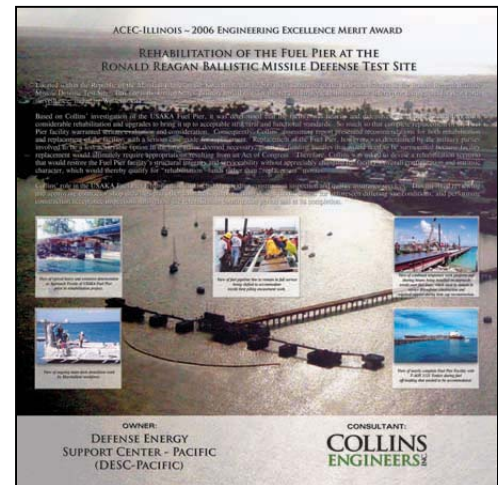


**Rehabilitation of the Fuel Pier at the Ronald Reagan Ballistic Missile Defense Test Site  
Kwajalein Atoll, Republic of the Marshall Islands  
Defense Energy Support Center-Pacific (DESC-Pacific)  
*American Council of Engineering Companies of Illinois—2006 Engineering Excellence  
Merit Award***

Located within the Republic of the Marshall Islands in the Kwajalein Atoll, 2,500 miles southwest of the Hawaiian Islands, is the Ronald Reagan Ballistic Missile Defense Test Site. This site is the United States' primary installation for theater and strategic ballistic missile interceptor testing, and for near-earth surveillance, including Western Asia.

Initially, Collins was tasked with performing a detailed above and below water inspection and assessment of the U.S. Army's Fuel Pier facility within the Kwajalein Atoll. The USAKA (U.S. Army Kwajalein Atoll) Fuel Pier resides on the lagoon side of Kwajalein Island, one of some 100 islands that are situated in a large ring forming the Kwajalein Atoll. The USAKA installation falls under the auspices of the Department of Defense and is known as the Ronald Reagan Ballistic Missile Defense Test Site. The mission of the installation includes theater and strategic ballistic missile testing; NASA space operations and testing; and near earth and deep space surveillance, with the USAKA activity being the nearest site to western Asia for such monitoring. So, given the part the installation plays in relation to national security, as well as the fact that the Fuel Pier is the only means of obtaining the fuel that runs the installation, and is also the primary supply point of mid-South Pacific fuel for the United States' military fleet, an accurate evaluation of the Fuel Pier's condition was vitally important.



During an inspection of the installation's only Fuel Pier, Collins Engineers, Inc. determined it was in a highly deficient state. The Fuel Pier plays a vital role at this pivotal military installation, so, for obvious reasons, not the least of which is national security, it was important to rectify the structural integrity and functionality. Complete replacement was not an option because of the type of funding and the Congressional actions that would be required; so, Collins devised a rehabilitation scenario that enveloped and enhanced existing construction that could remain, integrated it with new construction and employed state-of-the-art technology, and brought the facility up to an acceptable standard without changing its original configuration or inherent character, which, if done, would constitute replacement.

Collins' rehabilitation scenario had to provide for the fuel lines to remain in full service throughout the construction period to assure a sufficient fuel supply for installation operations and any refueling of visiting military vessels. The scenario also had to take into account the pristine and delicate ecological setting of the Fuel Pier with environmental protection considerations for the control of deleterious substance discharge in the water, the minimization of water column turbidity, and no impact on benthic species, coral, and all other sea life residing in and around the facility.