, CVN-80 USS *Enterprise*, would be well underway and it, too, would need expensive retrofitting.

Congress should again demand the Navy go through with the shock trial tests on the *Gerald R. Ford* and not postpone them to a later ship. Thousands of lives and potentially billions of dollars are at stake.

Sincerely,

A handwritten signature in black ink that reads "Danielle Brian". The signature is fluid and cursive, with the first name "Danielle" written in a larger, more prominent script than the last name "Brian".

Danielle Brian

Executive Director

