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SMALL WARS LOGISTICS

The Intervention in Haiti,

1915-1934

by

Jenna Schutz

A THESIS

Presented to the Faculty of

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SMALL WARS LOGISTICS: THE INTERVENTION IN HAITI, 1915-1934

Jenna Schutz, M.A.

University of Nebraska, 2011

Advisor: Peter Maslowski

Tailored to a unit's size, scope, and mission, logistics or the practical art of transporting and supplying military forces via air, land, and sea is at the heart of any military operation. During the late nineteenth century the United States became increasingly involved in low intensity conflicts throughout Latin America and the Philippines. The nature of small wars required not only military provisions, but also supplies to help stabilize countries. The 1915 intervention in Haiti by the U.S. Marine Corps and Navy is a prime case study for the flexible bifurcation of logistical efforts to support military and civic operations. Haiti's nineteen-year occupation showed the juxtaposition of technological innovations, specifically in weaponry and transportation, against Haiti's rugged terrain, climate, little to no railroads or roads, and penchant for revolution. The varying degrees of intensity in small wars forced logistics networks to utilize every means of mobility. By breaking down logistical elements such as rations or transportation, and focusing on their transformation and adaptation for use in the field, research highlighted the varying degrees of continuity between adoption, practice, dissemination of lessons, and redeployment.

Despite technological advancements spanning the occupation, Haiti's harsh environment forced Marines invariably to default to local procurement and basic pack train transport.

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Introduction

Viewed as an art form since the days of Sun Tzu, the relentlessly evolving state of warfare represents centuries of heroism, horror, heartbreak, and innovation. From antiquity, soldiers relied on complex systems to supply the necessities of war, be they transportation, food, weaponry, or medical care. Without these tools of the trade, fighting forces inevitably flounder. Defined by historian Martin Van Creveld as “the practical art of moving armies and keeping them supplied,” logistics is the backbone of military pursuits.¹ Regardless of its prominent place in warfare, historical scholarship on the subject remains sparse. Even though military history in general has a strong, socially popular following, many writers resort to the tried and true tales about “battles and leaders,” not willing to challenge the status quo. In the late 1960s military historians encouraged an interdisciplinary focus, broadening the scope of what previously defined military history by stepping away from command-centric studies to involve war’s interactions with culture, technology, economics, and politics.² Yet, even in the midst of the “new” military history, the study and analysis of logistics failed to receive the focus it deserves.

In 1966 James A. Huston wrote *The Sinews of War: Army Logistics, 1775-1953*. The preface serves as a historiographical study of the word “logistics,” tracing it

¹ Martin Van Creveld, *Supplying War: Logistics from Wallenstein to Patton* (London: Cambridge University Press, 1977), 1.

² John Whiteclay Chambers, “The New Military History: Myth and Reality,” *The Journal of Military History* 55, no. 3 (July 1991): 395-406.

from the abstract 1916 definition as a “branch of military science dealing with the moving, quartering, and provisioning of armies” to the fifteen responsibilities of the Assistant Chief of Staff in 1950, which recognized duties such as standardization, foreign aid, and maintenance.³ In the broadest sense Huston maintained logistics focuses on the three M’s of warfare: material, maintenance, and movement. While this volume was a truly comprehensive history of Army logistics, the book failed to examine other armed services.

The first cross-national contribution came with Martin Van Creveld’s *Supplying War: Logistics from Wallenstein to Patton*, which revolutionized the study of military history by recognizing the centrality of logistics in strategic considerations. As warfare changed so too did the means to supply its participants. Traditionally military historians broke down this historical process into three periods characterized by distribution method: magazine-fed standing armies, destructive plundering, and supply lines from camp. Other writers focused on the transportation allocated, from horse-drawn carts to the deuce and a half truck. Van Creveld distinguished himself by arguing on the basis of continuity. At the most basic level, he contended, “By and large, the story of logistics is concerned with the gradual emancipation of armies from the need to depend on local supplies.”⁴ Not until the late nineteenth century Industrial Revolution did armies adopt modern

³ The fifteen obligations of an Assistant Chief of Staff include: direction; plans; research; development; tripartite standardization; standards; procurement; cataloging; requirements; foreign aid; distribution; maintenance; installations; movements; and services. James A. Huston, *The Sinews of War: Army Logistics, 1775-1953* (Washington, D.C.: U.S. Government Printing Office, 1966), viii.

⁴ Van Creveld, 232.

weapons, such as breech-loading rifles. From then on the distribution network cycled through various forms of transportation, thus becoming increasingly fettered to the “umbilical cord of supply.” While praised for its ingenuity, *Supplying War* focused on the land-based movement of troops, not giving justice to air replenishment or naval logistics.

It took nearly twenty years for historians to offer an expansion. In 1993 John A. Lynn edited a book amending Van Creveld’s conclusions. In *Feeding Mars: Logistics in Western Warfare from the Middle Ages to the Present*, Lynn and his contributors drew parallels with the rise of a national economic base, technological advancement, and power projection abroad. Lynn widened the definition of logistics to include research and development, naval logistics, air supply, national industry, and non-domestic infrastructure. Logistics became more than just food and ammunition, as provisions like fuel and construction materials played a growing role in modern warfare.⁵

As *Feeding Mars* essayist George Satterfield’s “Bibliography of Logistics from the Ancient Greeks to the 1980s” indicates, the study of logistics is not an entirely new phenomenon. Nevertheless, a prevalent discontinuity in the field exists in the study of small wars.⁶ Major General Julian Thompson justified the omission of such conflicts from his book *The Lifeblood of War* claiming, “By their very nature, low intensity operations involve low ammunition expenditure, particularly shells, and

⁵ John A. Lynn, *Feeding Mars: Logistics in Western Warfare from the Middle Ages to the Present* (Boulder, CO: Westview Press, Inc., 1993), 187.

⁶ George Satterfield, “Bibliography of Logistics from the Ancient Greeks to the 1980s,” in *Feeding Mars*, 289-308.

compared with mobile warfare, little fuel.”⁷ Thompson may be correct, but scale is not the only issue facing logisticians in low-intensity warfare.

The Marines in Haiti braved both intense combat and sustained occupation efforts, making it a prime case study for tracing both the highs and lows of extended occupation. Depending on the nature of operations, the Marine Corps logistics network utilized every supply platform available to support combat actions and civic measures.

The ambiguous nature of the term “small war” allows for numerous types of military operations. In the United States, small wars are undeclared actions in which American military forces work in concert with diplomatic demands to intervene in a nation-state’s affairs to restore stability and preserve lives within the concern of U.S. interests.⁸ A large portion of small wars, especially involving Marines, developed from the federal government’s responsibility under the Monroe Doctrine to maintain hemispheric stability.⁹ Thus, the Caribbean interventions of the early twentieth century became synonymous with small wars.

⁷ Thompson argued that logistics did not inhibit operations in the low intensity warfare of the 1945 Borneo Campaign. The campaign’s proximity to a large Singapore base and adequate air and naval supply provided sufficient logistical support. Major General Julian Thompson, *The Lifeblood of War: Logistics in Armed Conflict* (London: Brassey's, 1991), xv.

⁸ United States Marine Corps, *Small Wars Manual* [henceforth: SWM] (Washington, D.C.: Government Printing Office, 1940), 1-1.

⁹ Presidents of the United States invoked numerous addendums to the Monroe Doctrine from its 1823 inception. Perhaps the most well-known addition, President Theodore Roosevelt’s 1904 “Roosevelt Corollary,” specifically allowed for unilateral action in cases of “flagrant and chronic wrongdoing by a Latin American Nation.”

Epitomizing Carl von Clausewitz's maxim, "War is the continuation of politics by other means," the Marine Corps became the foremost military arm of the Monroe Doctrine, seeing duty in Panama, Cuba, Nicaragua, Honduras, Mexico, Haiti, and the Dominican Republic between 1898 and 1934. In fact two-thirds of Marine Corps personnel experienced expeditionary foreign deployment in 1929.¹⁰ Known today under the collective designation of the Banana Wars, a name originally coined by cynical Marines, the U.S. not only deployed military forces to these countries, but also instituted civil measures ranging from public works to medical care.¹¹ With the wide-ranging responsibilities confronting interventionist forces, logistical support was extremely important to their success. Accordingly, a manipulation of Lynn's comprehensive notion of logistics, including Van Creveld's basic definition, is utilized in this study: logistics is the practical art of transporting and supplying military forces via air, land, and sea.

As the Corps' deployment expanded across the region, the institution increasingly identified with its distinct role as a stabilization force. The 1915 military intervention in Haiti, which lasted until 1934, embodied the critical role of logistics in the multifaceted world of small wars operations. Haiti housed two entities to stabilize the nation. The Marines of the First Marine Brigade stationed in Haiti led pacification efforts during the 1915 and 1918-1920 armed rebellions, but

¹⁰ SWM 1-2.

¹¹ Lester D. Langley, *The Banana Wars: An Inner History of American Empire 1900-1934* (Lexington, KY: The University Press of Kentucky, 1983), 6.

otherwise played a secondary role to the constabulary police (Gendarmerie).¹² Founded in 1915 under the mandate of the Haitian-American treaty, the Gendarmerie defined the occupation, maintaining its mission through civil measures. The Marine Corps pulled from its own ranks to fill the Gendarmerie's officer corps. Accepting a Gendarmerie billet meant increased pay and promotion; corporals became first lieutenants, and colonels pinned on Gendarmerie general stars. The constabulary force recruited local males and then trained them to serve as policemen, soldiers, and community leaders. Tasked to stabilize Haiti through the rehabilitation of infrastructure, the Gendarmerie pushed through public works projects ranging from roads to schoolhouses and oversaw medical assistance programs for civilians.

In an era of doctrinal development, the Marine Corps adamantly pursued quick dissemination of knowledge gained from field experiences.¹³ Through trial and error during the nineteen-year occupation, Haiti became a laboratory for small war methodology. The Haitian terrain and climate, coupled with deplorable roads and railroads, erected one hurdle after another in a logistics marathon. Due to the destruction wrought by Haitian revolutionaries, civil projects such as road construction often went uncompleted, further straining the logistics network. In the

¹² On November 1 1928, the Haitian government changed the Gendarmerie D'Haiti's name to Garde D'Haiti. The new title's translation more aptly defined the constabulary's military role. For the sake of continuity, the paper will maintain the term Gendarmerie D'Haiti throughout. James H. McCrocklin, *Garde D'Haiti: Twenty Years of Organization and Training by the United States Marine Corps* (Annapolis, MD: The United States Naval Institute, 1956), 177.

¹³ Keith B. Bickel, *Mars Learning: The Marine Corps Development of Small Wars Doctrine, 1915-1940* (Boulder, CO: Westview Press, 2001), 93.

age of automobiles, rail, and aircraft Haiti's tendency to relapse into rebellion obstructed Marine Corps policymakers' modernization attempts.

The study of Haiti's geography, environmental and political climate, and infrastructure prior to the 1915 American intervention is crucial to understanding what military forces faced upon landing on the shores of Port au Prince. Chapter one introduces pre-occupation Haiti, and then examines the military's supply efforts during the Spanish-American War, Cuban Insurrection, and landings at Vera Cruz. The arduous task of creating a supply system to combat the exotic environments of Cuba, the Philippines, and Mexico provided experiences for Marine strategists. The Corps' tenuous institutional foreknowledge regarding military intervention and occupation created the baseline for small wars theory.

The second chapter explores logistics at its base by breaking down critical supplies and their impact on Haiti's changing military and political environment. Witnessing the evolution of war staples like weapons or sanitation measures sheds light on how Marine and Navy personnel put small wars lessons into practice and then adapted them for Haiti's unique character. Marine Corps pacification efforts spanned the entirety of Haiti's 10,714 square miles. With remotely garrisoned units and dilapidated roads, communication by sea or air became the most efficient option.

The final chapter probes how Haiti's harsh terrain and climate affected land-based movement of men and material. Both military and civil operations faced severe logistical strain without proper roads, railways, or housing. With air, sea, and motor transportation options exhausted, units took advantage of pack trains and

mounted columns. The occupation underscored its reliance on core infrastructure by launching into rapid construction projects. To push past manpower shortages the Gendarmerie enacted antiquated servile laws that left a dark mark on the occupation. Civil measures strained the logistics network by creating demands well beyond providing materials for the small occupation force.

War in the early twentieth century is often remembered for its rapid evolution into the high body count attrition style combat of the Western Front. While the armies of Europe and, eventually, the United States slogged it out in the trenches, elements of the U.S. Marine Corps and U.S. Navy fought a very different kind of war in Haiti. The intervention in Haiti spanned a period of massive technological innovation. However robust the Marine Corps' intentions, the Haitian environment forced it to revert to ancient historical precedents, living off the land and relying on pack animals.

Figure 1-1. Map of Haiti



Chapter 1

Pre-intervention Haiti & Small Wars Logistical Lessons

At first glance the island of Hispaniola gives the impression of a tropical oasis, boasting majestic mountains, rich coastal plains, and sandy beaches. However, when the Marine Corps familiarized itself with the dynamic landmass in 1915 it saw a region dominated by mountains, harsh tropical weather, and a devastated infrastructure.¹ The steep mountainous terrain, sequestered plains, and absence of adequate road and rail networks made communication nearly impossible. Streets of the republic were in disrepair due to neglect since the days of French control.² Most roads resembled harsh trails and risked washout during the rainy season. With less than fifty miles of workable track, travel by rail proved equally limited. Often, the sea provided the safest and most efficient route to various Haitian hamlets.

The island included the countries of Haiti and the Dominican Republic. The western third of the island housed Haiti, making up 10,714 of the greater island's 30, 528 square miles.³ With a population cresting at two million in 1915, of which roughly eighty percent was rural, Haiti was poor and overpopulated upon the Marines' arrival.

¹ Robert Debs Heinl Jr. and Nancy Gordon Heinl, *Written in Blood: The Story of the Haitian People, 1492-1971* (Boston: Houghton Mifflin Company , 1978), 4.

² U.S. Marine Corps, *Military Monograph of Haiti*, (Government Printing Office, 1934).

³ Heinl and Heinl, 4.

Stumbled upon by Christopher Columbus on December 5, 1492, Haiti transformed into an objective of European power politics, coveted for its rich fields, slave-based economy, and prime location for hemispheric exploration. After the French took control in 1659, they quickly constructed roads and irrigation systems to protect the prosperous colony and support commerce.⁴ In August 1791, revolutionary Toussaint Louverture and his followers rebelled and overthrew the French. Western Hispaniola gained its independence and abolished slavery in 1804, at which time the nation adopted the new name “Hayti” or “mountainous.”⁵ Independence, however, proved ethereal and by the late 1800s over ninety percent of the population lived in squalor, plagued with illiteracy, malnutrition, and menial jobs. Teetering on the edge of chattel conditions, many peasants turned to revolution.⁶ Adopting the Haitian term *caco* or “birds of prey,” groups of revolutionaries exploited differences between Haiti’s social classes, serving as mercenaries to politicians with higher aspirations. Highly opportunistic and money hungry, *caco* members fought for the highest bidder, bringing a politician to power one year and assisting in his overthrow the next.

From the republic’s founding to the United States’ intervention in 1915, only two of Haiti’s twenty-four presidents ended their terms peacefully. Revolution

⁴ Ludwell Lee Montague, *Haiti and the United States, 1714-1938* (New York, NY: Russell & Russell, 1966), 4.

⁵ Heinl and Heinl, 4.

⁶ Allan R. Millett, *Semper Fidelis: The History of the United States Marine Corps* (New York: The Free Press, 1991), 178.

disposed of seventeen and eleven held office less than a year.⁷ In the seven-year span directly preceding intervention, seven presidents failed to finish their terms, and three died at the hands of *caco* insurgents.

Located only six hundred miles off Florida's coast, Haiti's proximity to the United States forced the countries into an unavoidable relationship. America's early relationship with Haiti centered on commerce. However, the adoption of the Monroe Doctrine in 1823 and its subsequent corollary in 1904 placed hemispheric responsibility in the hands of American politicians.⁸

President Woodrow Wilson's fears of European intervention made Western hemispheric stability a top priority. Likening the situation in Haiti with America's own exploitation by Europeans, President Wilson justified U.S. interest in Haiti as an act of hemispheric solidarity.⁹ Furthermore, Wilson believed Haiti was a backward country incapable of self-government. In his eyes Haiti was a struggling republic cursed with an unstable government caught regularly in the throes of anarchy. Considering Haiti's disturbing track record Wilson believed the only hope for political stability lay in U.S. intervention.

Since the Spanish-American War, the United States steadily increased its presence in the Caribbean and Pacific. In the thirty-six years between 1898 and

⁷ Hans Schmidt, *The United States Occupation of Haiti, 1915-1934* (New Brunswick, NJ: Rutgers University Press, 1971), 27.

⁸ Brian Loveman, *No Higher Law: American Foreign Policy and the Western Hemisphere since 1776* (Chapel Hill, NC: The University of North Carolina Press, 2010), 27.

⁹ Brenda Gayle Plummer, *Haiti and the United States: The Psychological Moment* (Athens, GA: The University of Georgia Press, 1992), 87.

1934 the U.S. intervened or occupied the Philippines, Panama, Cuba, the Dominican Republic, Nicaragua, Mexico, and Haiti. Characterized as unconventional or guerrilla warfare, these conflicts became a laboratory of ingenuity and experimentation that expanded the definition of war.

While the Marine Corps played a supporting role in earlier campaigns, the First World War put the Marines at center stage in Haiti, the Dominican Republic, and Nicaragua.¹⁰ Drawing on Army experiences on the American frontier, in the Philippines, and Cuba, any resulting military references, and the Corps' own manuals, the Marines entered Haiti with a hodgepodge of small wars logistical knowledge.

Primary Logistics

As Napoleon Bonaparte so aptly pointed out, the root of every military action is the command's ability to provide troops with the basic needs of food and water. Rations during the American Civil War and operations in the West included sugar, coffee, salt, one pound of hard bread, and either a quarter pound of fresh meat or three quarters pounds of salt pork.¹¹ Soldiers received fresh meat from cattle herds nearby driven by army contractors. On rare occasions the army issued fresh potatoes, onions, and various dried fruit to offset scurvy. Along the frontier, campaigning troops utilized dehydrated canned vegetables, but relied heavily on

¹⁰ Bickel, xi.

¹¹ Risch, 449.

forage, and antiscorbutics such as citric acid.¹² Between 1865 and 1888 numerous fresh and canned meats became alternative standard issue items. Then in July 1890, Secretary of War Redfield Proctor approved the addition of one pound of fresh vegetables to daily rations, attempting to create a balanced diet.¹³ The War Department adopted emergency rations in 1896 composed of ten ounces of bacon, sixteen ounces of hard bread, four ounces of pea meal, and two ounces of ground coffee, in addition to saccharin, salt, pepper, and tobacco.¹⁴

The onset of the Spanish-American War brought few changes to rations, with one exception. The impracticality of driving herds overseas forced the U.S. to find alternative and more economical practices to obtain fresh meat.¹⁵ The Subsistence Department utilized meatpacking innovations to supply fresh beef by refrigeration and canning. Officials argued that the canned meat in addition to vegetable and spice rations created a palatable stew. However, under extreme exposure to sun the meat turned stringy and distasteful.

Units received large stocks of food prior to departure. Those bound for Puerto Rico or Cuba took three to four months' supply of rations, while elements shipped to the Philippines carried food to sustain troops for six months. Despite the

¹² Randolph B. Marcy, *The Prairie Traveler: A Hand-book for Overland Expeditions* (New York: Harper & Brothers, Publishers, 1859), 33.

¹³ Adjutant General, *General Orders and Circulars*, War Department, Adjutant General's Office (Washington, D.C.: Government Printing Office, 1891), 393.

¹⁴ Secretary of War, *Annual Report of the Secretary of War for the Year 1895*, (Washington, D.C.: Government Printing Office, 1896).

¹⁵ Risch, 531.

vast stores on ship, strained supply lines forced soldiers to consume cold meat rations that Theodore Roosevelt described as “nauseating.”¹⁶ While far from a well-balanced diet, most ration issues in the war stemmed from failures in the supply chain and the lack of proper emergency rations. Whether utilizing mules, horses, carabao (domesticated water buffalo), or porters, marching troops normally outpaced their supply line in the first day. Resorting to travel or emergency rations of corned beef, baked beans, coffee, and hard bread, units invariably ran out of food within three days.

Every company embarked with a mess outfit or field oven that included four frying pans, six camp kettles, twenty mess pans, three butcher knives, two long-handled spoons, two long-handled forks, two dippers, one skimmer, one small coffee mill and roaster, and iron fittings for the oven.¹⁷ The leading field oven at the time was the Buzzacott Army cooker, a large metal box that weighed 175 to 200 lbs and required wagon transportation in the unpredictable terrain of the Philippines and Caribbean.¹⁸ The oven also consumed large quantities of firewood, which led to widespread foraging and the demolition of buildings for fuel.¹⁹ Nevertheless, when

¹⁶ Cosmas, 159.

¹⁷ Commissary General of Subsistence, *Manual for Army Cooks*, United States Army (Washington, D.C.: Government Printing Office, 1896), 249.

¹⁸ Francis H. Buzzacott, *The Complete Sportsman's Encyclopedia* (Chicago: M.A. Donohue & Co., 1913), 497.

¹⁹ Surgeon-General's Office, *Report of the Surgeon General of the Army to the Secretary of War*, United States Army (Washington, D.C.: Government Printing Office, 1899), 134.

faced with favorable road conditions the Buzzacott allowed a full seventy-five-man company to eat hot chow.

Following the Spanish-American War, Commissary General Charles P. Eagan faced scrutiny for issuing canned meat “under pretense of experiment.” While the claims proved false, the War Investigating Commission highlighted the need to improve rations for tropical climates.²⁰ Prior to the war, the army issued two types of food rations: the ordinary ration and the travel ration.²¹ In January 1899, an officers’ board reorganized the ration system to include four types: garrison, field, travel, and emergency; they were to be issued for use in permanent camps, active campaigns, non-marching transport, and exigent situations, respectively. In an effort to provide smaller emergency rations, the army developed a meat and grain compressed cake fashioned after Southwest Native American’s pinole. The emergency ration contained three cakes of meat and bread, three of chocolate, plus salt and red pepper. Although not officially adopted, the one-pound provisions saw service in the Philippines.

Despite numerous research trials, ration content went virtually unchanged from its 1900 developments until the mid-1920s. Forced to work with present rations, instruction for cooks became a top priority. In 1905 the War Department established its first Army training center for cooks at Fort Riley, Kansas. After years of prodding by the Commandant of the Marine Corps, Marines gained a few coveted

²⁰ Risch, 584.

²¹ United States War Department, *Regulations for the Army of the United States* (Washington , D.C.: Government Printing Office, 1899), 176.

spots in the Army's cooking program.²² In the midst of building a core set of cooks for expeditionary duty, the Marine Corps changed its system for procuring rations. Within the new "component system" private contractors won government bids on individual ration items based on competitive pricing. The Commandant of the Marine Corps estimated that the new procedures saved the government approximately \$50,000 annually.

Following the American Civil War, the Quartermaster Department received numerous requests for hot weather uniforms. Traditionally clothed in heavy blue wool coats and trousers with flannel undershirts, military men longed for more breathable fabrics. Until the Spanish-American War, the closest clothing to a lightweight outfit came in 1886, when troops stationed in Texas received brown canvas fatigues.²³ Given decent marks by Army Regulars, the Quartermaster Departments of the Army and the Marine Corps pushed to produce the item in mass. While manufacturing delays from fabric shortages forced the Army to modify antiquated blue wool uniforms, the Marine Corps comparatively small force received the canvas suit before embarkation for Cuba in June 1898.²⁴

Leaving much to be desired, the military's first venture with tropical fatigues received harsh critiques from troops. Lieutenant Colonel Robert W. Huntington, USMC, commander of the First Marine Battalion in Cuba, reported, "The material is

²² United States Navy, *Annual Reports of the Navy Department* (Washington, D.C.: Government Printing Office, 1912), 532.

²³ Risch, 504.

²⁴ Graham A. Cosmas, *An Army For Empire: The United States Army in the Spanish-American War* (Shippensburg, PA: White Mane Publishing Co., 1994), 179.

not suitable, the color after washing being nearly as distinct as white at night . . . the coat is too tight in the chest and back, and it should have more and larger pockets.”²⁵ He also claimed that the issued campaign hats were unsuitable for tropical climates because the material was too heavy and failed to protect the back of the neck from the sun. The Quartermaster Department switched to cotton khaki material by war’s end, but the rapid uniform turnover and varied khaki shades destroyed uniformity in the ranks. After perfecting the olive-drab dye set, the Army officially adopted the new uniforms in early 1902.²⁶ As demands for khaki fabric quickly rose following the announcement, quartermasters in the Philippines bought higher quality material from British suppliers in Singapore, Hong Kong, and Bombay than could be obtained stateside.²⁷ The Army began issuing olive-drab cotton uniforms in 1912, which the Marine Corps quickly adopted for their own service in Nicaragua. Also in 1912 the “Montana Peak” field hat made its debut in the 1912 *Uniform Regulations United States Marine Corps*.²⁸ Made of a lighter felt and with a reinforced three-inch brim, the hat blocked the sun while still remaining breathable.

²⁵ United States President, *The Abridgment: Message from the President of the United States to the Two Houses of Congress* (Washington , D.C.: Government Printing Office, 1899), 1335.

²⁶ Risch, 575.

²⁷ Cosmas, 309.

²⁸ Headquarters United States Marine Corps, *Uniform Regulations United States Marine Corps* (Washington , D.C.: Government Printing Office, 1912), 76.



Figure 1-2. The first illustrated Marine Corps uniform regulations featuring the cotton summer field uniform and Montana peak field hat worn in Haiti.²⁹

Innovations in carrying ammunition echoed the adoption of new weaponry. Cartridge belts, first seen in the Plains, had loops to carry individual rounds of ammunition. The simple loops exposed cartridges to the elements, often causing rifles to jam.³⁰ When the Parkhurst Company modified the U.S. military's main service rifle, the M1892 Krag-Jorgensen, in 1899 to intake bullets from a charger

²⁹ *Uniform Regulations United States Marine Corps*, Plate 48.

³⁰ Carter Rila, "The Development of U.S. Army Infantry Field Equipments, 1903-1956," *Military Collector & Historian* (The Company of Military Historians) XXI, Summer (1969): 35-43.

clip, the Mills Woven Cartridge Belt Company answered with a pocket-type rifle cartridge belt.³¹

The Army's 1905 adoption of the clip fed .30 cal M1903 Springfield rifle led to a number of variations in equipment. The first adaptation was a nine-pocket belt that held two five-round clips and had hooks on the back for a first aid packet, a canteen, and a haversack. Troops complained that the belt's rear adjustment was hard to access and attached items swung against their legs.³² To address complaints and research new options in troop equipment an Army Infantry Board convened in 1910. The Board recommended weight reduction, comfort of portability (putting weight onto a person's frame), facility to add or remove individual pieces of equipment based on needs and climate, simple construction, sanitation, comfort, and efficiency.

Based on the Board's suggestions, the Army designed an integrated pack with a pouch that provided space for everything issued to a 1910 servicemen and the capability to add or detach components depending on the mission. The pack weighed seventy pounds when fully equipped. Its principle components were the cartridge belt, haversack, pack carrier, canteen, cup, cover, meat can, and pouch. The pack carrier had a bedroll, spare clothing, bayonet, and entrenching tool that attached to the belt or haversack.³³

³¹ William Phillips, "The Evolution of the Pocket-Type Rifle Cartridge Belt in the United States Service," *Military Collector & Historian* (The Company of Military Historians), Spring (1970): 1-10.

³² Rila, 36.

³³ Rila, 37.

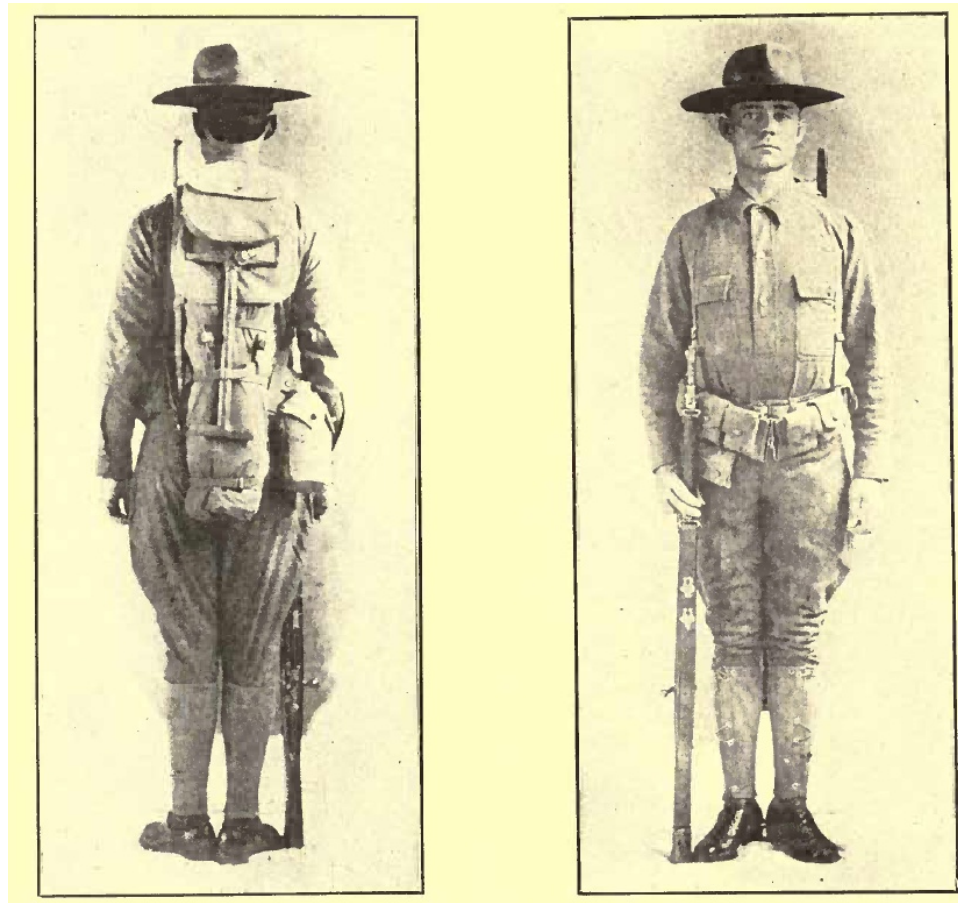


Figure 1-3. A Model 1910 pack fully equipped.³⁴

Thanks to the component design, cartridge belts continued to be adapted for different types of weapons and missions. For example, the issue of carrying revolver ammunition prompted more experimentation that led to the addition of two pairs of small pockets. Beginning in 1910 two types of belts saw service: a belt for use when riding a horse (mounted) and a belt used when on foot (dismounted). Both belts contained two five-pocket sections joined by an adjustable strap, but mounted belts switched out one pair of rifle cartridge pockets for two revolver pockets. The 1911

³⁴ Ordnance Department, USA, *Instructions for Assembling the Infantry Equipment Model of 1910* (Washington , D.C.: Government Printing Office, 1912).

changeover to the Colt .45 automatic pistol forced alterations once more; instead of two five-pocket sections, the M1912 Mills Horizontal Pistol Belt had six pockets allowing for forty-two rounds. In 1914 the Marines tested a Mills woven pistol holster that attached to the belt. Reviewers preferred it to the leather holster currently in use, stating that the woven holster fit closer to the body, eliminating the need for straps around the leg that kept the pistol from swinging back and forth.³⁵ The M1912 pistol belt and M1910 pack would see extensive service in Haiti.

Seven years following the Army's switch to the Springfield M1903, the Marine Corps received \$50,000 in appropriations to start modernizing its arsenal with the new weapon.³⁶ In spite of belated funding, every man had either a Springfield M1903 rifle or .45 cal M1911 Colt pistol by 1915. The Marines' armaments also contained a variety of light and heavy machine guns that included the M1909 Benét-Mercié, the M1884 Vickers-Maxim, and the M1895 Colt-Browning automatic machine guns.³⁷

Disease Control and Shelter

Providing troops with potable water, proper shelter, and medical care is critical to successful military campaigns. In the tropical climates of the Spanish-American War, American forces faced intense heat, rugged jungle and mountain

³⁵ William Phillips and Carter Rila, "Mills Horizontal Pistol Belt," *Military Collector & Historian* (The Company of Military Historians), Spring (1991): 43.

³⁶ United States Congress, *Hearings before Committee on Naval Affairs of the House of Representatives on Estimates Submitted by the Secretary of the Navy*, (Washington, D.C.: Government Printing Office, 1911), 202.

³⁷ Colonel Theodore Kane, "Memorandum," Headquarters, First Regiment, First Brigade, U.S. Marine Corps (August 11, 1915) from Folder 6, Box 6, Butler Papers, Marine Corps Archives [henceforth: 6/6/Butler Papers/MCA].

terrain, and unsanitary living conditions - the perfect environment to spread disease. The Medical Department was responsible for the hygiene and sanitary conditions of a command. Plagued with supply shortages during mobilization, the Medical Department pulled from states' National Guard medical stores and prioritized ordering for deploying troops. However, manufacturing delays, slow distribution, and lack of storage left the department with severe shortages that transferred overseas.³⁸ As the invasion force mobilized, the scarcity of space on board transports forced the Medical Department to leave the bulk of accumulated supplies at the docks. The Fifth Corps left for Cuba with only one first-aid packet per soldier.

The Medical Department also faced a shortage of trained surgeons and hospital staff, which required Surgeon General George Sternberg to rely on contract and volunteer regimental surgeons; many were unfamiliar with Army procedures. The real issue was keeping pace with ever-increasing Army numbers by enlarging the Medical Department's Hospital Corps from its 791-man peacetime strength.³⁹ After four months of buildup the Hospital Corps reached 6,000 personnel, still only half the necessary strength to care properly for a war-inflated 200,000-man Army. Spread thin, many clinics at home and overseas turned to infantry details as orderlies. Not only did these men lack any training but also their neglect of sanitation actually increased disease rates. Severe manpower constraints pushed Sternberg for the first time to employ large numbers of female nurses in Army

³⁸ Cosmas, 250.

³⁹ Cosmas, 252.

hospitals. Despite Sternberg's efforts, manpower deficits and supply woes continued to limit the Medical Department's effectiveness throughout the war in Cuba and the in the Philippines.

Following the victory in Santiago, Cuba, 20,000 battle fatigued men of Fifth Corps faced unsanitary conditions in overpopulated camps that nurtured crowd diseases like typhoid, while the tropic climate laid host to mosquito-spread yellow fever and malaria. Severely understaffed and undersupplied medical wards quickly depleted stores, while the lack of lighters (small draft boats) set departments into competition to claim boats for specific supply. Despite the growing epidemics, Cuban campaign commander Major General William R. Shafter failed to give priority to medical supplies. Doctors had to finagle boats in order to resupply their division hospitals.⁴⁰ The inability to reach isolated malaria stricken outposts with special diets and medicine further hampered troop recovery efforts.

In contrast to Army experiences in Cuba, the Marine battalion on the island had relatively few tropical disease cases. The command's insistence that men only use distilled water from Navy vessels offshore, coupled with the battalion quartermaster's forethought in purchasing empty wine casks to use as water containers at camps helped keep waterborne illness suppressed. The addition of sufficient clothing, food, mosquito netting, shelter tents, and medical stores ensured that ninety-eight percent of the 650-man force returned to the States fit for duty.⁴¹

⁴⁰ Cosmas, 256.

⁴¹ Trevor K. Plante, 'New Glory to Its Already Gallant Record'; The First Marine Battalion in the Spanish-American War," in *Marines in the Spanish-American*

Before the U.S. sent reinforcements to occupy Cuba in late 1898, unit commanders and medical personnel deployed ten days early to prepare for the influx of troops.⁴² Engineers and construction laborers accompanied the advance party, renovating Spanish barracks and completing new construction projects with pre-cut wood off transports. Upon completion of the various projects, medical staff disinfected the structures and enforced new standards of water, sewage, and garbage system management. Occupation regiments bound for Cuba brought supplies for fifteen to twenty-bed temporary clinics while the Army renovated Spanish military hospitals.⁴³

When 2,603 Marines of the Advanced Base Brigade and 652 Marines from the North Atlantic Fleet landed at Vera Cruz in 1914 the Navy deployed two medical outfits for expeditionary duty – a field unit for the landings and a larger unit attached to the main Marine force.⁴⁴ The two-unit system worked well as long as Marine outfits stayed a solitary element. As soon as Marines broke into smaller detachments, the Navy realized that their materials could not be further divided. Utilizing their experiences in the field the Navy revised the expeditionary standard to make the size of the force deploying determine the type of medical outfit. For instance, in 1915 a regimental size unit contained two battalions of three companies

War 1895-1899, ed. Jack Shulimson, 79-92 (Washington, D.C.: History and Museums Division Headquarters, U.S. Marine Corps, 1998), 87.

⁴² Cosmas, 309.

⁴³ Cosmas, 310.

⁴⁴ Secretary of the Navy, *Annual Reports of the Navy Department for the Fiscal Year 1915* (Washington, D.C.: Government Printing Office, 1916), 696.

that could be broken down to supply at the company level. Brigade level operations required a field hospital and separate regimental infirmary.

Supply Buildup and Facilities

In 1900 a General Board of naval officers recommended the creation of a military force capable of quick mobilization for use in the establishment of advanced bases during war.⁴⁵ Since the Marines had made rapid work of securing Guantanamo Bay in 1898, they became the obvious choice to take on the mission. With fewer than 5,500 men in 1901 and no available funding, the Marine Corps initially could not physically field a unit.⁴⁶ Many Marine Corps leaders had doubts about creating a quick mobilization force because they feared the Marine Corps' traditional missions of infantry and artillery would be at risk. Despite reservations, Marine Commandant General Charles Heywood formed one advanced base battalion in 1901. The 1903 advanced base force exercises in Culebra, Cuba, highlighted the importance of cooperation and coordination between the U.S. Navy and Marine Corps. The navy's insistence that Marines perform ship and shore duties in addition to their exercises wreaked havoc to training at sea and land operations. Training exercises the following year resolved most coordination issues between the sister services, yet the Marine Corps failed to commit extensive resources to the cause. As

⁴⁵ Secretary of the Navy, *Annual Reports of the Navy Department for the Year 1905* (Washington, D.C.: Government Printing Office, 1906).

⁴⁶ Millett, *Semper Fidelis*, 272.

manpower rose between 1912 and 1914 from 9,886 to 10,229 personnel, the Marine Corps lost its leading argument against advanced base forces.⁴⁷

Ten years after its conception, the Marine Corps finally began training classes at the Advanced Base School in Newport, R.I. Formulating the curriculum for the newly created school highlighted the complete lack of supplies, equipment, and transports needed for maneuvers. After receiving increased Congressional funds in 1913 large amounts of ordnance and equipment stores allotted for the advanced base force began to pile up, forcing the Corps to recommend considerable upgrades to their main supply depot in Philadelphia.

Since 1910 the Philadelphia depot received, manufactured, and distributed nearly all Marine uniforms and equipment, providing stores for 3,000 fully equipped men. By manufacturing articles on site, the Marine Corps saved ten to fifteen percent over private procurement.⁴⁸ With its increased manufacturing capacity, the depot quickly exhausted its storage space, forcing the Quartermasters Department to rent a warehouse several blocks away. Despite requests for \$175,000 in the annual estimates to Congress since 1912, the Marine Corps did not receive funding for additional storage buildings until 1917.⁴⁹

⁴⁷ Secretary of the Navy, *Annual Reports of the Navy Department for the Fiscal Year 1912*, (Washington, D.C.: Government Printing Office, 1913), 577; Secretary of the Navy, *Annual Reports of the Navy Department for the Fiscal Year 1913*, (Washington, D.C.: Government Printing Office, 1914), 5; Secretary of the Navy, *Annual Reports of the Navy Department for the Fiscal Year 1915*, 462.

⁴⁸ Secretary of the Navy, *Annual Report of the Navy Department* (Washington, D.C.: Government Printing Office, 1909), 1031.

⁴⁹ Secretary of the Navy, *Estimates submitted by the Secretary of the Navy* (Washington, D.C.: Government Printing Office, 1918), 207.

As tensions rose in Latin America and the Caribbean, the Advanced Base Brigade fell victim to expeditionary duties in Mexico, Nicaragua, and eventually Haiti. While advanced base operations never materialized, the buildup of supplies, arms, and manpower were instrumental in the mobilization of Marines to Haiti. In fact, elements of the First Regiment of the Advanced Base Brigade remained intact while serving in Haiti.

Transportation

Following the American Civil War the United States increased its involvement in overseas diplomatic and military expeditions. Expeditionary warfare is highly reliant on waterborne transportation, be it transit from the U.S., passage from ship-to-shore, or littoral conveyance. Prior to the Spanish-American War, the U.S. Army procured water transport separate from the U.S. Navy. The Army's inexperience with outfitting and loading ships created undue hardship for troops that reverberated throughout their deployments.

Originally estimated to carry 20,000-25,000 troops, in reality the Army's hodgepodge of vessels bound for Cuba transported 17,000 men in overcrowded, unsanitary conditions.⁵⁰ The transports also lacked proper stalls and necessary food for the 450 mules on board, loaded over two weeks prior to departure. An extreme shortage of small boats forced troops to man transport lifeboats, small Navy vessels, and other confiscated lighters during the June 22, 1898 landing. Meanwhile the lighters deficiency forced Army personnel to push mules overboard in the wake of weeks of inactivity and cramped conditions on board transports. As a result, fifty

⁵⁰ Risch, 548.

animals failed to make it ashore and drowned along the rocky coastline.⁵¹ A similar lack of lighters plagued disembarkation in the Philippines, but by utilizing native barges towed by tugboats, troops and material eventually reached the shore. A single barge carried roughly two hundred fully supplied personnel.⁵² Recognizing the delays, Manila's Chief Quartermaster Lieutenant Colonel James W. Pope recommended that all future expeditions have one high-powered low draft launch for every transport.⁵³

Aside from small vessels' high value in ship-to-shore movement, units used lighters and gunboats for coastal and riverine operations. During guerrilla missions in the Philippines, company commanders utilized gunboats to ferry troops for swift raids along the coast.⁵⁴ Marines performed the first successful amphibious landing by American forces at Guantanamo, Cuba, with whaleboats and steam cutters.⁵⁵ The Army also used small crafts to resupply units garrisoned in remote areas near waterways when overland supply was unavailable. In many circumstances supply

⁵¹ Emmett M. Essin, *Shavetails & Bell Sharps: The History of the U.S. Army Mule* (Lincoln: University of Nebraska Press, 1997), 126.

⁵² Huston, 287.

⁵³ Risch, 555.

⁵⁴ Brian McAllister Linn, *The U.S. Army and Counterinsurgency in the Philippine War, 1899-1902* (Chapel Hill, NC: The University of North Carolina Press, 1989), 140.

⁵⁵ David E. Kelly, "Marines in the Spanish-American War: A Brief History," in *Marines in the Spanish-American War 1895-1899*, ed. Jack Shulimson, 4-30 (Washington, D.C.: History and Museums Division Headquarters, U.S. Marine Corps, 1998), 15.

by water was the quicker option, bypassing the extremely rugged terrain of both Cuba and the Philippines.

The multifaceted nature of overseas expeditions lends itself to complex logistical networks of sea and land components. Aside from the aforementioned deficiencies in lighters, which caused delays in the ship-to-shore ferrying of supplies, inland troops relied heavily on wagon and pack trains to sustain provisions and equipment in the field. The Army first utilized mules in the early nineteenth century amidst westward expansion and Indian conflict. Traveling the uncharted western territory, frontiersmen and military personnel learned the art of supply in diverse topography. To descend mountains in loaded wagons, handler's rough locked one or both rear wheels to cut down on movement and create more friction.⁵⁶ The Army also utilized the rough locking technique to transport heavy artillery down steep slopes. Traveling by pack train with several months worth of supplies, pioneers quickly learned to streamline mule-packing methods. First and foremost, a good packsaddle should be firmly lashed to ease the burden and prevent slippage or chafing.⁵⁷ Secondly, a full load must be no more than 250 pounds, with no single item weighing more than 125 pounds to ensure the load could be evenly distributed. Caring for pack animals was imperative to reaching destinations alive. Without proper rest and feed, mules ran the risk of dying from overexertion, losing supplies in the process.

⁵⁶To rough lock wheels, chains attached the wheel to the wagon's undercarriage. Marcy, 93.

⁵⁷ Marcy, 100.

Despite the Army maintaining heavy numbers of mules throughout the 1870s and 1880s, the military lacked official doctrine spelling out pack and wagon train practices. When the U.S. went to war with Spain in 1898, the military drew from its service on the frontier for general guidelines, but lacked sufficient firsthand experience in specializations like packing, which forced them to supplement their ranks with American contractors. Within days of landing in Cuba, troops felt the reverberations of shipping deficits. Only a fraction of the available mules found space onboard transports.⁵⁸

With little more than trails for roads, the mass of men and machinery marched through treacherous terrain that was often impassable for larger carts. Operating in the midst of Cuba's rainy season turned the few serviceable paths into mud pits and found wagons up to their axles in mud, forcing troops to rely on pack trains.⁵⁹ Since mules were not impervious to the mud, packers reduced their loads by sixty percent, from the then accepted 250 pounds to 100. Not surprisingly a supply system built on daily wagon train deliveries suffered. The onset of fever and disease forced the military to supplement its pack leaders with contracted mule drivers. The slow pace of the pack trains and wagons perturbed leadership, claiming it hindered their advance. Despite officers' esteem for the supposedly more efficient six-mule wagons, the harsh realities of the terrain left wagons fighting deep mud and impassable roads. Essentials like food and ammunition moved predominantly via mule, cementing the efficacy of tested pack mules and competent packers.

⁵⁸ Essin, 125.

⁵⁹ Cosmas, 207.

Army experimentation with packing techniques and saddle types during the war led to the adoption of a Spanish saddle known as the *aparejo*. A complete *aparejo* included the body, cover, cincha, crupper, corona, lash rope, sling rope, lair ropes, pack covers, and pack blanket.⁶⁰ At its most basic level, the *aparejo's* body consisted of a grass-padded leather blanket with internal wood ribbing that formed to individual mules when wetted down prior to positioning, thereby helping cut down on chafing.⁶¹ Packers divided supplies into side and top packs depending on whether a load could be separated into equal weight and size. A series of complicated hitches held supplies in place, but was a two-man job and proved too complex for many military packers. The largest drawback in using *aparejos* was the necessity for expert packers.

⁶⁰ United States War Department, *Complete United States Infantry Guide for Officers and Noncommissioned Officers*, United States Army (Philadelphia: J.B. Lippincott Company, 1917), 1270.

⁶¹ Essin, 129.

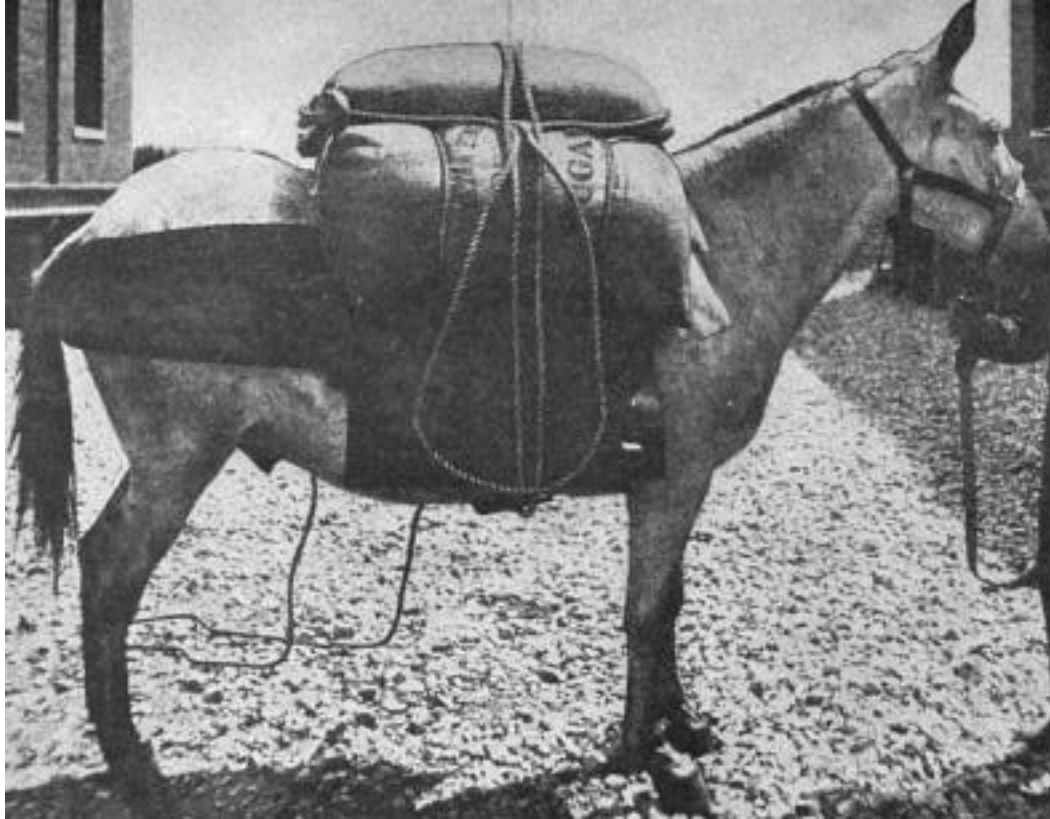


Figure 1-4. Pack mule outfitted with aparejo and double diamond hitch.⁶²

In Cuba the Army helped resolve the problem by employing large numbers of American civilian packers. The critical need for pack transportation during counterinsurgency operations in the Philippines persuaded the Army to make packer training mandatory for junior officers. The *aparejo* remained the premier packsaddle for U.S. forces throughout the first decade in Haiti.

When U.S. forces arrived in the Philippines, the army put soldiers to work as stevedores, unloading 1,000 tons of food, camp supplies, and ammunition in hot and rainy conditions. Echoing the Cuban campaign, the lack of shipping vessels delayed

⁶² H.W. Daly, *Manual of Pack Transportation*, Quartermaster Corps, United States Army (Washington, D.C. : Government Printing Office, 1917), 95.

mule deliveries and forced quartermasters to look to the local community for respite. Quartermasters hired Chinese laborers, local carabao carts, and carabao to assist with the transportation of ammunition, food, and the wounded.⁶³ The Army's Second Division employed fifty Chinese in each of its six regiments in the Philippines.

Artillery units stationed in the Philippines received the British Vickers-Maxim gun and quickly adapted it for transport by pack mule.⁶⁴ One artillery piece required thirteen mules with modified *aparejo* pack frames to carry the weapon. Four mules carried the broken down gun, while the remainder bore the ammunition.

The Army's first post Spanish-American War guidebook, *Field Service Regulations* of 1905, took a predominantly conventional stance, but benefitted the military's logistical arm as a straightforward guide.⁶⁵ It laid out operational requirements for transportation, ammunition, and subsistence. For instance, a fully armed infantryman should carry ninety rounds on his person, sixty more in battalion wagons no more than a mile behind the unit, and another 120 bullets in the ammunition column at least three miles to the rear.⁶⁶ The 1905 guide also detailed the responsibility to keep troops properly supplied with rations by utilizing the forward movement supply chain. It observed that when soldiers were on the

⁶³ Linn, 14.

⁶⁴ Essin, 129.

⁶⁵ U.S. Army, *Field Service Regulations, 1905* [henceforth: FSR] (Washington, D.C.: Government Printing Office, 1905), 119.

⁶⁶ FSR, 121.

move for extended periods in a country without railroads or water transport they became reliant on hard to maintain long lines of communication. To ensure troops and animals remained fed commanding officers found that local procurement becomes unavoidable. Commanders first used cash from government funds or captured public money to pay for materials, food, forage, and any other necessary services. If funds were not readily available, foraging parties stole supplies from the local populace.

The first official manuals to feature a section on small wars were the 1911 *Infantry Drill Regulations* and 1914 *Cavalry Service Regulations*. The latter publication contained a chapter entitled “Minor Warfare,” which discussed the fundamentals of guerrilla warfare and probable tactical counters.⁶⁷ Recognizing the variable terrain and onerous infrastructure minor warfare tended to confront, the Army staff asserted, “Owing to lack of good roads it will often be impossible to use wagons or even carts. Expeditionary forces will then be dependent on pack animals for transportation.”⁶⁸ The 1914 guide acknowledged the utility of satellite bases near hotspots as a powerful tool to support operations, stocking small amounts of equipment, clothing, ammunition, and even veterinary supplies to offer respite for soldiers and their animals. Furthermore it adapted pack train rules for guerrilla warfare, adding security by splitting the train into equal sections with one hundred yard gaps to counter losing entire columns to an ambush. Between 1910 and 1914

⁶⁷ *Cavalry Service Regulations 1914* [henceforth: CSR] (*Experimental*) (Washington, D.C.: Government Printing Office, 1914), 280.

⁶⁸ CSR, 281.

the Army published two comprehensive manuals on pack transport. Both gave detailed explanations for packing saddles, hitches, rigging packs, care for pack animals, necessary equipment, and train organization, giving commanders a readily available guide for supply by pack.⁶⁹

Nation-Building

President William McKinley described the U.S. strategy to stabilize the Philippines as “benevolent assimilation.”⁷⁰ Equivalent to twentieth-century humanitarian and nation-building efforts, the Army enacted civil measures hoping to normalize citizens’ daily lives and undercut the need to rebel. By employing military-age males and giving them a source of income away from the insurgency, civil projects brought males closer to the U.S.-supported government while building infrastructure. The military resumed schooling and enacted sanitation and medical services to inhibit the spread of disease. To boost the economy, large-scale public works projects repaired roads, and Manila became an open market port. The U.S. military pumped money into communities by paying for labor, transportation, and forage at the local level.⁷¹ By repairing roads and telegraph lines throughout the Philippines not only did troops, supplies, and information move exponentially quicker, but also natives utilized the roads to sell goods.

The Army’s civic actions created an entirely different set of logistics issues. Not only did quartermasters have to keep pace with supplying provisions to units

⁶⁹ CSR, 280; FSR, 12.

⁷⁰ Bickel, 34.

⁷¹ Brian McAllister Linn, *The U.S. Army and Counterinsurgency*, 21.

on the battlefield and in garrison, but they also furnished manpower and materials for provincial reconstruction. Taking advantage of dated Filipino laws, forced local laborers known as corvee, made up the bulk of the labor force. Construction equipment, however, was so hard to come by that one field commander claimed, "I have seen natives working with their hands and sharpened sticks on the road. It is not only pitiable [*sic*], but a great waste of labor."⁷² In spite of shortages, efforts built over 1,000 miles of road throughout the Philippines by late 1900. While most civil projects received funding from a mix of American and Philippine taxes, the Army often utilized seized guerrilla taxes, foodstuffs, and property to support communities.

The 1906-1909 occupation of Cuba mimicked the civil programs of the Philippines; however, without a parallel counter insurgency campaign bifurcating the logistic effort American occupiers placed greater focus on public works. Cuba's National Congress appropriated over fifty million dollars towards public works, thirteen million of which went directly to road construction.⁷³ By hiring Cuban and American contractors and engineers as laborers and procuring local supplies, the bulk of funding went back into Cuban hands.

⁷² Brian McAllister Linn, *The Philippine War: 1899-1902* (Lawrence, KS: University Press of Kansas, 2000), 258.

⁷³ Allan Reed Millett, *The Politics of Intervention: The Military Occupation of Cuba, 1906-1909* (Columbus: Ohio State University Press, 1968), 206.

TABLE I

Small Wars Measures Discussed in the Army's Professional Journals, 1898-1915⁷⁴

Measures Discussed	Number of Articles
Civil Measures	4
Medical/Sanitation	2
Martial Law	2
Military Measures	25
Garrisons	5
Scouts/Constabulary	10
Intelligence Procedures	2
Columnar Punitive Patrolling	9
Small Unit Combat Patrolling	4
Night Operations	2
Search and Destroy Operations	2
Reconcentration	3

Despite the hard-earned experiences of the Spanish-American War, Philippine War, and the 1906-1909 Cuban Intervention, formal doctrine concerning nation building did not exist. As Table I details, amidst 850 professional military journal articles between 1898-1915, only twenty-nine discussed small wars, of which four arbitrarily mentioned civil measures.⁷⁵ Not until the Army's 1911 *Infantry Drill Regulations* and 1914 *Cavalry Service Regulations* did small wars operations find a formal platform in sections entitled "minor warfare." Despite discussion on counter-insurgency strategy, including the use of native guides and tactical flexibility, both manuals omitted the role of civic measures as a stabilizing force. They also failed to mention garrisoning troops, the creation of constabulary

⁷⁴ Bickel, 44.

⁷⁵ Bickel, 43.

forces, or search-and-destroy missions – all of which proved critical to the eventual success of campaigns in Haiti.

America's armed forces stood at a crossroads as the U.S. gradually entered into a new era of hemispheric involvement. The advent of motor truck transportation in 1908 meant an uncertain future for wagon and pack supply. Learning from Army and limited inner service experiences in the late nineteenth and early twentieth centuries, the Marine Corps built a foundation of knowledge concerning the procurement of land and sea transportation and civil measures. The Marine Corps also capitalized on rations and uniforms, refined from years overseas. Despite the treasure trove of experience and consequent regulations and reports, the Marines' new calling as America's stabilization force was no match for the crumbling infrastructure, rugged environment, and insurgency of 1915 Haiti.

Chapter 2

Supplying Troops in Haiti

In 1914 Charles Zamor ascended to the Haitian presidency on the coattails of *caco* fighters, but maintaining the office was a bigger obstacle than attaining it. By June Zamor was fighting for his survival against rival Davilmar Theodore's forces in northern Haiti.¹ Secretary of State William Jennings Bryan requested an increase in Marine reserves at Guantanamo Bay, Cuba, in July in response to the tensions between the rivals.² The fully equipped regiment sat on board the *Hancock* in the waters off Port au Prince for six weeks during the autumn of 1914 before returning to Cuba. In October 1914 Zamor capitulated, only to have Theodore resign months later, unable to pay his supporters and leaving Haiti under the control of Jean Vilbrun Guillaume Sam. In the wake of presidential turnovers, the U.S. Navy became a fixture in Haiti's waters. The Marine Corps took advantage of the close proximity by making occasional landings to gain intelligence concerning roads, ports, warehouses, and movement of Haitian forces for future operations ashore.

As Rear Admiral William B. Caperton, commander of the Atlantic Fleet's Cruiser Squadron, and his staff prepared landing orders for Port au Prince, the Marine Corps dispatched two battalions on the cruiser *Montana* to reinforce the

¹ James H. McCrocklin, *Garde D'Haiti: Twenty Years of Organization and Training by the United States Marine Corps* (Annapolis, MD: The United States Naval Institute, 1956), 10.

² Donald A. Yerxa, *Admirals and Empire: The United States Navy and the Caribbean, 1898-1945* (Columbia, SC: University of South Carolina, 1991), 40.

Washington's 165-man Marine company off Haiti's coast in January 1915.³ Their presence deterred widespread revolutionary violence and although they did not land, the revolutionary false alarms provided a force in waiting when hostilities reached their climax the following summer.

The ratification of the Haitian-American Treaty in February 1916 by the United States set in motion the formation of numerous departments of the Haitian government to be administered or advised by officers of the U.S. Marine Corps.⁴ The most prevalent agency formed was the Gendarmerie D'Haiti. As the native constabulary force it eventually formed its own navy, medical corps, sanitation department, quartermaster's corps, and public works arm. Following the aforementioned February 1916 proclamation, the Gendarmerie became the primary engineer of Haitian infrastructure, it assumed all police and military duties with the Marine expeditionary force serving a secondary support role should *caco* activity become unmanageable. By building roads, communication lines, maintaining stability, and training Haitian constabulary recruits the Gendarmerie worked towards controlling Haiti.

Issued Basics

In the opening hours of July 27, 1915, a *caco* army under the leadership of Dr. Rosalvo Bobo stormed the Presidential palace, sending current President V. Guillaume Sam fleeing for his life into the French consulate. After the panicked

³ David Healy, *Gunboat Diplomacy in the Wilson Era: The U.S. Navy in Haiti, 1915-1916* (Madison, WI: The University of Wisconsin Press, 1976), 35.

⁴ McCrocklin, 55.

slaughter of 167 political prisoners by a member of Sam's staff, Bobo supporters stormed the consulate, beat the president to death, dismembered his body and paraded it through the streets of Haiti's capital. By order of the State Department 340 sailors and Marines off the *Washington* landed at Port au Prince at 5:00 p.m. on July 28 to protect American and foreign interests.

In contrast to the meagerly supplied landings in Cuba and the Philippines, troops in Haiti arrived with what Major Smedley Butler described as an "avalanche" of 400 tons of provisions, ranging from shelter tents to rations, that showcased a "misconception of what is actually required for Marines in the field."⁵ Bloated materiel issues spawned from the Marine Corps current advanced base mission, which called for substantial supplies to take and hold hostile beachheads. Fighting poorly trained *caco* rebels required comparatively less provisions. Advanced Base Force Marines mobilized in three days by drawing on unit stores at the Marine Corps Supply Depot in Philadelphia. The First Regiment landed fully equipped with Buzzacott stoves, water filters, shelter tents, weapons, water barrels, and lanterns.⁶

Marines arrived in the uniform adopted in 1912 featuring lightweight khaki material and brimmed field hats. Years into the occupation Marines still complained of fading color in their summer service trousers and poor material in the issued field

⁵ Hans Schmidt, *Maverick Marine: General Smedley D. Butler and the Contradictions of American Military History* (Lexington, KY: The University Press of Kentucky, 1998), 74.

⁶ Colonel Eli Cole, "Landing Order," Headquarters, First Regiment, First Brigade (August 17, 1915) from 6/6/Butler Papers/MCA.

hats.⁷ The everyday wear and tear of uniforms often created problems when coupled with supply delays. Haiti's extreme heat caused many of the russet leather shoes in stock to deteriorate to the point of cracked soles, forcing quartermasters to better ventilate storerooms. Besides their khaki field uniform Marines wore white undress for ceremonies or special duty, a style similar to modern dress whites.

The uniforms of the Gendarmerie copied the khaki and white uniforms of the officers and enlisted of the First Provisional Brigade. In fact, to initially clothe recruits the Haitian government bought excess Marine uniforms, simply switching out Marine Corps buttons with plain Haitian ones and removing the Marine Corps device.⁸ In concert with the February 1916 Gendarmerie announcement, the Constabulary initiated a new system utilizing prison laborers at Port au Prince and Cape Haitien to manufacture components of Gendarmerie's issued uniforms. Slow to become fully operational in October 1916, men of the Gendarmerie's Eleventh Company were so destitute for uniforms that they either wore extremely ragged ones or civilian attire.⁹ By 1924, most uniform items were available at the Post Exchanges, through the Gendarmerie, or made to order by native tailors.¹⁰

⁷ B.H. Fuller, "Annual Report for the Fiscal Year of 1924," (July 14, 1924) from Folder 220, Box 4, Entry 38A, Record Group 127, National Archive and Records Administration [henceforth: 220/4/38A/127/NARA].

⁸ United States Congress, *Inquiry Into Occupation and Administration of Haiti and Santo Domingo* (Washington, D.C.: Government Printing Office, 1922), 514.

⁹ 11th Company Commander, "Monthly Report," Gendarmerie D'Haiti (Port de Paix, Haiti, October 31, 1916) from Headquarters 11th Company monthly report 9 March 1915-12 October 1921/9/241/127/NARA.

¹⁰ John D. Brady, "Haiti," *Marine Corps Gazette* 9, no. 2 (June 1924): 155.

The necessity for constabulary members to travel often on horseback required the adoption of khaki breeches with leather leggings to lessen wear on trousers.¹¹ Adapting for hot weather, prisoners used the same khaki fabric as the breeches to make shirts in lieu of the heavier wool.¹² For the few items not manufactured in prisons the Gendarmerie added Colonel Cyrus Radford, the officer in charge of the Marine Corps supply depot in Philadelphia, to its ranks thereby receiving Marine Corps pricing on items from factories. Meanwhile each enlisted Marine, while serving as an officer with the Gendarmerie, was responsible for maintaining the following articles: one blanket, six drawers, one field hat, two pajama coats and pants, four flannel shirts, six cotton undershirts, two pairs of russet leather shoes, six pairs of socks, four sets of field trousers, and two woven belts.¹³

¹¹ McCrocklin, 89.

¹² United States Congress, *Inquiry into Occupation and Administration of Haiti and Santo Domingo*, 81.

¹³ Smedley Butler, "General Order, No. 18," Headquarters Port-au-Prince, Gendarmerie D'Haiti (September 20, 1917) found in Headquarters Gendarmerie/9/241/127/NARA.



Figure 2-1. Prisoners making shoes at the National Penitentiary at Port au Prince.¹⁴

The standardization of Army rations in 1900 left little to the imagination as to the basic components of field rations. Yet, the necessity to augment foodstuffs with local fare gave troops access to eggs, chicken, turkey, fish, bananas, oranges, limes, corn, and grapefruit.¹⁵ Quartermasters purchased native beef under contract

¹⁴ "Prisoners Making Shoes," 1919. Natives Folder. *The Banana Wars: Haiti Photo Collection*, U.S. Marine Corps History Division, Quantico, VA.

¹⁵ U.S. Marine Corps, *Military Monograph of Haiti*, (Government Printing Office, 1934), Appendix A: System of Supply.

at twelve to fifteen cents a pound.¹⁶ Dry goods such as onions, potatoes, and grain had to be shipped in among the 2000 tons of monthly provisions. To offset the cost of buying local produce, individual camps cultivated gardens. However, drought conditions in the summer and excessive rains in the winter sometimes hindered garden growth and local production, forcing troops to rely on canned vegetable rations. Quartermasters kept a four-month supply of rations at the depot commissary in Port au Prince and a three-month supply at Cape Haitien. Occupation forces found the rations overall satisfactory. However, numerous shipments arrived from the Supply Depot at Hampton Roads deteriorating from being improperly sealed and poorly packed.¹⁷

The families of Gendarmerie and Marine Corps officers stationed in Port au Prince had a number of facilities available early into the occupation for basic food. Americans could buy fruits, vegetables, eggs, poultry, and canned foods at the Brigade Sales Commissary three days a week.¹⁸ The commissary offered a limited supply of beef and received a daily delivery of fresh seafood. A Brigade bakery and range of local stores furnished breads and delicatessen foods as well. Early into the occupation the Marine Corps advised traveling families to bring clothing and household furnishings, but by 1923 post exchanges and the Quartermaster Department sold a variety of household articles. Marines applied to the First Brigade

¹⁶ Lemuel P. Padgett, *Hearings on Estimates Submitted By Secretary of the Navy*, U.S. Congress (Washington, D.C.: Government Printing Office, 1918), 174.

¹⁷ B.H. Fuller, "Annual Report for the Fiscal Year of 1924," (July 14, 1924) from 220/4/38A/127/NARA.

¹⁸ John D. Brady, "Haiti," *Marine Corps Gazette* 9, no. 2 (June 1924): 153.

commander for the privilege of purchasing items from the Quartermaster's stores.¹⁹ The Gendarmerie-ran Haitian prison system made a large percentage of Haitian furniture and everyday materials available for consumption by training prisoners in various trades.²⁰

As companies took station in smaller towns Colonel Eli Cole, commander of First Regiment, ordered each company to proceed with full equipment, 400 rounds of ammunition per man, 4000 rounds for each machine gun, thirty days rations, one screened mess hall, and a kitchen.²¹ In case of unforeseen expenditures company commanders received an additional seventy-five dollars in gold. Commanders listed the number of day's supply of rations and rounds of ammunition at the bottom of their daily reports to keep track of supplies on hand.

In combat operations unit commanders walked a fine line between ensuring their men had the necessary supplies for contingencies and not being weighed down. During the campaign to take Fort Riviere, Cole ordered troops garrisoned at Cape Haitien to bring one additional uniform, three pairs of socks, one extra pair of shoes, wire cutters, machetes, a blanket roll, two additional bandoliers of ammunition, one day's rations in a haversack, and two large boilers and roasting

¹⁹ Roy S. Geiger, "Application for privilege of purchasing Quartermaster's property and subsistence stores," Headquarters, Observation Squadron Two, U.S. Marine Corps (November 14, 1923) from 23 May-Dec 1925/1/Geiger Papers/MCA.

²⁰ United States Congress, *Inquiry Into Occupation and Administration of Haiti and Santo Domingo*, 571.

²¹ Colonel Eli Cole, "Regimental Order No. 46," Headquarters First Regiment, First Brigade, U.S. Marine Corps (Cape Haitien, August 24, 1915) from 4/6/Butler Papers/MCA.

pans per company to six advance bases.²² Marines patrolled out of the advance bases with one day's ration in their shirt pockets, while quartermasters maintained an additional five-day reserve on base.

The First Provisional Brigade entered Haiti with a veritable arsenal of firepower: the M1903 Springfield rifle, .45 cal M1911 Colt automatic pistol, Benét-Mercié M1909 automatic machine gun, M1895 Colt-Browning automatic machine gun, the Vickers-Maxim machine gun, the 3-inch landing gun, the 4.6-inch heavy field gun, and the M1906 4.7-inch heavy field gun.²³ Each company came equipped with at least four Colt-Browning automatic machine guns in addition to individual Springfield rifles and Colt automatic pistols. An Artillery Battalion provided extra support with twelve 3-inch landing guns and two 4.7-inch heavy field guns.²⁴

The Navy Bureau of Ordnance supplied the Marine Corps with the Navy field gun, and Colt and Benét-Mercié machine guns for use on board ship and in advanced base operations.²⁵ The use of advanced base detachments in Haiti allowed first responders to be properly armed, but left the depot at Philadelphia without sufficient reserves, forcing the Marine Corps to petition for funds to create the one-

²² Eli Cole, "Letter of Instructions Campaign Against *Caco*," First Regiment, First Brigade, U.S. Marine Corps (November 1915) from 11/Butler Papers/MCA.

²³ Colonel Theodore Kane, "Memorandum," Headquarters, First Regiment, First Brigade, U.S. Marine Corps (August 11, 1915) from 6/6/Butler Papers/MCA.

²⁴ Secretary of the Navy, *Annual Reports of the Navy Department for the Fiscal Year 1915* (Washington, D.C.: Government Printing Office, 1916), 763.

²⁵ Secretary of the Navy, *Annual Reports of the Navy Department for the Fiscal Year 1915*, 379.

year supply cushion. The Marine Corps also purchased small arms and ammunition directly from the Army and its ammunition plant at the Frankford Arsenal.

The harsh terrain and steep trails made transportation of wheeled artillery like the 8,068-pound 4.7-inch field gun extremely slow and taxing. Marine Corps artillery officers recommended a substantial increase in lighter weight mountain guns. They suggested creating two to three battalions of small mountain guns consisting of 809-pound 3-inch mountain howitzers, 570-pound 3-inch Hotchkiss light guns, and a modified 4.7-inch gun with a split trail.²⁶ Both the 3-inch howitzer and 3-inch Hotchkiss broke down into three mule and five mule packs, respectively.²⁷

During the formative period of the Gendarmerie, staff issued the Haitian Army's old French M1874 Gras rifles in late 1915. A shortage of ammunition pushed the Gendarmerie to issue Krag-Jorgensen carbines for a few years before receiving the Springfield 1903 rifles on loan from the Marine Corps in 1921.²⁸

Numerous innovations in the armaments field occurred during the Marines expansive occupation. In 1917, the Navy and Marine Corps adopted three different guns for infantry and aircraft use. On April 25, 1917, the Navy Ordnance placed an

²⁶ R.O. Underwood, "United States Marine Corps Field Artillery," *The Field Artillery Journal* (U.S. Field Artillery Association) 5 (1915): 308.

²⁷ Edward O'Hern, "Extracts From Lectures Delivered at the School of Fire for Field Artillery," *The Field Artillery Journal* (The United States Field Artillery Association) V, no. 1 (January-March 1915): 7.

²⁸ United States Congress, *Inquiry into Occupation and Administration of Haiti and Santo Domingo*, 82.

order to the Savage Arms Company for 3500 Lewis light machine guns.²⁹ At only twenty-eight pounds, Marines could easily carry the Lewis gun for long periods of time. It became a leading aircraft machine gun due to its weight, air-cooled barrel, and self-contained ninety-seven round drum magazine. The Marine Corps also began to use the M1918 .30 cal Browning automatic rifle (B.A.R.) as a squad machine gun in 1917. The last gun adopted by the Marine Corps in 1917 was the Browning .30 cal water-cooled heavy machine gun. The gun, with water and tripod, topped out at ninety pounds and could be carried by three men with limited mobility or placed on pack animals. With the same .30 cal ammunition as the Springfield, the Marines easily incorporated the Lewis, B.A.R., and Browning machine gun into their munitions repertoire.

²⁹ LtCol, USMC George Chinn, *The Machine Gun: History, Evolution, and Development of Manual, Automatic, and Airborne Repeating Weapons* (Washington, D.C.: Government Printing Office, 1951), 295.



Figure 2-2. Marines carrying the Browning heavy machine gun in 1926.³⁰

When the Marines landed in 1915, seventy percent of Haiti's population suffered from dangerous and debilitating diseases such as syphilis, typhoid, and malaria.³¹ Entering the disease-ridden environment, the first priority for the Navy Medical Department's expeditionary arm was preventative medicine. The department issued each Marine mosquito nets, provided vaccines, ten grains (0.65 grams) of quinine prophylaxis daily for malaria resistance, and instructed troops on disease prevention. Sanitary regulations covered the sterilization of drinking water,

³⁰ "Browning Heavy Machine Gun," January 1926. Marines Training Folder. *The Banana Wars: Haiti Photo Collection*, U.S. Marine Corps History Division, Quantico, VA.

³¹ Department of State, *Report of the President's Commission for the Study and Review of Conditions in the Republic of Haiti* (Washington, D.C.: Government Printing Office, 1930), 12.

proper food preparation, good hygiene, insect control, and venereal disease warnings.³²

Meeting U.S. forces in Port au Prince were masses of malnourished and diseased peoples, thousands of which were starving women and children.³³ As a temporary solution, *Washington's* cooks saved leftovers from the wardroom and mess, added rice to stretch servings, and dished it out twice a day to eight hundred women and children. The occupation later received funding for humanitarian assistance from the seized customhouses.

Supply problems arose when the First Provisional Brigade began to garrison the countryside in early October. Despite coming ashore with the a brigade size medical party, a mere five years later the medical department lacked enough experienced hospital corpsmen to cover assigned duties.³⁴ An American Red Cross outfit based in Port au Prince set up a school to train natives in nursing skills to alleviate manpower constraints. Spread thin from over commitment, numerous garrisoned units went without corpsman, instead relying on preventative actions

³² A daily dose of ten quinine grains served as a preventative measure, while Chief Surgeons prescribed a dose of thirty grains per day to treat active cases. L.J. Magill, "Sanitation Regulations," U.S. Expeditionary Force, United States Marine Corps (Port au Prince, Haiti, August 28, 1915) from 4/6/Butler Papers/MCA.

³³ Ivan Musicant, *The Banana Wars: A History of United States Military Intervention in Latin America from the Spanish-American War to the Invasion of Panama* (New York, NY: Macmillan Publishing Company, 1990), 182.

³⁴ Secretary of the Navy, *Annual Reports of the Navy Department for the Fiscal Year 1920* (Washington, D.C.: Government Printing Office, 1920), 933.

and supplies of quinine and first aid boxes.³⁵ The harsh terrain and difficult travel also hindered Naval doctors from reaching outposts for sanitary concerns.

The increased demands of outfitting expeditionary forces in Nicaragua, Mexico, and Haiti exhausted medical supply reserves at the U.S. Navy's depots at Mare Island, CA; Brooklyn, NY; and Canacao, Philippines.³⁶ Haiti received supplies only by depleting those of the depots and by quickly purchasing out-of-stock goods on the open market. Additionally, the leading manufacturers of the world's surgical instruments came out of a war-ravaged Europe, driving up costs from 200 to 1200 percent. By 1918, however, the Navy faced a medical stores surplus, and easily accommodated the needs of its expeditionary outfits barring supply chain issues.³⁷

Article XIII of the Haiti-U.S. Treaty called for the establishment of a public health administration. Pulled from a pool of Navy doctors, administrators of the National Hygiene Service provided medical service for civilians and worked closely with the Public Works Department to build and improve rural dispensaries, hospitals, and sewers.³⁸ In 1925 alone, the public health administration received \$1.4 million to fund projects. Many hospitals and clinics rented buildings during the initial years of the occupation. Stability and funding for new constructions offered

³⁵ *Provision for Officers*, February 28, 1925, Compendium of Information of the Garde/5/241/127/NARA.

³⁶ United States Congress, *The Abridgment 1915 Containing the Annual Message of the President of the United States to the Two Houses of Congress*, 64th Congress (Washington, D.C.: Government Printing Office, 1915), 980.

³⁷ Secretary of the Navy, *Annual Report 1920*, 12.

³⁸ *Borno President of the Republic Proposal*, November 25, 1925, 1925/Dept of Gendarmerie/8/241/127/NARA.

cheaper and more modern facilities. By the Marines' withdrawal in 1934 Haiti had eleven modern hospitals and 153 rural clinics.³⁹

The Gendarmerie established its own medical department consisting of sixteen medical officers and natives serving as hospitalmen.⁴⁰ Gendarmerie doctors were responsible for the physical welfare of constabulary forces within their assigned districts.⁴¹ When sanitation and public health staff was unavailable in Gendarmerie held areas, the constabulary's medical department also cared for sick civilians. The medical department received an annual \$10,000 allotment for operations from the Haitian government. The purchase of medical equipment, medication, construction materials for dispensaries, and surgeon pay overextended funding within the first year and forced the Chief of the Gendarmerie to lobby for additional funds.⁴²

Logistics from the Air and Sea

Still in its infancy at the beginning of the intervention, the Marine Corps' air arm played a minor role in logistical support. The Marine Observation Squadron 9

³⁹ Department of State, *Report of the President's Commission*, 12.

⁴⁰ Anonymous, "The Haitien Gendarmerie," *The Marine Corps Gazette* 11, no. 2 (June 1926): 77.

⁴¹ Gendarmerie D'Haiti, "Medical Department: Lieutenants of the Medical Department," from Medical Department/9/241/127/NARA.

⁴² Gendarmerie, "Gendarmerie Funding," (January 1917) from 9/Butler Papers/MCA.

(VO-9M) began in February 1919 as a seaplane and land aircraft unit.⁴³ Under the command of Captain Roy Geiger the squadron had six DG-4B and two JN-6 "Jenny" land-based airplanes, along with three HS-1 and three HS-2 seaplanes based at Bowen Field, Port au Prince and Bizoton, respectively. Landing fields and ports for seaplanes dotted the Haitian countryside and coast. Out of 1271 flights from October 1919 to July 1920, there were 342 reconnaissance flights, 15 raids, 100 photographic missions, 227 transporting passengers, 343 transporting mail, and 244 miscellaneous flights. With the construction of more landing strips came greater access inland and increased flights transporting cargo. By 1930 the squadron averaged 3000 pounds per month in mail, freight, and provisions.⁴⁴

An expeditionary aviation group created its own logistical demands such as oil, fuel, fabric, and maintenance. With a representative yearly maintenance and operating budget of \$88,500, squadron commanders worked hard to keep up fuel and oil supplies.⁴⁵ The squadron purchased limited oil locally from either oil wells near Azua, Dominican Republic, or from Haiti's castor oil bean manufacturers.⁴⁶ Port au Prince served as Haiti's main supply hub, having the capacity to store 1.36

⁴³ Roy S. Geiger, "Report of Operations of Squadron "E," Marine Aviation Force, from 1 October, 1919, to 1 July, 1920.," Squadron "E," Marine Aviation Force (Port au Prince, July 31, 1920) from 16 January-August 1920/1/Geiger Papers/MCA.

⁴⁴ William B. Sullivan, "Report of Operations from September 21, 1930 to October 20, 1930," Headquarters, First Brigade, U.S. Marine Corps (Port au Prince, Haiti, October 25, 1930) from Haiti 1929-1930/9/241/127/NARA.

⁴⁵ Roger Willock, *Unaccustomed to Fear: A Biography of the Late General Roy S. Geiger, U.S.M.C.* (Quantico, VA: Marine Corps Association, 2004), 138.

⁴⁶ George Thorpe, "Basic Supply Plan for Measures Exterior to the United States: Haiti," General Staff College (1921) from 1921/3/39D/127/NARA.

million gallons of oil from the West India Oil Company, the Texas Company, Ltd., and the Shell Company Ltd.⁴⁷ The squadron provided an additional fuel tank at Bowen Airfield.

During early hostilities the squadron not only assisted in creating maps, evacuating the wounded, delivering messages, and dropping supplies, but also experimented with glide bombing. Squadron members invented a crude bomb rack with a canvas mailbag tied to the bottom of the plane's fuselage and cinched together with chords held by the pilot. Angled thirty to forty-five degrees off the horizon and at an altitude of 250 feet pilots released twenty-pound bombs on *caco* campsites.⁴⁸ As hostilities waned, squadron missions shied away from bombing and focused more on supply and passenger transport. When communication in the field was problematic, ground troops placed messages on a looped string between two light poles.⁴⁹ Pilots then flew between the poles and caught the looped message with its unreel antenna. No matter the mission type, pilots always carried an emergency repair kit that consisted of thread, needles, a varnish-like liquid to coat fabric called dope, wire cable, and extra fabric.

⁴⁷ U.S. Marine Corps, *Military Monograph of Haiti*, (Government Printing Office, 1934), 901-200.

⁴⁸ Willock, 144.

⁴⁹ Roy S. Geiger, "Marine Corps Aviation: Small Wars," U.S. Marine Corps from 142/10/Geiger Papers/MCA.

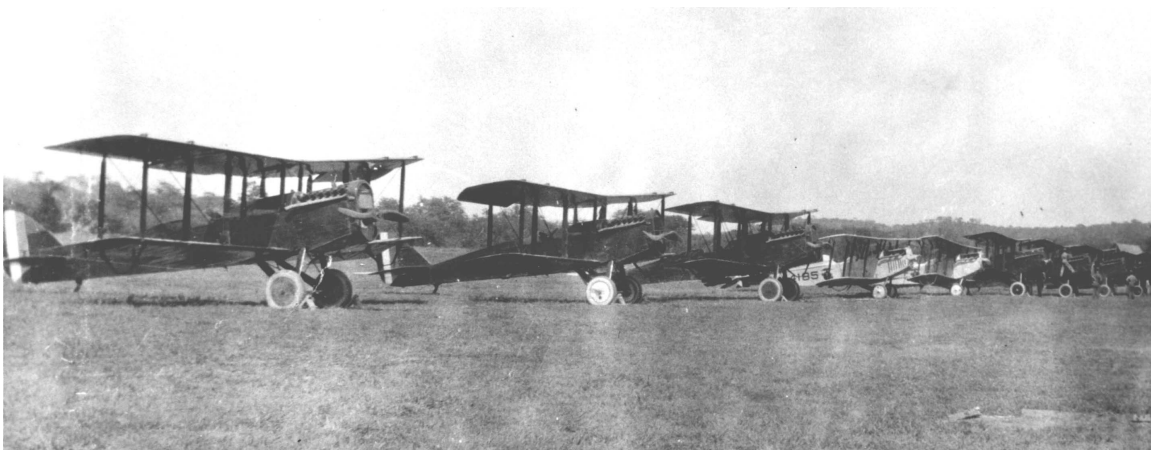


Figure 2-3. Marine aircraft at Bowen Field, Port au Prince 1920.⁵⁰

As a department of the Navy, the Marine Corps faced considerably fewer challenges to ensure naval logistical support. However, the Navy's meager four-boat transport fleet was inadequate and unavailable for duty, forcing the Marine Corps to travel by armored cruisers. In fact, all of the sailors and Marines that landed in the first three months traveled by armored cruisers specifically outfitted for carrying large numbers of men and materials. "Except for the terrific heat, overcrowded conditions of the ship and lack of cold water and every other civilized comfort we would have been quite comfortable had it not been for the bed bugs," described Major Smedley Butler, commander of First Battalion, First Marines Regiment on board the *Tennessee*.⁵¹

⁵⁰ "Bowen Field, Port au Prince," Date unknown. Transportation-Aircraft Folder. *The Banana Wars: Haiti Photo Collection*, U.S. Marine Corps History Division, Quantico, VA.

⁵¹ Letter SDB to Maud D. Butler, August 16, 1915 as reprinted in *General Smedley Darlington Butler: The Letters of a Leatherneck, 1898-1931* by Anne Cipriano Venzon, 153.

During the initial landing on July 28, 1915, at Haiti's Naval Yard at Bizoton, two armed launches and a small fleet of ship's boats landed personnel and materials.⁵² Vessels not under power had to be towed by a tugboat and then turned around and powered onto the beach by an anchor line.⁵³ Once ashore, a Naval officer assumed the duties of beachmaster by ferrying boats back and forth to the cruisers for supplies. When the First Regiment disembarked at Cape Haitien its engineering company along with two additional companies landed first, established guards at the wharf, and unloaded stores.⁵⁴ While engineers made minor repairs, the bulk of the First Battalion remained on the *Tennessee* packing the smaller boats. Only after the stores reached shore did awaiting units head landward.

⁵² Secretary of the Navy, *Annual Reports of the Navy Department 1915*, 763.

⁵³ Victor H. Krulak, *First to Fight: An Inside View of the U.S. Marine Corps* (Annapolis, MD: Naval Institute Press, 1984), 87.

⁵⁴ Colonel Eli Cole, "Landing Order," Headquarters, First Regiment, First Brigade (August 17, 1915) from 6/6/Butler Papers/MCA.



Figure 2-5. Marines unloading supplies at the Haitian Naval Yard at Bizoton.⁵⁵

The first months of the occupation taxed the Navy's small fleet of support vessels. Caperton pleaded with Chief of Naval Operations William Benson for additional ships to provide offshore support. With the *Eagle*, a repurposed yacht, "about on her last legs" and the navy tug *Osceola* nearly crippled from double duty as a gunship and supply runner, Caperton considered refitting the Haitian gunboat *Pacifique* before the gunboats *Marietta* and *Sacramento* arrived in the last week of August.⁵⁶

⁵⁵ "Unloading Supplies," 1915. General Folder. *The Banana Wars: Haiti Photo Collection*, U.S. Marine Corps History Division, Quantico, VA.

⁵⁶ Healy, 152.

With an 1100-mile coastline and unreliable roadways, occupation forces utilized small draft boats as a cheap and efficient way to move materials and personnel. The Public Works Department employed the sailboat *Fournisseur* for the movement of construction materials.⁵⁷ Small utility ships like the *Eagle* often saw duty as a runner, gunship, mail carrier, transport, or surveyor in Haiti's littoral waters.⁵⁸ Their four to seven-foot draft allowed for greater mobility in uncharted coastal areas. During the rainy season the Gendarmerie procured a number of twenty-foot dories to be used at the disposal of department commanders. If Navy or Gendarmerie vessels were unavailable, Marines hired native sailboats when practicable.⁵⁹ Since most of the Gendarmerie posts were along the coast and widely separated, water transportation was crucial to communication and supply.⁶⁰

⁵⁷ *The Banana Wars: Haiti Photo Collection*, U.S. Marine Corps History Division, Quantico, VA.

⁵⁸ James L. Mooney, *Dictionary of American Naval Fighting Ships*, 1991, <http://www.history.navy.mil/danfs/e1/eagle-iv.htm> (accessed January 29, 2011).

⁵⁹ Smedley Butler, "Returned," Gendarmerie D'Haiti (Port au Prince, February 29, 1916) from Expeditionary Commander Correspondence 1916/3/242/127/NARA.

⁶⁰ G.M. Kincade, "Water Transportation," Memorandum, Department of the South, Gendarmerie D'Haiti (August 12, 1916) from Department of the south Correspondence/7/241/127/NARA.



Figure 2-5. Gendarmerie river patrol in 1915.⁶¹

Despite Haiti's high concentration of rivers, none were navigable by deeper draft motorboats except Haiti's largest river, the Artibonite, but only for a short distance near Grande-Saline. For shallow waterways Marines used ten-inch draft boats for water patrols and plantain stock rafts (stems fastened together to make a flat raft) to carry construction materials and food downriver.⁶²

Operating out of Guantanamo Bay during 1915, the *Osceola* made weekly trips to Port au Prince and Cape Haitien to carry mail, stores, and provisions.⁶³ By 1921 Navy transports *Kittery* and *Gulfport* ferried 2000 tons of supplies per month

⁶¹ "River Patrol," 1915. Transportation-General Folder. *The Banana Wars: Haiti Photo Collection*, U.S. Marine Corps History Division, Quantico, VA.

⁶² R.L. Shepard, "Intelligence Report: River, Artibonite," U.S. Marine Corps (June 20, 1921) from H-145/14/38/127/NARA.

⁶³ William Caperton, *Schedule of Trips for "Osceola"*, Headquarters, First Regiment, First Brigade, US Marine Corps, August 20, 1915, from 7/6/Butler Papers/MCA.

from the Philadelphia Supply Depot.⁶⁴ Every three months the *Beaufort* carried gasoline, oil, and coal into Port au Prince. Navy and commercial vessels also shipped Gendarmerie supplies into Gonaives, St. Marc, Petit Goave, Jeremie, Aux Cayes, Jamel, Cape Haitien, and Port de Paix. The U.S. did not charge the Haitian government for transporting or storing the supplies on board the Navy ships. Haiti only incurred freight costs from the manufacturer to the Hampton Roads Naval Supply Depot. The Gendarmerie shipped 2185 tons per year under this method, without paying the estimated \$54,625 for commercial shipment.⁶⁵

Stationed in Haiti an average of two years, Gendarmerie and Marine Corps officers often made travel arrangements for their families to join them on deployment. Once Haiti became relatively stable, travel by passenger steamer became possible for family members. The Panama Line Steamship Company and Royal Netherlands Indian Mail Steamship Company ran out of New York City and Brooklyn, respectively, every five to eight days.⁶⁶ With official documentation families received discounted fares from thirty to sixty dollars per adult and fifteen to thirty dollars for children under twelve. The Panama Line took over mail service when the *Osceola* changed station in 1920.

⁶⁴ George Thorpe, "Basic Supply Plan for Measures Exterior to the United States: Haiti," General Staff College (1921) from 1921/3/39D/127/NARA.

⁶⁵ The Chief of the Gendarmerie D'Haiti, "Transportation of Supplies," Gendarmerie D'Haiti (Port au Prince, March 26, 1924) from Misc Correspondence 9 January-1 November 1924/14/241/127/NARA.

⁶⁶ Brady, "Haiti," 151.

The U.S. occupation forces established the Haitian Coast Guard in May 1917 under Article II of the treaty. Organized as a district within the Gendarmerie, the Coast Guard enforced maritime law, maintained lighthouses and buoys, and transported constabulary personnel and provisions along coastal waters.⁶⁷ During its formation the Chief of the Gendarmerie, General Smedley Butler, purchased four schooners with auxiliary power from the U.S. Navy.⁶⁸ Presented on June 1, the renamed *Republic, Independence, Progress, and Haiti*, took on the duties of naval vessels for the Gendarmerie. Over the course of the occupation, the Coast Guard procured four launches and six motorboats from the U.S. Navy.⁶⁹ Based out of Bizoton, the Coast Guard drew supplies through the Gendarmerie's Quartermaster Department and gasoline from the Naval Station at Guantanamo.⁷⁰

When *caco* revolutionaries revolted in Port au Prince in July 1915 the U.S. government responded quickly, landing sailors and Marines only hours after the first cries rang out. Quartermasters worked overtime by issuing supplies enroute while men received weapons briefs and medical lectures. Troop levels peaked in late August 1915 at 2000 as reinforcements arrived from Guantanamo and

⁶⁷ Smedley Butler, "General Order No. 16," Headquarters Gendarmerie D'Haiti (May 29, 1917) from Headquarters Gendarmerie D'Haiti/9/241/127/NARA.

⁶⁸ Smedley Butler became a General in the Gendarmerie when he became Chief of the Gendarmerie. He maintained the rank of major in the Marine Corps.

⁶⁹ U.S. Marine Corps, *Military Monograph of Haiti*, (Government Printing Office, 1934), 901-200.

⁷⁰ Alexander Williams, "Memorandum for the Brigade Commander," Gendarmerie D'Haiti (August 17, 1918) from Brigade Commander Correspondence 1 February 1918-2 December 1919/5/241/127/NARA.

Philadelphia. With troops onshore, the new logistical problem became maintaining the movement of men and material as Marines spread over the Republic. Despite its February 1919 arrival, the Marine Observation Squadron took years into the occupation to tap its logistical potential. The inland movement of troops lessened water transportation's impact beyond the coastline. In the end, logistical support depended on the horses, mules, wagons, automobiles, and men of the supply train.

Chapter 3

Land Transportation and Public Works

Transportation may be the greatest limiting factor on logistical networks. Once troops arrive on land, the availability of proper roads, ports, railroads, and other facilities constrains the maintenance of the force. The inadequate railroad lines, dilapidated roads, and restricted facilities of Haiti commanded the attention of U.S. occupiers. Geography affected overland transportation in Haiti because of the southeast running Massif du Nord and Noires mountain ranges, and the Massif de la Salle and Massif de la Hotte mountain ranges running east to west. Haiti's rainy season proved equally challenging, spanning eight months from April to November. The launch of public works projects was instrumental in eventually easing logistical concerns, but first created an even larger burden.

Construction and Public Works

Stabilization and infrastructure rehabilitation characterized America's occupation of Haiti. Entering a country with roads untouched from the days of French colonialism and little in the way of modern conveniences, the Marine Corps quickly set to work repairing rail lines, roads, and telephone wires out of military necessity and as a show of good faith towards the Haitian people. Initial public works efforts lacked tools, materials, and specialists. For instance, during the reopening of the twenty-five mile stretch of rail between Ennery and Gonaives in September 1915, Navy Lieutenant John Stapler and Ensign Thomas Moran, both attached to the *Castine*, not only led the repair efforts, but shared conductor duties

as well.¹ While most projects stemmed from Haiti's utter negligence in upkeep, Marines also contended with *caco* vandalism on train tracks. Although nothing more than a nuisance, *caco* acts made workers revisit completed tasks and sometimes delayed job completions.

The occupation's civil mission received an overhaul in February 1916 following the Treaty's Article XIII recognition that outlined creating a national agency for Haiti's public improvement under the supervision of engineers.² The Gendarmerie employed American civilian and U.S. Navy civil engineers as overseers on construction projects. In addition, engineers served as directors of the Service of Shop, Supply, and Transportation, the Public Works Administration, the Service of Irrigation, and the Service of Public Buildings.

During the occupation's early years, the Gendarmerie used the Public Works token subsidies to complete earlier Haitian projects with the least amount of work required to reopen in-demand roads and railways. Funding for public works projects initially came from three sources: the "Military and Civil Government" account administered by the Provost Marshal, fines adjudged by the Provost Court, and the Gendarmerie allotment.³ The General Supervisor of Road Repair, an officer

¹ Smedley Butler, "Report of Operations, September 20th to September 26th, inclusive," U.S. Marine Corps (Gonaives, Haiti, September 26, 1915) from 4/6/Butler Papers/MCA.

² Commander G.A. Duncan, "The Corps of Civil Engineers, U.S. Navy, in Haiti," *Proceedings*, March 1930: 209.

³ Acting Commandant Gendarmerie D'Haiti, "Report of Public Works," Gendarmerie D'Haiti (August 25, 1916) from Expeditionary Commander Correspondence 1916/3/242/127/NARA..

attached to the headquarters of the Gendarmerie D'Haiti, tracked and disbursed funding for roadwork.⁴ Beginning on April 1, 1917, Gendarmerie district commanders also received monthly \$10,000 stipends allotted specifically to road repair.⁵ Separate from any Public Works funding, all purchase requests by district commanders had to be authorized by the Chief of the Gendarmerie. The Public Works Administration lacked a consolidated supply branch until 1920 when the Republic's government gave \$15,000 to create a storage facility and procure materials.⁶ The Service of Shop and Supply economized the Public Works Administration's purchases, increasing productivity by having materials on hand. By 1922 the shop developed blacksmith, carpentry, and transportation services resulting in nearly \$20,000 of savings for the 1921-22 fiscal year.

As the *caco* rebellion died down, military actions died down as well and the Marines and Gendarmerie stepped into their nation-building role. Evidence of America's goal of departing Haiti with a stable modern infrastructure, more and more funds went toward construction projects with each year of the occupation. In fact in the first ten years of the occupation allotments for public buildings went from \$8,000 countrywide to \$50,000 for just one project (see Table II).⁷ Representative of

⁴ Alex Williams, "General Order No. 21," Gendarmerie D'Haiti (Port au Prince, May 10, 1918) from Headquarters Gendarmerie D'Haiti/9/241/127/NARA.

⁵ Smedley Butler, "General Orders No. 12," Headquarters, Gendarmerie D'Haiti (Port au Prince, Haiti, March 15, 1917) from Headquarters Gendarmerie D'Haiti/9/241/127/NARA.

⁶ Duncan, 217.

⁷ Inflation rates from 1915 to 1925 stood at 5.5%.

the high priority status afforded road development, road repair funding raised a striking 12,400 percent or 125 fold in the same ten-year timeframe.

TABLE II

Public Works Funding⁸

Public Works, Fiscal Year 1914-15:	
Repair of public buildings	\$8,000
Repair of public roads	\$6,000
Repair of prisons	\$7,000
Repair of bridges	\$6,000
Repair of wharves, etc.	\$7,000
Public Works, Fiscal Year 1919-20:	
Construction and repair of public buildings	\$24,000
Repair and maintenance of streets, etc.	\$68,400
Irrigation, etc.	\$24,000
Ports, harbors, wharves and quays	\$9,600
Public roads, bridges, etc.	\$180,000
Construction of school buildings, etc.	\$12,000
Public Works, Fiscal Year 1925:	
Improvement of the system of drainage at Port au Prince	\$200,000
Continuation of the improvements of the Champ de Mars	\$50,000
Construction for improvements and maintenance of the roads, bridges, and trails	\$750,000
Construction of a wharf at Jacmel	\$125,000
Construction a new building for the Telegraphic and Telephone Service at Port au Prince	\$50,000
Irrigation	\$150,000
Reconstruction of the telegraphic line Port au Prince-Petite Goave	\$146,000

The Gendarmerie attempted to procure building supplies locally for ease and to support the local community. However, staples like concrete and galvanized iron

⁸ "Changes in Regulations," Headquarters, Gendarmerie D'Haiti (Port au Prince, 1925) from Department of the Gendarmerie D'Haiti/8/241/127/NARA.

roofing were only available locally in limited quantities.⁹ Commercial shipping vessels delivered 600,000 pounds of building materials annually.¹⁰ Although the importation of construction materials was duty free and shipped gratis on U.S. Navy vessels, resulting in over \$50,000 in savings annually, the Gendarmerie struggled fiscally. To cut down on costs, the constabulary attempted to keep as much of the work in-house as possible by quarrying limestone, gathering coral and sand, making bricks, and cutting lumber.¹¹ Coral rock was easy to quarry and shape, but it quickly hardened when exposed to air.¹² Hardwoods like mahogany, lignum vitae, sparwood, and softwood cedar were available in quantities, but mainly used to build temporary structures.

Construction sites in remote villages created their own logistical concerns. One building type required 6356 cubic feet of stone, forcing laborers to traverse miles of winding rugged trails either carrying the stone on their head, by mule, or

⁹ U.S. Marine Corps, *Military Monograph of Haiti*, (Government Printing Office, 1934), Appendix A: System of Supply.

¹⁰ The Chief of the Gendarmerie D'Haiti, "Transportation of Supplies," Gendarmerie D'Haiti (Port au Prince, March 26, 1924) from Misc Correspondence 9 January-1 November 1924/14/241/127/NARA.

¹¹ Colonel Jon T. Hoffman, *Chesty: The Story of Lieutenant General Lewis B. Puller, USMC* (New York, NY: Random House Trade Paperbacks, 2001), 40.

¹² USMC Colonel George Thorpe, "Basic Supply Plan for Measures Exterior to the United States: Haiti," General Staff College (1921) from 1921/3/39D/127/NARA.

via a makeshift vehicle.¹³ While the Gendarmerie had trucks to move material, insufficient roads near job sites severely limited their use.

The meager funding in the beginning hurt the Gendarmerie's workforce capabilities, forcing it to draw labor from unlikely sources. An antiquated Haitian Rural Code allowed public roads to be maintained and repaired by corvee for four days monthly in a given district. Butler reluctantly reinstated the corvee because public works allotments failed to cover the cost of equipment and labor. Although the Gendarmerie provided shelter and rations, the corvee system stretched the dated law's boundaries because it pulled manpower from outside districts and extended their service.¹⁴ During the race to open the main road from Port au Prince to Cape Haitien by January 1, 1918, the corvee system fed and housed 9,000 laborers.¹⁵ Scores of workers not only volunteered hoping to expedite the benefits of the roads, but also stayed on following their required service for the higher living standards. In addition to corvee, the Gendarmerie often used prison laborers to cut costs. Initial roadwork consisted primarily of manual labor such as carrying dirt, pick axing rocks, and digging ditches - perfect jobs for the unskilled prisoner or

¹³ James H. McCrocklin, *Garde D'Haiti: Twenty Years of Organization and Training by the United States Marine Corps* (Annapolis, MD: The United States Naval Institute, 1956), 176.

¹⁴ From LtCol A.S. Williams, "Statement of Lieutenant Colonel A.S. Williams, U.S. Marine Corps relative to certain irregularities alleged to have been committed by officers and enlisted men in the Republic of Haiti," Gendarmerie D'Haiti (January 5. 1920) from Reports on Investigations/5/241/127/NARA.

¹⁵ McCrocklin, 95.

corvee. When it came time for the more technical tasks like building bridges and placing culverts, the Gendarmerie paid craftsmen to ensure standards.¹⁶

In January 1918, 1,250 Haitian men went to Cuba to find work – in February 1918 another 1,485 went to Cuba. High numbers of migrant workers made it difficult to obtain corvee labor.¹⁷ Paid labor also competed with Cuba's three and five dollar daily wages versus the Gendarmerie's allotted \$1.25.¹⁸ The corvee system came under scrutiny soon after its inception as claims of mistreatment reached the Occupation's leadership. The Gendarmerie received heat for their failure to abide by aforementioned law stipulations. Not only did Gendarmerie project supervisors ignore basic corvee laws, but there were also reports of Haitian Gendarmerie beating corvee laborers. On October 1, 1918, the Gendarmerie discontinued the corvee system in light of the allegations of mistreatment reaching Washington.¹⁹ Prisoners and paid laborers became the sole workhorses of the department.

A large part of establishing fiscal control in Haiti was the takeover of customhouses in key towns. In Petit Goave, Paymaster Fred McMillen, USN,

¹⁶ United States Congress, *Inquiry into Occupation and Administration of Haiti and Santo Domingo*, 566.

¹⁷ Department Commander, "Roads," Department of Aux Cayes, Gendarmerie D'Haiti (Les Cayes, Haiti, March 4, 1918) from Department of South Correspondence 7 January 1918-October 1919/7/241/127/NARA.

¹⁸ Glenn Perusek, "Haitian Emigration in the Early Twentieth Century," *International Migration Review* 18, no. 1 (Spring 1984): 9; District Commander, "Monthly Reports of Conditions-October 1920," District of Port de Paix, Gendarmerie D'Haiti (Port de Paix, Haiti, November 13, 1920) from Headquarters 11th Company monthly report 9 March 1915-12 October 1921/9/241/127/NARA.

¹⁹ United States Congress, *Inquiry Into Occupation and Administration of Haiti and Santo Domingo*, 562.

maintained complete authority over trade and port activities surrounding the area. As the Collector of Customs and Captain of the Port of Petit Goave, McMillen faced the arduous task of rehabilitating the customs house, warehouses, and offices. After individually procuring the necessary materials, he made vital repairs to the warehouse's roof and created a new system to administer imports and exports.²⁰

McMillen's story echoed throughout the country as troops, civilian contractors, and government agencies sought out building space for housing or offices. In order to ensure shelter for troops, newly garrisoned units relied on shelter tents and rental properties on a month-by-month basis until the Gendarmerie procured a proper building or land for construction. Between 1915 and 1918 American forces repaired and refurbished buildings, roads, and storage facilities but did not break ground on new construction. Insufficient funding forced the Gendarmerie to convert numerous buildings into barracks and offices. Small renovations ran the Republic between \$250 and \$500 on average.²¹ For larger purchases, such as the "Arsenal" building in St. Marc that cost \$3,865, district commanders had to file for authorization in the previous month's estimates.²² As more funds became available, Marine and Gendarmerie camps switched from the

²⁰ RADM Frank K. Allston, *Ready for Sea: The Bicentennial History of the U.S. Navy Supply Corps* (Annapolis, MD: Naval Institute Press, 1995), 168.

²¹ Department of the Cape Commander, "Purchase of barracks at Fort Liberte," Gendarmerie D'Haiti (Cape Haitien, December 27, 1916) from Department of the Cape Correspondence 21 December 1915-20 December 1916/6/241/127/NARA .

²² Captain A.S. Williams, "Gendarmerie," Headquarters Gendarmerie (Port au Prince, January 12, 1916) from Expeditionary Commander Correspondence 1916/3/241/127/NARA.

canvas shelter tents to native type housing.²³ Depending on the region, native dwellings had thatched roofs, rock or wattle and daub walls with mud or lime exteriors, or hardwood construction.

Officers' families began to arrive a year into the occupation. In need of housing, most rented bungalows in town that ranged from forty to one hundred dollars a month.²⁴ Initial residences lacked modern plumbing or kitchens and had to either requisition for a Buzzacott or pay for native cooks. Many of the higher end homes had swimming pools, garages, horse stalls, and electric lighting, but weak water pressure and incomplete sewage systems kept outhouses the norm.²⁵

Within months of the Gendarmerie's formation, Butler ardently pursued official control of public works, specifically road rehabilitation. He appealed to longtime peer and Assistant to the Commandant of the Marine Corps Colonel John Lejeune, "I am convinced that the control of the telegraph, postal services, and public roads by the Gendarmerie is necessary as a military measure. Personally, I do not care who builds the sewers, and cleans up the garbage, but I am interested in the roads."²⁶ Amid constitutional revisions the February 1, 1916 treaty detailing the

²³ Major R.L. Shepard, "Report of Operations," Headquarters, First Brigade, USMC (Port au Prince, Haiti, October, 1, 1921) from Opns. Reports, Intelligence, Summaries 1921-1924/3/18A/127/NARA.

²⁴ Randolph Coyle, "Service in Haiti," *Marine Corps Gazette* 1, no. 4 (December 1916): 345.

²⁵ John D. Brady, "Haiti," *Marine Corps Gazette* 9, no. 2 (June 1924): 151.

²⁶ Letter Smedley Butler to John A. Lejeune, July 13, 1916 as reprinted in *General Smedley Darlington Butler: The Letters of a Leatherneck, 1898-1931* by Anne Cipriano Venzon, 182.

responsibilities of the Gendarmerie survived in its original form and gave Butler's force full control of road projects.²⁷

In spite of steadily increasing funds for road construction, the corvee shutdown forced the Gendarmerie to reallocate large sums for labor, depleting material capital. In order to prioritize funding for road projects Smedley Butler divided Haiti's roads into three classes. Class A roads incorporated roadways between larger cities and economic centers, engineered to withstand all types of travel.²⁸ Feeder roads suitable for travel by motorized vehicles and wagons made up Class B roads. Class C contained trails necessary to maintain communication in the mountains.

With road projects spanning the Haitian countryside, many Gendarmerie faced a double-edged sword of equipment shortage and difficulties transporting provisions to those in need. The tools shortage not only retarded construction, but also forced department commanders to hold monthly balances in order to pay for large shipments of tools.²⁹ Attempting to save money at every turn, the Gendarmerie discouraged purchasing carts or animals purely for hauling gravel. Instead Haitian

²⁷ McCrocklin, 68.

²⁸ Memorandum SDB to Littleton W.T. Waller with Enclosure, May 16 1916 as reprinted in *General Smedley Darlington Butler: The Letters of a Leatherneck, 1898-1931* by Anne Cipriano Venzon, 153.

²⁹ Department Commander, "Roads," Department of Aux Cayes, Gendarmerie D'Haiti (Les Cayes, Haiti, March 4, 1918) from Department of South Correspondence 7 January 1918-October 1919/7/241/127/NARA.

men received twenty to thirty-five centimes (one cent pieces) for a barrel of gravel carried by personal burro or in a box on their heads.³⁰



Figure 3-1. Haitian laborers using burros to transport gravel for road resurfacing.³¹

In just under six weeks the Gendarmerie built twenty-one miles of the Port au Prince-Cape Haitien roadway at a cost of roughly \$500 a mile, with most of the

³⁰ Military Representative of the United States in Haiti, "Visit to Haiti and report thereon," (Port au Prince, Haiti, September 8, 1917) from miscellaneous reports 1915-1934/3/242/127/NARA.

³¹ "Road Resurfacing," Date unknown. Transportation-General Folder. *The Banana Wars: Haiti Photo Collection*, U.S. Marine Corps History Division, Quantico, VA.

funds spent on the crew's rations and cement for bridgework.³² The average road was built with a width of eighteen feet and ditches when possible.³³ After overhauling 579 miles of navigable roads and 280 miles of telephone lines in the occupation's first four years, the Gendarmerie officially established the Public Works Administration in 1919.³⁴ With its creation came increased funding and the freedom to expand beyond quick fix jobs. The Gendarmerie initiated new construction projects such as placing drainage ditches, culverts, and small bridges. It focused on issues stemming from Haiti's mountainous tropical environment by raising low sections of roadways to decrease flooding and relocating roads to grades of eight percent or less.³⁵ Even with avid road proponents like Butler, roads in Haiti could not withstand the rainy season and flooded four months of the year.

Initial bridgework consisted of repairing existing bridges and constructing new ones with cheap-creosoted wood with concrete abutments or crib bridges.³⁶ In 1924 the Gendarmerie began erecting permanent bridges made of concrete enclosed steel I-beam and steel truss bridges. During the building of the Artibonite

³² Letter Smedley Butler to Franklin D. Roosevelt, December 28, 1917 as reprinted in *General Smedley Darlington Butler: The Letters of a Leatherneck, 1898-1931* by Anne Cipriano Venzon, 198.

³³ Chief of Gendarmerie, "Roads," Department of Aux Cayes, Gendarmerie D'Haiti (Les Cayes, Haiti, June 29, 1918) from Department of South Correspondence 15 November 1915-4 January 1919/7/241/127/NARA.

³⁴ Duncan, 216.

³⁵ Supervisor of Roads, "Relocation of Roads," Department of the South, Gendarmerie D'Haiti (Aux Cayes, Haiti, May 29, 1917) from Department of the South Correspondence 12 August 1916-31 December 1917/7/241/127/NARA.

³⁶ Duncan, 214.

Bridge, Port au Prince's blacksmith shop and depot assembled the steel for the permanent structures and sent it out with timber on a convoy three times a week. Priority bridgework depended on the ability to ford individual waterways and whether or not it connected a Class A road.³⁷



Figure 3-2. Standard military crib bridge.³⁸

Trails proved critical to rooting out rebels in the early days of the occupation. Once relative stability came, all but core feeder trails got pushed to the periphery. Nevertheless, remotely garrisoned Gendarmerie units and the indigenous population regularly utilized Haiti's labyrinth of trails, necessitating their

³⁷ James Tracy, "General S.D. Butler, G.d'H.," Headquarters, Department of the Cape, Gendarmerie D'Haiti (Cape Haitien, Haiti, July 31, 1917) from Department of the Cape Correspondence 2 January-31 December 1917/6/241/127/NARA.

³⁸ "Military Crib Bridge," Date unknown. Bridges, Roads, & Canals Folder. *The Banana Wars: Haiti Photo Collection*, U.S. Marine Corps History Division, Quantico, VA.

maintenance. Not until August 1928 did the Gendarmerie receive funding to refurbish trails.³⁹ Under new trail specifications workers added drains, graded, and increased the width to twenty-nine feet, which was wide enough for two pack train columns.

By 1934 the Public Works Administration and its affiliates not only added 400 miles of railroad lines and over 1,000 miles of navigable roadways, but also maintained 264 bridges and 160 miles of trail. Public works provided the means for transporting, housing, and supplying Marine and Gendarmerie units. Without the Gendarmerie's public works arm, the U.S. occupation would not have had the tools to complete its mission in Haiti.

Land transport

As Marines landed in Haiti they faced a labyrinth of unknown jungle trails and rundown roads. During the opening revolt, Colonel Littleton Waller, Commander of First Brigade, taking a page from the Philippine and Cuban experiences, recognized that in order to squelch the broadening insurgency Marines needed to branch out into more remote villages throughout the country. Waller divided the country into three departments along latitudinal lines: the Department of Cayes (southern Haiti), Department of Port au Prince (central Haiti), and the Department of the Cape (northern Haiti). The three departments separated into twenty-seven districts, each controlled by a Marine company (see Figure 1-1). Smaller posts spread throughout the individual districts, separating units anywhere from ten to fifty miles. When the Gendarmerie took over interior operations they

³⁹ Duncan, 215.

occupied one hundred and seventeen posts; it remained imperative to maintain supply routes. To keep supplies moving both the Marines and Gendarmerie relied on motor transport, railroads, and pack trains.

The Marine Corps' first automobile purchase was a Studebaker-30 in July 1909 that carried mail and provided on-base transportation. In the next five years the Marines procured seventy-two motorcars.⁴⁰ Four of the Jeffery quad trucks accompanied the First Brigade to Haiti in July 1915. Jeffery quads were the standard issue military truck until the mid-1920s. They had four-wheel drive and thin solid tires that lacked the traction necessary for Haiti's rainy season.⁴¹ In addition to the quads, Marines used three-ton F.W.D., Dodge, and White trucks during the occupation.⁴² While capable of carrying large loads the F.W.D. heavy truck outweighed safety standards for newly engineered bridges, roads, and culverts and could not climb the steep grades of interior roads in wet weather.⁴³ Therefore, engineers confined the F.W.D. truck to the immediate areas surrounding Port au Prince and Cape Haitien. The Dodge and White motor trucks' lighter frames could traverse the Republic's steeper grade roads. Occupation forces used trucks for a

⁴⁰ Frank Evans, "Motor Transportation in the Marine Corps," *Marine Corps Gazette* 2 (March 1917): 7.

⁴¹ Vernon Megree, "Motor Transportation for Expeditionary Units," *Marine Corps Gazette* 13 (1928): 271.

⁴² B.H. Fuller, "Annual Report for the Fiscal Year of 1924," (July 14 1924) from 220/f/38A/127/NARA.

⁴³ J.S. Turrill, "Report of Operations," Division of Operations and Training, First Brigade, U.S. Marine Corps (January 2, 1924) from Photos-Operations Reports/Haiti Operations and Training 1924-1927/2/18A/127/NARA.

variety of purposes that ranged from mail service to towing artillery and caissons. Haiti's rain and dilapidated roads regularly ensnared trucks in muddy pits.

The buildup of passenger automobiles paralleled the increase in navigable roads. A far cry from the three autos in Haiti in 1915, more than 2,600 Nash and Ford touring cars were in Haiti by the Marine Corps 1934 departure.⁴⁴ However, many of the models lacked sufficient spare parts and were rarely drivable. The Gendarmerie's motor transport unit had more success gradually acquiring trucks, cars, and motorcycles throughout the 1920s. The 1924 construction of garages in Port au Prince for storage and maintenance helped bring the unit to its full capacity. By 1929 the Gendarmerie averaged ten cents per mile in operation costs for all its vehicles.⁴⁵

⁴⁴ McCrocklin, 49.

⁴⁵ McCrocklin, 188.



Figure 3-3. A Jeffrey quad stuck in the mud.⁴⁶

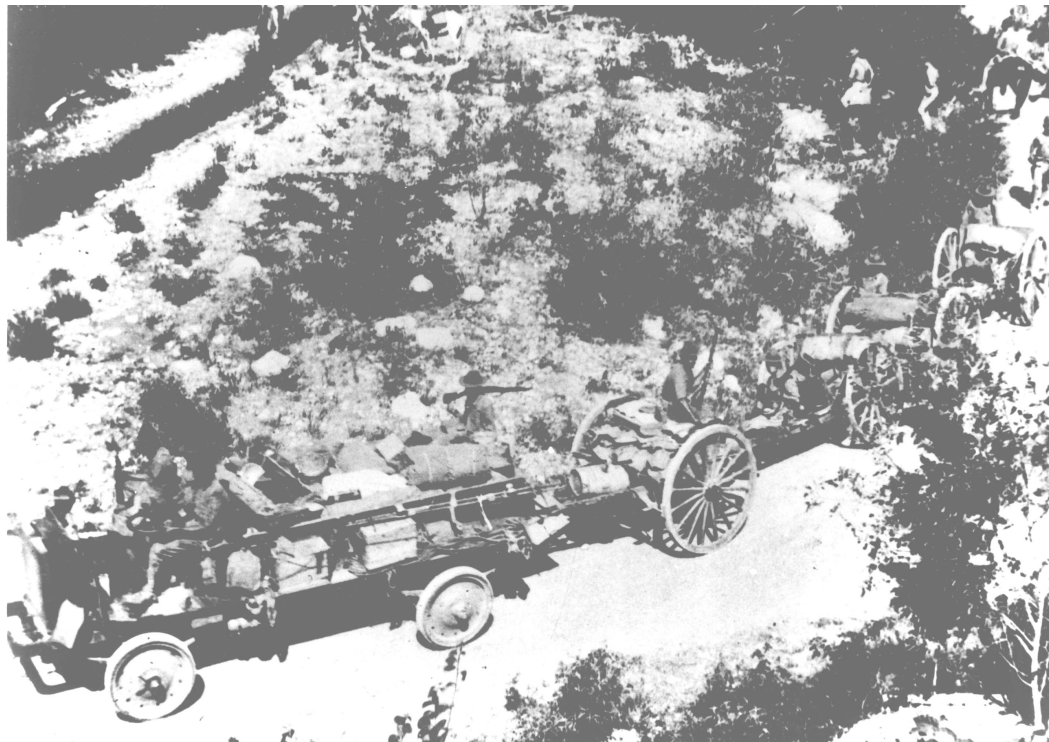


Figure 3-4. Jeffrey quad trucks pulling artillery along a mountain road.⁴⁷

⁴⁶ "Jeffrey Quad in Mud," 1915. Transportation-General Folder. *The Banana Wars: Haiti Photo Collection*, U.S. Marine Corps History Division, Quantico, VA.

In 1916, the Commandant of the Marine Corps requested \$30,000 from Congress for the purchase of two experimental armored cars.⁴⁸ Marines stationed in Haiti improvised armored vehicles with automatic rifles and machine guns. By placing armor on Jeffery quad trucks they proved the utility of reinforced motor transport in reconnaissance and offensive operations.⁴⁹ The Marine Corps received \$20,000 to develop two identical models for testing in the unforgiving environment of Haiti and the Dominican Republic. To accommodate sea travel researchers tested ease of loading and disembarking from a variety of ship-to-shore options. A Navy transport successfully moved the car into a forty-foot motor sailing launch, where it rested on two-by-twelve-inch beams, and then it touched ground either by a wood ramp or a portable attached bridge. Researchers also found that a thirty-six foot sailing launch was a second option for disembarkation. After the King car went through rigorous tests in handling over rough terrain and survived three flips unscathed the Marine Corps ordered production of five more armored cars.

The Armored Motor Car Company built the vehicle on the frame of a King Motor Car Company luxury sedan. Since early century sedans weighed roughly half a ton, the additional weight of armor and weaponry proved to be an issue when operating in Haiti. The King car came complete with an eight cylinder motor, quarter

⁴⁷ "Jeffrey Quad Pulling Artillery," 1916. Transportation-General Folder. *The Banana Wars: Haiti Photo Collection*, U.S. Marine Corps History Division, Quantico, VA.

⁴⁸ United States Congress, *Estimates Submitted by the Secretary of the Navy, 1916: Hearings before the Committee on Naval Affairs*, 64th Congress (Washington, D.C.: Government Printing Office, 1916), 2179.

⁴⁹ Evans, 1.

inch armor capable of stopping .30 caliber rounds, and a turret, which housed the Vickers, Lewis, or Benet light machine gun depending on availability. On January 1, 1918, the First Armored Car Squadron formed at the Marine Barracks in Philadelphia. Recognized for their advanced base potential, the Marines shipped five of the cars down to Haiti for use in an advanced base environment. The First Armored Car Squadron served with both the First and Second Marine Regiments on patrols.⁵⁰ Despite positive test results, King cars were not built to withstand the rugged trails and roads Haiti offered. Therefore, like their motor pool counterparts, King cars were relegated to larger cities and newly refurbished roads. Design shortcuts also greatly limited their effectiveness. The Quartermaster of the Marine Corps explained the car's shortfalls, "There are five armored cars in Haiti which have never been successful due to the weight of the body being in excess of the eff (efficient) load of the chassis." In light of his report and complaints of cramped conditions and hard to find replacement parts, the Quartermaster recommended the deployment of light tank platoons for future expeditionary duty. The Marine Corps officially disbanded the squadron in May 1921, but the King car remained a limited presence in Haiti until 1927.

⁵⁰ Beth Crumley, *What the Heck IS That Thing????*, June 7, 2011, <http://www.mca-marines.org/blog/beth-crumley/2011/06/07/what-heck-thing> (accessed June 20, 2011).

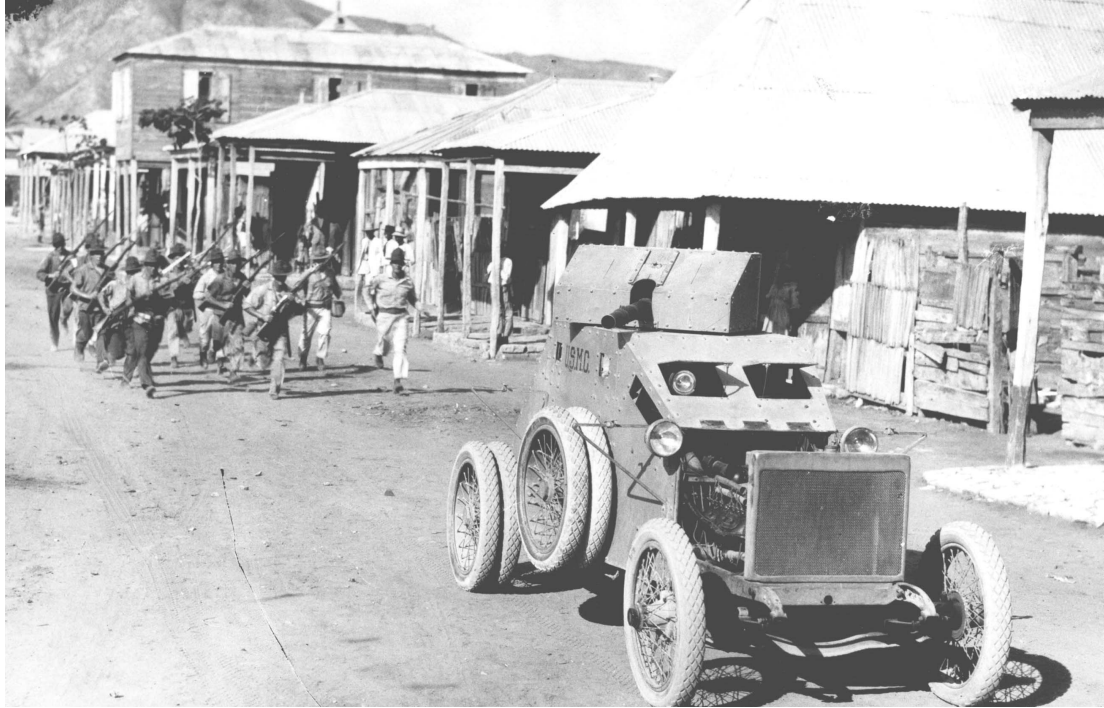


Figure 3-5. The King car in Port au Prince.⁵¹

Two privately owned railroad lines dotted Haiti's countryside. One stretched from Cape Haitien north to Grande Riviere for a total of fourteen miles. The second and most utilized railroad was the twenty-four mile line from Port-au-Prince to L'Etang Saumatre that also served as a key commercial artery. The Marine Corps also opened the twenty-five mile Ennery-Gonaives line within weeks of landing. The proportionally small amount of railroads for a country the size of Haiti forced occupation troops to lean heavily on automotive and pack supply. Since traveling thirty miles by train equated to nine hours on horseback, Marines took advantage of

⁵¹ "King Car," Date unknown. Transportation-General Folder. *The Banana Wars: Haiti Photo Collection*, U.S. Marine Corps History Division, Quantico, VA.

the scanty train accessibility whenever possible.⁵² Oftentimes, a single operation involved water, pack, and train transportation.

Recognizing the necessity of rail transport not only for troop movement but the maintenance of the local economy and food replenishment, Butler dispatched Captain Alexander Vandergrift to prepare the Ennery to Gonaives rail line. Complications arose however, when *caco* leadership refused to accept Butler's demands to not disturb the locals, instead setting fire to multiple culverts and railroad ties a mile outside of town.

On September 21, 1915, Butler and six squads attempted to open the Gonaives-Ennery line. The seven-car train pulled out of the station at 10:50 AM, only to stop multiple times within the first five miles to repair three separate culverts damaged by *caco* troops and to physically hand pump water into the tenders. A steep grade and overgrowth forced the fifty-five ton locomotive to play leapfrog, pushing the cars in two sections for the remainder of the trip. At 12:30 AM the train stopped for the night; after nearly fourteen hours the Marines made it ten and a half miles. The glacial pace continued the remaining fifteen miles, reaching the end of the line the following morning at 12:40 AM, averaging a speed of 2/3 miles per hour.⁵³ Butler's train ride highlighted the arduous task that lay ahead for the American occupation. Combating harsh terrain, dilapidated infrastructure, and the ever-

⁵² Frank L. Bride, "The Gendarmerie D'Haiti," *Marine Corps Gazette*, 3, no. 4 (December 1918): 298.

⁵³ Anne Cipriano Venzon, *General Smedley Darlington Butler: The Letters of a Leatherneck, 1898-1931* (New York: Praeger Publishers, 1992), 156.

present threat of rebel forces, U.S. Marines had to rely heavily on training and ingenuity in the field.

Five years into the occupation railroads still played only a minor role in supply. The railroad lines from Gonaives to Ennery and Cape Haitien to Grande Riviere were the only ones prominently used to supply troops in the Department of the Cape.⁵⁴

The sparse train presence, combined with barely serviceable roads, often wet conditions, and mountainous terrain, left remotely garrisoned troops reliant on pack trains for their supplies. Despite the diligence of the Public Works Administration Haiti's interior was dominated by trails barely navigable.

Companies of Gendarmes patrolled almost exclusively on horseback in the occupation's first days. Captain Calhoun Ancrum, Commander of Marine Barracks at Ouanaminthe in Haiti's northern district, quickly recognized that native horses gave out on trail marches despite careful treatment.⁵⁵ Ancrum claimed that a foot patrol nearly equaled a mounted patrol's pace and suggested a switch to predominantly foot patrols. Furthermore the Gendarmerie should buy five or six strong mules for mounted messenger and emergency patrol duties. He claimed that you get what you pay for and pleaded for the Gendarmerie to not waste their money procuring cheaper steeds because they simply delayed the column. Ancrum was not the only

⁵⁴ United States Congress, *Inquiry into Occupation and Administration of Haiti and Santo Domingo*, 1734.

⁵⁵ Calhoun Ancrum, "Mounted Companies of Gendarmes," Gendarmerie D'Haiti (Ouanaminthe, Haiti, September 8, 1916) from Department of the Cape Correspondence 21 December 1915-20 December 1916/6/241/127/NARA.

person who recognized the need for stronger horses, or better mules; Butler warned district commanders to never push government owned or rented horses beyond a trot.⁵⁶ Even so, in a pinch or for lighter detail the estimated 100,000 native animals could supplement pack trains.

The Department of the Cape found it very difficult to secure grass along trails, forcing mounted patrols to pack feed. Quartermasters purchased hay and corn locally, while oats shipped when needed from the mainland.⁵⁷ Estimating how much forage horses and mules required was an important part of the planning process for pack train missions. Pack too much feed and the animals were unnecessarily burdened; however, if not enough food was packed and grass was scarce, then troops run the risk of underfeeding and weakening the animals.

In 1917, the Gendarmerie received \$7,500 for feed and remounts at an estimated forty dollars per horse.⁵⁸ By 1921 allotments rose threefold with \$22,769 specified towards forage and remounts for the constabulary.⁵⁹ Even as the road system underwent extreme rehabilitation, funding continued to be funneled to the maintenance and buildup of pack trains.

⁵⁶ Smedley Butler, "Radiogram," Department of the Cape, Gendarmerie D'Haiti (Ouanaminthe, Haiti) from 11/Butler Papers/MCA.

⁵⁷ USMC Colonel George Thorpe, "Basic Supply Plan for Measures Exterior to the United States: Haiti," General Staff College (1921) from 1921/3/39D/127/NARA.

⁵⁸ Gendarmerie, "Gendarmerie Funding," (January 1917) from 9/Butler Papers/MCA.

⁵⁹ United States Congress, *Inquiry into Occupation and Administration of Haiti and Santo Domingo*, 385.



Figure 3-6. Haitian guide leading Marines through jungle trails.⁶⁰

Marines used mounted patrols with accompanying pack trains for the double duty of pursuing *caco* rebels and supplying troops. In one march, Butler and seventy-six men marched 230 miles from Port au Prince to Azua, Dominican Republic in ten days, six hours, and forty-five minutes. The mounted column included two machine guns, 10,000 rounds of ammunition, and a twenty-four-mule

⁶⁰ "Jungle Trails," 1919. Marines Training Folder. *The Banana Wars: Haiti Photo Collection*, U.S. Marine Corps History Division, Quantico, VA.

pack train with provisions for three weeks.⁶¹ After six days rest in Azua, the two-column pack train covered 176 miles in five days, eight hours, and forty-five minutes on their return route to Port au Prince. Much of the trek crossed a 3000-foot mountain range, forcing the men to dismount and pull their animals and having to survive on only two meal rations for the entire remainder of the march.

While mounted missions to the extremity of Butler's were rare, they highlighted the exhausting conditions facing men and animals in pack trains. Still lacking accurate maps of trails five years into the occupation, many pack train commanders had only verbal descriptions of routes or if they were lucky had a native guide.⁶² Within a week of arriving First Lieutenant Chesty Puller led a pack train with twenty-five Haitian Gendarmes from Port au Prince to Mirebalais and Las Cahobas. Unprepared for his first mission, Puller lacked maps, had no training for mule care, and a language barrier barred him from communicating with his men. He set a grueling pace, but miraculously made the thirty-four mile round trip without animal casualties. Pack train commanders learned quickly that taxing animals too heavily only burnt them out by causing them to overheat.

Resourcefulness, ingenuity, and sheer will characterized land transportation in Haiti. Marine Corps and Gendarmerie units utilized whatever was available to them in order to complete the mission. Many operations pulled together a combination of water, rail, truck, and pack transportation. For instance, small boats

⁶¹ Letter Smedley Butler to Thomas S. Butler, October 1, 1916 as reprinted in *General Smedley Darlington Butler: The Letters of a Leatherneck, 1898-1931* by Anne Cipriano Venzon, 188.

⁶² Hoffman, 27.

and trucks moved provisions and gasoline from Port au Prince to Gonaives.⁶³ Cities on Class B or C roads were the end state in a supply line that included motor transport and pack trains. As garrisons and patrols reached further into the interior, units became nearly fully reliant on pack trains. Out of twenty-two garrisoned towns, seventy-five percent utilized pack trains as their main or secondary form of supply in 1921. By America's 1934 withdrawal all three departments had the capacity in good weather to receive supplies by truck, boat, or pack train.⁶⁴

⁶³ Brigade Intelligence Office, "Station List and General Information Map," First Brigade, U.S. Marine Corps (Port au Prince, Haiti, 1921) from Haiti Operations Reports, Intelligence Summaries 1921-1924/3/18A/127/NARA.

⁶⁴ U.S. Marine Corps, *Military Monograph of Haiti*, (Government Printing Office, 1934), Appendix A: System of Supply.

Conclusion

As Haiti stabilized, military operations took a back seat to public works projects and Haitianization. Starting in 1927, the Gendarmerie began promoting capable Haitian enlisted personnel to officers within the constabulary, thereby gradually decreasing the number of noncommissioned Marines serving as Gendarmerie officers. When the turnover began only twenty-five percent of the Gendarmerie officer corps was Haitian; four years later Haitian presence nearly doubled.¹ In fact, by 1931 Haitian officers commanded seventy six percent of the constabulary's sub-districts and thirty five percent of its main districts.² Gendarmerie leadership also reformed the state military academy *Ecole Militaire*, increasing class sizes and replacing faculty. Under Gendarmerie Chief Major General Clayton Vogel's recommendations, the constabulary bolstered its ordnance and equipment stores, buying one hundred and fifty Browning light machine guns and various other supplies in the final days of occupation.

A 1929 uprising by anti-occupation proponents shocked American officials and exposed weaknesses in the Gendarmerie.³ The resulting American investigation recommended a shortened timeline for turning over agencies and hastening the

¹ James H. McCrocklin, *Garde D'Haiti: Twenty Years of Organization and Training by the United States Marine Corps* (Annapolis, MD: The United States Naval Institute, 1956), 212.

² Clayton Vogel, "Board of Investigation to inquire into and report upon the officer personnel required to carry into effect the Plan of Haitianization," *Garde d'Haiti* (Port au Prince, Haiti, August 28, 1931) from Haitianization of Haiti/9/241/127/NARA.

³ Allan R. Millett, *Semper Fidelis: The History of the United States Marine Corps* (New York: The Free Press, 1991), 209.

pace of withdrawal. In light of the investigation, Gendarmerie and expeditionary forces alike hesitantly turned over control of government agencies to their Haitian counterparts nearly two years earlier than originally planned. In July 1934, Navy transports and supply ships began the withdrawal process, evacuating the Marines' non-essential materials and civilian dependents.⁴ On August 15, 1934, amidst cheering Haitians, Navy and Marine Corps personnel boarded troop transports and steamed towards the U.S. leaving the Republic stabilized with a solid infrastructure.

In their nineteen-year occupation, the U.S. Marine Corps evolved from a service fighting to survive to an institution known for its participation in small wars. At the same time the Marines were in Haiti, they also deployed to Nicaragua (1912-1925, 1925-1933) and the Dominican Republic (1916-1921). Despite years of experience in the Caribbean, the Marine Corps failed to consistently forward lessons learned. Even the secondary efforts by Smedley Butler to translate the 1915 edition of the U.S. Navy's *Landing Force Manual* for the Gendarmerie did not extend past Haiti's borders.⁵ The localized nature of small wars severely limited the dissemination of experiences, forcing Marines instead to rely on veterans. Small wars practice finally found a platform in 1940 when the Marine Corps published the *Small Wars Manual*.

⁴ Ivan Musicant, *The Banana Wars: A History of United States Military Intervention in Latin America from the Spanish-American War to the Invasion of Panama* (New York, NY: Macmillan Publishing Company, 1990), 233.

⁵ Keith B. Bickel, *Mars Learning: The Marine Corps Development of Small Wars Doctrine, 1915-1940* (Boulder, CO: Westview Press, 2001), 98.

The influence of logistics on military operations cannot be overstated. At the most basic level troops and animals need food, water, and ammunition to survive in the field.⁶ Therefore, a steady supply of rations, potable water, and ammunition are imperative to being able to carry out missions. Even under the best environmental circumstances troops in Haiti frequently fell short in procuring the “big three” of supply. Haiti’s decrepit road system, grueling terrain, and monsoon rains did not help the situation, forcing Marines to rely on pack trains or aircraft for resupply in the interior.

If logistics is the lifeblood of a military operation then roads, trails, and railroads are the arteries. The Marine Corps quickly realized that in small wars logistics infrastructure was both a means to an end and an end in itself. The occupation of Haiti became a marriage of military control and construction management. The refurbishment and development of roads, medical services, and buildings all served the dual purpose of strengthening infrastructure and providing the Gendarmerie and Marines with critical services. The nineteen-year occupation allowed a generation of Marines to witness the juxtaposition of technological advancement against a backdrop of fundamental logistics. In the end, the Marines did whatever it took to get the job done and created a blueprint for small wars logistics in the process.

⁶ SWM, 3-2.

Appendix A

Gendarmerie D'Haiti Commanders and Staff

Commandant: Major General in the Gendarmerie

Lieutenant Colonel Smedley Butler	December 3 1915-May 1 1918
Colonel Alexander Williams	May 2 1918-July 18 1919
Lieutenant Colonel Frederick Wise	July 19 1919-January 16 1921
Lieutenant Colonel Richard Hooker	January 17 1921-April 14 1921
Lieutenant Colonel Douglas McDougal	April 15 1921-April 11 1925
Colonel Julius Turrill	April 12 1925-May 12 1927
Colonel Frank Evans	May 18 1927-March 31 1930
Colonel Richard Williams	April 1 1930-June 21 1933
Lieutenant Colonel Clayton Vogel	June 22 1933-July 31 1934

Assistant Commandant and Chief of Staff: Brigadier General in the Gendarmerie

Colonel Alexander Williams	July 24 1916-May 1 1918
Major James Tracy	July 5 1918-July 9 1919
Lieutenant Colonel Richard Hooker	October 9 1919-January 16 1921
Major James Meade	May 24 1921-April 20 1923
Major Calvin Matthews	April 21 1923-May 29 1926
Colonel William Harllee	August 31 1926-May 8 1927
Major William Bevan	May 9 1927-June 6 1928
Lieutenant Colonel Frederick Ramsey	June 8 1928-July 18 1929
Lieutenant Colonel Hamilton South	July 20 1929-November 27 1929
Lieutenant Colonel Richard Creesy	December 15 1929-September 3 1930
Lieutenant Colonel Clayton Vogel	November 12 1930-June 21 1933
Major Thomas Clarke	June 22 1933-July 31 1934

Appendix B

Marine Corps Commanders and Staff

First Brigade Commander

Colonel Littleton Waller	August 15 1915-November 21 1916
Brigadier General Eli Cole	November 21 1916-November 27 1917
Colonel John Russell	November 28 1917-December 6 1918
Brigadier General Albertus Catlin	December 7 1918-July 14 1919
Lieutenant Colonel Louis McCarty Little	July 15 1919-October 1 1919
Colonel John Russell	October 2 1919-January 14 1922
Colonel George Van Orden	January 15 1922-March 28 1922
Colonel Theodore Kane	March 29 1922-November 15 1923
Colonel William McKelvy	November 16 1923-January 21 1924
Brigadier General Ben Fuller	January 21 1924-June 11 1925
Colonel William McKelvy	June 12 1925-June 25 1925
Colonel Harold Snyder	June 26 1925-July 29 1925
Brigadier General Ben Fuller	July 30 1925-December 7 1925
Colonel John Myers	December 8 1925-January 24 1928
Colonel Presley Rixey, Jr.	January 25 1928-February 22 1928
Colonel Louis Gulick	February 23 1928-June 24 1929
Colonel Richard Cutts	June 25 1929-May 11 1931
Brigadier General Louis McCarty Little	June 3 1931-August 15 1934

Chief of Staff

Lieutenant Colonel Charles Long (No position again until 1920)	August 16 1915-June 1 1916
Major Thomas Turner	October 25 1920-June 20 1923
Major William Upshur	July 1 1923-June 21 1924
Major Holland Smith	June 21 1924-August 6 1925
Lieutenant Colonel Eli Fryer	August 11 1925-July 16 1927
Lieutenant Colonel Thomas Clinton	July 17 1924-July 24 1928
Major Paul Marmion	July 25 1928-July 2 1930
Major William Sullivan	July 3 1930-November 1 1931
Major Harry Smith	November 2 1931-April 4 1934
Major Alfred Noble	April 7 1934-August 15 1934

First Regiment Commander

Colonel Theodore Kane	August 8 1915-August 15 1915
Colonel Eli Cole	August 16 1915-May 8 1916

Second Regiment Commander

Colonel Eli Cole	July 31 1915-August 15 1915
Colonel Theodore Kane	August 16 1915-June 30 1916
Colonel Eli Cole	July 1 1916-November 30 1916
Lieutenant Colonel Philip Bannon	December 1 1916-January 10 1918
Major Richard Hooker	January 11 1918-March 31 1918
Major John Wadleigh	April 1 1918-April 28 1918
Lieutenant Colonel Richard Hooker	April 29 1918-July 20 1919
Lieutenant Colonel Thomas Brown	July 21 1919-October 2 1919
Colonel Randolph Berkeley	October 3 1919-October 20 1921
Colonel George Van Orden	October 21 1921-July 9 1923
Colonel William McKelvy	July 10 1923-June 10 1925
Major Maurice Shearer	June 11 1925-June 30 1925
Colonel Harold Snyder	July 1 1925-April 8 1926
Colonel Macker Babb	April 9 1926-June 30 1927
Major Archibald Young	July 1 1927-August 19 1927
Colonel Presley Rixey	August 20 1927-May 21 1929
Colonel Richard Williams	May 22 1929-May 30 1930
Colonel Edward Manwaring	May 31 1930-May 15 1932
Colonel Harry Bartlett	May 16 1932-June 16 1932
Colonel James Buttrick	June 17 1932-December 27 1933
Colonel Eli Fryer	December 28 1933-May 31 1934
Major Samuel Budd	June 1 1934-August 15 1934

Marine Observation Squadron 9

Captain Harvey Mims	February 22 1919-November 30 1919
Captain Roy Geiger	December 1 1919-January 20 1921
Captain Arthur Page, Jr.	January 21 1921-March 28 1921
Major Francis Evans	March 29 1921-March 4 1923
Captain Louis Bourne	March 5 1923-November 12 1925
Major Roy Geiger	November 13 1925-July 8 1927
Captain Russell Presley	July 9 1927-August 28 1928
Major Francis Evans	August 29 1928-July 2 1930
Major James Davis	July 3 1930-May 15 1932
Major James Moore	May 16 1932-August 15 1934

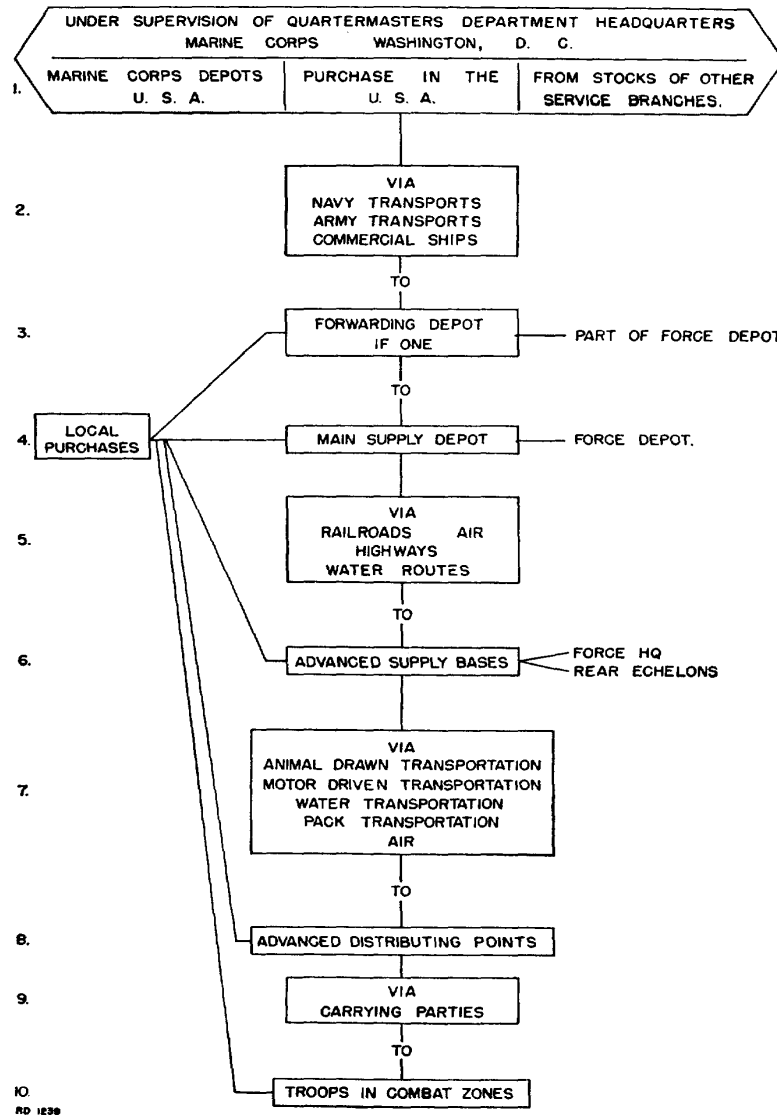
Appendix C

Supply Distribution Chart from *Small Wars Manual*

SWM 3-5

SUPPLY

SUPPLY PROCUREMENT AND DISTRIBUTION CHART FOR SMALL WARS MANUAL



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