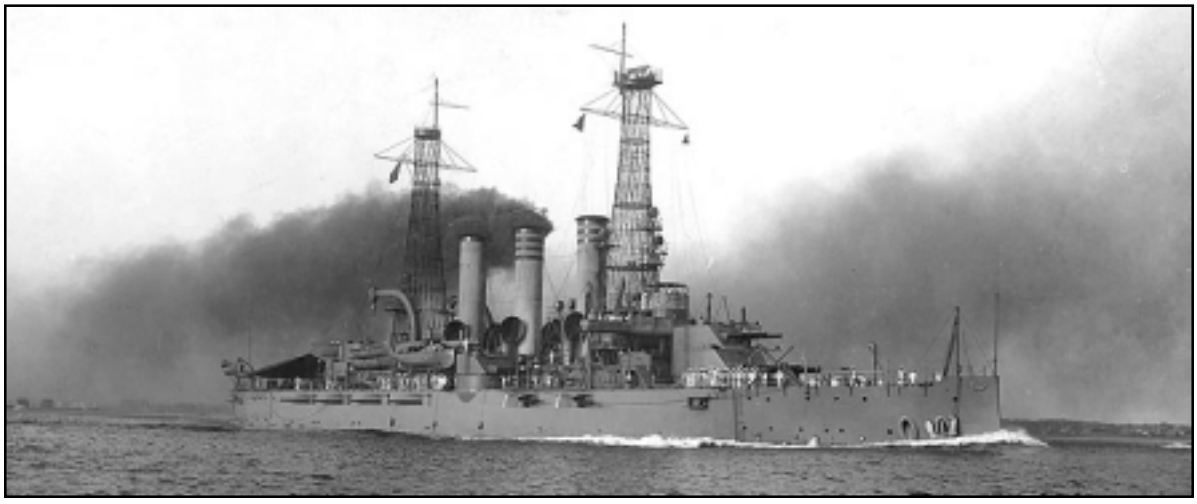
"Don't like the weather in Hatteras? Just wait an hour...."



MURPHY'S LAW AND THE BATTLESHIP VIRGINIA

"Oh, fuck." There was no panic or drama in these two simple words. Just a slow, steady, drawn-out "Oh, fuck."

The motivation for this profane statement was the seascape that I was confronted by upon surfacing from my dive on the battleship *U.S.S. Virginia*. Towering waves, pushed into monumental proportions, whose crests were fringed by white, spilling surf and whose azure faces were lined with abstract patterns of foam vibrated by a stout southeast wind stretched as far as the eye could see. As I bobbed on the surface for a moment listening to the rolling surf and whipping wind, I quickly realized that our boat was gone, and the chances of our being spotted 20 miles offshore North Carolina in these conditions were remote at best. "Oh, fuck," indeed.

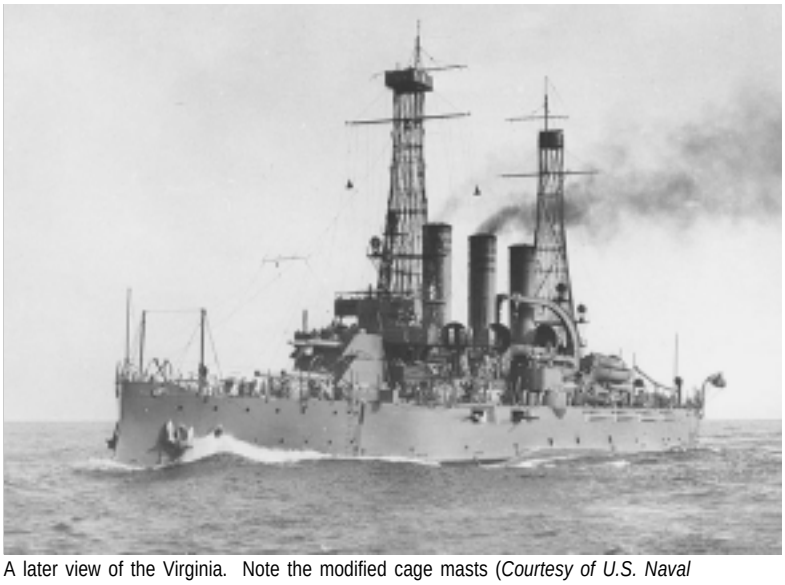
August 3, 2003, was a promising day. A group from the Association of Underwater Explorers had spent the past week in North Carolina diving some of the deeper wrecks off Hatteras. However, the primary objective of the trip was to explore and document the Virginia-class battleships *U.S.S. Virginia (BB-13)* and *U.S.S. New Jersey (BB-16)*. Since being sent to the bottom as part of an epic series of aerial bombardment tests conducted by Brigadier General William "Billy" Mitchell, the wrecks have been rarely visited by only a handful of divers. The first and only dive conducted on the battleship *U.S.S. Virginia* was accomplished by Ken Clayton and Harvey Storck on September 12, 1993. This perceived neglect is due in no small part to the depth at which these two wrecks reside. The *New Jersey*, the shallower of the two, rests in approximately 330 feet of water, while the *Virginia* is found in 390 feet of water. Having already been thwarted twice by the fickle Hatteras weather, this final day of our trip was the last chance to dive the battleship *Virginia*.

A Virginia-class battleship of the Great White Fleet, as originally built (*Courtesy of National Archives*).

Back in the day...

Originally conceived in 1898, the namesake of the Virginia-class battleships was the largest warship in the American arsenal at the time of her launching. At 441.3 feet in length, she was over 40 feet longer than any of her predecessors. The *Virginia* was also the fastest battleship to date, topping out at 19.18 knots during her sea trial. As with many of the earlier pre-dreadnought designs, however, she had many flaws that resulted in the ship becoming obsolete even before her launching in April 1904. Most notably, the primary and secondary batteries on the Virginia-class ships were stacked and of mixed caliber. The original concept behind this cumbersome arrangement was to allow the intermediate guns to concentrate on area targets that would require numerous hits while allowing the slower, less accurate, heavy-caliber guns of the day to devastate the armor belt or the main batteries of the opposing vessel at close range. Yet, several factors conspired against the successful construction of a mixed-caliber battleship. At the time, the U.S. Navy did not have access to the quick-firing six-inch intermediate guns utilized by other navies, and, unfortunately, relied on a slow, heavy eight-inch gun for the secondary batteries. These eight-inch turrets conflicted with the firing of the main 12-inch turrets, and made the Virginia-class battleships extremely top-heavy. Further, by the time the *Virginia* was built, the precision, range, and speed of the larger-caliber guns had improved to such a degree that there was little need for an intermediate battery at all. The future of naval warfare was headed towards long-range precision gunnery, which was soundly demonstrated in May 1905 at the Battle of Tsushima. The *Virginia* was antiquated before her time.

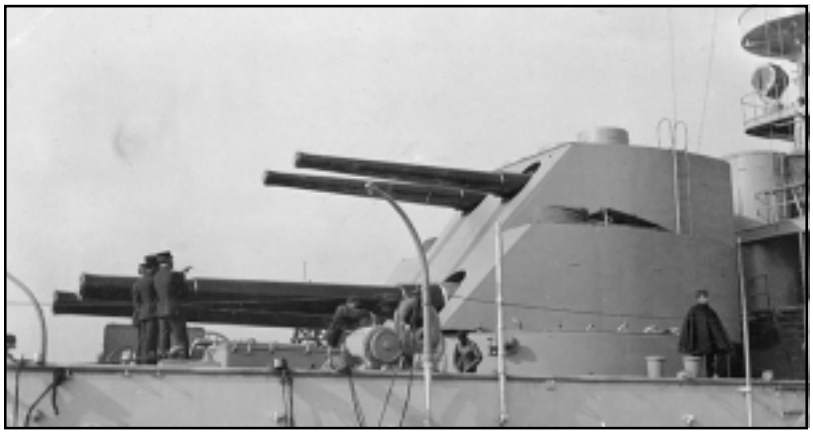
After she was commissioned into the U.S. Navy on May 7, 1906, the *Virginia* stretched her legs quite a bit during her first year and a half of active service, though she would also cumulatively spend over six months in drydock undergoing repairs, alterations, and modifications. After her shakedown cruise, she spent time conducting exercises off New England, as well as two visits to Cuba. Towards the close of 1907, she would participate in an epic round-the-world voyage that was intended to demonstrate America's naval might to the world, but more specifically, to the Japanese. Japan had recently put the world on notice when it soundly dominated the Russian Navy during the Battle of Tsushima in the Russo-Japanese War of 1904-1905. The United States had to send a message to Tokyo.



A later view of the Virginia. Note the modified cage masts (*Courtesy of U.S. Naval Historical Center).*

Departing from Hampton Roads, Virginia, on December 16, 1907, the 16 battleships, seven destroyers, five auxiliary ships, and 14,000 sailors comprising the Great White Fleet were intent on demonstrating President Roosevelt's "big stick" diplomacy. As part of the Great White Fleet, appropriately named due to the fleet's high-visibility white paint schemes, the *U.S.S. Virginia* would steam over 40,000 miles during the 14 months it took to complete the cruise. It would also represent the largest fleet of modern warships ever to assemble in the Pacific Ocean, exceeding the size and strength of the Russian fleet decimated at Tsushima. Unlike the Russian Navy, the Great White Fleet was well-received by the Japanese upon its arrival in the harbor of Yokohama, though leaders of both nations were undoubtedly sizing each other up. By the time the fleet was greeted back at Hampton Roads by President Roosevelt on February 6, 1909, it was clear that the cruise was a resounding success that ultimately ushered in the United States as a world power.

The *U.S.S. Virginia* and the Great White Fleet at San Francisco, 1908 (*Courtesy of National Archives*).



Two views of the stacked mixed-caliber turrets of the Virginia-class battleships (*Courtesy of National Archives*).

Coming down the mountain...

My first glimpse of the battleship *Virginia* was revealed as I was still over 150 feet from the wreck. I steadily descended along our shotline, while my two buddies, Joe Citelli and Andrew Donn, neared our grapnel on the giant inverted hull of the warship. While the ambient light was significantly muted, the water below 200 feet had a sharpness and clarity to it that offered an astoundingly surreal experience, as if I were in an aircraft on a twilight approach to a remote mountain-top runway. The HID lights of my comrades painted the hull of the battleship, revealing the massive size and scope of the wreck I was rapidly nearing. I quickly flared out over the hull and prepared to begin filming the former Great White Fleet leviathan that I now was finally touching. After confirming an "OK" with my fellow team mates amidst a swirling wall of amberjack, we set out to inspect the *Virginia* full of exuberance, knowing that we were getting a look at a wreck that only two others had seen since its sinking almost 80 years earlier.

After setting off to explore the wreck, we quickly noticed the presence of several large warsaw grouper that proceeded to join our procession as they curiously tagged along behind us. Dropping down the slope of the hull, we could see several portions of debris in the sand adjacent

to the wreck. There was an immense washout around the wreck, testament to the strong currents that typically washed over the battleship. The *Virginia* actually sat in a steeply sloping depression perhaps 30 feet deep, giving the impression that the battleship rested in a naturally formed amphitheater. Due to the constant scouring of the swift Gulf Stream currents, only a small portion of the superstructure – the little that remained after the thrashing from Billy Mitchell's attack – was crushed under the weight of the ship. The cage masts and the majority of the superstructure that was decimated by a single 1,100-pound bomb apparently slid off the deck as the battleship rolled, and now rested in the sand away from the bulk of the wreck.

The author, excited at the prospect of exploring the battleship *Virginia* (*Courtesy of Chris Dillon*).

As we cruised towards the bow, the base of the port eight-inch turret, as well as all six turrets for the secondary six-inch guns that lined the hull, were easily identifiable. Due to the reduced ambient light and the usual strong current, there was little growth on the wreck save some subtle encrustation and the occasional whip coral. As we neared the bow, two rows of large portholes punctuated the length of the hull. The inverted ram bow, which appeared to point towards the southeast, loomed high off the bottom. The HID lights of my fellow divers sliced through the gloom of the dark blue waters and backlit the profile of the bow, allowing me to easily view the sharp lines of the former battlewagon.

With our limited bottom time quickly ticking away, we began our journey back along the starboard side towards the stern and our shotline. Amidships, we noted a large damaged area where significant portions of armor plating had been blown away. The interior of the ship was revealed by a gaping hole that tempted us to venture inside. Unfortunately, our sojourn to the *Virginia* was nearing its end, and after a brief pause we continued aft. Glancing upward we saw our stark white line contrasted by the brilliant blue of the surface waters, and we darted up the hull to our grapnel. While my fellow divers prepared to extract the hook from the wreck, I proceeded to film the stern of the *Virginia.* At this time, I noted an odd difference between the battleships *Virginia* and *New Jersey*. While the *U.S.S. New Jersey* was sunk with her running gear intact, the *U.S.S. Virginia* had her two large screws, shafts, and single rudder completely removed prior to sinking.

As I continued to film, my buddies scootered the hook off the wreck and up the shotline. Slowly creeping up the line, we took a few minutes to congratulate each other on the remarkable dive. At approximately 200 feet in depth, the cooler 56-degree water on the bottom yielded to the warmer 80-degree surface water. The water towards the surface also had a noticeable green tint to it, and was definitely not as clear nor crisp as the water on the wreck. Decompression proceeded smoothly, and aside from the need for us to pad our time due to the unexpected increase in depth we encountered on the dive, everything was status quo. That was, until the shotline unexpectedly, and rapidly, departed our company.

"...a zealot, a fanatic, a one-idea man..."

Brigadier General William "Billy" Mitchell was destined to have an explosive impact on military aviation. The son of a U.S. senator, Billy Mitchell was born in France in 1879. At age 18, he enlisted into the U.S. Army as a private, but gained a commission due to his father's influence and served in the Army Signal Corps during the Spanish-American War. During his service with the Signal Corps, Mitchell's fondness for aviation grew, though he would not take flying lessons until 1916, when he was 38 years old.

Billy Mitchell's evolution into a hard-core aviation crusader undoubtedly occurred largely during World War I. In April 1917, Mitchell was assigned as an observer attached to British and French forces. At the time, the United States had no air units, and the American Expeditionary Force (AEF) instead had to utilize French aircraft; in some cases, American ground forces had to depend entirely on French air cover due to the absence of an American air arm. It was also during this time that Mitchell would meet and befriend British Major General Hugh Trenchard, commander of the Royal Flying Corps. Trenchard would help refine Mitchell's conceptual ideas on military aviation, and also forge Mitchell's vision of a single U.S. air service that ideally would be separate from both the Army and the Navy. Regarding Mitchell's abrasive personality, Trenchard stated that "if he can only break his habit of trying to convert opponents by killing them, he'll go far."

Mitchell worked hard to convince the AEF commander, General John J. Pershing, into restructuring and expanding the U.S. air presence in Europe. Pershing relented, and assigned Mitchell to train American pilots and organize aviation resources. In September 1918, Mitchell coordinated the largest Allied air offensive at the battle of St. Mihiel, which consisted of 1,500 aircraft. The overwhelming success of the air assault garnered Mitchell praise from his superiors, and also reinforced his beliefs regarding the superiority of aviation within the military.

Brigadier General William "Billy" Mitchell (*Courtesy of National Archives*).

Following the war, Mitchell was appointed assistant chief of the U.S. Army Air Service in 1919. Brigadier General Mitchell was disappointed and incensed that the Army Air Service was not capitalizing on the lessons learned in Europe, and was alarmed at the greatly reduced size of the service. This was in large part due to America's return to a policy of isolationism. To rectify this situation, Mitchell aimed to demonstrate the true potential that military aviation held. However, he had to approach the strengthening of American air power in a manner that would be consistent with the current isolationist doctrine. Therefore, he opted to focus on the benefit of air power for coastal defense rather than as an offensive weapon when he requested a demonstration

project to test his vision. It is important to note that Billy Mitchell was far from the only proponent of strengthening American military aviation. Admiral W.F. Fullam, who lobbied for the construction of U.S. Navy aircraft carriers, stated that "sea power will be subordinated to, or dependent upon, air power."

Many in the Navy worked to downplay and, in some cases, prevent these tests altogether. In fact, Secretary of the Navy Josephus Daniels offered to stand bareheaded on the bridge of any ship Mitchell chose to bomb. With the help of the press, Mitchell was successful in getting permission to utilize several German warships that were turned over to the U.S. as war reparations. In 1921, much to the astonishment, shock, and horror of the U.S. Navy, Brigadier General Billy Mitchell proceeded to systematically sink the submarine *U-117*, the torpedo boat destroyer *G-102*, the light cruiser *Frankfurt*, and the 549-foot long battleship *Ostfriesland*.

The sinking of the *S.M.S. Ostfriesland* (*Courtesy of National Archives*).

Back to the maelstrom...

Before the dive, we had discussed with the captain all the potential scenarios that could occur on the dive. As we had already completed several dives earlier in the week, he had become familiar with how we operated. One of the things we had stressed throughout the week was that the boat was never to tie off to our shotline at any time. Doing so would negate the effectiveness of a "live boat" situation. Furthermore, it could result in the shotline being carried away from the divers due to wind or current, forcing them to hold onto the line during decompression. This would result in a more strenuous and inefficient decompression, and totally negate the utility of using a shotline. Therefore, when we looked toward the surface to see the silhouette of our support vessel carrying our shotline away, we were perplexed and a bit aggravated at the current situation. Due to the glare in the water, we could not determine if the line had been caught in the boat's running gear, or if they had simply tied our line off to the boat. Regardless, based on the speed that the line was carried away from us, it was apparent that the wind had increased significantly. Initially, we tried to scooter along and keep pace with the line, but it was obvious this would be a losing battle. Believing that this was just a minor SNAFU, we promptly deployed liftbags to mark our position while we could still see the bottom of the boat.

Unbeknownst to us, a series of events had conspired against us. First, just as the often-stated Hatteras adage goes "If you don't like the weather, just wait an hour," the wind and seas had taken an unpredicted and dramatic turn. Having dived off Hatteras numerous times over the years, I can attest to the sometimes rapid instability of the Hatteras offshore weather. Due to the potential concurrence of two conflicting water masses -- that of the cool Labrador Current to the north, and the warm Gulf Stream Current to the south -- sudden and violent thunderstorms are common occurrences off Hatteras. This was a reality that I had been introduced to in the past. However, in this instance, in just over an hour the winds freshened to almost 25 knots, and the seas dramatically built to over 10 feet in the absence of any storm front. We entered the water with a stable forecast, three-foot seas, and a clear radar only to exit to a tumultuous Atlantic that was part roller coaster and part washing machine.

The other event, one that would not be revealed to us until much later, was that our support vessel was disabled. The throttle cable had parted, thus preventing the boat from maneuvering and standing on station adjacent to our shotline. Fearful that he would be separated from us, the captain made the snap decision to tie the shotline off while deploying sea anchors to slow his drift, and then to identify and remedy the mechanical issue. Amidst the commotion on deck, apparently no one noticed our liftbags pop up off the stern of the boat. It was not long before the boat sped away on the stout wind, and our liftbags disappeared behind a wall of water.

The sinking of the U.S.S. Virginia

Although Billy Mitchell undeniably and overwhelmingly sunk the battleship *Ostfriesland*, some in the U.S. Navy were in denial. "The *Ostfriesland* does not belong to the type of United States capital ships of the first class of the present day, naval officers pointed out. They declared without reservation that bombs dropped near the keel of the peculiarly constructed modern American ships will not even disable them." Thus, Mitchell was duly motivated to silence his critics, and requested the use of the *New Jersey* and *Virginia*, both of which had already been decommissioned in August 1920.

After participating in the Great White Fleet cruise, the *Virginia* had been assigned to various reserve and coastal protection duties. Even with the onset of hostilities in World War I, the *Virginia* did not see any action. With the armistice, the *Virginia* was converted into a troop transport and participated in six trips, carrying over 6,000 doughboys back to the United States. After she was decommissioned, the former battleship was stripped of anything that could be utilized by other ships in the navy; the 12-inch guns were the major exception, and were left onboard.

The Martin MB-1: the "gnat" that sunk a battleship (*Courtesy of National Archives*).

Brigadier General William "Billy" Mitchell successfully lobbied for a second demonstration project. The *U.S.S. New Jersey* and *U.S.S. Virginia* were released for this purpose and towed to a point off Diamond Shoals, just past the 50-fathom contour. Beginning at 11:53 a.m. on September 5, 1923, 14 1,100-pound bombs rained down from seven Martin MB-1 bombers. The 14-minute attack was devastating: both masts, the bridge, all three stacks, and the upper works were reduced to a mass of tangled debris. Less

than thirty minutes after the first bomb dropped, the *Virginia* rolled over on her port side and then dropped stern-first to the seabed below. The *New Jersey*, while requiring more attention, was also delivered to the briny depths of the Atlantic.

Billy Mitchell at work (*Courtesy of National Archives*).

The *Virginia* slips beneath the surface (*Courtesy of National Archives*).

Looking for three needles in a sea of haystacks

This is how I came to find myself bobbing on an ocean that resembled a mountain range, as opposed to the placid medium Jimmy Buffett immortalizes in songs. The seas had built to a true 10-12 feet with a few larger swells thrown in sporadically. Yet, when your vantage point is only 16 inches above the sea's surface, those already large masses of water look exponentially larger. I had anticipated rough sea conditions on deco following two separate liftbag lines parting under strain – one of which snapped at two points simultaneously – but I did not expect the spectacle to which I was now witnessing. "Oh, fuck" was a succinct, but definitely accurate, assessment of our predicament.

As Joe and Andrew surfaced, they too were faced with the rather unpleasant situation that Mother Nature presented us. Everyone's initial reaction seemed to be a resounding "Where's the fucking boat?!" The three of us could not understand what exactly had happened, and because we were drifting amongst very large, white-capping seas, we were all a bit disconcerted to say the least that our highly visible float ball was carried away with the boat. Throughout the discussion we all concentrated on trying to spot the boat, a task that was complicated by the steep troughs of the waves we constantly found ourselves wallowing in. Realizing that it would be highly unlikely that our boat, which had a very low profile, would be able to spot us in these conditions, I stated to no one in particular, "I hope they called Lurch."

Lurch is also known as Captain Michael Rodaway, master of the *Research Vessel Cape Fear*. Upon meeting the six-foot, seven-inch captain, the rationale for his bestowed moniker becomes immediately obvious. I have known Lurch for several years due to my past participation on various *U.S.S. Monitor* expeditions, during which the *Cape Fear* served as the primary support vessel for diving operations. As a professional mariner who has sailed on square-rigged tallships and served on modern merchant vessels that have carried him all over the world, I would not be surprised if Rodaway had saltwater coursing through his veins. In addition, the *Cape Fear*, a

Captain Lurch.

former offshore commercial fishing vessel, is a solid and robust vessel, with a much better field of view than our boat due to its greater freeboard and higher wheelhouse. We knew that if Lurch and the *Cape Fear* were on the job, we would be found in short order.

However, as we did not know what had happened to our boat, especially if it was even still afloat, we had no way of knowing if any assistance was coming. The three of us worked to stay together in the heaving seas, continuing to look for any signs of a boat – any boat. After about 20 minutes of pitching and rolling, we briefly spotted a fleeting glimpse of the antennae from the top of a boat well within a mile of our position. However, trying to flag the vessel down with our liftbags was futile, as the stalwart wind simply pushed the bags down into the water. This taunting provided interesting insight into what would be an effective signaling device; it was obvious that a safety sausage or similar gear would simply be bent over in the strong wind and rendered useless. It was obvious that a signal from an HID light would be sighted first, the success of which would greatly improve should we continue drifting until nightfall. We were confident that we would be found, though we were unsure about exactly how long that would take.

I attempted to flash the unidentified vessel with my HID, but all too soon we were dropped back down into the bowels of the surrounding seas. Approximately 10 minutes later, we were teased yet again with a brief glimpse of a vessel that was obviously searching for us. This time, we could see the A-frame on the stern of the vessel, revealing to us that the *Cape Fear* was now on scene. Unfortunately, we were carried down the back of a wave and relegated to seeing nothing but walls of water all around us. Finally, 20 minutes from our last sighting, I looked over to see the *Cape Fear* parallel to us in the trough of a large wave. I immediately flashed my HID in their direction, and a split second later we all saw a blast of diesel smoke bellow from the stack of the *Cape Fear* as Lurch throttled up to come retrieve us. The boat was perhaps a half-mile away from us, but Captain Rodaway said that while he could not see us, the HID light was instantly visible, "like a lighthouse."


The *R/V Cape Fear* (*Courtesy of Captain Michael Rodaway*).

Over the next 20 minutes, the *Cape Fear* worked to approach us through the building seas in order to launch its zodiac that would recover our deco bottles and cameras. Once free of any extraneous gear that would limit potential injury should we get bitch-slapped while trying to board the *Cape Fear*, we each in turn made our way towards the dive ladder on the stern of the bucking vessel.

This was complicated a bit by the fact that since we relinquished our deco bottles, we had no regulator to breath from, as our backgas was a hypoxic 9-10% oxygen. While I happened to get a relaxed series of waves that allowed me to quickly clamber up the ladder and onto the boat, my buddies had the trail line ripped from their hands a couple times due to the large waves passing through the area. However, after a few delays, they soon joined me on the boat just as a dispatched U.S. Coast Guard helicopter flew overhead.

Once safely aboard the *Cape Fear* and underway towards the dock, the adrenaline rush from the phenomenal dive and the recovery quickly gave way to the reality of what could have been. Had decompression gone badly or we been threatened by a shark, the absence of our boat could have been profound. Thankfully, we had no in-water emergency, and the unfortunate series of events were merely an inconvenience. Yet, I am quite sure we all learned from the experience. It was obvious that support divers are fairly useless if the boat encounters mechanical problems. While we utilized a shotline to provide maximum mobility to the support vessel, we found out all too well that a mechanical problem on a single-engine vessel, regardless of the unlikelihood of such a problem on a well-maintained boat, can be catastrophic on an extreme technical dive. In retrospect, had our boat simply marked our GPS position and then addressed the mechanical issue, they most likely would have been able to return to our position without difficulty. However, none of us fault the captain for what was undoubtedly a snap decision made under stress. Lastly, I think we all are now entertaining the idea of adding a personal EPIRB, stowed in a belt-mounted canister, and a Dive-Alert® to each dive team on remote technical dives such as this. Being lost at sea, even for only an hour, is not a fun experience.

The consequences of being a rebel

Billy Mitchell again proved that military aviation was a force to be reckoned with. However, his success and his rebellious style incensed many of his superiors. In order to get Mitchell off the front page of the newspapers, they stationed him in Hawaii. Yet, Brigadier General William Mitchell was not intent on staying quiet. Noting the inadequacy of the defenses in Hawaii, he drafted a scathing report. Furthermore, after a 1924 trip to Europe and the Far East that was intended to observe advances in military aviation, Mitchell submitted a paper that was to be shockingly prophetic. He believed that Japan was the dominant force to be reckoned with in Asia, and that they had aggressive intentions towards the United States. He predicted air attacks would be made on Pearl Harbor and the Philippines; regarding the Japanese air might, he stressed that "care must be taken that it is not underestimated."

However, the tragic loss of the U.S. Navy dirigible *Shenandoah* would overshadow his assessment of the Japanese threat. Mitchell promptly released a scathing statement to the media, wherein he stated that this accident was "the result of incompetency, criminal

negligence, and the almost treasonable negligence of our national defense by the War and Navy departments." This would end up being the last bomb dropped in Billy Mitchell's military career. He was put under arrest, and court-martial proceedings began on October 28, 1925, on the grounds of insubordination.


The bell of the *U.S.S. Virginia* (*Courtesy of Hampton Roads Naval Museum*).

The trial lasted seven weeks, however, the board deliberated for only half an hour before rendering a guilty charge. Instead of accepting the loss in rank, command and forfeiture of pay, Mitchell tendered his resignation. However, Billy Mitchell proceeded to lecture around the country, and continued to issue warnings about the status of America's defensive status and susceptibility to air attack. Drained and weakened from his continued battles with the old-school military, Brigadier General William Mitchell died in a New York hospital on February 19, 1936, at the age of 56.

In recognition of Billy Mitchell's life-long work to build a strong air arm, Congress posthumously promoted him to the rank of Major General in 1946. Additionally, a Congressional Medal of Honor was issued in his honor on August 8, 1946. The inscription read: "AWARD OF THE CONGRESS, AUGUST 8, 1946, FOR OUTSTANDING PIONEER SERVICE AND FORESIGHT IN FIELD OF AMERICAN MILITARY AVIATION." The medal was presented to Mitchell's son by General Carl Spaatz, Chief of Staff of the newly established United States Air Force. Billy Mitchell was finally vindicated.

In and of itself, our successful dive to the battleship *U.S.S. Virginia* was spectacular, and one that we will undoubtedly savor for some time. However, due to the added sequence of events that transpired after the dive, it is safe to say that we will never forget our brief visit to this historical wreck.

Michael C. Barnette is the Founder and Director of the Association of Underwater Explorers (http://www.mikey.net/aue), a coalition of divers dedicated to the research, exploration, documentation and preservation of submerged cultural resources. Employed as a marine ecologist with the National Oceanic and Atmospheric Administration (NOAA), he recently published *Shipwrecks of the Sunshine State: Florida's Submerged History*, a comprehensive book documenting the numerous shipwrecks around the state of Florida.