



ISLAND WARFARE

MAJOR ROBERT L. MAGINNIS

Island operations have been a significant part of U.S. military history. Such operations have been conducted, for example, in Cuba, the Solomons, the Philippines, Okinawa, Sicily, the Aleutians and, more recently, Grenada.

These joint operations are always difficult for a variety of reasons, but those conducted in some of the world's cold and windy archipelagos are especially challenging. And, unfortunately, the preparedness of the ground component of these joint forces has long been neglected. The Army should begin studying some of the lessons learned from both U.S. and Allied operations and then equip and train their soldiers accordingly.

Two campaigns can be used as examples of the kind of problems our forces might face in such areas in the future: The U.S. experiences in the Aleutians in World War II and the British experiences in the Falkland Islands in 1982. These areas share similarities in geography, weather, vegetation, and hydrology.

The Aleutian Archipelago, which is still strategically important for numerous reasons, is a 1,200-mile chain of more than 100 rugged, volcanic islands that include Amchitka, Attu, Adak, Agattu, Kiska, and Shemya.

Kiska, which lies midway between Adak and Attu, was occupied by 6,000 Japanese troops for 13 months in 1942-1943. (These forces were evacuated under cover of fog in late July 1943, and their departure was not detected until a U.S. task force of 34,426 men stormed the beaches on 15 August.)

Shemya—in the Eastern Hemisphere midway between

Adak's Naval Air Station and the Soviets' large naval base, Petropaulov—is a 4.5-by-2.5 mile atoll that was occupied near the end of the war by thousands of U.S. soldiers.

The mountainous island of Attu, 35 miles west of Shemya and the last island in the chain, was invaded by the Japanese in June 1942. In May 1943 the U.S. 7th Infantry Division assaulted its beaches under a shroud of fog. This battle cost both sides numerous casualties. All told, the U.S. landing force suffered 3,829 casualties, of which 549 were killed. The Japanese lost at least 2,351 men before the island was declared secure.

The lessons learned during that period can be discussed generally in terms of the battlefield operating systems.

First, maneuver to and on the islands was extremely difficult because of the geography, the weather, the vegetation, and the hydrology. The geography includes volcanoes, mountains, rocky cliffs, deep valleys, and uneven shorelines. The weather includes average winds exceeding 15 knots and annual precipitation exceeding 200 inches. The vegetation consists primarily of layered grasses and small shrubs. The decaying layered grasses and mosses form muskeg, which is spongy to the step.

Finally, the islands' hydrology is unique. The water table (almost without regard to the elevation) always seems to be just below the surface. Vehicle movement across the muskeg (along with the frequent temperature changes) quickly breaks down the cover to reveal underneath a thick and deep black mud that makes future vehicle movement almost impossible.

(Recent island maneuvers have verified this fact. The Army's versatile small unit support vehicle (SUSV) appears to be the only one that consistently conquers the muskeg, bog, and snow fields.)

During the war, U.S. soldiers made multiple amphibious landings in the Aleutian chain. These were difficult because of the unpredictable tides, the rocky shorelines, and the persistent fog. (To land on Attu in May of 1943, soldiers were suspended by their ankles over the bows of the landing craft so they could literally feel the way to shore.)

Most cross-country maneuver was by foot. Soldiers walked two steps forward and often slipped one step back. The snow on the steep slopes of Attu quickly exhausted young men carrying combat loads. Helicopters and airborne assaults were not available and would have been impossible in any case due to fog, wind, and terrain.

Intelligence-gathering resources were limited. The soldiers in the forward positions provided the only reliable intelligence.

Direct fire weapons provided the most effective fire support. Air strafing and bombing were limited to the few days when fog did not shroud the targets. Field artillery was shore-bound because of trafficability, and poor visibility and high winds significantly affected its accuracy. Naval gunfire was generally not available.

Mobility was limited not only for the reasons outlined above, but also because there were virtually no roads. (At that time, of course, helicopters and cross-country vehicles were rare.) Only steel mats made runway construction possible.

The high water table severely limited other construction. Buildings had to be built on platforms that were anchored to the ground to keep them from being blown away.

Air defense was not a U.S. strength in the Aleutians. The Japanese offered the only effective ground-to-air contest, and that was only marginally effective because target acquisition was limited by poor visibility. (The Japanese employed 75mm guns and 20mm cannons on Kiska against high flying bombers.)

COMBAT SERVICE SUPPORT

Combat service support was the commander's most pressing challenge during the campaign. The distances were tremendous, and the delivery systems were at the mercy of the weather. Ships found few deep, protected harbors. The high seas and accompanying winds frequently thrust these supply vessels against the rocky coastlines.

Most supplies had to be hand-carried. The soldiers' clothing was completely inadequate against the constant wind, cold, and mixed precipitation. Frostbite, hypothermia, and trench-foot plagued every soldier. (One hundred and twenty-six soldiers suffered debilitating trenchfoot during the unopposed invasion of Kiska in August of 1943.)

The command and control of ground forces during the campaign was also difficult. High level communications among the armed services were limited by interservice rivalries. Too, radio traffic was often ineffective because of the aurora bore-

alis, the unique mineralogical characteristics of the islands, and the limited technology of the day. The short-range radios were principally line-of-sight, and the AM radios were significantly affected by weather changes.

The Aleutian operations of World War II serve as a primer for a study of the British-Argentine War of 1982. The significant similarities affected the ground forces as much as the other services—if not more. The two locations were geographically similar (islands with mountains and high water tables). The weather was also similar (cold, windy, heavy precipitation, and frequent fog). The terrain on both island groups included bogs, grasslands, and areas with small shrubs. Additionally, both armies fought significant distances from their support bases.

The British lessons learned that are offered here are based on infantry battalion commanders' after action reports. As before, the lessons are presented using the battlefield operating systems as a guide.

INDIRECT FIREPOWER

The accuracy of the available indirect firepower in the Falklands was significantly affected by the winds, which, in some cases, were so bad that artillery corrections at a range of 10 kilometers amounted to as much as 1.5 kilometers. Once the artillery was properly targeted, it was still often only marginally effective against well-dug-in positions, as Argentine soldiers in positions overlooking Port Stanley demonstrated. One report indicated that not one man in these well-prepared positions was wounded by British artillery.

Additionally, the peaty soil of the islands reduced the explosive and fragmentation effects of the shells. In some cases, high explosive rounds that landed within 10 meters of a target did not produce casualties.

A number of mechanical problems arose. For example, the cold made it difficult to screw fuses into the shells. The 81mm mortar crews learned that the nature of the ground and the high frequency of firing, at charges 7 and 8, often caused baseplates to break. They also determined that it was more advantageous to increase their high explosive load and decrease the number of illumination rounds, because high winds frequently made the latter ineffective.

Small caliber direct fire weapons, rifles and machineguns, served well. The 2d Battalion, The Parachute Regiment (2 PARA), noted that shooting at short ranges (especially when clearing trenches) was an important skill to learn. They also noted that engaging fast moving, pop-up targets at short ranges (during day and night) appeared to be ideal preparatory training for the type of fighting they had to conduct. Such training would prepare soldiers to identify targets quickly and to engage them properly. The Director of British Infantry and the Royal Marines recommended increasing the then-current four-to-one ball-tracer mix to permit better fire control during conditions of limited visibility. Finally, the Royal Marines recommended that each rifle squad be given two machineguns to increase its available firepower.

The intelligence coming from resources outside the infantry battalion was too often improperly coordinated and slowly disseminated. This was due partly to the over-classification of information. ~~Information about the battalions' intentions,~~ however, was not as well protected by higher British headquarters. For example, the British Broadcasting Corporation World Service announced that the British attack on Goose Green was about to begin, which was useful information for the Argentine defenders.

Reconnaissance patrols provided the battalions' best source of accurate intelligence. The 3d Battalion, The Parachute Regiment (3 PARA), and the 2d Battalion, Scots Guard, found that aggressive and detailed patrolling was vital to successful infantry operations.

In fact, the 3 PARA had re-formed a patrol company a few months before the war, consisting of a small headquarters and 12 four-man patrols. Its assigned missions included OP screening, route reconnaissance, long range surveillance, and guides for rifle companies.

Although these patrols provided the details of the enemy strengths and unit dispositions, their activities did create risks. For example, the danger of clashes between patrols and the concurrent loss of secrecy could negate the value of putting out patrols. Clashes that did take place generally occurred when a patrol operated out of its assigned sector.

Three key patrol lessons were identified: First, proper preparation and detailed briefings were essential. Second, the unit had to have an effective system for identifying friend and foe. Finally, four-man reconnaissance patrols were absolutely indispensable.

LAND BATTLES

The nine major land battles of the campaign were all either fought at night or began as night attacks, because the British found that night operations reduced the number of friendly casualties. Employing the principles of information, simplicity, and surprise in planning night attacks, they depended on information generated by unit reconnaissance patrols. This information was disseminated to the lowest echelons. To avoid confusion, night operations were also made simple, but multi-phased. Finally, they capitalized on surprising the enemy.

In an advance to contact at night, a loose column formation proved easier to control, faster, and less tiring than a long "snake-like" formation. This formation made control easier because, in the darkness, it was hard to get accurate grid references and positively identify enemy targets.

A few other general points about the attack are worth noting. The importance of "fighting through" an objective in depth cannot be overemphasized. Thorough, realistic attack training is absolutely essential.

Reorganizing on the objective after an attack was another issue. The British commanders felt that a counterattack was likely to follow a successful attack. One of the lessons learned was that the successful attackers had to be supplied immediately with supporting weapons and replenished with ammunition.

The solution to this problem was to form a special group load carriers from unit personnel outside the rifle companies led by an experienced officer.

As Clausewitz observed, the decisive battles of history that "led directly to peace" were won with rifle and bayonet, not the age-old infantry tactic of closing with the enemy and destroying him by fire and maneuver. In the final analysis, it was the men who slogged up to Port Stanley with rifle and pack who ultimately carried the day.

The movement of British infantry across a trackless terrain of rocks and bog, in darkness and appalling weather, had a predictable effect. Many soldiers injured their ankles and knees as they tripped and fell under their heavy loads.

The infantry's ability to move rapidly cross-country with heavy loads was critical to the success of the operation. The 45 Commando Royal Marines and the 3 PARA moved more than 50 miles before attacking Port Stanley. Some infantry men were not accustomed to moving cross-country with full packs (which the British refer to as "yomping.") Some units found that their "yomping" preparation was insufficient (One unit suggested the desirability of a light trolley to use in moving heavy loads cross-country.)

The Argentines' use of mines to counter British mobility provided two valuable lessons. First, the British found that their own mine-clearing capability was weak. Second, they learned that the Argentine defenders did not mark their mine fields, and being uncertain about the mine hazard, rarely patrolled forward of their positions.

AIR-TO-GROUND

The British suffered some casualties from Argentine air-to-ground fire, and the British soldiers quickly learned to return fire and find cover, although not necessarily in that order. Accurately engaging enemy aircraft with small arms was a rapidly acquired skill. Uncontrolled, however, this small arms anti-aircraft fire was dangerous to troops in neighboring positions. The British also found that virtually anything fired at an attacking aircraft had a good effect. They learned that not only could they shoot an aircraft down, but they could also frighten a pilot into aborting his mission or using his weapons prematurely. In some cases, they actually prevented or hindered the use of aircraft missile systems.

An estimated 117 Argentine aircraft were destroyed during the war, most of them credited to air-to-air action (Sea Harrier Sidewinder missiles or 30mm cannon) or to ship-to-air missiles. Approximately 20 Argentine aircraft were shot down by shoulder-launched missiles (Blowpipes and Stingers), cannon fire, or small arms fire.

The British had limited close air support and army aviation resources, and those they did have were primarily dedicated to defending the fleet, providing logistical support, and evacuating casualties.

The British infantry had trained aboard ship as they sailed to the Falklands, and had done extensive physical training and weapons training. All the soldiers were taught to administer

intravenous infusions (IVs) and morphine, to apply first aid field dressings, and to carry out immediate resuscitations. These skills were critical during the operation because many British casualties had to wait as long as seven hours before being evacuated.

Casualty evacuation was typically linked to the details that carried ammunition resupply to forward positions. The battalion second-in-command often coordinated and ran resupply missions while also hauling out the wounded.

Ammunition resupply on the spread-out battlefield was problematic. It required the close and constant supervision of the battalion second-in-command. This took him away from other pressing matters. Unit preparations for night attacks were especially tasking. The unit was required to stockpile munitions before the attack. This strained the supply channels, which were already partially crippled by too few helicopters. The rate of ammunition use was also a problem; because it was higher than originally anticipated, the leaders had to monitor their expenditures closely.

Finally, there were small unforeseen situations. For example, a British Special Air Service (SAS) combat patrol in South Georgia radioed for a resupply of grenades. But a crate marked "handgrenades" that was delivered a couple of hours later by helicopter contained instead hundreds of teacups. (Fortunately, this was not a common occurrence.)

Probably the fiercest obstacle the British infantry encountered was the weather, which was positively cruel. From May on, it was wet, windy, and totally unpredictable. Freezing rain, driven by gale force winds in ever-changing directions, made operations difficult. Coupled with this were 12 to 14 hours of darkness each day.

The weather severely tested the durability and suitability of combat uniforms. The British did not have a boot that was suited for long cross-country movement and that dried quickly and retained heat. As a result, there were many trenchfoot cases (as high as 75 percent in at least one unit).

British command and control on the Falklands also provided a few lessons. In general, a battalion commander and his tactical command post were located far forward. The main battalion command post, however, moved infrequently and served

to "read the battle" and coordinate casualty evacuation, ammunition resupply, and movement of units in the rear area.

The plans they made seldom lasted more than 12 hours, and last minute changes riddled the battle planning process. For this reason, plans tended to be simple and limited to a single sheet order. To further frustrate the planners, the operation took place at the juncture of four map sheets and two grid zones.

Radio communications provided a few lessons. Radios were required down to the squad level. At company level, a multi-station system (similar to a frequency jumping VRC-12) proved best. This permitted the squad leaders to render situation reports and the troop commanders to direct their own local battles.

The British lessons learned from the Falklands War, along with the U.S. lessons learned from the Aleutian campaign, require careful consideration, because they pose critical implications for future island warfare in cold regions. Whether the future island battles involve the Aleutians (to defend critical strategic interests in the North Pacific), the Norway-to-Iceland corridor, or regions near the mineral rich southern hemisphere, we must always be prepared to fight on cold, windy, wet, mountainous islands.

The Army must experiment with equipment to find the best hardware for that environment, clothing and portable shelters that will sustain soldiers in the cruel environment, and weapon and ammunitions mixes (including fuses) that will perform in peaty soil and muskeg. Resupply systems must be independent of the weather and capable of crossing muskeg and snow. Communication systems must be able to defeat the constraints of weather, geography, mineralogical peculiarities, and atmosphere. Finally, joint doctrine should address the implications peculiar to interservice operations on and around cold region islands.

Major Robert L. Maginnis recently completed an assignment as S-3 of the 2d Brigade, 6th Infantry Division, in Alaska. He is now assigned to the Office of the Inspector General, Department of the Army. He is a 1973 graduate of the United States Military Academy and has attended the Naval Postgraduate School.

