



LEATHERNECK SURVEYORS

PART 1 ► THE ARTILLERY SURVEYORS

This is the first of a two-part series on the role of the United States Coast and Geodetic Survey serving with the United States Marine Corps during World War II in the Pacific Ocean. Eleven C&GS officers were called into the United States Marine Corps in 1942. Those officers served with distinction as regimental artillery survey officers, mapping officers, engineering officers, intelligence officers, and in specialized photogrammetric units. The survey and engineering officers were often in the front lines of some of the fiercest fighting of the Pacific war while the intelligence and photogrammetric officers, although nominally rear echelon, were also subjected to the hazards of artillery, aerial bombardment, and sniper fire while ashore, and kamikaze attack while offshore.

Marine Artillery Surveyors

Commander Robert Earle, like other officers of the C&GS detailed to the Marines, had quite diverse duty within the Marine Corps. While in training, he was placed in command of a battery of 90mm anti-aircraft guns and was transferred out to Guadalcanal with the 11th Marines Defensive Battalion in January, 1943. He served on Florida Island for much of the next 10 months as both a battery commander and construction engineering officer.

Above: Artillery survey crew of 10th Marines with survey gear. Commanded by Robert A. Earle, back row 4th from left

Location: Saipan, Marianas Islands

Photo Date: July 13, 1944

Credit: Family of Captain Robert A. Earle, C&GS

» ALBERT "SKIP" THEBERGE



Earle was transferred to the 10th Marines, 2nd Marine Division, as regimental survey officer in time for the Tarawa landings. The 10th Marines did not land until Monday, November 22, 1943, the third day of Tarawa. Apparently little was accomplished in the way of survey while at Tarawa, but Earle's unit was certainly placed in harm's way. According to Father C. C. Reidel, the regimental Catholic Chaplain, they proceeded about 150 yards inland before setting up HQ. After being there awhile, he noted that it was a little disconcerting to look back and see the 6th Marines advancing with the front about 60 yards behind them. All Japanese resistance ended the following day. Lieutenant Commander Earle worked for the next 2 days assisting the regimental surgeon tending wounded American Marines. Earle was no stranger to medical work having saved the infected leg of the son of a Moro chieftain at Zamboanga, Philippine Islands, in the early 1930's.

Following Tarawa, the 2nd Division went to Hawaii to train for the upcoming Saipan and Tinian campaigns. As 10th Marines regimental survey officer during the Saipan and Tinian campaigns, Earle received the Legion of Merit Medal for bringing the "survey sections to a high state of training"



Commander Jeremiah Morton, Marine artillery surveyor. Served in the Marianas
Photo Date: 1944?
Credit: Family of Commander Jeremiah Morton, C&GS

and serving "with this regiment through the TARAWA, SAIPAN and TINIAN operations. During the latter two operations his work, frequently accomplished under enemy fire,

Jeremiah Morton's survey crew on Saipan. Newspaper article termed Morton and his crew "sniper bait"

Location: Saipan, Marianas Islands
Photo Date: July 1944

Credit: Family of Commander Jeremiah Morton, C&GS

was invaluable" to the success of marine artillery operations. His proximity to the front lines on Saipan was shown on July 7, 1944, when the Japanese launched one of the greatest banzai charges of the war. Approximately 4,000 drunken, screaming, fanatical Japanese charged through the American lines. The brunt of this charge was launched against the 10th Marines. Commander Robert Earle and his surveyors were caught up in this great charge. His survey crew captured three Japanese battle flags during the intense fighting. Following the battle for Saipan, he was regimental executive officer and engineering officer prior to returning to the United States in late 1944.

That surveying work in the jungle warfare of the Pacific Islands was dangerous was recorded in an article in the *Washington Star* newspaper concerning Commander Jeremiah Morton, USC&GS, regimental survey officer for the 14th



Emmett Sheridan, left center, with III Corps artillery headquarters. Picture taken a few days after Japanese surrender

Location: Japan, Okinawa
Photo Date: August 1945
Credit: Family of Captain Emmett Sheridan, C&GS

Marines, 4th Marine Division, who landed on Saipan on D-Day. The correspondent wrote that Japanese snipers would wait to see the survey crews and pick them as targets of choice. The survey crews came to think of themselves as “sniper bait”. Besides surveying in the jungles following the initial day of invasion, the artillery surveyors came ashore during the first assault waves to orient the artillery as soon as possible after it came ashore. During the initial invasion on Saipan, Morton, “immediately upon landing and while under heavy shellfire, surveyed in the artillery positions and checked the accuracy of the map being used as an artillery fire chart. In extending this survey forward he repeatedly came under heavy mortar and rifle fire. His outstanding service was of inestimable value to the entire operation...” For his work on Saipan, CDR Morton received the Bronze Star Medal.

Lieutenant (JG) William Noble Martin was transferred to the Marines on June 30, 1942. He spent his first 2 1/2 years in the Marines training for his role with the 13th Marines, Fifth Marine Division. On February 19, 1945, then Commander Martin landed with the 13th Marines on the shores of Iwo Jima with advance elements of the regimental headquarters. He conducted an

initial survey of the beach area “while dodging mortar fire” such that landing artillery batteries were able to commence firing on Japanese positions within half an hour of landing. The following day, February 20, “he conducted a survey on the airfield and vicinity in the face of intense enemy small arms, mortar and artillery fire in order to complete the initial survey for his regiment and to locate initial points for three other artillery units prior to their landing...”

This allowed the Marine artillery to begin massing of fire to neutralize the many enemy targets. After Mount Suribachi was captured, Martin established flash ranging observation points on the slopes of Mount Suribachi and, “by the accurate survey and expert control of these instruments, enabled the artillery to locate and neutralize sixteen enemy gun emplacements.”

William Martin was sniped at on a regular basis during the time he was conducting surveys on Iwo Jima. One particularly pesky sniper had been harassing the headquarters area of the 13th Marines for a couple of days. As a prime example of the Japanese fanaticism encountered during the island fighting during the war, this particular Japanese had both feet blown off and had strapped sandals to the stumps of his legs to get around prior to being killed. Early in the morning of March 1, Commander Martin was sleeping the best he could in his foxhole at the HQ area when a random Japanese shell struck the ammunition dump about 100 yards from where he was attempting to sleep. Approximately 25 percent of the American artillery ammunition exploded, rudely awakening Martin. The exploding dump was a wild spectacle

with exploding mortar shells and 105 mm artillery projectiles flying through the air. Miraculously, no Marine died in the explosions and accompanying fires.

The most gratifying moment of Commander Martin’s Marine experience came when he was conducting survey work at the end of the airfield runway and the first Superfortress to use Iwo Jima for an emergency landing flew right over him prior to touching down. By war’s end over 20,000 American airmen that could not have made it back to airfields in the Mariana Islands landed on Iwo Jima. Iwo Jima was declared secure in mid-March 1945 although fighting continued until the end of the month. Thus ended the Fifth Marine Division’s only battle of the war. Upon return of the Fifth Marine Division to the United States, William Martin was assigned to Marine Barracks Quantico as an artillery survey instructor until separated from the Marine Corps in June 1947.

The last major amphibious landing of the war was on Okinawa. Because of the size of the island, Okinawa was more akin to the land fighting of Europe both in the area covered and the size of operational units. Lieutenant Commander Emmett “Red” Sheridan, recently of Marine Photographic Squadron VMD-154, was transferred to Third Corps Artillery to serve as Survey Officer and reported February 2, 1945. According to Sheridan, “Little time was allowed to become familiar with artillery and its surveying problems. However, Commanders H. G. Conerly and W. N. Martin, USC&GS, furnished much valuable information. In retrospect it is believed that the actual lack of study in courses as taught, and from manuals as written, had certain advantages for it was found that actual conditions in combat were far different.”

Sheridan landed on L-Day and established initial artillery survey control, and then throughout the battle, from April 1 to June 22, he maintained and coordinated artillery survey control throughout all areas under the Marine Corps’ jurisdiction. He spent much time in the front lines during this battle and received the Bronze Star Medal for his work which “enabled the

artillery to deliver accurate and effective fire against the enemy, and materially aided in the capture of Okinawa." Captain Emil Kirsch, USC&GS, was also present as an artillery surveyor during the Okinawa campaign. He normally served with the First Marine Amphibious Corps, but during the fighting to secure Mount Yontanzen [spelling uncertain] he was attached to the Third Amphibious Corps. During the Battle of Iwo Jima, Kirsch had served as an intelligence officer.

Artillery survey crew of 10th Marines with 3 captured Japanese battle flags. Survey crew caught in middle of huge Japanese banzai charge at Battle of Saipan. Robert A. Earle, in center front, commanding officer of survey crew.

Location: Saipan, Marianas Islands

Photo Date: July 13, 1944

Credit: Family of Captain Robert A. Earle, C&GS

Even the Coast and Geodetic Survey

Robert Sherrod, the great *Time* and *Life* correspondent of the war in the Pacific, attended the Iwo Jima pre-invasion briefing addressed by Vice Admiral Richmond Kelly Turner, USN, Lieutenant General Holland Smith, USMC, and James Forrestal, the Secretary of the Navy. This meeting took place on Turner's flagship three days before the landings on Iwo Jima. In his book, *On to Westward, The Battles of Saipan and Iwo Jima*, Sherrod reports that "Real unity of thought and command had been achieved for his [Turner's] operation, between the Army, Navy, Marines, and Coast Guard, and even the Coast and Geodetic Survey, which had a few men along." What Sherrod didn't know was that all during the Pacific war Coast and Geodetic Survey officers made many of the maps used by Marines in battle, helped select their landing sites, conducted needed hydrographic surveys before and after Marine landings, surveyed

in Marine Corps artillery positions, and helped target enemy artillery emplacements and other installations. In many cases they fought side-by-side with front-line Marines and were subjected to the same hazards. Yes, not only at Iwo Jima, but virtually everywhere the Marines fought, even the Coast and Geodetic Survey had a few men along. ■

Albert "Skip" Theberge served as a NOAA Corps officer for 27 years prior to retirement in 1995. During that period he was primarily engaged in nautical charting and seafloor mapping but also served a stint in geodesy working on the Transcontinental Traverse project during the 1970s. For the past 18 years he has worked as a research librarian at the NOAA Central Library and has produced a number of historical works related to the Coast and Geodetic Survey (C&GS) and seafloor mapping. He also produced the NOAA History website (www.history.noaa.gov) and the NOAA Photo Library (www.photolib.noaa.gov) which includes thousands of historic photos related to the work of the C&GS.

