NAVAL AVIATION NEWS

October 1978

NAVAL AVIATION NEWS

SIXTIETH YEAR OF PUBLICATION

COVERS — Front, NANews' Bill Bearden photographed North Island S-3s last July and created composite. Viking feature begins on page 8. Elmer Zost captured Firebee launch at White Sands, N.M., in the U.S. Army photo on back cover. See Did You Know on page 4 for details. Here, USS Ranger's crew wrestles with arresting barricade, proving muscle is still required on today's flattops. JOC Mike McGougan filmed drill.

editor's corner

343434343434. Ltjg. James R. Ratts of Norfolk-based HSL-34 likes numbers. Numerology can be intriguing. To wit, note the following extract from a recent Weekly Summary published by HSL-34.

"On the twenty-fifth of April, aircraft 34 passed the one-hundred-hour mark for the month while flying its 34th flight of the month aboard CG-34, representing HSL-34 during its 34th month of accident-free operations."

"It's too bad there aren't 34 days in a month," said Ratts.

Pro-Am NCLT. From Captain John Thompson, American Airlines pilot and C.O. of an NAS Lemoore-based naval reserve unit came this report: Competing against professional pilots from American Airlines, half ex-Navy, half ex-Air Force, in a Pro-Am NCLT were distinguished amateurs from the local area. Corcoran Mayor Al Kessler, Lemoore Mayor Tim Lee and Hanford *Sentinal* publisher Jack Morgan were there. Also on hand were Les Brown, National Director of the Navy League; Rex Moen, President, Hanford Chamber of Commerce; and Jim York, Sacramento real estate investor.

They "flew" the night carrier landing trainer, a flight simulator designed to enhance pilot skills in getting aboard the flattops after dark. Capt. Thompson ran the show which was an innovative way to demonstrate how Naval Aviators do their job in the carrier environment.

Les Brown was selected best amateur. American Airlines captain, Jack Neilon (ex-Navy, of course), captured the best professional honors. These two also comprised the winning team.

Boldt's Bolt. Thanks to the ingenuity of the Cecil Field–based VA-81 *Sunliners* ADCS Harold Groat and AD2 Boldt, and the squadron maintenance crew's persistence, *Corsair* #412 didn't have to undergo depot level maintenance after all. The aircraft leaked gas every time it was fueled. Several repair actions failed. Finally, Chief Groat re-read some Vought *Maintenance Digests*. An article on check valve failure in the wing defueling tee caught his eye. "Unfortunately," read the article, "the valve is inaccessible by any means other than upper skin removal."

Using a borescope (a fiber optic gadget that can be worked in and around tight areas like a plumber's snake and can "look" inside inaccessible spots), Groat discovered a bolt, actually a basket nut, lodged in the check valve. This was the culprit holding the valve open and causing the leak. Alas, the power plants people tried everything but the FOD (foreign object damage) stayed put.

"Why not fly it and have the pilot pull Gs to close it?" someone suggested. "Let's put a fishing hook on the borescope," offered another.

Boldt went to work with a piece of .0004 safety wire. "I attached it to the borescope, extending it about two inches in a hook shape. Then I took some .0032 wire and wrapped it around the end of the device and stretched it out the full length of the borescope. We probably broke some fibers, but now I had three degrees of controllable movement, instead of one, and a grabber.

"I had to get the hook under the valve," he went on, "and to one side of the basket nut. Then I twitched the long wire, hooked the FOD and extracted it. With a lot of luck, it came out in one motion."

Sunliner C.O., Commander Jerry Yarborough, said, "It could have cost the Navy in excess of $40 thousand to ship the plane off for removal of the wing skin and extraction of the FOD."

Where would Naval Aviation be without the likes of Chief Groat and PO Boldt?

NAVAL AVIATION NEWS did you know?

Navy-Air Force TransPac

In the first Navy-Air Force A-6 transPac, eight VA-196 *Intruders* from Whidbey Island, Wash., were flown direct from North Island to Barbers Point, Hawaii, using Air Force KC-135s for inflight refueling. While there, the squadron participated in Exercise *RimPac '78* as part of CVW-14 embarked in *Enterprise*. The transPac continued with six of the aircraft flying nonstop from Barbers

Point to Agana, Guam. The flight logged 8.3 hours with each A-6 tanking five times and receiving an average of 30,500 pounds of fuel. The KC-135s provided route and fuel profile planning with in-depth preflight briefs. The final leg was flown to Cubi Point, R.P., without tanker support. The flight proved that Navy use of Air Force tanker assets for A-6 transPacs is a rapid, effective means of moving aircraft throughout the Pacific Fleet.

Britannia Award

Ens. Greg L. Gore, attached to Cecil Field's VA-15, was presented the 1977 Britannia Award on June 24 by Rear Admiral William D. M. Staveley, Royal Navy, in ceremonies aboard HMS *Ark Royal* while the British carrier was visiting Jacksonville.

The trophy is awarded annually to the Navy or Marine Corps student with the most outstanding performance in air-to-air gunnery in jet fighter training. It is an expression of "grateful acknowledgment of assistance rendered by the U.S. Navy in training British naval pilots." At the beginning of the Korean War, Britain was unable to expand its training facilities sufficiently to accommodate the number of student pilots it needed. It called on the U.S. Navy for assistance and 258 British students went through the U.S. Navy training program between 1952 and 1956.

The trophy, a silver model of the Royal Navy jet fighter *Vampire*, sits permanently in the headquarters of the Chief of Naval Air Training, Corpus Christi, Tex. It is enscribed each year with the winner's name.

NAVAL AVIATION NEWS did you know?

Ens. Gore received his wings in September 1977. It was while completing his training at VT-7 in Meridian, Miss., that he compiled the highest advanced weapons grade of the year, which included three individual bombing excellence awards.

Catapult-Launched Drones

The Naval Air Engineering Center (NAEC), Lakehurst, is heading a tri-service project to make the launching of target drones more cost-effective.

In 1976, when a number of CE1-3 catapults (originally used by the Marine Corps to launch aircraft from remote jungle airfields) were declared excess, NAEC proposed modifying them for use for target drone launches.

According to Keith Menacker, NAEC program manager, it was determined that "drones could be launched from catapults at 10 percent of the cost of rocket assisted takeoffs, with no loss in performance."

At the request of NAEC, Army and Air Force engineers and technicians helped personnel at the White Sands Missile Range and Naval Ordnance Missile Test Facility in New Mexico install two CE1-3 catapults. At the same time, NAEC personnel modified the catapult dolly to make it compatible with the BQM 34 target drone, the first system to be tested. Preliminary testing at NAEC, using dummy *Firebees,* was completed by mid-1977. Feasibility demonstrations began at White Sands in January 1978 and three launches produced favorable results (see back cover).

NAEC technicians are performing CE1-3 maintenance and plan to set up a maintenance training program for White Sands personnel.

Aviation Hall of Fame

Captain Holden C. Richardson, Naval Aviation No. 13, was one of five pioneers enshrined in the Aviation Hall of Fame in a July 22 ceremony in Dayton, Ohio. Others honored were Clyde V. Cessna, Anthony W. Levier, Francis S. Gabreski and William P. Lear, Sr.

Capt. Richardson's involvement with Naval Aviation began when he was taken up for his first flight in 1911. He soloed at North Island, although he had not gone there primarily to learn flying. His interest lay in perfecting pontoons for seaplanes. He was the Navy's first test pilot but most of his contributions were in the technical aspects of naval aircraft (*NANews,* April 1977).

In 1912, Richardson developed a catapult which successfully launched a seaplane, following which he solved the major problem of pontoon suction by adding steps on the pontoon bottoms. He also flight tested the Navy's first flying boat, tailless seaplane and amphibian.

Later, Richardson developed a new catapult which launched a flying boat from a ship underway. During WW I, construction began on a series of huge Navy Curtiss flying boats for service in Europe. Their massive hulls were based on his

wind tunnel model. But the war ended before they were finished.

After the war, Richardson was one of the pilots of NC-3 when three Navy NCs took off from Long Island to attempt the first transAtlantic flight. NC-3 came down for a landing at sea to take navigational readings, but crashed into the waves instead. Severely damaged and at the mercy of the ocean it drifted toward the Azores, 200 miles away,finally floating safely into San Miguel harbor. Only NC-4 completed the historic trans-Atlantic flight.

After his retirement in 1929, Richardson became an engineering consultant with the Great Lakes Aircraft Corporation. In 1934 he was recalled to active duty in the Bureau of Aeronautics and served until 1946, when he retired for the second time.

Vice Admiral Frederick C. Turner, DCNO(Air Warfare), a member of the Board of Nominations of the Aviation Hall of Fame, presented Richardson's name for enshrinement.

Top Navy Information Officer

The Aviation/Space Writers Association has selected Captain Ted Wilbur, Head, Aviation Periodicals and History office, as the recipient of its 1977 Public Information Officer Award for top Navy information officer. It is the association's highest recognition of outstanding achievements by a Navy officer in the interests of military and other governmental aviation-space programs.

The national award honors Capt. Wilbur for his consistent high performance in promoting the role of U.S. Naval Aviation, citing in particular his contributions to the Sea-Air Operations Hall in the National Air and Space Museum. As DCNO(Air Warfare) representative to the Smithsonian Institution, he was project coordinator of the popular exhibition which is focused on carrier aviation.

The award was presented at a July 12 luncheon meeting of the association in Congress' Rayburn Building, Washington, D.C.

Second Wind for the Greyhound

The Service Life Extension Program (SLEP) is expected to enable Navy's C-2A *Greyhounds* to continue resupplying carriers at sea for an additional 7 to 10 years. Twelve C-2As remain of the 19 built for the Navy by Grumman Aerospace Corporation. The first of the 12 rolled off the SLEP line at NARF North Island on April 14 and was sent to the Naval Air Test Center, Patuxent River for evaluation. The rest will be reconditioned at the rate of two each year.

SLEP consists of replacing all electrical wiring and electrical connectors, overhauling the engines, inspecting and replacing all fittings where necessary, replacing all engine and flight control cables, synthetic rubber flexible hoses and rigid aluminum hydraulic tubing. NARF will also inspect and replace, as necessary, all stainless steel tubing. It will put in new red and white strobe lights to replace the red incandescent anti-collision lights, install updated navigation systems and change the 3 kva emergency system to a 10 kva. The entire center section of the wing will also be removed and rebuilt, and each aircraft will be given a fresh coat of paint.

The *Greyhounds* were built between 1965 and 1968 and introduced into the fleet in 1966. In December 1977 they began reaching the limit of their projected operational service life but the Navy has no other aircraft which can carry so much, so far, to a carrier at sea.

Operated by VRC-50 at Cubi Point, R.P., and VR-24, Sigonella, Italy, the C-2As annually carry, on an average, more than one million pounds of cargo, one million pounds of mail and 8,000 passengers. Much of the cargo is out-sized, which only they can deliver, such as some engines, transmissions, rotor blades and propellers. The arrival of a *Greyhound* aboard a carrier means delivery of up to 10,000 pounds of cargo, people or mail. It is a familiar and welcome sight all around the globe.

grampaw pettibone

Gramps' Mailbag

Dear Gramps,

There we were at 300 feet, 160 knots, in our intrepid S-3A *Viking*, scanning the blue waters in search of a submerged threat. Our protruded MAD boom had been quiet so far, but an eager crew anticipated the imminent detection of a magnetic disturbance. Then it happened – the MAD reacted violently, the copilot called out, "Madman," and the pilot yelled, "What the hell?" as an A-7 quickly pulled away after having slipped *underneath* our flight path.

Now, as impressive as that stunt was, I should make it known to that

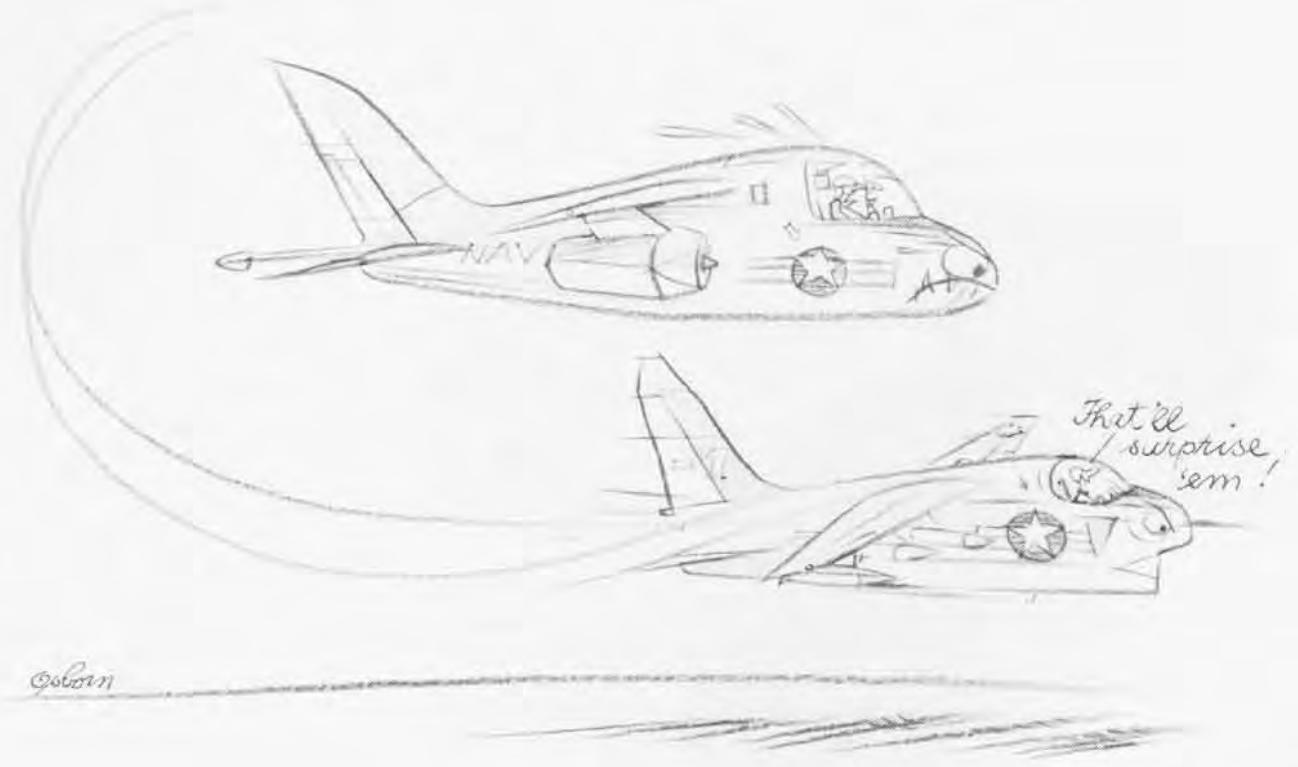
A-7 pilot that S-3s have been known to spit out sonobuoys from time to time in order to fulfill the ASW mission. Should the buoy be intercepted before hitting the water by a low-flying buoy-snatcher, not only will our mission suffer, but that of the low flyer, too. Imagine the FOD potential, or better yet, the damage potential of 20 pounds of metal.

Food for thought from an S-3A copilot.

George T. Sullivan, Ens., USNR
VS-28

Grampaw Pettibone says:

Buoy-oh-buoy! An A-7 *Tiger* who is all claws and no brains. You're right, son, this leads the list of unprofessional performances. This pilot could have paid with his life for participation in an unscheduled air show – that's too high an entry fee.



ILLUSTRATED BY Osborn

Gear Grinder

Following a routine preflight, the *Crusader* pilot made a start and taxied out to the duty runway. After receiving clearance to take the runway, he taxied into position and conducted a full-power checkout. Noting no discrepancies, he released his brakes and lit the burner shortly after commencing the takeoff roll. Approaching 125 knots, the pilot rotated to takeoff attitude and very shortly thereafter, thinking he was airborne, retracted the gear. The fuselage settled back onto the runway immediately. Despite extensive scraping and grinding of the gear doors and the bottom of the fuselage, the *Crusader* continued to accelerate and became airborne.

The amazed *Crusader* jockey made a turn to avoid a populated area and decided to assess the situation. There were no warning lights illuminated nor were there any other signs of trouble in the cockpit, so he requested the tower to divert an aircraft to conduct a visual inspection of his aircraft. No other aircraft being immediately available, it was decided that the pilot should lower the gear and fly by the tower for a check. The driver lowered the gear handle and noted all three gears indicated down and the hydraulic pressure normal. A low fly-by was conducted; the air traffic controller confirmed the gear was down. The pilot remained in the landing configuration and after making arrangements for a short field arrestment, made it without further damage.

Grampaw Pettibone says:

Great balls of fire! If this stunt doesn't shake the dew off the lily, nothin' will.

Here's an above average fighter pilot, with two WestPac cruises under his belt, that just couldn't stand prosperity. This fellow, a bit bored by a routine test hop, thought he'd spice it up a bit by executin' a sharp takeoff. There's nothing wrong with a sharp takeoff, but when it leads to a departure from flight discipline, the "professionalism" required in the execution becomes overshadowed by plain old "showmanship."

There are two dangerous periods in a pilot's life: One, when he's a young cub just learning to become a tiger, and two, when he's a battle-scarred tiger with plenty of time in model and maybe gettin' a few too many automatic reactions and becoming too relaxed. Wish I had a quarter – inflation, you know–for every time I've said that. (July 1969)

Night Taxi

An A-7E pilot on a local night mission was cleared for takeoff. After 100 feet of roll, the pilot heard a "pop" and observed a fuel boost caution light. Takeoff was aborted at 20 knots and a turn off the duty runway was requested from the tower. Clearing the runway, the pilot called the squadron duty officer on base radio to inform him of the difficulty. The pilot then switched back to ground control and made a turn onto an adjacent taxiway. The taxi light was not used.

The pilot made another turn through what he thought was a taxiway throat to the main mat area. In reality, he had inadvertently entered a fuel pit. The pilot saw the fuel pit pumping equipment almost immediately and stopped. Just before he stopped, the starboard main mount struck the center pit light and severed the hydraulic line to the landing gear actuator unit.

The pilot noted smoke drifting up the starboard side of the aircraft. The smoke was actually hydraulic fluid spraying forward from the ruptured hydraulic line. This mist ignited, causing fire to engulf the starboard side of the cockpit. Heat inside the cockpit became intense and the pilot broadcast that he was on fire and getting out. He unstrapped, blew the canopy, secured the engine and egressed over the port side. Line and fuel pit personnel extinguished the fire.

Grampaw Pettibone says:

Great balls of fire! The moral of this story is – or should be – pretty obvious. This young aviator felt familiar with the field and did not use his taxi light. In the 75 seconds before the mishap, he made three UHF frequency changes, three radio transmissions, three 90-degree turns, and traveled about 600 feet over the ground. Let's slow down, use our taxi light ashore and stop the aircraft when the burden of communicating precludes looking outside the cockpit. Taxi lights are neat. They shed light on things. The macho man is cool, but he can't see in the dark! Turn the taxi lights on ashore for common sense safety. Gramps would really appreciate your help on this one.

VS-29 Viking on approach to Enterprise.

S-3 UPDATE

The *Viking* and its crews have been on duty for four years now and continue to prove that the S-3 is an effective, versatile and reliable element in the crucial panorama of sea-based Naval Aviation. The multimission sub hunter has blended smoothly into tactical air wing operations under the CV concept. With minimum fluster, the *Viking* has become a solid member of the carrier team. An increasing number of air wing commanders sing loud its praises.

The *Viking* was first introduced to the fleet by USS *Kennedy*-based VS-21 in early 1975. Like the squadrons which would follow, VS-21's entire personnel complement, officers and men, matriculated at VS-41, Viking Varsity, based at NAS North Island (*NANews*, July 1976). Today, all 11 S-3A squadrons have earned their sea legs. VS-37 was the latest to deploy and is now on board *Connie*.

All has not been roses with the *Viking*. Few planes in this or any other generation achieve first-string status without blemishes or setbacks. There were, and still are, important hurdles to overcome. But for a community which transitioned en masse from an obsolescent ASW aircraft to one of such exceptionally sophisticated quality and performance, theirs was no less than an unprecedented achievement. This was especially true in view of the brief time frame involved. Although its predecessor, the S-2 *Tracker*, was a durable member of the Navy's flying inventory, there is no question that the *Viking* represents an exciting quantum advance in technology and capability.

Aircrews transitioned from piston to jet power, from manual overlay tracking equipment to digital computers, and, at the extraordinarily rapid rate of one squadron every six months, studied, trained and absorbed what it took to step up and into a brand new flying machine.

"When the VS community transitioned to the S-3," said Rear Admiral Robert W. Carius, Commander, Sea Based ASW Wing Atlantic, "it made the most dramatic leap of any group in terms of technology, ability and training requirements."

He explained, "Here we were with an aging airplane and reciprocating engines, 140-knot speeds, basic radar gear and some acoustic equipment. Compared to the *Viking*, operating the *Tracker* was manual labor. Training to repair the equipment, the engines and the aircraft didn't require an awful lot of deep study and maintenance effort.

"We then went to an aircraft with the most advanced fan-jet engine around, plus state-of-the-art avionics, and the most advanced radar, I think, in the world, a superb, integrated computer system and a new maintenance philosophy.

"Flight crews now master equipment which is as complex as it is effective, a sharp departure from what existed in the *Tracker*. Importantly, to date, we have not lost a single aircraft in a fleet squadron. The guys do an awful lot of flying and I believe the community, in a very short time, has done a doggone good job, especially when you examine all the learning and work which were required."

The climb to peak operational readiness is an ongoing struggle. There are difficulties to overcome in the *Viking* program. These center on shortages of parts, updated TPSs – test program sets – which are instrumental to maintenance repair actions: training, technical publications and personnel.

The obstacles are being tackled through a concerted fleet-wide effort. The Readiness Improvement Program (RIP) (*NANews*, December 1977) is a broad range endeavor which is achieving slow but sure results. The two-headed demon of cannibalization and lack of replacement parts has caused concern and imposed strenuous workloads on all levels in the chain of command. But there can be no question that the *Viking* is coming of age and will be able to flourish in its assigned role at sea.

Some of the deficiencies disclosed in RIP are being eliminated quickly. Others will require one or two years to correct. Meanwhile, it is a credit to the tenacious Navy enlisted men, whose working arenas are in the hangars and on the flight decks, that the *Vikings* function as well as they do today.

"I am continually amazed by the ability of our young technicians to maintain such a complex weapons system as the S-3A," said Rear Admiral Cecil J. Kempf in an interview this summer. Then Commander, ASW Wing Pacific, he now functions as Director of Aviation Programs Division in DCNO (Air Warfare).

On the operational front, the *Viking* naturally concentrates on finding submarines. Other taskings receive attention as well, however, and help account for the plane's popularity with tactical planners. These include, but are not limited to, electronic support, airborne early warning and surface surveillance which can be accomplished concomitantly with ASW.

The *Vikings* operate from both Pacific and Atlantic carriers, and are home-based on both coasts. At North Island, in addition to VS-41, are VSs 21, 29, 33, 37 and 38. At NAS Cecil Field, Jacksonville, Fla., are VSs 22, 24, 28, 30, 31, and 32.

East Coast echelon features planes from each of Cecil Field-based Viking squadrons. From lead to No. 6 are VSs 22,24,28,30,31 and 32.

Captain Tony Less headed Carrier Air Wing Nine which deployed to the Pacific aboard *Constellation* in 1977. Now serving as executive assistant to the Deputy Chief of Naval Operations (Air Warfare), Less recounted some of his experiences with VS-21, the *Viking* squadron in his air wing.

"It took some time at the outset," he said, "but with concentrated efforts, the S-3s integrated very well into our air wing operations. Indeed, they proved as tactically capable as any other unit and demonstrated an extraordinary and valuable versatility."

"The *Viking* crews were most resourceful. In addition to capably using the multitude of available aircraft sensors to locate submarines, they functioned effectively on surface surveillance missions and often assisted in providing communications and, sometimes, navigation services for other wing aircraft. Often, the *Vikings* exercised their in-flight refueling capability and were extended to continue on one mission or another. On most occasions, the S-3s were airborne for grueling four and five-hour stretches, doing a super job."

The captain cited the *Viking's* ECM support and its role during AAW Alerts, when possible unfriendlies approached the operating areas. "Using electronic sensors," explained Less, "the *Vikings* helped locate the bad guys and superbly assisted other air wing aircraft in providing precise bearing cuts for the fighters. This led to swift and accurate intercepts.

"I was also impressed with the S-3's around-the-clock operations even when EMCON conditions (ships radar and Tacan equipment secured and very limited, if any, UHF transmissions permitted) were in effect. The *Vikings* would routinely launch, travel far from the ship, conduct their lengthy mission and quietly and effectively return, on time, for scheduled recovery. All done in dark, IFR, all-weather conditions.

"As an air wing commander, operationally I really liked having them around. Maintainability and reliability was another story, but I can sure see improvements in those areas as of late."

From his desk at the pinnacle of Naval Aviation, Vice Admiral Frederick C. Turner, DCNO(Air Warfare), in conjunction with Vice Admiral F. S. Petersen, Commander, Naval Air Systems Command, maintains a careful eye on the *Viking* program.

"We recognize that maintainability and reliability problems exist," asserts VAdm. Turner, "and we are addressing every means within our power to correct them. It is mandatory that we sustain the momentum which has been generated so far in this regard. The *Viking* is thriving and must continue to do so. The S-3s are vitally essential to the strength and success of sea-based Naval Aviation."

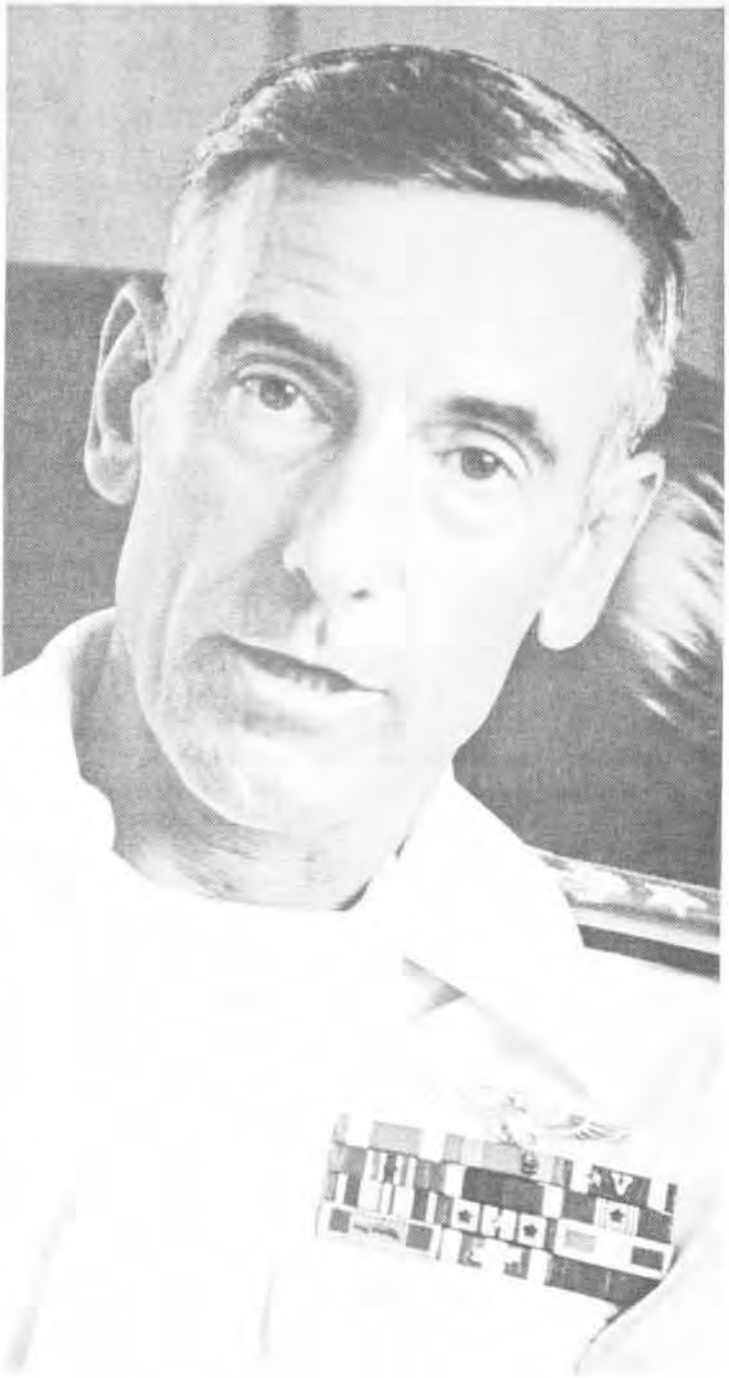
JOCS Bill Bearden

Above, technician works on nose section. Note WRAs stacked alongside aircraft. Left, aircrewman checks component inside S-3. Photo courtesy of Lockheed. Below, VS-29 Viking on Enterprise cat.

From top left, clockwise, pilot, copilot, Tacco and Senso function as a team to track subs. Crew station photographs courtesy Lockheed.

A *Viking* Voice

Rear Admiral Robert W. Carius wears two hats: one as Commander, Sea Based ASW Wings Atlantic, the other as Commander, Naval Base, Jacksonville. At the beginning of his flying career, he served in fighters. Later he commanded an ASW squadron, VS-29. He was catapult and arresting gear officer aboard *Bennington* and served as the airborne ASW research and development member on CNO's staff. He served as a project manager for the Atomic Energy Commission, was X.O. of *Princeton* and skipper of *New Orleans*. *NANews'* JOCS Bill Bearden filmed and interviewed the admiral at his Jacksonville headquarters.



NANews: As the newest carrier-based ASW aircraft, the S-3 has been in fleet use for over four years now. How is it being utilized as opposed to its predecessor, the S-2 *Tracker*?

Admiral Carius: The plane performs in one sense in the classical ASW role as we had envisioned, but its tasks have also been expanded to the point that it is involved in other areas which were not traditionally part of anti-submarine warfare.

In the past, an ASW plane like the S-2 would proceed by itself and try to make its own contact. If that contact were a submarine vice a biological disturbance, tracking and other ASW actions would follow accordingly. On some missions, the aircraft would coordinate its efforts with helicopters, friendly submarines and destroyers.

Now, the *Vikings* are part of air wings tasked with fighter, attack and other type missions in addition to ASW. Before, the S-2s were on CVSs which were devoted totally to ASW.

Other S-3 capabilities are being discovered which were not envisioned when the *Viking* first arrived. For example, ocean surveillance is a vital requirement for an operational commander. He must know what vessels are in an area 300 or so miles from his ships. Under some circumstances, the *Vikings* can conduct mining missions. Air wing commanders have worked them with *Intruders, Prowlers, Tomcats, Corsairs* and other aircraft.

How do you feel about the way the air wing commanders are utilizing the *Viking*?

I am very encouraged. The CAGs are so enthused with the S-3 that they are finding new ways to fully exploit its capabilities in accomplishing a variety of air wing missions. On the other hand, the acoustic operators, the AWs, understandably feel they should be doing specifically what they are trained to do — hunt subs. The enlisted man who works long and hard to become an expert at identifying ASW signatures obviously prefers to maintain his skills at the highest possible level. If ASW duties are not on the agenda, the AW feels less involved in the mission.

However, the air wing commander is an on-scene advisor for the carrier group commander and the ship's C.O. He must view the total picture which encompasses far more than ASW duties. Because the *Viking* is able to do so much, he must take advantage of its capabilities.

I also believe that when and if there is a need to use the aircraft in a hostile scenario, we will see the *Viking* perform more than just ASW missions.

Has the *Viking* become an integral part of the air wing?

Without reservation, the answer is yes. The VS as well as HS squadrons on the CVs want to be strong elements in the air wing and have proved that they are. Based on many talks with the CAGs, I am totally pleased with how these units have been integrated into air wing operations. It is most gratifying to observe once parochial groups (for example, VS/HS versus VA/VF) performing their missions so effectively together. This is testimony to the dedication and perseverance of all hands involved.

How well do the *Vikings* and *Orions* function together in ASW operations?

We work very closely with our land-based counterparts. We strive to ensure that the VP units and VS squadrons understand each other's capabilities.

The VS and VP types have deep respect for each other. Ten or so years ago I felt these groups had a tendency to go their own way. Coupled with the present mutual respect is the knowledge that both complement each other in a dynamic way and together with HS and other units, represent an imposing suite of weaponry in the business of antisubmarine warfare.

How would you compare the *Orion* to the *Viking*?

They compare very well. The P-3C has longer legs, a large aircrew and greater endurance, but the smaller, well integrated *Viking* crew has an avionics package which is slightly more advanced than that in the *Orion*. Both aircraft collect and process information very effectively.

On many of our training exercises, an S-3 will relieve a P-3 on station, and vice versa. You can hardly tell when the bridge occurs.

Left, disco, Viking style. Plane captain signals aircrew during pre-taxi checks. Below, ground crew prepares Mk46 torpedoes for loading.

How does the future look for more S-3 CODs?

We have only one S-3 COD and it operates in WestPac. At present, we are awaiting final Congressional and Presidential approval to convert two more of our original "Flight Training Only Aircraft" (pre-production S-3 models) to COD mission aircraft. All indications are that this program will be initiated when the President signs the FY 79 defense budget this fall.

Are there differences between the East and West Coast *Viking* communities?

If you visited a squadron on the West Coast and then one on the East Coast and observed the manner in which they operate and the emphasis they put on certain elements of ASW, you would be hard pressed to say there is a difference.

Since we have only one fleet replacement squadron – VS-41 at North Island – the VS community enjoys remarkably good continuity in the training area. VS-41 is like a single wellspring whence all our maintenance and flight crews emanate. There are minimum differences in the way the squadrons do things.

One difference, and it is an important one, is beyond our control. And that is: Atlantic squadrons are more likely to encounter noncooperative subs than the Pacific squadrons. Efforts are being made to supply the West Coast squadrons with as much realistic sub-hunting training as possible to make up for this.

Would you comment on the Readiness Improvement Program?

Slowly but surely, RIP works. Progress has been especially noticeable in the VAST program, specifically in the area of software testing. I am encouraged by the program which is doing just what its name implies.

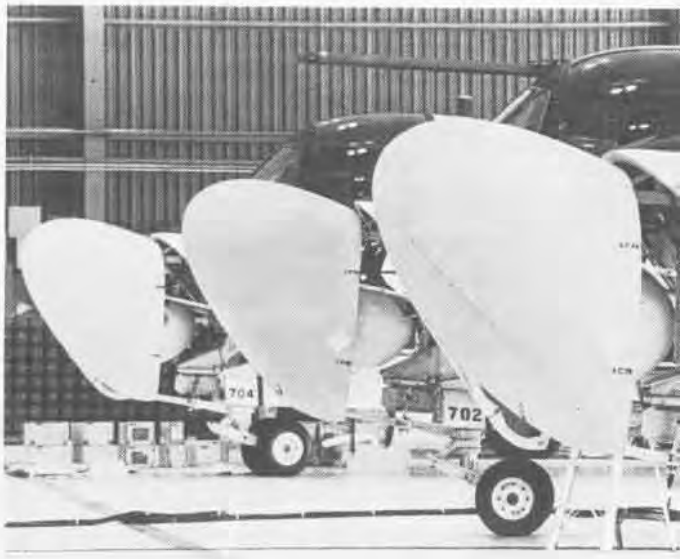
Any other comments?

We are charged with outfitting all the Navy's fleet carriers with parts and material for the *Viking* and are hard at work bringing the squadrons up to full speed. I think we are going to see even more progress as we go along. I recognize that, at times, positive results aren't visible, especially from the vantage point of the men and women in the shops who work so hard and who are so important to the *Viking's* success.

I believe that as its reliability and readiness rates continue to improve, the S-3 will become the finest, total weapons system ever designed, bar none. There is no doubt about it, the *Viking* is maturing nicely.

What They Are Saying

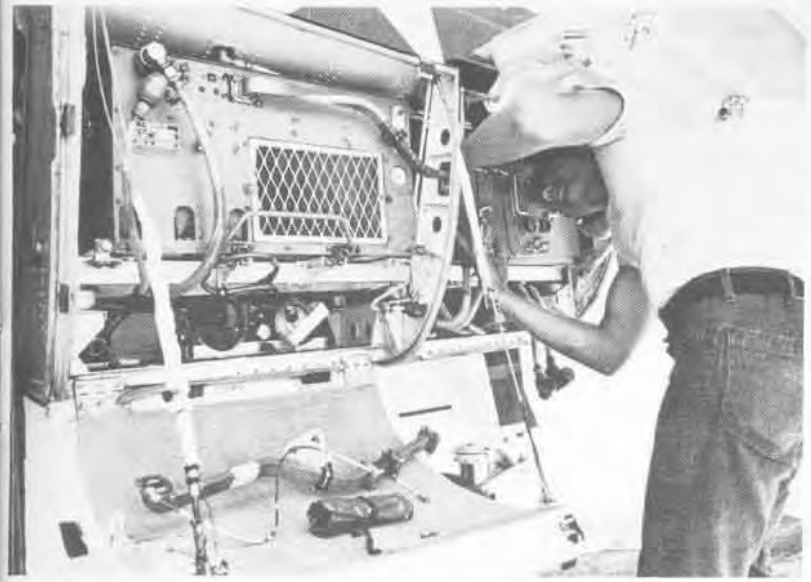
in the Fleet

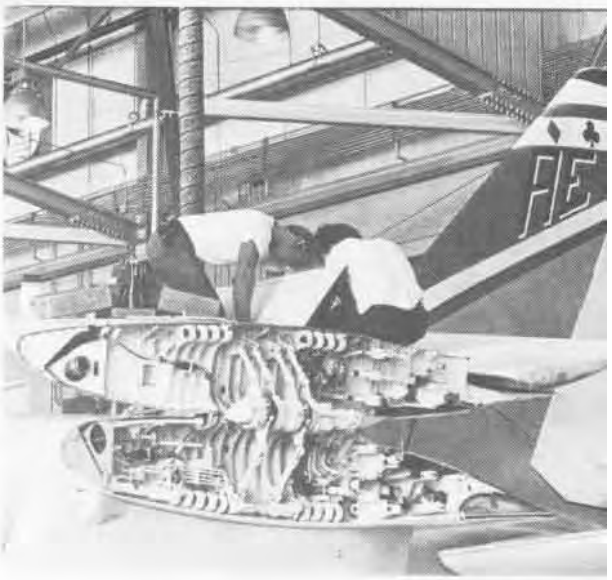


'The Viking is an easy plane to maintain. It provides a super platform from which to do a super job. It needs help in the parts area and the initiatives in progress are going to help. I have worked on almost every type of Navy aircraft — fighters, attack planes, transports and helos. This is one of the best.'
LCdr. Terry Hitchcock, Wing One

'RIP helped us identify data link problems. The data link is working much better now and when it goes wrong, the crews want to know why. Consequently, they make concerted efforts to get it up again. Both operations and maintenance departments are more conscious of the data link system since RIP began.'
Ltjg. Fred Goodwin, VS-37

Photographs (pages 14-18)
by JOCS Bill Bearden



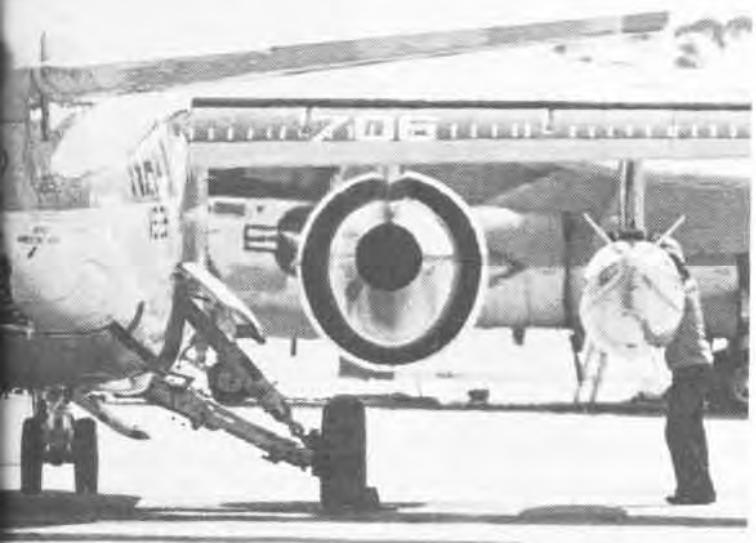


'Initially the data link was unreliable. I remember checking out units which failed a short time later. Now we check the system out and know it will work much longer than was previously the case. One of the most dramatic improvements has been in the switching logic unit. The increased reliability is a by-product of RIP.'

AT2 Jack Barnett, VS-37

'During the lull between deployment and work-ups, maintenance has gone to a ten-hour day, four-day week, with two shifts — day and night. We're also on six-section duty with a maintenance chief supervising each section. Morale is good and we've increased production and flight time.'

Lt. Jim Bellflower, VS-28



'Maintenance on these aircraft is really a snap. I was in A-7s before S-3s. It takes about eight hours to change an A-7 engine, only four for an S-3.'

LCdr. Jack Lyons, VS-33

'The Viking has so many diverse capabilities it can often perform two missions at the same time. On a long-range ASW patrol, for instance, it is possible to conduct surface surveillance work, within certain limits.

'The auxiliary power unit feature on board precludes the need for external air power, power carts, cables, etc., and makes the flight deck people happy.

'The S-3 handles well in the carrier pattern and can come aboard in a wide range of wind conditions.

'I've been in two different Viking squadrons and have never heard a complaint by the flight deck handlers or from the air traffic control people. Comments have always been positive.

'The ease of maintaining the airplane helps, although, as everyone knows, we have had to cannibalize more than we'd like to.

'But it's hard to find anything negative about the Viking because I see so many good things happening in our community.'

Commander Russ Gill, VS-24

VS-28 Viking on final

The Message Then...

Dilbert didn't listen

...Still Applies

the Aerology Officer!

"Boeing fighters" in Naval Aviation history almost always evokes memories of, or references to, the famed F4B series (*NANews*, January 1978). While the F4B series deserved fame as the outstanding Boeing fighters, the experience with three prior series provided the basis on which Boeing designed the fighter prototype that became the XF4B-1. The last series of these predecessors was the F3B.

In 1927, the Navy conducted competitive trials for a "battleship fighter." It had to be a convertible design, capable of being catapulted from battleships using a single-float (plus tip floats) landing gear, or operating from carriers with wheels. Prototypes were evaluated at the Navy's test station, NAS Anacostia, Washington, D.C., and Boeing was selected as the big winner with what was then designated as the XF3B-1. Their entry had first flown in March 1927. The XF3B-1 was largely based on the prior F2B-1 Navy fighter design, with a new planform for the lower wings, along with structural redesign for the single main float seaplane landing gear.

For the production order of 74 airplanes, the XF3B-1 was completely redone. The tapered wings were replaced with larger, constant-chord wings, the upper ones having a small sweepback. The new design provided greatly improved visibility for the pilot during combat maneuvers. The fuselage was lengthened and its structure redesigned. The landing gear was replaced with a simpler design and the tail surfaces and ailerons became the first examples of Boeing's all-metal construction, using corrugated skin.

The prototype F3B-1, which first flew in February 1928, was a convertible landplane/seaplane, using the tail surface planform of earlier Boeing fighters. However, the full production configuration was a purely carrier fighter with reconfigured, smaller tail surfaces. The battleship fighter concept had been abandoned.

The F3B-1s served extensively with both fighter and bomber squadrons aboard the Navy's new carriers. Deliveries were in late 1928, and the F3B-1s continued in carrier fighter service until fully replaced by their F4B successors in 1932. Subsequently, they were popular as command and utility aircraft before being finally phased out in the mid-Thirties.

F3B-

F3B-

F3B-

3B

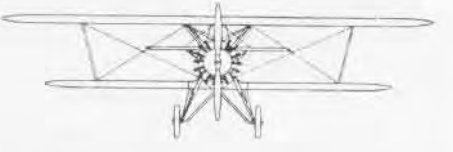

F3B-1

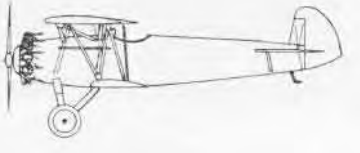

XF3B-1


F3B-1


F3B

Span		
XF3B-1		30'1"
F3B-1		33'0"
Length		
XF3B-1 (land)		22'9"
(sea)		27'4"
F3B-1 (land)		24'10"
Height		
XF3B-1 (land)		9'3"
(sea)		10'4"
F3B-1 (land)		10'1"
Power plant		
XF3B-1	P&W R-1340	425 hp
F3B-1	P&W R-1340B	450 hp
All data for landplanes:		
Maximum speed		
XF3B-1		157 mph
F3B-1		155 mph
Service ceiling		
XF3B-1		21,800'
F3B-1		26,900'
Range		
XF3B-1		336 miles
F3B-1		382 miles
Armament		
XF3B-1		one .30 cal machine gun one .50 cal machine gun
F3B-1		two .30 cal machine guns up to five 25-lb. bombs under each lower wing





BRUNSWICK DELI

The flight galley at NAS Brunswick, Maine, recently closed its doors. Spearheaded by MS2 Mike Tice, the station's food service team developed a whole new concept of flight meal preparation and merchandising – and then opened the Flight Deli.

Ever fly a 12 to 14-hour patrol over the North Atlantic? If so, you'll understand the critical importance of inflight meals to Navy aircrews. Before, during and following a flight, aircrews need additional food for energy. Nervous tension builds in anticipation of the coming flight and stays high, burning up energy. Fatigue develops. A well balanced meal – attractively garnished and displayed – helps. It is a means of relaxing, breaking the monotony of a watch.

Understanding its vital support mission, the Flight Deli offers an individual selection of quality food attractively packaged. The selection includes seven different box lunches. Each aircrewman can order whichever one he wants.

One choice is the Windtee, a hearty serving of thinly sliced roast beef on a hoagie roll, topped with fresh julienne strips of green peppers and a complementary serving of horseradish.

Another is the Drogue, three pieces of crispy chicken, rye bread wedges and butter chips with crisp tossed salad.

Other selections are the Dagwood, Wayfarer, Schooner and Ready 1. All selections include soup du jour, a candy bar, cookies, chips, fruit, juice and milk.

The Dieter's Box Lunch includes a chef's salad, fresh grapefruit, orange slices – 729 calories.

For those who prefer a hot meal, there's a selection of turkey, beef sirloin or omelette frozen dinners. For those who like to do their own cooking, there's a choice of four, from ham steaks to hot dogs. These also come with all the needed extras to round out the meal.

With 14 different menus, hot and cold, the NAS Flight Deli supports Brunswick aircrewmen where it counts – in the stomach.

VR-1 RETIRES

By JO2 Lou Anne Aguirre

This month the Navy says goodby to its first and oldest transport squadron, Fleet Logistics Support Squadron One (VR-1).

VR-1 was commissioned March 9, 1942, shortly after the United States entered WW II. Air operations at that time ranged from Massachusetts to Florida. By 1978, the scope of operations included virtually all of the U.S., the Caribbean, and occasional flights to the Far East, South America and Europe.

During WW II, the squadron transported explosives, spotted enemy submarines and flew wounded Americans to stateside hospitals. After the war, VR-1 brought the troops home, squadron R5Ds averaging over 10 flight hours a day per plane in May 1945.

In its 36 years, VR-1 has flown over 20 types of aircraft. The first were RS-5s, PBM-3Rs and R4Ds. In 1943, VR-1 received its first four-engine landplane, an R5D-1, nicknamed *Dumbo*, which logged the squadron's first transoceanic flight. It has flown such unfamiliar aircraft as the R5C and JRB-4 and, since 1973, modern jet transports, the C-9B *Skytrain II* and the CT-39 *Sabreliner*. But, no matter what the plane, VR-1 established a tradition of providing immediate airlift service to the fleet. VR-1 was home-based and flew from NAS Norfolk and Patuxent River, Md.

The unit's safety record is impressive. By June 1945, the 1,000th accident-free Atlantic crossing had been made. In 1959, VR-1 received its fourth consecutive CNO Safety Award in recognition of 22,000,000 accident-free miles. In 1972, VR-1 again earned the award and, in 1977, it earned its 11th consecutive, Naval Air Force Atlantic Fleet Safety Award recognizing an equal number of accident-free years.

It has been an exciting and rewarding 36 years, whether transporting the Secretary of the Navy, the *Apollo-Soyuz* space crew, folks going home on leave, or cargo. Regardless, VR-1 has always provided the same courteous, efficient service while applying its motto "Can Do – Where To?"

By JO3 C. R. Lovejoy

Aboard *Midway* there is a sudden loud clanging. Then, "Fire, fire! There is a fire in compartment B-0227-7L, starboard side. Away the Flying Squad, away."

Wherever a member of the squad is, he drops what he is doing and races through the ship, heading for the source of danger, ready to do his part in the highly organized team effort that is *Midway's* first line of defense against fire and engineering casualties.

On the scene, the men slip their oxygen breathing equipment on, the nearest hose is pulled out and "charged" with water, the phone talker is in contact with damage control central and the damage control assistant (DCA). The members of the Flying Squad are ready to go into action.

"It is my responsibility to find out

what is inside the space, determine what exactly the problem is, and how to deal with it most effectively," says HTC G. H. Zaske, flying squad CPO. "Every situation is different."

Zaske and his crew have approximately four minutes to arrive at the scene, assess the situation and report to *Midway's* DCA and advise him of the situation.

Then it is the DCA's responsibility to decide whether the Flying Squad can bring the situation under control or if he should recommend general quarters.

The squad moves quickly and smoothly. The rigorous training they accept as part of the responsibility of their job pays off. There are no false moves, no hesitation or wasted time.

The hatch to the space is opened, releasing a billowing cloud of black smoke. But no glow can be seen, so other team members, fire hose in hand, enter the space.

All senses alert, the "hose team" slowly advances into the smoke-filled space. They cannot see anything but the nozzleman *feels* heat on his right. Backing up a couple of paces, he begins spraying the area.

Soon the fire is out, the smoke cleared and the compartment dewatered. The squad members replace the gear and return to their normal routine.

The Flying Squad is also called to handle situations involving fuel and steam leaks, flooding, high temperature alarms; in short, anything that is, or could prove to be, dangerous to the ship and its crew.

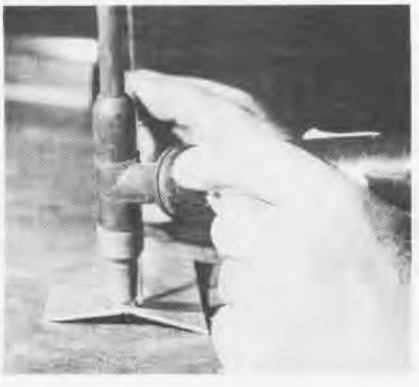
Members of the Flying Squad are on call 24 hours a day. To be considered for the squad, an applicant must have a year's experience on board *Midway*, meet all requirements of the damage control personnel qualification standards and be recommended to fill a vacancy.

Opposite page, top, is emblem of Midway's Flying Squad. At far left, HT2 K.W. Stanis, R division member of the squad, checks daily work requirements. Center, top, HTFN Jedwabnik and Stanis on their way to an emergency. Below, center, and below, Flying Squad members in action.

AVIATION TORCH

NAMTD 2002
NAMTD 5001

NAVAL AIR MAINTENANCE TRAINING GROUP

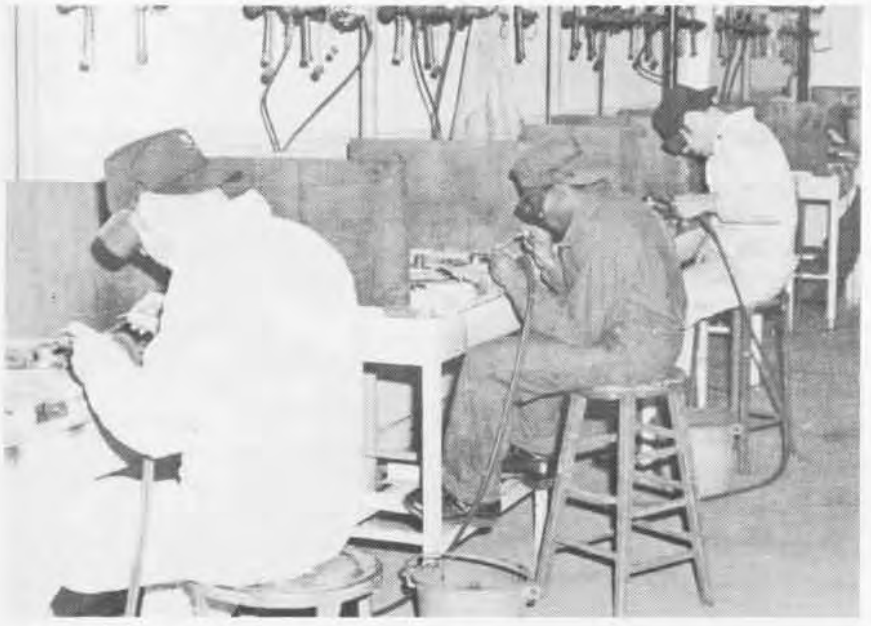


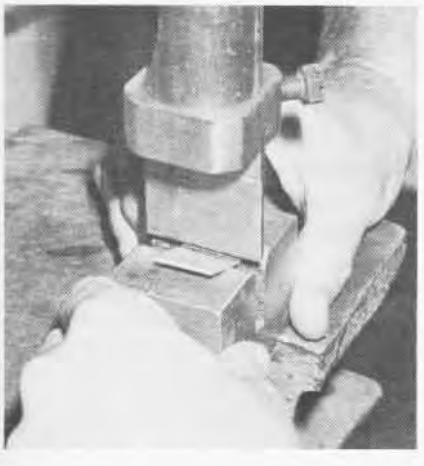
Need a Certified Aviation Torch? Naval Air Maintenance Training Detachment 5001, at Naval Air Maintenance Training Group, Memphis, Tenn., trains some of the best in the business.

Established on December 9, 1977, NAMTraDet 5001, in a four-week course, trains, certifies and recertifies aviation welders, in oxyacetylene, arc and heli-arc welding.

After passing an evaluation near the end of the course, the student attends an additional two-week course where, in many hours of practice, he hones his knowledge and skills to the level necessary to meet certification requirements. Welds made during the certification procedures are subjected to chemical and stress tests and examinations by microscope and x-ray. Once the student demonstrates the ability to produce strong, sound and contamination-free joints, he becomes a certified aircraft welder, NEC 7222.

NAMTraDet 5001 achieved 100 percent certification of its first class. Each of the eight students who graduated in May received certification in stainless steel and aluminum welding and returned to the fleet a Certified Aviation Torch.





Different metals and requirements call for different welding methods. Student, opposite page, top, is practicing arc welding. On this page, top, students practice procedures and techniques. During certification process welds are examined under a microscope, above left; a welded sample undergoes many tests, including visual and chemical, above, and stress, left. Heli-arc welding uses inert gases and electricity to form the bond, far left.

PEOPLE · PLANES · PLACES

Honing the Edge

In an emergency, seconds mean the difference between saving a pilot and an aircraft from disaster. It is the job of the 42-man crash and rescue crew at NS Rota, to ensure that precious seconds are not wasted. In addition to its first priority of saving lives, the crew, commanded by Capt. Charles W. Roe, does miscellaneous maintenance work and assists in controlling base fires. In the photo, after clearing away part of the fire, one of the handline/rescue personnel approaches the mock-up and simulates a rescue while the others provide back-up support.

Six squadrons of CVWR-20: VFs 201 and 202, Dallas; VA-203, Cecil Field; VA-205, Atlanta; VFP-206, Washington, D.C.; and VAQ-208, Alameda, journeyed to Fallon for AcDuTra. During the 15-day period, the squadrons flew alpha strikes and participated in a SAR exercise and a bombing derby in which VF-201 won in the fighter competition and VA-205 was the winning attack squadron. Cdr. Melvin L. Seidel commands the air wing.

The *Tigers* of VA-65 held their visual weapons training cycle last summer at Oceana. The unusual aspect of this particular weapons detachment was that it was held at Oceana, not Fallon, Yuma or El Centro, thus reducing time away from home for squadron personnel. Ordnance expended included over 1,500 Mk76 practice bombs, 13,000 pounds of live ordnance, 47 Mk45 paraflares and 10 mines. Twenty-one crew members competed in visual dive, 25 in close air support and 8 in mining exercises, amassing 404 hours in 210 sorties.

HAL-5, Point Mugu, recently completed two weeks of weapons system instruction and coordination operations with Reserve Riverine and Seal forces. One week was spent in weapons training at Fort Hunter-Liggett near Monterey and another week on river support and tactics at Travis AFB. Established in March 1977, the *Blue Hawks* spent many hours training for their first operational AcDuTra.

Personnel from HM-12 Det 2 and Mine Countermeasures Unit Bravo boarded LPH-2 recently for a successful mine countermeasures readiness inspection of *Iwo Jima's* capability to support MCM units in a mine-clearing role. The week's schedule included launching the various MCM systems from the helicopter platform. This required coordination of the MCM unit, hangar and flight deck crews and the crew of the tow aircraft. Capt. Mulloy, ComPhibRon-6, expressed satisfaction with the way the exercise was conducted and *Iwo Jima's* ability to act as a platform for MCM operations. Capt. W. H. Brown is C.O. of the amphibious assault ship.

Despite the presence of civilian television teams, there was no glitter or glamor to NATO Exercise *Dawn Patrol* for 1,500 Marines clad in full combat gear hitting the beaches and struggling up the craggy mountain ranges in a series of amphibious, land and air attacks on the coasts of Sardinia, Greece and Turkey. The combined landing force, under Col. W. G. Cretney, 32d Marine Amphibious Unit C.O., included the Royal Netherlands Marines, British Royal Marines, French Commandos, the Italian San Marco Tactical Group, the 32d Regiment Hellenic (Greek) Army and a Turkish amphibious Marine battalion.

Anniversary

Cecil Field marked 26 years as a naval air station on June 30, 1978. It was originally commissioned on February 20, 1943, as NAAS Cecil Field, in honor of Cdr. Henry Barton Cecil, who lost his life in the crash of the dirigible *Akron* in 1933. On June 30, 1952, the auxiliary field became a full-fledged naval air station.

Awards

Capt. Henri B. Chase presented Ltjg. James R. T. Patterson, VA-37, with the Jim Morin Award during the Eighth Annual Corsair Ball at Cecil Field. The award, in honor of Adm. Jim Morin, is presented each year to VA-174's outstanding replacement pilot.

In ceremonies held at VA-174, Cecil Field, the first annual John J. Murphy Award was presented to co-recipients AMH1 Robert Hahn and AE2 Barry Card for their sustained superior performance and dedication to professional excellence. The award, established in honor of LCdr. John J. Murphy, is given to the outstanding maintenance supervisor and technician in the squadron. Murphy recently retired as VA-174 airframes field services representative, training maintenance technicians for Vought Corporation.

For the fourth consecutive year, NAS Oceana was named winner of the ComNavAirLant Golden Mike Award. Each year a ship, station and squadron are selected for the best internal communications program. Winner in the ship category was *Kennedy*, with *Nimitz* and *America* receiving honorable mention. Norfolk-based VRF-31 took the squadron category, with Oceana's VA-176 as runner-up.

At the Fourth Annual Fighter Country Fling held in Oceana, Capt. Samuel C. Flynn, ComFitWing-1, named the wing's fighter pilot and radar intercept and maintenance officers of the year. They are, respectively, LCdr. Jeffery C. Frederick, VF-31; Lt. James A. Boyd, VF-101 and Lt. Bert Coffman, VF-102. VAdm. George E.R. Kinnear, ComNavAirLant, was guest speaker at the affair.

Moffett Field's VP-91 is the recipient of the Liberty Bell Award, presented annually by the Naval Reserve Association to the reserve squadron demonstrating the highest level of ASW expertise. Of the crews participating, VP-91's Crew Five, under LCdr. Jim McMahon, achieved the highest on-station performance marks. Each crew member was presented a letter of commendation.

The *Knight Riders* of VA-52 were awarded CVW-11's Golden Tailhook for their WestPac deployment aboard *Kitty Hawk*. The carrier's skipper, Capt. E. J. Hogan, presented the award to VA-52 C.O., Cdr. Bill Galbraith. The A-6E squadron from Whidbey Island made 836 landings. Four VA-52 pilots were recognized for placing in the top 10 in landing grades among the 10 embarked squadrons. LSO Lt. Jack Ekl received top honors for the best landing grade, 3.92, while maintaining a 100 percent boarding rate. Cdr. Galbraith, Lt. Joe Kohler and Ltjg. Tim Fetzer finished second, fourth and seventh, respectively, in overall competition.

The *Golden Warriors* of VA-87 were named the LAtWing-1 Attack Weapons Squadron of the Year. Capt. H. B. Chase, ComLAtWing-1, presented the annual trophy for bombing excellence to Cdr. Don Gerrish, VA-87 C.O. Members of the bombing derby team were: LCdr. Don Weiss, Lts. Rich Owen, Greg Lane and Bob Christensen, and Ltjg. Dewey Gordon. Team members who groomed the A-7 fire control systems included: ATAN James Long, AO3 Perry Forester, AQ3s Pierre Coulombe and C. Fraser, AQ1 James Whited, AE3 Richard Pressley, AO2 Charles Long, AQ2 A. Reed, AQ1 Robert Parker and AT3 Larry Cathcart.

Two *Boomerangers* from Moffett Field's VP-48 were spotlighted in the Silver Shutter competition. Ltjg. Scott Nicholson was recognized for his photographs of merchant vessels taken with the P-3C's system camera. AO3 Jay Heffernan won with a handheld camera. The Silver Shutter contest was established to highlight the importance of VP aerial photography and to refine photographic techniques.

The VP-19 maintenance team at Moffett Field was named winner of the AVCM Donald M. Neal Aircraft Maintenance Award. Formerly known as the Golden Wrench Award, it was renamed in memory of Donald M. Neal, former branch head of the antisubmarine aircraft test directorate at NATC Patuxent River. The award is presented annually to the patrol squadron demonstrating the most outstanding aircraft maintenance.

ComNavAirPac selected VS-38 as recipient of the CNO Aircraft Maintenance Award for air antisubmarine squadrons for calendar year 1977. C.O. Cdr. Durbin said, "There is no outfit around that deserved it more. These men have worked hard and long and justly earned the award. The statistics didn't win this award, people did — people with a positive attitude and a great amount of pride — and those people are in VS-38. I'm very proud to have been a part of it."

Grumman aircraft representative Bill Norton recently presented Lt. William D. Vance and AMS3 William Andrus with 1,000-hour award plaques for time logged in the C-2A *Greyhound*. Both men are with the *Foo Dogs* of VRC-50, Cubi Point.

During ceremonies held at the annual birthday ball of HM-12, Norfolk, LCdr. Michael L. Lagow was selected as HM-12 Officer of the Year for 1977 and Lt. William A. Meeley, Jr., was chosen HM-12 Pilot of the Year.

The *Ugly Angels* of HMH-36, MCAS(H) New River, received the National Defense Transportation Association Unit Award for 1977 during the association's annual forum in Washington, D.C. Picked from among the Marine Corps' ground and air transportation units, the squadron's determination to fly anyone or anything, anywhere, yielded a transportation record the Department of Defense felt deserving of special recognition.

PEOPLE · PLANES · PLACES

Rescues

Fallon's SAR helo recently worked overtime rescuing two severely injured hikers. The first rescue took place in the Sierra Nevadas west of Lake Tahoe. A hiker, who had fallen off a rugged cliff, sustained a broken neck and major internal injuries. After receiving first aid from one of the crewmen, he was lifted to South Lake Tahoe hospital. The next day, the SAR crew answered a call from the Mono County sheriff's office for assistance in rescuing a man who had sustained head injuries when he fell off a sheer rock face. The injured man was hoisted into the helo and taken to Washoe Medical Center in Reno. The crewmen participating in the rescues were Lts. Bud Manning and Phil Tetlow, AT2 Gary Hochstein, HM2 Jon Lee, HM3 Bob Wilson and ADAN Jeffrey Van Sickle.

Records

Lt. Gary Morgan from Lemoore's VA-122 is believed to be the first NFO to fly in an A-7. After completing a sortie with instructor pilot LCdr. Wilbur Trafton, he said, "I thoroughly enjoyed it. It's nice to fly in a tactical aircraft again, especially at low levels."

Two VA-52 *Knight Riders* received plaques for achieving 1,000 hours in the A-6. LCdrs. Steve Hatfield and Joe Mobley have flown the A-6A, B, C, E and KA-6D models. Squadron Leader Andy Evans, Royal Air Force, received a special plaque for flying 500 hours while on exchange duty. The awards were presented by Grumman tech rep Dick Sommers.

Congratulations went to Cdr. William K. King, C.O. of VT-28, for completing his 5,000th hour in the S-2 *Tracker*. Cdr. King has a certain sentiment for the S-2 he is pictured with — he flew it as a flight student in 1958. The aircraft has logged over 11,400 hours and will retire this year, along with other S-2s being replaced by the T-44A.

Patuxent River's VP-68 achieved its 40,000th accident-free flight hour while deployed at Rota. C.O., Cdr. C. R. Paty, said, "In VP-68 we think safety, we preach safety and, most importantly, we practice safety."

Operating several types of transports, VR-30 has amassed over 34,000 accident-free hours. The squadron operates two C-9B *Skytrain IIs* from Alameda, as well as five C-1A *Traders* and three CT-39 *Sabreliners* from North Island, delivering high priority cargo, personnel and mail to aircraft carriers on station.

An S-3A *Viking* from VS-29 piloted by LCdr. Dan Hacker, with crew members Ltjgs. Larry Buckler and Rich Tye and AW2 Charlie Brown, surpassed 25,000 accident-free hours while on an ASW training flight from North Island. The record spans almost seven years.

VA-113, commanded by Cdr. M. J. Webber, passed its 20,000th accident-free hour recently. Lt. Tom Mariner logged the record hour in a *Corsair*. Webber pointed out, "20,000 hours equates to one man working 40 hours a week for almost 10 years." The *Stingers* have conducted safe flight operations since May 1974 and have made two WestPac cruises during the period.

Led by Cdr. Gerry Smith, VA-196 reached a milestone of 15,000 accident-free flight hours. The feat was accomplished over 38 months, including 4,843 carrier landings and 538 days at sea. The squadron is deployed aboard *Enterprise* in WestPac.

Several squadrons marked accident-free flight records in years: VS-31, 8; HS-15, 5; and HC-3, 4. Lts. Pete Lance and Gordon Sedgwick of HC-3 both passed the 1,000-hour mark in the CH-46D.

Cecil Field was awarded a ComNavAirLant citation for 10 years of accident-free aircraft operation. RAdm. Robert W. Carius presented the award to C.O. Capt. Harold N. Wellman, and the air operations department, in recognition of operations without a major aircraft accident since March 1968.

Change of Command

ASO: RAdm. Paul L. Foster relieved RAdm. Van T. Edsall.

CNATra: RAdm. Joseph J. Barth, Jr., relieved RAdm. Burton H. Shepherd.

ComCarGru-3: RAdm. Robert E. Kirksey relieved RAdm. Paul A. Peck.

ComResPatWingLant: Capt. Richard J. Lanning relieved Capt. D. R. Yeager.

CVW-14: Cdr. David N. Rogers relieved Cdr. Darrel D. Owens.

HSL-30: Cdr. Ronald H. Jesberg relieved Cdr. Bradley A. Butcher.

MCAS Beaufort: Col. Bruce B. Rutherford relieved Col. Paul Siegmund.

NARF Norfolk: Capt. Henry Carlton North, Jr., relieved Capt. Allen D. Williams.

NAS Corpus Christi: Capt. Joseph Karl Kuehmeier relieved Capt. R. E. Williams.

NAS Patuxent River: Capt. Verle W. Klein relieved Capt. Charles R. Gillespie, Jr.

MABS-31: Maj. R. L. Thacker, Jr., relieved Maj. Stanford E. Sheaffer.

TACGru-2: Capt. William F. Agnew relieved Capt. G. R. Miyagawa.

VA-12: Cdr. Richard B. Curtis relieved Cdr. David R. Edwards.

VA-81: Cdr. Phil Jacobs relieved Cdr. J. O. "Funky" Yarborough.

VAQ-130: Cdr. Gus Gudmunson relieved Cdr. Pete "Mongo" Ferrentino.

VAQ-138: Cdr. J. R. Shapard relieved Cdr. R. L. Newman.

VF-143: Cdr. Paul W. Cooper, Jr., relieved Cdr. James B. Lusk, Jr.

VF-201: Cdr. Jon Jordon relieved Cdr. Guy Freeborn.

VMFA-251: LCol. Frederick J. Schober relieved LCol. Myrl W. Allinder, Jr.

VP-26: Cdr. Richard J. Petrucci relieved Cdr. Robert L. Geck.

VP-49: Cdr. Bryon E. Tobin, Jr., relieved Cdr. Robert M. Howard.

VP-60: Cdr. Howard C. Lysne relieved Cdr. Stephen G. Snipes.

VP-68: Cdr. James W. Hartley relieved Cdr. C. R. Paty.

VQ-4: Cdr. Floyd C. Painter relieved Cdr. B. R. Anderson.

VT-6: Cdr. Richard B. Mills relieved Cdr. Richard D. Stout.

VT-28: Cdr. William H. Zachary relieved Cdr. William K. King.

VXN-8: Cdr. Jerry C. Russell relieved Cdr. Thomas R. Ryan II.

Et cetera

Having 2,300 flight operations a month, the ALF on San Clemente Island had a serious problem when its radar went down. MATCU-33, Yuma, provided the solution. The radar needed to be overhauled and MATCU-33 sent a replacement radar and its crew of one officer and 16 enlisted men. The team headed by Capt. Bill Carey maintained and operated the equipment until the Navy's was repaired and functioning.

During last year's defensive combat maneuvers syllabus, VA-81's pilots realized that their A-7s' bright white bellies and big orange tails made them much more visible to the adversary, VA-45. After researching combat paint schemes, Cdr. Jerry Yarborough had the the corrosion control crew paint #414 all gray. In the weeks that followed, 414 flew numerous DCM sorties, as squadron pilots assessed the paint scheme. It worked. With ComNavAirLant's approval, VA-81 now has a full complement of camouflaged aircraft.

Brunswick's VP-44 recently held a ceremony to celebrate the arrival of its first P-3C *Orion* Update II. The aircraft, first of nine to be delivered to VP-44 in 1978, was flown by Cdr. Michael C. Roth, C.O.

A six-man film team from Naval Internal Relations Activity, Washington, D.C., spent two days this summer at Whidbey Island documenting the EA-6B *Prowler's* role and numerous aspects of the air station's operations. Before the Whidbey Island stint, it filmed air ops at Cubi Point on *Enterprise* and all West Coast air stations, and footage of *Coral Sea* in drydock at the Bremerton Naval Shipyard. Later the team filmed air ops in Europe and on the East Coast. The crew, which produces all of the CNO Sitreps, was filming Sitrep 14, the story of Naval Aviation today. Cdr.

Tommy Thompson, X.O., Naval Photographic Center (left in photo), and crash crewman BM1 John Selvidge (right) watch as Sitrep crewman Charles Strathman prepares to shoot footage of an EA-6B from VAQ-137 approaching bounce strip.

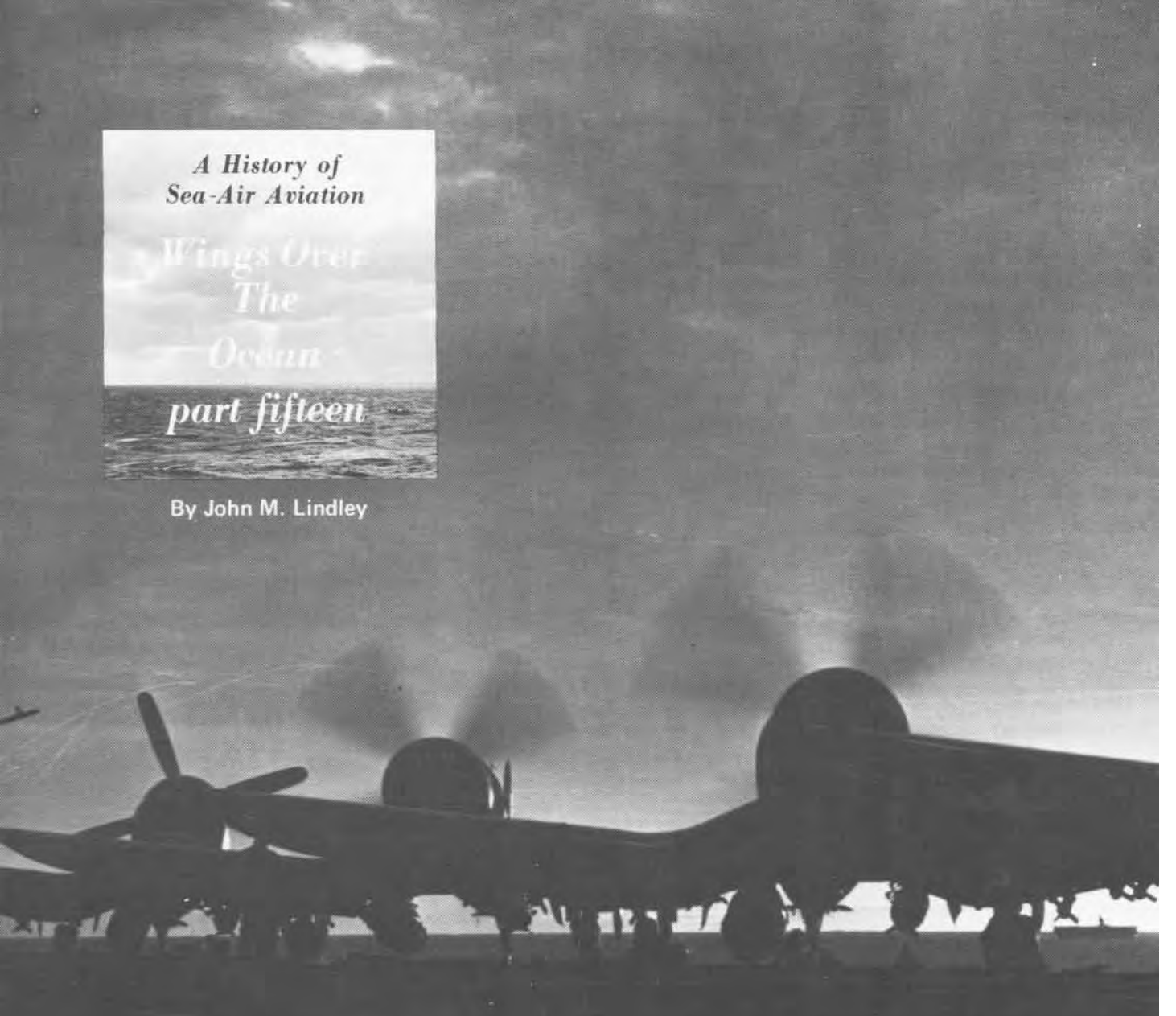
VAdm. Robert Baldwin, Com7thFlt, presented a check for $2,414.66, carved from wood and shaped to resemble the flight deck of *Midway*, to Vern Reid, manager of TVW Channel Seven, Perth, Western Australia, on behalf of Task Group 77.4. The money was collected in response to an appeal from TVW-7 on behalf of Western Australia's Children's Disease Research. Personnel from *Midway*, *Ponchatoula* (AO-148), *Navasota* (T-AO-106), *Worden* (CG-18) and *Francis Hammond* (FF-1067) contributed. *Midway* was flagship of the task group headed by RAdm. Paul A. Peck and commanded by Capt. Donald Felt. Dion Francis, manager of the Bank of New South Wales, was instrumental in exchanging the currency collected.

A History of Sea-Air Aviation

Wings Over The Ocean

part fifteen

By John M. Lindley



Naval Aviation Since 1945

The dropping of two atomic bombs on Japan in 1945 had an unsettling effect on sea-air aviation in the immediate postwar years. Atomic bombs seemed to be the ultimate in cost-effectiveness for military weapons. A single airplane carrying nuclear bombs could cause as much damage and destruction to an enemy's city and war-making machinery as the mass conventional bombing raids of WW II. As the Chief of the Army Air Forces, General H. H. Arnold, put it in 1945, the atomic bomb had made destruction "too cheap, too easy."

The direct effect of the explosion of atomic bombs on Japan and in tests after the war was to challenge the need for Naval Aviation in the future. Proponents of strategic bombing argued that the armies and navies of WW II were obsolete and that the only defense forces that the U.S. needed were atomic bombs and a fleet of long-range bombers to deliver them. Just at the time when the Navy's multiple carrier task force had proven its power to dominate the seas, it seemed the strategic bomber would relegate the carrier to ancient history. Proponents of atomic bombing talked as though the ancient Greek myth-makers had decided that they no longer needed Bellerophon and, that when they

Corsairs, armed for early morning raid, on deck of Sicily (CVE-118)

wanted to kill a monster like the Chimaera, they would just send Pegasus into the sky to drop a bomb on it from a great height.

Concurrent with this challenge to Naval Aviation was the rapid disappearance of the significant differences between land and sea-based aircraft used for commercial air transport. Land planes made intercontinental passenger flights over the oceans with ease and rapidity. The flying boat was no longer a prominent passenger carrier in transoceanic operations.

Yet, despite these challenges and changes on both the military and civil fronts, Naval Aviation has continued to maintain its distinctiveness as a part of sea-air aviation.

The effectiveness of the atomic bombs which brought destruction to Hiroshima and Nagasaki left political and military leaders with an extraordinarily perplexing problem: how to prevent mankind from blowing itself up in a nuclear holocaust. This problem grew even more complex and pressing when the Soviet Union detonated an atomic bomb in 1949 and a hydrogen device in 1954, thereby ending the nuclear monopoly of the United States.

Although the Soviets possessed atomic weapons by 1950, the U.S. took the position that its stockpile of nuclear arms would prevent Soviet

aggression. According to naval historian Stephen W. Roskill, the consequence of this deterrent strategy for the Western nations was a reduction in conventional military forces after 1945 because policymakers expected that nuclear arms would deter minor, as well as major, aggression. However, as Roskill pointed out, "The stalemate in the nuclear field acts as an incentive to minor aggression, which the deterrent strategy is powerless to prevent." Thus the Soviet attempt to cut off the city of Berlin in 1948-49 and the North Korean attack on South Korea in 1950 produced conflicts which were settled with conventional rather than nuclear weapons. The Korean War was typical of the kind of aggression which resulted from the nuclear stalemate between the U.S. and the Soviet Union.

In the Cairo Declaration of 1943, the leaders of the United Nations declared that Korea would be a unified, free, independent and democratic state after the Japanese were defeated. Following the Japanese surrender, the U.S. and the Soviets agreed that they would jointly disarm the Japanese troops in Korea. The Soviets would take care of this north of the 38th parallel; the United States, south of that convenient dividing line. When the Soviets balked at the idea of unification of the two Koreas in 1947, the U.S. placed the problem before the United Nations. The U.N. tried but was unable to bring the two Koreas together. In 1948 the Republic of Korea sprang to life in the south and the Democratic Peoples' Republic of Korea began to govern the north. With the establishment of two Korean nations, the U.S. removed all its troops (except 500 advisors) in July 1949.

Nearly a year later, in the early morning of June 25, 1950, seven infantry divisions and one armored division of the North Korean People's Army crossed the 38th parallel and attacked South Korea. On the evening of the next day, President Harry Truman instructed General Douglas MacArthur, in Japan, to use his air and naval forces to assist the South Koreans. The following day, the U.N. Security Council voted to assist the Republic of Korea in repelling the attack. By the end of June, MacArthur had been given the authority to bomb North Korean targets. Thus, nine days after the war began, carrier aviators from USS *Valley Forge* and HMS *Triumph* struck military targets in the North Korean capital of Pyongyang, which were outside the range of land-based U.N. aircraft. The 57 planes completely surprised the North

Koreans and destroyed an airfield, parked aircraft, ground installations and a fuel tank farm. Later carrier strikes hit railroad facilities and other supply installations. The U.N. carrier air forces on these initial strikes used British *Seafires* and *Fireflies* and American F4U *Corsairs,* AD-1 *Skyraiders,* and F9F *Panther* jets. This was the first wartime mission for jet planes.

By the end of July 1950, the U.S. Navy had committed all five of its Pacific Fleet carriers and their escorts to the war in Korea as part of Task Force 77 (TF 77). Carrier planes flew close air support missions for U.N. troops who were slowly retreating to the port of Pusan on the southeast coast of Korea. On September 4, 1950, U.S. Navy *Corsairs* shot down a Soviet airplane, marking the first combat between carrier planes and Soviet aircraft. Once U.N. forces established themselves at Pusan, they broke out of their defensive perimeter with MacArthur's brilliantly conceived amphibious landing at Inchon, a South Korean west coast port about 15 miles from Seoul, the South Korean capital. The U.S. Marines were the first ashore at Inchon on September 16, and quickly took Seoul and a key airfield at Kimpo. During the assault at Inchon, TF 77 encountered no North Korean air or naval opposition; thus its three carriers provided close air support for the Marines and flew interdiction missions.

The landing at Inchon caught the North Koreans by surprise. Soon U.N. ground forces took the offensive, driving north toward the 38th parallel. By early October 1950, U.N. troops had crossed into North Korea and headed for the Yalu River which separated North Korea from Manchuria in Red China. In October the first Red Chinese "volunteers" joined the North Koreans. The next month Soviet-built MiG-15 fighters fired on U.S. aircraft. The MiG-15 (named for its designers Artem I. Mikoyan and Mikhail I. Gurevich) had a maximum speed of 680 miles per hour and was considered, at the time, to be the most advanced operational fighter in the world. The first all-jet air battle took place on November 8 when four F-80s and four MiGs tangled. One MiG was shot down; there were no American losses.

While the Red Chinese transported volunteers across the Yalu in late 1950, TF 77 carrier planes tried to knock out 6 of the 17 bridges across the Yalu in order to slow the stream of supplies from Manchuria. Although these air strikes were largely successful in spite of heavy fighter and antiair-

Over Korea, from top, Corsair, Panther, Skyraider.

Snow covers flight deck of Philippine Sea, Korea 1951

craft fire, North Korean and Red Chinese forces drove U.N. troops back to the 38th parallel. By January 1951 the battle lines had stabilized just above the 38th parallel, along the Han River. Three months later, U.N. forces were back to the parallel. Frustrated by the men and supplies that the communists received from the Manchurian sanctuaries, Gen. MacArthur advocated bombing north of the Yalu River – to stop the flow of reinforcements. In April President Truman announced that he not only refused to widen the war by adopting this strategy, but also had replaced MacArthur with General Matthew B. Ridgway.

From the spring of 1951 until the signing of the armistice on July 27, 1953, carriers of TF 77 continued to support the ground operations of U.N. forces. Although carriers did not provide air support for U.S. Navy forces or for attacks on North Korean naval vessels, they kept very busy. U.N. carrier aircraft flew air patrol, antisubmarine and reconnaissance missions, but most carrier aircraft were involved in raids on inland targets or in close support missions along the battle line. As historian Gerald Wheeler has pointed out, "The average combat mission was against a bridge, factory, railroad line, or troop concentration, and all provided hazards of flak and ground fire."

Naval Aviation carried out other missions. Land-based patrol planes such as the P4Y *Privateer* and P2V *Neptune* and the PBM *Mariner* seaplane flew antisubmarine patrols, mine spotting, photographic reconnaissance and air-sea rescue missions.

The helicopter received its first combat test in Korea. According to historian James A. Field, the helicopter ". . . proved of transcendent value as plane guard for carrier operations, as platform for observation and for gunfire spotting, in the location of underwater mines, in providing courier and transport service between ships at sea and across difficult terrain ashore, in the rescue of pilots down behind enemy lines, and in the rapid evacuation of the wounded."

As part of its minesweeping operations in Wonsan Harbor in March 1951, the U.S. Navy made LST-799 into a helicopter carrier. Its helos did their share in clearing the mines, and also rescued 24 pilots who were forced down in the Wonsan area between March 1951 and November 1952.

The other major air combat innovation in Korea was the jet plane. Jets such as the Grumman F9F *Panther* (maximum speed 579 miles per hour) and the McDonnell F2H *Banshee* (maximum speed 532 miles per hour) joined piston attack planes like the F4U *Corsair* (maximum speed 470 miles per hour) and the AD-1 *Skyraider* (maximum speed 375 miles per hour) in the air over Korea. The *Corsairs* and the *Skyraiders* were valuable planes since they could remain on station longer than the jets. Nevertheless, the jets represented the fighter and attack aircraft of the future because they were much faster. Their speed, combined with their silent approach and bombing steadiness, made them very effective in tactical roles. The increasing effectiveness of the jet in TF 77 operations was reflected in the changing ratio between jet and propeller planes. Between July 1950 and January 1951 the ratio was 1:2, but between February and July 1953, it was 4:3. Thus jets were definitely established as part of the Navy's air arm by the end of the Korean War.

Although the United Nations and North Koreans had begun truce talks in June 1951, the air and sea war in Korea continued until the armistice was signed in July 1953. Three years of war in Korea had a substantial impact on the U.S. Navy. The tactics and most of the weapons had been those of WW II, but the air war had seen the introduction of jets and helicopters. The U.S. had neither used its nuclear weapons nor had it won a clear-cut victory. The war also demonstrated the continuing need for a strong navy, especially a carrier navy, to fight hot and cold wars. Perhaps the biggest tactical surprise of the war had been the failure of U.N. land and sea-based air power to cut the communist supply lines. Despite the presence, at various times, of one Australian, 17 American, and 4 British aircraft carriers, whose aircraft flew a total of about 280,000 operational sorties, the communist supplies continued to get through. Even night carrier aircraft raids on nocturnal communist activity failed to cut the enemy supply lines permanently.

Malcolm Cagle and Frank Manson, two naval officers who have written a history of the naval war in Korea, summed up the overall air interdiction campaign in Korea as only partially successful because U.N. air forces were unable to hit the sources of supply in Manchuria. They could only attack the railroads, bridges, highways, storage depots and supply traffic in Korea. Historian James Field agrees with Cagle and Manson on the limited effectiveness of the air war. He concluded that strength in the air was not in and of itself "the precondition of victory" and that the war showed once again "the essential interdependence of air and surface activity."

Although some political and military leaders in the U.S. had called upon President Truman to use nuclear weapons against the communists, he would not. Apparently total war of the sort which Gen. Arnold envisaged in 1945 when he declared that strategic bombing had made destruction "too cheap and easy" was now obsolete because no aggressor could use nuclear weapons without risking the possibility that he would bring retaliatory nuclear destruction upon himself.

This policy of avoiding total war and trying to limit conventional warfare permeated the war in Vietnam between 1962 and 1973. The gradual involvement and escalation of the U.S. combat presence in Vietnam in the early years indicate that political and military leaders in the U.S. wanted to limit the level of fighting just as President Truman had done in Korea.

(Continued)

letters

This is in reference to the above picture which appeared on page 2 of the July 1978 issue. I was a Ltjg. standing in Vulture's Gulch at the time and thus had about the same perspective as the photograph. I was aboard *Coral Sea* as a member of a VC-33 *Skyraider* det preparing for a Med cruise. As I recall, this air group (whatever the heck M was) came aboard for a few days of qualifications. (My log book shows we were back ashore by August 7.) I believe the incident happened on the initial recovery of the air group on coming out from shore, and this was the first plane aboard. It floated down the deck, over all the wires, and tripped over what was apparently the second set of barriers. Looks like they got the third set laid down and the first set is just starting down in the photograph. After balancing on the prop dome for what seemed like a long time, it flopped back to an upright position on the gear. But what made it stick in my memory (being a junior officer at the time) was that the poor devil in the cockpit was an ensign or j.g. detailed to fly the CAG's airplane out to the ship. Made me sweaty-handed to think of what was in store for him. Bet he remembers it much more clearly than I do.

James M. Patton, Jr.
Chief of Flight Operations
Langley Research Center
Hampton, Va. 23665

Flight Surgeon Information

The Naval Aerospace Medical Institute is attempting to update its records concerning Flight Surgeons who have died on active duty.

Anyone who knows of any Naval Flight Surgeon who has died while on active duty, especially in the last 15 years, is requested to contact Ms. Jacque Devine at the Institute. Call: commercial 904-452-2240, autovon 922-2240, FTS 948-2240; or write: Commanding Officer (Code 013), Naval Aerospace Medical Institute, NAS Pensacola, Fla. 32508.

Information should include name, rank, and date and place of death.

Enlisted Pilots

James R. Gould has written a book called *Silver Eagles on Freedom's Ramparts*, a history of the U.S. Navy's enlisted pilots. The book is a tribute to the 3,700 NAPs who played vital roles in Naval Aviation's history. Contact TOV Publishing Company, 1267 Castlemont Ave., San Jose, Calif. 95128, for information on obtaining the book.

Gotcha!

Your biased writers are glorifying Naval Aviation (however inadvertently) at the expense of historical truth. (See July 1978 issue, page 36.) No British carrier – including *Ark Royal*, then with Force K well north of Rio de Janeiro – was within a thousand miles of Montevideo when the *Admiral Graf Spee* was trapped there. It was the great and glorious surface Navy, unassisted by carrier air, which did the job – alone.

A. G. Nelson, Capt.
OpNav (Op-981T)

Ed's Note: Message received!

Oops

In the May 1978 issue, on page 12, the lady identified as Ella Stringfellow is really Corrie Battles, instrument worker. She is reworking a gyroscope, not an AAU-21 altimeter.

Ella Stringfellow
5421 Forest Oak Drive S.
Mobile, Ala. 36618

Ed's Note: Regret the error but we're only as good as our sources.

Correction

The following information is provided to correct some errors in the text of an article on JASMMM [Joint Aviation Supply and Maintenance Material Management] which appeared in the June 1978 issue.

A specially tailored two-week reserve class has been taught for some time with quotas controlled by CNavRes. The next class convenes in November. At present the course is taught 14 times a year and, except for the reserve session, all classes are three weeks long.

Worth special mention is the JASMMM class taught somewhere on the road: once a year JASMMM leaves Athens, Ga., with quotas controlled by the applicable tycom. Such an offering is currently scheduled at ComNavAirPac.

One other minor point requiring clarification concerns personnel eligible to attend the course. While we are in the business of providing training to a wide variety of officer, enlisted and senior civilian maintenance, supply, logistics and operational personnel, the course is not really designed for the 1510 AEDO (as implied in the article) or engineering (non-aviation) personnel in general.

R. L. Mosher, LCdr.
JASMMM Maintenance Instructor

Ed's Note: It's becoming a cliche, but we are only as good as our source.

Help

I would greatly appreciate help in finding some photos, stories, etc., of the USN's NE-1 *Grasshopper*. Any material used will be credited.

Lorn W. Westfall
Confederate Air Force
15308 Tanglebriar Drive
Dickinson, Texas 77539

I am currently researching the history of the North Vietnamese Air Force from 1964 to 1973. I would like to contact individuals having any information on its aircraft, units and personnel.

Michael O'Connor
406 7th St.
Mosinee, Wisc. 54455

I am researching two areas of Naval Aviation history for articles I would like to publish, and need inputs from people who were or are involved in the Kaman SH-2 in the LAMPS role, and with drones and RPVs.

Anything *NANews* readers can tell me will be appreciated as I'd like the articles to tell it like it really is. Contributors will be given proper credit.

I need photos, which I will copy and return immediately, and I will refund postage.

Orin L. Humphries
5208 North Elgin
Spokane, Wash. 99208

Published monthly by the Chief of Naval Operations and Naval Air Systems Command in accordance with NavExos P-35. Offices are located in Bldg. 146, Washington Navy Yard, Washington, D. C. 20374. Phone 202-433-4407; Autovon 288-4407. Annual subscription: $12.85, check or money order ($3.25 additional for foreign mailing) direct to Superintendent of Documents, Government Printing Office, Washington, D.C. 20402. Single copy $1.25.

SQUADRON INSIGNIA

HSL-34

Helicopter Antisubmarine Squadron, Light 34 was commissioned on September 27, 1974, in response to the increased demand for LAMPS helicopter units. The squadron has eight detachments, each consisting of three pilots and 10 enlisted personnel, including two AWs. Its SH-2F Seasprites provide antisubmarine warfare and anti-ship surveillance and targeting capabilities. HSL-34 received the Captain Jay Isbell Trophy for ASW excellence and the Chief of Naval Operations Aviation Safety Award for 1977. Led by Cdr. R. C. Strand, the Professionals are home-based at Norfolk.

NAVAL AVIATION NEWS