



## Elements of

# HARBOR DEFENSE

By ENS Wilfredo D. Viray, USNA



PHASE of naval warfare that has not yet been perfected into a science is harbor defense, because in it, all the factors are variable, depending, among others, on the geography of the coastline, the availability of materials, and the intensity of the attack expected. It is not the aim of this article to lay down any form of harbor defense doctrine, nor go into the mechanics of implementing one; rather, it is aimed at presenting a clear-cut discussion of the subject based on lessons learned from actual combat. Amphibious assault doctrines have been formulated after the success and failure of amphibious operations during the early times and the first and second world wars. One way to effect a good, strong harbor defense, then is to curtail the effectiveness of all the phases of an amphibious operation.

An amphibious assault requires the utmost in surprise, coordination, and striking power in order to be successful. Also, the assaulting forces must have a predominance in air power, support ships and assault troops. Superior air power is imperative as air supremacy can compensate for any deficiency in troop strength and/or support ships, but the opposite is not true. For a harbor defense to be effective, then, control of the air is mandatory, through aircraft and AA fire.

An undefended harbor defense is just like a closed gate that can be opened at will. Cement embankments, nets, booms, and barbed wires could be demolished and removed as easily as they could be placed. Well-concealed field guns should be situated in such a way that they can be made to bear on any enemy unit attempting to remove the installations. A close surveillance of the area will insure the detection of UDT's (underwater demolition teams) when these start their intelligence study of the harbor and, afterwards, actually start destroying its defenses.

In the face of a much superior enemy force, any harbor defense can achieve only a delaying action. No defenses could withstand the force and impact of a pre-D-day shore bombardment and close and distant air supports of a stronger force. Hence, either of two ways could be adopted; first, concealment — keeping one's own armaments silent till the most opportune time to fire has arrived, say during troop debarkation or when the landing crafts hit

the beach; secondly, mobility—when faced with a much stronger enemy, the inferior force should be versatile and fast, striking when and where least expected.

A harbor defense perimeter should be treated in a most confidential manner inasmuch as prior knowledge of the enemy of the defense set-up will make it possible for them to make an accurate estimate of the situation. Concealed mechanical defenses and gun emplacements should not be known to the enemy until these things have achieved their objectives. Enemy reconnaissance will come both from the air and the surface. Secrecy and surveillance, as well as striking power will keep the reconnaissance planes and UDT's guessing and away from our shores.

In the experience of the United States Navy in amphibious operations, there has never been a beachhead that has not been taken. This has been because the requirements of a successful amphibious assault previously cited have always been fulfilled. The mistakes in Saipan were studied and evaluated. The succeeding attack on Tarawa was indeed successful as far as casualties and time element were concerned. The staggering number of deaths in Iwo Jima was, percentage-wise, reduced considerably because the Japanese virtually conceded the beachhead to the United States Marines and dug-in the mainland.

The Japanese doctrine on coastal defense, if any they had, was meager and inadequate to meet the shock, impact and rapidity of a well-planned amphibious assault. The



*To adequately meet a well-planned amphibious assault, it is imperative that there must be a good and similarly well planned system of harbor defense. Surface craft as shown above may be used to support the system.*

Japanese had one consolation: they were against overwhelming odds that defeat was inevitable. They could stall, they could fight to the last, but they could never win. Their wealth resources were almost drained toward the end of the war, and the materials available to them most certainly offered the maximum but inadequate resistance that could have been derived from them.

The Philippine Navy is built more or less around a striking force made up of patrol crafts, gunboats, and submarine chasers, and any contemplation of a harbor defense supported by these surface vessels can be considered sound. However, in so doing, the purpose for which some of the types of ships have been constructed will be defeated. Ships are designed for a particular type of

duty and all their characteristics and armaments are made to give that type of vessel every advantage possible. Most of our crafts are designed for ASW, an offensive task more often than not, and shifting their assignment to one of a defensive nature could very well mean the inefficient misallocation of surface forces such as the Japanese did with their aircraft carriers and submarines during the Second World War. A criterion is very hard to arrive at. A compromise between logistics and the operating forces should be secured. Let us use whatever we have the best way we can.

"One bowman, placed on a wall, is a match in war for a hundred enemies, and a hundred for ten thousand; therefore, a fort is recommended," wrote Sir William Jones in



Naval cadets receive instructions in steering vessel. Later they are made to apply what they have learned by doing things themselves. Above, cadets, under guidance of PN personnel, steer a vessel in Manila Bay.

the *Ordinances of Menu*, published in 1805. Such was the doctrine in early times. Today, there is nothing more vulnerable than a fort; there is nothing more fatal than to have one's back against a wall with the enemy in number after him. The times have changed. New doctrines have evolved, but the concepts are still the same.

Today, a fort is a defensive minefield laid with utmost secrecy and in a manner most difficult for mine-sweeping operation. The threat of a minefield alone will go very far in harbor defense. There is nothing more detrimental to the morale of the enemy. The minefield should be a combination of several types of mines laid in a definite, accurate pattern so that several enemy sweeping operations will be required to clear it.

A fort, at present, is also a mobile unit of field artillery concealed the best way possible. The failure of the Carden Plan<sup>2</sup> for crossing the Dardanelles during the First World War could be attributed to the brilliance of Col. Von Saunders of the German Army in employing artil-

lery units that could be transported from one vantage point to another. These artillery pieces stood guard over the defensive minefields that were indeed very costly and most dangerous to clear.

Mobility and concealment will undoubtedly make the fire control of enemy support ships extremely difficult if not possible. Minefields, like the nets, booms, embankments, and barbed wires previously mentioned, to be effective, must be closely guarded and supported by guns, both close and long range, if possible.

A harbor defense should be the last resort of any power. Any country caught with its back against itself is doomed to lose. Let us build in any way we can a striking force that will keep the enemy away from our coasts, even if it be temporary.

1 Cdr Liberato Picar, first PN officer to graduate from the Harbor Defense Officers Course at the US Naval School Command, Treasure Island. Other officers who subsequently completed the course were Ledr Marcelino Calinawan and Lt Alfonso Montiel.

2 A four-step plan submitted by Admiral Carden to the then First Lord of the Admiralty Winston Churchill. It provided for minesweeping operations and the reduction of the forts and torpedo tubes at the entrance to, and along, the strait, done in steps.