Sea Basing

Executive Summary

The Department of Defense (DoD) conceives the Sea Base as a secure, sovereign location, well offshore, which could support and sustain the operations of an expeditionary force ashore. Crucial to the Sea Base, as presently conceived, is its ability to be established in ten days, support the operations of a Marine Expeditionary Brigade (MEB) ashore for thirty days, and recover and reconstitute that expeditionary force within thirty days.

If Naval forces are to establish and operate from a Sea Base, they will need a mix of best commercial practices, intelligently employed legacy vehicles, and new purpose-built systems. Specifically, this Panel finds and recommends that:

- End-to-end material transport will be the Sea Base’s critical core function. It will need high throughput and great reliability. We note in particular the importance of rational materiel packaging in standardized containers.

- A high-speed surface connector (HSC)—a vessel that can move troops and materiel between the Sea Base and waters immediately offshore—will prove to be a critical enabler of Sea Basing. The HSC is essential to our ability to establish the Sea Base at a secure stand-off distance. We see no realistic near- or mid-term alternatives to an HSC if the Sea Base is to have the capability of moving heavy materiel—in particular armored combat vehicles—to forces ashore. A properly designed HSC will afford important synergies with the legacy landing craft air cushion (LCAC), which we also regard, for all its limitations, as an indispensable system offering unique heavy-lift capabilities over the beach. The HSC should be capable of loading, carrying, and discharging LCACs that would serve effectively as pallet-trucks. This would permit the Sea Base to retain the LCAC’s unique advantages while minimizing its greatest limitation: high fuel consumption.

- The Maritime Prepositioning Force (Future) (MPF(F)) will be the centerpiece of any foreseeable Sea Base. It is not, however, ready to be designed and built. The Panel strongly believes that the MPF(F) should incorporate new connector interfaces that permit high-speed loading and unloading from an automated floating warehouse. The MPF(F) offers great opportunities to exploit best commercial practices.

- In the near-term, the Navy should implement an MPF(F) program, with a fully operational and affordable interim sea basing capability and demonstrator platform. The vessel will provide a cost effective “Spiral 0” platform for spiral development, near term testing and refinement of Sea Basing concepts and operational plans. Equally as important, the vessel provides an essential fully functional interim sea base asset for use in real world contingencies in the shortest timeframe possible with the lowest risk and least cost. An affordable converted vessel available within 18 months is achievable that will closely mimic the range of possible final capabilities and provide a flexible platform for development. The vessel will be able to be dry-docked in the U.S., have necessary port access, incorporate needed advanced ship design and operational technology, and support a strategic U.S. shipbuilding industrial base now. Appendix E discusses this topic in greater detail.