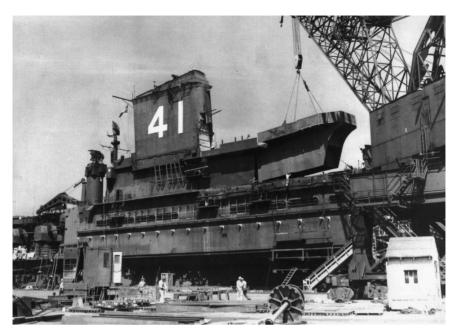
Chapter 1

Coming of Age

The world was at war in 1943. America fought Germany to the east and Japan to the west. Although the tide of battle had begun to turn in the Americans' favor, the outcome was far from certain. Aircraft and ship construction was a top national priority. On October 27, work began in a Virginia shipyard on the USS Midway, an aircraft carrier that would become the largest and most sophisticated warship in the world. Construction continued twenty-four hours a day in a race to get Midway into the war.

Meanwhile, the life path of millions of American boys in high school in 1943 was clearly marked. Within a year or two, they would be fighting for their country, whether they wanted to or not. During World War II, a senior in high school could volunteer for the military before he finished his final semester and still receive his high-school degree. He could be as young as seventeen and still volunteer, with his parents' permission. By volunteering, he could choose the Navy, Army, or Marines. Or he could wait to be drafted and have no choice as to where he would be assigned. A young man's life in 1943 was decided by others. He knew he could be sent to fight and was expected to die if necessary.

It might be on a tiny Pacific atoll such as Tarawa, smaller than New York City's Central Park. It might be in the snow-laden forests of France, where men lost blackened fingers to frostbite. He could be assigned to a unit chasing Germans across the North African desert. It might be aboard a submarine that hunted the enemy from deep in the frigid North Atlantic Ocean.



Construction of the USS *Midway* continued around the clock in order to enter World War II. Built in only seventeen months at a cost of \$90 million, it became the largest and most powerful ship in the world, but it missed the war by one week.

More than eleven million teenagers were drafted into military service in World War II, in addition to the six million who volunteered. Battle hardened those who survived. Some came of age aboard the USS Midway aircraft carrier when it was ready for sea duty. They became part of an unprecedented forty-seven-year odyssey beginning on September 10, 1945. Their orders were to preserve a newfound fragile peace.

Buddy Herrmann's hands ached as he held onto the USS *Midway* aircraft carrier's brass steering wheel in the darkened pilothouse. The young sailor, who usually had duty in one of the carrier's anti-aircraft gun turrets, was temporarily assigned to stand night watch at



World War II's exposed aircraft engines posed unique challenges when the USS *Midway* sailed into sub-Arctic water. The oil in the engines had to remain heated overnight so crews could start the planes when air operations were scheduled.

the helm in the island high above the flight deck. Darkness blanketed *Midway* as sixty-knot winds drove rolling mountains of waves into its side. Each wave's attack threatened to spin the wheel free of his grip and throw Herrmann against nearby equipment. Bruised and battered, he leaned hard into one thundering wave after another through the night.

Down on the hangar deck where *Midway*'s planes were repaired and parked, each ship's roll threw men off their feet. They bounced on the nonskid surface, scraping arms, legs, and faces. Some broke fingers when they tried to keep from falling. Sailors on the hangar deck nearly lost their balance every few seconds as the ship rolled



Men working on the flight deck off the coast of Greenland faced permanent frostbite injuries during a daring operation called "Operation Frostbite" in 1946. The USS *Midway* was the first carrier to operate extensively in the midwinter sub-Arctic.

with the waves. It was 1946, and the Labrador Sea near Greenland threatened to pound the life out of *Midway*.

Four years earlier, when most of *Midway*'s crew still attended high school, Pres. Franklin Delano Roosevelt had faced a huge decision in December 1942. It had been six months since the American Navy had inflicted a stunning defeat on the Japanese in a sea battle near Midway Atoll in World War II. The Navy had broken the Japanese communication code, which enabled it to spring a trap on a powerful

fleet of Japanese warships. Had the enemy seized Midway, Japan would have been in a position to attack Hawaii and threaten the continental United States. But the Americans prevailed and the tide of war in the Pacific turned in their favor.

America still faced a massive battlefield across the Pacific Ocean, however. Should the president authorize faster construction of dozens of small, escort aircraft carriers with limited capability or approve a huge, new kind of aircraft carrier that would dwarf everything afloat and transport more than one hundred aircraft into battle? If the enemy somehow sank that kind of ship, it could become a devastating Navy loss.

After many discussions in the White House and Pentagon, President Roosevelt decided to build the largest, most powerful ship the world had ever known. It was named the USS *Midway* in honor of America's victory at Midway Atoll. Shipyard welders, electricians, plumbers, steamfitters, and others were assembled to work seven days a week to get *Midway* into the war as soon as possible.

Meanwhile, Dudley Gilbert in Rhode Island, John Rieman in Missouri, Donald Fry in Pennsylvania, and Don Struchen in Iowa were freshmen or sophomores in high school. They had no idea that in a few short years they would help launch a ship on an odyssey that would continue for an unparalleled forty-seven years.

Newport News Shipbuilding & Dry Dock Company in Virginia received a \$90 million contract to build the USS *Midway*. Work got under way on October 27, 1943. Within a few months, the 29,000-ton hull took shape as shipyard workers pored over ninety tons of blueprints in an era long before computer-aided designs.

They worked continuously to assemble the Navy's first steel flight deck on *Midway*. (Earlier aircraft-carrier flight decks made of wood had proved vulnerable to attacks by suicide Japanese dive bombers.) Welders joined together a 196,000-piece flight-deck jigsaw puzzle.

Some pieces weighed several tons and others as little as a pound. Once they completed the flight deck, workers assembled eight, 650-square-foot wooden houses on the deck to protect the welders as they worked through the night. A small city of thousands of shipyard workers toiled around the clock for almost eighteen months, eager to get the USS *Midway* into the war.

By March 1945, the USS *Midway* shipyard workers were ready to slide the nearly finished *Midway* from its dry dock and into the water for the first time. Called the "christening," the centuries-old ritual of slamming a full champagne bottle against its bow was watched by



When the USS *Midway* was commissioned in 1945, it became the largest ship in the world for a decade and the first U.S. Navy ship too large for the Panama Canal (five feet too wide).

thousands. A daring pilot who had survived the Battle of Midway, Ensign George Gay, was a guest of honor. Speakers urged the audience to buy war bonds to help pay for the war and in honor of the world's most sophisticated aircraft carrier.

When completed and commissioned six months later on September 10, *Midway* became the first U.S. Navy ship too wide for the Panama Canal. It was a floating steel honeycomb of 1,750 watertight rooms, called compartments in the Navy. The small compartments made the carrier less vulnerable to flooding from torpedo damage. Four turbines fed by twelve boilers were spread throughout the ship to improve survivability. Although that made it difficult to work on them, they produced 212,000 horsepower. *Midway*'s top speed was thirty-three knots, fast enough for a sailor to water-ski behind an aircraft carrier that weighed 90 million pounds.

Midway's final construction phase came at a time when America was slowly winning the war in both Europe and the Pacific. The battle for a small Pacific island called Iwo Jima had raged for nearly a month. But victory remained uncertain. America continued drafting young men for military duty. Many decided to enlist before they received a draft notice, so they could choose the Navy, Marines, Army, or Army's Air Force. From every corner of America they were sent to basic-training camps.

Joe Delaney hated living with his divorced father in Waltham, Massachusetts while his brother and sister lived with his mother in New York. He was seventeen years old in 1944 and miserable. He talked his father into allowing him to enlist in the Navy. Joe was sure he would be fighting the Japanese a few months later. He was trained to be a communications specialist.

Ray Shirley spent most of his boyhood in Tennessee and northern Georgia. After graduating high school, he spent two years behind a mule and a plow or handpicking cotton in hot and humid summers on the family farm. He decided there had to be a better way to make a living. He volunteered for the naval air corps. After training, he was responsible for taking care of bombs.

After growing up in a Missouri orphanage, John Rieman enlisted as soon as he turned seventeen, about the same time that construction got under way on the USS *Midway* in 1943. The Navy sent him to North Africa and he became a cook.

The son of a watch adjuster in rural Connecticut, Buddy Herrmann enlisted and left a family so poor they had to hunt ducks in the fall and fish in the summer to put food on their table. In the absence of a refrigerator, they had Jell-O only in the winter, when it was cold enough for his mother put it outside on a windowsill so it could thicken. Herrmann would learn how to fire the anti-aircraft guns that were installed around the edge of *Midway*'s flight deck.

The reasons varied for others who enlisted and ultimately were assigned to *Midway*. "It was just the right thing to do. Everyone else was joining up and by enlisting I had a choice of what service I'd serve in," said one sailor. Some decided early in life that the Navy was for them.

Others were more calculating. "You couldn't get a date unless you joined the service," said Tom Turner, a Marine on *Midway*. Turner enlisted in the summer of 1944. After flunking out of a military foreign-language school, he would be trained to fire *Midway*'s antiaircraft guns.

Then the world changed. In the span of four days in August 1945, two nuclear bombs destroyed Japan's will to wage war. In the time it took to split an atom, the operational plan for *Midway* and its crew mutated. They would not fight the Japanese as they had expected. *Midway*'s mission became one of preserving a peace that had been won at a cost of more than one million dead and wounded American men and women by the end of World War II.



Leaving home to join the Navy and see the world also included hard work, such as keeping 1,750 rooms aboard the USS *Midway* clean. Some members of the crew were permanently assigned to ship's maintenance, deep below the water line.

A month later, thousands of men rode trains destined for Newport, Rhode Island. They had been told they were part of the first USS *Midway* crew. They were to become "plankowners," a title and maritime honor dating back to the era of wooden sailing ships. The original crewmembers of all ships were called plankowners. About three thousand men became *Midway*'s "ship's company"—the crew that ran the ship. Each had a specific job.

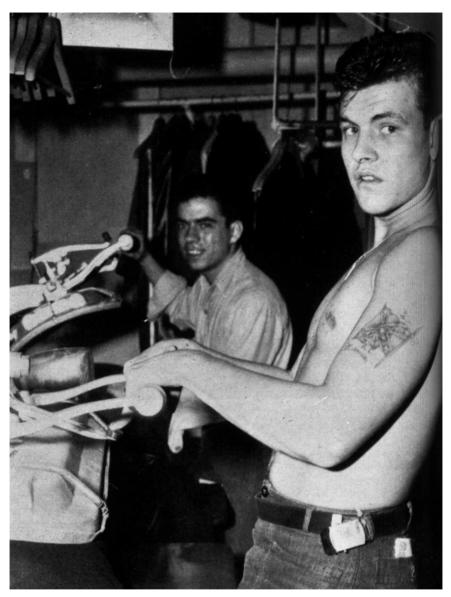
Dudley Gilbert would help operate the four, twenty-ton anchors and hundreds of feet of anchor chain, each link weighing 130 pounds. He had joined the Navy because it seemed everyone he knew was either in the military or working for a defense contractor. He felt that it was his obligation to enlist when the country was at war. Don Struchen would join Tom Turner and Buddy Herrmann at the anti-aircraft guns. The Iowa farm boy didn't pass aviation radioman school so he was assigned to the guns. John Rieman would find himself in one of six kitchens, called galleys, aboard *Midway*. And Ray Shirley would report to the weapons department to help handle thousands of tons of bombs, including some classified as secret, and ammunition stored deep inside the aircraft carrier.

Another 1,500 young men represented *Midway*'s "air wing." They were the pilots, aircraft mechanics, and aviation supply personnel responsible for the 120 planes initially assigned to the USS *Midway*.

Midway became a small town crammed inside a massive ship. Almost everything found ashore was part of Midway: a newspaper, radio station, library, laundry, jail, welding shops, repair shops, dry cleaning, chapel, power plant, barber shops, dentist's office, sewage plant, water plant, plumber's shop, hospital, gymnasium, ice-cream shops, pharmacy, convenience stores, and more. Each had to be operated by a group of sailors, many of them still teenagers.



Sailors sought entertainment whenever they could find it during long deployments and combat operations. Some bet on the exact time *Midway* would drop its anchor when it reached a foreign port.



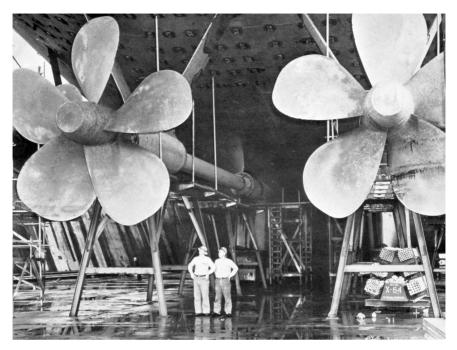
Midway was a floating city at sea with all types of jobs. Some sailors were assigned to the steam-filled laundry when they first reported aboard, prior to assignment to their permanent work station.



Midway's library contained 5,000 books.

Its population of 4,500 included young men from across America, many of whom had never seen the ocean. It also included hundreds of battle-scarred World War II veterans who had survived air-to-air dogfights high over the Pacific, sudden attacks by Japanese submarines, and even jumping into the sea as the ship under their feet sank to the bottom.

Midway stopped most sailors in their tracks the first time they walked up to the ship that soared more than 175 feet above them. The world had never seen such a large ship. It contained more than 2,500 miles of wiring connecting 12,000 lights and more than two



The huge size of the USS *Midway* amazed its crew. The four propellers each measured eighteen feet in diameter and weighed more than twenty tons. Each had to be perfectly balanced to operate properly for months at a time in the middle of the ocean.

thousand motors. More than three hundred heating and ventilation systems had been installed, along with firefighting sprinklers that sprayed 40,000 gallons of water a minute. At 968 feet, it was more than three football fields long, and its flight deck towered fifty feet above the ocean. Some of the 1,750 working and sleeping compartments were thirty feet below the waterline.

Officers handed each new sailor a booklet titled "This is the U.S.S. *Midway*, Largest, Fastest, Toughest Carrier Ever Built." It showed the crew how to tie socks together before sending them to the laundry. It reminded sailors: "When in doubt, 'SALUTE!" They were told



Sailors spent thousands of hours cleaning, polishing, chipping, and painting *Midway*. A clean environment was more efficient, safe, and healthy. It extended the life of equipment but also came at a cost of tedious and boring-but-necessary work at sea.



Early crews aboard the USS *Midway* tested its unprecedented size and capability to determine how blimps, helicopters, and jets could operate on its flight deck. The carrier pioneered several naval aviation standards that later influenced Navy operations at sea.

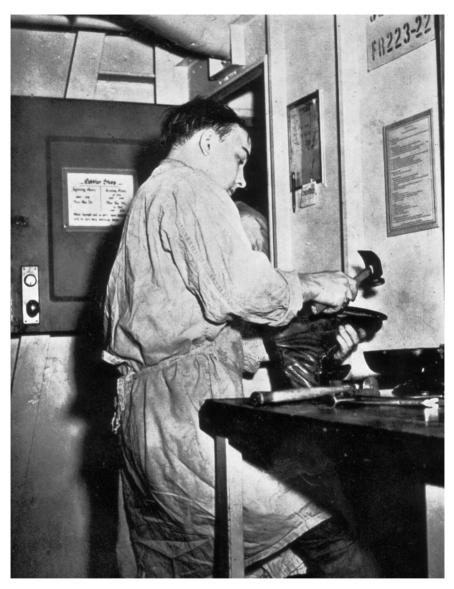
"filthy language . . . stinks up the Navy just as much as it does at home" and encouraged everyone to buy National Service Insurance to protect their family in case they died in the line of duty. Officers taught sailors that they must always wear the proper uniform and never wear white socks with a uniform or sport beards or earrings.

Each sailor had to find his way through a maze of passageways and compartments to report to his department chief. The galleys' size overwhelmed John Rieman when he reported as a cook. *Midway* cooks prepared 13,500 meals every day. *Midway*'s coffeemakers



The galleys' best cooks were assigned to the eighty-gallon, steam-heated tubs where soups, sauces, and gravies were prepared. They had no temperature gauges so they could only judge when a batch was ready to be served by the sound of the steam.

brewed 10,000 cups at a time. Bakers baked 1,000 loaves of bread every night. Two barrels of flour were required to fill a single dough mixer. If potatoes were on the menu, 3,000 pounds had to be peeled the night before. If the menu included beef, butchers had to trim and prepare 4,250 pounds of it. Every recipe was written in increments of 100 servings.



As a floating city at sea, *Midway* required a wide range of skills within its crew, from shoe repair to carpentry. Oftentimes, a skill that a sailor developed in the Navy became the basis for his career when he returned to civilian life.

Midway remained a warship, even though it joined the U.S. Navy fleet eight days after the end of World War II. In late 1945, Francis Derby and the rest of the crew sailed for the Caribbean aboard Midway to test its design, construction, and fighting capability. Derby had enlisted at age seventeen to avoid the draft. The Worcester, New York, native was a carpenter on Midway, an all-steel ship. Other than repairing cabinets and furniture in officers' staterooms and offices, he had little to do. One day during a seagoing test, he nearly dropped his saw when Midway's engines suddenly were thrown into reverse while steaming at full speed. The captain needed to know if the carrier could handle a sudden stop at that speed. A fierce shudder ran down the ship's spine and up the legs of Derby and every sailor on Midway. The carrier held together as the massive propellers reversed their spin.

The crew discovered that *Midway*'s designers had placed a low priority on their comfort. Although *Midway* had 291 blowers that



Sailors slept in canvas bunks stacked three high. On cruises to the tropics, a lack of air conditioning led to hot, humid sleeping compartments and sometimes moldy bunks. More than one hundred sailors slept in a single compartment.

pushed air through six miles of vents, the floating steel honeycomb absorbed and retained heat. The heat and humidity inside the ship became unbearable when *Midway* arrived in the Caribbean. Mildew began to grow on the sailors' canvas bunks. For some it got so bad that they dragged their thin mattresses to a secluded spot outside and slept under the stars.

In some compartments, crew bunks were stacked four high. The top bunk was so close to the ceiling, called the bulkhead on a ship, that a man couldn't turn over in his bed. To roll over, he had to climb down onto the deck, turn around, and then climb up over three sleeping sailors back into his bunk. It nearly caused a mutiny on *Midway*. When the carrier returned to port, many bunks were relocated so they could be three high instead of four.

The 400 officers on *Midway* slept in groups of 2 to 8, depending on their rank. Only the captain, his executive officer, and the admiral (who was responsible for the ships that sailed with and protected *Midway*) enjoyed traditional, freestanding beds in private bedrooms. Most sailors on the carrier slept in large compartments that held more than one hundred bunks. The aisles between them were only about two feet wide. A sailor couldn't pass another without turning sideways. The youngest and newest sailors were forced to sleep in bunks almost on the floor at the entrance. They rarely slept more than an hour at a time without someone walking by them. Privacy became a distant memory on *Midway*.

Sailors also were assigned bunks closest to their duty stations. The forty corpsmen slept in a room next to the sick bay. Many of the 200 cooks slept in a single compartment one level below the main galley in the middle of the ship. Usually only one or two ladders (among hundreds on *Midway*) separated crammed living quarters from where sailors worked. A sailor might spend eighteen months on the carrier and see less than 20 percent of the ship. Sailors were

discouraged from wandering through engineering plants, welding shops, or aircraft engine repair compartments. If a sailor didn't have business there, he had no business being there.

As a result, the USS *Midway* was composed of dozens of neighborhoods. A sailor slept, ate, worked, and played games with buddies in his medical, supply, aircraft repair, engineering, flight-deck, security, or other department. His loyalty started with the man next to him and extended perhaps to the chief petty officer who commanded him.



Sailors lived only a few feet from their work stations. These men, responsible for *Midway*'s massive anchor chains, slept just below the flight deck, where the aircraft were launched.



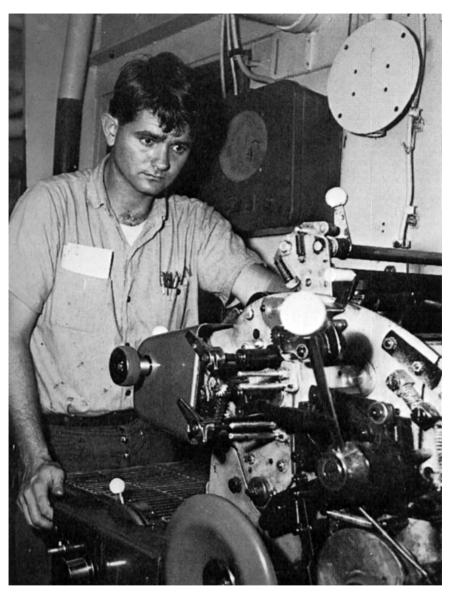
Comprehensive medical facilities were aboard *Midway*, including a hospital, called "sick bay," that included an intensive-care unit, two operating rooms, X-ray facilities, exam rooms, and a pharmacy. Only the sickest and most badly injured sailors were assigned to beds in sick bay. Next door was the dentist's office.

Usually the chief was a "grizzled veteran" in his early thirties. Young sailors learned to share their problems with their chief. In turn, he taught them how to cope in a life dictated every waking moment by the orders of others. He also taught them how to sober up after the last night on liberty, how to take care of a new tattoo, how easily a descending elevator could decapitate a careless sailor, or how a band saw could cut a hand in two if he didn't pay attention. Chiefs turned teenagers from Denver, San Diego, Waco, and Columbus into men. Chiefs ran the Navy, teaching and training one sailor at a time.

Midway's captain commanded all the neighborhoods aboard the carrier. In many ways he acted as the mayor of a floating city at sea. It was his job to get the neighborhoods to work together for months at a time, sometimes in the most brutal conditions possible. Twice as old as most of his crew, the captain strove to inspire green sailors. There was "the Navy way, the right way, and then there's the *Midway*," and he trusted his department heads to teach that. It was vital on *Midway*'s first mission.

America's relations with the Soviet Union's leader, Joseph Stalin, had become extremely strained in 1946. Stalin wanted to establish communism across Eastern Europe, while Pres. Harry Truman viewed expanding Soviet influence as a threat to democratic European countries. It became known as the Cold War: a battle of threats, moves, feints, and nerves between the United States and Soviet Union over world influence that stopped just short of open warfare.

The Soviet sub-Arctic worried American military planners. The Soviet Union had massive naval bases near the Arctic Circle, not far from Finland and Norway. The Soviets had the ability to invade Western Europe from the frozen north. The U.S. Navy had fought World War II mostly in the warm waters of the Pacific Ocean. Could the Navy stop a Soviet invasion in freezing conditions?



The majority of *Midway* sailors spent only a few years in the Navy, many of them learning skills that they used to build careers as civilians. As a floating city at sea, *Midway* produced pressmen, journalists, electricians, mechanics, nurses, X-ray technicians, pilots, tailors, policemen, attorneys, and others.



In a floating city at sea, there was no landfill for garbage. Classified documents were burned, while the bulk of refuse generated by 4,500 men went over the side of the ship.

The USS *Midway* would find out. In March 1946, Capt. A. K. Morehouse was in command when the aircraft carrier pulled out of Norfolk, turned north, and steamed toward Greenland—and weather that threatened to freeze a man's tear ducts shut forever if he didn't stay focused and remember his training.

Only six months old, *Midway* became the first carrier to operate extensively that far north in the winter. The sailors would have to find ways to keep aircraft in flying condition as sleet and snow blew across *Midway*'s slick, ice-covered flight deck.

Ten days after the ship left port, the weather roughened, the wind stiffened to thirty-five miles an hour, and *Midway*'s anti-aircraft guns next to Donald Fry crusted with ice. He had dropped out of high school as a junior in April 1945 and enlisted in the Navy. The bitter cold on *Midway* reminded him of winter storms in his hometown of York, Pennsylvania.

Waves approaching from the side threatened to sweep Fry, Buddy Herrmann, Tom Turner, and Don Struchen out of their gun turrets and into the sea. When the weather calmed slightly, they practiced firing the guns at targets pulled by aircraft. *Midway* had more guns than any of the forty aircraft carriers that had been built previously. Their job was to defend *Midway* in the last seconds when enemy aircraft descended to attack the ship. Within a few years, however, the arrival of powerful, high-altitude jets would render a carrier's anti-aircraft guns ineffective.

Then matters got worse as huge waves hit *Midway* head on. Usually fifty feet above the water, *Midway*'s bow dug into the waves, sending green, roiling water racing down the flight deck toward the stern. Because the carrier was so large, pilots who approached from the rear to land said when the bow dug into a wave, they could see the deck bend at the middle flight-deck expansion joint. The joints allowed the flight deck to bend in heavy seas but also allowed water into the ship's interior. Sailors who worked directly under the flight deck sometimes were soaked by torrents of water that cascaded through the expansion joints.



In heavy seas, aircraft could slide off the flight deck if they were not properly secured. Each aircraft's "plane crew" was responsible for its safety. They used heavy chains to secure the planes to the flight deck.

Sub-Arctic storms relentlessly assaulted *Midway*. When Fry was off duty and in his bunk three levels below the flight deck, he saw water running down *inside* the aircraft carrier's hull. When seas stayed rough, the cooks on *Midway* stopped cooking for fear of burning themselves. The aircraft carrier's galleys contained steam kettles, deep-fat fryers, and griddles the size of picnic tables. In rough seas, the most the sailors could expect from John Rieman and the rest of the cooks was coffee and sandwiches.

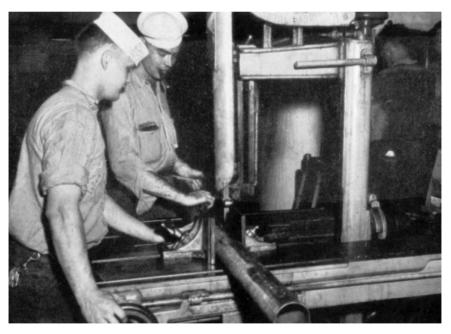
When *Midway* changed direction during this particular storm, the carrier started rolling from side to side. Joe Delaney's eyes widened



The USS *Midway* was built on what originally was a battleship-hull design. That made it very top heavy and prone to extreme rolling in high seas. New sailors often experienced seasickness only a few hours after leaving port for the first time. Some sailors called *Midway* the "USS *Rock 'n' Roll.*"

with each roll from one wave's crest to the next. *Midway* had been built on a hull concept originally contemplated for a lighter battleship. The narrow hull with a wide steel flight deck made *Midway* extremely top heavy. Back and forth the carrier rolled as sailors deep inside *Midway* grew green with seasickness.

Many young men aboard *Midway* were seeing the ocean for the first time. Few knew if they were prone to seasickness. Diesel fumes, greasy fried food, and claustrophobia made some sick before the ship left the pier. Some had to carry a bucket. When they felt nausea coming on, they stopped, threw up into the bucket, and then went back to work. Usually a sailor got over his seasickness after a week of very little food, vomiting, and dry heaves. For many, the sub-Arctic deployment brought a fresh round of illness.



Even if he were seasick, a sailor was expected to report for duty every day. When at sea, sailors worked seven days a week and looked forward to liberty ashore when *Midway* pulled into a foreign port.

It was even worse for *Midway* sailors ordered to stand out in the howling wind for hours at a time. Those who stood "smoke watch" had the coldest and most dangerous job. Perched on the highest platform on the mast, they reported whenever they saw the smoke rising from *Midway*'s twelve smokestacks darken. That indicated the fuel mixture needed adjustment. The ship's doctors discovered that the lookout's body temperature dropped four degrees during a four-hour watch in brutal wind and cold weather. Orders were issued that limited duty outside to two hours.

Meanwhile on the flight deck, Bill Larkin leaned into the gale. Before being assigned to *Midway*, he had patrolled the East Coast during World War II. Once, as his transport headed south to Puerto Rico, he saw a tanker torpedoed off the Georgia coast by a German submarine. On *Midway* he was a plane captain, making sure the planes were ready before the pilots climbed in. He needed three pairs of gloves to keep his fingers from freezing as snow whipped across the pitching deck. Larkin and others wrapped special blankets around aircraft engines to warm the motor oil. Sometimes they built small campfires under the engines to keep the oil from freezing, using their bodies as a windbreak. Larkin had one of the most dangerous jobs on *Midway*.

Aircraft crew chiefs such as Ray Shirley faced their own challenges. A pitching, windy, and snow-covered flight deck made it difficult to carry bombs to planes and attach them to wings and fuselages. There was no rail at the edge of the flight deck to keep Shirley from falling or being blown over the side and into the sea.

The ingenuity and dedication of Larkin and the flight-deck crew triumphed over weeks of bitter cold off the coast of Greenland.

Midway's pilots faced unique dangers of their own. If one crashed, near-freezing water became his enemy and life was measured in minutes. Pilots received specific instructions on how to wear the

new rubberized nylon "poopy suit" they had been issued: wear long underwear, two pairs of socks, two pairs of gloves, and a scarf. Avoid overheating and sweating by dressing slowly. Take your time, because perspiration becomes ice in the sub-Arctic. Walk to the plane. And don't touch freezing metal with bare hands.

Pilots learned they had to put the poopy suit on correctly if they hoped to survive a crash in frigid water. If one failed to tie the trouser bottoms tightly or neglected to cinch the scarf around his neck, thirty-five-degree water seeped inside the suit. A leaking suit would fill with seawater and pull him under the surface before a destroyer or helicopter could rescue him.



Early pilot rescues were as dangerous as plane crashes. This pilot was accidentally dropped on *Midway*'s flight deck when a rescue helicopter had difficulty landing.



The USS *Midway* returned to Norfolk, Virginia after a deployment to the Mediterranean in 1951. Note the single "straight deck" and the anti-aircraft guns on the bow. The carrier's angle deck was added in 1955-57.

On March 26, 1946, *Midway* turned south and left the Labrador Sea, reaching New York City on March 28. The crew had set several new winter-operations standards in naval aviation. Its pilots had crashed into paralyzing waters, and all but one had survived. Flight-deck crews had learned how to launch and recover planes in weather that froze flesh and water in minutes. A green, largely untested crew had developed a sense of unity from having overcome unimaginable danger. *Midway*'s pioneers came home armed with self-confidence and pride. They had blazed a new naval aviation trail among the icebergs. The Navy better understood how to fly in severe weather.

For a few sailors, it marked the beginning of a Navy career. Most, however, left the Navy in two or four years, embarking on a civilian life far afield from their Navy training. Ray Shirley fired guns in the Navy but became a communications professor at the University of Tennessee. Buddy Herrmann left *Midway*'s gun turrets to work for a Texas utility company for forty-three years. Don Struchen also left *Midway*'s anti-aircraft gun turrets to work for a propane gas company in Iowa. After four years in the Navy, John Rieman left the Navy went on to get his high-school degree and then worked in a Boston machine shop for the next thirty-six years. Navy carpenter Francis Derby left the Navy after ten years and spent the rest of his life repairing and refinishing furniture. Tom Turner ultimately served more than thirty-one years in the Marine Corps and fought in the Korean War and in Vietnam.

The beginning of *Midway*'s odyssey also marked the beginning of many young men's adult lives.