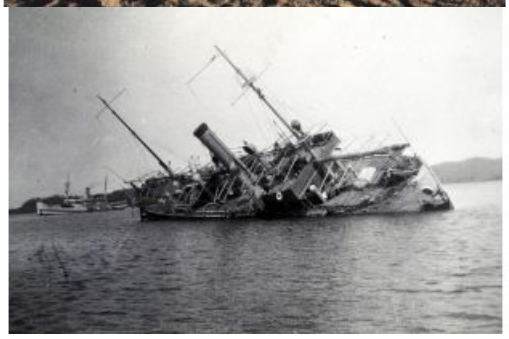
100 Years of Service



This year marks the 100th Anniversary of the Commissioned Corps of the National Oceanic and Atmospheric Administration (NOAA Corps). The law forming the service was signed on 22 May 1917 and overnight made the field officers of the then United States Coast and Geodetic Survey uniformed commissioned officers. Literally hundreds of hydrographers, topographers and geodesists have since served in this uniformed service. As such, a look back at the origins and history of this organisation is in order.

Many elements of the National Oceanic and Atmospheric Administration (NOAA) and its commissioned officer service are direct descendants of the US Coast and Geodetic Survey (USC&GS), the oldest physical scientific agency in the US Federal Government. NOAA and the NOAA Corps can trace their lineage to 1807 when President Thomas Jefferson, among the most scientific of the United States presidents, signed a bill for the 'Survey of the Coast'. The first Superintendent of the Coast Survey was Ferdinand Rudolph Hassler, a Swiss immigrant whose scientific skill, strength of character, and indomitable nature guided the young science agency through many difficult times until his death in 1843. Hassler left a thriving organisation imbued with principles of accuracy, scientific standards, and integrity as his gift to science and the American people.

During the period before the American Civil War, the work force of the Survey was made up of a nucleus of civilians working hand-in-hand with Army and Navy officers. These men and women (the Coast Survey was the first United States Federal agency to hire female professionals) worked at charting the nation's waterways, producing topographic maps of our shorelines, and conducting geodetic surveys that were the backbone of all precise mapping efforts. Their efforts made the marine highways of the United States among the best charted in the world.

The Civil War Years

With the outbreak of the Civil War, all Army officers were withdrawn from the Survey and never returned; all naval officers but two

were withdrawn from Survey duty. Consequently, the civilian officers of the Survey were called upon to serve in the field and provide mapping, hydrographic and engineering expertise for Union forces for the duration of the war. Curiously, the Army gave Coast Survey officers 'assimilated rank' which allowed them to wear Army uniforms while in the field. The Navy, on the other hand, retained them as civilians, putting coast surveyors in jeopardy of execution as spies if captured.

Whether Army or Navy, these coast surveyors served in virtually all theatres of the war including the defences of Washington, on the Peninsula with McClellan, with the Union blockading forces, with Farragut and Porter on the Mississippi and Red Rivers, with Grant at Vicksburg and in Virginia, and with Sherman in Georgia and the Carolinas. They were often in the front lines or in advance of the front lines conducting their mapping duties. For its part, the Coast Survey office force produced many of the coastal charts and interior maps used by Union forces throughout the war.

New Responsibilities

After the Civil War, the Coast Survey resumed its work of making the shores of our Nation safe for commerce. The area of responsibility continued to grow with the acquisition of Alaska in 1867 and the 1871 law requiring the Coast Survey to carry geodetic surveys into the interior of the United States. Naval officers returned to hydrographic duty on the Survey and remained until the Spanish-American War (1898) when all were withdrawn permanently.

With the acquisition of the Philippines and Puerto Rico, the Coast and Geodetic Survey's (C&GS) realm of responsibility increased again. Initial surveys in the Philippines were in support of defence needs as naval vessels and army transports grounded on uncharted shoals with distressing frequency.

During the years between the Spanish-American War and World War I, all C&GS work was conducted by civilians even though shipboard personnel wore uniforms that were virtually indistinguishable from naval uniforms. With the entry of the United States into the war in 1917, the commissioned service of the C&GS was formed in order to eliminate the anomalous condition that arose during the Civil War which placed civilian assistants accompanying armed forces in jeopardy of being considered spies.

Also, by forming a uniformed commissioned service that could be rapidly transferred into the Armed Forces, the rapid assimilation of C&GS technical skills for defence purposes was assured. Even today, if a national emergency occurs, the NOAA Corps could be assimilated rapidly into the armed services by order of the President.

Serving During World War I

Over half the commissioned officers of the C&GS served with the Army, Navy, or Marine Corps during World War I. They served as artillery orienteering officers, mine-laying officers in the North Sea, troop transport navigators, intelligence officers, and even on the staff of General 'Black Jack' Pershing, the head of the American Expeditionary Force.

Colonel E. Lester Jones, then director of the Coast and Geodetic Survey and 'father of the Commissioned Corps,' returned to the United States and was a founder of the American Legion and first president of the Pioneer Post.

Following WWI, the commissioned officers and civilians of the C&GS reverted to their role of peaceful surveyors and chart makers of the United States. The young men who came into the commissioned service during this period spent years developing expertise in land surveying, sea floor and airways charting, coastline mapping, geophysics and oceanography. This expertise was combined with the hardships of a lifestyle that was characterised by years in survey field assignments or attached to survey vessels.

World War II

With the outbreak of World War II, once again over half of the commissioned officers of the C&GS were transferred to either the Army, Navy, or Marine Corps. Of the C&GS civilian workforce, approximately half, slightly over 1,000, joined the armed services. Those remaining on the home front were engaged almost exclusively in activities related to the prosecution of the war. Three officers who remained in the C&GS and eleven members of the agency who had joined other services were killed during the course of the war.

Officers and civilians of the Survey served in North Africa, Europe, and throughout the Pacific. These individuals served with distinction, earning the respect of the highest echelons of the armed services. Members of the Survey shared the danger, hardship and years of separation from loved ones that were common to all services.

As the C&GS officers were but a small portion of the men and women under arms during this period, there is no claim that C&GS men or ships were instrumental in turning the tide of any one battle or enemy engagement. But the claim is justly made that the Survey helped speed the movement of men and material, that it was instrumental in improving the efficiency of putting ordnance on target, and that their charts, field artillery surveys, and skill in developing new instrumentation and methods saved countless American and Allied lives. Much of this work was done at the front as the officers were subjected to all the hazards of land, air and naval warfare.

Providing Support in the Field

C&GS officers served as artillery surveyors, hydrographers, amphibious engineers, beach masters, reconnaissance surveyors for the worldwide aeronautical charting effort, instructors at service schools and in a plethora of technical positions. In Europe, the work of C&GS artillery surveyors assured the success of the devastating tactic of 'time-on-target'. In the Pacific, C&GS ships

often operated in advance of fleet units.

Of the USS *Pathfinder*, a C&GS ship taken over by the Navy for the duration of the war, it was said, "The road to Tokyo was paved with *Pathfinder* charts." Admiral Chester Nimitz, in praising this ship's work, referred to it as a C&GS ship, because the technical expertise was provided by C&GS officers transferred into the Navy. C&GS amphibious engineers were regimental navigators for Army engineer shore and boat regiments moving men and supplies during General Douglas MacArthur's leap-frog war up New Guinea and into the Philippines.

In the worldwide aeronautical charting effort of WWII, C&GS officers were reconnaissance surveyors with the Army Air Forces travelling throughout the world pioneering many of today's civil air routes. On the home front, C&GS chart makers provided close to 100 million charts and maps to the Allied forces. These included press runs of over 1,800 target charts of such areas as Ploesti and Hiroshima. Adding to the total contribution of the C&GS to the war charting efforts was the assignment of a C&GS officer as the first commanding officer of the Army Air Forces Aeronautical Chart Plant at St. Louis.

The Post-war Years

Following WWII, C&GS officers returned home to be immediately ordered to the business of surveying and charting the United States. Many men who had spent years overseas were immediately sent out on survey ships and mobile field survey parties. Defence projects were still prominent as the C&GS sent geodetic and hydrographic survey crews to Arctic Alaska for 10 years on Distant Early Warning Line surveys; conducted geodetic and geophysical surveys of various rocket ranges; and sailed on oceanographic cruises for the Navy. C&GS expertise was used in establishing seismic stations for monitoring nuclear testing.

In 1959, as it became increasingly evident that the United States' environment was intertwined with the world environment, C&GS was given the mandate to conduct worldwide oceanographic studies. In the 152 years since its inception, the Survey of the Coast had grown from a relatively small operation centered on the east coast of the United States to an agency working in all the oceans of the world.

Following two reorganisations in which many science agencies with related missions were brought together in one agency, NOAA and the NOAA Corps came into existence in 1970 following a short stint as the Environmental Science Services Administration and the ESSA Corps (1965-1970).

Serving NOAA and the Nation

Today, NOAA is comprised of the National Weather Service, National Marine Fisheries Service, Office of Oceanic and Atmospheric Research (NOAA Research), National Environmental Satellite, Data, and Information Service, National Ocean Service, and the Office of Marine and Aviation Operations. NOAA Corps officers serve on and command NOAA's fleet of research and survey vessels and aircraft, and also serve within each of NOAA's line offices.

NOAA officers and civilians are equally at home under the sea, on the sea, surveying the land, charting the airways, flying into hurricanes and other dangerous weather phenomena, monitoring environmental spacecraft, and studying the most important star, our sun. They have served on all the oceans of the world and have represented the United States in many nations. One can only wonder what Ferdinand Hassler would think about the organisation that he helped found so many years ago.