## NOT FOR PUBLICATION UNTIL RELEASED BY THE HOUSE ARMED SERVICES COMMITTEE

## STATEMENT OF

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BEFORE THE

HOUSE ARMED SERVICES SEAPOWER SUB-COMMITTEE

ON

**FUTURE FLEET ARCHITECTURE STUDIES** 

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NOT FOR PUBLICATION UNTIL RELEASED BY THE HOUSE ARMED SERVICES COMMITTEE Mr. Chairman, Ranking Member Courtney, and distinguished members of the Sub-Committee, I appreciate the opportunity to testify on the Future Fleet Architecture Studies that were conducted in accordance with the FY16 National Defense Authorization Act (NDAA). Section 1067 of the NDAA directed the Secretary of Defense to conduct three independent studies of a future fleet architecture in the 2030 timeframe. The three studies were conducted by: (1) Department of the Navy (DON), which was comprised of a Navy-led Project Team with participation from the Office of Net Assessment within the Office of the Secretary of Defense and the Naval Surface Warfare Center Dahlgren Division; (2) MITRE's National Security Engineering Center – a federally funded research and development center (FFRDC); (3) Center for Strategic and Budgetary Assessments (CSBA) – an independent, non-governmental 501c3 non-profit institute.

These studies are a starting point in the analysis that the Navy will use to develop our future fleet architecture and design. None of them, including the Navy Project Team study, has been endorsed by the Chief of Naval Operations as a comprehensive solution set to focus our future fleet development. We will continue to incorporate what we learn from them into our ongoing research and development and rapid fielding, concept development, and strategic thinking. They will contribute to the high velocity learning that is necessary to strengthen our naval power to outpace our peer competitors and future threats.

All three studies were based on a 2030 strategic environment defined by the reemergence of great power competition and the growing availability of high-end warfighting
capabilities designed to counter U.S. military advantages. The NDAA did not define the initial
conditions of the study so all three research groups defined their own starting conditions. The
NDAA guidance did direct that each study consider the same baseline Intelligence threat
assessment, U.S. National Security Strategy, potential threats to the U.S. in the 2030
timeframe, and traditional and alternative roles and missions of U.S. forces. The study teams
each utilized other government and non-government analyses to inform study assumptions.
Evolving technology was taken into account, including unmanned technology, and each looked
for opportunities to reduce operation and sustainment costs. The studies were not limited to a
specific scenario or constrained by current or projected fleet platform architecture, although
current and projected capabilities of our forces, employment of forces, including forward
presence, and the effects of force structure on capability and capacity requirements, were
taken into consideration.

While each entity conducted its study independently, generated its own assumptions and performed its own analysis, several common themes emerged across the three studies. All three studies determined that U.S technological advantage is being challenged, and in some cases surpassed. They determined that our naval forces will need to be more maneuverable, integrated and agile, in an increasingly contested information environment where potential adversaries will attempt to deny our forces freedom of action in multiple domains (sea, air, land, cyberspace). They found the need for naval forces to operate in a more distributed manner and that demand will remain high for mobile, resilient forward-deployed naval forces, and indicated that we must consider the potential contributions and cost effectiveness of directed energy weapons, both offensive and defensive, and the potential of unmanned surface, undersea and air systems. The studies suggest that improvements in sensors and networks will allow the Navy to operate more distributed, and improvements in logistics, force protection and fire power of ships forward will improve our ability to deliver combat effects. We are examining these ideas thoroughly. Some of the recommendations in the studies will be acted upon, or acted upon more quickly than was already being planned. Some recommendations show promise but will need further analysis and exploration.

As these studies progressed, the Navy took steps to clarify our organizational structure and terminology, and better integrate the activities informing our thinking about future fleet design and architecture. We now define "fleet design" as how the fleet fights and wins, as expressed through concepts, doctrine, and tactics, techniques and procedures. We use the term "fleet architecture" to refer to those activities that support the fleet design, to include presence, surge forces, and force packages; the processes through which forces are prepared for and recover from deployment; bases and facilities that support or host material components of the fleet; and material components of the fleet, such as ships, aircraft, unmanned vehicles, personnel, weapons, and sensors.

To guide our fleet design and architecture for the near-, mid-, and far-terms we identified leads to take stock of the myriad ongoing activities across the Navy that inform our thinking about fleet design and architecture. They are responsible for aggregating the inputs from studies, wargames, experiments, and other exploratory activities into strategies, concepts of operations, requirements, or additional study both within and across time frames.

These studies are part of a larger effort to inform and focus our future fleet development efforts and increase our warfighting advantage over current and future adversaries. Recently, U.S. Fleet Forces Command promulgated a Fleet Design concept paper that outlines how the

Navy will accomplish the imperative of strengthening naval power at and from the sea in the face of rising maritime threats and the rapidly changing nature of conflict. It will serve as a stimulus for developing, refining and testing new operating concepts and capabilities, and central to this concept is implementing integration, distribution and maneuver principles to all naval missions. Furthermore, the Chief of Naval Operations established a Fleet Design Advisory Panel to review each of the three studies and their recommendations, and derive a set of criteria against which any proposed fleet design and architecture could be assessed. These efforts will be supported by a robust program of studies and analysis, wargames, experiments, technology demonstrations, and prototyping with visibility and participation from a wide spectrum of key stakeholders, in order to identify the most promising insights from each study for inclusion in our future force plans and capability decisions.

The Future Fleet Architecture studies were three independent studies that were conducted to recommend potential alternatives to future Navy fleet architectures in the 2030 timeframe. They are intended to guide considerations to shape a future fleet, not a specific path for the Navy to take. Designing and developing the Navy's Fleet is a continuum of three separate, but related efforts. The Force Structure Assessment uses today's operational demands on the Fleet to project the size and composition of the Fleet in the near- to mid-term. We will conduct further analysis of the study recommendations to identify the most promising insights from each study for inclusion in our future force plans and capability decisions. Finally, the Navy's ongoing 2045 Future Fleet Design and Architecture (FFDA) effort considers the future operational environment, technological developments and expected threats to describe the Fleet over the long term.

Collectively, the studies validated our need for a larger battle fleet size than is currently planned. Further analysis will need to be conducted -- informed by both the studies and future operational concepts -- to determine optimum fleet size, mix, and required resourcing over time. The Navy looks forward to working with the Congress and others to achieve the maritime superiority the nation needs, today and in the future.

## **Summary**

In conclusion, the three Future Fleet Architecture studies provided a range of insights and perspectives that both validated, but also informed, the Navy's current thinking on fleet architecture and design. None of them is an end all, be all solution. They are just the starting point, but they will play a crucial foundational role in the process of designing a future fleet in alignment with CNO strategic priorities as laid out in the Navy's Design for Maintaining Maritime Superiority, which calls for exploration of alternative fleet designs.

As these studies progressed, the Navy took steps to clarify our organizational structure and terminology to better integrate the activities informing our thinking about future fleet design and architecture. To guide our fleet design and architecture for the near-, mid-, and far-terms are taking stock of the myriad operational, logistical, administrative, research and development, and other activities taking place across the force. These findings will be aggregated with studies, war games, experiments, and other exploratory activities into strategies, concepts of operations and requirements, or referred for additional study.

The Navy is at a point of strategic inflection. The maritime environment is becoming more stressed, contested and congested, and the pace of change is accelerating in almost every area. We must continue to outpace our peer competitors and future threats. To meet these challenges, we must ensure that future fleet development is thoughtful, informed, agile and focused. These studies will help the Navy determine optimum fleet size and mix, over time. We appreciate the opportunity to learn from them. This is a complicated process, as much art as science, and while more work remains, the Navy is dedicated to working with Congress to meet current, emerging and future threats and will continue to innovate, adapt, fight and win – as it has for hundreds of years and as it will continue to do in the future – in order to defend the American people and promote global security and prosperity. Thank you.