

'build us a building as close to these plans as you can.' Cowley and Fort Knox carpenters began construction of a full-scale mock-up in April, 1942, completed less than two months later. The building at that time even contained a test monitoring and control center, which has since been removed.

The LST building duplicated every beam, rivet, support, stiffener, light, vent, and hatch of the tank deck of the new-type ship that was to become the LST. Duplicated, that is, in wood. The materials used in construction would have no bearing on the ventilation tests to be conducted. For all intents and purposes, a person standing in the building had the feeling of being aboard an LST on the tank deck.

One of the first tests attempted was to attach hoses to the exhaust of individual tanks, which were in turn joined to a master exhaust duct to carry gases to the outside. On signal from the monitoring crew located in the building control room, each tank would start its engine in turn and dart out the bow of the "ship" and down the ramp as though landing on a hostile shore. This technique left a forest of exhaust lines hanging from the ceiling, creating a built-in obstacle to the tanks further aft in the ship. Numerous problems were encountered in the system, including leaks requiring personnel to wear protective masks hindering their movement. The repeated use of exhaust lines would require constant refitting after each departure of vehicles within the LST.

The Navy design group then started experimenting with the use of vents, deflectors, baffles, and interior design changes. The Navy architects eventually decided that the best way to ventilate the ship was with large exhaust fans that cleared the entire tank deck area. Wesley Cowly, speaking from his residence in Radcliff, Kentucky mentioned that "every time the designers took out their pencil and made a change to the plans, me and my carpenters made changes to the building. When they were satisfied with the plans, they rolled them up and left. The building still stands today."

The important role the LST played in World War II has been well documented in other places and will not be repeated here. Without the help of tankers and construction personnel at Fort Knox, Kentucky, one of the Navy's most unique and versatile ships may have never come to pass.

In speaking with LST veterans groups who have toured the building, it has been confirmed that LSTs hauled more than just tanks. It seems the LST was used to haul almost anything that had to be transported over water and unloaded at a beach, shore, or harbor.

The versatility of the LST would eventually become apparent. It was found that the quickest way to evacuate an island was to dock an LST on the beach, drop the ramp and watch its tank deck fill with frightened civilians and soldiers. Standing side by side, shoulder to shoulder like sardines, the LST would then cast off fully loaded with its human cargo. On other occasions the tank deck could be filled with hospital cots and used to evacuate the wounded to nearby hospitals.

In one military action, General Truscott fully exploited the versatility of the ship during the Sicily invasion, when he loaded his LSTs to twice their capacity, in one case 94 vehicles on one LST.

Upon completion of testing, the LST building was transferred to the United States Armor School and became a classroom for about 3 decades.

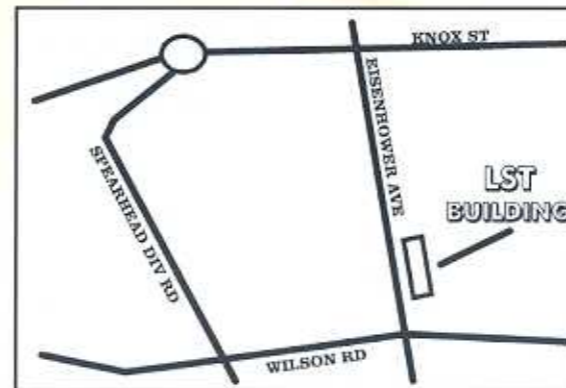


Today, the building is one of the few World War II wooden structures remaining at Fort Knox. It is used as a storage facility for the Patton Museum, protecting some antique armored vehicles from the ravages of the changeable Kentucky weather.

The natural elements and the animals native to this part of Kentucky have taken their toll on the building. It sports a new roof, thanks to a donation of labor and materials from a contractor, who was engaged to roof warehouses on the installation. The paint is peeling and wooden panel pieces are missing on the inside of the building where birds have nested and raised their young. The building has no heat, air conditioning, or restrooms.



In the military where all buildings are constructed in similar styles based on their function, the LST building is truly unique. It was not built to any known building style or plan, but rather from boat plans. In our world of order, as a historical structure, it is considered a "renegade" building because it does not fit in any recognized category of design or construction.



Note: Tours of the building are available to groups visiting Fort Knox. For information contact the Radcliff-Fort Knox Tourism Commission (800-334-7540) or the Patton Museum of Cavalry and Armor (502-624-3812).

The Landing Ship Tank

# LST

That Never Went To Sea

The Story of How the Allies Tested the Ship That Would Win World War II

## THE LST BUILDING AT FORT KNOX

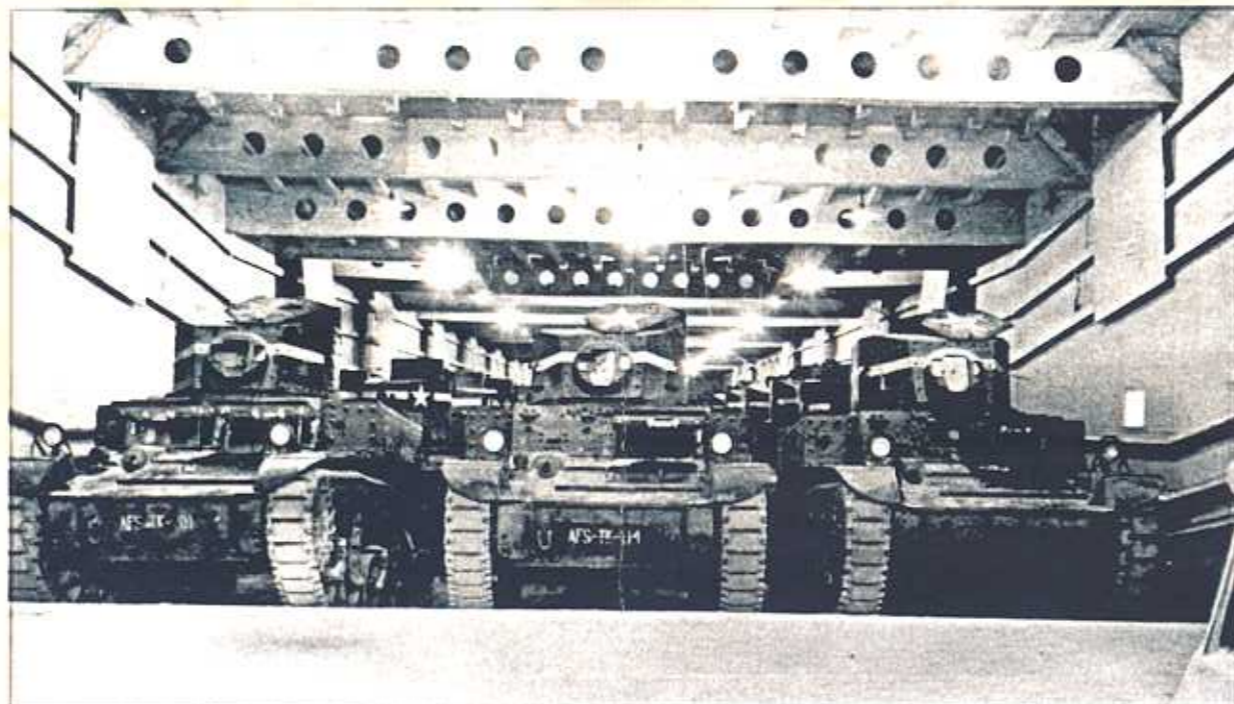
When one thinks of unique structures, thoughts turn to Egypt's Pyramids, France's Eiffel Tower, and Fort Knox's Gold Vault. But few know of the existence of the LST (Landing Ship Tank) building on Eisenhower Avenue, Fort Knox.

In the fantasy world of Hollywood, the LST building is located just down the street from the Gold Vault as it appears in the James Bond film, *Goldfinger*. Just as *Goldfinger's* motorcade turns off Eisenhower Avenue into the driveway of the Gold Vault, the LST building is shown on the left with its front sloping much like the bow of a ship. The truth of the matter is, the LST building and the Gold Vault are on opposite sides of the military installation.

There have been numerous histories written about the Landing Ship Tank (LST) but seldom do they mention the role played by land locked Fort Knox, which lies in the rolling hills of central Kentucky.

The story of this building reminds one of the Biblical story of Noah and his marvelous Ark which is chronicled in the book of Genesis. Genesis means beginning and that is where the story of Fort Knox's Ark should start, at the beginning.

In 1941, the fall of France made clear that a cross-channel invasion would be required to defeat the Third Reich. The British Admiralty was quick to submit rough specifications to the United States Navy Department for the types and sizes of ships that would be required for this invasion, hoping to have them built under the Roosevelt-Churchill Lend-Lease Agreement.



Testing the LST design at Fort Knox during WWII

One of the designs called for a ship that could carry 20 tanks and a dozen 2-1/2 ton trucks. The concept of the Landing Ship, Tank, or LST began its evolution. At the time, the Navy and its ship designers had no experience building such a ship, and even less interest.

The requirement for ocean-going vessels to allow for landing tanks in a combat-ready configuration on a hostile shore was an entirely new concept in ship design and construction. Navy architects quickly realized one major design problem was the ability to warm up tank engines before driving down the ship's 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. This quest, determining how to properly ventilate an LST, is how Fort Knox got its own ark.

Testing began at Aberdeen Proving Ground with a large box representing the space one tank could occupy in the ship. When a medium tank was placed in the container with the engine operating at high speed, the instruments recording the amount of toxic gas produced proved the volume to be staggering. Further tests using a full-scale mock-up was ordered by the War Department.

According to local tradition, the Fort Knox post commander was requested to send tanks and crews to Aberdeen to participate in testing. The commander in his wisdom, suggested the architects come to Fort Knox instead.

Wesley Cowley was head of the Post Engineers at that time. Now 93 years old, Mr. Cowley was interviewed and explained, "The architects showed up here at Fort Knox with boat plans, and said