

Navy SBIR/STTR Success



Hybrid Stanchions and Stanchion Accessories for CLF Ships

The generation of over \$53 million in Phase III revenue is a direct result of the significant cost savings the system provides to the U.S. Navy - \$90.4 million in life-cycle savings.

Topic Number: N04-213

\$850,000

Phase III Revenue: **\$53,446,717**

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About the Technology:

The U.S. Navy's cargo ships carry a variety of items necessary to sustain fleet operations. This cargo is constrained with 10-foot long repositionable, vertical stanchions. The problem lies in the fact that these stanchions must adhere to strict fire, smoke, weight and performance requirements - and previous methods to meet those needs were not very cost efficient. A new system was required that eliminates the waste and fire hazard issues associated with wood, needs less manpower to install and remove, and is safer and more economical to operate. This led KaZaK Composites to develop four new hardware items that can be used individually or in combination to replace the traditional wood and nail bracing approach. The result was a system that was quicker, safer, and more efficient for blocking and bracing the cargo within the stanchions.

Naval Benefit

In addition to needing less manpower to operate, and greatly improving operator safety, the cost savings is a significant advantage to the Department of Defense. KaZaK's new system costs \$500 per unit, generating a savings of \$700/unit. Each ship needs approximately 9,000 stanchions to support each fleet mission and there are currently 14 ships. This equates to \$90.4 million in life-cycle savings for the U.S. Navy of which \$88.2 million is acquisition savings.

Transition

This innovation has led to over \$53 million in sales from the DoD alone. KaZaK Composites' superior performance on this and other SBIR projects led Plasan US to acquire the company in 2011. Plasan US Defense Composite Structures – the former KaZaK Composites – is the current supplier of stanchions used as the primary cargo load restraint foundation on the T-AKE. Prime contractors such as NASSCO and Military Sealift Command (MSC) could also benefit from this system. While the T-AKE cargo ship (PMS 325) was the initial target, Plasan US Defense Composite Structures' next-generation dunnaging system can be procured by any platform that utilizes a deck and overhead grid system for bracing cargo. In addition, commercial rail shipments could also be secured with the stanchion system.



Plasan US (formerly KaZaK Composites)