

OVERVIEW: Tecom (Telecommunication) Support at Wynnhaven Beach & D-84 - Eglin Air Force Base, FL – located just west of Fort Walton Beach

The War in Iraq prompted Eglin Air Force Base, located in the Florida Panhandle, to construct two landing areas along the Santa Rosa Sound & Choctawhatchee Bay where the 22nd Marine Expeditionary Unit from Camp Lejeune, NC would perform military training exercises. Using LCAC-50 hovercrafts and other amphibious assault vehicles, the training operations included unloading tanks off of battleships stationed out in the Gulf of Mexico, moving them across the Sound & the Bay, and banking onto the beaches that were armored with the Armorflex Articulating Concrete Block (ACB) System.

Peterson Engineering originally designed the beach protection & armoring system using precast concrete slabs with upper and lower toewalls to prevent scour and undermining of the system. As the engineer approached his final design, he began to feel less comfortable about the long-term performance of precast concrete slabs. Of specific concern was the probability of the concrete cracking if the sand foundation below the system developed scour problems. Instead the Armorflex system was designed using Class 70 & Class 85 block with polyester cables and with platypus anchors located at the top corners of each mat. The system also included a Geotex 111F monofilament geotextile that lay directly below the block. The ACB mats were custom fabricated with the open cell block located above the mean water level and the closed cell block below it. The blocks were sized to be able to handle the loads and stresses from the loaded hovercrafts banking onto and off of the block, as well as turning in a circular motion while on the block.

Mats were transported to the jobsite via flatbed trucks. Unloading the trucks using two large excavators and a spreader bar, the mats were temporarily stockpiled on site until installation began. Once installation began, it took the contractor approximately 3 days at each location to install the ACB system.



PRODUCT:	ArmorFlex Class 70 Open-cell and Class 85 Closed-cell mattresses
AMOUNT:	11,444 Square feet CL70 and 17,165 Square feet CL85.
DATE:	Fall of 2003 thru Spring 2004
OWNER:	Eglin Air Force Base, located in the Florida Panhandle.
ENGINEER:	Greg Peterson of Peterson Engineering in Pensacola, FL
CONTRACTOR:	C.W. Roberts Contracting, Inc. Freeport, FL
SUBMITTED BY:	Dan Hunt
DATE:	July 2004

