

THE HOOK

JOURNAL OF CARRIER AVIATION



SUMMER 2022



ETC Kayla Jaramillo sings the national anthem at the Women's History Month event in Black Shoe Country on board USS George H.W. Bush (CVN 77), 24 Mar '18.

Black Shoes, Brown Shoes

by Roger Mola

On board USS *George H.W. Bush* (CVN 77), Assistant Lieutenant Jesse Gazur says that as boatswain's mates, helmsmen and navigators, "we steer the ship and find the winds." Reactor Officer CAPT Jim Von St. Paul calls his 500 black shoe Sailors "the lifeblood of the ship. Without them the ship would have no steam to launch aircraft, no lights, no water to drink."

AZI Steven Lazio is a brown shoe once assigned to a squadron ashore, but now on board USS *Gerald R. Ford* (CVN 78) servicing F/A-18 *Super Hornet* engines in the carrier's hangar bay maintenance/jet shop. "Everyone's mission on an aircraft carrier is to get these birds in the air. We live and die by flight schedules. That's our culture."

As command master chief (CMC) on board *Bush*, black shoe Ronald Glass is the most senior of the ship's 400 chief petty officers and fills part of the carrier's leadership triad alongside the commanding and executive officers. Glass changes his jersey color with each watch as visible solidarity with airmen.

"I don't think there's a clash of cultures, brown shoes versus black, there are microclimates," said Glass. "In any organization you have tribes, people flock to communities even in their off time. You work in Weapons [Department] and you gravitate toward people in Weapons."

The bottom line, said Glass, "is you can't launch aircraft without cooks. Pilots are going to get hungry."

As a journalist I have a fear of exposure by someone who's actually flown or floated in the topic I've covered from my desk. Despite dozens of articles on carrier aviation I'd never set foot on one built since 1943. I had only walked the decks of the *Intrepid Sea, Air & Space Museum* moored at New York City's Pier 86. And I had never heard the term "black shoe" until I opened a letter from retired CWO Kevin O'Brien, whose first tour was as an electronics technician on board USS *Nimitz* (CVN 68) in 1979. I worried O'Brien would tell me what I'd done wrong, but he told me what I hadn't done.

MC2 David Mora Jr. USN



A shooter's final shot — LT Joshua Pritt honors an old tradition as he ties his boots together for launch off the flight deck of *Bush* to honor his retirement from the Navy, 17 May '18.

"Virtually no attention to the black shoes," he wrote. "I was disappointed you focused almost exclusively on the temporary, visiting air wing and flight operations," adding that a brown shoe rotation is five to six months while black shoes may be assigned to maintain and operate the ship for three-plus years.

"The roughly thirty five hundred black shoes ARE the carrier, and the brown shoes are the visitors that return to a land base after a deployment," he declared. "It's too bad this doesn't seem to be understood or appreciated."

So, literally and figuratively, I embarked to change that. The first stop was *Gerald R. Ford* moored for incremental availability at NavSta Norfolk. Then after submitting my next-of-kin form, I flew from Chambers Field by C-2A *Greyhound* 100 miles out to sea for an arrested landing aboard *George H.W. Bush*.

I toured 20 departments beyond the flight deck and hangar bay to ask dozens of Sailors the significance of black vs. brown shoe. Every seaman and airman acknowledged the disparate heritage and culture.

"You can't tell rate and rank by the boots only," began LT Ayifa N. Brooks, *Ford's* Assistant Public Affairs Officer (PAO), as I stepped into the hangar bay. Today the only aviation personnel (airdales) who wear brown shoes exclusively are pilots. I could define roles among air wing crew at a glance by their rainbow of jersey colors, but below decks struggled to distinguish Sailors unless they were carrying or fitted with specialized gear.

Following its creation in 1775, the Continental Navy (forerunner of the U.S. Navy) required Sailors to wear black shoes with their blue cloth uniform. The design helped conceal the pumice and tar from wooden decks. This practice continued when coal began to power ships, but as the early Naval Aviators trained at North Island, Calif., they petitioned the Navy to adopt a tan leather boot, leggings (puttee) and khaki uniform modeled after the Marine field uniforms worn at Guantanamo Bay, Cuba, to hide the ever-present dust.

Brown shoes remained regulation until 1976. However in 1986, they returned after a petition by Naval Aviation personnel and a sympathetic Secretary of the Navy John Lehman who was a Naval Reserve Naval Flight Officer. ALNAV 151 stated that effective April 1987, "brown shoes with khakis will be worn by all officers with aviation designators, all chief petty officers (CPOs) in aviation ratings and qualified flight surgeons, aviation physiologists and aviation experimental psychologists assigned to aviation units. The only authorized shoe will be a low-quarter, plain-toe, brown, leather dress shoe."

That year *All Hands* magazine declared that "Brown Shoes Are Back," and they stayed back. Each year on 4 December, the U.S. Naval Institute reminds its 86,000 Twitter followers that "shoe color marks a cultural divide" and to celebrate Wear Brown Shoes Day.

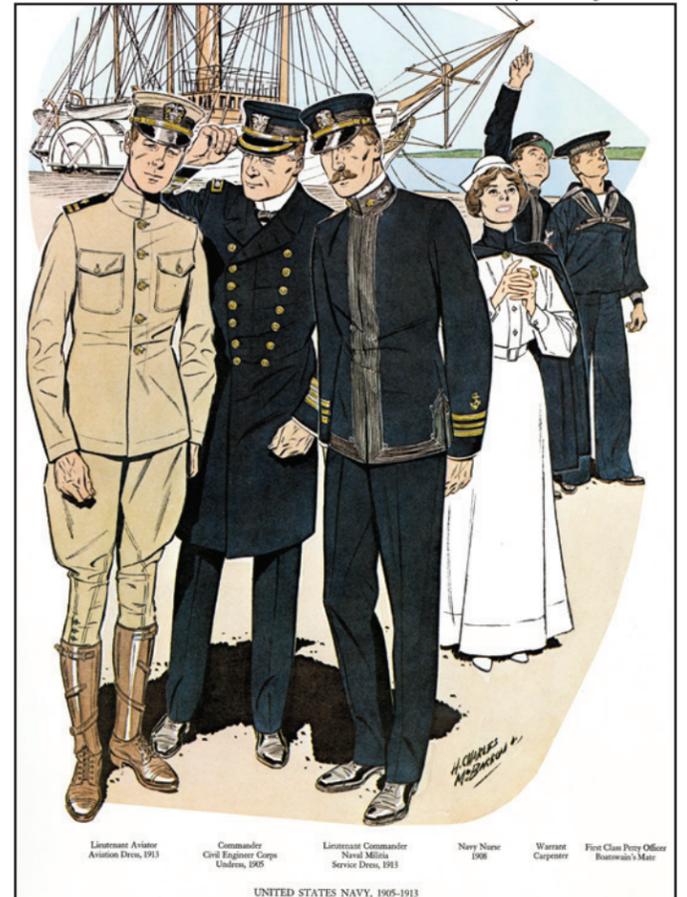
The first young Sailor I met aboard *Ford* also made me question the premise. As an aside, all are young. The entire ship's complement is five to 40 years my junior, including *Ford's* commanding officer, CAPT Paul Lanzilotta.

AO1 Dawntrell Rasberry had never heard the terms black shoe/brown shoe, at least in the context of Navy culture. Rasberry's boots are black steel tips, and he said the only browns he sees are on contractors from Huntington Ingalls Industries or Newport News Shipbuilding. Weapons elevator operator AO3 Bryze Robertson has five years of service and enlightened the term to us both.

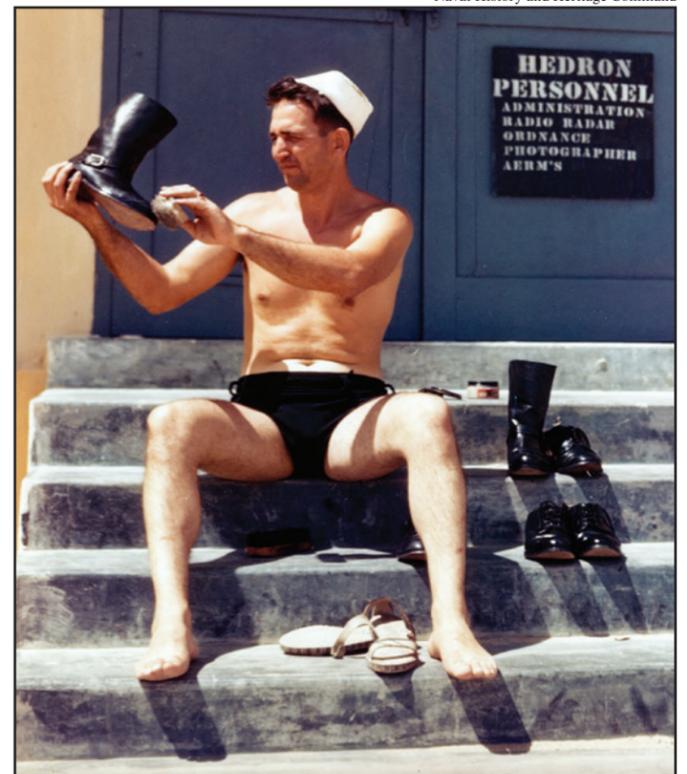
Rasberry and Robertson demonstrated the elevator by raising two 500-lb. and one 2,000-lb. bombs marked in a light blue band identifying them as inert. Though the Sailors are part of the human-machine interface or HMI, only medical personnel tending an emergency can ride the platform. On average the seamen interact with the air wing less than 25 percent of a 12-hour watch. Add in fatigue, and once off duty Robertson said he spends 100 percent of his time with Sailors from his own department kicking back or playing corn hole.

As Kevin O'Brien said, "The people I knew best were those six or eight guys I worked with in Operations Electronics and usually I'd eat with one or two, maybe at midrats." Just as often, he dined alone. "When you're with these guys twenty-four hours, it's not like you're lacking for their company."

Some Sailors said that mechanization and new methods also reduce interaction. On a *Nimitz*-class carrier a working party of 200 Sailors broke down shipments of food deliveries into smaller lots to lower into ship stores, while elevators on the *Ford*-class carrier allow a forklift to load full pallets.



An illustration of 1913 uniforms shows the Naval Aviator's brown shoes in contrast to the traditional black shoes. While not official initially, the Navy eventually adopted the practice.



A Sailor polishes his shoes on the steps of an enlisted men's barracks at NAS Natal, Brazil, circa 1944-45.

On board *Ford* LT Brooks helps create events for all hands to mix and socialize, such as a talent show in which Sailors sing karaoke for an audience of 1,500. For the Super Bowl the PAO installs artificial turf and an inflatable projection screen in the hangar bay. At “steel beach” picnics and swim calls, airdales mingle with black shoes.

O'Brien had never read a black shoe story in the *Nimitz* news bulletin. Today's *Bush's Daily Avenger* celebrates black shoe feats such as completion of a maintenance and material management inspection (3MI) that spanned 250 supervised checks across 20 departments. CAPT Lanzilotta directs his PAO to “capture the awesomeness of *Ford's* power projection both inside and out” and to showcase Sailors from all departments. The carrier runs feature articles in its series *This is Ford Class*.

CAPT Lanzilotta described himself as “one black shoe and one brown” and said the disparate cultures are unified by the carrier's teams and by the mission to take the ship to sea together. Lanzilotta recognizes birthdays and anniversaries with a Bravo Zulu on the IMC, letters of recognition and a spotlight in the newsletter. “I may show too much attention to the Reactor Department, since by the nature of their work, they are unseen by most Sailors aboard.”

He said he doesn't think of Sailors in terms of black or brown shoe culture, but notices a different pace and feel depending on the ship complement.

“When we do precision navigation in restricted waters, we need tides [and] currents. We take a lot of time to do that. That's kind of a SWO (Surface Warfare Officer) thing, and it's slow, different pacing, very deliberate. Fighter pilots are used to four hundred eighty miles per hour and are more swashbuckling and not dwelling on details that are extraneous. The pace picks up when the air wing is aboard.”

CAPT Robert Aguilar, commanding officer of *Bush*, also makes a special effort to recognize crew “in the bowels of the ship.”

“There's a lot happening below the flight deck,” said Aguilar, adding that a carrier is the most heterogeneous of any ship in the Navy. But with communities within each community, it's his job to integrate all crew into a seamless culture. He encourages an open-door policy to hear concerns firsthand in addition to regular meetings with his 20 department heads, who in turn reach 3,200 sailors. Aguilar also needs to manage culture clash beyond the hull.

MCSN Steven Edgar, USN



Sailors applaud after announcement of an award at an all-hands call on *Bush's* flight deck, 22 Mar '19.

MCSN Aaron Bewkes, USN



HT3 Emilia Flores operates a portable exothermic cutting unit on board USS Dwight D. Eisenhower (CVN 69), 13 Apr '20.

“From the perspective of our strike group exercises, we need to bring a team together consisting of a destroyer, submarine, etcetera as opposed to the *Bush* alone.”

At the time of my visit, Aguilar noted that the last two months felt like six, and like *Ford's* Lanzilotta, said carrier pacing is driven by flight operations. The *Bush* slows momentum in the holiday season but ramps up in February.

In *Ford's* island Assistant Navigator LT Greg Sutter, a helicopter pilot, directs three black shoe boatswain's mates from the Deck Department serving as helmsmen. A helmsman trains for eight months before qualification to stand bridge watch alongside SWOs and enlisted quartermasters.

“When we're in a restricted maneuvering evolution such as replenishment at sea or an anchor detail, we need to maintain the ordered course within half a degree by both gyrocompass and magnetic compass,” said Sutter. When the weekly supply ship pulls alongside, *Ford's* master helmsmen is trusted by the conning officer and commanding officer to maintain a consistent gap of 300 feet while steaming at 15 knots.

“Our plan for navigation comes from the operations side,” said Sutter. “While in the theater the commander wants all his assets in a certain place in time for the strike group. We do navigation for launch and recovery based on the mission. For example, we need twenty-five knots headwind for the E-2 *Hawkeye*.” Environmental conditions alone may provide the relative wind across the deck, but black shoes help the bridge crew dance to the desired number, always mindful of where the ship has the right to operate, and always finding at least 180 feet depth below the hull. The *Ford* pilothouse is situated for a clear view of its flight deck, but the position leaves shadow zones or blind spots around its hull while navigating narrow channels. Sutter relies on his black shoes to report clearance.

In addition, *Ford's* command reports the ship's situational position to all hands each day by IMC, which the PAO calls a morale booster.

DC1 Kelsey Lund stands watch in a repair locker, donning her fire-fighting equipment (FFE) consisting of flash gear, boots and helmet to handle deck fires, gas leaks and ruptured pipe. Some of her counterparts are rated aviation technicians to respond to aircraft fires, crash and salvage. Lund said any cultural difference is not necessarily directly by rate and rank but more so on length of deployment, such as 18 months versus her five years. On duty-section days she cross trains with emergency teams from all rates in six sections, which might narrow the cultural difference, but “you only get to know someone personally if you work with them all the time.”

LT Brandon Carney and BM2 Faeline Matthews of the Boat Deck Department suggest that a black shoe/brown shoe gap is partly expressed by the formal lines of ownership indicated on the respective bull's-eye stenciled on that section's wall.

“The Reactor Department owns its own maintenance, the flight-deck and hangar bay maintenance is done by the air wing,” said LT Carney. Does he often interact with flight deck crew? “No, they all do their own thing.” Departments like deck, however, gain part ownership of a space such as the hangar bay by maintaining and operating certain equipment.

“The boat deck is for shipboard recovery,” added Carney. Matthews explained, “We are focused on navigation and seamanship. We handle the secondary areas of recovery, after aviation.” This includes operating two rigid hull inflatable boats (RHIB) for rescue as well as perimeter patrol during a swim call. An RHIB operated by a black shoe floats into action if a crewmember falls or is blown overboard by jet wash, or jumps. In his 17 years, Carney has never seen an intentional splash.

As noted above, AZ1 Lazio is a brown shoe in *Ford's* aircraft intermediate maintenance department (AIMD), also caring for ground support equipment like cranes. Lazio said the cultural divide of black shoe versus brown is in part by job location. Prior to *Ford* he worked at a naval air station.

“My first interaction with the black shoe Navy was on this ship during carrier qualifications. At an air base it's more laid back, while here you're working at the ship's base,” which is driven by the mission “to get the birds in the air,” said Lazio. “On a carrier you're not thinking about holiday or vacation time when the crew can sleep in.” While Lazio's AIMD shop does major engine inspection, “getting it off the aircraft is the squadron's job.”

“The squadron drives our workload. Without the squadron we don't have a mission.” For all helicopter engines and some heavily damaged *Hornet* engines, Lazio will “throw the engine in a can” to offload and send ashore.



MCSN Bayley McMichael, USN



The glow of the welder's torch illuminates HT3 Michael Kub at work on board *Bush*, 29 Mar '21

MC3 Zachary Melvin, USN



QMSN Raymond King, assigned to *Ford's* Navigation Department, plots the course in the ship's pilothouse, 8 Jun '21.

Considering the carrier is a floating air base means Lazio literally chains a *Super Hornet's* GE 414 engine to its deck for a full power run. "We run the trailer to the fantail and secure it to the anchor point and pretend the ship is the aircraft."

The Deck Division leading petty officer on board *Bush*, BM1 Akeiva Perry, handles the carrier's anchor chain. Perry serves in the fo'c'sle, where a bridge chain girder is stenciled with the phrase "Black Shoe Country."

"The chain runs one thousand eighty feet and each link weighs three hundred fifty pounds," said Perry, who guides the chain into spinning wildcats, which look like an attack version of mushroom. The fo'c'sle space designated as Black Shoe Country is set aside for recognition and special events, but it also hosts a Captain's Mast as necessary. A pair of footprints painted on the deck indicates where a Sailor must stand for a disciplinary hearing, sometimes flanked by one of the two black shoe attorneys on board, Assistant Judge Advocate General LT Alexandra Mooney.

Alongside Perry, CWO2 Jesse Gazur said he's proud to be among the oldest rate in any branch of the U.S. military, the boatswain's mate.

"There's lots of joking between the surface rates and the brown shoes but it's a great camaraderie," said Gazur, who thinks that any social separation perceived aboard a carrier isn't by shoe color but by pay grade. He works 16 to 17 hours per day when *Bush* is underway, whether driving a RHIB, or hooking the carrier to help the refueling crew [grapes due to their purple jersey color] in its air wing to pump on 1.5 million gallons of JP-5 jet fuel.

LT Elizabeth Presley is one of five dentists on board the carrier. She sees Sailors for normal checkups and preventive care during their months at sea, but too often treats the deterioration of a Sailor's teeth caused by energy drinks and chewing tobacco.

When not drilling the teeth of her fellow crew, LT Presley drills Sailors in triage and the use of the Ferno portable stretcher. Unlike the standard Stokes baskets in the corridors, the design enables rescuers to lower the wounded vertically through hatches.

CDR Frederick Espy, Damage Control Assistant, is among the legion of black shoes staffing the repair lockers for first response below decks,

supplementing the silver-suited airdales. Black shoes tend to acid or refrigerant leaks, electrical fire, smoke and flooding.

A carrier's hull and equipment require constant preventive maintenance due to corrosion or from regular handling, and corrective maintenance when something breaks. Both need to leverage the talents of ENCM Shaun Murphy, Maintenance & Material Management (3M) Chief, and LCDR David Jefferson, 3M Officer.

"Saltwater can be harsh," said LCDR Jefferson, "and in the Persian Gulf there's also lots of sand in the air" that invites corrosion. His 3M crew does preventive maintenance on equipment and tools, verifies the seals on watertight hatches, lubricates and greases cable and wire and checks for leaks and kinks. Black shoes also lubricate the aircraft catapult tracks.

MC3 Ryan Pitt, USN



Sailors assigned to Deck Department on board *Bush* set the break on the port anchor chain, 23 Aug '21.



A bos'n pipes a command over the loudspeaker system and voice tube on board a World War II escort carrier. Note the fancy lanyard on his "call," still a point of pride for his successors in the fleet today.



Some traditions will always be with us. BMSN Kory Johnson blows a boatswain's pipe during a chief petty officer pinning ceremony on the fo'c'sle of USS Carl Vinson (CVN 70), 1 Feb '21.

HOIST A MUG OF BROWN SHOE BLEND TO THOSE WHO EARN AN OK 3-WIRE ON A MOONLESS NIGHT

\$1 FROM EVERY BAG OF BROWN SHOE BLEND SOLD WILL GO TO THE TAILHOOK EDUCATION FOUNDATION.*

WWW.OLDSALTCOFFEE.COM



*MUST BE PURCHASED ON WWW.OLDSALTCOFFEE.COM



"There's a lot of skill and maintenance behind the scenes before we put that aircraft on the catapult," said Jefferson. "Triggers are built into the system to generate maintenance checks for whatever aircraft we're flying," added ENCM Murphy. "If we're flying the F/A-18, I need to check the holdback bars and maybe check the hydraulics raising and lowering the observation bubble on the flight deck."

Senior Medical Officer CDR Michael Kaselis provides both preventive and corrective care, comparing his 42-person on board *Bush* to a small town's community hospital, including a surgeon and operating bay, a family doctor and many aviation medical specialties. In the last year about 500 Sailors tested positive for COVID-19, but only two required hospital care.

"These are young healthy Sailors so the most common needs are not illness but rather external injuries from working and moving about the ship," said CDR Kaselis. "For example the venturi effect can cause a hatch to close before a Sailor can catch it," crushing the fingers. Kaselis says too often a Sailor gets dizzy and falls while standing a long watch while consuming nothing but energy drinks.

Medical screens Sailors for their biannual physical assessment and even provides the exercise treadmills for the crew to spin in the hangar bay. The staff also trains Sailors to begin field care by conducting flopper drills in which a mannequin is placed at their feet and requires the appropriate response.

"A lot of medical time goes into monitoring our nuclear Sailors," said LT Cameron Burnett, a radiologist. He issues Thermoluminescent Dosimeters (TLD) to select crew to monitor their level of radiation exposure to supplement the daily vigilance done by the Reactor Department. He sends the TLDs to the shipyard for a cumulative reading.

CAPT Von St. Paul's Reactor Department on board *Bush*, includes nearly 500 Sailors and officers. The carrier's second largest department after Air, it is responsible for the equipment that supplies power for the ship's propulsion and every other power-hungry task from catapults to cooking.

"We also make four hundred thousand gallons of fresh water per day by driving the water through membranes," said Von St. Paul. About half the water is for human use, while the other provides steams for the catapults. Reactor Sailors are drawn from the surface warfare side and train on a prototype reactor at Nuclear Power School. For both safety and security,

a nuclear Sailor is isolated while on duty and signs a nondisclosure agreement regulating interaction with others outside of their six-hour watch. As a result, carrier leadership lauds their quiet efforts by a loud shout through the IMC.

BM3 Andres Morales, the Boatswain's Mate of the Watch during the time of my visit, pipes in the IMC. Pipers memorize eight or nine tones, which open or close various announcements. He wears his bosun's pipe on a macramé lanyard, and chances are he learned the skill from BMCS Edmundo Brantes, Deck Departmental Leading Chief Petty Officer.

"I'm the Deck Department's dad, mom, financial counselor," said Brantes. "The boatswain's mate is the original Navy rate going back centuries, and we're the carriers of the Navy traditions. You carry your boatswain's pipe through your career, and I make sure the Sailor knows how to macramé its lanyard." Since most young Sailors now only carry a smartphone, Brantes and senior crew also wear oversized wristwatches to encourage a traditional timepiece.

"Deck guys often get a crossed-anchor tattoo on the webbing of their hand between the thumb and index finger," added Brantes. Off-duty Deck Sailors may have little interaction with other departments or with the air wing. "My gals go out on liberty together, run nail parties."

He teaches his 80 Deck Department Sailors to sound a cheer using a unique "Hooyah!" Other carrier departments might adopt their own nuance.

"[Black shoes] in carrier departments have a healthy rivalry, a good-natured competition among them," said Brantes. "Our deck crew won second place in the damage control Olympics. It's run as a game but could cut ten seconds off pulling the fire hose off the rack. [It] definitely gives you the bragging rights; it's a big deal aboard ship."

Brantes brags about his Sailors who stand watch at vulture's row, the highest catwalk on the carrier. "Lookouts are the ship's first line of defense twenty four-seven and catch something before our radar costing millions. One spotted a submarine periscope well before the radar."

CMC Glass pauses for coffee in the "Goat Locker," the ship's exclusive domain for his 400 CPOs; even the CO must request permission to enter. "[The] Goat Locker is to eat separately and talk about discipline and review personnel matters," said Glass, taking a seat alongside senior black shoes who lead Sailors in the Public Affairs and Weapons Departments.





LT Chea Hale-Hernandez, PS3 Shavaughn Hunter and PSSN Christian Maple, from disbursing, repair a card reader that allows Sailors to make purchases on board USS Theodore Roosevelt (CVN 71), 16 Nov '13.

Glass, like all on board, gets paid through the effort of CDR Anthony P. Bannister, the Supply Officer for *Bush*.

"I'm the bank on board," said Bannister, whose 13 divisions not only stuff the ATMs for a Sailor to withdraw pay but run its boggling parts supply chain along with most anything dedicated to eating or sleeping. This includes five messes, 500 staterooms for officers and the occasional distinguished visitor, and barbershops.

"The captain is the mayor of the city [and] I'm the city manager," analogized Bannister, who manages its \$200 million annual budget for aviation parts and \$20 million budget for ship repair parts like valves, pipes, pumps and blowers. Yet parts on the *Bush* shelves are owned by the Navy system and can be seized for use elsewhere in the fleet.

"Parts don't belong to the captain until we take them off the shelf for use. Then an accounting entry is made," said CDR Bannister. Though he can tally the number of daily meals at 20,000, consisting of three meals for 3,000 Sailors plus midrats, he doesn't think of food as entrees but as entries on a ledger.

"At any given time, we have from one million to five million dollars worth of food in our ship stores, and every seven days we replenish, but at the same time send off the retrograde (food waste), which requires a kind of reverse supply chain." Accounting for ship inventory requires complex financial modeling and many of Bannister's subordinates hold MBAs from prestigious schools.

"We use the Navy working capital fund, which is a kind of credit card, to buy parts in advance of the need, and it spans the fiscal calendar. Aviation parts are always on hand or on order; we don't fabricate our own, and unlike Amazon or Walmart, if a part's defective, we can't just order a replacement because Boeing or Lockheed may have an eighteen-month lead time." Supply offloads the repairable parts, called carcasses, for repair. The process is ever more costly.

"On the surface-Navy side, major contractors have realized that repair parts are where the money is," explained Bannister.

Same for the energy drinks. The Supply Department manages a Starbucks-like coffee kiosk, two 7-11-style convenience stores and vending machines selling \$60,000 per month in energy drinks alone; another shout to dentists and doctors.

All the Sailors I met said the different traditions and uniforms of black and brown shoes invite a low-key rivalry. But it never distracts from their common goal to launch and recover aircraft safely and effectively, or to respond seamlessly to any hazard.

Kevin O'Brien, whose letter inspired my trips to modern aircraft carriers, began boot camp at the relatively old age of 24, earning him the nickname "Grampa." In his 12th year of Navy service, he was selected as a warrant officer, thus becoming a Mustang. As a black shoe he performed many official duties ashore and afloat and in an unofficial task mooned Russian trawlers from the catwalk as they spied on his steel beach picnic.

On board *Nimitz* during one cruise for its 100th day at sea, he along with each crewman received two cans of beer. "First time since the olden days when alcohol was served on a Navy ship. We were watched over very closely," he recalled.

O'Brien described the air wing as "visiting" since the complement is the last to join the carrier on deployment after leaving home port, and the first to leave the ship before entering, leaving the berths empty while black shoes live aboard for years to keep the carrier mission ready.

"Think of a carrier like a cannon, with the brown shoes providing the projectile, but black shoes providing and maintaining the gun that fires it. One's useless without the other," said O'Brien. "Take away the ship's company and the ship is useless, dead, missing its eyes and ears or its ability to move or operate its built-in defenses." After reflection, he softens.

"There was a friendly rivalry between black shoes and brown shoes much like between Sailors and Marines, but when it came to fighting a common enemy, we fought back-to-back. Brown shoes? We maybe say that with a wink. Sailors are Sailors and we're brothers and sisters."

MC3 Zachary Melvin, USN



CSSN Marilyn Mejiasanchez shows off a dessert in the aft galley of USS Gerald R. Ford (CVN 78), 21 May '20.

Aerial Traps: A Naval Aviator's Role in the Parasite Aircraft Concept

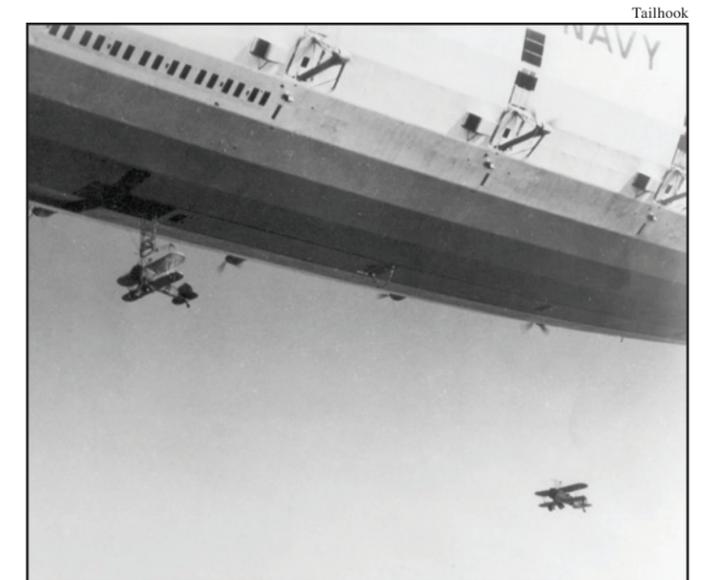
by A.T. Roberts



Above: Test pilot Edwin Schoch and a McDonnell technician with the XF-85 Goblin at Muroc AFB in 1948.

Most enthusiasts of Naval Aviation are well aware of the Navy's "flying aircraft carrier" concept of the early 1930s. Both *Akron*-class rigid airships were outfitted with hangars, handling equipment and biplane fighters of the day to test the feasibility of aerial defense and extending patrol range over the sea. Aircraft launching and returning to their motherships employed a "trapeze" method using a "skyhook," basically the airborne version of a tailhook, placed on top of the upper wing of the aircraft. As time went on a combination of things brought the program to a halt. Repeated lighter-than-air accidents, concerns over the viability of the huge airships in a contested environment and the rapid development of conventional carrier operations put an end to the idea of the airship carrier. However, the concept of motherships and more specifically the trapeze hook eventually received a second chance to prove itself.

Before the United States was officially involved in World War II, conflict with Germany was seen as inevitable within certain communities in the U.S. military and planning for such an eventuality proceeded accordingly. With most of the European continent consumed by the Third Reich and with England threatened, the Army Air Corps began developing the once unthinkable concept of trans-Atlantic bombing. A request was issued for an intercontinental bomber with a maximum range of 10,000 miles, combat radius of 4,000 miles, ceiling of 40,000 feet, a 300-mph cruise speed and 10,000-lb. bomb load. This solicitation materialized as the Convair B-36 *Peacemaker*. At the same time concerns arose over how to provide fighter escort for such a long-range bomber. This question culminated in another Air Corps request in 1942 to address the problem. The proposal called for the bomber to physically carry its fighter escort along.



A pair of Navy F9C Sparrowhawk fighters during operations from USS Macon (ZRS 5) in 1934. While the trapeze system proved sound, the huge rigid airships were costly and vulnerable.