



## Red Diver Up

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“Red Diver ready.” The words signal the beginning of a grueling, highly physical four hour evolution with all but 20 minutes devoted to preparation or recovery. The 20 minutes of “work” is mired by nearly zero visibility, currents which could sweep a person away in seconds, and a wreck site littered with sharp edges and hidden dangers determined to keep the most ardent explorer from finding its secrets. Combine those challenges with the health risks of decompression sickness (aka “bends”), nitrogen narcosis, and air embolisms, and one is left with the indelible picture of either a quixotic or brave individual. Recognized as one of the nation’s premier female divers with her induction into the Women Divers Hall of Fame in 2003, CAPT Gina Harden is not by any standard foolhardy, nor would she describe herself as particularly brave. So, what forces have shaped this Navy diving pioneer, leader, mentor, and role model?

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## **Red Diver Take a Vent**

For even the most physically and mentally fit individual, Navy Dive school can only be described as arduous. CAPT Harden spent a lifetime preparing for this opportunity. In 1975, the Navy opened diving to females, but by the time she was admitted in 1981, only six women had graduated. Even in 2012, females comprise an amazingly small portion of total divers, numbering only 7 of the 1,270 (less than 1%) on active duty. Additionally, there are fewer than 10 qualified women currently serving in the Navy Reserves. She is the second most senior female diver in the US Navy, both active and Reserves, junior only to RADM Martha Herb, the first female diver to be selected for flag officer. CAPT Harden initially wanted to be a pilot, another community recently opened to females, but a Navy SEAL recruiter and family friend suggested dive school. A proclivity for hard work and a lifelong love of the water equipped her with the necessary prerequisites for success.

Dedication to hard work is a family trait. CAPT Harden's father, Master Chief Floyd Harden, a retired Recruiting Command Force Master Chief, and her mother, Judy, greatly influenced her, incorporating their high sense of morality and integrity into her everyday life. Identifying her father as her first and truest mentor, he always told her, "If you are going to do something, you do it right." Success in dive school would ensure she did not disappoint him; however, she knew his love and his acceptance were not tied to earning a diving pin.

Affectionately called "bossy" by her three sisters, CAPT Harden credits her position as the eldest with her initial leadership experience. There was a lot of responsibility placed on her at a young age; whether that responsibility was self-induced or a result of assignment is left to speculation. Teamwork, a pillar of Navy diving, is an essential attribute for a diver. The family's close bond and frequent moves throughout the U.S. and Europe forged CAPT Harden's commitment to team building and esprit de corps; both contributed to her exceptional work ethic and empathetic nature. An introvert by nature, she translated her work ethic into sports training in order to cultivate relationships.

CAPT Harden devoted many years of training to athletics, still swimming at least one mile a day. Her commitment was not limited to swimming. She attended Florida State University on a basketball scholarship after proving herself worthy during a walk-on trial. This dedication was fundamental to her success in dive school, which requires a level of physical fitness beyond most people's capabilities. The estimated attrition rate today is approximately 30%, less than the 36% rate when she went to school. Changes in training protocol have contributed to the decrease in attrition.

In addition to the changes in training protocols, decreased attrition can be attributed to changes in dive gear from the MK-V on which CAPT Harden qualified. Weighing well over 200 pounds submerged, the gear outweighed her by at least 90 pounds. Due to the difference between her 5'4" frame and the behemoth dive suit, to wear it she needed to pad her shoulders with tube socks and wrap ties around her wrists to shorten the sleeves. Designed to be formidable and exclusionary, dive school devised challenges to sequentially increase in difficulty. One exercise included climbing out of the water on a 13-rung vertical ladder in full MK-V gear. CAPT Harden then had to rotate and lift a leg in the 17 pound boot. Additionally, the helmet afforded little visibility for her to see where to place her feet, and the suit's massive bulk prohibited her ability to hug the ladder. The feat necessitated a combination of

tactical approach, skill, and sheer strength to accomplish. No small feat for even the most physically fit 5'10" man, let alone a diminutive woman.

### **Red Diver Circulate, Circulate**

Challenges designed to develop essential diver attributes are strewn throughout the course's several months. Described by CAPT Harden as a "survival of the fittest environment," failure in any undertaking equated to dismissal. The challenges' purpose is simply to prepare the individual for the physical and psychological rigors and the intense reliance on teamwork involved with deep diving. Serving as attrition tools, these challenges also provide candidates the opportunity to cultivate an appreciation and respect for diving beyond the physical elements. In addition to the intense academic curriculum involving medicine, physiology, and physics, there are physical thresholds which must be met. The tests range from a rigorous exercise regime called Raunchy Ditties, to the Barrel test and Ditch & Dawn, to the ultimate stress test during Pool Week.

The first day of dive school began with CAPT Harden, the sole female, and her 25 male counterparts meeting on the blacktop in full PT gear preparing for their first run. A typical PT session consisted of several miles of running in 2x2 formation with instructors constantly yelling and forcing students to periodically stop for calisthenics; the day ended with everyone running off the pier into the ocean for a swim to the off-shore buoy and back, often causing nausea. This continuous conditioning prepared divers for the intense physical stress incurred with deep water diving. Aerobic exercise improves the muscle's efficient use of oxygen, thereby increasing the body's ability to function under less than ideal conditions. With the increased weight of the gear due to water in the suit and the weights attached to keep the diver on the bottom of the ocean, the diver could be carrying an additional 50 pounds. Enduring this "torture" forged tight bonds between classmates which often resulted in Gatorade slushies and shared worry about completing the program.

Their concern was not without warrant. Of the 39% non-graduates, many were lost to trials such as the Barrel test and Ditch & Dawn. The Barrel test, performed underwater in full MK-V gear, required the students to remove 12 bolt phalanges for inspection by surface crews. The effort included removing studs, wing nuts, and gaskets on a heavy metal lid, placing each in a bag attached to the diver's belt. Once all items are collected, the bag is tied to a rope and the completion signal given to the surface with a tug of the rope. Once verification occurs, the bag is returned to the diver to replace the lid by reversing the process. Doing this in zero visibility in the three-fingered gloves decreases the diver's dexterity and ability to function under difficult conditions. If a nut fell or the diver dropped the bag, the likelihood of retrieval is minimal. Dropping something during a salvage dive could mean a loss of a valuable artifact or someone's life.

While the Barrel test focuses on the physical actions with salvage diving, Ditch and Dawn's training benefits center on the importance of the buddy system no matter how difficult the conditions. An essential characteristic of safe diving is that divers never leave their buddy; doing so in dive school results in automatic failure. This exercise places the student under physically and psychologically challenging circumstances to see if students will stay calm and with their buddy diver. During Ditch and Dawn, CAPT Harden tested using "the pot," aka the Jack Brown rig, a small facemask rig with a garden hose type breathing hose. While buddied with an instructor, she dove to the bottom and removed her mask after taking two breaths and turning off the oxygen. After taking two quick breaths on the surface, she returned to the bottom, replaced the mask and restarted her oxygen flow. While this sounds relatively simple, the risk of over breathing is high. Inadvertently, CAPT Harden turned her O<sub>2</sub> too high, causing the mask to bounce off her face and her to hyperventilate. While her buddy signaled "okay," she

struggled for 2 or 3 minutes, conquering her fear and regaining her composure so she could remain on the bottom. Resuming normal breathing and staying with her buddy, she passed the test.

These two tests reinforce the skills which ensure success, and, literally, survival for the divers. Not unlike firefighters training with real fires, these exercises prepare divers to face the unique challenges inherent in water environments and low visibility. In 2002-2003, CAPT Harden commanded a Navy Reserve dive team assisting the Florida Department of Transportation with concrete encased submerged telephone poles. Using hydraulic chainsaws and jackhammers at a depth of 30 feet with zero visibility, the diver had to smash approximately 10 inches of concrete and cut through 6 feet diameter poles. Similar to cutting down trees, the divers had to ensure the poles fell in the correct direction through the use of strain lines with the surface and precision cutting under water. Without visual cues, the divers relied on touch by placing their foreheads on the desired side while shimmying to the bottom, determining relation to the cut line in the process. Dependent upon constant communication with the surface crew for equipment power, the diver requested power on during cutting and power off when not. During these breaks in cutting, location disruptions occurred, causing diver disorientation. When this happened with CAPT Harden, she surfaced, established a sight-line, and returned to the bottom. It was at that time she realized there were only six inches of pole remaining. A final cut in the wrong direction could have resulted in several tons of concrete crashing down on her or the pole falling away from the pier, pulling the crane and surface crew into the water.

As important as physical conditioning and teamwork are to diving, it remains a solitary effort. Any malfunction with an individual's equipment threatens to disrupt concentration, causing panic. Pool week simulates the unexpected loss of equipment and disorientation, allowing dive candidates to experience panic and practice self-protection. While positioned at the bottom of a pool, student divers endure repeated "attacks" by instructors who grab and pull at masks and hoses, designed to disorient and confuse. For CAPT Harden, not knowing the proreption's direction increased her anxiety and magnified the perception of danger. While rolling into a ball and turning away from the endless attacks while protecting vital equipment parts was physically difficult, she insists remaining calm and composed was far more difficult.

Releasing self-possession puts a diver in mortal danger and risks his buddy. One of CAPT Harden's team, a newly certified diver, nearly lost his fight when faced with panic during a trip to the bottom. Because of the extreme depth, constant monitoring and intervention to prevent disequilibrium is essential while traveling down on a diving platform. On this particular dive, the new diver was unable to stay calm and gave in to his panic. Vomiting in his helmet, he risked aspiration and pneumonia, or worse, death. Fortunately, his buddy, a highly-experienced Master Chief diver, was able to abort the mission and return him to the surface for medical care.

### **Red Diver Leaving the Bottom**

At the end of her military obligation, CAPT Harden left the Navy for new adventures vowing never to return to the Navy. However, after five years, the draw of service was too powerful, and she returned to the Navy, albeit in a Reserve status. Despite being a Reservist, most of her professional life still centered on the Navy with punctuations of civilian employment, the most notable of which are Physical Therapist and Physical Education Teacher with the latter garnering her a Teacher of the Year award. Choosing the Reserves provided CAPT Harden with traditional operational jobs and historic salvage diving billets she could balance with a full and varied professional and personal life.

CAPT Harden served with distinction with the Force Protection Office in Bahrain, at JFCOM developing lessons learned for SECDEF Rumsfeld, and supporting the humanitarian mission after the Banda Aceh Tsunami in Thailand. However, she singles out her position as NAVCENFORD OIC in Afghanistan as her most emotionally rewarding and challenging experience. Following an Inspector General Report identifying the need for a more intense Navy presence in Afghanistan, her job was to establish Navy presence in theater, providing advocacy and centralized administrative capabilities for Navy Individual Augmentees. As the senior Naval Officer in theater, she built a Headquarters that would be universally recognized and to which all Sailors would be accountable, a formidable task with little assigned staff and in an environment of endemic personnel mission changes. Assisting both active duty and reserve sailors required agility and flexibility.

The active duty and reserve components serve complementary functions. By design Naval Reserves fill requirement gaps between permanent and transient missions. Therefore, when quick-fused, yet long-termed missions emerge, the Reserves are frequently called. While all missions require divers not only to be safe and cautious, some missions also increase the stakes by requiring the delicate touch and precision of an archaeologist. Dives on the USS Monitor occurred under the public's critical eye and resident archaeologists. The first ironclad warship commissioned by the US, the USS Monitor was raised in 2002. Sunk off the coast of North Carolina in 1864, the Civil War vessel rested in 240 feet of water, requiring a deep depth salvage effort between US Navy Divers and the National Oceanographic and Atmospheric Association (NOAA). The team surfaced the turret and many artifacts, including human remains. Any misstep could have resulted in the destruction of a national treasure or the loss of life, dealing a severe blow to Navy Diving's credibility and future mortality.

Other missions are also highly visible and muster media attention due to their unique nature. The recovery expedition of the Ehime Maru, a Japanese training vessel which collided with the USS Greenville off the coast of Hawaii in 2001, was one such assignment. In a highly emotionally charged mission, CAPT Harden headed one dive team, a contingent of the joint effort comprised of 66 US and 30 Japanese divers. During the 24/7 evolution, her team worked the night shift retrieving personal effects and ship artifacts. While not directly involved with the human remains retrieval of eight of the nine lost, she was deeply moved by the surviving family members' appreciation at the return of their loved ones personal items, which was no doubt reinforced by her close relationship with her own family.

### **Red Diver Give a Bottom Report**

Despite her small stature and unassuming presence, CAPT Harden thrived and excelled in this male-dominated community. Buoyed on a personal level by fellow divers, the diving community and the Navy as a whole did not share their enthusiasm with integration. While she experienced discrimination, some was more subtle than others. For all Unrestricted Line Officers (URL), including Dive Officers, Surface Warfare Officer School (SWOS) is a mandatory credential. The typical career path for a Dive Officer candidate was SWOS, then Dive school. Not so for female candidates. Women would be sent to Dive school first; if successful, they would go to SWOS. Still in its infancy, gender desegregation was clandestinely resisted. Without SWOS qualifications, officers would have to re-designate to a Restricted Line Officer position, thus making them ineligible for Command-at-Sea eligibility, the goal of every URL Officer.

Discrimination aside, CAPT Harden felt she was accepted as an equal by her peers. Crediting her intestinal fortitude, grown from a healthy respect of fear of failure, being goal oriented, and a true team member, she was able to perpetually "prove" herself to naysayers. With each new instructor or partner, she would win them over with her consummate professionalism and ability to complete the mission at

their level. With no different physical qualification standards between men and women, she had to maintain a fitness level far above the average female, earning respect.

Respect morphed to friendship, friendships which have endured decades, forged from common experiences and interdependency and cemented in trust and mutual admiration. CAPT Harden maintains close ties with a handful of teammates, frequently meeting with them to reminisce over a glass of wine or lay wreaths at the gravestones of fallen divers. A small and deeply devoted group, these divers share what she refers to as the “brotherhood.” They are there for each other regardless of reason or circumstance.

Despite a 31 year career, CAPT Harden is not ready to retire. Currently a student at the Naval War College, she looks forward to her next assignment and challenge. She continues to serve as a role model and mentor for all who meet her. Her advice is simple: First, work hard and believe in yourself. Anything you want is achievable with effort and belief, and if you can't, then the goal wasn't worthy of you. Second, don't take things personally. Most people are more concerned with themselves than how their actions affect you.

### **Red Diver Stand Up and Go To the Ladder**

It is time for the next chapter in this extraordinary woman's life. No doubt further duties will exploit the lessons learned from her vast and varied career and help mold yet another generation of both male and female US Naval Officers.