MILITARY TIMEPIECES

 Courtesy of
 The Society of
 Military Horologists
 NAWCC Chapter 143

 Special Exhibit at
 The National Watch
 and Clock Museum®

 March 2001 -
 March 2002
IN MEMORIAM

William R. Bricker,
FNAWCC
1923-2001

Mr. Bricker served as president of the NAWCC Society of Military Horologists since 1995 and was the Society’s newsletter editor. He inherited a collection of military timepieces from his father and became an avid collector, particularly of watches belonging to those who made military history, such as Field Marshal Erwin Rommel and Admiral Robert Peary. His primary interest was in the story behind the watch and he told many of these stories, through the years, in the Society of Military Horologists’ newsletter.

He was the driving force behind the Military Timepieces collection currently on display at the National Watch and Clock Museum®. Mr. Bricker and his companion, Betty Ann Taylor, were familiar, always charming figures at the museum this past year and will be missed. This booklet was Mr. Bricker’s project. The editorial staff of the NAWCC is very proud to have been able to facilitate its completion.


A graduate of Millersville University, PA, with a master’s degree from New York University, he was an educator and administrator for more than 40 years and the national director of the Boy’s and Girl’s Clubs of America from 1972 to 1989. He received a Lifetime Achievement Award from Boy’s and Girl’s Clubs of America in April of 2000. He was appointed to several presidential task forces and served on panels to help fight crimes against children and to discuss key issues affecting young Americans. At President Reagan’s request, he represented the State Department as an ambassador and served on the UNESCO monitoring panel. He was on the board of directors for the Cummings Memorial Fund, the Jamestown Philomenian Library, the Naval War College Foundation and Museum, and the National Protecting First Foundation.

During World War II, he saw active duty as a naval aviator. After two decades of Naval Reserve service, he concluded his military career as the Naval Air Group Commander.

—compiled from The Jamestown Press, RI, with help from Thomas A. Frank
Military Timepieces

This booklet details the Military Timepiece special exhibit currently on display at the National Watch and Clock Museum®, Columbia, PA. The exhibit runs through March 2002.

Introduction

A frequently asked question of military horologists is, “Why do you collect only military timepieces?” The reasons are many, and a few are given below:

- Military timepieces followed rigid production standards, resulting in highly accurate timepieces.
- Many collectors are veterans of military service and have used these timepieces in their careers.
- Many military timepieces have been in use under the most exacting or diverse conditions, and many can be linked to history—through the men who used them.

In my own case, my father was an avid collector of military timepieces, and I caught the interest from him. Also, since I was a naval aviator for two decades, use of these instruments for navigation often meant the difference in whether or not you made it back to your aircraft carrier. Later, I became quite intrigued with the stories behind many of these watches. After researching their use in significant events, it was fun to share these stories with fellow collectors.

Military timepieces were often designed like their civilian counterparts and at the same time had to be specially constructed to do specific jobs. [Often the same watch movement would be used with a sturdier case for the military.] Luminous numerals or hands were necessary for use at night. On aircraft, vibration-free movements and cases were needed to keep timepieces running and accurate.

Waterproof watches had to be designed for underwater operations. Keeping accurate time under conditions of high or low temperatures was also important, as was the need to combat stale air on ships or mud conditions in fox holes or trenches. Placing “hacking” mechanisms in watches was vital so that all persons involved in a coordinated mission would start with the same exact time. There were other advances as well—like unbreakable crystals and non-glare dials that often made the difference in event outcomes. So the timepieces utilized were often different from their civilian counterparts at the time. Later, many unique military features were incorporated into watches for everyday use.

In closing I want to say this: The NAWCC Museum exhibit is only a small sampling of the many timepieces held in personal and museum collections. These particular watches were first exhibited at the 2000 NAWCC National Convention in Philadelphia. The exhibit then moved to the National Watch and Clock Museum® where it will remain until March 2002.

Acknowledgment must be given to our founders, Dr. Bill Huckaba and

Society of Military Horologists Chapter 143
Marvin Whitney. Without their foresight there would be no Society of Military Horologists. Thanks must also go to Ed Christiansen, our former secretary, and our present Secretary Joe Miller, for their hard work in building the membership to encompass collectors from 10 different countries. The NAWCC staff was most helpful, especially Editor Diana Burnett, Associate Editors Amy Klinedinst and Dee Wolfe, and former Acting Museum Curator Michele Nichols.

I hope this catalog will be of interest and useful for all collectors of watches. It will give them an insight into timepieces used by our military personnel since our country’s founding. Their sacrifices afford us the freedoms we all presently enjoy.

Commander William R. Bricker
Past President, Society of Military Horologists
NAWCC Chapter 143

The facts and object provenance presented in this booklet are to the best of our knowledge. Any additional information pertaining to watches included in this group would be graciously received.

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All articles were written and edited by Commander William R. Bricker and were originally published in the Society of Military Horologists Newsletters.
Pocket Watch, c.1760
John Davies
London, England

Revolutionary war hero Captain John Bricker of George Washington’s Lifeguards carried this watch during the conflict. The inner case is inscribed “Liberty or Death, 1776.” The watch is a fusee, key wound and lever-set. 42.1.2001

Pocket Watch, c.1760
John Arnold
London, England

This cylinder watch was the most accurate of its time and was made for use at sea. It was a forerunner to the pocket chronometer. 8.1.2001
Pocket Chronometer, c. 1780
W.E. Cribb
London, England

Used by the Royal Navy, this watch uses a pivoted detent chronometer escape-ment. 14.1.2001

Pocket Watch, c. 1770
Pierre LeRoy
Paris, France

This watch has a detached verge escapement and was accurate for this time period. LeRoy developed the first French detent chronometer. 2.4.2001
Pocket Marine Watch, c.1790
Thomas Earnshaw
London, England

This prototype watch uses a rack lever escapement. This type of escapement was patented by Peter Litherland and was designed specifically for marine time-keeping. 4.4.2001

Pocket Watch, c. 1800
Pennington
London or Liverpool, England

This is an early fusee lever-set watch and was used by the Royal Navy. This watch has a “hacking,” or seconds setting mechanism, that allows the sweep seconds hand to be stopped and set precisely to Greenwich Mean Time. 15.1.2001
Captain Blackwood, His Watch and the Great Sea Battle

During the year 1805, there was a sense of anxiety and panic all through Great Britain. Parliament in London had been in an uproar. Napoleon, the conqueror of most of Europe, had amassed hundreds of thousands of French elite troops to cross the English channel for his conquest of England. The only obstacle in his way was the English channel fleet under Admiral Cornwallis. To counter this annoyance, Napoleon had joined his formidable French fleet with that of Spain and was preparing to sail together to sweep the channel.

English Admiral Lord Nelson, fresh from victories against the French fleet in Egypt and the Danish Navy, was given the assignment to find the combined enemy fleet and destroy it. This would be the principle means of defeating any attempt at

Pocket Chronometer, c.1800
John Arnold
London, England

A silver-cased three-size detent chronometer, this watch was made for Henry Blackwood, one of Admiral Nelson’s trusted captains at the Battle of Trafalgar, around the time that Harrison’s chronometer design was being reduced in size for use at sea.

It is key wound and set, with a helical mainspring, and a fusee maintaining cone. The watch was placed in a lined chronometer box and was used for navigation. It can be time adjusted by the setting screws on its bi-metallic balance. Arnold is known for his detent escapement and his ability to produce a pocket-size chronometer that keeps accurate time over an extended period. 8.4.2001
invasion on the part of the Grand Army, which Bonaparte had encamped on the French coast.

The French Mediterranean fleet, based at Toulon, was Nelson’s settled object. For months on end, he sought out the fleet, when finally off Gibraltar, he received word that the combined fleet was harbored at Cadiz, Spain. He sent Captain Henry Blackwood, his most trusted frigate captain, to take a squadron and shadow their fleet. On October 19, Blackwood signaled Nelson that the enemy was on the move. Nelson kept his main force well out of sight. Although French Admiral Villeneuve had only meant to drive Blackwood and his squadron away, once his ships started their maneuvers, his fleet was committed.

By first light on October 21, the two fleets were in sight of each other. The French-Spanish fleet consisted of 33 ships of the line with 2568 cannons. The British fleet consisted of 27 ships of the line with 2148 cannons, an advantage for the French-Spanish fleet of 420 guns. Before long, the hostilities started. It was a pell-mell battle. Although the British plan was to attack the main line and cut off the rear echelon, the French-Spanish fleet kept sailing south. Finally, off of Cape Trafalgar, the combined fleet was ordered to come about and return to Cadiz. This maneuver took the British by surprise.

However, they had the wind at their backs and proceeded to bear down on the enemy. While sailing toward his adversary, Nelson signaled his fleet, “England expects that every man will do his duty.” Captain Blackwood, who had been at Nelson’s side, was ordered to return to his ship and engage the enemy. With guns blazing, Nelson cut through the enemy’s main line. Nelson’s flagship, Victory, received devastating blows from several of the French great ships, causing considerable damage. By this time, all of the ships were in battle, with 30,000 seamen on the French and Spanish ships against 17,000 on the British side. The battle roared on; thousands of seamen engaged in hand to hand combat and, as ships joined together, fought across their ship’s decks. By day’s end, the Royal Navy reduced the enemy fleet by a staggering 23 ships. However, casualties on both sides were many. The French and Spanish fleet listed 6,953 dead or wounded. The British lost 1,690, but most important, their great Admiral Lord Nelson succumbed to a marksman’s bullet in the heat of the battle. Perhaps this, the greatest epic encounter of ships under sail, can best be understood by the letter written by Captain Blackwood to his wife on the evening after the battle.

**The Battle of Trafalgar**

Captain Henry Blackwood to his wife

22 October 1805, 1 o’clock at night

The first hour since yesterday morning that I could call my own is now before me, to be devoted to my dearest wife, who, thank God, is not a husband out of pocket. My heart, however, is sad, and penetrated with the deepest anguish. A Victory, such a one as has never been achieved, yesterday took place in the course of five hours; but at such an expense, in the loss of the most gallant of men, and best of friends, as renders it to me a Victory I never wished to have witnessed - at least, on such terms. After performing wonders by his example and coolness, Lord Nelson was
wounded by a French Sharpshooter, and died in three hours after, beloved and regretted in a way not to find example.... I never was so shocked or so completely upset as upon my flying to the Victory, even before the action was over, to find Lord Nelson was then at the gasp of death. His unfortunate decorations of innumerable stars, and his uncommon gallantry, was the cause of his death; and such an Admiral has the Country lost, and every officer and man, so kind, so good, so obliging a friend as never was. Thank God, he lived to know that such a Victory never was before gained. Almost all seemed as if inspired by the one common sentiment of conquer or die. The Enemy, to do them justice, were not less so: they fought in a way that must do them honour. Bonaparte, I firmly believe, forced them to sea to try his luck, and what it might procure him in a pitched battle. They had the flower of the Combined Fleet, and I hope it will convince Europe at large that he has not yet learnt enough to cope with the English at sea.

Lord Nelson has left cause for every man who had a heart never to forget him.... I stayed with him till the Enemy commenced their fire on the Victory, when he sent me off. He told me, at parting, we should meet no more; he made me witness his Will, and away I came, with a heart very sad.... Under Lord N. it seemed like inspiration; the last signal he made was such a one as would immortalize any man, ‘England expects every officer and man will do their utmost duty.’ The alacrity with which the individual Ships answered it, showed how entirely they entered into his feelings and ideas. Would to God he had lived to see his prizes, and the Admirals he has taken! Three in all: amongst them, the French Commander-in-Chief, Villeneuve....

Captain’s Watch, c.1840
D. Delachaux
Le Locle, Switzerland

A special and rare watch that belonged to William F. Bricker, a U.S. naval submarine captain in WWI. It has a two-train winding and setting mechanism with a built in stopwatch. The left dial records Greenwich time and the right dial records local time. The key for winding and setting the watch is in the crown. 1.4.2001
Post Script:

Henry Blackwood went on to become an Admiral in the British Navy and was knighted by a grateful king. The French Emperor gave up his dream of invading Great Britain and moved his troops to concentrate on other European conquests.
Deck Watch, c.1860
E. Howard Company
Boston, Massachusetts

This early deck watch made for the U.S. Navy was used during the Civil War.
40.1.2001

Captain’s Watch, c.1880
Maker Unknown
England

Known as a captain’s watch, this watch’s face is inscribed U.S. Navy and includes three separate dials. One measures seconds, and the other two display local time and Greenwich Mean Time. As such, this watch can be used for navigation and the calculation of longitude. 43.1.2001

Pocket Watch, c.1883
American Watch Co.
Waltham, MA

A deck watch owned by the Navy, this is one of the seven watches carried by Admiral Peary when he found the North Pole. 21.1.2001
Pocket Watch, c. 1887
American Watch Co.
Waltham, MA

Matthew Henson, deputy to Admiral Peary, owned this watch and took it on the arctic expeditions. The inscription on the case back reads “R.E. Peary/North Pole Expedition/1908.” 20.1.2001
A hundred years ago, the United States declared war on Spain. Lasting a little over a hundred days, this brief, one-sided conflict resulted in the greater participation of American in world affairs, as a new major naval power. Although the first major sea battle of this war was fought half a world away in the Philippines, the conflict arose out of the rebellion against Spanish rule in Cuba. American Navy ships were sent to protect American lives and America’s large interests in sugar plantations and mills.

While at anchor in Havana Harbor, the battleship Maine exploded. The American press felt that the explosion was set off by the Spaniards. Rumors started to fly that a Spanish fleet was on its way to destroy the American base at Key West and blockade the American East Coast. On April 11, 1898, President McKinley sent a war message to Congress, and a week later Congress declared Cuba and Puerto Rico to be free and independent, declared a state of war, and directed the President to use armed force as necessary. Admiral William Sampson with the North Atlantic Squadron was directed to establish a blockade of Cuban waters.

Meanwhile, in the Pacific area, then-Commodore George Dewey was appointed commander-in-chief of the U.S. Asiatic Squadron and told to be prepared to strike a quick and effective blow against the Spanish naval forces in the Philippines. On April 25th, Dewey was ordered to commence operations against the Spanish fleet and to capture or destroy all vessels “using utmost endeavors.”

Pocket Watch, c.1889
Elgin Watch Company
Elgin, Illinois

This watch belonged to Captain C.G. Gridley, commanding officer of Admiral Dewey’s flagship Olympia at the Battle of Manila Bay in 1898.
5.1.2001
With seven ships totaling 100 guns, the Dewey squadron, led by his flagship Olympia commanded by Captain Charles Gridley, sought out the Spanish, finding them at anchor in Manila Bay. On May 1st, he commenced bombardment and by noon that day the entire Spanish fleet was burned, sunk, or abandoned. A grateful President immediately appointed Commodore Dewey to the rank of Admiral. With no Spanish naval power left in the area, Dewey awaited the arrival of the American troop convoy carrying 11,000 army troops to seize and hold the Islands. While on the way, Spanish Guam was captured and the independent Hawaiian Islands were annexed.

Back in the Caribbean, the Spanish fleet, off the Cape Verde Islands, sailed for Cuba. Admiral Sampson had calculated that the Spanish would head for Havana or Puerto Rico and sent his ships there on blockade assignments. In the meantime, the Spanish fleet sailed unscathed to Santiago, Cuba, where they went to anchor. The American picket ships finally determined that they were at Santiago and proceeded to set up a blockade outside Santiago harbor. During this time, 16,000 soldiers embarked from Tampa to break the back of the Spanish army. By mid-June the expeditionary force reached Santiago and began an amphibious assault. At San Juan Hill, the Spanish took a stand. The Americans under Colonel Theodore Roosevelt prevailed and moved to the city’s outskirts. The Spanish Governor in Havana ordered the Spanish squadron to get out of Santiago harbor at any cost. As in the battle of Manila Bay, an inferior Spanish fleet was annihilated by a superior and well-managed American fleet. Within a fortnight, the army in Santiago surrendered. With the U.S. in command of the Caribbean, troops were landed in Puerto Rico and the capitol was captured, bringing the war to an end.

The consequences of this war dramatized to the American public and to the world the emergence of the United States as a major naval power and brought about the acquisition of lands overseas. Now, Puerto Rico and Guantanamo in the Caribbean, and Hawaii, Guam, Samoa, and the Philippines in the Pacific became U.S. territories. Spain, on the other hand, decided to divest herself of all her principal colonies and put up for sale all her remaining Pacific possessions. So the “Splendid Little War” came to a close as America steamed into the twentieth century.

Two watches owned by significant naval leaders are highlighted here. The one shown at the top of page 9 belonged to Admiral William Sampson. It is dated 1848 and was given to him as a young man. William Sampson spent his entire career in...
the U.S. Navy, graduating from the Naval Academy in 1861, first in his class. During the Civil War he was at sea on a blockade ship and fought under Admiral Farragut at the Battle of Mobile Bay. In 1884 he was a member of the International Prime Meridian and Time Conference. He later became Superintendent of the Naval Academy and served in that capacity from 1886 to 1890. In 1898 he was promoted to Rear Admiral and given command of the North Atlantic Squadron.

The second watch, shown on page 12, belonged to Captain Charles Gridley. It was manufactured in 1890 by the Elgin National Watch Company, is 18 size, and has a silver case. It is fully jeweled and is stem wound and lever-set. Charles Gridley also spent his entire career in the U.S. Navy. He attended the Naval Academy in 1860 and, with his accelerated class, entered the Civil War with the West Gulf Blockading Squadron. He received great distinction fighting with Admiral Farragut at the Battle of Mobile Bay. He spent 30 years at various stations around the world, including a tour as instructor at the Naval Academy. In April 1898, he took command of Dewey’s flagship, the Olympia. It was on the morning of the Battle of Manila Bay when Dewey gave his famous command, “You may fire when ready, Gridley,” immortalizing the doughty captain.

Presentation Watch, c. 1890
Maker unknown
Swiss

This is a 38-size watch with five dials — the conventional dial, time; month; day; date; and seconds with phases of the moon. The case back is engraved to Commander W.R. Bricker.
Chronograph, c.1898
Leopold Huguenin
Le Locle, Switzerland

This watch, made for the U.S. Navy for use during the Spanish-American War, has a second jump hand dial and split time chronograph. It is lever-set and has two buttons to start and stop the hands. 49.1.2001

Pocket Watch, c. 1890-1910
Junghans Watch Co.
Germany

This watch belonged to Field Marshal Erwin Rommel, commander of the German Afrika Korps. It was presented to an American colonel in the occupation army after World War II by Rommel’s Chief of Staff in the desert.
Explorer’s Watch, c.1900
Herbert Blockley
London, England

One of the first watches reputed to be “absolutely waterproof,” this watch has a leather ring around the movement and a sealed cap over the crown. Highly jeweled, the watch has a power reserve dial and can be used in extreme hot or cold temperatures. The Royal Geographical Society presented this watch to Sir Ernest Shackleton, an Antarctic explorer. 5.4.2001

Pivoted Detent Chronometer, c. 1910
Unknown
French

This watch is designated for use on a French airship by the numerals on the back, “CMT/1916.” Originally, this watch was housed in an expensive case, but when the French appropriated it for war time use, it was placed in this brass case. 4.2001
The Evolution of the Early Military Wristwatch

The use of the wristwatch by the military is a little more than 100 years old. Perhaps the first use by American forces was during the Spanish-American War of 1898. During this same period, British forces started using “wristlets” in combat during the South African (Boer) War of 1899-1902. It is not known when the first soldier or officer strapped a watch to his wrist for the first time to keep his hands free while having access to time. But as early as the 1880s, several Swiss watch companies were producing bonafide wristwatches for German naval officers.

These early wrist pieces were usually small pendent watches fitted into a leather cup wrist strap. Most of these were purchased by officers to be used in the field. The early advertisements stated the watches were absolutely dust and damp proof—reliable timekeepers for use under the toughest conditions.

In the early 1900s, several American companies were manufacturing watches to fit the wrist. They included such brands as Elgin and Waltham with jeweled movements and Ingersoll with a pinlever movement. On the Swiss side there were watches made by Longines, Omega, Girard Perregaux, and Movado. These were pocket watch movements, size 13 - ligne (Swiss) or 0 - size (American), housed in round cases fitted with wire lugs. Dials were typically porcelain enamel with luminous hands and numbers. A leather or canvas strap was attached. As World War I approached, protective metal grills were devised to fit over the bezel to protect the glass crystal. These became very popular with the troops on both sides of the conflict.

However, once the war got underway, trench warfare was the mainstay. This brought about new concerns. Since all soldiers in the trenches wore steel helmets, special care was taken to make sure there would be no reflection off the helmet to minimize one’s location. Yet large numbers of officers and men wore wristwatches that were apparently made to be shiny. This led to the enemy being able to detect its foe by the glitter and reflection of their watch. What a wonderful target for a sniper with a good telescope rifle to see that small flash as far as a mile away on a sunny day and maybe put another notch on his rifle butt! So wrote a reporter in 1916 about his doubts as to the advisability of wearing a wristwatch in the trenches.

Naval Aviator’s Watch
Made by several watch companies
U.S.A.

This wristwatch was issued to a naval aviator who served in World War I. These types of watches were unmarked but were made to government standards. They were usually small pocket watch movements housed in round cases and fitted with wire lugs to attach the leather strap. Metal protective grills were devised to fit over the bezels to protect the glass crystals.
Another concern was the dampness of life in the trenches as well as at sea. Watches were made as “water-proof” as possible by using screw-down bezels, backs, and crown covers. Other requirements became very apparent, particularly for naval personnel. Submarine commanders requested construction of a special watch that could fulfill their needs. First, it had to be water tight—when a submarine is on the surface, its deck is usually awash. Second, it must be non-magnetic; subs are driven by electricity, and watches made of magnetic materials would have been affected. Third, the watch balance mechanism must show a minimum of expansion and contraction with variations of temperature. And, fourth, the dial must be quite legible at any time so that it can be read in moonlight, twilight, or subdued artificial light. The use of luminous hands and numbers on black dials became most commonplace for use both on land and at sea.

The watches used by aviators were usually of a larger size so they could be strapped over a jacket sleeve or attached around one’s leg. The dials were often made of luminous material, to be used for day or night flying. The demand for elapsed time chronographs was not as great since the missions were close by because of limited range. Watches became standard issue to pilots. However, only the Elgin watch with the eagle and “Elgin, USA” on the dial signified a military-issue timepiece.

After World War I, wristwatches became quite common for use in aerial navigation, and many special types of high quality watches were made specifically for this purpose.

So, in closing, it can truly be said that WWI set the stage for wristwatches to become an acceptable item for both military and civilian use. They proved both their durability and serviceability under the most stringent conditions of war.

Torpedo Boat Watch, c. 1909
Elgin Watch Co.,
Elgin, Illinois

This watch was included in the first trials for torpedo watches held by the U.S. Naval Observatory in 1916. It received a merit record and was purchased by the U.S. Navy. It has a 21-jewel movement with gold jewel settings.
Taking Flight—The Story of the First Naval Aviator

The year 1910 was historic for the United States Navy. With the outbreak of World War I drawing near, a young naval officer was about to embark on an incredible mission.

Lieutenant Theodore Gordon Ellyson had completed his training at the U.S. Naval Academy in Annapolis, Maryland, in 1905. He began his service to the country, quickly achieving success and promotion. Two days before Christmas in 1910, Lieutenant Ellyson received his orders to report to the Glenn Curtiss Aviation Camp in San Diego, California. Months earlier he was serving as a submarine commander, charting the deep. Now he would become the first naval aviator, charting the skies.

This was a time of great exploration for the Navy. Aviation was a new concept that later would provide key strengths in combat, but for this day Lt. Ellyson was beginning an adventure that would not only change his life but also alter the face of the United States Navy and the science of aviation.

While Lieutenant Ellyson began his training, a number of aviation “firsts” were already occurring: the first plane to land on a Navy ship, the first successful hydroaeroplane flight, the first use of wireless communications from an airplane, and the first flight of an aircraft built for the Navy.

These flights lasted just a few minutes but were key in the developmental process and the success of aviation as a whole.

Lieutenant Ellyson quickly broke new ground as a naval aviator, and in July of 1911 he completed the first night flight in Hammondsport, NY.

The fearless lieutenant continued to blaze new trails. He even gave us a glimpse of his brief yet historic flight from an inclined wire rig in Hammondsport, NY.

Said Ellyson, “The engine was started and run at full speed and then I gave the signal to release the machine . . .

" I held the machine on the wire as long as possible as I wanted to be sure that I had enough headway to rise and not run the risk of the machine partly rising and then falling. Everything happened so quickly and went off so smoothly that I hardly
knew what happened except that I did have to use the ailerons, and that the machine was sensitive to their action."

One can just picture that scene, with Ellyson behind the controls, the engine roaring, not knowing what to expect as he waited for the release. Meanwhile, the hopes of the U.S. Navy were riding on his wings with this test. Anxious Navy brass, eager scientists, photographers, well-wishers, and emergency crews must have all eagerly awaited this brief moment that would again provide another crucial building block in the history of flight for the U.S. Navy.

Ellyson’s primitive test laid the groundwork for the technology employed on aircraft carriers today—the catapult system of launching, proving that Ellyson was a true aviation pioneer in so many ways.

While Ellyson was meeting success in the skies, he also gives us an early indication of the fashion sense and practicality of the early aviator. Lieutenant Ellyson requisitioned the Navy for the funds to purchase the following: a light helmet with detachable goggles and covering for the ears, yet having holes to hear the engine; a leather coat lined with fur or wool; leather trousers; high rubber galoshes; and a life preserver. While a small stride, it was a tremendous improvement from the football helmet and tire tubes used for protection at the onset of this exploration just a year earlier.

During World War I and later into the 1920s, Lieutenant Ellyson pioneered new frontiers for the Navy and opened the door for a new era of military might and technology. However, on February 27, 1928, his 43rd birthday, Lieutenant Ellyson, now Commander Ellyson, died doing what he loved most—flying. His plane, a Loening amphibian, crashed into the Chesapeake Bay, killing Ellyson and two others.

One of Ellyson’s awards was presented posthumously to his widow, Helen Mildred Lewis Glenn. The award, known as the Navy’s Gray Eagle, carried this inscription: “The Venerable Order of the Gray Eagle. The most ancient naval aviator on active duty. In recognition of a clear eye, a stout heart, a steady hand, and a daring defiance of gravity and the law of averages.”

Despite his early death, his innovations and accomplishments live on today in this age of high technology and aeronautics. 

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**Chronometer Watch, c.1910**
Ulysses Nardin
Le Locle, Switzerland

Made for the Royal Navy, this lever-set chronometer watch was used for navigation at sea. The watch comes with its own wooden box. A small brass fitting prevents the watch, mounted in a silver case, from being removed from the box. 10.4.2001
Pocket Chronograph, c.1910
Allion
Versailles, France

Captain Eddie Rickenbacker, an American air ace and winner of the congressional medal of honor, carried this watch during WWI. 7.1.2001

Sidereal Watch, c.1913
Waltham Watch Co.
Waltham, MA

This watch has 19 jewels and gold jewel settings and was used in conjunction with Admiral Byrd’s Hamilton watch. This watch measures sidereal time. Because of the earth’s orbit around the sun, a sidereal day is approximately 3 minutes and 56 seconds shorter than a conventional solar day. A sidereal day is the time between two successive transits of a star across the meridian. A solar day is the time between two successive transits of the sun across the meridian. 11.1.2001
Pocket Watch, c.1916
Waltham Watch Company
Waltham, Massachusetts

On June 3, 1918, this 37-size, 8-day watch was presented to Commodore L. Wells, C.B., C.M.G., of the Royal Navy by his New York-based staff. Wells was the liaison to the U.S. Navy during World War I. 39.1.2001

Navigation Watch, c. 1919
Longines Wittnauer Watch Company
New York/Switzerland

A U.S. Navy Master Navigation watch, this deck watch has a 36-size case and dial with a 20-ligne, 17-jewel movement. This 8-day watch with power reserve dial would be wound every two or three days and set to the time signal to insure correct time. 46.1.2001

Pocket Chronograph, c.1920
Longines Watch Co., S.A.
Geneva, Switzerland

This watch was presented to General James Doolittle. As an army pilot, Doolittle won many national air races and trophies. 2.1.2001
Sidereal Watch, c.1920
Maker Unknown
Switzerland

This deck watch was used for airship navigation on the U.S.S. Macon. The Macon was one of the largest airships built for the Navy and could hold several fighters to provide air support and to act as scouts. 22.1.2001

Pocket Chronograph, c.1920
Lemania
Geneva, Switzerland

This watch was used in tandem with the sidereal watch aboard the U.S.S. Macon. 23.1.2001
Commander Richard E. Byrd Reaches the North Pole By Air

Seventy-four years ago, on May 9, 1926, in a decade notable for pioneering aviation exploits, Richard E. Byrd and his pilot-mechanic, Floyd Bennett, won fame as the first to fly an airplane to the North Pole. Or so they claimed. In the newspapers of the day, specifically the New York Times, the front page headline reads “Byrd flies to North Pole and back; round trip from Kings Bay, Norway in 15 Hours 51 minutes; circles top of the World several times.” In a sub-heading it reads, “Peary’s Observations are confirmed; flight is favored by sunlight and the absence of fog; sun compass functions perfectly.”

In an exclusive story written for the magazine Aero Digest, the flight’s pilot, Floyd Bennett, retells the event. He relates how the expedition left New York on April 5 with a ground crew of 52 men on a steamer supplied by the U.S. Shipping Board. “We carried 2 airplanes; a small Curtiss plane to be used for finding a suitable landing field for our big three-motor Fokker monoplane, which was to carry Byrd and Bennett from Spitzbergen to the North Pole. Our 1500 tons of supplies and equipment were sufficient for a cruise of 10,000 miles.

On the morning of April 29th we sighted Spitzbergen, and that afternoon entered King’s Bay. On arrival, a small party went ashore to search for a landing field and base. Next to the King’s Bay was a space a mile wide and a mile and a half long—as good a landing place as we could hope for. After working all night, the equipment was off loaded, with the small plane first, and then the fuselage of the large plane, being lashed to a raft alongside the ship. Next came the big wing that was placed on the fuselage. Our two wing engines, gas, and other supplies, came next and in two more trips we were through. After installing the plane engines, they were ready for the run-up test. The conditions were brutal. The temperature was below zero and several men had frost bite. Also it was difficult to sleep with the constant daylight, it was an odd sensation to wake at midnight and find the sun shining as noon.

The engine test went very smoothly. Blow torch burners under the hoods and warmed oil helped the engines start immediately. Next came the skis. To their knowledge, a plane of this size with a useful load of 6000 pounds was unknown to have been started on skis. However, after a number of tries that necessitated raising the landing gear off the snow to replace broken skis, we were ready to test fly the plane. All went well and after placing all the survival equipment and food on board, with over 600 gallons of fuel, good-byes were exchanged.

After an unsuccessful takeoff—too heavy and not enough air speed—pilot Bennett was able to stop the plane only a matter of yards from the water. The run-
way was again smoothed out. The tail of the plane was tied down and close to 500 pounds of supplies were removed. Byrd then turned to his pilot and said, ‘Bennett we ought to go while the weather is good.’ He answered, ‘Then let’s go now.’

“At 12:50 AM on May 9th we were again in the plane for another start. The engines were at full throttle and with a signal, the line holding the tail was cut. A little more than halfway down the runway, we cleared the snow and became airborne. After four months of preparation we actually started our flight to the Pole. The first 60 miles were over water along the coast. Then our course was directly North into the great unknown. As we looked down, the polar ice pack became quite solid, which is what we had hoped for because in case of engine failure we had a better chance to land. There were great pressure ridges running in every direction. But between the ridges were fields of comparatively smooth ice. We believed that a plane could land with some chance of taking off again—of course with great risk.

“Everything went smoothly for the first six hours; Commander Byrd continually checking the course with his sun compass, taking the wind drift of the plane, using his sextant and watch to determine our position, and taking photographs, both still and motion pictures. He relieved Bennett at the wheel every 20 minutes out of every hour so the pilot could check gas consumption.

“After 7 1/2 hours into the flight, Commander Byrd reported an oil leak in the starboard engine. We could see the oil covering the engine cowling and tail section. It looked bad, and it was impossible to get to the engine. If the leak was at the bottom of the tank, all the oil would drain out and the engine would seize. The decision was made to continue the flight to the pole and, if necessary, return on two engines.