

CHAPTER 7

STRENGTHENING THE FREE WORLD

Rehabilitation in Greece 1947 - 49

The advantages of having a military - civilian Engineer organization in being were demonstrated when the United States decided to help Greece recover from the devastation of war.

Soon after the end of World War II, Greece was torn by a civil war between Communist guerillas and government troops. President Truman and Congress believed it was in the national interest to prevent a Communist take-over. To strengthen the anti-Communist forces a program of economic aid to Greece was developed under the auspices of the State Department. A Greece on the road to economic recovery would be less likely to fall to Communism.

President Harry S. Truman appointed Dwight P. Griswold, a former governor of Nebraska, as the administrator of the recovery program. Soon after his arrival in Greece in July 1947, Griswold reported on the extensive devastation he found. The State Department decided that the reconstruction and rehabilitation of roads, railroads, bridges, ports, and the Corinth Canal, one of the main Greek waterways, were of primary importance. Once the country's transportation system was restored and the ports were in operable condition, economic recovery would be more rapid.

The State Department received some 100 letters from construction firms interested in doing the work. The Department was, however, unfamiliar with doing construction and letting contracts and had no organization to do the job. It sent representatives a number of times to the Office of the Chief of Engineers to get information regarding such matters as the selection of contractors, the types of contracts that could be used, and the amount of the fee to be paid. The State Department concluded it would be unable to do the work because it did not have the know-how in dealing with contractors and had no organization to put into Greece. It asked the Engineers, who had a far-flung civil works construction organization, to do the work. The Secretary of State requested the Secretary of War to assume responsibility for the job. Assigned to the Corps of Engineers in late July 1947, it was scheduled to be completed within a year.

The Engineers set up the Grecian District with headquarters in Athens, with personnel to be largely drawn from divisions and districts, and entered into agreements with a number of contractors who formed joint ventures. In mid-August, Colonel David W. Griffiths, the new district engineer, some of his civilian employees and some of the contractors' employees, arrived in Athens. Actual reconstruction began in mid-September with the clearing away of debris from the harbor of Piraeus, the port of Athens. Soon work was under way on the reconstruction of other ports, the reconstruction of wrecked railroad bridges and tunnels, and on the upgrading of highways which had deteriorated badly. The Corinth Canal was being cleared of debris. Soon after arriving in Greece, Colonel Griffiths was given the additional duty of upgrading a number of airfields. All of this work had to be done rapidly and efficiently. As the Secretary of War wrote, "the War Department is on continual exhibition to the President, the Congress, the State Department and to Greece . . . and other interested nations." Colonel George W. Marvin, the chief engineer of the U. S. Army Group advising the Greek Army in its fight against the guerillas, helped Colonel Griffiths by obtaining Greek Army units to provide security for men working on district projects.

About 900 miles of highway were reconstructed, three major ports rebuilt, railroad bridges and tunnels totalling some two miles were restored, and 10 airfields were upgraded. The Corinth Canal was reopened after about one million cubic yards of earth and debris had been removed. Actual construction time was about a year and a half, the overrun having been due mainly to guerilla attacks, unusually severe winter weather, and delays in getting supplies. Once again, the Engineer military - civil organization made possible the efficient accomplishment of a mission.

Karl C. Dod

Source: (1) *Engineers in the Cold War*, MS in Engineer Historical Division. (2) Historical Division, *Examples of Civic Action Undertaken by the Corps of Engineers in Overseas Areas*, 1974.

Building the ICBM Bases

In October 1957, the Soviet Union put the first satellite, "Sputnik", into orbit around the earth. The news created a sensation. The United States was unable to duplicate such a feat at the time. Simultaneously, the Russians announced that they had developed an intercontinental ballistic missile (ICBM) which could fly at a speed of 13,000

miles an hour and hit a target 5,000 miles away. Although much work had been done on missiles in the United States, there was now a great outcry for a fully developed system of ICBM's to counter the Russian threat.

The Secretary of Defense assigned to the Air Force responsibility for developing and constructing ICBM's, together with the bases from which to launch them. The Air Force requested the Corps of Engineers, with its nation-wide military-civil organization, to build the bases. Actual construction of the bases would be by contractors selected by the Engineers. Speed was of the utmost importance.

Initially, the districts in which the sites were located supervised construction. As the effort expanded, a coordinating group, called the Los Angeles Field Office (LAFO), under the command of Colonel Thomas J. Hayes, III, was set up on 15 July 1959 in the Los Angeles District. Further rapid expansion of construction required a much larger organization, resulting in the establishment of the Corps of Engineers Ballistic Missile Construction Office (CEBMCO) in August 1960 at Los Angeles, under the command of Brigadier General Alvin C. Welling. With a peak strength of some 30 officers and 500 civilians, CEBMCO had under its supervision all ballistic missile base construction.

Practically all of the personnel needed to staff the newly-established Engineer offices which supervised the construction of the missile bases came from existing divisions and districts of the Corps of Engineers. Employees of CEBMCO, for example, came from engineer installations all over the world, many of them being "old-timers" with the Corps. On leaving CEBMCO, employees were entitled to full re-employment rights in the organizations they had left.

Many Engineer districts, laboratories, and testing stations provided support for ICBM base construction. All the real estate needed for the missile bases was acquired by the Districts in which the sites were located. The Waterways Experiment Station (WES) at Vicksburg, Mississippi, undertook waterproofing studies and made recommendations regarding concrete materials. The Rock Island District provided information on protective coatings. Various division laboratories tested materials needed for foundation work. A soils team from OCE investigated several missile sites to determine the adequacy of the sub-grade. Expertise developed in boring tunnels on the Missouri River dams was applied on the ICBM silos. Many of the districts supplied inspection teams to check on the construction done by contractors. LAFO and CEBMCO, in their daily operations, used numerous standard Corps of Engineer manuals and existing engineer studies and reports.

Construction of the missile bases was highly successful. By the end of the year 1963, the superiority of the United States over Russia in missile strength was estimated to be four to one.

Karl C. Dod

Source: 1st Ind, CEBMCO to CofEngrs, May 64 on Ltr, CofEngrs to Div Engrs *et. al.*, 1 May 64.

Building the Base at Thule

The Korean War, with its accompanying international tensions, made necessary the building of air bases in regions where, a short time before, such construction would have been impossible. Probably the most spectacular job the Engineers had was the building of a base in northern Greenland which would help protect North America against attack from across the Arctic. During Christmas week of 1950, when United Nations forces were in full retreat in Korea, Secretary of the Air Force Thomas K. Finletter met with Lieutenant General Lewis A. Pick, the Chief of Engineers, to tell him of the need for an air base in northern Greenland. The need was urgent. By November 1951 an air base would have to be ready to take the largest planes.

Despite the almost insuperable difficulties such a job would entail, General Pick was confident it could be done. He informed Secretary Finletter: "If you can give us \$1,000,000 today, \$15,000,000 on January 15, and the remainder of \$50,000,000 on February 1, we will build a base and have it operational by November 1, 1951, provided you are willing for us to spend that much money . . . without any more assurance than my word for it that any of the equipment and materials . . . will even be successfully moved to the site." With a vast military-civil construction organization at his command, Pick was confident he could keep his promise.

No time was lost in getting on with the job. Engineers and airmen selected a site at Thule in northern Greenland, some 900 miles from the Pole, and midway between Washington and Moscow. Within days, Pick assembled engineers in his office to prepare plans for construction and had selected a number of construction firms which agreed to form a joint venture to do the job. The contractors set up their main recruiting office in Minnesota, a part of the country where workers for Army and Air Force projects in northern regions had been recruited in the past. To supervise construction, Pick set up the Northeast District under Colonel Clarence Renshaw.

Transportation requirements were so large that even the biggest commercial companies could not handle them. Only the Army and Navy with their many types of vessels and landing craft would be able to put men and equipment ashore on Greenland's inhospitable coast. The Joint Chiefs of Staff gave Pick responsibility for the military aspects of the job. Major General Harry B. Vaughan was appointed Deputy Chief of Engineers for the operation. The Air Force

and the Navy would provide support on an interdepartmental support basis.

The first on-the-ground reconnaissances at Thule were made in February when the area was still shrouded in winter darkness. Plans for construction were developed in the spring and supplies and equipment procured. In early June the convoy of ships taking men and supplies to Greenland steamed out of the harbor at Norfolk, Virginia, sailed through seas of ice off Greenland's coast, and arrived at Thule on 9 July. A great variety of jobs were soon underway. Piers were put in to enable ships to unload faster. Roads were built, fuel storage was provided, barracks and supply depots were erected, and most important of all, the airfield was being built practically on schedule. In mid-October the Engineers turned the airfield over to the Air Force.

Thule, part of America's first line of defense in the Arctic had been built, under General Pick's direction, by the teamwork and cooperation of the military-civil organization of the Corps, the contractors, the Air Force, and the Navy.

Karl C. Dod

Source: Lewis A. Pick, "The Story of BLUE JAY," *The Military Engineer*, (July - August 1953), 278 ff.