

Logistic Support for Air-Borne Assault in Island Landing Operations - Problems and Counter-measures

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Air-borne combats in the future high tech warfare will go through significant changes in terms of the warfare environment, combat modes and methods, as a result of the extensive use of high tech in the military. It also increases the requirements for providing military supplies. Improving supplies for air-borne cover has become a crucial issue in sustaining and strengthening military capabilities to ensure a victorious island landing.

1. The present state and problems of logistic support for air-borne assault during island landing operations

In recent years, in line with the continuous development of China's national economy and defense modernization, the air-borne forces, as one of the key forces, has been provided with much improved equipment and provisions. The delivery modes and methods of military supplies of the air-borne troops have advanced remarkably as a result, in part because of the mobile cooking cars have been a much welcomed addition, which ensures timely meals for troops during times of field drilling, war preparation and flood rescuing operations. This addition eliminated the traditional method of providing meals for the troops that involved digging a hole in the ground to set up the wok every time the troops were out in the field. While the newly equipped cooking cars, thermal food container cars, refrigerated cars and water-tankers are sufficient equipment for the troops, there are also problems:

- 1) It is hard to maintain the warm temperature in meals. Considering the situation the air-borne troops are normally thrown in: it involves short preparation time, rapid movement, unfamiliar territories and lack of special heating facilities, therefore it is difficult for them to carry raw materials and cooking utensils to cook hot meals. For instance, at present, China's troops are mainly provided with hot meals that are cooked on the spot from fresh supplies, while field food supplies are usually excluded, which makes it difficult to adapt to the needs of air-borne forces in island

landing operations.

- 2) The modernization level of food providing equipment is not high enough. Right now the new cooking cars, refrigerated cars and thermal food container cars are too large and clumsy with low mobility and cannot be easily used and moved around in field operations. These types of equipment also lack adequate air-borne packaging, which limits the possibility of being dropped from air. This shows that there is much room for improvement in air-borne food supplies for island landing operations.
- 3) Field food supplies lag far behind. At present, paratroops are not supplied with food that is good enough for modern warfare, mostly because the dry food supplies are not appetizing, they have no balanced nutritious content and some of the dry food supplies can only be swallowed with water. There is also the problem of having a single food group or type not a wide enough range of food groups.
- 4) The clothing and body protection equipment is not up to the standard. The island landing operation in high tech warfare means many high accuracy weapons will be used in the battlefields, which requires special protection for the troops involved. Currently, China's paratroops are not equipped with adequate clothing and other body protection equipment for carrying out operations under such severe circumstances.
- 5) Water supply problem is especially remarkable. The island landing operation by air-borne troops entails that they can only carry a limited amount of supplies, especially water, when being flown from the base to the field. Therefore enough drinking water needs to be guaranteed.
- 6) It will be difficult to gather enough supplies. The nature of forceful island landing operations conditions that the paratroops have to be ready in an extremely short period of time, which makes it difficult to gather enough supplies of all the necessary types and quantities. In addition, many of the military supplies lack any air-borne capabilities, making it hard for wrapping, packaging, transporting, dropping and collecting those supplies. Therefore the packaging of the supplies will have to be quickly improved.

1. Counter-measures for supplying the air-borne troops in island

landing operations

- 1) To replace the concept of "hot meals" with the idea of just guaranteeing "food" for the troops. For a long time in the past, the Chinese military have insisted on providing hot meals to the troops as the main food supply, and using field food as supplements. Hot meals have been limited to rice, steamed buns, hot dishes and soups that are cooked fresh. This practice has in effect cold-shouldered the supply of field food, thus limiting the efficiency with which food can be provided for. In the island landing operation of a high tech warfare, it will become less and less possible for "hot meals" to be cooked and delivered in a conventional way. Therefore, the concept of "hot meals" must be updated, perhaps, to mean meals that are heated to a certain temperature. Therefore, hot meals in the traditional sense, which include rice, steamed buns, dishes, soups and other field snack food, as long as they are heated to a certain temperature, should be considered hot meals. In a high tech warfare, supplying food for the air-borne troops involved in the island landing operation has to follow the guideline of "heating up already cooked meals" and placing the essential emphasis on providing adequate and nutritious food to the troops. Therefore, researching on meals that can be easily heated has become a priority.

- 2) To raise the awareness of war preparation and start accumulating military provision reserves in advance. Adequate war supply reserves provide the basic precondition for winning the war. As a mobile contingency force, the paratroops need to have sufficient supplies at all times in order to guarantee rapid movement. To achieve this goal, three areas need to be considered. First, to scientifically set up reserve levels. In view of the needs of the island landing operation, the headquarters should set up a series of reserve level standards for various divisions and regiments, which should be followed strictly by the troops. This will make sure the level of military supply reserves will be standardized and systematized. Secondly, there should be prioritizing of military supply reserves - there are the vital key reserves and others are auxiliary supplies, so that priorities will be given to special supplies and equipment for the air-borne troops. For instance, supplies of clothing and quilts, field equipment, field food, water transportation appliances will be priorities, while food, fuel and other supplies that could be provided locally will become standard reserves. Thirdly, increase supplies at the regimental level, especially the air-borne regiments so that they will not have to have

additional supplies when they need to carry out combat operations, thus the preparation time is reduced. The food supply level should be the amount a soldier can carry for a certain number of days and the troops can carry for a certain number of days. Clothing and quilt supplies should be about 6% of the number of air-borne troops in order to meet the needs for landing operations.

- 3) To apply multiple supplying methods simultaneously to ensure high mobility and flexibility. The way to guarantee essential military supplies for island landing operations is to be open to all methods and channels according to the changing combat requirements. First, before boarding the planes, troops should be supplied with high sugar, high fat, and high protein foods to provide enough calories. Secondly, the main method for carrying supplies is for the individuals to carry their own supplies, which will be dropped at the time the troops parachute. Under the circumstances, which make it impossible to cook, the main kinds of food should be individually packaged field meals that do not require heating. The paratroops will carry some supplies with them, while the logistic supply staff will centrally control the rest of them. During fierce battles, troops need to be quickly and adequately re-hydrated, especially air-borne troops that have gone through long flying, therefore, sufficient and continuous water supplies are more than crucial. Thirdly, logistic supplies for paratroops in the island landing operation should be treated as a key element that will influence the result of the war. Commanders of the joint operations should not hesitate to use strategic forces, such as helicopters or long-range transportation planes, to drop necessary supplies.
- 4) To speed up the research process for producing logistic supplies that are tailor-made for island landing paratroops. Because the main combat tactic for sending troops to carry out military operations on an island is through air-borne troops, the supplies that can be carried on one soldier will have to be much lighter and smaller than normal without compromising on the performance and functions. So the future logistic supply work should aim for equipment and supplies that are smaller in size and lighter in weight. More compact cooking vehicles and compartmentalized cooking cars need to be quickly produced to meet the requirements of such air-borne operations. For instance, cooking facilities that can be used to provide meals for a squad have been invented that could cook four dishes, a main grain food such as rice or steamed buns and soup in 40 minutes. This

equipment should be quickly put into use for the troops. In addition, certain research departments should also work on series of field meals that are small, light, highly nutritious, easy to carry and easily heated. For example, a certain troop, with the collaboration of a research institution, has invented a "fried rice" that uses beef and rice as the main components. This is not only a great improvement on the traditional pilot biscuits; it is just the kind of food to be recommended for future air-borne operations in high tech warfare.

- 5) To provide different food for different combat stages. Air-borne landing operations on an island usually start with surprise attacks. Once the battle has begun, series of field snack food should be provided, which contain high calories and high nutrition but easily digestible and easy to carry. They can be served almost at any stage of the battle very quickly. After the paratroops have taken over control, hot meals can be provided at the level of individual squad or company from fresh supplies cooked on proper cooking facilities, both of which will have then been parachuted. Once the main troops are transported to the island, land vehicles can deliver major cooking cars, food-processing cars, cooking utensils and fresh raw materials for hot meals. At this stage, hot meals will be served to the troops at the levels of battalion or company. In such ways, sufficient food supplies can be delivered at various stages of the battle to ensure adequate physical strength of the troops.
- 6) To quickly set up rapid provision detachments to guarantee supplies for key operations. This will be an effective way to improve essential supply services for the paratroops in their landing operations. Such detachments could be centered around a service staff, composed of 20 people at the division level and around 10 people at the regimental level. They will be subordinate to their own logistic department but report directly to the military supply section. The detachments will be mainly responsible for processing the main grain food and dishes for various divisions and regiments as well as delivering meals to the front line at the right time. Experiences in the past few years in military training operations have proved that such centralized service detachments have been very effective. These detachments not only provide meals, clothes and other essential supplies to the troops; they also have the abilities for self-defense, which will be highly necessary in combats like this.