



Naval Air Station Oceana Future Base Design

October 2021

PURPOSE

The Naval Air Station Oceana (NAS Oceana) Future Base Design (FBD) is an innovative prototype initiative which challenges traditional base support delivery methods to transform, optimize, and modernize installation capabilities and resilience while also reducing total ownership cost and footprint of NAS Oceana infrastructure. FBD is a transformational and comprehensive approach to Navy installation management. The primary focus of NAS Oceana FBD is support to the warfighter – NAS Oceana’s core mission – targeting the installation’s sustainment control at primary warfighting missions that enable, generate, and increase naval power. Recognizing the significance and value of the ongoing cooperative relationship between NAS Oceana and its local community, NAS Oceana FBD fully integrates the City of Virginia Beach as a key collaborative stakeholder and partner.

Traditional appropriated funding strategies are unreliable, including end-of-year disbursements. The NAS Oceana FBD responds to this reality by rapidly developing innovative and creative installation designs which leverage non-traditional funding solutions to increase installation resilience, efficiency, and effectiveness in direct support of Navy, Joint, and Interagency Warfighter readiness, mission priorities, and lethality. This direct response addresses the challenge and enables the NAS Oceana FBD to drive long-term sustainability and resilience to Navy’s Master Jet Base.

BACKGROUND AND CURRENT STATE

In the long term, the current Facilities Sustainment and Restoration Model has proven unsustainable for NAS Oceana’s aging infrastructure. Increased costs and decreased effectiveness of infrastructure and facility repair projects result from delays between

requirement generation and the eventual solution. Recapitalization requirements also increase in cost when funding is deferred. This inefficient timing drives limited funds to legacy infrastructure at the direct expense of fleet readiness. NAS Oceana's FBD challenges the status quo of the shore sustainment model to stop, if not reverse, this negative trend.

SCOPE

The NAS Oceana FBD:

- Leverages existing authorities and teams with willing public, private, and government partners to provide the greatest support to Navy warfighting readiness
- Provides pioneering core infrastructure and facility base operations supporting Navy, Joint, and Interagency Warfighters
- Defines core and non-core services, directing resources at primary warfighting missions enabling, generating, and increasing naval power
- Reduces total installation infrastructure ownership costs and footprint utilizing: public/public, public/private (P4) opportunities, realigned delivery of services and infrastructure/facility usage and, out-lease agreements of underutilized government land to obtain in-kind considerations

APPROACH

NAS Oceana FBD will employ a private sector master developer to effect a comprehensive, wholesale redevelopment of all available land and facilities both inside and outside of the existing installation perimeter fence line. The plan will include the realignment of non-core services to private and/or public-private providers for delivery to military members and their families at current rates and costs. Facilities and non-core services which will be made available include barracks, galleys, military facilities, i.e. unoccupied office/tenant space, golf course, and fitness centers. The master developer may seek private investors to finance construction, renovations, and maintenance of facilities which will further allow NASO to reduce deficits and upgrade existing facilities.

NAS Oceana is presently collaborating with Dominion Energy Virginia in support of their Coastal Virginia Offshore Wind (CVOW) project. This partnership will likely result in the U.S. Navy granting a utility easement over 150 acres of installation property, the construction and operation of a CVOW switching station, accompanying large-scale industrial battery storage facility, and associated power lines. These projects are crucial to the successful delivery of approximately 2.6 gigawatts of off-shore-generated wind energy to the commercial electric grid.

NAS Oceana FBD will also facilitate opportunities to deploy fifth generation (5G) wireless technology that may augment current and planned commercial carrier Spiral 3.5G services with secure wireless broadband system thereby establishing the capability to improve the efficiency and effectiveness of installation and tenant command mission requirements, e.g. Artificial Intelligence, Smart Basing, Hampton Roads Fiber Ring, Robotics, etc.

NAS Oceana has employed the use of a contracted "Integrator" in order to leverage approximately 1,100 acres of underutilized land parcels aboard the installation to create a new business model prototype for Shore Installation Management that maximizes receipt

of in-kind considerations, thus augmenting core mission area infrastructure sustainment support.

- Integrator will leverage the best, most innovative, and agile companies who do not normally operate in the FAR-based arena, increasing access to commercial solutions for defense requirements via teaming relationships
- Integrator provides flexibility to incorporate best business practices and commercial industry standards
- Integrator will enable a streamlined and consolidated redevelopment approach vice the more customary incremental and protracted approach resident within the traditional Installation Development Planning process – synergy is achieved by maximizing benefit and utility
- Integrator will facilitate public/private collaboration which leads to flexible, quicker, and cheaper project design and execution

DESIRED OUTPUTS

The NAS Oceana FBD seeks the following desired outputs:

- Reduce the large and growing backlog of unfunded installation requirements
- Reduce emergency, urgent, and routine infrastructure service calls
- Reduce installation total ownership costs by leveraging public/private solutions to divest facilities and infrastructure not directly related to core mission support. (i.e. “non-core” functions)
- Provide efficiencies in the delivery of base operating services and new capabilities
- Create energy resilience for core mission areas and reduce electric grid dependence
- Improve efficiency of installation management (i.e., Artificial Intelligence, Smart Basing, 5G, Hampton Roads Fiber Ring, Robotics)
- Identify lessons and proven concepts to tailor applicability for other military installations.

CURRENT GUIDANCE AND DIRECTION

The Department of Defense (DOD) and Department of Navy (DON) have standing policy guidance to pursue optimization and modernization:

- The DOD 2018 National Defense Strategy (NDS) clearly describes, “the current bureaucratic approach, centered on exacting thoroughness and minimizing risk above all else, is proving to be increasingly unresponsive... Our backlog of deferred readiness, procurement, and modernization requirements has grown... and can no longer be ignored,” and further clarifies that, “delivering performance means we will shed outdated management practices and structures while integrating insights from business innovation.” The NDS directs leadership to “deliver performance at the speed of relevance,” and “organize for innovation.”
- The DON Business Operations Plan (BOP) calls for the development and implementation of a sustainable path to infrastructure modernization, achieving quick wins at every installation to demonstrate opportunities to think differently and improve infrastructure readiness (BOP FY2020-2022, Strategic Objective 1.2.C).
- The CNRMA Commander’s FY21 Planning Guidance directs installations to “drive savings to support mission critical areas” and to “identify tasks better accomplished

with a P4/IGSA arrangement.”

ASSUMPTIONS

The NAS Oceana FBD makes the following assumptions:

- NAS Oceana will be authorized to demonstrate the proof of concept for installation modernization, energy resilience, and advanced smart base technologies
- NAS Oceana FBD execution plans will include input from the Installation Mission Integration Group (IMIG), who will identify relevant operational and planning considerations, including existing environmental and operational constraints (i.e., Air Installation Compatible Use Zones [AICUZ]), as well as known and anticipated mission growth requirements
- NAS Oceana FBD planning and implementation will incorporate Mission Assurance (MA) and Antiterrorism Force Protection (AT/FP) guidance, creating out-lease provisions favorable to DoD AT/FP and MA interests, both now and in the future
- NAS Oceana FBD will adhere to U.S. Navy and City of Virginia Beach AICUZ compatible development criteria and U.S. Government (USG) easement limitations
- NAS Oceana will maintain real property ownership over all assigned USG property

COST AND RESOURCES

NAS Oceana FBD implementation costs are associated with funding the selected integrator. Any additional costs that may be identified will be satisfied with realized in-kind consideration and cooperative partnership agreements. Thereafter, NAS Oceana FBD intends to operate as a near zero-cost effort, relying primarily on the receipt of in-kind consideration from P4 partners supplementing sustainment funds.

PERFORMANCE METRICS

Mission Support – Infrastructure Figure of Merit (IFOM) rating of core infrastructure

- Improve NAS Oceana aggregate IFOM rating to good quality (80-90). (e.g., operability of hangar doors, aircraft shore electrical connections, upgraded HVAC systems, upgraded/new simulators, painted hangars)
 - NAS Oceana current aggregate IFOM ratings is 74 – fair quality
- Investments & improvements in underserviced core infrastructure (i.e. ATC Tower, fire station, Security Department building, Aircraft Fuels building)
 - Reduction in per year Public Works Emergency/Urgent Service Calls for core facilities
 - Reduction in per year infrastructure-related incidents negatively impacting squadron readiness (inoperable HVAC, hangar doors, and aircraft LP air)

Cost Reduction

- Reduction in the total cost of ownership measured in dollars per year by reducing the large backlog of maintenance and repair of aging critical facilities
- Execution of Intergovernmental Service Agreements (IGSAs) with local municipalities, reducing current costs of service contracts

Modernization

- With improved energy resiliency and reliability, NAS Oceana proper will be able to

- operate for 14 days in event of power outage
- Aspirational 5G services delivered throughout base
- Improvements in core infrastructure physical appearance (fresh paint, mold removal, grounds keeping, facades)

Quality of Life and Sailor Satisfaction

- Improved retention
- Esprit-de-corps
- Overall satisfaction of squadron personnel