



The Fort Knox "LST Building," at left, was built to test methods of ventilating the ships that would carry tanks and trucks ashore in the Sicily invasion. The model below, from the Patton Museum collection, is an LST, the ship on which the building was based.

The Fort Knox Navy

by Captain Matthew D. Morton



Driving around Fort Knox, many of the things we pass daily remind us of the rich heritage of cavalry and armor. More often than not, we give little thought to the roles played out on the battlefields of this century by the silent armored sentinels that grace our installation. Certainly we would never give a second thought to a strange-looking building, let alone a strange-looking building that isn't even made out of red brick. Fort Knox has such a building, one that played a role in the invasion of Sicily and the cross-channel invasion of Europe, our own "Landing Ship, Tank" building located just off of Eisenhower Avenue in the collection of WWII-era buildings near Harmon Hall.

The fall of France made it clear that a cross-channel invasion would be required to defeat the Third Reich. The British Admiralty was quick to submit designs to the United States for boats and ships that would be required for this invasion, hoping to have them built under Lend-Lease. One of the designs called for a ship that could carry 20 tanks and a dozen 2½ ton trucks, hence the Landing Ship, Tank, or LST. At the time, 1941, the Navy and its ship designers had no experience building such a ship, and even less interest.¹

One reason for this shortfall was the mistaken belief that, should events in Europe force the United States to return there, forces would disembark on secure docks in friendly ports.²

The requirement for tanks to deploy onto a hostile shore brought with it many difficult, implied tasks. One was the ability to warm up tank engines be-

fore driving down the ramp into hostile fire. Another was the need for enough fresh air to keep the crews of those 20 tanks alive long enough to drive down the ramp. This was like starting up 20 tanks inside a small garage with the door closed, not on a deck in the open air. This quest, determining how to ventilate an LST, is how Fort Knox got its own "navy."

With preliminary testing conducted at Aberdeen Proving Ground, construction of a full scale mock-up began at Fort Knox in April, 1942, and was completed less than two months later. Testers then tried different types of baffles and vents until they decided that the best way to ventilate the ship was with large exhaust fans that cleared the entire tank deck area. This eliminated the need for individual hookups to each vehicle exhaust. The individual hookups would have hindered debarkation speed, reduced ability to perform routine maintenance, and would have to be replaced after the tanks were off-loaded.³ It also gave the ships a flexibility that General Truscott would fully exploit during the Sicily invasion, when he loaded his LSTs to twice their capacity, in one case 94 vehicles on one LST.⁴

After testing, the building became a classroom, and no further amphibious training was conducted.⁵ Today, it serves as an annex to the Patton Museum. Perhaps a coat of gray paint and some bow numbers would make it a more befitting tribute to forward-looking Army thinkers in the realm of amphibious operations, men like Colonels Daniel Noce and Arthur Trudeau, who

formed the 1st Engineer Amphibian Brigade and started working out the problems of how to assault from the sea. It is also a round-about tribute to General George S. Patton, Jr., who did his homework on amphibious operations in the mid-1930s with his staff study of 19 amphibious landings throughout history and his general staff study of Gallipoli. It should serve as a reminder to us all that history takes many shapes and forms, not all being old tanks or red brick buildings.

Notes

¹Geoffrey Perret, *There's A War To Be Won*, (New York: 1991), p. 182, note, Perret cites James A. Huston, *The Sinews of War: Army Logistics 1775-1963*, (Washington, D.C.: 1966).

²Perret, p. 181.

³John Campbell, LTC (Ret.), Fort Knox's Dryland Navy, *Armor Magazine*, July-August 1979.

⁴Perret, p. 188.

⁵Telephone interview with William Goldie, CPT, U.S. Army (Ret.).

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