

The operation staff of the training command had prepared a schedule for this ship to follow. It included:

- 14 July ... Tactical maneuvers
- 15 July ... Forenoon - beaching operations
Afternoon - night - maneuvers under black out restrictions
- 16 July ... Maneuvers, day and night firing exercises
- 17 July ... Beaching and firing exercises
- 18 July ... Fueling at sea operations
- 19 July ... Docking operations
- 20 July ... Forenoon - fire fighting school
Afternoon - beaching operations
- 21 July ... Beaching and mooring exercises
- 22 July ... Disabled beaching and towing exercises
- 23 July ... Full speed trial runs
- 24 July ... General drills and practice battle problems
- 25 July ... Tactical maneuvers
- 26 July ... Final inspection of personnel, and material and observations by Captain Roberts, USN, of the Training Base, of getting underway beaching, mooring, general drills, battle problems and anchoring.

With conclusion of final inspection of the 26th the shake-down cruise had officially ended. As the ship moved to anchor off the beach, to seaward of the entrance of Saint Andrew's Bay to await the scheduled time of departure, the crew had a feeling of relief. For two weeks all hands had worked very hard and well. They began experiencing a greater sense of pride in their ship when they were notified that due to their cooperation and teamwork the ship had ranked high in efficiency and appearance among the ships present. The 677 got underway at 2200 on 26 July for Gulfport, Mississippi, steaming in column as guide with LST 705. Continued drills and firing exercises enroute. By 1500 of the 27th the ship was steaming in conformity with the Gulfport Channel and at 2015 she was secured to the Gulfport loading dock, bow to the beach.

The loading of Naval Construction Battalion equipment through the bow doors to the tank deck extended throughout 29 and 30 July. The ship got underway at 1720 of the latter date after loading was completed. She cleared the harbor entrance at 1902 and set course for return to New Orleans via the south entrance, Mississippi River. Soon after entering the river in the early morning of 31 July, all ship's power failed, including the main engines. This necessitated anchoring in the channel until repairs were effected. No other incidents occurred and the ship moored alongside the ammunition dock in the afternoon to discharge all ammunition in preparation for entry into New Orleans.

For her final availability from 1 August to 6 August the ship was assigned to Todd-Johnson docks where she underwent necessary minor repairs and acquired a super-conning station. On 3 August at the Florida Avenue docks, the LCT 901 was placed aboard with R. Wynn, Ensign USNR, and a crew of 12 men, and R. Hicks, Lt.(jg)(MC), USNR, and 12 enlisted personnel from LST Flotilla SIX Staff, all for transportation to combat staging areas. Several of the officers and crew were granted several days leave during the period prior to leaving the continental limits. On 6 August the ship moved to Naval Supply Depot, completed receiving supplies at 1400; then proceeded down river to the ammunition depot for complete allowance of ammunition, finally refueling at Narco several hours run up river from New Orleans, before moving to quarantine anchorage early in the morning of 7 August.

Thus all preparations had been completed for the voyage to the Pacific. The ship was loaded to capacity with provisions, fuel, and ammunition. The tank deck was filled with construction equipment and the main deck held an LCT. The crew was established at 11 officers and 120 men. Passengers included one officer and 12 men of LCT 901 crew and 1 officer and 12 men of LCT Flotilla SIX Staff. At 2018 therefore of 7 August 1944, slipping her moorings, the ship got underway from New Orleans to Coco Solo Naval Base, Canal Zone, via Guantanamo Bay, Cuba. At 0300 8 August anchored in the Mississippi River off Pilot