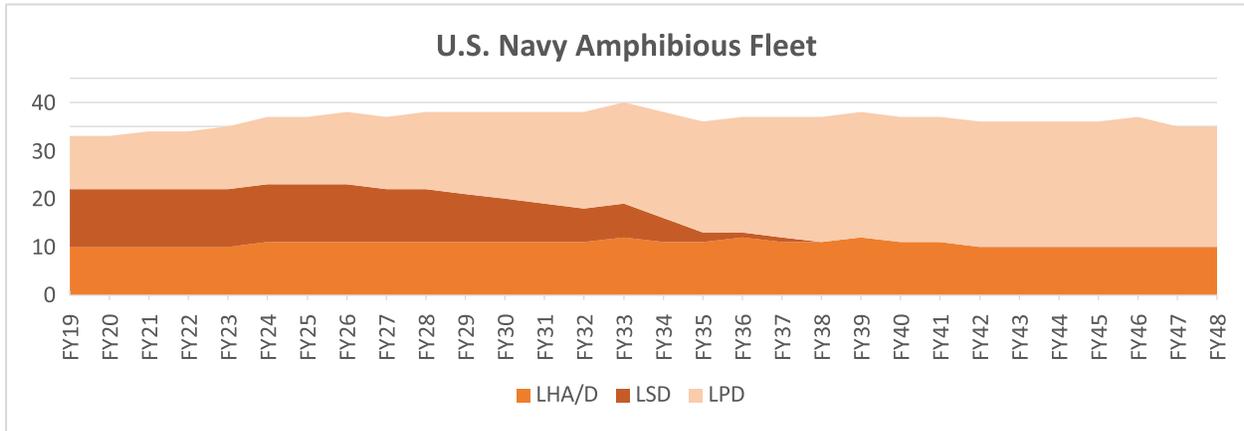


## Advancing Amphibious Warfare in an Era of Great Power Competition

### KEY POINTS:

- In order to meet the U.S. Navy requirement of 38 total amphibious warships, the future plan is to include 12 amphibious assault ships (LHA/LHD) and 26 amphibious transport docks (LPDs)
- The Navy's FY2019 30-year Shipbuilding Plan does not reach this requirement until FY2033, when the Navy will briefly achieve 12 amphibious assault ships



### AMPHIBIOUS SHIPS SUPPORT SEA CONTROL AND POWER PROJECTION

- Historically, 38 amphibious warships were needed to provide the lift for a 2-3 MEB assault.
- Today, 38 ships are required for U.S. naval posture to deter aggression, particularly in the Middle East and Indo-Pacific.
  - Amphibious forces are not only used for conducting operations ashore. For example, during most of 2018, Amphibious Ready Groups (ARG) were the primary naval forces operating in the Middle East.
  - The replacement of amphibious landing docks (LSD) with LPD Flight II in the early 2030s creates an opportunity for the amphibious fleet to expand its capabilities.
  - By incorporating missile launchers, such as the vertical launch system, LPDs could provide additional lethality in addition to destroyers and cruisers.

### INDUSTRIAL BASE CHALLENGES:

- LPD Flight II is not currently being procured using a Block Buy or Multi-Year Procurement model; this eliminates the savings from ordering economic quantities of equipment and materials, which can be more than 10% of the ships' cost.
- The newest LHA, LHA 8, began construction in FY2017 and will deliver in FY2024; LHA 9 currently will not be procured until FY2024, resulting in a 7-year gap between ships; the interval is 3-4 years between ships thereafter.
  - Production gaps idle workers between ship builds. For example, even if a ship takes 4 years to build, hull fabricators may only work on it for the first year; if the next ship does not start for several years, they must be idled, repurposed, or laid off.
  - Production gaps also have an extremely negative impact on the supply vendor base by shutting down the material and equipment suppliers lines of production.

### RECOMMENDATIONS:

1. Buy LPD Flight II using a Block Buy or Multi-Year Procurement contracting approach
  - In a Block Buy model, multiple ships are contracted at one time and then paid for all at once or incrementally over time.
  - Through a Multi-Year Procurement approach, multiple ships are contracted over multiple years, and each ship is funded as it enters production.
2. Bring LHA 9 procurement and construction forward to FY2021
  - Establish a consistent 3 to 4-year build interval instead of waiting until 2024 to do so.
3. Incorporate surface-to-surface and surface-to-air missile launchers into LPD Flight II, and investigate installing them on LPD Flight I during their mid-life modernization.
4. Develop a plan for mid-life modernization of amphibious ships, similar to those for destroyers and aircraft carriers
  - LHAs and LPDs would be updated with current C3 systems to enable them to integrate with the rest of the fleet and contribute to the full range of naval missions.

*"Today, 38 ships are required for U.S. naval posture to deter aggression."*