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**US Army Corps
of Engineers**
HUNTSVILLE ENGINEERING
AND SUPPORT CENTER



ARCHIVE SEARCH REPORT

FINAL

Marine Corps Recruit Depot Eastern Recruiting Region Parris Island

Beaufort County, South Carolina

SEPTEMBER 2001

Prepared by
US Army Corps of Engineers
ST. LOUIS DISTRICT

EXECUTIVE SUMMARY

Marine Corps Recruit Depot Eastern Recruiting Region (MCRD ERR) Parris Island consists of approximately 6,707.955 acres in Beaufort County, South Carolina. Modern military use of Parris Island began with the construction of the U.S. Naval Station, Port Royal in the 1890s. The Marine Corps established a training base on the island in 1909 on a temporary basis and permanently in 1915. The installation increased in size nearly a hundred fold during the World War I expansion of the base to include the entire island. The Marine Corps' main mission for the base has been recruit training, but it also included artillery training in the late 1930s and an air station in the 1940s. Ordnance and explosive (OE) and chemical warfare material (CWM) related features of the base included assorted small arms ranges, rocket, grenade and mortar use, coastal defense gun emplacements, aerial bombing targets, artillery impact areas, gas chambers, various ordnance storage areas, maneuver areas, and training stations and courses.

The Archives Search Report identified 29 ranges associated with Parris Island, including those currently in use, historic ones and three of questionable existence. The following pages contains a table of the identified ranges on Parris Island. The ASR identified a number of other historic ranges beyond the installation boundary, which are Formerly Used Defense Sites (FUDS) and further investigation is the responsibility of the U.S. Army Corps of Engineers. The ASR companion volume *Range Identification and Preliminary Range Assessment*, contains further range information in a format consistent with the DoD proposed range rule, *Closed, Transferred, and Transferring Ranges Containing Military Munitions*.

Ranges Identified	Time Frame of Use (Approximate)	Current Range Status
Khe Sanh/Range A	1918 to present (1999)	Range remains in use.
Hue City/Range B	1918 to present (1999)	Range remains in use.
Chosin/Range C	1942 to present (1999)	Range remains in use.
Starlight/Range D	1942 to present (1999); earlier range use suspected.	Range remains in use.
Inchon/Range E	1944 to present (1999); earlier range use suspected.	Range remains in use.
Pusan Range, Nak Tong Range and Recreational Firing Range (Broad River Small Arms Ranges)	1918 to early 1940s, single range; early 1940s to present (1999), as multi-small arms range complex	Range remains in use.
Rocket and Mortar Impact Area	1930s? to early 1960s?	Range remains as part of Khe Sanh/Range A's safety fan.

Indoor Small Bore Range (Building 765)	early 1950s to present (1999)	Range remains in use.
Miscellaneous Training Stations, Courses and Maneuver Areas	maneuver ranges: 1918 to present; Page Field stations and courses: mid-1980s to present	Range remains in use.
Guadalcanal Hand Grenade Range	1974 to present (1999)	Range remains in use.
Mine and Booby Trap and Practice Grenade and Mine Field Range	early 1980s to present (1999)	Range remains in use.
Practice Grenade Range	late 1980s to present (1999)	Range remains in use.
Combat Assault Course	1987 to present (1999)	Range remains in use.
Gas Chamber (Bldg. 793)	early 1980s to present (1999)	Range remains in use.
Aerial Bombing Target at Page Field	mid-1930s to 1942	Range part of Page Field training stations, courses and maneuver area.
Strafing Range at Page Field	late 1930s	Range part of Page Field training stations, courses and maneuver area.
Aerial Bombing Target at Golf Course	1942 to 1946	Redeveloped as a golf course.
Trap and Skeet Ranges at Page Field	early 1940s to early 1950s	Buildings razed; range area remains undeveloped.
Recreational Firing Range at Horse Island	mid-1980s to present (1999)	Range remains in use.
Aerial Bombing Target at Parade Deck	mid-1930s to early 1940s	Redeveloped as parade deck.
Rifle Range at Ballast Creek	1916 to 1918 (portions may have remained in use through late 1930s)	Redeveloped, currently includes dredge spoil and buildings.
Field Artillery West Main Range	1937 to 1940	Portions redeveloped for a variety of uses, including Argonne Housing Area; other portions remain undeveloped.
Field Artillery East Shrapnel Range	1937 to 1940	Generally remains undeveloped, except for Gibb's Island (i.e. Guadalcanal Hand Grenade Range).
Gas Chamber (Bldg. 685)	1945 to early 1950s	Building and vicinity remain in use as Close Combat Instructional area.
Aerial Bombing Target at	early 1940s to 1946	Range remains undeveloped.

Southern Tidal Flats		
Gas Chamber at Elliott's Beach	mid-1950s to early 1980s	Building razed.
Grenade Range Near Old Swimming Pool at Weapons and Field Training Battalion Area	early 1940s?, existence of range suspect	Suspect range in housing area of Weapons and Field Training Battalion Area.
Fuse Range at Elliott's Beach	1991?, existence of range highly suspect	Suspect range in undeveloped area near Elliott's Beach.
Hand Grenade Range near Elliott's Beach	1991?, existence of range highly suspect	Suspect range in undeveloped area near Elliott's Beach.

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1.0 INTRODUCTION

1.1 AUTHORITY

Section 107 of the Federal Facilities Compliance Act of 1992 amended the Resource Conservation and Recovery Act (RCRA). This act required the U.S. Environmental Protection Agency (EPA) to promulgate regulations identifying when conventional and chemical military munitions become hazardous waste subject to RCRA Subtitle C regulations. The EPA's final military munitions rule, published 12 February 1997 (62 FR 6622), postponed action on identifying military munitions on closed, transferring, or transferred ranges as solid waste pursuant to the Department of Defense (DoD) developing the "range rule", to adequately protect human health and the environment.

The DoD proposed range rule, *Closed, Transferred and Transferring Ranges Containing Military Munitions*, Title 32 Code of Federal Regulations (CFR) Part 178, contains a five part process that is not inconsistent with the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). The proposed rule is tailored to the special risks posed by military munitions and military ranges. The rule is proposed under the authorities of the Defense Environmental Restoration Program (DERP); the DoD Explosive Safety Board (DDESB); and Section 104 of CERCLA as delegated to the DoD by Executive Order (EO) 12580 (59 FR 2923, 23 January 1987). Active and inactive ranges on military installations are not covered by the range rule. *DoD Ammunition and Explosives Safety Standards (DOD 6055.9 STD)*, published in July 1997, provides range guidance on these facilities.

In July 1997, Headquarters, U.S. Marine Corps contracted with the U.S. Army Corps of Engineers St. Louis District to prepare an *Archive Search Report (ASR)* and *Range Identification and Preliminary Assessment Report* to facilitate development of a comprehensive range inventory on Marine Corps installations. These reports provide detailed information on facility missions and features relating to ordnance, explosives, suspected chemical warfare materials (CWM) and any other warfare materials (i.e., radiological, biological).

Since 1990, the U.S. Army Engineering and Support Center, Huntsville (USAESCH), has been the Center of Expertise (CX) and Design Center for Ordnance and Explosives (OE). In cooperation with the USAESCH, the U.S. Army Corps of Engineers, St. Louis District, prepares ASRs in support of environmental restoration at active Department of Defense installations, Formerly Used Defense Sites (FUDS) and installation transitions under Base Realignment and Closure (BRAC) recommendations

1.2 SUBJECT

Marine Corps Recruit Depot Eastern Recruiting Region (MCRD ERR) Parris Island consists of approximately 6,707.955 acres near Beaufort and Port Royal, South Carolina. Although the French and Spanish built fortifications on the island in the 15th century, modern military use at Parris Island began with the construction of the U.S. Naval Station, Port Royal in the 1890s. The dry dock facility was obsolete within 15 years, which allowed the Marine

Corps to establish a training base on the island first in 1909 on a temporary basis and permanently in 1915. The installation increased in size nearly a hundred fold during the World War I expansion of the base to include the entire island. Although, other missions have been associated with Parris Island, such as the Marine Corps Air Station on Page Field in the 1940s or artillery training in the late 1930s, the main mission of the base has been recruit training since the Marine Corps has controlled the site. Ordnance and explosive (OE) and chemical warfare material (CWM) related features of the base included assorted small arms ranges, rocket, grenade and mortar use, coastal defense gun emplacements, aerial bombing targets, artillery impact areas, gas chambers, various ordnance storage areas, maneuver areas, and training stations and courses. Plate 1 in the report plates section shows the general location of the site.

1.3 PURPOSE

The ASR compiles information obtained through historical research at various archives and records holding facilities, interviews with persons associated with MCRD ERR Parris Island and an inspection of the site. The search directs efforts towards determining possible use or disposal of OE and CWM on the military establishment. The research places particular emphasis on establishing the types, quantities and areas of use and disposal. This process obtains information for use in developing recommendations for further action at MCRD ERR Parris Island.

1.4 SCOPE

This investigation focuses on OE and/or CWM usage on identified ranges at MCRD ERR Parris Island. A companion volume, *Range Identification and Preliminary Range Assessment*, contains information required by the range rule and DOD 6055.9 STD. In support of the range information, the Archive Search Report presents:

- A brief history of the military activities in the vicinity of MCRD ERR Parris Island.
- A review of related site investigations.
- Review of archives and repositories visited for historical records, specifying the extent of the records searched.
- An aerial photography and map analysis of the site.
- Real estate information, past and present.
- Findings of the site inspection.

2.0 PREVIOUS SITE INVESTIGATIONS

2.1 CORPS OF ENGINEERS DOCUMENTS

The Charleston District of the Corps of Engineers investigated the Formerly Used Defense Sites (FUDS) in Beaufort County in support of DERP. The Charleston District completed an Inventory Project Report (INPR) number I04SC0808 for MCRD ERR Parris Island in 1989. The INPR assigned a categorical exclusion to the MCRD ERR Parris Island based on it being an active DOD site. Other completed INPRs in Beaufort County were reviewed but they did not provide applicable information to this report not available from other sources.

2.2 OTHER REPORTS

Other investigations performed at MCRD ERR Parris Island include numerous environmental and hazardous and toxic waste studies. The Marine Corps prepared these investigations in accordance with the Installation Restoration Program (IRP), DERP and the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). Generally, the primary focus of these previous studies was not OE and CWM but Hazardous, Toxic and Radioactive Waste (HTRW). The following paragraphs discuss the relevant OE and CWM information gained from these reports¹:

Naval Energy and Environmental Support Activity

1986 *Installation Assessment Study of Marine Corps Recruit Depot Parris Island, South Carolina*, dated September 1986.

This report identified 16 sites that were potentially contaminated and recommended further investigation of 6. Under the Waste Generation portion of the report, it discussed several areas relating to OE use. Of note, they estimated 25,000-50,000 grenades were used yearly at Parris Island and reported TNT and RDX concentrations of 0.05 and .35 ppm respectively at the 1977 grenade range (i.e. Guadalcanal). At the Infiltration Courses, structure 4023 and 4024 (i.e. Combat Assault Course), it estimated that 6,400 ¼ pound blocks of TNT were detonated to simulate artillery fire. Soil samples show TNT content as high as 81 ppm and RDX as high as 890 ppm. As for NBC training, it makes note of a gas chamber Quonset hut at Elliott's Beach (structure EB-11), which was demolished following the gas chamber's move to AS26 in 1984. The report also notes that the only NBC material used is tear gas, though evidence gathered for this ASR that Chemical Agent Identification Sets (CAIS) were at Parris Island (see section 4.1.3).

Naval Facilities Engineering Command - Southern Division

1998 *Master Work Plan Marine Recruit Depot Parris Island, South Carolina Comprehensive Long-Term Environmental Action Navy (CLEAN) Contract*, dated March 1998

¹ These paragraphs do not include a comprehensive inventory of these studies or review of their contents. Not all the reports and studies reviewed contained information directly used in this ASR.

This document highlighted the status for the Installation Restoration sites at Parris Island. The site/SWMUs (solid waste management unit) were reviewed and compared to the OE areas in this report.

3.0 SITE DESCRIPTION

3.1 LAND USE

3.1.1 Location

MCRD ERR Parris Island consists of approximately 6,707.955 acres in Beaufort County, South Carolina (see Plate #1). Parris Island lies at the entrance to Port Royal Sound, approximately six miles south of Beaufort, South Carolina.

3.1.2 Prior Site Use

Prior to the Navy and Marine Corps operation of MCRD ERR Parris Island, predominate use of the dry land was for private residences and agricultural purposes. The wetlands remained undeveloped.

3.1.3 Present Site Use

As implied by its name, the MCRD ERR Parris Island is the Marine Corps eastern training base for their recruits.

3.2 OTHER SITE DATA

Previous reports and investigations prepared for this installation included comprehensive information on the climate, geology, soils, hydrology, ecology, demographics and archaeology for the Twentynine Palms area. To avoid duplication of this work and economize efforts, this report does not include information concerning these topics. If required, consult the holdings at MCRD ERR Parris Island's Natural Resources and Environmental Affairs (NREA) office.

4.0 SITE HISTORY

4.1 HISTORICAL SITE SUMMARY

4.1.1 General Site History

The **Marine Corps Recruit Depot Eastern Recruiting Region Parris Island, South Carolina** is the oldest, major Marine Corps facility in the United States. Prior to its establishment in 1915, Parris Island had a military past that spanned over 400 years and included fortifications constructed by the Spanish, French and U.S. Navy.²

The military history of Parris Island begins when the French Captain Jean Ribaut brought an expedition to the area in 1562, and named the sound Port Royal. Ribaut left behind a small outpost named **Charlesfort**, generally accepted as being located on the southern end of Parris Island. The post was abandoned early the following year. By 1566, the Spanish controlled the area and they constructed **Fort San Felipe** in the vicinity of the original French fortifications. Following its destruction in 1576, the Spanish established a new fort, **Fort San Marcos**, also in the vicinity between 1577 and 1586. This fort was abandoned in 1587 and by the 1600s, the English controlled Carolina. The later 18th century fortifications in the greater Beaufort and Port Royal Sound area, such as the 1731 Fort Frederick, were not established on Parris Island.

In 1860, South Carolina succeeded from the Union, and Confederate forces established fortifications on both Hilton Head and Bay Point at the entrance to Port Royal Sound. These fortifications fell to the Union in November 1861, which then controlled the entire area. Although, occupied by Union forces afterwards, the only military use of the Parris Island during the Civil War appears to be as a coaling station. The fortification on either side of the entrance to the Sound remained in the military's hands.³

Proposals to establish a permanent Naval depot in the Beaufort/Port Royal area occurred as early as 1856, though it wasn't until 1882 that Congress appropriated funds for a naval coaling station, storehouse and wharf. The Navy purchased approximately 41 acres of land in 1883 on the northeast side of Parris Island and construction began on the naval station. Subsequent appropriations in 1890 expanded the scope of the installation to include a dry dock. On 26

² Unless otherwise noted, section 4.1.1 relies on Eugene Alvarez's unpublished manuscript *Parris Island: "The Cradle of the Corps."* *A History of the United States Marines Corps Recruit Depot, Parris Island, South Carolina, 1562-1998*. This manuscript was originally researched and written for the History and Museums Division, Headquarters, U.S. Marines Corps and is similar to other histories published by the USMC. This investigation located additional primary source documentation that confirmed much of the material in that manuscript, plus others that augmented or contested it. When disparities arose, this investigation relied on the primary sources.

³ See Section 5.2 Potential DOD Ownership for a more complete discussion of these properties: Hilton Head Military Reservation and Bay Point Military Reservation.

June 1891, the facility was officially designated as the **United States Naval Station, Port Royal, South Carolina** and the first Marine Corps detachment at Parris Island was established at that time.

In 1898, the Spanish American War broke out. The coastal defenses of Port Royal Sound included Hilton Head Military Reservation, Bay Point Military Reservation and the unfinished Fort Freemont, where modern breech loading weapons were yet to be emplaced. As such, additional temporary fortifications were established on Parris Island.

At the turn of the century, the size of ships needing to dry dock increased. Instead of enlarging the Parris Island facility, in 1901 the Navy recommended and Congress authorized establishing a new naval station on the Cooper River at Charleston, South Carolina (Bureau of Yards and Docks, 1901). This new shipyard eventually rendered the Parris Island facilities obsolete and by 1904 the only personnel at the base were the Marine guards protecting government property (Coletta 1985). Taking advantage of the available assets, the Commandant of the Marine Corps established the **Marine Officers' School, U. S. Naval Station, Port Royal**, which opened on 1 January 1909. The following year, a temporary recruit training facility was also opened at Parris Island but both facilities were deactivated in 1911. On 28 August 1911, the installation was redesigned the **U. S. Naval Disciplinary Barracks, Port Royal**.

The post finally received a permanent tenant on 25 October 1915 when the **Marine Barracks, Port Royal, South Carolina**, was established and the Navy officially turned the station over to the Marine Corps. Care of the Naval Disciplinary Barracks was also turned over to the Marines at that time.

The United States entrance into World War I created a need for a much larger Marine Corps and accordingly additional recruit training facilities. As such, the installation expanded to include all of Parris Island, which represented an increase in land size from the naval station of nearly 100 times (see section 5.1 Real Estate). The increased size allowed for additional training and maneuver areas including: a New Rifle Range on the west side of the island; a Maneuver Grounds, at the southern end; a Quarantine or Receiving Station, at the location of the current Marsh's Landing; and the contemporary Rifle Range became a flying field with seaplane access (see Appendix G-4 & 6). The name of the post was also changed to **Marine Barracks, Paris Island, South Carolina**, on 22 June 1917. The more familiar spelling with two "r"s was mandated the following December. By the end of the war, Parris Island trained over 41,000 recruits for the conflict in Europe.

The 1920s-1930s saw a continuation of the recruit training mission at Parris Island though other schools such as a Noncommissioned Officers school, rifle coaches school and Sea-Going Depot also existed. The active use of the original flying field didn't last long, as it was closed on 15 November 1921 and abandoned on 21 September 1922 (Coletta 1985). Although budgets were tight, especially during the depths of the depression improvements to the base facilities at the time included much needed bridge and road access and fresh water supplies. The 1930s also saw the reestablishment of aviation facilities at Parris Island with construction of lighter than air mooring masts and a new airfield on south end of the island. This larger

airfield became operational and was officially designated **Page Field** in 1935. Two years earlier, the Parris Island naval disciplinary barracks closed and the remaining prisoners were removed. By 1938, the three missions of the Marine Barracks at Parris Island were: to equip and train fighting recruits, provide training areas for aviation squadrons and provide training areas for antiaircraft and pack howitzer artillery units (Headquarters USMC 1938). Although artillery firing on Parris Island occurred as early as 1921, this mission expanded in 1937 with the establishment of two ranges on post and the acquisition of the offsite **Hilton Head Lighthouse Reservation**. The Defense Battalions formed at Parris Island (i.e. 3rd, 4th, 5th, 9th and 11th) primarily trained at the Hilton Head location dubbed, **Camp McDougal**. On 15 December 1941, the Air Detachment Page Field officially became **Marine Corps Air Station Parris Island, South Carolina** and was further developed (Heinl 1940; MCAS Parris Island 1945).

The United States entrance into World War II required a massive buildup of basic trainees. During 1942, 13 recruit battalions were operational at Parris Island, including a Women's Reserve Battalion activated on 14 January 1944. A depot Drill Instructor School was also operational as early as December 1944, or January 1945. The post reached a record of 18,398 recruits on the base at one time in 1945. During the entire wartime period, the depot trained 240,509 recruits.

Following the war, two of Parris Island earlier missions were withdrawn. The establishment of Camps Pendleton and Lejeune and an expanded Quantico provided superior facilities for artillery and antiaircraft training. On 1 July 1946, Page Field was placed in caretaker status, as its runways were not long enough for newer aircraft. By March 1947, the remainder of the squadron was transferred to Cherry Point.

Parris Island's primary mission remained recruit training, as is reflected in its redesignation on 1 December 1946, as the **Marine Corps Recruit Depot (MCRD) Parris Island, South Carolina**. The post war period also saw the integration of women on a permanent basis into the Marine Corps in 1948, with a recruit battalion being formed at Parris Island. In September 1949, the training of African-American recruits began at Parris Island with the closing of the segregated Montford Point facility at Camp Lejeune. The Parris Island Naval Hospital also closed on 31 August 1949, following the completion of a new Naval Hospital in Beaufort.

In June 1950, the United States entered the Korean War. The wartime expansion swelled the number of recruits at Parris Island to a one time high of 21,540 in 1952, surpassing World War II figures. 1952 also saw the establishment of a permanent Marine Corps Drill Instructor School at Parris Island. Tragedy struck the depot on 8 April 1956, when six recruits drowned in a training accident in Ribbon Creek. Reforms in training and instruction followed the infamous incident.

During the Vietnam War, Parris Island once again geared up to train additional troops needed for the conflict. Following that war, the length of the recruit training increased to 12 weeks and in 1974, an Individual Combat Training Course for recruit training was activated at Page Field.

On 1 April 1983, the base was "officially" redesigned **Marine Corps Recruit Depot Eastern Recruiting Region Parris Island, South Carolina**, reflecting a 1976 change that placed all the recruiting districts directly under the command of the commanding officer of the recruit depot. In 1988, a Basic Warrior's Course was added and the Crucible Course was first run in December 1996. Training of basic recruits continues to the present as the primary mission of Parris Island, though the length and content of the curriculum has changed over time.

4.1.2 Summary of Ordnance and Explosives Activities

The MCRD ERR Parris Island has a long and varied history of ordnance usage. Besides the small arms qualifications, pyrotechnics, simulators, and weapons familiarization (rockets, 40mm grenades and hand grenades) associated with the current basic training program, previous missions at Parris Island have included the use of coastal defense cannons, artillery firing, and aviation bombing and strafing.

This investigation found no specific evidence concerning the weapons used or emplaced at Parris Island prior to the late 19th century. Assumably the 16th century French and Spanish forts had cannon mounted for the protection of these works against rival European powers and attacks against Native Americans. The soldiers of these forts would also have been armed with small arm musketry of the period. It is likely that cannon balls and shells, musket balls and powder to shoot these arms were stored inside the forts.

No direct evidence was located concerning ordnance use at Parris Island during the next 300 years. The surrounding islands of Hilton Head and St. Phillips had fortifications and saw hostile action during the Civil War. No direct evidence was located that either army used Parris Island for this purpose, though Federal forces had patrols that occupied Parris Island during the war (Alvarez 1998). The presence of ordnance related items remaining from these uses is conceivable but no evidence was located to indicate it.

Following the construction of the Naval Station, the first Marine detachment was assigned to guard the Parris Island facility. The specific types of weapons that accompanied this detail are unknown. With the outbreak of the Spanish-American War in 1898, the coastal defenses of Port Royal were not completely modernized with the Endicott period, breech-loading guns. The three 10-inch disappearing guns and two 4.7-inch rapid fire guns for Batteries Jesup and Fornance at Fort Freemont would not be transferred until the following year. As such, two Civil War era, muzzle loading 8-inch rifles were placed at the Hilton Head Military Reservation (War Department 1898, 1918). Temporary fortifications were also established on Parris Island. **Fort Haines** and **Fort MacKay** clearly show on contemporary site plans (see Appendix G-1). Secondary sources also indicate two additional sites: **Quarantine Fort** and **Station Fort** were also built and the military placed muzzle loading 10-inch Rodman guns, sleeved to 8-inches, on the island (Alvarez 1998). This investigation found no corroborating documentation for this, nor could it determine the specific location of any gun emplacements at Parris Island. However, one site plan for Port Royal Sound shows "projected armament" in the Elliott's Beach area (see Appendix G-33).

Another unconfirmed possibility for the Spanish-American War time period was whether the Beaufort or Broad Rivers were mined. Fort Fremont had a casemate and Building 16 at Parris Island was a Magazine but no supporting documentation was found that indicated that the mining of the rivers occurred. Following this war, Parris Island had a second "temporary storage magazine, building XXI" though its specific location could not be found on the site plans (see Appendix G-2).

The specific types of ordnance associated with the Marine Officers' School and the temporary recruit training facility operated at Parris Island between 1909 and 1911 is unknown. Assuredly, it included small arms training but without locating any site plans for the time period, ascertaining the location of a Rifle Range is not possible. By 1916, site plans show the Rifle Range at Ballast Creek, with firing lines at 200, 300, 350, 400, 500 and 600 yards and a target butt at the southern end (see Appendix G-3). Presumably this is the same small arms range used earlier in 1910-11. No documentation was located concerning the use of grenades or firing areas for heavier weapons such as artillery during this period, though use of these items is conceivable. However, the firing of artillery would have required significantly more real estate than any sources imply the Marine Corps owned at Parris Island prior to WWI.

The World War I build up saw the expansion of the post to include the entire island allowing for additional training areas, including a Maneuver Grounds at the southern end of the island on the current golf course (see Appendix G-4). This appears to be the same location as the Sea-Going Depot, where marines fired artillery in a "grassy enclosed park named in honor of the former post commander, "Battery Pendleton" (Alvarez 1998). The location of the battery, direction of fire and the types of weapons used are unknown. The artillery may have included the 75mm howitzers or 3-inch guns but since the purpose of the training was for ship bound marines, typical naval guns of the time would also seem reasonable. The firing of artillery on Parris Island prior to the late 1930's would have been hampered by civilians who were allowed to remain in their homes on the southern parts of island following the seizure of the land in 1918. A map from 1937 shows the location of some of these residences (see Appendix G-9). Other collected but unreferenced documents also mention this issue.

The WWII expansion also allowed for the construction of a New Rifle Range on the western edge of the island (i.e. the current Weapons and Field Training Battalion area). The new rifle range actually consisted of three ranges: a 1,000 Yard Range, a 600 Yard Range and a Pistol Range (see Appendix G-4 & 6). Although the ranges have been modified and upgraded over the years, their location and use generally corresponds to the current Khe Sanh, Hue City, Pusan and Nak Tong ranges today. The earlier Rifle Range at Ballast Creek was converted to a flying field. The standard small arms at the time were M1903 Springfield rifle, 30 caliber Browning machine gun and the .45 caliber pistol.

By 1919, the ordnance storage of the post expanded to include Magazine, 48, Ammunition Storage and Building 85, Ammunition Salvage Storage, though the location of building 48 could not be ascertained from the map (see Appendix G-5). Assumably these were temporary uses, as latter maps did not indicate an OE mission for either site. Building 85 was latter razed to construct the current Headquarters building.

Besides the troops stationed at the post, Naval and Marine personnel on ships in the area would use the small arms ranges at Parris Island to qualify (USS Patoka 1923), a practice that continues today for military in the area. By 1927, there were 61 targets at the 600 Yard Range, 16 targets at the 1,000 Yard Range and 12 targets at the Pistol Range. The installation felt that these ranges were suitable for machine guns but not light mortars or 37mm firing. In 1930, the increased range of the caliber .30 M1 ammunition necessitated moving the 600 yard rifle range (see Plate 3) (MB PI 1927, 1930). By 1929, Building 20, Ammunition Storage had been constructed at the 600 Yard Range (see Appendix G-6).

Ordnance used in training during the mid-1930s included caliber .22, .45 ball cartridges; cartridges for VERY pistols; cartridges caliber .30, (ball, blank, dummy, tracer, and wooden for V.B. [Viven-Bessieres] rifle grenade); hand grenades (dummy and practice); V.B. rifle grenade (dummy and fragmentation); signals (M5, white star); flares (illuminating, parachute type for rifle grenades) (MB PI 1935; MB PI QM 1936, 1937). The location of a hand grenade or rifle grenade range was not highlighted on site plans of this period.

By 1937, the Marines Corps definitely conducted artillery firing at Parris Island, having set up two impact areas on the installation: an East Shrapnel Range and a West Main Range (see Appendix G-9 and Plate 2). Marines from Quantico traveled to Parris Island and fired 1,794 High Explosive and Shrapnel rounds from French 75mm guns and Pack Howitzers in July 1937. In 1938, Quantico Marines returned, firing 1,828 shrapnel and HE rounds. In 1939 they returned again, though the number of rounds fired is unknown. Annual service practice also occurred for antiaircraft battalions on Parris Island in this time frame, which required renting private property north of the gate for searchlight positions (MB Quantico, 1st Battalion, 10th Marines 1937, 1938; USMC HQ 1939; MB PI, 2nd AA Battalion 1938).

Even with these artillery ranges, the Marine Corps at Parris Island acquired additional land to fire weapons with a longer range than could be fired on the island. On 10 July 1937, the Department of the Agriculture granted the Department of the Navy use of the wildlife refuge that had been the Hilton Head Lighthouse Reservation. Subsequently, the Defense Battalions at Parris Island established Camp McDougal on the lighthouse reservation, using caliber .30 and .50 machine guns, 3 and 5-inch guns. Additional gun emplacements for 7-inch naval guns and the Panama mount for 155mm guns were also installed at Hilton Head, presumably at the lighthouse area but possibly at other Formerly Used Defense Sites (FUDS) on the island (see section 5.2). Artillery use of this site lasted at least through August 1942 when the last Defense Battalion left the area (see Appendix G-14, Heintz, 1940; MB PI 1942). This investigation did not find evidence of the use of the larger artillery weapons on Parris Island.

Although earlier aerial gunnery and bombing could not be documented, by 1938 aerial gunnery and bombing has occurred at Parris Island. This investigation identified four bombing targets on Parris Island:

- Aerial Bombing Target at the Parade Deck (Swearengen 1999)
- Aerial Bombing Target at Page Field (see Appendix G-15)
- Aerial Bombing Target at the Golf Course (see Appendix G-21)

Aerial Bombing Target at the Southern Tidal Flats (site inspection)

By 1941, Army units in the area are also using the southern bombing target. The bombs known to have been used included 3 to-5 pound miniature practice bombs (i.e. AN-MK5, AN-MK-23 & AN-MK43) and the 100-pound sand or water filled practice bombs (i.e. the Navy's MK 15 and the Army's M38A2). The use of aerial rockets or other type of bombs, such as HE or fragmentation bombs, on the Parris Island targets could not be confirmed (see Plates 4 & 5; MB Quantico 1938; Swearingen 1999).

A Strafing Range also reportedly existed and consisted of a wooden platform at Page Field. Its exact location could not be ascertained since it is not shown on the reviewed site plans, but it is thought to have existed at the southeast end of the airfield (see Plate 4 and Appendix G-10). The use of other parts of the installation for bombing and gunnery practice could not be confirmed. The types of small arms recovered from the strafing range area included caliber .50 rounds and possibly 20mm rounds (Swearingen 1999).

By 1942, it appears that both the Parade Deck and Page Field bombing targets are no longer used, having succumbed to the further development of the base at that time. Also during the war, MCAS Parris Island along with Naval Air Station Beaufort acquired 5 water ranges and another 5 off site bombing, strafing and rocketry targets (see Plate 6). These FUDS sites (listed below, see section 5.2 for further details) provided the needed additional ranges for the war time expansion:

- Bull Point Bombing and Strafing Target on Caper's or Pritchard's Island**
- Hunting Island/Fripp Island Bomb Target/Rocket Range**
- Egg Island Dive Bombing Target**
- Edisto Island's Bay Point Strafing Target**
- Impact Target on the northeastern beach of Hilton Head Island**

Following the war, MCAS Parris Island had excess amounts of 2.25-inch Sub-Caliber Aerial Rockets (SCAR), caliber .50 ball and tracer rounds, aircraft engine starters, depth markers and AN-219 bomb fuzes. The closing of the airfield that same year appears to be the end of aerial range use at Parris Island. Additionally, the airfield had a Trap and Skeet Ranges (AS-47 & AS-48) to the north of the airfield's cantonment area during this period (see Appendix G-21 & 34; MCAS PI 1945, 1946a, 1946b).

WWII expansion at Parris Island also saw improvements to the Weapons and Field Training Battalion Area, with the addition of eight Small Bore Ranges along the Broad River upstream from the Pistol Range. They also built two more 600 yard ranges, Range "C" and Range "D", and a Hand Grenade Practice Area to the east of Range "D" (i.e. current Range "E"). Aerial imagery analysis of hand grenade practice area on Range E in 1945, indicates that there may be three undocumented range uses of the area. There is a 350 yard wide butt with firing lines at 100, 200 and 300 yards in line with Ranges B, C & D. Across Range D and E, there are ground features that are approximately 300 yards wide and possibly 600 yards long, which look like a range with a west, northwest direction of fire. Also present are two 150 foot

diameter circles, which resemble snap-in or dry firing ranges (see ASR section 4.4.2.2). Also by WWII, the installation is also using parts of the 1,000 Yard Range for rifle and hand grenades (see Appendix G-13, 17 & 19). Reportedly another Hand Grenade Range existed near the old swimming pool in the Weapons and Field Battalion Training Area, but it was never located on site maps or confirmed by aerial photographs (Swearengen 1999).

Ammunition storage also greatly increased during the war. By 1946, the Weapons and Field Training Battalion area has four Ready Ammunition Stores (i.e. 721-724 and 784) and one Ammunition Storehouse (i.e. 786). A larger ordnance storage complex was built northwest of Page Field and contained three Small Arms Magazine (A1-A3), three High Explosive Magazine (A4-A6), a Fuze Magazine (A7), Smoke Drum Magazine (A8), two Inert Magazines (A9-A10) and a Ready Magazine (A11). By the 1980's several of these buildings had been razed (see Appendix G-19 , 21 & 27)

None of the reviewed site maps denoted a mortar or a rocket range. Demonstrations of the trench mortar at Parris Island are reported to have occurred as early as the 1930s. The standard "trench" mortars of the time were the 3-inch Stokes Infantry Mortar or the 81mm Stokes-Brandt Mortar, though no primary source was located to confirm this use at Parris Island. However, by 1947 the installation was to receive 60mm HE, smoke (WP) and illumination rounds. In 1954 instructors demonstrated the use of the 60mm mortars along with the 3.5 inch rocket launcher. Historical imagery also shows the use of the earlier 2.36-inch rocket . Interviews and the site inspection indicate that Rocket and Mortar Impact Area was in the marshy area between the Broad River and Range "A". OE debris found in this area include 60mm and 81mm mortars, 2.36-inch and 3.5-inch rockets and rifle grenades. A retired EOD CW04 recalled clearing primarily practice rounds, particularly rockets from the area. The use of the 40mm practice grenades and AT-4 anti-tank rocket is currently allowed on Khe Sanh or Range "A", giving credence to its earlier use for rocket and grenade training. The impacting of mortars or rockets at other locations on base was not confirmed (Alvarez 1998; MB PI c.1945; MCRD PI, 6th Battalion 1954; MCRD PI, W&FTB 1997; USMC HQ 1947c; Swearengen 1999).

Shipping records from 1947, indicate that the Parris Island was to receive 400 non-electric blasting caps. The specific use of these items could not be determined, though assumably it was for setting off HE charges for OE disposal or for training charges. This investigation found no evidence of a specified demolition area or pit, but an EOD detachment existed on the installation until the early 1970s. In lieu of a designated EOD area, dud rounds were probably destroyed in place (USMC HQ 1947a; Swearengen 1999).

By the early 1950s, there is one indoor ranges in the Weapons and Field Training Battalion area, a Small Bore Range in Building 765. The presence of other indoor ranges was not confirmed by the reviewed documents. Also by this time, a Grenade Pit exists northeast of the Hand Grenade Practice Range (see Appendix G-22 & 23).

By 1970, a new 600 Yard Range, Range "E" replaces the earlier Hand Grenade Practice Area, Grenade Pit and other ranges noted on aerial imagery. The Small Bore Ranges along the

Broad River north of the Pistol Range have been merged, abandoned or converted to other ranges. The Page Field Trap and Skeet Range also appears abandoned (see Appendix G-25 & 26).

The reviewed site plans did not designate any specific maneuver training areas at Parris Island. However, the site inspection found numerous expended blank small arms cartridge cases in many of the undeveloped areas of Parris Island. The inspection team found these expended blanks cases south of the Weapons and Field Training Battalion Area and around Page Field. Although not an exhaustive survey of the post, it appears to verify the use of the undeveloped areas for maneuver training in the past. Their presence in and around Page Field is hardly surprising given that area's development in the 1970s and 1980s as a training area, with specified courses. The majority of these course or stations do not involve the use of OE beyond blank ammunition, pyrotechnics and simulators. The exceptions include: the Guadalcanal Hand Grenade Range opened on Gibb's Island in 1974; the Practice Grenade & Mine Field, south of East-West runway; a later Practice Grenade Range, north of the East-West runway of Page Field; the 1990s Mine/Booby Trap area, which was earlier NBC Movement Course (1987) and a Practice Grenade Range and Mine Field (1983); and CAC (Combat Assault Course), which had been know as the Infiltration Course, south of the NW-SE runway of Page Field

As of the writing of this report, there are eleven active weapon ranges at Parris Island. The ranges are the multipurpose infantry weapon range, **Khe Sanh**, (i.e. Range "A"); the four known distance ranges, **Hue City, Chosin, Starlight, Inchon** (i.e. Range "B", "C", "D" & "E"); two pistol ranges **Pusan** and **Nak Tong**; an **Indoor Range (Building 765)**; **Guadalcanal grenade Range** on Gibb's Island; the **CAC Range**; and the **Recreational Firing Range** on Horse Island (MCRD PI, W&FTB 1997). Section 7.0 Range Summary contains of a brief description of these ranges and other ranges identified in this report.

Of a minor OE note is the presence of saluting cannons on Parris Island. The type and size of these cannons have varied over time but they all use a blank smokeless powder charge, which fires no projectiles.

4.1.3 Summary of Chemical Warfare Material Activities

Chemical warfare training at Parris Island has primarily concerned introductory training and equipment familiarization using irritants and the use of screening smoke. However, it has also included the use of Chemical Agent Identification Sets (CAIS) and decontamination kits.

This investigation did not uncover any information regarding the use of chemical warfare materials (CWM) at Parris Island prior to 1936. While it may seem probable that gas mask fit training with irritants occurred before this, particularly during WWI, it may not have. The United States' chemical warfare training program was in its infancy in WWI and many of the troops sent overseas didn't received their gas mask training until they got there. Either way, no evidence was located to confirm the presence or use of CWM at Parris Island in the 1910s and 1920s.

The first documented discussion of chemical weaponry at Parris Island occurs on 27 January 1936. It concerned the building of a miniature range for the 4.2-inch Chemical Mortar for training mortar troops without the cost of ammunition. The miniature range used rubber bands instead of powder rings but the discussion implies the contemporary or eventual use of these items, as well as the contemporary 3-inch Stokes Infantry Mortar or the 81mm Stokes-Brandt Mortar. The demonstration use of trench mortars is reported to have occurred at Parris Island in the 1930s (Alvarez 1998; MB PI 1936).

The next year the following items were requested added to the Allowances of Ammunition (Except Small Arms) to begin chemical warfare training in Fiscal Year 1938:

- 50 Grenades, hand, irritant, (CN-DM), M6
- 50 Grenades, hand, tear, CN, M7
- 50 Grenades, hand, smoke, (HC), M8
- 2 Pair Gloves, impervious
- 300 Candles, smoke, HC, M1
- 4 Masks, Diaphragm
- 1 Cylinder, chlorine gas
- 500 Capsules, CN (tear gas) (MB PI 1937)

Whether this indicates the beginning of CWM training or if it began earlier or later is undetermined. Site plans do not identify a Gas Chamber until Building 673 is shown as being added in Fiscal Year ending on 30 June 1945. By 1952 the Quonset Hut Gas Chamber appears to remain in the same spot but has been renumbered as Building 685. Nearby, Building 875 is the Gas Mask Storage Building. Building 685 remains standing today in use for the Close Combat Instruction training near the "Crucible" (see Appendix G-18 & 22). The gas chamber moved to building EB-11 at Elliott's Beach in the mid-1950s, before moving to its current location at building 793 near Page Field in the mid-1980s (Alvarez 1998; Naval Energy and Environmental Support Activity 1986).

The specific types of CWM on hand during WWII are unknown. However, following the war, the installation had 250 drums of surplus F.S. screening smoke at the airfield, which were to be dumped at sea after being shipped to the Naval Ammunition Depot Charleston. They were also requesting 250 tear gas hand grenades at that time (Bureau of Ordnance 1948; USMC HQ 1947b).

Sometime before the mid-1960s the installation received CAIS with war gases, and had already discontinued their use. According to an interviewee, in the 1965-67 time frame, EOD personnel from MCAS Beaufort destroyed about a dozen 8-inch diameter metal containers (i.e. "pigs") filled with glass tubes found in the a warehouse located near the gas chamber. The CAIS were reportedly WWII vintage and based upon their description appear to be the M1 detonation gas identification set with war gases. They were destroyed at MCAS Beaufort by burning them, the standard prescribed method at the time. They tested the area in the vicinity of the WWII gas chamber and detected mustard gas residue, and to a lesser extent lewisite.

This was determined by using the glass tube inhaler type detection kits, where material changed color in the presence of different chemical warfare gases. This account is supported by events a decade late. The Army's Technical Escort Center dispatched a team to inventory, recap and escort a CAIS from Parris Island to MCAS Beaufort in 1975. Although the mission concerned one "pig" or less of ID sets, it took two operations: one in August and another in October. The specific type of CAIS was not identified on the operation reports (Swearengen 1999; USA TEU 1975a, 1975b).

During the 1970's, training at Parris Island included a Nuclear, Biological and Chemical (NBC) Warfare School. By 1981 the NBC program provided each recruit with greater knowledge of the NBC equipment utilized by the Marine Corps. The program included instruction on the NBC suit, decontamination kits and warning devices. Realism was facilitated by simulated chemical attacks utilizing smoke grenades and audible NBC alarms (Alvarez 1998; MCRD Parris Island HQ 1982).

4.1.4 Certificates of Clearance

The archive search did not reveal any certificates of ordnance clearance, decontamination or dedudding associated with MCRD ERR Parris Island. The base had EOD troops on post through the early 1970s, which assumably responded to incidents and range clearance as required. Since that time the EOD unit at MCAS Beaufort has provided assistance as needed. They provided this investigation a review of their Parris Island incident reports from January 1995 to March 1999. There were nearly 50 incidents concerning items thought to relate to past range use. About 85% of the incidents concerned the Guadalcanal Grenade Range. The last response was on 31 October 1996. On 29 June 1997 the MCAS Beaufort EOD cleared the range. The other incidents concerned four practice bomblets (i.e. the 3-pound MK 23) from the golf course area, a flare from the ASP, an artillery simulator from Page Field, a .50 caliber AP round from Marsh's Landing, and a point detonating fuze from the golf course. Discussing the fuze with the staff, they thought it might have belonged to a 60mm mortar but couldn't say for sure.

4.2 REVIEW OF HISTORICAL RECORDS

Appendix A contains full references of all in text citations along with the location of the copied document. The research team searched at the following locations for records relating to OE and CWM activities at MCRD ERR Parris Island. At these repositories the research team used finding aids and records managers to assist in locating documents relevant to the research topic. The ASR team also accumulated complementary documents reviewed on MCRD ERR Parris Island but not specifically used. These complementary documents are stored with the original ASR documents. Appendix H lists additional repositories and personnel contacted which reported no pertinent information.

4.2.1 National Archives

Eighth and Pennsylvania
Washington, D.C. 20408
POC: Rick Peuser
202-501-5671

The research team reviewed the finding aids for the applicable Record Groups and researched the following entries:

Record Group 18 (Records of the Army Air Forces)

Entry 170 Correspondence Relating to Forts, 1917-1938
Boxes 2863, 2889

Record Group 26 (Records of the U.S. Coast Guard)

Entry 100 Boards of Survey (Real Property), 1939-1946
Boxes 24, 25, 30

Record Group 71 (Records of the Bureau of Yards and Docks)

Entry 9 Index to Letters Sent and Received, 1899-1916
Volumes 1886-1899

Entry 14 Index to General Correspondence, 1899-1916
Box 23

Record Group 72 (Records of the Bureau of Aeronautics)

Entry 19 General Correspondence, 1925-1942
Boxes 668, 979-993

Entry 62A General Correspondence
Boxes 2794-2796

Record Group 74 (Records the Bureau of Ordnance)

Entry 25 General Correspondence, 1926-1944
Box 1640

Record Group 77 (Records of the Office of the Chief of Engineers)

Entry 220 Coast Defense Fortification File, 1898-1920
Boxes 1-4

Entry 391 Construction Completion Reports, 1917-1943
Boxes 1-2

Entry 1007 Geographic File
Boxes 31, 34, 114

Entry 1009 Harbor Defenses Geographic File, 1918-1945
Boxes 19-24, 115

Record Group 92 (Records of the Office of the Quartermaster General)

Entry 1205 Letters Sent, 1888-1889
Volume 1

Entry 1206 Letters Received Index, 1889
Volume 1

Entry 1207 Letters Received, 1884
Volume 1

Entry 1208 Letters Sent, 1889
Volume 1

Entry 1209 Index to Correspondence Records, 1890
Volume 1

Entry 1211 Record Cards for Correspondence, 1890
Box 1

Entry 1212 Name Card Index to Entry 1313
Box 1

Record Group 98 (Records of U.S. Army Commands)

Entry 124 Security Classified Correspondence, 1921-1939
Box 1

Entry 134 IV Corps Area Decimal Correspondence File, 1916-1939
Boxes 1-5

Record Group 127 (Records of the U.S. Marine Corps)

Entry 18 (sub-series) General Correspondence, 1913-1932
Boxes 44, 45, 49, 93-96, 110, 231-233, 268-273, 361-371

Entry 18 (sub series) General Correspondence, 1933-1938
Boxes 24, 26, 27, 49, 56, 57, 58, 160-165, 231-233, 237-240

Record Group 153 (Records of the Office of the Judge Advocate General)

Entry 56 Reservation File, 1800-1950
Boxes 31, 411

Record Group 159 (Records of the Office of the Inspector General)

Entry 11 Annual Inspection Reports, 1912-1939
Box 14

Entry 11A Reports of Annual Inspections and Special Investigations, 1917-1920
Boxes 1-10

Entry 26 General Correspondence, 1917-1934
Boxes 400, 703, 793

Record Group 175 (Records of the Chemical Warfare Service)

Entry 2 Index Briefs, 1918- October 1942
Boxes 289, 352, 361, 362, 383

Record Group 394 (Records of U.S. Army Continental Commands, 1920-1942)

Entry 123 IV Corps Area Correspondence, 1920-1942
Boxes 204, 208

Record Group 407 (Records of the Adjutant General's Office)

Entry 366 Special Projects Harbor Defense, 1929-1948
Boxes 2, 3, 15, 19, 20

4.2.2 National Archives at College Park

8601 Delphi's Road
College Park, MD 20740
POC: Rich Boylan
301-713-6800

The research team reviewed the finding aids for applicable Record Groups and researched the following entries:

Record Group 71 (Records of the Bureau of Yards and Docks)

Entry 1001 Naval Property Case Files, 1941-1958
Boxes 1154-1177

Entry 1013 Interdepartmental Air Traffic Control Board Meeting Minutes
Boxes 1-2

Record Group 72 (Records of the Bureau of Aeronautics)

Entry Unclassified General Correspondence, 1948-1949
Boxes 358-360

Entry Unclassified General Correspondence, 1950
Box 190

Entry Unclassified General Correspondence, 1952
Boxes 161-162

Entry Unclassified General Correspondence, 1953
Boxes 233-236

Entry Unclassified General Correspondence, 1954
Boxes 173-179

Entry Unclassified General Correspondence, 1955
Box 191

Entry Unclassified General Correspondence, 1956
Box 183

Entry Unclassified General Correspondence, 1957
Box 187

Entry Unclassified General Correspondence, 1958
Box 144

Entry Unclassified General Correspondence, 1959
Box 135

Entry Records Relating to Inactive Air Stations (Real Estate Files), 1943-1959
Box 13

Record Group 74 (Records of the Bureau of Ordnance)

Entry General Correspondence (Restricted), 1942
Box 425

Entry General Correspondence (Confidential), 1942
Box 700

Entry General Correspondence (Restricted), 1943
Boxes 238, 239, 451

Entry General Correspondence (Confidential), 1943
Box 361

Entry General Correspondence (Restricted), 1944
Boxes 268, 807

Entry General Correspondence (Confidential), 1944
Box 498

Entry 1001 General Correspondence, 1907-1949
Box 58

Entry 1003A General Correspondence (Unclassified and Confidential), 1948-1959
Boxes 93, 114, 125, 200, 361, 476, 498

Entry 1025 Ordnance Status Reports, 1941-1956
Boxes 1-16

1945 Entry 1529 Office of Administration, Construction and Procurement Subject Files,
Box 1077

1946 Entry 4444 Office of Administration, Construction and Procurement Subject Files,
Box 193

1947 Entry 5595 Office of Administration, Construction and Procurement Subject Files,
Box 129

Record Group 77 (Records of the Office of the Chief of Engineers)

Entry 106B General Correspondence, 1918-1945
Boxes 775, 777-780

Entry 1011 Formerly Security Classified Subject Files, 1940-1945
Boxes 477, 685

Record Group 127 (Records of the U.S. Marine Corps)

Entry 18B Office of the Commandant General Correspondence, 1939-1950
Boxes 183, 210-228, 230, 236-244, 249, 402, 481

Entry 37B Record of Training Exercises and Maneuvers, 1941-1950
Boxes 5-15

Record Group 291 (Records of the Federal Property Resources Service)

Entry 5 Utilization and Disposal Service Real Property Disposal Case Files, 1949-1962
Box 200

Record Group 407 (Records of the Adjutant General's Office)

Entry Army-AG Project Decimal File, 1940-1945
Boxes 4332, 4333, 4337, 4353

Record Group 429 (Records of Organizations in the Executive Office of the President)

Entry 12 Real Property Surveys
Boxes 57-58

4.2.3 National Archives, Cartographic & Architectural Branch

**8601 Adelphi Road
College Park, MD 20740
POC: Henry Gwazda
301-713-7040**

Record Group 23 (Records of the Coast and Geodetic Survey)

Entry Danger Area Charts (bombing, gunnery), 1952-1954
Box 4

Record Group 71 (Records of the Bureau of Yards and Docks)

Entry Navy Department, Plan Files
Reels 619-624

Record Group 77 (Records of the Office of the Chief of Engineers)

Entry Fortifications Map File

Entry Miscellaneous Forts File

Record Group 92 (Records of the Office of the Quartermaster General)

Entry Bound Volumes of Plans, 1904-1905

The research team also consulted *Aerial Photographs in the National Archives-Special List 25*, dated 1990, for the Beaufort County. Using the indexes, the following imagery covers the site and was acquired:

Record Group 145 (Records of the U.S. Agricultural and Stabilization Conservation Service)

12 Feb 51	1:20,000	CDU-2H 152-157, 204-210
22 Feb 51	1:20,000	CDU-1H 36-39

The research team also consulted the coverage overlays for the site in Record Group 373 (Records of the U.S. Defense Intelligence Agency) and found and acquired the following imagery:

29 Apr 45	1:21,000	VV 94-99, 109-114, 164-168
07 Jan 59	1:5,500	un-numbered

4.2.4 National Archives, Still Pictures Branch

**8601 Adelphi Road
College Park, MD 20740
POC: Reference Desk
301-713-6795**

Record Group 71 (Records of the Bureau of Yards and Docks)

Entry CA Photographs of Construction Projects, 1879-1943
Boxes 354-357, 449-457

Entry CB Photographs of Construction Projects, 1940-1943
Boxes 97, 118

Entry CP Photographs Construction and Aerial Views of Naval Public Works, Facilities, and Utilities, 1941-1953
Boxes 54, 64, 65

Record Group 80 (General Records of the Department of the Navy)

Boxes 543, 712, 951, 1375, 1494

4.2.5 Washington National Records Center
4205 Suitland Road
Suitland, MD 20409
POC: Leanne Townsend
301-457-7010

The research team reviewed the finding aids for the applicable Record Groups and researched the following entries:

Accession 291-71A-7194
Box 34

Accession 291-79-0018
Box 24

4.2.6 National Personnel Records Center
Military Records
9700 Page Avenue
St. Louis, MO 63132-5100
POC: Wilson Sullivan
314-538-4085

The research team reviewed the master accession listings but found no useful information.

4.2.7 U.S. Army Center of Military History
103 Third Street
Fort McNair, D.C. 20319-5058
POC: Robert K. Wright
202-685-2714

The research team reviewed Historical Data Cards, Camp, Post and Station Files, and Historical Summaries.

4.2.8 U.S. Army History Institute
Carlisle Barracks, PA 17013
POC: Richard Summers
717-245-3601

The research team reviewed photographs, conducted a database search in the library, reviewed base newspaper reels, and reviewed post historical files.

4.2.9 **Naval History Center Photographic Archive**
Building 44, Washington Navy Yard
Washington, D.C. 20374-5059
POC: Jack Green
202-433-2765

The research team reviewed still pictures and oversized aerial photography for the site.

4.2.10 **Naval Aviation History Center**
Building 157-1, Washington Navy Yard
Washington, D.C. 20374-5059
POC: Tod Baker
202-433-4355

The research team reviewed aviation histories for the site.

4.2.11 **Naval History Center Library**
Building 44, Washington Navy Yard
Washington, D.C. 20374-5059
POC: Reference Librarian
202-433-4132

The research team reviewed the Navy's Annual Reports to Congress.

4.2.12 **Marine Corps Historical Center and Museum**
History and Museum Division-Reference Section
Building 58, Washington Navy Yard
Washington, D.C. 20374
POC: Danny Crawford
202-433-3874

The research team reviewed historical background files and unit files for defense battalions for the site.

4.2.13 **Marine Corps Historical Center and Museum**
History and Museum Division-Archives Section
Building 58, Washington Navy Yard
Washington, D.C. 20374
POC: Frederick Graboske
202-433-4253

The research team reviewed map files for the site.

4.2.14 U.S. Army Chemical-Biological Defense Command
Historical Office
Aberdeen Proving Ground, MD 21010-5423
POC: Jeff Smart
410-436-4430

The research team reviewed the *Army Ordnance Magazine*, the *Chemical Warfare Service Bulletin*, and the 9710 Technical Escort Files, copying applicable documents.

4.2.15 Defense Technical Information Center
8725 Kingman Road, Suite 944
Ft. Belvoir, VA 22060-6218

The research team conducted a database search and reviewed applicable reports.

4.2.16 Naval Construction Battalion Center
History Office
1000 23rd Avenue
Port Hueneme, CA 93043-4301
POC: Carol Marsh
805-983-5913

The team reviewed the following reference texts:

Vertical Historical File Folders
MCRD Parris Island, SC
Port Royal Navy Yard, SC

Contract Construction Completion Reports
MCRD Parris Island, SC (2 Boxes)

U.S. Navy - Bureau of Yards and Docks
1927 *Public Works of the Navy Data Book*, dated July 1927.

U.S. Navy - Bureau of Yards and Docks
1938 *Public Works of the Navy Data Book*, dated July 1938.

U.S. Navy - Bureau of Yards and Docks
1945 *Public Works of the Navy Data Book - Volume 1-Buildings* July 1945 edition
(contains page revisions through 1950) (NAVDOCKS P-164).

U.S. Navy - Bureau of Yards and Docks
1947 *Public Works of the Navy Data Book - Volume 2-General Information* July 1947
edition (NAVDOCKS P-164).

U.S. Navy - Bureau of Yards and Docks
1909 *Maps - Navy Yards and Naval Stations*, dated May 1909

U.S. Navy - Bureau of Yards and Docks
1914 *Maps - Navy Yards and Naval Stations*, dated 1914.

U.S. Navy - Bureau of Yards and Docks
1916 *Maps - Navy Yards and Naval Stations*, dated 1916.

U.S. Navy - Bureau of Yards and Docks
1941 *Maps - Navy Yards and Naval Stations*, unpublished volume compiled in
January

U.S. Navy - Bureau of Yards and Docks
1960 *Maps - Naval Shore Activities - 6th Naval District*

U.S. Navy - Bureau of Yards and Docks
1960 *Maps - Naval Shore Activities - Chesapeake Naval District* unpublished volume
compiled in January 1960

The team reviewed the *Annual Reports of Expenditures and Operations* for Parris Island and
Port Royal for Fiscal Years 1913 through 1939.

Record Group 2 Naval Facilities Engineering Command
Box Aerial Photograph: Naval Shore Establishments
Box 5 Photos: Parris Island, SC
Box 14 Aerial Photograph: Naval Shore Establishments; Beginning of WWII and from
1930 to 1933
Box 22 Photos: Parris Island, SC
Box 42 Photos: Parris Island, SC

Photographs from the 1950s

Series SII6
Boxes 1-42

Series SII7
Box 1-38

Series SII8
Box 1-40

Series SII9
Box 1-7

4.2.17 Naval Construction Battalion Center
Civil Engineering Support Office (CESO), Building 1443
Port Hueneme, CA 93043
POC: Mona Leon-Guerro
805-982-3057

The research team reviewed the facility index cards, covering the pre-1958 material, for the Sixth Naval District in South Carolina, specifically for references to the MCRD Parris Island (Facility Number 610) and the Port Royal Shipyard.

The reviewed the following reels for MCRD Parris Island:

- Reel 583, copied frames: 592
- Reel 584, copied frames: 18, 19 (2 parts), 21, 23, 24
- Reel 585, copied frames: 576, 583 (2 parts), 585

4.2.18 National Oceanic and Atmospheric Administration
Nautical Data Branch
1315 East-West Highway
Silver Spring, MD 20910-3282
POC: Gregory Norris
301-713-2737, ext. 124

The research team reviewed microfilm rolls of map standards for several years. They also reviewed microfilmed backup documentation regarding danger areas established over water areas.

4.2.19 National Oceanic and Atmospheric Administration
Aeronautical Chart Division
1315 East-West Highway
Silver Spring, MD 20910-3282
POC: Carl Nixon
301-713-2941

The research team reviewed sectional aeronautical charts for areas near the site. They obtained current charts detailing danger areas.

4.2.20 National Archives-Southeast Region
1557 St. Joseph Avenue
East Point, GA 30344
POC: Gary Fulton
404-763-7477

Record Group 77 (Records of the Office of the Chief of Engineers)

Accession 77-85-0001
Box 10

Record Group 181 (Records of Naval Districts and Shore Establishments)

Entry 7874 Log Books, 1907-1908
Log Book Port Royal

Record Group 270 (Records of the War Assets Administration)

Accession 270-51A-0001
Boxes 516, 517

Accession 270-58A-0542
Box 678

Record Group 291 (Records of the Federal Property Resources Services)

Accession 291-72A-2459
Box 8

4.2.21 Federal Records Center-Atlanta
1557 St. Joseph Avenue
East Point, GA 30344
POC: Tom Steinichen
404-763-7651

The research team reviewed the master accession listing and reviewed the standard form 135s but found no useful accessions.

4.2.22 Headquarters, U.S. Marine Corps
Office, Deputy Chief of Staff for Installations and Logistics
Facilities & Services Division
Land Use and MILCON Branch CMC (LFL)
2 Navy Annex, Room 3110
Washington, D.C. 20380-1775
POC: Kelly Dreyer
703-695-8302

The research team reviewed real estate files, environmental reports, and base master plans.

4.2.23 Marine Corps Recruit Depot East Recruiting Region Parris Island
Natural Resources and Environmental Affairs Office
Building 159
Parris Island, SC 29905
POC: Tim Harrington
843-525-3423

The team reviewed the Installation Restoration Program files and copied excerpts from:

Brown and Root Environmental Co.

1996 *Master Work Plan, Marine Corps, Depot Parris Island, South Carolina,*
U.S. EPA Identification Number SC6 170 022 762, March 1996.

Naval Energy and Environmental Support Activity, Port Hueneme, CA

1986 *Initial Assessment Study of Marine Corps Recruit Depot, Parris Island, South*
Carolina, September 1986.

4.2.24 Marine Corps Recruit Depot East Recruiting Region Parris Island
Weapons and Field Training Battalion
Building 771
Parris Island, SC 29905
POC: CW03 Bob Ledyard, Chief Range Officer
843-525-2466

CW03 Ledyard provided copies of the current Standard Operating Procedures:

MCRD Parris Island - Weapons and Field Training Battalion

1997 *Standard Operating Procedures for Range Operations and Field Training, BnO*
P3000.1K, dated 14 May 1997.

Marine Corps Recruit Depot Parris Island

1996 *Standard Operating Procedures for Recruit Training, DepO P1513.1D, dated 22*
September 1996.

4.2.25 Marine Corps Recruit Depot East Recruiting Region Parris Island
Public Works Department
Building 400
Parris Island,, SC 29905
POC: Sharad Thakar, Civil Engineer
843-525-2604

The team reviewed the contents of the engineering drawing and map room, paying particular attention to the drawers not associated with specific buildings. They reviewed and copied maps from the following drawers:

Drawers 1 to 22 (specific drawer labels not recorded)

41 to 45 (specific drawer labels not recorded)
Ammo Bunkers
Master Shore Development Plans (2)
Demolished Facilities (2)
Charts/Graphs/Old Maps

The team also reviewed the following reports, but did not identify any pertinent information for this investigation not previously acquired:

1974 *Master Plan Military Complex Beaufort, SC*, dated June 1974.

1984 *Master Plan Military Complex Beaufort, SC*, dated February 1984.

1992 *Master Plan Marine Recruit Depot Parris Island, SC*, dated September 1992.

4.2.26 Marine Corps Recruit Depot East Recruiting Region Parris Island
Building 159
Parris Island,, SC 29905
POC: Gloria McGonnel, Plant Property Manager
843-525-2597

The team received copies of the installation's class 1 property records and a summary print out of their *Detailed Inventory of Naval Shore Facilities* database, which resides at Port Hueneme, CA.

4.2.27 Parris Island Museum
Marine Corps Recruit Depot East Recruiting Region Parris Island
Box 19001
Parris Island, SC 29905-9001
POC: Steven Wise, Museum Director
843-525-3765

The team reviewed the Command Chronologies from 1965-1998, copying pertinent information. They also reviewed the museum's image database for photography title references containing "ranges", "aerial", "grenade" or "rocket". The team also reviewed the contents of thirteen maps, containing maps 840165-1 to 840165-203, copying various maps.

4.2.28 Marine Corps Air Station (MCAS) Beaufort
Explosive Ordnance Disposal (EOD Unit)
P.O. Box 55010
Beaufort, SC 29904-5010
POC: SSGT Parrell or SSGT Zahn
843-522-7513 or DSN 832-7513/7565

The EOD unit provided the team with a review of incident reports from January 1995 to present for Parris Island, though they did not allow them access to the original reports.

4.2.29 U.S. Army Corps of Engineers - Savannah District
100 W. Oglethorpe Avenue
P.O. Box 889
Savannah, GA 31402
ATTN: CESAS-RE-PC
POC: Anthony (Tony) Marshall
912-652-5017

The research team reviewed the INPR holdings for Beaufort County, SC and made copies of portions of the following files:

I04SC0018 St. Helena Homer Site, Beaufort
I04SC0454 USO 38-107, Beaufort
I04SC0471 Parris Island Gap Filler Annex
I04SC0951 Hilton Head Military Reservation
I04SC0972 Hilton Head Lighthouse Reservation

4.2.30 U.S. Army Corps of Engineers - Charleston District
Programs and Project Management
P.O. Box 919
334 Meeting Street
Charleston, SC 29402-0919
POC: Jim Truelove
843-727-4489

The research team reviewed the INPR holdings for Beaufort County, SC and received copies of the categorical exclusions for the following sites:

I04SC0808 Marine Corps Recruit Depot, Parris Island
I04SC0810 Marine Corps Air Station, Beaufort
I04SC0955 Naval Air Station Beaufort
I04SC0956 Spring Island Bomb Target, Beaufort

4.2.31 Naval Facilities Engineering Command-Southern Division
2155 Eagle Drive
P.O. Box 190010
North Charleston, SC 29419-9010
Real Estate Division, Cadastral Services and Jurisdiction
POC: William (Bill) Holling, Reality Specialist
843-820-7498, (DSN: 583)

The research team reviewed the real estate transaction folders, which comprised approximately 1 cubic foot of records. They obtained copies of the *Real Estate Summary Map*, the Land Register ledger sheets and other pertinent data.

4.2.32 Inter-Library Loan

Bailey, Gilbert P.

1944 *Boot: A Marine in the Making*. The Macmillan Company, NY.

Cruz, Daniel

1987 *Boot: The Inside Story of How a Few Good Men Became Today's Marines*. St. Martin's Press, New York, NY

Dowling, G. G.

1970 *Parris Island 'from Cusabo to Leatherneck'*. The Peacock Press, Ltd. Beaufort, SC.

Headquarters U.S. Marine Corps

1960 *A Brief History of the Marine Corps Recruit Depot Parris Island, South Carolina 1891-1956*. Marine Corps Historical Reference Series Number 8. Historical Branch, G-3 Division, Washington, D.C.

Jeffers, H. Paul and Levitan, Dick

1971 *See Parris and Die Brutality in the U.S. Marines*. Hawthorne Books, Inc., New York, NY.

Jones, Katharine M.

1960 *Port Royal Under Six Flags*. The Bobbs-Merrill Company, Inc., NY.

McKean, William Baggarley

1958 *Ribbon Creek*. The Dial Press, NY.

Mersky, Peter B.

1997 *U.S. Marine Corps Aviation 1912 to the Present*. The Nautical & Aviation Publishing Company of America, Baltimore, MD.

Michie, James L.

1980 *An Intensive Shoreline Survey of Archeological Sites in Port Royal Sound and the Broad River Estuary, Beaufort, South Carolina*. Prepared by the Institute of Archeology and Anthropology, University of South Carolina.

Moore, Herb

1983 *Rows of Corn: A True Account of a Parris Island Recruit*. Sandlapper Publishing Company, Orangeburg, SC.

Rowan, N. R.

1994 *Women in the Marines: The Boot Camp Challenge*. Lerner Publications Company, Minneapolis, MN.

4.2.33 U.S. Department of Agriculture
Aerial Photography Field Office
2222 W 2300 S
Salt Lake City, Utah 84119-2020
POC: Sharron McGiff
801-975-3503

The research team reviewed photo-mosaics of available imagery for Beaufort County and located and acquired the following imagery:

20 Jan 55	1:20,000	CDU-2P 177-182
26 Jan 55	1:20,000	CDU-3P 11-16, 42-45
19 Nov 59	1:20,000	CDU-2AA 45-51, 98-105, 134-139, 188-191
01 Nov 65	1:20,000	CDU-1GG 144-151, 198-204, 230-233
28 Apr 72	1:40,000	A40-45013 372 44-47, 68-71

4.2.34 U.S. Geological Survey
EROS Data Center
Sioux Falls, South Dakota 57198
POC: Kimberly Kringen
605-594-6151 ext. 2075

The research team reviewed photo-mosaics of available imagery using the installation's geographic coordinates but did not identify any pertinent coverage for the site.

4.3 SUMMARY OF INTERVIEWS

The archive search team contacted many people by telephone and personally to assist in the collection of information for this report. Appendix D lists interviewees and copies of pertinent individual conversation records. With the agreement of the installation, the number of people interviewed for historical information was limited. The most beneficial was an interview with Thomas F. Swearingen, a retired Chief Warrant Officer (CW04). He retired in 1974 with 27 years in EOD and 30 years with the USMC. His familiarity with Parris Island comes from living there three times: as a youth in the 1930s, boot camp in 1943 and as an EOD officer at MCAS Beaufort from 1965-74 (except for two years in Vietnam). After retiring, he returned to the Port Royal area. His father was SGT. Major at Parris Island, and he was there from 1932-38, when they left for Quantico. He returned during World War II to complete his basic training and act as a drill instructor. He gave valuable input on range use and clearance that was not included in the reviewed historical records. He conformed the use of artillery in the late 1930s and described the 1930s era bombing and strafing targets at Page Field, the Parade Deck and Southern Tidal Flats. Based on his EOD clearance efforts; He related areas of rocket, mortar and grenade use, as well as the presence of chemical agent identification sets at Parris Island. He also described various FUDS in the Port Royal Sound area.

4.4 AIR PHOTO INTERPRETATION AND MAP ANALYSIS

4.4.1 Map Analysis

The archive search team located numerous site specific layout plans and maps for Parris Island, which were analyzed for OE and CWM features. The paragraphs below discuss the relevant information retrieved from the reviewed maps in Appendix G. The maps are discussed in order of creation or final revision, except for the last four, which show Formerly Used Defense Sites (FUDS) and summarize real estate in the area around Parris Island. All historical maps and site plans contained in Appendix G are printed on 11 x 17-inch paper for reproduction. Full size copies remain in the ASR backup files and a complete set of scanned images files has been placed on a CD diskette and given to the Parris Island Natural Resources Environmental Affairs office.

In summary, analysis of these maps located numerous ranges, training areas and ordnance storage facilities. The following tables lists the different ranges:

TABLE 4.4.1 MCRD ERR Parris Island Ranges Weapons and Field Training Battalion Area

Khe Sanh; Range "A" (1941-1999); 1,000 Yard Range (1929-41); New Rifle Range (1918)
Grenade Courts (1944)
Day Movement Course, (1998)
Rifle Grenade (1941)

Hue City; Range "B" (1941-1999); 600 Yard Range (1932-41)
600 Yard Range (1929-32); New Rifle Range (1918)

Chosin; Range "C" (1944-1999)

Starlight; Range "D" (1944-1999)

Inchon; Range "E" (1970-1999)
Hand Grenade Practice Area (1944- 1968)
Grenade Pit (1953-70)

Pusan; Pistol Butts (1929-1999); New Rifle Range (1918)
Small Bore Ranges No. 1 (1944-70); 22 Range (1941)
Small Bore Ranges No. 2 (1944-70); 22 Range (1941)
Small Bore Ranges No. 3 (1944-70)
Small Bore Ranges No. 4 (1944-70)
Small Bore Ranges No. 5 (1944-54)
Small Bore Ranges No. 6 (1944-54)
900" Range (1973); Skeet Range (1946-53); Small Bore Ranges No. 7 (1944)
900" Range (1973); Skeet Range (1946-53); Small Bore Ranges No. 8 (1944)
Small Bore Range in Building 765 (1952)
Electric Pistol Range, Building 788 (1952)

TABLE 4.4.2 MCRD ERR Parris Island Ranges Miscellaneous Areas

Rifle Range at Ballast Creek (1916-1918)

Aerial Bombing Target at Parade Deck (1937-1940) based on interviews, not verified by maps
Bldg. 685, Gas Chamber, Quonset Hut (1952-73); Gas Chamber, Building 673, (1945)
Skeet Range at Horse Island (1988)
Tactical Bivouac Area at Elliott's Beach (1980s)
Field Fortification Display, Bldg. 4026 (1980s)
East Shrapnel Range(1937-39)
West Main Range(1937-39)

TABLE 4.4.3 MCRD ERR Parris Island Ranges Page Field Training Area

Aerial Bombing Target at Page Field (1937)
Strafing Range at Page Field (1937-1940) based on interviews, not verified by maps
Aerial Bombing Target at Golf Course (1946)
Skeet Range, Building AS48 at Page Field (1946-53)
Trap Range, Building AS47 at Page Field (1946-53)
Bldg. 4020, Hand Grenade Range, on Gibb's Island (1983)
Mine/Booby Trap (1994); NBC Movement Course (1987); Bldg. 4119, Practice Grenade & Mine Field (1983)
Field Fortification Course II (1994): Bldg. 4024, Infiltration Course, south of Page Field (1983)
Bldg. 4022, Night Movement Course, south of Page Field (1983)
Wire Entanglement Display (1987)
Practice Grenade Range (1987)
Day Movement Stations (1994); Squad Offense Course (1987)
Night Movement Course (1987)
Day Movement 1 and Day Movement 2 (1994); Fire Team/NBC Movement Course (1987)
CAC (Combat Assault Course) (1994);.Infiltration Course (1987)
Combat Town (1994)
NBC Field Course (1994)
Booby Trap Course (1994)
Gas Chamber, 793 (1998)

TABLE 4.4.4 MCRD ERR Parris Island Ordnance Storage Structures

Main Station

Bldg. 45, Paint Locker (1946-1960s); Bldg. 45, Magazine(1934-1940s); Bldg. No. 16, Magazine (1899-1919)
temporary magazine, XXI (1905) - not specifically located
Bldg. 48, Ammunition Storage (1919)) - not specifically located
Bldg. 85, Ammunition Salvage Storage.(1919)
Gun Shed GA (1941)
Bldg. 875, Gas Mask Storage Building (1953-73)

Weapons and Field Training Battalion Area

Bldg. 20, Ammunition Storage (1929)
Bldg. 721, Ready Ammunition Stores (1946-1970s)
Bldg. 723, Ready Ammunition Stores (1946-1970s)

Bldg. 724, Ready Ammunition Stores (1946-1970s)
Bldg. 784, Ready Ammunition Stores (1946-1970s)
Bldg. 786, Ammunition Storehouse (1946-1970s)

Ordnance Storage / Page Field Area

Bldg. A1, Small Arms Magazine (1946-)
Bldg. A2, Small Arms Magazine (1946-)
Bldg. A3, Small Arms Magazine (1946-)
Bldg. A4, High Explosive Magazine (1946-)
Bldg. A5, High Explosive Magazine (1946-)
Bldg. A6, High Explosive Magazine (1946-)
Bldg. A7, Fuze Magazine (1946-)
Bldg. A8, Smoke Drum Magazine (1946-)
Bldg. A9, Inert Magazine (1946-)
Bldg. A10, Inert Magazine (1946-)
Bldg. A11, Ready Magazine (1946-1970s)
Bldg. 4002 (1973-1999)

TABLE 4.4.5 MCRD ERR Parris Island Historic Fortifications

Fort MacKay (1899)
Fort Haines (1899- 1905)

TABLE 4.4.6 Formerly Used Defense Sites (FUDS) in area of MCRD ERR Parris Island

Hilton Head Lighthouse Reservation, Camp McDougal, or Marine Corps Firing Range
Hilton Head Military Reservation, Civil War era: Fort Walker, Fort Welles, Fort
Sherman, Fort Howell and Fort Mitchell
Jericho Well and Main Gate
Burton Well Field
Fort Freemont
Bay Point Military Reservation on St. Phillip's Island; Civil War era: Fort Beauregard
Bull Point Bombing and Strafing Target on Caper's or Pritchard's Island
Hunting Island/Fripp Island Bomb Target/Rocket Range
Egg Island Dive Bombing Target
Edisto Island's Bay Point Strafing Target
Marine Corps Auxiliary Air Facility Georgetown

Ranges information suspected to have been located on site maps, but not, included the following items:

Artillery use prior to 1937
Coastal Defense Guns Emplacement during Spanish-American War,
3-inch and 5-inch Guns Emplacements of for the WWII Defense Battalions
Rocket Ranges (2.36-inch, 3.5-inch or AT-4s)
Mortar Ranges
EOD or Demolition Area

Bureau of Yards and Docks, Naval Department

1899 *Plan of the U.S. Naval Station Port Royal, S.C.*, dated October 1899. Item:
840165CO-18, Parris Island Museum, MCRD ERR Parris Island, SC.

Appendix G-1

The map shows the layout of the naval station, which serves as the basis for the current installation. There are a few dozens buildings shown, including: **Fort MacKay**, southeast of the wharf and **Fort Haines**, at the northwest end of the naval station. Given the time frame of the map, these forts probably related to coastal defenses established during the Spanish-American War. This is the first of the maps acquired that shows an ordnance related feature: **Building No. 16, Magazine**, located near Fort Haines. The map also delineates the boundaries of property acquired in 1899.

Naval Department, Civil Engineer's Office

1905 *Plan of the U.S. Naval Station Port Royal, SC.*, dated July 1903, submitted as no changes 30 June 1905. *Maps - Navy Yards and Naval Stations*, dated May 1909, Seabee Museum/History Office, Naval Construction Battalion, Port Hueneme, CA.

Appendix G-2

The map shows the layout of the naval station and is similar to the earlier map, except that Fort MacKay by the wharf is no longer denoted. In addition to Building 16, a second **temporary magazine, XXI** is listed in the building schedule but careful review of the drawing could not locate it.

U.S. Marine Corps

1916 *Map of Parris Island, SC.*, dated 5 April 1916. Map Drawer: Master Shore Development Plans, Public Works Department, MCRD ERR Parris Island, SC.

Appendix G-3

This map covers the entire island, delineating the areas which are under cultivation by private landowners, owned by the military or are marshland. The former Naval Station at the northeast end of the island is now labeled as **U.S. Marine Barracks**. To the south is a **Rifle Range at Ballast Creek**. The range is on a raised islet in the marshland, surrounded by Ballast Creek (south of the current marina). Firing lines at 200, 300, 350, 400, 500 and 600 yards are denoted, as is the target butt at the southern end. At the southern most end of the raised land portion of the Parris Island is **Old Fort Charles**, though recent archeological investigations indicate this is actually the location of Fort San Marcos.

Bureau of Yards and Docks, Naval Department

1918 *Plot of Island and Environs, Extension to Marine Barracks Parris Island, SC.*, dated 11 June 1918. Reel 584, frame 18, Construction Battalion Logistics Center, Naval Construction Battalion, Port Hueneme, CA.

Appendix G-4

This map covers the entire island, delineating the areas which are marshland and which are not. There are no longer any private landowners denoted and the island appears to be completely under control by military. A series of roads connect the raised portions of the island, with access to Parris Island being reached by the wharf at the Main Station (i.e. the former Naval Station). In addition to Main Station, the map also delineates the following developed areas: Quarantine Station, Training Camp, Maneuver Grounds, the **Existing Rifle Range**, and a **New Rifle Range** at the western edge of the current Weapons and Field Training Battalion area. The map does not provide further details of these areas. The Quarantine Station appeared as early as 1898 on site maps (see Appendix G-33).

U.S. Marine Barracks Parris Island

1919 *Annual Report 1919 Main Station*, dated 30 June 1919. Record Group 71,
Entry: Photos of Construction Projects 1879-1942, Parris Island, Box 354, Still
Pictures Branch, National Archives, College Park, MD.

Appendix G-5

This plan shows the building layout of the main station, which has been further developed since its origins as a Naval Station. The building lists includes three ordnance related buildings: **16, Magazine**, **48, Ammunition Storage** and **85, Ammunition Salvage Storage**. The Magazine remains at its earlier location, away from most of the cantonment area. It is approximately 10 by 20 feet. Building 85, is about 20 by 150 feet and located adjacent to other warehouses along Boulevard De France. This is the only map that so designates this building as such, which is apparently a temporary use. Careful review of the map did not locate building 48, which later maps show as being on the wharf.

U.S. Marine Barracks Parris Island

1929 *Receiving Station, Flying Field and Rifle Range* dated 30 June 1929. Map
Drawer: Master Shore Development Plans, Public Works Department, MCRD
ERR Parris Island, SC.

Appendix G-6

This map details three areas originally developed in 1919 (maps not included here). The Receiving Station covers the earlier Quarantine Station and the Flying Field, which lies on the 1916-1918 Rifle Range near Ballast Creek. The newer **Rifle Range** is at the location denoted in 1918, the Weapons and Field Training Battalion area. It shows three ranges: a **1000 Yard Range**, **600 Yard Range** and **Pistol Butts**, at western side of the current Weapons and Field Training Battalion area. Building **20, Ammunition Storage** is near the firing line at the 600 Yard Range.

U.S. Marine Corps

1934 *Key Map Marine Barracks Parris Island, SC.*, dated 30 June 1933, revised 30
June 1934. Record Group 71, Reel 620, Folder 610 Parris Island, National
Archives, College Park, MD

Appendix G-7

This general plan of the entire installation shows that the Flying Field constructed on top of the 1916-1918 Rifle Range is abandoned and a new [Heavier Than Air] "H.T.A. Landing Field" and Mooring Mast appear to the south on what will become Page Field.

U.S. Marine Corps

1934 *Map of Main Station Marine Barracks Parris Island, SC.*, dated 30 June 1933, revised 30 June 1934. Item: 840165-132, Parris Island Museum, MCRD ERR Parris Island, SC.

Appendix G-8

This plan of the main station lists only one ordnance related feature, **Building 45, Magazine**, which was formally number 16. The area immediately to the south of the magazine is designated as the Naval Hospital. The Naval Prison, noted as being "occupied by the Marine Corps", is to the southwest.

U.S. Marine Barracks Parris Island

1937 *Field Artillery Range*, dated 1 December 1937. Record Group 127, Entry 18B, Box 236, Folder 1275/70-5480 Parris Island, National Archives, College Park, MD.

Appendix G-9

This map overlays a key map of Parris Island created in 30 June 1936, showing the proposed Artillery Ranges. This specific "Key Map" was not recovered by the archive search but the map easily overlays the "Key Map" of 1934 above. The source map was color coded according to the legend but not all the colors were present on the recovered copy. The map delineates two impact areas on the installation: an **East Shrapnel Range** and a **West Main Range**. The East Shrapnel Range, with one firing position, has a southerly direction of fire from the earlier Quarantine/Receiving Station to the eastern edge of the Page Field runways. It has an 11,000 foot long impact area and 17,000 foot long danger zone fan. The West Main Range, has nine firing positions denoted, including three concrete ones (**B, H & R**), available for use with HE rounds. Firing point R on Horse Island provides the apex of the danger zone for this range, which has a southerly direction of fire across portions what is now the Weapons and Field Training Battalion area, Magazine area, and the western portion of Page Field. The designated Impact Area for this range varies from 9,000 to 16,500 feet from firing position R. However, it extends only about 7,500 feet beyond positions B, C, & D, located along the edge. The West impact area also has a covered concrete OP [observation point], for forward observation (Note: this feature remains in 1999). The map also locates five other, tower OPs on the installation (Note: there's two OP #2s). The map does not state the specific types of weapons to be used with either range but the length depicted correlates to the 75mm artillery weapons described in collateral documents of the time. Elsewhere, the butts at the Weapons and Field Training Battalion area have two designations: Old and New. They generally match the locations of the butts for the 600 and 1,000 Yard Ranges. The detail of this does not allow for a good comparison of the location of the 600 Yard Range, which moved in 1930 (see Section 4.2). The map also delineates several areas for tree removal whose shape and location match the contour of land above the marshes. Below is the map's legend in total:

LEGEND

Green shaded - Impact area. The area on the EAST is the shrapnel range. The area on the WEST is the main range. The cross hatched (in red and green) area becomes an impact area only when firing from positions C and D, and possibly from F and L. The cross hatched (in all green) areas will not be used as impact areas (except to noted below) during, the time that AIRCRAFT ONE is using PAGE FIELD

Red shaded - Danger zones when using entire impact areas.

Blue Shaded - To be cleared of trees.

Black shaded - recommended for squatters. Battery positions H (Holcomb), B (Buttrick) and R (Ruffner) to be made of concrete. When firing HE, concrete positions only will be used. Battery positions A, C, D, E, F, L, and T, are some of the other possible positions and they require no construction. Any of these or the concrete positions may be used for firing shrapnel, and L is particularly suited for landing operations.

Red rectangle marked OP (Dug Out) is a small surface OP for forward observation. This to be made of concrete with overhead cover. OP's numbers 1, 2, 3 and 4 to be towers 40' high, with two landings, one at 30'. The other OP (on the East Range) to be a tower 20' high as shown.

Yellow indicates telephone lines with two complete circuit and outlets (Plugs) from each circuit at each possible range guard post marked S. Small rectangles in purplish black indicate the approximate location of a squatters domicile (occupied).

NOTE: By mutual arrangement between the local commanders of AIRCRAFT and ARTILLERY present the size of the restricted impact areas may be increased to include a portion or all of the cross hatched (in all green areas). Thus, if aircraft would agree to confine their activities (on the field) to that portion of the field west of the broken red line, all of the eastern (shrapnel) impact area could be used. Or if they would agree to confine their activities (on the field) to the northeast half, northeast of a line connecting the northwest and southwest corners of the field, then the western (main) impact area could be increased to include that portion of the cross hatched (in all green) area west of the broken green line. Activities of Aircraft in the air shouldn't materially interfere with Artillery practice. Should the plane fly over the line of fire and lower than the maximum ordinate for the maximum range for the position occupied at the moment, the safety officer could hold the fire of the battery for an instant. Another solution is to use field 5 miles to northeast. Particularly when the only mission of the aircraft present is to observe for Artillery.

U.S. Marine Barracks Parris Island

c.1937 Southern Area, Parris Island, S.C., undated map c.1937, based on aerial photography flown 15 May 1937. Record Group 127, Entry 18 General Correspondence, 1933-38, Box 24, Folder 1275/70-5480, National Archives, College Park, MD.

Appendix G-10

This is an aerial photo map of the southern portion of Parris Island. It has been modified to include information concerning the Field Artillery Range described above. Since it is undated beyond noting the imagery date of 15 May 1937, it is not clear if this map precedes the previously discussed map or follows it. Observation points and gun emplacements are depicted that correspond to those described above but there aren't as many. The legend denotes that additional permanent gun emplacements, observation points and a protected OP are to be constructed, though the quality of the copy does not always allow for delineation where these items are. The map also delineates numerous "Areas to be cleared". Since these all have large vegetation present, this apparently refers to tree clearing and not UXO clearance, but it is not clear.

Since the map is made on aerial photography, analysis of the imagery is also possible. The **Aerial Bombing Target** adjacent to the eastern edge of Page Field is clearly visible (it appears on a 1941 map, see below). The Mooring Mast is also clearly visible, with a large cleared circular area surrounding it. The **Strafing Range** wooden platform described by an interviewee (see section 4.3), maybe the dark rectangular feature at the southeastern end of Page Field, though this is unclear. The size of this feature is approximately 57 feet by 125 feet. The aerial photo map does not cover the main station portion of the installation, so it can not confirm the parade deck bomb target reported in the interviews to have been present in the late 1930s.

Bureau of Yards and Docks, Naval Department

1940 *Marine Barracks Parris Island, SC Key Map.*, dated 30 June 1940. Reel 583, frame 592, Construction Battalion Logistics Center, Naval Construction Battalion, Port Hueneme, CA.

Appendix G-11

This poor quality map delineates areas of potential development on the installation as it geared up for war. No sign of the artillery ranges (i.e. observation points or firing points) noted in 1937 are visible on this map or any later ones. Page Field has the runways depicted, as opposed to the earlier open field. Of potential interest are two hand drawn areas, delineating **Limits of High Explosives Areas**. One, a **Fuze & Detonators** area covers the area inland from Elliott's Beach. The other is to the northeast of the current magazine area. Both areas have road networks and buildings laid out, with the area northeast of the magazine area requiring fill to construct the roads. These features do **not** appear on any other recovered map. Assuredly this map represents plans for ordnance storage that were never enacted.

U.S. Marine Barracks Parris Island

1941 *Map of Training Station Marine Barracks Parris Island, S.C.*, dated 30 June 1941. Map Drawer: Master Shore Development Plans, Public Works Department, MCRD ERR Parris Island, SC.

Appendix G-12

This plan shows only the Training Station portion of the cantonment area. Of ordnance interest is the **Gun Shed GA**, just east of the intersection of Guantanamo Drive and Malecon

Drive. Potentially, this structure housed the 3-inch and 5-inch naval guns that Marine troops trained with as part of the Defense Battalions 3, 4, 5, 9 and 11 during World War II. The location of any ranges on Parris Island associated with these weapons is not depicted on any of the recovered maps. Reviewed collateral documents indicate this training occurred at Camp McDougal at the Hilton Head Lighthouse Reservation FUDS.

U.S. Marine Barracks Parris Island

1941 *Map of Rifle Range Marine Barracks Parris Island, S.C.*, dated 30 June 1941.
Map Drawer: Master Shore Development Plans, Public Works Department,
MCRD ERR Parris Island, SC.

Appendix G-13

This plan details the Weapons and Field Training Battalion area, which has a significantly more developed cantonment area associated with it than in 1929. The ranges shown include: the **1,000 Yard Range**, **Pistol Range**, **22 Range**, **600 Yard Range** (handwritten note as "B" Range) and **Rifle Grenade** (handwritten note as "A" Range). The rifle grenade area consists of three, 60 foot diameter circles, in between the 1,000 Yard and 600 Yard Ranges. The building list does not denote any ammunition storage facilities in the area.

U.S. Engineer Office, Savannah, Georgia

1941 *Proposed Aircraft Machine Gun Range*, dated 21 October 1941. Record Group 127, Entry 18B, Box 211, Folder 1275-65 Ranges, Target, National Archives, College Park, MD.

Appendix G-14

This map presents the danger zone established near the entrance of Port Royal Sound at Camp McDougal on the Hilton Head Lighthouse Reservation. The Danger Zone was established on 16 December 1937 (33 CFR Part 204.70). The site is a FUDS property (see section 5.2) but it was a Marine Corps firing range under the Commanding General of the Marine Barracks at Parris Island. The range is two sectors extending 23,000 and 8,000 yards into the ocean from the old lighthouse at N32° 09' 59" and W80° 44' 23".

U.S. Marine Barracks Parris Island

1941 *Page Field, Field Lighting*, dated 19 September 1941, revised 22 December 1941. Map Drawer: 42, Page Field, Public Works Department, MCRD ERR Parris Island, SC.

Appendix G-15

This map of Page Field clearly shows an **Existing Bomb Target** "to be relocated" that was first seen on the 1937 aerial photo above (see Appendix G-10). The target is about 400 feet east of the N-S runway, in between the eastern ends of the NE-SW and E-W runways. The target consists of three concentric circles, 50, 100 and 200 feet in diameter.

U.S. Coast and Geodetic Survey

- 1942 *Savannah Sectional Aeronautical Chart, Edition 8-2*, dated 18 June 1942.
Record Group 23, Entry Savannah, Cartographic Branch, National Archives,
College Park, MD.
Appendix G-16

The research team reviewed the Savannah (Q-8), Sectional Aeronautical Charts between October 1936 (edition 1) and 1968. These maps highlight danger areas (i.e. areas for civilian air traffic to avoid) associated with military ranges, typically bombing and gunnery ranges. The maps do not denote specific range names or service use. However, the archive search team determined the names of some of these ranges from collateral sources, both textual and cartographic. The maps did not delineate a danger area on Parris Island, until edition 7-1 (November 1941), which is essentially the Danger Area depicted above (see Appendix G-14), even though the Danger Zone was first established in 1937. By this map, Edition 8-2 (June 1942), the Danger Area is modified to include the southern end of Parris Island across Hilton Head, St Helena, St. Phillips, Pritchard, Fripp and Hunting Islands. This covers most of the identified FUDS ranges on the coast (see Appendix G-34). By Edition 11-1 (Sep. 1943) the Danger Area extends along the entire coast and by Edition 20 Sept 1946, it is all gone.

U.S. Marine Barracks Parris Island

- 1944 *Rifle Range - Proposed Heads at Ends of Butts*, dated 15 November 1944. Reel 585, frame 583, Construction Battalion Logistics Center, Naval Construction Battalion, Port Hueneme, CA.
Appendix G-17

This map depicts the World War II era configuration of the Weapons and Field Training Battalion area. The ranges depicted are (from west to east):

Small Bore Ranges No. 1 through No. 8; No. 1 & 2 over 22 Range (1941)
Pistol Range
Range "A", with firing lines at 1,000, 500, 300 and 200 yards
Grenade Courts, at approximately the 700 yard point of Range "A"
Range "B", with firing lines at 600, 500, 300 and 200 yards
Range "C", with firing lines at 600, 500, 300 and 200 yards
Range "D", with firing lines at 600, 500, 300 and 200 yards
Hand Grenade Practice Area

The three rifle grenade circles depicted in 1941 are not depicted, though the area between Range A and Range B is open. This is the first map to show the Savannah Creek Dredge Cut and to designate Borrow Pit locations within the Impact Area of the West Main Range, shown of the 1937 Field Artillery Range Map. Later maps designate these areas, and other areas within the former Impact Area, as borrow pits.

U.S. Marine Barracks Parris Island

1946 *Map of Marine Barracks Parris Island, S.C., Map A.*, dated 30 June 1946.
Item: 840165-129, Parris Island Museum, MCRD ERR Parris Island, SC.
Appendix G-18

This map delineates the locations of the buildings within the main cantonment area. Of a range of interest is the addition of a **Gas Chamber, Building 673**, added in Fiscal Year ending on 30 June 1945. An adjacent building **No. 875, Emergency Radio Building**, later becomes the Gas Mask Storage Building, which is listed at **No. 874** and is about 1,000 feet away. Early structures noted in this analysis, no longer have an OE related use. Building H-45, had been the Magazine but is labeled as a Paint Locker. The Gun Shed is denoted as Building 627, a garage.

U.S. Marine Barracks Parris Island

1946 *Map of Marine Barracks Parris Island, S.C., Map B.*, dated 30 June 1946.
Item: 840165-129, Parris Island Museum, MCRD ERR Parris Island, SC.
Appendix G-19

This map of the Weapons and Field Training Battalion area is essentially the same as the 1944 map with the exception that Small Bore Range Nos. 7 & 8 have been replaced by a **Skeet Range** and several ammunition storage buildings are noted. The buildings are:

No.	Use
721	Ready Ammunition Stores
723	Ready Ammunition Stores
724	Ready Ammunition Stores
784	Ready Ammunition Stores
786	Ammunition Storehouse

This map also shows the Borrow Pit locations noted on the 1944 map.

U.S. Marine Barracks Parris Island

1946 *Map of Marine Barracks Parris Island, S.C., Map C.*, dated 30 June 1946.
Item: 840165-129, Parris Island Museum, MCRD ERR Parris Island, SC.
Appendix G-20

This map of Jericho Wells and Horse Island areas does not depict any areas of any OE interest. It is included in this section primarily to give a complete view of the installation after the war, in conjunction with Maps A, B & D.

U.S. Marine Barracks Parris Island

1946 *Map of Marine Barracks Parris Island, S.C., Map D.*, dated 30 June 1946.
Item: 840165-129, Parris Island Museum, MCRD ERR Parris Island, SC.
Appendix G-21

This map shows the building layout of the Magazine Area and Page Field. The ranges depicted are a **Skeet Range, Building AS48**, a **Trap Range, Building AS47** (both north of Page Field) and a **Bomb Target** about half a mile south of the N-S runway. The Bomb Target consists of 4 concentric circles, 100, 200, 400 and 600 feet in diameter. The buildings listed are:

No.	Use
A1	Small Arms Magazine
A2	Small Arms Magazine
A3	Small Arms Magazine
A4	High Explosive Magazine
A5	High Explosive Magazine
A6	High Explosive Magazine
A7	Fuze Magazine
A8	Smoke Drum Magazine
A9	Inert Magazine
A10	Inert Magazine
A11	Ready Magazine

Gibb's Island, to the east of Page Field, has a causeway with a road to a building AS30 and what appears to be a dock at a channel to the Beaufort River.

Marine Corps Recruit Depot Parris Island

1952 *Master Shore Development Plan Part III- Section 2 General Development Plan, Sheet 15 of 17*, dated 31 July 1952. Map Drawer: Master Shore Development Plans, Public Works Department, MCRD ERR Parris Island, SC.

Appendix G-22

The drawing is part of a complete building list of installation structures at the time. The lists generally agree with the previously described structures, with three noted exceptions for structures of an ordnance use or storage purpose. Building 673 is not listed, however the **Gas Chamber, Quonset Hut**, is now referenced as Building 685 and **Building 875** is the **Gas Mask Storage Building**. In the Weapons and Field Training Battalion area: there is an indoor, **Small Bore Range in Building 765**, the Post Exchange and along the Broad River Small Arms Ranges, **Building 788** is an **Electric Pistol Range**.

Marine Corps Recruit Depot Parris Island

1953 *Marine Corps Recruit Depot Parris Island*, dated 30 June 1953. Map Drawer: Master Shore Development Plans, Public Works Department, MCRD ERR Parris Island, SC.

Appendix G-23

This map shows the entire installation, including Page Field, which is denoted as being under MCAS Beaufort but inactive. The Magazine Area and the Trap and Skeet Ranges north of Page Field remain unchanged but the Bomb Target to the south has been replaced by the green

of the 8th Hole and the tee for the 9th of the golf course. The Gas Chamber, Building 685 is at the same location as the earlier building 673. Collateral sources indicate that Building EB-11, is a **Gas Chamber at Elliott's Beach**, which first appears on this map. The change at the Weapons and Field Training Battalion area is that the Grenade Court at about the 700 yard point of Range "A" is no longer shown but a replacement **Grenade Pit** is shown northeast of the Hand Grenade Practice Area and Range "D". The borrow pit noted in 1944 and 1946 is enlarged and the Argonne Trailer Park has been constructed within the West Main Range Impact Area.

Marine Corps Recruit Depot Parris Island

1954 *Master Shore Development Plan Part III- Section 2 General Development Plan, Area "H" Sheet 9 of 17*, dated 30 July 1954. Record Group 71, Entry 1001, Box 1175, Folder Parris Island: W42-37-PI-4, National Archives, College Park, MD.

Appendix G-24

This map of the Weapons and Field Training Battalion area is essentially the same as earlier ones, except the Skeet Range, which replaced the 1944 Small Bore Range Nos. 7 & 8, is no longer depicted. The grenade pit shown in 1953, is outside the map area.

Naval Facilities Engineering Command, Southeast Division

1970 *Addition & Alterations to Outdoor Rifle Range Area & Vicinity Map, Marine Recruit Depot Parris Island*, dated 28 April 1968, revised 6 February 1970.
Map Drawer: Land Use, Plans, Public Works Department, MCRD ERR Parris Island, SC.

Appendix G-25

This map details the Weapons and Field Training Battalion area. New **Range "E"** replaces the earlier Hand Grenade Practice Area, The map denotes that the **Existing Hand Grenade Range** is to be removed, which assumably occurred by the time of this As-Built revision. Small Bore Ranges Nos. 1 & 2 and Nos. 3 & 4 are shown merged together. Small Bore Ranges Nos. 5 & 6 are not depicted at all. A range appears to occupy the location of the earlier Skeet Range and Small Bore Range Nos. 7 & 8 but it is not labeled. The Borrow area is located just southeast of the Weapons and Field Training Battalion cantonment area. This area is within the Impact Area of the West Main Range of the 1937 Field Artillery Range.

Marine Corps Recruit Depot Parris Island

1973 *Map of the Marine Recruit Depot Parris Island*, dated 5 January 1968, revised November 1973. Map Drawer: Land Use, Plans, Public Works Department, MCRD ERR Parris Island, SC.

Appendix G-26

This map depicts the building layout of the entire installation. At the Weapons and Field Training Battalion area, the changes include that the grenade pit is no longer depicted. A **900" Range** occupies the location of the earlier Skeet Range and Small Bore Range Nos. 7 & 8.

The other Small Bore Ranges, shown modified in 1968, appear smaller. Neither the Skeet or the Trap Ranges north of Page Field is any longer depicted, nor is the original 1890s Magazine, Building H45. The Gas Chamber Building 685, the Gas Mask Storage Building 875, and the Ammunition storehouses and magazine remain. Two Borrow Pits are located west of Page Field, within the Impact Area of the 1937 Field Artillery Range. Building 4002, first appears near the N-S runway of Page Field, which later maps denote as requiring an Explosive Safety Quantity Distance (ESQD).

Marine Corps Recruit Depot Parris Island

1983 *Map of the Marine Recruit Depot Parris Island*, dated 13 June 1983. Map Drawer: Land Use, Plans, Public Works Department, MCRD ERR Parris Island, SC.

Appendix G-27

This map depicts the building layout of the entire installation. The Weapons and Field Training Battalion area and Magazine area appear essentially unchanged, except the following buildings appear to have been razed:

No.	Use
721	Ready Ammunition Stores, at Weapons and Field Training Battalion area
723	Ready Ammunition Stores, at Weapons and Field Training Battalion area
724	Ready Ammunition Stores, at Weapons and Field Training Battalion area
784	Ready Ammunition Stores, at Weapons and Field Training Battalion area
A11	Ready Magazine, at Page Field

Page Field remains inactive as an airfield but has been developed, along with Gibb's Island as a training area with the following ranges:

No.	Use
4020	Hand Grenade Range, on Gibb's Island
4119	Practice Grenade & Mine Field, south of East-West runway
4024	Infiltration Course, south of Page Field, north of Golf Course.
4022	Night Movement Course, south of Page Field, north of Golf Course.

The area inland from Elliott's Beach is designated a **Tactical Bivouac Area** and had has a **Field Fortification Display, Building 4026**. Building EB-11, the reported Gas Chamber at Elliott's Beach, no longer appears and has probably been razed.

Marine Corps Recruit Depot Parris Island

1987 *New Combat Courses, General Locations, Location Map and Index of Drawings*, dated 22 July 1987. Map Drawer: 44, Public Works Department, MCRD ERR Parris Island, SC.

Appendix G-28

This map depicts the building layout of the entire installation, which remains essentially the same as described in 1983. However, some changes have occurred to the ranges at Page Field, with additional ones planned to be constructed. A **Wire Entanglement Display** is in the center of the runways. The Practice Grenade Range has moved north of the East-West runway. In its place are the **NBC Movement Course** and a **Squad Offense Course**, further to the south. The **Night Movement Course** has moved east of the N-S runway and south of the E-W runway. Just south of this a new **Fire Team/NBC Movement Course**, which is to be constructed. Also to be constructed is a new **Infiltration Course**, south of the NW-SE runway.

Marine Corps Recruit Depot Parris Island

1988 *Master Shore Station Development Plan, Part II Section 2, General Development Map, Area "F"*, dated 1 July 1966, revised 1 March 1988. Map Drawer: Master Shore Development Plans, Public Works Department, MCRD ERR Parris Island, SC.

Appendix G-29

This map details the north end of Horse Island, and denotes **Building 881, as a Skeet Range**. Assumably the direction of fire is northwest, into the marshland toward Jericho Point.

Marine Corps Recruit Depot Parris Island

1994 *Map of the Marine Recruit Depot Parris Island*, dated January 1994. Item: 840165-122, Parris Island Museum, MCRD ERR Parris Island, SC.

Appendix G-30

This map depicts the building layout of the entire installation, with hand drawn updates to the Page Field training area. The Wire Entanglement Display and Practice Grenade Range noted on the 1987 maps, are no longer depicted. The 1983 Infiltration Course is now labeled **Field Fortification Course II**. A **Mine/Booby Trap** area replaces the existing 1987 NBC Movement Course, which replaced the 1983 Practice Grenade Range and Mine Field. South of that is the **Day Movement Stations**, which had been the Squad Offense Course in 1987. The delineation for the Night Movement Course remains but it is unlabeled. To the south, Fire Team/NBC Movement Course, that was to be constructed in 1987, is now labeled as **Day Movement 1** and **Day Movement 2**. The area of the Infiltration Course, south of the NW-SE runway in 1987, is now the **CAC (Combat Assault Course)**. New training areas are **Combat Town**, west of Page Field, **NBC Field Course**, north of that and the **Booby Trap Course**, to the northeast of the runways. Other areas of the installation appear unchanged from earlier descriptions.

Marine Corps Recruit Depot Parris Island

1996 *ESQD Arcs MCRD Parris Island, S.C.*, dated 19 September 1996. Map Drawer: Depot Maps, Public Works Department, MCRD ERR Parris Island, SC.

Appendix G-31

This map shows the ESQDs (Explosive Safety Quantity Distance) around the following ammunition storage buildings:

No.	Radius (feet)	Name (from earlier maps)
A1	215	Small Arms Magazine
A2	100	Small Arms Magazine
A3	215	Small Arms Magazine
A4	1250	High Explosive Magazine
A5	100	High Explosive Magazine
A6	1250	High Explosive Magazine
A7	1250	Fuze Magazine
A8	-	Smoke Drum Magazine
A9	100	Inert Magazine
A10	-	Inert Magazine
4002	250	

Marine Corps Recruit Depot Parris Island

1998 *Depot Map MCRD PISC.*, dated 9 January 1998. Map Drawer: 22, Public Works Department, MCRD ERR Parris Island, SC.

Appendix G-32

This map shows the entire installation and represents the conditions of the site a year prior to this writing. The Weapons and Field Battalion Area has names associated with its ranges as followings:

Range "A"	Khe Sanh
Range "B"	Hue City
Range "C"	Chosin
Range "D"	Starlight
Range "E"	Inchon
Pistol Range	Pusan

Only the Small Bore Range nearest building 786 remains depicted but unlabeled. A **Day Movement Course**, lies between Ranges "A" and "B", at the location of the 1941 rifle grenade range. Building 627, the WWII era Gun Shed, has been removed and buildings A4 to A7 in the magazine area are not depicted. The Horse Island Skeet Range building 881, remains as does Building 685, which had been the gas chamber. Apparently, it no longer serves this purpose as a new building in the cantonment area for Page Field is labeled as the **Gas Chamber, 793**. The other areas of the Page Field area remain as shown on the 1996 map, though this map provides additional details concerning subdivisions within the courses. For example, the **Mine and Booby Trap** area is composed of the **Skyscraper Cargo Net** and **Stairway to Heaven** stations.

U.S. Army Corp of Engineers

c.1898 *St. Helena Reservation and Adjacent Territory*, undated, circa 1898. Record Group 77, Entry Fortifications Map File, Drawer 192. Sheet 3-2, National Archives, College Park, MD.

Appendix G-33

This map shows the Port Royal Sound area and the four contemporary military reservations: the U.S. Naval Station on Parris Island, the Hilton Head Military Reservation, the Bay Point Military Reservation on St. Philips Island and the St. Helena Military Reservation (i.e. Fort Freemont). The statements "Projected Armament" labeled on Hilton Head and Parris Island, imply that this map was used to plan additional fortifications for the Spanish American War. The site on Parris Island appears in the Elliott's Beach area, though no details of the type gun is denoted. A detail of St. Helena Military Reservation shows two, unlabeled gun battery emplacements and a casemate location. Based on the name and location, conceivably, the casemate stored mines for mining the Beaufort River, though no collateral documentation was discovered to support this supposition. The location for the two Parris Island light beacons are clearly shown and the Quarantine Station is noted at the location of the WWI era Receiving Station, even though recovered real estate information does not indicate the Navy owns the property at this time.

Marine Corps Air Station Parris Island

1944 *Danger Area, Aerial Gunnery, Bombing and Tactical Operations of MCAS Parris Island, MCAAF Georgetown, NAS Beaufort*, dated, 10 June 1944.
Folder: Parris Island, SC, U.S. Naval Aviation History Center, Washington Navy Yard, Washington, D.C.

Appendix G-34

This map shows the coastline from Savannah, GA north to Myrtle Beach, SC. It denotes water and land ranges associated with MCAS Parris Island, MCAAF Georgetown and NAS Beaufort. It also locates other military airports in the area, showing the water areas belonging to the 3rd Army Air Force and the NAS Charleston. The land targets shown are, from south to north, with appropriate land names added for clarity: **Bull Point Bombing and Strafing Target** on Caper's or Pritchard's Island; **Hunting Island/Fripp Island Bomb Target/Rocket Range**; **Egg Island Dive Bombing Target**; and **Edisto Island's Bay Point Strafing Target**.

The water ranges are, from north to south:

Gunnery Range No. 5, associated with Parris Island
Gunnery Range No. 4, associated with Parris Island
Gunnery Range No. 3, associated with Parris Island
Gunnery Range No. 2, associated with Beaufort
Gunnery Range No. 1, associated with Beaufort
Gunnery Range No. 2, associated with Georgetown
Gunnery Range No. 1, associated with Georgetown

The map does not show the Hilton Head Impact Target, added in March 1945 but it does show an Emergency Landing Field on the northeast end of the island.

U.S. Marine Barracks Parris Island

c.1971 *U.S. Marine Barracks Parris Island Proposed Bridge Head and Water Supply Area*, undated, circa 1942, revised circa 1971. Folder: Beaufort MCRD 84.648 acres, muniment files, Real Estate Division, Naval Facilities Engineering Command-Southern Division, Charleston, SC.

Appendix G-35

This map shows the 15 tracts of real estate acquired in 1942 for the Jericho Wells and Main Gate entrance. The map has been updated to reflect the 51.75 acres the acres disposed of in 1970.

Naval Facilities Engineering Command

1992 *Real Estate Summary Map Marine Recruit Depot Parris Island, S. C.*, revision 5 dated 9 October 1992. Real Estate Division, Naval Facilities Engineering Command-Southern Division, Charleston, SC.

Appendix G-36

This real estate map shows the 14 tract consolidated tracts of real estate acquired to form the installation. The map has been updated to reflect the FUDS disposals at Burton Well Field and Jericho Wells and the Main Gate entrance. Reviewing this map in conjunction with collateral muniment documents provide the basis for the Real Estate summary (section 5.0).

4.4.2 Air Photo Interpretation

Government and contractor personnel conducted an aerial photography database search (see section 4.2). The aerial photography retrieved covered MCRD ERR Parris Island during military use. The imagery acquired is in photographic print format. The analyst performed the interpretation using the following source materials:

PHOTO DATE	APPROX. SCALE
29 Apr 45	1:21,000
12 & 22 Feb 51	1:20,000
20 & 26 Jan 55	1:20,000
07 Jan 59	1:5,500
19 Nov 59	1:20,000
01 Nov 65	1:20,000
28 Apr 72	1:40,000

The analyst delineated imagery containing important areas on hard copy plots and digitized it using Computer-Aided Drafting and Design (CADD) software. The digitized features overlay scanned aerial photography, resulting in the final plots (see Plate 7). The analysis involved using stereo viewing of photography which allows more accurate identifications over

monoscopic interpretations. Resolution and scale of the imagery limited the identification of features discussed in this study. The analyst used the word "probable" when discussing features for which identification is reasonably accurate. The analysis used the term "possible" when identification was not positive, but the object/area matched known features/locations on other sources. Analysis of the aerial photographs referenced the site maps discussed in sections 4.4.1 above. The **bolded** numbers in parentheses referenced in the sub-paragraphs below refer to the feature descriptions on the annotated aerial photography plates. *Note: Feature description numbers are not necessarily transferable between imagery plates of different years.* The sub-paragraphs below describe the relevant features identified on the imagery:

4.4.2.1 1937 Imagery

The archive search could not locate the imagery used to create the aerial photomap discussed in section 4.4.1 as Appendix G-10. That map showed the southern portion of Parris Island and was modified to include information concerning the Field Artillery ranges. The quality of the reproduced map prevents detailed analysis of the site features, however the Aerial Bombing Target at Page Field is clearly visible. The Strafing Range at Page Field may also be visible. An interviewee described it as being a wooden platform at the southeastern end of Page Field. A dark rectangular feature, approximately 57 feet by 125 feet, is discernable and may be the range. The aerial photomap does not cover the main station portion of the installation, so additional features can not be reviewed.

4.4.2.2 1945 Imagery (Plate 7)

The 1945 imagery shows the installation at the end of the World War II expansion. Most of the ranges, aerial bombing targets, and other ordnance-related features shown on site plans are visible on the photos with few exceptions. Of the four aerial bombing targets depicted on the plates, only the Aerial Bombing Target at the Golf Course (1) is clearly visible. It consists of concentric circles with diameters of 100, 200, and 400 feet. The Aerial Bombing Targets at Page Field (2) and the Southern Tidal Flats (3) remain but are barely discernable. The parade deck has been paved removing all traces of the Aerial Bombing Target there. In the Weapons and Field Training Battalion Area, the ranges generally correspond to the site plans. The target berms and firing lines at Ranges A, B, C, and D (4, 5, 6 & 7) are all clearly defined, as are the numerous Small Arms Ranges adjacent to Broad River (4A) are also visible on the photos. At the time the imagery was taken Range E was designated as a Hand Grenade Practice Range, though its appearance doesn't match that use. A 350 yard wide target berm and firing lines (8) are visible at approximately 100, 200, and 300 yards. The range is in line with Range B, C & D, though the area appears less distinct or developed than these other ranges. At the southern end, there are two circular features (9) approximately 150 feet in diameter, which resemble snap in or dry fire ranges. Another feature not designated on the site plans or mentioned in historical texts, is what appears to be an earlier range with a west, northwest direction of fire which cuts across both Ranges E and D (10). It is approximately 300 yards wide and possibly 600 yards long, though the last two hundred yards have tree cover indicating a longer period of disuse. There is ground scaring evident at the location of the rifle grenade circles (11) noted

on a 1941 map between Ranges A and B. There is no evidence on the photos of the reported grenade court (12) south of the swimming pool in the Weapons and Field Training Battalion Area. Trees obscure clearly discerning the gas chamber, building 673 (13) as shown on site maps. Some building development has occurred on the northern portion of the Rifle Range at Ballast Creek (14), though the southern portion remains discernible. The Field Artillery concrete observation post (15) south of Wake Blvd. but the concrete gun emplacement can not be distinguished. The Trap and Skeet Ranges at Page Field (16) are visible north of the Page Field cantonment area, as are the ordnance storage structures (17) to the west. The creation of runways on the airfield has obscured all past evidence of the possible strafing range noted on the 1937 imagery.

4.4.2.3 1951, 1955, 1959, 1965, and 1972 Imagery

Later imagery confirmed the findings of the map analysis without adding significant information on past range use. The 1951 imagery shows a golf course over the formerly visible aerial bombing target with the concentric circles. By 1972, Range E is fully formed with firing lines similar to those at Ranges B, C, and D.

5.0 REAL ESTATE

5.1 CONFIRMED DOD OWNERSHIP

MCRD ERR Parris Island consists of approximately 6,707.955 acres of real estate in fee and easements. Based on a review of the current real estate summary maps and muniment files at the Naval Facilities Engineering Command, Southern Division Charleston, SC, the total acreage the military has owned at MCRD ERR Parris Island is 7,093.518 acres (see Appendix G-35 & 36; NAVFAC Southern Division c.1992). The difference includes 385.563 acres of Formerly Used Defense Sites (FUDS) at the Burton Well Field and at the Jericho Wells/Main gate area. Table 5.1 summarizes the acquisitions and disposals for the base.

Table 5.1 - Real Estate History Summary		
ACQUISITIONS	Fee Acreage	Easement Acreage
Tract III - by deed from Silas Taylor on 28 February 1879 to the Department of Commerce (not clear when transferred to Department of the Navy; other secondary sources cite parcel as including 21.5 acres).	10	
Tract VI - by deed from James Jouett on 22 December 1883 for U.S. Naval Station Port Royal, SC.	37	
Tract VII - by deed from James & Galena Jouett on 22 December 1883 for U.S. Naval Station Port Royal, SC.	4	
Tract V - by deed following Civil Action from McLeod, Eaton, & Densler on 27 June 1899 for U.S. Naval Station Port Royal, SC.	10	
Tract II - by deed from Civil Action from Brooks, Jackson, Jenkins, and Johnson between 27 June and 7 July 1899 for U.S. Naval Station Port Royal, SC.	10	
Tract I - by deed from Charles E. Danner on 3 November 1901 for well water.	0.13	
Tract XI - ordered taken by Presidential Proclamation No. 1472 on 7 August 1918, commandeering the remainder of the island for enlargement of the recruit station at Parris Island, SC.	5,909.62	
Tract IV - transfer by letter from Department of Commerce 8 Jan 1929, originally acquired by government on 26 July 1876 for lighthouse.	2.25	
Tract XIII - by Legislative Act of the State of South Carolina on 7 March 1929 granting U.S. Government right of way between Parris Island and Jericho Point for the causeway.	20	
Tract XII - by Civil Action No. 827 on 8 July 1942 from 16 sub-tracts for Jericho Wells and main gate entrance.	84.648	2.94
Tract XIV - by Civil Action No. 888 on 16 October 1942 from The People's Bank for 1 fee tract and 39 easement sub-tracts for Burton Well Field.	313.86	17.29

Tract VIII - transferred by letter from General Services Administration on 28 April 1954.	17	
Tract IX - by Civil Action No. 68-83 on 30 January 1968 from 7 sub-tracts to extend Rifle Range Impact Area.	626.45	
Tract X - by deed from Paul & Margret Woods on 29 February 1968 to extend Rifle Range Impact Area.	28.33	
Fee and Easement Sub-Totals Past Acreage at MCRD ERR Parris Island	7,073.288	20.23
Total Past Acreage at MCRD ERR Parris Island		7,093.518
Disposals - FUDS Parcels		
<u>Tract XII Jericho Wells portion</u> - Quitclaim deed to Bay Street Corporation on 19 February 1970 (does not reflect additional 1.22 gained by disposal survey).	51.753	
<u>Tract XII portion of Main gate entrance</u> - Quitclaim deed to Beaufort County on 10 July 1973.	19.95	
<u>Tract XIV Burton Well Field</u> - Quitclaim deed to Beaufort County on 10 July 1973.	313.86	
Total FUDS Disposals	385.563	0
Fee and Easement Sub-Totals Current Acreage at MCRD Parris Island	6,687.725	20.23
Total Current Acreage at MCRD ERR Parris Island		6,707.955

Discrepancies appear to exist in some instances between when the deed was acquired and when the Marines first used it. Examples include the Quarantine Station, on site maps as early as 1898 and the original Rifle Range at Ballast Creek, on site maps by 1916. According to the NAVFAC sources, neither parcel of the land appears to have been acquired prior to the presidential proclamation ordering it taken in 1918. Possibly, lease or rental agreements existed for the earlier land use, which were destroyed following their acquisition in fee. Another potential explanation for the inconsistencies is that the acquisition records are missing. The files did not appear complete for the period between the initial acquisitions in 1883 and the 1918 commandeering of the remainder of the island. Numerous contradictions exist in acreage values relating to this period from various sources. It should also be noted that the 6,707.955 acre figures does not agree with the Class I property information maintained by the MCRD Parris Island in the *Detailed Inventory of Naval Shore Facilities* database at Port Hueneme, CA. Review of the base's supporting documentation for their figure was lacking.

5.2 POTENTIAL DOD OWNERSHIP

Besides the FUDS parcels noted in Table 5.1, the archive search identified other sites in the area of MCRD Parris Island of former military ownership or land use. The U.S. Army Corps of Engineers Charleston District has identified some of the sites as FUDS properties, others have not. Since these sites were not the primary focus of this investigation, the following information has not been completely researched and the corresponding back-up sources are not necessarily part of the cited materials in Appendix C.

The **Parris Island Gap Filler Annex**, INPR I04SC047100, concerns 0.37 acres of the MCRD Parris Island used by the Air Force between 1957 and 1970 under a use permit. It received a categorical exclusion from the FUDS program, as it remains within the Department of Defense.

The Marine Corps at Parris Island used the **Hilton Head Lighthouse Reservation** FUDS for artillery and anti-aircraft training prior to and during World War II. The site, INPR number I04SC097200, consisted of 94.66 acres. On 10 July 1937, the Department of the Agriculture granted the Department of the Navy use of the wildlife refuge that had been the Commerce Department's lighthouse. Subsequently, the Defense Battalions at Parris Island established Camp McDougal on the lighthouse reservation. Improvements on the beachfront, included gun emplacements for 7-inch naval guns and the Panama mount for 155mm guns. The Coast Guard also used this site during WWII following the completion of the Defense Battalion training. In 1947, the Marine Corps used a portion of Hilton Head as a recreational site, presumably it was the lighthouse property but it may have been another FUDS property (see below). The site was declared surplus and sold on or about 11 February 1949.

Also on Hilton Head Island was the War Department's **Hilton Head Military Reservation**, INPR I04SC095100. The site consisted of approximately 803 acres on the northeast shoreline, first acquired during the Civil War. At the outbreak of the war, the Confederates established **Fort Walker** on the north end of the island. In November 1861, Union forces captured the fort, renaming it **Fort Welles** and established Hilton Head the headquarters of South Atlantic Blockading Squadron. Union forces also erected **Fort Sherman**, **Fort Howell** and **Fort Mitchell** on the island during the war. The exact location of these fortifications and their post-war use was not confirmed by this research effort. However, the site remained in military hands, as an Executive Order dated 27 October 1874 declared the site a Military Reservation. Hilton Head Military Reservation also had a 15-inch dynamite gun mounted and two 8-inch gun battery mounted in 1898. Based on collected data, it is unclear when the site was sold to private interests, but the INPR implies June 1923.

Also on the northeastern beach of Hilton Head Island is a suspected bombing range. By March 1945 MCAS Parris Island completed an "Impact target" on Hilton Head (MCAS Parris Island 1945), however this research effort did not determine the specific location of the site. A retired EOD Chief Warrant Officer stationed at MCAS Beaufort described clearing approximately 5 dump trucks of OE scrap from beach property of private landowners (Broad River Beach/ Port Royal Plantation Beach). He described the OE as primarily HE fragment bombs but it also included water and sand filled bombs (Swearengen 1999).

Another military use of Hilton Head Island not fully documented by an INPR is the emergency landing field. The Department of the Navy built the airfield on Hilton Head in support of the Marine Corps artillery and antiaircraft use at the lighthouse reservation. Aerial photography⁴

⁴ The aerial photography referred to is single still pictures of the site and not stereo imagery like that acquired for 1945 and used in section 4.4.2 Aerial Photo Interpretation. The 1945 stereo imagery acquired did not include coverage of Hilton Head.

was located showing the two runways but its exact location was not determined. A map shows it on the northeast side of the island but it does not appear to exactly coincide with either the Hilton Head Lighthouse Reservation or the Hilton Head Military Reservation.

On the north side of Port Royal Sound there are other undocumented FUDS. Two are pre-WWII sites: **Fort Freemont** and **Bay Point Military Reservation**. There are also five WWII era sites: **Bull Point Bombing and Strafing Target** on Caper's or Pritchard's Island; **Hunting Island/Fripp Island Bomb Target/Rocket Range**; **Egg Island Dive Bombing Target**; **Edisto Island's Bay Point Strafing Target** and **Marine Corps Auxiliary Air Facility Georgetown**.

Fort Fremont consisted of about 170 acres on St. Helena Island. Apparently established in 1899 to protect the entrance to Port Royal Sound, the fort had three 10-inch disappearing guns (**Battery Jesup**), two 4.7 inch rapid fire guns (**Battery Fornance**) and a small arms range. It was placed out of commission on 14 June 1912, and appears to have been disposed of in 1923, though this was unconfirmed.

The **Bay Point Military Reservation** consisted of about 126 acres on the southern end of St. Phillips Island. Military use appears to have begun with the Confederate's establishment of **Fort Beauregard** there in 1861. The Union captured this fort along with the fortifications on Hilton Head in November 1861. The subsequent use of the site is undetermined but it was reserved for military purposes by an Executive Order dated 27 October 1874. The disposal date of the property is unknown.

Little is known about the five WWII era sites, except their location on a map (see Appendix G-34). The MCAS Parris Island and the Naval Air Station Beaufort both appear to have used the sites. This research effort did not uncover any specific location and size information concerning these sites. However, research did locate aerial imagery showing the location of a "new rocket range" on the southeast corner of Hunting Island. Additionally, the retired EOD Chief Warrant Office stationed at MCAS Beaufort recounted how a park ranger for the Hunting Island State Park would frequently call them out to collect caliber .50 cartridge cases and complete rounds from the island. He also suspected there may have been some kind of range at Bay's Point based on incidents, but didn't specify which one (Edisto or St. Phillip's Island) (Swearengen 1999).

Additional properties in the Port Royal Sound/Beaufort area are associated with the Naval Air Station/Marine Corps Air Station (MCAS) Beaufort. An example is the Laurel Bay Capehart Housing Area, which has also housed marines from Parris Island. A companion Archives Search Report is being completed on MCAS Beaufort which will discuss those properties. The Port Royal Sound/Beaufort area also has the Naval Hospital in Beaufort, which replaced the earlier one on Parris Island. Beaufort County also had a number of other fortifications from the 1700s and 1800s, including: **Fort Balbour**, **Beaufort Arsenal**, **Beaufort Fort (Port Royal Fort)**, **Fort Frederick**, **Fort Lyttleton**, **Passage Fort**, **Fort Prince Frederick**, and **St. Helena Island Post**. The significance of these fortifications to the DERP FUDS program seems doubtful.

Also of dubious notation are two searchlight positions rented in 1938 north of the main gate in April and May 1938 for annual service practice for anti-aircraft battalions on Parris Island (MB Parris Island, 2nd AA Battalion 1938).

5.3 SIGNIFICANT PAST OWNERSHIP OTHER THAN DOD

This investigation did not reveal any significant past ownership of Fort Campbell with relationship to OE or CWM.

5.4 PRESENT OWNERSHIP

The Department of the Navy is the current fee holder of MCRD Parris Island. Additionally, there are other real estate agreements (i.e. leases, permits, licenses, and easements) with a variety of agencies and private concerns.

6.0 SITE INSPECTION

6.1 GENERAL PROCEDURES AND SCOPE

An ASR site inspection is limited in scope to a visual, non-intrusive inspection of the areas suspected as having an OE or CWM hazard potential. This potential is based on an analysis of the collected information. Prior to the inspection, the Archive Search team determines these areas of the site to investigate. The team follows a site safety and health plan (SSHP) prohibiting digging or handling of potential OE and CWM. The SSHP defines standard operating procedures to ensure safety and prevent accidents. Appendix L-1 contains a copy of the SSHP. The inspection team consisted of the following St. Louis District Corps of Engineers personnel: Gregg E. Kocher and Randal S. Curtis. They performed the site survey on 23-25 March 1999. Subsection 6.2 contains a synopsis of the site inspection and Appendix L-2 contains a detailed account. Appendix I includes current site photographs.

6.2 SITE INSPECTION SYNOPSIS

The team traveled to Parris Island, South Carolina on 23 March 1999. After arriving on base, the ASR team met with the installation's point of contact, Tim Harrington of Natural Resources and Environmental Affairs. He contacted CW03 Bob Ledyard, the Chief Range Officer to determine if the Khe Sanh/Range A was free for the remainder of the day to allow inspection of the down range areas. The range was free and both Tim and Bob accompanied the team there.

The interest behind this area was to investigate a probable Rocket and Mortar Impact Area between the Broad River and Range A, south of Ribbon Creek. A good portion of this area is wetlands, which doesn't lend itself to inspection. The team concentrated their inspection efforts on the oyster shell berms and shoreline riprap of the Broad River. The team found a piece of 3.5-inch rocket tail at N 32° 20' 11.63", W 80° 43' 10.37"; 17S NR 26393 77777⁵ and a 3.5-inch rocket practice warhead at N 32° 20' 10.55", W 80° 43' 09.49"; 17S NR 26416 77744. They also found what appeared to be the rear body of an 81mm mortar at N32° 20' 10.64", W 80° 43' 09.65"; 17S NR 26412 77746. These items verify accounts of the area being used as an impact area for rockets and mortars. The team also found numerous pieces of ferrous, 2 to 3-inch diameter rods of undetermined use due to their extremely poor condition. Most were heavily oxidized and encrusted with oyster shells. It was guessed that some might be from SCAR (sub-caliber aerial rocket) 2.25-inch motors. The team did not find any warheads or fins in the area to support this supposition but the observed degradation, would have completely removed most visible traces of these items.

Continuing south along the Broad River shoreline, they came to the target butt area for the WWII vintage Small Bore Ranges, west of Range A. They found residue from a possible burn pit for small arms ammunition, which included cartridge cases, bullets and starter clips. At

⁵ All coordinates were taken with an AN/PSN-11 PLGR GPS (Global Positioning System) receiver using mapping datum World Geodetic System (WGS) 1984.

this point, Bob and Tim parted company with the St. Louis personnel, who completed the remainder of the investigation alone. While still at Range A, they walked the location of a Grenade Course depicted on a 1944 map and of a Rifle Grenade Range depicted on a 1941 map. Both areas were up range from the main firing line on the Khe Sanh Range, and exhibited no evidence of their earlier use. An obstacle course covers the Rifle Grenade Range.

The following day, Wednesday 24 March, the team continued the site visit in the morning. They began by locating Concrete Firing Position R on Horse Island at N 32° 21' 23.96", W 80° 42' 37.12"; 17S NR 27256 80006. This firing position consisted of five L and U shaped concrete barricades; four in line, with a fifth to the rear. The barricades in a line are spaced about 55 feet apart, with U shaped barricades in the middle and the Ls on the flanks. The rear barricade was also U shaped. This is the typical arrangement of permanent 75mm artillery firing points of the late 1930s.

Upon returning to Parris Island, the team located several areas that were on the original U.S. Naval Station portion of the base: Magazine #16 and Fort Haines near the Four Winds club and Fort MacKay near the Criminal Investigation Division Building. The current post Headquarters lies on the WWI vintage Ammunition Salvage Storage, Building 85. The team then attempted to locate if any improvements occurred at the non-concrete firing positions associated with the 1937 artillery firing positions. Marsh's Landing lies at the approximate location of position T and bore no discernable evidence of this past use. Likewise, no evidence was found for positions A, D, E, and F, which lie within the Weapons and Field Training Battalion Area. Immediately to the south of Marsh's Landing and the Marina, lies the original Rifle Range at Ballast Creek. The area has been heavily regraded and reportedly received dredge spoil in the past. The team inspected the southern area near where the target butts would have been, which appeared to be the least disturbed. They located a line of five 2.5 by 2.5 feet concrete blocks at N 32° 20' 03.98", W 80° 40' 12.82"; 17S NR 31035 77555. These blocks appear to have been related to the former butts, based on their location, embedded metals post and on their uniform spacing and alignment. In addition, caliber .30 bullets were found scattered about the area near the blocks.

North of the Page Field training area, the team hiked back to the location of a 1950s vintage Skeet and Trap Range, AS47 & AS48, but found no evidence of this past use. They also didn't find any evidence of the past use of the Aerial Bombing Target at Page Field or the Strafing Range Area at Page Field, even though they found numerous signal illumination ground flares of recent origin in the area. The 1950s era Gas Chamber, Building 685, still exists at the Close Combat Instruction area near the "Crucible".

At 1400, they met with retired Chief Warrant Officer (CW04) Thomas F. Swearngen, whose interview provided valuable guidance and confirmation of the historical data. They met with him in the Parris Island Museum.

The inspection team then traveled to the south end of the base to look at two Aerial Bombing Targets, one at Golf Course shown on site plans and one in the tidal flats reported through interviews. Regrading for the golf course completing covers the target shown on site plans,

though recent archeological investigations for the 15th Century Spanish and French settlements in the area have found bomblets and a point detonating fuze. The team then located the Aerial Bombing Target at Southern Tidal Flats at N 32° 18' 07.40", W 80° 40' 44.17"; 17S NR 30226 73962. The target reportedly consisted of three vertical angle irons rising from the ground with canvas stretched between them. The team found only one post standing but the remains for a second was clearly visible. Although this other target was never found on site plans, the inspection team found a fair amount of OE debris to the east of the target center. The sheet metal debris appeared to all come from 100-pound practice bombs, such as the Navy's MK 15 and the Army's M38A2. They did not locate any of the 3 to 5-pound bomblets described as being found at the other locations, nor did they find any debris from HE bomb use or SCARs. They did find what appeared to be the remains of a M17 float flare, in the tidal flats, too.

The inspection team completed the inspection the following day, Thursday 25 March. They located the Concrete Observation Point for the 1937 Artillery Range at N 32° 19' 58.37", W 80° 42' 03.82"; 17S NR 28134 77373. This structure, just a short hike into the woods behind the mess hall for the Weapons and Field Training Battalion Area, is approximately 20 feet long, 6 feet wide and 7 feet tall with about 1 foot thick walls. Also in this area is the rubble from Concrete Firing Position B, along the north side of the Ballast Creek dredge cut. Unlike the Horse Island position, none of the concrete remains in place. Apparently post WWII dredging in the area destroyed the structures. The rubble from this 75mm artillery firing point is at N 32° 19' 57.37", W 80° 41' 59.23"; 17S NR 28254 77343 and is visible from the roadway next to Argonne Trailer Park. The team spent about 1 to 2 hours in the woods and flats south of the Weapons and Field Training Battalion Area looking for evidence of artillery use. They found numerous expended blank small arms cartridges and the remains from small arms ammunition boxes but did not find any OE debris relating to artillery use. The non-concrete firing positions in this area, also bore no evidence of past use such as packaging debris.

Prior to leaving Parris Island, the team provided an out-briefing to Tim Harrington.

7.0 RANGE SUMMARY

7.1 RANGE IDENTIFICATION AND PRELIMINARY RANGE ASSESSMENT

The Archives search Report identified twenty-nine ranges associated with MCRD ERR Parris Island, including some currently in use, historic ones and three of questionable existence:

- Khe Sanh/Range A
- Hue City/Range B
- Chosin/Range C
- Starlight/Range D
- Inchon/Range E
- Pusan Range, Nak Tong Range and Recreational Firing Range (Broad River Small Arms Ranges)
- Rocket and Mortar Impact Area
- Indoor Small Bore Range (Building 765)
- Miscellaneous Training Stations, Courses and Maneuver Areas
- Guadalcanal Hand Grenade Range
- Mine and Booby Trap and Practice Grenade and Mine Field Range
- Practice Grenade Range
- Combat Assault Course
- Gas Chamber (Bldg. 793)
- Aerial Bomb Target at Page Field
- Strafing Range at Page Field
- Aerial Bombing Target at Golf Course
- Trap and Skeet Ranges at Page Field
- Recreational Firing Range at Horse Island
- Aerial Bombing Target at Parade Deck
- Rifle Range at Ballast Creek
- Field Artillery West Main Range
- Field Artillery East Shrapnel Range
- Gas Chamber (Bldg. 685)
- Aerial Bombing Target at Southern Tidal Flats
- Gas Chamber at Elliott's Beach
- Grenade Range Near Old Swimming Pool at Weapons and Field Training Battalion Area
- Fuse Range at Elliott's Beach
- Hand Grenade Range near Elliott's Beach

The following subparagraphs briefly summarize each of the identified ranges. The ASR companion volume *Range Identification and Preliminary Range Assessment*, contain further range information in a format consistent with the DoD proposed range rule, *Closed, Transferred, and Transferring Ranges Containing Military Munitions*.

7.2 RANGES

7.2.1 Khe Sanh/Range A

This is an active, multipurpose infantry weapon, live fire range in the Weapons and Field Training Battalion area. The range began in 1918 as the 1,000 Yard Range of the "New Rifle Range", which replaced the earlier range at Ballast Creek. During World War II, additional uses included hand grenade courts and rifle grenade circles. Primarily used as a machine gun field firing range in 1999, it is also used for familiarizing troops with light anti-tank/anti-armor (subcaliber) weapons with the AT-4 9mm training device, an M16 rifle field firing range and an M203 range for 40mm practice grenades. In addition to these ranges, a day movement course was incorporated into the southern area in the 1990s. The location of this range is shown on historical maps in ASR Appendix G-4, 6, 13, 17, 19, 23-28, 30, and 32 and on ASR Plates 3 and 7.

7.2.2 Hue City/Range B

This is an active, 600 yard known distance rifle range in the Weapons and Field Training Battalion area. It is the western most of the four parallel known distance ranges at Parris Island. The range began in 1918 as the 600 Yard Range of the "New Rifle Range". In 1930, the range was reconstructed at approximately the same location to allow for the longer-ranging caliber of the .30 M1 ammunition adopted by the Marine Corps. This required reorienting the range in a more northwesterly direction. Improvements and modifications have been made over the years since then. The location of this range is shown on historical maps in ASR Appendix G-6, 13, 17, 19, 23-28, 30 and 32 and on ASR Plates 3 and 7.

7.2.3 Chosin/Range C

This is an active, 500 yard known distance rifle range in the Weapons and Field Training Battalion area. It is the western, middle range of the four parallel known distance ranges at Parris Island. The Marine Corps built the range in 1942, during the World War II era facility expansion. The range appears to originally have had 600 yard firing lines. The location of this range is shown on historical maps in ASR Appendix G-17, 19, 23-28, 30 and 32 and on ASR Plates 3 and 7.

7.2.4 Starlight/Range D

This is an active, 500 yard known distance rifle range in the Weapons and Field Training Battalion area. It is the eastern, middle range of the four parallel known distance ranges at Parris Island. The Marine Corps built the range in 1942, during the World War II era facility expansion. The range appears to originally have had 600 yard firing lines. Aerial photo analysis of 1945 imagery indicates that a range with a westerly direction of fire existed across Ranges D and E, possibly in the 1930s. No other documentation was found to confirm this use. The location of this range is shown on historical maps in ASR Appendix G-17, 19, 23-28, 30 and 32 and on ASR Plates 3 and 7.

7.2.5 Inchon/Range E

This is an active, 500 yard known distance rifle range in the Weapons and Field Training Battalion area. It is the eastern most of the four parallel known distance ranges at Parris Island. Construction on the known distance range was completed by 1970 but the location had several earlier ranges present. Site plans show a hand grenade practice area at this location from approximately 1944 to 1968 and a grenade pit from 1953 to 1970. Aerial photo analysis from 1945 to the 1960s, show a less developed range paralleling Ranges B, C and D with firing lines at about 100, 200 and 300 yards. Another less distinct range is visible in 1945, with a westerly direction of fire across Ranges D and E. Two circular Snap-In or Dry Fire ranges also are discernable in the 1945 imagery. The 1937 Artillery Firing Concrete Firing Position H also appears to have been located on this range. The location of this range is shown on historical maps in ASR Appendix G-9, 10, 17, 19, 23-28, 30 and 32 and on ASR Plate 3 and 7.

7.2.6 Pusan Range, Nak Tong Range and Recreational Firing Range (Broad River Small Arms Ranges)

These three pistol ranges are part of a complex of active and historical small arms ranges with target butts arrayed along the Broad River shoreline, west of Range A in the Weapons and Field Training Battalion area. The ranges have been modified and reconfigured a number of times, since a **Pistol Range** was completed here in 1918, as one of the three ranges associated with the "New Rifle Range." By 1941, a **.22 caliber Range** was added but the World War II expansion saw the development of the site for **Small Bore Ranges Nos. 1 through 8**. Some of these ranges were later reconfigured into other ranges [i.e. Nos. 7 and 8 became the **Skeet Range** (1946-1953) and later a **900 inch Range** (1973)] or abandoned. By 1952, Building 788 has been constructed as an **Electric Pistol Range**. As of 1999, most of the ranges have been abandoned, dismantled or reconstructed and only three remain. The Marine Corps uses **Pusan Range** for service pistol practice and qualification. The **Nak Tong Range** is a close combat pistol range that is also used for shotgun and handgun qualification. The **Recreational Firing Range** dates back to at least 1989 and is used solely for recreational firing of privately owned handguns, no magnum calibers being permitted. The location of this range is shown on historical maps in ASR Appendix G-6, 13, 17, 19, 23-28, 30, 32 and on ASR Plate 3 and 7.

7.2.7 Rocket and Mortar Impact Area

This indistinct range is located on the Broad River Shore line south of Ribbon Creek in the Weapons and Field Training Battalion area. Recovered site plans and maps did not designate either a rocket or a mortar range on Parris Island, though historical documents indicate the Marine Corps used both types of weapons there, though details are sparse. Demonstrations of the trench mortar occurred as early as the 1930s. Presumably, this included the 3-inch Stokes mortar, or possibly the newer 81mm mortar. The installation received 60mm mortars in 1947 and continued mortar demonstrations through at least the mid 1950s. Mortar ammunition on-hand included high explosive, white phosphorus smoke and illumination rounds. Installation

photographs show the use of both the World-War II-era 2.36-inch bazooka rockets and the Korean War-era 3.5-inch anti-tank rockets, apparently practice rounds but this was unconfirmed. The location and breadth of this range is based on accounts of EOD removal actions in the 1960s and confirmed by the OE debris located during the ASR site inspection, therefore range boundaries are only estimates. The location of this range does not appear on any of the historical maps collected for the ASR though the approximate location is shown on ASR Plate 3.

7.2.8 Indoor Small Bore Range (Building 765)

By the early 1950s, a small bore range resides within Building 765 in the Weapons and Field Training Battalion area. Primarily used as a pistol range, it also saw the use of caliber .22 target rifles. As of 1999, it is actively used only for air rifles. The location of Building 765 is shown on historical maps in ASR Appendix G-13, 17, 19, 23, 25, 30 and 32 and on ASR Plate 3.

7.2.9 Miscellaneous Training Stations, Courses and Maneuver Areas

Like most military installations, MCRD ERR Parris Island has less developed areas, which have been used for maneuvers and various other types of training. Maneuver grounds are first designated at the south end of the island during WWI on what will become the golf course (see ASR Appendix G-4). Most recently, the former Page Field area has seen most of the development of these training stations, though other areas, such as Elliott's Beach, have also been used. These areas are not strictly "firing ranges", but Marines have used blank ammunition and/or various pyrotechnic munitions, smoke and simulators on them. Generally speaking, any areas of Parris Island not fully developed are suspect for this type of ordnance use. These miscellaneous training stations include the following:

- Tactical Bivouac Area [*]
- Field Fortification Display (Bldg. 4026) [*]
- Field Fortification Display (1994) [*]
- NBC Movement Course (1987)
- Infiltration Course (Bldg. 4024)
- Night Movement Course (south of page Field, 1983)
- Wire Entanglement Display (1987)
- Day Movement Stations (1984)
- Squad Offense Course (1987)
- Night movement Course (1987)
- Day Movement 1 and Day Movement 2 (1994) [*]
- Fire Team/NBC Movement Course (1987)
- NBC Field Course (1994)
- Combat Town (1994)
- Booby-trap Course (1994)

*- These areas are actively used As of May 1999

Areas used for these types of activities were not identified on historical maps and data prior to 1984 is meager. Because of the lack of adequate backstops and danger zones, it is believed that no live, service rounds were fired in these areas, unless part of another range such as the two late 1930s Field Artillery ranges. Earlier, WWI era artillery firing also occurred at Parris Island but at an undetermined location. The location of the known training stations and courses listed above are shown on historical maps in ASR Appendix G-4, 27-28, 30, 32 and on ASR Plate 4.

7.2.10 Guadalcanal Hand Grenade Range

This live, fragmentation hand grenade range is on Gibb's Island east of Page Field, Building 4020, and dates back to about 1974. It replaced an earlier hand grenade range in the Weapons and Field Training Battalion Area, which was razed to construct the Inchon/Range E. The Guadalcanal Hand Grenade Range has been in use since then, although an accident in 1993 reduced the use frequency down to two or three times per year in 1999. The location of this range is shown on historical maps in ASR Appendix G-27-28, 30, 32 and on ASR Plate 4.

7.2.11 Mine and Booby Trap and Practice Grenade and Mine Field Range

Site plans in 1983 denote this portion of the former Page Field, south of the east-west runway as a **Practice Grenade and Mine Field** area. By 1987 it became the **NBC Movement Course**, only to be reconfigured and expanded into a **Mine/Booby-Trap** area by 1994. Practice hand grenades, ground flares, simulators and practice landmines are known to have been used in this area, with distinct evidence to indicated the use of live mine fuzes, HE grenades, actuators or other pyrotechnics. The location of this range is shown on historical maps in ASR Appendix G-27-28, 30 and 32 and on ASR Plate 4.

7.2.12 Practice Grenade Range

By 1987, site plans denote this portion of the former Page Field, north of the east-west runway as a Practice Grenade Range. It apparently replaced the 1983 practice hand grenade range area, immediately to the south of the east west runway, when it became a NBC Movement Course. This site remains the practice hand grenade range in 1999 and is used for distance and accuracy throwing. The location of this range is shown on historical maps in ASR Appendix G-28, 30 and 32 and on ASR Plate 4.

7.2.13 Combat Assault Course

This portion of the former Page Field was established as an **Infiltration Course** in 1987. The range was expanded and modified by 1994 as the Combat Assault Course (CAC). This course uses blanks, pyrotechnics, smoke and simulators, such as the M115A2 simulator, projectile, airburst, to simulate battlefield conditions. In addition, several pits can be rigged with a quarter-pound block of TNT, which when electrically initiated simulate noise and confusion.

The range remains in use as of 1999. The location of this range is shown on historical maps in ASR Appendix G-28, 30 and 32 and on ASR Plate 4.

7.2.14 Gas Chamber (Bldg. 793)

Building 793 was established as a gas chamber within the former cantonment area of Page Field in approximately 1984, replacing earlier gas chambers. This facility uses riot control agents, such as CS, to instruct recruits in the proper fitting and donning of the protective mask. The location of this range is shown on historical map in ASR Appendix G-32 and on ASR Plate 5.

7.2.15 Aerial Bomb Target at Page Field

This bombing target, located on the eastern edge of Page Field, dates back to at least 1937. The target consisted of three concentric circles, 50 , 100 and 200 feet in diameter. The target predates the establishment of runways on the open airfield and lasted in use until around late 1941-early 1942. Miniature practice bombs have been recovered in the area by EOD units and there was no evidence that other types of bombs were used. The location of this range is shown on historical maps in ASR Appendix G-10 and 15 and on ASR Plates 4 and 7.

7.2.16 Strafing Range at Page Field

During the late 1930's a portion of Page Field was used as an air-to-ground strafing target. The exact location could not be ascertained but is thought to have been on the southeast end of the airfield. The target consisted of an approximately 100 foot by 100 foot plywood deck that was shot at by aircraft whose ammunition was color-coded to be able to score hits. Range use is thought to have ceased with the expansion of Page Field and the establishment of distinct runways in 1940. The location of this range is not delineated on any historical maps but can possibly be distinguished on ASR Appendix G-10, is also included on ASR Plate 4.

7.2.17 Aerial Bombing Target at Golf Course

This bombing target was established as a replacement for the **Aerial Bombing Target at Page Field** in 1942. Like that target, miniature practice bombs have been recovered in the area by EOD units and there was no evidence that other types of bombs were used. Range use is thought to have ceased around the time Page Field was placed on caretaker status in July 1946. The golf course was completed over the target by 1948. The location of this range is shown on historical maps in ASR Appendix G-21 and on ASR Plate 4 and 7.

7.2.18 Trap and Skeet Ranges at Page Field

A trap and skeet range was established north of the cantonment area of Page Field by 1946, though it was probably in use in the early 1940s. The range contained two structures, buildings AS47 and AS48, with a field of fire over the marsh around Ballast Creek. The closing of the airfield after the war likely limited its use and the ranges are not delineated on

site plans after 1953. The ASR site inspection did not locate any physical evidence of its existence in March 1999. The location of this range is shown on historical maps in ASR Appendix G-21 and 23 and on ASR Plates 5 and 7.

7.2.19 Recreational Firing Range at Horse Island

This range first appeared on site plans in 1988 as a **Skeet Range** on Horse Island. The ASR site inspection did not locate a skeet house but only a series of five-foot high posts, set close together, peppered with small-size shot (possibly number six), indicating a possible restriction on the loads that can be fired. A set of bleachers indicates a military use, rather than purely one for civilian or off-duty recreational firing. In 1999 the range is primarily a shotgun range, and may be used for familiarization fire for the military police. The location of this range is shown on historical maps in ASR Appendix G-29 and 32 and on ASR Plate 5.

7.2.20 Aerial Bombing Target at Parade Deck

This bombing target, although not positively located on site plans or aerial photography, was located on the parade deck as early as 1937. The target use ceased with the paving of the parade field completed in the early 1940s. Miniature practice bombs are reported to have been the ordnance used at the time. The location of this range is not shown on any historical maps collected in ASR but the general location of the target is shown on ASR Plate 5.

7.2.21 Rifle Range at Ballast Creek

This was the first identified range in use at Parris Island and it was located on the high ground of an inside bend of Ballast Creek, south of the contemporary Quarantine / Receiving Station. This 600 yard rifle range first appeared on site maps in 1916 but may it have been constructed earlier. The site is also thought to have contained a small pistol range. The site was sometimes referred to as the "Old Rifle Range" to differentiate it from the rifle and pistol ranges constructed in the Weapons and Field Training Battalion Area in 1918. Following World War I through 1922, this range was used as a flying field, though portions of the target butts remained through the late 1930s. Most of the land for this range has since been covered by dredge fill, although evidence of the concrete target foundations remain. The location of this range and the 1920s changes is shown on historical maps in ASR Appendix G-3, 4, 6 and 7 and on ASR Plates 5 and 7.

7.2.22 Field Artillery West Main Range

In 1937 the Marines established two impact areas for field artillery firing, the largest being the **West Main Range**. This range had a concrete observation point and a total of nine firing positions, including three concrete points. Firing point R on Horse Island provides the apex of the surface danger zone (range fan). The impact area is 9,000 feet in length and the range fan extends 16,500 feet. Artillery use is known to have included High Explosive and Shrapnel rounds from the 75mm gun, Model 1897, known as the "French 75", as well as the 75mm pack howitzer, M1. Other calibers such as 2.95-inch mountain gun, 37mm anti-tank and

105mm howitzer may have been fired, but no evidence was uncovered to support this. No direct evidence was uncovered that this impact area was used for aerial bombing or had been used for artillery training prior to 1937. The location of this range is shown on historical maps in ASR Appendix G-9 and 10 and on ASR Plate 2.

7.2.23 Field Artillery East Shrapnel Range

Established in 1937 as one of two field artillery ranges, the East Shrapnel Range consisted of a single firing position at Ballast Creek with a southerly direction of fire. The surface danger zone was approximately 17,00 feet long and extended along the marshes of Parris Island, east of Page Field. Unlike the West Main Range, this range did not have any concrete observation points or firing points and no specific records of weapon firing were found. Presumably, the ordnance used included 75mm gun ammunition, which was the most common caliber during this time. The location of this range is shown on historical maps in ASR Appendix G-9 and 10 and on ASR Plate 2.

7.2.24 Gas Chamber (Bldg. 685)

In the fiscal year ending 1945, the Marines constructed **Building 673** as the first identified gas chamber on base. By 1952, this Quonset hut structure appears at the same location renumbered as **Building 685**. The structure was primarily used for protective gas mask training, though the use of chemical agent identification sets (CAIS) is suspected in the area. Obsolete CAIS were recovered by Marine Corps EOD some time between 1965-1967 and again, by an U.S. Army Technical Escort Unit in 1975. Based on the description of these kits, they are believed to have been the M1 Gas Instructional Set. As of 1999, Building 685 remains in use as the center of the Close Combat Instructional area. This range is noted a gas chamber on historical maps in ASR Appendix G-18 and 22, though it is shown on many others. ASR Plates 5 and 7 also show the location of the range.

7.2.25 Aerial Bombing Target at Southern Tidal Flats

Although not located on any of the reviewed historical site plans, a bombing target existed on the tidal flats south of the golf course. Presumably, the time frame of range use covered World War II, though the target is barely discernable on 1945 aerial imagery. The ASR site inspection located two ten-foot tall metal posts, which formed the target's center. The inspection team also found rusty sheet metal debris apparently from 100 lb. practice bombs scattered around the target. They did not find any debris from 2.25-inch subcaliber aerial rockets (SCAR) or HE bombs at this location, though the Parris Island air station had these items and used them at other locations in the Port Royal Sound area (i.e. FUDS). The location of this range is not shown on any of the historical maps collected in the ASR but it is shown on ASR Plates 4 and 7.

7.2.26 Gas Chamber at Elliott's Beach

Building EB-11 at Elliott's Beach was used as a gas chamber, since razed,. The time frame of use appears to be from the mid-1950s to the early 1980s, when the building appears on site plans, though it is not specifically referenced as a gas chambers. Like the other gas chambers, the structure was primarily used for protective gas mask training, though given the time frame of use, potentially chemical agent identification sets (CAIS) may also have been used. The location of Building EB-11 is shown on historical maps in ASR Appendix G-23, 26 and 27 and on ASR Plate 5.

7.2.27 Grenade Range Near Old Swimming Pool at Weapons and Field Training Battalion Area

Identification of this range relies completely on a credible interviewee, who indicated that an area near the old swimming pool at Weapons and Field Training Battalion Area had been used as a grenade range during his recruit training in 1943 (Swearengen 1999). He recalled it being used primarily for throwing inert training grenades through 2 by 4 simulated window frames, however he thought they also may have used practice or HE grenades. Contemporary maps do not designate any ranges in the described area, which had officer housing within 500 feet. A careful review of aerial photography from 1945 did not reveal any distinct ground features of harden grenade courts as would be used with HE rounds, further casting doubt on their use. The location of this range is not shown on any historical maps collected for the ASR but the general area is denoted on ASR Plates 5 and 7.

7.2.28 Fuse Range at Elliott's Beach

Identification of this range relies completely on a previous range investigation prepared by the DoD Training and Performance Data Center (TPDC) in 1991⁶ and could not be confirmed by other information. Reportedly, the range was a practice hand grenade range, consisting of two throwing points and a target pit area. Based on grid coordinates in the report, the range lies near the Tactical Bivouac Area, inland from Elliott's Beach. Conversations with current personnel whose experience at MCRD ERR Parris Island dates before the writing of the report can not confirm the range use or location. The location of this range is not shown on any historical maps collected for the ASR but is shown on ASR Plate 5. The existence of this range is suspect. Possibly the TPDC report confused it with one of the Practice Grenade Ranges at Page Field.

7.2.29 Hand Grenade Range near Elliott's Beach

Like the Fuze Range at Elliott's Beach, identification of this range relies completely on the 1991 TPDC range investigation⁷ and could not be confirmed by other information.

⁶ Department of Defense Training and Performance Data Center
1991 *United States Marine Corps Weapon Training Range, Unit Training Areas and Unit Training Facilities, Marine Corps Recruit Depots located at San Diego, California, Parris Island, South Carolina.* dated May 1991.

⁷ Department of Defense Training and Performance Data Center

Reportedly, the range was a live, fragmentation hand grenade range used for familiarization and qualification. It is described as being 200 by 180 meters in size, with two throwing bunkers, a platform for controlling the range and six tire targets. Based on grid coordinates in the report, the range lies near the boat launch near Elliott's Beach. Conversations with current personnel whose experience at MCRD ERR Parris Island dates before the writing of the report can not confirm the range use or location. The location of this range is not shown on any historical maps collected for the ASR, but is shown on ASR Plate 5. The existence of this range is highly suspect and is believed to have been confused with the Guadalcanal Hand Grenade Range, which existed in 1991, but was omitted in that report.

1991 *United States Marine Corps Weapon Training Range, Unit Training Areas and Unit Training Facilities, Marine Corps Recruit Depots located at San Diego, California, Parris Island, South Carolina.* dated May 1991.

APPENDIX A
REFERENCES

The following list of references only represents the items cited in preparation of this report, and does not illustrate all the documents reviewed or copied for the backup files (see Records Review section 4.2 for further details). Source listings for locating each document are noted except where relatively widely available.

Section 2.0 PREVIOUS SITE INVESTIGATIONS

Naval Energy and Environmental Support Activity

1986 *Installation Assessment Study of Marine Corps Recruit Depot Parris Island, South Carolina*, dated September 1986.

Naval Facilities Engineering Command – Southern Division

1998 *Master Work Plan Marine Recruit Depot Parris Island, South Carolina Comprehensive Long-Term Environmental Action Navy (CLEAN) Contract*, dated March 1998

Section 4.1 HISTORICAL SITE SUMMARY (cited references only)

Alvarez, Eugene

1998 *Parris Island: "The Cradle of the Corps", A History of the United States Marine Corps Recruit Depot, Parris Island, SC 1562-1998*, dated 1998. Historical Files. Parris Island Museum, Marine Corps Recruit Depot, Parris Island, SC.
Appendix C-1

Bureau of Ordnance

1948 *F.S. Smoke Mixture, Disposition of*, dated 16 June 1948. Record Group 74, Entry 1003A, Box 125, Folder L11-3/KV (1-1-48). National Archives, Archives II, College Park, MD.
Appendix C-2

Bureau of Yards and Docks

1901 *Transfer of Port Royal Naval Station*, dated 15 October 1901. Vertical Files, Folder Reports of BuDocks to the Secretary of the Navy, Port Royal, SC, 1865-1905. Naval Construction Battalion Center, Port Hueneme, CA.
Appendix C-3

Coletta, Paolo E.

1985 *United States Navy and Marine Corps Bases, Domestic*, dated 1985. Greenwood Press, Westport, CT.
Appendix C-4

Department of Defense Training and Performance Data Center

1991 *United States Marine Corps Weapon Training Range, Unit Training Areas and Unit Training Facilities, Marine Corps Recruit Depots located at San Diego, California, Parris Island, South Carolina.* dated May 1991, Land Use and MILCON Branch CMC (LFL), Headquarters U.S. Marine Corps, Washington DC.

Appendix C-35

Heinl, Robert

1940 *Hilton Head Marines*, dated March 1940. Marine Corps Gazette, Volume 24, Number 1. U.S. Marine Corps Museum Library, Washington Navy Yard, Washington DC.

Appendix C-5

Marine Barracks Parris Island, SC

1927 *Rifle Range Data*, dated 22 July 1927. Record Group 127, Entry 18 General Correspondence 1913-32, Box 44, Folder 1275-65 Target Ranges. National Archives, Washington DC.

Appendix C-6

Marine Barracks Parris Island, SC

1930 *Construction Work on New Range*, dated 14 October 1930. Record Group 127, Entry 18 General Correspondence 1913-32, Box 45, Folder 1275-65 Target Ranges. National Archives, Washington DC.

Appendix C-7

Marine Barracks Parris Island, SC

1935 *Ammunition Allowance for Recruit Training*, dated 16 January 1935. Record Group 127, Entry 18 General Correspondence 1933-38, Box 160, Folder 2000-20. National Archives, Washington DC.

Appendix C-8

Marine Barracks Parris Island, SC

1936 *Miniature Range, 4.2" Chemical Mortars*, dated 27 January 1936. Record Group 127, Entry 18 General Correspondence 1933-38, Box 27, Folder 275-65 Target Ranges. National Archives, Washington DC.

Appendix C-9

Marine Barracks, Parris Island, SC, Quartermaster

1936 *Ammunition*, dated 3 June 1936. Record Group 127, Entry 18 General Correspondence 1933-38, Box 161, Folder 2000-20 Target Ranges. National Archives, Washington DC.

Appendix C-10

Marine Barracks Parris Island, SC

1937 *Allowances of Ammunition (Except Small Arms) for Training, U.S. Marine Corps, Fiscal Year 1938*, dated 18 January 1937. Record Group 127, Entry 18 General Correspondence 1933-38, Box 161, Folder 2000-20-10 Heavy and Light. National Archives, Washington DC.

Appendix C-11

Marine Barracks, Parris Island, SC, Quartermaster

1937 *Ammunition*, dated 9 June 1937. Record Group 127, Entry 18 General Correspondence 1933-38, Box 161, Folder 2000-20-10 Heavy and Light. National Archives, Washington DC.

Appendix C-12

Marine Barracks, Parris Island, SC , 2nd Antiaircraft Battalion

1938 *Rental of Private Land for Use of Battery H for Annual Service Practice*, dated 5 April 1938. Record Group 127, Entry 18 General Correspondence 1933-38, Box 27, Folder 1275-70. National Archives, Washington DC.

Appendix C-13

Marine Barracks, Parris Island, SC

1943 *Gas Alarms - Provision of*, dated 11 August 1943. Record Group 74, Entry General Correspondence 1943, Box 451, Folder KP59. National Archives, Archives II, College Park, MD.

Appendix C-14

Marine Barracks, Quantico, VA, 1st Battalion, 10th Marines

1937 *1937 Report of Annual Service Practice, First Battalion, Tenth Marines, Fleet Marine Force*, dated 18 July 1937. Record Group 127, Entry 18 General Correspondence 1933-38, Box 232, Folder 2400-15 1933-38. National Archives, Washington DC.

Appendix C-15

Marine Barracks, Quantico, VA 1st Battalion, 10th Marines,

1938 *Report of Annual Service Practice, First Battalion, Tenth Marines, Fleet Marine Force, Conducted at Marine Barracks, Parris Island, SC, 6 May - 5 June 1938*, dated 20 June 1938. Record Group 127, Entry 18 General Correspondence 1933-38, Box 231, Folder 2400-10 Artillery, Heavy and Light. National Archives, Washington DC.

Appendix C-16

Marine Barracks, Quantico, VA

1938 *Aerial Gunnery and Bombing Operations at Quantico, VA and Parris Island, SC*, dated 21 July 1938. Record Group 127, Entry 18 General Correspondence 1933-38, Box 232, Folder 2400-15 1933-38. National Archives, Washington DC.

Appendix C-17

Marine Corps Recruit Depot, Parris Island, SC

1982 *Command Chronology for the period 1 July - 31 December 1981*, dated 15 March 1982. Command Chronologies, Box 1981-1982, Folder Command Chronology July-Dec 1981. Marine Corps Recruit Depot Museum Archives, Parris Island, SC.

Appendix C-18

Marine Corps Recruit Depot, Parris Island, SC, Weapons and Field Training Battalion

1997 *Standing Operating Procedures for Range Operations and Field Training*, dated 14 May 1997. General Files. Ordnance Office, Marine Corps Recruit Depot, Parris Island, SC.

Appendix C-19

Marine Corps Air Station, Parris Island, SC

1945 *History of MCAS, Parris Island, SC, Submission of*, dated 21 May 1945. Box N/A, Folder Parris Island, SC. U.S. Naval Aviation History Center, Washington Navy Yard, Washington DC.

Appendix C-20

Marine Corps Air Station, Parris Island, SC

1946a *Disposition of Excess Ordnance Materials*, dated 6 February 1946. Record Group 74, Entry 4444, Box 193, Folder Quantico, VA Mar-Apr 1946. National Archives, Archives II, College Park, MD.

Appendix C-21

Marine Corps Air Station, Parris Island, SC

1946b *Disposition of the Following Excess Munitions on Hand at this Station, is Requested*, dated 13 March 1946. Record Group 74, Entry 4444, Box 193, Folder Quantico, VA Mar-Apr 1946. National Archives, Archives II, College Park, MD.

Appendix C-22

Naval Energy and Environmental Support Activity

1986 *Initial Assessment Study of Marine Corps Recruit Depot, Parris Island, SC, NEESA 13-095*, dated September 1986. Land Use and MILCON Branch CMC (LFL), Headquarters U.S. Marine Corps, Washington DC.

Appendix C-23

Navy Facilities Command, Southern Division

c.1972 *Land Register, Sixth Naval District*, dated c. 1972. Real Estate Files. U.S. Navy Facilities Command, Chesapeake Division, Norfolk, VA.

Appendix C-24

- U.S. Army Technical Escort Unit, Aberdeen Proving Grounds, MD
1975a *Operational Report - Trip #36-75*, dated 18 August 1975. Vertical Files.
Chemical Defense Biological Agency Historical Office, Edgewood, MD.
Appendix C-25
- U.S. Army Technical Escort Unit, Aberdeen Proving Grounds, MD
1975b *Operational Report - Trip #49-75*, dated 30 October 1975. Vertical Files.
Chemical Defense Biological Agency Historical Office, Edgewood, MD.
Appendix C-26
- U.S. Marine Corps Headquarters
1938 Memorandum: *Peace Time Requirement of Quarters and Barracks for Marine Barracks, Parris Island, SC*, dated 10 November 1938. Record Group 127, Entry 18 General Correspondence 1933-38, Box 24, Folder 1275/70-5480. National Archives, Washington DC.
Appendix C-27
- U.S. Marine Corps Headquarters
1939 Memorandum: *Preparation of an Artillery Range at Parris Island*, dated 21 September 1939. Record Group 127, Entry 18 General Correspondence 1933-38, Box 236, Folder Parris Island. National Archives, Washington DC.
Appendix C-28
- U.S. Marine Corps Headquarters
1947a *Shipment Order*, dated 3 January 1947. Record Group 74, Entry 5595, Box 129, Folder Quantico, VA Jan-Mar 1947. National Archives, Archives II, College Park, MD.
Appendix C-29
- U.S. Marine Corps Headquarters
1947b *Shipment of Grenades*, dated 15 October 1947. Record Group 74, Entry 5595, Box 129, Folder Quantico, VA Jan-Mar 1947. National Archives, Archives II, College Park, MD.
Appendix C-30
- U.S. Marine Corps Headquarters
1947c *Shipment of Ammunition*, dated 13 November 1947. Record Group 74, Entry 5595, Box 129, Folder Quantico, VA Jan-Mar 1947. National Archives, Archives II, College Park, MD.
Appendix C-31

U.S. Ship Patoka

1923 *Small Arms Target Practice of the Crew of the USS Patoka on Rifle Range at Parris Island, SC*, dated 22 May 1923. Record Group 127, Entry 18 General Correspondence 1913-32, Box 44, Folder 1275-65 Target Ranges. National Archives, Washington DC.

Appendix C-32

War Department

1898 *8 Inch Gun Battery, Port Royal Harbor, SC*, dated 31 December 1898. Record Group 77, Drawer 253, Sheet 17-2. National Archives, Archives II, Cartographic Center, College Park, MD.

Appendix C-33

War Department

1918 *Fort Fremont*, dated 21 February 1918. Record Group 77, Entry 220, Box 4, Folder Savannah and Port Royal, SC. National Archives, Washington DC.

Appendix C-34

Section 4.4 AIR PHOTO INTERPRETATION AND MAP ANALYSIS

Bureau of Yards and Docks, Naval Department

1899 *Plan of the U.S. Naval Station Port Royal, S.C.*, dated October 1899. Item: 840165CO-18, Parris Island Museum, MCRD ERR Parris Island, SC.

Appendix G-1

1918 *Plot of Island and Environs, Extension to Marine Barracks Parris Island, SC.*, dated 11 June 1918. Reel 584, frame 18, Construction Battalion Logistics Center, Naval Construction Battalion, Port Hueneme, CA.

Appendix G-4

1940 *Marine Barracks Parris Island, SC Key Map.*, dated 30 June 1940. Reel 583, frame 592, Construction Battalion Logistics Center, Naval Construction Battalion, Port Hueneme, CA.

Appendix G-11

Marine Corps Air Station Parris Island

1944 *Danger Area, Aerial Gunnery, Bombing and Tactical Operations of MCAS Parris Island, MCAAF Georgetown, NAS Beaufort*, dated, 10 June 1944. Folder: Parris Island, SC, U.S. Naval Aviation History Center, Washington Navy Yard, Washington, D.C.

Appendix G-34

Marine Corps Recruit Depot Parris Island

1952 *Master Shore Development Plan Part III- Section 2 General Development Plan, Sheet 15 of 17*, dated 31 July 1952. Map Drawer: Master Shore Development Plans, Public Works Department, MCRD ERR Parris Island, SC.

Appendix G-22

1953 *Marine Corps Recruit Depot Parris Island*, dated 30 June 1953. Map Drawer: Master Shore Development Plans, Public Works Department, MCRD ERR Parris Island, SC.

Appendix G-23

1954 *Master Shore Development Plan Part III- Section 2 General Development Plan, Area "H" Sheet 9 of 17*, dated 30 July 1954. Record Group 71, Entry 1001, Box 1175, Folder Parris Island: W42-37-PI-4, National Archives, College Park, MD.

Appendix G-24

1973 *Map of the Marine Recruit Depot Parris Island*, dated 5 January 1968, revised November 1973. Map Drawer: Land Use, Plans, Public Works Department, MCRD ERR Parris Island, SC.

Appendix G-26

1983 *Map of the Marine Recruit Depot Parris Island*, dated 13 June 1983. Map Drawer: Land Use, Plans, Public Works Department, MCRD ERR Parris Island, SC.

Appendix G-27

1987 *New Combat Courses, General Locations, Location Map and Index of Drawings*, dated 22 July 1987. Map Drawer: 44, Public Works Department, MCRD ERR Parris Island, SC.

Appendix G-28

1988 *Master Shore Station Development Plan, Part II Section 2, General Development Map, Area "F"*, dated 1 July 1966, revised 1 March 1988. Map Drawer: Master Shore Development Plans, Public Works Department, MCRD ERR Parris Island, SC.

Appendix G-29

1994 *Map of the Marine Recruit Depot Parris Island*, dated January 1994. Item: 840165-122, Parris Island Museum, MCRD ERR Parris Island, SC.

Appendix G-30

1996 *ESQD Arcs MCRD Parris Island, S.C.*, dated 19 September 1996. Map Drawer: Depot Maps, Public Works Department, MCRD ERR Parris Island, SC.

Appendix G-31

Marine Corps Recruit Depot Parris Island

1998 *Depot Map MCRD PISC.*, dated 9 January 1998. Map Drawer: 22, Public Works Department, MCRD ERR Parris Island, SC.

Appendix G-32

Naval Department, Civil Engineer's Office

1905 *Plan of the U.S. Naval Station Port Royal, SC.*, dated July 1903, submitted as no changes 30 June 1905. *Maps - Navy Yards and Naval Stations*, dated May 1909, Seabee Museum/History Office, Naval Construction Battalion, Port Hueneme, CA.

Appendix G-2

Naval Facilities Engineering Command

1992 *Real Estate Summary Map Marine Recruit Depot Parris Island, S.C.*, revision 5 dated 9 October 1992. Real Estate Division, Naval Facilities Engineering Command-Southern Division, Charleston, SC.

Appendix G-36

Naval Facilities Engineering Command, Southeast Division

1970 *Addition & Alterations to Outdoor Rifle Range Area & Vicinity Map, Marine Recruit Depot Parris Island*, dated 28 April 1968, revised 6 February 1970. Map Drawer: Land Use, Plans, Public Works Department, MCRD ERR Parris Island, SC.

Appendix G-25

U.S. Army Corp of Engineers

c.1898 *St. Helena Reservation and Adjacent Territory*, undated, circa 1898. Record Group 77, Entry Fortifications Map File, Drawer 192. Sheet 3-2, National Archives, College Park, MD.

Appendix G-33

U.S. Coast and Geodetic Survey

1942 *Savannah Sectional Aeronautical Chart, Edition 8-2*, dated 18 June 1942. Record Group 23, Entry Savannah, Cartographic Branch, National Archives, College Park, MD.

Appendix G-16

U.S. Engineer Office, Savannah, Georgia

1941 *Proposed Aircraft Machine Gun Range*, dated 21 October 1941. Record Group 127, Entry 18B, Box 211, Folder 1275-65 Ranges, Target, National Archives, College Park, MD.

Appendix G-14

U.S. Marine Barracks Parris Island

1919 *Annual Report 1919 Main Station*, dated 30 June 1919. Record Group 71, Entry: Photos of Construction Projects 1879-1942, Parris Island, Box 354, Still Pictures Branch, National Archives, College Park, MD.
Appendix G-5

1929 *Receiving Station, Flying Field and Rifle Range* dated 30 June 1929. Map Drawer: Master Shore Development Plans, Public Works Department, MCRD ERR Parris Island, SC.
Appendix G-6

1937 *Field Artillery Range*, dated 1 December 1937. Record Group 127, Entry 18B, Box 236, Folder 1275/70-5480 Parris Island, National Archives, College Park, MD. Appendix G-9

c.1937 *Southern Area, Parris Island, S.C.*, undated map c.1937, based on aerial photography flown 15 May 1937. Record Group 127, Entry 18 General Correspondence, 1933-38, Box 24, Folder 1275/70-5480, National Archives, College Park, MD.

Appendix G-10

1941 *Map of Training Station Marine Barracks Parris Island, S.C.*, dated 30 June 1941. Map Drawer: Master Shore Development Plans, Public Works Department, MCRD ERR Parris Island, SC.

Appendix G-12

1941 *Map of Rifle Range Marine Barracks Parris Island, S.C.*, dated 30 June 1941. Map Drawer: Master Shore Development Plans, Public Works Department, MCRD ERR Parris Island, SC

Appendix G-13

1941 *Page Field, Field Lighting*, dated 19 September 1941, revised 22 December 1941. Map Drawer 42, Page Field, Public Works Department, MCRD ERR Parris Island, SC.

Appendix G-15

1944 *Rifle Range - Proposed Heads at Ends of Butts*, dated 15 November 1944. Reel 585, frame 583, Construction Battalion Logistics Center, Naval Construction Battalion, Port Hueneme, CA.

Appendix G-17

1946 *Map of Marine Barracks Parris Island, S.C., Map A.*, dated 30 June 1946. Item: 840165-129, Parris Island Museum, MCRD ERR Parris Island, SC.

Appendix G-18

U.S. Marine Barracks Parris Island

1946 *Map of Marine Barracks Parris Island, S.C., Map B.*, dated 30 June 1946.
Item: 840165-129, Parris Island Museum, MCRD ERR Parris Island, SC.
Appendix G-19

1946 *Map of Marine Barracks Parris Island, S.C., Map C.*, dated 30 June 1946.
Item: 840165-129, Parris Island Museum, MCRD ERR Parris Island, SC.
Appendix G-20

1946 *Map of Marine Barracks Parris Island, S.C., Map D.*, dated 30 June 1946.
Item: 840165-129, Parris Island Museum, MCRD ERR Parris Island, SC.
Appendix G-21

c.1971 *U.S. Marine Barracks Parris Island Proposed Bridge Head and Water Supply Area*, undated, circa 1942, revised circa 1971. Folder: Beaufort MCRD 84.648 acres, muniment files, Real Estate Division, Naval Facilities Engineering Command-Southern Division, Charleston, SC.
Appendix G-35

U.S. Marine Corps

1916 *Map of Parris Island, SC.*, dated 5 April 1916. Map Drawer: Master Shore Development Plans, Public Works Department, MCRD ERR Parris Island, SC.
Appendix G-3

1934 *Key Map Marine Barracks Parris Island, SC.*, dated 30 June 1933, revised 30 June 1934. Record Group 71, Reel 620, Folder 610 Parris Island, National Archives, College Park, MD
Appendix G-7

1934 *Map of Main Station Marine Barracks Parris Island, SC.*, dated 30 June 1933, revised 30 June 1934. Item: 840165-132, Parris Island Museum, MCRD ERR Parris Island, SC.
Appendix G-8

Section 5.0 REAL ESTATE

See above for sections 4.1 and 4.4.

APPENDIX B

**ABBREVIATIONS, ACRONYMS,
AND BREVITY CODES**

ABBREVIATIONS, ACRONYMS AND BREVITY CODES

The following list contains abbreviations, acronyms and brevity codes within this ASR, as well as typical others.

AAF*	Army Air Field
AA	Anti-Aircraft
ACGIH	American Conference of Governmental Industrial Hygienist
AEC	Army Environmental Center
AFB	Air Force Base
ACGIH	American Conference of Governmental Industrial Hygienist
ANSI	American National Standards Institute
AP	Armor Piercing
APDS	Armor Piercing Discarding Sabot
APERS	Anti-Personnel
AP-T	Armor Piercing-Tracer
ASR	Archive Search Report
AT	Anti-Tank
BD	Base Detonating
BD/DR	Building Demolition/Debris Removal
BLM	Bureau of Land Management
BRAC	Base Realignment and Closure
CAC	Combat Assault Course
CADD	Computer-Aided Drafting and Design
CAIS	Chemical Agent Identification Set
cal	Caliber
CBDCOM	Chemical and Biological Defense Command
CE	Corps of Engineers
CEHNC	Corps of Engineers, Huntsville Engineering and Support Center
CEMVS	Corps of Engineers, Mississippi Valley-St. Louis District
CEMVK	Corps of Engineers, Mississippi Valley-Vicksburg District
CEP	Circular Error of Probability
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CESO	Civil Engineering Support Office
CFR	Code of Federal Regulations
COE	Chief of Engineers
ctg	Cartridge
CWM	Chemical Warfare Material
CWS*	Chemical Warfare Service
CX	Center of Expertise
DA	Department of the Army
DEET	Diethyltoluamide
DERP	Defense Environmental Restoration Program
DOD	Department of Defense
DOI	Department of Interior

EE/CA	Engineering Evaluation/Cost Analysis
EIS	Environmental Impact Statement
EB	Elliott's Beach
EM	Engineer Manual
EO	Executive Order
EOD	Explosive Ordnance Disposal
EPA	Environmental Protection Agency
ERR	Eastern Recruiting Region
ETL	Engineering Technical Letter
FGDC	Federal Geographic Data Committee
FM	Field Manual
FS	Feasibility Study
FUDS	Formerly Used Defense Sites
GIS	Geographic Information System
GPS	Global Positioning System
GSA	General Services Administration
HAZWOPER	Hazardous Waste Operations
HBX	high blast explosives; mixtures of RDX, TNT and aluminum
HE	High Explosive
HEAT	High Explosive Anti-Tank
HEI	High Explosive Incendiary
HEP	High Explosive Plastic
HMX	cyclotetramethylenetetranitramine (a type of high explosive)
HTA	Heavier Than Air
HTRW	Hazardous Toxic and Radioactive Waste
HTW	Hazardous and Toxic Waste
IAS	Initial Assessment Study
IATCB	Interdepartmental Air Traffic Control Board
INPR	Inventory Project Report
IRP	Installation Restoration Program
LD	Lyme Disease
MB	Marine Barracks
MCAS	Marine Corps Air Station
MCAAF	Marine Corps Auxiliary Air Field
MCAAP	McAlester Army Ammunition Plant
MCRD	Marine Corps Recruit Depot
MCX	Mandatory Center of Expertise
MIDAS	Munitions Items Disposition Action System
MT	Mechanical Time
MTSQ	Mechanical Time Super Quick
NARA	National Archives and Records Administration
NAVSEA	Naval Sea Systems Command
NAS*	Naval Air Station
NCP	National Contingency Plan

n.d.	No Date
NEW	Net Explosive Weight
NGVD	National Geographic Vertical Datum
NIMA	National Imagery and Mapping Agency
NIOSH	National Institute for Safety and Health
NMAS	National Map Accuracy Standards
NPL	National Priorities List
NOAA	National Oceanic and Atmospheric Administration
NOFA	No Further Action
NPRC	National Personnel Records Center
NRC	National Records Center
NWS	National Weather Service
OCE	Office Chief of Engineers
OE	Ordnance and Explosives
OP	Observation Point or Ordnance Pamphlet
OSHA	Occupational Safety and Health Administration
PA	Preliminary Assessment
PD	Point Detonating
PE	Professional Engineer
PETN	pentaerythritol tetranitrate (a type of high explosive)
PI	Parris Island
PIBD	Point Initiating, Base Detonating
PM	Project Manager
PPE	Personal Protective Equipment
QASAS	Quality Assurance Specialist, Ammunition Surveillance
QM	Quartermaster
QRE	Qualitative Risk Evaluation
RAC	Risk Assessment Code
RDX	cyclotrimethylenetrinitramine; also known as cyclonite or hexogen (a type of high explosive)
RG	Record Group
RI	Remedial Investigation
RI/FS	Remedial Investigation/Feasibility Study
SARA	Superfund Amendments and Reauthorization Act
SCAR	Sub-Caliber Aerial Rocket
SEP	Spherical Error of Probability
SOP	Standing Operating Procedures
SPB*	Surplus Property Board
SSHO	Site Safety and Health Officer
SSHP	Site Safety and Health Plan
SWMU	Solid Waste Management Unit
TCRA	Time Critical Removal Action
TEU	United States Army Technical Escort Unit
TM	Technical Manual

TNT	Trinitrotoluene
TP	Target Practice
TPDC*	Training and Performance Data Center of DOD
USACE	U.S. Army Corps of Engineers
USADACS	U.S. Army Defense Ammunition Center and School
USAFHRA	U.S. Air Force Historical Research Agency
USATCES	U.S. Army Technical Center for Explosive Safety
USATHMA	U.S. Army Toxic and Hazardous Materials Agency
USC	United States Code
USCG	United States Coast Guard
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UXO	Unexploded Ordnance
VB	Viven-Bessieres, in reference to rifle grenades
WAA*	War Assets Administration
W&FTB	Weapons and Field Training Battalion
WGS	World Geodetic System
WNRC	Washington National Records Center

* designates an historic acronym

APPENDIX C
CITED REFERENCES

CITED REFERENCES

Section No. Cited References

- C-1 Alvarez, Eugene
Parris Island: "The Cradle of the Corps", A History of the United States Marine Corps Recruit Depot, Parris Island, SC 1562-1998, dated 1998. Historical Files. Parris Island Museum, Marine Corps Recruit Depot, Parris Island, SC.
- C-2 Bureau of Ordnance
F.S. Smoke Mixture, Disposition of, dated 16 June 1948. Record Group 74, Entry 1003A, Box 125, Folder L11-3/KV (1-1-48). National Archives, Archives II, College Park, MD.
- C-3 Bureau of Yards and Docks
Transfer of Port Royal Naval Station, dated 15 October 1901. Vertical Files, Folder Reports of BuDocks to the Secretary of the Navy, Port Royal, SC, 1865-1905. Naval Construction Battalion Center, Port Hueneme, CA.
- C-4 Coletta, Paolo E.
United States Navy and Marine Corps Bases, Domestic, dated 1985. Greenwood Press, Westport, CT.
- C-5 Heidl, Robert
Hilton Head Marines, dated March 1940. Marine Corps Gazette, Volume 24, Number 1. U.S. Marine Corps Museum Library, Washington Navy Yard, Washington DC.
- C-6 Marine Barracks Parris Island, SC
Rifle Range Data, dated 22 July 1927. Record Group 127, Entry 18 General Correspondence 1913-32, Box 44, Folder 1275-65 Target Ranges. National Archives, Washington DC.
- C-7 Marine Barracks Parris Island, SC
Construction Work on New Range, dated 14 October 1930. Record Group 127, Entry 18 General Correspondence 1913-32, Box 45, Folder 1275-65 Target Ranges. National Archives, Washington DC.
- C-8 Marine Barracks Parris Island, SC
Ammunition Allowance for Recruit Training, dated 16 January 1935. Record Group 127, Entry 18 General Correspondence 1933-38, Box 160, Folder 2000-20. National Archives, Washington DC.

- C-9 Marine Barracks Parris Island, SC
Miniature Range, 4.2" Chemical Mortars, dated 27 January 1936. Record Group 127, Entry 18 General Correspondence 1933-38, Box 27, Folder 275-65 Target Ranges. National Archives, Washington DC.
- C-10 Marine Barracks, Parris Island, SC, Quartermaster
Ammunition, dated 3 June 1936. Record Group 127, Entry 18 General Correspondence 1933-38, Box 161, Folder 2000-20 Target Ranges. National Archives, Washington DC.
- C-11 Marine Barracks Parris Island, SC
Allowances of Ammunition (Except Small Arms) for Training, U.S. Marine Corps, Fiscal Year 1938, dated 18 January 1937. Record Group 127, Entry 18 General Correspondence 1933-38, Box 161, Folder 2000-20-10 Heavy and Light. National Archives, Washington DC.
- C-12 Marine Barracks, Parris Island, SC, Quartermaster
Ammunition, dated 9 June 1937. Record Group 127, Entry 18 General Correspondence 1933-38, Box 161, Folder 2000-20-10 Heavy and Light. National Archives, Washington DC.
- C-13 Marine Barracks, Parris Island, SC , 2nd Antiaircraft Battalion
Rental of Private Land for Use of Battery H for Annual Service Practice, dated 5 April 1938. Record Group 127, Entry 18 General Correspondence 1933-38, Box 27, Folder 1275-70. National Archives, Washington DC.
- C-14 Marine Barracks, Parris Island, SC
Gas Alarms - Provision of, dated 11 August 1943. Record Group 74, Entry General Correspondence 1943, Box 451, Folder KP59. National Archives, Archives II, College Park, MD.
- C-15 Marine Barracks, Quantico, VA, 1st Battalion, 10th Marines
1937 Report of Annual Service Practice, First Battalion, Tenth Marines, Fleet Marine Force, dated 18 July 1937. Record Group 127, Entry 18 General Correspondence 1933-38, Box 232, Folder 2400-15 1933-38. National Archives, Washington DC.
- C-16 Marine Barracks, Quantico, VA 1st Battalion, 10th Marines,
Report of Annual Service Practice, First Battalion, Tenth Marines, Fleet Marine Force, Conducted at Marine Barracks, Parris Island, SC, 6 May - 5 June 1938, dated 20 June 1938. Record Group 127, Entry 18 General Correspondence 1933-38, Box 231, Folder 2400-10 Artillery, Heavy and Light. National Archives, Washington DC.

- C-17 Marine Barracks, Quantico, VA
Aerial Gunnery and Bombing Operations at Quantico, VA and Parris Island, SC, dated 21 July 1938. Record Group 127, Entry 18 General Correspondence 1933-38, Box 232, Folder 2400-15 1933-38. National Archives, Washington DC.
- C-18 Marine Corps Recruit Depot, Parris Island, SC
Command Chronology for the period 1 July - 31 December 1981, dated 15 March 1982. Command Chronologies, Box 1981-1982, Folder Command Chronology July-Dec 1981. Marine Corps Recruit Depot Museum Archives, Parris Island, SC.
- C-19 Marine Corps Recruit Depot, Parris Island, SC, Weapons and Field Training Battalion
Standing Operating Procedures for Range Operations and Field Training, dated 14 May 1997. General Files. Ordnance Office, Marine Corps Recruit Depot, Parris Island, SC.
- C-20 Marine Corps Air Station, Parris Island, SC
History of MCAS, Parris Island, SC, Submission of, dated 21 May 1945. Box N/A, Folder Parris Island, SC. U.S. Naval Aviation History Center, Washington Navy Yard, Washington DC.
- C-21 Marine Corps Air Station, Parris Island, SC
Disposition of Excess Ordnance Materials, dated 6 February 1946. Record Group 74, Entry 4444, Box 193, Folder Quantico, VA Mar-Apr 1946. National Archives, Archives II, College Park, MD.
- C-22 Marine Corps Air Station, Parris Island, SC
Disposition of the Following Excess Munitions on Hand at this Station, is Requested, dated 13 March 1946. Record Group 74, Entry 4444, Box 193, Folder Quantico, VA Mar-Apr 1946. National Archives, Archives II, College Park, MD.
- C-23 Naval Energy and Environmental Support Activity
Initial Assessment Study of Marine Corps Recruit Depot, Parris Island, SC, NEESA 13-095, dated September 1986. Land Use and MILCON Branch CMC (LFL), Headquarters U.S. Marine Corps, Washington D.C.
- C-24 Navy Facilities Command, Southern Division
Land Register, Sixth Naval District, dated c. 1972. Real Estate Files. U.S. Navy Facilities Command, Chesapeake Division, Norfolk, VA.
- C-25 U.S. Army Technical Escort Unit, Aberdeen Proving Grounds, MD
Operational Report - Trip #36-75, dated 18 August 1975. Vertical Files. Chemical Defense Biological Agency Historical Office, Edgewood, MD.

- C-26 U.S. Army Technical Escort Unit, Aberdeen Proving Grounds, MD
Operational Report - Trip #49-75, dated 30 October 1975. Vertical Files. Chemical Defense Biological Agency Historical Office, Edgewood, MD.
- C-27 U.S. Marine Corps Headquarters
Memorandum: *Peace Time Requirement of Quarters and Barracks for Marine Barracks, Parris Island, SC*, dated 10 November 1938. Record Group 127, Entry 18 General Correspondence 1933-38, Box 24, Folder 1275/70-5480. National Archives, Washington DC.
- C-28 U.S. Marine Corps Headquarters
Memorandum: *Preparation of an Artillery Range at Parris Island*, dated 21 September 1939. Record Group 127, Entry 18 General Correspondence 1933-38, Box 236, Folder Parris Island. National Archives, Washington DC.
- C-29 U.S. Marine Corps Headquarters
Shipment Order, dated 3 January 1947. Record Group 74, Entry 5595, Box 129, Folder Quantico, VA Jan-Mar 1947. National Archives, Archives II, College Park, MD.
- C-30 U.S. Marine Corps Headquarters
Shipment of Grenades, dated 15 October 1947. Record Group 74, Entry 5595, Box 129, Folder Quantico, VA Jan-Mar 1947. National Archives, Archives II, College Park, MD.
- C-31 U.S. Marine Corps Headquarters
Shipment of Ammunition, dated 13 November 1947. Record Group 74, Entry 5595, Box 129, Folder Quantico, VA Jan-Mar 1947. National Archives, Archives II, College Park, MD.
- C-32 U.S. Ship Patoka
Small Arms Target Practice of the Crew of the USS Patoka on Rifle Range at Parris Island, SC, dated 22 May 1923. Record Group 127, Entry 18 General Correspondence 1913-32, Box 44, Folder 1275-65 Target Ranges. National Archives, Washington DC.

- C-33 War Department
8 Inch Gun Battery, Port Royal Harbor, SC, dated 31 December 1898. Record Group 77, Drawer 253, Sheet 17-2. National Archives, Archives II, Cartographic Center, College Park, MD.
- C-34 War Department
Fort Fremont, dated 21 February 1918. Record Group 77, Entry 220, Box 4, Folder Savannah and Port Royal, SC. National Archives, Washington DC.
- C-35 Department of Defense Training and Performance Data Center
United States Marine Corps Weapon Training Range, Unit Training Areas and Unit Training Facilities, Marine Corps Recruit Depots located at San Diego, California, Parris Island, South Carolina. dated May 1991, Land Use and MILCON Branch CMC (LFL), Headquarters U.S. Marine Corps, Washington D.C.

APPENDIX C-1

Alvarez, Eugene

Parris Island: "The Cradle of the Corps", A History of the United States Marine Corps Recruit Depot, Parris Island, SC 1562-1998, dated 1998. Historical Files. Parris Island Museum, Marine Corps Recruit Depot, Parris Island, SC

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**Parris Island: "The Cradle Of The Corps."
A History of the United States Marine Corps Recruit Depot,
Parris Island, South Carolina, 1562-1998**

By

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The History And Museums Division,
Headquarters, U. S. Marine Corps
Washington, D. C.

MCRD
PARRIS ISLAND
MUSEUM, SC

On May 1, 1562, an expedition commanded by Frenchman Jean Ribaut, and in the interest of French Huguenots, took possession of the entry to the present St. Johns River in North Florida, appropriately naming it the "River Of May." A crude marker was erected on a river bank site, which is now the location of the United States Naval Station, Mayport.

It should be mentioned that Parris Island has perennially been plagued with spelling conflicts. One is that Jean Ribaut's name was spelled "Ribao" by the Spaniards, and "Ribaut" and "Ribault" by the English and French. "Ribault" is the common usage in Florida, and "Ribault" and "Ribaut" have been used in nearby Beaufort and Port Royal. "Ribaut" has persisted on Parris Island at least since a monument was dedicated in 1924, to honor the French. Nevertheless, spelling questions persisted even after 1948, when Mr. Robert C. Gooch of the General Reference and Bibliography Division, Library of Congress, asserted the best modern usage of the Frenchman's name should be "Ribaut." (2) French references state both spellings are correct, and the problem was not put to rest by the Marine Corps until 1961. Then, for uniformity in correspondence, Parris Island officially adopted "Ribaut." (3)

Having claimed Florida for France, Ribaut next sailed along the Georgia coast northward to a spacious harbor of "beauty and grandeur," where "without danger all the ships in the world might be harbored." He named the harbor Port Royal. We believe from the engravings of Jacques le Moyne that a stone column bearing the crest of King Charles IX of France was erected on Lemon Island, near Parris Island where a small wilderness outpost named Charlesfort was constructed of logs and earth. (4*)

Leaving approximately 30 men in an area abounding with deer, fish, berries, and fruit, Ribaut returned to France as Charlesfort fell on hard times. The tiny fort was abandoned in 1563, when its inhabitants attempted to return to Europe in a poorly constructed ship, and were reduced to acts of cannibalism during their voyage. Survivors were captured by the

* A monument column at Fort Caroline National Historical Park, Jacksonville, Florida, lists "Ribaut" and not "Ribault." The plaque is dated May 1, 1924. Congressman Charles E. Bennett, who is an authority on the French in Florida, insists the proper spelling should be "Ribault." With due respect to Mr. Bennett, the author has used "Ribaut," which is commonly used in South Carolina, and is inscribed on the Parris Island monument dedicated to the French. Some argue the column was not placed on Lemon Island and that Charlesfort was not established on Parris Island. In 1997 archaeologist continued searching for Charlesfort and were nearly certain the fort site was at last confirmed near the Ribaut Monument. Port Royal is the name of the large harbor bordering Parris Island and the nearby town.

English, and it is possible their Parris Island built ship was the first ocean-going craft constructed by Europeans in the United States. (5)

Political upheavals delayed Ribaut's New World return, but in 1564 Frenchman Rene de Laudonniere, who was Ribaut's second in command in 1562, returned to Florida with approximately 300 men and women to establish a Huguenot colony named Fort Caroline. It was constructed approximately five miles inland on the banks of the "River of May" (the St. Johns River), near the modern city of Jacksonville.

Nor did it take long for the Spanish to realize their shipping lanes for transporting confiscated gold and other goods were endangered by a Florida French presence. This realization prompted King Philip II to dispatch Pedro Menendez de Aviles to Florida with orders to destroy the French and their fort. Menendez and his men encamped at St. Augustine in 1565, and with little mercy slaughtered most of the French. Thus, the French influence in Carolina and Florida came to a violent end, as the first major encounter among Europeans for the control of North America resulted in a significant victory for Spain. (6*)

In the vicinity of the abandoned Charlesfort, the Spanish constructed Fort San Felipe in 1566, which was destroyed by the Indians ten years later. But the Spaniards persisted and built Fort San Marcos and approximately 60 other buildings on Parris Island between 1577 and 1586, only to abandon the area in 1587, due to English activity. (7)

Twenty-two years after the English landed at Jamestown in 1607, the final chapter for the European possession of the Carolina low country ensued with a series of English land grants. Between 1629 and 1663 the crown deeded territory between the 31st and 36th parallels to various persons, such as Sir Robert Heath, which resulted in more attention being paid to Parris Island by William Hilton in 1663. (8) William Sayle brought a colony to Port Royal seven years later, but it was moved north to the Ashley and Cooper Rivers, where Charleston was founded in 1680. Following other unsuccessful adventures, a distinct Parris Island record emerged when Major Robert Daniell and later Edward Archer, were granted and purchased the island, in 1698 and 1701. A permanent Port Royal British settlement soon appeared, and the town of Beaufort, named after the Duke of Beaufort, Henry Somerset, was born in 1710-1711. The town quickly became a port for ships "to

*St. Augustine is designated the oldest permanent city (1565) in the United States. It is likely children were born at Fort Caroline long before Jamestown.

take in masts, pitch, tar, turpentine, and other naval stores." (9)

On July 1, 1715, Colonel Alexander Parris (1661-1736) secured the title for Parris Island, then named "Archer's Island," derived from Edward Archer's name. Colonel Parris was the South Carolina Public Treasurer, who also owned eight smaller islands, and considerable other South Carolina property by 1733. Parris died on March 10, 1736, at the age of 74, and his will included gifts of a personal and family nature and Parris Island acreage (Archer's Island), to his son-in-law John de la Bere and other family heirs.

Although the Parris family descendants retained part of the island as late as 1800, after 1758, grandsons George de la Bere sold a Parris Island plantation to Thomas Wigg, and other property to Colonel Nathaniel Barnwell and William Elliott. In later years acreage was deeded to Sara Wigg, Thomas Taylor, Thomas Grayson and others, but in time the island name "Parris," as opposed to "Archer," remained. (10)

Beaufort was scarcely four years old in 1715, when the Yemassee Indians fell on its people with savage force. In 1731, Fort Frederick was constructed near the present Beaufort Naval Hospital, to protect the town from future assaults. Greater potential dangers existed during the French & Indian War of 1754-1763, and during the American Revolution, 1775-1783. (11) Yet, although considerable military activity occurred between Savannah and Charleston, Port Royal and Beaufort experienced only limited Revolutionary War action, in 1779. (12)

It is known the Spanish imported African slaves to Santa Elena (Parris Island), and the first island slaves owned by an Englishman belonged to John de la Bere. Mr. Archer and Colonel Parris owned slaves, whose earliest descendants could be buried in the depot's Negro cemetery near the rifle range. (*) Parris' son-in-law, John de la Bere, inherited

*Daniell was the landgrave, then Archer purchased the island from Daniell. Neither Archer or Alexander Parris lived on the island, so their slaves should not be buried on the depot. Two of Colonel Parris' direct descendants were employed at the depot fire station in 1956. Mr. James G. and Albert W. Barrineau were great, great, great grandsons of Parris, who report family records state that Archer paid Daniell 100 pounds for the island. There is no record of what Parris paid. Colonel and Mrs. Parris were buried in Charleston's St. Phillip's Episcopal churchyard.

The Elliott name has been spelled at Parris Island with one "l." Yet the Beaufort Elliotts are listed in the Biographical Directory Of The American Congress with two "t's." That spelling will be adhered to since William Elliott (1838-1907) was a Parris Island planter of note. The family is most likely the namesake of Elliott's Beach. General Stephen Elliott, Jr. served in the Civil War and is buried in Beaufort.

surroundings had an abundance of "the best materials for naval construction." The geographical location of the salubrious harbor was one whereby:

Every ship load of produce coming through the Gulf of Mexico, and from Florida, Georgia, and a portion of South Carolina, in its transit either to Europe or the northern States, passes so immediately in its vicinity as to make it a position of incalculable importance in the occupation of an enemy. (16)

On December 20, 1860, South Carolina seceded from the Union and the vast area of Port Royal (including Parris Island) became part of the Southern Confederacy. The Federal government assigned Admiral Samuel F. Du Pont to sail from Hampton Roads, Virginia, on October 29, 1861, with a 70-ship armada that included 25 transports carrying 15,000 soldiers and a battalion of 350 Marines. On November 1, a hurricane scattered most of the fleet off Cape Hatteras, and the Marines lost seven men. Subsequently, during the naval bombardment and invasion of Forts Walker and Beauregard on Hilton Head Island, and across the harbor at Bays Point, the only Marines engaged were those manning the guns on board ships including the USS Wabash, USS Susquehanna, and USS Pawnee. Fort Beauregard was later occupied by the Marine battalion until the command returned to Washington in March 1862.

It is interesting to consider several miscellaneous and ironical particulars regarding the Marine presence at Port Royal. First, an engagement between United States and Confederate Marines almost occurred off Hilton Head. Secondly, Du Pont's Marines participated in the largest American amphibious operation as of that time, in a form of warfare which later became synonymous with the Marine Corps. Thirdly, with the possible exception of a planter who refused to abandon Parris Island, there was no reason for the Marines to even notice the site of their future famous recruit training camp. (17)

Following Du Pont's victory all of Hilton Head, Parris Island and Beaufort were picketed by Federal troops. Parris Island became a coaling station, and in 1863 two companies of black troops were ordered from Hilton Head to Parris Island to prohibit anyone from landing there without a pass. This was because marauders on the island were slaughtering beef, including a fine bull who was the "last of his sex." The occupation inspired one Federal soldier to write, "The Butchered Bull: A Ballad of Parris Island," — the first of many Parris Island poems. (18) Nevertheless, with little to do besides patrol duty, many soldiers found the island a delightful place to enjoy "sweet potatoes and southern sun-

and Port Royal enlightened the officers with glowing arguments favoring a Port Royal station, stressing the largest ship afloat, the Great Eastern, could enter and depart Port Royal Harbor at low tide. The boast was questionable. The City Councils also asserted a ship was never lost entering or leaving the capacious harbor, and on one instance over 200 vessels of all sizes were safely sheltered there. (30)

The arguments were apparently successful, since by an Act of Congress approved on August 7, 1882, the government committed itself to a Parris Island naval station, with an appropriation of \$20,000 for a storehouse and ten coal bins, and an additional \$6,800 for a wharf and a building. Government land was first purchased and base construction began by 1883; however, quarters were austere for the workers, military and civilian. Ensign William Braunersreuther, USN, commanding, forwarded correspondence to the Chief of Bureau of Yards and Docks stating:

The men now living in the yard have undergone the most severe sufferings during the cold and wet weather, and I have had two with a mild form of pneumonia; their quarters is an old barn structure which affords little protection from the weather, and an adequate shelter is much needed. (31)

Exactly when the Port Royal Naval Station could historically be regarded a true base is unclear. But the station was operating by 1889, and was in service for certain no later than 1891. The first commanding officer was Lieutenant Charles H. Lyman, USN.

By a subsequent Act of Congress on September 7, 1888, the Navy began searching for the most desirable location for a naval dry dock to be built on or near the Gulf of Mexico or on the South Atlantic coast. Once again a group of officers turned to the search and selected Port Royal (Parris Island), for reasons previously stated, in addition to the proximity of the Port Royal & Augusta Railroad, whose terminus was in the nearby town of Port Royal. After studies by a private concern were completed, and compared with those made by Lieutenant Lyman, the officers officially recommended the establishment of a dry dock and a supply depot on the site of the infant Port Royal (Parris Island) Naval Station. (32)

On June 30, 1890, an appropriation of \$200,000 was allotted for the construction of a Parris Island timber dry dock. But before dock work began an additional \$300,000 was requested to erect an office building and to change the location of the naval wharf, as well as to pay civil employees, and provide for dredging and other necessary incidental expenses. (33) One year later the "United States Naval Station, Port Royal, South Carolina,"

was formally dedicated on June 26, 1891. (*)

The tug Planter Boy transported guests to the Parris Island celebration, who were received by the station commander, Lieutenant Lyman, and Lieutenant George Mackay, USN, the dock engineer. State military units were present including the Augusta, Georgia, Oglethorpe Light Infantry and the Beaufort Volunteer Artillery Company.

The event highpoint was to witness a "powerful steam trip-hammer drive a huge pile deep into the earth," that was followed with artillery salutes, and a band playing the "Bonnie Blue Flag," "Yankee Doodle," and other "patriotic airs." Congressman William Elliott was the principal speaker, and tributes were extended to Lieutenants Lyman and Mackay. The festivities ended when the Planter Boy returned the visitors to Beaufort in a journey marked with singing most of the way. Following the dock's 1895 completion, ships to soon use the slip until 1901, included the USS Texas and Amphitrite. (34)

Lieutenant Lyman as the station's first "official" commanding officer supervised the construction while he commanded the base from February 12, 1886, to November 9, 1891. Lyman entered the naval service in 1866, and had an illustrious and sometimes stormy career until his death in Washington, D. C., on January 28, 1897. (35) Lieutenant Lyman's oldest son, Charles H. Lyman II, spent his youthful years on Parris Island, and later as a Marine captain he commanded the Marine Barracks, Naval Station, Port Royal, from 1904 to 1906. As a colonel he served two separate tours as the base Chief of Staff of the by then expanded and renamed Marine Barracks, Parris Island, and again commanded the base (Acting) in August 1924. Lyman was also the first commanding general of the Fleet Marine Force (FMF), created in 1933. Lieutenant Lyman's grandsons included Rear Admiral Charles H. Lyman III, USN, and Colonel Andrew I. Lyman, USMC (Ret.), whose oldest son, Colonel Charles H. Lyman IV, retired from the Marine Corps in 1995. (36)

On June 26, 1891, the first Marine Corps detachment was established at Parris Island. It consisted of First Sergeant Richard Donovan and two corporals and 10 privates, who were assigned to keep a watchful eye on the "very vicious characters from the cities in

*It should be noted the Port Royal Naval Station was on Parris Island proper and included the dry dock. As previously noted, the harbor is also known as Port Royal, as is the nearby town.

the vicinity," employed as laborers at the dock. The Marines lived in tents with little protection against the weather, and were subject to sickness and disease. Only after the recommendation of the station medical officer were they moved to a large coal shed room, where the men remained until the detachment was expanded to 20 Marines, and a barracks for them was completed in 1893.

The station's first Marine Corps officer was Clarence A. Ingate, who arrived on the island May 1, 1895. He was succeeded on September 15, 1896, by First Lieutenant Henry C. Haines, and the detachment was designated "Marine Barracks, U. S. Naval Station, Port Royal, South Carolina." (37)

Construction on the dry dock progressed from 1891 to 1895, and must have been fascinating to watch. One source reports the wood facility was like "a giant amphi-theatre" descending into the water, and was 26' deep, 104' wide and almost 450' long. As a ship was floated into the dock an iron gate was towed into its mouth sealing the open end. Water was then pumped out and repairs began. Upon completion of any cleaning or repairs, the dock was flooded, the gate removed, and the ship entered the Beaufort River to proceed on its way. (38*)

Persons from Beaufort and Port Royal, and merchants and black families who lived on the island never forgot when the USS Amphitrite slipped into the dock to test the facility, most likely in January 1896. The ultimate test, however, was scheduled in mid-February for the docking of the USS Indiana, then the nation's largest battleship afloat. Again excursions came from the vicinity and Savannah, but were disappointed when the Indiana failed to arrive from Hampton Roads. Sometime in mid-March the battleship did enter Port Royal Harbor and was greeted by as many as 5,000 spectators who came to witness the docking event.

But another disappointment was in store. The large battleship required at least 26-feet

*Other sources state the dock was 496 feet long with a "floor or bottom" length of 459 feet, and an "extreme breadth" of 97 feet. Two centrifugal pumps were used with an individual discharge of 35,000 gallons a minute that could drain the dock in about an hour and a half. The dock was built after the plans of O. Von Nerta, and contracted by Justin McCarthy, both from New York. An early map of the Naval Station lists the dock entrance to be 79-feet 8-inches, and the length to be a maximum of 625-feet 11-inches. The decision to deactivate the dry dock seems to have been made in 1900. Some period photographs suggest the slip may of had two gates. However, it is more likely the pictures were taken when the slip was under construction, and the appearing second gate was a dam keeping water out of the slip.

named Boulevard de France, another gate was located at present Cuba and Panama Streets. A dam was near the present World War II constructed laundry Building #158, and low lands were in the vicinity of the swimming pools or along Cape Gauffre Street.

Swamp or low lands also existed in the present Four Winds Club vicinity, to the World War II still standing bakery Building #295. At the junction of Santo Domingo and Mexico Streets was a strip of high ground and Fort Maine, and nearby was a dispensary that "looked like Noah's Ark." Plans were made to convert Building #17 into a temporary hospital in 1904, but the dispensary appears to have had its services curtailed or closed from 1907 to 1909, until it was probably reactivated in 1912. A significant expansion of Parris Island's medical facilities occurred when Lieutenant (junior grade) Lucian C. Williams became Parris Island's first dental officer on August 4, 1913.

By 1909, the naval station had bachelor officers' quarters, an older Marine officers' quarters building, and a merchandise shop and storehouses in addition to a brig. That was most likely in a building on the site of the still standing World War II bakery (Building #295) where a brig existed as late as the early 1930s. (*) Building #10 was used as a barracks, while Building #11 was the Quartermaster's Building that may have then had a mess hall. (5)

A year-long school for Marine Corps officers had been at Annapolis since 1903, with plans under study to relocate it to New London, Connecticut. Yet, as the Navy abandoned the dry dock, Marine Corps Commandant George F. Elliott declared in 1908, the officers' school would be transferred to Parris Island. (6) The purpose of the "Marine Officers' School, U. S. Naval Station, Port Royal," was to indoctrinate and train newly commissioned officers, in a facility which opened on January 1, 1909, under the command of Lieutenant Colonel Eli K. Cole. (7)

Organizing and equipping the school began as early as August 1908, when Captain Edward Warren Banker, Assistant Quartermaster, USMC, received orders to proceed to the Naval Station to inspect facilities there. Banker returned to Parris Island in December 1908,

*The present brig is one of the older structures on the base. It would appear it was originally a storehouse or machine shop that was converted into a brig with the creation of the naval disciplinary barracks. It most likely was retained as a brig when the disciplinary barracks were deactivated in 1933. Other brigs were on Parris Island, and a 1916 map shows a brig adjacent to the Lyceum.

The Corps' growth also caused an expansion of the Puget Sound facility, and especially at the Mare Island, California, depot that opened in 1911. Attention focused toward San Diego having a Marine base as early as 1914. Construction began there in 1919, and the California base was commissioned in 1921; however, it did not officially become a recruit depot until March 1, 1924. (34)

In October 1916, it was reported that a German submarine might be in the vicinity and operating near Port Royal. Several weeks later an officer, "going incognito in civilian clothes on a hunting trip," investigated an area near Sapelo Island, Georgia, in search of what seems to have been a good rumor at best regarding any Germans there. Nevertheless, the rumors and incident did cause the Parris Island commander to reassess the island's defense capabilities and its 2,000 Marines, who were mostly recruits armed with rifles. Their supporting fire was two three-inch guns and two old 16-pounders used for ceremonies, but were without ammunition and were minus firing pins. (35)

Parris Island was not attacked, but noncommissioned officers and recruit squad leaders carried a bandolier of ammunition and rifles until the end of the war. (36) The United States, in the meantime, entered World War I ("The Great War") in April 1917, as Parris Island was confronted with the first of its many expansion crises and war time growth.

Chapter IV

World War I, 1917-1918

"Each man is steeped in the idea he, individually, bears the honor of the Corps. He is held accountable for it. It is a sacred trust not lightly given." (1)

While the nation prepared for war, the Navy Department issued an appeal for "young men of grit and ambition to serve their country in the first line of defense." The Marines were praised in the New York Times as being envied by the other services, since its men were "encyclopedias" of military knowledge, who served on both the land and sea. Such remarks prompted many men and some women to enlist, as did recruiting programs that included parades and the use of patriotic photographs and themes. (2)

Increased enlistments precipitated a tremendous expansion on Parris Island that required an additional 6,000 acres of land, which was obtained by a presidential proclamation in 1918. But even additional land and accelerated construction could not accommodate a flood of recruits, that in California required an expansion at Mare Island, and the temporary return to training boots in various navy yards. (3)

The number of recruits processed at Parris Island in 1917-1918 has been stated to be between 41,000 and 60,000 men. Most likely 46,202 is correct, with the maximum number of men on the depot at one time during World War I, being 10,850 in September 1918. Recruits were mostly volunteers between the ages of 18 and 35, but conscripts were also accepted by law. Corps-wide figures indicate that only 60,189 of 239,267 applicants, and approximately 5,000 drafted Marines were permitted to enter the Marine Corps from October to December 1918. Yet, the Marine Corps maintained its high standards as noted by the New York Times. (4) It reported that only men of the highest calibre would be enlisted, and that the Marines were only "picking the cream" of those who still offered themselves to fill the few vacancies left. (5)

The rapid war time expansion placed a tremendous burden on the island's facilities, and the Port Royal Post Office, which received thousands of letters addressed to "Marine Barracks, Port Royal." This prompted the Post Office Department to dispatch an inspector to Parris Island to examine the newly created problem. Subsequently, the Post-master General requested the Marine Corps to change the depot's postal address from "Marine Barracks,

Port Royal," which was confused with the nearby town, to "Marine Barracks, Paris Island," spelled with one "r." A Marine Corps order dated June 22, 1917, directed the new address be used.(6)

The incorrect spelling of Colonel Parris' name persisted until May 3, 1919, when the Marine Corps directed the correct name spelling should be with two "r's," to be used henceforth. Nevertheless, the island's name perplexed others until the South Carolina Historical and Genealogical Society declared in 1930:

In lighter matters the much disputed question as to whether the name of the island near Port Royal, upon which Ribaut probably erected his fort, is derived from the city of Paris [France] or is really the name of Alexander Parris, treasurer of the province of South Carolina and part owner of the island, has been settled to be Parris. (7)

Although Parris Island was recalled in its infancy as a place of sand and unpaved roads, and an occasional building of stake boards, by August 1917, new construction made it the "Hot Bed of the Marine Corps." Beginning on May 5, the erection of a cantonment covering 160 acres and costing over \$4,000,000 enlarged the four square miles of the old naval station, the maneuver area, and quarantine or receiving camp. By March 1918, approximately 233 temporary buildings located west of the present parade ground were prepared to house 5,000 men, leaving 2,000 in tents. Later, additional buildings were provided for 4,100 Marines, as the cantonment was expanded to accommodate a maximum capacity of about 16,000 men. (8) It was also in 1918, that Brigadier General Eli K. Cole returned to Parris Island, becoming the first Marine Corps general officer to command the base. (9)

Other appropriations included \$2,000,000 for the construction of an electric light plant. (10) Additional projects were the building of three open-air theatoreums; improvements on the post dock and Boat Repair Section, and expansion of the Post Office. Building #73 was constructed adjacent to the current brig in 1918. The World War I bakery, which produced over 5,000 loaves of daily bread was enlarged, as was the ice house, which increased its production from two to 10 tons of ice daily. Power from the boiler plant was increased from 375 to 1,000 kilowatts, while much of the land fill for new roads was to use the abundance of local oyster shells, which were covered with gravel and oil. The shells were hauled by Negro laborers, naval prisoners, and innumerable recruits who formed oyster

Fifty-three new targets were added to the rifle range by expanding the "No. 1" range and adding a "No. 2" facility that was operational on August 15, 1918. The total war time targets numbered 67, with targets as distant as 800 and 1,000 yards. A pistol range of 12 targets was also operating, and all of the ranges were built and maintained by the rifle range detachment and recruits undergoing instruction on the range.

The war years saw over 48,000 men fire better than 2,000,000 pistol rounds and 15,000,000 rifle rounds, with an amazing 85% rifle qualification. This admirable number was attained by skillful rifle coaches who were schooled in marksmanship at Parris Island. Their maximum number at any one time was 360, while the greatest number of recruit shooters under their instruction at one time was 4,400.⁽¹⁹⁾ Once again the New York Times praised the Marines by reporting that as "raw as our recruits were, they have had the benefit of the finest system of instruction and the most expert coaches in the art of the rifle there are in the World."⁽²⁰⁾

In addition to the rifle coaches school and others mentioned, a Sea School to train fleet Marines opened during the war. It was located near the Ribaut Monument site on the present golf course, and consisted of a mess hall, several small buildings and some tents. But it was not realized when the school was established that part of the area was on the location of a former Spanish fort, and more importantly, on the alleged site of Charlesfort. Thinking its earthworks were Civil War fortifications, the Marines removed the underbrush and leveled a dirt parapet for land fill in the fort's moat. This action was reported to Colonel John M. Willis, U. S. Army Corps of Engineers, who first brought Charlesfort's site to the attention of the Marines. The post commander immediately placed the area off limits, and a map and photographs were made "to enable the place to be again readily restored to its former state." That endeavor began in 1919, when Major George H. Osterhout, Jr., began exploration of Charlesfort.⁽²¹⁾

Parris Island's war time recreational needs were partially filled by religious activities, a Young Men's Christian Association (YMCA), the Knights of Columbus, and Beaufort's Sojourner's Club. (*) The YMCA opened its first building in the east wing (the present First Battalion area) in July 1917, and later opened other huts and tents in the west wing

*Father E. A. Brodman was stationed at Parris Island, being the only padre in the Marine Corps at the beginning of World War I.

Depot land acquisitions in the 1920s included the Jericho Point right-of-way to the causeway in 1925. A smaller strip of land between Jericho Point and Parris Island, which was acquired in 1929, later became the location of the present main gate. (43) Beautification projects and the removal of tents and old temporary buildings altered more the war time appearance of the base. (44)

The Naval Hospital on Mexico Street had approximately 170 beds and received emergency civilian cases from Beaufort. The 1920s hospital also had a galley and a large mess hall, an operating suite, and an X-ray and developing room. It had its own brig, laboratory, morgue, garage and store rooms, and there were "quiet rooms" and solariums in the wards for reading and sitting, and screened verandas for some of the wards. The wards were located in two wings, which had four wards each. Quarters for the hospital staff were across the street, in the vicinity of where the current modern enlisted dormitory stands. A Red Cross Building was adjacent to the hospital on its south end.

Patients with contagious diseases were cared for in a west wing sick bay. The 1920 staff was comprised of a commanding officer, an executive surgeon, three medical officers, a chief nurse among eight female nurses, three chief petty officers, and 29 corpsmen. Dental care was usually performed on recruits at the Receiving Barracks, and the average number of cavities for 1922 recruits was six per patient. (45)

Parris Island schools included the Noncommissioned Officers' School, which may have trained some DIs, a rifle coaches school, and a Cook's and Baker's School that was established in 1923. The Field Music School remained and trained drummers and trumpeters who had to master such bugle calls as "Overcoat Call," church, mail, water, first sergeant's, stable, and other calls for any imaginable message that could be conveyed through a horn. (46*)

The "Sea-Going Depot" trained Marines to serve on ships until it was moved to Norfolk, Virginia in 1921. Students were quartered in separate barracks near Charlesfort's location, in an area with a tower-like log gate. Their barracks were equipped similar to ship

*Major Bill Fiander, USMC (Ret) was a 1934 Parris Island recruit and field music. "My reason for becoming a 'music' is the Corps accepted you at 17 as a musician or drummer. It was called a 'Minority Cruise.' Your rank was Trumpeter. There was no attempt to teach us to read music, we were taught calls by sound and ditties." Letter to the author August 8, 1996.

compartments and were furnished with nettings, hammocks, mess tables, and "ditty-box racks." Sea language was taught, bells were used, and the duties of an orderly were taught. Other studied skills included sailing, handling small boats, signaling, knot splicing, oarsmanship, military courtesy, and subjects such as marksmanship and drill. Firing and loading artillery was practiced at a battery in a "grassy enclosed park, named in honor of the former post commander, 'Battery Pendleton.'" (47)

Parris Island was authorized an aviation field in 1919, and a contract of \$144,800 was let in 1920. A site adjacent to the marina was scheduled to have four hangars for sea and land planes, the construction of a concrete seaplane ramp and service roads. (*) It was stated that once the field was completed, Parris Island would be "one of the best equipped flying fields in the country." In 1923, a radio and aeronautical station was established. Large U. S. Navy dirigibles including the Los Angeles passed over Beaufort and Parris Island in the 1920s, too. (48)

Additional aviation interest was created by a long distance record setting flight of 10,953 miles in 1923. The flight was made by Marine aviators flying a DH-4B-1 from Santo Domingo to various points in the United States. One stop was at Parris Island on September 22, where the landing field was so poor the pilot had to land on the base golf course. There he was met by Major Alfred A. Cunningham, the "first" aviator of the Corps. The flight continued cross country to San Francisco, and returned to Parris Island on December 1, en route to Santo Domingo. (49)

"The Roaring 20s" were characterized by fun, fads and crime, and Parris Island shared in all. One depot Marine amazed people by chewing up light bulbs and breaking 10-penny nails with his teeth. Marine divers, prompted by persistent Negro stories, explored Parris Island's waters for the sunken treasure of pirate Jean Laffite. Numerous blacks were still living on the island in the 20s, and in 1923, the First African Baptist Church and the Reform Methodist Union Episcopal Church applied for charters. Evangelist Bob Jones was scheduled to preach on the island in 1923. For several years "get together" parades were

*The seaplane ramp on the east end of the marina road is presently used for launching boats. Several brick and wooden structures in the area date back to the 1920s or 1930s, as does the large metal hangar (Building #22) facing the Page Field Road. Aircraft such as the de Havilland DH-4 were at the field in 1919-1920. Lieutenants Kemble and Ford Rogers may have landed the first plane on Parris Island in July 1919 (See Parris Island Museum photograph).

created by 1934, and maintained to World War II at Page Field. (*) The second site may have replaced the first. But it seems at both sites a mast anchored the forward part of an airship and allowed a dirigible to swing hinge like with the wind. A road circled the masts and fronted buildings and fuel tanks that serviced the airships. (29)

Parris Island prepared for the permanent stationing of aircraft in 1934. That year the "washboard" road to the planned aviation field and Page Field mooring mast was paved, but remained a circuitous route. The journey then was made via today's Wake and Yorktown Boulevards to Page Field.

In 1934, WPA workers with mules began draining and clearing the airfield site which opened by September. The following month hangars were erected and completed early in 1935. (**) By March 1935, flights such as 18 Fleet Marine Force planes from Quantico belonging to "Flying Squadron No. 9" arrived at Parris Island, where they executed low-level maneuvers over the base for the amusement and entertainment of persons from nearby towns. Beaufort responded to the squadron arrival by treating its men to a party and a dance. Additional local interest in aviation was evident on another instance when as many as 3,000 visitors attended a Parris Island air show in 1935. (30)

In July the depot commander officially named the landing site in honor of Marine aviator Captain Arthur Hallet Page, Jr., who was killed on September 1, 1930, while competing in the National Air Races at Chicago, Illinois. Between 1935 and 1939, numerous flying units from Quantico used the field's grassy runways, while adjacent areas were used for bombing and gunnery practice by units such as VMS-1, VO7-M, VB-1, and Naval Aviation Squadron VS-6. Practice targets for the planes were chalked on the parade field

*The mast at the initial site seems to have been later relocated to Page Field - the second site. Interview of Miss Ellen Capelmann June 18, 1981. See base 1931 and 1939 aerial photographs in the Parris Island Museum. Mr. Stratton Demosthenes identified the initial mast site in correspondence March 28, 1983, to the author. Mr. Demosthenes states, "the first mooring mast was located next to the sixth green and the seventh fairway" of the first base golf course. In 1975, retired Chief Warrant Officer Thomas F. Swearngen recalled the Page Field mast was located where the platform of the old radome stood as of 1982.

**The first depot hangars were erected near the present marina and must have been for seaplanes since aviators would have to cross Ballast Creek to reach the field, as the Page Field causeway and bridge were not constructed until World War II. The first metal hanger was dismantled and may have been shipped to Parris Island from Haiti. Whether that hangar is the still-standing Building #22 is unclear. Another of several hangars stood on the corner of Cuba and Tanambogo Streets. Several of the hangars were destroyed by a 1940 hurricane.

west end which was once used as a practice bombing range. The bombs were small 10-pound ordnance armed with a harmless shotgun cartridge in the end of the bomb that exploded on impact marking the spot with a puff of smoke. (31*)

Bombing was also done on Hilton Head island and tugs pulled targets for pilots to practice gunnery at sea. A parachute tower and a glider school were also considered for the base before the war. In 1938, the the depot had an amphibian and scout plane attached to the Headquarters Squadron at Page Field. But in spite of the ever increasing aviation activity, aviation crews continued living in a hangar and ate at the main station mess hall. In 1939, it was proposed the field should become permanent, and it was the opinion of many that Page Field was destined to be one of the largest flying fields in the Marine Corps. (32)

By the late 1930s, artillery defense batteries and searchlight units trained at Parris Island and nearby Hilton Head. Preparations for using that site began after the government acquired use of the old lighthouse reservation, and by 1937, interested Congressmen landed at Page Field to view the progress at the rattlesnake-infested Hilton Head. By 1939, developments on Hilton Head included an on going construction of barracks, a mess hall, hospital, post exchange, recreation room, boiler and hot water house, ammunition shelters, vehicle sheds, a headquarters' building and a pump house and well that supplied a 7,500-gallon water tank on a steel tower at Hilton Head. The encampment was named Camp McDougal, and was located on the northern end of Hilton Head near the old lighthouse. (**) Civilians lived on the island nearby. (33)

In December 1937, the Second Anti-Aircraft Battalion, FMF, arrived at Parris Island from Quantico, Virginia, and was temporarily quartered in east wing barracks, while the camp on Hilton Head was being readied for occupation in May 1938. The battalion shortly moved to Camp McDougal where the men lived in tents until barracks were built. Practice

*A Beaufort Gazette article of May 22, 1975 stated that Marine Scout Squadron VMS-1 was the first unit stationed at Page Field, on September 23, 1938. Depot children often dug up practice bombs. Mr. Stratton A. Demosthenes recalled that, "We would find a hole, reach in, feel the little fins, pull some dirt away, and pull them up. We would cover the hole by caving it in with our heel-- this was for the benefit of the next person." Mr. William Kennedy (retired) of the depot electrical office owns one of the practice bombs.

**Small lead projectiles were abundant a low tides on the north end of Hilton Head as late as 1957. The projectiles were most likely ordnance used in nearby battles of the DuPont expedition of the Civil War. Several of the small projectiles are in the Parris Island Museum.

firing with three and five-inch artillery weapons was done, and searchlights were on the island by March 1938. This afforded persons in Beaufort "their first chance to see the Anti-Aircraft Searchlights put an aeroplane on the spot." (34) The Third and Fourth Defense Battalions arrived at Hilton Head by 1939.

Yemassee grew during the Depression because it was adjacent to two major highways and received trains each hour of the day. In 1931, the town had over 30 buildings besides its homes, and a population of better than 500 persons. By 1932, the Greyhound Bus Company operated between Yemassee and Beaufort, and the town remained the last stop for civilians who were about to become boots. These individuals were billeted in Yemassee when necessary in wooden barracks. A tornado, however, damaged the Yemassee facility in the early 1930s, and temporarily interrupted the housing of recruits. (35)

The number of recruits at Parris Island during the 1930s varied widely. In 1930, for example, about 2,600 boots arrived, while at other times prior to 1939, about 300 recruits were processed each month. The minimum numbers seem to have been during the depths of the Depression, with only 500 recruits processed in 1932, and 750 in 1933. Although these numbers increased, one 1935 platoon began training with as few as eight recruits in one platoon, and in January 1936, there were seldom more than two platoons on a training schedule at one time. Platoon 8 had 18 recruits and three DIs in 1938, but such an abundance of instructors for so few recruits was rare.

The length of recruit training also varied from as long as 14 weeks to as few as 24 or 21 days, in 1934. The organization of companies and recruit platoons was retained as in the past, but during the 1930s, boots and their instructors were placed under a separate recruit command. Companies and platoons were identified with diverse letters and numbers as C-26, A-1, and 27-X. (36)

Such erratic recruit numbers frequently caused a shortage of experienced DIs, which was alleviated by retaining recruit "Acting Jacks," or appointing privates in the 1930s as acting sergeants or corporals. These promotions were payless, and acting ranks had authority only over other boots. Such acting NCOs were identified at times by wearing only one of a set of chevrons on one sleeve, yet Leatherneck magazine carried photographs of recruit platoons of the 1930s that showed privates as DIs, with no chevrons but had acting ranks. The permanent DIs were identified by a full set of chevrons and a swagger

nation lectures were still given, recruit subscriptions to Leatherneck magazine were encouraged, and swimming instruction was taught at the new pool and at the old dry dock.

(4)

During normal times a 1931 pamphlet informed recruits they could expect to be clothed, fed, and put to bed on their first day at the base. The second day was spent taking exams, receiving haircuts, and being sworn in. With an additional issue of clothing, equipment, and a rifle the recruit was assigned to a 66-man platoon and sent to the east wing before it was closed, and later to the main station.

During the first three weeks basic military subjects were taught, including bayonet and drill. The fourth week was devoted to rifle "snapping in," meaning practicing shooting positions for hours, while aiming at large black dots painted on white aiming posts. The fifth and sixth weeks were spent live-firing the 1903 Springfield rifle on the big range, which was capped by the formal qualification day.

The range course in the 1930s required proficiency at the 200, 300, 500, and 600 yard lines. Slow and rapid fire was done, and a shooter had to master the standing, kneeling, sitting, and prone positions. Targets were the A, B, and D types. Marksmen were required to shoot 275 points out of 350; sharpshooters had to post a score of 300, and an expert had to record 315 points. Additional pay was awarded superior shooters, and during the 1930s platoons qualified as many shooters as 95%. Recruits also received familiarization firing of the Browning Automatic Rifle (BAR), the Thompson sub-machine gun, and demonstrations of the trench mortar. Drill Instructors may have served as rifle instructors at times.

The final two training weeks were spent back at the east wing. Here there was more drill, schooling, and participation in a physical training program that sounded like "all work and no play." A recruit indoctrination pamphlet informed boots of island services, which included tailor, barber, and cobbler shops, and a laundry. Conveniences for "comfort and self improvement" could be found in the post exchange, the library, and at the Post Inn. At the Inn one could use the bowling alley and player pianos, and attend concerts and dances every week. Relatives and friends of recruits were permitted to stay at the Post Inn, which had a restaurant and soft drink counter. (45) It is difficult to imagine, however, that 1931 DIs permitted recruits to indulge in all or even a few of the activities the pamphlet listed,

bay side. Upon completion of boot camp Edwards was assigned to the depot "war college," which may have been the NCO School where some DIs were trained. But this is unclear.

General Fields also became a Drill Instructor. His recruit platoon contained a number of high school graduates and college men from Notre Dame and West Point; yet some of these college educated men were not clean enough for the Marines. One recruit who paid little attention either to his uniforms or to himself was scrubbed down with Octagon soap and brushes by the other boots, who left "some red and little streaks of blood around where they had scrubbed." The lesson was thorough and was never repeated again. (47)

Private Mitchell Paige was awarded the Medal of Honor on Guadalcanal, but Paige recalled that he "never realized anybody or anything could be so rough" as our drill instructors, who "were truly tough men." Paige recalled working in a mess hall, "swabbing, scrubbing pots and pans and waiting on tables, from 0400 to late at night." Other arduous training was at the bayonet course, which had a sign reminding the recruit that —

"A BAYONET FIGHTER KILLS OR GET'S KILLED!"

His DIs on another occasion marched the platoon into a rifle range tidal stream. "The first man in the water marched straight through, the rest followed, and as a consequence, nobody was hurt." Years later Colonel Paige offered the opinion that "six Marines drowned when marched into that same creek by their drill instructor, but apparently they did not maintain march discipline," in Ribbon Creek. Graduation ceremonies were "the highlight in my life to that point," when the platoon "marched in a parade behind a Marine band," and Paige saw a Marine officer at Parris Island for the very first time. (48)

Private Henry T. Dawes was quartered in the main station recruit barracks in 1937, but at sometime he visited the east wing and was impressed with seeing boxer Gene Tunney's name carved on one of the old barracks. Dawes, may in error, recalled spending two weeks at the rifle range, where recruits threw practice hand grenades and fired the water-cooled machine gun. Towards the end of his training the platoon was quarantined for mumps at Niver's Beach. Dawes retired as a Lieutenant Colonel, and recalled that his DIs were fair and "straight shooters," who taught the platoon eight man squad drill. Yet, there was always swift punishment for the recruit who was out of line. (49)

disbursed to meet the needs of the post.

The largest postwar project was the construction of a modern Naval Hospital, which was authorized by President Harry S. Truman on May 22, 1945. The hospital site was on 200 acres near "Old Fort" Frederick between Beaufort and Port Royal. The first bids for contracts were issued on June 18, 1946, and work began on July 18. The ground breaking ceremonies were observed on July 31, 1946.

Those present included South Carolina Congressman L. Mendel Rivers; Mr. Harry R. Sheppard, Chairman of the Naval Affairs Appropriations Committee; Commandant Alexander A. Vandegrift; and Major General Julian C. Smith who commanded Parris Island at that time. The hospital was planned for a capacity of 750 beds and was estimated to cost \$7,200,000. By April 1947, steel framework was being erected, and on July 18, 1947, the hospital cornerstone was dedicated. Appropriate ceremonies included the encasement of copies of historic 1863 papers, that first requested a Federal hospital in Beaufort.

The hospital was completed on February 1, 1949. During the two and a half years of construction, the Thompson & Street Contracting Company employed a minimum of 710 men on a payroll of \$2,500,000, and there were 37 sub-contractors. The structures required at least 20,000 cubic yards of concrete, 4,000,000 bricks, and 3,500 tons of steel. The facility and its first 300 beds was officially commissioned at 1100 on April 29, 1949, at a cost that had increased to \$9,500,000. As on previous occasions the commissioning was attended by dignitaries including Congressman Rivers and Governor Strom Thurmond.

The units' first commanding officer was Captain L. B. Marshall, USN, who also presided over the decommissioning of the Parris Island hospital. The new hospital's first patient was HM1 Frank J. Clark, USN, and the first child born there was a boy to Lieutenant (jg) and Mrs. James Carroll at 1511 on May 9, 1949. The first set of identical twins were born to Chief Warrant Officer and Mrs. Richard Cooley on May 14, 1949.

By May 5, 1949, all of Parris Island's hospital patients and equipment were removed from the post. The defunct hospital was entrusted to a 15-man Administrative and Dis-establishment Unit that maintained its 53 buildings and 15 acres of land. The Parris Island Naval Hospital lowered its colors for the final time when it was decommissioned on August 31, 1949.

Free movies were shown at the main station and Weapons Battalion Lyceums, Hilton Head, Elliott's Beach, and at the open-air theater which was also used for ceremonies and dances. On days films were shown a black flag was flown at the Drive-In. The Boot reported, however, that many women were uncomfortable at the Drive-In because profanity was heard there. By March 1948, plans were discussed for a rifle range Drive-In about one-half the size of the main station theater, but the facility was never built. (25)

Elliott's Beach remained both a training and recreational area which was furnished with volley ball courts, a softball diamond and horseshoe pits. Hilton Head Island was also designated a recreational site from May 5 to September 5, 1947. Billeting was available in three cottages and in a World War II barracks, that was served by an exchange, a sick bay, a recreational room, and a mess hall. Transportation to the island was furnished from the post docks, and single men were required to bring their own sheets. Blankets were not furnished for anyone. (26)

In October 1946, military personnel were permitted to wear civilian clothing with some restrictions on the depot, and on liberty and leave. Uniforms were required during the war. Off-post recreation could be found in Savannah or in Charleston, or at the Beaufort USO. That designation was discarded on January 1, 1948, but services were continued under the name of the "Navy and Marine Corps YMCA." Yet the new name was never accepted and was changed several times. In March 1949, the "Beaufort Armed Services YMCA" was simply changed to the "USO-YMCA." (27)

The Parris Island Boot celebrated its third anniversary in December 1946. By then it had been directed by 12 editors, and had a distribution of about 9,000 copies a week. The newspaper had been housed in the Information Services Office in Building #17, and in Building #853 on Malecon Drive. In April 1948, the Boot was relocated to the old Recreation Office in Building #265. (28)

The Boot lost many talented writers at the end of the war and was reduced to a staff of four. Consequently, the smaller staff necessitated decreasing the number of pages to eight, except on special editions. The last regular copy to carry the motto, "Let's Be Damned Sure That No Boy's Ghost Will Ever Say, 'If Your Training Program Had Only Done Its Job,'" was dated April 20, 1946. That expression was replaced with a new phrase, "By U. S. Marines For U. S. Marines," on February 1, 1947. Between 1946-1949, the Boot format

coaches on the rifle range until the platoon reached the firing line. More coaches were assigned during the firing time. (35)

The reactivation of the Third Battalion on August 2 and the Fourth Battalion on August 17, 1948, was attributed to the Selective Service Act of 1948. The reactivated Fourth Battalion was billeted in Quonset huts along the Boulevard de France, and had its headquarters in the former radio transmitter Building #852, that currently houses depot engineers, etc., and stands near the depot's maintenance plant. It appears the Quonset Huts were moved to the present commissary and Third Battalion area sometime after the war. During the war PB Barracks occupied the site.

Until the Korean War, the peak number of recruits arriving at the depot on one day was 323, reporting on September 3, 1948. The overall number of boots tripled on the base during that year, yet the expansion was brief. The Fourth Battalion was deactivated on November 22, 1948, and the Third Battalion closed on January 8, 1949. Upon President Truman's signing of Public Law 625, the Women's Armed Services Integration Act, in mid-February the Third Battalion was reactivated for training women recruits. The female Third Battalion was housed in the resurrected stucco two-story barracks built for women during the war. (36)

As in the past one reason for the reactivation of the women Marines was to free males for combat positions in the event of another war. As noted, the Women's Armed Services Integration Act of 1948 was the vehicle that returned women to the Corps on a permanent basis, after their having last departed the depot on May 15, 1946. The battalion's first commanding officer was Captain Margaret M. Henderson. (37) During January 1949, the Director of the women Marines, Colonel Katherine A. Towle, and Captain Henderson visited the depot to examine the World War II facilities, which had been partly occupied by the Depot Instruction Company.

The new training period was to be about six weeks for women, and a platoon numbered approximately 48 recruits. The first female recruit to report was Private Bonnie J. Lovil, who was followed by others who were soon introduced to the Corps by having their hair clipped, but not as short as the men. Although their training consisted mostly of learning clerical duties, the women did indulge in hours of drill, and participated in such exercises as going through the tear gas chamber while singing "The Marines' Hymn." (38)

On March 23, 1949, Platoon 1 numbering 30 recruits and two female DIs, posed for its platoon photograph. The platoon sergeants were Staff Sergeant Dorothy E. Sullivan and Sergeant Bertha I. Schultz. Graduation ceremonies were held at 1330 on April 12, and the depot commander, Major General Alfred H. Noble (1948-1950), and Colonel Towle were present. Eleven of the women were promoted to the rank of private first class. Fifteen women were assigned to the depot's Personnel Administration School, and several months later six women enrolled in the Fifteenth Recruiter's School class, becoming the first females to enter that school. (39)

A second major personnel change was the integration of black recruits. For all practical purposes blacks were excluded from the Marine Corps until 1942, and even then their numbers were small. They were mostly assigned to such positions as stewards and stevedores, and were formed into two segregated defense battalions. Of those black Marines who served overseas, nine were killed or died from wounds, and 78 were wounded. (40)

Regional and national segregation practices were observed at Parris Island with regard to black Marines, who were restricted from certain post services and had their own social affairs. The Boat noted in October 1945, that the last 15 rows of seats in the depot theater were reserved for enlisted grades, "with the exception of three rows of seats in the left rear" that were set aside "for colored personnel." (41)

Recruit training was also segregated in the Marine Corps, and black recruits did not train at Parris Island during the war. Instead, they had segregated camps at Montford Point, Camp Lejeune, North Carolina, where they were initially trained by white drill instructors until blacks were assigned the task. The Montford Point training was the same as the normal course for whites, but racial barriers did exist. However, black DIs were as demanding as the whites, and one black recruit recalled that discipline seemed to be his instructor's lone stock in trade.

On July 1, Commandant Clifton B. Cates (1948-1951) directed the Montford Point camp be closed on September 9, 1949. By the latter part of that month the training of black recruits began at Parris Island. Although they were initially assigned to segregated platoons, their minuscule numbers made this arrangement unsatisfactory. Economics and new military racial policies soon demanded total integration. (*)

took a platoon through boot camp alone because of the acute shortage of DIs.

Drill Instructors were often dropped and added to platoons in training, however, from 1946-1950 all training was still executed at lightning-like speed. The obstacle course was run, the Quonset hut gas chamber was visited, and field entrenchments and mortar positions were viewed. Recruits scrubbing messhall garbage cans were dubbed "The Man in the Iron Mask." The only relief afforded recruits were chapel visits, the mercy of a DI, and pith helmets worn to shelter recruits from the sun during the summer months. (44)

Recruit dress very much resembled that of prisoners. In addition to pith helmets and regulation hats, the dungaree jacket was not tucked in the trousers, which were not bloused, and the ankle-high World War II "boondocker" was worn. The shoe is praised by former Marines and was one which appeared constructed inside out. That is, the smooth leather was on the inside of the shoe and the rough side was out. Private Julius J. Ginther recalled in 1947:

In order to break them in, the DI had us put the shoes on and go to the head and put each foot in the toilet, flush it and get the boondocker soaked. Then we were taken out on the parade ground and troop and stomped until the shoes dried. It seemed to work.

Three weeks were spent on the rifle range which remained a training high point for most recruits. In 1947, a range instructor school was reactivated, and in March 1948, six old wooden PB buildings were reopened to house the increased volume of boots. In December 1948, a new rifle course with a possible score of 250 points was introduced. Range improvements also included the construction of concrete grenade pits, and an indoor .22-caliber range with 10 targets, which were primarily used for rifle team practice in 1949. (45)

Recruits fired the .22-caliber rifle prior to firing the M1, and were familiarized with and fired the BAR. Due to the absence of V-12 platoons, qualification percentages dropped, but later gradually improved. For instance, during the first seven months of 1946 the range accommodated 11,855 shooters, and 71.5% qualified. In 1948, 18,560 recruits fired the M1 and posted a mark of 81.4%. Platoon 70 fired 100% qualification in 1949. Parris Island's rifle team captured the Elliott's Trophy for rifle competition, and Private John J. McCloskey became the first Parris Island boot to receive the Matthews Trophy for outstanding recruit marksmanship in 1948. (46)

west side of the Douglas Visitors Center, or near a later putt-putt golf course. The Toyland was later moved to a deactivated First Battalion mess hall Building #617, which was located in the vicinity of, and across the street from the Open Air Theater screen. Toyland was moved to the former women's dental annex near the Page Field or "DI Bridge, in 1959."

Self-service facilities were introduced for recruits at the old Triangle Exchange in 1954, and in 1957, mobile exchange trucks visited recruit battalions for boots to purchase necessary toilet articles between regularly scheduled Triangle Exchange calls. However, the practice did not last long. The rifle range exchange was renovated in 1957. The following year a sporting goods store opened in one of the depot's older wooden buildings across the street from the present Sports Station Building #287 (former Sports Center and MWR) on the Boulevard de France. The old exchange gasoline station received three new pumps and a 4,000-gallon tank that year. The station was located between Malecon Drive and the Boulevard de France, near the recruit World War II (and later) Triangle Exchange and West End Dispensary.

The Marine Corps Exchange operated other facilities, such as the cobbler and dry cleaning shops, and the Hostess House. The latter was furnished with vending machines, an open kitchen, a beauty shop, and child care services for the thousands of customers who filled its rooms between 1950 and 1959. In 1952, the facility charged \$1.50 per person per night; that amount increased, depending on the choice of bathroom facilities, to as much as \$2.50 per night in 1956.

The depot continued stressing the value of education, religion, and the maintenance of healthy Marines. Depot schools of the 1950s included the Atomic-Biological-Chemical Defense School (ABC), the DI and NCO Schools, the Band School, and the Field Music School, whose students had to master 96 bugle calls to graduate in 1954. The Personnel Administration School graduated its first women Marines in the 1950s. Other schools were the Clerk Typist School, a Basic Administration School, the Personnel Classification Clerk's course, and the Recruiter's School located in Building #910. During the mid-1950s, new brick school buildings, such as #565 and #566, were constructed for recruits in battalion areas, whereas Buildings #920, #921, and #922 were constructed near the women's barracks.

In addition to teaching recruits military subjects, a Special Education School was opened in 1956, to teach boots the "three r's." Recruits with below 70 GCT scores received four weeks of instruction in basic academic subjects, in addition to some recruit training, so that they would not be too far behind in their training as Marines. The academic instructors at the school were mostly

drill required more precision, and instilled more discipline and quickness of mind. It appear though that the Marine Corps experienced organizational problems with eight-man drill, primarily because the Marine rifle squad was composed of thirteen men at that time. Therefore, in 1956 the Corps introduced Thirteen Man Squad Drill.

The intricate moves of that drill necessitated many additional hours of instruction, and drill instructors wrung their hands in anguish over what form of drill the Marine Corps might think of next. Their anxiety was warranted when the Corps decided to return to the eight-man drill in 1958-1959, and then reverted to the Field Manual 22-5 drill in 1960. (5) Eight man squad drill was abolished in the Marine Corps on December 15, 1961.

By the time a platoon entered its rifle training it had a personality and emerging spirit, and was maturing into a team. The first week on the range was devoted to snapping in, or practice shooting with no ammunition while aiming at large black dots, painted on white school range wooden posts. The second week recruits fired both the .22-caliber and M1 rifles, and worked pulling targets in the rifle range butts.

Record day was a highpoint in recruit training and occurred during the third range week in a more relaxed atmosphere encouraged by DIs. A platoon at this time might be taken to see a movie in the range theater-Lyceum. The maximum score was 250 points with 50 rounds of ammunition, that was fired in the standing, sitting, kneeling, and prone positions at the 200, 300, and 500-yard lines. One hundred and ninety points were required to achieve the marksman's medal, 210 points for a sharpshooter, and an expert rifleman had to score 220-250 points. Although no extra pay was awarded shooters at this time, the recruit who did not qualify was nearly disgraced. (*)

Recruits also fired the .45-caliber pistol and the BAR, in addition to throwing hand grenades, and at times witnessing demonstrations of the flame thrower, machine gun, rocket launcher and mortar. Variations or the omission of certain demonstrations occurred, however, at different times between 1950 and 1959. (6)

The rifle instruction of the 1950s remained as excellent as in previous years. Parris Island's coaches were trained at a rifle range school, and in 1951, 40 coaches were sent to the Naval Academy in Annapolis for three months to teach midshipmen how to shoot. The following year the depot rifle team captured the Elliott's Trophy for marksmanship, and Parris Island's coaches quali-

*It was not unknown for Drill Instructors to use pencils or other similiar objects on targets in the rifle butts to improve a platoon's score. Officers often supervised target markings to monitor shooter scores.

fied 87.9% of their recruits. Permanent personnel requalified with the M1 rifle, posting 95.6%. At least a dozen regular platoons qualified 100% of their shooters in the 1950s, with individual scores of 240 out of 250 points being posted by two boots in 1951. Four 1956 recruits were such outstanding marksmen they were immediately assigned to the Marine Corps Rifle Team, and competed in national matches held at Camp Perry, Ohio, that year. Camp Pendleton Marine Sergeant Emmett D. Duncan fired an amazing 250-point score on a Parris Island range in 1955.

The rifle range management was an immense job. An adequate supply of ammunition had to be maintained, targets had to be constructed and repaired at a target factory, and the range liaison office had to coordinate the training of all recruit platoons. Waterways near the range were patrolled for safety, and the work of armorers was never done. In 1952, a range armory in Building #700 maintained over 6,000 rifles issued to recruits in exchange for their regular training rifles, which were minus firing pins. Upon leaving the range, the training rifle was reissued and the firing rifles were reconditioned for future platoons to fire.

Rifle slings were always retained by the recruits; however, web slings were substituted for leather ones for awhile in the 1950s, but never seemed popular. Once the platoon departed the rifle range, recruit training was practically suspended for one, and sometimes two weeks, while police or mess duties were assigned. Nor was it uncommon to have a platoon fragmented at several locations on the post, which weakened unit control. During this training lull Drill Instructors received a brief rest, since their duties were temporarily scaled down to include only monitoring the welfare of their platoon and picking-up recruits' mail.

After the platoon resumed its training, the Drill Instructor quickly reasserted his omnipotent authority to take up any slack that occurred on the rifle range, or during the period spent in a mess hall. In some ways this time seemed like the forming days. Other training activities included an overnight march to Elliott's Beach. During this exercise recruits pitched two-man tents, known as shelter-halves, practiced night scouting and patrolling, became acquainted with maps and the compass, and participated in exercises that included assaulting fortifications such as bunkers and machine gun nests. The field activities seem to have diminished by 1954, when recruits were forwarded at the termination of boot camp for advanced infantry training at Camp Lejeune.

Recruits also visited the Quonset hut gas chamber, which was initially located in the west end, and later at Elliott's Beach. Each recruit had to enter the gas-filled hut, remove his mask and sing "The Marines' Hymn." The gas was a simple tear gas and its irritating effects soon vanished, but

of every Drill Instructor School class from 1955 to 1980. The 1942 building itself was an historic loss, having been the depot grade school, and site of Staff Sergeant McKeon's celebrated trial in 1956.

Plans were immediately made to rebuild a modern school nearly on the site of the burned building, and a temporary DI School was relocated across the street in Building #172. Organized efforts collected historic replacements for the school's destroyed holdings, and requests for Drill Instructor memorabilia and historic items were printed in Leatherneck magazine in 1982. (16)

Parris Island's weather occasionally created needs for emergency services, too. On February 10, 1973, it was reported that 6 to 6.4 inches of snow, with drifts of 1 to 1 1/2 feet fell on the island. That record snow fall easily bettered the 2 inches that fell in 1958. Temperatures dropped into the low 20s, and were accompanied by 30 mile-per-hour winds causing damage to many water pipes on base. An ice storm hit the post in 1980, and the temperature dropped to 12 degrees in January 1982. More snow fell on Parris Island on February 24, 1989, and on Christmas Day 1990. (17)

In June 1977, severe thunder and wind storms uprooted trees on Horse Island and caused weather damage at the rifle range. Two years later winds from hurricane "David" skirted Parris Island and caused slight damage. A large tree limb, for example, fell on the depot's main electric supply line, leaving the entire base without power for a brief period of time. Although not weather-related, a solar eclipse was visible from the island on March 7, 1970. Summer heat reached 110 degrees in June 1985, during a severe southeast heat wave. Powerful and devastating Hurricane "Hugo" narrowly missed the base while slamming into Charleston and creating extensive damage north of Parris Island in September 1989. (18)

During the 1970s, and early 80s, the depot remained a place of schools, as it had been in the past. Besides the DI and Primary Marksmanship Instructor Schools, there was a Personnel Administration School; the Staff NCO and NCO Schools; a First Sergeant's School; and the Nuclear, Biological and Chemical Warfare School. Two other schools closed. The Recruiter's School graduated its final class in Building #923, on August 4, 1972. Since August 13, 1947, it trained some 12,000 Marines. All future recruiters attended the Marine Corps Recruiters School in San Diego, which was activated in 1971. (19)

A second school to close was the Field Music School which dated back to the infancy of the post. Redesignated as the Drum And Bugle Corps School in 1972, it was deactivated in 1977.

do with being a good Marine." (42) However, despite articles about how superior the DIs of the 1970s were, a 1979 depot command chronology stated that "Drill Instructor proficiency in all essential subjects has deteriorated in recent years " (43) An explanation of that statement is unclear, since at least until 1980 the attrition rate of the Drill Instructor's School remained high. A command chronology reported, for instance, that in the period from July 1, to December 31, 1971, only 160 of 323 students comprising three classes graduated from the school. Yet, during the period of July 1 to December 31, 1980, 102 of 129 students graduated, which was a much higher percentage than in the past. (44)

Whether Drill Instructors of the 1970s were more or less proficient than those of the 1980s is a matter of debate. Yet, by the late 1970s, the Corps was demanding more than just lip service from its Drill Instructors to honor the "Drill Instructor's Pledge" or "Creed." Likewise, in the 1980s, Drill Instructors and officers supervising recruit training were directed by a massive "SOP FOR MALE RECRUIT TRAINING" that a Philadelphia lawyer would find difficult to comprehend. (45)

The course for recruits was reduced to eight weeks from 1965 to 1970, due to the demands of the war in Vietnam. Yet in 1970, the training period was extended to nine weeks, which still included three weeks of marksmanship training on the rifle range. In 1971, the nine week program was combined with one or more weeks of Individual Combat Training (ICT) at Camp Lejeune. Drill Instructors accompanied their platoons to that base to assist in the training until they and the boots returned to Parris Island, where the recruits completed boot camp. In 1973, recruit training was extended to 11 or 12 weeks, and the decision was made to abolish ICT at Camp Lejeune. By the following year a rudimentary ICT course was constructed at Page Field to eliminate the interruption of recruit training necessitated by the 300-mile long bus ride to Camp Lejeune.

The course consisted of classrooms, field fortifications, a live grenade range on Gibbs Island, a dry net and repelling tower, an infiltration course, and facilities for practice landing exercises from an amphibian tractor and a helicopter. At some time recruit training was reduced to 11 weeks in 1974, and to 10 weeks in 1978. The training period was eight weeks for females and 10.3 weeks (with two weeks on the rifle range) for males in 1983.

Another significant change in recruit policy went into effect in April 1976. All recruiting districts were placed under the direct command of the commanding officers of the two recruit depots, one on the east coast and one on the west coast, in 1976. The change was made as part of an effort to improve the quality of recruiting and to better inform recruiters about what was transpiring at the

The base recruit chapel received additional donated stained-glass windows during the decade. One was donated by the Kentuckiana Detachment #729, Marine Corps League, on April 18, 1996. It was dedicated to the memory of Marine Colonel Richard Higgins, who was murdered by terrorists while serving with United Nations forces in Lebanon. In July 1996, the Fourth Marine Division Association dedicated a commemorative window created by former Marine Richard Gibney. The Fifth Marine Division Association donated a chapel window on Memorial Day 1994. (23)

The Weapons Training Battalion remained an essential part of recruit training, and as elsewhere changes were observed. The organization is currently known as the Weapons And Field Training Battalion, which in 1996 had 350 personnel. The Range Company taught marksmanship, and the Field Training Company was primarily responsible for field training areas, Page Field, the rappel tower, gas chamber, grenade range and a new 1997 Crucible course. A Range Support Platoon supported safety precaution regarding rifle firing with sentries posted in the range tower, at the Battery Creek Bridge, and in patrol boats.

Recruits in 1997, began marksmanship training in the eighth training week. An expanded three weeks course (instead of the former two) required 190 points to qualify as a marksman, 210 for sharpshooter, and 220 out of 250 points for expert. All recruits must qualify and could re-shoot numerous times. (*) By the 1990s, target butts were called "pits," and paste was no longer used to patch target holes. Instead, stickers like postage stamps were used. The cotton cloth target was replaced by a plastic target, and as in the past shooters and pullers swapped target duties for one another. (24)

On October 9, 1990, base commander Major General Jarvis D. Lynch, Jr., dedicated Marine combat battle names to ranges in the Weapons Training Battalion. The pistol range was named the Pusan Range, and the close combat pistol range became the Naktong Range. The much larger A, B, C, D and E rifle ranges were respectively named Khe Sanh, Hue City, Chosin Reservoir, Starlite, and Inchon Ranges.

The grenade range which opened in 1974, was closed on the Guadalcanal range in 1997. It was in the past intended to assist the switch of recruits for combat training at Camp Lejeune, and

*Private Kelly Stripp failed to qualify eight times and was eventually disqualified and sent home. There she practiced marksmanship and after 18 months returned to Parris Island to fire 210 points and qualify as a sharpshooter. In 1995 one female recruit was allowed better than 20 opportunities to qualify and many men seem to have been given more opportunities than eight. See, Tri-Command Tribune, October 18, 1996, p. B8. Davis correspondence.

became a part of the Basic Warrior Training program, which was mostly replaced in 1997. In February 1992, female recruits began live grenade training when 93 women from N Company 4006 fired their grenades. The grenade range was still used for personnel other than recruits.

In the summer of 1994, construction of a new Pusan Pistol Range was completed after the former pistol range was destroyed during a severe March 1993 storm. Construction materials cost more than \$27,000, but labor was done and money saved, from work done by Marines. A range patrol boat monitored waterways during live firing hours, while a Range Support Platoon" ensured Parris Island range and other safety. From December 1996, to a projected June 1997, extensive landscaping was done on the Inchon range to create better drainage. The \$780,000 project included bringing about 45,000 tons of fill material to Parris Island to raise the range elevation about one and a half feet higher than the highest tide. The range was resown with grass, and new benches for shooters were constructed. (26)

Parris Island maintained three male (1-2-3) and one female (4th) training battalions during the 1990s, and in 1990 approximately 800 recruits formed a gigantic number one on the parade ground to mark the 50th anniversary of the First Recruit Training Battalion, which was activated on August 6, 1940. (27)

Recruit training went through many significant alterations during the 1990s, for both male and female recruits. In the 1990s, women were required to qualify with the M16A2 military rifle as were the men. Under the tenure of Commandant Krulak female and male training standards were reported to be the same (they were not), and female Drill Instructors were issued the previously only male issued campaign hats. (*) First Lieutenant Theresa M. Velazquez became the first woman Marine to work in a male battalion (the First Recruit Training Battalion) in 1995, and in January 1994, GySgt Shanda L. Elkins became the first female regimental drillmaster at Parris Island. On February 2, 1997, the first all-female recruit graduation ceremony was held on the main parade deck by the female Fourth Recruit Training Battalion, since the command came into existence in 1986. The graduating platoons were 4004 and 4005 from Company O. (28)

*Cpl William M. Lisbon of the Tri Command Tribune took first place in a Corps-wide photo contest for photographing SSgt Kimberly A. Corbin in a newly received campaign hat, featured on the cover of Leatherneck magazine. The Fourth Battalion (female) phased out its traditional "Carolina blue" color for a burgundy shade in March 1996. The change was made to "more closely resemble the depth and richness of the other recruit training battalions' colors."

APPENDIX C-2

Bureau of Ordnance

F.S. Smoke Mixture, Disposition of, dated 16 June 1948.
Record Group 74, Entry 1003A, Box 125, Folder L11-
3/KV (1-1-48). National Archives, Archives II, College
Park, MD.

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L11-3/17
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To: The Chief of the Bureau of Ordnance

From: The Commanding General
Marine Corps Recruit Depot
Parris Island, South Carolina

16 JUN 1948

Subject: F. G. Smoke Mixture, Disposition of.

- Reference: (a) War Corps, Parris Island ltr, 1945/AMH/dw Serial 5210 dated 2 June 1948.
(b) Island ltr L11-3/17(Pr6)GMW dated 12 May 1948.
(c) Revised OEL A4-46.
(d) DORS 119686.

1. Reference (b) authorized the disposition of two hundred fifty (250) drums of F. G. smoke mixture which are on hand at the station and surplus to the Armed Services, or commercial requirements. Because of the suggested bad condition of the containers, the station was requested to investigate the feasibility of draining out the mixture from the drums and "bleeding" it off into the atmosphere, in order to avoid the hazards incident to possible leakage of the material while in transit to a dumping activity.

2. In reference (a), it is noted that the proposed method of disposition by emptying the drums at the station is considered to be impracticable, due to fact that there are no suitably isolated, and unpopulated areas near the station, and further, the swampy character of the terrain in the vicinity prohibits the movement of the heavy drums into areas in which there are inadequate roadways.

3. In view of the stated conditions, reference (d) is being issued to cover the shipment of the drums to the Naval Ammunition Depot, Charleston, South Carolina for disposition by dumping in deep water in accordance with reference (c). By copy of this letter, the Naval Ammunition Depot, Charleston is requested to accomplish the indicated disposition when a dumping vessel is available.

4. In this connection, it is also requested that the Naval Ammunition Depot, Charleston make available to the station, sufficient qualified personnel at the time the drums are to be shipped, to determine that the drums are in safe condition for shipment and to supervise their out

	111-2/17 (Pr6) 1111/17
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	loading and delivery to destination. Any drums which are considered to be unsafe for shipment will, of necessity, have to be emptied and disposed of at the station in the manner outlined in reference (b).
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APPENDIX C-3

Bureau of Yards and Docks

Transfer of Port Royal Naval Station, dated 15 October 1901. Vertical Files, Folder Reports of BuDocks to the Secretary of the Navy, Port Royal, SC, 1865-1905. Naval Construction Battalion Center, Port Hueneme, CA.

*Bullock's Report to Lt-Nav
1 October 1905.*

NAVAL STATION, PORT ROYAL, S.C.

This station has been practically closed and no operations were carried on during the year beyond those necessary for the preservation of the public property.

The 40-ton locomotive crane was disassembled and prepared for shipment to the navy yard, Charleston, S. C.

Some repairs were made to buildings to fit them for use of the crew of vessels to secure isolation on account of diphtheria. Under appropriation "Maintenance," the expenditures amounted to \$14,751.82. Owing to the necessity of maintaining the electric plant to prevent deterioration, the attendance thereon cost \$8,988.98, while the bills for water amounted to \$3,132.97.

SOURCE: SEABE MUSEUM

Q: PORT HUEN IN SC

SERIES: VERTICAL FILE

BOX: _____

FOLDER: REPORT - Bullock

S. C. MARINE CORPS REC. DEPOT

1905-1905

Report of the Chief of the Bureau of Yards and Docks.-- Oct. 15, 1901

Transfer of Port Royal Naval Station

The board of officers appointed by you, as authorized and directed by the act of June 7, 1900, to examine into the expediency of changing the naval station, Port Royal, S. C., to some point at or near the city of Charleston, S. C., made its report under date of January 10, 1901, recommending a site at a point about 6 miles above the city of Charleston, on the west bank of the Cooper River. This report was transmitted by you to the chairman of the Committee on Naval Affairs, United States Senate, on January 11, 1901, and is printed as Senate Document No. 86, Fifty-sixth Congress, second session.

By act of March 3, 1901, Congress authorized the transfer of the Port Royal station to the site selected, and negotiations which had been going on from the first were brought to a head as soon as practicable. Some difficulty was experienced in reaching an agreement as to the price to be paid for certain portions of the property held by private citizens, but a satisfactory conclusion was finally arrived at, and after the necessary investigation of the title had been made by the United States attorney, deeds were executed on the 12th day of August, 1901, transferring to the United States three tracts of land, comprising 258.11 acres, 171.03 acres, and 760 acres, respectively, the first two in fee simple and the last for "the site, location, and purposes of a naval station," in consideration of the payment of \$50,000, \$34,206, and \$1, respectively.

Possession of the property was taken, on behalf of the United States on the date of the execution of the deeds, and arrangements were made for the care and protection of the property pending the detail of an officer or representative of the Department to take charge.

In the meantime, the question of a general scheme of improvement of the station was submitted to a board of officers, of which Rear-Admiral H. C. Taylor is senior member, and its report has just been received and will at once be examined by the Bureau, after which steps will be taken to carry out such recommendations as are approved and for which funds are available.

Operations at Port Royal have been limited to repairs necessary to preserve the public property.

The Bureau is now carrying on negotiations looking to the purchase of about 948 acres of marsh land laying on the east bank of the Cooper River, opposite the site of the Charleston Station. This tract can be

purchased at this time for a very reasonable price, \$1,000, and is very desirable, in order that the Department may more satisfactorily control the water front.

APPENDIX C-4

Coletta, Paolo E

United States Navy and Marine Corps Bases, Domestic,
dated 1985. Greenwood Press, Westport, CT.

SOURCE: SEABEE MUSEUM
~~NO.~~ PORT HUENEME, CA
SERIES: _____
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FOLDER: BOOK: U.S. NAVY + MC. BASES, JAMES IZEL
P BY PAULOE COLETTA 1985

**PARRIS ISLAND, S.C., NAVAL STATION, 1861-1919, MARINE
CORPS RECRUIT DEPOT, 1861-1911, 1917- , AND NAVAL
DISCIPLINARY BARRACKS, 1911-**

Beaufort and Chechessee rivers and Port Royal Sound have for four centuries seen military establishments come and go. The French were the first to settle here, but their only permanent contribution was the name Port Royal, given to their settlement on Parris Island. The Spanish, who followed the French, were driven out by the Indians only to return and once again depart when the Englishman Sir Francis Drake attacked St. Augustine in 1586. The English made the first permanent settlement in South Carolina in 1670, bypassing Parris Island for a more desirable location, present-day Charleston.

Port Royal's easy access to the sea made her a base in peacetime for ships in the coastal trade as well as naval vessels and troops in time of war. During the American Revolution England stationed some forces in Port Royal to protect and defend the South Carolina coast. At the beginning of the American Civil War, Port Royal played an important role in the strategy of both the Union and the Confederacy. The Confederates constructed two forts to defend the Sound, a good base for blockade runners, and to protect the flank of Charleston: Fort Walker on Hilton Head Island and Fort Beauregard on Phillips Island. These forts fell to Commo. Samuel F. DuPont's Union forces on 7 November 1861, opening Port Royal Sound, its tributaries, and islands to the Federal troops.

The Union capture of Port Royal provided the U.S. Navy with a much-needed blockade base for her South Atlantic Blockading Squadron. It acted as a supply base for the blocking ships and allowed them to remain on station much longer than if Norfolk, Va., had been their supply base. It became the headquarters for the commanding officer of the South Atlantic Blockading Squadron after the victory of November 1861, and the name Port Royal was to be used for this U.S. Navy facility during approximately the next fifty years. Rear Adm. DuPont remained as commander of the blockading squadron until relieved by Rear Adm. John A. Dahlgren on 6 July 1863. By 15 September 1864 there were ninety-

PARRIS ISLAND, S.C. 419

The Bureau of Navigation, in 1901, was searching for a solution to the overcrowded conditions on the receiving ships. Rear Adm. A. S. Crowninshield, Chief of the Bureau, thought he had found the ideal solution for the naval station at Port Royal, which was about to be abandoned. To Crowninshield there were no disadvantages to Port Royal that could not be overcome. His bureau purchased an artesian well about three quarters of a mile from the station and piped in a plentiful supply of water; the USS *Topeka* and the USS *Wasp* were both assigned to Port Royal, the former as the station ship and the latter as a small-caliber rapid-fire gunnery training vessel. The incompleting sawmill building was converted into a barracks, mess hall, bath house, and cook house for 300 recruits. Secretary of the Navy William H. Moody heartily approved of this new use of Port Royal, but because Congress made no appropriation for the naval station, the 300 recruits were withdrawn and the building abandoned once again.

In 1903 Secretary Moody submitted no budget for Port Royal because it had been practically closed. But in the spring of that year good use was made of it. The USS *Buffalo*, after a two-month stay in Norfolk, sailed for the Caribbean on 5 December 1902. On 22 December two cases of diphtheria, which proved to be fatal, were discovered aboard, so *Buffalo* headed to the nearest hospital, at Pensacola, Fla. (q.v.). This hospital could not handle the situation, so the ship was ordered to the Port Royal Naval Station, where about 750 men were billeted in the abandoned buildings. These crewmen arrived in January 1903 and remained until the end of March. The thirty-seven-man Marine guard at the station was increased by over ninety men, with detachments coming from navy yards at New York (q.v.), Philadelphia (q.v.), and Norfolk (q.v.). Following this incident the permanent Marine guard at Port Royal was brought up to seventy enlisted men.

During the years from 1904 to 1908 the only personnel at Port Royal was the Marine guard, whose mission was simply to protect government property. In 1908 Maj. Gen. G. F. Elliot, Commandant of the Marine Corps, requested that Port Royal Naval Station be given to the Corps for use as a school of application, or officers training school. This request was granted; on 27 August 1908 the Bureau of Yards and Docks turned over the station to the Marine Corps and it became The Marine Officers School, Port Royal. After extensive renovations and improvements to the physical plant, a recruit depot as well as an officers' school was established. This was the largest recruit depot (three companies) of the Corps and the only officers' training school. However, only two classes of well-trained Second Lieutenants graduated from this school; twenty-seven in 1909 and twenty-four in 1910. The Corps also desired to establish a "sea-going" school here, a two-month course of instruction for Marines prior to their joining a ship's company. But this was not to be.

In 1910 the Secretary of the Navy's Board on Punishments recommended that disciplinary barracks be established for men convicted of purely military offenses and whose records showed they might eventually become good sailors. The board stated these barracks "should not be makeshift" and should be located in

PARRIS ISLAND, S.C. 421

S.C. About two years later the official spelling of "Parris" was decreed by Order No. 32.

Parris Island was the training ground for 46,202 recruits during the nineteen months of World War I. This recruit training, or "Boot Camp," developed at Parris Island was like none other in any American service. The "D.I.," or Drill Instructor, an NCO, was the most feared, and later respected man in the lives of the recruits. This boot camp was to remain essentially unchanged until 8 April 1956, the night of "The Disaster at 'Ribbon Creek,'" when, six recruits drowned there during exercises. Following their eight weeks of recruit training, most men were transferred to Quantico, Va. (q.v.), for advanced training prior to overseas duty. However, about 8 percent remained at Parris Island to attend one of the following schools: NCO, Field Music, Band, Clerical, Signal, Cooks and Bakers (usually those who did not qualify on the rifle range), Radio, or Pay.

In the years immediately following World War I, the Parris Island facilities were larger and more numerous than ever before. The naval hospital had been expanded to include 250 beds and Navy nurses were assigned to the hospital for the first time in 1919. A large "flying field" capable of handling the largest and fastest planes of the Navy was established in July of the same year. The chief mission of this field was training Marine pilots in flying the Navy's DH-4 bombers and, along with the field at Quantico, was the home station for the aviation forces of the Atlantic Coast Advanced Base and Expeditionary Forces. However, the life of this field at Parris Island was short, indeed; on 15 November 1921 it was closed for economic reasons and by 1 September 1922 it was abandoned. After the war there was a total of 631 wooden and 13 brick buildings, excluding the hospital and prison buildings, which could accommodate about 15,000 men and 92 officers.

During the 1920s Parris Island was greatly affected by the parsimonious attitude of the government. Salvaging, moving, and reconditioning of the physical plant with the purpose of consolidating the facilities at the main station took place, and the name was changed to Recruit Depot, Marine Barracks, Parris Island. Additions to the station were provided, however; a monument to mark the first stronghold of France in North America on Parris Island and a farm for the naval prison still located on the Island were set up. This farm was quite a success because it produced enough foodstuffs to appreciably reduce the cost of the subsistence of the prisoners as well as furnish other personnel at the station with potables at a greatly reduced price. A Cooks and Bakers School was opened to train the galley forces for the entire Marine Corps. In the late 1920s a causeway was constructed connecting Parris Island to the mainland; also an airship mooring site was erected at the flying field, Page Field.

During this period and the early 1930s the strength of the Marine Corps was slashed by Congress to the point where its Commandant said his organization could no longer carry out its mission. This cut in strength and a demand for expeditionary service in Nicaragua and China had a great impact upon Parris

APPENDIX C-5

Heinl, Robert

Hilton Head Marines, dated March 1940. Marine Corps Gazette, Volume 24, Number 1. U.S. Marine Corps Museum Library, Washington Navy Yard, Washington DC.

THE MARINE CORPS GAZETTE

WASHINGTON, D. C.

Vol. 24

MARCH, 1940

No. 1

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Opinions or assertions in the articles are the private ones of the writers, and are not to be construed as official or reflecting the views of the Navy Department or the naval service at large.

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PATRONIZE OUR ADVERTISERS

THE MARINE CORPS GAZETTE

Vol. 23

MARCH 1940

No. 1

HILTON HEAD MARINES: A Defense Battalion Trains at Camp McDougal

By 2ND LT. ROBERT D. HEINL, JR., U. S. M. C.

ON a remote island off the coast of South Carolina's "Low Countries" the Marine Corps' newest permanent camp and newest type of organization have arisen and taken shape side by side. Camp McDougal, Hilton Head Island, is the camp, and the Third Defense Battalion is the organization. Each has attracted Service attention in its own fashion: the first as a new station point, and the second as a military task organization completely novel within the Corps.

Since the defense battalion remains a newcomer whose arrival was unheralded at the outset, perhaps it might be well to set forth the nature of such a force, its mission, organization, and probable employment. The name itself, "Defense Battalion," indicates its nature in a word, for the

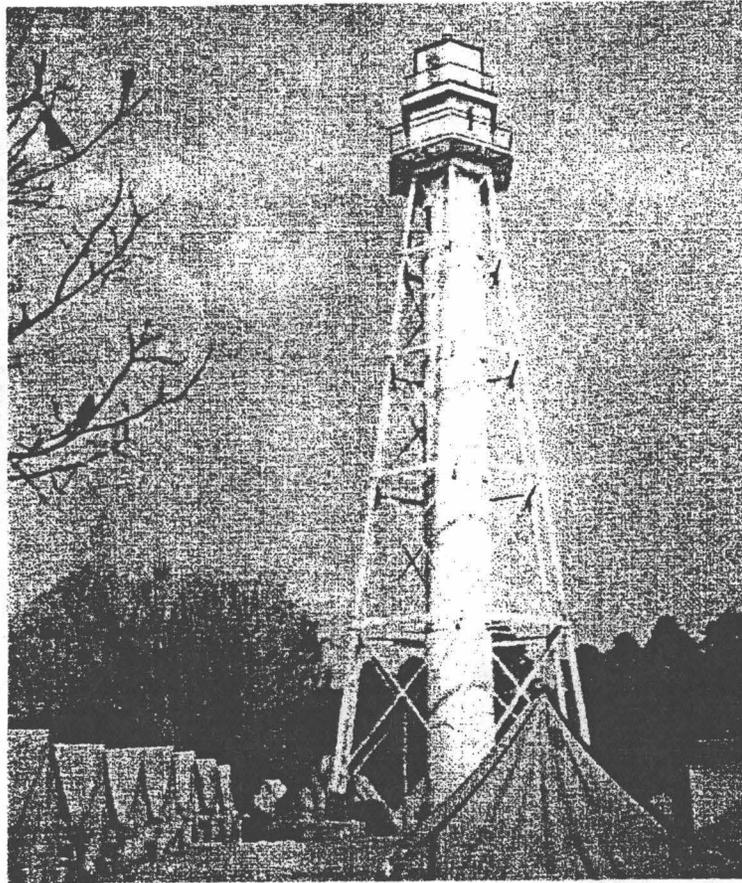
unit is designed to provide an all-around defense for a naval base or strategic location against attacks by air or sea—it might not be heresy to term it a Marine Corps version of Coast Artillery. Strange as this characterization may at first sound, it is quite within the bounds of stated mission of a Corps charged in Navy Regulations "to man such naval defenses . . . as may be erected for the defense of naval bases and naval stations beyond the continental limits of the United States." Simply, the defense battalion lifts from the highly mobile and essentially offensive units of the Fleet Marine Force Brigades the onus of providing relatively immobile base defenses. Their liberty of action and that of the United States Fleet is thus assured when sensitive advanced bases are securely held by units trained



Firing at Hilton Head

MARCH 1940

5



The Hilton Head Lighthouse

and equipped for just such a mission.

Like any task-force designed to ward off thrusts from the air and sea (and like its prototype, the Coast Artillery), the Defense Battalion embodies a group of varying weapons which range from anti-aircraft guns, machine-guns and searchlights to seacoast-batteries equipped with Navy five-inch guns and machine-guns for beach-defense. More exactly, its organization is as follows: (1) an anti-aircraft artillery group of three four-gun batteries of mobile Army three-inch guns; (2) a searchlight and sound-locator battery; (3) a .50 calibre machine-gun battery; (4) a .30 calibre machine-gun battery; (5) a five-inch artillery group divided into three two-gun batteries of Navy five-inch fifty-one calibre guns. Because it is not required to move rapidly, the total personnel, officers and men, amounts to some 750, and required transport and headquarters services are at a minimum. Although its troops normally carry the pistol, their rifles accompany them to all stations so that as a last resort, they may provide their own ground-security as Marine infantry.

Although announced or speculative assignments to duty project defense battalions—in anticipation—to far-flung

islands from the Caribbean to the mid-Pacific, the only island so far to be occupied is that of Hilton Head, a site sufficiently untamed, but not in apparent danger of seizure or in need of defense. The relative remoteness of Hilton Head is ideally suited for concentrated gunnery-training, and the South Carolina winter climate is sometimes compared even to that which Southern Californians boast. With Parris Island at least in supporting distance, the site approaches the ideal.

Camp McDougal is, in fact, senior to the Battalion which now occupies it, having been first employed by troops of the erstwhile Fifteenth Marines during their period of organization in the past two years. Federal occupancy of the land dates back much farther, since the Government reservation was originally that set aside for the Lighthouse Service, several of whose structures dominate the camp and provide facilities around which life revolves. To trace the matter even more remotely into history, we can look to Hilton Head's seizure in one of the U. S. Army's early landing-exercises, during the Civil (or as the Low Countries say) "the Confederate" War. Thereafter, planters, who had kept this Sea Island under complete

and luxurious cultivation, were forced to flee, and their lands became forfeit in taxes, or reverted by Squatters' Rights to colonies of former slaves, many of whom but one generation removed from Africa, and who to this day speak an aboriginal patois known as "Gullah." Over the once cultivated island grew a semitropical forest of palmetto and pine, broken here and there by clearing tilled by Negroes. Along its isolated white beaches, the surf rolled alone except where a few navigational marks were sited by the Lighthouse Service. Inland, amid a clearing hung with Spanish Moss, a tall lighthouse overshadowed a cluster of buildings. Later, they were to become the Headquarters and Post Exchange, respectively, of a Marine Corps camp.

Here, in mid-Autumn, the Third Defense Battalion began its training-program for all weapons as they became available and as recruits joined to fill the expanded unit. A natural division of the reservation into beach and camp areas, with an intervening mile of swamp and woodland between, permitted training to be carried out uninterrupted on the beach while administration and normal services are provided in camp.

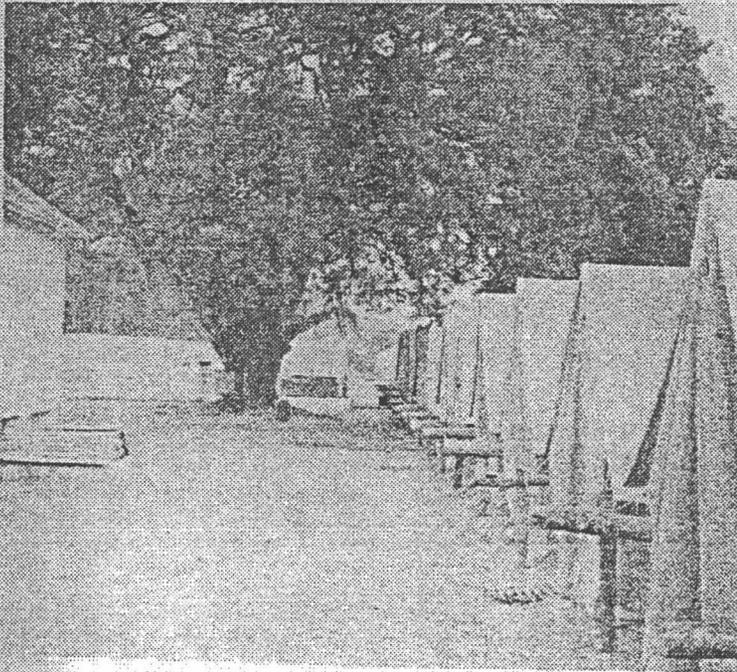
On the beach, there are several hundred boxes of three-inch guns and their fire-control gear, as well as a safety tower recently painted Marine Corps green. The delight of at least one gunnery sergeant was that he felt quite at ease until all woodwork was just the regulation shade. To seaward of the four guns is a substantial wall built by men of the 50 calibre machine-gun battery to protect their lengthy firing-line from tides which are almost to the gun-positions. Just behind this wall is a level embankment of sand in which numerous machine-gun traps have been implanted so bridle that vibration, the bane of virtually all heavy armament weapons, is substantially reduced. Somewhat to the right of the machine-guns and down the beach behind twisted ruins of a sea navigational light, may be seen a complete pre-technological station whose wiring, vanes and arrows proclaim its readiness to provide artillery data at any hour.

Like a fine sea-coast gun, the single three-inch is emplaced in a pit which provides shade. Located well north of the regimental artillery, she has her own plotting gear and other necessary auxiliaries set to landward in the woods which in this vicinity border the beach. There also is the nerve center, a large-sized plotting board equipped with movable brass arms, slides and protractors upon which the graphic reproduction of any target's movement is made possible, to the accompaniment of concentrated checks whose insistent bells synchronize all operations.

Along the sandy trail which joins the camp and beach, lies the magazine area, a section of woods which has been cleared of all underbrush (but not entirely of rattlesnakes) and is now dotted with sandbag bastions to protect the various types of ammunition. Here a sentry is always



The 3-inch AA Gun in Action



Camp McDougal

MARCH, 1940

posted as a firewatch. Special orders expressly forbid the use of his pistol on snakes!

All day, truck-traffic shuttles to and from the beach, carrying working-parties, batteries to conduct training, and officers on duty. This road and its parallel telephone-line probably bear more traffic than any on the island, even that which covers the eight miles to the dock. Its route was completely overgrown when advanced detail surveyed and cleared it in work reminiscent of that in Nicaragua, so tropical is the Hilton Head forest.

Centered about headquarters in the light-keeper's one-time house, the camp proper extends in all directions. Within the yard and picket-fence (now carefully white-washed by a Massachusetts maintenance-officer), all officers and staff noncommissioned officers have their tents. To the north is a large group of storage-tents used either as shops or to shelter property. Still beyond, in the edge of the woods, water-trans-

port parks its trucks and leads a secluded and shady life within easy distance of the heads, which are on the outermost frontier. Headquarters faces the main camp-area, mess-hall (in the process of extension to seat additional troops), and recreation-building which houses the Post Exchange. Timber encroaches closely upon the south side of Camp McDougal, but trees and Spanish Moss provide excellent shelter for the camp sick-bay, somewhat beyond which, during a week-end walk, the communication-officer noosed alive a huge cottonmouth-moccasin, aided only by a short walking-stick and a shoelace. Fortunately the camp itself seems to be safe from the incursions of such neighbors and much more allergic to mosquitoes, although careful medical testing has as yet failed to discover any of the malarial variety.

The day's operations and training will naturally vary, but certain features seem to be standard, such as tracking-drill for the anti-aircraft guns, using planes sent from Parris Island. All morning and afternoon, the guns train and elevate in coincidence with the target overhead, while loading-crews simulate maintenance of fire with drill shells. Parris Island also provides a motor-boat for surface tracking-exercises by five-inch personnel. On many afternoons, machine-guns fire at towed aerial sleeves, very much to the fascination of the coastal gentry who maintain hunting lodges and preserves on the Island. By day the recreation-building becomes a school where director-crews and other technical personnel learn the mechanics of their instruments from charts that have in many cases been drawn on Hilton Head itself by officers who brought along necessary equipment for just such work.

At the same time that troops in Camp McDougal are being trained, elements of the battalion remain on Parris Island, where certain phases of instruction may be carried out equally well. In addition, since it is the head of transportation for the camp, Parris Island requires the presence of battalion quartermaster-activities. Daily boats which carry rations and mail to Hilton Head are the sole connecting-link with the main station, except radio. Once material is landed at the crude dock, trucks must ferry it over "the county road," a highway very similar to the motor-trails one used in Haiti. In forty-five minutes, a truck can reach camp after an eight-mile run through woodlands and cultivated stretches which are likewise suggestive of the fertile portions of Haiti. Along the road traffic consists mostly of negroes, although a single automobile may occasionally pass, usually bearing a license-plate at least three years old. In one respect, however, the county road would spell perfection to a highway-engineer: it has no billboards.

Camp-life has become settled now that all hands are well shaken down. During the day, drill keeps the command amply occupied, and the late afternoon is always available for athletics, hiking or fishing. By night, everyone burrows into his tent, lights the stove and lantern to spend an evening writing letters, reading or playing cribbage. And if civilian gentlemen happen to stroll into camp from the neighboring hunting-lodge, the Marines smile when they reflect that it costs the huntsmen hundreds of dollars to duplicate, even partially, the life in a defense battalion at Camp McDougal.



Mr. Charles Edison



Mr. Lewis Compton

The Marine Corps Gazette extends congratulations to our new Secretary of the Navy and Assistant Secretary of the Navy.

THE MARINE CORPS GAZETTE

APPENDIX C-6

Marine Barracks Parris Island, SC

Rifle Range Data, dated 22 July 1927. Record Group 127, Entry 18 General Correspondence 1913-32, Box 44, Folder 1275-65 Target Ranges. National Archives, Washington DC.

270.UOS-ck. 22 July, 1927.
HEADQUARTERS, RECRUIT DEPOT, MB, PARRIS ISLAND, SOUTH CAROLINA.

From: The Commanding Officer.
To : The Major General Commandant.
Via: (1) The Commanding General.
Subject: Rifle Range Data.

1. In compliance with the instructions contained herein, the following information is furnished:

- (1) The Rifle Range, MB., Parris Island, S. C., is located on the Northwest side of Parris Island, S.C. The necessary transportation to and from the Main Station is furnished by the Post Quartermaster. The range is about three (3) miles distance from the Main Station.
- (2) Sixty-one Rifle Targets with all ranges from 200 to 600 yards inclusive.
Sixteen (16) Rifle Targets with all ranges from 200 to 1000 yards inclusive.
In addition to the above there are wooden butts available for thirty additional Rifle Targets with ranges from 200 to 600 yards inclusive.
- (3) There are twelve (12) Pistol Targets available with ranges from fifteen (15) to seventy-five (75) yards inclusive.
In addition to the above there are wooden butts for ten targets which could be used in an emergency.
- (4) The general condition of the grounds, firing points, target butts, target frames, etc. are excellent, with the exception of the thirty additional rifle target butts and the ten additional wooden pistol target butts, which would require some repairs, being of wood construction.
- (5) The following listed buildings are located at this range:

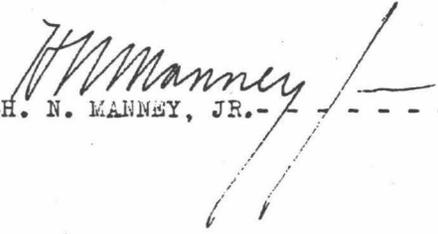
4	Two story barracks with a capacity of 65 men each	-260
1	Cooks and messmen barracks	6
1	Old Mess Hall used for barracks	65
1	Mess Hall with seating capacity	-404
1	Recreation building and movie hall with a seating capacity	-400

Subject: Rifle Range Data. Page #2 22 July, 1927.

2 Recruits Heads.
1 Permanent Detachments Head.
2 Shelter Buildings or sheds total area - -5100 Sq. ft.
1 Rifle Armory.
1 Pistol Armory.
1 Storeroom and carpenter shop.
1 Office Building.
1 Magazine, G. I. Construction, size 82' x 23'
1 Magazine, old, badly in need of roof and repairs
size 150' x 31'
1 Guard House
2 Sets Officers quarters
1 Fire Barn capacity 1 truck.
5 Sets Non-commissioned officers quarters.
1 Sick Bay.

- (6) There are facilities available at this range to quarter two (2) officers and three hundred thirty-six (336) enlisted men using available buildings. This includes the five (5) enlisted men quartered in married non-commissioned officers quarters. Eight Hundred Eight (808) enlisted men could be quartered by the use of tents in addition to the barracks. This number of men could be handled on the range with the present target facilities, not including the wooden butts.
- (7) The land on which this range is situated is owned by the Government.
- (8) This range is suitable for machine gun firing, but not suitable for light mortars and 37 MM firing.
- (9) Range is not suitable for combat practice.

2. Photographs and sketches of rifle range, butts, buildings, etc. will be forwarded under separate cover as soon as same can be prepared.


-----H. N. MANNEY, JR.-----

APPENDIX C-7

Marine Barracks Parris Island, SC

Construction Work on New Range, dated 14 October 1930. Record Group 127, Entry 18 General Correspondence 1913-32, Box 45, Folder 1275-65 Target Ranges. National Archives, Washington DC.



IN REPLYING
REFER TO NO.

UNITED STATES MARINE CORPS

Rifle Range Detachment, Recruit Depot
Marine Barracks, Parris Island
South Carolina

14 October, 1930

From: The Commanding Officer, Rifle Range Detachment.
To : The Major General Commandant, Headquarters
U.S. Marine Corps, Washington, D.C.
VIA: (1) The Commanding Officer, Recruit Depot, Post.
(2) The Commanding General, Post.

SUBJECT: Construction work on new range.

Enclosure: 1. Map of Island, showing location of new butts.

1. Since June 1st, 1930, work has been in progress toward the completion of the new range in order that it would be ready for use when the present supply of 1918 ammunition is exhausted. The work is now nearing completion and the range can be put in use immediately. It is not contemplated however, that it will be needed before January, 1931.

2. Concrete bases for the target carriers has been poured and all target carriers from number 20 to number 45 have been erected, painted and placed in operating condition.

3. The range has been surveyed with the idea of accurately locating the firing points. Firing points have been constructed and sodded.

4. A new road has been constructed which will permit the passage of vehicles and troops in all sorts of weather.

5. A depression in the vicinity of the 200 yard firing point, similar to the depression on the old range, will collect considerable water during the rainy season, but it is believed that the drainage obtained by the construction of a concrete culvert and ditches which have already been completed, will adequately drain this vicinity. All firing points have been elevated above the surrounding ground and constructed to a width of approximately 12 feet which will obtain well drained firing points and increase the comfort of the firers.

-2-

6. The danger zone in rear of the butts is not inhabited, nor will the bullets of the M-1 ammunition at maximum range, 5500 to 6000 yards, strike any inhabited territory. The only danger in the use of the M-1 ammunition will be the vicinity of the mouth of Archers Creek and in Ribbon Creek directly behind the butts when boats are passing. In this connection, a lookout behind the butts can warn of the approach of any boats in Ribbon Creek as this creek is in direct view and directly behind the butts. To warn of the approach of boats in Archers Creek a lookout post is already established. Except from possible fall of ricochet bullets on the end of Horse Island, all other bullets will strike into the marshes or tidal flats as shown on enclosure.

Howard R. Huff

460./EFS:j. 1st Endorsement. 14 October, 1930.
HEADQUARTERS, RECRUIT DEPOT, M.B., PARRIS ISLAND, SOUTH CAROLINA.

From: The Commanding Officer.
To: The Major General Commandant.
Via: The Commanding General.
Subject: Construction work on new rifle range.

1. Forwarded.

H. N. Manney, Jr.
H. N. MANNEY, JR.

770.00-6-slp. 2nd Indorsement. 15 October, 1930.
MARINE BARRACKS, PARRIS ISLAND, SOUTH CAROLINA.

From: The Commanding General.
To: The Major General Commandant.

1. Forwarded.

Harry Lee
HARRY LEE.

APPENDIX C-8

Marine Barracks Parris Island, SC

Ammunition Allowance for Recruit Training, dated 16 January 1935. Record Group 127, Entry 18 General Correspondence 1933-38, Box 160, Folder 2000-20. National Archives, Washington DC.

553
jjr

OFFICE OF THE POST COMMANDER,
MARINE BARRACKS,
PARRIS ISLAND, SOUTH CAROLINA.
16 January, 1935.

FROM: The Post Commander.
To: The Major General Commandant, Headquarters,
U. S. Marine Corps, Washington, D. C.
Subject: Ammunition allowances for Recruit Training.
Reference: (a) MCO let 1975-70/7 40-189-gs, 4 Jan 35.

1. In preparing the eight week training program called for by reference (a), consideration is being given to increasing the time allotments of the following subjects:

Rifle Marksmanship, to include anti-aircraft marksmanship. (B. F. M. III - Six - 2).
Automatic Rifle Marksmanship, to include the course prescribed by Marine Corps Order No. 50.
Thompson submachine gun marksmanship, to include the course prescribed by Marine Corps Order No. 54.
Instruction with Hand Grenades, to include the course provided for by Marine Corps Order No. 43.
Firing Rifle Grenades, to include the course provided for by Marine Corps Order No. 45.

2. If the foregoing proposals are to be included in the eight week program additional ammunition allowances will be necessary. Therefore, before submitting the program called for, it is requested that the Major General Commandant express his policy on these matters. The following ammunition allowances will be necessary for the full courses prescribed:

Cartridges, caliber .30, ball, (For BAR Course), per man.....	410
Cartridges, caliber .30, ball, (For anti-aircraft marksmanship)	
per man.....	15*
Cartridges, caliber .32, ball, (For anti-aircraft marksmanship)	
per man.....	20
Cartridges, caliber .45, ball, (For TSMG Course), per man.....	140
Cartridges, wooden bullet, caliber .30, (For rifle grenade)	
per man.....	4
Grenades, Hand, Practice, per man.....	3
Bouchons, (Fuse essentially) with primer cap, (For practice grenades),	
per man.....	2

550-jjr

Subject: Ammunition allowances for Recruit Training.

Bouchon, (Fuse assembly) with No. 6 detonators, (For practice
grenades) per man..... 1

* Plus 5 tracer, and 15 ball, when towed targets are available.

3. In this connection ammunition expenditures under the
tentatively approved 6 week training program will be as follows:

Cartridges, caliber .30, ball,
(For Browning Machine Gun marksmanship), per man..... 10#
Cartridges, caliber .30, ball,
(For BAR marksmanship), per man..... 10
Cartridges, caliber .30, ball,
(For musketry exercises) per man..... 65#
Cartridges, caliber .30, blank (For musketry, combat principles
and bush warfare exercises) per man..... 45#
Cartridges, caliber .22, ball,
(For musketry exercises) per man..... 50
Cartridges, caliber .45, ball,
(For TSMG marksmanship) per man..... 10
Rifle grenades, V. B. (Fragmentation)
for demonstration, per platoon..... 3#
Cartridges, Very pistol, for instruction in combat
principles and bush warfare, per platoon..... 5#
Flares, illuminating, parachute type for rifle grenade
attachment; for instruction in combat principles and
bush warfare; per platoon..... 1#

Also for the proposed 8 week training program.

JESSE F. DYER

APPENDIX C-9

Marine Barracks Parris Island, SC

Miniature Range, 4.2" Chemical Mortars, dated 27 January 1936. Record Group 127, Entry 18 General Correspondence 1933-38, Box 27, Folder 275-65 Target Ranges. National Archives, Washington DC.

1275-65
AO-812-af

27 January 1936

From: The Major General Commandant.
To: The Commanding General, Marine Barracks,
Parris Island, S.C.

Subject: Miniature range, 4.2" Chemical Mortars.

Enclosures: (a) Blue print of 4.2" Chemical Mortar miniature range.
(b) Set of photographic prints (7 to set).
(c) Map of Lyman Field, miniature range.
(d) Set of problems (16 to set).

1. Enclosures (a), (b), (c), and (d) are furnished in connection with the training of mortar troops in the technique of mortar firing. Recent experiments at Quantico have been most successful in training chemical personnel in the figuring of fire data, in fire control, and selection of chemical agents, without the expense of ammunition the cost of which is approximately \$29.00 per round. While this training should not take the place of field firing with live ammunition, it permits of preliminary training and correction of faults before field firing, and is comparable to the instruction given with the 22 cal. rifle prior to record range practice.

2. The 4.2" Chemical Mortar range is so designed that the commands, fire data, elevating and traversing mechanism, fire control instruments, etc., are the same as those used in the field. The propellant used are rubber bands of a certain size and weight which, when weighed on the testing device and registering "Average," will equal one powder ring of 150 grains, and the same range is obtained using a given number of bands for the same number of powder rings as shown on the range table. One foot on the table equals 100 yards on the map.

3. Enclosures (a), (b), (c), and (d) describe the miniature range designed especially for training in the technique of fire of the 4.2" Chemical Mortar and the distances. Propellant and fire control data used are synchronized on the table, with the field range tables for the weapon. While the ranges of other howitzer weapons, such as the 3" Stokes Infantry Mortar and the 81 m/m Stokes-Brandt Mortar, are different from the range of the

4.2" Chemical Mortar, the technique employed is similar. Valuable training in the use of mortars and the technique of fire can be given personnel assigned mortar platoons, through the use of a miniature mortar range similar to the one described in the enclosures.

L. McCARTY LITTLE,
By direction.

APPENDIX C-10

Marine Barracks, Parris Island, SC, Quartermaster

Ammunition, dated 3 June 1936. Record Group 127,
Entry 18 General Correspondence 1933-38, Box 161,
Folder 2000-20 Target Ranges. National Archives,
Washington DC.



IN REPLYING
 REFER TO No.
 5.1

UNITED STATES MARINE CORPS
 OFFICE OF THE POST QUARTERMASTER
 MARINE BARRACKS, PARRIS ISLAND, S.C.
 3 June, 1936.

From: Post Quartermaster.
 To: The Major General Commandant.
 Via: The Post Commander.
 Subject: Ammunition.
 Reference: MGC Letter to CG., 2000-20 over A0-134-cel,
 dated 14 May, 1935.

1. In connection with above reference, the following amount of ammunition has been expended since 1 July, 1935:

<u>TYPE.</u>	<u>AMOUNT EXPENDED</u> <u>1 July 35 to 31 May 36.</u>	<u>EST. EXP.</u> <u>JUNE 36.</u>
Bouchons, hand practice grenade, w/no 6 detonator.	58	18
Bouchons, hand practice grenade, w/primer cap, w/o detonator.	81	18
Cartridges, ball, cal .22 long rifle.	643780	60000
Cartridges, ball, cal .30, M-1.	609970	102000
Cartridges, ball, cal .30, M-1, (MG-Grade.)	65700	7500
Cartridges, ball, cal .30, M-06	60480	None.
Cartridges, ball, pistol, cal .45, (M-1911).	360180	30000
Cartridges, dummy range, cal .30, M-1.	607	50
Cartridges, cal .30, w/wooden bullets, (for firing V.B. rifle grenade.)	1212	110
Cartridges, tracer, cal .30, M-1, (F.A. Lot #480.)	3340	120
Cartridges, blank, cal .30, M-1909.	6000	None.
Grenades, hand, dummy.	48	3
Grenades, hand practice, w/o bouchons.	43	6.
Grenades, rifle dummy, V.B., type	50	5
Signals, white, star ground, M-5.	6	None.

2. The following unexpended ammunition is the approximate amount that will be on hand as of 1 July 1936:

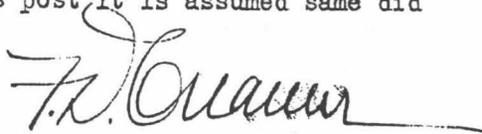
<u>TYPE</u>	<u>QUANTITY.</u>	<u>LOCATION.</u>
Bouchons, hand practice grenade, w/no 6 detonator.	67	Rifle Range.

5.1

Subject: Ammunition.

<u>TYPE</u>	<u>QUANTITY</u>	<u>LOCATION.</u>
Bouchons, hand practice grenade, w/ primer cap, w/o detonator.	153	Rifle Range.
Cartridges, ball, cal .32 long rifle	None	400000 on reqn.
Cartridges, ball, cal .30, M-1.	63990	Rifle Range.
Cartridges, ball, cal .30, M-1, (MG-grade)	9745	" "
Cartridges, ball, pistol, cal .45, (M-1911)	49255	" "
Cartridges, dummy range, cal .30, M-1	806	" "
Cartridges, cal .30, w/wooden bullets, (for firing V.B., rifle grenade.)	5712	" "
Cartridges, tracer, cal .30, M-1 (F.A. Lot #480.)	3540	" "
Cartridges, dummy, cal .30, M-06, corrugated.	4984	" "
Cartridges, dummy, range, cal .30, M-1, slotted.	2000	" "
Cartridges, dummy, range, cal .30, M-1921, slotted.	1619	" "
Grenades, hand, dummy	216	" "
Grenades, hand practice, empty, w/o bouchons.	476	" "
Grenades, rifle dummy, V.B., type	142	" "
Signals, white, star ground, M-5	18	Recruit Depot.

3. In view of the fact that table number two of reference was not received at this post, it is assumed same did not apply to this post.



F.D. CREAMER. / 1

Copy to: The Quartermaster, Headquarters Marine Corps,
 Washington, D.C.

APPENDIX C-11

Marine Barracks Parris Island, SC

Allowances of Ammunition (Except Small Arms) for Training, U.S. Marine Corps, Fiscal Year 1938, dated 18 January 1937. Record Group 127, Entry 18 General Correspondence 1933-38, Box 161, Folder 2000-20-10 Heavy and Light. National Archives, Washington DC.



IN REPLYING
REFER TO No.
457x550.2

jjr

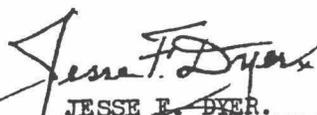
UNITED STATES MARINE CORPS
RECRUIT DEPOT, MARINE BARRACKS, PARRIS ISLAND, S. C.
18 January, 1937.

From: The Post Training Officer.
To: The Major General Commandant, Headquarters,
U. S. Marine Corps, Washington, D. C.
Via: The Commanding General.
Subject: Allowances of Ammunition (Except Small Arms) for
Training, U. S. Marine Corps, Fiscal Year 1938.

References: (a) MGC letter 2000-20-10 AO-217-cel, dated 5 Jan 37.
(b) Allowances of Ammunition (Except Small Arms) for
Training, U. S. Marine Corps, Fiscal Year 1937 -
Table I.
(c) Allowances of Ammunition (Except Small Arms) for
Training, U. S. Marine Corps, Fiscal Year 1937 -
Table II.

1. I request that the following be included in Allowances
of Ammunition (Except Small Arms) for Training, U. S. Marine Corps,
Fiscal Year 1938, for the purpose of chemical warfare training of
recruits and permanent personnel at this Post:

50 Grenades, hand, irritant, (CN-DM), M6;
50 Grenades, hand, tear, CN, M7;
50 Grenades, hand, smoke, (HC), M8;
2 Pair Gloves, impervious;
300 Candles, smoke, HC, M1;
4 Masks, diaphragm;
1 Cylinder, chlorine gas;
500 Capsules, CN (tear gas).


JESSE E. DYER.

2000-5
099-jbl.

1st Indorsement.
Marine Barracks, Parris Island, S. C.

19 January 1937

From: The Commanding General.
To: The Major General Commandant.

1. Forwarded.


J. T. BUTTRICK.

APPENDIX C-12

Marine Barracks, Parris Island, SC, Quartermaster

Ammunition, dated 9 June 1937. Record Group 127,
Entry 18 General Correspondence 1933-38, Box 161,
Folder 2000-20-10 Heavy and Light. National Archives,
Washington DC.



IN REPLYING
 REFER TO NO.

5-1

UNITED STATES MARINE CORPS
 OFFICE OF THE POST QUARTERMASTER
 MARINE BARRACKS, PARRIS ISLAND, S.C.
 9 June, 1937.

From: Post Quartermaster.
 To: The Major General Commandant.
 Via: Post Commander.

Subject: Ammunition.

Reference: (a) MGC letter to All Posts and Organizations,
 2000-20-10 over A0-217-cel, dated 9 June 36.

1. In connection with above reference, the following amount of ammunition has been expended since 1 July 1936:

TYPE	AMOUNT EXPENDED 1 July 36 to 31 May 37.	EST. EXP. June 37.
Bouchons, hand practice grenade, w/no 6 detonator	189	24
Bouchons, hand practice grenade, w/primer cap, w/o detonator	338	24
Capsules, C.N. (tear gas) size 00	240	10
Cartridges, ball, cal .22 long rifle	956250	52350
Cartridges, ball, cal .30, National Match 1936	18000	-----
Cartridges, ball, cal .30, M-1	705686	60000
Cartridges, ball, cal .30, M-1 (MG-Grade)	89740	8000
Cartridges, ball, pistol, cal .45, (M-1911)	424660	41000
Cartridges, blank, cal .30, M-1909	2500	-----
Cartridges, cal .30, w/wooden bullets, (for firing V.B., rifle grenades)	2036	125
Cartridges, dummy range, cal .30, M-1	370	-----
Cartridges, dummy range, cal .30, M-1, slotted	2028	-----
Cartridges, tracer, cal .30, M-1	983	125
Cartridges, very pistol, green	15	-----
Cartridges, very pistol, red	23	-----
Grenades, hand, dummy	43	8
Grenades, hand practice, empty, w/o bouchons	7	-----
Grenades, rifle, dummy, V.B., type	65	4

Subject: Ammunition.

2. The following unexpended ammunition is the approximate amount that will be on hand as of 1 July 1937:

TYPE	QUANTITY	LOCATION.
Bouchons, hand practice grenade, w/no 6 detonator	61	Rifle Range
Bouchons, hand practice grenade, w/ primer cap, w/o detonator	186	do.
Cartridges, ball, cal .22, long rifle	None	
Cartridges, ball, cal .30, M-1	377324	do.
Cartridges, ball, cal .30, M-1 (MG-Grade)	20075	do.
Cartridges, ball, pistol, cal .45, (M-1911)	231945	do.
Cartridges, cal .30, w/wooden bullet, (for firing V.B. rifle grenade)	3445	do.
Cartridges, dummy, cal .30, M-06 (corrugated)	4984	do.
Cartridges, dummy range, cal .30, M-1	386	do.
Cartridges, dummy range, cal .30, M-1, slotted	2962	do.
Cartridges, dummy range, cal .30, M-21, slotted	1619	Recruit Depot.
Cartridges, tracer, cal .30, M-1	2292	Rifle Range.
Cartridges, very pistol, green	38	Recruit Depot.
Cartridges, very pistol, red	32	do.
Cartridges, very pistol, white	33	do.
Grenades, hand, dummy	164	Rifle Range
Grenades, hand practice, empty, w/o bouchons	475	do.
Grenades, rifle, dummy, V.B., type	72	do.


 F.D. CREAMER.

Copy to: The Quartermaster, Headquarters, U.S. Marine Corps,
 Washington, D.C.

APPENDIX C-13

Marine Barracks, Parris Island, SC , 2nd Antiaircraft
Battalion

*Rental of Private Land for Use of Battery H for Annual
Service Practice*, dated 5 April 1938. Record Group
127, Entry 18 General Correspondence 1933-38, Box
27, Folder 1275-70. National Archives, Washington
DC.



IN REPLYING
REFER TO No.

1275/JLP/mm

UNITED STATES MARINE CORPS
HEADQUARTERS,
SECOND ANTI-AIRCRAFT BATTALION,
FLEET MARINE FORCE,
MARINE BARRACKS, PARRIS ISLAND, S.C.

5 April 1938.

From: The Commanding Officer.
To: The Major General Commandant, Headquarters
U.S. Marine Corps, Washington, D.C.
Subject: Rental of private land for use of Battery H
for annual service practice.

1. It is requested that the necessary steps be taken to lease the below described plots of land for searchlight positions (2 searchlight sections) during the remainder of April and the month of May.

(a) About three acres of pasture land located in town of Burton, S.C., approximately 800 yards northwest of the north end of the causeway from the mainland to Horse Island. ($L=32^{\circ} - 22' - 45''$) = $80^{\circ} - 43' - 20''$ on ungridded army tactical map, Fort Fremont Quadrangle). Owner Mr. H.H. Lake of Burton, S.C. Rental asked \$1.00.

(b) About two acres of uncultivated field located approximately 600 yards west of Burton - Parris Island road and about $\frac{3}{4}$ miles southwest of Burton railroad station. ($L=32^{\circ} - 23' - 55''$) = $80^{\circ} - 44' - 30''$ on ungridded army tactical map, Fort Fremont Quadrangle). Owner Mrs. Fannie G. Kirkland of Beaufort, S.C. Lessee Mr. James L. Hill of Burton, S.C. Owner agrees right of Mr. Hill to sub-let, papers to be in his name. Rental asked \$15.00

2. These positions have been used by the battery as searchlight positions in agreement with the owners in order to determine their suitability. They were found to be satisfactory positions and essential to this battery for practice for and conduct of the annual service practice. The nature of the terrain demands that at least two lights be sited off Parris Island. No suitable public lands are available.


J.L. PERKINS.

APPENDIX C-14

Marine Barracks, Parris Island, SC

Gas Alarms - Provision of, dated 11 August 1943.
Record Group 74, Entry General Correspondence 1943,
Box 451, Folder KP59. National Archives, Archives II,
College Park, MD.



IN REPLYING
REFER TO No.
DQM PISC Reqn No. 751-43
Serial No. 2853-STR
YAW/smr

UNITED STATES MARINE CORPS
OFFICE OF THE DEPOT QUARTERMASTER
MARINE BARRACKS, PARRIS ISLAND, S. C.

11 August, 1943.

From: Depot Quartermaster.
To: Chief of the Bureau of Yards and Docks,
Navy Department, Washington, D. C.
Via: (1) Post Quartermaster.
(2) The Commanding General.
Subject: Gas Alarms - Provision of.
Reference: (a) Bu Y & D ltr KP59/A16-1 over D-4,
dated July, 27, 1943.

1. It is requested that one set, Gas Identifi-
cation, Detonation and one set, Gas Identification, In-
structional, be furnished this post for use as outlined
in reference (a). Shipment to be made addressed to Depot
Quartermaster, Marine Barracks, Parris Island, S. C.

082143 01174

G. C. Davison, Jr.
A. C. DAVISON, JR.
Acting

Ser. #794
3.3/JDM/es 1st Endorsement 12 August, 1943
Office of the Post Quartermaster, M. B., Parris Island, S. C.

From: Post Quartermaster.
To: The Commanding General.

1. Forwarded.

374043
7/31

KP59/A 16-1
James D. McLean
James D. McLean
D-4

n 1310 2nd Endorsement 13 August 1943.
wgc Marine Barracks, Parris Island, South Carolina.

From: The Commanding General.
To: Chief of Bureau of Yards & Docks,
Navy Department, Washington, D. C.

1. Forwarded.

Hayden Freeman
HAYDEN FREEMAN,
by direction.

APPENDIX C-15

Marine Barracks, Quantico, VA, 1st Battalion, 10th
Marines

*1937 Report of Annual Service Practice, First Battalion,
Tenth Marines, Fleet Marine Force, dated 18 July 1937.
Record Group 127, Entry 18 General Correspondence
1933-38, Box 232, Folder 2400-15 1933-38. National
Archives, Washington DC.*

SOURCE: NARA WASH DC
RG: 127
SERIES: E. R. GENCORP 1937
BOX: 232 2400-X-20 2400-15
FOLDER: 2400-15 1933-38

1115-5/STC-wgh.

HEADQUARTERS, FIRST BATTALION,
TENTH MARINES, FIRST MARINE BRIGADE,
FLEET MARINE FORCE, MARINE BARRACKS, QUANTICO, VA.

15 July, 1937.

From: The Commanding Officer.
To: The Major General Commandant.
Via: (1) The Commanding General, First Marine Brigade,
Fleet Marine Force, Marine Barracks, Quantico, Va.
(2) The Commanding General, Fleet Marine Force,
Marine Barracks, San Diego, Calif.

Subject: 1937 Report of Annual Service Practice, First Battalion,
Tenth Marines, Fleet Marine Force.

References: (a) Brigade Special Order No. 203, dated 21 May 1937.
(b) Brigade Special Order No. 205, dated 21 May 1937.
(c) Brigade Special Order No. 208, dated 27 May 1937.

Enclosures: (1) Ltr C.O. to MGO, dated 29 June 1937, recommending
certain improvements at Parris Island accompanied
by a mosaic of Parris Island.
(2) Memorandum on Air Spot Arrangements.
(3) (a) Battalion Problem #1, Parris Island.
(b) Battalion Problem #2, Parris Island.
(c) Battalion Problem #3, Parris Island.
(d) Battalion Problem #4, Parris Island.
(4) Reports of Service Practice.

1. Pursuant to orders contained in references (a), (b) and (c), the First Battalion, Tenth Marines, carried out its annual service practice at Parris Island, South Carolina, from 1 June to 24 June, 1937. During the period 2 June - 10 June, inclusive, this battalion furnished troops and material to the Base Defense Weapons Class, Marine Corps Schools, at Parris Island, for training of the student officers; therefore battalion service practice was necessarily restricted during this period.

2. Below is tabulated statistical data of interest in connection with the service practice:

A. Material:

- 2 Batteries, 75 m/m Pack Howitzer.
- 2 Batteries, French 75 m/m guns with special sight mount for Pack Howitzer sights.

-1-

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- 4 #20 Caterpillar tractors.
- 6 #10 Caterpillar tractors.
- 1 Cross-Country car.
- 2 1/2-ton trucks.
- 3 1-ton trucks.
- 3 2-ton trucks.
- 1 Experimental high speed tractor, with 2 1-ton trailers.
- 4 Caissons, French 75 m/m gun.
- 5 Miles Marine Corps Field Telephone wire, 7 strand, twisted pair.
- 5 Miles field telephone wire M-40, and similar weights. Other telephone signal equipment, standard.
- 2 Forester Radio sets, voice and key transmission and reception.
- 2 Sets MC 100, key transmission and reception only.

B. Ammunition:

French 75 m/m gun	994 rounds, Shrapnel.
	160 rounds, High Explosive.
	40 Fuzes, short.
	120 Fuzes, long.
Pack Howitzer	440 rounds, Shrapnel.
	200 rounds, High Explosive.
Totals	1794 rounds. 160 Fuzes (Separate).

Expended:

Training in conduct of fire from O.P.	1176 rounds.
Training in conduct of fire with air observation	145 rounds.
Training in conduct of fire by Liaison Methods	54 rounds.
Tactical Exercises	417 rounds.
Defective Rounds, destroyed	2 rounds.
Totals	1794 rounds.

Duds:

7 Reported; 6 Destroyed; 1 Not found. (Plot indicated it fell in swamp).

C. Training in conduct of observed fire: (Except air observation).

- (1) Total number of problems fired 120
- (2) Officers regularly participating 14
 - (a) Average number of problems fired 8 1/2
 - Distributed: Axial (Percussion and Time) 3
 - Lateral small t (Percussion and Time) 3
 - Lateral Large T (Percussion) 1 or 2
 - Liaison 2 or 1
 - (b) Average time from initial range command to range command for effect:

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(2) Effectiveness of the fires:

Liaison - Satisfactory.

Observation Posts - Satisfactory.

K Transfers - Satisfactory. A 100-yard circle in each case enclosed the target; the normal barrages fired were also satisfactorily correct in both range and deflection. No difference in accuracy was observed between the fires of the first day when the mosaic was used as the firing chart and those of the second day when a grid sheet was substituted for the mosaic.

Transfers from Center of Impact and High Burst Adjustments - Satisfactory for the adjusting battery in each case. Only about 50 percent satisfactory for the non-adjusting battery in each case. These fires were executed with the French 75 M/M gun with the Pack Howitzer sights and only a rough calibration of the battalion was undertaken prior to the firings. Ranges were satisfactory in each case for the non-adjusting battery but there was approximately a 20-mil error in this battery's data for deflection in each case, resulting in ineffective fire at ranges beyond 3800 yards. A check of all data accounted for approximately 15 mils of the error as follows:

(1) No separate plot of the point of impact was executed for the non-registering battery; the use of the registering battery's data for deflection change accounted for about 10 mils of the total error.

(2) Errors in Battery Laying accounted for a total of about 5 mils.

F. Miscellaneous:

(1) Maps: Blue print of Parris Island prepared by G.E.C., U.S.N. Scale 1 inch - 100 yards, date 1936.

Maps: Parris Island and vicinity, 1:20000 gridded, prepared by Marine Corps Schools, dated 1937.

Uncontrolled Mosaic: (Ungridded) Parris Island and vicinity, dated 1931. Scale 1:16000 (Approximate).

Uncontrolled Mosaic of southern area of Parris Island. Scale 1:20000 (Approximate), gridded, dated 1937.

No one of these maps or mosaics was entirely satisfactory as a firing chart or as a basis for daily work. Steps have been taken to provide suitable maps for next year.

(2) Survey Work: The battalion partially surveyed the Island and was able to establish a limited number of control points with reasonable accuracy. Using these control points as a base, a mosaic was laid of the southern area and this mosaic was used as the control map for battalion problems.

(3) Air Safety Patrol: An old model amphibian plane was stationed on Parris Island throughout the service practice and was used daily to patrol the shore line and warn the battalion of fishing craft, etc., approaching the danger area. This plane was unfit for any tactical work.

REPRODUCED AT THE NATIONAL ARCHIVES

HEADQUARTERS, FIRST BATTALION,
TENTH MARINES, FIRST MARINE BRIGADE,
FLEET MARINE FORCE, MARINE BARRACKS, QUANTICO, VA.

29 June, 1957.

From: The Commanding Officer.
To: The Major General Commandant.
Via: The Commanding General, First Marine Brigade.
Subject: Recommended improvements on Artillery Range in
messing facilities and barracks at Parris Island,
S.C.
Enclosure: (1) Moskie southern area Parris Island, scale
1:20000 (approximate).

1. The following recommendations are submitted for the
improvement of the Artillery Range on Parris Island prior to the
next service practice:

(a) Clear the areas marked on enclosure (1) by felling
and burning the small brush and by felling, trimming and
removing the trees. This clearing will greatly facilitate
training in conduct of observed fires.

(b) Cut down the sand bank and the brush in front of
the gun emplacement on Horse Island to permit a minimum
gun elevation of 60 mils. (Horse Island is not shown on
enclosure (1).)

(c) Bury the telephone and electric lines along the
road to Rifle Range between the points marked "X - X" on
enclosure (1), in order to permit safe firing from tactical
positions north of the road.

(d) Make permanent installations of all the present
leads off the post telephone cable and of all leads to the
new observation towers constructed.

(e) Move the tower immediately north of Page Field to a
new position (as indicated on enclosure (1)) on the north side
of the road north of the hangars.

(f) Place a 20-foot iron pipe equipped with halyards on
all 40-foot observation towers to permit hoisting of a warning
flag from any tower.

-1-

(g) Modify the present 40-foot observation towers as follows: Remove the railing around the ladder-well on the top deck and place a trap door over the ladder-well.

(h) Evacuate the Post Farm residence during the period of the service practice to permit more unrestricted firing from positions in the vicinity of the golf course toward the west and southwest.

(i) Construct a new 4-gun concrete emplacement at the point marked on enclosure (1), and faced in the direction shown. The forward protecting wall at each gun position should be two feet wider than the forward walls of the present emplacements; and each wall should be provided with a slit 2 feet off the ground and 2 inches in height by 6 inches in length.

(j) Construct two 30-foot observation towers at the points marked on enclosure (1); the towers to hold 20 men and to provide protection (as a dugout) against high explosive shell.

(k) Construct a new 40-foot tower similar to the present ones (as modified) at the point marked on enclosure (1).

(l) Construct suitable magazines to house the following amounts of 75 m/m ammunition:

(1)	High Explosive Shell-----	1500 rounds
(2)	Shrapnel-----	3000 "
(3)	Fuzes-----	500

(m) Install single-bar gates, that may be used to close main roads entering the danger zone, at the points indicated on enclosure (1).

2. The following recommendations are submitted for the improvement of messing facilities at Parris Island during the Annual Service Practice:

(a) Repair and modernize the East Wing mess hall in order that this battalion will be able to conduct its own mess.

(b) Enlarge the galley at B.O.Q. and modernize it by the installation of electric stoves and by providing tighter ice boxes.

APPENDIX C-16

Marine Barracks, Quantico, VA 1st Battalion, 10th
Marines,

*Report of Annual Service Practice, First Battalion, Tenth
Marines, Fleet Marine Force, Conducted at Marine
Barracks, Parris Island, SC, 6 May - 5 June 1938, dated
20 June 1938. Record Group 127, Entry 18 General
Correspondence 1933-38, Box 231, Folder 2400-10
Artillery, Heavy and Light. National Archives,
Washington DC.*

IN REPLYING
REFER TO No.



UNITED STATES MARINE CORPS
HEADQUARTERS, FIRST BATTALION,
TENTH MARINES, FIRST MARINE BRIGADE,
FLEET MARINE FORCE, MARINE BARRACKS, QUANTICO, VA.

June 20, 1938.

From: Major James D. Waller, U. S. Marine Corps.
To: The Major General Commandant.
Via: (1) The Commanding General, First Marine Brigade,
Fleet Marine Force.
(2) The Commanding General, Fleet Marine Force,
Marine Barracks, San Diego, California.

Subject: Report of Annual Service Practice, First Battalion,
Tenth Marines, First Marine Brigade, Fleet Marine
Force, conducted at Marine Barracks, Parris Island,
S. C., 6 May --- 5 June, 1938.

References: (a) Brigade Special Order No. 137-38.
(b) Brigade Special Order No. 143-38.
(c) Brigade Special Order No. 144-38.

Enclosures: (A) Reports of Service Practice.

1. In compliance with references (a), (b) and (c) this
battalion conducted its annual service practice at Marine Barracks,
Parris Island, S. C., from 6 May --- 5 June, 1938, inclusive.

2. MOVEMENT QUANTICO, VA. --- PARRIS ISLAND, S. C.

(a) Pursuant to reference (a) the advance echelon,
consisting of two (2) Commissioned, thirty (30) enlisted, USMC
plus one (1) enlisted (MC) U.S.N., Captain R. E. Forsyth, U. S.
Marine Corps (Bn 4) in command, left Marine Barracks, Quantico,
Va., at 0630, 2 May, 1938, via truck, and arrived at Marine Bar-
racks, Parris Island, S. C., at 1830, 3 May, 1938. The night
2-3 May was spent in Fayetteville, N. C.

(b) The following transportation was used to make
this movement:

- 2, Chevrolet, $\frac{1}{2}$ ton trucks.
- 2, Ford, $\frac{1}{2}$ ton trucks.
- 2, International, 1 ton trucks.
- 1, Ford (Harmon Herrington) Reconnaissance Car.
- 1, Chevrolet, Cross-country car.

4. TRANSPORTATION

The truck transportation was inadequate. This was especially true of the light truck or passenger carrying vehicles. Although Battery "C" was formed no additional truck transportation was allowed for it. Two Ford, $\frac{1}{2}$ ton trucks and two station wagons had been surveyed due to their unservicability and were not replaced. The Base Defense Weapons Class, Marine Corps Schools, (17 Officers) were assigned to work with the battalion but no transportation was furnished for them. The Battalion Detail (Signal and Instrument Sections) were necessarily increased but there was no increase in motor transportation. In fact the battalion although increased by one (1) firing battery and its total personnel increased by one hundred and forty-five men since its last service practice, had less trucks than heretofore, to wit: 2 Station Wagons, Ford, and 3 International, 2 ton trucks. In order to function tactically as a battalion it necessitated two trips being made for the battalion personnel. Those extra trips not only delayed the problems but also destroyed the "picture" of them thereby lessening the benefits derived.

5. IMPACT AREA

The impact area, while superior to those at Fort Hoyle and Fort Meade, Md., is far inferior to the impact area at Fort Bragg, N. C. Its terrain is extremely flat and a great portion of it is not visible from the Observation Posts (towers) due to rows of large trees. It is a good impact area or range for demonstration but not for the training of artillery for actual service conditions.

6. TRAINING WITH THE BASE DEFENSE WEAPONS CLASS,
MARINE CORPS SCHOOLS.

(a) This training was very beneficial to the battalion. It is regretted however that the schedule was not revised, that is, to have this battalion conduct its service practice prior to its assignment with the Base Defense Weapons Class rather than following same. This would enable this battalion to smooth out the rough spots and increase its speed prior to working with the young inexperienced officers of this class. This would also enable us to give a much better demonstration as to what an artillery battalion should be.

(b) As has been stated above the Marine Corps Schools should have sufficient transportation for their student officers. It is also thought that the schools should furnish clerical assistance.

fired concentrations on a time schedule. These concentrations were approximately sixty-six (66) percent effective. One of the concentrations which had previously been located during daylight hours by means of intersection was in error. While the batteries fired effective fires on the "spot" at which the target had been plotted, it was found that an error by the battalion detail had caused it to have been plotted incorrectly. The movement to the assembly area and then into position and the subsequent firing was all done under cover of darkness. It is thought that these two problems were of untold benefit to the battalion. They were conducted in such a manner as to approximate as nearly as possible service conditions.

(d) The "Fire Direction Center" was used during each of these problems and functioned in an excellent manner.

10. AMMUNITION

The following ammunition was received and expended as follows:

(a) Received:

French Gun, 75mm (1897)	Shrapnel	376	
	Shell, H. E.	264	640
	Fuze MK III	164	
	Fuze MK IV	100	
75mm Pack Howitzer	Shrapnel	788	
	Shell, H.E.	400	1188
	Fuze MK III	16	
	Fuze MK IV	184	
			1828

(b) Expended as follows:

Observed fires (O. P.)	933
Liaison	300
Air Observation	274
Bn Problems (Fire Direction Center)	251
K Transfer (Battery)	40
Adjustment of Sheafs	24
Checking Instrument Direction	3
Incomplete Problems %	3
	1828

% (These three rounds were expended when it was attempted to register a battery on a base point designated by coordinates by the Fire Direction Center. Adjustment could not be obtained due to difficulty of the battery in identifying the base point from its observation post. "Cease Firing" was given and the mission assigned another battery.)



IN REPLYING
REFER TO No.

2400/JLP/ajg

UNITED STATES MARINE CORPS
HEADQUARTERS
SECOND ANTI-AIRCRAFT BATTALION
FLEET MARINE FORCE
MARINE BARRACKS, PARRIS ISLAND, S.C.

31 January, 1938.

From: The Commanding Officer.
To: The Major General Commandant.
Via: The Commanding General, Marine Barracks,
Parris Island, S. C.

Subject: Target Practice.

Reference: (a) Regulations to Govern the Use and Navigation
of the Waters of the Atlantic Ocean, Adjoining
Hilton Head and St. Helena Islands, South
Carolina, comprising the Firing Range of the
United States Marine Corps at that locality.
(b) Letter Bureau of Construction and Repair,
EP59(NE), dated 25 January, 1938.

Enclosure: (A) Copy of reference (b).

1. It is desired to begin antiaircraft firing with
cal., .50 AA machine guns and three inch guns not later than
20 February, 1938.

2. It appears that the necessary craft for patrol-
ling the field of fire will not be available until a much later
date, inasmuch as they are coming from Puget Sound. Therefore
it is requested that suitable patrol boats be obtained from
some nearby station until the motor boats are received from
Puget Sound, or that the Coast Guard be requested to perform
this service pending the arrival of the Puget Sound motor
boats.


J. L. PERKINS.

REPRODUCED AT THE NATIONAL ARCHIVES

2400-10

HEADQUARTERS,
Marine Barracks, Quantico, Virginia.
10 September, 1937.

WARNING NOTICE

WARNING NOTICE

SUBJECT: Firing of 37 m/m sub caliber guns.

References: (a) Fire Control Map, USMC Reservation, 1935, 1-10,000.
(b) USC&G Survey, Lower Potomac River, Cedar Point to Mattawoman Creek, 559.
(c) Regulations to govern the use and navigation of Potomac River within the firing range of the U. S. Marine Barracks, Quantico, Virginia, 8 January, 1934.

1. The First Battalion, 10th Marines, First Marine Brigade, Fleet Marine Force, is authorized and will conduct 37 m/m sub-caliber firing at a towed target on the Potomac River, as follows:

Tuesday, September 14, 1937	1300 to 1600
Wednesday, September 15, 1937	0900 to 1200
Thursday, September 16, 1937	0900 to 1200
	and
	1300 to 1600

- a. FIRING POINT: Southeast corner of TURNER FIELD, (52.17-63.94)(Reference (a)).
- b. IMPACT AREA: Potomac River, 4500 yards southeast of Firing Point.
- c. RIGHT SAFETY LIMIT: Line from Firing Point 300 yards east of CLIFTON

APPENDIX C-17

Marine Barracks, Quantico, VA

Aerial Gunnery and Bombing Operations at Quantico, VA and Parris Island, SC, dated 21 July 1938. Record Group 127, Entry 18 General Correspondence 1933-38, Box 232, Folder 2400-15 1933-38. National Archives, Washington DC.

REPRODUCED AT THE NATIONAL ARCHIVES

NARA DC
RG 127
Entry 18 Gen. Inv. 1933-38
Box 232
Folder 24015 1933-1938



HEADQUARTERS
MARINE BARRACKS, QUANTICO, VIRGINIA

21 July, 1938.

From: The Commanding General.
To : The Chief of Naval Operations, Navy Department,
Washington, D. C.
Via : The Major General Commandant, Headquarters,
U. S. Marine Corps, Washington, D. C.
Subject: Aerial gunnery and bombing operations at Quantico, Va.,
and Parris Island, S. C.
Reference: (a) Civil Air Regulations, U. S. Department of Commerce,
Bureau of Air Commerce, approved 21 May 1935.
(b) Chief of Naval Operations Letter OP-58-E-Mts-A4-3/AS-13
(351203-1), dated 25 October 1937.
Enclosures: (A) Washington sectional aeronautical chart.
(B) Savannah sectional aeronautical chart.

1. Paragraph 60.347 of reference (a), recently promulgated, prohibits bombing and aerial gunnery within the limits of a civil airway.
2. Brown Field, Quantico, Va., is located within green airway number four and amber airway number seven, paragraphs 60.23003 and 60.23106 of reference (a), as shown on aeronautical chart, enclosure (A). Page Field, Parris Island, S. C., is located within amber airway number seven, paragraph 60.23106 of reference (a), as shown on aeronautical chart, enclosure (B).
3. For years training of Squadrons, Aircraft One, FMF., based at Quantico has included bombing with non-explosive bombs at that place and bombing and aerial gunnery at Parris Island, S. C. The continuation of this training is essential.
4. It has been ascertained by consultation with Department of Commerce representatives that all phases of training of tactical squadrons can be carried on at Quantico and Parris Island with the exceptions noted above. Local representatives are without authority to waive Civil Air Regulations prohibiting aerial gunnery and bombing within civil airways.
5. Therefore, in accordance with reference (b), it is requested that the Navy Department arrange with the proper civil aviation authorities the following:

REPRODUCED AT THE NATIONAL ARCHIVES

Subject: Aerial gunnery and bombing operations at Quantico, Va.,
 and Parris Island, S. C.

(a) At Brown Field, Marine Barracks, Quantico, Va.,
located at latitude 38°30'; longitude 77°19', permission to
conduct aerial bombing with non-explosive bombs and aerial
camera gunnery.

(b) At Page Field, Marine Barracks, Parris Island,
S. C., located at latitude 32°19'; longitude 80°41', permission
to conduct bombing and aerial gunnery.

6. A squadron is scheduled to begin bombing and gunnery exercises
at Parris Island on 1 August, 1938, and a waiver of Civil Air Regulations for
that place is requested by that date.

7. It is understood that the appropriate civil airways authorities
will be given notice prior to the conduct of these practices and that they
will be conducted only during weather prescribed for contact flying.

J. C. BRECKINRIDGE.

APPENDIX C-18

Marine Corps Recruit Depot, Parris Island, SC

Command Chronology for the period 1 July - 31 December 1981, dated 15 March 1982. Command Chronologies, Box 1981-1982, Folder Command Chronology July-Dec 1981. Marine Corps Recruit Depot Museum Archives, Parris Island, SC.

UNITED STATES MARINE CORPS
Marine Corps Recruit Depot
Parris Island, South Carolina 29905

3A:WPC:JRP:wrb
5750
15 MAR 1982

From: Commanding General
To: Commandant of the Marine Corps (Code HDH)
Subj: Marine Corps Recruit Depot, Parris Island, South Carolina Command Chrono-
logy for the period 1 July - 31 December 1981; submission of
Ref: (a) MCO P5750.1E
Encl: (1) Marine Corps Recruit Depot, Parris Island, South Carolina Command
Chronology for the period 1 July - 31 December 1981
1. As directed by the reference, the enclosure is submitted.

Robert E. Haebel
ROBERT E. HAEBEL

SOURCE: MCRD PARRIS ISLAND
MUSEUM ARCHIVE
SERIES: COMMAND CHRONOLOGIES
BOX: 1981-82
FOLDER: COMMAND CHRONOLOGY
JULY-DEC 1981

UNITED STATES MARINE CORPS
Marine Corps Recruit Depot
Parris Island, South Carolina 29905

3A:WPC:JRP:wrb
5750
15 MAR 1982

From: Commanding General
To: Commandant of the Marine Corps (Code HDH)
Subj: Marine Corps Recruit Depot, Parris Island, South Carolina Command Chrono-
logy for the period 1 July - 31 December 1981; submission of
Ref: (a) MCO P5750.1E
Encl: (1) Marine Corps Recruit Depot, Parris Island, South Carolina Command
Chronology for the period 1 July - 31 December 1981
1. As directed by the reference, the enclosure is submitted.

Robert E. Haebel
ROBERT E. HAEBEL

SOURCE: MCRD PARRIS ISLAND
MUSEUM ARCHIVES
SERIES: COMMAND CHRONOLOGIES
BOX: 1981-82
FOLDER: COMMAND CHRONOLOGY
JULY-DEC 1981

APPENDIX C-19

Marine Corps Recruit Depot, Parris Island, SC,
Weapons and Field Training Battalion

*Standing Operating Procedures for Range Operations
and Field Training*, dated 14 May 1997. General Files.
Ordnance Office, Marine Corps Recruit Depot, Parris
Island, SC.

UNITED STATES MARINE CORPS
Weapons & Field Training Battalion
Marine Corps Recruit Depot
Parris Island, South Carolina 29905 5080

BnO P3000.1K
S3

4 MAY 1997

BATTALION ORDER P3000.1K

From: Commanding Officer
To: Distribution List

Subj: STANDING OPERATING PROCEDURES FOR RANGE OPERATIONS AND
FIELD TRAINING (SHORT TITLE: SOP FOR RNG OPS & FLD TRNG)

Ref: (a) MCO P3570.1A
(b) MCO 3574.2H
(c) MCO 8025.1C
(d) FMFM 0-8
(e) FMFM 0-9
(f) DepO P5100.16C
(g) DepO P8000.3G
(h) DepO 3591.4G
(i) DepO 3590.6C
(j) DepO P11018.1A
(k) DepO P1513.1
(l) Entry Level Rifle Marksmanship Detailed Instructor
Guide
(m) Sustainment Level Rifle Marksmanship Detailed
Instructor Guide
(n) Pistol Marksmanship Detailed Instructor Guide

Encl: (1) Locator Sheet

1. Purposes

- a. To establish standing operating procedures for range operations and field training conducted at Weapons & Field Training Battalion.
- b. To provide uniformity and safety in marksmanship and field training.
- c. To provide procedural guidance for unit commanders, staff sections, instructors, and range personnel.

2. Cancellation. BnO P3000.1J and BnO P3550.1

SOP FOR RNG OPS & FLD TRNG

3. To conduct all marksmanship training/support with integrity and a firm grounding in the doctrine set forth in the FMFM's O-8 and O-9. Our goal is to **train** Marines; qualifying will follow.

1003. RANGE DESIGNATIONS. Listed are the weapons capability that each range can accommodate. Although many of the weapons are no longer fired by recruits, other units may request the use of the range utilizing their own organic weaponry.

1. Range Title: Khe Sanh
Range Type: Multipurpose infantry weapons live fire range.
Firing Points: Portable Infantry Targeting System (PITS)
Roof top, window, rubble pile and bunker (x2)
M203: 8 hardened firing points.
Machinegun: 17 Pits.
AT-4: 8 hardened firing points.
Targetry: 36 P.I.T.S. remote control targets at unknown distances.
50 point rifle presentation/BZO range
Misc hard targets for M203 practice
Allowable Munitions: All small arms ammunition with non-exploding projectiles and a maximum range of less than 4100 meters. M782 40mm practice ammunition. (Fired from 500 yard standard firing line) and all standard pyrotechnic munitions.

2. Range Title: Hue City
Range Type: Known distance rifle range
Firing Points: 49
Firing Lines: 50, 75, 100, 150, 200, 300, 500 and 600 yards
Targetry: 50 known distance style target carriages
Allowable Munitions: All small arms ammunition with non-exploding projectiles with a maximum range of less than 4100 meters. M203 white star parachutes and M49 ground illumination flares.

Note: Hue City range may accommodate ammunition with a maximum range of 5288 meters (7.62 mm Match or Special Ball) with the approval and waiver of increased surface danger zone requirements by the Commanding General.

3. Range Title: Chosin/Starlight
Range Type: Known distance rifle range
Firing Points: 49 positions
Firing Lines: 36 yard BZO/Grouping, 200, 300 and 500 yards.
Targetry: 49 known distance style target carriages
Allowable Munitions: All small arms ammunition with non-exploding projectiles with a maximum range of less than 4100 meters.

SOP FOR RNG OPS & FLD TRNG

4. Range Title: Inchon
Range Type: Known distance rifle range
Firing Points: 50 positions
Firing Lines: 36 yard BZO/Grouping, 100, 200, 300 and 500 yards.
Targetry: 50 known distance style target carriages
Allowable Munitions: All small arms ammunition with non-exploding projectiles with a maximum range of less than 4100 meters.
 5. Range Title: Pusan
Range Type: Known distance pistol range
Firing Points: 30 positions at 25 yds, 26 at 50 yds.
Firing Lines: 7, 15, 25 and 50 yards.
Targetry: 30 turning targets at 25 yds and 26 stationary targets at 50 yds.
Allowable Munitions: All small arms ammunition with non-exploding projectiles with a maximum range of less than 1800 meters.
 6. Range Title: Nak Tong
Range Type: Close combat pistol range
Firing Points: 10
Firing Lines: 3 thru 25 yards.
Targetry: 10 stationary targets .
Allowable Munitions: All small arms ammunition with non-exploding projectiles with a maximum range of less than 1800 meters.
- Note: High barricades at 25 yard firing positions.
7. Range Title: Indoor Range (Bldg 765)
Range Type: Air rifle and pistol range
Firing Points: 12 positions
Firing Lines: 33ft/10m and 25 yds.
Targetry: 12 manually turned target holders.

Allowable Munitions: All O₂/CO₂ fired pellets. .22 cal pistols may be fired with the permission of the Commanding Officer. However, only one shooter may be allowed to fire at a time due to ventilation restrictions.
 8. Range Title: Recreational Firing Range
Range Type: Known distance pistol and shotgun range
Firing Points: 30
Firing Lines: 3 thru 25 yards.
Targetry: 30 stationary targets .
Allowable Munitions: All small arms ammunition with non-exploding projectiles with a maximum range of less than 1800 meters.

Note: Some benches at 25 yard firing positions.

1-5

SOP FOR RNG OPS & FLD TRNG

9. Range Title: Grenade Range
Range Type: Grenade throwing targets.
Throwing Pits: 30
Targetry: 2 stationary targets.
Allowable Munitions: All hand-throw grenades; specifically M67 HE.

10. Range Title: Combat Assault Resupply Course
Range Type: Individual movement course
Demolition Pits: 32
Movement Lanes: 8
Allowable Munitions: Although propane and oxygen noise simulators are used to generate artillery noise, the course has the capability to accommodate one quarter (1/4) stick of TNT per demo pitt with electrical blasting caps or one hand thrown M115A2 simulator.

SOP FOR RNG OPS & FLD TRNG

CHAPTER 16

NBC TRAINING/GAS CHAMBER

16000. GENERAL. The purpose of gas chamber training is to give the recruit or Marine confidence in the M40 Field Protective Mask (FPM) in the presence of gas and to fulfill each Marine's annually required gas chamber exercise.

16001. TRAINING REQUIREMENTS. The FTP Student Handout Book provides the learning objectives to be accomplished during the conduct of the course, and will not be repeated herein. However, if at anytime the Book conflicts with the safety guidelines provided herein, this directive shall take precedence. At no time will safety be placed second to training accomplishment. At no time will Drill Instructors take recruits into the gas chamber without the supervision of the NBC primary instructor and ONLY during the conduct of the chamber exercise.

16002. PERSONNEL REQUIREMENTS. To ensure the safe operation of the gas chamber, the following personnel manning requirements are established as a minimum:

a. NBC PRIMARY INSTRUCTOR. The Primary Instructor will have the 5711 MOS. The NBC Primary Instructor will ensure training is conducted per MCO P5100, the current FPM lesson outline plan, and the current FTP Instructor Guide. Upon observing an unsafe condition, he will immediately terminate training until the problem is rectified.

b. CHAMBER SAFETY OFFICER. While recruits are being exposed to CS gas, one Recruit Company Officer or Series Gunnery Sergeant will remain inside the gas chamber to ensure safe operation. Upon observing an unsafe condition, the Chamber Safety Officer will direct the NBC Primary Instructor to terminate training until the problem is rectified.

c. RECOVERY AREA SAFETY NCO. While recruits are recovering from exposure to CS gas, one Series Drill Instructor will remain outside the chamber, with the recruits, to ensure the safe and proper conduct of recovery are followed.

d. SENIOR DRILL INSTRUCTOR. All Senior Drill Instructors will remain with the recruits while they are in the gas chamber. They are to assist the FTP NBC Primary Instructor in the conduct of training inside the gas chamber.

e. DRILL INSTRUCTOR. The Drill Instructor will supervise the conduct of recruits preparing to enter the chamber, and the recovery and mask cleaning portion of training.

f. CORPSMAN. The Corpsman, with a safety vehicle, will be located near the recovery area. The corpsmen will make a radio check with the BMC prior to the start of the evolution.

SOP FOR RNG OPS & FLD TRNG

g. RECRUITS. All recruits who are medically qualified will undergo gas chamber training while at WFTBn. Recruits will be exposed to CS gas in the chamber environment at least once.

(1) Recruits who do not complete the full duration of exposure in the chamber will be remediated. If their mask is determined to be faulty, they will be issued a new mask, and brought back into the chamber.

(2) If the Primary Instructor determines that an individual recruit has not demonstrated competence with the mask, the recruit will be instructed on the proper procedures for donning and clearing the mask and brought back into the chamber until proficient and confident with his mask. ONLY THE PRIMARY INSTRUCTOR IS AUTHORIZED TO MAKE THIS DETERMINATION!

16003. DUDS. In the event of a "dud" CS grenade, the grenade will be secured in a fireproof container, i.e., an ammunition can. EOD will be notified at 522-7513/7429/7565 to dispose of the grenade.

16004. DISPOSAL OF EXPENDED CANISTERS. Expended CS canisters may be placed in standard trash receptacle. All unexpended ammunition will be returned to the Ammunition Supply Point, via WFTBn Ammo Tech, per DepO 8020.1A.

APPENDIX C-20

Marine Corps Air Station, Parris Island, SC

History of MCAS, Parris Island, SC, Submission of,
dated 21 May 1945. Box N/A, Folder Parris Island,
SC. U.S. Naval Aviation History Center, Washington
Navy Yard, Washington DC.

DECLASSIFIED

KV7/A12-1(6)/1W-407

U. S. MARINE CORPS AIR STATION
PARRIS ISLAND, SOUTH CAROLINA

med

~~CONFIDENTIAL~~
93353

~~CONFIDENTIAL~~

31 May 1945.

From: Commanding Officer.
To: Office of the Chief of Naval Operations, History Unit, Op-33-J-6.
Via: (1) Commanding General, Post.
(2) Commandant, Sixth Naval District.

Subject: History of MCAS, Parris Island, S.C., submission of.

References: (a) Aviation Circular Letter No. 74-44.
(b) Aviation Circular Letter No. 92-44.
(c) Aviation Circular Letter No. 23-45.
(d) CNO ltr dated 14Mar45, OP-33-J-6-JEJ, 118433.
(e) Manual for Historical Officers, NavAer 00-25Q-26.

Enclosure: (A) MCAS, Parris Island, S.C., History of.

1. Enclosure (A) is submitted herewith.
2. First Lieutenant Eleanore O. Little, MCWR, serves as Historical Officer for this station.

Wm. K. Lanman Jr
WM. K. LANMAN, JR.

Copy to: Director of Aviation.

1165 1st Endorsement 7 June 1945.
m a r Marine Barracks, Parris Island, South Carolina.
Conf-27-45-

~~CONFIDENTIAL~~

From: The Commanding General.
To: Office of the Chief of Naval Operations, History Unit, Op-33-J-6.
Via: Commandant, Sixth Naval District.

1. Forwarded.

RECEIVED
03 Room 7005

Clayton B. Vogel
CLAYTON B. VOGEL.

157114

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SOURCE: U.S. NAVAL AVIATION HISTORY
SERIES: _____
BOX: _____
FOLDER: PARRIS ISLAND SC

DECLASSIFIED E011652

~~CONFIDENTIAL~~

U. S. MARINE CORPS AIR STATION
PARRIS ISLAND, SOUTH CAROLINA

CHRONOLOGY

Prior to 1928*

1928 - 1934 The Navy used the old mooring mast at the north end of the field for its dirigibles.

1937

23 September Marine Scouting Squadron One was the first squadron stationed on this field. It was attached to the First Marine Aircraft Group, Fleet Marine Force, Marine Barracks, Parris Island, South Carolina. Marine Gunner Albert S. Munsch was in command.

1938

March - May VMS-1, Major Medaris commanding, used this field for gunnery practice.

August Marine Gunner Ray Trevelyan became Commanding Officer. Later he was to return to this air station as the Executive Officer of VMB 611.

1940

4 June Marine Gunner Ray Trevelyan relieved as C.O. and Captain John S. E. Young took over his duties.

* Prior to 1928, there are few available records of the history of the area now covered by the Marine Corps Air Station. Doubtless, it was an extensive marshland, inhabited by negro small farm planters. This area had a sandy, coastal terrain, traversed by winding rivers, with the sea beyond to the eastmarine vegetation of all kinds....birds....and palm trees.

~~CONFIDENTIAL~~

-2-

1940 (cont'd)

5 October The Air Detachment, Page Field, Marine Barracks, S.C., was organized with Capt. J.P.E. Young as Commanding Officer, with eight men attached. Captain Young was promoted to Major on 28 April 1941.

1941

Jan.-Nov. Glider groups of 711 and 71 were using station.

Jan.-31 March Detachment of eight men, of the 35th Army Air Base Squadron, Savannah, attached to field as a bombing range detail.

16 January Sixteen additional men were attached to the air station.

15 December The designation of the organization was changed from Air Detachment, Page Field, Marine Barracks, Parris Island, S.C., to U.S. Marine Corps Air Station, P.I., S.C., with Major Young still the Commanding Officer.*

1942

1 January On this date, a total of 21 men were attached to the station.

19 January The designation of this organization was changed from Air Detachment, Page Field, Marine Barracks, P.I., S.C., to Headquarters Squadron, USMCAS, P.I., S.C. Major Young continued as C.O.

June Eighty-five men now on duty at the field.

2 September Lt. Col. H.J. Larson relieved Major Young as C.O. and continued until his death 3 December 1942.

* See III, DOCUMENTS, for data on "Page Field" designation dtd 17 May 1935, 19 Jan 1942, 20 Jan 1942, and 16 Mar 1944.

~~CONFIDENTIAL~~

Narrative -7-

perimental gunnery practice on a special strafing target constructed on the field. The First Marine Aircraft Group carried out a series of group problems, using Page Field as a base.

On the field then there was a single engine Grumman amphibian throughout the entire year, with the addition in September, 1939, of a single engine Vought scout landplane. These two airplanes operated regularly with the Defense Battalions located at Parris Island. The missions carried out by these airplanes in this work consisted of tracking flights for sound locators and searchlights, towing target sleeves for machine gun and 3-inch anti-aircraft units, and patrols of the sea danger areas during heavy caliber target practice on towed surface water targets. In addition, there was a small amount of transportation of personnel by aircraft between Parris Island and Hilton Head, plus some flights of a cross-country nature.

During 1941 there was a decided increase in activity on the field, for during January to November ^{two} glider groups used the field for operations. ^{It was} They ~~VMLG-71~~ ^{comprised of HQ Sq and VMLS-711} ~~were Squadrons 711 and 712.~~ A unit of the Army also used the field at this time, for a detachment of eight men, of the 35th Army Air Base Squadron, then in Savannah, became attached to this field from January to March 31. This detachment comprised a bombing range detail to work in conjunction with the Army's aircraft. The Army used the bombing target on the southern tip of Parris Island, and the aerial machine gun ranges to seaward of Hilton Head Island.

The Marine personnel of the field was now increasing steadily and by January 16, 1941 there were sixteen more men attached. The designation of the organization was changed from Air Detachment, Page Field, Marine Barracks, Parris Island, S.C., to U. S. Marine Corps Air Station, P.I., S.C., with Major Young

~~CONFIDENTIAL~~

Narrative -11-

Cherry Point, N.C. Except for the period between July 15 and July 23, when the squadron went to Boca Chica, VMB 611 remained here until August 8, 1944. It's commanding officer was Lt. Col. G. A. Sarles, and the executive officer, Major Ray Trevelyan.

On January 15 the enlisted Women Reserves arrived on the Air Station, with 1st Lt. Pearson as their commanding officer, and on April 15 the Aviation Women's Reserve Squadron 11 was formed, the squadron which is now doing administrative work on the air station...with a personnel of 165 women reserves.

About this time, on May 12 to be exact, recommendations were made and approved for the instigation of efforts toward building an outlying field for MCAS at Georgetown, S.C....a location about 110 miles north. In a Chief of Naval Operations Memo to the Director of Marine Corps Aviation, the CNO approved the assignment of Georgetown as an outlying field, and further approved the development of expeditionary facilities sufficient for staging two Marine tactical squadrons for gunnery training on off shore ranges there.

Quoting the memorandum: "In an IATCB meeting #232 on 10 February 1943 approved recommendations were "that the Georgetown Airport, Georgetown, South Carolina, located at Latitude 33 degrees 19' 30", Longitude 79 degrees 18', be approved for use by the Navy for operations of the Eastern Sea Frontier."* Under Navy sponsorship, CAA then constructed this airport. All structures, except messing facilities and the heads, were to be constructed from prefabricated materials by Marine Corps personnel to further their training for advance base occupation.

*From CNO Conference Memo to Director of Marine Corps Aviation, Serial 096331, dtd 12 May 1944.

~~CONFIDENTIAL~~

Narrative -13-

of flying in making up their syllabi, plus the recent addition of rocket range firing; divisional and sectional tactics; flight training; night flying; advanced stages of gunnery and firing on tow sleeve; and ground training, including aircraft identification, gunairstructor training, and instrument instruction in the Link trainers.

Among the many services which the permanent headquarters squadron was to provide to these visiting squadrons were: aerology and air traffic control; general messes; officers messes; officers club; Marine Corps clothing and property; communication facilities; fuel and oil supplies; motor vehicle repair; recreational activities; maintenance and operation of Public Works; Naval Aeronautical stores and standard stock supplies; minor engine and aircraft repair; parachute work; photographic activities; post exchange; and security.

Of course many of these services have been augmented, or increased, by personnel and equipment furnished by the tactical units. In addition to these services, the Air Station has always carried on its required duties as a utility unit for Parris Island.

The second week of 1945 found VMF 521 departing from Parris Island, on January 13 to be exact. On January 23 VMF 524 arrived with Major Donald R. Sapp the Commanding Officer. Major Sapp, incidentally, had brought back the record of eight zeros to his credit when he returned from overseas duty. VMF 524 left on February 8, to return again on March 19 with Major Harlan Rogers as C.O. Following Major Rogers, both Major Edward R. Dyer, and Major Donald Bush took over the

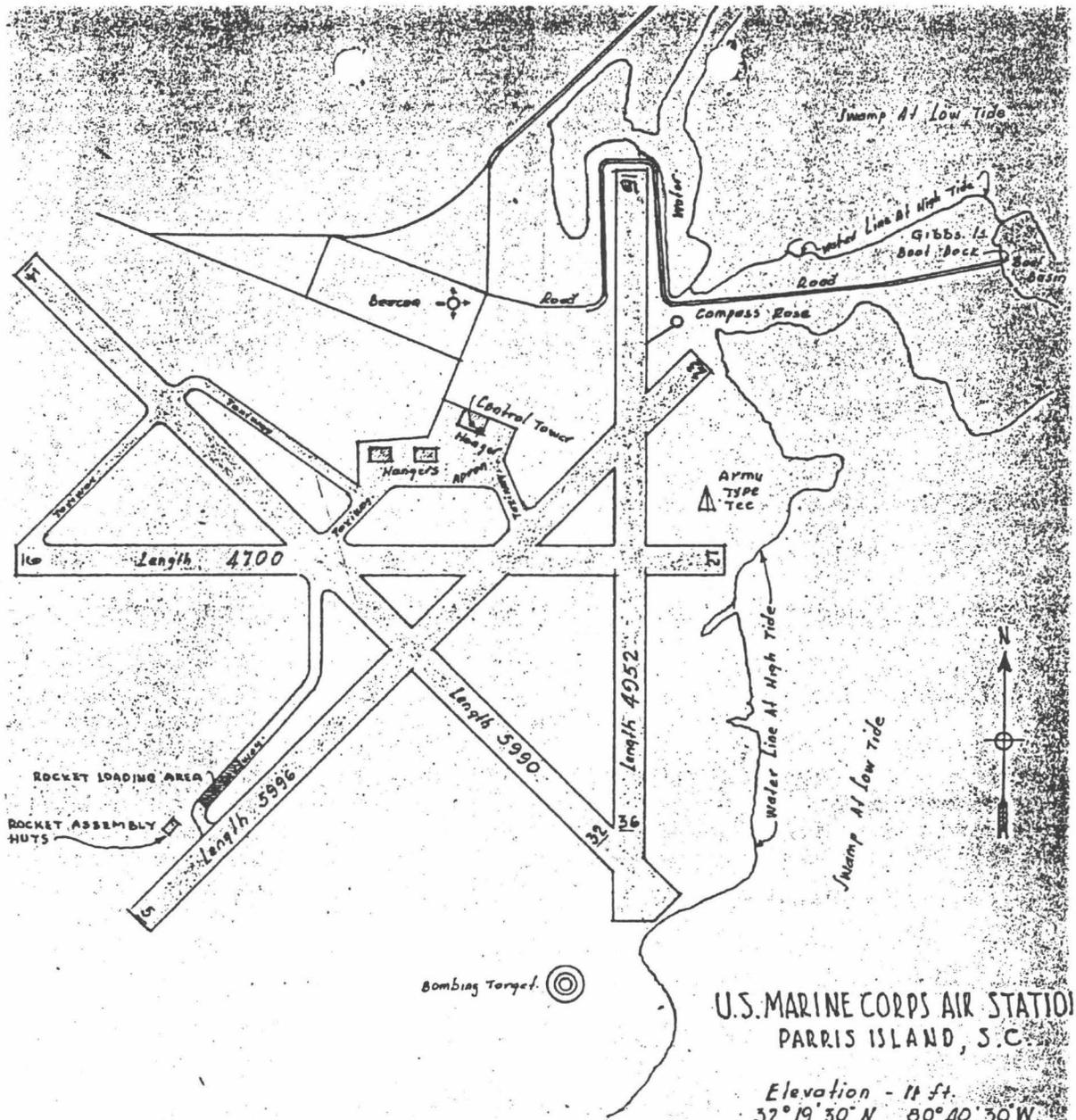
~~CONFIDENTIAL~~
Narrative -14-

command of the squadron. Marine Fighting Squadron 523 made its appearance here on February 19. Major Edward J. McGee was its commanding officer.

By this time, Georgetown was gradually reaching its completion, with Captain W.D. Toy-Jr., as officer in charge. On January 4, 1945, 2d Lt. Patrick H. Tobin was assigned there as Security Officer, and by January 16 there were 18 men stationed there. This outlying field was considered in the same category as an advanced base. All the buildings were necessarily of rough temporary construction as was mentioned before, with refinements considered as unnecessary to the overall efficiency of the facility. Up until March, Georgetown was operated on the basis of using money already allotted for the MCAS at Parris Island, but on March 12 it was suggested by the Public Works Officer that a request for a special allotment be made to the Bureau of Aeronautics, looking forward to the time when Georgetown would become an operating unit. Plans are now in progress for an Impact Target at Georgetown to be used for rocket practice, and located on the ocean shore line east of the field. The contemplated date for occupancy and use of the OLF was dated May 15, 1945.

During the first two months of 1945 Lt. Clyde Shipshire had directed the construction of an impact target on Hilton Head island for the MCAS at Parris Island. It was completed sometime in March. On the 27th VMF 524 did the first firing on the range. The Range consists of a control and glide angle tower and a rake hut.

This brings us up to the first of May, with Headquarters Squadron, MCAS, consisting of 25 officers and 260 men; with the Aviation Womens Reserve Squadron consisting of 9 officers, and 169 enlisted; and with Marine Fighting Squadron 524, all operating from this air station.



All runways 200' wide
 Instrument Landing Runway 14
 Contact Lights All Runways
 Portable Flood Lights

~~CONFIDENTIAL~~

DIAGRAM NO. 1
 JAN 9, 1945

APPENDIX C-21

Marine Corps Air Station, Parris Island, SC

Disposition of Excess Ordnance Materials, dated 6 February 1946. Record Group 74, Entry 4444, Box 193, Folder Quantico, VA Mar-Apr 1946. National Archives, Archives II, College Park, MD.

REPRODUCED AT THE NATIONAL ARCHIVES

KV7/PAL/07/HCS

U. S. MARINE CORPS AIR STATION
PARRIS ISLAND, SOUTH CAROLINA
6 February 1946.

KV
MNZ

From: The Commanding Officer
To: Chief of the Bureau of Ordnance,
Washington, D.C.

FILE

KEM

Subject: Disposition of excess ordnance material.

1. The disposition of the following excess ordnance material on hand at this station is requested.

- 12060 - Cartridge, Starter, Aircraft, Engine, Type D, Lot #121
- 2400 - Cartridge, Starter, Aircraft, Engine, Type D, Lot #473
- 240 - Cartridge, Starter, Aircraft, Engine, Type D, Lot #123
- 40 - Cartridge, Starter, Aircraft, Engine, Type D, Lot #148
- 60 - Cartridge, Starter, Aircraft, Engine, Type D, Lot #419
- 800 - Cartridge, Starter, Aircraft, Engine, Type D, Lot #438
- 140 - Cartridge, Starter, Aircraft, Engine, Type B, Lot #101
- 1980 - Cartridge, Starter, Aircraft, Engine, Type E, Lot #23
- 2640 - Cartridge, Starter, Aircraft, Engine, Type E, Lot #22
- 2700 - Cartridge, Starter, Aircraft, Engine, Type E, Lot #65
- 9180 - Cartridge, Starter, Aircraft, Engine, Type E, Lot #68
- 20 - Fuze, Bomb, AN-219-Mod. 3-Nose-Lot #20
- 48 - Fuze, Bomb, AN-219-Mod. 3-Nose-Lot #165
- 48 - Fuze, Bomb, AN-219-Mod. 3-Nose-Lot #161
- 21 - Fuze, Bomb, AN-219-Mod. 3-Nose-Lot #163

021146 0663

SOURCE: NARA COLLEGE PARK, MD

RG: 74

SERIES: ENTRY 4444

BOX: 193

FOLDER: QUANTICO VA MAR-APR

1946

REPRODUCED AT THE NATIONAL ARCHIVES

Subject: Disposition of excess ordnance materiel.

2 -Fuze, Bomb, AE-219-Mose
67-Marker, Depth Charge, Day Use-Mk1-Med. I-Lot#247
8 -Marker, Depth Charge, Night Use-Mk2-Lot#20 }

Harold R. Lee
HAROLD R. LEE

SOURCE: _____
RG: _____
SERIES: _____
BOX: _____
FOLDER: _____

APPENDIX C-22

Marine Corps Air Station, Parris Island, SC

*Disposition of the Following Excess Munitions on Hand
at this Station, is Requested, dated 13 March 1946.*

Record Group 74, Entry 4444, Box 193, Folder
Quantico, VA Mar-Apr 1946. National Archives,
Archives II, College Park, MD.

REPRODUCED AT THE NATIONAL ARCHIVES

U. S. MARINE CORPS AIR STATION
PARRIS ISLAND, SOUTH CAROLINA

KV7/F41/07-rhr

March 1946

From: ⁵⁰³⁶ The Commanding Officer, MCAS, Parris Island, S.C.
To: Bureau of Ordnance, Washington, D.C.

Subject: Excess Munitions.

1. Disposition of the following excess munitions on hand at this Station, is requested.

(a) 2725 SubCal. A.C. Body Mark 3 Mod 2 Rocket Assemblies, Motor Mark 11 Mod 0.

Lot No. RMBF 2381	-----	399
Lot No. RMBF 2371	-----	176
Lot No. RMBF 2370	-----	48
Lot No. RMBF 2369	-----	1664
Lot No. RMBF 2388	-----	1352
Lot No. RMBF 931	-----	960
Lot No. RMBF 933	-----	248
Lot No. RMBF 1464	-----	568
Lot No. RMBF 3709	-----	2704
Lot No. RMBF 3708	-----	192
Lot No. RMBF 3707	-----	88
Lot No. RMBF 3706	-----	184
Lot No. RMBF 3705	-----	288

TOTAL 8,871 Rockets

(b) 50 Cal. Cartridge Ball, M2 AC.

Lot No. 18323	-----	120,050
Lot No. 12094	-----	157,500
		TOTAL 277,550 Rounds

(c) 50 Cal. Cartridge Tracer, M1 AC.

Lot No. 8131-A	-----	33,600
Lot No. 20009	-----	3,500
Lot No. 12834	-----	53,900
		TOTAL 91,000 Rounds

(d) FS Smoke Mixture, Sulfur Triomide.

250 - 55 gallon single Bung Drums 880# each.

SOURCE: NARA COLLEGE PARK, MD

RG: 74

SERIES: ENTRY 4444

BOX: 193

FOLDER: QUANTICO VA MAR-APR 1946

Harold R. Lee
HAROLD R. LEE

AMSO
516406
TO: Mad Crane
CIT 94080

BOSO 516288
* MAD, also letter

APPENDIX C-23

Naval Energy and Environmental Support Activity

Initial Assessment Study of Marine Corps Recruit Depot, Parris Island, SC, NEESA 13-095, dated September 1986. Land Use and MILCON Branch CMC (LFL), Headquarters U.S. Marine Corps, Washington, D.C.

16 - [unclear]
6 sub [unclear]
600 CS



September 1986

**INITIAL ASSESSMENT STUDY
OF MARINE CORPS RECRUIT DEPOT,
PARRIS ISLAND, SOUTH CAROLINA**

NEESA 13-095



**NAVAL ENERGY AND ENVIRONMENTAL
SUPPORT ACTIVITY**

Port Hueneme, California 93043

**Release of this document requires
prior notification of the chief official
of the studied activity.**

5.2.8 Recruit Training Areas. All activities involving ordnance are directly related to recruit training. Ordnance is utilized in three types of training--marksmanship training, hand-grenade training, and the infiltration courses. Most ordnance used at the Depot has consisted of small arms ammunition. Defective rounds discovered during operations at the firing ranges and training areas have been disposed of at MCAS Beaufort by the explosive ordnance disposal (EOD) unit. Defective grenades have been detonated in place.

In addition to training using ordnance, other recruit training activities involving the handling of hazardous materials have included Nuclear, biological, and Chemical (NBC) training and Geiger Counter training using cobalt discs.

5.2.8.1 Marksmanship Training--There are five firing ranges at the Depot, including rifle and pistol ranges for recruits and permanent personnel, and a field firing range using machine gun fire and pop-up targets. Four of these ranges have been located in the western portion of the Depot, next to Ribbon Creek and Broad River, since at least the 1930's. The fifth range (E) was added in the late 1950's. The majority of the ammunition used has consisted of 5.56mm ball for M-16 rifles, although ammunition for the .38 and .45 caliber pistols has also been used. An estimated 10 million to 20 million rounds of ammunition per year have been discharged on these ranges. The designated impact area behind the ranges is marshland drained by Ribbon Creek. Due to concerns of potential contamination resulting from small arms projectiles entering the marsh, a water sample was collected from Ribbon Creek and tested for copper and lead in 1977. Analytical results indicated negligible contamination, with a copper concentration of 0.04 ppm and lead below the detection limit of 0.01 ppm (Dadohara, 1977).

Weapons used during training have been cleaned by recruits in grassy areas behind the battalion mess halls. Disassembled rifle parts have been cleaned with rags, toothbrushes, and copper wire bore and chamber brushes using CLP, a mixture of petroleum distillates and silicone, since about 1981. Prior to the use of CLP, kerosene and gasoline were used. Water used in rifle cleaning enters the storm drains. Rags too worn to launder and worn-out brushes are disposed of in the dumpsters. These wastes contain small quantities of cleaning solvent, dirt, carbon, unburned propellant, and fine particles of copper, lead, brass, and steel.

5.2.8.2 Hand Grenade Training--There are two practice ranges for hand grenades at the Depot--one for live fuze training and one for live hand grenades. The live grenade range (Structure 4020), located in the easternmost portion of Page Field, has been active since the late 1950's. Prior to the late 1950's, the grenade range was located where Marksmanship Training Range E is currently located. An estimated 25,000 to 50,000 grenades per year have been exploded on the grenade range. Recoverable metal parts from the live grenade range have been collected periodically for disposal through DRMO (Section 7.6). Surface soil samples collected from the grenade range in 1977 showed low concentrations of TNT and RDX of 0.05 and 0.35 ppm (or less), respectively (Dadshara, 1977).

5.2.8.3 Infiltration Courses--The infiltration course for daylight training (Structure 4024) and the night movement course (Structure 4023) were constructed in 1975. These courses were not present at MCRD Parris Island before 1975. Recruits are trained in maneuvering in combat situations and must scale a wall and crawl through a series of obstacles and around sandbagged bunkers. Instructors detonate ¼-pound TNT demolition blocks inside the bunkers and simulate gunfire with an oxygen-propane machine gun simulator. There are 32 unlined demolition pits in the course, in which demolition blocks are detonated to simulate artillery fire. An estimated 6,400 ¼-pound blocks per year have been detonated in these pits since their construction. The area surrounding the pits is flat with no clear drainage pattern. Surface soil samples were collected around the course in 1977. Analysis of the samples showed TNT content as high as 81 ppm and RDX concentrations as high as 890 ppm (Dodohara, 1977).

5.2.8.4 NBC Training--Nuclear, Biological, and Chemical (NBC) recruit training has been provided in and near Building AS26. No actual NBC materials have been used at MCRD Parris Island, with the exception of tear gas. The NBC training consists primarily of classroom instruction. The gas chamber has been operated in the western portion of AS26 since 1984. The gas chamber was previously located in a quonset hut at Elliot's Beach (Structure EB-11, which has since been demolished) since about 1948. This quonset hut was located in GDM M-25, directly north of Structure EB-11. A portable smoke generator, chemical canisters, and smoke grenades have been used in gas chamber training. Empty chemical canisters and expended smoke grenades have always been disposed of in the Depot dumpsters.

5.2.8.5 Geiger Counter Training--Prior to the mid-1970's, small radioactive cobalt discs, about 1-inch in diameter, were routinely placed in an open field in the vicinity of Building 923 for Geiger Counter training. During training, all discs placed in the field were collected and accounted for. When not in use, the discs were stored in lead canisters within a concrete vault in the floor of Building 923. This type of training was discontinued in the mid-1970's, and these discs were sent to Barnwell Laboratories for disposal in 1980.

5.2.9 Power/Steam Plants. The main power plant for MCRD Parris Island is located in Building 160, a two-story brick structure built in 1942. Building 160 occupies a location adjacent to and north of the old drydock, in the oldest part of the base. The original coal-burning power plant and its coal shed, built near the turn of the century, were adjacent to the existing location and the drydock, which was also used as a coal dock. Coal was barged from Port Royal to Parris Island and unloaded at the drydock. During the build-up during World War II, the present structure, with three Babcock & Wilcox boilers firing No. 6 fuel oil and three steam-driven 1,000 kW generators, was constructed in 1942. It is estimated that about 600 tons per year of boiler ash were generated between 1918 and 1942. This ash was employed in construction of roads throughout the Depot.

The old power plant was retained on a standby basis until early in the Korean War, when Building 160 was enlarged. The 172-foot-by-68-foot structure was lengthened by 52 feet and a Riley Stoker boiler was installed. The

APPENDIX C-24

Navy Facilities Command, Southern Division

Land Register, Sixth Naval District, dated c. 1972. Real Estate Files. U.S. Navy Facilities Command, Chesapeake Division, Norfolk, VA.

ACTIVITY MARINE CORPS RECRUIT DEPT CITY Parris Island COUNTY BEAUFORT STATE SOUTH CAROLINA DOC. FILE
 ACTIVITY CODE CITY CODE 1195 COUNTY CODE 013 STATE CODE 46 MAP FILE
 ACCTS. NO. M 00263 FILE NO. PAGE 1A PI FILE

L	TRACT & PARCEL NO.	FORMER OWNER OR DESCRIPTION	DOCUMENT	PROJECT	CONTRACT AMOUNT (DEPOSIT)	DEFICIENCY PAYMENT	LAND COST (PRORATA)	INTEREST (PRORATA)	ENL. SERVICES	APPRAISAL SERVICES	TITLE EVIDENCE	OTHER COSTS	DATE OF DOCUMENT	L
1	I	CHARLES E. SWINNER	DEED				2097						8 NOV 1901	1
2														2
3	11-001	JONATHAN BRADY	Civil Action				2500						27 JAN 1899	3
4	002	THOMAS STICKSON	"				125						27 JAN 1899	4
5	003	LEWIS STICKSON & JOHN JOHNSON	"				450						6 JUL 1899	5
6	004	JOHN JOHNSON	"				1425						7 JUL 1899	6
7		TOTAL TRACT II												7
8														8
9	11	SILAS E. TRIGOR	DEED				220						28 FEB 1929	9
10														10
11	11	TRANSFER FROM DEPT OF COMMERCE, U.S.A.	LETTER				150						8 JAN 1929	11
12														12
13	V-321	WILFRED McLEOD ET AL	Civil Action				1487.50						27 JAN 1899	13
14	322	THOMAS EATON	"				1700						27 JAN 1899	14
15	323	L. J. DENSLER & R. D. DENSLER	"				2500						27 JAN 1899	15
16		TOTAL TRACT V												16
17													22 DEC 1893	17
18	VI	JAMES E. JOUETT	DEED				5000							18
19														19
20	VII	JAMES E. & SALENA JOUETT	DEED				12							20
21														21
22	11	TRANSFER FROM G.S.A.	LETTER				50						28 APR 1924	22
23														23
24	IX-008	LEWIS H. WILSON	CA 68-83		30400	11365	42265						30 JAN 1968	24
25	-006	LEWIS H. WILSON	"		2000	735	2735							25
26	-007	FLORENCE M. RAMSEY	"		3000	750	3750							26
27	-010	BARNETT G. MARK	"		200	6300	6500							27
28	-011	BARNETT G. MARK	"		50	1360	1410							28
29	-012	STATE OF SOUTH CAROLINA	"		6000	-	6000							29
30	-014	FLEMING A. ANDERSON	"		2000	750	2750							30
31		TOTAL FOR TRACT IX					66400							31
32														32
33	X	PAUL FRED WOODS & MARGARET D. WOODS	DEED				29500						29 FEB 1968	33
34														34
35	XI	VIRIADIS	DECLARATION NO. 1472										7 APR 1918	35
36														36
37	XII-001	PETER JACOBSON & ELIZABETH SUTHERS JACOBSON	CA NO. 827				654.75						8 JUL 1942	37
38	001	See App 34736 for account XII-001	"											38
39	002	See App 34736 for account XII-002	"											39
40	003	IMMERS LAKE JOHN J. JARE & JOHN J. JARE	"				227.60							40
41	004	John Simpson Singleton & James Thomas et al	"				1095.00							41
42	005	WILSON & LANCET MARY C. LAKE	"				401.20							42
43	007	MARY CECILIA LAKE & MARGARET LAKE	"				1247.50							43
44	009	JOHNSA SIMPSON, Victoria Cecil, MARGARET BORN, et al	"				12.60							44
45	509	See App 34736 for account XII-009	"											45
46	510	LOUIS R. MANSOR & MARIE MANSOR	"				5265.00							46
47	511	Francis Mansor	"				380.00							47
48	512		"				1750.00							48
49	513	FRANK S. MANSOR	"				765.00							49
50		TOTAL												50

Appendix C - Cited References
 Page C-123

SR8480003-247 - 241 2 (Rev. 2/62)

LAND REGISTER - 6TH NAVAL DISTRICT

ACTIVITY MARINE CORPS RECRUIT DEPOT
 ACTIVITY CODE _____
 ACCTG. NO. 1100243

CITY PARRIS ISLAND
 CITY CODE 145
 FILE NO. _____

COUNTY BEAUFORT
 COUNTY CODE 213

STATE SOUTH CAROLINA
 STATE CODE 45
 PAGE 18
 DOC FILE _____
 MAP FILE _____
 P.I. FILE _____

LINE NO.	STATUS	DATE TITLE VESTED	FORM 241 NAVCOMPT CARD NO.	RECORDED		JURISDICTION	911-10		-11-30		911-30		911-50		TOTAL INVENTORY AREA	TOTAL INVENTORY COST
				BOOK	PAGE		TYPE	AREA	COST	AREA	COST	AREA	COST	AREA		
1				24	371	CONCURRENT	0.13	2437								
2																
3				22	363						1.20	25.00				
4				18	363						0.23	125				
5				22	371						3.50	450				
6				22	371						4.75	1425				
7						CONCURRENT					10.00	4500				
8																
9				11	572	CONCURRENT	10.00	220								
10																
11		26 JULY 1878		11	511	CONCURRENT			2.25	150						
12																
13				22	367	CONCURRENT					6.50	1487.50				
14				22	363	CONCURRENT					0.50	1200				
15				22	363	CONCURRENT					1.20	2500				
16											10.00	5187.50				
17																
18				14	87	CONCURRENT	27.00	500								
19																
20				14	39	CONCURRENT	4.00	0								
21																
22		2 APRIL 1874		5	16	CONCURRENT			17.00	50						
23																
24				505	1572	PROBATIONARY					19.22	42215				
25				"	"	"					1.18	27.25				
26				"	"	"					2.24	3750				
27				"	"	"					8.45	6500				
28				"	"	"					1.68	1400				
29				NOT RECORDED	"	"					576.27	6000				
30				385	1672	PROBATIONARY					0.30	2750				
31											674.25	66400				
32																
33				151	303	REPRODUCTION	28.33	29,500								
34																
35						EXCLUSIVE					5709.62					
36																
37						EXCLUSIVE					4.365	554.75				
38																
39																
40						EXCLUSIVE					15.64	777.60				
41											9.10	1095.00				
42											10.03	400.20				
43											16.87	1243.50				
44											2.003	121.62				
45																
46						EXCLUSIVE					3.10	5265.10				
47											6.00	360.00				
48											9.00	1750.00				
49											2.02	76.00				
50																

SOEAS70003-247 - Sht 2 (Rev. 2/82)

LAND REGISTER - 4TH MARVAL DISTRICT

ACTIVITY CODE _____ CITY _____ COUNTY _____ STATE _____ DOC FILE _____
 ACTIVITY CODE _____ CITY CODE _____ COUNTY CODE _____ STATE CODE _____ MAP FILE _____
 ACCTG. NO. _____ FILE NO. _____ PAGE 2B FILE _____

LINE	STATUS	DATE TITLE VESTED	FORM 244 NAVCOMPT CARD NO.	RECORDED		JURISDICTION TYPE	911-20		911-40		911-50		TOTAL INVENTORY AREA	TOTAL INVENTORY COST
				BOOK	PAGE		AREA	COST	AREA	COST	AREA	COST		
1										7.26	150			
2										2.50	150			
3										84.648	12,524.65			
4			134	53						-15.63	-777.60			
5			"	"						-8.18	-1,095.00			
6			"	"						-10.03	-401.20			
7			"	"						-16.27	-1,283.50			
8			134	53						-2.243	-12.60			
9										32.845	9,094.75			
10										-4.10	-615.00			
11										6.00	-2,963.74			
12										-5.10	-735.10			
13										-2.25	-150.10			
14										-2.50	-150.00			
15						PRADETRUM			Palatka	12.945	4,270.91			
16														
17										0.245	397.5			
18										2.10	230.26			
19										6.00	360.00			
20										3.36	764.90			
21										-0.42	-765.00			
22										12.345	42,300.1			
23														
24			4B	397		EXCLUSIVE	28.00	0						
25														
26						EXCLUSIVE				213.260	2000.00			
27										-213.26	-2000.00			
28										0	0			
29														
30														
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ARCHIVES SEARCH REPORT
 Marine Corps Recruit Depot Eastern Recruiting Region
 Parris Island, SC

REGISTRATION-247 - SHE 2 (REV. 2/82)

LAND REGISTER - 6TH NAVAL DISTRICT

ACTIVITY WALTON RICKS DEED - 1967 CITY _____ COUNTY _____ STATE _____ DOC FILE _____
 ACTIVITY CODE _____ CITY CODE _____ COUNTY CODE _____ STATE CODE _____ MAP FILE _____
 ACCTG. NO. _____ FILE NO. _____ PAGE 38 F.I. FILE _____

L I N E	STATUS	DATE TITLE VESTED	FORM 244 NAVY COMPT CARD NO.	RECORDED		JURISDICTION TYPE	921-10		921-20		921-30		921-40		921-50		TOTAL INVENTORY AREA	TOTAL INVENTORY COST	L I N E
				BOOK	PAGE		AREA	COST	AREA	COST	AREA	COST	AREA	COST	AREA	COST			
1									1.41	202.00									1
2									0.91	182.00									2
3									+ 2.62	+ 124.00									3
4									2.94	588.00									4
5																			5
6																			6
7									1.30	65.00									7
8									0.33	36.00									8
9									0.52	26.00									9
10									0.47	26.00									10
11									0.47	26.00									11
12									0.42	26.00									12
13									0.20	18.00									13
14									1.63	80.00									14
15									0.36	18.00									15
16									0.90	45.00									16
17									0.04	18.00									17
18									0.84	40.00									18
19									0.09	18.00									19
20									0.47	18.00									20
21									1.85	175.00									21
22									2.23	75.00									22
23									0.44	18.00									23
24									1.23	30.00									24
25									0.09	18.00									25
26									0.01	18.00									26
27									0.15	18.00									27
28									0.33	18.00									28
29									0.12	18.00									29
30									0.11	18.00									30
31									0.17	18.00									31
32									0.06	18.00									32
33									0.27	18.00									33
34									0.44	18.00									34
35									0.24	18.00									35
36									0.10	18.00									36
37									+ 0	+ 1.00									37
38									17.29	921.00									38
39																			39
40																			40
41																			41
42																			42
43																			43
44																			44
45																			45
46																			46
47																			47
48																			48
49																			49
50																			50

LAND REGISTER - 6TH NAVAL DISTRICT

CITY _____ COUNTY _____ STATE _____ DOC. FILE _____
 CITY CODE _____ COUNTY CODE _____ STATE CODE _____ MAP FILE _____
 FILE NO. _____ PAGE 24 FILE _____

TRACT & PARCEL NO.	FORMER OWNER OR INCORPORATION	DOCUMENT	PROJECT	CONTRACT AMOUNT (DEPOSIT)	DEFICIENCY PAYMENT	LAND COST (PRORATA)	INTEREST (PRORATA)	ENG. SERVICES	APPRAISAL SERVICES	FILE EVIDENCE	OTHER COSTS	DATE OF DOCUMENT
XII-222	Gen. J. Conitt (Federal) Lease back	CA No. 862				282.00						8 JUL 1964
-223	Gen. J. Conitt, Mary C. Cook, Robert & Marie Cook et al	"				182.00						"
-225	James Green Estate	"				126.00						"
TOTAL TRACT XII												
XIV-001 1/2		CA No. 895										✓ 207 1965
005 1/2	SARAH DENNIS											
007	VARON: SUEAN THORNTON & SONS											
101	VARON: MARK VARON, CAROL ANN VARON, WILHELM											
004 1/2	SARAH DENNIS with VARON WILHELM											
011	VARON: DENNIS & FOLST											
05-14	VARON: WIFE VARON, CAROL ANN VARON, WILHELM FUCHS											
05-07	ESTELLE SARANTON & MARILETTA WILHELM											
018	THOMAS THOMAS, THOMAS THOMAS, WILHELM LOHN											
019	VARON: COHEN, BLACK & FINE											
01	N. CHRISTIANSON, SONS Company											
027	FRANK RUDOLPH											
023 1/2	EARL KIRKMAN & FAYNE KIRKMAN, BIRTH OF SIM. KIRKMAN											
024 1/2	EARL KIRKMAN, S.G. ROBINSON, W.B. CALHOUN											
027	E. J. JENSEN & SONS OF S.W. JENSEN											
018	E. J. JENSEN, EUGENE LAND FARMERS AND HOME OWNERS											
020	MARY FRAU											
031	L.D. CHRISTENSEN											
031	JOHN H. CHRISTENSEN											
032	W. E. PRESNELL, WIFE & O.G. PRESNELL											
031	MARY C. LEE & VIRGINIA E. BURKHOLDER											
032	CLARA ANDERSON JOHNSON											
031	JARVIS CONGERTON SIMMONS, BESSIE E. STEWART											
036	GIANNI ANDERSON & THE TRUSTEE BANK											
037	M. P. SCHNEIDERMAN & M.T. SCHNEIDERMAN											
036	MARY C. LEE											
039	JARVIS FIELDS, SIMMONS, WIFE, MARY WIFE, FIELDS, ANDERSON, SIMMONS											
040	JARVIS, GAMES, SARVIN, DENNIS											
040	GIANNI ANDERSON & THE TRUSTEE BANK, WILHELM, FUCHS, WILHELM, FUCHS, WILHELM, FUCHS											
TOTAL TRACT XIV												
TOTAL OF SUBJECTS												

Appendix C - Cited References
Page C-127

APPENDIX C-25

U.S. Army Technical Escort Unit, Aberdeen Proving
Grounds, MD

*Operational Report - Trip #36-75, dated 18 August
1975. Vertical Files. Chemical Defense Biological
Agency Historical Office, Edgewood, MD.*

DEPARTMENT OF THE ARMY
US Army Technical Escort Center, Edgewood Arsenal
Aberdeen Proving Ground, Maryland 21010

SAREA-TE-OP

18 August 1975

MEMORANDUM FOR: COMMANDER, USA TECHNICAL ESCORT CENTER

SUBJECT: Operational Report - Trip #36-75

1. Location. MCRD Parris Island, SC; Ft Bragg, NC; and MCAS Quantico, VA
2. Time. 4 - 15 August 1975
3. Personnel.
 - a. USATEC personnel
 - (1) SFC Cholette
 - (2) SP5 Valentine
 - b. Other
 - (1) MCRD Parris Island, SC - CWO Ring or Gunnery Sgt Poteet, AV 832-4161
 - (2) Ft Bragg, NC - CPT Carawan, NBC Branch 18th Airborne Corp., AV 236-3901
 - (3) MCAS Quantico, VA - SGT Stafford, Ammo Depot, AV 278-5296/5298
4. Circumstances and Background. This mission was in support of the recovery of War Gas ID Sets. The team was required to inventory, regasket, and prepared ID Sets for an escort shipment at a later date.
5. Execution. The following was accomplished at the above locations:
 - a. Parris Island, SC. There was one incomplete ID set found. The escort kit and overpack was not shipped from Charleston SC Airfreight to Parris Island at no fault of CWO Capria (point of contact). The set was inventoried, marked properly, and left in bunker with overpack for later pickup. The set needs a new lead gasket.

SAREA-TE-OP
SUBJECT: Operational Report - Trip #36-75

18 August 1975

b. Ft Bragg, NC. It was reported that Ft Bragg had (12) K952 ID sets and (2) K952 ID sets in propellant charge cans. When inventoried, we found (4) K952 and (9) K953/K954 sets. Some of the sets were very old and rusty but when checked, we found no leakers. The sets were properly repacked, marked, and numbered from #1 to #13. Sets #1 thru #7 had new lead gaskets and overpacks mounted, these sets are ready for escort. Sets #8 thru #13 do not have new gaskets but they were resealed with old gaskets and overpacks are on hand. There is a need for 2 more overpacks and 6 new lead gaskets. One overpack with pig was not used and was left on site. CPT Carawan was our point of contact and was very helpful and supporting.

c. MCAS Quantico, VA. There were (51) K952 ID Sets and (3) K954 ID Sets on hand when inventoried. The (3) K954 sets were repacked, new lead gaskets replaced, marked properly, and placed into overpacks for pickup at a later date. The 3 sets are marked #1 thru #3. #1 set was not complete. The (51) K952 sets were not opened because I was instructed to only make an inventory of these sets and prepare the (3) K954 sets for shipment.

6. Recommendations. None.

7. Future action required. This is a final report.

8. Attachments.

- a. DA 662's (SFC Cholette & SP5 Valentine)
- b. DA 1594 (Daily Log)

Wilfred A. Cholette
WILFRED A. CHOLETTE
SFC, Cm1C
NCOIC Trip #36-75

Reviewed by:

[Signature]
~~Plans & Operations Branch~~

[Signature]
~~Operations Division~~

APPENDIX C-26

U.S. Army Technical Escort Unit, Aberdeen Proving
Grounds, MD

*Operational Report - Trip #49-75, dated 30 October
1975. Vertical Files. Chemical Defense Biological
Agency Historical Office, Edgewood, MD.*

DEPARTMENT OF THE ARMY
US Army Technical Escort Center, Edgewood Arsenal
Aberdeen Proving Ground, Maryland 21010

SAREA-TE-OT

30 October 1975

MEMORANDUM FOR: COMMANDER, USA TECHNICAL ESCORT CENTER

SUBJECT: Operational Report - Trip # 49-75 ; Mission # RQS-121

1. Location. Parris Island, Marine Corps Recruit Depot, South Carolina.
2. Time. 0800 hrs, 19 Oct 75 to 1300 hrs, 24 Oct 75.
3. Personnel.
 - a. Tech Escort Center Personnel
 - SFC Arbo - Team Leader
 - SGT Williams, M. ^{Asst} Team Leader
 - SP5 Risavy - Team Member
 - SP5 Gaskill - Team Member
 - SP4 Potts - Team Member
 - PFC Vasquez - Team Member
 - b. Marine Corps Personnel
 - CW3 Ring, Ammo Officer, Autovon 8-832-4161
 - SSG McCoy, Ammo NCOIC, Autovon 8-832-4161
4. Circumstances and Background. The mission was for a six man team to proceed to Parris Island, S.C. MCRD to complete repack of one container (PIG) containing one war gas ID set and escort container by road from Parris Island MCRD to MCAS, Beaufort, S.C. and turn container over to SSG Diaz, Air escort team leader for air transport to Edgewood Arsenal, Maryland.
5. Execution. The escort team departed Edgewood Arsenal at 0800 hrs 19 Oct 75 and arrived at Beaufort, S.C. 1800 hrs 19 Oct 75. SFC Arbo and SP5 Risavy made contact with CW3 Ring and SSG McCoy, MCRD 0800 hrs 20 Oct 75 to coordinate mission requirements while remainder of team stood by in Beaufort, S.C. Arrangements for necessary documents for shipment of cargo were accomplished. Cargo container was inspected to determine what was needed to complete repacking and enroute reconnaissance was made to determine safest and most feasible route to accomplish the road escort portion of the mission.

~~FOR OFFICIAL USE ONLY~~

7000
checked
30 Oct 75
S. Arbo

SAREA-TE-OT

30 October 1975

SUBJECT: Operational Report - Trip # 49-75; Mission # RQS-121

On 21 Oct 75, the cargo container repacking was accomplished by SFC Arbo, SP5 Risavy and SP5 Gaskill. A second route reconnaissance was made during morning hours to determine traffic conditions in comparison with the afternoon reconnaissance of the previous day. It was determined that the hours of 1215 to 1245 was the best time for the road escort which was the area lunch time. CW3 Ring and SSG McCoy coordinated with the base PMO for MP and State Police escorts for the road escort. South Carolina law requires State Police escorts on state highways and roads.

Escort Team was notified by phone that Army aircraft for cargo would be delayed for 24 hours. Base PMO was notified of change. On 22 Oct 75, final coordination was made on shipping documents and arrangements for move on 23 Oct 75.

On 23 Oct 75, entire escort team reported to MCRD for loading of cargo on truck and issue of weapons for escort mission. At 1200 hrs, two MP escort vehicles arrived at departure site and convoy was formed. One MP vehicle in lead, one TEC vehicle, cargo vehicle, TEC vehicle and MP vehicle in tail position. Convoy proceeded to base main gate where State Police escort joined convoy at 1215 hrs for further movement to MCAS, Beaufort, S. C. Convoy march time was forty-five (45) minutes, arriving at MCAS 1300 hrs.

Cargo vehicle was parked near runway and secured by TEC guard personnel.

Army aircraft arrived at 1420 hrs and cargo and weapons were turned over to SSG Diaz for transport to Edgewood Arsenal. Army aircraft departed MCAS at 1500 hrs and departure time was given to 1LT Marcum via Autovon by SFC Arbo. At 1515 hrs, escort team departed MCAS enroute to Savanna, GA where team remained overnight.

24 Oct 75, Escort team departed Savanna, GA 0840 hrs via commercial aircraft and arrived at Edgewood Arsenal, MD at 1300 hrs at which time the mission was completed.

6. Recommendations. This unit should provide escort teams with all documents necessary for movement of cargo in order to expedite preparation of such documents.
7. Future actions required. This is a final report.
8. Attachments. None.

Reviewed by:

[Signature]

Raymond J. Arbo
RAYMOND J. ARBO
SFC
Escort Team Leader

APPENDIX C-27

U.S. Marine Corps Headquarters

Memorandum: *Peace Time Requirement of Quarters and Barracks for Marine Barracks, Parris Island, SC*, dated 10 November 1938. Record Group 127, Entry 18 General Correspondence 1933-38, Box 24, Folder 1275/70-5480. National Archives, Washington DC.

REPRODUCED AT THE NATIONAL ARCHIVES

IN REPLYING
REFER TO NO.
AO-218-hem



HEADQUARTERS U. S. MARINE CORPS

6473

WASHINGTON

NOV 10 1938

MEMORANDUM:

From: The Director, Division of Operations and Training.
To: The Major General Commandant.
Subject: Peace time requirement of quarters and barracks
for Marine Barracks, Parris Island, S.C.

I. PROBLEM INVOLVED:

1. The high cost of maintaining temporary buildings at the Marine Barracks, Parris Island, and the construction of permanent barracks at that post, necessitates a study of the peace time requirements of Parris Island to determine the maximum number of officers, warrant officers, enlisted men, and civilians for whom quarters or barracks will be required, with a view to eliminating unnecessary temporary quarters and barracks, or placing them definitely in an inactive status.

II. FACTS PRESENTED:

1. The peace time mission of Parris Island is three-fold: (1) To equip and train recruits; (2) To provide training areas for aviation squadrons; and, (3) To provide training areas for artillery units.

2. The authorized allowance as of 30 September 1938 of Parris Island was:

	<u>Officers</u>	<u>W.O.</u>	<u>Enl.</u>
Marine Corps	23	7	316
Navy	13	3	44

To distinguish the authorized allowance of permanent post personnel from recruits and temporary units utilizing Parris Island as a training area, the above authorized allowance will be referred to as Permanent Post Personnel.

3. Marine Corps quarters are assigned to all Marine officers and warrant officers, to 61 enlisted Marines, including 28 below the third pay grade, and to 13 civilians. Marine Corps quarters are also assigned to 13 Naval officers and warrant officers, and to 7 Navy petty officers. Other Naval officers and

enlisted men are quartered on the Naval Hospital Reservation.

4. Temporary quarters are required for aviation squadrons and artillery units utilizing Parris Island throughout the year as a training area.

5. Three hundred eighty-three (383) buildings are maintained on the Marine Corps Reservation. These buildings are widely separated, necessitating high maintenance cost.

III. DISCUSSION:

1. As stated under paragraph II (1), the peace time mission of Parris Island is threefold: (1) To equip and train recruits, i.e., 48% of all recruits taken into the Marine Corps; (2) To provide training areas for aviation squadrons; and, (3) To provide training areas for antiaircraft and pack howitzer artillery units.

2. In order to carry out its mission, Parris Island must maintain quarters and barracks in full commission for Permanent Post Personnel and Recruits; and must maintain in a status of reserve commission, quarters and barracks for temporary occupancy by aviation and artillery units training at Parris Island.

3. To arrive at a logical conclusion as to quarters and barracks requirements necessary to permit Parris Island to carry out its mission, it is believed necessary to present a picture of recent quarters and barracks requirements, and future estimated requirements based on the present enlisted strength of the Marine Corps plus yearly increases of 1,000 enlisted until a strength of 22,000 is reached in 1943.

4. To facilitate analysis of quarters and barracks requirements, this study will show under separate headings requirements for:

- a. Permanent Post Personnel.
- b. Recruits.
- c. Temporary personnel attached for training.

5. Permanent Post Personnel.

a. The present authorized allowance of Parris Island is:

Marine Corps: 23 officers
7 warrant officers
316 enlisted

Navy: 13 officers
3 warrant officers
44 enlisted

APPENDIX C-28

U.S. Marine Corps Headquarters

Memorandum: *Preparation of an Artillery Range at Parris Island*, dated 21 September 1939. Record Group 127, Entry 18 General Correspondence 1933-38, Box 236, Folder Parris Island. National Archives, Washington DC.

IN REPLYING
REFER TO NO.
12757-360
AO-267-ess



HEADQUARTERS U. S. MARINE CORPS
DIVISION OF PLANS AND POLICIES
WASHINGTON

21 September, 1939.

MEMORANDUM FOR THE DIRECTOR, DIVISION OF PLANS AND POLICIES:

Subject: Preparation of an artillery range at Parris Island.

References: (a) Report of board, AO-218-hem, dated 4 January 1938.
(b) Report of annual artillery service practice during the period of 20-29 May, 1939, at Parris Island, S.C., by the 1st Bn, 10th Marines, FMF.

1. Reference (b) states in part that the facilities for varying the artillery problems at the Parris Island artillery range are limited. It also recommends that certain areas, essentially the same as those included in reference (a), be cleared of brush, scrub trees, etc.

2. (a) A suggestion has been made to the Commanding Officer, 1st Battalion, 10th Marines, that he use the secondary impact area which includes Gibbs Island in order to assist in varying the artillery problems.

(b) A suggestion has also been made to the Commanding General, Parris Island, that the use of Public Relief Funds for the clearing recommended in reference (b) might be proper. If not, then he should recommend a method and means of accomplishing the work.

3. No contrary conditions have arisen since 4 January, 1938, the date of the board's report. It is recommended that the recommendations contained in reference (a) be approved.

file act
W. LeGette
C. W. LEGETTE,
Major, U. S. Marine Corps.

TOTAL 21

IN REPLYING
REFER TO NO.

AO-218-hem

HEADQUARTERS U. S. MARINE CORPS

WASHINGTON

4 January 1938.

MEMORANDUM FOR THE DIRECTOR, DIVISION OF OPERATION & TRAINING:

Lt. Col. Bourke, Major LeGette, and Major Pepper today met and studied the report of Brig. General Vogel relative to the preparation of an artillery range at Parris Island.

It was noted from the above report (par. 3) that because the shrapnel range on Gibbs Island was not used during 1937 firing, the clearing of that island was unnecessary. Gibbs Island was not used last year because it was found that there were a sufficient number of varied firing positions for the limited number of officers firing without using the short shrapnel range on Gibbs Island. However, this year a greater number of officers will be required to fire, and it will be necessary to use the shrapnel range as officers become familiar with other firing positions in order to vary the problems.

As to shells damaging the flying field (par. 6) attention is invited to the fact that during the 1937 service practice no shells fell on the flying field although impact areas adjacent to the flying field were used.

Although it is believed that some further clearing should be done, possibly merely clearing narrow lanes, since sufficient heightening of observation towers is believed to be impractical, it is recommended that no further clearing be done until another year's practice is fired when more definite recommendations can be made.

R. H. Pepper
R. H. PEPPER,
Major, U. S. Marine Corps.

APPENDIX C-29

U.S. Marine Corps Headquarters

Shipment Order, dated 3 January 1947. Record Group 74, Entry 5595, Box 129, Folder Quantico, VA Jan-Mar 1947. National Archives, Archives II, College Park, MD.

REPRODUCED AT THE NATIONAL ARCHIVES

File No.
 Serial
 CS-117-D

HEADQUARTERS
 U. S. Marine Corps
 Washington, D. C.

Date 5 January 1947.

ENGINEER
 SHIPMENT ORDER Sheet No. 1 of 1 Sheets

From: The Quartermaster, General of the Marine Corps.
 To: The Chief of the Bureau of Ordnance.

Att: Mr. Roylance (Code Mn2 b).

Ship To: See below

Marked For: See below.

Reference: (a) DQM (GS) MCRD MCRD PISC rean 302-46 to DQM atd 16Dec46
 (b) DQM ltr 330-6 over 2143 to QMGMC of 26Dec46.
 (c) Tel Conv Mr. Roylance (BuOrd) and Mr. Killian (HQMG)
 of 30Dec46.

KK/Sps
 M.C.
 2/1/47
 010947
 0546

Item No.	USMC Engr Cat. No.	Article	Unit	Quantity
1.	E-11085	4-C-49-210 Cap, blasting, special non-electric.	each	400

Confirming reference (c), it is understood that the following has been made available at Naval Ammunition Depot, Naval Base Charleston, Naval Base South Carolina, on call to a representative of the Depot Quartermaster, Marine Corps Supply Depot, Marine Corps Recruit Depot, Parris Island, South Carolina, under authority of Ammunition Shipment Order 519029.

J. S. Reynaud
 J. S. Reynaud,
 By direction.

Copy to: Depot Quartermaster, Marine Corps Depot of Supplies, Norfolk, Virginia, by letter.
 Depot Quartermaster (General Supply), Marine Corps Supply Depot, Marine Corps Recruit Depot, Parris Island, South Carolina.

SOURCE: NARA COLLEGE PARK, MD
 RG: 74
 SERIES: ENTRY 5595
 BOX: 129
 FOLDER: QUANTICO VA JAN-MAR 1947

Copy to:

APPENDIX C-30

U.S. Marine Corps Headquarters

Shipment of Grenades, dated 15 October 1947. Record Group 74, Entry 5595, Box 129, Folder Quantico, VA Jan-Mar 1947. National Archives, Archives II, College Park, MD.

REPRODUCED AT THE NATIONAL ARCHIVES

THE QUARTERMASTER GENERAL
OF THE MARINE CORPS
AND REFER TO

SERIAL **CS-101**
No. 31,931



HEADQUARTERS U. S. MARINE CORPS

WASHINGTON 25, D. C.

15 October 1947.

KK/578

77712

101647 0115

From: The Quartermaster General of the Marine Corps.
To: The Chief of the Bureau of Ordnance.

Subj: Shipment of Grenades.

1. It is requested that the following item be shipped from the Naval Ammunition Depot, Charleston, South Carolina to the Depot Quartermaster (General Supply), Supply Depot, MCRD, Parris Island, South Carolina, marked for "Recruit Training Battalions", and invoiced to the Supply Officer, Recruit Training Battalions, MCRD, Parris Island, South Carolina:

250 50020-C GRENADES, Hand, Tear,
GN, Mk 7, w/fuze, M201

P. H. Millichap
P. H. MILLICHAP,
By direction.

CC:
DQM (GenSup), SupDep, MCRD, Parris
Island, S. C.
SupOf, RecTrgBns, MCRD, Parris Island,
S. C.

SOURCE: NARA COLLEGE PARK MD

RG: 74

SERIES: ENTRY 5595

BOX: 129

FOLDER: QUANTICO, VA JAN-MAR

APPENDIX C-31

U.S. Marine Corps Headquarters

Shipment of Ammunition, dated 13 November 1947.
Record Group 74, Entry 5595, Box 129, Folder
Quantico, VA Jan-Mar 1947. National Archives,
Archives II, College Park, MD.

REPRODUCED AT THE NATIONAL ARCHIVES

THE QUARTERMASTER GENERAL
OF THE MARINE CORPS
AND REFER TO

SERIAL CS-101/1e
No. 31,971



HEADQUARTERS U. S. MARINE CORPS
WASHINGTON 25, D. C.

13 November 1947.

KK 1578
MN2
JED
111747
0325

From: The Quartermaster General of the Marine Corps.
To: The Chief of the Bureau of Ordnance.

Subj: Shipment of ammunition.

1. It is requested that the below listed ammunition be shipped from the Naval Ammunition Depot, Crane, Martin County, Indiana to the Post Property Officer (General Supply), Marine Corps Recruit Depot, Parris Island, South Carolina, marked for "Weapons Training Battalion", and invoiced to the Post Property Officer (Recruit Training and Weapons Battalions), Marine Corps Recruit Depot, Parris Island, South Carolina:

60MM MORTAR

- 100 R4CAA SHELL, HE, M49A2, w/fuze, PD, M52A1B1
- 100 R4CJA SHELL, Smoke, WP, M52, w/fuze, PD, M52B1E5
- 100 R4CKA SHELL, Illuminating, M83A1, w/fuze, M65A1

P. H. Millichap
P. H. MILLICHAP,
By direction.

CC: PPO (GenSup), MCRD,
Parris Island, S.C.
PPO (RecTrg&WpnsBns), MCRD,
Parris Island, S.C.

SOURCE: NARA COLLEGE PARRIS, MD
RG: 74
SERIES: ENTRY 5595
BOX: 129
FOLDER: QUANTICO, VA JAN-MAR 1947

APPENDIX C-32

U.S. Ship Patoka

Small Arms Target Practice of the Crew of the USS Patoka on Rifle Range at Parris Island, SC, dated 22 May 1923. Record Group 127, Entry 18 General Correspondence 1913-32, Box 44, Folder 1275-65 Target Ranges. National Archives, Washington DC.

REPRODUCED AT THE NATIONAL ARCHIVES

1H1649-23


U.S.S. PATOKA
Navy Yard, Charleston, S.C.
22 May 1923.

From: Commanding Officer.
To: Chief of Naval Operations.
VIA: Commandant, 6th Naval District.
Subject: Small arms target practice of the crew of the USS
PATOKA on Rifle Range, Parris Is., S.C.

1. Through the courtesy of Brig. Gen. E. K. Cole, USMC, Commanding General of the Marine Barracks, Parris Is., S.C., the Commanding Officer was able to send the entire crew of the PATOKA to Parris Is. for small arms target practice while the ship was undergoing overhaul at the Navy Yard, Charleston, S.C., from Apr. 1 to May 24, 1923. The crew was divided into three details and each detail was allowed six firing days on the range for firing the qualification courses. Upon the completion of these courses matches were held between primary teams, division teams, and between the ship's team and one team from Parris Is. and one team from the M.B., Navy Yard, Charleston.

2. The following data shows the general results obtained:

Total No. of officers and men on board	107
No. of officers and men firing	103
No. of officers and men qualified expert riflemen	82
No. of officers and men qualified marksmen	19
No. of officers and men who fired and failed to qualify.	2

3. The courses in pistols, machine guns, and collective fire were fired by the greater number of the men.

4. The final score for the ship is about 9.5 (exact report in detail will be submitted), out of a maximum of 11.4 possible. The score of trophy winner last year was 6.1.

5. This target practice not only was of excellent military value for training the men, but it was also an excellent outing and diversion for the crew of the ship.

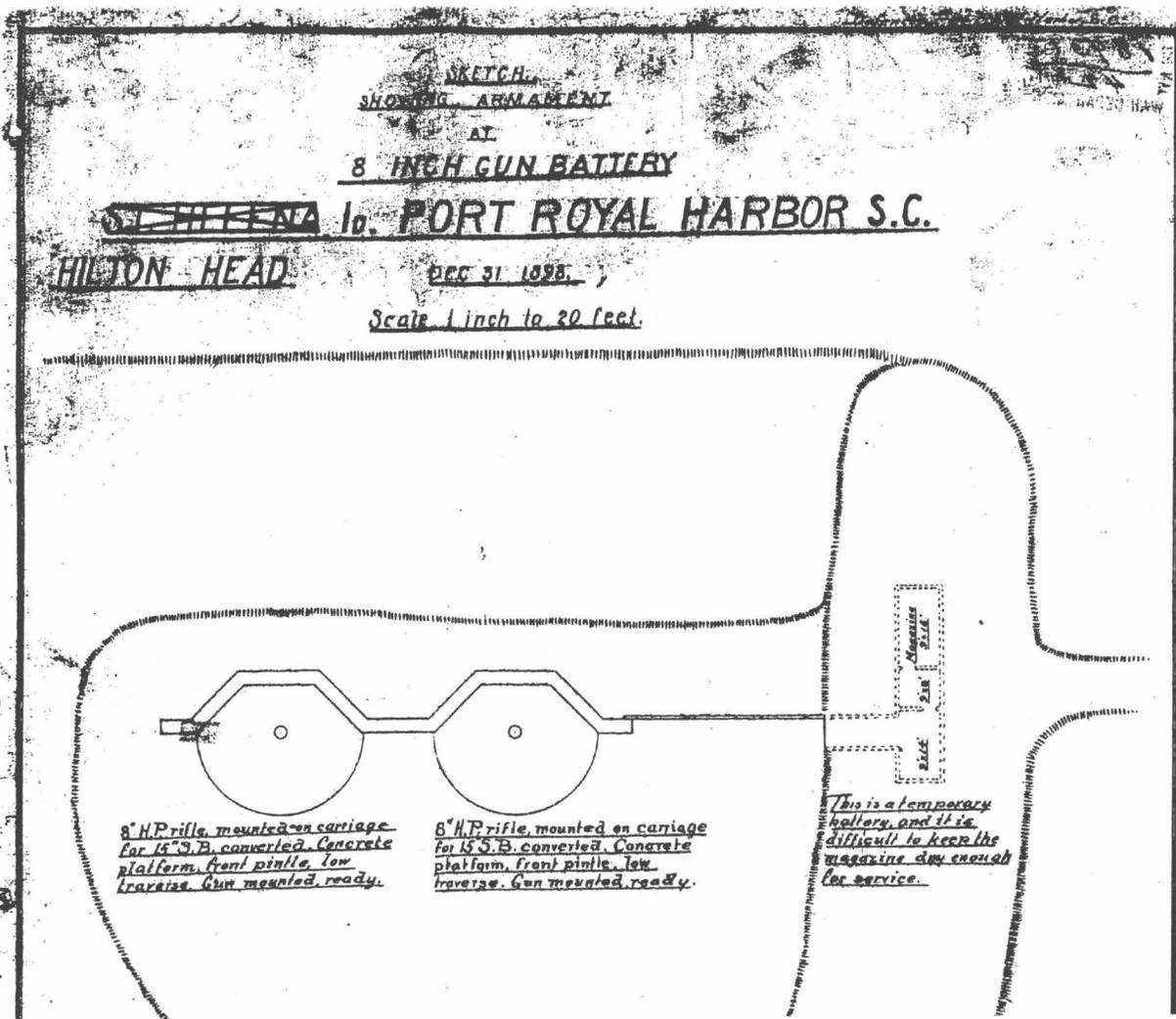
6. These results were largely accomplished through the courtesy and assistance rendered by Brig. Gen. Cole and the officers and men attached to the rifle range. Marines of experience were assigned to act as coaches. Capt. C.F. Blodel, U.S.M.C., the Range Officer, took interest in the work and not only lent every assistance in carrying out the target practice but exerted himself to provide amusements, movies, baseball games, etc., when the firing was not in progress.

A

APPENDIX C-33

War Department

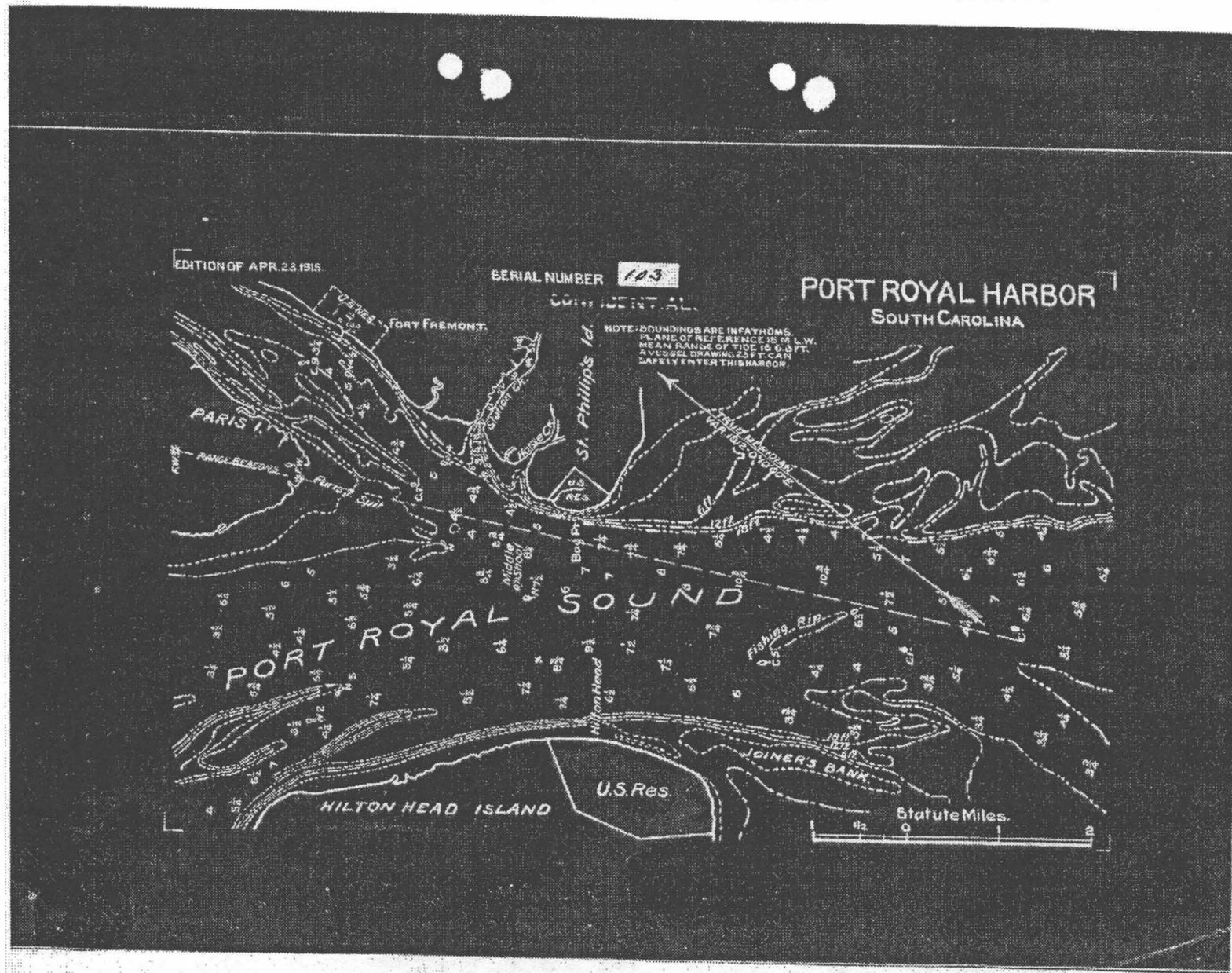
8 Inch Gun Battery, Port Royal Harbor, SC, dated 31 December 1898. Record Group 77, Drawer 253, Sheet 17-2. National Archives, Archives II, Cartographic Center, College Park, MD.

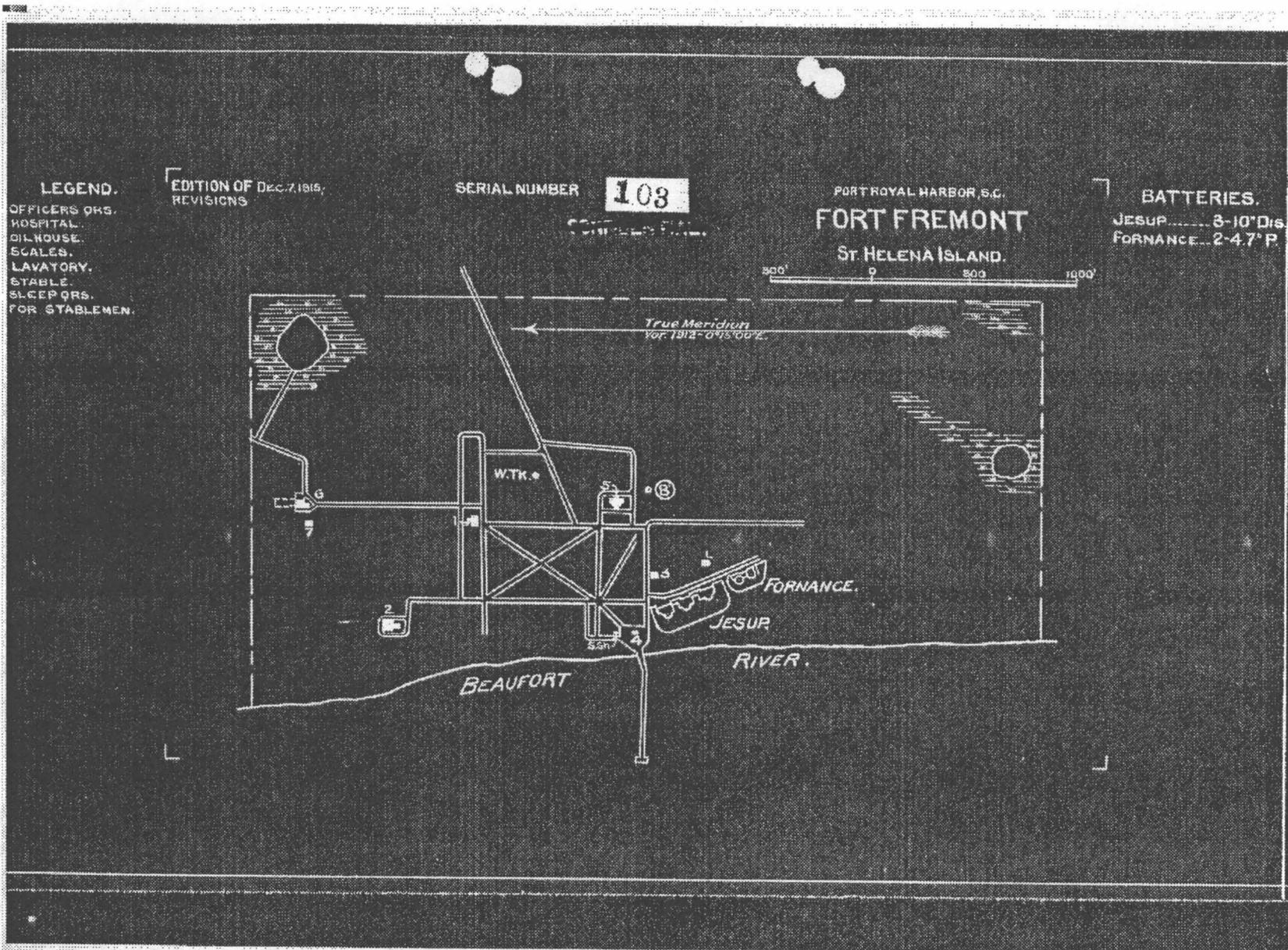


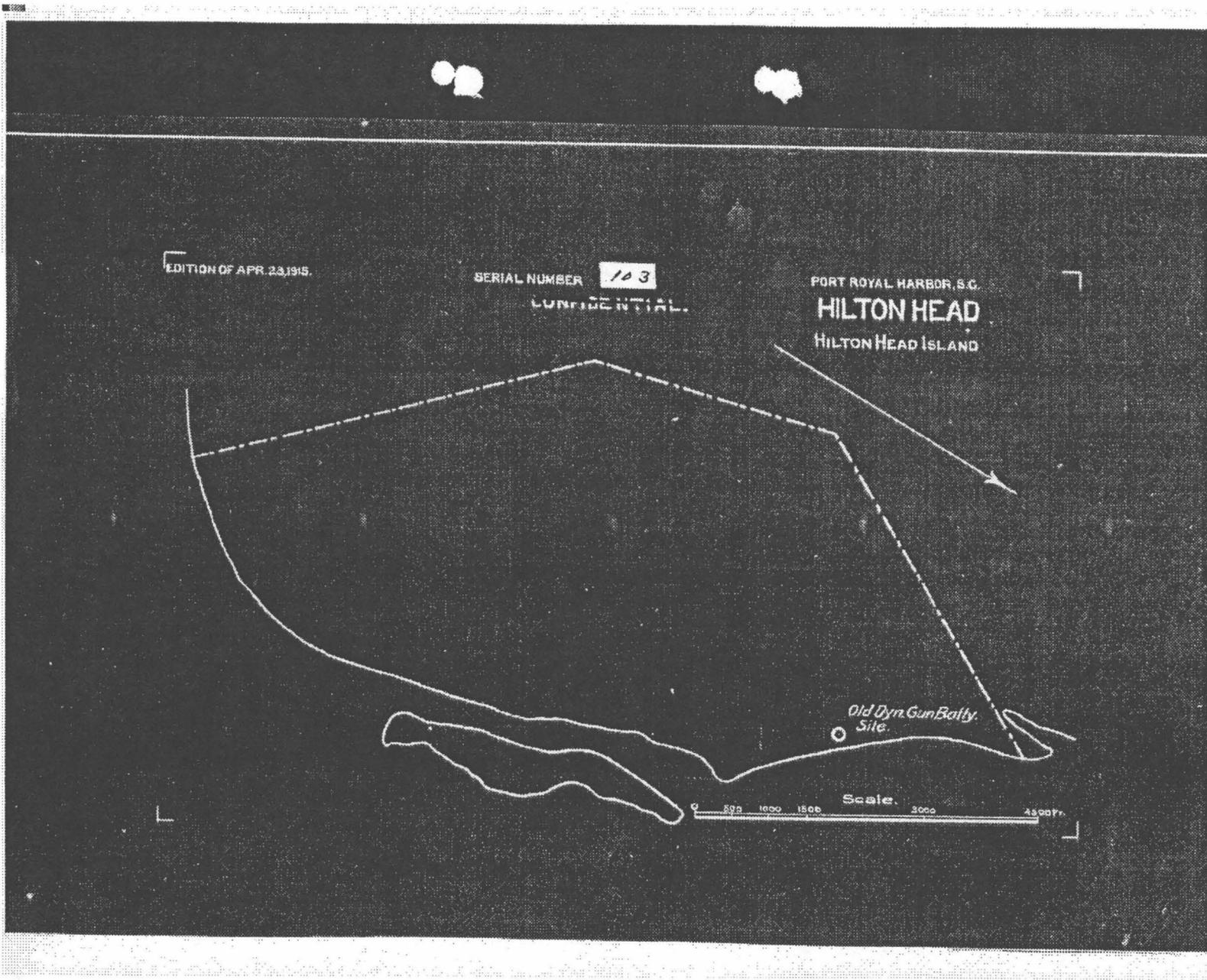
APPENDIX C-34

War Department

Fort Fremont, dated 21 February 1918. Record Group 77, Entry 220, Box 4, Folder Savannah and Port Royal, SC. National Archives, Washington DC.







Ledger - 1
Batteries
PORT ROYAL, S.C.

FORT FREMONT

BATTERY JESUP: *Out of commission (j-1)*

Guns: 3 10-inch B.L.R., model of 1895 in Empl. 1, model of 1888
MII in Empls. 2 and 3. (j-1)

Carriages: Disappearing, model of 1896. (j-1)

Status: Transferred September 2, 1899. (j-1)

Hoists: Projectile: ~~3 Taylor Remond front delivery.~~ (j-1) *None*
removed (j-2)

Powder: None. (j-1)

Remarks: *Arms removed (j-3)*

BATTERY FORNANCE: *Out of commission (j-1)*

Guns: 2 4.7 Armstrong r.f.guns. (j-1)

Carriages: Armstrong pedestal mounts. (j-1)

Status: Transferred September 2, 1899. (j-1)

Hoists: None. (j-1)

Remarks:

Journal - 1
BATTERIES
PORT ROYAL, S.C.

1

The following statement, unless otherwise indicated, is based on the report of completed batteries for the Charleston, S. C., district:

FORT FREMONT

BATTERY JESUP: Battery consists of 3 10-inch B.L.R., model of 1895 in Empl. 1 and model of 1888MII in Empls. 2 and 3, on disappearing carriages, model of 1896. Three Taylor Raymond front delivery projectile hoists. No powder hoists. Transferred Sept. 2, 1899.

BATTERY FORNANCE: Battery consists of 2 emplacements for 4.7 Armstrong r.f.guns on Armstrong pedestal mounts. The 2 guns and mounts are on hand dismounted. No hoists. Transferred Sept. 2, 1899.

Under date of April 1, 1914, (71562/460), the Secretary of War approved program for hoist widening work with funds available under the 1914 fortification act, which program includes the conversion of the three T.R. hoists at Battery Jesup into back delivery hoists and their shipment, one to Fort H.G. Wright, N. Y. and two to Fort Wetherill, R.I.

Fort Fremont has been placed out of commission under instructions of Secretary of War in indorsement of the Chief of Coast Artillery dated June 14, 1912. (85359).

3 10-inch projectile hoists² have been removed from B. Jesup, Fort Fremont. (R.C.S., Jan., 1915.)

3

July 18, 1918, the C.C.A. advises that the following armament has been removed for service elsewhere as indicated (662A-F9 and F9/1)

Ft. Fremont	Battery Jesup	2 10-inch guns have been transferred to service abroad, and
		1 10-inch gun has been transferred to Sandy Hook.

Memoranda - 1
Batteries
Port Royal, S.C.

¹
Letter to District Engineer, Savannah, Ga., Feb. 21, 1918
(662A(Sav)F1) as follows:

1. After the removal of armament now contemplated for shipment abroad and for use on transports, there will remain in service at the defenses of Savannah the following batteries:

Port Royal

Fort Fremont:

Battery Fornance 2 4.7-inch guns

2. The above information is furnished for the confidential files of your office. The batteries and armament not mentioned above are listed for removal. After checking this information with the records of your office a statement should be furnished this office, showing the batteries and armament now at the defenses of Savannah and not included in the above list.

2

Inforcement by District Engineer, Savannah, Ga., Feb. 23, 1918
on office letter of Feb. 21, (See 1 above) as follows:

3. The inclusion of battery "Fornance" in the list for Fort Screven is an error. This battery is at Fort Fremont, defenses of Port Royal Sound. Besides this battery and its armament of two 4.7-inch guns, there is at Fort Fremont battery "Jesup" with three emplacements for 10-inch guns; two of these guns and their mounts are in place; the third gun has been dismantled and removed.

APPENDIX C-35

Department of Defense Training and Performance Data Center

*United States Marine Corps Weapon Training Range,
Unit Training Areas and Unit Training Facilities, Marine
Corps Recruit Depots located at San Diego, California,
Parris Island, South Carolina. dated May 1991, Land
Use and MILCON Branch CMC (LFL), Headquarters
U.S. Marine Corps, Washington D.C.*

TPDC 91 - 033

TPDC



UNITED STATES MARINE CORPS

**WEAPONS TRAINING RANGES
UNIT TRAINING AREAS
UNIT TRAINING FACILITIES**

MARINE CORPS RECRUIT DEPOTS

located at

**SAN DIEGO, CALIFORNIA
PARRIS ISLAND, SOUTH CAROLINA**

MAY 1991

**DEPARTMENT OF DEFENSE
TRAINING AND PERFORMANCE DATA CENTER**

**3280 PROGRESS DRIVE, ORLANDO, FL 32826-3229
(407) 281-3623**

UNITED STATES MARINE CORPS
LAND AND TRAINING AREA REQUIREMENTS MANAGEMENT INFORMATION SYSTEM
MARINE CORPS RECRUIT DEPOT, PARRIS ISLAND

PAGE 21

14 MAY 1991

RANGE NAME: FUSE RANGE

OUTDOOR NON-FIRING

DATA DATE: FEB 27, 1989

DESCRIPTION: PRACTICE HAND GRENADE RANGE
TOTAL NO. FIRING PTS: 2 NO. USEABLE PTS: 2
STATUS: ACTIVE

RANGE USES:

PRIMARY USE: HAND GRENADE DISTANCE AND ACCURACY (NON-LIVE) COURSE

AMMUNITION AUTHORIZED:

HAND GRENADE, PRACTICE

TARGETS/SIMULATORS/DEVICES:

TARGET DESCRIPTION	QUANTITY	POWER	CONDITION
PIT AREA	1		

FACILITIES (NUMBER OF EACH):

NONE

ELECTRICITY AVAILABLE: NO

INSTALLED COMMUNICATIONS: NONE

LASERS AUTH: NO

LIGHTS: NO

NIGHT USE AUTH: NO

MANEUVERS AUTH: NO

WATER SYSTEM: NO

MAP COORDINATE: NF286757

PRIMARY DIRECTION OF FIRE: 360 DEGREES

SIZE: 60 METERS X 80 METERS.

AREA SUITABILITY:

UNIT TYPE	UNIT SIZE	NO. OF UNITS
-----	-----	-----
RECRUIT	PLATOON	1

GEOGRAPHICAL DATA:

ACCESS ROUTES	NUMBER
LAND	1

SOIL TYPE	PERCENTAGE
SANDY	20%
LOAMY	80%

TERRAIN TYPE	PERCENTAGE
LEVEL	100%

14 MAY 1991
RANGE NAME: HAND GRENADE RANGE
OUTDOOR FIRING
DATA DATE: FEB 27, 1989

UNITED STATES MARINE CORPS
LAND AND TRAINING AREA REQUIREMENTS MANAGEMENT INFORMATION SYSTEM
MARINE CORPS RECRUIT DEPOT, PARRIS ISLAND

PAGE 22

DESCRIPTION: GRENADE FAMILIARIZATION AND QUALIFICATION RANGE
TOTAL NO. FIRING PTS: 2 NO. USEABLE PTS: 2
STATUS: ACTIVE
YEAR BUILT: 84

RANGE USES:
PRIMARY USE: HAND GRENADE QUALIFICATION COURSE

AMMUNITION AUTHORIZED:
HAND GRENADE, FRAG.

TARGETS/SIMULATORS/DEVICES:
TARGET DESCRIPTION QUANTITY POWER CONDITION
TIRES 6

RANGE USE RESTRICTIONS/COMMENTS:
-WEAPONS RESTRICTIONS/CAVEATS
THE RANGE CONTAINS TWO THROWING BUNKERS AND ONE PLATFORM FOR
CONTROL AND OBSERVATION.

FACILITIES (NUMBER OF EACH):
TOWERS: 1

ELECTRICITY AVAILABLE: NO
INSTALLED COMMUNICATIONS: COMMERCIAL TELEPHONE, PUBLIC ADDRESS
LASERS AUTH: NO LIGHTS: NO NIGHT USE AUTH: NO MANEUVERS AUTH: NO WATER SYSTEM: NO

MAP COORDINATE: NF286753
PRIMARY DIRECTION OF FIRE: 270 DEGREES
SIZE: 200 METERS X 180 METERS.

AREA SUITABILITY:
UNIT TYPE UNIT SIZE NO. OF UNITS

RECRUIT PLATOON 1

GEOGRAPHICAL DATA:
ACCESS ROUTES NUMBER
LAND 1
SOIL TYPE PERCENTAGE
SANDY 20%
LOAMY 80%
TERRAIN TYPE PERCENTAGE
LEVEL 100%

APPENDIX D
INTERVIEWS / POC

INTERVIEWS

The following individuals provided pertinent information through interviews concerning Marine Corps Recruit Depot Eastern Recruiting Region Parris Island. A summary of these cited conversations is included in Section 4.3. Details of the conversations are recorded as Telephone Conversation Record for the following:

<u>Individual</u> <u>Contacted</u>	<u>Date</u> <u>Interviewed</u>	<u>Position</u>	<u>Conversation</u> <u>Documented</u>
Thomas Swearingen	9 February 1999	retired Chief Warrant Officer (CW04)	D-3

The archive search team also contacted the following individuals in preparation of this ASR. Conversation with these people yielded information of three general sorts:

- background data contained in written documents
- negative information (i.e. no pertinent knowledge of the site)
- coordination of efforts for various interested parties

While valuable, conversations with these individuals did not yield information cited in this report and hence Telephone Conversation Records have not been included. (See additional Points of Contact under section 4.2 Records Review):

<u>Individual</u>	<u>Telephone Number</u>	<u>Position</u>
<u>Headquarters U.S. Marine Corps (DSN: 225)</u>		
Commandant of the Marine Corps 2 Navy Annex (LFL-6) Washington, D.C. 20380-1775		
<u>CMC (LFL) Environmental Management Section</u>		
Craig Sakai	703-695-8517	Head, Environmental Management Program
Kelly Dreyer	703-695-8302	Installation Restoration Program Manager
CAPT Dave Cook	703-695-8302	
FAX	703-695-8550	
<u>CMC (LFL) Real Estate and Base Structure Section</u>		
Richard Anderson	703-695-8240	
<u>CMC (LFL)</u>		
Kim Weirick	703-695-8202	Deputy Chief, Land Use and MILCON Branch CMC (LFL)
<u>Other</u>		
MAJ Lehmann	703-614-2544	HQMC PP&O (Office, Deputy Chief of Staff for Plans, Policy and Operations)
MAJ Shannon Shy	703-614-2150	HQMC-CL (counsel?)

Marine Corps Recruit Depot Eastern Recruiting Region Parris Island

Tim Harrington	843-525-3423	Natural Resources and Environmental Affairs Office
	harringtont@pik.usmc.mil	
Sharad Thakar	843-525-2604	Civil Engineer, Public Works
1stLT Ed Power	843-525-3322	Weapons and Field Training Battalion
CW03 Bob Ledyard	843-525-2466	Chief Range Officer
Steven Wise	843-525-3765	Director, Parris Island Museum
	wise@clb.usmc.mil	
Gloria McGonnell	843-525-2597	Plant Property Manager

Marine Corps Base Quantico (DSN: 278)

Marine Corps Air Ground Museum

Mike Starn	703-784-2606	Aviation Curator
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U.S. ARMY CORPS OF ENGINEERS POINT OF CONTACTS (POC)

The following individuals prepared the Archive Search Report or are involved in the process:

U.S. Army Corps of Engineers

St. Louis District

Engineering Division - Ordnance and Technical Services Branch (CEMVS-ED-P)

1222 Spruce Street

St. Louis, MO 63103-2833

<u>Individual</u>	<u>Telephone Number</u>	<u>Position</u>
Kenneth J. Brimm	314-331-8797	ED-P, Historian
Brian Colgate	314-331-8744	ED-S, CADD Specialist
Randal Curtis	314-331-8786	ED-P, ASR Project Manager
Michael Dace	314-331-8036	ED-P, Chief of Ordnance and Technical Service Branch
Shirley Hamilton	314-331-8848	ED-P, Project Assistant
Jennifer James	314-331-8897	ED-P, Quality Assurance Specialist Ammunition Surveillance (QASAS)
Gregg E. Kocher	314-331-8790	ED-P, Safety Specialist
Shelia Thomas	314-331-8793	ED-P, Historian
Rick Webster	314-331-8639	ED-S, Aerial Photography Interpretation

U.S. Army Engineering and Support Center Huntsville

Center of Expertise and Design Center of Ordnance and Explosives

CEHNC-ED-SY-O

P. O. Box 1600

Huntsville, AL 35807-4301

<u>Individual</u>	<u>Telephone Number</u>	<u>Position</u>
Danny Mardis	205-895-1797	ASR Project Manager

TELEPHONE OR VERBAL CONVERSATION RECORD DATE: 9 February 1999

For use of this form, see AR340-15; the proponent agency is the Adjutant General's Office.

SUBJECT OF CONVERSATION UXO and ordnance use at MCRD Parris Island		
PERSON CALLING Randal S. Curtis	ADDRESS CEMVS-ED-P	PHONE NUMBER AND EXTENSION 314-331-8786
PERSON CALLED Thomas F. Swearngen	OFFICE retired Chief Warrant Officer (CW04)	PHONE NUMBER AND EXTENSION 843-525-1464

SUMMARY OF CONVERSATION:

At the suggestion of the installation I spoke with retired Chief Warrant Officer (CW04) Thomas F. Swearngen. We spoke for approximately about 70 minutes as he described his knowledge of UXO and ordnance use at Parris Island. He retired in 1974 with 27 years in EOD and 30 years with the USMC. Once I explained the purpose of my phone call, he provided almost all of this information with little questioning from me (i.e. I wasn't putting words or ideas in mind). On 24 March 1999, the ASR team met personally with him and reconfirmed this information and the locations of items of interest.

His familiarity with Parris Island comes from living there three times: as a youth in the 1930s, boot camp in 1943 and as an EOD officer at MCAS Beaufort from 1965-74 (except for two years in Vietnam). After retiring, he returned to the Port Royal area. His father was SGT. Major at Parris Island, and he was there from 1932-38, when they left for Quantico. He returned during World War II to complete his basic training and act as a drill instructor.

ARTILLERY-PARRIS ISLAND

As he recalled, there was no established artillery ranges at Parris Island in the 1930s. However, he remembered that the 75mm pack howitzers would come down from Quantico and set up near where the current senior enlisted quarters are (in the obstacle courses area). Marines would fire toward Elliot's Beach with Zone 1 (i.e. short range) charges. He was unaware of any charge greater than that or any rounds larger than the 75mm being used. Periodically, about 2-dozen times, while he was at MCAS Beaufort, the EOD unit would respond to incidents in the vicinity of trailer park. They found pieces of fuze and shrapnel, but never a complete UXO dud round that he remembered. They also found portions of 75mm projectiles lodged in trees in the Elliot's Beach Area.

He also recalled a reinforced concrete bunker in the woods behind the Weapons Training Battalion. He was fairly certain it still exists but he didn't know what its specific use was but it looked like an observation post (I reported on our research indicating its use for artillery ranges). He never was called to recover UXO in that area but it was covered up with vegetation.

He doesn't know anything about WWII era Defense Battalion 3" and 5" guns, reportedly at Parris Island.

BOMBING RANGES-PARRIS ISLAND

In the 1930's, the bombing range was at what's currently the main parade ground. He recalled watching Marine pilots drop the 5-pound bomblets there as a kid. After the runs were completed, he and his buddies would dig them up, clean them and then sell them to Marines looking for souvenirs of the lamp variety. He thought they may have been made of zinc or pewter. They made the bombs at the Navy Yard in DC, as his Dad worked there after he was transferred from Parris Island. The parade ground was covered with asphalt by his time in boot camp.

Another bombing range was located near the current golf course. An exact description of the location was difficult to ascertain over the phone but he thought the remnants of the target were still there. The target consisted of welded railroad ties, covered with canvas. The area had lots of debris from the water and sand filled bombs.

STRAFING RANGE-PARRIS ISLAND

He remembered a strafing range in the 1937-38 time frame. The location of the strafing range can be located by "positioning one's self at the entrance to the rappelling tower and facing east toward the swamp". They built a runway over the spot in WWII. Planes would come down from Quantico and land at Page Field, which at the time was nothing but an open field (i.e. no distinct runways). They had built a large wooden platform/deck approximately 100 by 100 feet, which fighters would shot at. Each pilot's ammunition had different color printers ink on it/in it, which was used to score the individual pilots. The biggest ammo that he was aware of them using was caliber .50. However, he remembered recovering 20mm cartridge cases and TP projectiles at places on the island, but not necessarily specifically at this location.

ROCKET RANGE-PARRIS ISLAND

Based on OE debris he collected while with the EOD unit, he thought the 2.36-inch and 3.5-inch rocket range was on the Broad River beach area. The impact area was on the beach, as far north of the pistol range as you could go by vehicle and then some (i.e. it was past the most distant berm for A Range). They cleared out at least a weapons carrier load of WWII and Korean era rocket residue from this area. As he recalled, it was all essentially practice rounds. He felt that with the tidal action in the area, we might still locate some debris. He suspects that the impact area for the rifle grenade range and 60mm mortar range must have been in the same area as the rocket range.

HAND GRENADE RANGES-PARRIS ISLAND

He described a WWII era hand grenade range, located behind the Weapons Battalion HQ in what is now a cleared field. It was near, but well behind, the old indoor swimming pool, which is now gone. It was used for both practice and HE hand grenades but mostly inert training grenades. The range was made up of 2 by 4-inch wood framing, simulating building windows.

The new hand grenade range, which is now closed, is at the extreme east end of the old airfield on the Beaufort River side.

MORTAR RANGES-PARRIS ISLAND

He felt certain that there had been a 60mm range on Parris Island but couldn't say for certain where it was located. He suspected it was in the area of the rocket range (see above) having found mortar OE debris there. To the best of his knowledge the 60mm rounds the recovered were practice rounds. He didn't recall any 81mm rounds except maybe flares.

SMALL ARMS RANGES-PARRIS ISLAND

He remembered that during WWII, the Marines had built pistol and small ranges along Broad River shoreline to the northwest. The pistol range and rifle ranges fired directly into the an impact area in the water. He personally shot rising submachine guns, sub-caliber carbines and pistols there.

He remembered another pistol range near the current marina and O club in the 1930s. It had about 5 berms, about 10-12 feet tall. They were gone by the time he was there for boot camp.

CHEMICAL WARFARE MATERIAL-PARRIS ISLAND

In the 1965-67 time frame, they opened up the old CW warehouse. Located by the gas chamber, it was approximately 100 by 20-30 feet wide galvanized metal building, with a concrete deck. They found a bunch of chemical gas identification kits from WWII. They collected about dozen of the 8-inch diameter metal containers filed with glass tubes. They destroyed the items at MCAS Beaufort by burning them, the standard, prescribed method at the time. They tested the demolition area following the disposal but found no traces of chemical warfare gas residue.

However, in vicinity of the old WWII gas chamber, they tested and detected mustard gas residue, and to a lesser extent lewisite. They determined this by using the glass tube inhaler type detection kits, where material changed color in the presence of different chemical warfare gases.

EOD RANGE-PARRIS ISLAND

There was no EOD or demolition range at Parris Island to his knowledge. The EOD team at Parris Island in the early 1970s, was there primarily for the hand grenade range. They generally destroyed items in place or took them to the EOD range at MCAS Beaufort. The unit at the air station gained the EOD support mission for Parris Island in the early 1970s.

MCAS BEAUFORT

While at MCAS Beaufort, the EOD unit kept the EOD area meticulously clean. However, he did know that the air station had designated an area for burial of radioactive material, generated by different units and/or aircraft. The radiological disposal yard was located on a dirt road past the hobby shop but before the picnic area. A barbed wire fenced area enclosed the area, with a lock on it and appropriate signage.

MCB QUANTICO

He was at Quantico from 1939-43. He recounted a tale of a prank he played on the Marmon-Herrington (CTL3 and 3A), 2 man tank crews. The tanks were tiny, fast, rubber tracked, vehicles that ran around the woods. The Marines had constructed trenches and log

walls as obstacles to maneuver over and across but just barely. Prior to some HQ types coming down, he and his buddies increased the depth of the trenches and the height of the log walls, so the tanks could no longer maneuver through them. His pop gave him the expected disciplinary measures of a Marine Corps father of the time.

FUDS RANGES

On the northeastern beach of Hilton Head, he felt there was a bombing range. When he was at MCAS Beaufort, they responded to complaints from the private landowners (Broad River Beach/ Port Royal Plantation Beach) about the OE debris. The OE was primarily HE fragment bombs, with "mushroom head" fuzes but it also included water and sand filled bombs and 2.25-inch SCAR (sub-caliber aerial rockets). They collected up to 5 dump trucks of OE scrap off the beach, which they buried out in big holes at MCAS Beaufort's demolition range. He knew that prior to WWII, there was a Marine Corps detachment at Hilton Head. They had a small arms range in use there but they came back to Parris Island for yearly qualification. He was not aware of any artillery firing occurring at Hilton Head in the 1930s.

He also suspected that there was some kind of facility at Hunting Island. The ranger for the State Park would frequently call them out to collect caliber .50 cartridge cases and complete rounds. It was obviously used as some kind of impact area. He also suspected that there may have been some kind of range at Land's End/Bay's Point.

WATER RANGES

As for water targets, he heard rumors of them taking the covered landing craft ("kicker"), which was about 40-50 feet long out, and placing 55 gallon drums in the ocean for aerial target practice.

SITE VISIT

I inquired if CW04 Thomas F. Swearngen would be able to join us during the site visit to help locate some of these areas but he begged off. He's due to go in for chemotherapy for leukemia, next Monday and wasn't sure if he would be out of the hospital by the week of 22 March.

APPENDIX E

PRESENT SITE PHOTOGRAPHS

PRESENT SITE PHOTOGRAPHS

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3.	Probable Rocket and Mortar Impact Area. Probable rear body of 81mm mortar.....	E-4
4.	Probable Rocket and Mortar Impact Area. One of many 2 to 3-inch diameter metal rods of undetermined use	E-4
5.	Probable Rocket and Mortar Impact Area 3.5-inch practice rocket warhead	E-5
6.	Former Small Bore Ranges Butts near Broad River shoreline. Residue from a possible burn pit for small arms ammunition	E-5
7.	Approximate location of grenade course depicted on 1944 map Khe Sanh/Range “A”	E-6
8.	Approximate location of rifle grenade range depicted Khe Sanh/Range A.....	E-6
9.	Concrete Firing Position R-U shaped barricade	E-7
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12.	Rifle Range at Ballast Creek, looking east from Ballast Creek Bridge toward butt area.....	E-8
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15.	Aerial Bombing Target at Page Field, Approximate location	E-10
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17.	Aerial Bombing Target at Southern Tidal Flats. OE debris.....	E-11
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19.	Concrete Observation Point for 1937 Artillery Range	E-12
20.	1937 artillery firing point B circled in red looking west from roadway next to Argonne Trailer Park	E-12



Photo #1 – Marine Corps Recruit Depot Eastern Recruiting Region – Probable Mortar Impact Area. Looking south along oyster shell berms and Broad River shoreline riprap toward firing lines of Range A.



Photo #2 - Marine Corps Recruit Depot Eastern Recruiting Region – Probable Rocket and Mortar Impact Area. Piece of 3.5-inch rocket tail at N 32⁰ 20' 11.63", W 80⁰ 43' 10.37"; 17S NR 26393 77777.



Photo #3 Marine Corps Recruit Depot Eastern Recruiting Region – Probable Rocket and Mortar Impact Area. Probable rear body of 81mm mortar at N32⁰ 20' 10.64", W 80⁰ 43' 09.65"; 17S NR 2641277746.



Photo #4 Marine Corps Recruit Depot Eastern Recruiting Region – Probable Rocket and Mortar Impact Area. One of many 2 to 3-inch diameter metal rods of undetermined use; possibly from a 2.25-inch SCAR but condition never allowed for a good identification.



Photo #5 Marine Corps Recruit Depot Eastern Recruiting Region – Probable Rocket and Mortar Impact Area 3.5-inch practice rocket warhead at N 32⁰ 20' 10.55", W 80⁰ 43' 09.49"; 17S NR 26416 77744.



Photo #6 Marine Corps Recruit Depot Eastern Recruiting Region – Former Small Bore Ranges Butts near Broad River shoreline, west of Range A. Residue (i.e. cartridge cases and bullets) from a possible burn pit for small arms ammunition.



Photo #7 Marine Corps Recruit Depot Eastern Recruiting Region – Grenade Course (1944)
approximate location of grenade course depicted on 1944 map looking northwest toward firing line for Khe Sanh/Range A in background.



Photo #8 Marine Corps Recruit Depot Eastern Recruiting Region – Rifle Grenade (1944).
Approximate location of rifle grenade range depicted on a 1941 map looking northwest toward obstacle course and firing line for Khe Sanh/Range A in the distant background.

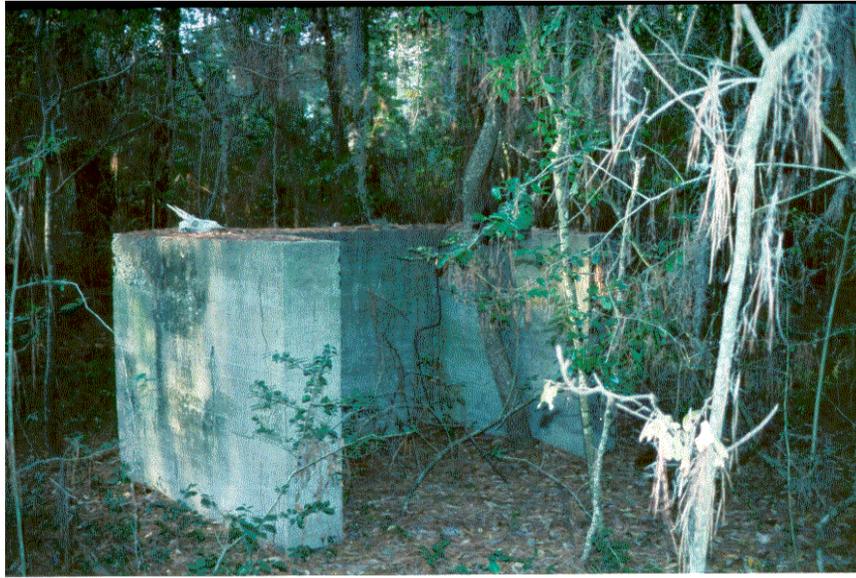


Photo #9 Marine Corps Recruit Depot Eastern Recruiting Region – Concrete Firing Position R – this U shaped barricade is one of five L and U shaped barricades at this position, which is typical of permanent 75mm artillery firing points of the late 1930s.



Photo #10 Marine Corps Recruit Depot Eastern Recruiting Region – Magazine #16 – approximate location of original U.S. Naval Station magazine;; Four Winds Club in background is approximate location of Fort Haines.



Photo #11 – Marine Corps Recruit Depot Eastern Recruiting Region - Fort MacKay – approximate location of Spanish- American War defense emplacement; Note: (CID) Criminal Investigation Division Building and original dry dock area in background.



Photo #12 – Marine Corps Recruit Depot Eastern Recruiting Region - Rifle Range at Ballast Creek, looking east from Ballast Creek Bridge toward butt area of former range; circled is location of 5 2.5 by 2.5 foot concrete blocks.



Photo #13 – Marine Corps Recruit Depot Eastern Recruiting Region – Skeet and Trap Range, AS47 & AS48 – approximate location of former range.



Photo #14 – Marine Corps Recruit Depot Eastern Recruiting Region – Building 685, former Gas Chamber – currently Close Combat Instruction area.



Photo # 15 Marine Corps Recruit Depot Eastern Recruiting Region – Aerial Bombing Target at Page Field. Approximate location of pre-1942 target; Note: ground illumination flare in foreground runway in clearing in background.



Photo #16 Marine Corps Recruit Depot Eastern Recruiting Region - Aerial Bombing Target at golf Course. Approximate location of target center.



Photo #17 Marine Corps Recruit Depot Eastern Recruiting Region – Aerial Bombing Target at Southern Tidal Flats. OE debris, probably from 100-pound practice bombs; Note vertical metal angle iron tie in background acting as target center.



Photo #18 Marine Corps Recruit Depot Eastern Recruiting Region – Aerial Bombing Target at Southern Tidal Flats. Vertical metal angle iron is one of three that marked target center at N 32° 28' 07.40", W 80° 40' 44.17"; 17S NR 30226 73962.



Photo #19 Marine Corps Recruit Depot Eastern Recruiting Region – Concrete Observation Point for 1937 Artillery Range. Coordinates at N 32⁰ 19' 58.37", W 80⁰ 42' 03.82"; 17S NR 28134 77373.



Photo #20 Marine Corps Recruit Depot Eastern Recruiting Region – 1937 artillery firing point B circled in red looking west from roadway next to Argonne Trailer Park.

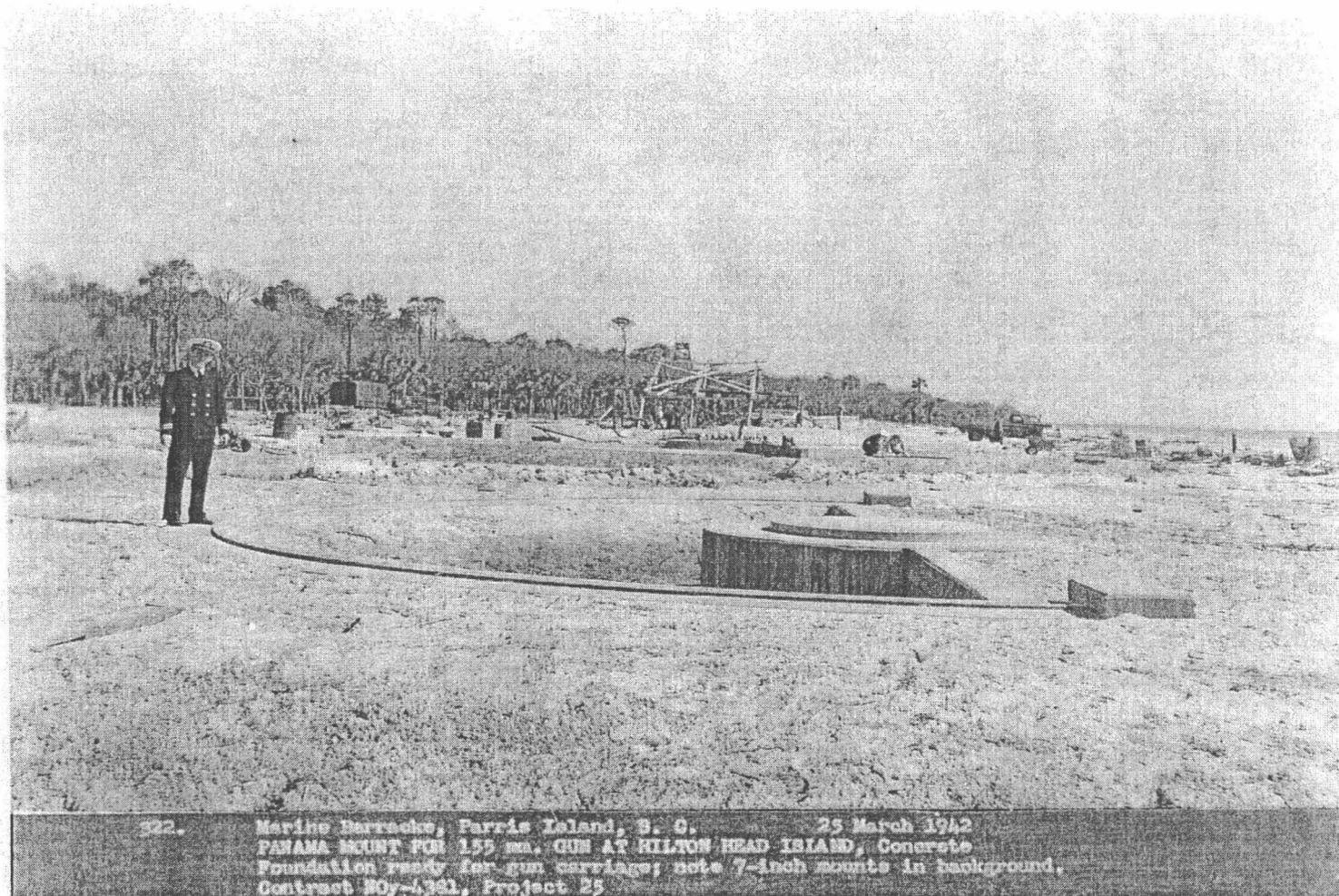
APPENDIX F
HISTORICAL PHOTOGRAPHS

HISTORICAL PHOTOGRAPHS

- | <u>Section No.</u> | <u>Historical Picture</u> |
|--------------------|---|
| F-1 | Marine Barracks, Parris Island, SC
Photograph - Marine Barracks, Parris Island, SC. Panama Mount for 155 mm. gun at Hilton Head Island, dated 25 March 1942. Record Group 71, Entry CA, Box 356 Folder Parris Island, S.C. (Hilton Head Island) Still Pictures Branch, National Archives at College Park, MD |
| F-2 | Marine Barracks, Parris Island, SC
Unlabeled Photograph 2.36 inch rocket used at Parris Island, circa 1945.
Miscellaneous Photograph Parris Island Museum, MCRD ERR PI, SC. |
| F-3 | Marine Barracks, Parris Island, SC
Photographs- From Yearbook <i>Marine Barracks, Parris Island, SC. Marine Corps Recruit Depot 6th Battalion</i> . Book VE 434.P3.M37 1954 U.S. Military History Institute Carlisle Barracks, PA |

APPENDIX F-1

**Marine Barracks, Parris Island, S.C., Panama
Mount for 155 mm. Gun at Hilton Head Island, dated
25 March 1942. Record Group 71, Entry CA Box
356 Folder Parris S.C. (Hilton Head Island) Still
Pictures Branch National Archives at College Park,
MD**



APPENDIX F-2

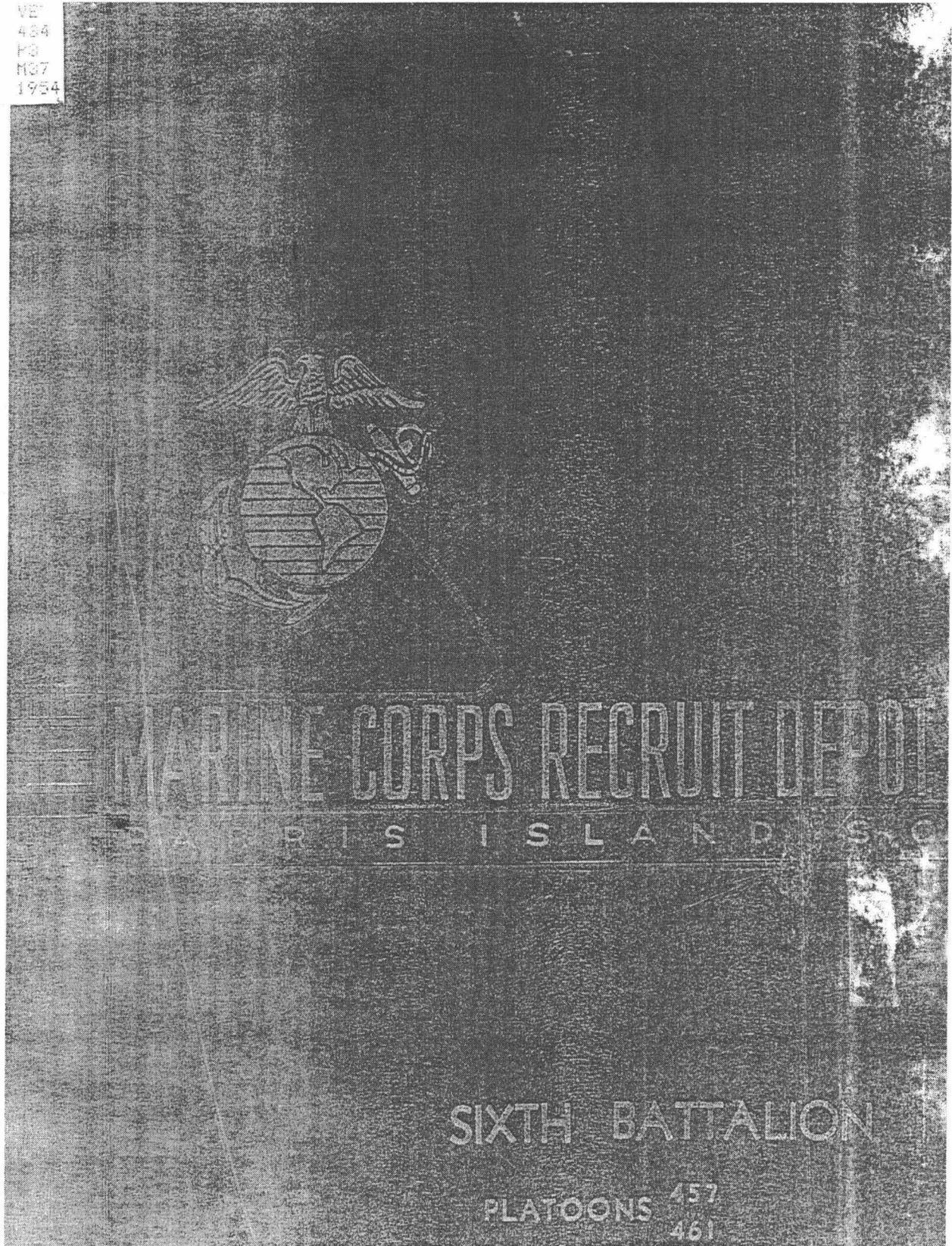
**Marine Barracks, Parris Island, S.C., Unlabeled
Photograph of 2.36 inch Rocket Used at Parris Island,
circa 1945. Miscellaneous Photograph Parris Island
Museum, MCRD ERR Parris Island.**



APPENDIX F-3

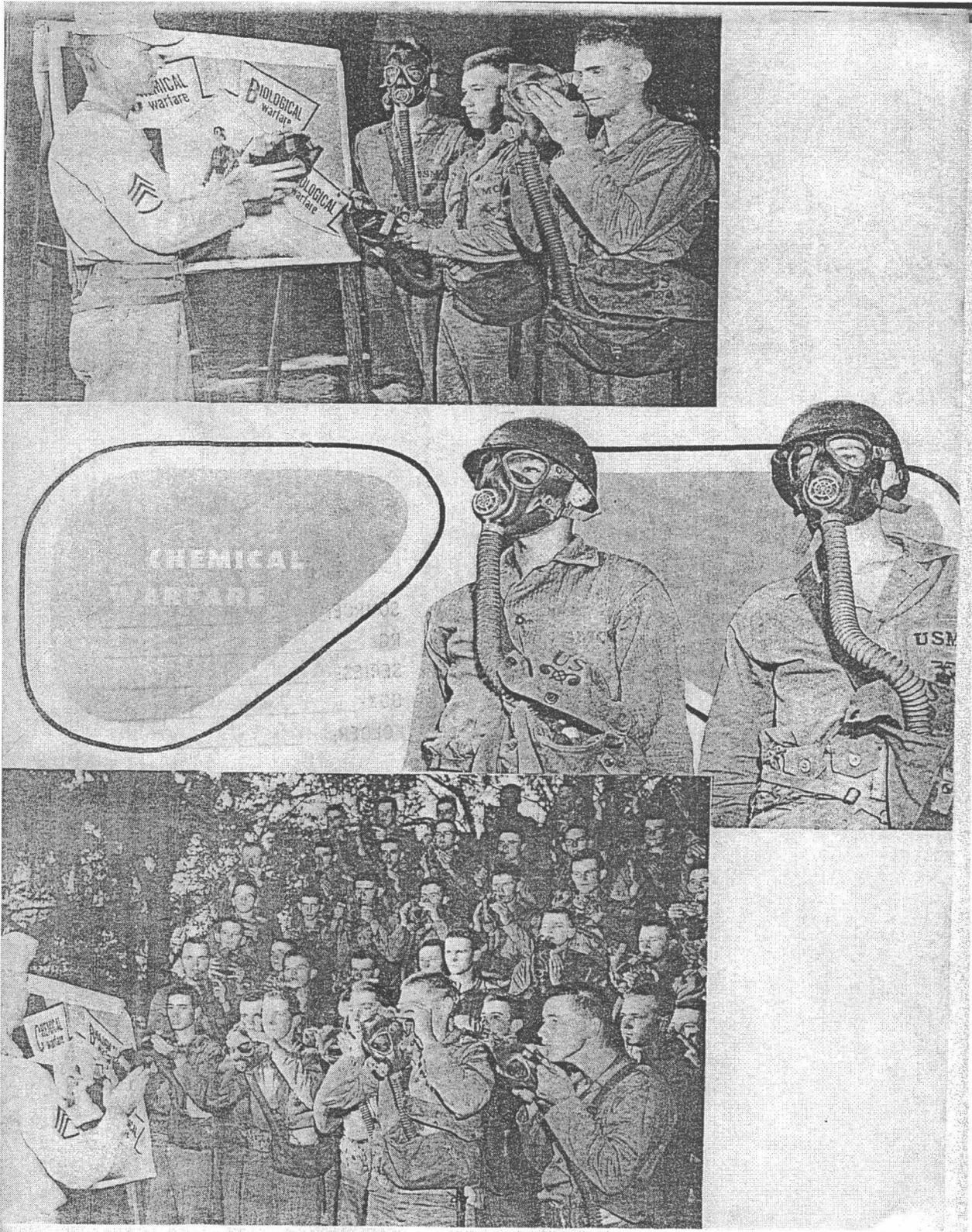
**Marine Barracks, Parris Island, S.C. Marine Corps
Recruit Depot, 6th Battalion. Book: VE 434.P3.M37
1954 U.S. Military History Institute, Carlisle
Barracks, PA**

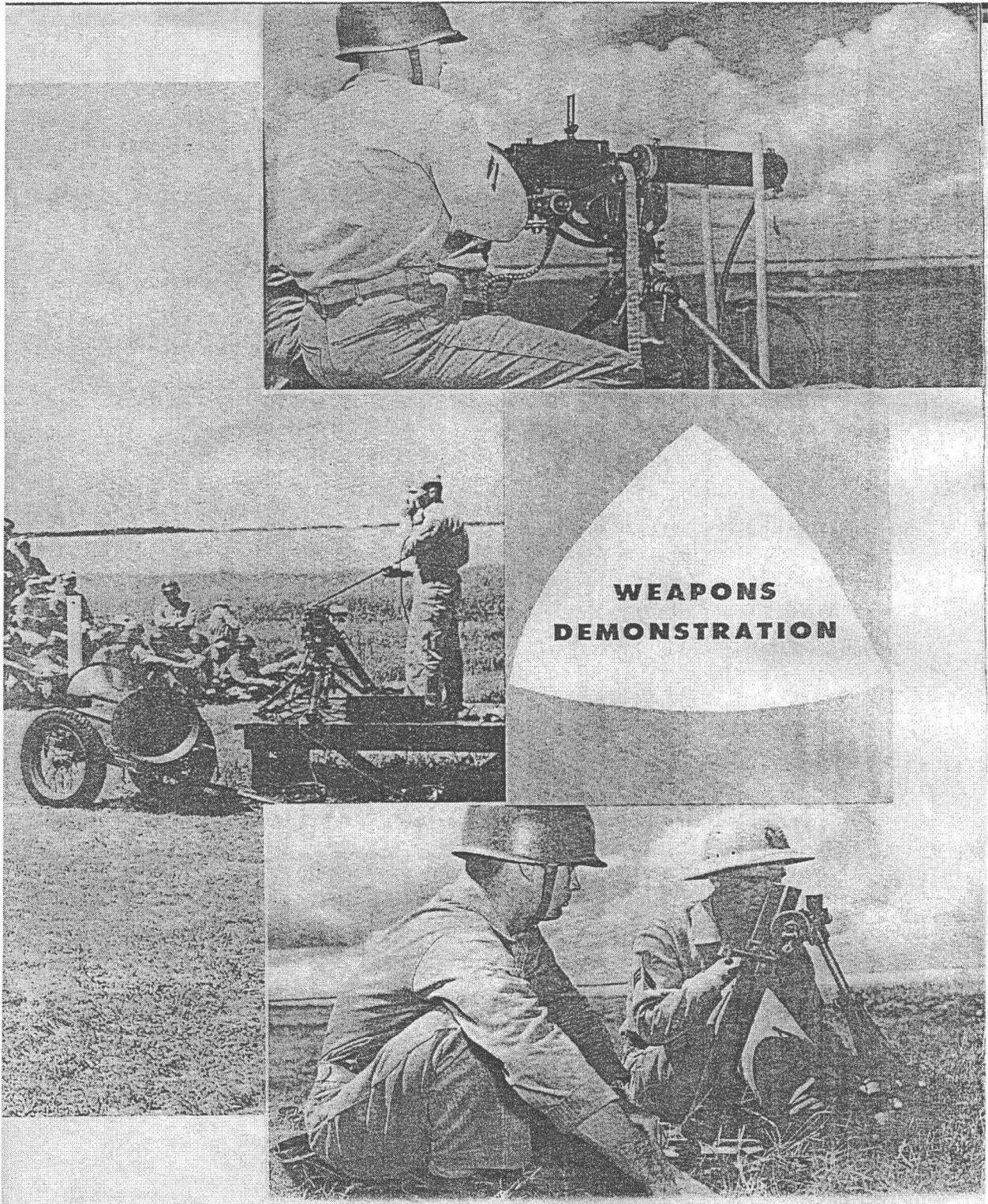
VE
484
P3
M37
1954

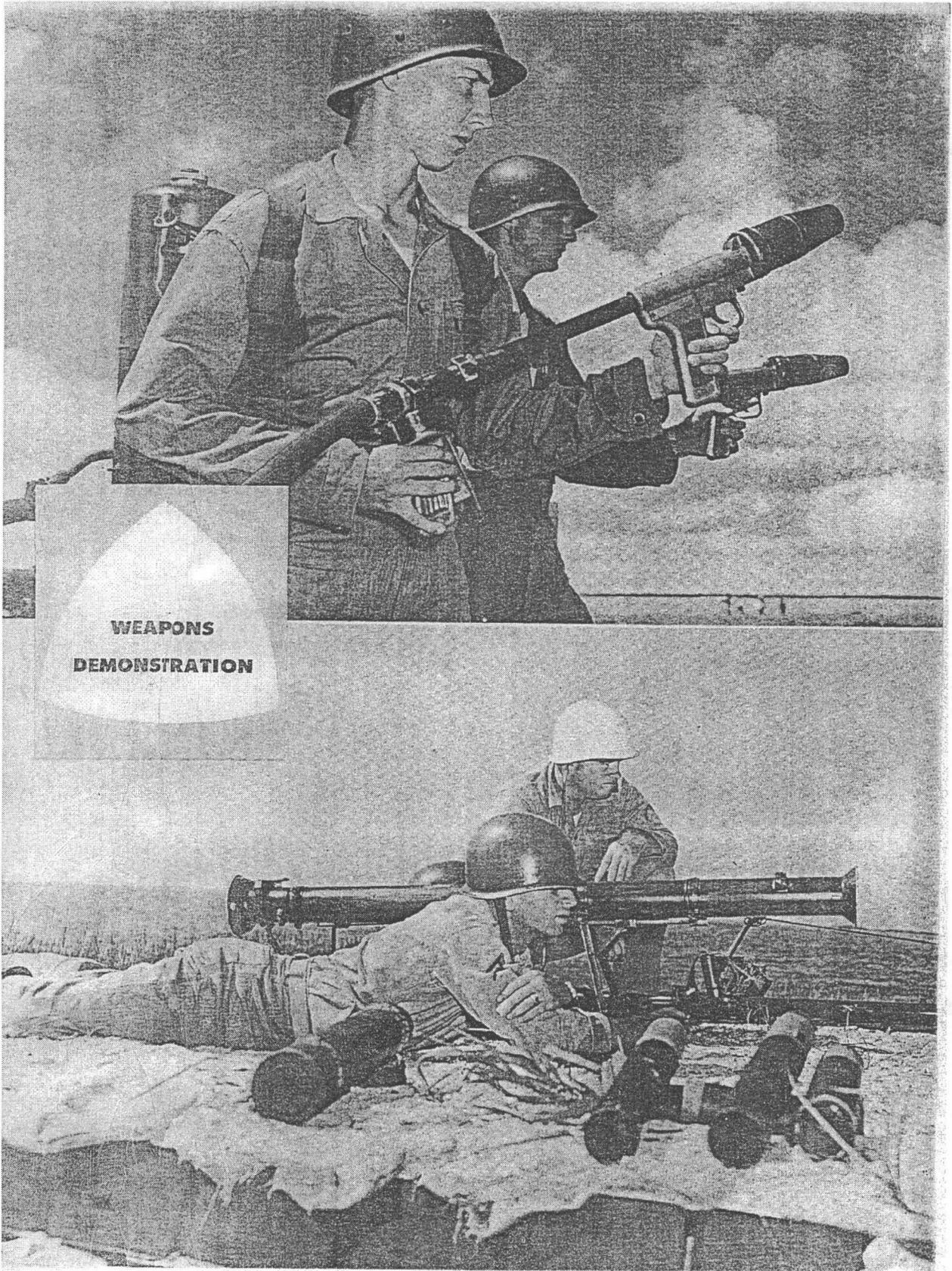












APPENDIX G

HISTORICAL MAPS / DRAWINGS

HISTORICAL MAPS / DRAWINGS

Section No. Historical Maps / Drawings

- G-1 Bureau of Yards and Docks, Naval Department
Plan of the U.S. Naval Station Port Royal, S.C., dated October 1899. Item:
840165CO-18, Parris Island Museum, MCRD ERR Parris Island, SC.
- G-2 Naval Department, Civil Engineer's Office
Plan of the U.S. Naval Station Port Royal, SC., dated July 1903, submitted as
no changes 30 June 1905. *Maps - Navy Yards and Naval Stations*, dated May
1909, Seabee Museum/History Office, Naval Construction Battalion, Port
Hueneme, CA.
- G-3 U.S. Marine Corps
Map of Parris Island, SC., dated 5 April 1916. Map Drawer: Master Shore
Development Plans, Public Works Department, MCRD ERR Parris Island, SC.
- G-4 Bureau of Yards and Docks, Naval Department
Plot of Island and Environs, Extension to Marine Barracks Parris Island, SC.,
dated 11 June 1918. Reel 584, frame 18, Construction Battalion Logistics
Center, Naval Construction Battalion, Port Hueneme, CA.
- G-5 U.S. Marine Barracks Parris Island
Annual Report 1919 Main Station, dated 30 June 1919. Record Group 71,
Entry: Photos of Construction Projects 1879-1942, Parris Island, Box 354, Still
Pictures Branch, National Archives, College Park.
- G-6 U.S. Marine Barracks Parris Island
Receiving Station, Flying Field and Rifle Range dated 30 June 1929. Map
Drawer: Master Shore Development Plans, Public Works Department, MCRD
ERR Parris Island, SC.
- G-7 U.S. Marine Corps
Key Map Marine Barracks Parris Island, SC., dated 30 June 1933, revised 30
June 1934. Record Group 71, Reel 620, Folder 610 Parris Island, National
Archives, College Park, MD.
- G-8 U.S. Marine Corps
Map of Main Station Marine Barracks Parris Island, SC., dated 30 June 1933,
revised 30 June 1934. Item: 840165-132, Parris Island Museum, MCRD ERR
Parris Island, SC.

- G-9 U.S. Marine Barracks Parris Island
Field Artillery Range, dated 1 December 1937. Record Group 127, Entry 18B, Box 236, Folder 1275/70-5480 Parris Island, National Archives, College Park, MD.
- G-10 U.S. Marine Barracks Parris Island
c.1937 *Southern Area, Parris Island, S.C.*, undated map c.1937, based on aerial photography flown 15 May 1937. Record Group 127, Entry 18 General Correspondence, 1933-38, Box 24, Folder 1275/70-5480, National Archives, College Park, MD.
- G-11 Bureau of Yards and Docks, Naval Department
Marine Barracks Parris Island, SC Key Map., dated 30 June 1940. Reel 583, frame 592, Construction Battalion Logistics Center, Naval Construction Battalion, Port Hueneme, CA.
- G-12 U.S. Marine Barracks Parris Island
Map of Training Station Marine Barracks Parris Island, S.C., dated 30 June 1941. Map Drawer: Master Shore Development Plans, Public Works Department, MCRD ERR Parris Island, SC.
- G-13 U.S. Marine Barracks Parris Island
Map of Rifle Range Marine Barracks Parris Island, S.C., dated 30 June 1941. Map Drawer: Master Shore Development Plans, Public Works Department, MCRD ERR Parris Island, SC.
- G-14 U.S. Engineer Office, Savannah, Georgia
Proposed Aircraft Machine Gun Range, dated 21 October 1941. Record Group 127, Entry 18B, Box 211, Folder 1275-65 Ranges, Target, National Archives, College Park, MD.
- G-15 U.S. Marine Barracks Parris Island
Page Field, Field Lighting, dated 19 September 1941, revised 22 December 1941. Map Drawer 42, Page Field, Public Works Department, MCRD ERR Parris Island, SC.
- G-16 U. S. Coast and Geodetic Survey
Savannah Sectional Aeronautical Chart, Edition 8-2, dated 18 June 1942. Record Group 23, Entry Savannah, Cartographic Branch, National Archives, College Park, MD.

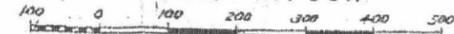
- G-17 U.S. Marine Barracks Parris Island
Rifle Range – Proposed Heads at Ends of Butts, dated 15 November 1944. Reel 585, frame 583, Construction Battalion Logistics Center, Naval Construction Battalion, Port Hueneme, CA.
- G-18 U.S. Marine Barracks Parris Island
Map of Marine Barracks Parris Island, S.C., Map A., dated 30 June 1946. Item: 840165-129, Parris Island Museum, MCRD ERR Parris Island, SC.
- G-19 U.S. Marine Barracks Parris Island
Map of Marine Barracks Parris Island, S.C., Map B., dated 30 June 1946. Item: 840165-129, Parris Island Museum, MCRD ERR Parris Island, SC.
- G-20 U.S. Marine Barracks Parris Island
Map of Marine Barracks Parris Island, S.C., Map C., dated 30 June 1946. Item: 840165-129, Parris Island Museum, MCRD ERR Parris Island, SC.
- G-21 U.S. Marine Barracks Parris Island
Map of Marine Barracks Parris Island, S.C., Map D., dated 30 June 1946. Item: 840165-129, Parris Island Museum, MCRD ERR Parris Island, SC.
- G-22 Marine Corps Recruit Depot Parris Island
Master Shore Development Plan Part III- Section 2 General Development Plan, Sheet 15 of 17, dated 31 July 1952. Map Drawer: Master Shore Development Plans, Public Works Department, MCRD ERR Parris Island, SC.
- G-23 Marine Corps Recruit Depot Parris Island
Marine Corps Recruit Depot Parris Island, dated 30 June 1953. Map Drawer: Master Shore Development Plans, Public Works Department, MCRD ERR Parris Island, SC.
- G-24 Marine Corps Recruit Depot Parris Island
Master Shore Development Plan Part III- Section 2 General Development Plan, Area "H" Sheet 9 of 17, dated 30 July 1954. Record Group 71, Entry 1001, Box 1175, Folder Parris Island: W42-37-PI-4, National Archives, College Park, MD.
- G-25 Naval Facilities Engineering Command, Southeast Division
Addition & Alterations to Outdoor Rifle Range Area & Vicinity Map, Marine Recruit Depot Parris Island, dated 28 April 1968, revised 6 February 1970. Map Drawer: Land Use, Plans, Public Works Department, MCRD ERR Parris Island, SC.

- G-26 Marine Corps Recruit Depot Parris Island
Map of the Marine Recruit Depot Parris Island, dated 5 January 1968, revised November 1973. Map Drawer: Land Use, Plans, Public Works Department, MCRD ERR Parris Island, SC.
- G-27 Marine Corps Recruit Depot Parris Island
Map of the Marine Recruit Depot Parris Island, dated 13 June 1983. Map Drawer: Land Use, Plans, Public Works Department, MCRD ERR Parris Island, SC.
- G-28 Marine Corps Recruit Depot Parris Island
New Combat Courses, General Locations, Location Map and Index of Drawings, dated 22 July 1987. Map Drawer: 44, Public Works Department, MCRD ERR Parris Island, SC.
- G-29 Marine Corps Recruit Depot Parris Island
Master Shore Station Development Plan, Part II Section 2, General Development Map, Area "F", dated 1 July 1966, revised 1 March 1988. Map Drawer: Master Shore Development Plans, Public Works Department, MCRD ERR Parris Island, SC.
- G-30 Marine Corps Recruit Depot Parris Island
Map of the Marine Recruit Depot Parris Island, dated January 1994. Item: 840165-122, Parris Island Museum, MCRD ERR Parris Island, SC.
- G-31 Marine Corps Recruit Depot Parris Island
ESQD Arcs MCRD Parris Island, S.C., dated 19 September 1996. Map Drawer: Depot Maps, Public Works Department, MCRD ERR Parris Island, SC.
- G-32 Marine Corps Recruit Depot Parris Island
Depot Map MCRD PISC., dated 9 January 1998. Map Drawer: 22, Public Works Department, MCRD ERR Parris Island, SC.
- G-33 U.S. Army Corps of Engineers
St. Helena Reservation and Adjacent Territory, undated, circa 1898. Record Group 77, Entry Fortifications Map File, Drawer 192. Sheet 3-2, National Archives, College Park, MD.
- G-34 Marine Corps Air Station Parris Island
Danger Area, Aerial Gunnery, Bombing and Tactical Operations of MCAS Parris Island, MCAAF Georgetown, NAS Beaufort, dated. 10 June 1944. Folder: Parris Island, SC, U.S. Naval Aviation History Center, Washington Navy Yard, Washington, D.C.

- G-35 U.S. Marine Barracks Parris Island
U.S. Marine Barracks Parris Island Proposed Bridge Head and Water Supply Area, undated, circa 1942, revised circa 1971. Folder: Beaufort MCRD 84.648 acres, muniment files, Real Estate Division, Naval Facilities Engineering Command-Southern Division, Charleston, SC.
- G-36 Naval Facilities Engineering Command
Real Estate Summary Map Marine Recruit Depot Parris Island, S.C., revision 5 dated 9 October 1992. Real Estate Division, Naval Facilities Engineering Command-Southern Division, Charleston, SC.

PLAN of the U.S. NAVAL STATION PORT ROYAL, S.C.

Scale in Feet.



Property Acquired in 1899 Shown in Red

Bureau of Yards and Docks,
Navy Department, Washington, D.C.
Oct. 1899.

Andrew Eastwood
Chief of Bureau.

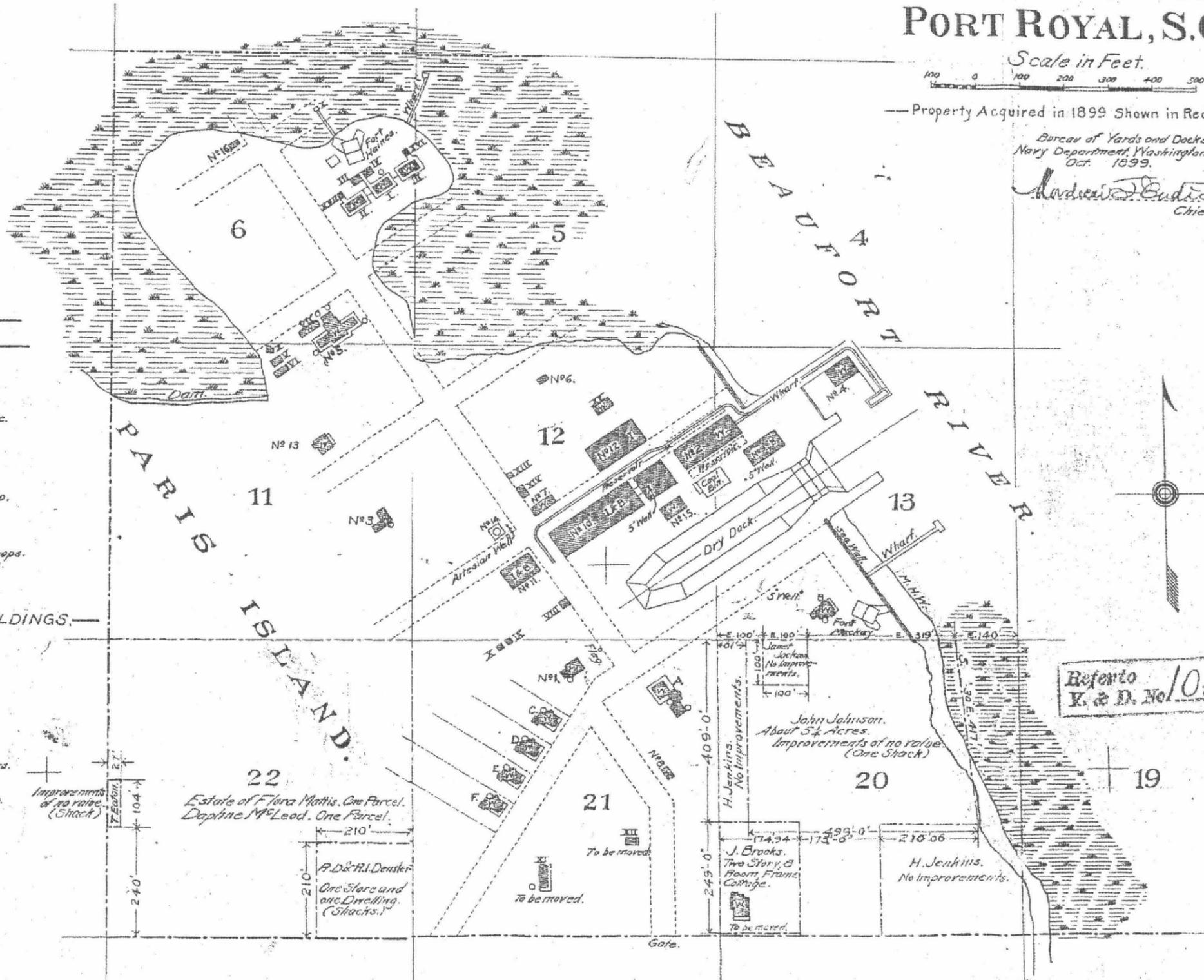
LEGEND.

YARD BUILDINGS.

- A. Commandant's House.
- B. Civil Engineer's House.
- C. Executive Officer's House.
- D. Surgeon's House.
- E. Paymaster's House.
- F. Naval Constructor's House.
- 1. Office Building.
- 2. Coal Shed.
- 3. Barn.
- 4. Boat House.
- 5. Marine Barracks.
- 6. Privy.
- 7. Yard D. Carpenter Shop.
- 8. Servants' Quarters.
- 9. Pump and Power House.
- 10. C. and P. Shop.
- 11. Store House.
- 12. Steel Annex to C. and P. Shop.
- 13. Marine Officer's Quarters.
- 14. Steel Tower and Tank.
- 15. C. and P. Tool House.
- 16. Magazine.

TEMPORARY BUILDINGS.

- I. Dispensary.
- II. Pavilion Wards.
- III. Kitchen.
- IV. Mess Hall.
- V. Barn.
- VI. Tool House.
- VII. Canteen.
- VIII. Hose House.
- IX. Wood House.
- X. Privy.
- XI. B. Fracks.
- XII. Quarters for Petty Officers.
- XIII. Oil House.
- XIV. Lime House.
- XV. Y. and D. Carpenter Shop.
- XVI. Operating Room.
- XVII. Store Room.



Refer to
K. & D. No. 10598

840165CO-18

Traced by Geo. P. Wood.

193

PORT ROYAL

616

L E G E N D.

Electric Light Wires ——— Steam Pipes ——— Water Pipes ——— Sewers & Drains ——— Telephone Wires ——— Railways ———
 Electric Lights, Arc # ——— Hydrants ——— Manholes ——— Salt Stacks, Stations, Yards, Outfalls, etc.

YARD BUILDINGS.

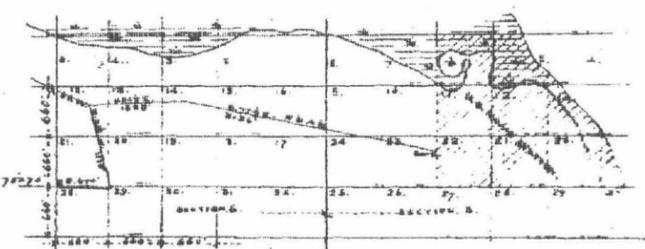
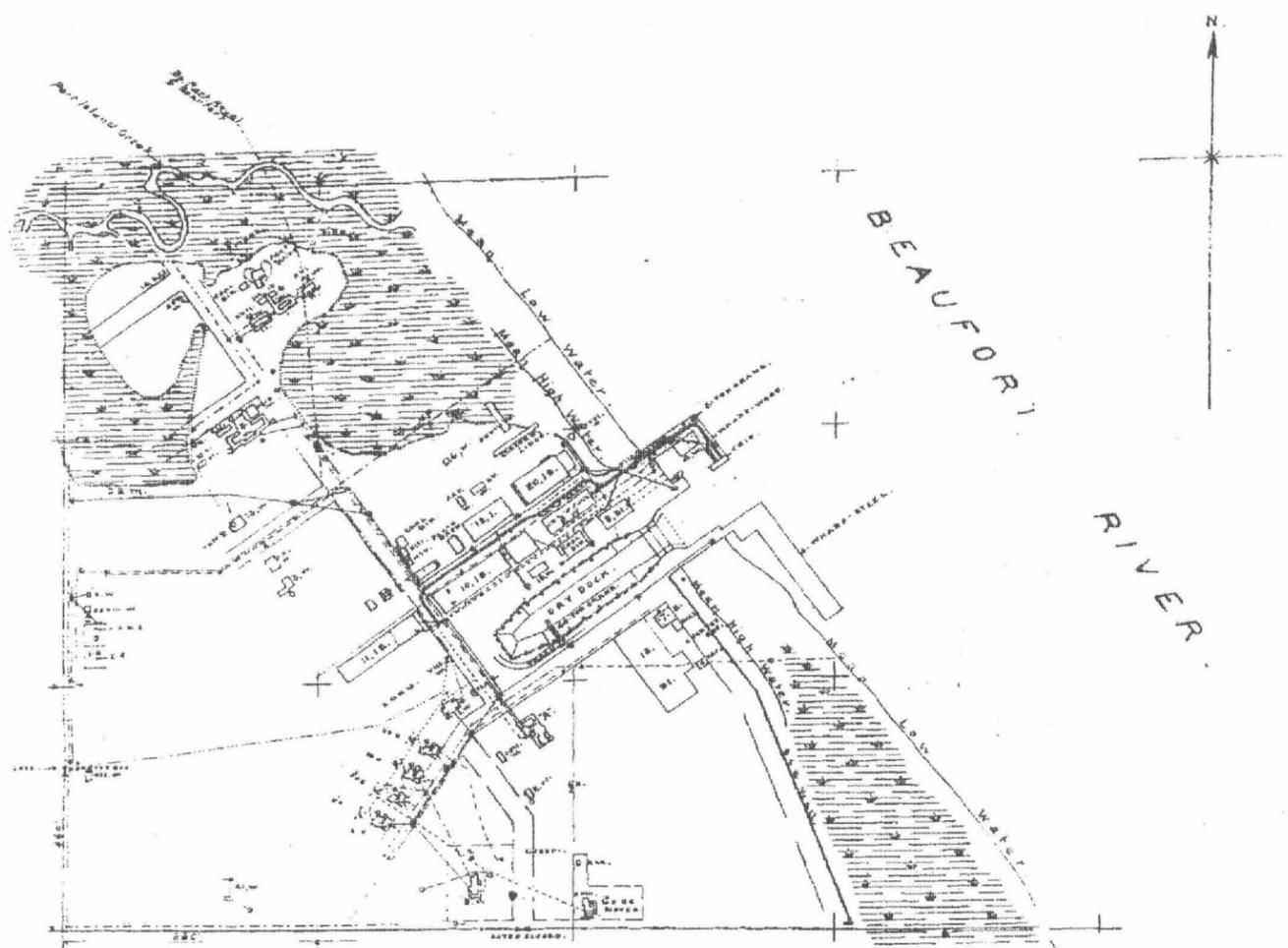
- A. Commandant's Office
- B. Civil Engineer's Office
- C. Capt. Quarters
- D. Surgeon's Office
- E. Purveyor's Office
- F. Naval Storehouse

- 1. Administration
- 2. Coal Shed
- 3. Barracks
- 4. Boat Ho.
- 5. Marine Barracks
- 6. Store
- 7. Ammunition
- 8. Barracks, U.S.
- 9. Barracks, U.S.M.C.
- 10. Barracks, U.S.N.
- 11. Storehouse, U.S.
- 12. Steel Shed, C.R.
- 13. Marine Officers' Quarters
- 14. Ammunition & Store
- 15. Fuel Ho.
- 16. Magazine
- 17. Office, S.E.
- 18. Shop, S.E.
- 19. Gunpowder, U.S. Barracks, U.S.M.C.
- 20. Barracks, U.S. Barracks for Landmen

- 1. Dispensary
- 2. Pavilion, Wards
- 3. Kitchen
- 4. Mess Hall
- 5. Barn
- 6. Boat Ho.
- 7. Gun Ho.
- 8. House Ho.
- 9. Wood Ho.
- 10. Police

TEMPORARY BUILDINGS.

- 11. Barracks, Gated Men
- 12. Guard Ho.
- 13. Oil Ho.
- 14. Store Ho.
- 15. Supply Y.D.
- 16. Operating Rm.
- 17. Storeroom
- 18. Books Ho.
- 19. Store Ho.
- 20. Wagon Shed
- 21. Magazine
- 22. Conservatory
- 23. Chicken Ho.
- 24. Workshop
- 25. Molding Shop Ho.
- 26. Unlaid
- 27. Shooting Gallery
- 28. Bath Ho.
- 29. Mess Hall
- 30. Smoking Ho.
- 31. Wash Ho. & Privy
- 32. Out Ho.



Part of Paris Island:
 Showing parcel of ground owned by the Navy Department at S.W. corner of Lot 21, Section 6, Township 2, Range 1 West of St. Helena Meridian, Cr. This parcel are two cistern wells, the water is potable and ample. Government has been accorded right-of-way for water pipes over public roads from parcel to station.
 Scale 1 inch = 1000 Feet.

P L A N OF THE U.S. NAVAL STATION. PORT ROYAL, S. C.

FISCAL REPORT—JULY 1903.

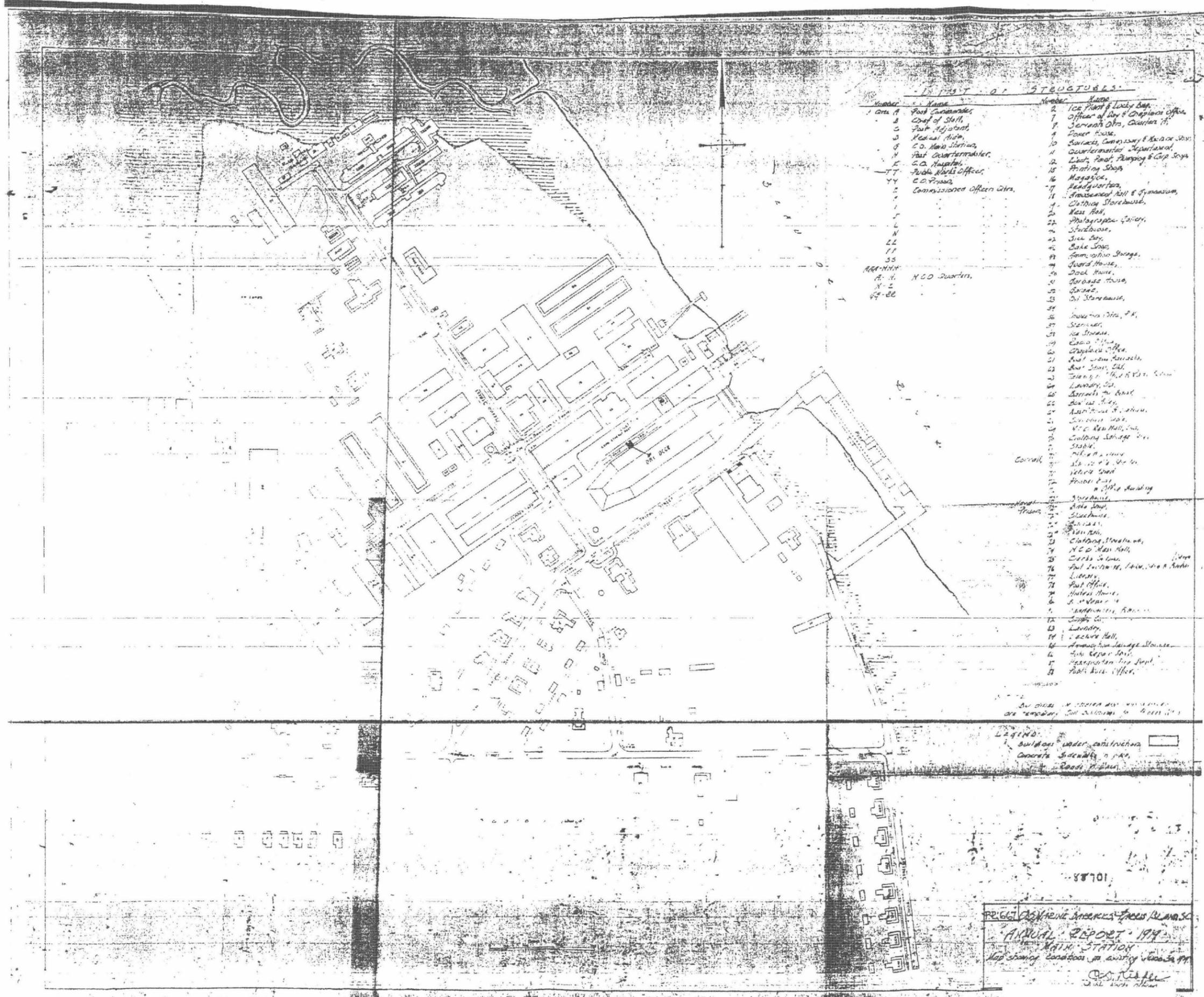
Note:
 "There are no changes in the drawing submitted since last annual report."
 Annual Report, June 30, 1904.
 Annual Report, June 30, 1905.

CIVIL ENGINEER'S OFFICE.
 Scale 1/4 inch = 200 Feet.

E. Irvine
 Commander, U.S.N.
 Commandant

George Mackay
 Civil Engineer, U.S.N.
 in Charge Engineering Dept.





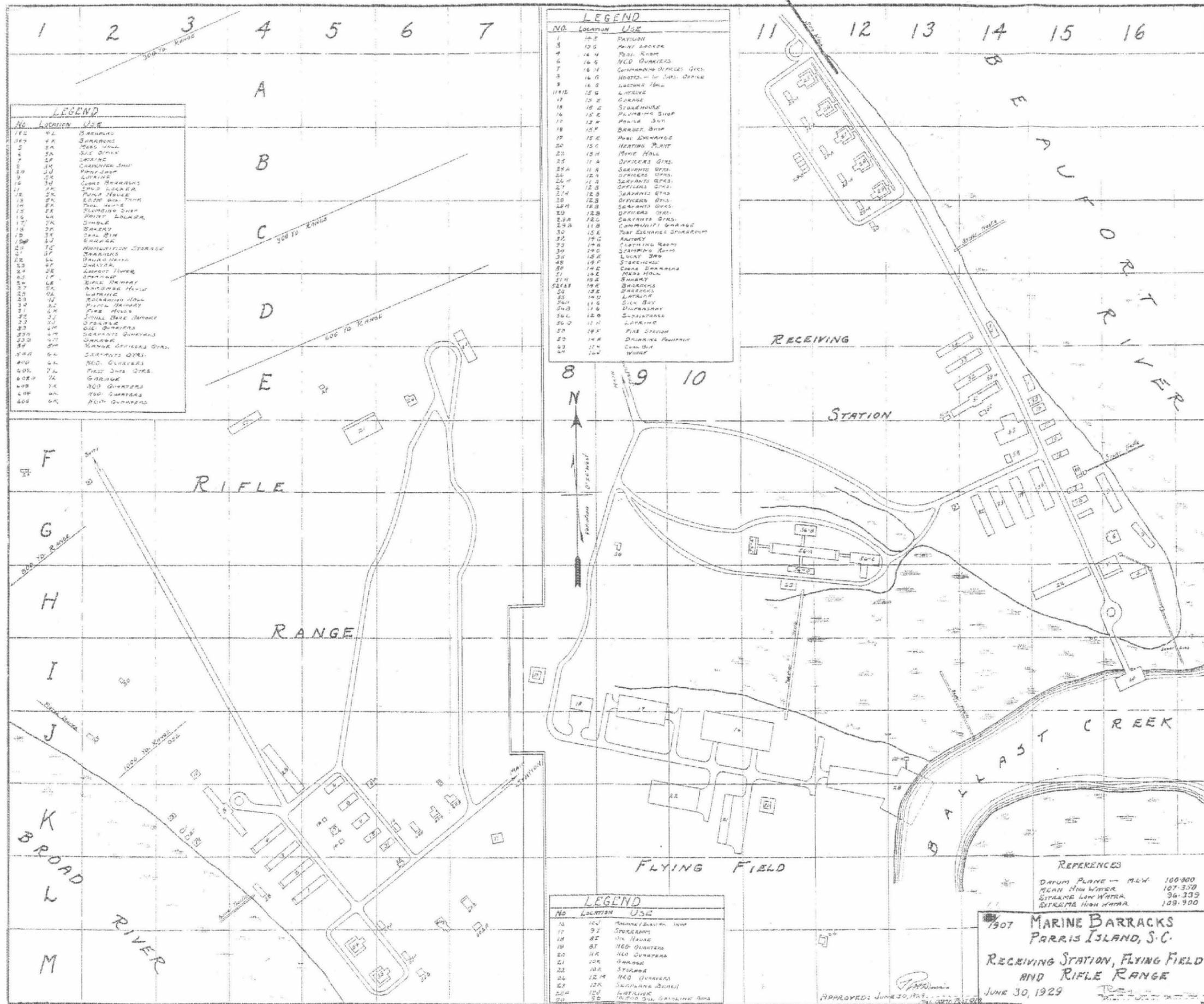
LIST OF STRUCTURES

Number	Name	Number	Name
1	Post Commander	2	Ice Plant & Larder Bldg.
2	Chief of Staff	3	Officer of Day & Chaplain's Office
3	Post Adjutant	4	Surrounding Area, Quartermaster's
4	Medical Aid	5	Power House
5	C.O. Mess Station	6	Garage, Compressor & Wash of Store
6	Post Quartermaster	7	Quartermaster's Department
7	C.O. Hospital	8	Latrine, Post, Pumping & Cap Shop
8	Public Works Officer	9	Printing Shop
9	C.O. Prison	10	Magazine
10	Commissioned Officer's Qtrs.	11	Headquarters
11		12	Amusement Hall & Gymnasium
12		13	Clothing Storehouse
13		14	Mass Hall
14		15	Photographic Gallery
15		16	Stables
16		17	Stable
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98		99	Stable
99		100	Stable

SW CORNER OF SECTION 10, T. 10 N., R. 10 W.,
 ARE SHOWN. THE DISTANCE TO CORNER IS 1/4
 MILE.

LEGEND
 Buildings under construction
 Concrete structures in plan
 Roads in plan

87701
 PROJECT ENGINEER'S OFFICE, ST. LOUIS, MO.
 ANNUAL REPORT - 1914
 MAIN STATION
 Map showing conditions in existing conditions in 1914
 C. S. [Signature]
 Chief Engineer



LEGEND

No.	Location	Use
112	112	BARBERS
113	113	BARBERS
114	114	MESS HALL
115	115	MESS HALL
116	116	MESS HALL
117	117	MESS HALL
118	118	MESS HALL
119	119	MESS HALL
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197	197	MESS HALL
198	198	MESS HALL
199	199	MESS HALL
200	200	MESS HALL

LEGEND

No.	Location	Use
1	112	BARBERS
2	113	BARBERS
3	114	MESS HALL
4	115	MESS HALL
5	116	MESS HALL
6	117	MESS HALL
7	118	MESS HALL
8	119	MESS HALL
9	120	MESS HALL
10	121	MESS HALL
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13	124	MESS HALL
14	125	MESS HALL
15	126	MESS HALL
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85	196	MESS HALL
86	197	MESS HALL
87	198	MESS HALL
88	199	MESS HALL
89	200	MESS HALL

LEGEND

No.	Location	Use
10	10	BARBERS
11	11	BARBERS
12	12	MESS HALL
13	13	MESS HALL
14	14	MESS HALL
15	15	MESS HALL
16	16	MESS HALL
17	17	MESS HALL
18	18	MESS HALL
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29	29	MESS HALL

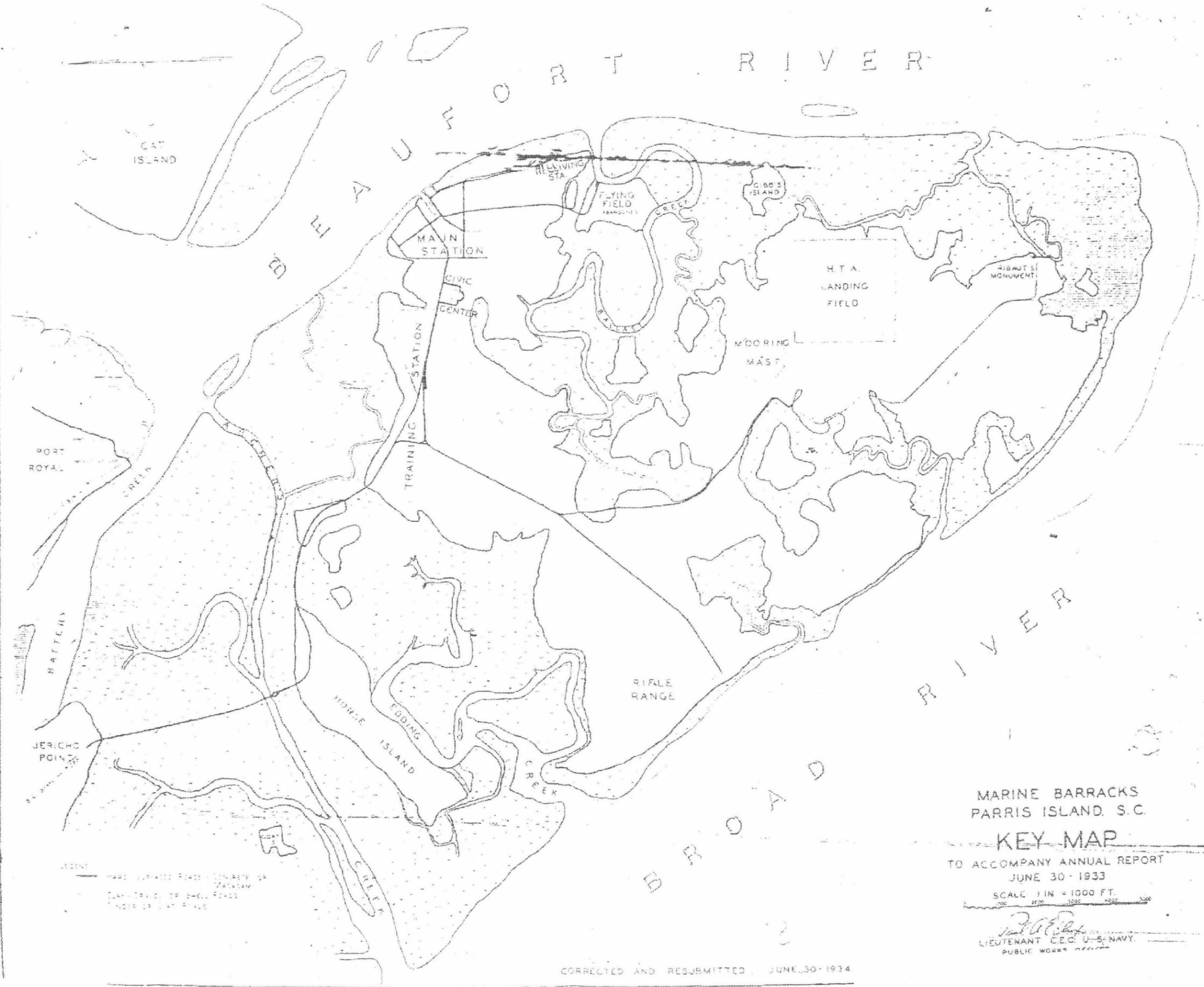
REFERENCES

Datum Plane - M.L.W. 100.000
 Mean High Water 107.370
 Extreme Low Water 96.339
 Extreme High Water 109.900

**1907 MARINE BARRACKS
 PARRIS ISLAND, S.C.
 RECEIVING STATION, FLYING FIELD
 AND RIFLE RANGE**

JUNE 30, 1929

APPROVED: JUNE 30, 1929



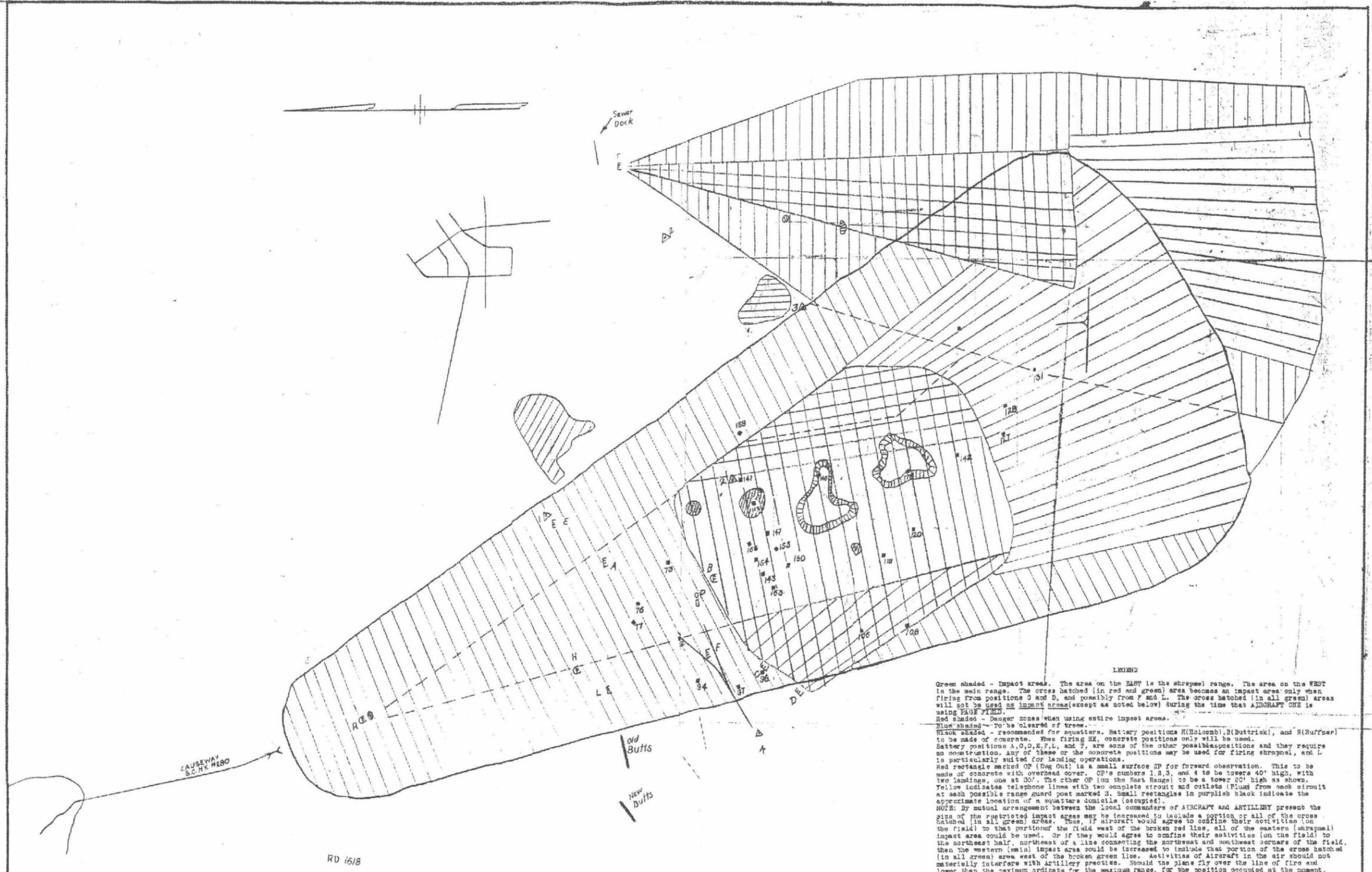
MARINE BARRACKS
 PARRIS ISLAND, S.C.
KEY MAP

TO ACCOMPANY ANNUAL REPORT
 JUNE 30, 1933

SCALE 1 IN = 1000 FT.

John A. [Signature]
 LIEUTENANT, U.S. NAVY.
 PUBLIC WORKS SECTION

CORRECTED AND RESUBMITTED, JUNE 30, 1934



TRACED FROM:
 OVERLAY FOR:
 KEY MAP (BLUEPRINT)
 OF DARRIS ISLAND S.C.
 SCALE: 1/12,000, DATED 30 JUNE, 1936
 SHOWING PROPOSED ARTILLERY RANGES

LEGEND

Green shaded - Impact areas. The area on the EAST is the shrapnel range. The area on the WEST is the main range. The cross hatched (in red and green) area becomes an impact area only when firing from positions O and D, and possibly from F and L. The cross hatched (in all green) areas will not be used as impact areas (except as noted below) during the time that AIRCRAFT CREW is using EAGLE PILES.

Red shaded - Danger zones when using entire impact areas.

Blue shaded - To be cleared of trees.

Black shaded - recommended for squatters. Battery positions R (Holoomb), S (Buttrick), and R (Ruffner) to be made of concrete. Thus firing HE, concrete positions only will be used.

Battery positions A, O, D, E, F, L, and P, are some of the other possible positions and they require no construction. Any of these or the concrete positions may be used for firing shrapnel, and L is particularly suited for landing operations.

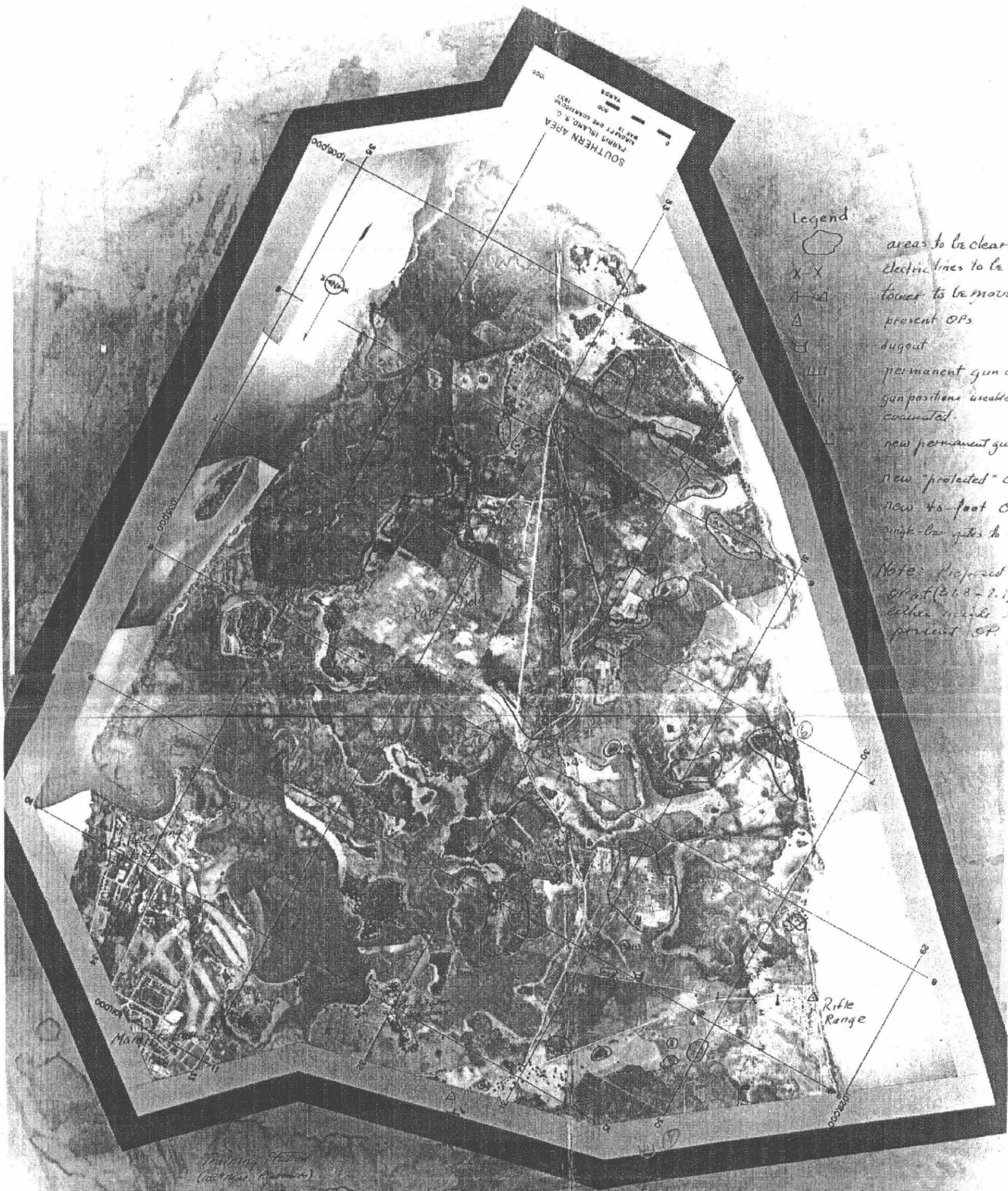
Red rectangle marked OP (Dig Out) is a small surface OP for forward observation. This to be made of concrete with overhead cover. OP's numbers 1, 2, 3, and 4 to be towers 40' high, with two lanterns, one at 30'. The other OP (on the East Range) to be a tower 20' high as shown.

Yellow indicates telephone lines with two complete circuits and outlets (Plugs from each circuit at each possible range guard post marked 3. Small rectangles in purplish black indicate the approximate location of a squatters domicile (occupied).

NOTE: By mutual arrangement between the local commanders of AIRCRAFT and ARTILLERY present the size of the restricted impact areas may be increased to include a portion or all of the cross hatched (in all green) areas. Thus, if aircraft would agree to confine their activities (on the field) to that portion of the field west of the broken red line, all of the eastern (shrapnel) impact area could be used. Or if they would agree to confine their activities (on the field) to the northeast half, northeast of a line connecting the northwest and southwest corners of the field, then the western (main) impact area could be increased to include that portion of the cross hatched (in all green) area east of the broken green line. Activities of aircraft in the air should not materially interfere with artillery practice. Should the plane fly over the line of fire and lower than the maximum ordinate for the maximum range, for the position occupied at the moment, the artillery officer could hold the fire of the battery for an instant. Another solution is to use field's miles to northeast. Particularly when the only mission of the aircraft present is to observe for artillery.

TRACED BY BELL	U S MARINE BARRACKS PARRIS ISLAND S.C.
CHECKED BY BELL	
FIELD ARTILLERY RANGE	
APPROVED: 1 DEC. 1937	
<i>H. M. Sylvester</i> LIEUT. COL. USM. PUBLIC WORKS OFFICER	

SCALE 1 IN = 1000 FT.



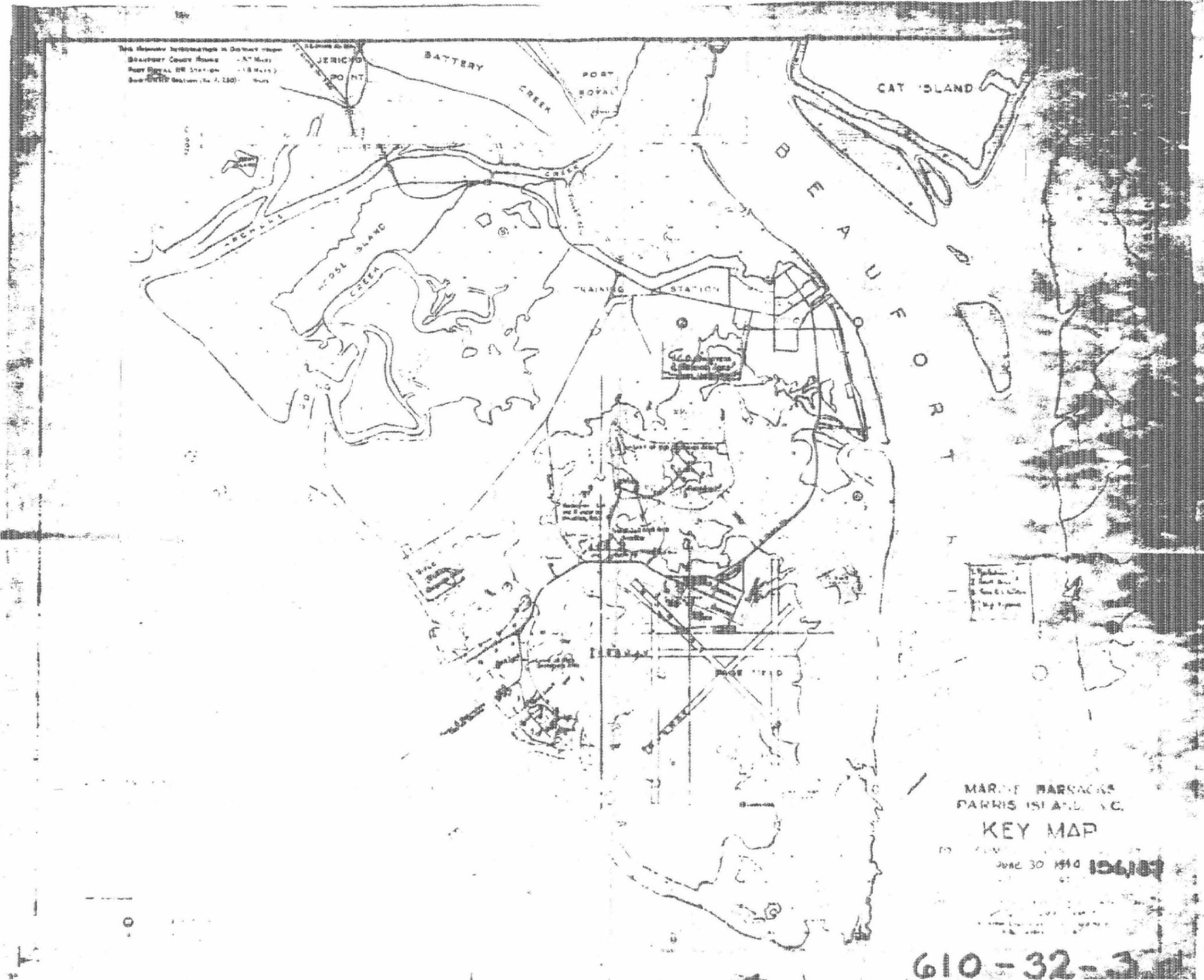
Legend

- areas to be cleared.
- electric lines to be buried.
- tower to be moved.
- present O.P.s
- dugout
- permanent gun emplacement
- gun positions useable if Post Farms connected.
- new permanent gun emplacement.
- new "protected" O.P.s.
- new 40-foot O.P.
- single-bar gates to be installed.

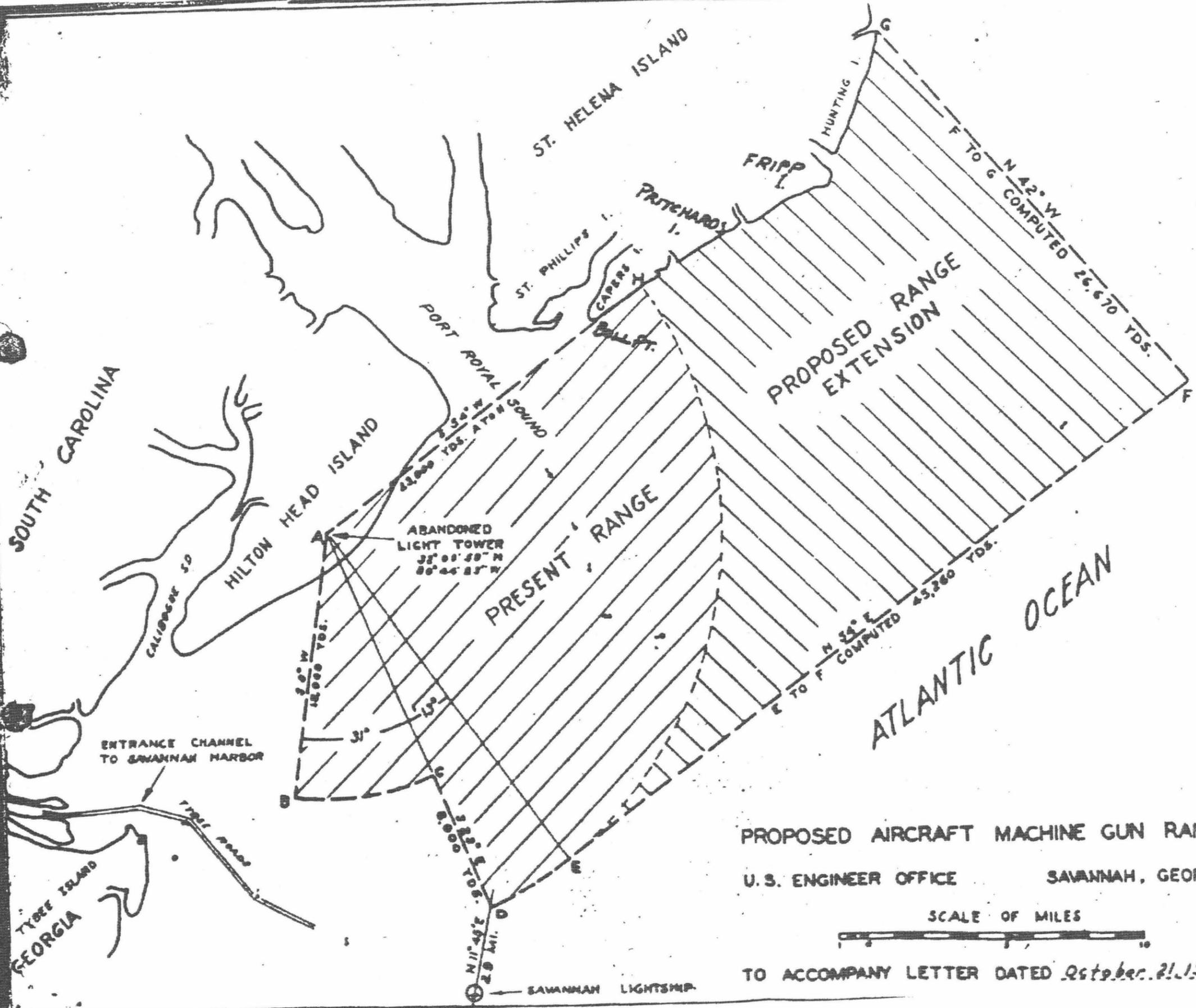
Note: Proposed "OP" at (B12-2.1) other marks present O.P.

Training Station (at base of mountain)

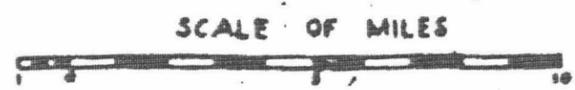
To House Island position - about 1000 yds from arrow point.



REPRODUCED AT THE NATIONAL ARCHIVES

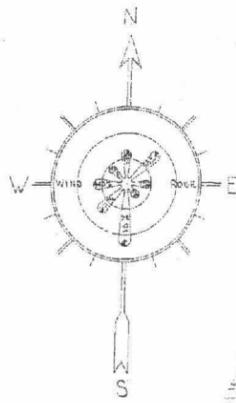
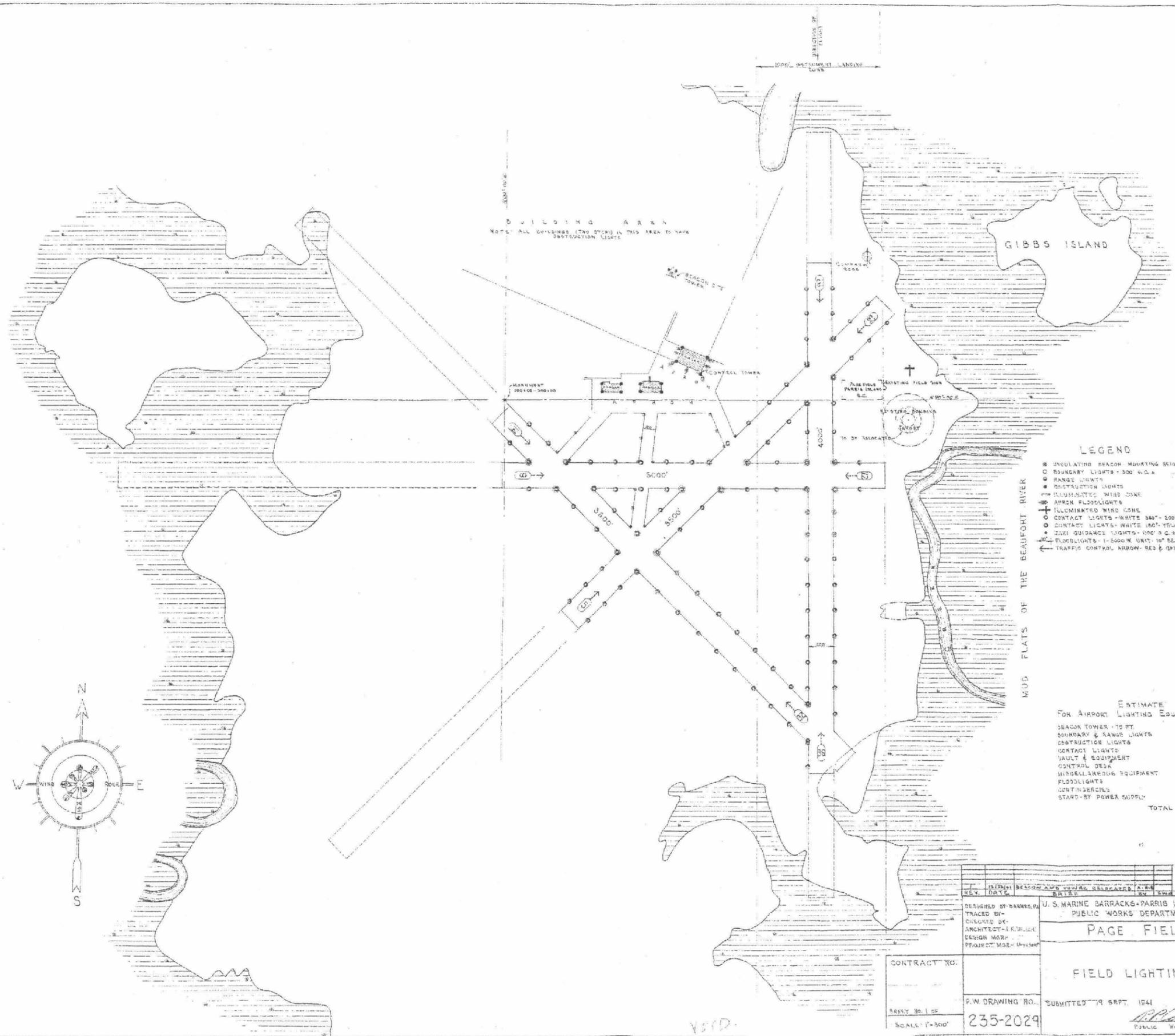


PROPOSED AIRCRAFT MACHINE GUN RANGE
 U.S. ENGINEER OFFICE SAVANNAH, GEORGIA



TO ACCOMPANY LETTER DATED October 21, 1941

SOURCE: NAVY COLLECTOR'S FILE
 RG: 127
 SERIES: 1865-1866-1867-1868-1869-1870-1871-1872-1873-1874-1875-1876-1877-1878-1879-1880-1881-1882-1883-1884-1885-1886-1887-1888-1889-1890-1891-1892-1893-1894-1895-1896-1897-1898-1899-1900-1901-1902-1903-1904-1905-1906-1907-1908-1909-1910-1911-1912-1913-1914-1915-1916-1917-1918-1919-1920-1921-1922-1923-1924-1925-1926-1927-1928-1929-1930-1931-1932-1933-1934-1935-1936-1937-1938-1939-1940-1941-1942-1943-1944-1945-1946-1947-1948-1949-1950-1951-1952-1953-1954-1955-1956-1957-1958-1959-1960-1961-1962-1963-1964-1965-1966-1967-1968-1969-1970-1971-1972-1973-1974-1975-1976-1977-1978-1979-1980-1981-1982-1983-1984-1985-1986-1987-1988-1989-1990-1991-1992-1993-1994-1995-1996-1997-1998-1999-2000-2001-2002-2003-2004-2005-2006-2007-2008-2009-2010-2011-2012-2013-2014-2015-2016-2017-2018-2019-2020-2021-2022-2023-2024-2025-2026-2027-2028-2029-2030-2031-2032-2033-2034-2035-2036-2037-2038-2039-2040-2041-2042-2043-2044-2045-2046-2047-2048-2049-2050-2051-2052-2053-2054-2055-2056-2057-2058-2059-2060-2061-2062-2063-2064-2065-2066-2067-2068-2069-2070-2071-2072-2073-2074-2075-2076-2077-2078-2079-2080-2081-2082-2083-2084-2085-2086-2087-2088-2089-2090-2091-2092-2093-2094-2095-2096-2097-2098-2099-2100-2101-2102-2103-2104-2105-2106-2107-2108-2109-2110-2111-2112-2113-2114-2115-2116-2117-2118-2119-2120-2121-2122-2123-2124-2125-2126-2127-2128-2129-2130-2131-2132-2133-2134-2135-2136-2137-2138-2139-2140-2141-2142-2143-2144-2145-2146-2147-2148-2149-2150-2151-2152-2153-2154-2155-2156-2157-2158-2159-2160-2161-2162-2163-2164-2165-2166-2167-2168-2169-2170-2171-2172-2173-2174-2175-2176-2177-2178-2179-2180-2181-2182-2183-2184-2185-2186-2187-2188-2189-2190-2191-2192-2193-2194-2195-2196-2197-2198-2199-2200-2201-2202-2203-2204-2205-2206-2207-2208-2209-2210-2211-2212-2213-2214-2215-2216-2217-2218-2219-2220-2221-2222-2223-2224-2225-2226-2227-2228-2229-2230-2231-2232-2233-2234-2235-2236-2237-2238-2239-2240-2241-2242-2243-2244-2245-2246-2247-2248-2249-2250-2251-2252-2253-2254-2255-2256-2257-2258-2259-2260-2261-2262-2263-2264-2265-2266-2267-2268-2269-2270-2271-2272-2273-2274-2275-2276-2277-2278-2279-2280-2281-2282-2283-2284-2285-2286-2287-2288-2289-2290-2291-2292-2293-2294-2295-2296-2297-2298-2299-2300-2301-2302-2303-2304-2305-2306-2307-2308-2309-2310-2311-2312-2313-2314-2315-2316-2317-2318-2319-2320-2321-2322-2323-2324-2325-2326-2327-2328-2329-2330-2331-2332-2333-2334-2335-2336-2337-2338-2339-2340-2341-2342-2343-2344-2345-2346-2347-2348-2349-2350-2351-2352-2353-2354-2355-2356-2357-2358-2359-2360-2361-2362-2363-2364-2365-2366-2367-2368-2369-2370-2371-2372-2373-2374-2375-2376-2377-2378-2379-2380-2381-2382-2383-2384-2385-2386-2387-2388-2389-2390-2391-2392-2393-2394-2395-2396-2397-2398-2399-2400-2401-2402-2403-2404-2405-2406-2407-2408-2409-2410-2411-2412-2413-2414-2415-2416-2417-2418-2419-2420-2421-2422-2423-2424-2425-2426-2427-2428-2429-2430-2431-2432-2433-2434-2435-2436-2437-2438-2439-2440-2441-2442-2443-2444-2445-2446-2447-2448-2449-2450-2451-2452-2453-2454-2455-2456-2457-2458-2459-2460-2461-2462-2463-2464-2465-2466-2467-2468-2469-2470-2471-2472-2473-2474-2475-2476-2477-2478-2479-2480-2481-2482-2483-2484-2485-2486-2487-2488-2489-2490-2491-2492-2493-2494-2495-2496-2497-2498-2499-2500-2501-2502-2503-2504-2505-2506-2507-2508-2509-2510-2511-2512-2513-2514-2515-2516-2517-2518-2519-2520-2521-2522-2523-2524-2525-2526-2527-2528-2529-2530-2531-2532-2533-2534-2535-2536-2537-2538-2539-2540-2541-2542-2543-2544-2545-2546-2547-2548-2549-2550-2551-2552-2553-2554-2555-2556-2557-2558-2559-2560-2561-2562-2563-2564-2565-2566-2567-2568-2569-2570-2571-2572-2573-2574-2575-2576-2577-2578-2579-2580-2581-2582-2583-2584-2585-2586-2587-2588-2589-2590-2591-2592-2593-2594-2595-2596-2597-2598-2599-2600-2601-2602-2603-2604-2605-2606-2607-2608-2609-2610-2611-2612-2613-2614-2615-2616-2617-2618-2619-2620-2621-2622-2623-2624-2625-2626-2627-2628-2629-2630-2631-2632-2633-2634-2635-2636-2637-2638-2639-2640-2641-2642-2643-2644-2645-2646-2647-2648-2649-2650-2651-2652-2653-2654-2655-2656-2657-2658-2659-2660-2661-2662-2663-2664-2665-2666-2667-2668-2669-2670-2671-2672-2673-2674-2675-2676-2677-2678-2679-2680-2681-2682-2683-2684-2685-2686-2687-2688-2689-2690-2691-2692-2693-2694-2695-2696-2697-2698-2699-2700-2701-2702-2703-2704-2705-2706-2707-2708-2709-2710-2711-2712-2713-2714-2715-2716-2717-2718-2719-2720-2721-2722-2723-2724-2725-2726-2727-2728-2729-2730-2731-2732-2733-2734-2735-2736-2737-2738-2739-2740-2741-2742-2743-2744-2745-2746-2747-2748-2749-2750-2751-2752-2753-2754-2755-2756-2757-2758-2759-2760-2761-2762-2763-2764-2765-2766-2767-2768-2769-2770-2771-2772-2773-2774-2775-2776-2777-2778-2779-2780-2781-2782-2783-2784-2785-2786-2787-2788-2789-2790-2791-2792-2793-2794-2795-2796-2797-2798-2799-2800-2801-2802-2803-2804-2805-2806-2807-2808-2809-2810-2811-2812-2813-2814-2815-2816-2817-2818-2819-2820-2821-2822-2823-2824-2825-2826-2827-2828-2829-2830-2831-2832-2833-2834-2835-2836-2837-2838-2839-2840-2841-2842-2843-2844-2845-2846-2847-2848-2849-2850-2851-2852-2853-2854-2855-2856-2857-2858-2859-2860-2861-2862-2863-2864-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- LEGEND**
- INDICATING BEACON MARKING BRIGHT-TR
 - BOUNDARY LIGHTS - 300' O.C.
 - RANGE LIGHTS
 - OBSTRUCTION LIGHTS
 - ILLUMINATED WIND CONE
 - AREA FLOODLIGHTS
 - ILLUMINATED WIND CONE
 - CONTACT LIGHTS - WHITE 360° - 200' O.C.
 - CONTACT LIGHTS - WHITE 180° - YELLOW 180°
 - TWIN GUIDANCE LIGHTS - 200' O.C.
 - FLOODLIGHTS - 1-5000W UNIT - 10° BEAM SPREAD
 - ↑ TRAFFIC CONTROL ARROW - RED & GREEN LIGHTS

ESTIMATE FOR AIRPORT LIGHTING EQUIPMENT

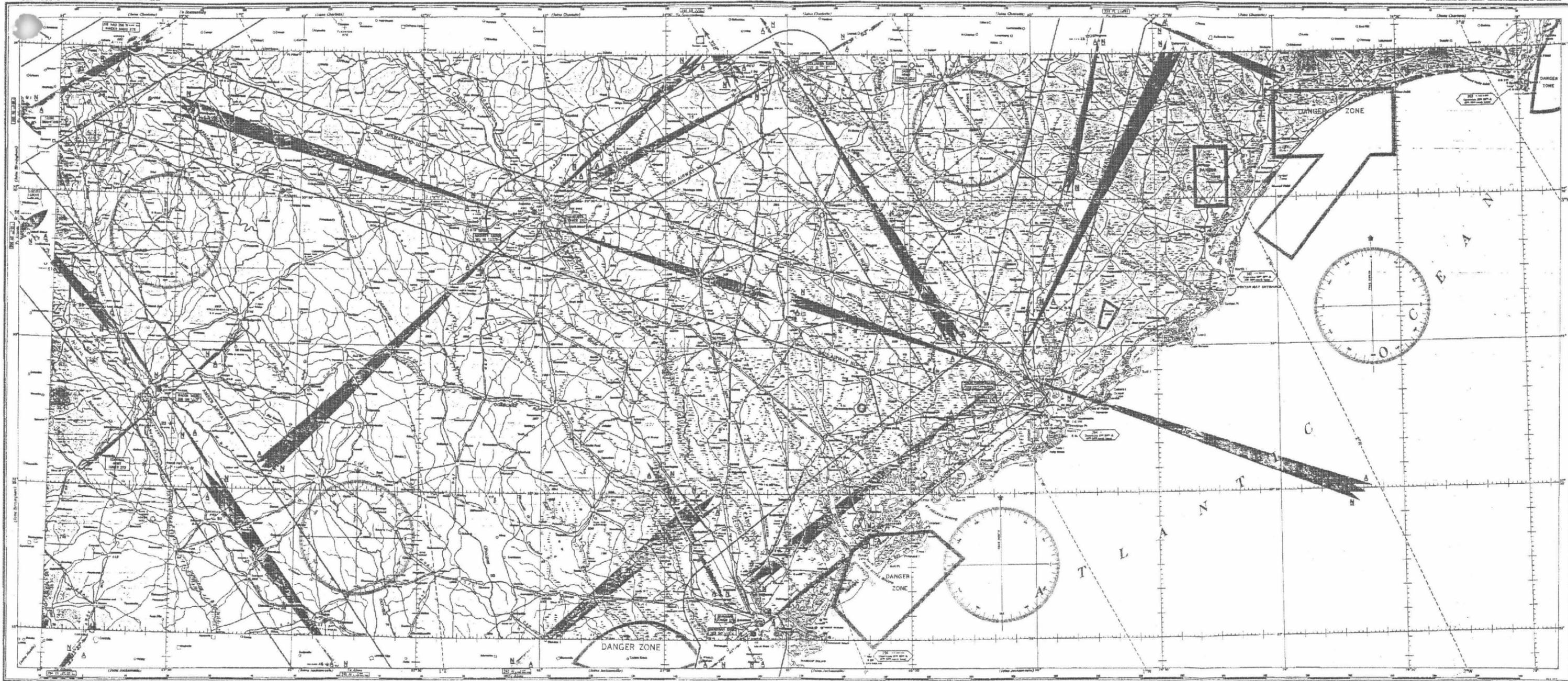
SEASON TOWER - 15 FT.	\$3,000
BOUNDARY & RANGE LIGHTS	3,425
OBSTRUCTION LIGHTS	4,800
CONTACT LIGHTS	19,723
VAULT & EQUIPMENT	8,100
CONTROL DESK	5,000
MISCELLANEOUS EQUIPMENT	6,515
FLOODLIGHTS	16,400
CONTINGENCIES	15,000
STAND-BY POWER SUPPLY	4,700
TOTAL	\$77,000

DESIGNED BY: DANIEL R.	U.S. MARINE BARRACKS - PARRIS ISLAND, S.C.
TRACED BY:	PUBLIC WORKS DEPARTMENT
CHECKED BY:	PAGE FIELD
ARCHITECT: A. M. L. H. C.	
DESIGN MARK:	
PROJECT NO.:	

CONTRACT NO.:	
FIELD LIGHTING	
REV. NO. 1 OF	F.W. DRAWING NO. 235-2029
SCALE: 1"=300'	SUBMITTED 19 SEPT. 1941
	<i>R. C. Carter</i> PUBLIC WORKS OFFICER

YSCD

22



SAVANNAH (Q-8)
 GEORGIA
 JUNE 18, 1942

1. This chart is published for the use of pilots and is not to be used for navigation purposes. It is not to be used for navigation purposes unless it is used in conjunction with the appropriate enroute chart. It is not to be used for navigation purposes unless it is used in conjunction with the appropriate enroute chart. It is not to be used for navigation purposes unless it is used in conjunction with the appropriate enroute chart.

POPULATION		CLASS OF AIRPORT	
75,000	Class 1	Class 1	Class 1
5,000	Class 2	Class 2	Class 2
5,000	Class 3	Class 3	Class 3

RESTRICTED

SAVANNAH (Q-8)
 SECTIONAL AERONAUTICAL CHART

PERMANENT FILE COPY 1

8-2



WAD GRENADIER PRACTICE AREA

RANGE 'A'

RANGE 'B'

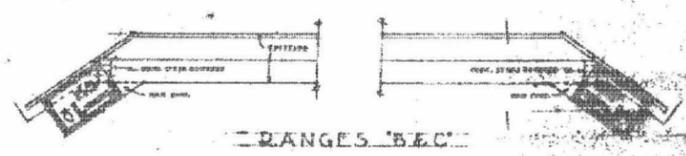
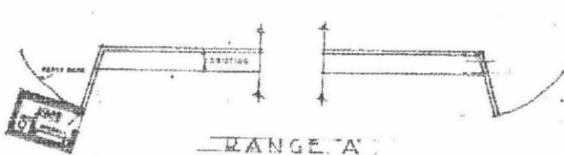
RANGE 'C'

RANGE 'D'

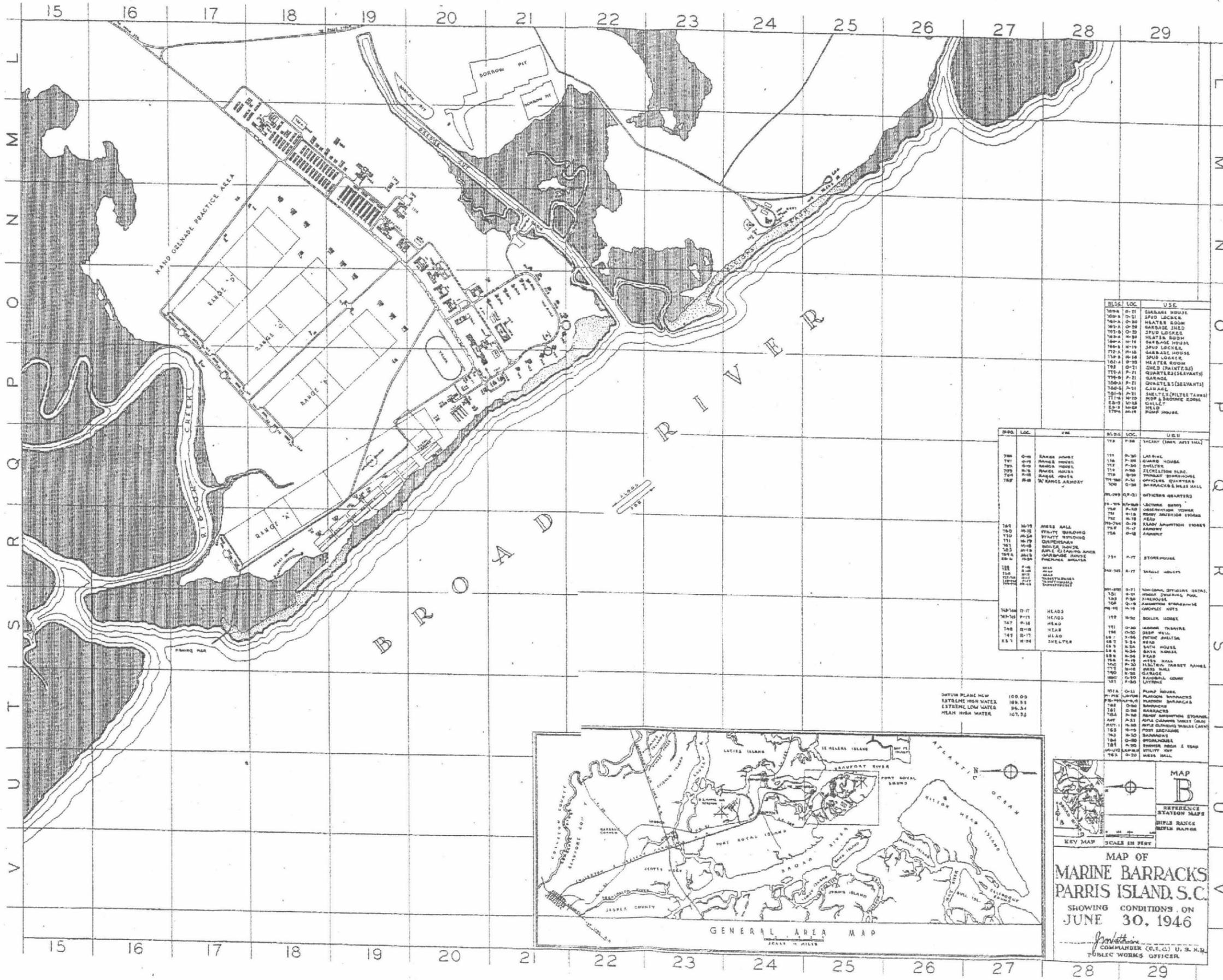
SIBSON CREEK

SCALE 1" = 300'

NOTE: ALL BEARS TO HAVE 10' HIGH FENCES AND CONC. BOW (1' x 1') WALLS TO BE CONC. BLOCKS



V
U
T
S
R
Q
P
O



BLDG. LOC.	USE
100-A 0-11	SARGENT HOUSE
100-A 0-12	SPUD LOCKER
100-A 0-20	HEATER ROOM
100-A 0-22	GARBAGE SHED
100-A 0-23	SPUD LOCKER
100-A 0-24	HEATER ROOM
100-A 0-25	SARGENT HOUSE
100-A 0-26	SPUD LOCKER
100-A 0-27	SARGENT HOUSE
100-A 0-28	HEATER ROOM
100-A 0-29	SPUD LOCKER
100-A 0-30	HEATER ROOM
100-A 0-31	QUARTERS (SERVANTS)
100-A 0-32	QUARTERS (SERVANTS)
100-A 0-33	QUARTERS (SERVANTS)
100-A 0-34	QUARTERS (SERVANTS)
100-A 0-35	QUARTERS (SERVANTS)
100-A 0-36	QUARTERS (SERVANTS)
100-A 0-37	QUARTERS (SERVANTS)
100-A 0-38	QUARTERS (SERVANTS)
100-A 0-39	QUARTERS (SERVANTS)
100-A 0-40	QUARTERS (SERVANTS)
100-A 0-41	QUARTERS (SERVANTS)
100-A 0-42	QUARTERS (SERVANTS)
100-A 0-43	QUARTERS (SERVANTS)
100-A 0-44	QUARTERS (SERVANTS)
100-A 0-45	QUARTERS (SERVANTS)
100-A 0-46	QUARTERS (SERVANTS)
100-A 0-47	QUARTERS (SERVANTS)
100-A 0-48	QUARTERS (SERVANTS)
100-A 0-49	QUARTERS (SERVANTS)
100-A 0-50	QUARTERS (SERVANTS)
100-A 0-51	QUARTERS (SERVANTS)
100-A 0-52	QUARTERS (SERVANTS)
100-A 0-53	QUARTERS (SERVANTS)
100-A 0-54	QUARTERS (SERVANTS)
100-A 0-55	QUARTERS (SERVANTS)
100-A 0-56	QUARTERS (SERVANTS)
100-A 0-57	QUARTERS (SERVANTS)
100-A 0-58	QUARTERS (SERVANTS)
100-A 0-59	QUARTERS (SERVANTS)
100-A 0-60	QUARTERS (SERVANTS)
100-A 0-61	QUARTERS (SERVANTS)
100-A 0-62	QUARTERS (SERVANTS)
100-A 0-63	QUARTERS (SERVANTS)
100-A 0-64	QUARTERS (SERVANTS)
100-A 0-65	QUARTERS (SERVANTS)
100-A 0-66	QUARTERS (SERVANTS)
100-A 0-67	QUARTERS (SERVANTS)
100-A 0-68	QUARTERS (SERVANTS)
100-A 0-69	QUARTERS (SERVANTS)
100-A 0-70	QUARTERS (SERVANTS)
100-A 0-71	QUARTERS (SERVANTS)
100-A 0-72	QUARTERS (SERVANTS)
100-A 0-73	QUARTERS (SERVANTS)
100-A 0-74	QUARTERS (SERVANTS)
100-A 0-75	QUARTERS (SERVANTS)
100-A 0-76	QUARTERS (SERVANTS)
100-A 0-77	QUARTERS (SERVANTS)
100-A 0-78	QUARTERS (SERVANTS)
100-A 0-79	QUARTERS (SERVANTS)
100-A 0-80	QUARTERS (SERVANTS)
100-A 0-81	QUARTERS (SERVANTS)
100-A 0-82	QUARTERS (SERVANTS)
100-A 0-83	QUARTERS (SERVANTS)
100-A 0-84	QUARTERS (SERVANTS)
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100-A 0-86	QUARTERS (SERVANTS)
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100-A 0-89	QUARTERS (SERVANTS)
100-A 0-90	QUARTERS (SERVANTS)
100-A 0-91	QUARTERS (SERVANTS)
100-A 0-92	QUARTERS (SERVANTS)
100-A 0-93	QUARTERS (SERVANTS)
100-A 0-94	QUARTERS (SERVANTS)
100-A 0-95	QUARTERS (SERVANTS)
100-A 0-96	QUARTERS (SERVANTS)
100-A 0-97	QUARTERS (SERVANTS)
100-A 0-98	QUARTERS (SERVANTS)
100-A 0-99	QUARTERS (SERVANTS)
100-A 0-100	QUARTERS (SERVANTS)

BLDG. LOC.	USE	BLDG. LOC.	USE
100-B 0-11	BARBERS SHOP		
100-B 0-12	BARBERS SHOP		
100-B 0-13	BARBERS SHOP		
100-B 0-14	BARBERS SHOP		
100-B 0-15	BARBERS SHOP		
100-B 0-16	BARBERS SHOP		
100-B 0-17	BARBERS SHOP		
100-B 0-18	BARBERS SHOP		
100-B 0-19	BARBERS SHOP		
100-B 0-20	BARBERS SHOP		
100-B 0-21	BARBERS SHOP		
100-B 0-22	BARBERS SHOP		
100-B 0-23	BARBERS SHOP		
100-B 0-24	BARBERS SHOP		
100-B 0-25	BARBERS SHOP		
100-B 0-26	BARBERS SHOP		
100-B 0-27	BARBERS SHOP		
100-B 0-28	BARBERS SHOP		
100-B 0-29	BARBERS SHOP		
100-B 0-30	BARBERS SHOP		
100-B 0-31	BARBERS SHOP		
100-B 0-32	BARBERS SHOP		
100-B 0-33	BARBERS SHOP		
100-B 0-34	BARBERS SHOP		
100-B 0-35	BARBERS SHOP		
100-B 0-36	BARBERS SHOP		
100-B 0-37	BARBERS SHOP		
100-B 0-38	BARBERS SHOP		
100-B 0-39	BARBERS SHOP		
100-B 0-40	BARBERS SHOP		
100-B 0-41	BARBERS SHOP		
100-B 0-42	BARBERS SHOP		
100-B 0-43	BARBERS SHOP		
100-B 0-44	BARBERS SHOP		
100-B 0-45	BARBERS SHOP		
100-B 0-46	BARBERS SHOP		
100-B 0-47	BARBERS SHOP		
100-B 0-48	BARBERS SHOP		
100-B 0-49	BARBERS SHOP		
100-B 0-50	BARBERS SHOP		
100-B 0-51	BARBERS SHOP		
100-B 0-52	BARBERS SHOP		
100-B 0-53	BARBERS SHOP		
100-B 0-54	BARBERS SHOP		
100-B 0-55	BARBERS SHOP		
100-B 0-56	BARBERS SHOP		
100-B 0-57	BARBERS SHOP		
100-B 0-58	BARBERS SHOP		
100-B 0-59	BARBERS SHOP		
100-B 0-60	BARBERS SHOP		
100-B 0-61	BARBERS SHOP		
100-B 0-62	BARBERS SHOP		
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100-B 0-68	BARBERS SHOP		
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100-B 0-70	BARBERS SHOP		
100-B 0-71	BARBERS SHOP		
100-B 0-72	BARBERS SHOP		
100-B 0-73	BARBERS SHOP		
100-B 0-74	BARBERS SHOP		
100-B 0-75	BARBERS SHOP		
100-B 0-76	BARBERS SHOP		
100-B 0-77	BARBERS SHOP		
100-B 0-78	BARBERS SHOP		
100-B 0-79	BARBERS SHOP		
100-B 0-80	BARBERS SHOP		
100-B 0-81	BARBERS SHOP		
100-B 0-82	BARBERS SHOP		
100-B 0-83	BARBERS SHOP		
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100-B 0-93	BARBERS SHOP		
100-B 0-94	BARBERS SHOP		
100-B 0-95	BARBERS SHOP		
100-B 0-96	BARBERS SHOP		
100-B 0-97	BARBERS SHOP		
100-B 0-98	BARBERS SHOP		
100-B 0-99	BARBERS SHOP		
100-B 0-100	BARBERS SHOP		

DATUM PLANE MSL 100.00
 EXTREME HIGH WATER 100.13
 EXTREME LOW WATER 99.34
 MEAN HIGH WATER 100.72

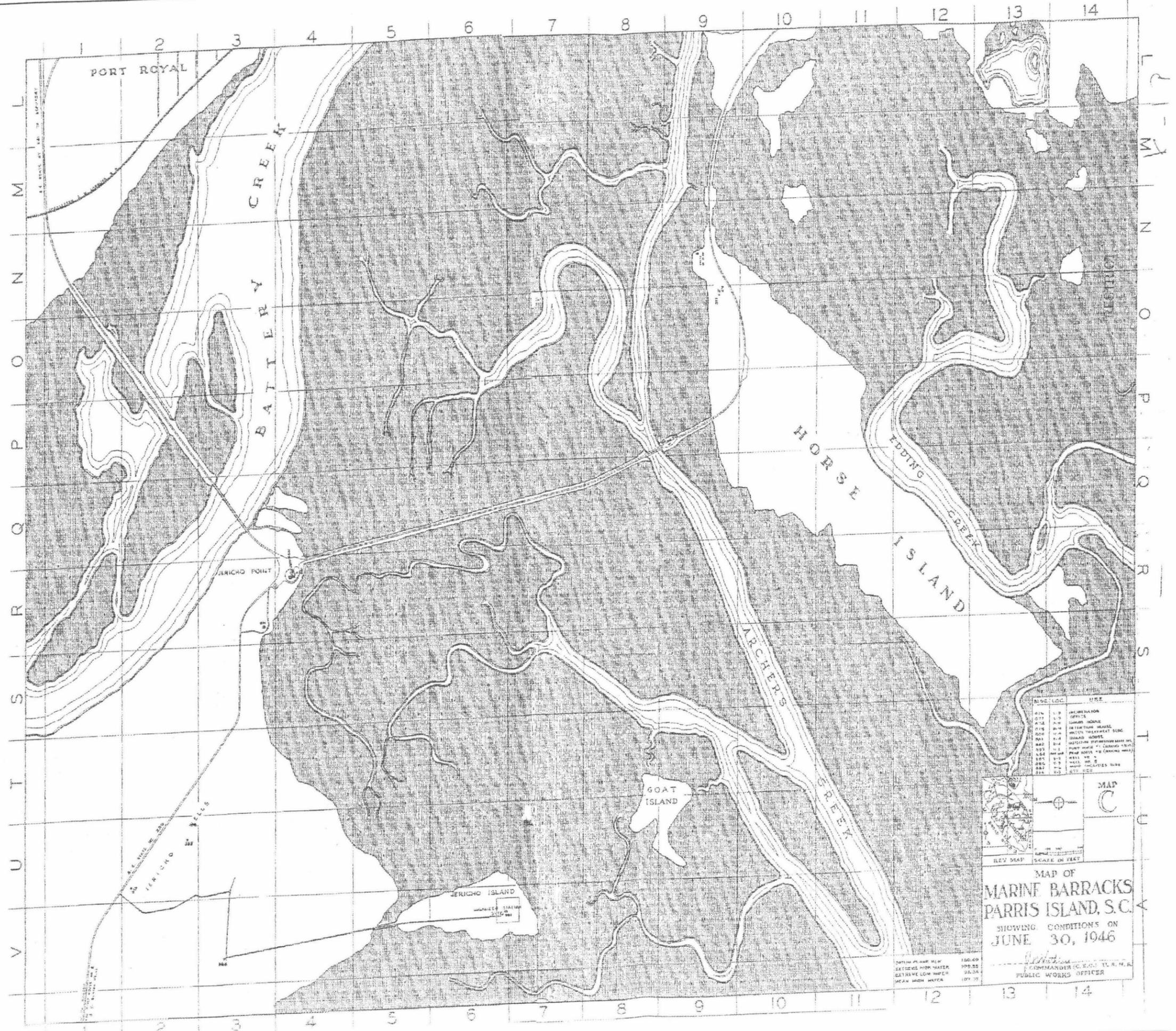


MAP B
 REFERENCE STATION MAPS
 BROAD RIVER RANGE
 BROAD RIVER RANGE

KEY MAP SCALE IN FEET

MAP OF MARINE BARRACKS PARRIS ISLAND, S.C.
 SHOWING CONDITIONS ON JUNE 30, 1946

J. M. ...
 COMMANDER (C.E.C.) U. S. N.
 PUBLIC WORKS OFFICER



SYMBOL	DESCRIPTION
076	INCUBATOR
077	OFFICE
078	COMMUNION HOUSE
079	INSTRUCTION BUILDING
080	ARMORY
081	ISLAND HOUSE
082	RESTROOM
083	WATER TOWER
084	ENGINEER STATION
085	WALL
086	WALL
087	WALL
088	WALL
089	WALL
090	WALL
091	WALL
092	WALL
093	WALL
094	WALL
095	WALL
096	WALL
097	WALL
098	WALL
099	WALL
100	WALL

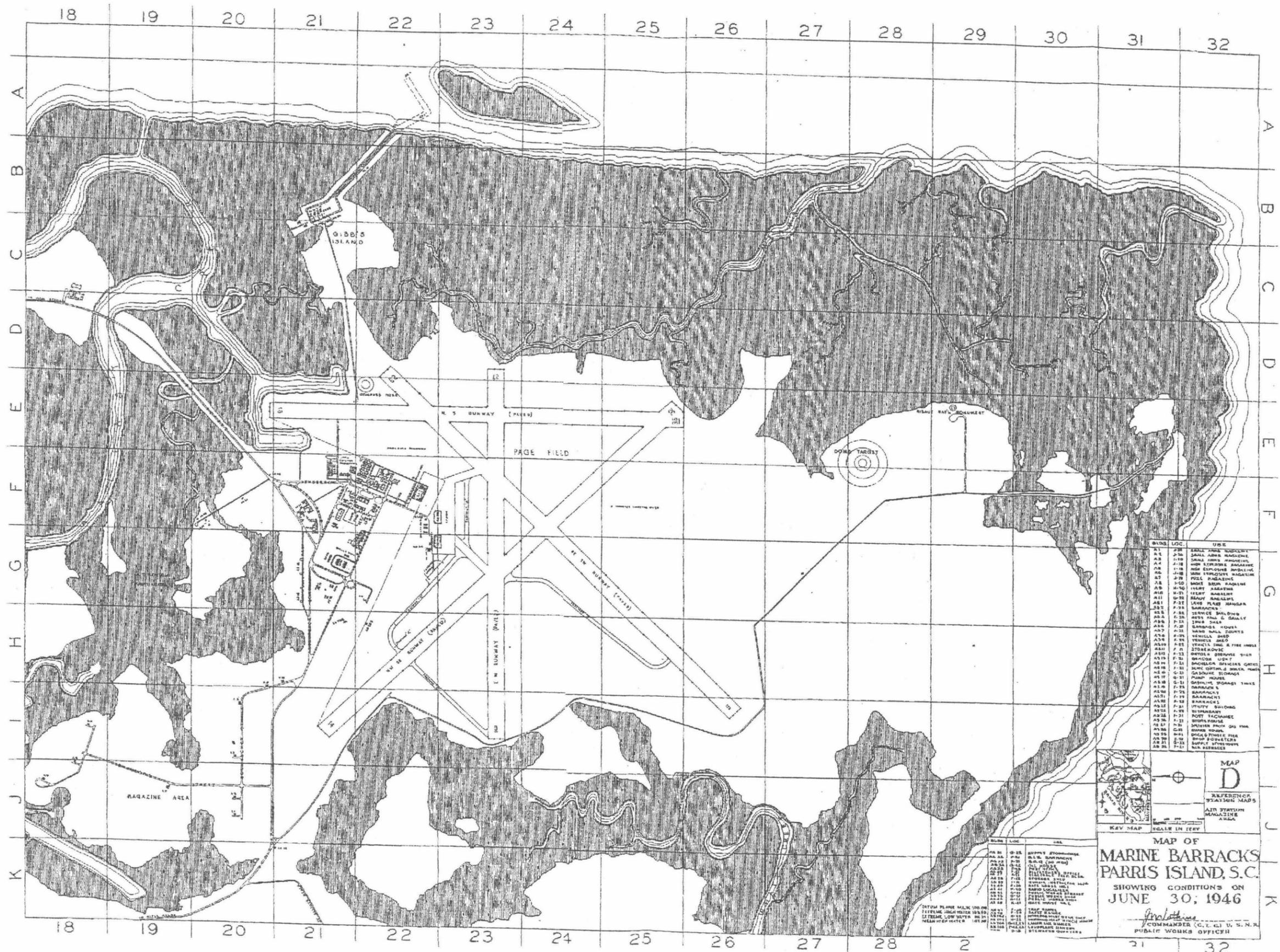
KEY DIAGRAM

SCALE IN FEET

MAP OF
MARINE BARRACKS
PARRIS ISLAND, S.C.
SHOWING CONDITIONS ON
JUNE 30, 1946

W. H. ...
COMMANDER (C. E. C.) U.S. N. M. S.
PUBLIC WORKS OFFICER

DEPTH PLANE IN FEET
EXTREME HIGH WATER 106.00
EXTREME LOW WATER 104.00
MEAN HIGH WATER 105.00



SYMBOL	LOC.	NAME
A1	F-28	SMALL STORE BUILDING
A2	F-30	SMALL STORE BUILDING
A3	F-31	SMALL STORE BUILDING
A4	F-32	SMALL STORE BUILDING
A5	F-33	SMALL STORE BUILDING
A6	F-34	SMALL STORE BUILDING
A7	F-35	SMALL STORE BUILDING
A8	F-36	SMALL STORE BUILDING
A9	F-37	SMALL STORE BUILDING
A10	F-38	SMALL STORE BUILDING
A11	F-39	SMALL STORE BUILDING
A12	F-40	SMALL STORE BUILDING
A13	F-41	SMALL STORE BUILDING
A14	F-42	SMALL STORE BUILDING
A15	F-43	SMALL STORE BUILDING
A16	F-44	SMALL STORE BUILDING
A17	F-45	SMALL STORE BUILDING
A18	F-46	SMALL STORE BUILDING
A19	F-47	SMALL STORE BUILDING
A20	F-48	SMALL STORE BUILDING
A21	F-49	SMALL STORE BUILDING
A22	F-50	SMALL STORE BUILDING
A23	F-51	SMALL STORE BUILDING
A24	F-52	SMALL STORE BUILDING
A25	F-53	SMALL STORE BUILDING
A26	F-54	SMALL STORE BUILDING
A27	F-55	SMALL STORE BUILDING
A28	F-56	SMALL STORE BUILDING
A29	F-57	SMALL STORE BUILDING
A30	F-58	SMALL STORE BUILDING
A31	F-59	SMALL STORE BUILDING
A32	F-60	SMALL STORE BUILDING
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A34	F-62	SMALL STORE BUILDING
A35	F-63	SMALL STORE BUILDING
A36	F-64	SMALL STORE BUILDING
A37	F-65	SMALL STORE BUILDING
A38	F-66	SMALL STORE BUILDING
A39	F-67	SMALL STORE BUILDING
A40	F-68	SMALL STORE BUILDING
A41	F-69	SMALL STORE BUILDING
A42	F-70	SMALL STORE BUILDING
A43	F-71	SMALL STORE BUILDING
A44	F-72	SMALL STORE BUILDING
A45	F-73	SMALL STORE BUILDING
A46	F-74	SMALL STORE BUILDING
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A60	F-88	SMALL STORE BUILDING
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A65	F-93	SMALL STORE BUILDING
A66	F-94	SMALL STORE BUILDING
A67	F-95	SMALL STORE BUILDING
A68	F-96	SMALL STORE BUILDING
A69	F-97	SMALL STORE BUILDING
A70	F-98	SMALL STORE BUILDING
A71	F-99	SMALL STORE BUILDING
A72	F-100	SMALL STORE BUILDING

MAP D
REFERENCE
STATION MAPS
AIR STATION
MAGAZINE
AREA

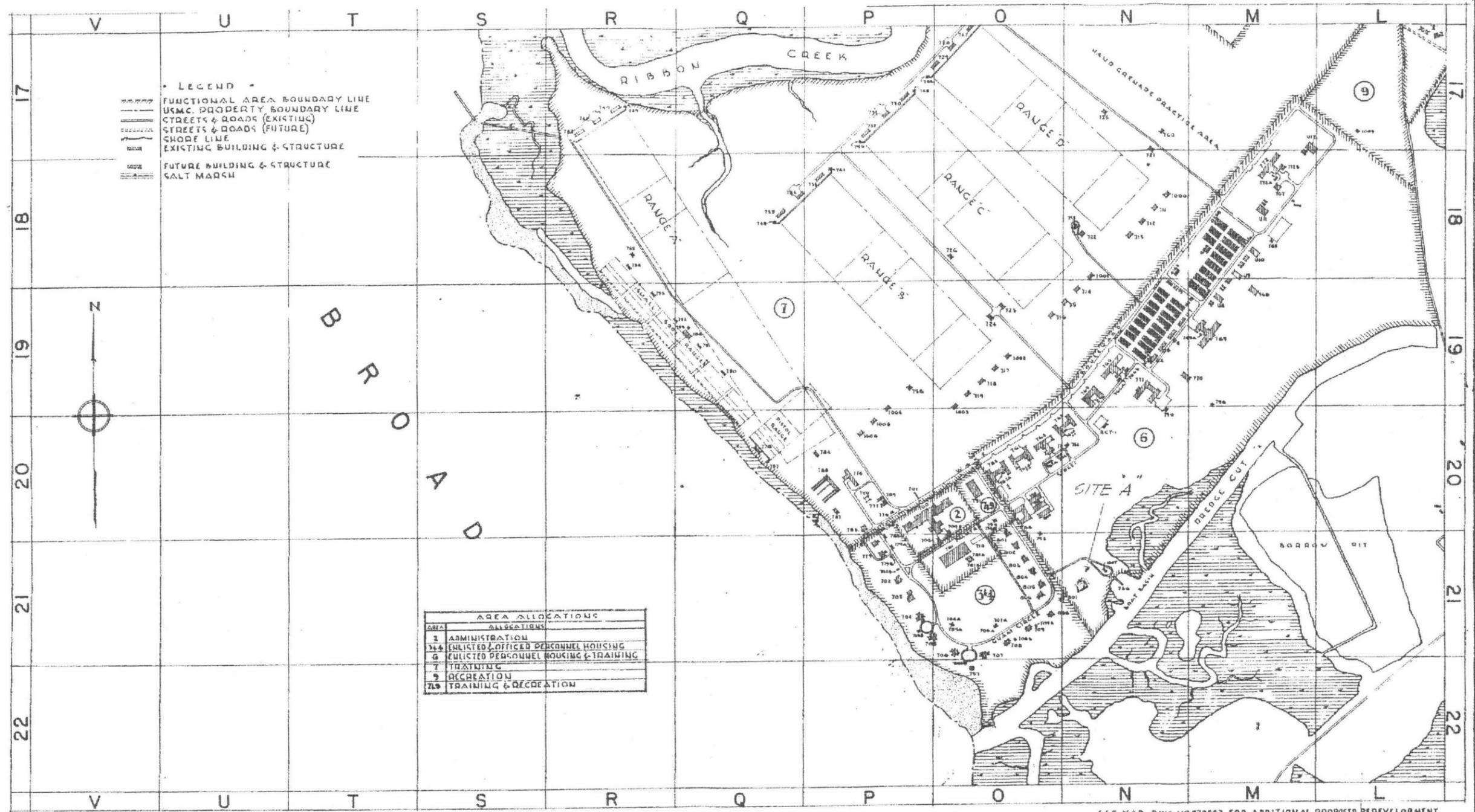
KEY MAP
SCALE IN FEET

MAP OF
**MARINE BARRACKS
PARRIS ISLAND, S.C.**
SHOWING CONDITIONS ON
JUNE 30, 1946

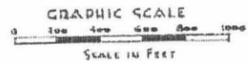
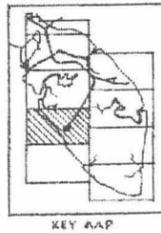
W. L. ...
COMMANDER (C. L. 4) U. S. N. R.
PUBLIC WORKS OFFICER

SYMBOL	LOC.	NAME
A61	F-25	OFFICE BUILDING
A62	F-26	OFFICE BUILDING
A63	F-27	OFFICE BUILDING
A64	F-28	OFFICE BUILDING
A65	F-29	OFFICE BUILDING
A66	F-30	OFFICE BUILDING
A67	F-31	OFFICE BUILDING
A68	F-32	OFFICE BUILDING
A69	F-33	OFFICE BUILDING
A70	F-34	OFFICE BUILDING
A71	F-35	OFFICE BUILDING
A72	F-36	OFFICE BUILDING
A73	F-37	OFFICE BUILDING
A74	F-38	OFFICE BUILDING
A75	F-39	OFFICE BUILDING
A76	F-40	OFFICE BUILDING
A77	F-41	OFFICE BUILDING
A78	F-42	OFFICE BUILDING
A79	F-43	OFFICE BUILDING
A80	F-44	OFFICE BUILDING
A81	F-45	OFFICE BUILDING
A82	F-46	OFFICE BUILDING
A83	F-47	OFFICE BUILDING
A84	F-48	OFFICE BUILDING
A85	F-49	OFFICE BUILDING
A86	F-50	OFFICE BUILDING
A87	F-51	OFFICE BUILDING
A88	F-52	OFFICE BUILDING
A89	F-53	OFFICE BUILDING
A90	F-54	OFFICE BUILDING
A91	F-55	OFFICE BUILDING
A92	F-56	OFFICE BUILDING
A93	F-57	OFFICE BUILDING
A94	F-58	OFFICE BUILDING
A95	F-59	OFFICE BUILDING
A96	F-60	OFFICE BUILDING
A97	F-61	OFFICE BUILDING
A98	F-62	OFFICE BUILDING
A99	F-63	OFFICE BUILDING
A100	F-64	OFFICE BUILDING

RESTRICTED



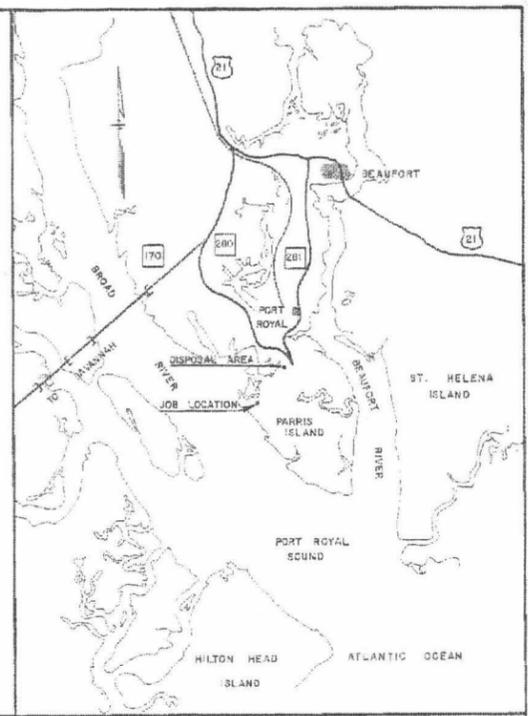
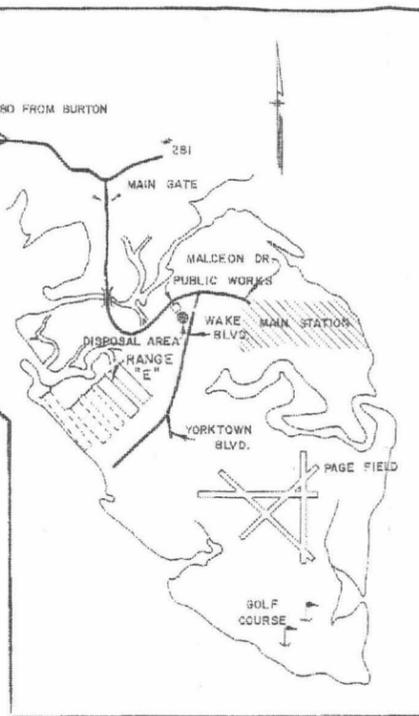
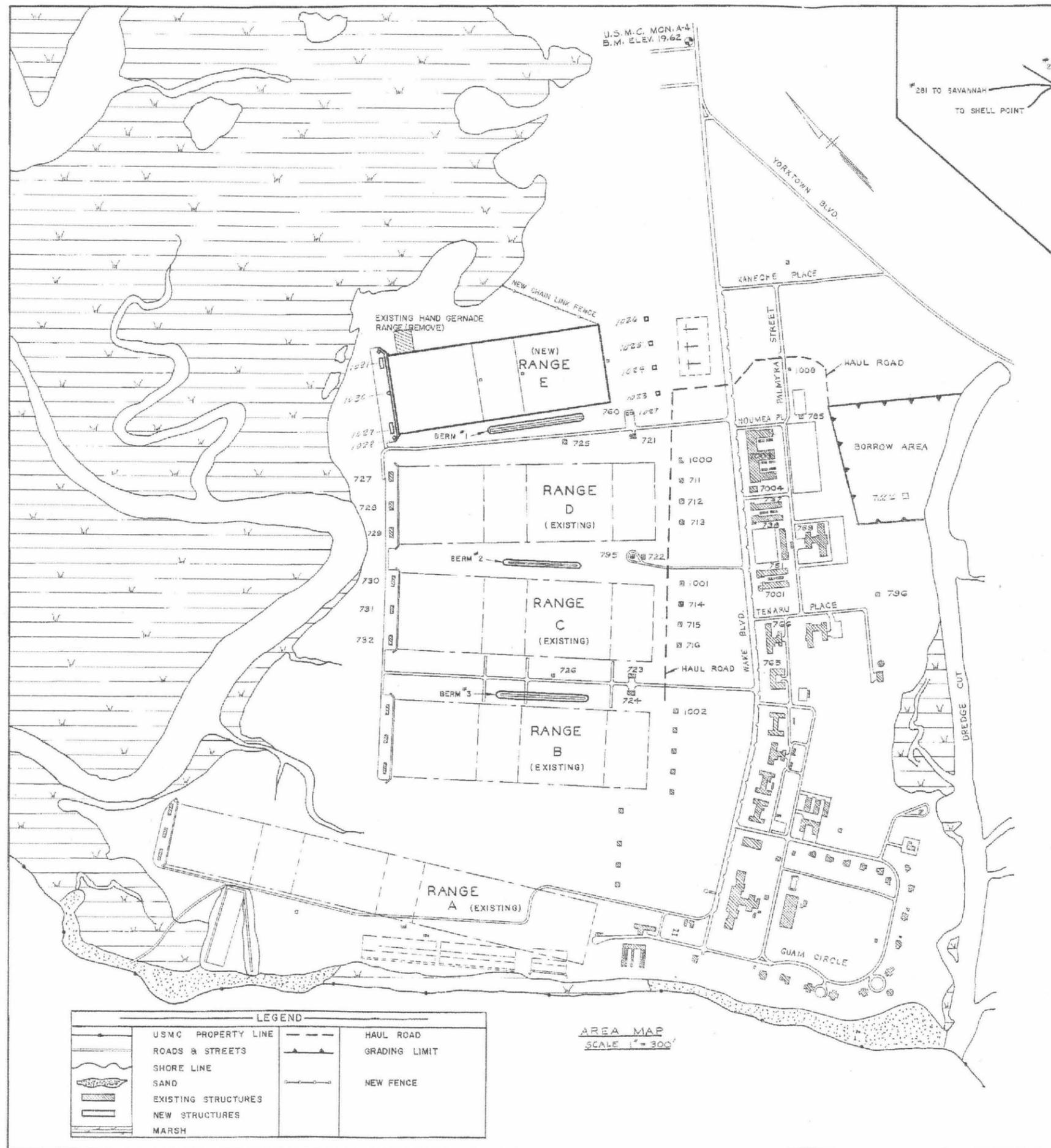
SEE Y&D DWG NO. 572552 FOR ADDITIONAL PROPOSED REDEVELOPMENT.



SYMBOL	DESCRIPTION	DATE	APPROVAL
APPROVED FOR SHORE STATION DEVELOPMENT BOARD DATE: _____			
APPROVED FOR BUREAU OF Y&D DATE: _____			
APPROVED FOR SPANISH BUREAU OR OFFICE DATE: _____			
APPROVED FOR LOCAL DEVELOPMENT BOARD DATE: _____			
P.W. DWG. NO. 3580	DEPARTMENT OF THE NAVY BUREAU OF YARDS & DOCKS MARINE CORPS RECRUIT DEPOT PARRIS ISLAND, S. C.		
DRAWN: PETTIGREW TRACED: _____ ACTING MANAGER: _____	MASTER SHORE STATION DEVELOPMENT PLAN PART III - SECTION 2 GENERAL DEVELOPMENT PLAN AREA 'M' - CONDITIONS AS OF 30 JUNE 1954		
ACTING DIRECTOR: _____	SCALE 1" = 500' SHEET 5 OF 15 Y&D DWG. NO. 572548		
APPROVED: <i>[Signature]</i> COMMANDING GENERAL DATE: 30 JULY 1954	DATE: 30 JULY 1954		

JUNE 1954

ENCLOSURE (2)



INDEX OF DRAWINGS		
NAVFAC DRAWING NO.	SHEET NUMBER	TITLE
1215101	1	AREA & VICINITY MAP
1215102	2	RIFLE RANGE LAYOUT
1215103	3	GRADING PLAN
1215104	4	BERMS 2 & 3
1215105	5	BORROW AREA
1215106	6	BORROW AREA SECTIONS
1215107	7	WATER & SEWER
1215108	8	RETAINING WALL
1215109	9	TARGET SUIT LAYOUT
1215110	10	BUTTS PLAN & TOILET TYPE B
1215111	11	CONTROL HOUSE & CONTROL TOWER
1215112	12	TARGET STORAGE SHED
1215113	13	TOILET TYPE A
1215114	14	LECTURE SHED
1215115	15	TARGET CARRIER
1215116	16	TARGET NUMBER, DOOR & WINDOW SCHEDULES
1215117	17	FIRING LINE TARGET MARKERS
1215118	18	SITE POWER & COMMUNICATIONS
1215119	19	SCHEDULES & DETAILS

NOTES:
 1. EXISTING RANGES ARE SCHEDULED TO BE IN USE DURING CONSTRUCTION. SEE SPECIFICATIONS FOR SCHEDULES.
 2. HAUL ROAD TO BE IN VICINITY OF ROUTE SHOWN. ACTUAL LOCATION TO BE APPROVED BY THE OFFICER IN CHARGE.

RECORD DRAWING
DATE 2/10/70
SHEET 1 OF 19

DRWG. CORRECTED TO AS BUILT 2/10/70 S.M.T.

SYMBOL	DESCRIPTION	DATE	APPROVED

REVISION

NO.	DESCRIPTION	DATE	APPROVED

PIEDMONT ENGINEERS & ARCHITECTS
422 PARK AVE. GREENVILLE, SC

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
SOUTHEAST DIVISION
CHARLESTON, S.C.

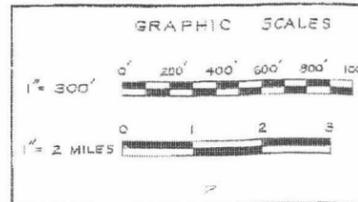
NAVAL CORPS RECRUIT DEPOT
PARRIS ISLAND, S.C.

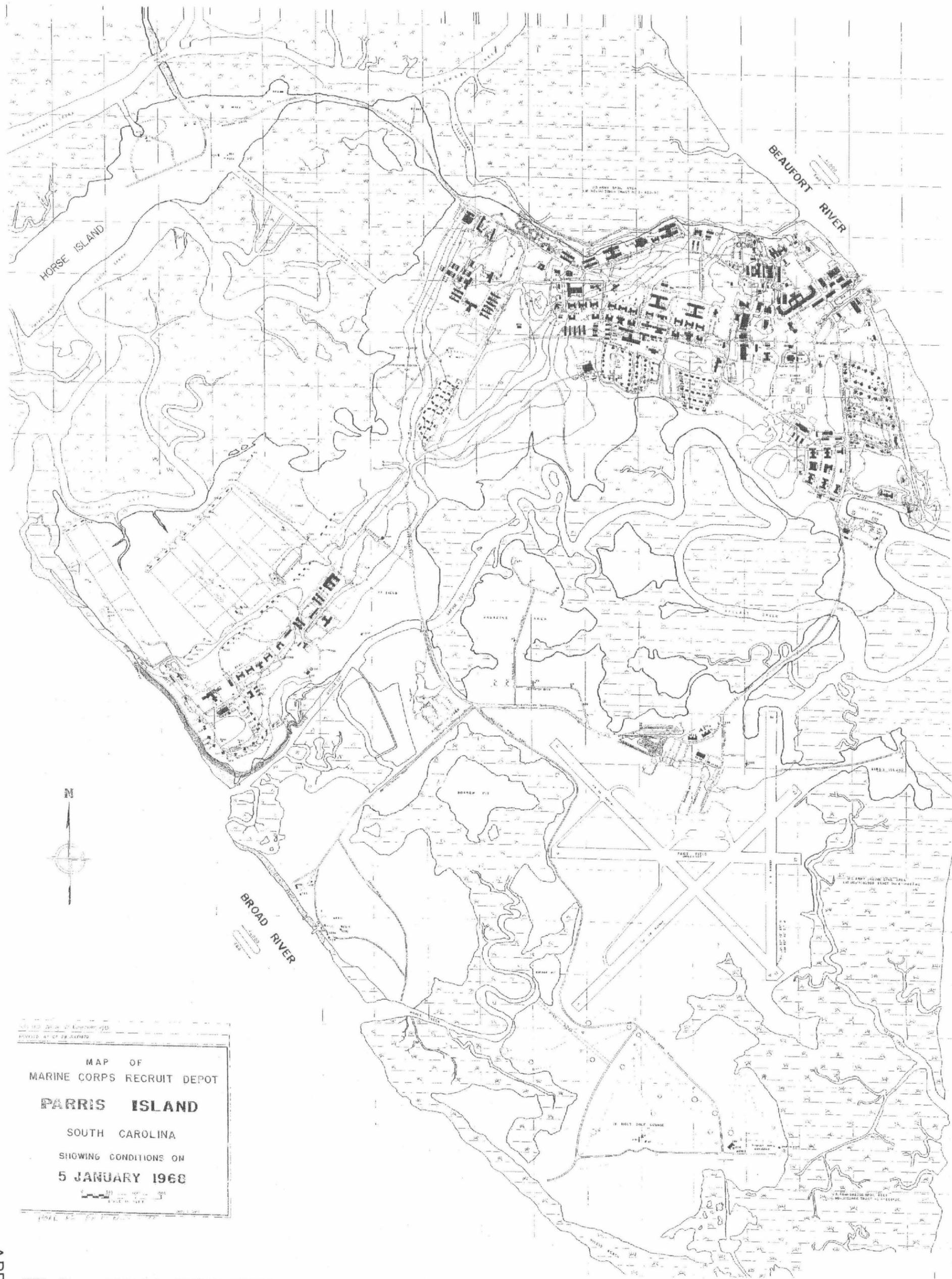
ADDITION & ALTERATIONS TO
OUTDOOR RIFLE RANGE
AREA & VICINITY MAP

DESIGNER: J.E. JONES
CHECKER: J.E. JONES
DATE: 4/25/68

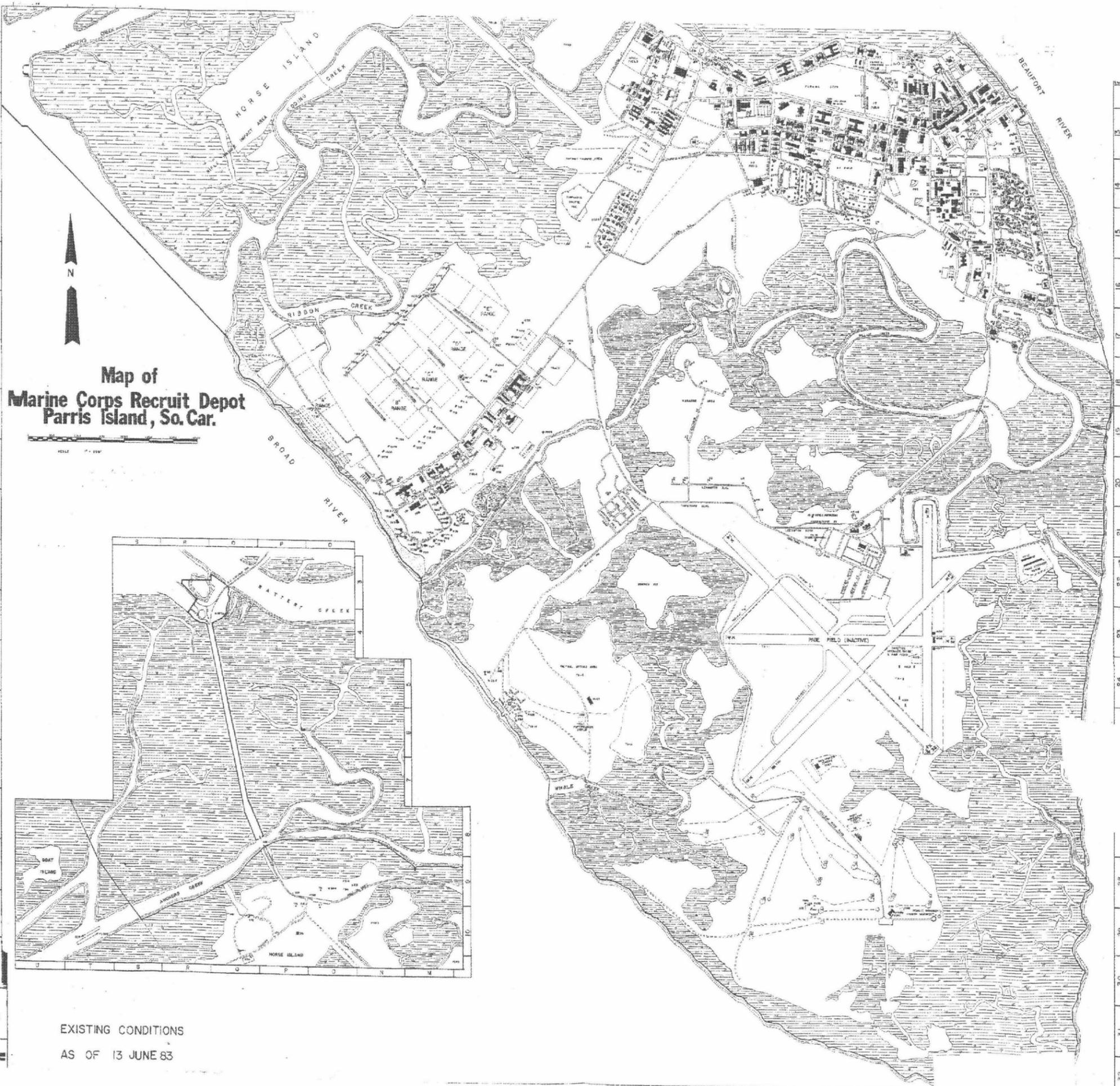
OFFICER IN CHARGE: [Signature]
DATE: 4/25/68

SCALE NOTED

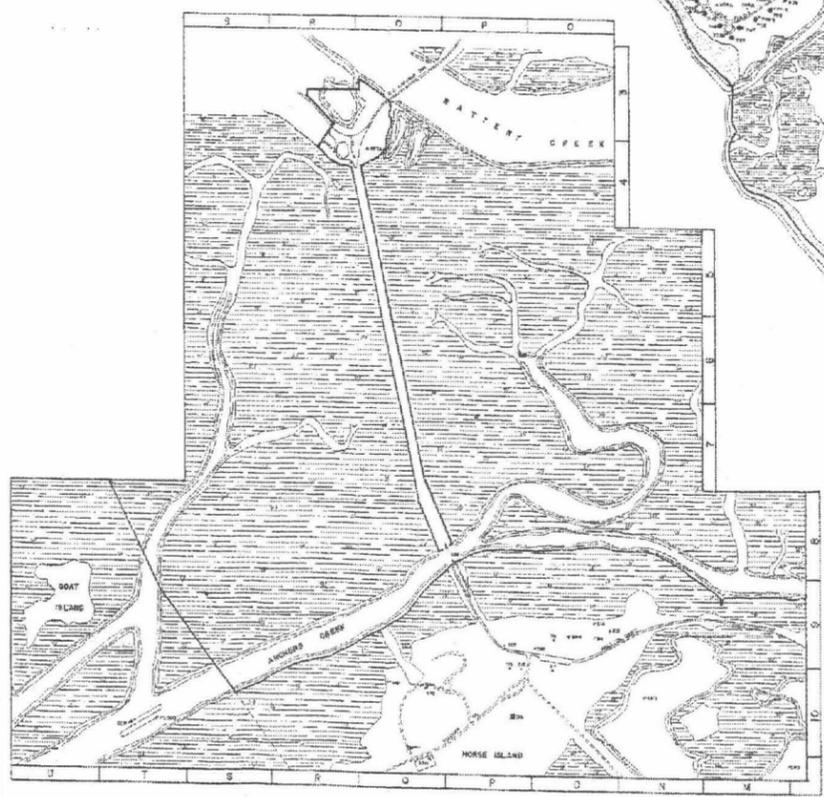




MAP OF
 MARINE CORPS RECRUIT DEPOT
PARRIS ISLAND
 SOUTH CAROLINA
 SHOWING CONDITIONS ON
5 JANUARY 1968

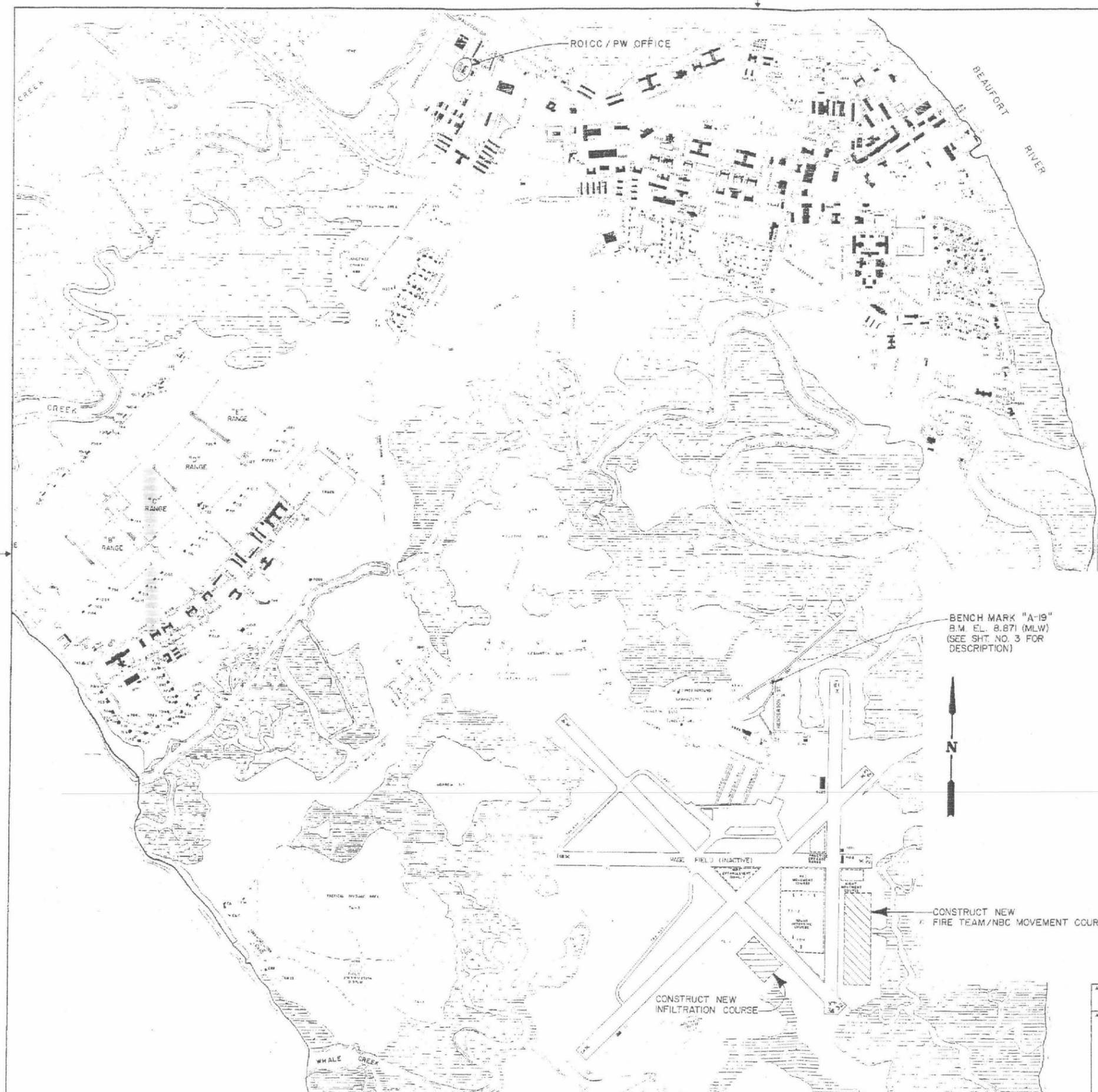


**Map of
Marine Corps Recruit Depot
Parris Island, So. Car.**



EXISTING CONDITIONS
AS OF 13 JUNE 83

REVISIONS			
SYMBOL	DESCRIPTION	DATE	APP.

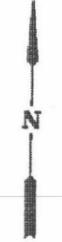


INDEX OF DRAWINGS

NAVFAC DWG. NO.	DWG. NO.	TITLE
514801	1	GENERAL LOCATIONS
514802	2	FIRE TEAM / NBC MOVEMENT COURSE, LAYOUT PLAN
514803	3	INFILTRATION COURSE, GRADING PLAN
514804	4	INFILTRATION COURSE, LAYOUT PLAN
514805	5	BORING LOGS
514806	6	OBSTACLES AND STRUCTURES, SECTIONS AND DETAILS ①
514807	7	OBSTACLES AND STRUCTURES, SECTIONS AND DETAILS ②
514808	8	OBSTACLES AND STRUCTURES, SECTIONS AND DETAILS ③
514809	9	OBSTACLES AND STRUCTURES, WALL DETAILS
5148020	10	CONTROL AND SAFETY TOWERS, ELEVATIONS AND DETAILS
5148021	11	CONTROL TOWER DETAILS
5148022	12	ELECTRICAL AND GAS PIPING LAYOUT
5148023	13	ELECTRICAL DIAGRAM
5148024	14	ELECTRICAL AND GAS PIPING DETAILS

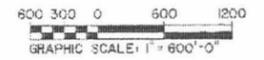
BENCH MARK "A-19"
B.M. EL. 8.871 (MLW)
(SEE SHT. NO. 3 FOR DESCRIPTION)

GENERAL NOTES:
THE CONTRACTOR SHALL SUBMIT MANUFACTURER'S DATA FOR ALL THE MATERIALS AND EQUIPMENTS SPECIFIED ON THE DRAWINGS TO CONTRACTING OFFICER FOR APPROVAL BEFORE INCORPORATING IN THE WORK. HE SHALL NOT PROCEED WITH THE WORK UNTIL MODIFICATIONS HAVE BEEN APPROVED BY THE CONTRACTING OFFICER. OTHER SUBMITTAL REQUIREMENTS, SEE SPECIFICATIONS.

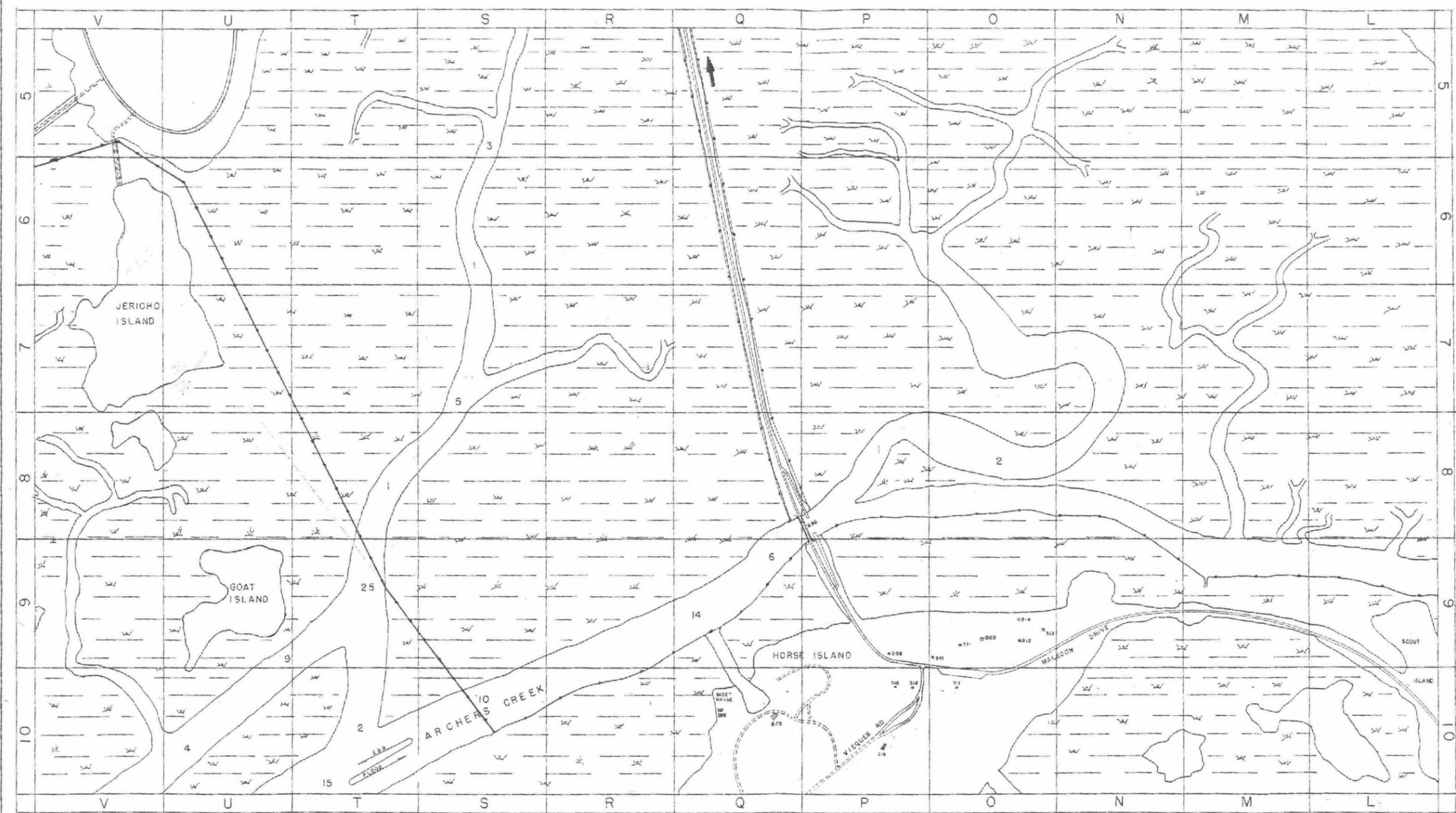


CONSTRUCT NEW FIRE TEAM/NBC MOVEMENT COURSE

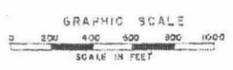
CONSTRUCT NEW INFILTRATION COURSE



ARCH. & ENG. FIRM THE LPA GROUP, INC. CONSULTING ENGINEERS AND PLANNERS COLUMBIA, S.C.	P. W. DWG. NO. 6851	DEPARTMENT OF THE NAVY MARINE CORPS RECRUIT DEPOT PEARLE ISLAND, S.C.
	DRAWN BY MARK BREELAND	NEW COMBAT COURSES GENERAL LOCATIONS LOCATION MAP & INDEX OF DRAWINGS
ARCH. & ENGR. SEAL 	CHECKED BY ELHAM FARZAM	APPROVED? <input type="checkbox"/> DATE 20 July 87 PUBL. WORKS OFFICER ELHAM FARZAM



- LEGEND**
- U.S.M.C. PROPERTY BOUNDARY LINE
 - STREETS & ROADS (EXISTING)
 - SHORE LINE
 - ▨ EXISTING BUILDINGS & STRUCTURES
 - SALT MARSH
 - ← MAIN STATION ENTRANCE



APPROVED FOR CHIEF OF NAVAL OPERATIONS	DATE	APPROVED FOR NAVAL FACILITIES ENGINEER IN COMMAND	DATE	APPROVED FOR COMMANDANT OF THE MARINE CORPS	DATE	APPROVED FOR LOCAL NAVY BOARD	DATE
P.W. DWG. NO. 3578		DEPARTMENT OF THE NAVY BUREAU OF YARDS & DOCKS MARINE CORPS RECRUIT DEPOT PARRIS ISLAND, S. C.		MASTER SHORE STATION DEVELOPMENT PLAN PART II SECTION 2 GENERAL DEVELOPMENT MAP AREA F - CONDITIONS AS OF 1 JULY 1966		SCALE 1" = 400' SPEC SHEET 7 OF 14 NB	
DRAWN BY		CHECKED BY		IN CHARGE		APPROVED	
DATE		DATE		DATE		DATE	

Map of
Marine Corps Recruit Depot
Parris Island, S.C.

JAN 194





ESQD ARCS
MCRD PARRIS ISLAND, S.C.
19 SEPT 1996

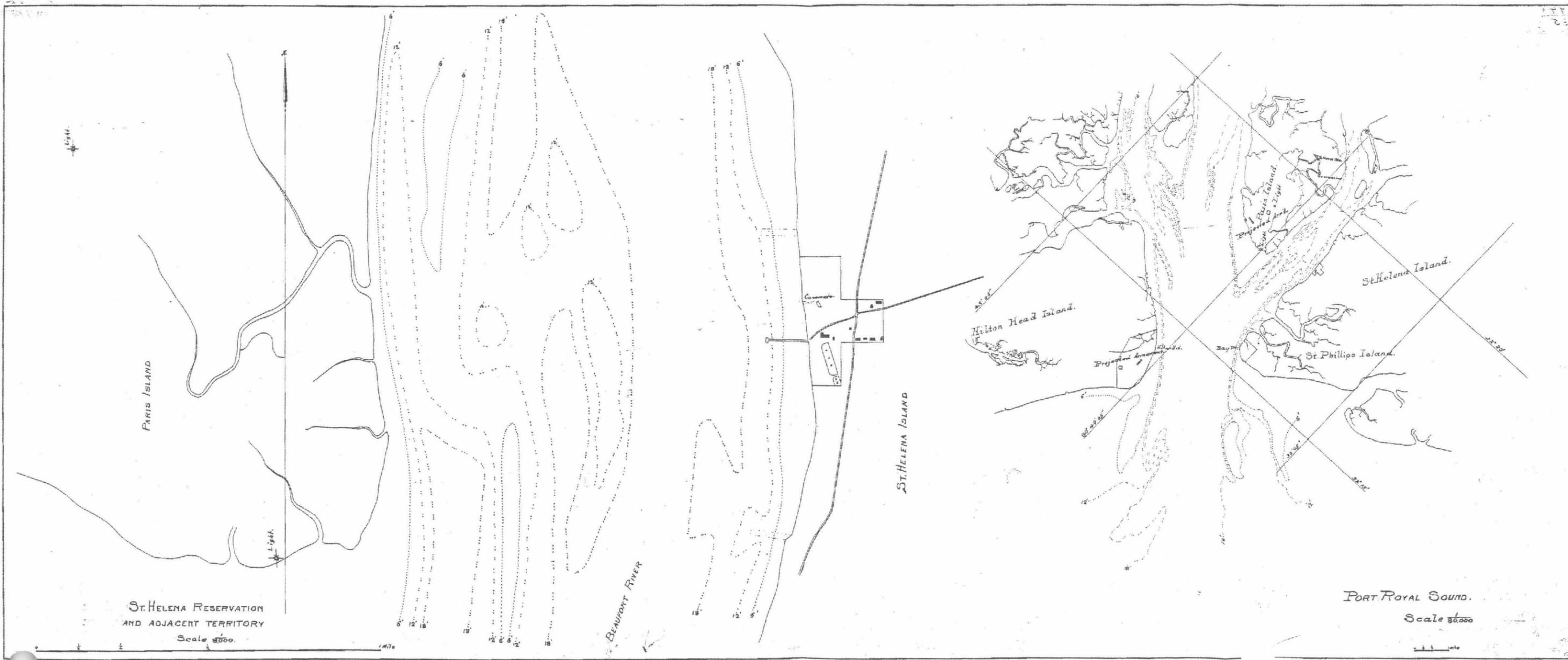
MCRD PIS. PW MAP/General Dept. Plans

MCRD PARRIS ISLAND



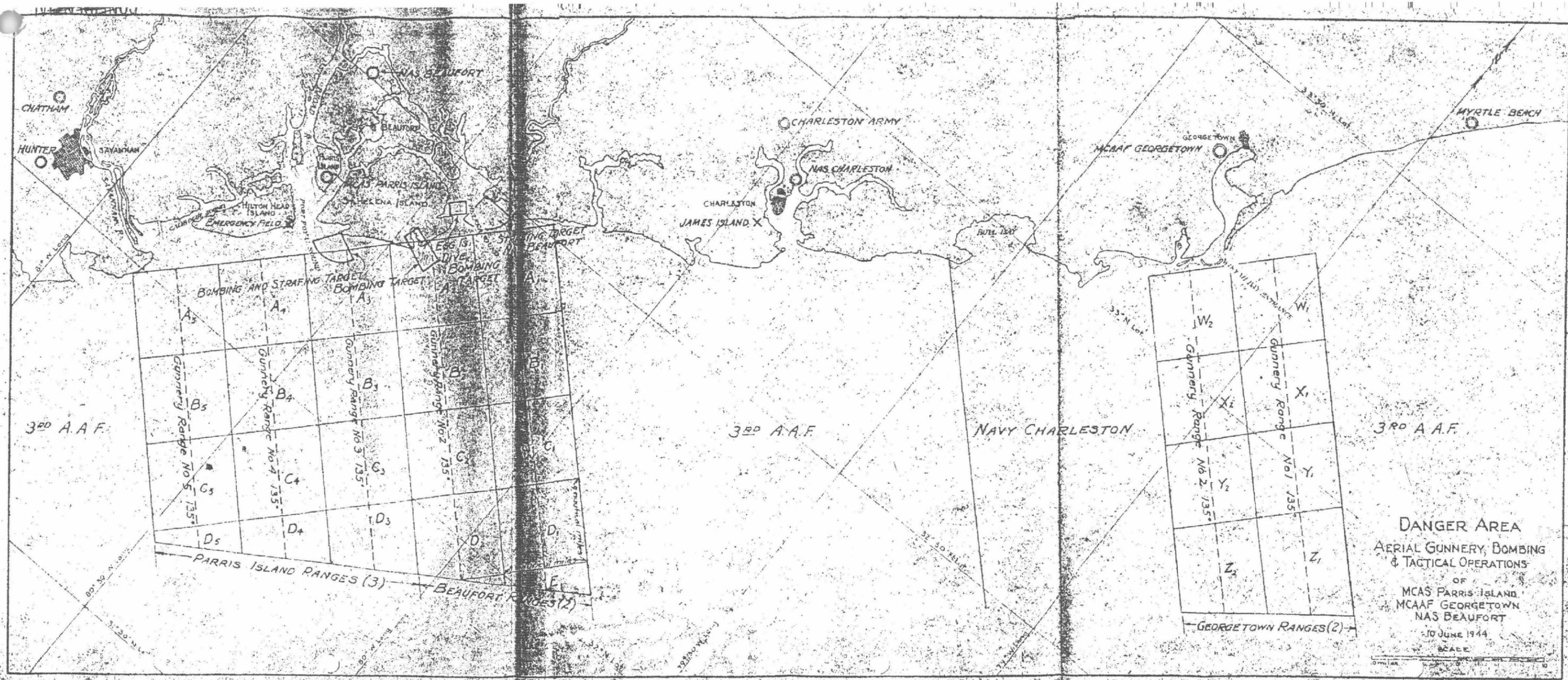
DESIGN & SCALE: 1" = 100'		DATE: 10/27/50	
DRAWN BY: SGT. J. J. JAMES		CHECKED BY: CAPT. J. J. JACKSON	
APPROVED BY: [Signature]		DATE: 10/27/50	
DRAWN BY: SGT. J. J. JAMES		DATE: 10/27/50	
APPROVED BY: [Signature]		DATE: 10/27/50	
DEPOT MAP MCRD PISIC			

REVISIONS	
NO.	DESCRIPTION

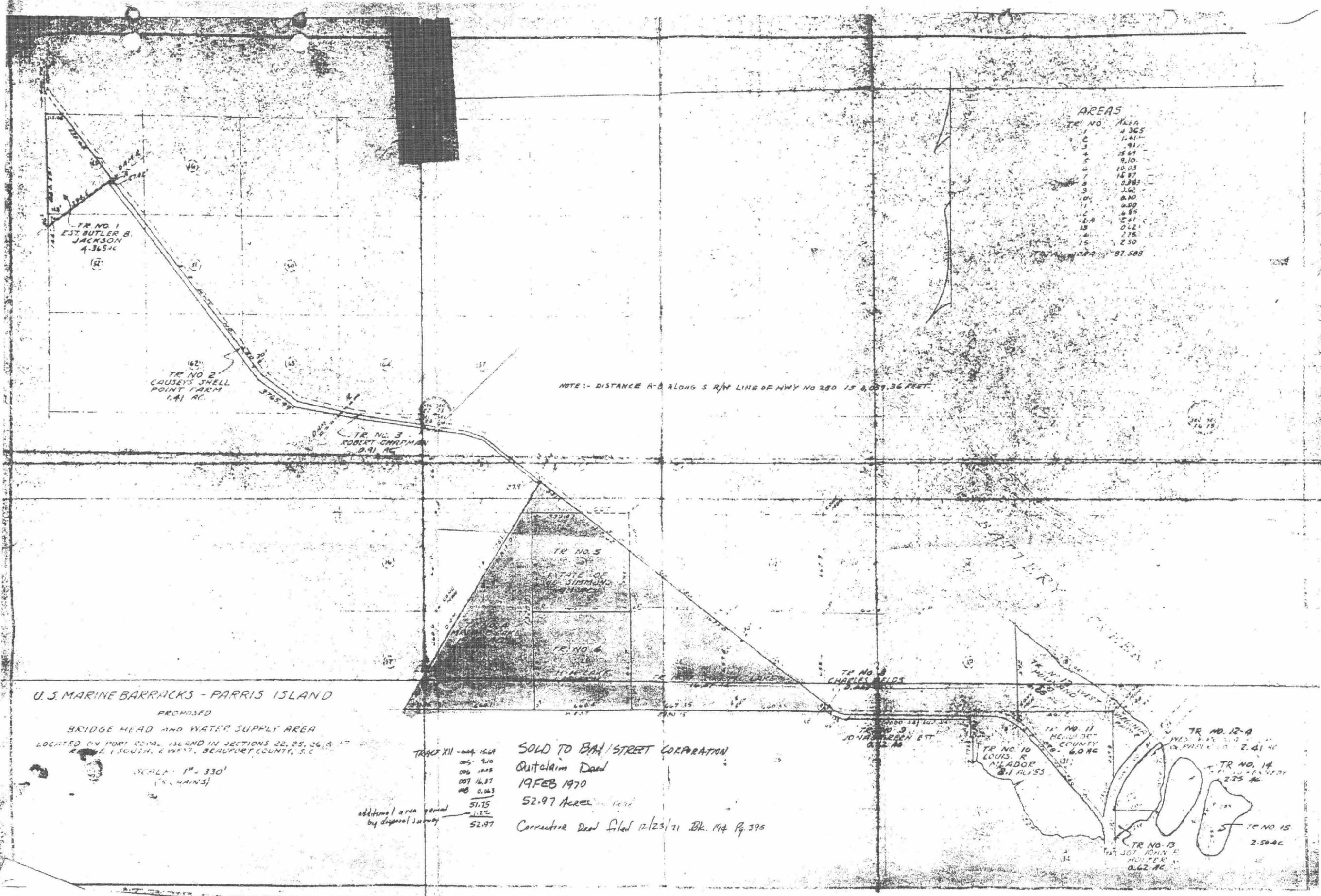


National Archives at College Park, Cartographic & Architectural Branch
Record Group 77 (Records of the Chief of Engineers)
Entry Fortifications Map File
Drawer 192, St. Helena Island Military Reservation, SC
Sheet 3-2

192-3-2



DANGER AREA
AERIAL GUNNERY, BOMBING
& TACTICAL OPERATIONS
 OF
 MCAF PARRIS ISLAND,
 MCAF GEORGETOWN,
 NAS BEAUFORT
 10 JUNE 1944
 SCALE



AREAS

TR NO.	AREA
1	4.365
2	1.41
3	.91
4	15.69
5	9.10
6	10.03
7	14.87
8	0.283
9	1.62
10	8.40
11	4.80
12	4.85
12-A	5.41
13	0.42
14	2.25
15	2.50
TOTAL	87.588

NOTE: - DISTANCE A-B ALONG S R/W LINE OF HWY NO 280 IS 8,009.36 FEET.

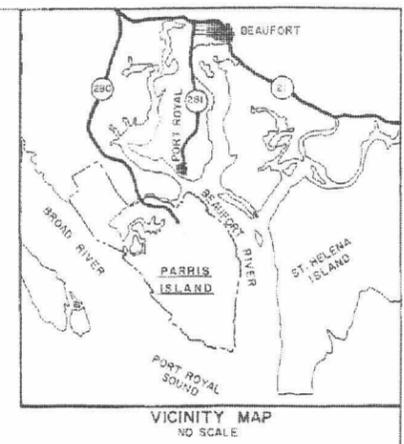
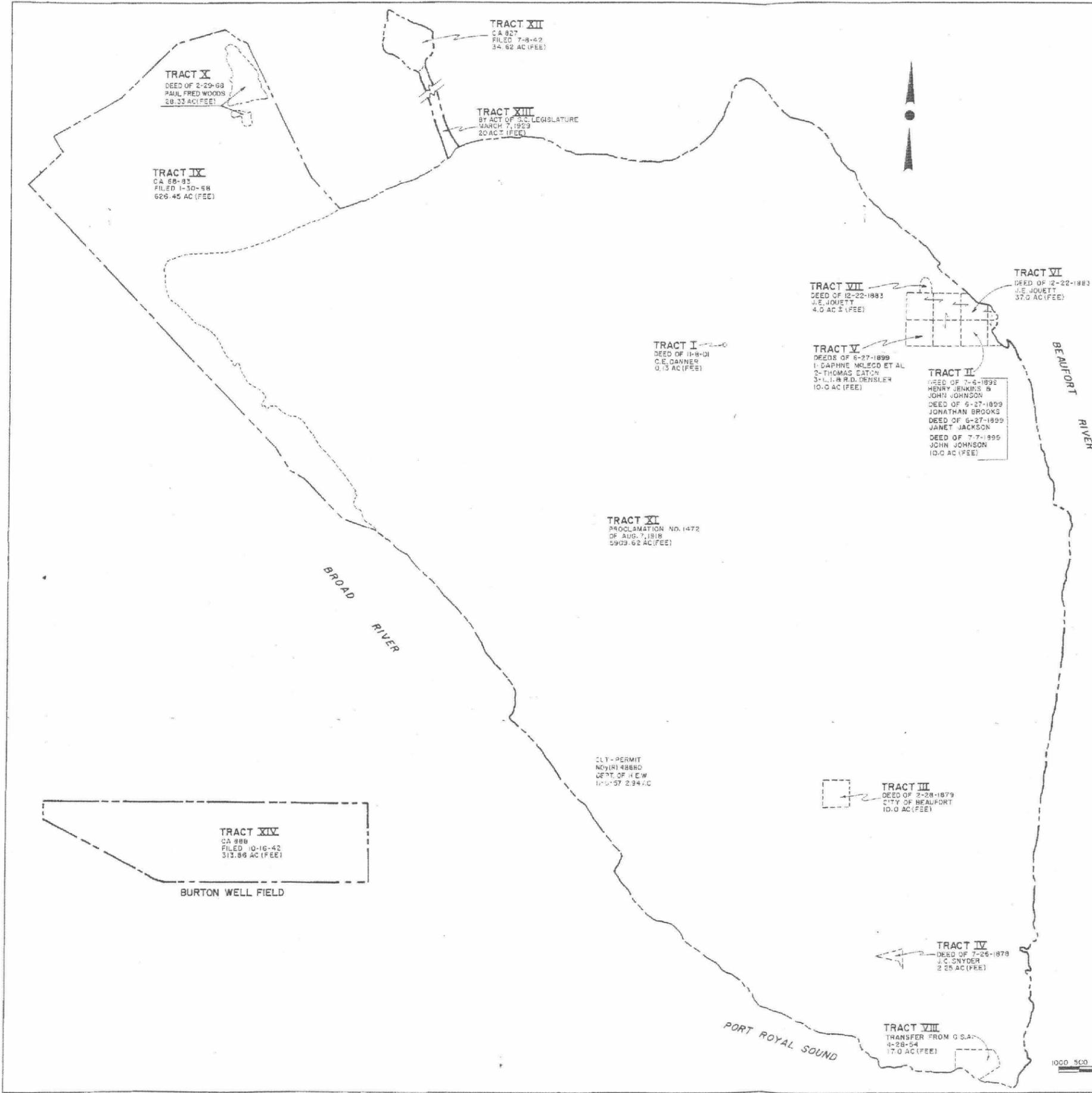
U.S. MARINE BARRACKS - PARRIS ISLAND

PROPOSED
BRIDGE HEAD AND WATER SUPPLY AREA
LOCATED ON PORT COCA, ISLAND IN SECTIONS 22, 25, 26, & 27
RANGE 1 SOUTH, 2 WEST, BEAUFORT COUNTY, S.C.

SCALE: 1" = 330'
(5 CHAINS)

TRACT XII - 004 15.69
005 9.10
006 10.03
007 14.87
008 0.283
51.15
additional area gained
by disposal survey 1.82
52.97

SOLD TO BAY STREET CORPORATION
Quitclaim Deed
19 FEB 1970
52.97 Acres
Corrective Deed filed 12/23/71 Blk. 194 Pg. 395

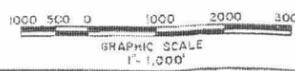


FEDERAL JURISDICTION						
TRACT NO.	LAND ACQUIRED BY	AREA	DATE ACCEPTED BY U.S.A.	STATE LANDS COMMISSION ACTION	APPLICABLE STATE STATUTE	DEGREE
I	DEED	0.13	N.A.	N.A.	NOTE 1	CONCURRENT
II	"	10.0	"	"	"	"
III	"	10.0	"	"	"	"
IV	"	2.25	"	"	"	"
V	"	10.0	"	"	"	"
VI	"	37.0	"	"	"	"
VII	"	4.0	"	"	"	"
VIII	TRANSFER	17.0	"	"	"	"
IX	CA 88-83	626.45	"	"	N.A.	PROPRIETARY
X	DEED	28.33	"	"	"	"
XI	PROCLAM.	5903.62	"	"	NOTE 2	EXCL. 3 TO 10" SEE NOTE 3
XII	CA 927	34.62	10-25-42	"	"	EXCLUSIVE
XIII	ACT OF LEG.	20	N.A.	"	"	"
XIV	CA 888	313.86	10-25-43	"	"	"

NOTES: 1. SESSIONS LAWS OF 1871, CHAPTER 14, PAGE 535
 2. SESSIONS LAWS 1908, XXV, 1127 (S.C. CODE, 1932, SEC. 2042 (52))
 3. THE STATE OF SOUTH CAROLINA ACCEPTED CONCURRENT JURISDICTION ON THE FOLLOWING LANDS IMMEDIATELY ADJACENT TO AND SURROUNDING PARRIS ISLAND AND INCLUDING AT THE HIGH WATER MARKS AND EXTENDING UPWARD TO THE CHANNELS OF BROAD RIVER, SOUND TO THE SOUTH, SOUND RIVER TO THE WEST, AND BEAUFORT RIVER TO THE EAST. THIS ADDRESS SPECIFIED. SEE JTR DATED SEPT. 2, 1877 FROM GOV. OF S.C.

LEGEND
 GOVERNMENT PROPERTY LINE ———
 INTERIOR TRACT LINE - - - - -

TOTAL ACERAGE THIS MAP 7,023.26 Ac ±



NO. 2	AMC.	CHANGE IN JURISDICTION TRACT II	3-1-80	
NO. 1	AMC.	ADDITION OF CLT-PERMIT NOYIRI 4868C	5-7-75	
NO. 1	AMC. OR COR.	DESCRIPTION OF AMENDMENT OR CORRECTION	DATE	SOONER-ETAK APPROVAL
DRAWN: COVINGTON		DEPARTMENT OF THE NAVY - NAVFACENGCOM		
SUBMITTED: C.B. McCORD DIR. S.E. DIV.		MARINE CORPS RECRUIT DEPOT PARRIS ISLAND, S. C.		
CONCUR: DATE		REAL ESTATE SUMMARY MAP		
C.D. DATE		APPROVED BY: NAVFACENGCOM		SCALE: 1" = 1,000'
		SHEET 1 OF 1		FED. DWG. NO. 5104824

APPENDIX H

**SITE SAFETY AND HEALTH PLAN / SITE
INSPECTION REPORT**

SITE SAFETY AND HEALTH PLAN / SITE INSPECTION REPORT

Section No. Plan / Report

H-1 Site Safety and Health Plan – Marine Corps Recruit Depot Eastern Recruiting
Region

H-2 Site Inspection Report – Marine Corps Recruit Depot Eastern Recruiting Region

APPENDIX H-1

Site Safety and Health Plan - Marine Corps Recruit Depot Eastern Recruiting Region

**SITE SAFETY AND HEALTH PLAN (SSHP)
Marine Corps Recruit Depot Eastern Recruiting Region
Parris Island, SC**

The purpose of this site visit is to reconnoiter, document, and photograph areas on Marine Corps Recruit Depot Eastern Recruiting Region, Parris Island, South Carolina suspected to be contaminated with unexploded ordnance and/or toxic chemical munitions.

PREPARED BY: Gregg E. Kocher
OFFICE USACE, CEMVS-ED-P
ADDRESS 1222 Spruce St. St. Louis, MO
PHONE (314) 331-8790
DATE PREPARED 22 March 1999
REVIEWED/APPROVED BY: George Sloan
SSHO

NOTE: This SSHP is to be used only for non-intrusive site visits and must be approved by safety prior to the start of the field visit. All team members must read and comply with the SSHP, and attend the safety briefings. The Site Safety and Health Officer (SSHO) shall ensure that the Safety Briefing Checklist and the SSHP acceptance form (Appendix C) are filled out prior to the start of the site visit.

A. SITE DESCRIPTION AND PREVIOUS INVESTIGATIONS

1. **Site Description:** Although the Marine Corps traces its history on Parris Island back to the late 1800's, it did not officially become a recruit depot until World War I. Not only was basic training conducted, but a variety of other skills as well, such as the NCO School, music school and signal school. During World War II, tremendous expansion took place in terms of facilities and the number of recruits trained. Today, the Marine Corps Recruit Depot, Parris Island continues to train 20,000 marines each year

a. **Size** 6,707.955 acres

b. **Present Usage** (check all that apply)

- | | | |
|--|--|--|
| <input checked="" type="checkbox"/> Military | <input type="checkbox"/> Recreational | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Residential | <input type="checkbox"/> Commercial | |
| <input type="checkbox"/> Natural Area | <input type="checkbox"/> Industrial | |
| <input type="checkbox"/> Agricultural | <input type="checkbox"/> Landfill | |
| <input checked="" type="checkbox"/> Secured | <input checked="" type="checkbox"/> Active | <input type="checkbox"/> Unknown |
| <input type="checkbox"/> Unsecured | <input type="checkbox"/> Inactive | |

2. **Past Uses:** Naval ship yard.

3. **Surrounding Population** (check all that apply)

- | | | |
|---|--------------------------------------|---|
| <input checked="" type="checkbox"/> Rural | <input type="checkbox"/> Residential | <input checked="" type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Urban | <input type="checkbox"/> Industrial | Wildlife management area |
| <input type="checkbox"/> Commercial | | |

4. **Ordnance/Explosives (OE) Potential:** A wide array of infantry weapons from small arms to hand grenades, possibly artillery and practice bombs.

B. DESCRIPTION OF ON-SITE ACTIVITIES (check all that apply)

- | | | |
|--|---|--|
| <input checked="" type="checkbox"/> Walk-through | <input checked="" type="checkbox"/> Drive-through | <input type="checkbox"/> Other (specify) |
| <input checked="" type="checkbox"/> On-Path | <input type="checkbox"/> On-road | |
| <input checked="" type="checkbox"/> Off-Path | <input type="checkbox"/> Off-road | |

C. SITE PERSONNEL AND RESPONSIBILITIES

1. **Responsibilities**

a. **Project Manager** The Corps of Engineers Project Manager (PM) is overall responsible for the site visit. He will assign a Team Leader, (in most situations this

will be the PM). The PM will ensure that the SSHP is completed along with coordinating and executing the site visit.

b. Site Safety and Health Officer The SSHO is designated to conduct safety, enforce the SSHP, conduct safety briefings and ensure that the team leader can safely fulfill his objectives. The SSHO will maintain the safety gear and monitor on-site operations. The SSHO is responsible for identifying, marking and reporting any unexploded ordnance and explosives.

2. Team Members

<u>Name</u>	<u>Position</u>	<u>Address</u>	<u>Phone</u>
Randal Curtis	PM	CEMVS-ED-P	314-331-8786
Gregg E. Kocher	SSHO	CEMVS-ED-P	314-331-8790

D. OVERALL HAZARD EVALUATION (check one)

High Moderate Low Unknown

This assessment was developed using the Site Investigation Hazard Analysis and Risk Assessment Code Matrix.

E. GENERAL PRECAUTIONS Prior to the on-site visit, all team members are required to read this SSHP and sign the form acknowledging that they have read and will comply with it. In addition, the SSHO shall hold a brief tailgate meeting in which site specific topics regarding the day's activities will be discussed. If unanticipated hazardous conditions arise, team members are to stop work, leave the immediate area and notify the SSHO. The buddy system will be enforced at all times.

F. STANDARD OPERATION SAFETY PROCEDURES, ENGINEERING CONTROLS AND WORK PRACTICES

- 1. Site Rules/Prohibitions** At any sign of unanticipated hazardous conditions, stop tasks, leave the immediate area and notify the SSHO. Smoking, eating and drinking allowed in designated areas only.
- 2. Material Handling Procedures** Do not handle.
- 3. Drum Handling Procedures** Do not handle.
- 4. Confined Space Entry** An area identified as a Permit Required Confined space will not be entered. All confined spaces shall be considered permit required confined spaces until the pre-entry procedures demonstrate otherwise. Confined spaces may be entered without a written permit or attendant provided the space is determined not to be a permit required confined space as specified in 29 CFR 1910.146.

5. **Electrical Protection** Overhead power lines, downed electrical wires and buried cables pose a danger of shock and electrocution. In addition, buildings may contain exposed wiring that may hold a potential load. Workers should avoid contact with any and all exposed wire and cables
6. **Spill Containment** N/A
7. **Excavation Safety** Do not enter trenches/excavations.
8. **Illumination** Site visits will be conducted during daylight hours only.
9. **Sanitation** Use existing sanitary facilities.
10. **Buddy System** Individuals will maintain constant contact with other personnel at all times. No one will work alone at any time during the site visit.
11. **Engineering Controls** N/A
12. **Insects** Wearing light colored clothing and tucking in the pant legs can reduce contact. In severely infested area it may be necessary to tape all openings. Apply repellents to both clothing and bare skin. Diethyltoluamide (DEET) is an active ingredient in many repellents, which are effective against ticks and other insects. Repellents containing DEET can be applied on exposed areas of skin and clothing. However, repellents containing permethrin should be used on only clothing. For more information on insect bites, refer to Appendix B.
13. **Poisonous Vegetation** Recognition and avoidance is the best protection. Cover all exposed skin. If it is known or suspected that an individual has been exposed, wash the effected area with soapy water.
14. **Inclement Weather** When there are warnings or indications of impending severe weather (heavy rains, strong winds, lightning, tornadoes, etc.), weather conditions shall be monitored and appropriate precautions taken to protect personnel and property from the effects of the severe weather.
15. **Hot Weather** In hot environments, cool drinking water shall be made available and workers shall be encouraged to frequently drink small amounts, e.g., one cup every 15 - 20 minutes; the water shall be kept reasonably cool. In those situations where heat stress may impact worker safety and health, work regimens shall be established. Environmental monitoring of the Wet Bulb Globe Temperature Index shall be conducted and work loads and work regimens categorized as specified in the American Conference of Governmental Industrial Hygienist (ACGIH) publication "Threshold Limit Values and Biological Exposure Indices". For more information on Heat Stress refer to Appendix A of this SSHP.

16. Cold Weather Cold injury (frost bite and hypothermia) and impaired ability to work are dangers at low temperatures and when the wind-chill factor is low. To guard against them; wear appropriate clothing; have warm shelter readily available; carefully schedule work and rest periods, and monitor workers' physical conditions.

17. Off-Road Driving Ensure all emergency equipment is available with the vehicle i.e. tire changing equipment. Drivers shall familiarize themselves with the procedures for engaging four-wheel drive systems before the need for added traction arises. Vehicles will not be driven into an environment that is unknown, such as deep water, or an unstable surface. Vehicles will not be driven into a suspected ordnance impact area.

18. Ordnance

a. General Information

(1) The cardinal principle to be observed involving explosives, ammunition, severe fire hazards or toxic materials is to limit the exposure to a minimum number of personnel, for the minimum amount of time, to a minimum amount of hazardous material consistent with a safe and efficient operation.

(2) The age or condition of an ordnance item does not decrease the effectiveness. Ordnance that has been exposed to the elements for extended periods of time may become more sensitive to shock, movement, and friction, because the stability agent in the explosives may be degraded.

(3) When chemical agents may be present, further precautions are necessary. If the munition item has green markings leave the area immediately, since it may contain a chemical filler.

(4) Consider ordnance that has been exposed to fire as extremely hazardous. Chemical and physical changes may have occurred to the contents, which render it more sensitive than it was in its original state.

b. On-Site Instructions

(1) DO NOT TOUCH or MOVE any ordnance items regardless of the markings or apparent condition.

(2) DO NOT conduct a site visit during an electrical storm or an approaching electrical storm. If a storm approaches during the site visit leave the site immediately and seek shelter.

- (3) DO NOT use a radio or cellular phone in the vicinity of a suspect ordnance item.
- (4) DO NOT walk across an area where the ground cannot be seen.
- (5) DO NOT drive a vehicle into a suspected OE area; use clearly marked lanes.
- (6) DO NOT carry matches, cigarettes, lighters or other flame producing devices into a OE site.
- (7) DO NOT rely on color code for positive identification of ordnance items or their contents.
- (8) Approach ordnance items from the side; avoid approaching from the front or rear.
- (9) Always assume ordnance items contain a live charge until it can be determined otherwise.
- (10) Dead vegetation and animals may indicate potential chemical contamination. If a suspect area is encountered, personnel should leave the immediate area and evaluate the situation before continuing the site visit.

c. Specific Action Upon Locating Ordnance

- (1) DO NOT touch, move or jar any ordnance item, regardless of its apparent condition.
- (2) DO NOT be misled by markings on the ordnance item stating "practice", "dummy" or "inert". Practice munitions may contain an explosive charge used for spotting the point of impact. The item may also be mislabeled.
- (3) DO NOT roll the item over or scrape the item to read the markings.
- (4) The location of any ordnance items found during site investigations should be clearly marked so it can be easily located and avoided.
- (5) Reporting will be conducted in accordance with CELMS-PM-M, Standard Operating procedure for Reporting Ordnance and Unexploded Ordnance (UXO), dated 19 January 1995.

19. Other (specify)

G. SITE CONTROL AND COMMUNICATIONS

1. **Site Map** Any maps will be maintained by the PM or Safety Officer.
2. **Site Work Zones** N/A
3. **Buddy System** Individuals will maintain constant contact with other personnel at all times. No one will work alone at any time during the site visit.

4. **Communications**

a. **On-Site** Verbal communications will be used among team members.

b. **Off-Site** Communications shall be established on every site. Communications may be established by using a cellular, public or private phone which may be readily accessible. (specify below)

Cellular phone

Public/private phone

Other

c. **Emergency Signals** In the case of small groups, a verbal signal for emergencies will suffice. An emergency signal for large groups (i.e. air horn, whistle) should be incorporated at the discretion of the SSHO. (specify below)

Verbal

Nonverbal (specify)

H. **EMERGENCY RESPONSE** Team members are to be alert to the dangers associated with the site at all times. If an unanticipated hazardous condition arises, stop work, evacuate the immediate area and notify the SSHO. A First Aid Kit and emergency eye wash (if applicable) will be located in the field vehicle. If qualified persons (i.e. fire department, medical facility or physician) are not accessible within five minutes of the site, at least two team members shall be qualified to administer first aid and CPR.

1. **Emergency/Important Telephone Numbers**

Emergencies..... 911
Beaufort County Sheriff (843) 525-7256

Beaufort Memorial Hospital (843) 522-5200
Marine Corps (EOD), MCAS, Beaufort (843) 522-7513/7565
Huntsville Safety Office (205) 895-1598/1596
Huntsville Safety (after hours)..... (205) 895-1180
On-site cellular phone..... 314-
St. Louis Corps of Engineers (314) 331-8036

2. Hospital/Medical Facility Information

Name: Beaufort Memorial Hospital
Address: 955 Ribault Rd., Beaufort, SC Phone: (843) 522-5200

Distance to hospitals: 3.7 miles

Route to Hospital: refer to the site map included with this SSHP.

I. MONITORING EQUIPMENT AND PROCEDURES

1. Exposure Monitoring For non-intrusive on-site activities such as site visits, air monitoring is typically not required. However, if the site situation dictates the need for monitoring, complete the following information on a separate page and attach the page to the SSHP.

- a. **Monitoring Equipment To Be Utilized** N/A
- b. **Equipment Calibration Results** N/A
- c. **Action Levels** N/A

2. Heat/ Cold Stress Monitoring

a. Heat Stress monitoring criteria published in Chapter 8 of the NIOSH/OSHA/USCG/EPA "Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities" shall be followed.

b. Cold Stress monitoring shall be conducted in accordance with the most current published American Conference of Governmental Industrial Hygienists (ACGIH) cold stress standard.

J. PERSONAL PROTECTIVE EQUIPMENT Typically, for non-intrusive site visits, Level D is required. If a higher level of protection is to be used initially or as contingency, a brief discussion will be attached. At a minimum personnel shall wear clothing suitable for the weather and work condition. The minimum for field work shall be short sleeve shirt, long trousers, and leather or other protective work shoes or boots. If a higher level of protection is to be used initially or as contingency, a brief discussion will be attached.

1. **Footwear** Footwear providing protection against puncture shall meet the applicable requirements as stated in EM 385-1-1, paragraph 05.A.08. All activities which personnel are potentially exposed to foot hazards will be identified and documented in a hazard analysis.

2. **Hand Protection** Persons involved in activities which subject the hands to injury (e.g., cuts, abrasions, punctures, burns, etc.) shall use leather gloves.

3. **Head Protection** Hardhats shall be worn when personnel are subject to potential head injury. The identification and analysis of head hazards will be documented in a hazard analysis.

4. **Eye Protection** Personnel will wear eye protection when activities present potential injuries to the eyes. All eye protection equipment shall meet the requirements as stated in EM 385-1-1, paragraph 05.B.

K. DECONTAMINATION PROCEDURES Decontamination procedures are not anticipated for this site investigation. Team members are cautioned not to walk, kneel or sit on any surface with potential leaks, spills or contamination.

L. TRAINING All site personnel shall have completed the training required by EM 385-1-1 and 29 CFR 1910.120 (e). The U.S. Army Corps of Engineer (USACE) Project Manager shall ensure, and the SSHO shall verify, that all on-site personnel have completed appropriate training. Additionally, the SSHO shall inform personnel before entering of any potential site-specific hazards and procedures.

M. MEDICAL SURVEILLANCE PROGRAM The USACE Project Manager shall ensure, and the SSHO shall verify, that all on-site personnel are on the Medical Surveillance Program meeting the requirements of 29 CFR 1910.120, and ANSI Z-88.2, as appropriate, depending on the personnel protective equipment (PPE) and site specific tasks.

<u>NAME</u>	<u>HAZWOPER DATE</u>	<u>PROVIDER</u>	<u>MEDICAL DATE</u>
<u>Randal Curtis</u>	<u>21 JAN 99</u>	<u>Corps of Engineers</u>	<u>JUN 98</u>
<u>Gregg Kocher</u>	<u>12 NOV 98</u>	<u>Corps of Engineers</u>	<u>AUG 98</u>

N. LOGS, REPORTS AND RECORD KEEPING Site logs are maintained by the Project Manager and SSHO. This is to include historical data, personnel authorized to visit the site, all records, standard operating procedures, air monitoring logs and the SSHP.

O. GENERAL The number of personnel visiting the site shall be a limited to a minimum of two, maximum of eight. The more personnel on-site, the greater potential for an accident. The SSHO may modify this SSHP if site conditions warrant it and without risking the safety

and health of the team members. This modification will be coordinated with the team members. The SSHO shall notify Corps of Engineers Safety Office in Huntsville, AL. of the change as the situation allows.

APPENDIX A

HEAT- RELATED INJURIES

Once the signals of a heat-related illness begin to appear, the victim's condition can quickly get worse. A heat related illness can result in death. If you see any of the signals of sudden illness, and the victim has been exposed to extremes of heat, suspect a heat-related illness.

People at risk for heat-related illness include those who work or exercise outdoors, elderly people, young children, and people with health problems. Also at risk are those who have had a heat-related illness in the past, those with medical conditions that cause poor blood circulation, and those who take medications to get rid of water from the body (diuretics).

People usually try to get out of extreme heat before they begin to feel ill. However, some people do not or can not. Those that work outdoors often keep working even after they begin to feel ill. Many times, they might not even recognize that they are in danger of becoming ill.

Heat cramps, heat exhaustion, and heat stroke are conditions caused by overexposure to heat. You can help prevent heat-stress emergencies by recognizing and properly treating symptoms. Below is a quick reference guide to heat-related emergencies:

HEAT CRAMPS Heat cramps are the least severe, and often are the first signals that the body is having trouble with the heat. *Symptoms* include: muscle twitching; painful spasms in the legs, arms or abdomen.

WHAT TO DO:

- Have the individual rest in a cool place.
- Give cool water or a commercial sports drink.
- Lightly stretch the muscle and gently massage the area.

HEAT EXHAUSTION Heat exhaustion is a more severe condition than heat cramps. *Symptoms* include: cool, moist, pale, or flushed skin, headache, nausea, dizziness, weakness, and exhaustion.

HEAT STROKE Heat stroke is the least common but most severe heat emergency. It most often occurs when people ignore the signals of heat exhaustion. Heat stroke develops when the body systems are overwhelmed by heat and begin to stop functioning. **Heat stroke is a serious medical emergency.** *Symptoms* include: red, hot, dry skin; changes in consciousness; rapid, weak pulse; and rapid, shallow breathing.

WHAT TO DO: When you recognize a heat-related illness in its early stages, you can usually reverse it.

Get the victim out of the heat.

Loosen any tight clothing and apply cool, wet cloths, such as towels or sheets.
If the victim is conscious, give cool water to drink. Do not let the conscious victim drink too quickly. Give about 1 glass (4 ounces) of water every 15 minutes.

Let the victim rest in a comfortable position, and watch carefully for changes in his or her condition. The victim should not resume normal activities the same day.

Refusing water, vomiting, and changes in consciousness mean that the victim's condition is getting worse. Call for an ambulance immediately if you have not already done so.

If the victim vomits, stop giving fluids and position them on their side.

Watch for signals of breathing problems.

Keep the victim lying down and continue to cool the body any way you can. If you have ice packs or cold packs, place them on each of the victim's wrists and ankles, on the groin, in each armpit, and on the neck to cool the large blood vessels.

APPENDIX B

BITES AND STINGS

Scorpions, Bees and Spiders

Bee stings are painful, but rarely fatal. Some people however, have a severe allergic reaction to an insect sting. This allergic reaction may result in a breathing emergency. If an insect stings someone, remove the stinger. Scrape it away with from the skin with your fingernail or plastic card, such as a credit card, or use tweezers. If you use the tweezers, grasp the stinger, not the venom sac. Wash the site with soap and water. Cover it to keep it clean. Apply a cold pack to the area to reduce the pain and swelling. Watch the victim for signals of an allergic reaction.

Scorpions live in dry regions of the southwestern United States and Mexico. They live under rocks, logs, and the bark of certain trees and are most active at night. Only a few species of scorpions have a sting that can cause death.

There are only two spiders in the United States whose bite can make you seriously sick or be fatal. These are the black widow spider and the brown recluse. The black widow is black with a reddish hourglass shape on the underside of its body. The brown recluse is light brown with a darker brown, violin-shaped marking on the top of its body. Both spiders prefer dark, out of the way places. Often, the victim will not know that he or she has been bitten until he or she starts to feel ill or notices a bite mark or swelling.

Symptoms: include nausea and vomiting, difficulty breathing or swallowing, sweating and salivating much more than normal, severe pain in the sting or bite area, a mark indicating a possible bite or sting, and swelling of the area.

First Aid: if someone has been stung by a scorpion or bitten by a spider he or she thinks is a black widow or brown recluse, wash the wound, apply a cold pack to the site, and get medical help immediately.

Ticks - Lyme Disease

Transmission:

Lyme Disease (LD) is most commonly transmitted by a tick bite (usually painless). The tick vectors include *Ixodes scapularis* (Deer Tick), *Ixodes dammini* (Deer tick), *Amblyomma americanum* (Lone Star Tick) and *Ixodes pacificus*. *Ixodes dammini* was thought to be the only species responsible for transmission until it was shown to be the same as *Ixodes scapularis* in 1993. The ticks prefer to live in wooded areas, low growing grassland, seashores and yards. Depending on the location, anywhere from less than 1% to more than 90% of the ticks are infected with spirochetes.

The Deer tick has a 2 year life cycle and must feed 3 times. In the larvae stage, it is tan, the size of a pin head and feeds on small animals like the mouse where it can pick up the spirochete. During the nymph stage the tick is the size of a poppy seed, beige or partially transparent and feeds on larger animals such as cats, dogs and humans. The adult ticks are black and/or reddish and feed on cattle, deer, dogs and humans. The Lone Star tick is gray with a white dot. April through October is considered the "tick season" even though Lyme disease is a year round problem. Ticks are very active in the spring and early summer.

Location:

Cases of Lyme disease have been reported in virtually every state, although the Northeastern, Great Lakes, and Pacific Northwest areas are particularly endemic.

Symptoms:

Lyme disease is called the "Great Imitator" because it can mimic many other diseases, which makes diagnosis difficult. A rash can appear several days after infection, or not at all. It can last a few hours or up to several weeks. The rash can be very small or very large (up to twelve inches across). A "bull's-eye" rash is the hallmark of LD. It is a round ring with central clearing. Unfortunately, this is not the only rash associated with Lyme. Various other rashes associated with LD have been reported. One bite can cause multiple rashes. The rash can mimic such skin problems as hives, eczema, sunburn, poison ivy, flea bites, etc. The rash can itch or feel hot or may not be felt at all. The rash can disappear and return several weeks later. For those with dark skin the rash will look like a bruise. If you notice a rash, take a picture of it. Some physicians require evidence of a rash before prescribing treatment.

Early Symptoms: Several days or weeks after a bite from an infected tick, a patient usually experiences "flu-like" symptoms such as aches and pains in their muscles and joints, low grade fever, and/or fatigue.

Other Possible Symptoms -- No organ is spared:

- Jaw -- pain, difficulty chewing
- Bladder -- frequent or painful urination, repeated "urinary tract infection"
- Lung -- respiratory infection, cough, asthma, pneumonia
- Ear -- pain, hearing loss, ringing, sensitivity to noise
- Eyes -- pain due to inflammation, sensitivity to light, scleritis drooping of eyelid, conjunctivitis, blurring or double vision
- Throat -- sore throat, swollen glands, cough, hoarseness, difficulty swallowing
- Neurological -- headaches, facial paralysis, seizures, meningitis, stiff neck, burning, tingling, or prickling sensations, loss of reflexes, loss of coordination, MS like syndrome
- Stomach -- pain, diarrhea, nausea, vomiting, abdominal cramps, anorexia

- Heart -- weakness, dizziness, irregular heart-beat, myocarditis, pericarditis, palpitations, heart block, enlarged heart, fainting inflammation of muscle or membrane, shortness of breath, chest pain
- Joint -- arthralgias or arthritis, muscle inflammation and pain
- Other Organs -- liver infection, elevated liver enzymes, enlarged spleen, swollen testicles, irregular or ceased menses
- Neuropsychiatric -- mood swings, irritability, poor concentration, cognitive loss, memory loss, loss of appetite, mental deterioration, depression, disorientation, sleep disturbance
- Pregnancy -- miscarriage, premature birth, birth defects, stillbirth
- Skin -- single or multiple rash, hives

The above is a list of possible symptoms. They can occur in any combination. You may have one or several symptoms but not everyone will experience every symptom. Lyme affects each host in a different way. Having one or many of these symptoms does not indicate that you have Lyme disease. Diagnosis for Lyme is a clinical one and must be made by a physician experienced in recognizing LD. Serological testing is not reliable.

Lyme Disease Prevention:

- Dress properly, wear long-sleeved shirts that button at the wrist, long pants tucked into socks, and closed shoes. Choose light-colored fabric so you can spot and brush off ticks.
- Apply approved tick repellent and use only as directed. Products that contain DEET are tick repellents. They do not kill the tick and are not 100% effective in discouraging a tick from feeding on you. Products like Permanone contain permethrin and are known to kill ticks. However, they are not to be sprayed on the skin. Permanone can be sprayed on clothing. Once it is dry it is assumed to be safe. Ticks are anti-gravitational. They are generally seeking the highest point. If they get on your body below the clothes line, one hopes they will travel up and die once they come in contact with treated clothing.
- Always do regular tick checks when outdoors.
- Shower after all outdoor activities are over for the day. If the tick is still wandering it may wash off. Check all body parts that bend. Run fingers gently over skin. If there is a tick and it is attached, it will feel like the last piece of scab left before a cut completely heals. Remove ticks promptly and properly from yourself.

Proper Tick Removal:

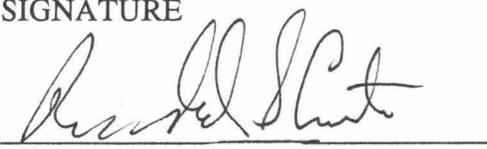
Using fine-tipped tweezers, grasp tick close to the skin. Apply gentle, steady straight upward pressure to remove. Disinfect the bite site. Do not squeeze the body, apply Vaseline, use a burnt match, or clean with alcohol while the tick is attached. Any of these actions could cause transmission of the bacteria. Save the tick for testing. Put it in a vial or zip lock bag with a blade of grass. Contact your doctor for further instructions.

The best defense against LD is education. Know your facts.

APPENDIX C

SSHP ACCEPTANCE FORM
ABBREVIATED SITE SAFETY AND HEALTH PLAN
FOR
Marine Corps Recruit Depot Eastern Recruiting Region
Parris Island, South Carolina

I have read and agree to abide by the contents of the Site Safety and Health Plan.

NAME	OFFICE	SIGNATURE	DATE
<u>Randal Curtis</u>	<u>CEMVS-ED-P</u>		<u>3/23/99</u>
<u>Gregg E. Kocher</u>	<u>CEMVS-ED-P</u>		<u>" "</u>

SITE SURVEY SAFETY BRIEFING

(Check subjects discussed)

Date 23 March 1999

GENERAL INFORMATION

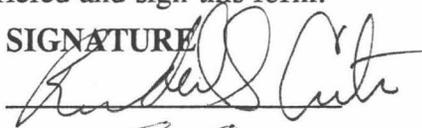
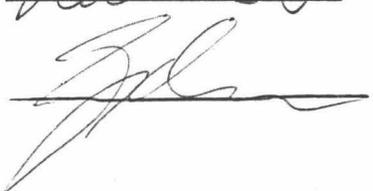
- Purpose of Visit
- Identify Key Site Personnel

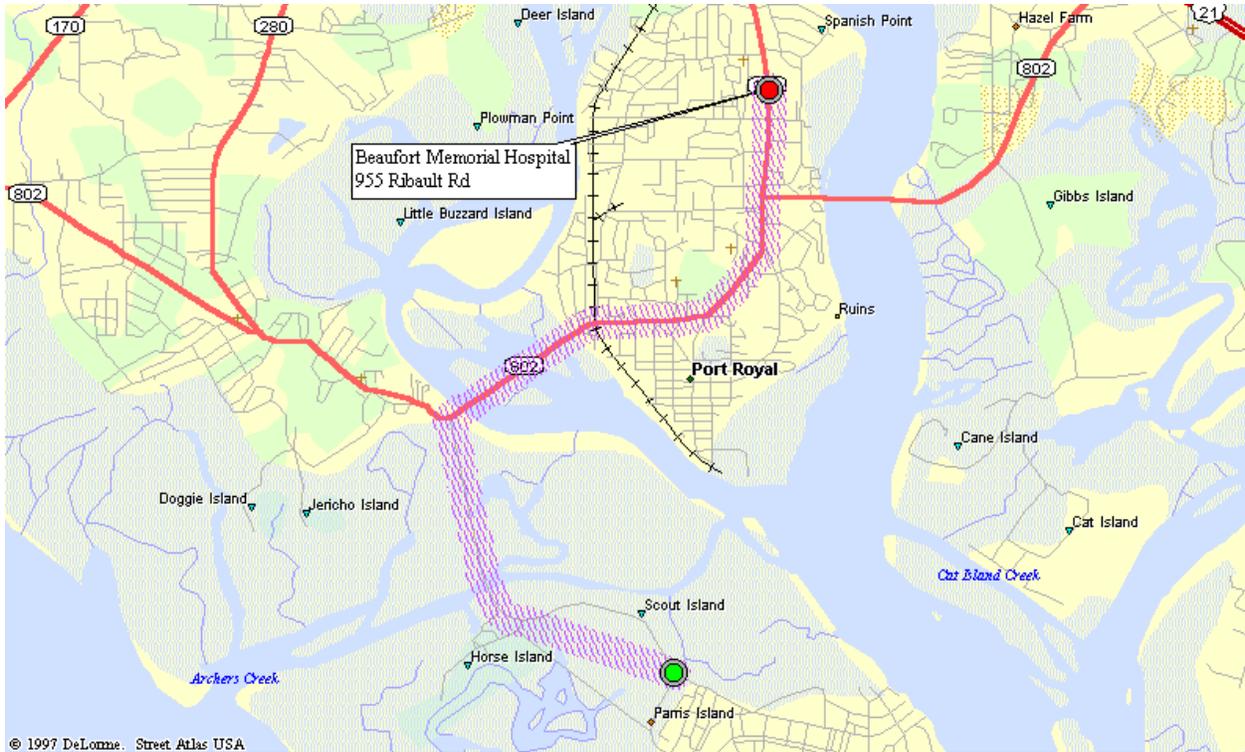
SITE SPECIFIC INFORMATION

- Site Description/Past Use
- Results of Previous studies
- Potential Site Hazards
- OE Safety Procedures
- Site SOP
- Site Control and Communications
- Emergency Response
 - Location of First aid Kit
 - Emergency Phone Numbers
 - Map to Facility
- PPE
- Weather Precautions
 - Cold/Heat
 - Severe Weather

Safety Briefing Attendance

All team members and any accompanying personnel will be briefed and sign this form.

NAME (Print)	ORGANIZATION	SIGNATURE
<u>Randal S. Curtis</u>	<u>USACE-CEMVS-ED-P</u>	
<u>Gregg E. Kocher</u>	<u>USACE-CEMVS-ED-P</u>	



APPENDIX H-2

Site Inspection Report - Marine Corps Recruit Depot Eastern Recruiting Region

CEMVS-ED-P

29 March 1999

MEMORANDUM FOR RECORD

SUBJECT: ASR Site Inspection MCRD ERR Parris Island, SC

1. Personnel from the St. Louis District Corps of Engineers traveled to South Carolina to perform a site survey of the Marine Corps Recruit Depot Eastern Recruiting Region (MCRD ERR) Parris Island. The Ordnance and Explosive (OE) and Chemical Warfare Materials (CWM) Archive Search Report (ASR) program typically includes a site inspection. The ASR site inspection characterized OE and CWM potential based on a visual examination of selected areas at the MCRD ERR Parris Island. Areas to be investigated were selected in an attempt to confirm the use of historic ranges identified from site maps or from interviews. The site inspection included only visual and non-intrusive methods of inspection. The team followed a site safety and health plan (SSHP) prohibiting digging or handling of potential OE/CWM. The inspection team consisted of the following personnel: Gregg E. Kocher and Randal S. Curtis.
2. The team traveled to Parris Island, South Carolina on 23 March 1999. After arriving on base, the ASR team met with the installation's point of contact, Tim Harrington of Natural Resources and Environmental Affairs. He contacted CW03 Bob Ledyard, the Chief Range Officer to determine if the Khe Sanh/Range A was free for the remainder of the day to allow inspection of the down range areas. The range was free and both Tim and Bob accompanied the team there.
3. The interest behind this area was to investigate a probable Rocket and Mortar Impact Area between the Broad River and Range A, south of Ribbon Creek. A good portion of this area is wetlands, which doesn't lend itself to inspection. The team concentrated their inspection efforts on the oyster shell berms and shoreline riprap of the Broad River. The team found a piece of 3.5-inch rocket tail at N 32° 20' 11.63", W 80° 43' 10.37"; 17S NR 26393 77777¹ and a 3.5-inch rocket practice warhead at N 32° 20' 10.55", W 80° 43' 09.49"; 17S NR 26416 77744. They also found what appeared to be the rear body of an 81mm mortar at N32° 20' 10.64", W 80° 43' 09.65"; 17S NR 26412 77746. These items verify accounts of the area being used as an impact area for rockets and mortars. The team also found numerous pieces of ferrous, 2 to 3-inch diameter rods of undetermined use due to their extremely poor condition. Most were heavily oxidized and encrusted with oyster shells. It was guessed that some might be from SCAR (sub-caliber aerial rocket) 2.25-inch motors. The team did not find any warheads or fins in the area to support this supposition but the observed degradation, would have completely removed most visible traces of these items.

¹ All coordinates were taken with an AN/PSN-11 PLGR GPS (Global Positioning System) receiver using mapping datum World Geodetic System (WGS) 1984.

4. Continuing south along the Broad River shoreline, they came to the target butt area for the WWII vintage Small Bore Ranges, west of Range A. They found residue from a possible burn pit for small arms ammunition, which included cartridge cases, bullets and starter clips. At this point, Bob and Tim parted company with the St. Louis personnel, who completed the remainder of the investigation alone. While still at Range A, they walked the location of a Grenade Course depicted on a 1944 map and of a Rifle Grenade Range depicted on a 1941 map. Both areas were up range from the main firing line on the Khe Sanh Range, and exhibited no evidence of their earlier use. An obstacle course covers the Rifle Grenade Range.

5. The following day, Wednesday 24 March, the team continued the site visit in the morning. They began by locating Concrete Firing Position R on Horse Island at N 32° 21' 23.96", W 80° 42' 37.12"; 17S NR 27256 80006. This firing position consisted of five L and U shaped concrete barricades; four in line, with a fifth to the rear. The barricades in a line are spaced about 55 feet apart, with U shaped barricades in the middle and the Ls on the flanks. The rear barricade was also U shaped. This is the typical arrangement of permanent 75mm artillery firing points of the late 1930s.

6. At 0900, they left Parris Island to visit:

Marine Corps Air Station (MCAS) Beaufort
Explosive Ordnance Disposal (EOD Unit)
P.O. Box 55010
Beaufort, SC 29904-5010
POC: SSGT Parrell or SSGT Zahn
843-522-7513 or DSN 832-7513/7565

The EOD unit provided the team with a review of incident reports from January 1995 to present for Parris Island, though they did not allow them access to the original reports. There were nearly 50 incidents concerning items thought to relate to range use, with about 85% of them concerning the Guadalcanal Grenade Range. The last response was on 31 October 1996. On 29 June 1997 they reportedly cleared the range. The other incidents concerned four practice bomblets (i.e. the 3-pound MK 23) from the golf course, a flare from the ASP, an artillery simulator from Page Field, a .50 caliber AP round from Marsh's Landing, and a point detonating fuze from the golf course. Discussing the fuze with the staff, they thought it might have belonged to a 60mm mortar but couldn't say for sure. They also showed the team their ordnance museum, which had many rare items of interest.

7. Upon returning to Parris Island, the team located several areas that were on the original U.S. Naval Station portion of the base: Magazine #16 and Fort Haines near the Four Winds club and Fort MacKay near the Criminal Investigation Division Building. The current post Headquarters lies on the WWI vintage Ammunition Salvage Storage, Building 85. The team then attempted to locate if any improvements occurred at the non-concrete firing positions associated with the 1937 artillery firing positions. Marsh's Landing lies at the approximate location of position T and bore no discernable evidence of this past use. Likewise, no evidence was found for positions A, D, E, and F, which lie within the Weapons Training

Battalion Area. Immediately to the south of Marsh's Landing and the Marina, lies the original Rifle Range at Ballast Creek. The area has been heavily regraded and reportedly received dredge spoil in the past. The team inspected the southern area near where the target butts would have been, which appeared to be the least disturbed. They located a line of five 2.5 by 2.5 feet concrete blocks at N 32° 20' 03.98", W 80° 40' 12.82"; 17S NR 31035 77555. These blocks appear to have been related to the former butts, based on their location, embedded metals post and on their uniform spacing and alignment. In addition, caliber .30 bullets were found scattered about the area near the blocks.

8. North of the Page Field training area, the team hiked back to the location of a 1950s vintage Skeet and Trap Range, AS47 & AS48, but found no evidence of this past use. They also didn't find any evidence of the past use of the Aerial Bombing Target at Page Field or the Strafing Range Area at Page Field, even though they found numerous signal illumination ground flares of recent origin in the area. The 1950s era Gas Chamber, Building 685, still exists at the Close Combat Instruction area near the "Crucible".

9. At 1400, they met with retired Chief Warrant Officer (CW04) Thomas F. Swearngen, whose interview provided valuable guidance and confirmation of the historical data. They met with him in the Parris Island Museum.

10. The inspection team then traveled to the south end of the base to look at two Aerial Bombing Targets, one at Golf Course shown on site plans and one in the tidal flats reported through interviews. Regrading for the golf course completing covers the target shown on site plans, though recent archeological investigations for the 15th Century Spanish and French settlements in the area have found bomblets and a point detonating fuze. The team then located the Aerial Bombing Target at Southern Tidal Flats at N 32° 18' 07.40", W 80° 40' 44.17"; 17S NR 30226 73962. The target reportedly consisted of three vertical angle irons rising from the ground with canvas stretched between them. The team found only one post standing but the remains for a second was clearly visible. Although this other target was never found on site plans, the inspection team found a fair amount of OE debris to the east of the target center. The sheet metal debris appeared to all come from 100-pound practice bombs, such as the Navy's MK 15 and the Army's M38A2. They did not locate any of the 3 to 5-pound bomblets described as being found at the other locations, nor did they find any debris from HE bomb use or SCARs. They did find what appeared to be the remains of a M17 float flare, in the tidal flats, too.

11. The inspection team completed the inspection the following day, Thursday 25 March. They located the Concrete Observation Point for the 1937 Artillery Range at N 32° 19' 58.37", W 80° 42' 03.82"; 17S NR 28134 77373. This structure, just a short hike into the woods behind the mess hall for the Weapons Training Battalion Area, is approximately 20 feet long, 6 feet wide and 7 feet tall with about 1 foot thick walls. Also in this area is the rubble from Concrete Firing Position B, along the north side of the Ballast Creek dredge cut. Unlike the Horse Island position, none of the concrete emplacements remain in place. Apparently post WWII dredging in the area destroyed the structures. The rubble from this 75mm artillery firing point is at N 32° 19' 57.37", W 80° 41' 59.23"; 17S NR 28254 77343 and is visible

from the roadway next to Argonne Trailer Park. The team spent about 1 to 2 hours in the woods and flats south of the Weapons Training Battalion Area looking for evidence of artillery use. They found numerous expended blank small arms cartridges and the remains from small arms ammunition boxes but did not find any OE debris relating to artillery use. The non-concrete firing positions in this area, also bore no evidence of past use such as packaging debris.

12. Prior to leaving Parris Island, the team provided an out-briefing to Tim Harrington.



RANDAL S. CURTIS, P.E.
Project Manager/Civil Engineer



GREGG E. KOCHER
Safety and Occupational Health Specialist

ENCL (Site Inspection Map)



APPENDIX I
REPORT DISTRIBUTION LIST

REPORT DISTRIBUTION LIST

<u>Addressee</u>	<u>No. Copies</u>
Commander, U.S. Army Engineering and Support Center Huntsville, ATTN: CEHNC-ED-SY-O (D. MARDIS) P.O. Box 1600 Huntsville, Alabama 35807-4301	2
Commandant of the Marine Corps ATTN: Deborah Moorefield, RCRA & Munitions Environmental Policy Coordinator 2 Navy Annex (LFL) Washington, D.C. 20380-1775	10
Commanding General, Marine Corps Recruit Depot Eastern Recruiting Region Natural Resources and Environmental Affairs (NREA) Office ATTN: Tim Harrington P. O. Box 19003 Parris Island, SC 29905-9003	8

PLATES

REPORT PLATES

- 1 **MCRD ERR Parris Island** - Vicinity Map
- 2 **MCRD ERR Parris Island** - Ranges 1937 Field Artillery
- 3 **MCRD ERR Parris Island** - Ranges Weapons and Field Training Battalion Area
- 4 **MCRD ERR Parris Island** - Ranges Page Field Training Area
- 5 **MCRD ERR Parris Island** - Ranges Miscellaneous Areas, Ordnance Storage & Historic Fortifications
- 6 **MCRD ERR Parris Island** - Formerly Used Defense Sites (FUDS)
- 7 **MCRD ERR Parris Island** - Aerial Photograph-1945

Thematic Computer-Aided Design and Drafting (CADD) map files completed in association with this Archives Search Report are based on historic cartographic, aerial and site visit data collected during this investigation. The thematic maps were created using Intergraph's Microstation.

The thematic maps were created by scanning and warping selected historic data to reference points collected from non-stable selected base maps such as U.S. Geological Survey (USGS) 7.5 minute, quadrangle sheets or National Imaging and Mapping Agency (NIMA) maps. The horizontal scale and horizontal datum of the base maps is generally known. In this case the datum used was World Geodetic System (WGS) 1984. Attempts have been made to rectify the data to the referenced base maps. However, distortions in scale and contortions of the features are present. These distortions are a result of inaccuracies in the source data, as well as the processes of scanning and rectifying the data. Much of the data on the maps lack sufficient information to support a determination of accuracy.

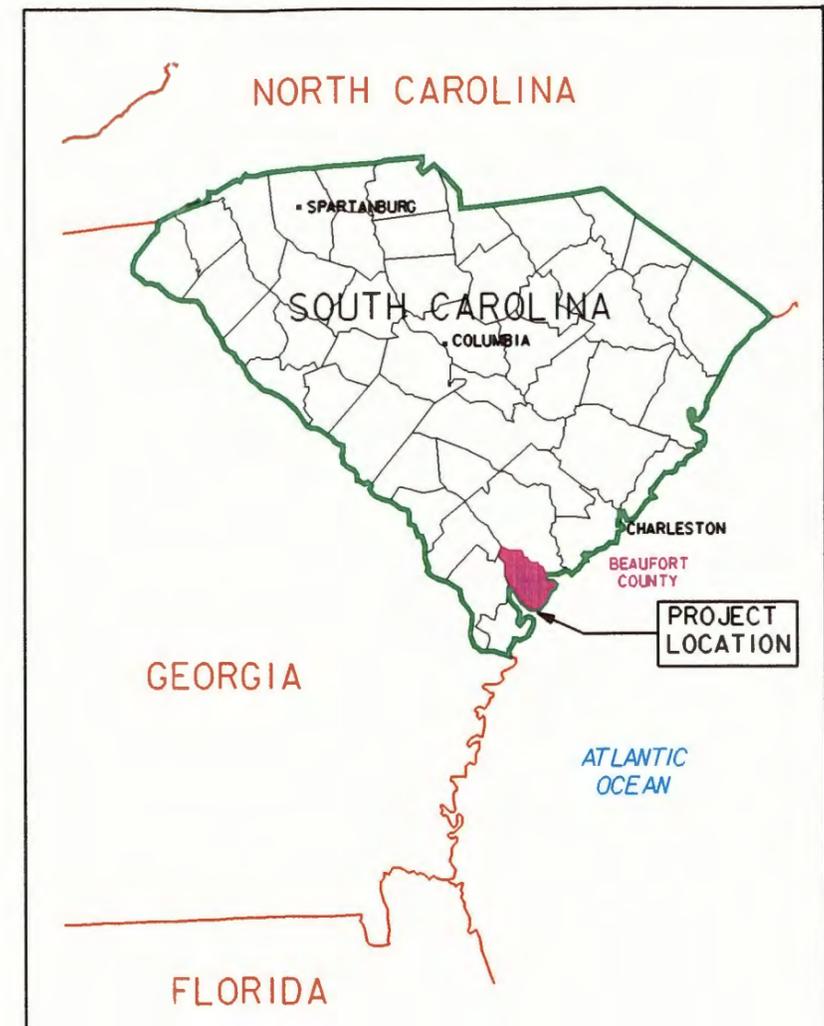
Many of the historic maps used were hand-drawn or built on locations that were inaccurate by modern standards. In general, historic map inaccuracies are unknown and not quantifiable. The unknown inaccuracies may then be magnified by the georeferencing process. Therefore, thematic maps generated from historic maps and drawings will have accuracy no greater than the least accurate source.

The historical aerial photography has been semi-rectified (georeferenced) to the base map; however, the photos have not been corrected for photogrammetric displacements such as those due to topography or the altitude of the aircraft at the time of imaging. They are not orthorectified images. Locations of features noted on aerial photography are not exact due to the rectifying of both the image and the base map.

The horizontal and vertical locations of selected features noted in the ASR and located on the thematic maps have been established utilizing Global Positioning System (GPS) technology. These coordinates were acquired using the Federal Version PLGR96+ GPS receiver. Features located utilizing GPS techniques are so noted in the ASR. The PLGR+96 uses the Precise Positioning Service (16 m SEP) and Wide Area GPS Enhancement (WAGE) 4 m CEP.

Copies of the thematic maps are included on the companion CD diskette to this report. The

lineage and source of the historic data used to generate the thematic maps is unknown. The majority of Federal Geographic Data Committee (FGDC) Metadata fields are therefore unknown. A metadata file that gives all available pertinent information has been provided with this product. The statements above are inclusive of all available information regarding the historic data sources and the thematic maps generated. The thematic maps are not original digital mapping data; are scanned and warped data with selected unique feature annotation. The intended purpose of the mapping data is for photo-interpretation and not design. The vector data and associated symbology is unique to the intended purpose. The majority of the digitized features are not part of the current Tri-Service CADD Standards list of features and associated line types and symbology (ie. range fans, pits, disturbed land). The mapping data produced does comply with applicable Tri-Service Standards.

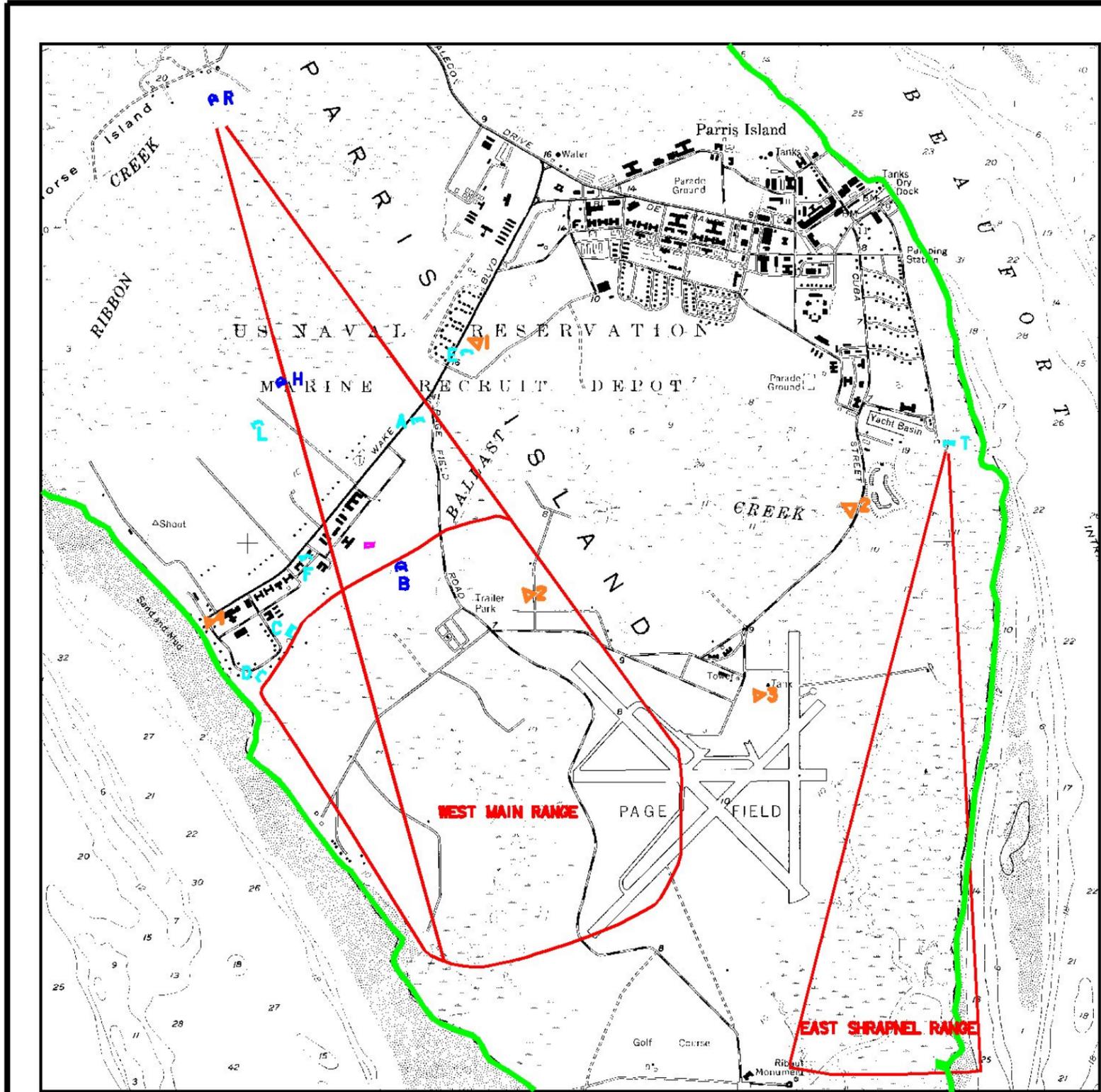


LEGEND

 PROJECT BOUNDARY



	U.S. ARMY CORPS OF ENGINEERS ST. LOUIS DISTRICT	
	MARINE CORPS RECRUIT DEPOT EASTERN RECRUITING REGION PARRIS ISLAND, SC BEAUFORT COUNTY	
VICINITY MAP		
PROJ. DATE: APRIL, 1999 12-MAY-1999 12:22	DATE OF MAP: 1998 f:\toaw\toaw39at\sc-ar\parris\map\parrisvic.dgn	PLATE NO. 1



- LEGEND**
- ▭ PROJECT BOUNDARY
 - ▭ RANGES
 - ▲ OBSERVATION POINT
 - E NON-PERMANENT FIRING POSITION
 - E CONCRETE FIRING POSITION
 - ▭ CONCRETE OBSERVATION POST



	U.S. ARMY CORPS OF ENGINEERS ST. LOUIS DISTRICT
MARINE CORPS RECRUIT DEPOT EASTERN RECRUITING REGION PARRIS ISLAND, SC BEAUFORT COUNTY	
RANGES 1937 FIELD ARTILLERY	
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PLATE NO. 2	

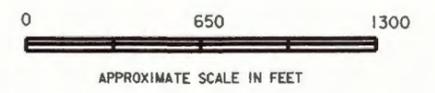
KEY TO FEATURES:

FEATURE NUMBER	FEATURE DESCRIPTION
A	KHE SANH; RANGE "A" (1941-1999); 1,000 YARD RANGE (1929-1940); NEW RIFLE RANGE (1918)
A1	GRENADE COURTS (1944)
A2	DAY MOVEMENT COURSE (1998)
A3	RIFLE GRENADE (1941)
B	HUE CITY; RANGE "B" (1941-1999); 600 YARD RANGE (1932-1941)
B1	600 YARD RANGE (1929-1932); NEW RIFLE RANGE (1918)
C	CHOSIN; RANGE "C" (1944-1999)
D	STARLIGHT; RANGE "D" (1944-1999)
E	INCHON; RANGE "E" (1970-1999)
E1	HAND GRENADE PRACTICE AREA (1944-1968)
E2	GRENADE PIT (1953-1970)
F1	NAK TONG
F2	PISTOL BUTTS (1929)
G1	SMALL BORE RANGE NO. 1 (1944-1970)
G2	SMALL BORE RANGE NO. 2 (1944-1970)
G3	SMALL BORE RANGE NO. 3 (1944-1970)
G4	SMALL BORE RANGE NO. 4 (1944-1970)
G5	SMALL BORE RANGE NO. 5 (1944-1954)
G6	SMALL BORE RANGE NO. 6 (1944-1954)
G7	SMALL BORE RANGE NO. 7 (1944)
G8	SMALL BORE RANGE NO. 8 (1944)
H	22 RANGE (1941)
I	SKEET RANGE (1946-1953)
J	900' RANGE (1973)
K	ELECTRIC PISTOL RANGE, BUILDING 788 (1952); PUSAN (1999)
L	SMALL BORE RANGE IN BUILDING 765 (1952)
M	ROCKET AND MORTAR IMPACT AREA

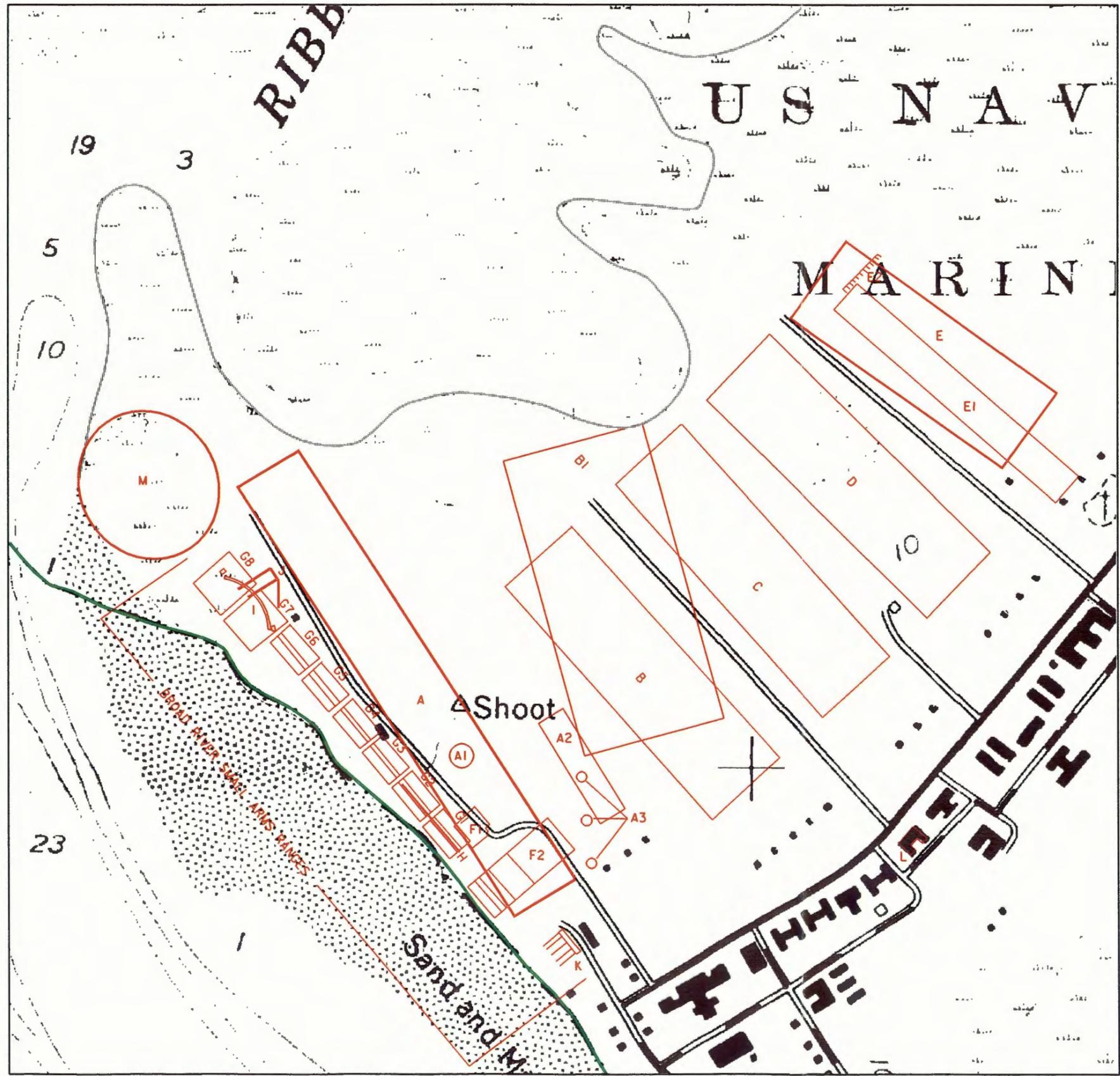
BROAD RIVER SMALL ARMS RANGES

LEGEND

- PROJECT BOUNDARY
- RANGES



	U.S. ARMY CORPS OF ENGINEERS ST. LOUIS DISTRICT
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RANGES WEAPONS AND FIELD TRAINING BATTALION AREA	
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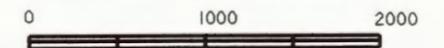


KEY TO FEATURES:

FEATURE NUMBER	FEATURE DESCRIPTION
1	AERIAL BOMBING TARGET AT PAGE FIELD 1937)
2	STRAFING RANGE AT PAGE FIELD (1937-1940) (EST. LOCATION)
3	AERIAL BOMBING TARGET AT GOLF COURSE (1946)
4	SKREET RANGE, BUILDING AS48 AT PAGE FIELD (1946-53)
5	TRAP RANGE, BUILDING AS47 AT PAGE FIELD (1946-53)
6	GUADALCANAL HAND GRENADE RANGE (1983-99)
7	MINE/BOOBY TRAP (1994)
8	BLDG. 4119, PRACTICE GRENADE AND MINE FIELD (1983)
9	PRACTICE GRENADE RANGE (1987)
10	CAC (COMBAT ASSAULT COURSE) (1994)
11	INFILTRATION COURSE (1987)
12	COMBAT TOWN (1994)
13	GAS CHAMBER, 793 (1998))
14	NBC MOVEMENT COURSE (1987)
15	FIELD FORTIFICATION COURSE II (1994)
16	INFILTRATION COURSE, SOUTH OF PAGE FIELD (1983) BUILDING 4024
17	NIGHT MOVEMENT COURSE SOUTH OF PAGE FIELD (1983) BUILDING 4022
18	WIRE ENTANGLEMENT DISPLAY (1987)
19	DAY MOVEMENT STATIONS (1984)
20	SQUAD OFFENSE COURSE (1987)
21	NIGHT MOVEMENT COURSE (1987)
22	DAY MOVEMENT 1 AND DAY MOVEMENT 2 (1994)
23	FIRE TEAM/NBC MOVEMENT COURSE (1987)
24	NBC FIELD COURSE (1994)
25	BOOBY TRAP COURSE (1994)

LEGEND

-  PROJECT BOUNDARY
-  RANGES
-  MISC. TRAINING STATIONS AND COURSES



APPROXIMATE SCALE IN FEET

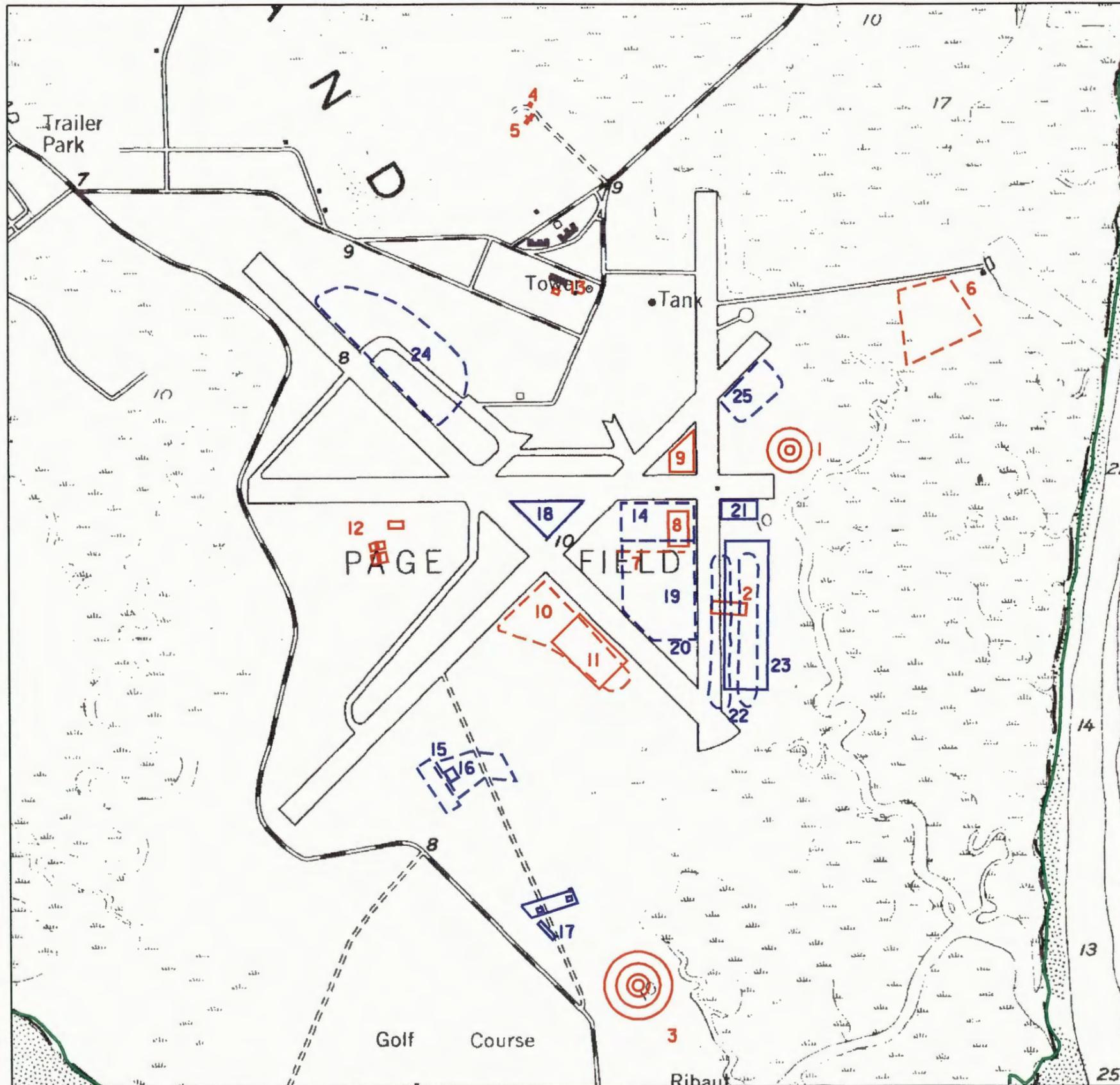


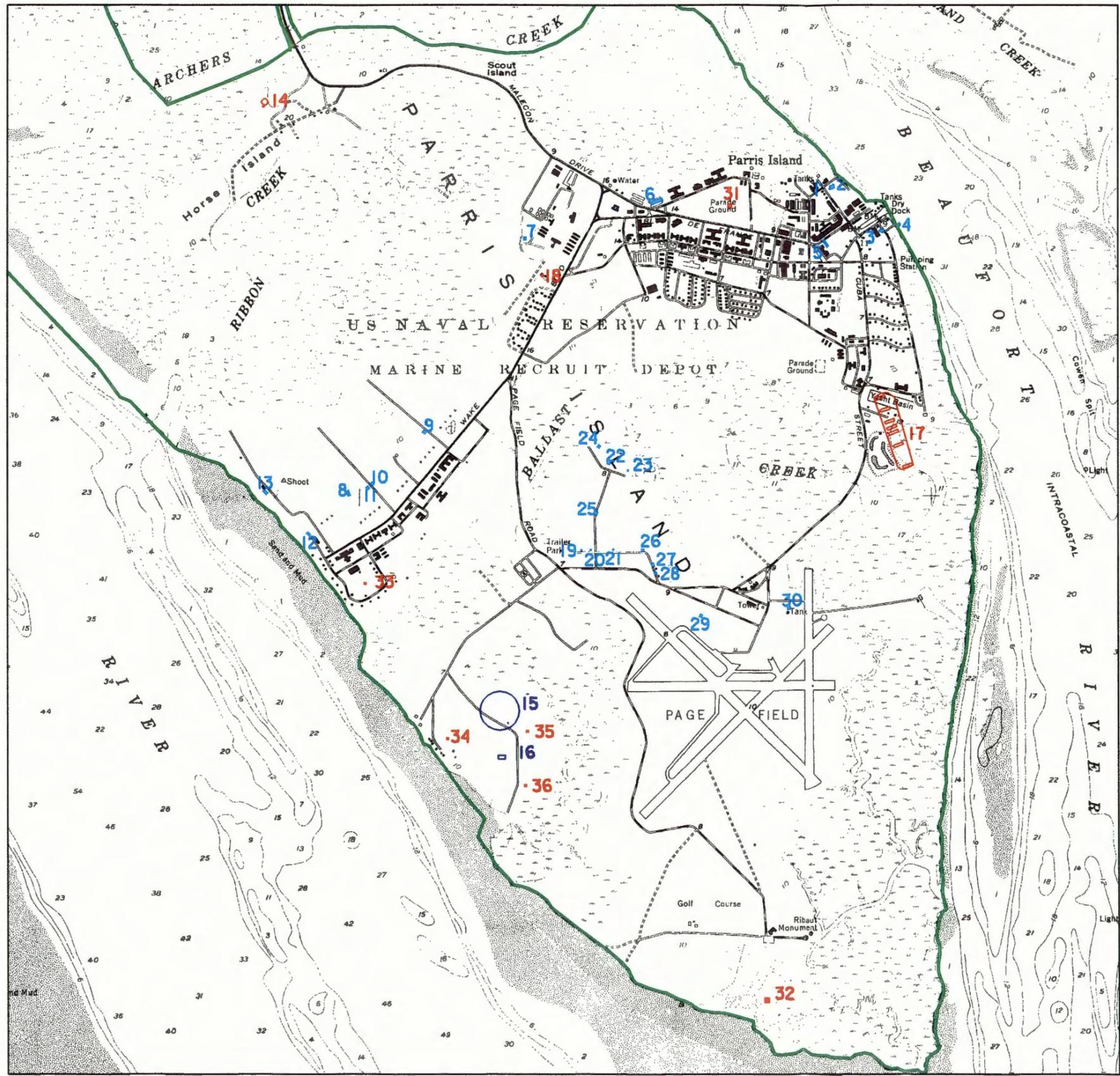
U.S. ARMY CORPS OF ENGINEERS
ST. LOUIS DISTRICT

MARINE CORPS RECRUIT DEPOT
EASTERN RECRUITING REGION
PARRIS ISLAND, SC
BEAUFORT COUNTY
RANGES
PAGE FIELD TRAINING AREA

PROJ. DATE: APRIL, 1999 DATE OF MAP: 1943 PLATE NO. 4

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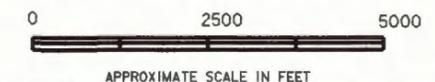


KEY TO FEATURES:

FEATURE NUMBER	FEATURE DESCRIPTION
1	BLDG. 45, MAGAZINE (1934-1940s), PAINT LOCKER (1946-1950s), BLDG. 16 MAGAZINE (1899-1919)
2	FORT HAINES
3	FORT MACKAY
4	TEMPORARY MAGAZINE XXI (1905) - not specifically located BLDG. 48, AMMUNITION (1919) - probable location - not specifically located
5	BLDG. 85 AMMUNITION SALVAGE STORAGE (1919)
6	GUN SHED GA (1941)
7	BLDG. 875, GAS MASK STORAGE BLDG. (1953-73)
8	BLDG. 20 AMMUNITION STORAGE (1929)
9	BLDG. 721, READY AMMUNITION STORAGE (1946-1970s)
10	BLDG. 723, READY AMMUNITION STORAGE (1946-1970s)
11	BLDG. 724, READY AMMUNITION STORAGE (1946-1970s)
12	BLDG. 784, READY AMMUNITION STORAGE (1946-1970s)
13	BLDG. 786, AMMUNITION STORAGE (1946-1970's)
14	RECREATIONAL FIRING RANGE AT HORSE ISLAND
15	TACTICAL BIVOUAC AREA
16	BLDG. 4026, FIELD FORTIFICATION DISPLAY
17	RIFLE RANGE AT BALLAST CREEK (1910)
18	BLDG. 673, GAS CHAMBER
19	BLDG. A1, SMALL ARMS MAGAZINE (1946-)
20	BLDG. A2, SMALL ARMS MAGAZINE (1946-)
21	BLDG. A3, SMALL ARMS MAGAZINE (1946-)
22	BLDG. A4, HIGH EXPLOSIVES MAGAZINE (1946-)
23	BLDG. A5, HIGH EXPLOSIVES MAGAZINE (1946-)
24	BLDG. A6, HIGH EXPLOSIVES MAGAZINE (1946-)
25	BLDG. A7, FUZE MAGAZINE (1946-)
26	BLDG. A8, SMOKE DRUM MAGAZINE (1946-)
27	BLDG. A9, INERT MAGAZINE (1946-)
28	BLDG. A10, READY MAGAZINE (1946-)
29	BLDG. A11, READY MAGAZINE (1946)
30	BLDG. 4002 (1973-1999)
31	AERIAL BOMB TARGET AT PARADE DECK (1937-1940) - approximate location on interviews
32	AERIAL BOMB TARGET AT SOUTHERN TIDLE FLATS (32°18'7.4", 80°40'44.17" as located by GPS)
33	POSSIBLE GRENADE RANGE NEAR OLD SWIMMING POOL WEAPONS BATTALION TRAINING AREA
34	GAS CHAMBER AT ELLIOTT'S BEACH
35	POSSIBLE FUZE RANGE AT ELLIOTT'S BEACH
36	POSSIBLE HAND GRENADE RANGE AT ELLIOTT'S BEACH

LEGEND

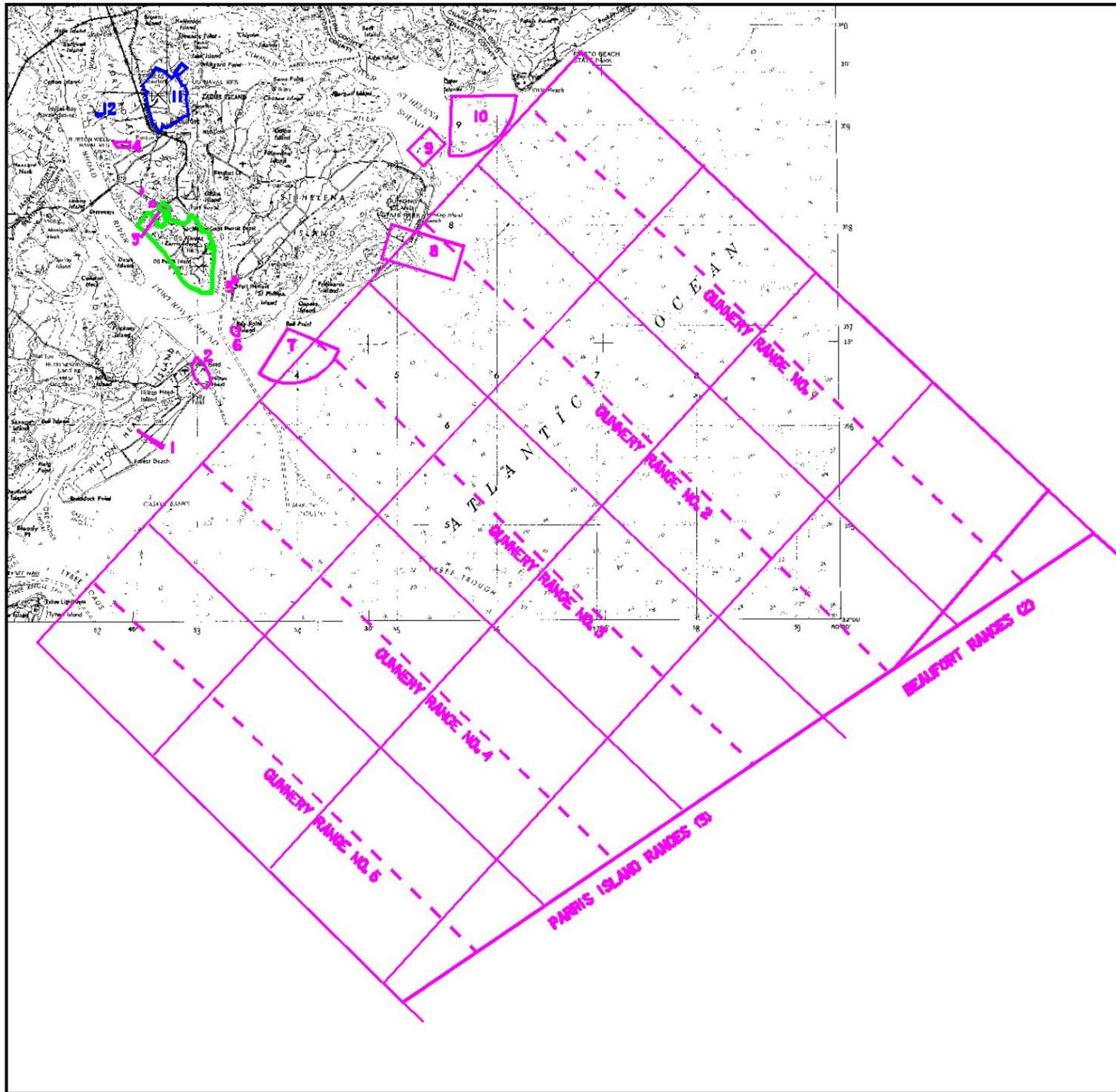
-  PROJECT BOUNDARY
-  RANGES
-  ORDNANCE STORAGE AND HISTORICAL FORTIFICATIONS
-  MISCELLANEOUS TRAINING STATIONS, COURSES AND MANEUVER AREAS



U.S. ARMY CORPS OF ENGINEERS
ST. LOUIS DISTRICT

MARINE CORPS RECRUIT DEPOT
EASTERN RECRUITING REGION
PARRIS ISLAND, SC
BEAUFORT COUNTY
RANGES MISCELLANEOUS AREAS, ORDNANCE
STORAGE & HISTORIC FORTIFICATION

PROJ. DATE: APRIL, 1999	DATE OF MAP: 1979	PLATE NO. 5
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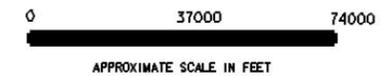


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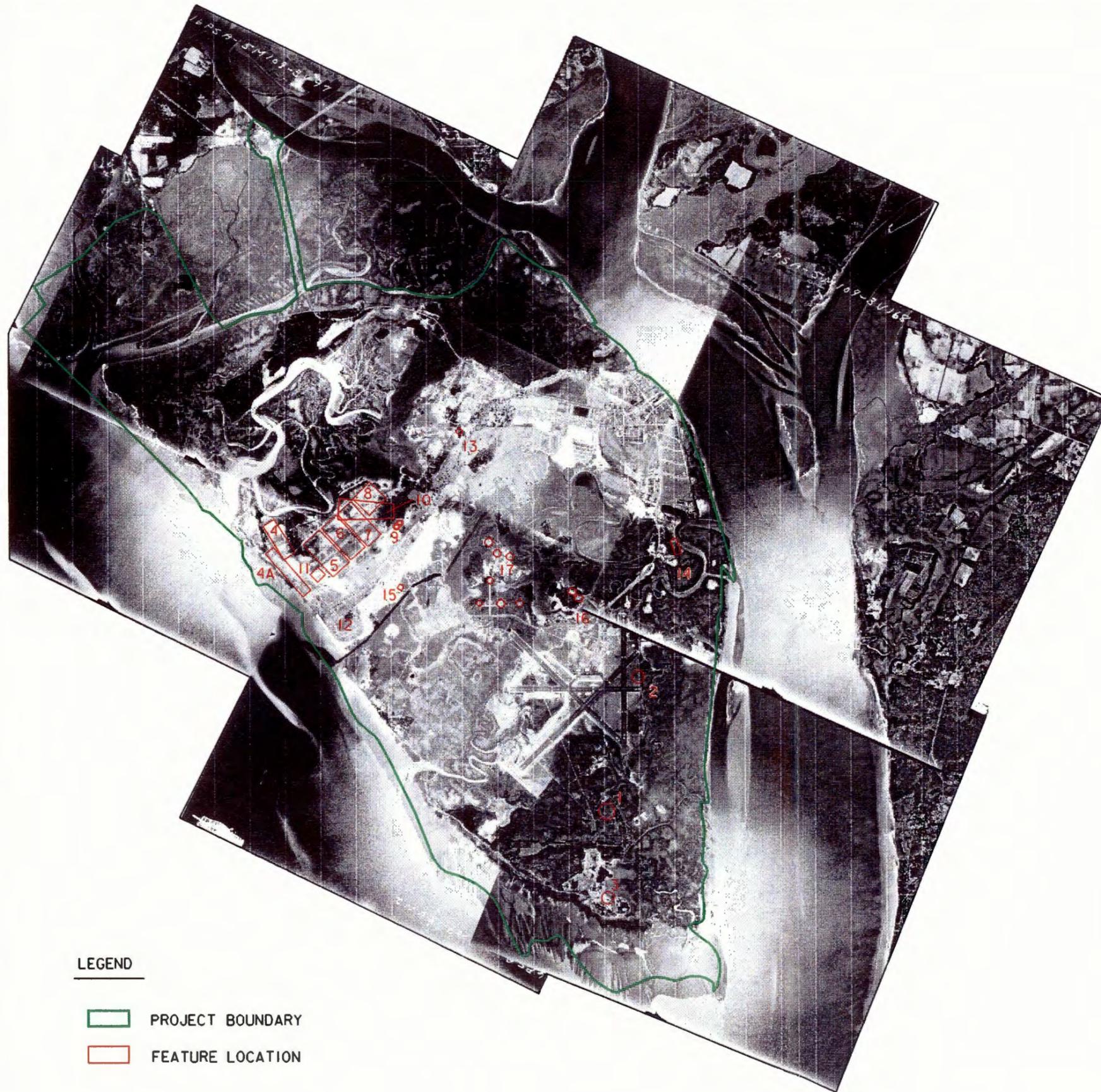
FEATURE NUMBER	FEATURE DESCRIPTION
1	HILTON HEAD LIGHTHOUSE RESERVATION, CAMP MCDUGAL OR MARINE CORPS FIRING RANGE
2	HILTON HEAD MILITARY RESERVATION, CIVIL WAR ERA; FORT WALKER, FORT WELLES, FORT SHERMAN, FORT HOWELL AND FORT MITCHELL
3	JERICOH WELL AND MAIN GATE
4	BURTON WELL FIELD
5	FORT FREMONT
6	BAY POINT MILITARY RESERVATION ON ST. PHILLIPS ISLAND; CIVIL WAR ERA; FORT BEAUREGARD
7	BULL POINT BOMBING AND STRAFING TARGET ON CAPER'S OR PRITCHARD'S ISLAND
8	HUNTING ISLAND/FRIPP ISLAND BOMB TARGET/ROCKET RANGE
9	EGG ISLAND DIVE BOMBING TARGET
10	EDISTO ISLAND'S BAY POINT STRAFING TARGET
11	MCAS BEAUFORT
12	LAUREL BAY NAVAL HOUSING

LEGEND

- ▭ PROJECT BOUNDARY
- ▭ FORMERLY USED DEFENSE SITES (FUDS)
- ▭ OTHER ACTIVE MILITARY INSTALLATIONS



	U.S. ARMY CORPS OF ENGINEERS ST. LOUIS DISTRICT
MARINE CORPS RECRUIT DEPOT EASTERN RECRUITING REGION PARRIS ISLAND, SC BEAUFORT COUNTY	
FORMERLY USED DEFENSE SITES (FUDS)	
PROJ. DATE: APRIL, 1999	DATE OF MAP: 1978
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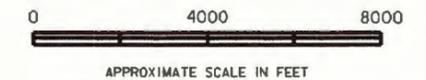


KEY TO FEATURES:

- | FEATURE NUMBER | FEATURE DESCRIPTION |
|----------------|---|
| 1. | AERIAL BOMBING TARGET, AT GOLF COURSE |
| 2. | AERIAL BOMBING TARGET AT PAGE FIELD |
| 3. | AERIAL BOMBING TARGET AT SOUTHERN TITLE FLATS |
| 4. | RANGE A |
| 4A. | SMALL BORE RANGES 1-8 |
| 5. | RANGE B |
| 6. | RANGE C |
| 7. | RANGE D |
| 8. | 350 YARD WIDE TARGET BERM AND FIRING LINES AT APPROXIMATELY 100, 200, AND 300 YARDS VISIBLE ON THE HAND GRENADE PRACTICE AREA WHICH BECOMES RANGE E |
| 9. | TWO CIRCULAR FEATURES APPROXIMATELY 150 FEET IN DIAMETER, WHICH RESEMBLES SNAP IN OR DRY FIRE RANGES |
| 10. | POSSIBLE EARLIER RANGE WITH A WESTERN DIRECTION OF FIRE, WHICH CUTS ACROSS BOTH RANGES E AND D; 300 YARDS WIDE AND POSSIBLY 600 YARDS LONG |
| 11. | GROUND SCARRING EVIDENT AT THE LOCATION OF THE 1942 RIFLE GRENADE CIRCLES |
| 12. | NO EVIDENCE ON THE REPORTED GRENADE COURT SOUTH OF THE SWIMMING POOL |
| 13. | TREES OBSCURE GAS CHAMBER, BUILDING 673 |
| 14. | BUILDING DEVELOPMENT ON NORTHERN PORTION OF THE RIFLE RANGE AT BALLAST CREEK |
| 15. | FIELD ARTILLERY CONCRETE OBSERVATION POST |
| 16. | TRAP AND SKEET RANGES AT PAGE FIELD |
| 17. | ORDNANCE STORAGE STRUCTURES |

LEGEND

- PROJECT BOUNDARY
- FEATURE LOCATION



U.S. ARMY CORPS OF ENGINEERS
ST. LOUIS DISTRICT

MARINE CORPS RECRUIT DEPOT
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PARRIS ISLAND, SC
BEAUFORT COUNTY

1945 AERIAL PHOTOGRAPHY

PROJ. DATE: APRIL, 1999	DATE OF PHOTO: 1945	PLATE NO. 7
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