

# **A Few Issues Concerning Logistic Support for the Cross-strait Amphibious Landing Operation**

By Yu Chuanxin, Academy of Military Science

*Journal of Military Economics Studies*  
January 15, 2001

The amphibious operation involving crossing the sea to land on an island is an important issue facing the Chinese military. This essay touches on a few observations concerning the logistic cover for such landing operations.

- 1. Under specific regional circumstance where the island landing operation will take place, the issue of delivering adequate landing provisions becomes the most prominent part in providing necessary logistic cover. Comprehensive planning needs to be in place, which takes into account of natural elements such as the coastal condition, the monsoon season, tide changes and shallow swampy beaches.**

The main coastal lines which the Chinese military could consider landing extend for over a thousand kilometers, which are primarily covered by shallow muddy beaches extending 3 - 8 kilometers to the sea. This not only considerably limits areas where conventional landing could be operated; it also restricts operations involving logistic cover. The extreme tidal changes in the straits to be crossed make it even more difficult for providing logistic cover. During the two monsoon seasons, there are also very strong winds, which makes it especially risky for smaller tonnage ships to cross the straits safely. The other coast of the island is even harder for landing as it is not only farther away from the mainland, the vertical, tough-to-climb cliffs also protect the coastal line. Landing is hard enough; it is even harder to guarantee any logistic cover.

In light of the present situation, China's military has limited logistic capacities on the sea, which means it cannot provide all the necessary logistic supplies for island landing operations. Although there are considerable numbers of civilian ships and fishing boats available, they are inevitably under the restraints of severe natural forces - both in crossing the straits and in forceful landing. Therefore, when planning for such landing operations, emphasis should be placed on logistic provisions derived from the geographical specifics and combat method involved in island landing

operations. The first phase of the battle should focus on providing logistic cover for the military forces, while the middle and last phases should concentrate on mobilizing vast numbers of civilian ships. The guideline should be to develop a strategy using battle ships with strong landing abilities and military helicopters for air cover. The air cover will be used as the leading force while civilian ships will provide additional reinforcement.

- 1) The first phase of the island landing operation requires that the logistic cover be timely, accurate and highly efficient. Experiences have shown that the only way to guarantee such timely, accurate and highly efficient logistic provisions is through air cover. Helicopters have unique advantages in providing logistics: first, crossing the straits will put relatively little restraints on helicopters, while ordinary vessels will not only be slow in crossing the straits, they will have to overcome difficulties in landing. Secondly, helicopters are fast and highly mobile. Most of the military helicopters operate at speeds of above 250 kilometers per hour, which can quickly, accurately and efficiently transport huge numbers of personnel, provisions and equipment to the front line. Thirdly, most helicopters can serve multiple purposes and can be used for air transportation of logistics, rescue and transporting of the casualties, and carrying out emergency equipment repair work. Fourthly, military helicopters have great abilities for carrying and lifting heavy loads.
- 2) While focusing on building up the air transportation abilities for logistics, emphasis should also be given to strengthening special transportation capabilities at the sea. The operation of crossing the straits and landing on the island is no doubt a high intensity, three-dimensional warfare; therefore, logistic cover should also combine air and sea operations simultaneously. In view of the specific geographical circumstances of the straits to be crossed, the sea transportation fleet needs to be able to cross the straits safely, landing forcefully and smoothly, in order to provide timely logistic guarantee. At the present time, foreign military forces have turned more and more to the use of high power hovercrafts and storm trooper rafts as well as other advanced ships in carrying out landing operations. China should try to use their experiences as reference points when planning out its own operations regarding the specific strait.
- 3) While the first phase of the landing operation relies primarily on the

military forces, the middle and last phases should concentrate on mobilizing vast numbers of civilian ships and boats. In this way, not only the logistic needs will be met; huge amounts of defense budget can be saved. First of all, in terms of the stages, the first stage is primarily about timely, accurate and efficient delivering of the logistics, which can only be provided by air force and rapid movement ships on the sea. But during the middle and last stages, when China's military has presumably already taken control of the situation, dangers from the sea will be reduced, but huge quantities of continuous supplies are needed, which can be sufficiently covered by civilian vessels. Secondly, looking at the existing logistic situation, if the military forces decide to rely solely on their own resources for the entire operational stages, then huge additional provisions would have to be provided for both in the air and at the sea. The reality of the situation regarding both the defense budget and the actual abilities rules that option out. However, if focus is placed on civilian vessels during the first phase of the operation, then not only the operation will be difficult to be carried out, it might run into severe dangers at the sea for lack of protection. Therefore, the most plausible strategy to ensure a successful landing operation is to divide it into different stages with different emphasis, prioritize the key factors, grasp the right moment, and combine the military with civilian resources.

- 1. In terms of the geographical location China is in, the Southeast coast is the front line and rear echelon at the same time; therefore threats will come from all directions. Only by strengthening the air defense can logistic service be guaranteed and improved.**

If we look at the target of China's military operations, it has been to intensively strengthen its offensive weaponry system including surface-to-surface missiles and cruise missiles, in order to improve accuracy in hitting the targets. On the other hand, it has also reviewed and improved its offensive program, pointing its high-caliber guns at China's politically and economically sensitive areas such as airports, harbors and highly populated regions. In view of the fact that the strait is only one to two hundred kilometers wide, which means most of China's important military targets including airports, harbors, command centers, telecommunication systems, warehouses, and weapon factories, are within easy firing range from the other side. At the same time, China's railways, roads, bridges, hospitals, government offices, power and energy industries will also be under direct military threat. If the other side's bombardments turn from direct military

targets to potential economic lifelines, then China's abilities to transform economic resources into combat forces will be considerably weakened. In that case, the task of safeguarding the logistics will also be grimly challenged. Therefore, China should place intense emphasis on air defense abilities to safeguard the logistic supplies and sustainable provisions. While much needs to be done in this respect, focus should be placed on the following areas: to improve air defense abilities in key areas and key targets, to further focus on certain crucial cities and targets, based on the specific preparation for the landing operation; to expand the air raid shelter system and move some key projects underground or to shelters. In recent years, some air raid shelters have not only been left out of repair, they have been damaged considerably by human volition. These air raid shelters should be put back into working order and air defense forces should be re-deployed according to the new air defense needs; there should also be further improvement in the air defense command system incorporating the urbanization process, wartime and peaceful-time air defense, as well as civilian air defense mechanisms; there should be further strengthening of the air defense equipment and expansion of wartime supplies. These considerations should be long-term considerations, scientifically structured and soundly planned out; there should be educational programs for the general public on necessary air shelter knowledge and emergency measures, especially on the possible consequences of many advanced modern bombs and weapons that have emerged in recent years, and how to deal with them in emergency situations.

**2. The task of providing logistics for the island landing operation in a highly efficient manner should be done through perfecting a logistic mechanism incorporating high efficiency, rapid speed and sustainability.**

The challenges facing providing logistic services for the landing operation are going to be the following: the unprecedented size, the high speed at which services are to be provided, the high intensity and varied methods in which logistics are delivered, and the sustainability of the services. Therefore, the wartime logistics will have to have a sound, perfected and scientifically proven mechanism.

First of all, a highly efficient wartime command system for logistics has to be established. Based on the principles of high mobility, high flexibility, smooth operation and high efficiency, the command system should be able

to transcend regions, divisions and types of the armed forces to achieve an integrated central command. Only in this way can the logistic command system operate in all directions, with great depths and be able to combine air and ground forces. Secondly, the contingency forces should be strengthened in such a way that they become the highly efficient, rapid reaction safeguarding forces. According to statistics, in the war of Kosovo, it was mainly the mobile contingency forces that carried out the transportation of more than a thousand kinds of logistic supplies amounting to several tens of thousands of tons. Thirdly, a technical force should be formed, led mainly by reservists. The nature of the island landing operation will require a technically well-trained professional force to carry out the ever-expanding supportive roles. Therefore a large enough supportive logistic force should be established composed of mainly technical staff of sufficient numbers and types to meet the needs of the war operation. For instance, in the war of Kosovo, the U.S. military twice called for reservists, most of who were engineers and 90% served in the logistic sectors. They made considerable contributions to the war effort. We can see from this example that the reserves can be a significant force in the time of the landing operation.

There are certainly many problems to be solved in building up the logistics to prepare for the island landing operation; but the emphasis should definitely be placed on the timely and accurate delivery of the services at the minimum cost and damage, and a smooth command mechanism. The three elements, once in place, will lead to a sound overall construction of the logistics.