A HYPOTHESIS REGARDING THE ARMY’S INCINERATOR AT
FORT MCDOWELL, MARIN COUNTY, CALIFORNIA

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Fort McDowell is a former military installation located on Angel Island in San Francisco Bay. The fort was utilized by the U.S. Army from 1899 to 1946. During that time, over 750,000 U.S. servicemen were processed through the installation, either on their way to war or upon their return. Untold numbers of soiled or otherwise unneeded uniforms were discarded on the island. Most were burned in a base incinerator, leaving nothing behind but the buttons, buckles, snap fasteners, insignia, and other metallic remnants. Field observations have led to a hypothesis regarding disposal of these remains and how their disposal enabled archaeological site formation.

FORT MCDOWELL

Fort McDowell was a military installation located on Angel Island in San Francisco Bay. Today, what remains of the fort is part of Angel Island State Park. Following the Columbus Day wildfire in October 2008, which burned about half of the island, I spent several weeks surveying the fire zone and documenting archaeological resources associated with Fort McDowell (Parkman 2008a, 2009a). The results of that survey help inform this discussion.

The U.S. Army utilized Fort McDowell from 1899 to 1946 (see http://www.militarymuseum.org/CpReynolds.html). The military occupation of Angel Island began even earlier, with the creation of Camp Reynolds in 1863. Camp Reynolds would later become the West Garrison of Fort McDowell. Over 750,000 U.S. servicemen were processed through Angel Island, either on their way to war or upon their return. As part of troop processing, men destined for overseas duty were given their required shots, including tetanus, which was reflected on newly issued dog tags.

During World War II (WWII), the fort was part of the San Francisco Port of Embarkation. Over the years, untold numbers of soiled or otherwise discarded uniforms were discarded on the island, as were various kinds of web gear and other military equipment. In the early years of the base’s history, uniforms appear to have been burned along with miscellaneous garbage on the surface of open-air disposal sites and in trenches. Several open-air disposal sites have been identified, including one on the west side of the island near Perles Beach and another at East Garrison. During WWII, the discarded uniforms were burned in the base incinerator. Few items survived incineration other than small bits and pieces, such as buttons, buckles, snap fasteners, insignia, and other metallic uniform accoutrements. What remained after incineration was used as fill behind the seawall at East Garrison and at Point Blunt (Parkman 2009b, 2009c).

The incinerator was built of bricks on the waterfront at East Garrison. It appears to have been constructed by the Works Progress Administration (WPA) prior to 1938. A similar brick incinerator was completed by the WPA at the San Francisco Presidio in 1936. The incinerator played a useful role in the day-to-day operations at Fort McDowell, and it was used until the Army abandoned the base in 1946. The interior of the incinerator still holds a substantial layer of white ash, which is considered toxic due to the presence of heavy metals. A visual inspection of the ash just inside the openings revealed several shards of molten glass and some small nondescriptive pieces of scrap metal. Prior to construction of the incinerator, rubbish was burned in open pits or in heaps piled on the ground. During WWII, materials slated for incineration were ferried to Angel Island and disposed of via the base incinerators, one of which was on the water and the other on the shoreline. The incinerator on the water probably discarded its waste into San Francisco Bay. This incinerator no longer exists, although the second incinerator is extant (Figure 1A).
The analysis of what remained after incineration provides insight into the role of Fort McDowell. Additionally, field observations have led to a hypothesis regarding disposal of these remains and how disposal enabled archaeological site formation. What remained after incineration was scooped out and discarded behind the nearby seawall (Figure 1B). Additional materials were trucked to Point Blunt and used to create what appears to be an engineered mound (Figure 1C).

ARTIFACTS

A vast array of military artifacts has been found on Angel Island, and most of the items show evidence of burning (Parkman 2009a, 2009b, 2009c, 2010a, 2010b, 2010c, 2010d, 2010e) (Figures 2 and 3). The following are but seven examples of what has been found. These items serve to remind us of the stories artifacts such as these can tell.

- **Bronze Collar Disk, Type II, ca. 1926-1937, U.S. Nebraska 134th Infantry Regiment (Figure 2a).** This group was reorganized as the 134th Infantry Regiment shortly after being mobilized in 1917 and served...
Figure 2. Selected collar and cap disks from Fort McDowell, ca. 1918-1946. Most of these artifacts were found at Point Blunt and passed through the incinerator at East Garrison. Figure 2a is a bronze collar disk, Type II, ca. 1926-1937, U.S. Nebraska 134th Infantry Regiment. Figure 2b is a gilt collar disk, Type II, ca. 1926-1937, U.S. 15th Infantry Division. Not to scale.
Figure 3. Selected artifacts from Point Blunt, WWII era. Not to scale.
in World War I (WWI, 1917-1919) as part of the 34th Division. They arrived in France near war’s end, too late to be sent to the “Front.” The 134th came to California in December 1941 on what proved to be a cancelled deployment to the Philippines. In 1942, the Regiment’s 2nd Battalion was sent to Alaska as part of the expeditionary force that took the Aleutian Islands back from the Japanese Imperial Army. This collar disk probably belonged to a soldier who was at Fort McDowell between August 2 and 10 while being outfitted for deployment to Alaska. The 134th was mobilized in 1940, but the new Class III type collar disks probably were not provided to the men of the 2nd Battalion until they passed through Fort McDowell on their way to Alaska. This disk would have been discarded because it was obsolete.

- **Gilt Collar Disk, Type II, ca. 1926-1937, U.S. 15th Infantry Division (Figure 2b).** This group was deployed to China in 1900 for the Boxer Rebellion, then deployed to the Philippines during the so-called “Philippine Insurrection.” They returned to China as the “China Marines” and remained deployed there until 1938, when they were replaced by the U.S. Marine Corps. This collar disk probably belonged to a soldier who passed through Fort McDowell after returning from China. It was probably attached to a discarded uniform.

- **Two Francs Coin (Aluminum-Bronze, 1924) (Figure 3a).** This was a coin struck in France between 1920 and 1927 during the time of the Third Republic and demonetized in 1949. It is known as “Chambres de Commerce.” It measures 27 mm in diameter. How this coin ended up in the Point Blunt Dump, over 8,000 km from France, can only be imagined. It was probably left in the pocket of an incinerated uniform.

- **Distinctive Unit Insignia, 64th Coast Artillery Regiment (Brass, ca. 1941-1945) (Figure 3b).** This brass pin is the Distinctive Unit Insignia for the 64th Coast Artillery (Anti-Aircraft) Regiment, which was stationed at Fort Shafter in Honolulu, Hawaii. It depicts a “winged bullet.” Originally, there was red enamel on the end of the “bullet,” but the enamel has been lost to the effects of weathering. The 64th was the Army’s first anti-aircraft artillery unit, organized at Fort Shafter in 1922. At the time of the surprise attack on Pearl Harbor in December 1941, the 64th was the only anti-aircraft unit that had ammunition at its battery locations. Fort Shafter was spared the horrors experienced by many of the military installations around Honolulu on December 7. There was, however, a lone casualty when a member of the 64th was killed by an errant shell fired by the U.S. Navy at Pearl Harbor.

- **Dog Tags.** Over the years, numerous military dog tags have been found at former Fort McDowell (Parkman 2010a, 2010b, 2010c, 2012a, 2012b, 2012c, 2012d). These are M1910 and M1940 (2nd Type) identification tags that the Army discarded, after replacing them with newer models when the servicemen passed through the San Francisco Port of Embarkation on their way to war in between 1941 and 1945. Three of these dog tags and the men who wore them are described below, exemplifying the tales that dog tags can tell us. In a way, each of the three men suffered some form of enslavement, or at the very least, a similar hardship. These were life-changing ordeals that they overcame and survived. I believe we can find inspiration in their stories. In many ways, these three dog tags, and the stories of the men whose names are stamped on them, present a snapshot of the American experience in WWII.

- **TEC 4 James Kiyoto Izumi (1919-2005), a Japanese-American, was born in Honolulu in 1919 (Parkman 2012d) (Figure 4a).** His parents were citizens of Japan, but they had been living in Honolulu for several years. Izumi enlisted in the U.S. Army three weeks prior to the attack on Pearl Harbor. While he was training as a rifleman in the soon-to-be legendary 100th Infantry Battalion, it appears that his parents, considered enemy aliens by the U.S. authorities, may have been sent to the Rohwer Concentration Camp in Arkansas for the duration of the war. In December 1942, Izumi was assigned to the Military Intelligence Service and sent to their newly created school at Camp Savage, Minnesota. When he graduated six months later, he was assigned to the Pacific Theatre of Operations and by 1943 had been deployed as a language specialist. He spent the next two years at war with Japan, aware that his family was incarcerated behind barbed wire back home in the U.S. Izumi and his family were sent to Rohwer Concentration Camp in Arkansas for the duration of the war. In December 1942, Izumi was assigned to the Military Intelligence Service and sent to their newly created school at Camp Savage, Minnesota. When he graduated six months later, he was assigned to the Pacific Theatre of Operations and by 1943 had been deployed as a language specialist. He spent the next two years at war with Japan, aware that his family was incarcerated behind barbed wire back home in the U.S.

- **PFC Walter Sivola (1910-1988), a Finnish-American, knew what it meant to be a slave laborer (Parkman 2012a, 2012b) (Figure 4b).** Captured by the Japanese Imperial Army when Gen. Wainwright surrendered Corregidor on May 6, 1942, Sivola became a prisoner of war (POW) and was forced to work as a slave laborer, first in the Philippines and later at camps in and around Osaka, Japan. Sivola survived the war and lived the rest of his life in Los Angeles.
PFC Emanuel Jefferson (1921-), an African-American, was born on a farm in Mississippi, was drafted into the then highly segregated U.S. Army in 1942, and was sent to South Carolina for port workers training (Parkman 2010a, 2010b) (Figure 4c). In 1943, he was deployed to Espiritu Santo in the South Pacific and worked at loading and unloading dangerous munitions from supply ships. During the liberation of the Philippines, Jefferson voluntarily transferred to the Americal Division of the U.S. Army and soon found himself in the thick of it. One day, while unloading a ship in an area of Philippine City of Cebu that was thought to have been cleared of the enemy, the Japanese launched a surprise attack on the poorly armed company of port workers. Jefferson and others in his outfit grabbed the few weapons that were available to them and held off the attack until reinforcements arrived. For his actions under fire that day, he was awarded a Bronze Star. Following the war’s end, he was stationed in occupied Japan with the U.S. Army Medical Corps. Years later, he transferred to the Tank Corps and ended up in West Germany in 1961, during the famous standoff with Soviet tanks at Checkpoint Charlie. This was the era of Jim Crow and the Civil Rights Movement. In 1962, a racist officer from the South assumed command of the unit and had a confrontation with Jefferson over a personal matter, soon forcing him out of the Army just shy of Jefferson making his 20 years and qualifying for retirement. Following the Army, Jefferson worked in the airline industry and now lives in the San Francisco Bay area.

I should note that I interviewed Emanuel Jefferson on several occasions. To my surprise, he told me that he was never on Angel Island. I asked him how his old dog tag might have found its way to Point Blunt,
where I found it in 1994. He said that he had no idea how it came to be there, but he did mention that he was stationed at the San Francisco Presidio for a short time in 1943, before deploying to the South Pacific. While at the Presidio, PFC Jefferson must have turned his old dog tag in to the military authorities when they issued him a new one. In 1943, the military issued a new type of dog tag, one that did not show the soldier’s next of kin. That was the new dog tag Jefferson wore when he deployed to the war zone. The older dog tag I found showed his mother’s name and mailing address back home in Mississippi. It seems obvious that the military ferried trash from the Presidio to Fort McDowell, where it could be incinerated and discarded. Trash may have been sent to Angel Island from the Oakland Army Base depot as well, as it was also part of the San Francisco Port of Embarkation.

Interestingly, James Izumi’s dog tag, like Emanuel Jefferson’s, was the type showing the soldier’s next of kin (M1940, 2nd Type). Most of the dog tags I have found on Angel Island are this type, although there are a few exceptions. For example, Walter Sivola’s dog tag was a pre-WWII type (M1924). Whereas Emanuel Jefferson and James Izumi passed through the San Francisco Port of Embarkation in 1943, after the military decided to remove the next of kin information from their dog tags, Walter Sivola passed through two years earlier. He arrived at Fort McDowell wearing an old-style dog tag issued to him in the late 1930s. He turned it in and was given a new dog tag, the type that listed his next of kin.

Walter Sivola was captured when Corregidor fell. Like many of his comrades, Sivola discarded his dog tag along with his weapons, shortly before the surrender. Over the years, thousands of American dog tags have been found at Corregidor, evidence of the fear that must have gripped the soldiers shortly before they fell under Japanese control. The M1940 (2nd Type) dog tag was stamped with the name and address of the soldier’s next of kin. Apparently, most of the soldiers who were about to surrender worried that this information might be used against them during interrogation or even result in harm to their loved ones back home. In the hands of an enemy interrogator, a POW’s dog tag showing the precise address of his next of kin, could prove to be a powerful psychological tool. Under extreme duress, a POW might crack if the interrogator insinuated that they had the ability to harm his family. The U.S. military never admitted it, but this is probably why the dog tag was revised in 1943. The new model no longer included reference to the soldier’s next of kin. Interestingly, the American soldiers who surrendered at Bataan did not discard their dog tags like the men did at Corregidor a month later. The desire to rid themselves of dog tags may have been in part due to the rumors those on Corregidor heard after the fall of Bataan. A few years ago, Sivola’s dog tag was found at Corregidor (Parkman 2012a, 2012b). This was the dog tag that had replaced his older M1924 dog tag that I found on Angel Island. The dog tag he discarded at Corregidor listed his mother and her address in Phelps, Wisconsin. In 1942, Phelps had a population of less than 1,500 people. It would not have been difficult to locate Sivola’s mother in Phelps, a thought that must have crossed Sivola’s mind as he was about to surrender.

DISCUSSION

At Quarry Point, along the waterfront of East Garrison, there is a refuse site associated with burning (Figure 1B). The archaeological site extends for an unknown distance along the seawall and includes the area’s two known Army incinerators (only one of which remains). Within this area are the remnants of a relatively small open pit of unknown origin, immediately adjacent to the seawall near Building 64 (Deer Pen). I took my trowel and cleaned the north wall of the open pit and created a 1-m long by 0.5-m deep soil profile for the purpose of documenting any observable stratigraphy. In doing so, I identified a relatively thin (10-15 cm thick) stratum about 30 cm below the surface that consisted of burned cultural materials. I noted some undecorated whiteware ceramic sherds (“mess hall ware”), a whiteware ceramic lid for a sugar bowl, a multi-colored transfer print ceramic sherd, some molten glass shards, a considerable number of wire nails, several small fragments of a salt or pepper shaker brass lid, two fragments of a bone toothbrush handle, a single piece of saw-cut cattle bone, some small bits and pieces of coal, and a small, clear, rectangular cork-closure bottle with one indented panel. The bottle is of a type that typically held cooking extract, and the nature of its seam indicates that it was manufactured after ca. 1904.
There was a concentration of partially fused metal items clearly visible near the western edge of the stratum, immediately adjacent to the seawall. In order to inspect and sample this feature, I excavated a small (30 by 30 cm) unit down to the target location. From the mass of artifacts, I recovered seven coat-sized (~22.6 mm diameter) and cuff-sized (~15.3 mm diameter) military buttons (i.e., two-piece, wire shank, “Great Seal” style General Service Buttons), two collar disk insignia (a Federal “U.S.” collar disk and an artillery collar disk for a Company C), 19 brass belt buckles (some bearing fragments of scorched, khaki-colored, cotton web belts, used with web trouser belts; 16 enlisted men’s open-face claw-style buckles and three closed-face buckles), more than 50 brass tips from web trouser belts (most marked “QUMSD” for U.S. Quartermaster Department), a copper snap-fastener marked “Rau & Co., Providence, RI,” and three brass grommets probably from web trouser belts. Like the belt buckles, the collar disks indicate that these are the remnants of enlisted men’s uniforms.

On the backside of the buttons for which I can make out the backmarks, there are the names of WWI era companies, including L.A. Myers Jr. Inc. Newark, NJ; City Button Works, NY; and R. Liebmann Mfg Co. The buckles also bear makers’ marks that are WWI era, such as Anchor Brand, Waterbury Buckle Company, and Anson Mills. Several of the buckles are marked with a 1904 patent date. Based on these artifacts, it is clear to me that the collection dates from ca. 1914-1918. As further support for this dating, I should note that I also found a spent .30 caliber (.30-06) military cartridge case bearing the headstamp FA 8 13 (i.e., Frankford Arsenal, August 1913). This cultural deposit does appear to be associated with a WWI era dump, perhaps dating to the year 1918 and the war’s end.

As a WWI dump site, it contains a range of materials that were dumped and/or burned at the site, including what appear to be the remnants of trash from the mess hall. Given that many of the artifacts show evidence of burning—and I should note that I did find charcoal, ash, and molten glass in the cultural stratum observed in the soil profile—I believe that my “Button Hypothesis” is worth pursuing and that, in the end, it will be supported. Indeed, at different stages of the U.S. Army’s ca. 1899-1946 occupation of East Garrison, untold numbers of discarded uniforms were burned on site near the seawall or elsewhere (e.g., in the incinerators) and deposited as ash deposits behind the seawall or trucked to Point Blunt (Parkman 2009c).

Looking at the artifactual materials I recovered in the soil profile, it is obvious that uniforms were being burned, of which only the small metal bits and pieces such as buttons, collar disks, belt buckles, belt tips, grommets, and various fasteners survived the flames. The remains of web trouser belts especially attest to the tremendous number of discarded uniforms that must have been burned and deposited behind the seawall at Quarry Point (Figure 5). Between 1899 and 1946, more than 750,000 soldiers passed through East Garrison, and it is likely that they accounted for an enormous number of worn-out and soiled uniforms in need of disposal. Quite likely, the site contains a great multitude of metal buttons, collar disks, insignia, belt buckles, belt tips, and grommets derived from countless uniforms of the Spanish American War, WWI, and WWII.

Figure 5. Brass buckle from an M1910 cotton waist belt, Fort McDowell, ca. 1918. Note the remnants of the belt’s cotton weave affixed to the buckle.
There are probably even more of these artifacts at Point Blunt, on the western side of the island, where an engineered landform appears to consist largely of artifact-rich fill (Parkman 2008b, 2009d, 2010d, 2010e) (Figure 1C). The Army used the fill to bridge a gap between Point Blunt and the rest of the island. The fill creates a flat-topped mound, atop of which several structures now sit. Over the years, numerous WWII era artifacts have been found eroding from the surface of the mound or on the beach below after eroding from the mound. It appears that most of the recovered artifacts passed through the base incinerator before being deposited at Point Blunt. This includes all seven of the artifacts described above (dog tags, collar disks, insignia, and French coin). Artifacts that passed through the incinerator (Figures 2 and 3) appear much more affected by burning than those that were subjected to open-air burning (Figure 6).

Figure 6. Selected artifacts from an open-air dump at Camp Reynolds, ca. 1870-1918. Some of these items show evidence of burning. Not to scale.
CONCLUSIONS

This article is an overview of my study of two unique historic archaeological sites on Angel Island, the first at Quarry Point along the waterfront at East Garrison, and the second at Point Blunt. Based on some very preliminary observations, I have hypothesized that the fill area directly behind the seawall at Quarry Point (Figure 1B) and in the engineered mound at Point Blunt (Figure 1C) contain enormous numbers—perhaps numbering in the millions—of military buttons, insignia, buckles, and various other metallic elements of discarded and burned uniforms. Furthermore, the necessity of disposal caused the U.S. Army to create these unique archaeological sites.

Individually, these bits and pieces of discarded militaria have only limited significance. Except for dog tags, they are essentially anonymous. In their anonymity, they are like the hundreds of thousands of all-but-forgotten servicemen who marched off to war from Angel Island, little more than anonymous faces in a never-ending column. But when all these little bits and pieces are viewed together, as a greater assemblage of small things forgotten, they represent a vast and seldom seen museum of history existing right beneath our feet and providing mute testimony to some of the most important times in our nation’s history. In their own way, these artifacts help to rescue individuals from the anonymity of the past. They help bring to life the heroic stories of men like Emanuel Jefferson, James Izumi, and Walter Sivola, to whom we owe so much.

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