

H-Gram 018: 30th Anniversary of Operation Praying Mantis

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No Higher Honor: The Road to Operation Praying Mantis, 18 April 1988

"Mr. Secretary, I think we've shed enough blood today," said Chairman of the Joint Chiefs of Staff Admiral William Crowe to Secretary of Defense Frank Carlucci. With that, the primary target of Operation Praying Mantis, the Iranian frigate Sabalan, dead in the water with a laser-guided bomb down her stack and U.S. Navy planes ready for the kill, was given a stay of execution. Sabalan's skipper, the infamous "Captain Nasty" (named for his habit of firing into the



Operation Praying Mantis, 18 April 1988: Jets flying from aircraft carrier Enterprise (CVN-65) sink Iranian frigate Sahand (F-74) in retaliation for the mining of Samuel B. Roberts (FFG-58) four days earlier (USN 081212-N-1522S-005).

crews' compartments of neutral merchant ships and tankers, and leaving the high-casualty scene of attack with his trademark radio call, "Have a nice day") also lived to go on to be a vice admiral. Nevertheless, the cost to the Iranians of the one-day operation was very high: over 60 dead and 100 wounded. Sabalan's sister, Sahand, was on the bottom, the largest warship sunk by the U.S. Navy since World War II, smothered by a rain of air- and ship-launched Harpoon missiles, laser-guided air-launched Skipper missiles, and a variety of other air-delivered ordnance. The Iranian missile boat Joshan was also on the bottom, having fired the last operational U.S.supplied Harpoon missile in the Iranian inventory at the cruiser USS Wainwright (CG-28)-and narrowly missing-crippled by a shower of Standard missiles fired in surface-to-surface mode and then sunk with guns. Three Iranian Revolutionary Guard Corps speedboats were also sunk and others damaged. An Iranian Air Force F-4 Phantom fighter, hit by an extended range Standard missile from Wainwright, barely made it back to Bandar Abbas, Iran. Two Iranian oil platforms in the Arabian Gulf, used for intelligence collection and staging points for Iranian reconnaissance and attacks against neutral shipping, were also heavily damaged by U.S. naval gunfire and demolition charges emplaced by U.S. Marines off USS Trenton (LPD-14). U.S. forces were unscathed, except for a Marine AH-1 Sea Cobra helicopter that crashed into the ocean after nightfall while pursuing Iranian speedboats, killing its two-man crew. Operation Praying Mantis, the largest U.S. Navy surface action since World War II, did succeed in modifying Iranian behavior, and represented the culmination of several years of undeclared war between the U.S. and Iranian navies (both of them, regular and Revolutionary Guard). Although there continued to be tense encounters, the Iranians refrained from laying additional minefields in the Arabian Gulf.

The proximate reason for the execution of Operation Praying Mantis was to retaliate for minefields laid by the Iranians in the shipping lanes of the Arabian Gulf. On 14 April 1988, the frigate USS Samuel B. Roberts (FFG-58) struck a mine in a recently and deliberately laid Iranian minefield in the shipping channel in the central Arabian Gulf. The Iranian-made Sadaf 02 (Farsi for "oyster") moored contact mine, based on a 1908 Russian design, inflicted severe damage to the Samuel B. Roberts, breaking her keel, flooding two main spaces, and starting fires. Casualties were light; ten wounded, four of them seriously, only because an alert lookout had spotted the mines, giving the ship's captain, Commander Paul X. Rinn, enough time to order his crew to get above the main deck before the ship hit an unseen mine while attempting to back out of the minefield. Post-event computer simulations all indicated the ship should have sunk, yet her well-trained and drilled crew saved their ship in one of the most inspiring damage-control efforts

in the history of the U.S. Navy. At the height of the fire and flooding, the commander of the U.S. Middle East Force, Rear Admiral Anthony Less, asked Commander Rinn via radio if he was considering abandoning ship. Rinn replied that he had no intention of giving up the ship and finished with the ship's motto, "No Higher Honor." The motto derived from the battle report filed by Lieutenant Commander Robert Copeland, skipper of the first Samuel B. Roberts (DE-413), lost in an extraordinarily valiant sacrificial action during the Battle of Leyte Gulf in World War II, in which he stated there was "no higher honor" than to lead the American Sailors who displayed such extraordinary courage during battle.

For more on Operation Praying Mantis and the undeclared naval war between the U.S. and Iran in the late 1980s, please see attachment H-018-1. For more on the legacy of Coxswain Samuel B. Roberts and the three ships that have been named for him see my previous H-Gram 010/H-010-4.

75th Anniversary of World War II

Operation Vengeance: Admiral Yamamoto Shot Down, 18 April 1943

At 0935 on 18 April 1943, 16 U.S. Army Air Force P-38 Lightning twin-engine fighters arrived over Bougainville in the northern Solomon Islands after a circuitous 600-mile flight from Guadalcanal. The two Japanese G4M Betty bombers and six escorting A6M Zero fighters were exactly where the P-38s expected to find them. Four of the P-38s, designated the 'killer" group, went after the bombers, while the others engaged the fighter escorts. The pilots did not know who was aboard the bombers-only that their target was a VIP-nor did they know the true source of the intelligence regarding their target, having been told a cover story that it had been provided by Australian coast watchers. Both of the bombers were shot down. One bomber crashed in the jungle of Bougainville and the other crashed at sea just off the coast. The next day, a Japanese search party found Admiral Isoroku Yamamoto, commander in chief of the Japanese Combined Fleet, in the jungle, sitting upright, buckled in his seat thrown from the aircraft, clutching his katana ("samurai sword") with one

white-gloved hand, dead from a .50-caliber slug through his face. One P-38 and pilot were lost on what was the longest fighter-intercept mission of the war. The P-38s returned several times over the next weeks to make it look to the Japanese that the intercept of Yamamoto had been a coincidence, and not because U.S. naval intelligence had broken the Japanese navy code (by then the JN-25D cipher), intercepted and deciphered the message with Yamamoto's flight schedule, and done so in sufficient time for Admirals Nimitz, Halsey, Mitscher, and commanders at Guadalcanal to plan and execute a complex and daring "joint-service" mission (the USAAF P-38s were the only aircraft that had the legs to execute the mission, and even then needed special drop tanks flown in just in time from General MacArthur's Southwest Pacific theater). Operation Vengeance (as best I can tell a name given after the fact) is one of the greatest intelligence-operations success stories of all time. For more, please see attachment H-018-2.

A Presidential Unit Citation for a Failed Attack: USS Tunny's Second War Patrol, 9 April 1943

It was a submarine skipper's dream come true. On the night of 9 April 1943, the Japanese convoy was right where naval intelligence reports said it would be, approaching the Japanese stronghold at Truk Island in the central Carolines, and the submarine USS Tunny (SS-282) was in the perfect position. On the surface, but ballasted down with decks awash, Tunny's skipper, Lieutenant Commander John A. Scott could see off his port bow a column of ships led by a destroyer, followed by a large aircraft carrier. Off his starboard bow was another column, led by a destroyer, followed by two smaller aircraft carriers. At a range of about 880 yards, Scott set up to take out all three carriers, when out of the darkness came three motor torpedo boats, forcing him to submerge. Nevertheless, Tunny fired all four stern tubes at the smaller carrier and all six bow tubes at the large carrier. The shots appeared to be perfect, and seven of the ten torpedoes were heard to detonate at the right time. Back in Pearl Harbor, the attack was hailed as the greatest of the war to date, only to have the euphoria dashed by subsequent deciphered Japanese messages

confirming the safe arrival at Truk of all ships in the convoy. The Japanese traffic also confirmed that only the escort carrier Taiyo had been slightly damaged, and that all the torpedoes that would otherwise have been hits had prematurely detonated just short of their targets. Despite the result, Scott's attack would be rightly lauded as a superb example of daring and skill. The results of the attack provided yet more confirmation of what many submarine skippers had been saying for months: U.S. torpedoes were unacceptably defective. Tunny and Scott would go on to earn a second Presidential Unit Citation on her fifth war patrol, dueling and sinking a Japanese submarine, and damaging the super-battleship Musashi. Taiyo led a charmed life for a while, surviving four attacks and two torpedo hits from U.S. submarines, before finally succumbing to torpedoes from the submarine USS Rasher (SS-269) on 18 August 1944, sinking with heavy loss of life (estimated about 800). For more on USS Tunny's extraordinary second war patrol, please see attachment H-018-3.

100th Anniversary of World War I

Dental Valor

U.S. Navy dental officers earned two of the 12 Medals of Honor awarded to U.S. Navy personnel for exceptional acts of valor under combat conditions during World War I, one of them posthumously. Lieutenant Commander (and future vice admiral) Alexander Gordon Lyle was awarded the medal for rescuing and operating on a wounded Marine while under intense bombardment in France on 23 April 1918. Lieutenant (Junior Grade) Weedon Oscar Osborne would be awarded the Medal of Honor posthumously for action during the Battle of Belleau Wood on 6 June 1918, when he attempted to carry a wounded Marine officer off the battlefield under intense fire, which killed both. Lyle and Osborne are the only two U.S. Navy dental officers to be awarded the Medal of Honor. Their citations are in attachment H-018-4.

At the time, the Medal of Honor could be awarded for exceptional courage under non-combat conditions, and nine other Navy personnel won such awards during World War I. The Navy combat version of the medal was distinguished by a different design, known as the "Tiffany Cross," which was introduced in 1919 for World War I Navy recipients. This design was officially discontinued in 1942, partly because it looked too much like a German Iron Cross and partly because the Navy and Marine Corps Medal had been by then created for non-combat acts of valor. The non-combat version during World War I retained the original Civil War (and current) five-pointed design.

120th Anniversary of Spanish-American War

Battle of Manila Bay, 1 May 1898

The Spanish Pacific Squadron didn't have a prayer. The United States, on the other hand, had been planning the attack on the Spanish in the Philippines for over four years. According to my "Z-power" professor at the Naval Academy, the fact that the Battle of Manila Bay occurred at all was because the Spanish could not find a white sheet big enough to be seen by the U.S. Asiatic Squadron. That tonguein-cheek remark was somewhat unfair in that the Spanish flagship, the cruiser Reina Cristina, made a valiant effort to get underway under a hail of U.S. fire. Hit 81 times with half her crew of 400 dead or wounded, the burning Reina Cristina was ordered scuttled by the wounded embarked Contra-Almirante Patricio Montojo. Nevertheless, Montojo had previously recognized that his old, ill-trained, under-manned squadron would be no match for the U.S. Asiatic Squadron in a battle of maneuver. Therefore, he chose to fight from an anchored position in shallow water in the small bay between Sangley Point and the peninsula of Cavite so as to spare the city of Manila from damage resulting from the battle and to give his sailors the best chance of swimming ashore after his ships were sunk. Had he anchored his ships under the protection of the one Spanish shore battery with large enough guns to reach the U.S. squadron, the battle might have been a bit more even, but he didn't. As a result, the U.S. Asiatic Squadron under the command of the combatexperienced and aggressive Commodore George Dewey, embarked on the modern protected cruiser

USS Olympia (C-6), cruised back and forth off Cavite at ever-decreasing range, blasting the anchored Spanish ships like ducks in a shooting gallery, suffering only a handful of ineffective hits in return.

In the end, the Battle of Manila Bay was more like a massacre. At a U.S. cost of one dead (from a heart attack/heat stroke on a non-engaged support ship) and seven wounded, all seven Spanish ships were abandoned-either sunk, aground, scuttled or on fire, with between 77 and 381 dead (sources vary). Hailed in the American press as a great victory, the battle propelled Commodore Dewey to "rock star" fame, a presidential run, the rank of "Admiral of the Navy" (technically senior to the World War II five-stars), and president of the new U.S. Navy General Board from 1900 until his death in 1917. Nevertheless, the battle failed in its objective, which was to so shock Spain that it would give up Cuba without a fight. Instead, the Spanish refused to negotiate and sent a force of cruisers to Cuba, and the United States had to resort to an invasion of the island. The victory also sucked the United States into the ongoing insurrection between the Filipino people and Spain when the nation replaced Spain as colonial master of the Philippines, which would cost far more lives than the Spanish-American War (and would largely be written out of U.S. history). For more on the Battle of Manila Bay, please see attachment H-018-5 "You May Fire When Ready, Gridley."



A view of damage to the hull of USS (FFG-58) while in dry dock in Bahrain. The damage was sustained when the ship struck a mine while on patrol in the Persian Gulf on 14 April 1988 (DN-SN-93-01455).

H-018-1: No Higher Honor— The Road to Operation Praying Mantis, 18 April 1988

H-Gram 018, Attachment 1

Samuel J. Cox, Director NHHC April 2018

(Note: Sources on U.S. and Iranian operations in the Arabian/Persian Gulf during the late 1980s often conflict. I've attempted to reconstruct using open sources; however, I welcome input from participants to make this more accurate. This note is also a bit long, but I did not write anything on the 30th anniversary of many of these incidents.)

The Tanker War

In 1979, the pro-United States Shah of Iran was overthrown in a violent revolution that resulted in the Islamic Republic of Iran, led by Supreme Leader Grand Ayatollah Ruhollah Khomeini. The revolution resulted in the termination of an increasingly close relationship between the U.S. Navy and the Iranian Navy. Iran under the Shah was viewed by the United States as an important ally in the Cold War against the Soviet Union. As a result, the United States had supplied the Iranians with sophisticated weaponry, such as Harpoon anti-ship missiles, F-14 Tomcat fighters with Phoenix long-range air-to-air missiles, and P-3 Orion ASW aircraft, which fell into the hands of the virulently anti-United States Khomeini regime. Four destroyers had been under construction for

the Shah's navy, but the contract was terminated and the ships were completed for the U.S. Navy. Known as the *Kidd*-class, these destroyers were modified Spruance-class destroyers upgraded with a significantly enhanced anti-air missile and radar suite. These ships were often referred to as the "Ayatollah" or the "Khomeini" class, with a bit of envy, since the Shah bought weapons upgrades that the U.S. Navy couldn't afford in the austere late 1970s. Named after admirals killed in battle during World War II (Kidd, Callaghan, Scott, and Chandler), their heavy-duty air-conditioning suites made them ideal for operations in the Arabian Gulf, where they deployed frequently in the 1980s, sometimes in action against Iran. These fine ships are now in the service of the Taiwan navy.

In September 1980, Saddam Hussein, dictator of Iraq, launched a blatant large-scale military offensive into Iran, hoping to take advantage of the chaos and turmoil that was rampant in Iran as a result of the Revolution. Initially meeting success, like the German offensive into the Soviet Union in World War II, the offensive quickly bogged down, and the war devolved into an eight-year stalemate, with hundreds of thousands of casualties on both sides. The Iranians gradually gained back ground using massed human-wave attacks, suffering immense casualties against Iraq's better-equipped army. Even that wasn't enough to hold back the Iranians, and Iraq eventually resorted to widespread use of chemical weapons to blunt the Iranian counter-attacks, which still eventually drove into eastern Iraq.

As the bloody stalemate on the land continued, the war spread to the Arabian Gulf, initially confined to the far northern end. The superior (U.S.-trained) Iranian Navy and Air Force quickly bottled up the Iraqi navy in port and prevented Iraq from shipping oil in her own tankers through the Arabian Gulf. In retaliation, Iraq began attacking Iranian shipping in the northern Gulf, using a variety of aircraft in hit-and-run type attacks. Initially the Iranians did not respond in kind, keeping their attacks focused on Iraqi naval targets. As the war dragged on, the Iranian regime, viewed as a pariah by most of the world, found it increasingly difficult to maintain the readiness of its sophisticated U.S. air and naval weaponry due to embargoes and sanctions. Meanwhile, Iraq got help from the Russians and Western nations such as France, who viewed Saddam Hussein's brutal dictatorship as a lesser of two evils compared to Khomeini's revolutionary regime.

In March 1984, using their new French-supplied Super Étendard fighters, armed with Exocet antiship missiles, the Iragi air force attacked Iran's Kharg Island oil export transshipment facility in the northern Arabian Gulf, vital infrastructure for Iran's economy. Iran retaliated by attacking neutral ships in the Arabian Gulf, many of which were carrying supplies and some war materials to Kuwait, where they were then transshipped over land into Iraq. Iraq then began attacking tankers going to and from Kharg Island, and the "Tanker War" was on. As attacks on shipping increased in 1985, the Iragis accounted for about three fifths of all ships struck. By the end of 1987, Iraq had conducted 283 attacks on shipping, while Iran attacked 168 times. Combined, the attacks had killed 116 merchant sailors, with 37 missing and 167 wounded, from a wide variety of nationalities. Initially there was great concern that the attacks would cut off the vital flow of oil from the Arabian Gulf, but all they really did was drive up insurance rates. The world's need for oil was so great, that over 100 dead merchant seamen was apparently an acceptable price.

Almost all Iraqi anti-ship attacks were conducted with Super Étendard and then, later, Mirage F-1EQ fighters, armed with an ample supply of French Exocet missiles. Most of the Iraqi targets were very large Iranian tankers, which absorbed hits by Exocets fairly well. Actual sinkings were rare; the first tanker sunk was *Neptune*, which was empty en route Kharg Island in March 1985. Iran responded to the attacks by establishing an offshore transshipment point, using large tankers as storage off Larak Island near the Strait of Hormuz, where oil would be transferred to foreign tankers. Meanwhile, Iranian tankers would make the dangerous shuttle run between Larak Island and Kharg Island, with the result that foreign-flag tankers were largely spared from Iraqi attacks. The same was not true for shipping destined for Kuwait (and then Iraq).

Cut off from outside supply, Iran resorted to a wide variety of platforms and weapons to conduct ship attacks. These included machine-gun and rocket-propelled grenade (RPG) attacks from small speed boats ("Boghammers" and similar types) that did little damage; wire-guided antitank missiles launched from helicopters operating off Iranian oil platforms in the Arabian Gulf, which also did minimal damage against large ships; and Maverick missiles fired by F-4 Phantom fighters, which were more effective, but an increasingly scarce weapon. Most of these attacks caused relatively minor damage, but did hit ships from multiple nations, particularly Kuwait. Later in the tanker war, Iran began using Sea Killer missiles fired from their four Saam-class frigates, which caused greater damage and casualties. In particular, the frigate Sabalan, under the command of Abdollah Manavi (also known as "Captain Nasty") became notorious for deliberately firing into the crews' quarters of neutral ships; in several instances, this resulted in high numbers of deaths. However, it was the resort to mine warfare by the Revolutionary Guard Corps Navy (IRGCN) that would change the nature of the tanker war and draw the U.S. Navy into direct conflict with Iran at sea.

Following the Iranian revolution, Iran had two separate navies. The "regular" Islamic Republic of Iran Navy (IRIN) consisted of reasonably welltrained and professional sailors, many United States-trained holdovers from the Shah's navy. The leaders of the IRIN were also viewed with great suspicion by the Iranian revolutionary regime, and their loyalty was questioned and their resources were deliberately constrained, which reduced readiness and capability. The Iranian Revolutionary Guard Corps Navy (IRGCN) were religious zealots, who were better at loyalty to the regime than seamanship. Nevertheless, the IRGCN was significantly more aggressive and unpredictable than the IRIN and more willing to tangle with the U.S. Navy with their fast speedboats. It was the IRGCN, little constrained by the notions of "rules of war," that determined that sea mines would be more effective than the IRIN's mostly pinprick attacks on shipping.

Throughout 1986 and into 1987, Iragi anti-ship strikes began to range further down the Gulf, as the Iraqis improved their air-to-air "buddy" refueling techniques. By 1987, a typical Iraqi antiship profile would be for several Mirage F-1EQ fighters to stage from their home base at Al Jarrah to Shaiba airfield in southern Iraq, near the Kuwait border. Two would launch for a night strike, one Exocet-armed and the other a buddy tanker. The F-1s would hug the edge of Kuwait and Saudi airspace (frequently in it) to avoid Iranian radar coverage (although intercepts by Iranian fighters were very rare). The tanker would turn back and the strike F-1 would proceed toward a preplanned turn point, turn on its Cyrano IV radar in search mode, make the turn to the east toward Iran, descend to low altitude and increase speed, lock on and fire the Exocet at any big radar blip in the declared exclusion zone along the Iranian coast. Usually the blip was an Iranian shuttle tanker, because all other ships had been warned not to be in that area. In theory, the F-1 pilots were supposed to identify their target before they shot, but few were that fastidious, generally being more concerned about being jumped by Iranian fighters during the run in. As a result, most of the Iragi Exocet shots were fired at an unidentified, but presumed Iranian, radar blip. (The peak of operational capability by the Iraqi air force would occur in 1987, when several Mirage F-1s, with relays of F-1 buddy tankers, flew 600 miles, the length of the Arabian Gulf. They flew at night, under Iranian radar, and hit the Iranian oil storage

tankers at Larak Island with new French-supplied laser-guided bombs. The Iraqi air force during Desert Storm in 1991 had atrophied into a pale shadow of its 1987 peak.)

The number of air attacks by both sides doubled in 1986 over those of 1985. In November 1986, Kuwait issued a call for foreign assistance to protect Kuwaiti-flag tankers, which were increasingly being hit by Iranian attacks. The Soviet Union responded first, chartering tankers under Soviet flag and providing escort through the Gulf to Kuwait. Concerned that the Soviet Union was getting an advantage, the United States wanted to respond to the Kuwait request, but U.S. law precluded U.S. warships from escorting (and defending) foreign flag ships. In March 1987, after much lawyering, the solution was to "re-flag" 11 Kuwaiti tankers (and LNG carriers) with the U.S. flag and registry. The ships would be renamed, provided a U.S. master, inspected by the U.S. Coast Guard (which waived all kinds of safety requirements), and fly the American flag, which then made it legal for U.S. Navy ships to defend them. Doing so, however, would put the U.S. Navy in direct conflict with Iran, although a key assumption was that the Iranians "wouldn't dare" to attack a U.S.-flag ship. The assumption was valid with the IRIN, but not with the IRGCN.

USS Stark Attack

On 17 March 1987, as the U.S. Navy focused on the possibility of outright conflict with Iran, the frigate USS *Stark* (FFG-31) was hit by two Exocet missiles launched by an Iraqi Mirage F-1EQ5, killing 37 U.S. Sailors and heavily damaging the ship.

Despite intelligence warnings that the Iraqi ship strikes were occurring further south, and despite a dangerous encounter between USS *Coontz* (DDG-40) and an Iraqi Mirage F-1 in the same vicinity, and despite operating only a few miles from the declared exclusion zone, *Stark* continued in Condition IV (peacetime steaming) as much of the

crew focused on an engineering inspection the next day. U.S. Air Force E-3A AWACs aircraft detected and reported the Iragi aircraft when it was still 200 miles from Stark, heading south on a standard attack profile, except the pilot seemed to be having difficulty maintaining steady altitude. This contact was reported to *Stark*'s skipper, Captain Glenn Brindel, who asked to be informed if the aircraft developed into a threat, but was not on the bridge for the rest of the approach. At a range of 70 miles, Stark's own radar picked up the Iragi aircraft, as well as its Cyrano IV radar in search mode. As the aircraft drew closer, with a projected CPA of only a few miles, the SPS-49 radar operator recommended to the TAO (tactical action officer) to issue the standard radio warning to the aircraft that it was approaching a U.S. Navy vessel and risked being fired upon. The TAO opted to wait.

At 2105, the Iraqi jet reached its turn point (further south than almost all previous attacks,) turned toward *Stark* and began an accelerated descent. At 2107, the Iraqi jet fired an Exocet at a range of 22 miles from *Stark* while the frigate detected the Cyrano IV in target mode. At 2108, *Stark* issued a radio warning via military distress frequency about the same time the aircraft launched a second Exocet at a range of 15.5 miles. The aircraft turned away without acknowledging the radio call.

Stark's radar did not detect the missile launches. The first warning of an inbound missile came from the forward lookout. On board *Stark*, the captain was called when the plane changed course, but could not be immediately located. The CIWS (close-in weapon system) operator was in the head, unbeknownst to the combat information center watch officer (CICWO) or TAO, although it wouldn't have made much difference since the CIWS was masked and not ready. The SRBOC (chaff) launchers were not ready. The weapons control console was not manned, since the CICWO was covering both positions on the watch bill, and the executive officer was actually sitting in the WCO's chair, waiting to talk to the TAO about some administrative manner. The ship did not maneuver to bring the 76-mm gun to bear, and no weapons were fired or other defensive measures taken.

The first missile penetrated Stark's port side below the bridge. The missile warhead did not detonate, but the missile's fuel ignited (and because of the relative short range of the shot, there was an ample supply) and flaming fuel sprayed throughout the crews' quarters and other interior spaces. The second missile impacted a few feet from the first and did detonate. The two missiles killed 29 of Stark's crew outright and another eight would die of their wounds and burns, with another 21 wounded. Unlike the slow reaction by the CIC to the developing threat, Stark's damagecontrol effort was nothing short of heroic. Despite the heavy casualties and loss of key personnel (due partly to damage to the chief's quarters,) Stark's crew battled the flames, some of which were burning at great intensity (3,500 degrees) and with great ingenuity corrected a severe list that developed due to the firefighting water. Once the fires were out, Stark was able to return to Bahrain under her own power.

Iraq apologized for the attack, claiming it was an accident, although they also incorrectly initially claimed that the Stark was operating in the declared exclusion zone. It was an accident, but it was an accident waiting to happen due to continual Iraqi negligence in positively identifying targets before shooting. The Iragis never identified or produced the pilot during subsequent investigations, but reports that he was executed are probably not true. Saddam Hussein viewed the U.S. acceptance of Iraq's apology with no further action to be a sign of U.S. weakness. That the Iraqi aircraft fired two missiles caused extensive debate and speculation at senior U.S. Navy levels (I was a CNO intelligence briefer at the time) because the Mirage F-1EQ5 variant sold to the Iraqis by the French was only equipped to carry one. This led to the theory that the attack

was actually carried out by a Dassault Falcon 50, a multi-engine, multi-seat aircraft used as a trainer by the Iragis, which had Cyrano IV radar and could carry more than one Exocet. Nevertheless, the Iragis were also capable of considerable ingenuity and had modified an F-1 to carry two missiles and this was the first such attempt (the pilot's unfamiliarity with carrying two missile was presumably why he was all over the sky on the way down). The Falcon 50 had sufficient range to reach as far as the Red Sea, and so was viewed as a potential long-range threat during Desert Storm, contributing (along with lack of adequate tanking) to holding back significant numbers of U.S. Navy fighters for fleet air defense during Desert Storm.

On the American side, the Navy board of inquiry recommended that both Captain Brindel and the TAO, Lieutenant Basil Moncrief, be brought up for court-martial. Neither was tried, but both received a letter of reprimand via non-judicial punishment (NJP) from Admiral Frank Kelso, commander in chief, Atlantic Fleet, and left the Navy early. *Stark*'s executive officer was also relieved for cause and received a letter of admonition. Had it not been for the commanding and executive officers' extraordinary actions in saving their ship, the punishment might have been more severe.

Operation Earnest Will

Operation Earnest Will, the U.S. Navy escort of "re-flagged" Kuwaiti tankers, officially commenced in July 1987. However, on 25 May, U.S. Navy ships did provide escort for a Kuwaitiflagged cargo ship that was transporting U.S. arms to Bahrain. Operation Earnest Will would last from 24 July 1987 to 26 September 1988 and was the largest naval convoy operation since World War II. (And, as an aside, on 28 June, Iraqi planes dropped chemical weapons on an Iranian civilian target for the first time, although Iraq had previously used chemical weapons against Iranian troops, delivered by artillery, rockets, and air.) As the ground war continued to stalemate, both sides became increasingly desperate to find a way to break the deadlock. Iraq used chemical weapons, both sides began to fire large numbers of SCUD surface-to-surface missiles at each other's cities, Iran launched a surprise amphibious assault across the Shatt al-Arab waterway and captured Iraq's al Faw Peninsula, and the IRGCN decided to resort to mines. The first ship to hit and be damaged by Iranian mine, the day after the *Stark*attack, was one of three Soviet-flagged tankers chartered by Kuwait.

The first Earnest Will convoy left the United Arab Emirates en route Kuwait on 22 July, consisting of two U.S.-flagged Kuwait ships, including the huge tanker Bridgeton (former Kuwaiti name al-Rekkak), escorted by USS Worden (CG-18), USS Fox (CG-33), USS Kidd (DDG-993), USS Crommelin (FFG-37) and USS Klakring (FFG-42). The Iranians had very good intelligence regarding the convoy's movement, and the night before the convoy was to transit west of Farsi Island (a small Iranian island in the middle of the north-central Gulf,) several IRGCN small boats laid a string of mines across the deep-water channel (to which Bridgeton was essentially constrained). U.S. intelligence detected unusual Iranian activity near Farsi Island (which was actually a planned small-boat surface attack that the Iranians aborted), but did not detect the Iranian minelaying activity in real time. On 24 July, Bridgeton struck an Iranian moored contact mine. The massive ship absorbed the power of the mine, which, despite the size of the hole, did not significantly impact the tanker. The result, however, was one of the more ignominious photos in the annals of U.S. naval history, which showed Bridgeton arriving in Kuwait with her erstwhile U.S. escorts following in her wake, apparently using the big tanker as a "minesweeper" for their own protection. The assumption that the Iranians "wouldn't dare" was shattered. The incident also revealed that despite all the preparation for the convoy, the United States had virtually no mine-warfare assets in the Arabian Gulf. Further convoys were postponed during the scramble to deploy eight MH-53 Sea Stallion mine-warfare helicopters and eventually

eight ocean-going minesweepers (MSOs) and six coastal minesweepers (MSCs).

Iran Ajr Capture: Caught Red-handed

Throughout the summer of 1987, tensions continued to increase between the United States and Iran as Iran laid more minefields in various locations in the Arabian Gulf, which of course the Iranians denied doing. On 10 August, the tanker *Texaco Caribbean*, under U.S. charter by a U.S. firm, struck a mine off Fujairah (along with a couple other ships, at least one of which sank). This was the first time Iranian mines had been laid outside the Strait of Hormuz. Also that same day, a U.S. F-14 from USS *Constellation* (CV-64) fired two Sparrow air-to-air missiles at a radar blip that had been assessed as showing hostile intent toward a U.S. P-3, although nothing was hit.

There was also a secret (at the time) adjunct to **Operation Ernest Will, called Operation Prime** Chance. As part of the operation, U.S. Army special operations attack helicopters were embarked on U.S. Navy frigates. In addition, two barges were acquired, Hercules and later Wimbrown 7, which were used as mobile sea bases, each with a SEAL platoon, two Mark III fast patrol boats, U.S. Army MH-6 and AH-6 "Little Bird/Sea Bat" helicopters, an explosive ordnance disposal detachment, and a U.S. Marine Corps security detachment. The planning for the barges was somewhat controversial, due to perceived vulnerability to attack. Admiral Lee Bagget, commander in chief, Atlantic Fleet, called it a "floating Beirut Barracks," a reference to the terrorist attack in 1983 that killed over 241 U.S. service members, mostly Marines and 18 U.S. Navy Sailors.

Despite the risk, Operation Prime Chance achieved a stunning success on 21 September 1987. An IRGCN detachment had essentially commandeered an IRIN LST, *Iran Ajr*. The ship had mixed IRIN and IRGCN crew, who did not like each other. *Iran Ajr* loaded 18 *Sadaf* 02 moored contact mines with the intent to mine the main

channel leading to Bahrain. Iran Ajr's unusual communications profile, and stop at the Iranian Rostam oil platform (used by the IRGC for intelligence collection) alerted U.S. naval intelligence in Bahrain. The frigate USS Jarret (FFG-33) was ordered to investigate the suspicious activity, and two U.S. Army attack helo's from Jarret caught Iran Ajr in the act of laying mines. Cleared to engage, the Army helos fired rockets and numerous machine gun rounds into the LST, seriously damaging the ship, killing several crew members and causing others to jump over the side. When the helos returned 15 minutes later after re-arming, they were astonished to see Iran Ajr still intent on accomplishing her mission. The LST, with her remaining crew, had resumed minelaying, so the helos conducted a second attack. A SEAL team subsequently boarded and took control of the ship, including the ten mines still on board. Three Iranians were killed outright and two others were lost after going over the side. The United states rescued and captured 26 other Iranians (who were returned to Iranian authorities via the UAE, complete with U.S. Navy T-shirts and ball caps). The Iranians tried to claim that Iran Air was on a routine resupply mission to Iranian oil platforms, prompting Secretary of Defense Casper Weinberger to comment, "That's the biggest load of groceries I've ever seen." Iran Ajr was towed into international waters in the Iranian-declared exclusion zone, and deliberately scuttled by the United States. The capture of the LST also proved to be an intelligence collection bonanza, as it included copies of Iran's primary war plan in the event of conflict with the United States.

Not sufficiently chastised (a lesson for any future engagement with Iran), the IRGCN planned to retaliate by attacking targets on the Saudi coast (including potentially the U.S. barges) with a massed attack by about 60 small speedboats (Operation *Hajj*). Through a good source, U.S. naval intelligence learned of this operation and advance warning was provided to both the United States and the Saudis. However, on the night of the planned attack, 3 October 1987, sea conditions on the Iranian side of the Gulf turned the Iranians' attempt to form up into a total fiasco and the mission was scrubbed. The Saudi's reacted with significant naval and air force, but upon finding nothing, accused the United States of crying "wolf."

Still not giving up, the IRGCN mounted another operation in the night of 8 October, this time with much less intelligence warning. U.S. Army helos from the USS Klakring sighted a group of three Iranian speed boats (one Boghammer and two others) southwest of Farsi Island. One of the Iranian boats fired what was proved to be a U.S.made Stinger hand-held surface-to-air missile at the helos, which missed. The helos then engaged the Iranian boats, sinking one and heavily damaging two (one of which later sank). The United States rescued six Iranians, but two died from their wounds, and seven Iranians were killed. The United States also found components of Stinger missiles, the first confirmation that the Iranians had acquired this weapon. As a result of this attack, the Iranians once again called off the operation, even though a few IRGCN commandos were already ashore in Saudi Arabia, and the largest IRGCN operation of the war was thwarted.

Operation Nimble Archer

Still undeterred, the IRGC tried to retaliate via a different means. When the Iranians captured the Iraqi al-Faw peninsula, they also captured Iraqi Silkworm (a Chinese-made derivative of the Soviet Styx) coastal defense cruise missiles. (The IRGC had also purchased some of their own Silkworms from China and were busy building launch sites along the eastern side of the Strait of Hormuz.) At maximum range, a Silkworm fired from the al-Faw Peninsula could just reach the Kuwait Sea Isle oil transshipment terminal off the Kuwait coast near the Mina al-Ahmadi refinery. On 15 October, the Iranians fired a captured Iragi Silkworm from the al-Faw and hit the U.S-owned, Liberian-flag tanker Sungari anchored off Mina al-Ahmadi. On 16 October, the Iranians did it again, hitting the U.S.-

flagged (re-flagged Kuwait) tanker *Sea Isle City* at the off-shore terminal, wounding 18, including permanently blinding the U.S. master.

On 19 October 1987, the United States executed Operation Nimble Archer in retaliation for Iranian Silkworm attacks off Kuwait. At 0800, the USS Thach (FFG-43) radioed a warning giving Iranians on non-operational oil platform in the Rashadat (Rostam before 1979) oil field 20 minutes to abandon the platforms. Then the USS Hoel (DDG-13,) USS Leftwich (DD-984,) and USS John Young (DD-973) opened fire on the platforms with their 5-inch guns. The steel lattice work nature of the platforms made them difficult targets to do much significant damage to, despite a considerable expenditure of ordnance. SEALS also went aboard a platform and set demolition charges after collecting a trove of documents of significant intelligence value. Although Iran had used the platforms, which had helo pads, as a staging point for Iranian attacks on neutral shipping by AB-212 helicopters armed with anti-tank weapons, the International Court of Justice ruled in 2003 that the U.S. attack was "unjustified" on self-defense grounds (although I am not sure who cared by then).

No Higher Honor

Following the *Iran Ajr* capture and Operation Nimble Archer tensions in the Gulf continued, but the U.S. and Iran refrained from shooting at each other. Nevertheless, the bloody attrition in the land war continued, and the "War of the Cities" ramped up as both Iran and Iraq fired SCUD missiles into civilian population centers. On 18 March 1988, the Iraqis launched a major air attack against Iran's Kharg Island, succeeding in sinking two Iranian supertankers, but losing two TU-22 Blinder bombers and one Mig-25RB Foxbat highaltitude reconnaissance bomber to Iranian F-14 Tomcats.

At sea in the Gulf, U.S. Navy commanders had been given more liberal rules of engagement (ROE) to interfere in continuing Iranian attacks

against neutral ships. Although U.S. Navy ships were still not allowed to defend foreign-flag ships, the new ROE permitted U.S. Navy ships to operate in proximity to neutral ships in order to deter an attack, or to aggressively maneuver and dog Iranian warships to give them something to worry about besides attacking other ships. The result was a number of instances of dangerous maneuvers and near-collisions between U.S. and Iranian warships. In particular, the frigate USS Samuel B. Roberts (FFG-58) essentially harassed the notorious Iranian frigate Sabalan, breaking up several potential attacks. Given Sabalan's trackrecord of high-casualty attacks, Samuel B. Roberts's actions, under the command of Commander Paul X. Rinn, no doubt saved the lives of neutral seamen. In a couple of cases, Roberts and Sabalan mixed it up like two fighter pilots maneuvering to gain positional advantage, with the *Roberts* gaining the upper hand in each.

Whether the Iranians deliberately targeted Samuel B. Roberts, which had become a significant impediment to them, is unknown. However, Iran actually had a decent intelligence collection and tracking capability, and as Roberts returned from a successful Earnest Will escort (the 25th; no Earnest Will convoy had suffered any damage after the first one), the IRIN cargo ship Charak laid a 12-mine field ahead of Roberts's track on the night of 13/14 April 1988. Either the Charak or her sister Souru laid another minefield the same night about 60 miles away. Late the next afternoon about 1640, the forward lookout alertly spotted three mines ahead, and the OOD immediately brought the ship to full stop, and as soon as Commander Rinn reached the bridge he could confirm they were mines (and not dead sheep or other floating trash often mistaken for mines). Rinn called the ship to general quarters without actually sounding the GQ alarm, and ordered everyone not absolutely necessary to get above the main deck, an action that no doubt saved many lives. He then tried to back Roberts out of the minefield following his own wake, which proved easier said than done.

While backing down, Roberts struck an Iranian moored contact mine, resulting in a massive explosion that broke the ship's keel (the only thing actually holding the ship together was the main deck), quickly flooding the ship with over 2,000 tons of water in two main spaces (if a third flooded the ship would be lost) and starting a major fire that proved extremely difficult to put out. The ship lost power for about five minutes with three of the four diesel generators damaged. A Sailor (ENFN Mike Tilley, who had chosen not to get above the main deck), although trapped below decks, was able to "suicide-start" the fourth diesel generator. With some electrical power and pumps restored, the crew was able to fight the fire, while others shored up the third main space below, and still others cabled the superstructure together. It also became apparent that firefighting water was flooding the ship, and Roberts was slowly sinking by the stern. As if things weren't bad enough, and with night approaching, the Sabalan arrived on scene within five miles, and Rinn ordered a live round loaded on the missile launcher. Sabalan subsequently kept her distance. At one point, Rinn had to make a difficult decision and ordered fire-fighting to cease in order not sink his own ship. The chief engineer, Lieutenant Gordan van Hook, then devised an innovative alternate way to get the fire to go out, which actually worked. The last fires were out at 2105. Ten of Roberts's crew required MEDEVAC, four of them serious burn cases that had to be taken to the States. Roberts would be towed to the UAE and subsequently loaded on the Mighty Servant 2, brought back to the United States and repaired, and served until she was decommissioned in 2015. All thanks to an extraordinary damage control effort by all hands by an extremely welltrained crew.

Operation Praying Mantis

Iran experienced a really bad day on 18 April 1988. Having gained a foothold on Iraq's al-Faw Peninsula months before, Iranian troops had become bogged down in the muck and mire (much like "Flander's Fields" in World War I) under a constant rain of Iraqi artillery. When the Iraqi Republican Guard launched a massive counteroffensive on 18 April, aided by chemical weapons, the Iranians on the al-Faw were defeated with surprising ease. It was becoming apparent to the Iranians that they were running short on humans for "human wave" attacks. The same day, the United States executed Operation Praying Mantis, giving Iran additional reason to believe that the United States was now actively intervening on the side of Iraq.

Operation Praying Mantis was the largest of five major U.S. Navy surface actions since World War II. It was the first, and so far only, time the U.S. Navy has exchanged surface-to-surface missile fire with an enemy, and it resulted in the largest warship sunk by the U.S. Navy since World War II. The trigger for the execution of Praying Mantis was the mine strike by USS Samuel B. Roberts on 14 April. The primary tactical objective of the operation was to sink the Iranian frigate Sabalan. The larger objective was to inflict enough pain on Iran to deter them from laying any more minefields in the Arabian Gulf. The commander of the operation was Rear Admiral Anthony Less, Commander Joint Task Force Middle East, embarked on the command ship USS Coronado (AGF-11), supported in the Gulf of Oman by Battle Group Foxtrot, commanded by Rear Admiral Guy Zeller, Commander Cruiser-Destroyer Group Three, embarked on USS Enterprise (CV-65). (The convoluted chain of command in the Arabian Gulf/Arabian Sea will be the subject of a future Hgram.)

Operation Praying Mantis began in similar fashion to Operation Nimble Archer the previous October, only on a larger scale. At 0800, Surface Action Group (SAG) Bravo approached Iran's Sassan oil platform in the central Arabian Gulf. SAG Bravo consisted of USS *Merrill* (DD-976,) with Commander Destroyer Squadron Nine and an HSL-35 LAMPS helo detachment embarked, the USS *Lynde McCormick* (DDG-8,) and USS *Trenton* (LPD-14,) with a Marine Air-Ground Task Force (MAGTF) embarked along with the LAMPS detachment off the damaged Samuel B. Roberts. At 0800, Merrill issued a warning giving Iranians on the platform 20 minutes to abandon it; some did, some didn't. After time was up, the U.S. ships opened fire. An Iranian ZU-23 anti-aircraft gun on the platform returned fire until the Iranians requested a cease-fire, and the U.S. complied. More Iranians abandoned the platform and cleared the area on a tug, but some remained on the platform and resumed firing. A Marine AH-1 attack helo off Trenton put a stop to further resistance. Marines then boarded the platform and captured one wounded survivor, some small arms, and more documents of intelligence value before emplacing explosives that were subsequently detonated.

SAG Bravo was then ordered to proceed to the Rakhsh oil platform and destroy it. Two Iranian F-4 Phantoms commenced an attack run on SAG Bravo but broke off as soon as *Lynde McCormick* locked on to the F-4s with missile fire control radar. During the operations there were several examples of the "fog of war." A Soviet *Sovremenny*-class DDG was initially misidentified as an Iranian *Saam*-class frigate (like the *Sabalan*) and a UAE patrol boat was initially misidentified as an Iranian Boghammer speedboat, but their identities were cleared up before they were fired on. However, at this point, orders were received to de-escalate the situation, and the attack on Rakhsh was called off.

Meanwhile, SAG Charlie commenced a similar operation at Iran's Sirri Oil Platform. After the obligatory warning, the USS *Wainwright* (CG-28) with OTC, Captain Dave Chandler embarked, USS *Simpson* (FFG-56,) and USS *Bagley* (FF-1069) opened fire. Although the ships attempted to be careful where they fired since Sirri was still an active oil-production platform, a stray shell hit a compressed-gas tank, and the resulting mass fireball incinerated the Iranian gun crew. Embarked SEALS were initially assigned to board the platform, but that was deemed not necessary.

The Iranians initially reacted to the attacks on the oil platform by sending five IRGCN Boghammer speedboats into the southern Arabian Gulf, using machine guns and rocket-propelled grenades (RPGs) to attack any non-Iranian targets they could find. The U.S.-flag oil rig supply ship Willie Tide, the Hong Kong-flag, British-owned tanker York *Marine*, and the Panamanian-flag oil rig *Scan Bay* were all damaged by these attacks. Later in the day, VA-95 A-6E Intruder aircraft off USS Enterprise engaged four other IRGCN Boghammers (after being fired upon). The fast boats proved difficult to hit, but a Rockeye cluster bomb on the second pass did the trick, sinking one of the Boghammers and causing the others to flee to Iranian waters. A couple other small Iranian speedboats were also sunk during the course of the day.

In response to the U.S. attacks on the oil platforms, the IRIN Kamen-class missile patrol boat (PTG) Joshan, under the command of Captain Abbas Mallek, was ordered to proceed to the scene, although the orders were ambiguous as to what exactly she was supposed to do. Approximately three hours later, Joshan was detected closing on SAG Charlie. Captain Chandler, on board Wainwright, was well aware from intelligence reports that Joshan was carrying the last operational Harpoon anti-ship missile in the Iranian navy inventory. Chandler later said he would have shot Joshan at 35 miles were it not for the de-escalatory order. However, as the Joshan and SAG Charlie continued to close at a combined speed of over 50 knots, Wainwright continued to broadcast warnings to Joshan to turn away or be fired upon. Captain Mallek responded on the radio, "I am doing my duty. I am in international waters and will commit no provocative attack." However, at 13 miles, following yet more warnings, Joshan locked on to Wainwright with her fire-control radar. Chandler issued a last radio warning, "Stop engines,

abandon ship, I intend to sink you." *Joshan* responded by launching her Harpoon at *Wainwright*.

In response to the Harpoon launch, Simpson fired four Standard missiles in surface-to-surface mode at Joshan and Wainwright fired one. (Although the Standard missile's anti-air warhead is relatively small, the missile gets to the target extremely fast...and when I was in TAO school in 1982, the instructor hammered that point home.) At least four of the missiles hit Joshan's superstructure with devastating effect, but not enough to sink the ship. Chandler opted to keep Wainwright's bow pointed at Joshan to minimize radar cross section. The Iranian Harpoon's seeker either failed to activate or was lured off by chaff, and the missile passed close aboard down Wainwright's starboard side. *Bagley* also fired a Harpoon at Joshan, which missed. The U.S. ships then sank the crippled patrol boat with guns. The Joshan suffered 15 sailors killed; among the severely wounded was Captain Mallek with a severed leg. While the surface action was going on, two Iranian F-4 Phantom fighter-bombers were orbiting too close for comfort and Wainwright engaged them with two extended-range Standard missiles. The F-4s took evasive action, but one missile blew a large hole in the wing of one of the aircraft. The pilot managed to bring the badly damaged plane to land at Bandar Abbas, a credit to both the his skill and the toughness of the F-4.

The Iranians did not get the de-escalation order, and at 1230 the Saam-class frigate Sahand (sister ship to Sabalan) departed Bandar Abbas, under the command of Captain Shahrokhfar. Although not as notorious as Captain "Nasty" Manavir, Shahrokhfar had a reputation as an aggressive skipper. Two VA-95 A-6E's flying SUCAP for USS Joseph Strauss (DDG-16) spotted Sahand. The lead A-6 (piloted by future Rear Admiral Bud Langston) made an identification pass and was fired on by a hand-held SAM from Sahand. Langston fired a Harpoon at the vessel, and Joseph Strauss and the other A-6 followed suit; all three Harpoon's probably hit. The A-6s attacked again with laser-guided Skipper missiles and bombs as other *Enterprise* aircraft rolled in with yet more ordnance. The damage to *Sahand* was severe, and she was soon burning stem-to-stern with fires out of control before a massive explosion in one of her magazines sank her, with a loss of at least 45 of her crew.

Joseph Strauss had been operating as part of SAG Delta, covering the approaches to Bandar Abbas and the Strait of Hormuz. SAG D consisted of USS Jack Williams (FFG-24,) with Commander DESRON 22, Captain Donald Dyer, embarked, USS O'Brien (DD-725,) and Joseph Strauss. There were multiple reports that the Iranians fired Silkworm anti-ship missiles at SAG Delta. A subsequent investigation reported that none were fired, although there were witnesses who were sure they saw some large flying objects pass by. The United States did not publically state that Iran fired any Silkworm missiles, possibly because any Silkworm missiles fired at SAG Delta would have come from Iranian territory, which the United States had previously stated would result in a significant escalatory response. Whether or not Iran fired Silkworms at SAG Delta, Joseph Strauss fired multiple Standard missiles at long range at an Iranian C-130 that was acting as if it might be attempting over-the-horizon targeting for the Iranian Silkworm sites ashore. None of the missiles hit, but the C-130 kept its distance, as the commanding officer of Joseph Strauss intended.

There was one definite Iranian Silkworm launch. It was in the northern Persian Gulf, fired from the al-Faw Penisula (before the Iraqis recaptured it) at maximum range and targeted against USS *Gary* (FFG-51) which was covering the U.S. special operations barges from possible Iranian attack. *Gary* took effective evasive actions and possibly shot down the missile, although the missile was also likely about out of fuel.

The Iranians were still not sufficiently chastised, and at 1630 *Sabalan* finally departed Bandar

Abbas. Although guickly located, there was only one U.S. aircraft nearby that had ordnance (after the field day on *Sahand* earlier). An A-6, flown by Lieutenant Commander James Engler (who had earlier sunk a Boghammer), conducted an identification pass and was fired on by an SA-7 hand-held surface-to-air missile from Sabalan. In accordance with the ROE, Engler (and his bombardier-navigator) responded by planting a Mk 82 500LB laser-guided bomb down Sabalan's stack. (Engler would receive a Distinguished Flying Cross for his actions this day). The single hit crippled the ship, leaving her dead in the water and burning, with Captain Nasty immediately on the air pleading for help. Unfortunately, the time it would take for other Enterprise Air Wing 11 aircraft to arrive and attack would seriously stretch the bounds of what could be considered permissible "self-defense" under the ROE. At this point, Secretary of Defense Carlucci approved CJCS Admiral Crowe's recommendation to cease any further hostile action. Sabalan was towed back into Bandar Abbas and eventually repaired and returned to service. Captain Nasty would eventually achieve the rank of vice admiral.

The only U.S. casualty of the battle was a Marine Corps AH-1T Sea Cobra helicopter gunship that crashed after dark about 15 nautical miles from Abu Musa Island, killing both crew members. Operating from *Trenton*, the helicopter was sent to investigate possible Iranian activity. The helo had been in near-continuous action all day and crew fatigue may have been a factor in the crash as there was no sign of combat damage when the helicopter was later raised from the bottom.

With that, Operation Praying Mantis was over. The next major action in the undeclared war with Iran would be a tragic accident on 3 July 1988 in which the cruiser USS *Vincennes* (CG-49) shot down a commercial Iranian jet (Iran Air flight 655), killing all 290 civilian passengers on board. This tragedy, ironically, would significantly contribute to ending the bloody Iran-Iraq War. (Sources for this H-gram include Twilight War: The Secret History of America's Thirty-Year Conflict with Iran by David Crist and No Higher Honor: Saving the USS Samuel B. Roberts in the Persian Gulf by Bradley Peniston. Both are truly superb books. The description in No Higher Honor of how skipper Rinn used the legacy of Samuel B. Roberts and the history of ships named in his honor to inspire his crew through intense combat training is my favorite part.)



Admiral Isoroku Yamamoto, IJN (1884-1943), official portrait by Shugaku Homma, 1943 (NH 79462-KN).

<image>

"Death of Japanese Admiral Isoroku Yamamoto." Painting by Sergeant Vaughn A. Bass, of the 4th Air Force Historical Section, based on information provided by Lieutenant Colonel Thomas G. Lanphier, Jr. It depicts then-Captain Lanphier's P-38 Lightning fighter shooting down a Betty bomber that was carrying Admiral Yamamoto. Another P-38 is attacking one of the Zero fighters that formed the admiral's escort. This action took place near Kahili, Bougainville, on 18 April 1943 (USAF 11462).

H-018-2: Operation Vengeance—Admiral Yamamoto Shot Down, 18 April 1943

H-Gram 018, Attachment 2 Samuel J. Cox, Director NHHC April 2018

On 14 April 1943, multiple U.S. radio-intercept sites copied a Japanese naval message encoded in the JN-25D cipher. U.S. Navy code breakers in

Washington, DC, and at Fleet Radio Unit Pacific at Pearl Harbor (also known as Station Hypo, but by then more frequently referred to as "FRUPAC") immediately set to work trying to break the message. The already difficult process was compounded further because the Japanese had made some changes following the sinking of the Japanese submarine *I-1* in shallow water off Guadalcanal by the New Zealand navy corvette *Moa* in late January (although at the same time, captured material brought up by U.S. Navy divers from the submarine proved very beneficial in other code-breaking efforts). At this time, FRUPAC was under the direction of Commander William B. Goggins. Goggins had no intelligence or codebreaking background, but proved to be an able officer and leader who gained the trust of the FRUPAC code breakers following the recall of the popular (and hero of the Battle of Midway) Commander Joe Rochefort in October 1942 as a result of a sordid power struggle with OP-20G in Washington, DC. Rochefort's reward for FRUPAC/Hypo's success in breaking the Japanese naval code before Midway was to be given command of a floating drydock. Goggins had been severely wounded as executive officer of the light cruiser USS Marblehead (CL-12) in a Japanese bombing raid off Java in February 1942; the story of how he successfully escaped from Java just ahead of the Japanese occupation is an epic story in itself.

FRUPAC was the first to decrypt some of the message, although there were still a significant number of blanks, and it took another 18 hours to get a more complete decryption and translation. Some sources credit Marine Major Alva B. "Red" Lasswell with breaking the message. As chief linguist at FRUPAC, he certainly had a key role, but it was a team effort that included cryptanalysts Ham Wright and Tommy Dyer, and traffic analysts Tom Huckins and Jack Williams, supervised by Lieutenant Commander Jasper Holmes. Junior members of the team included future Supreme Court Justice John Paul Stevens, and future Rear Admiral "Mac" Showers. This was essentially the same cast, minus Rochefort, which achieved spectacular success before the Battle of Midway. Holmes gave a heads-up to Pacific Fleet intelligence officer, Commander Edwin Layton, and, once a finished translation was in hand, Holmes and Lasswell hand-carried it to Layton, who then went in to see Admiral Chester Nimitz. commander in chief of the Pacific Fleet.

The contents of the message included the flight schedule of Admiral Isoroku Yamamoto, commander in chief of the Japanese Combined Fleet (roughly Nimitz's equivalent) and architect of the Japanese attack on Pearl Harbor (and the disaster at Midway). Yamamoto was already on an inspection trip to Japanese bases near Rabaul and the northern Solomon Islands. The message contained precise details and timing of Yamamoto's flight to Japanese airfields on and near Bougainville Island, scheduled for 18 April. It also contained how many Japanese aircraft would be involved: two G4M twin-engine Betty bombers carrying passengers and six A6M Zero fighter escorts.

Layton and Nimitz discussed the pros and cons of killing Yamamoto. Layton's extensive background in Japanese language and culture made his assessment uniquely valuable to Nimitz. Layton's view was that no other Japanese admiral had Yamamoto's stature, experience, innovative thought, or charisma. Other Japanese admirals had technical ability and leadership skill, but none on par with Yamamoto; his loss would be a major blow to the Japanese navy's morale, already reeling from defeats at Midway and Guadalcanal. Layton later described his mixed emotions because he personally knew Yamamoto.

Different sources have different versions of who was involved in making the decision to shoot down Yamamoto. Layton believed it was Nimitz alone. President Roosevelt was out of Washington, DC, during the period and there is no documentary evidence of his involvement. Secretary of the Navy Frank Knox may have been involved as the contents of the message were by then known to a very small circle of people in Washington in office of the CNO, OP-20G, and ONI. Some sources recall a message being sent from Knox to Nimitz, but none has ever been found, nor would it have been standard practice to transmit such a message regarding codebreaking intelligence. The deputy director of ONI, Captain Zacharias, was tasked to write a memo on precedents for killing enemy commanders, but who it was for and where it went is unknown.

Regardless of who else may have been involved, Nimitz made the decision and tasked Vice Admiral William Halsey, commander of U.S. Forces in the South Pacific Area, to plan and execute an operation to shoot down Yamamoto. The task then flowed to Rear Admiral Marc Mitscher, who at that time was Commander, Aircraft, Solomons (COMAIRSOLS), which had superseded the "Cactus Air Force" on Guadalcanal. It was a 400-mile flight from Guadalcanal to Bougainville, and to avoid detection by the Japanese, the outbound leg would have to be a circuitous 600-mile flight. None of the Navy and Marine fighters on Guadalcanal had sufficient range to execute the mission, nor were any aircraft carriers close enough to do so.

The U.S. Army Air Force's 339th Fighter Squadron, equipped with long-range twin-engine P-38G Lightning fighters was the only force available on Guadalcanal to execute the mission. Even then, special larger 330-gallon drop tanks had to be flown in just in time from General MacArthur's Southwest Pacific theater in New Guinea. Each fighter would carry one large and one standard drop tank; fortunately, both would be close enough to the aircraft centerline to avoid asymmetric flight problems. Eighteen aircraft and pilots were selected for the mission, including two spares. Four aircraft were designated as the "kill flight," with the pilots selected by Mitscher due to proven "high-scoring" combat experience. Although the commander of the 339th Squadron, Major John Mitchell, would lead the mission (but was not in the kill flight), a number of the pilots were drawn from two other squadrons because of their experience. At the request of Mitchell, Marine Lieutenant Colonel Luther S. Moore, found and had fitted a U.S. Navy ship's compass on Mitchell's P-38 (and possibly in other aircraft as well) to aid navigation.

On 17 April, Halsey approved the plan. The pilots were only told the target was a VIP, and were also told a cover story that the intelligence had been obtained via Australian coast watchers near Rabaul (although it didn't take long for the pilots to figure out the intelligence came from intercepted communications). When the flight launched, two of the killer flight had to abort (a blown tire and an engine problem) and their designated spares flew in their place. According to the intercepted message, the first leg of Yamamoto's flight was from Rabaul to an airfield on Balalea Island near Bougainville, and Mitchell calculated the intercept to occur at 0934 local.

Although often described as an inspection tour, a major purpose of Yamamoto in going to Bougainville was to congratulate Japanese naval aviators on what was assessed to be the successful conclusion of Operation I-Go. Operation I-Go was a major Japanese air counteroffensive against Guadalcanal and other locations in New Guinea that commenced on 7 April 1943. The air groups from the carriers Zuikaku and Zuiho (Carrier Division One,) and Junyo and Hiyo (Carrier Division Two) had been flown ashore to airfields in the northern Solomon Islands and near Rabaul. Flying from land bases, the carrier aircraft would participate in strikes with land-based Navy (for Guadalcanal) and Army (for New Guinea) twin-engine bombers. This was no easy feat for the Japanese, since their air groups were not organized or normally equipped to operate independently from their carriers.

On 7 April, the Japanese launched the largest air attack in the Pacific since the attack on Pearl Harbor. Sources vary, but about 70 bombers (including carrier aircraft) and over 110 fighters attacked Guadalcanal. Although Guadalcanal had been relatively calm since the Japanese evacuated in February, there was ample intelligence warning that the raid was coming. U.S. forces around Guadalcanal were at a rare Condition "Very Red," and 76 U.S. interceptors met the Japanese raid. Given the number of Japanese aircraft involved, the results were unspectacular. Nevertheless, Japanese Val carrier dive bombers from *Hiyo*'s air group sank the U.S. oiler USS Kanawha (AO-1) and the New Zealand navy corvette HMNZS Moa, which had previously

sunk the Japanese submarine I-1. Japanese Vals from Junyo's battle-experienced air group also struck the destroyer USS Aaron Ward (DD-463) as she was escorting LST-449. Witnessing the attack on Aaron Ward from the LST was Lieutenant (Junior Grade) John F. Kennedy, a passenger on his way to take command of PT-109 at Tulagi. Although Aaron Ward had survived punishing damage during the Friday the 13th Battle (November 1942) off Guadalcanal, the Japanese dive-bomber pilots were apparently some of the best surviving Japanese carrier aviators, and Aaron Ward was hit by several bombs and several damaging near-misses. Aaron Ward sank with 27 of her crew dead or missing and 59 wounded. Her skipper, Lieutenant Commander Frederick Becton survived and went on to command the second USS Laffey (DD-724) during the D-Day landings (where she was hit by a dud German 8-inch shell) and then at Okinawa, where she would survive being hit by about six kamikaze aircraft. Becton would earn a Navy Cross and four Silver Stars during the war, along with two Presidential Unit Citations.

Follow-on Japanese raids on Allied forces on New Guinea met with the same lackluster success, but wildly inflated claims by Japanese pilots convinced Yamamoto and others that *I-GO* was a big success. It came at a cost of about 55 Japanese aircraft (and about 25 U.S. aircraft) and, not wishing to sustain that rate of loss in his dwindling number of carrier aircraft, Yamamoto declared victory and terminated the operation on 16 April.

Bad omens abounded before Yamamoto commenced his congratulatory tour. Junior staff members tried to convince him not to make the flight, or at least to change the schedule, to no avail. Lieutenant General Hitoshi Imamura, the senior army commander in the Solomons, described how he had narrowly avoided being shot down in the central Solomons a month earlier (this was the same general whose transport had been sunk by Japanese torpedoes aimed at

the USS Houston-CA-30-in the Battle of Sunda Strait on 1 March 1942). The commander of the carrier aircraft, Vice Admiral Jisaburo Ozawa (who had relieved Vice Admiral Nagumo after the Battle of Santa Cruz) offered to provide a much larger fighter escort, which Yamamoto declined. The navy staff officer who had "the" message transmitted, was so concerned that Japanese army communications had been compromised that he ordered the message not to be sent via army channels, and then was mortified to learn it had gone out via army communications anyway (and intercepted by the United States, but not decoded to my knowledge). At the last minute, Yamamoto ordered his chief of staff, Vice Admiral Matome Ugaki, to fly in the second aircraft. They had always flown together previously. When both bombers were shot down, Ugaki was one of the three survivors of the aircraft that crashed in the water, despite the fact he was already severely weakened by some jungle disease. Ugaki would go on to command the Japanese battleship group at the battle off Samar at Leyte Gulf in October 1944, and then he would fly what is believed to be the last kamikaze mission of the war (and be shot down), several hours after the Emperor's surrender announcement. Ugaki's copious diary would be one of the most valuable documents to survive the war for describing the Japanese side of events.

In the melee that occurred during the intercept, both Japanese bombers were shot down, and although a couple of Zero fighters were claimed, none were actually lost. One U.S. P-38 and its pilot failed to return from the mission, although the exact time and cause of the loss is uncertain. The pilot who the U.S. Air Force would ultimately give credit (many years later) for shooting down Yamamoto's plane, Captain Rex T. Barber, came back with 104 holes in his aircraft. Captain Thomas G. Lanphier also claimed to have shot Yamamoto down, resulting in a decade-long dispute, and for many years the two shared half credit. When the U.S. Air Force finally sided with Barber, Lanphier lost his "ace" status as he reverted to four kills. The mission was also somewhat marred by security breaches following the mission. The Navy originally submitted the mission commander, Major Mitchell, for a Medal of Honor, but this was downgraded to a Navy Cross prior to approval because the Navy was so incensed by the "loose talk" of the pilots. However, all pilots who flew the mission were awarded Navy Crosses.

The Japanese did not announce Yamamoto's death until 21 May, although U.S. Navy communications-traffic analysts and cryptanalysts were able to determine by changes in Japanese communications that he had been killed almost immediately. Yamamoto's death was a major blow to Japanese navy morale, having much the effect that Eddie Layton had predicted. Like Layton, a number of the intelligence personnel involved in the operation would later express mixed feelings. Whether they had met Yamamoto personally or not, through their intelligence analysis they had come to know Yamamoto as a respected and worthy adversary. It also turned out long after the fact that the code breakers had been incorrect: Yamamoto's first destination was apparently Buin and not Balalea airfield, but it proved to be "close enough."

(Sources include: Combined Fleet Decoded: The Secret History of American Intelligence and the Japanese Navy in World War II by John Prados, as well as And I Was There: Pearl Harbor and Midway–Breaking the Secrets by Edwin Layton and Roger Pineau; and Double-Edged Secrets by Jasper Holmes, as well as Samuel Eliot Morison's History of U.S. Naval Operations in World War II series.)



World War II boat emblem of USS Tunny (SS-282)

H-018-3: A Presidential Unit Citation for a Failed Attack— USS *Tunny*'s Second War Patrol, 9 April 1943

H -Gram 018, Attachment 3 Samuel J. Cox, Director NHHC April 2018

USS *Tunny* (SS-282) was awarded the first of two Presidential Unit Citations for her second war patrol–from 24 March to 23 April 1943. Up until that point in the war, the U.S. submarine force had largely under-performed. Two primary reasons were the difficulty of finding targets in the vast expanse of the Pacific Ocean and malfunctioning torpedoes; although, in some cases, lack of experience and aggressiveness in some

submarine skippers was determined to be a factor. However, in Lieutenant Commander John A. Scott, Tunny had a truly aggressive and capable skipper. Tunny also had another advantage in that by early 1943, U.S. Navy codebreakers at Fleet Radio Unit Pacific (FRUPAC) had broken-and were copying with great regularity-the Japanese "Maru" code. Although not as sophisticated as the Japanese JN-25 series navy general operating codes, the Maru code nevertheless contained extremely valuable intelligence about Japanese ship movements. Lieutenant Commander Jasper Holmes had the lead for FRUPAC for sanitizing and passing communications intelligence-derived data to Commander, Submarine Force Pacific (COMSUBPAC) in a way that would not compromise the sensitive source. The ad-hoc process actually worked very well. As U.S. submarines were increasingly provided with the sanitized intelligence, their opportunities to sink

Japanese ships also increased. The faulty torpedoes, however, were still a problem. (In H-Gram 008/H-008-3 "Torpedo Versus Torpedo," I discussed these problems in detail.)

Tunny departed Pearl Harbor on 18 March 1943 for her second war patrol. After a brief stop at Midway Island she commenced transit on March 24 toward Japanese-held Wake Island. While conducting reconnaissance around Wake Island, Tunny sank the Japanese cargo ship Suwa Maru, firing two torpedoes for one hit. Tunny then survived being depth-charged and bombed twice. She moved on from Wake, and based on intelligence, located and sank the cargo ship Toyo Maru on April 2-firing three torpedoes for one hit. Lieutenant Commander Scott had a good shot at the cargo ship, but not the escorting destroyer 1,000 yards behind. He boldly sank the Toyo Maru anyway. *Tunny* then survived two sustained depth charge attacks. On 4 April, *Tunny* sank the cargo ship Kosei Maru-two for two on torpedoes. She then endured yet another sustained depth charge attack from escorting destroyers.

Lieutenant Commander Scott was among those submarine skippers who had come to believe, based on hard experience, that war-shot torpedoes ran deeper than the depth for which they were actually set. Since U.S. torpedoes were intended to pass under a ship and explode via magnetic influence, this was a serious problem. Although the Bureau of Ordnance continued to place the blame for poor results on the skippers rather than the torpedoes, some skippers like Scott were compensating by setting their torpedoes to run shallow. For the first part of this war patrol, Scott was having decent success with this technique, having sunk three ships in three attempts. What Scott didn't know for surealthough he and other skippers suspected-was that the magnetic exploders were also unreliable. After that problem was discovered and fixed-by de-activating the magnetic exploder-it was learned that the contact exploders were unreliable too.

On April 8, the Intelligence analysts and codebreakers at FRUPAC decrypted a Maru code message that indicated a convoy including three aircraft carriers was due to arrive at the Japanese stronghold of Truk Island on early morning of April 10. Tunny was vectored to intercept. Scott planned to make a night surface attack, with his decks awash, making use of Tunny's new "SJ" radar, which the Japanese had no means to detect. As described in the introduction, Scott's initial set-up was textbook perfect, and although it was disrupted by the untimely appearance of three motor torpedo boats which forced him to attack submerged, it was still a great tactical set up. All four of the stern torpedoes fired at the lead smaller carrier were heard to explode, and three of the six fired at the larger carrier were heard to explode. Yet another sustained Japanese counterattack by depth charges kept Tunny from getting visual or other confirmation of the hits.

Commander, Submarine Force Pacific would describe Scott's attack as "an illustrious example of professional competence and military aggressiveness." And it was-except for the torpedoes. In this case, setting them to run shallow backfired. The carriers were larger than the previous targets Scott had attacked, and the combination of shallow depth and larger magnetic signature caused the magnetic exploders to detonate prematurelyapproximately 50 yards from their targets. These malfunctions were confirmed by subsequent intercept and decryption of Japanese communications that identified the small escort carrier *Taiyo* as having suffered minor damage as a result of the premature detonation of torpedoes. Analysis of this failure was a major factor in Admiral Nimitz' decision to order the deactivation of the magnetic exploders in June 1943.

Tunny's attack on the three carriers off Truk is also a great case study in how the "fog of war" becomes the "fog of history." The identity of the three carriers is still in doubt, with the exception

of the Taiyo. Accounts that identify the carriers by name state they were Junyo, Hiyo, and Taiyo. This, however, would not match Scott's description of one large and two small carriers. Junyo and Hiyo were sisters, and although not full-size fleet carriers, were much larger than Taiyo. The small escort carrier Taiyo-and her sisters Chuyo and Unyo-proved to be a bad design, and the Japanese used them as aircraft-transport ferries rather than operational aircraft carriers. The three generally made runs between Japan and Truk ferrying aircraft. Japanese records show that Taiyo departed Yokosuka, Japan on April 4, in company with her sister Chuyo and escorts en route to Truk via Saipan. A U.S. submarine reported sighting the Junyo and Hiyo at Saipan at the same time Japanese records show Taiyo and Chuyo there. This misidentification made its way into official reports, and later histories. Japanese records also confirm that Taiyo and Unyo were present during Tunny's attack, and would account for Scott's sighting of two small carriers. The Junyo and Hiyo, as well as the Fleet Carrier Zuikaku and the smaller Zuiho, were at or near Truk at the time of the attack after having flown off their air groups to Rabaul and the Bougainville area of the northern Solomon to participate in Operation I-GO (see H-018-2). However, Japanese records do not indicate which, if any, of those other carriers were present during Tunny's attack. On the other hand, the records of Zuikaku, Zuiho, Hiyo, Taiyo, and Unyo all eventually wound up on the bottom of the ocean. Only Junyo survived the war-sort ofas a badly damaged derelict in port, having been hit by three torpedoes from a "wolf pack" of three U.S. submarines. Unyo would be sunk by USS Sailfish (SS-192) on 4 December 1943, also near Truk. The true identity of the "large" carrier may never be known.

Tunny's adventure was not yet over. On April 11, *Tunny* sighted the Japanese submarine *I*-9 on the surface near Truk. *Tunny* fired her three remaining forward torpedoes at the *I*-9; however, the Japanese submarine maneuvered to avoid them and counter-fired. Two torpedoes narrowly missed *Tunny*. She was then unsuccessful in trying to maneuver to sink a Japanese destroyer with her last torpedoes. The Japanese destroyer attacked first, and *Tunny* was pounded yet again by depth charges, sustaining minor damage. She then concluded her patrol at Midway, and would receive a Presidential Unit Citation for her second war patrol. Lieutenant Commander Scott was awarded a Navy Cross.

Tunny would survive nine war patrols, and the fifth, also under the command of Scott, would earn her a second Presidential Unit Citation and a second Navy Cross for Scott. Among the highlights was *Tunny's* duel with the Japanese submarine I-42. Although details are sketchy, it appears both submarines were aware of the other, and both maneuvered for about 90 minutes at relatively close range (under 2,000 yards) trying to gain a firing advantage over the other. Tunny won, and sank the I-42 with two torpedoes. Later in the patrol, Tunny fired six torpedoes at the Japanese super-battleship Musashi. The torpedoes passed under an escorting destroyer, which alertly signaled the Musashi, which was able to avoid all but one torpedo, which hit in her bow. The destroyer than counter-attacked down the torpedo wakes and subjected *Tunny* to yet another beating. The damage didn't really faze the huge battleship, but she was out of action for a month for repairs.

Tunny continued her distinguished service after World War II. She was re-commissioned during the Korean War but did not serve there. Instead she was extensively modernized and converted to carry the Regulus land-attack surface-to-surface missile (with hangar for two missiles, and a launcher.) *Tunny* was re-designated as SSG-282. The drawback to the Regulus was that the submarine had to be surfaced to fire the missile. In 1966, *Tunny* was converted yet again into a troop-carrying submarine, with a deck shelter for small amphibious vehicles, and re-designated APSS-282. *Tunny* then conducted special operations and supported Marine amphibious operations along the coast of Vietnam. *Tunny* finally met her end as an exercise target, by a torpedo fired by the USS *Volador* (SS-490) in 1970.

(Sources include the same as H-018-2, plus: *Pig Boats: The True Story of the Fighting Submariners of WW II* by Theodore Roscoe and *Silent Victory* by Clair Blair, Jr., as well as Morison's series. The website combinedfleet.com has extensive data about Imperial Japanese Navy Operations.)



Alexander G. Lyle, shown here as a vice admiral (Dental Corps), circa 1948 (NH 48019).



Lieutenant (Junior Grade) Weedon E. Osborne, USN (DC) (NH 47548).

H-018-4: 100th Anniversary of World War I—Dental Valor

H-Gram 018, Attachment 4 Samuel J. Cox, Director NHHC April 2018

Medal of Honor Citation for Lieutenant Commander Alexander Gordon Lyle, U.S. Navy Dental Corps:

"For extraordinary heroism and devotion to duty while serving with the 5th Regiment, U.S. Marine Corps. Under heavy shellfire, on 23 April 1918 on the French Front, Lieutenant Commander Lyle rushed to the assistance of Corporal Thomas Regan, who was seriously wounded, and administered such effective surgical aid while bombardment was still continuing, as to save the life of Corporal Regan."

Lieutenant Commander Lyle's Medal of Honor is located at the National Naval Medical Center (now Walter Reed) in Bethesda, MD. Since Lieutenant Commander Lyle survived, no ship was named in his honor.

Medal of Honor Citation for Lieutenant (Junior Grade) Weedon Edward Osborne, U.S. Navy Dental Corps:

"For extraordinary heroism while attached to the 6th Regiment, U.S. Marines, in actual conflict with the enemy and under fire during the advance on Bouresche, France on 6 Jun 1918. In the hottest of the fighting when the Marines made their famous advance on Bouresche at the southern end of Belleau Wood, LTJG Osborne threw himself zealously into the work of rescuing the wounded. Extremely courageous in the performance of this perilous task, he was killed while carrying a wounded officer to a place of safety."

Lieutenant (Junior Grade) Osborne and the Marine officer he was carrying, Captain Duncan, were both killed by shellfire. The destroyer USS *Osborne* (DD-295) was named in his honor and served during the 1920s before being sold off and converted for use as a commercial banana boat in Central America. Upon the outbreak of World War II, the re-named vessel was required and refitted to run the Japanese blockade of Bataan and Corregidor in the Philippines, but it made it only as far as Australia before the Philippines fell. She caught fire in Sydney Harbor in 1942 and was unsalvageable–eventually being deliberately sunk off Sydney in 1947.

Lieutenant (Junior Grade) Osborne's rare "Tiffany Cross" Medal of Honor was recovered by the FBI after someone tried to sell it—it had been first stolen from the family in the 1950s—and provided to the National Museum of the U.S. Navy in 2003. There has been discussion as to whether it actually is the original or a replica, but is believed to be the original.

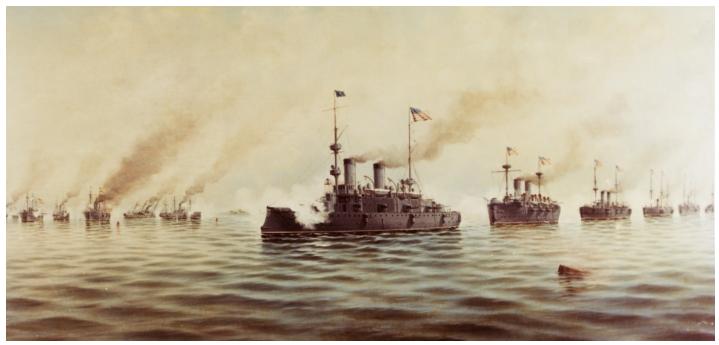
I realize that my H-grams are about naval history, but there was only one other dental officer in any service to be awarded the Medal of Honor: Captain Ben L. Salomon, U.S. Army. I find his Medal of Honor citation to be worth the read.

"For conspicuous gallantry and intrepidity at the risk of his life above and beyond the call of duty:

"Captain Ben L. Salomon was serving at Saipan, in the Marianas Islands on July 7, 1944, as the surgeon for 2nd Battalion, 105th Infantry Regiment, 27th Infantry Division. The Regiment's 1st and 2nd Battalions were attacked by an overwhelming force estimated between 3,000 and 5,000 Japanese soldiers. It was one of the largest

attacks attempted in the Pacific Theater during World War II. Although both units fought furiously, the enemy soon penetrated the Battalions' combined perimeter and inflicted overwhelming casualties. In the first minutes of the attack, approximately 30 wounded soldiers walked, crawled or were carried into Captain Salomon's aid station, and the small tent soon filled with wounded men. As the perimeter began to be overrun, it became increasingly difficult for Captain Salomon to work on the wounded. He then saw a Japanese soldier bayoneting one of the wounded soldiers lying near the tent. Firing from a squatting position, Captain Salomon quickly killed the enemy soldier. Then, as he turned his attention back to the wounded, two more Japanese soldiers appeared in the front entrance of the tent. As these enemy soldiers were killed, four more crawled under the tent walls. Rushing them, Captain Salomon kicked the knife out of the hand of one, shot another and bayoneted a third. Captain Salomon butted the fourth enemy soldier in the stomach and a wounded comrade then shot and killed the enemy soldier. Realizing the gravity of the situation, Captain Salomon ordered the wounded men to make their way as best they could back to the regimental aid station, while he attempted to hold off the enemy until they were clear. Captain Salomon then grabbed a rifle from one of the wounded and rushed out of the tent. After four men were killed while manning a machine gun, Captain Salomon took control of it. When his body was later found, 98 dead enemy soldiers were piled in front of his position. Captain Salomon's extraordinary heroism and devotion to duty are in keeping with the highest traditions of military service and reflect great credit upon himself, his unit, and the United States Army."

It is also noteworthy that it took until 2002 for Captain Salomon to be awarded the Medal of Honor, which was originally turned down because he was wearing an arm brassard with a red cross. At the time the Geneva Convention stipulated that medical personnel could not bear arms against the enemy, although more recent interpretations are that it is permissible for medical personnel to defend themselves with pistols or rifles. For many years, the sticking point was Salomon's use of a "crew-served" machine gun. Nevertheless, after many years and many attempts to get Salomon the award, President George W. Bush approved it in 2002.



"Battle of Manila Bay, Sunday, May 1, 1898," by Dr. Alfonso Saenz, a Spanish naval surgeon. Painted in 1899 (KN 619).

H-018-5: 120th Anniversary of Spanish-American War—Battle of Manila Bay, 1 May 1898 "You May Fire When Ready, Gridley!"

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H-Gram 018, Attachment 5 Samuel J. Cox, Director NHHC April 2018

In the mid-1890s, as tensions between the United States and Spain increased due to the rebellion in the Spanish colony of Cuba, the U.S. Navy began planning for the possibility of conflict with Spain. For about four years, the U.S. Navy worked on a plan for the U.S. Asiatic Squadron to defeat the Spanish Pacific Squadron-based in the Philippines-immediately upon the outbreak of war. At that time, war planning was mostly done at the U.S. Naval War College in Newport, RI. Although sidetracked for a bit due to a war scare with Japan, the plan was well-advanced when it appeared war was imminent. The war scare occurred when Japan deployed a cruiser to the Hawaiian Islands in response to reports of discrimination against Japanese nationals by the

Dole regime (basically U.S. businessmen/planters who had overthrown the native-Hawaiian monarchy).

In anticipation of having to execute the plan, the high-energy Assistant Secretary of the Navy, Theodore Roosevelt-compared to the much more low-energy Secretary of the Navy John Davis Long-hand-picked Commodore George E. Dewey to assume command of the U.S. Asiatic Squadron in January 1898. Dewey had a distinguished himself under fire during the Civil War at the battles of New Orleans, Port Hudson and Fort Fisher. Dewey was deeply impressed by the Union commander in the first two battles, Admiral David Farragut, and would later state that whenever in a tough situation he would ask, "what would Farragut do?" Dewey was also a voracious consumer and user of intelligence, devouring many books and reports on the Philippines in the Navy Department Library and Office of Naval Intelligence (then co-located) before he reported for duty in the Far East. Once there, he established close relationships with the U.S. consul general in Manila, and through that means quickly developed a very accurate understanding

of the Spanish squadron's strength, capability, and condition of readiness. He then implemented a rigorous battle training program for the Asiatic Squadron, at that time operating out of Hong Kong. He would later say that the battle of Manila Bay was won in the harbor of Hong Kong (due to the extensive training.)

Dewey's flagship was the protected cruiser USS Olympia (C-6). ("Protected" meant it had armor protecting vital areas, as opposed to "unprotected" cruisers.) Completed in 1895, Olympia benefited from lessons of many of the design flaws in ships built in the late 1880s and early 1890s as the U.S. Navy rapidly came out of a protracted period of stasis and neglect after the Civil War. Armed with two twin 8-inch gun turrets fore and aft, ten single 5-inch guns, four Gatling guns, and six 17-inch torpedo tubes, Olympia displaced 5,300 tons and could make a top speed of 21.7 knots. Olympia was the technological cutting edge of her day. (She is still preserved as a museum ship in Philadelphia, and a visitor will note the numerous "first of's"-such as tripleexpansion engines-of a truly modern warship, as well as a few "last of's" such as a ram bow and sail rig.)

Dewey had three other protected cruisers in his squadron, which were a mishmash of design and capability. USS Boston was the oldest (1884) and least capable, and was one of the original "ABC" program of ships that started the U.S. Navy out of the doldrums. USS Baltimore (C-3) was newer (1890) and had served as the Asiatic Squadron flagship in the early 1890s and had just returned from Hawaii. USS Raleigh (C-8) was newer (1894) but only had 6-inch guns as her main armament. The squadron also had two gunboats, USS Petrel (PG-2) and USS Concord (PG-3), both decently armed for gunboats with 6-inch guns. Dewey also incorporated the revenue cutter McCulloch, which just happened by en route to the U.S. West Coast via the Mediterranean and Indian Ocean. As the threat of war became imminent, Dewey augmented his capability by purchasing the

collier Nanshan and supply vessel Zafiro, both foreign-flagged ships that happened to be in Hong Kong, complete with their crews and cargo. (Obviously, procurement regulations were different at the time, but they were remarkably efficient).

By contrast, the Spanish Pacific Squadron was in deep trouble before the war even started. Contra-Almirante (Rear Admiral) Patricio Montojo's ships were outdated, poorly-maintained, undermanned, short on ammunition, and several ships had already been transferred to the Atlantic. Spain's strategy seemed to be based more on saving face than putting up an effective fight. Montojo's flagship was the unprotected cruiser Reina Cristina. Armed only with 6.4-inch guns and a top speed of 16 knots, she was the queen of the squadron but no match for Olympia. Montojo's biggest ship was Castilla, but her 8-inch guns had been stripped to equip shore batteries; she was no longer capable of steaming under her own power and had to be towed. The rest of Montojo's squadron consisted of two small, unprotected cruisers and two even smaller protected cruisersand a gunboat.

Montojo clearly understood that his ships were no match for the U.S. Asiatic Squadron. With war declared on 25 April, Montojo received word on April 28 that Dewey was underway from Hong Kong. Montojo had initially planned to mount his defense of the Philippines at Subic Bay, but quickly abandoned that idea as it was unlikely he could get his ships there in time, if at all. He opted to anchor his force off the Cavite Peninsula in shallow water and await the Americans there. Although there were shore batteries at Cavite, they did not have range to reach the U.S. ships. A primary rationale for where Montojo anchored was to give his sailors the best chance of survival. He chose not to anchor under the protection of Fort San Antonia Abad, whose 9.4-inch guns could outrange the Americans, for reasons that must have made sense to him. On 30 April, Montojo was informed that Dewey's force had

reached Subic Bay, so he anticipated the U.S. squadron to arrive off Manila after midday on 1 May.

The entrance to Manila Bay was generally considered to be unnavigable at night, and at least the northern of the two channels had reportedly been mined. Adopting the "damn the torpedoes" attitude of his role model, Farragut, Dewey boldly led his ships through the little used and poorly charted southern channel under the cover of darkness. Some reports claim a couple Spanish mines exploded but were ineffective, but details are vague. A shower of sparks from McCulloch's stack apparently attracted some ineffective Spanish-shore-battery-fire. The only known U.S. fatality of the operation was the chief engineer of McCulloch, who suffered either a heart attack or heat exhaustion while trying to put out the soot fire in McCulloch's stack. Regardless, the Spanish were surprised and shocked to find the U.S. ships off Cavite at 0515 in the morning. The Spanish ships and shore batteries at Cavite opened fire first, but the U.S. ships were out of their range.

At 0541, Commodore Dewey gave his immortal command, "You may fire when ready, Gridley," and the U.S. force began methodically blasting the Spanish squadron. "Gridley" was Captain Charles Vernon Gridley, commanding officer of *Olympia*. Gridley was actually very seriously ill, and would die on 5 June 1898, probably from a combination of dysentery and liver cancer. He died in Japan while being transported back to the United States for treatment. (Like Dewey, Gridley also had a distinguished Civil War record and served with Farragut at the battle of Mobile Bay).

For the next couple hours, Dewey's force steamed back and forth-five times-firing first to port, reversing course, then firing to starboard. With each pass, range to the Spanish decreased from 5,000 yards at first, to 2,000 yards at the end. At this point, Montojo, with his return fire completely ineffective, ordered his ships to attempt to ram the U.S. ships. His flagship, *Reina Cristina*, succeeded in getting underway, and as a result, drew heavy fire. Within a short period, 200 of her crew of 400 were casualties, including Montojo, with a heavy loss of life among her gun crews. Montojo ordered the heavily damaged ship into shallow water and scuttled her. The unprotected cruiser *Ulloa* also attempted to get underway, but was holed below the waterline; her captain killed and half the crew were casualties. The immobile *Castilla* only had guns on her port side, and when the tide swung her in the opposite direction, her captain ordered her abandoned and scuttled.

At 0745, the fog of war struck when Dewey received a report that his ships were down to 15 rounds of ammo per gun. Dewey then ordered a withdrawal, but so as not to affect the morale of the men, said they were withdrawing for "breakfast." The ships' captains then all convened on *Olympia* and determined that they had suffered little damage and no men killed. It was also discovered that the ammunition report had been garbled; the true report was that only 15 rounds per gun had been expended.

At 1045, apparently after a leisurely breakfast, the U.S. ships resumed firing on the Spanish, but the great majority of damage had already been done. The Spanish put up little further resistance. Ulloa finally sank, and Montojo ordered the entire fleet scuttled, after disabling all guns. U.S. ships then shifted fire and silenced shore batteries on Sangley Point. The Spanish struck their colors at 1240. Reina Cristina was hit about 80 times, Castilla about 50 times, and Ulloa 33 times. The other Spanish ships were all hit between three and 13 times. Nevertheless, despite the one-sided nature of the battle, the accuracy of U.S. gunnery was abysmal. Of 5,859 shells expended, only about 170 hit Spanish vessels. Improving gunnery accuracy would become a major issue in the U.S. Navy over the next decade, and ideas for how to do so would provoke dissension and controversy. Casualty figures for the Spanish vary widely depending on the source. My United States Naval

Academy *Seapower* textbook says 381 were killed and U.S. ships hit 15 times. The U.S. forces suffered seven or nine wounded (depending on the source), although the Spanish would later claim Dewey hid a higher number of killed and wounded in the approximately 150 U.S. Sailors who deserted in the Philippines over the next months.

Having won a great victory, Dewey was faced with the perennial problem of, "now what?" The U.S. Navy had a plan to defeat the Spanish navy, but the United States did not have a plan to annex the Philippines. The city of Manila remained in Spanish hands. In a somewhat bizarre event, Dewey asked the Spanish governor general to use the cable from Manila to Hong Kong so that he could request instructions from the U.S. government about what to do. Somewhat unsurprisingly, the governor general refused. Dewey then had the cable cut, and he was then on his own to make decisions about the future of the Philippines. Despite the loss of the Spanish squadron, the city of Manila refused to capitulateand would not do so until August 1898. In the meantime, Dewey and the U.S. would get drawn in to the ongoing insurrection against the Spanish by much of the Filipino population. Dewey was eventually able to get word to the United States that he had sufficient force to take the city-in cooperation with Filipino rebels- but would not be able to hold it. In a surprisingly short period of time, by May 28, a U.S. Army division of 11,000 men left San Francisco on the way to the Philippines and long-term involvement in the islands. Along the way, the cruiser USS Charleston made a side trip and conducted a bloodless capture of Guam, whose Spanish governor had not yet learned there was a war on.

Dewey's situation in Manila Bay became more complicated in June 1898, when the German Asiatic Squadron showed up uninvited. Under the command of Vice Admiral Otto von Diederich, the German Squadron made no overtly hostile moves, although Dewey believed the Germans were rude, arrogant, and engaged in suspicious activity with ulterior motives. Given that the U.S. squadron was low on ammunition, Dewey was careful not to provoke the Germans. At the time, the Germans under Kaiser Wilhelm II were trying to make up for lost time and catch up to the British and French in acquiring colonies—and coaling stations—around the world. If the U.S. wasn't going to annex the Philippines the Germans apparently were itching to do so. Eventually, the Germans went away.

The Spanish made an attempt to send a relief force to the Philippines, which included the battleship *Pelayo*, but it only made it as far Suez, before Spain determined they would be better used defending Spain's own coast after the crushing defeat of the Spanish squadron in Cuba in July 1898– the battle of Santiago. The United States had a plan to bombard Spain, and two battleships (*Iowa* and *Oregon*) and the armored cruiser *Brooklyn* were ordered to do so, but the operation was cancelled before the ships ever left the Caribbean.

Dewey's victory catapulted him to immense fame. The U.S. newspapers hyped the victory and it seemed every artist in the United States did a painting of the battle. Dewey actually ran for election for president in 1900, but withdrew before the election, and the incumbent William McKinley was re-elected-and then assassinated. Dewey was then appointed as president of the new General Board for the U.S. Navy. The General Board consisted of very senior U.S. naval officers whose purpose was to advise the Secretary of the Navy, and to try to break down the stovepipes between the different Navy bureaus that tended to operate as independent fieldoms. (There will be more on this in a future H-gram, because this power struggle would eventually lead to the creation of the Office of the Chief of Naval Operations in 1915 and the OPNAV staff). Dewey, with the rank of Admiral of the Navy (the only U.S. admiral ever to hold that rank) served as the president of the General Board until his death in

1917, although he had largely been incapacitated by a stroke in 1914.

(Sources for this piece include; *Sea Power* by E. B. Potter-the classic history of seapower textbookand *History of the U.S. Navy* (Volume 1) by my academy advisor, Professor Robert Love. Also Al Nofi's 1997 book, *The Spanish American War*, 1898.)