Aggregated Logistics

By Thomas Russell, Director, Logistics Innovation Office June 2020 "Logistics Innovation Office Newsletter"

Traditional sustainment of logistics operations has involved the establishment of large, capable operating bases that are semi permanent and hosting plenty of hardstand, supply dumps and intermediate maintenance capabilities. Throughput and distribution requirements necessitated an airfield, port infrastructure and access to developed road structures as components to these bases. This is how we supported the conflicts of yesterday. This is not how we will support and sustain FMF operations in the future.

The EABO concept calls for forces that can opportunistically disperse horizontally and concentrate vertically to achieve tactical advantage. The disbursed, maritime nature of the future operating environment will require us to conduct onward movement and throughput of sustainment through the surface and air domains with less reliance on the ground domain. The contested nature of that environment will require us to be allusive, mobile, and deceptive if we are to endure and not be targeted. We must be prepared to conduct combat service support in a manner consistent with this environment.

The "Fight Right" Logistics Combat Element (LCE) must be centered around the surface domain. This is where we will run our logistics trains and how we will displace supporting forces and ourselves. We will augment our distribution operations through the air domain accomplished with electric vertical takeoff and land unmanned logistics cargo drones. These systems will be inexpensive, plentiful and autonomous. We will anticipate their attrition and it will not hamper our ability to accomplish our logistics mission when it occurs. Instead of fixed land bases, our LCEs will be required to remain mobile and organized in a manner that allows them to be segregated in a logical manner around disbursement seaborne platforms, thus enabling the LCE to break away and scramble in different directions periodically and then aggregate rapidly at a later time at a prescribed location to continue support operations.

The ability to remain mobile and operate within the maritime domain will be accomplished through the use of Offshore Support Vessels (OSVs) which are commercial in nature, optimized for logistics, low cost and versatile platforms that resemble normal commercial watercraft. The centerpiece of our afloat logistics support bases will be a Mobile Unmanned Undersea Base (MU2B). The MU2B will be a large, subsurface drone that serves as a vanishing island that can loiter submerged in deep water, maneuver and can surface at prescribed times and locations to serve as the hub of a floating logistics EAB site. This capability will have a large operating deck to serve as hardstand that can interface with the different variants of OSVs for the marshaling of supplies and equipment and onward movement to shore based EAB sites via stern landing vessels or cargo drones.

Platform support vessels, fast supply vessels, expeditionary fast transport, organic connectors, and light amphibious warships will aggregate around the MU2B to form the general and direct support capability. The base will have the ability to store bulk class III and certain critical supplies in dry pressurized spaces. With several hours of advanced notice, supplies and equipment can migrate back to their prime platforms for disengagement, the base will submerge and navigate to a new loiter site where it will remain submerged and hidden until directed to surface. Meanwhile, the disengaged seaborne platforms will rendezvous to a different MU2B that will surface at an alternate location and time to aggregate with the arriving platforms to function as a new afloat logistics EAB site.

The future operating environment demands a different approach. The difference extends to skill sets, organization and technologies. How we sustain and support FMF operations in this contested environment will require creative and innovative solutions that will be new and different if we are going to be successful and endure.