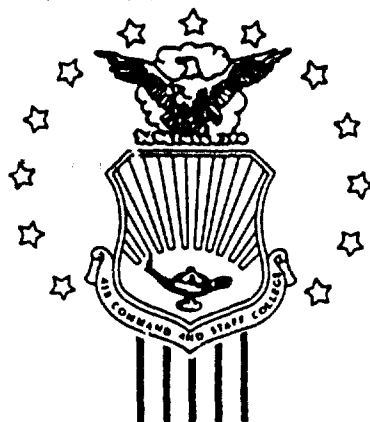


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AIR COMMAND AND STAFF COLLEGE

STUDENT REPORT

FUNDING ENGINEER OPERATIONS IN COUNTRIES
INVOLVED IN LOW-INTENSITY CONFLICTS

MAJ Douglas D. Gransberg

88-1070

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Submitted to the faculty in partial fulfillment of
requirements for graduation.

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PREFACE

This paper is an engineer's attempt to analyze the legal framework which governs the application of his profession in developing countries with low-intensity conflicts. When I started this effort, I thought I would be making a small contribution to the development of low-intensity conflict doctrine. I was wrong. We know how we are going to employ engineers in low-intensity conflicts. The problem lies in finding a way to legally pay for their efforts. Thus, I found myself wading through volumes of laws and regulations, wishing I was either a lawyer or a finance officer. It was easy to see why so much controversy had arisen out of the funding practices used for engineer exercises in Central America. There is no single body of guidance that a commander can read which tells him how to fund engineer operations in developing countries. Thus, this paper is an attempt to fill that gap.

First, I want to thank Major William Bowen, Instructor, USAF JAG School, for reviewing the paper in detail and helping keep my legal interpretations in line with the law. I would also like to thank Mr. W. Hays Parks, Chief, International Law, Department of the Army, for his review and helpful comments. Finally, I want to acknowledge my advisor MAJ(P) James Vickrey, Low-Intensity Conflict ACSC, and my sponsor, LTC Michael J. Turner, Chief, Operations Division, Army/Air Force Center for Low-Intensity Conflict, for their considerable assistance in the overall effort.



EXECUTIVE SUMMARY

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REPORT NUMBER 88-1070

AUTHOR(S) MAJOR DOUGLAS D. GRANSBERG, USA

TITLE FUNDING ENGINEER OPERATIONS IN COUNTRIES INVOLVED
IN LOW-INTENSITY CONFLICTS

I. Purpose: To analyze current rules for funding engineer operations in developing countries, identify existing constraints and their effect on engineer operations, and recommend changes necessary to achieve success of those operations in support of US military and foreign policy objectives in those countries involved in low-intensity conflicts.

II. Problem: Engineer operations in developing countries are governed by a confusing tangle of laws, directives, regulations, legal opinions, and after-the-fact Comptroller General decisions. This framework changes with every appropriations bill. As a result, DOD has had to rely on its own interpretations of these instruments in funding engineer operations. Unfortunately, these funding practices have received a good deal of unfavorable attention from the US Congress. There is no single body of guidance to which a commander can turn to plan the funding of these operations.

III. Data: The US accrues benefits from using US engineer units to build various construction projects in developing countries with low-intensity conflicts. These benefits are:

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increased readiness through high quality realistic training conducted during exercises in these countries, enhanced response to contingency operations by construction of necessary facilities ahead of time, and achievement of stated foreign objectives without the introduction of combat troops. The analysis of current rules for funding engineer operations in developing countries found six general principles which can be used to plan the funding of these operations. These principles were applied to Exercise Ahuas Tara II (an exercise conducted in Honduras in 1983 which caused alot of controversy on this subject) to see what effect current legislation would have had on that exercise if it had been conducted today. Much of the confusion which existed in 1983 has been eliminated today. Unfortunately, instead of making it easier for DOD to take advantage of the benefits available in these exercises, Congress has made it more difficult to conduct them by further restricting the funding.

IV. Conclusions: DOD now has formal authority to use US engineer troops to build humanitarian and civic action projects in conjunction with authorized joint combined exercises overseas. Exercise construction must be identified early enough to include the funding in the annual Military Construction Appropriations Bill. It is now virtually impossible to use Operations and Maintenance funds to finance any exercise related construction.

V. Recommendations: Legislation should be introduced to reverse the ruling that all exercise related construction be funded from the Military Construction Appropriation. Exercise O&M funding should be allowed for projects under \$200,000. Additionally, changes to Titles 10 and 22 of the US Code are recommended to increase DOD's flexibility in types of humanitarian assistance and civic action projects it can build during exercises. Finally, a change to Army Regulation 435-35 is recommended to incorporate recent Comptroller General decisions defining funded and unfunded project costs.

ABOUT THE AUTHOR

Major Douglas D. Gransberg was commissioned into the US Army Corps of Engineers through ROTC at Oregon State University. He earned both Bachelor and Master of Science Degrees in Civil Engineering at that institution. He is also a Registered Professional Engineer in the State of Oregon. His publications are as follows:

- a. "Railroad Trackbed Design Using Hot-mix Asphalt," National Asphalt Paving Association Information Series, No. 74, 1979, with Mr. Gregory Clemmons.
- b. "A Summary of Railroad Roadbed Design, Construction and Maintenance Practices," Transportation Research Institute Report, No. 80-17, July 1980, with Mr. Gregory Clemmons.
- c. "A Different Type of Training Project," Engineer Magazine, Spring 1982.
- d. "Integrated Multiple Project Scheduling System," Defense Technical Information Center Report, No. AD-A127961, April 1983.
- e. "Project Scheduling Using Critical Path Method and Charting Techniques for Harris Computers," Defense Technical Information Center Report, No. AD-A129688, May 1983, with Mr. Robert Stackowiak.
- f. "Value Engineering for Contractors," The Military Engineer, September 1983.
- g. "Increasing the Engineer Force Structure: How SAME Can Help," The Military Engineer, May 1986, with COL Edward G. Rapp.

Major Gransberg has served in various staff and command positions throughout the Army Corps of Engineers. He commanded a combat engineer company in West Germany and a combat heavy engineer company at Fort Lewis, Washington. He also served in contract construction management positions in the St. Paul Engineer District. Before coming to Air Command and Staff College, he was the Engineer Operations Officer for

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the US Military Training Mission to Saudi Arabia (a joint service Security Assistance Organization).

Chapter One

INTRODUCTION

"Our ... forces play a role [in low intensity conflict] ... through civic action: the construction and restoration of infra-structure, the assisting of others in the improvement of their own lives, whether by restoring land, building roads, digging wells, or helping provide medical and educational services... On our own terms, we can compete with shovels and win. Our adversaries require guns. It is an instructive difference." (19:16-11)

Secretary of Defense Caspar W. Weinberger
14 January 1986

"In those countries where United States and host nation interests converge, engineers can be a valued tool in achieving United States politico-military objectives." (4:D7-1) Military engineer units represent the ability to provide tangible, long-term military and economic assistance to nations engaged in low-intensity conflicts. Using them also avoids the appearance of direct United States (US) military intervention. Employing engineer capability without violating US law constitutes a significant challenge to US military planners. Successfully meeting this challenge provides foreign policy benefits as well as readiness benefits from the realistic training of engineer troops in construction tasks unavailable in CONUS. Finally, it provides assistance which deters the circumstances leading to the direct deployment of US combat power.

"Winning the hearts and minds" of the indigenous population is a well established precept of successful counterinsurgency operations. Developing nations are often unable to meet the financial challenges of simultaneously improving the economic status of their people and providing adequate support to their military during low-intensity conflict. This creates a dilemma whose solution may involve external assistance from the US. Again, the employment of US engineers achieves both the political and military objectives. "They provide the host government with a tangible product that benefits the indigenous population and elicits support of the government from the population." (4:D7-2) However, to employ engineers as suggested often requires approval from the highest levels of the US government.

While Congress clearly supports providing developing

nations with both economic and military assistance (3:84), using military elements to assist in accomplishing economic objectives is a relatively recent phenomenon. As such, no single body of definitive guidance exists on the subject. To fill the gap, the Department of Defense (DOD) has had to rely on its own interpretations of various portions of US law to carry out these operations. The result is a bureaucratic tangle of laws, directives, regulations, legal opinions, and after-the-fact Comptroller General decisions. Unfortunately, commanders are reluctant to "promote humanitarian assistance and civic action (HA&CA) projects for fear of violating... the law." (4:D1-13) Recent legislation has attempted to address this problem. However, a great deal of uncertainty still exists, and more improvements are necessary to allow the maximum use of US engineer troops as a foreign policy tool.

Chapter Two

PURPOSE

The purpose of this paper is threefold:

1. To analyze the various legislative, regulatory, and policy instruments which apply to funding engineer operations in developing countries involved in low-intensity conflicts.
2. To identify existing constraints and their effect on the execution of engineer operations.
3. To propose changes necessary to achieve success in executing engineer operations in support of US military and economic objectives in developing countries involved in low-intensity conflicts.

This paper is based on a comprehensive analysis of one engineer operation in Honduras: Ahuas Tara II, 1983-84. The funding of engineer activities during this operation generated much controversy and resulted in several landmark Comptroller General decisions and legislation aimed at correcting the funding problems. Understanding the controversy required the reading of a very broad base of legislative, regulatory, and policy information. As such, the conclusions reached in this analysis have possible application to a wide range of operations throughout the world.

It must be noted that engineer operations during a typical exercise cover a very broad spectrum of tasks. These range from the classical combat engineer tasks of technical reconnaissance, tactical bridging, and mine warfare to a wide variety of construction tasks in support of the exercise administration and logistics. Funding the combat engineer tasks is not in dispute. These tasks are clearly training. The controversy revolves around funding the construction tasks. Henceforth in this paper, the term "engineer operations" is used to define military engineer construction tasks undertaken during the course of an exercise.

Chapter Three

BACKGROUND

GENERAL HISTORY

The United States has a long history of encouraging development as a tool to achieve stability and world peace. This ethic reflects in the military who have reacted to natural disasters, who have provided humanitarian assistance in remote and dangerous areas, and who have a tradition of providing food, shelter, and medical attention for the civilian victims of warfare. In all these cases, military engineers are uniquely qualified to render assistance. One combat mission of the engineers is to build. A road built to provide a main supply route for a field exercise helps indigenous farmers get their crops to market when the exercise is over. A bridge built during a river crossing exercise later provides remote area access to host government medical and agricultural personnel. A sanitary sewage system built to protect soldiers from disease will provide the same protection to the local population when the soldiers leave. Thus, it would seem logical that US policy would encourage the use of military engineers in this manner. In fact, the January 1987 National Security Strategy of the United States declares:

US policy for dealing with Low-Intensity Conflict situations may be summarized as follows: When it is in US interest to do so, the United States will take measures to strengthen friendly nations ... by systematically employing ... the full range of political, economic, informational, and military instruments of power. Where possible, action will be taken before instability leads to violence.
(16:33)

In theory, the use of military engineers in this role is possible. In practice, the myriad of laws, policies, and regulations make it very difficult, if not at times impossible, to legitimately fund engineer operations in developing countries.

THE BENEFITS

Historically, the funding of US government construction projects hinges on the calculation of a benefit/cost ratio which shows that the benefits of the project exceed its cost.

In other words, if the US taxpayer spends a dollar on construction, he will receive more than a dollar in benefits from his investment. While such quantitative analysis is beyond the scope of this paper, it is useful to point out the qualitative benefits accrued to the US from military construction projects in developing countries. The benefits fall in three broad categories: training, military contingency operations, and foreign policy objectives.

Training Benefits

The first category deals with providing active duty and reserve engineer units realistic training opportunities which are not available in the United States. Engineer units have soldiers whose Military Occupational Specialty (MOS) requires that they actually build something to gain and maintain their proficiency. It is often difficult or impossible to simulate engineer tasks in the manner used by the combat arms. An infantryman can learn patrolling and assault techniques without the presence of an actual enemy soldier, but to teach an Asphalt-Concrete Specialist his job requires the purchase of asphalt and concrete as well as an opportunity to use them. Consequently, the cost of properly training an Asphalt-Concrete Specialist is often much greater than the cost of training an infantryman. The cost factor often results in a lack of realistic training in engineer units and a degradation in their readiness. (Note: The author's unit at Fort Lewis went two years without any meaningful Asphalt-Concrete training due to a lack of funded projects.)

Even when funding is available, it is often difficult to make engineer construction training realistic due to administrative and environmental restrictions on US installations. Army Regulation 415-32 (AR415-32), Performance of Military Construction in CONUS by Troop Units, states, "While execution of these projects has the objective of furthering the mission training of construction units, poor quality or excessively slow rates of production will be unacceptable." (7:1) The Director of Engineering and Housing (DEH), not the engineer unit commander, controls on-post projects. The requirement for DEH quality assurance inspections (usually conducted by government service civilians) and the desire to minimize disturbance to the military community cause the projects to be built in an administrative mode during normal business hours rather than in a tactical mode under simulated combat conditions. While these projects satisfy the need to train on individual technical skills, they are rarely of any value to the unit's command and control structure. In reality, the projects are "commanded" by the DEH and "controlled" by factors outside the unit.

One such factor is the environmental laws which have been enacted in the past 20 years. These have a significant impact on realistic engineer construction training. Few training areas (for good reason) allow the cutting of trees, the stripping of topsoil, or the use of high explosives in the manner engineers would use during war. As a result, engineer units rarely get to train using only locally available materials such as uncut timber, unprocessed rock, or insitu clay. Additionally, local regulations on dust control, noise abatement, and water quality also serve to dampen the amount of realism possible during training. Finally, restrictions on the use of troop labor also come into play. "Due to labor agreements in the United States, training for their [the engineers'] mission while in the United States is difficult." (4:D7-2) To avoid problems in this area, most training projects are demolished. This proves that they were really built for training and not to circumvent troop labor regulations or minor construction project authorities. It also unnecessarily wastes valuable construction materials and hurts engineer troop morale.

The impact of restrictions detailed above is magnified for Reserve Component engineer units. As these units have only two weeks per year in which to conduct their annual training, realism in construction MOS training is of the utmost importance. Additionally, the need to exercise and evaluate unit command and control systems is critical. Unfortunately, the legal, regulatory, and administrative constraints placed upon these units make it virtually impossible to achieve the required level of realism during annual training.

Few of the restrictions detailed above exist in developing countries. The engineer unit deploys as a unit under its own command and control. Typical projects in Central America have exercised the full range of engineer MOS's while challenging the unit's leadership in an environment virtually identical to that they will face in war.(16:F-1) An abundance of raw materials and an absence of stateside rules and regulations complete the realism and insure that the training is of the highest standard possible in peacetime. Finally, knowing the facilities constructed will be used by the local population provides additional motivation for the troops and thus maximizes the overall effect on the unit's readiness. "Participating units accrue training and readiness benefits which cannot be duplicated at United States installations." (4:D7-1)

Contingency Operation Benefits

Preparation for future military contingency operations in developing countries with active insurgencies is the second major category of benefit. "The United States profits by having airfields and other infrastructural projects completed or under construction that can be used for contingency operations." (4:D7-1) The US must plan for the possibility of using US combat forces to support an ally. Article 3 of the 1947 Rio Treaty details US responsibilities in the Western Hemisphere:

The High Contracting Parties agree that an armed attack by any State against an American State shall be considered as an attack against all the American States and, consequently, each one of the said Contracting Parties undertakes to assist in meeting the attack... (12:2)

US treaty obligations in other parts of the world require the same response. "In nations facing insurgency, engineers are needed to prepare the theater...General engineering missions are required before United States combat forces are introduced. Theirs [the engineers'] is a battlefield preparation mission." (4:D7-3) In a nutshell, the US can gain valuable time in a future crisis by seizing the opportunity to build the required facilities today.

The Cuban construction activities on Grenada before the US rescue mission are a sterling example of how the Communist hierarchy places value on "preparing the battlefield." When the fact that Soviet construction battalions have no weapons is considered, it is easy to conclude that the so-called "100 unarmed Cuban construction workers" may have been a military engineer unit dressed in civilian clothes. The 10,000-foot runway being built in Grenada is exactly the type of infrastructural project referenced in the above paragraph. The same types of projects are currently being built in Nicaragua. After the rescue mission, the US deployed elements of Mobile District, US Army Corps of Engineers, to complete the runway in Grenada. The US now has access to it for use in its contingency operations in the Caribbean.

Foreign Policy Benefits

Grenada was an example of achieving US foreign policy objectives through direct military intervention. The last category of benefits are accrued by achieving US foreign policy objectives through nonviolent means. In this role, US

engineers deploy to accomplish humanitarian assistance and civic action (HA&CA) programs which complement the US economic and developmental assistance provided by agencies other than DOD. The foreign policy objective achieved in this manner is stated in Section 2151(a), Title 22 of the US Code:

The Congress declares that a principal objective of the foreign policy of the United States is the encouragement and sustained support of the people of developing countries in their efforts to acquire the knowledge and resources essential to development and to build the economic, political, and social institutions which will improve the quality of their lives. (4:D1-3)

Foreign policy has economic, political, and military components. Military HA&CA projects help achieve this objective in a number of ways. Economically, the engineers can build many of the basic facilities which support economic expansion in the host country. The construction of infrastructural facilities is one of the first steps toward economic stability in a developing country.

Clauswitz said, "War is an extension of politics by other means." (1:95) But by using military engineers, the US can demonstrate its commitment to defend an ally before circumstances deteriorate to the point where force is the only solution. The debate in Congress regarding support to the Contras in Nicaragua graphically illustrates this point. Fiscal year (FY) 87 aid to the Contras was restricted to "nonlethal" assistance. Transferring this logic to any developing country involved in a low-intensity conflict favors the use of US engineers in an HA&CA construction role. It provides a good way to demonstrate US commitment to support its allies through "nonlethal" (i.e. politically acceptable) assistance. This satisfies the political component of foreign policy.

Avoiding, if possible, the deployment of US combat forces is the military component of current US policy for developing nations facing insurgencies (17:34). This can only be achieved through credible deterrence of external threats. "Engineers can serve as a deterrent to insurgent or conventional aggression by neighboring countries." (4:D7-1) Enhancing the credibility and popularity of the host government is another important component of deterrence. Military HA&CA projects address social problems and strengthen the host nation social institutions. As these problems receive visible solutions, the host government's credibility is bolstered in the eyes of its population.

COMPARISON OF BENEFITS

The discussion above shows the benefits accrued from using US engineers to construct military, infrastructural, and HA&CA projects in developing countries facing insurgencies. While the future contingency operations and foreign policy benefits are clear and important, the greatest benefit to the US is the training value received by the engineers themselves. The dynamic character of Airland Battle and the role engineers play in its success make it critical that US engineers be trained to a level of readiness equal to the maneuver forces. "Some corps engineer units may be attached to...divisions [maneuver forces]. Others will operate in direct or general support." (9:50) This fact justifies the utilization of training funds to finance engineer operations in developing countries where top quality training is possible. As said before, the US government justifies construction projects on a benefit/cost ratio basis. The benefits have been described. Next, the costs, or more accurately the details of funding, are examined.

Chapter Four

REVIEW OF CURRENT FUNDING RESTRICTIONS

In spite of Congressional declarations supporting United States economic and military assistance to developing nations, ... Congress has created a series of laws which individually and collectively prohibit, restrict, delay, or dilute actions need-ed to assist a host nation government to success-fully achieve development objectives and oppose externally supported insurgencies. (4:D1-3)

US laws severely restrict engineer operations in developing countries. As a result, they have been the object of substantial controversy. It is out of this controversy that this paper's thesis springs. Consequently, a review of the restrictions placed on the funding of engineer operations by US laws, DOD directives, Army regulations, and Comptroller General decisions is appropriate to this analysis. This chapter briefly discusses the restrictions and the funding authorities established by each of the aforementioned legal and regulatory vehicles.

THE BASICS

The Foreign Assistance Act (FAA), the Arms Export Control Act (AECA), and the Military Construction Codification Act (MCCA) govern the funding of engineer operations in developing countries. The FAA and AECA are incorporated as sections of Title 22 of the United States Code (USC), and the MCCA is incorporated as a section of Title 10, USC. The important distinction of the funding authorities established by Titles 10 and 22 is:

1. Title 10 funds are appropriated for US military expenditures including operations and maintenance (O&M) and military construction.
2. Title 22 funds are appropriated for foreign assistance. Often, the cost of US military assistance must be reimbursed by the host nation.

These laws are further implemented by DOD directives and Army regulations. Comptroller General decisions based on Government Accounting Office (GAO) audits impose the final set of restrictions on the funding practices used by DOD for engineer operations. Collectively, they constitute an extremely complex set of rules by which commanders must try

to accomplish their engineer missions. However, a number of easily understood principles can be drawn from the study of the various laws, directives, regulations, and legal decisions. The remainder of this chapter describes and explains them in layman's terms to provide a planning guide for funding engineer operations.

Principle 1: Use the Right Pot of Money.

Though the first principle is well known, it is restated to form a baseline for building the remaining principles. "It [Congress] has devised specific measures to ensure ... that ... programs in one area are not supported by appropriations to be used elsewhere." (5:2) In other words, funds can only be spent for their appropriated purpose. The literature on engineer operations in developing countries shows the most common funding error to be using exercise O&M funds to finance military construction and security assistance projects improperly classified as training projects. The bottomline is this: if a major exercise in a developing country depends on the completion of a military construction project and funds from the appropriate military construction account are not available, the commander must cancel or postpone the exercise. Failure to do so is both a violation of the Antideficiency Act and a federal crime (15:--). This is a bitter pill to swallow and is probably the root of some of the problems experienced by DOD in the past few years.

Principle 2: Fund Exercise Related Construction from the Unspecified Minor Construction Account.

The second principle is an extension of the first and comes from the FY87 Military Construction Appropriations Bill (10:17). Exercise related construction must use funds from the Army's unspecified minor construction account. "...these funds will be used to pay for all exercise related construction ... including those costing less than \$200,000." (10:17) This basically plugs the exception to the use of military construction funds mentioned above which allowed the use of O&M funds for projects whose funded cost was less than \$200,000. Again, exercise planners must take a long-term approach and insure that funding is procured for exercise related construction in the appropriate account.

Principle 3: Define Funded Versus Unfunded Project Costs.

The third principle involves differentiating "funded" and "unfunded" project costs. Unfunded costs are those which would have been incurred whether or not the project in question was constructed. In effect, they are sunk costs to

the US government. They include military salaries, depreciation on government equipment, and planning/design costs (8:2-2). On exercise related construction projects, they also include the transportation costs of materials, supplies, and government equipment as well as travel and per diem costs for troop labor (10:17). Simply put, if an engineer unit had participated in an overseas exercise and built nothing of lasting value for the host nation, the cost incurred would be an unfunded cost. Logically then, the funded cost of an exercise related project is the incremental cost incurred to build and leave something of value to the host nation. This includes the cost of the materials used, project specific overhead costs, and the fuel and maintenance of US government equipment. Unfunded costs may be financed from exercise O&M monies. Funded costs must be financed as detailed by Principle 2.

Principle 4: HA&CA Projects Are Built For Civilians.

While the first three principles reduce the commander's flexibility, the fourth principle expands it. Public Law 99-661 added Chapter 20 to Title 10, USC which recognized HA&CA projects as valid military missions and established the funding authority to conduct them. HA&CA projects may be constructed "in conjunction with authorized military operations ... if ... the activities will promote: 1) the security interests of both the United States and the [host] country ... and 2) the specific operational readiness of the armed forces who participate ..." (11:290) The operative principle is that an HA&CA project must benefit the US as well as the host nation. The specific benefits must be the furthering of US security policy and enhanced readiness through the experience gained by US forces in the field. Additionally, the prime beneficiary of the HA&CA project must be "the civilian, noncombatant population." (11:290) Public Law 99-661 goes on to restrict the types of construction to "...rudimentary surface transportation systems, well drilling, and ... basic sanitation facilities, and rudimentary construction and repair of public facilities." (11:290) Finally, it provides specific funding authority for these projects. This authority gave DOD an additional pot of money from which to finance these operations. Though not specified, it must be assumed that the division of costs detailed in Principle 3 would apply on HA&CA projects. Planners should note that these projects also require the approval of the Secretary of State. (13:402) .

Principle 5: The Host Nation Should Help.

The fifth principle is that engineer projects in developing nations should be cooperative in nature with some

element of host nation involvement. Title 22, USC states:

... defense services to any country shall be furnished ... for the purpose of assisting foreign military forces in less developed, friendly countries ... to construct public works and engage in other activities helpful to the economic and social development of such friendly countries. (14:414)

Additionally, "assistance from the United States shall be in support of, rather than a substitution for, the self-help efforts that are essential to successful development programs ..." (4:D1-4) Thus, engineer projects in a developing country should be combined efforts with host nation forces. This principle relates to the foreign policy benefits discussed in Chapter 3; adhering to it insures that those benefits are accrued. Applying this principle also insures consistency with low-intensity conflict doctrine. (9:4)

Principle 6: Keep HA&CA and Exercise Related Construction Separate From Security Assistance.

The sixth and last principle deals with the relationship between security assistance and engineer exercises. Any project which primarily enhances the readiness of host nation armed forces must be built under the authority of Title 22, not Title 10. This requires that the host nation reimburse the US for all project costs plus a markup for foreign military sales (FMS) overhead costs. (4:D1-12) The danger here is that commanders may be tempted to rationalize the value of friendly countries' military facilities to be a benefit to US contingency operations and that this alone authorizes the US to bear the cost. The Comptroller General ruled, "... action must be taken by DOD ... to ensure O&M funded exercises are not used to finance security assistance activities." (5:1) Therefore, planners must objectively analyze all planned HA&CA and exercise construction projects and be sure that their true purpose is not security assistance.

An interesting aside to Principle 6 is found in section 2302 of Title 22, USC. It says that defense services may be furnished "for the purpose of assisting foreign military forces in less developed friendly countries (or the voluntary efforts of personnel of the Armed Forces of the United States in such countries) to construct public works and other activities..." (14:414) It would appear from this citation that US engineers could voluntarily construct HA&CA projects using materials and other items purchased from security assistance accounts. The interpretation of this passage in

Title 22 is not totally clear. Apparently, Congress intended that US personnel be allowed to make their expertise available for small-scale humanitarian projects without the fear of violating the FAA or AECA (18:--). Additionally, there is currently a debate over the legal definition of "voluntary." This should not be considered a loophole in the law. Exercise planners should apply Principle 6 as discussed above.

SUMMARY

The six principles for planning the funding of engineer operations come from a broad base of law and regulation. It is important to remember that our legal and regulatory framework is constantly changing. In the past three years, there has been a shift toward allowing military elements to provide humanitarian and limited economic assistance. This shift is best shown by the addition of Chapter 20 (Humanitarian and Civic Assistance Provided in Conjunction with Military Operations) to Title 10, USC. Additionally, Congress' direct mention of exercise related construction in the FY87 Military Construction Appropriations Bill illustrates the visibility that engineer operations in low-intensity conflict environments have achieved. Thus, it is very important that commanders and their staffs understand the administrative and legal rules for the employment of engineers in developing countries. To aid understanding, the next chapter will analyze the engineer portion of the Ahuas Tara II exercise in light of current restrictions and illustrate the use of the six principles developed in this chapter. Additionally, Appendix B contains a checklist which helps a commander analyze a specific project, determine its proper classification, and lay out its funding plan.

Chapter Five

ANALYSIS OF AHUAS TARA II IN LIGHT OF CURRENT LEGISLATION

EXERCISE DETAILS AND PROBLEMS

Exercise Ahuas Tara II employed US engineers to construct 33 projects ranging from base camps to airfields in six different locations throughout Honduras (See Appendix C for list of projects). It was selected for this analysis because of the extreme controversy which its funding practices created. The controversy centered on the methods used to fund exercise related construction and HA&CA projects. In a nutshell, DOD funded the exercise from O&M accounts using the following logic:

... any construction conducted during the exercise was merely an incidental result of troop training -- an authorized O&M activity -- and should not be subject to the accounting requirements of military construction projects. (5:5)

The GAO took exception to this view and published Comptroller General decision B-213137. It had three findings apropos to this analysis:

1. "DOD's O&M appropriations may not be used to finance construction activities in support of joint combined exercises in Honduras." (5:5)
2. "Facilities constructed by DOD in Honduras are not so clearly minor and temporary that they would qualify under previous GAO decisions for funding as operational expenses charged to O&M appropriations." (5:5)
3. "DOD's O&M funds may not be used for the provision of civic action or humanitarian assistance to Honduras." (5:5)

A 30 January 1986 clarification of Comptroller General Decision B-213137 brought out a fourth problem: "DOD cost computations for O&M funded construction may have been understated, because of DOD's failure to include all costs attributable to that \$200,000 authority." (6:1)

Exercise literature shows that the decision to use O&M funds was not an inadvertent mistake. A good deal of thought

was given to the propriety of this decision, and it was made in good faith on the logic stated above as well as a number of legal, technical factors. The underlying reason for the controversy was the lack of definitive guidance on the subject of funding engineer training projects in developing countries. "This entire funding controversy obscures the training and readiness benefit achieved by United States forces conducting HA&CA activities during these exercises." (4:D1-13)

APPLYING THE SIX PRINCIPLES TO AHUAS TARA II

If Ahuas Tara II were conducted today, the funding would be better defined. A look at the list of projects in Appendix C shows them to be military in nature. Thus, applying Principle 1, they should be funded as military construction projects. Principle 2 tells us to program the money from the unspecified minor construction line of the military construction appropriation as the projects are exercise related.

Applying Principle 3 is not so clear cut. The GAO uses AR 415-35 to separate funded and unfunded project costs. In this case, funded costs would be financed from the unspecified minor construction account, and unfunded costs would be financed by exercise O&M money. It is clear from AR 415-35 that the costs of construction materials and equipment usage should be funded costs. It also tells us that military personnel appropriations, equipment depreciation, and design costs should be classified as unfunded. The question arises on the designation of the costs for per diem, travel, and equipment transportation. If the engineer units who participated in Ahuas Tara II had built only pioneer roads, tent cities, and other typical force support activities, the propriety of funding these expenses with O&M money would not be in question. DOD's assertion (6:2) that the projects were constructed incidental to exercise training tells us that the engineer unit's primary purpose was to participate in the exercise. Therefore, the per diem, travel and equipment costs were incurred as a part of the exercise and should be classified as unfunded. (10:17) It is important to understand this: if the engineers had deployed to Honduras only to build the projects and not participate in an authorized exercise, these costs would become funded costs, financed from the unspecified minor construction account.

None of the projects in Appendix C appear to be humanitarian or civic action in nature. Therefore, in applying Principle 4, O&M money could not be used to finance the project specific costs of materials and equipment usage. It is tempting to rationalize certain features (wells, sewage

line, water supply, hospital, etc.) of the projects as having an HA&CA value. This argument would go on to say that the civilian population could use these facilities after the exercise. This rationalization is wrong. Most engineering projects have some inherent civic value. This fact is irrelevant in this analysis. The facilities were built to support a military exercise. The exercise could not have been conducted without these support facilities. They were used by exercise personnel during Ahuas Tara II and subsequent exercises. Therefore, they are clearly exercise related construction, not HA&CA, projects and must be funded accordingly.

Principle 5 was fulfilled in Ahuas Tara II. Honduran military engineers and civilian contractors worked side by side with US engineers (6:9). Therefore, the spirit of host nation involvement required by Title 22 was satisfied.

The application of Principle 6 illustrates the greatest danger for criticism and controversy if Ahuas Tara II were reenacted today. Principle 6 warns about mixing security assistance and exercise related construction. To apply this principle correctly, planners must examine the project's ultimate use and determine whether the US or the host nation accrues the greatest benefit. If the host nation's military infrastructure is the greater beneficiary, then the project constitutes security assistance. The Ahuas Tara II projects have been continuously used by US elements to support additional exercises in Honduras. Thus, the US is the major beneficiary, and the projects are not a form of security assistance. An interesting point arises for the future. If the US were to turn these facilities over to the Honduran government intact, Title 22, USC would require the Hondurans to reimburse the funded project costs. (14:--).

SUMMARY

In summary, recent legislation has increased the amount of definitive guidance on funding engineer operations in developing countries. Today, Ahuas Tara II engineer projects would be funded as exercise related construction. Funded project costs would be financed from the unspecified minor construction account. Unfunded costs, including per diem, travel, and equipment transportation, would be funded from O&M appropriations. This analysis shows the need to plan the construction funding well in advance of the exercise. Such a project cannot be put together on a "last minute" basis using available O&M funds.

The analysis also illustrates an incredible irony. In spite of Congress' stated intention: "... this initiative

will eliminate all questions and concerns about the costing and grouping of projects and ultimately increase the flexibility of the Department [DOD]." (10:17), the opposite is actually true. By tying exercise related construction to the annual Military Construction Appropriations Bill, Congress forces construction training to compete for funds with regular military construction projects necessary to maintain the quality of life for the military community. This competition is a mismatch. Additionally, the technical definition for a valid HA&CA project (i.e. civilian noncombatants as the prime beneficiary of the project) will make it extremely difficult to integrate HA&CA projects into joint combined exercises. So while funding these projects from available O&M money has been legitimized, Congress has so reduced the scope of legitimate projects as to make them virtually illogical in most exercise scenarios. Thus, Congress not only made it more difficult to obtain funding, but also made it less likely that these projects will be included in joint combined exercises in developing countries. In summation, the Congress has chosen to throw away the plethora of benefits which can be achieved through the use of US engineers.

Chapter Six

CONCLUSIONS

The following conclusions can be drawn from the analysis of current legislation, regulation, and legal decisions relating to engineer operations in developing countries:

1. Recent legislation regarding exercise related construction has provided the definitive guidance which was previously missing. It settled the controversy over how to fund these programs properly.
2. The addition of Chapter 20 to Title 10, USC constitutes Congressional recognition of HA&CA projects as a valid military mission. It also provided authority for DOD to earmark funds specifically for HA&CA projects.
3. Exercise related construction must be identified in time to include the required funding in the annual Military Construction Appropriations Bill.
4. The costs incurred for per diem, travel, and equipment transportation (normally designated as funded project costs in AR 415-35) may be designated as unfunded costs if they are incurred in the course of an authorized exercise. This is not allowable if the sole purpose for deploying the engineers is to complete the construction itself.
5. Engineer operations in developing countries with low-intensity conflicts are closely watched from the highest levels of the US government. The rules which govern them change with every appropriations bill. Commanders must document the logic used to assemble funding schemes for engineer projects and submit all their plans for these operations for competent legal review before executing them.

Chapter Seven

RECOMMENDATIONS

Recent legislation on this subject was a reaction to the controversy created by Ahuas Tara II and other exercises in Central America. Instead of increasing the commander's flexibility to accomplish the training needed to achieve military readiness, Congress further tied the hands of DOD and made it harder to accomplish this vital mission. The training value of engineer construction projects is still ignored, and as a result, the ancillary benefits (contingency operations and foreign policy) of troop construction projects in developing countries are also lost. Therefore, it is recommended that legislation be introduced that removes exercise related construction from the annual Military Construction Bill and permits it to be funded from military exercise O&M accounts (the accounts from which the rest of military training is funded). Realistically, some dollar limit must be placed on these projects. \$200,000 would be a logical figure as it is consistent with the MCCA.

Secondly, a change to AR 435-35 to reflect recent legislation and GAO decisions is recommended. This change should entail designating per diem, travel, and equipment transportation costs as unfunded project costs for projects constructed during overseas exercises.

Next, section 405 of Chapter 20 to Title 10, USC should be amended to allow the construction of rudimentary bridges, buildings, health care facilities, and other types of projects which would normally be built during the course of a military exercise but would also be of humanitarian and civic value to the indigenous population.

Lastly, Title 22 should be amended to allow the turn over to the host nation of exercise construction projects built under the authority of Title 10 which have humanitarian or civic value without reimbursement. This change would allow the maximizing of benefits to the US by capturing the foreign policy and contingency benefits available from projects built for their training value.

All of the above recommendations are calculated to allow the maximum readiness benefit to be accrued by making engineer training exercises easier to fund. While the author is primarily concerned about engineer troop training, the additional benefits discussed in Chapter Three are also of importance. General Paul F. Gorman, the former Commander-in-Chief of US Southern Command, tied it all together when he

said, "But like the National Bipartisan Commission on Central America, I see no way of separating political and economic measures from security measures on behalf of our [National] interests." (2:23)

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APPENDICES

Appendix A--Acronyms and Abbreviations

Appendix B--Commander's Project Analysis Checklist

Appendix C--Exercise Ahuas Tara II Projects

Appendix A

ACRONYMS AND ABBREVIATIONS

AECA:	Arms Export Control Act
AR:	Army Regulation
CONUS:	Continental United States
DEH:	Director of Engineering and Housing
DOD:	Department of Defense
FAA:	Foreign Assistance Act
FMS:	Foreign Military Sales
FY:	Fiscal Year
GAO:	Government Accounting Office
HA&CA:	Humanitarian Assistance and Civic Action
MCCA:	Military Construction Codification Act
MOS:	Military Occupational Specialty
O&M:	Operations and Maintenance
US:	United States
USC:	United States Code

Appendix B

COMMANDER'S PROJECT ANALYSIS CHECKLIST

The purpose of this checklist is to give a commander and his planning staff an initial guide by which they can analyze proposed construction projects. From it, they can determine the project's classification and the formula for funding various project costs. Planners should document the logic used to reach this determination and submit it for legal review prior to implementation.

1. Project Purpose:

- a. If to provide a service or facility to the noncombatant, indigenous population of the host nation, classify the project as HA&CA.
- b. If to provide support to a US or joint combined exercise, classify the project as exercise related military construction.
- c. If to provide a service or facility to the host nation's military forces, classify the project as security assistance.
- d. If none of the above apply, classify the project as general military construction.

2. HA&CA Project Costs:

- a. Does the project involve the construction of rudimentary surface transportation systems, well drilling, basic sanitary facilities, or other rudimentary public facilities?
 - 1). If not, the project is not a valid HA&CA project under the definition in Chapter 20, Title 10, USC. Reclassify as 1b., 1c., or 1d. above, or seek legal advice before proceeding or including in an exercise.
 - 2). If yes, move to the next question.
- b. Will the HA&CA project be built in conjunction with an authorized military operation?
 - 1). If not, the HA&CA project is outside the scope of DOD's authority to provide this type of assistance. Seek legal advice before starting.

- 2). If yes, break out the funded and unfunded costs as shown in the next paragraph. Funded costs shall be charged to the current Section 405, Chapter 20, Title 10, USC appropriation. Unfunded costs shall be charged to their proper appropriation. (Note: The project must be approved by both the Secretary of State and Secretary of Defense.)

c. Funded Costs:

- 1). Materials, supplies, and services.
- 2). Project specific overhead charges from the Corps of Engineers or Naval Facilities Engineering Command.
- 3). Maintenance and operations costs for Government-owned equipment.
- 4). Contract labor costs.

d. Unfunded Costs:

- 1). Military personnel salaries, allowances, etc.
- 2). Depreciation on Government-owned equipment.
- 3). "Materials, supplies, and items of installed equipment that have been obtained for the project on a nonreimbursable basis." (8:2-2) This would include materials, etc., which are made available by other US agencies, the host nation, and available raw materials like timber and rock.
- 4). Planning and design costs.
- 5). Travel and per diem costs for troop labor.
- 6). Transportation costs for Government-owned equipment.

3. Exercise Related Construction Project Costs:

- a. Will the project be built in conjunction with or as a part of an authorized military exercise overseas?

- 1). If not, classify the project as either security assistance or military construction, not exercise related construction.

- 2). If yes, break out the funded and unfunded costs as shown in the next paragraphs. Funded costs shall be charged to the unspecified minor construction account of the current Military Construction Appropriation Bill. Unfunded costs shall be charged to their proper appropriation.

b. Funded Costs:

- 1). All materials, supplies, and services including those received on a nonreimbursable basis from other US government agencies.
- 2). Contract labor costs.
- 3). Project specific overhead costs.
- 4). Maintenance and operation costs for Government-owned equipment.

c. Unfunded Costs:

- 1). "Transportation costs for materials, supplies and Government furnished equipment." (10:17)
- 2). Travel and per diem costs.
- 3). Materials, supplies, and services provided on a nonreimbursable basis by the host nation.
- 4). Military personnel salaries, etc.
- 5). Depreciation on Government-owned equipment.
- 6). Planning and design costs.

4. Security Assistance Projects Costs: All costs of these projects must be financed by the appropriate FMS account. The host nation must enter into an agreement with the US to reimburse all project costs and make payment in advance of the construction start.

5. General Military Construction Project Costs: These project costs are broken out in accordance with AR 415-35. (8:2-1)

Appendix C

EXERCISE AHUAS TARA II PROJECTS

The following is a listing of the projects undertaken during exercise Ahuas Tara II in Honduras. It is provided as a reference for the material discussed in Chapter Five.

<u>Location</u>	<u>Project</u>
Aguacate	Airfield Base camp site preparation C/46th EN BN cantonment Water supply pipelines
Choluteca	Terrain reinforcement
Tiger Island	Emergency airstrip Roads and site preparation Base camp water well
Palmerola	MP IF Cantonment SIG IF Cantonment AVN IF Cantonment JTF Cantonment SPT Cantonment Hospital Cantonment JTF Command Bunker Personnel Shower Vehicle washrack
San Lorenzo	Airfield Base camp site preparation Base camp obstacles and services Cantonment areas Dining facilities and water tower Electric distribution system Helipads Hospital POL berms Post exchange Base camp road upgrade Sewer line Water wells
Trujillo	3-319 Artillery cantonment Airfield improvements SEABEE cantonment