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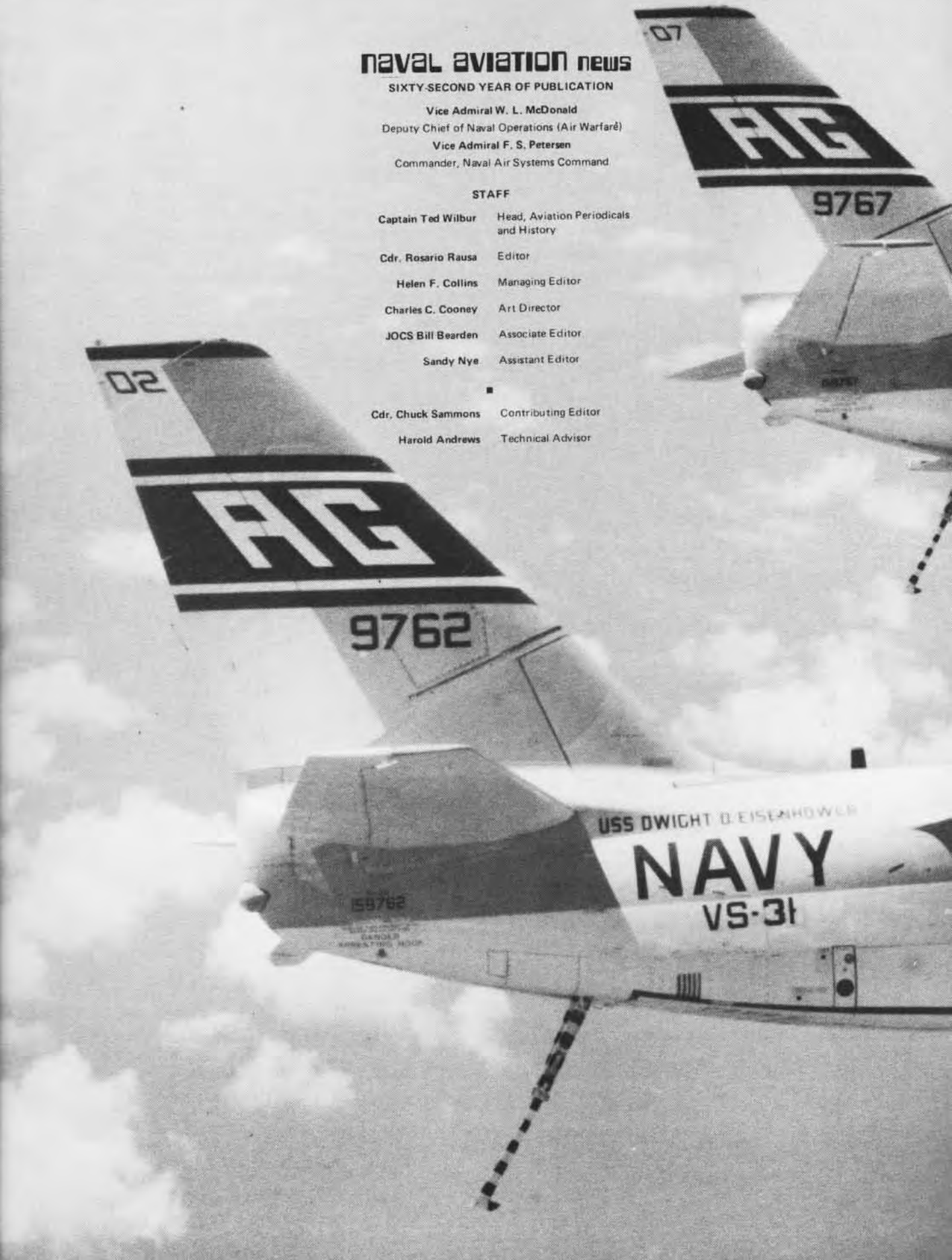


COVERS – Scenes from USS Midway and Japan on the wraparound cover were arranged by NANews' Charles Cooney. See feature on CV-41 home-porting beginning page 8. Here, PH1 Hines filmed S-3A Vikings from USS Eisenhower's VS-31 in May 1978.

EDITOR'S CORNER

Welcome Aboard, Zachary! Last July, Ltjg. Joel K. Vanderwaal of VR-24 eased his T-39 very carefully onto the runway at Naples, Italy, shortly before midnight, just as Carol J. Kenyon gave birth to her first child, Zachary Anderson Kenyon. Lt. Larry D. Thomas, M.D., of the dispensary at NAF Sigonella, Sicily, delivered the child with the aid of nurse Lt. Lisa Hiles. Carol's husband, PN2 Mark Kenyon, was also on board. The baby arrived three weeks early, well before Mrs. Kenyon was scheduled to be flown to Naples for the event. "This is our first baby," said Zachary's father. "I'll know now when to bring Carol in the next time."

What's a Cockpit? According to Delta Air Lines' *Up Front* (which quoted from the July 1979 issue of Boeing's *Airliner*), research has provided the following: The term cockpit originated in the ancient and continuing sport of cockfighting. Two fighting cocks are placed in a depression, or cockpit, in the center of a small arena. The floor of the pit is usually below the level of the arena, and a low fence surrounds the pit, projecting slightly above the floor of the arena. Because of a general physical similarity, the sporting term was applied to small boats in which the crew and passengers sit in a sunken area below deck level and are protected from water flowing on the deck by a low fence-like barrier, or coaming. When airplanes came on the scene early in this century and evolved to the point of having what we now call fuselages, the well-established nautical term cockpit was applied to openings in the top of the fuselage where the pilot, passengers or other crew members sat. With the closed-cabin configuration of later aircraft, the aeronautical sense of the word cockpit took on a different meaning and is now used to identify the pilots' station regardless of form or location.

Leatherneck Perfection. McDonnell Douglas' Harry Gann filmed VMFA-323 F-4Ns bound from El Toro for USS *Coral Sea* prior to a deployment last year. Lt.Col. David V. Denton led the flight. Note the side numbers. That's organization!

Show of Force. Apollo Soucek Field (NAS Oceana, Va.) shows off some of its aircraft, left. On display at the base of Oceana's tower is an F-14 *Tomcat* flanked by an A-6 *Intruder* and an A-4 *Skyhawk* with an F-4 *Phantom* in the slot. VT-2 of Training Air Wing Five, based at Whiting Field, Fla., put some teeth into its T-34C *Mentor*, right. Former VT-2 instructor, Capt. Greg Johnson, USMC, sent us the photo.

Twins? Howard Chandler Christy's lady sailor from a 1917 recruiting poster has nothing on PH3 Coleen White of Point Mugu's photo lab. PHAN Ed Ellis took the picture of Coleen.

DID YOU KNOW?

Hush House A new aircraft test and evaluation facility (ATEF) is being built at the Naval Air Test Center, Patuxent River, Md. The Hush House, as it is nicknamed, is an acoustical enclosure where NATC personnel will run aircraft engines at full power and very high noise levels without disturbing the surrounding area. The main chamber will be constructed from prefabricated acoustical metal walls and ceiling panels designed to absorb noise. A specially designed 84-foot-long attenuation tube will carry engine exhaust gases out of the main chamber.

The ATEF, when operational early in 1981, will enable NATC project personnel to perform tests and evaluations in a controlled environment on station. By eliminating expenditures for travel costs, fuel, etc., that would have to be made to transport aircraft to other test sites, the ATEF is expected to return its initial investment in less than five years.

UC-12B "She'll fly a little slower and a little lower than the T-39, but she'll also fly a heck of a lot cheaper," said Rear Admiral James E. Service as he accepted delivery of a UC-12B on September 28, 1979, at NAS New Orleans. RAdm. Service was director of the Aviation and Manpower Training Division on the staff of CNO. The occasion was the formal ceremony accepting the second of 66 operational Navy UC-12Bs to be delivered during the next three years. The first UC-12B arrived at Patuxent River, Md., earlier in September.

The military version of the Beechcraft *Super King Air 200* will replace aging reciprocating engine aircraft and will supplement the Navy's transport inventory. It will be used for logistics support by the active duty force and naval reserve, with overall scheduling in the U.S. coordinated through the New Orleans Naval Air Logistics Center. The UC-12B is designed to carry 8 to 12 passengers in addition to the pilot and copilot. It has a maximum cruise speed of about 300 mph and a range up to 1,760 miles. The aircraft can operate from short, grass runways and fly at 31,000 feet, providing pressurized comfort. Its advanced solid state avionics can automatically navigate the plane through bad weather conditions.

The configuration of the UC-12B lends itself to a variety of transport, training and utility missions. Complete dual controls permit two-pilot operation or flight crew training. It can move high priority cargo and personnel rapidly, such as repair crews, accident investigation teams or injured personnel. The UC-12B has been designed for reliability, maintainability and low cost of operation.

Lieutenant Commander H. J. Pricenski and Lieutenant T. J. Sullivan piloted NAF Atsugi's first UC-12B 10,000 miles in November from Wichita, Kansas, to Yokota Air Base in Japan, for a total of 44.2 flight hours.

DID YOU KNOW?

Flight Data Recorder

A new experimental solid state memory flight data recorder (SSMFDR) was flight tested in December at NAS North Island, Calif., by a team from the Naval Air Test Center, Patuxent River, Md. Flight data recorders store information right through the last minutes of an aircraft's flight. This information is used by investigators, in the event of a crash, to help determine the cause of the accident.

According to Dan M. Watters, project manager at NATC's Systems Engineering Test Directorate, the new recorder was developed to eliminate shortcomings in the older magnetic tape flight recorders. The latter, installed in P-3Bs, E-2Bs, C-2As and KC-130Rs, have a history of problems in reliability and logistic support. None of three P-3Bs which crashed during 1978 had an operable recorder on board. Mr. Watters explained that the SSMFDR, with no moving parts, eliminates the possibility of mechanical breakdowns; and that the recorder has very low read/write power requirements – which results in little internal heat and in enhanced reliability.

The SSMFDR, when installed on a P-3B *Orion,* would record data from about 25 mechanical sensors. For example, critical flight information would be stored, as well as audio information from three voice channels. Therefore, the last few minutes of continuous audio and digital sensor data prior to an accident or incident would be available in the unit. The recorder, which is about six inches square and two inches deep, is installed in an airfoil on the vertical stabilizer of an aircraft and is ejected upon aircraft crash impact.

If the results of the tests are satisfactory, the unit will eventually be installed in all new aircraft requiring flight recorders. Since the system is lightweight, future improved models could be installed on high-performance fighter/attack aircraft which currently do not have recorders.

Blue Angels Recruiting

The U.S. Navy Flight Demonstration Squadron, the *Blue Angels,* will select for its 1981 team a Naval Flight Officer (1320) and three pilots. One of the pilots will represent the Marine Corps. Final selections will be made in September 1980 but interested officers are encouraged to submit their applications as soon as possible.

An applicant should be a tactical jet pilot or Naval Flight Officer with 1,500 hours of flight time, rotating to or on shore duty. The letter of application should be endorsed by his commanding officer and forwarded to the Navy Flight Demonstration Squadron, with a copy to the Chief of Naval Air Training, and another to the Chief of Naval Personnel (Pers-433A) or Commandant of the Marine Corps (Code AA). The application should specifically include the officer's experience and qualifications.

Questions regarding application or comments concerning the mission of the *Blue Angels* are invited. Write: Commanding Officer, Navy Flight Demonstration Squadron, NAS Pensacola, Fla. 32508. Telephone: autovon 922-2583 commercial 904-452-2583.

Aircraft Modernization Program

The aircraft modernization program complements the purchase of new aircraft by significantly increasing the capabilities of those aircraft already in service in Naval and Marine Corps Aviation. Captain Ren Stedman, program coordinator for the Deputy Chief of Naval Operations (Air Warfare), Vice Admiral W. L. McDonald, discussed the program. "While purchase of more modern aircraft, such as the F/A-18, responds to long-term needs," said the Captain, "the modernization program is the most expeditious and cost-effective method of answering the fleet's near-term requirements.

"The program's prime objective," he went on, "is to modernize aircraft that are already in the active inventory. This is accomplished by incorporating technical improvements which make the planes we are currently operating substantially better.

"The program is divided into two categories," said Stedman: "conversion in lieu of procurement (CILOP) and 'other modifications.'" Under CILOP there is a service life extension program (SLEP) which has been in effect for some time and which focuses on restoring and/or replacing primary aircraft structures that have reached their fatigue life limit. Configuration and system improvements are also included and permit expansion or change of mission capability in existing aircraft.

CILOP evolved in the early 1970s as a result of increased unit costs of replacement aircraft coupled with fiscal constraints. Hence, CILOP became an acceptable near-term alternative to purchasing new aircraft in order to meet or maintain force levels. A classic example of this was the conversion of the A-6A version of the *Intruder* attack bomber into the more sophisticated A-6E. More than 300 of the older attack aircraft became A-6Es over a seven-year period beginning in 1972.

In the "other modifications" category, focus is on modernizing systems and components of existing aircraft with emphasis on improving readiness and combat effectiveness. Safety of flight items, reliability and maintainability improvements and, generally speaking, incorporation of components which embody new technology are included. Forward-looking infrared (FLIR) devices, for instance, have been installed under the program. FLIR measurably enhances an aircraft's detection, identification and attack capabilities at night.

"Plans call for replacement of the A-6Es in the mid-1990s," said Stedman. "In order to maintain the force level until then, a major rewinging effort has been ongoing for several years through the service life extension program. In fiscal years 1980 and 1981, under the same program, eight of the older A-6Es will be converted to KA-6D tankers. These tankers are expected to satisfy mission requirements until a replacement air refueling aircraft is introduced to the fleet in the mid-1980s." Many aircraft, incidentally, are included in the aircraft modernization program, including the A-7, F-14, H-53, S-3 and E-2.

There are seven categories within the overall aircraft procurement Navy account (APN) budget. These are combat, airlift, training, "other" aircraft, aircraft spares and repair parts, aircraft support equipment and facilities, and the modernization of aircraft (APN-5) which is devoted to the subject program. Historically, the N-5 account uses 15 percent of the total aircraft procurement budget but it can change depending on circumstances. The percentage increases or decreases, contingent on the number of new aircraft which are purchased. When more new aircraft are bought, less is spent on the modernization program. This will be noticed, for example, as the F/A-18 *Hornet* eventually replaces the F-4 *Phantom* and the A-7 *Corsair*.

VAdm. McDonald, who as DCNO(Air Warfare) is the Navy's top aviator, said, "The program is the most expeditious method we have to respond to fleet requirements. Fortunately, current aircraft designs have sufficient growth and strength potential to allow for these modifications and service life extensions."

Naval and Marine Corps Aviation continues to function as a vital component of U.S. sea-going forces, and the aircraft modernization program plays a dynamic role in maintaining readiness in the fleet.

Grampaw Pettibone

From the Mailbag

Sparks in the Dark

What began as a routine field mirror landing practice (FMLP) hop came close to imminent disaster last fall for LCdr. Doug Bradt. He and his A-7 *Corsair* took off from NAS Cecil Field and flew toward nearby Whitehouse Field at about eight p.m.

"I cleared him for takeoff," said AC2 Joe Biles, who was in the tower at Cecil Field. "While he was rolling down the runway, I saw sparks shooting from the exhaust. I immediately called Jacksonville departure control and they relayed the message to the pilot."

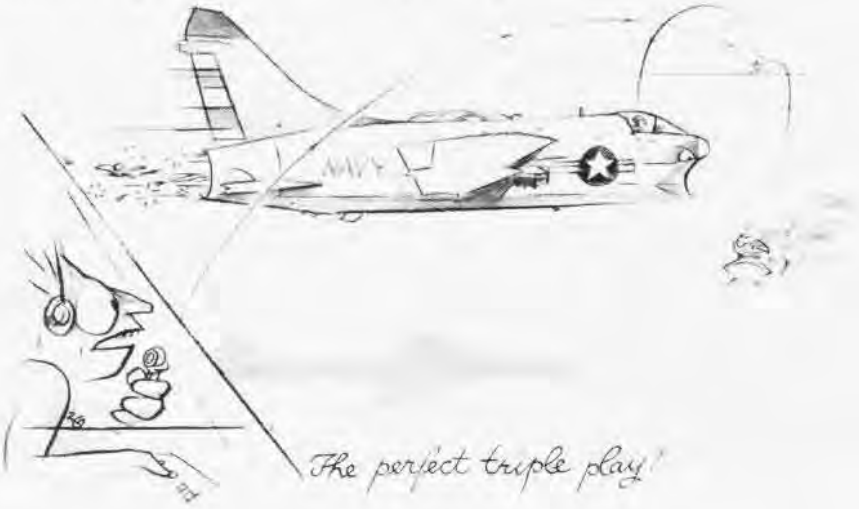
In the meantime, crash crewman Randy Alexander, from the Cecil Field fire department, was also alerted and he called the tower on the FM radio to confirm AC2 Biles' observation. The aircraft returned to Cecil without further incident. LCdr. Bradt taxied to the line where the maintenance crew discovered the aircraft had ingested some birds on takeoff roll, seriously fodding the engine.

Grampaw Pettibone says:

Holy fodding feathers! The accurate diagnosis and alert actions by

AC2 Biles and crash crewman Alexander averted a potential disaster that was promoted by birds of the feather flocking together – unfortunately, on the duty runway.

It makes old Gramps proud to be able to add to LCdr. Bradt's and Attack Squadron 174's thanks to these two gents. "Well done."



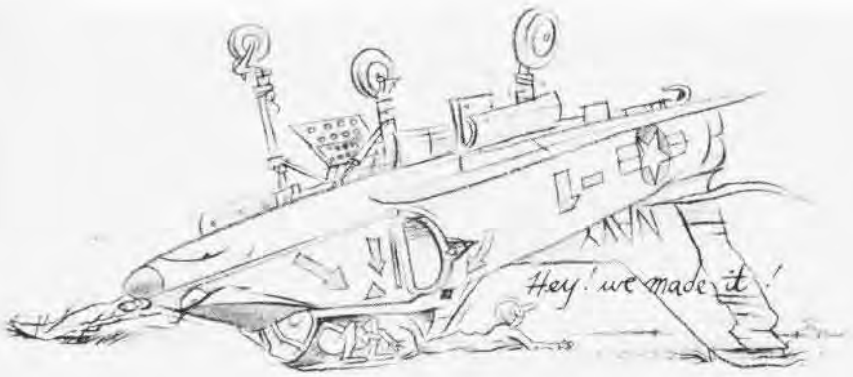
No Flap Flop

Upon completion of the high altitude portion of a familiarization-type flight check ride, the instructor pilot (IP) in the rear seat of a TA-4J directed the student to make some practice precautionary approaches at home field where a light but steady rain was falling and a crosswind was blowing. After the approaches, the student entered the touch and go pattern but was waved off three successive times due to overshooting the centerline. The instructor demonstrated a touch and go, then the student made one. After this fifth pass, the IP noted 1,600 pounds of fuel remaining and directed the student to make a full-stop landing. Realizing that the student hadn't made a no-flap approach, which was required for the flight, the instructor directed the student to make a no-flap, full-stop landing using speed brakes and spoilers.

The approach was flown on speed and centerline with a centered ball to touchdown. The student brought the power back to idle and the spoilers were extended. At the 5,000-feet-remaining marker, the aircraft was traveling about 120 knots; at 4,000 feet, 100 knots. The instructor told the student to commence braking. Speed was 50 knots at the 2,000-foot marker. Shortly after that, the instructor took the controls, released the brakes, crossing the long field arresting gear (located at 1,000 feet remaining), and then began braking again. The aircraft drifted right, the nose swinging to the left. The IP ordered the student to drop the hook. The *Skyhawk* was now in a right skid, 15 feet right of centerline.

The instructor released the left brake, engaged nosewheel steering, and reapplied the right brake in a futile attempt to stop the nose from drifting. The aircraft, sliding sideways with its nose 90 degrees left of runway head-

ILLUSTRATED BY Osborn



ing, departed the strip at 20 knots, 200 feet from the end. It continued skidding upright for another 40 feet before the starboard wing dug into the ground. The aircraft rolled inverted and came to rest on the canopy, tail section and left wing. The student secured the engine, using the throttle and emergency fuel cutoffs. The crew egressed without injury.

Grampaw Pettibone says:

Great jumpin' Jehoshaphat, you gotta be skiddin' me! The decision to attempt a no-flap, full-stop landing in the TA-4J on a wet runway with an obvious crosswind was not in the best interest of aviation safety. The computed roll-out distance for such a landing under the conditions indicated, using maximum braking techniques, is 6,300 feet. Since touchdown was 700 feet from the approach end, there was minimum room for error. Sufficient fuel remained to safely permit execution of the no-flap approach to a touch-and-go landing followed by a full-flap, full-stop landing.

These lads could have also made a long-field arrestment or, at the 4,000-foot marker with speed in excess of 80 knots (which was the case here), take it around.

Luckily, the two survived. Unluckily, the *Skyhawk* sustained strike damage. The adage, "Any landing you can walk away from is a good one," does not apply!

The Bent Mentor

Following a normal briefing, preflight and engine run-up, the pilot of the T-34B *Mentor* positioned his aircraft for takeoff on runway 12L, 2,087 feet long. It was the shorter of two parallel runways. The pilot went to full power, checked his instruments and commenced takeoff roll. The aircraft left the runway at about the 1,000-foot mark. Seconds later it began to vibrate and seemed to lose power. The back-seat passenger, who had no aviation experience, noted some difficulty in getting the aircraft to lift off. Once airborne, the aircraft was in an abnormally nose-high attitude and displayed sluggish roll and yaw characteristics. The T-34 then settled back toward the ground, the right wing dipping momentarily and contacting the runway.

At this point, the pilot considered aborting the takeoff but elected not to in view of the short length of runway remaining. He continued airborne and raised the gear and flaps, which seemed to improve the flight characteristics sufficiently to establish a slight positive rate of climb.

The pilot attributed the poor aircraft performance to a possible engine malfunction, and decided to attempt an emergency landing on the remaining portion of the upwind end of the longer parallel runway, 12R, which was 7,270 feet long. He began a right turn and requested an emergency landing. The engine appeared to have regained power and was now running smoothly. The pilot thought he could make the runway and extended the wheels and flaps.

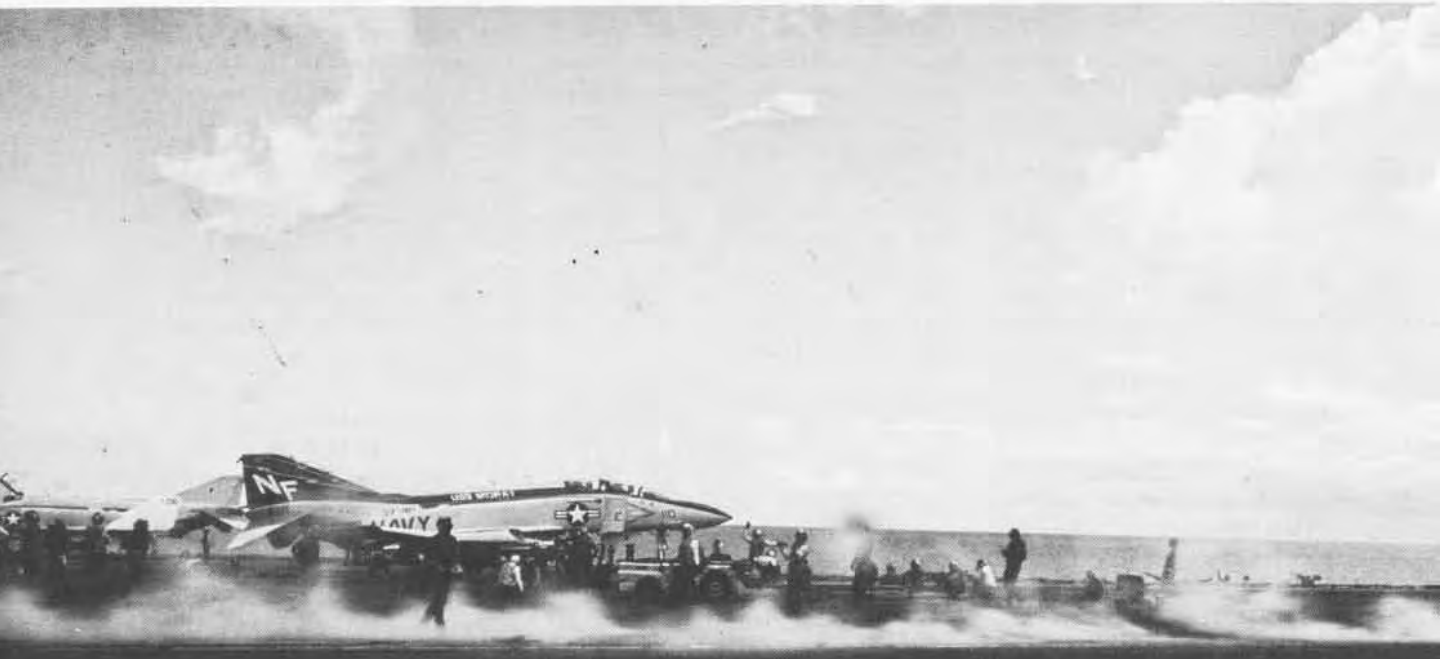
The aircraft began to vibrate again and the engine seemed to lose power. Its rate of descent also increased. Seconds later, the *Mentor* struck the ground, left wing first, and skidded to a stop, 150 feet abeam of the long runway. The pilot and the passenger egressed unharmed. The aircraft sustained strike damage.

Grampaw Pettibone says:

Holy over-rotation! This song sounds like the all too sad and familiar "Aviator's Lament" (pilot error) with a strong a cappella chorus of the "Supervisor's (lack thereof) Waltz." Old Gramps questions the rationale of putting a passenger in the air with an aviator who has relatively little model experience, only 1.2 hours of flight time within the last 80 days, as a matter of fact. Plus, he was on his first flight from a strange field, using the shortest runway possible. Why did this pilot, who was the unit Natops officer, have so little recent flight time? One would think that an hour or so of refresher flight in the local takeoff-landing pattern would have been in order for starters and may have saved the day, not to mention the aircraft or the passenger's respect for Naval Aviation.

Engineering analysis of the engine fuel flow divider showed that it was not functioning properly, and could have caused sluggish response to fuel throttle commands. Whether or not this contributed to the cause of this mishap is unknown. When you overrotate the aircraft and arrive on the back side of power curve, as this young lad did, you're hurtin' for certain, and the best fuel flow divider in town won't help. Recognizing an oncoming stall might, however.

HOME-PORTING
MIDWAY STYLE



Action on Midway flight deck, above. Opposite, Yokosuka housing area, and families awaiting CV-41's arrival.

If you were to ask the 4,500 crewmen of the aircraft carrier *Midway* and Carrier Air Wing Five their personal opinions of being part of forward deployment in Japan, you'd receive answers that run the gamut from "I hate it" to "I love it." And each person would have very valid reasons why. Put the same question to their families, who live in or near *Midway's* Yokosuka home port, and you'd get echoed remarks. Ask a Navy operational planner his views on homeporting and the answer would most likely be that it's one of the best decisions the Navy has made in a long time.

Unlike most six-month deployments from stateside home ports, *Midway* sailors face a year-round assignment packed with arduous duty demands, but at the same time offset by many once-in-a-lifetime benefits. The crew is part of an operational unit that is ready to respond on practically any day of the year. And they work long, hard hours. The crew's families, on the other hand, find themselves coping with an entirely new life style in a foreign country. In many cases wives have to rely on their own resources, especially when their husbands are away on the ship. As would be expected, some dependents experience immediate "culture shock," while others settle right in with no great difficulty.

When *Midway* steamed into Tokyo Bay and docked in Yokosuka, about 30 miles south of Tokyo, on October 5, 1973, she became part of the Navy's Overseas Family Residency Program. And the only U.S. aircraft carrier ever home-based overseas.

The home-porting of the 34-year-old carrier at Yokosuka represents an effort by the Navy to obtain maximum use of available ships to meet U.S. commitments while, at the same time, increasing time in port for all ships.

"The original reason for homeporting a carrier and other ships overseas was to gain increased operational readiness for the Navy," said Captain Thomas F. Brown III, *Midway's* former commanding officer (Captain E. Inman Carmichael is the carrier's current C.O.). "At the same time this allows Navy people the opportunity to experience the tremendous adventure of traveling and living in a foreign country."

"The fact that *Midway* is permanently deployed," he added, "allows the other five Pacific Fleet carriers to serve only a one-in-five deployment rotation, giving them more time in their home ports."

Midway's operations officer, Commander Jay Grafton, added, "And having a carrier and air wing married on a permanent basis provides a constant level of readiness."

The 65,000-ton carrier demonstrated that readiness earlier last year when she was called upon to "stand in" as the damaged carrier *Ranger's* replacement for *Constellation* operating in the Indian Ocean. *Ranger* was scheduled to relieve *Constellation*, which was on an extended regular deployment, but was unable to do so after she was damaged in a collision with the Taiwan-owned tanker *Fortune*.

"We operate at the same rate as a carrier that is deployed for six months," said Capt. Brown, "only we do it all year. Our operating tempo is about 50 percent at sea and 50 percent in port. About 30 percent of the in-port time is normally spent in Yokosuka."

Aviation Electrician's Mate First Class Donald Beasley claimed that all one has to do is check *Midway's* statistics to know "she is operationally superior to any other carrier we have in the fleet."

Amplifying Beasley's claim, *Midway's* assistant carrier air traffic control officer, Lieutenant Darrell Jones, said, "She's the oldest Pacific fleet carrier but she's also the most efficient at flight deck and air operations." He added, "She's a hard-working ship and because we work together all the time as a team there's good integration between ship's company and the air wing."

Midway's statistics support her crew's boasts. She holds the 1978 Commander in Chief, U.S. Pacific Fleet Golden Anchor Award for retention; flies the Commander Naval Air Force,U.S. Pacific Fleet Battle

E pennant for the third consecutive year and has earned Es in eight other categories. In addition, four squadron and four departmental Es were earned in 1978.

"Our leaders tell us this is an unprecedented accomplishment," remarked Capt. Brown. "So, our new sailors have evidence they're coming to a first-rate organization, unsurpassed in both the Atlantic and Pacific Fleets."

AE1 Beasley admitted, "It's a strenuous and demanding job. We average a 12-hour day, often seven days a week, whether in port or at sea."

Midway's Catholic chaplain, Lieutenant Commander John F. Friel, added, "*Midway* is hard work and suffering. A sailor comes to a very difficult assignment here and has to make the most of it. And he shouldn't be afraid to be proud of it."

He explained that the husbands aren't only married to their wives, "they're also married to the ship for the two or three years they're here. A good marriage gets better. A weak or immature marriage breaks up. There is no in-between." He added, "But in the Navy in general that's true. It's just made more extreme here."

In addition to the rigors of *Midway's* operating tempo, differences in preference arise over *Midway's* ports of call. In any case, there are unusual travel opportunities available to *Midway's* dependents.

"We are trying to do two things that oppose each other," explained the operations officer. "We try to get time in our home port for the married people and also try to get time in other foreign ports for the unaccompanied or single sailors. It's a give-and-take situation."

Capt. Brown explained that about 75 percent of *Midway's* crew is either single or unaccompanied. "They are interested in traveling to other ports. However, many of the accompanied 25 percent also take advantage of the opportunity to travel and so do their dependents."

Sailors and their dependents stationed in Japan now qualify for environmental and morale leave (EML) transportation. With special leave orders, a Navy dependent can travel on military aircraft on a standby priority which is just higher than space available. So the families can, in some cases, benefit from the ship's travel. EML allows them to travel twice a year to any Military Airlift Command terminal throughout the world. Dependents can use the flights even if their sponsors are not along.

"It's a tremendous benefit and I travel every opportunity I can when we can afford it," related Vicki Jones, the wife of Lt. Darrell Jones. "I want to follow the ship and EML is the only way to travel unless you're wealthy, and most Navy people aren't."

Kattie Bazar, wife of Chief Machinist's Mate Paul Bazar, echoed the feelings. "It's one of the best things the Navy has done for morale."

Chief Bazar, commenting on the duty, said, "I hate it at times, but I'm proud to be part of it because we have a fine crew and a fine ship." He added, "We just operate so cotton pickin' much."

In spite of the difficult and fast-paced operational schedule, morale thrives on *Midway* because of two intangibles — patriotism and pride.

"Patriotism is the only thing you can market here and it's not a bad product," said Chaplain Friel. "I remind the sailors that they are part of the Navy's Overseas Family Residency Program and an extension of the United States' foreign policy."

A newly reporting sailor meets the challenge the moment he reports aboard *Midway*.

"I challenge each new man to try and have a better attitude and more enthusiasm than the man he's replacing," explained Capt. Brown. "The credit for our outstanding performance record goes to the crew. The best attitude and enthusiasm of any crew I've ever seen."

However, the attitude of *Midway* sailors and families concerning this type of duty assignment runs the spectrum of pros and cons. It seems to just depend on whom you talk with.

"It's better duty than a West Coast carrier, where you deploy for six months and come back for a five-month turnaround," insisted Master Chief Gunner's Mate Robert Malmquist, *Midway's* master chief of the command. "I have more time with my family now than I did when I was on a West Coast carrier. To me, it's a lot more beneficial being over here."

He explained that it is rough in the beginning on a new man until he becomes used to the heavy work load. "Then he takes pride in being able to perform under various conditions."

Another chief petty officer commenting on the same subject feels *Midway's* constant on-call status and in-port time at Yokosuka clash. "From the Navy's standpoint of having a forward-deployed carrier available at a moment's notice, it's fantastic," commented Chief Bazar. "But from a family man's point of view I'm not fond of it. We spend very little time at home because we operate under one heck of a tight schedule."

Speaking just the opposite of Malmquist, Bazar feels a stateside-based carrier really has it better. "A carrier comes over here for six months and then goes back home. She goes on limited availability or into the yard. The crew are home more with their families than we are."

PO1 Beasley agreed there is quite a bit of separation, "but I find it easier to take being gone two months and back in for 20 days than being gone for six months."

Feeling about *Midway's* Yokosuka in-port time varies with each sailor and each dependent.

"The Navy goofed," said Kattie Bazar. "The husbands have little free time. The majority of the time here in Yokosuka, they are working. But in other ports they have maximum liberty." She feels it is really harder on the wives than on the husbands, "because the men stay busy. For the wives, if they don't work or find some outside activities, they just sit."

Vicki Jones said that she is not finding it difficult to adjust. "My husband has made six and eleven-month cruises. A two-month cruise (when *Midway* replaced *Ranger* in the Indian Ocean) is not dificult." She added, "Maybe it is for wives whose husbands have never made a long cruise."

Like her husband, Sherry Beasley finds adjusting family life to the shorter cruises is simpler. "It would be difficult for him to be out for six months, but it would be even harder on me and the children. It's easier with him coming in and going out than being out for a long stretch."

Although a liberal liberty policy exists, *Midway's* work load continues when they're in Yokosuka. "Then, it's patch 'er up and paint 'er up time," said Bazar.

"There are times when demands require us to stay late," said Beasley. "In foreign ports we have maximum liberty and in Yokosuka we get time off, when we first return, to be reunited with our wives."

Unlike most carriers, the repair and maintenance work done in Yokosuka replaces *Midway's* need for a long overhaul period. "We do a little bit each time we come in and set aside the heavy work for our annual two-month overhaul period," explained Cdr. Grafton.

One point that most *Midway* sailors agree on is that having duty on *Midway* truly allows the Navy to live up to its recruiting slogan: "Join the Navy and see the world."

"When we ask a young sailor why he came into the Navy, a frequent answer is travel," said Capt. Brown. "On *Midway* he gets a chance to do just that."

Midway's disbursing officer, Ensign Donald Anderson, said of the duty, "It's dynamite. Every port we pull into is a foreign one and that was my whole purpose for coming out here."

"As a bachelor, I'm enjoying the tour a great deal," said Lieutenant Junior Grade James Walsh, a pilot with Fighter Squadron 151. "I always look forward to pulling into port and I'm ready to leave when the ship does. It's the best of both worlds for me."

Naval Aviators quickly discover the continuous and realistic environment of flight duty aboard *Midway*. (One of the complaints *NANews* often receives when interviewing pilots is the limited amount of flight time they are getting in their squadrons. Apparently *Midway* flyers are not experiencing this problem.)

"A pilot coming to the air wing realizes just about double the flight operations and carrier landings of a stateside pilot," explained Cdr. Grafton. "And it makes them hungry for more."

Midway's operational scenario is what one would expect to find associated with an operational carrier and air wing. Many long hours of hard work, ample flying time and sailors bursting with professionalism and pride over their accomplishments. But what about the other side of their lives. The side they face when they salute the ensign and depart down the gangway for liberty or home.

With *Midway's* overseas deployment, sailors and dependents face many challenges in adapting to life in Japan. They're confronted with a floating yen-to-dollar rate, a very congested and different traffic system, and an entirely new language and culture.

Moving to Japan with a family presents the usual problems of moving anywhere, plus a few unusual ones. There's the transportation problem, finding housing, furniture, mail, school registration and, oh yes, ORIENTation – getting used to a new country, its language and people.

Most families quickly overcome these obstacles. Nevertheless, a tarnished image of life under the Overseas Family Residency Program exists today, coming largely from the negativism of a disillusioned, but vocal, few.

"Overseas home-porting suffers from a poor public relations image," admitted Capt. Brown. "When *Midway* first came to Japan, we didn't have a good situation. We didn't have the amount of housing available nor the facilities to support the families that we do now.

"Buildings are going up constantly on the Yokosuka Navy Base. We have a new exchange and commissary complex along with high-rise apartments and town houses."

"Our first impression was that the tour was going to be really bad," said Lt. Jones. "But that was because we heard only about the problems one might expect to encounter."

Jones' wife Vicki added, "I didn't want to come. We loved our last duty station. We owned our own home, our family was nearby and all of these things figure in. But once we got here we were pleasantly surprised. Everything has been 75 percent better than we expected."

Housing is the major concern for all newly arriving families. At present, with new construction at Yokosuka and the already existing housing, the on-base housing situation is at the best level since *Midway's* arrival six years ago. Normal waiting period for government quarters now ranges from a week to two months. Families can be located at Yokosuka or nearby Yokohama. Many decide to move into a Japanese-style house and find it can be a very rewarding experience. For some, it's a matter of avoiding the long commute through heavily congested traffic. Others feel it would be more enjoyable to live in Japan and experience it as the Japanese do.

"Most of us feel it's the ideal way to see Japan," said Chief Yeoman William Hastings of *Midway's* dependents' assistance team (DAT). "We have sailors who live on the economy just like the Japanese – from sleeping on futons (bed rolls) to using Japanese cooking facilities.

"And even though Japanese houses are cold in the winter, they love it," claimed Hastings. "There aren't all the conveniences of back home, but then this is not the United States. This is Japan."

The high cost of living and the floating yen rate in Japan tend to stretch the tightest purse strings and could cause severe financial problems for some *Midway* families if it were not for two allowances – a housing allowance (HOLA) and a cost of living allowance (COLA). Both are designed to offset the higher cost of living and are given only to sponsored families. The single sailors aboard *Midway* draw neither.

"The people suffering the most, financially and otherwise, are those who are not command-sponsored," said Master Chief Machinist's Mate

Herman Carney, *Midway's* career counselor. "These are usually the young seamen who bring their families over at their own expense. They don't want to put in the additional year which is required for command sponsorship. They receive no added allowances and are not eligible for government quarters."

Thrust into a sink-or-swim situation, *Midway* wives and their children bear the brunt of coping with life in Japan, especially when the carrier is gone. This is not an unusual situation for families stationed anywhere overseas. It is compounded here, perhaps, because of *Midway's* operating schedule.

"For Navy wives who have been overseas, it's not so difficult," said Janet Moor. "But for the new wives who have not, it means adjusting to a new situation where they're the minority and it's frightening to them. When the ship is gone, a wife has to cope with things by herself and at times she feels there's no help available."

Midway wives do have a place to turn to for help when the ship pulls out. They have a resource of their own in the dependents' assistance team.

"The DAT is the focal point of our organization back home to anybody with a problem," said Capt. Brown. "When anything happens the DAT is the first place a family goes."

Chief Hastings explained DAT's function: "We pretty much fill in for the husband if a wife needs help with anything from a legal problem to a lost identification card. We're here to help the dependents and all it takes is a phone call."

A *Midway* wife not only has to make a cultural adjustment when she arrives in Japan, but often she must be the head of the house. And in the case of a new arrival, that could mean finding a house, buying a car, getting a Japanese driver's license, arranging for household goods delivery, and anything else to make her family's stay in Japan more comfortable. To this end, DAT can be a great help.

An auxiliary of *Midway* DAT is a group of volunteer *Midway* wives called "Lady DAT." This is *Midway's* version of "Welcome Wagon."

"Lady DAT is really a welcoming arm of DAT and offers to a wife someone to talk to when she feels she can't talk about her problems to a man at DAT," explained Hastings.

Another outlet available to help *Midway* sailors and dependents overcome "culture shock" is the carrier's shore-based I Division. This division operates the ship's orientation program for reporting personnel and an intercultural relations program.

"Our I Division helps get people outside the base's main gate and into Japan," explained Master Chief Carney. "Before I Division, we had people stationed here for two years who never left the base."

The intercultural relations information covers all aspects of Japan, as well as a tour to Tokyo.

In spite of *Midway's* arduous duty, operating tempo and family separation problems, the 1978 Golden Anchor winner is certainly doing something right. Her sailors are reenlisting and she is winning unprecedented awards. The sailors of *Midway* are proud of their accomplishments.

Scenes from Midway.

Information for this article was provided by JO1 James Giusti and NIRA Film & TV Production Division.

Photographs for cover and Midway article were taken by JO1s Gary Martin and James Giusti, Midway, and other Navy photographers.

In the early morning light, the serenity of a calm Pacific Ocean is broken by the roaring sounds of an aircraft carrier awakening for the day's mission.

The flight deck comes alive with activity as aircrews inspect the planes, and ordnance personnel load missiles and bombs. All topside hands prepare for the first launch of the day.

"Let's start 'em up!" blasts the air boss with authority. With a deafening roar, *Midway* launches the first planes of Carrier Air Wing Five into the familiar skies off the coast of Japan. For the past six years *Midway* has operated as a unit of the Seventh Fleet. She is not on a deployment cycle from the West Coast, she is home-ported in Yokosuka, Japan.

Midway is the United States' oldest operational fleet aircraft carrier, and the only one ever home-ported in a foreign country. The families and crews are part of the Overseas Family Residency Program.

Midway's operating schedule differs significantly from her West Coast counterparts. In order to respond to the many Seventh Fleet operational contingencies, *Midway* may be away from Yokosuka – at sea for three weeks, in port for ten days, at sea for seven days, in port in another Far Eastern country for five days, and then at sea for another two weeks, *Midway* maintains a 50-percent time-in-port average throughout the year; about 30 percent of the total time is spent in Yokosuka. During these in-port periods, the air wing is detached to Naval Air Facility, Atsugi, where intense shore-based operational training hones *Midway's* fighting sword to razor-sharp readiness.

Air Wing Five is composed of six squadrons and three detachments, two of which are Marine Corps Dets. VMFP-3 flies RF-4 photo reconnaissance aircraft and VMAQ-2, EA-6B tactical electronic warfare aircraft. This past January, VAQ-136 took the place of VMAQ-2. The other squadrons are: VFs 151 and 161; VAs 56, 93 and 115; VAW-115; and a detachment from HC-1.

In recent Battle E competition, *Midway's* unparalleled performance was recognized when she was designated the most operationally-ready aircraft carrier in the Pacific Fleet. Air Wing Five squadrons, for example, were awarded four Battle Es.

Fighter Squadron 161, flying F-4Js, has established an unprecedented combat-ready performance record aboard *Midway*. During both shore and carrier-based operations, VF-161 aircrews have captured 266 individual Battle Readiness Excellence Awards in missile-firing exercises, air intercepts, air combat maneuvering and conventional air-to-ground ordnance delivery in a single competitive period.

Additionally, the VF-161 *Chargers* have made many contributions to the fighter community in the form of articles and programs ranging from foreign object damage prevention to fighter tactics. The *Chargers* have opened the door to joint exercises in dissimilar air combat maneuvering (DACM) between U.S. fighters and those of Australia, Korea, Taiwan and Japan.

Through the combined efforts of VF-161, the Navy Fighter Weapons School at Miramar, and VC-5 from Cubi Point, the squadron realized CVW-5's long-sought goal of attaining the first realistic DACM training in the Western Pacific. In February 1979, the *Chargers* were awarded the Fighter Battle E for their accomplishments.

In one year, VF-161 flew 4,600 hours, 3,600 of which were flown while the squadron was embarked in *Midway* at sea. During that same period, the *Chargers* accumulated 2,100 carrier landings. In VF-161, double centurions, those attaining 200 carrier arrested landings, are common. Even a few first-tour triple centurions are seen aboard *Midway*.

Midway aircrews are constantly exposed to every facet of Naval Aviation including foreign controllers, strange divert fields, ICAO flight rules and procedures, and year-round shipboard operations. Additionally, they are exposed to joint exercises with diverse military units throughout the Orient, as well as with the U.S. Marine Corps and Air Force.

In one year, *Midway* participated in 13 joint exercises, enabling her aircrews to gain the unique experience and insight needed for the interrelation of forces to properly defend that region of the world.

Every day is a history-making day aboard *Midway*. Her mission is challenging and continuous, and her crew and aircrews are proud to be part of the *Midway* tradition.

By Ltjg. Robert Hummel and Ltjg. Neil N. Nacchio, VF-161

Rear Admiral Robert C. Mandeville is Commander Light Attack Wing, Pacific located at NAS Lemoore, Calif. Although far removed from Yokosuka and *Midway* by actual distance, he has an abiding interest in CV-41, its ship's company/air wing team, and their dependents. There are two A-7 squadrons aboard the carrier — VAs 56 and 93. All of the pilots and support personnel in these units have undergone training in RAdm. Mandeville's command before transferring to the land of the rising sun. He recently discussed *Midway* and home-basing in Japan with *NANews:*

"When Midway *was first based in Japan in 1973, duty there was thought of as undesirable, both from an operational and a home-basing viewpoint. That perception has changed over the years and the majority of* Midway *people are sincerely pleased with their assignments, living in Japan and operating from the busiest carrier in the Navy. In fact there is a growing number of aviation personnel seeking assignment to* Midway.

"The flying is far and away the best available in the Navy today. Pilots and aircrews are getting more flight hours, more traps, and more operational experience than their counterparts on other carriers. The crises in Iran and Afghanistan have a lot to do with that, of course, and it is true that the ship has spent considerable time away from her home port.

"But even before trouble brewed in Southwest Asia, Midway *flyers were getting a full measure of flying. Carrier Air Wing Five is probably the most proficient air wing in Naval Aviation today. For example, VAW-115 recently won the AEW Excellence Award and VA-56 captured the C. Wade McClusky Trophy and ComNavAirPac Battle E, all highly prestigious accomplishments.*

"In my visits to Midway, *what has impressed me more than anything else is the tremendous ship/air wing team spirit. It is unlike any I have seen since the days years ago when an entire air wing was based at a single air station. Ship's company and air wing personnel function in a superbly professional manner. They support each other ashore and afloat. The entire* Midway *team, including dependents, is like one big, hard-working family.*

"What also shines through is the pride that the team exudes. They are doing a tough job and doing it well.

"There are drawbacks to duty in Japan as a Midway *officer, sailor or dependent. It is not easy adjusting to a country whose manner of living is sharply different from that in the U.S. Also, the deployment schedule, especially in times of crisis, demands sacrifices on the part of all hands and their families.*

"The bottom line is that USS Midway *is today playing an effective and vital role in the vanguard of the Navy's sea-going forces."*

Commander Denny Wisely was skipper of *Midway*-based VF-151 before becoming the current commanding officer of the U.S. Navy's Flight Demonstration Squadron, the *Blue Angels.* He spoke with *NANews* about *Midway* duty:

"My family and I (wife and two children) thoroughly enjoyed the two-and-a-half-year tour in the Far East. Like many others, we tried to take full advantage of the travel opportunities and got to see many places in the Pacific. It was a most rewarding experience.

"During my assignment with VF-151, Midway *spent about 35 percent of her time in port in Yokosuka with the families. Overall, counting other places we visited,* Midway *was in port 50 percent of the time. When in Yokosuka, the air wing staged out of NAS Atsugi. We had a heavy work load even when ashore but managed to take time off.*

"I was particularly pleased with our petty officers who really came around to liking the duty. Their earlier perceptions that serving on Midway *was not a good assignment changed substantially. The work was hard but it was also very gratifying. And we all seemed to adjust to living in and appreciating Japan.*

"We set up an air-to-air adversary program with the Japanese Air Force which worked out well. We did the same with units like VC-5 and squadrons from other carriers. We also piled up a lot of flight time. Aircrews were getting more than 250 traps during their tours aboard CV-41. If you want to fly, Midway *is the place to be.*

"In addition to gaining valuable operational experience, we took enormous pride in knowing that Midway played a critical role for the Navy, largely because of its strategic location. We were, so to speak, at the tip of the sword."

(Cdr. Wisely was also at the tip of the sword as a lieutenant, flying F-4 *Phantoms* in VF-114 over North Vietnam. On December 20, 1966, he shot down an AN-2 *Colt* and on April 24, 1967, he bagged a MiG-17. He was the first pilot of any service to shoot down two aircraft in the Vietnam Conflict.)

CROSS-COUNTRY

By LCdr. Dick Sim, VAW-115
and Lt. Dan Graham, VA-115

Flying overseas can be an enjoyable experience. The rights and privileges afforded military aircrews are impressive. However, the responsibilities are equally heavy. As operators of military aircraft, the crews have the potential to create international incidents. It behooves them to ensure that such incidents are not caused by ignorance of the basic and specific rules of a country, or of air traffic control (ATC), naval operations or the International Civil Aviation Organization (ICAO). In most countries, violation of air regulations is a criminal offense, and therefore the violator is not protected by the Uniform Code of Military Justice.

To better prepare its aviators for crossing countries on their cross-country flights, Carrier Air Wing Five created an instrument board and instrument exam. CVW-5 has been forward deployed since 1973 with *Midway*, home-ported in Yokosuka, Japan. The following information should prove helpful on your flights.

A Rittle Ranguage Goes a Wrong Way

English is the universal language of aviation. But, the fact that both parties are speaking the same language doesn't always mean that they understand each other. A common pitfall for a U.S.-trained pilot is that while English is being spoken, the rules may have been changed – rules agreed upon by the International Civil Aviation Organization. Pertinent similarities and differences are given in DOD Flight Planning Documents and the International Airman's Information Manual. A working knowledge of these publications and associated documents enables aircrews to anticipate upcoming clearances and readbacks, and makes it easier to decipher those foreign-English accents.

Destination Western Pacific

ICAO codes for airports also differ from those used in the United States. It is a four-letter code broken down into: area, country, flight identification region and airport. An example: RJTA. R for East Asia; J, Japan; T, Tokyo flight identification region (FIR); and A, Atsugi. Another example would be RPMB. R for East Asia, P, Philippines; M, Manila; and B, Cubi Point.

International flight plans must describe the route of flight in detail. They must include as a separate entry, either named fixes or geographic point coordinates, with estimated arrival times for each ATC boundary crossing. Position, time, flight level; position and time of next reporting point; and the identification of the subsequent reporting point should be included in each open seas position report.

ATC boundaries are FIR boundaries on the charts. ATC is a "control" and is addressed as Tokyo Control, Manila Control and so on. ICAO requires complete position reports at all times. When in radar contact, reports may be abbreviated, but time estimates to the next reporting point may also be required.

When unable to contact the ATC agency at an FIR boundary, ground control intercept (GCI) radar sites, as listed in the en route supplement, should be contacted to ensure that

interceptors are not launched. These sites will also provide radar advisory service but *should not* be mistaken for ATC agencies.

Fright Revel One Five Zero

Altitude structure is another area that is different. The ICAO standard changeover point from mean sea level (MSL) altitude to flight levels is 3,000 feet above ground level (AGL). Below 3,000 feet, the local barometric pressure (QNH) is used. Above 3,000 feet the standard day setting of 29.92 inches is set. Over the open seas, flight levels are used at all times. The procedure for altimeter setting varies according to the flight identification region. The rules for the FIR in which the aircraft is flying prevail, as modified by the controlling agency with which the crew is in communication. The rules governing altimeter setting and transition altitudes/transition flight levels are delineated in the DOD Flight Planning Documents for each country. The rules for the country generally apply to its FIRs. The rule in Japan is 29.92 (QNE) for flight level 140 and up. In the Philippines the transition altitude is 3,000 feet except around Manila, Clark Air Base, Naval Air Station, Cubi Point and some other airports, where it is 7,000 feet. Taiwan's transition altitude is 11,000 feet and in Korea the transition zone is 13,500 feet to flight level 140. The appropriate altitudes are depicted on the flight information publication (FLIP) IFR charts.

Planning Your DD 1801

Flight plans are required for all flights into international and foreign airspace. These must be transmitted and received by ATC in each area prior to entry. For some foreign states, this is the only advance notification required. For others, such as Hong Kong, it serves as a check against previously granted permission to enter national airspace.

Stopover flight plans are not used in the Western Pacific. However, multiple flight plans may be filed at the departure airport and those plans passed along by wire with some degree of success. For round robin flights, it is best to file with no mention of practice approaches, field carrier landing practice, etc. This is because ATC tends to treat any approach as a final landing. A proven procedure is to file the round robin, and then request the delay and subsequent portion of the flight when under the control of the ATC facility near the practice approach field.

IFR, VFR or What

ICAO does not allow VFR flight from sunset to sunrise and not above flight level 200 unless cleared by a controlling agency. Over open seas, flight above flight level 150 is to be flown IFR unless in controlled airspace. An aircraft carrier and air wing are covered in this case by having a controlled area. CV Natops defines this area as "surface to unlimited within 50 nm." In accordance with OpNavInst. 3770.4, the carrier requests altitude reservation areas (ALTRV) from the cognizant FIR. Aircraft using the ALTRV are required to be under the control of the requesting agency — the ship. Airways passing through the ALTRVs are not part of the ALTRV and are to be avoided. Aircraft on the airway will be at altitudes of flight levels consistent with the procedure of the controlling FIR.

ICAO recognizes both the hemispherical or semi-circular (East is odd) and the quandrantal rules for altitude separation. The quandrantal rule is explained in FLIP and is used primarily around Australia and in the Indian Ocean.

Coming, Going and Customs

An Air Force publication entitled *Foreign Clearance Guide* has information about countries, which includes useful data on lodging, money exchange, whether or not to drink the water, etc. Obtaining clearance to enter the country's airspace is explained in detail. For example, for Hong Kong it states that message clearance must be obtained 72 hours prior to entering Hong Kong FIR. Each landing costs a lot. Flight crews must have TAD orders and ID cards in order to leave the vicinity of the aerodome. Immigration and customs are handled at airports of entry and exit, in accordance with local procedure for all civil aircraft. Military aircraft (and in some cases military flying club aircraft) will normally be given an abbreviated procedure. An exception to this is common at U.S. bases where local interpretation of the rules may require a very elaborate time-and-paper-consuming procedure, including drug-sniffing dogs, security gates, etc.

The general information section of the guide has a chapter explaining national rights. Regarding the status of military aircraft, it reads, "U.S. Military Aircraft are sovereign instrumentalities. When cleared to overfly or land in a foreign territory, it is the U.S. policy to assert that military aircraft are entitled to the privileges and immunities which customarily are accorded warships."

Flying overseas can and should be an enjoyable experience when you are aware of and follow the rules.

Survival

"THIS IS FIVE EIGHT SIX. OUT!"...Alfa Foxtrot 586's final words as it ditched in the frigid waters of the turbulent North Pacific in October 1979. A VP-9 P-3C from Moffett Field had been on a routine surveillance, antisubmarine flight with 15 crewmen on board. A runaway prop brought them down to an emergency landing in the raging sea. Within four minutes Alfa Foxtrot 586 sank.

Ten of the 15 crewmen survived and were rescued from their life rafts by a Russian trawler 12 hours later. A major factor in their survival was their waterproof anti-exposure suits, QD-1s, which provided protection from the frigid environment. Without the suits, it is doubtful that the men would have survived those hours of exposure.

If an unprotected aircrewman ditches in 42-degree F water, he will be helpless in 30 minutes. Death comes in 30 more minutes. The anti-exposure suit protects the crewman by providing a watertight seal from the cold, particularly when he is fully immersed in cold water. Flight clothing remains dry.

Waterproof life preserver material (chloroprene rubber coating on nylon cloth) is used for the QD-1s. The legs end in boots. Elastic wrist and neck seals provide watertight integrity, and a zipper seals the body opening. The zipper assembly is waterproof. There are insulated mittens and an inflatable hood. The Navy works at keeping the QD-1 operating satisfactorily because when it does function properly it can keep an aircrewman alive until rescued.

During the past year, squadron interest in the QD-1 rose significantly as concern for safety increased after the Alfa Foxtrot 586 ditching. Without delay, 10,000 additional QD-1s were obtained through the Naval Air Systems Command. The Air Launched Missiles and Armament Branch Shop (Air-4104) directed that a sample selection be evaluated immediately at the Weapons Quality Engineering Center, Naval Weapons Station, Yorktown, Va.

The engineers subjected the QD-1s to exhaustive testing to determine the quality, reliability and serviceability of the samples. Pool tests simulated major operational requirements as closely as possible. The conclusion was startling. Zippers which were supposed to be watertight leaked on some of the QD-1 suits, but not on others. Five minutes after the pool tests began, a quart of water had entered some of the suits. This would have made them ineffective in an emergency.

Closer examination determined that some zippers had deteriorated as a result of aging and storage. All of the defective zippers were manufactured by one company, while those that did not leak came from a different company. Additional pool tests and evaluations supported the initial analysis that Brand X zippers leaked to the point where the QD-1 was unserviceable and could therefore no longer be issued. NavAirSysCom then established a segregation procedure for removing anti-exposure suits with Brand X zippers from squadron stocks.

Every aircrewman has to have a reliable, serviceable anti-exposure suit. The QD-1 helps fill that need.

Gear

By Ed Johnson
Weapons Quality Engineering Center,
Yorktown, Va.

A photoreconnaissance plane has just completed a mission. It is deep within a sparsely populated area. Suddenly, the plane loses power. The pilot ejects, his chute opens, and he begins his descent. As he floats down, his personal safety and chances of being rescued quickly are foremost in his mind.

One thing he depends on is his survival radio beacon, AN/URT-33A, which activates automatically when he ejects. It transmits a swept-tone signal on the military emergency distress frequency of 243 MHz, and provides a locator signal for search and rescue operations. The signal is sent continuously for at least 15 hours.

Special receivers in rescue aircraft are set for the emergency frequency. Tuning and switching are not required. Once the distress signal is detected, the rescue aircraft home in, locate the pilot, and direct recovery operations.

The emergency signal must be heard by the rescue planes if the pilot is to be located quickly. During the conflict in Southeast Asia, there were problems with unserviceable beacons. When the radio or beacon was damaged or became inoperative, rescue times for downed pilots were increased and recoveries were much more difficult.

The Air Launched Missiles and Armament Branch of the Naval Air Systems Command (Air-4104) became concerned after learning from squadron personnel that the AN/URT-33A was not transmitting even the minimum power required for detection by a rescue aircraft. Tasked by NavAir, the engineering staff of the Weapons Quality Engineering Center, Naval Weapons Station in Yorktown, Va., began quality evaluations of 10 AN/URT-33As.

The engineers determined that there was a mismatch problem between the survival beacon and the test equipment. The test equipment was supposed to simulate the electrical properties of a standard AN/URT-33A flexible antenna. It was used by maintenance personnel to make power adjustments before an AN/URT-33A was issued to a pilot. During these power adjustments, the output power was adjusted for what was thought to be maximum. However, maximum power was not achieved.

As the quality evaluation progressed, the electrical properties of the flexible antenna were measured and compared to the test equipment. The difference was significant. The design and test of a prototype antenna load network was initiated.

A special engineering study began. Stub tuners (devices to determine the proper length of an antenna) were cut. Delay line techniques were applied. And a prototype antenna load network was built, consisting of an impedance translator and a band reject filtering adaptor.

Ten samples were tested and evaluated, and comparisons were made between the maintenance test equipment and the prototype. A sample beacon was evaluated with the test equipment and the output power adjusted for maximum. Less than 60 milliwatts of output power were realized on the emergency distress frequency of 243 MHz. However, when the same sample was evaluated with the prototype antenna network, more than 200 milliwats of output power were measured. The results were the same for all the samples. In other words, by making internal adjustments, the output power was increased and the URT-33A has become a better survival beacon.

After reviewing the evaluation results, NavAirSysCom instructed Yorktown to manufacture a supply of antenna load networks to be made available to squadrons. With these, the AN/URT-33A survival beacon will operate much more effectively and the downed pilot will have a better chance of a quick, successful recovery.

naval aircraft

XTBU-1

One of the least known production aircraft of WW II was the *Seawolf* torpedo-bomber. Originally Vought's XTBU-1 prototype, first flown just after Pearl Harbor, the *Seawolf* was produced by Consolidated-Vultee as the TBY-2 at its wartime Allentown, Pa. plant. After many delays in the production program, 180 had finally been delivered at the time of post-war contract termination. Initial deliveries were made to fleet squadrons in June 1945; however, no TBY-equipped squadron reached operational status. Prior to VJ Day, the decision had already been made not to deploy TBYs, the production order was cut back, and the *Seawolves* subsequently saw only limited training and utility use after the war.

The Navy's 1939 torpedo-bomber (VTB) competition was won by Grumman. Two XTBF-1 prototypes were ordered in early 1940, and production TBF orders followed during the pre-Pearl Harbor buildup. Vought's entry also won a prototype order, for one XTBU-1, placed soon after the Grumman contract. While the XTBF-1 used a Wright R-2600 engine, the XTBU-1 used the P&W R-2800. Both were three-place aircraft, with torpedoes or bombs carried in an internal bomb bay, single .50 cal. gun, firing forward, a power-operated aft dorsal turret containing a .50 cal. gun, and a .30 cal. gun in a ventral position. The Vought design was notable in its slimmer fuselage lines. No production orders were placed for the XTBU-1; however, the prototype contract was continued as a backup for the TBF.

Early flight testing of the prototypes indicated that the XTBU-1 had considerably better performance, along with other superior characteristics. As a result, in the early war period, the Navy explored possible production to supplement the *Avengers*. Due to Vought-Sikorsky's heavy *Corsair* work load, both engineering and production, a number of avenues were investigated. Finally, an extensively subcontracted program was established, with the subcontractors assigning engineers to assist in production engineering at Vought-Sikorsky. By December 1942, plans had changed and Vought was to continue with engineering, while Vultee would produce the aircraft, using new plant facilities to be located at Allentown, Pa.

Continued flight testing of the XTBU-1 revealed a number of necessary changes; these were developed and tested as the engineering and production facilities for building the 1,100 airplanes ordered were being completed. In July 1943, Vought's *Seawolf* engineering group moved to Allentown to complete the engineering for the TBY-1. Consolidated-Vultee (the companies merged in March 1943) undertook the redesign job for replacing the P&W R-2800 "B" series engine of the TBY-1s with "C" engines in two XTBY-2s, production to change over at the 301st airplane. The problems of starting a complete new production facility led to continuing delays and, in early 1944, it was decided to produce only the TBY-2, all airplanes to be completed with "C" series engines. Two additional .50 cal. guns were also added, in fairings under the inboard wings. All engineering responsibility had been taken over by Consolidated-Vultee, although Vought continued flight development of many of the improvements using the XTBU-1.

In the summer of 1944, the first TBY-2 was completed, making its initial flight on August 20. Testing and production buildup continued into 1945. By the summer of 1945, early Patuxent River tests had revealed a number of deficiencies, and the airplanes that had already been delivered to squadrons were withdrawn pending correction. Re-evaluation of the whole VTB situation in July led to cutbacks in the production order and a decision to use the aircraft only in operational training. Fleet logistics support of two VTB types was no longer considered justified in view of the planned cutbacks in VTB carrier complements.

With the end of the war, the end for limited production aircraft was clearly in sight. Use as target-towing utility aircraft, initial assignment to reserve units, and other duties extended the *Seawolf's* service life for only a short while before all were scrapped in the post-war cutbacks.

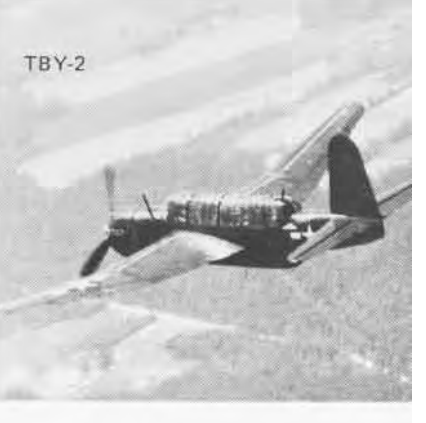
Seawolf

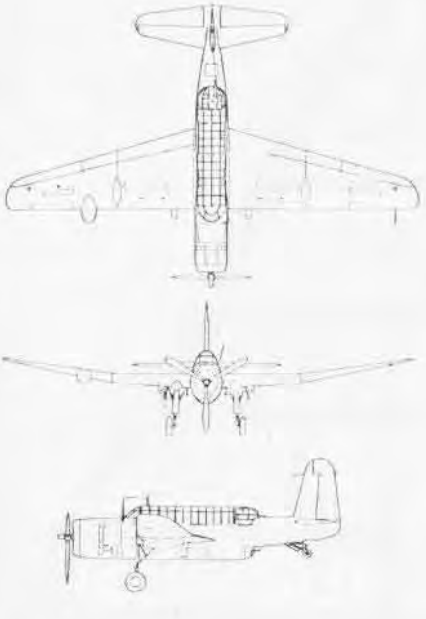
TXTBU-1

TBY-2

TBY-2

TBY-2





Seawolf

Span		56'11"
Length		39'2"
Height		18'7"
Engine	P&W R-2800-34	2,100 hp
Maximum speed		316 mph
Service ceiling		31,800'
Maximum range (external tanks)		1,615 miles

Crew 3

Armament

- Fixed
  - three .50 machine guns
- Turret
  - one .50 machine gun
- Tunnel
  - one .30 machine gun
- Internal
  - one torpedo or two 1,600-lb. bombs (max)
- External
  - two 1,000-lb. bombs (max) on wing racks

NAS
GLENVIEW, ILL
STRENGTH THRU READINESS!

A-4 Skyhawk

By Commander
John DeFrancesco,
USNR-R

Naval Air Station, Glenview has played an important role in reserve Naval Aviation for more than 40 years. Many Naval Aviators have landed there at some time in their careers since the station is centrally located in the midwest. It was commissioned as NRAB Chicago in August 1937 at Great Lakes, Ill. Later that year, when the airfield at Great Lakes proved inadequate for higher speed aircraft, the base was moved to Curtiss-Reynolds Airport at Glenview.

Eighteen miles north of Chicago and five miles west of Lake Michigan, NRAB Chicago began with 20 officers, 100 enlisted men, six Grumman fighters, three Berliner-Joyce observation planes, three Curtiss *Helldivers*, five training planes and one Loening amphibian.

Its primary mission was similar to its mission today – recruiting, training, and maintaining reserve readiness. One major difference, though, was in the flight training that was designed to select students for appointment as aviation cadets. After 30 days' training, students were given 10 hours of dual instruction. Those meeting the required standards were sent to Pensacola, Fla., for further training.

A major turning point in Glenview's history came with U.S. entry into WW II. Plans were drawn in 1942 to use naval reserve air bases for primary flight training. NRAB Chicago was considered an important area because of its central location, and construction of facilities costing $12.5 million was approved. The landing mats and runways and many of the buildings built in 1942 are still in use. By November 28, 1942, the construction was completed and on New Years Day, 1943, the NRAB was designated a naval air station. By that time the base had expanded to 1,200 acres from its original 230, and was operating 15 outlying fields. In May 1944, NAS Chicago was renamed NAS Glenview. The last change was made to eliminate delays in mail delivery and to make it easier for personnel reporting for duty.

During the war, nearly 9,000 aviation cadets received their primary flight training at Glenview. Many of them received their instruction from movie actor Robert Taylor, now deceased. He was a Naval Aviator who had already attained star billing when he began his tour as an instructor. Taylor and his wife, actress Barbara Stanwyck, lived near the base in Park Ridge.

A carrier qualification program began at Glenview in late 1942 and the carriers *Wolverine* and *Sable*, converted cruise ships, were used for training on Lake Michigan. About 15,000 Navy and Marine Corps pilots carrier qualified with some 135,000 landings aboard the two ships.

During the war years, aviation cadets rolled up an impressive 786,000 daytime and 27,000 night flight hours. An estimated 2,225,000 takeoffs and landings were made. Planes used in this training included N3N-3 *Yellow Perils*. Toward the end of the war, a reduction in the Navy pilot training program brought fewer cadets to Glenview and flight instructors were transferred to other commands.

The syllabus for primary flight in effect at the end of 1942 was divided into six stages: primary dual, primary solo, advanced solo, final, formation and night flying. Cross-country and celestial navigation hops, which had previously been taught at intermediate school, were added later.

Glenview became a stop on the Naval Air Transport Service's VR-3 route in 1944, serving the Great Lakes industrial region. Two flights daily carried aircraft parts with the highest priority rating, manufactured by area firms and urgently needed in the Pacific.

Women were first stationed at Glenview when three Waves arrived from Norman, Okla., in May 1943, assigned to the ground school and first lieutenant's office. By December 1944, the women numbered 322 enlisted and 12 officers, assigned to virtually every office on base.

The Naval Air Primary Training Command transferred its headquarters from Kansas City to NAS Glenview in July 1944.

When the Japanese surrendered, in August the following year, the Navy launched a comprehensive program to retain aviators, mechanics and other specialties in the air branch. Thousands of operational planes were turned over to the reserves.

NAS Glenview ceased to function as the primary training command in July 1946, and became the home of the Naval Air Reserve Training Command headquarters. This was the official beginning of the Naval Air Reserve program, although 21 reserve activities were already in operation. The primary mission was to maintain proficiency and a state of readiness of Navy and Marine Corps personnel who had served on active duty.

At the Combat Information Center Officers School, established at Glenview in the fall of 1947, student officers learned aircraft interception procedures. The unit, also known as the Naval Air Technical Training Unit, was the largest airborne radar and ground school of its kind at the time. In addition to Navy and Marine Corps personnel, hundreds of Air Force and Allied Forces officers attended.

February 1949 marked the beginning of a program to requalify organized groups in carrier operations aboard USS *Cabot* (CVE-71). It was the first carrier flying by reservists since the war had ended three years earlier. The cruise created great interest and served as an example for others who followed.

A major reorganization took place in November 1949 with Air Wing Staff 72 administering the squadrons and providing technical support. Air groups were reorganized into individual operational squadrons under command of the air wings.

Another aspect of Glenview's history began in 1954 when the National Model Airplane Meet was first hosted by the base. Tens of thousands visited the air station during week-long activities involving air shows, static displays and other demonstrations, during the years 1954, 1958, 1962, 1966, 1970, 1971 and 1972.

The selected reserve program was formally established within the overall reserve organization in February 1957. The new concept was to provide a fully trained and equipped force ready to deploy immediately in the event of hostilities. Two years later, units of the Naval Air Reserve participated in full scale fleet exercises. Fifty-five crews flying 36 P-2s and S-2s took part in antisubmarine defense exercises on the West Coast with elements of the Pacific Fleet and the Canadian Navy. Shortly thereafter a second exercise was conducted in the Atlantic.

The air station played a role in several national events during the tur-

N3N trainers over Glenview during early 1940s, at left. SNJ Texan, above, used in wartime training and later.

bulent late Sixties. In April 1968, troops and equipment were airlifted onto the base during the Chicago riots that followed the assassination of Dr. Martin Luther King. In August, federal troops were ordered into Glenview at the request of the mayor of Chicago and the governor of Illinois for crowd control, if needed, during the Democratic National Convention.

Various reserve units have been located at the air station over the years. VS and HS squadrons were based there until 1970, and VA squadrons until 1971. Reserve VP and VR squadrons are still flying out of Glenview. VR-51 Det Glenview's mission was, and remains, flying airlifts and other logistic missions.

A new Coast Guard station was opened in 1969 to provide helicopter search and rescue over southern Lake Michigan, and to fly coastal pollution patrols, ice surveys, flood relief and other related missions.

The *Air Barons*, the reserve's equivalent of the *Blue Angels*, were based at the air station from their beginning in February 1969 until the group was discontinued in December 1971. They flew Douglas A-4 *Skyhawks* which were also operated by the attack squadrons based there at the time.

The Naval Air Reserve Training Command became the Naval Air Reserve Force in March 1972. Commander Naval Air Reserve/Commander Naval Air Reserve Force relocated in 1973 to New Orleans to combine with the Surface Reserve under the Chief of Naval Reserve. Similarly, jet aircraft based at Glenview were transferred in

A VP-60 Orion passing Chicago skyline.

the early Seventies, leaving a complement of propeller and rotary wing aircraft at the air station.

There was a resurgence of construction activity at the base in the mid-Seventies: a modern BEQ, an up-to-date hangar to maintain the 18 P-3s of VPs 60 and 90, and a 400-man Army reserve center and hangar complex which provide support to the Army's Fort Sheridan Flight Detachment, one of Glenview's tenants. A new control tower was added in 1979.

A Marine Air Reserve Training Detachment is another tenant of the air station, which also has one of the largest intermediate maintenance activities in the reserve command.

Glenview is a stopover for many transient aircraft of the Military Airlift Command which flies C-9 *Skytrain* medevac missions into the air station on a regular basis since there is a concentration of four military hospitals in the area: Downey Veterans Hospital and Naval Regional Medical Center Hospital, both at Great Lakes, Hines Veterans Hospital near Maywood and the Veterans Research Hospital in downtown Chicago.

NAS Glenview was commissioned with the thought that it would serve only "for the duration" but it is very much here to stay. Commanded by Captain B. Eskew, it houses 12 tenant commands from all the services, and supports over 100 aircraft, 1,300 full-time military and civilian personnel, and some 30 reserve units. Now, just as in its early days, it plays a vigorous and effective role within the defense structure of the country.

PEOPLE • PLANES • PLACES

Awards

Lt. David J. Blazin and Ltjg. Robert G. Collier, Jr., were awarded Air Medals for their actions on August 1, 1979, while embarked in *America* with VAW-124. The men were conducting flight ops in their E-2C when the *Hawkeye* experienced severe engine problems and lost power. Collier prepared the aircraft for ditching. Blazin alerted the crew. He also succeeded in relighting one engine and initiated a climb just before the plane would have struck the water. The flyers were cited for extraordinary composure under pressure and for saving the aircraft and crew.

NAS Meridian's Lt. Gerard Tom Lennon, Jr., was named TraWing-1's Instructor of the Year for his performance in the T-2C *Buckeye*. Lt. Robert R. Gangewere, Jr., was recognized as Instructor of the Year in helicopter training for TraWing-5, Whiting Field.

In a recent presentation by RAdm. Paul J. Mulloy, ComPatWingsLant, to Capt. T. B. Hacker, C.O., NAS Brunswick received a Meritorious Unit Commendation. The citation read in part: "For meritorious service in the management, administration and support of career motivation and retention programs. . . ."

Records

VA-35's X.O., Cdr. Mike Luecke, and B/N Ltjg. Fred Eliot achieved the 50,000th trap aboard *Nimitz* following a routine flight in their A-6E *Intruder*. The *Black Panthers* are commanded by Cdr. J. A. Pieno and are home-based at Oceana.

Midway's 243,000th arrested landing was made by VA-56's X.O., Cdr. C. S. "Scotty" Mitchell, flying one of the squadron's A-7s. The trap concluded a tanking mission while the battle group was en route from port visits in Western Australia to Diego Garcia. The landing was Cdr. Mitchell's 582nd career trap and his 29th *Midway* trap since becoming X.O. of the *Champions*.

Redesignated

Marine Air Reserve Training Detachment, Dallas was redesignated Marine Aircraft Group 41 last December as part of the 4th Marine Aircraft Wing. The change accomplished two objectives: the restructured reserve wing more closely aligns in size and organization with regular aircraft wings, and it places active duty Marines as members of reserve units, rather than on headquarters staffs or as administrators and instructors. Each unit is now composed of both active and reserve administrators who train together, work together and in the event of a unit mobilization, deploy together.

Rescue

A New Orleans reservist kept a critically injured Air Force sergeant alive during a medevac from Lajes Field, Azores, to the U.S. Lt. Bert Eichold, medical officer for VP-94, was on AcDuTra when the sergeant suffered a severe head injury. En route to Bethesda Naval Hospital, onboard a P-3 from VP-8, the injured man experienced severe convulsions and loss of consciousness. Eichold administered emergency treatment during the flight to Andrews AFB. The patient was then transferred to the medical facility at Bethesda, Md.

Honing the Edge

Alameda's VA-303 was the only CVWR-30 squadron to participate in the multi-nation Exercise *Kernel Potlatch II.* During the eight-day detachment to Whidbey Island, the squadron performed in the enemy role first, simulating cruise missile threats against the U.S./Canadian task force, later switching to friendly forces and providing close air ground support. Led by Cdr. Tom Gehman, VA-303 deployed six A-7Bs for the event and logged over 150 flight hours.

VP-23, Brunswick, participated in *Ocean Safari,* a major NATO exercise in the North Atlantic. Operating a detachment in Norway and flying numerous sorties from their base in Keflavik, the *Sea Hawks* gained valuable experience working with English, Norwegian and Canadian aircrews. More than 17,000 men were directly involved in the operation, which took three years to prepare. It was designed to demonstrate and improve NATO's capability to provide maritime support to Europe in time of crisis.

From a CNO message to VPs 60, 62,64, 66, 68, 90, 92, 93 and 94: "The FY-79 AcDuTra performance of the nine reserve VP squadrons operating from Lajes, Azores, was most commendable. I am duly impressed with the spirit, dedication to duty and professionalism displayed by all hands. Your safe nine months of operational flying in direct support of CinCLantFlt ASW and surveillance requirements, working side by side with the regulars as a true One Navy team, exemplifies my total force goal for the Navy. You trained hard and performed a vital operational service at the same time. My congratulations on a job well done." Adm. T. B. Hayward.

This helicopter seemed to be pausing to remind a jet that it was next on the schedule at last year's Point Mugu Air Show.

Point Mugu pilots maneuver so expertly that only close examination of this photograph makes clear that it is actually two air-

planes refueling two others. The A-6 *Intruders'* refueling of the A-4 *Skyhawks* was part of last year's Point Mugu Air Show.

PEOPLE · PLANES · PLACES

HS-3 SAR crewman AWAN Brock Jewell gets a bird's eye view of *Forrestal* as the SH-3H he is riding in makes a high sweep over the ship's flight deck. The helo was assigned to the carrier.

Last fall, a Norfolk-based amphibious task force of 13 ships and more than 10,000 Navy and Marine Corps personnel steamed through the Med against heavy simulated opposition as part of Exercise *Display Determination 79*. It demonstrated NATO's ability to reinforce and resupply the southern region of the alliance.

The *Thunderbolts* of VA-176 completed 181 consecutive flights in the A-6E *Intruder* without the loss of a single sortie for maintenance. Flight ops took place during the squadron's deployment on board *Independence*, participating in Exercise *Display Determination 79*. The maintenance department's performance enabled 16 aircrewmen to become centurions. Squadron skipper is Cdr. Frank Stauts.

Change of Command

Blue Angels: Cdr. Denny Wisely relieved Cdr. Bill Newman.

CVW-3: Cdr. L. F. Schriefer relieved Cdr. K. S. Jones.

HC-6: Cdr. Charles E. Plaugher relieved Cdr. Larry W. Beguin.

HS-11: Cdr. Edward G. Moninger, Jr., relieved Cdr. Lyle E. Lewis, Jr.

NAF El Centro: Capt. William A. Lott relieved Capt. E. D. Lighter.

NAF Kadena: Capt. W. R. Petersen relieved Capt. W. D. Cloughley.

TraWing-4: Capt. Conrad I. Ward relieved Capt. David H. Fischer.

VF-24: Cdr. Charles R. Brokaw relieved Cdr. Richard M. Vance.

VF-121: Cdr. Philip S. Anselmo relieved Cdr. F. X. Mezzadri.

VF-143: Cdr. Steven U. Ramsdell relieved Cdr. Paul W. Cooper, Jr.

VFP-63: Cdr. Joseph T. Phaneuf, Jr. relieved Cdr. Denis J. Bell.

VMFA-115: LCol. Jack B. Hammond relieved LCol. L. B. Hannah.

VP-46: Cdr. Michael J. Knosky relieved Cdr. Joe A. McElmurry.

VP-62: Cdr. Samuel B. Butler relieved Cdr. John T. Tate.

VP-90: Cdr. Stanley R. Huff relieved Cdr. Kenneth T. Hall, Jr.

TIME TO STAY

$20,000 Bonus plus Hawaii

Quite a bonus was in store for AW2 Gregory McIlroy and his wife Rebecca, an AC2, when they reenlisted for a total of eight years at NAS Cecil Field, Fla.

The couple, who have been married less than two years, received a combined total of $20,000 and assignment to Hawaii. Reenlisting under the guaranteed assignment retention detailing (GUARD III) program, Greg, who enjoys scuba diving, has orders to VP-17. Rebecca, a bowling enthusiast, is headed for Ford Island.

Aside from the selection reenlistment bonus money and orders, the couple received dinner at Cecil Field's Beacon Club, reenlistment portraits, theater passes, and Special Services and Navy Exchange goodies. To put more icing on the traditional reenlistment cake, each received a 96-hour special liberty pass.

For the McIlroys, unison pays off in many ways.

SCORE Program

The purpose of the selective conversion and reenlistment (SCORE) program is to offer Class A school and rating conversion as a reenlistment incentive. In some ratings, Class C school and automatic advancement to petty officer second class are also available. OpNavInst. 1133 (series) contains guidance on what types of rating conversions are normally authorized. Generally speaking, conversions must be to ratings which are more undermanned than a member's current rating. The air traffic controller (AC) and aviation fire control technician (AQ) ratings currently need additional personnel via the SCORE program. During FY 1979, more than 100 people reenlisted in aviation ratings using the provisions of the SCORE Program. For additional information, contact your command career counselor.

"When considering what I was going to do with my future," says AZ3 James D. Peck of VAW-123, "I decided to look into the SCORE program. I knew I wanted to stay in the Navy because I enjoy the military organization, and, most of all, the team work involved. However, I was tired of working at a desk and wanted a 'hands on' job around aircraft."

Peck contacted his career counselor for advice. "He explained my options under the SCORE program," Peck said. "I found I could be guaranteed Class A and C schools and lateral conversion to the aviation structural mechanic rating. As a result, my decision to reenlist was easy."

Navy Enlisted Classifications

Additional aircrew NEC openings are now available for enlisted Navy women. Female applicants who meet the requirements in Transman article 9.1212 will be sent through the five-week NACCS at NAS Pensacola, and further training in the associated fleet readiness squadron. Volunteers are entitled to flight pay during flight training and may wear aircrewman gold wings after graduating.

If you are interested in becoming an aircrewman in any of the following NECs, talk with your career counselor and then contact the enlisted naval aircrew detailers by telephoning autovon 291-5867. Detailers are ADCS Robertson, AEC Mazzone and AT1 Jones.

NECs Open to Women in the Navy:

NEC	TITLE	SOURCE RATING
8211	Helo Utility Aircrewman	AD, ABH, AE, AM, AO, AT, PR
*8216	Helo Vertical Replenishment	AD, AE, AM, AT
*8225	Helo Vertical Onboard Delivery	AD, AE, AM, AT
8241	Fixed Wing Utility Aircrewmen	ABH, AD, AE, AM, AO, AT, PR
8250	C-9 Crew Chief	AD, AM, AE
8245	Transport Plane Captain	AD, AE, AM
*8252	C-130 Flight Engineer	AD, AE, AM
8258	Transport Plane Captain	AD, AE, AM
8268	Radar Operator	AT, AE, AX
*8269	Utility Flight Electronics Tech	AT
*8273	TACAMO Operator/Tech	AT, RM
*8274	TACAMO Reel Operator	AE, AM
*8278	Loadmaster	AB, AD, AE, AM, AO
8282	Drone Control Operator	AD, AE, AM, AT
*8283	Environmental Reconnaissance Observer	AG
*8283	Aerial Cameraman	PH
8289	Flight Attendant	AD, AE, AK, AM, AO, AZ, MS
8294	In-flight Medical Specialist	HM

*Denotes newly opened aircrew NECs for enlisted women.

GERMAN NAVAL

After passing my final public school examination to qualify for admission to a university, in May 1915 I voluntarily enlisted for service with the I. Seebataillon at Kiel. There I received naval infantry training and, in October, I was transferred to the 2. Marine-Infanterie-Regiment in Flanders, on the right flank of our Western Front. As a member of that unit I took part in the trench fighting going on and in June 1916 I was designated a reserve officer candidate.

In September I was sent to take an officers' training course at Munster Lager. There the training and the duty were so strenuous that only about 50 percent of the participants were qualified as officers at the end of the four months and then sent back to the front as sergeants. After proving themselves at the front, most of that group were promoted to lieutenant.

During a brief furlough from my officer training in Munster Lager, I became acquainted with the aviation service by a relative of mine who lived in Berlin-Johannisthal, the great aviation center of the time. I then became very enthusiastic about all aspects of military flying and, upon my return to Munster Lager, I applied for a transfer to the aviation service. The move was at first opposed by my regiment. But at the end of my course of instruction an order came down from the Supreme High Command stating that it would be best for the well-being of the aviation service if all requests to join it were approved.

At that time the service was not a separate branch like the Navy or Army. The aviation officers and enlisted men were merely detached from their original units and even wore the uniforms of their old units. So it was, for example, that Rittmeister Manfred Freiherr von Richthofen wore his Uhlan uniform, Immelmann the Garde colors, Boelcke the infantry grey, and Christiansen the Navy blue. The only distinction was that on all uniforms a small propeller was affixed to each shoulder board and, after meeting the qualifications, each man wore the flyer's badge on the lower left breast of his jacket.

Hansa-Brandenburg W.12. Inset, Stormer.

However, there were differences in the badges awarded by each branch of service. The Army badge consisted of an oval oak wreath in silver with the imperial crown at the top and the image of an airplane in flight in the center of the badge. The Army aviation observer, who in contrast to his naval counterpart was always an officer, had in the center of his badge a black and red checkerboard. In our branch of service, the Marine-flyer's badge also had an oval oak wreath with the imperial crown on top, but the badge was done in gold-colored metal. The pilot's badge depicted a sea eagle in flight over Heligoland and the sea, the observer's badge a sea eagle sitting on a craggy cliff overlooking the sea.

Naval aviation observers, who were all enlisted men, had to have a thorough knowledge of seamanship, gained either in the Imperial Navy or the Merchant Navy. Officers did not have to meet this requirement, so those like myself who did not have this training had to undergo a special course in seamanship.

German naval aviation was placed under the Navy High Command, which appointed an officer in charge of aviation. In turn, that officer had subordinates in charge of naval landplanes and seaplanes. The best known naval landplane pilot was surely Oberleutnant Gotthard Sachsenberg, the 31-victory ace who was decorated with the Pour le merite.

There were also naval artillery re-

AVIATION

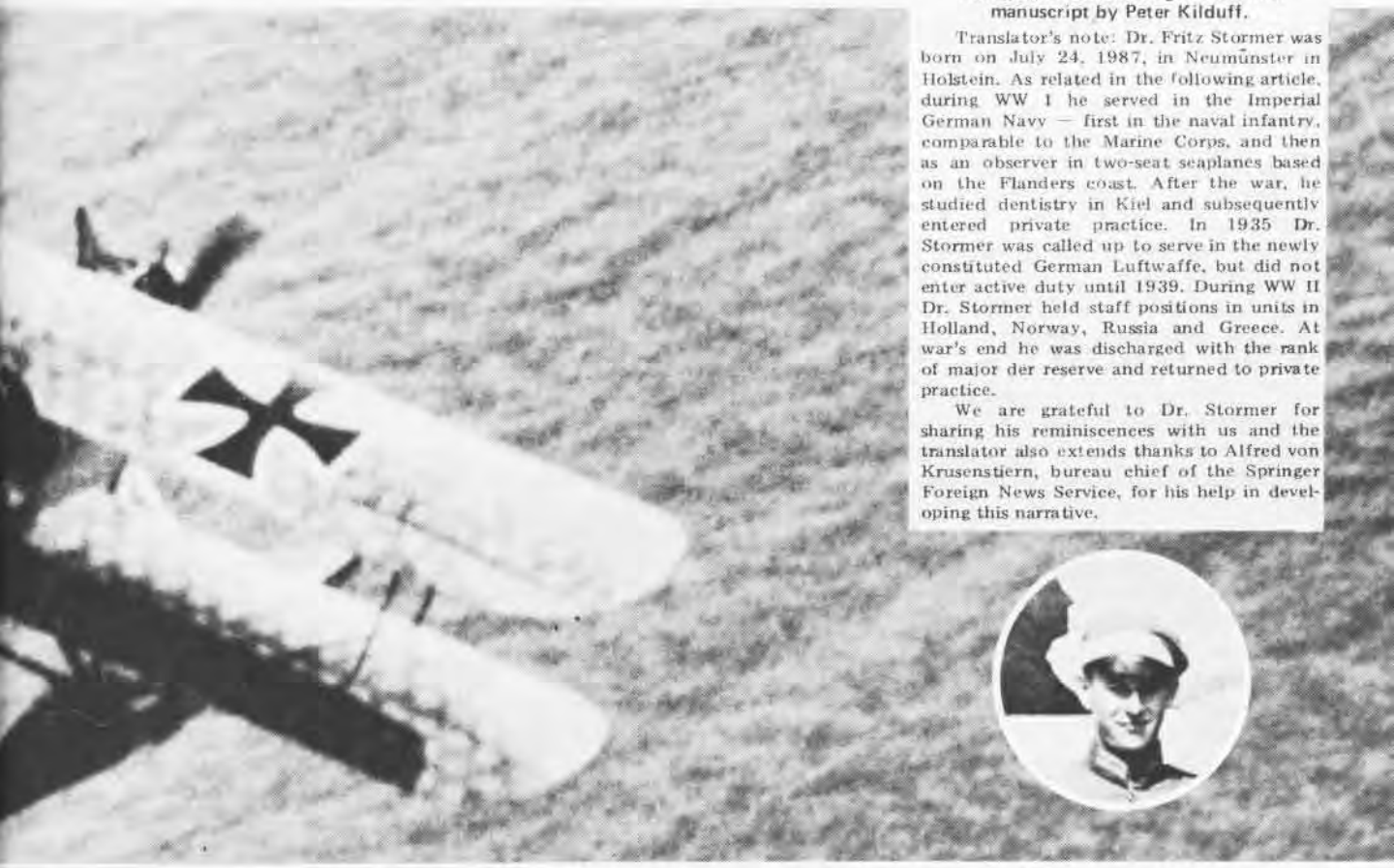
Part one of two parts

This article originally appeared in the Summer 1979 issue of Cross and Cockade.

Translated from the original German manuscript by Peter Kilduff.

Translator's note: Dr. Fritz Stormer was born on July 24, 1987, in Neumünster in Holstein. As related in the following article, during WW I he served in the Imperial German Navy — first in the naval infantry, comparable to the Marine Corps, and then as an observer in two-seat seaplanes based on the Flanders coast. After the war, he studied dentistry in Kiel and subsequently entered private practice. In 1935 Dr. Stormer was called up to serve in the newly constituted German Luftwaffe, but did not enter active duty until 1939. During WW II Dr. Stormer held staff positions in units in Holland, Norway, Russia and Greece. At war's end he was discharged with the rank of major der reserve and returned to private practice.

We are grateful to Dr. Stormer for sharing his reminiscences with us and the translator also extends thanks to Alfred von Krusenstiern, bureau chief of the Springer Foreign News Service, for his help in developing this narrative.



connaissance aircrews, which, like the naval landplane fighter pilots, were placed under a single command. Seaplane crews for the Baltic were assigned to the I. Seeflieger-Abteilung with seaplane stations at Appenrade, Kiel, Warnemünde, Rügen, Putzig/Danzig, Liebau, Oesel and Riga. Stations at List/Sylt, Heligoland, Wilhelmshaven, Nordeney and Borkum belonged to the II. Seeflieger-Abteilung.

Units assigned to the Flanders front were the I. Seeflugstation at Zeebrugge and the II. Seeflugstation at Ostende. Together with the naval landplane unit at Nieuw-Munster and the fighters at Westkerke, they were all placed under a single command, which had two group commanders named to run it. One was in charge of landplanes, the other led the seaplanes.

The regular forces assigned to carry out combat missions reported directly to the commanding officers of the seaplane stations. In the case of Zeebrugge, that officer was Kapitanleutnant Friedrich Christiansen, whom everybody called Krischan. The Zeebrugge seaplane station was charged with overseeing the area known as Hoofden, the expanse of water from the Dutch coast to about Scheveningen, from there across the English Channel to High Yarmouth, up the British coast to the Thames River and back across to Zeebrugge. The Ostende seaplane station was responsible for the mouth of the Thames to Margate and across the Channel to Ostende. These stations also had control in their areas over all of our own ship traffic, submarines, blockade nettings, mine fields, navigational buoys, etc., as well as the responsibility of reporting all changes in position of enemy destroyers, minesweepers and submarines. Of course, they also attacked from the air enemy blockade runners and aviation units.

Opposing the enemy seaplane units in our areas was comparatively easy to do, as our Hansa-Brandenburg monoplanes were superior to the British flying boats in terms of speed, maneuverability and armament. There were comparatively few aerial battles over this large section of the sea and rarely a casualty of our own to lament. The victories we did achieve, despite a strong defense by the opposition, were substantiated by a number of photographs and other documents.

On the other hand, the drag of our twin pontoons put us at a serious disadvantage in terms of speed, maneuverability and armament if we were

ambushed on takeoff or landing by British or French land-based fighters. Our best defense was to fly in tight formation, close to the water. Our two-seat reconnaissance aircraft were each equipped with a ring-mounted machine for the observer to operate from the rear seat, so by using this formation the combined firepower of five aircraft could be brought to bear on an opponent.

Generally, the squadron flew in a wedge-shaped formation, with the commanding officer in the leading aircraft. Behind him and to the right was the airplane commanded by the man who was photo officer and deputy commander of the unit. During an attack by fighters coming in from above and behind, the aircraft under attack went even lower so that a sloping V was formed and all machine guns had an unobstructed field of fire. It was a lesson learned through hard experience that made land-based enemy fighters respect our formations, gliding along close to the water's surface with a slight advantage against the classic attack from above and behind. This perhaps explains why enemy forces inflicted only light casualties on our naval observation aircraft.

At the Zeebrugge seaplane station there were also torpedo aircraft, twin-engine Hansa-Brandenburgs, set up to drop torpedoes at about 130 kilometers per hour (80 mph). To the best of my knowledge, we used these aircraft only about five times, as they were very clumsy and, during the torpedo dropping run, needed the calmest sea state possible, since upon entering the water the torpedoes were immediately subject to gravitational forces and their courses could not be corrected. To the best of my recollection, aircraft from Seeflugstation Flandern I (Zeebrugge) sank only one enemy transport ship with air-launched torpedoes and, to be sure, the main interest in doing so was to be rewarded with a medal or a prize.

Also stationed at Zeebrugge were artillery-spotting aircrews operating from two-bay Friedrichshafens, which were used to help range batteries along the beach when they fired at moving objects on the water, such as enemy monitors (shallow draft armored warships), speed boats or other attackers. Since they flew at high altitudes, they were an especially popular object of attack by enemy fighters and, when they did not fly above our protective torpedo boats, they suffered heavy casualties. Flying boats were rarely available and, even then, only used for air-sea rescue missions.

Navigation by naval aircraft was carried out with a compass (of the type used for drawing arcs) and triangle, as well as a drift meter. We used small sea maps, sectioned off into well-defined quadrants. Since these maps were classified as secret, they were carried in a specially-made lead mounting so they would sink if dropped overboard and thereby avoid capture by the enemy. Since large maps of the sea could not be carried aloft with us, we found this form of map expedient and helpful. Noted on these small maps were all of the known registered buoys, mine obstacles and nets, ships that had run aground, wrecks, etc. Thus, we could carry out our missions with the small 35 x 25-centimeter (13 ½ x 9 ¾") maps, as well as with a larger version, always able to give our relative position when reporting emergencies by wireless telegraphy.

Bomb-dropping equipment was not available in our C-type aircraft, not even a bombsight. From time to time, small 5-kilogram (11-pound) bombs were taken along and dropped over the side during low-level attacks on submarines or other such prized targets that did not stop or did not comply with the request to head for our port. The bombs did not produce great results, but they did damage the ballast tanks on submarines and thereby made them unable to submerge. In other uses, the bombs were good for our morale, as the shock caused by the explosion was quite impressive.

The duration of flights by fighter and reconnaissance aircraft was between three and four hours at speeds up to 160 kilometers per hour (100

Top pilot Christiansen, right, with senior officer of naval staff.

mph). The larger Friedrichshafen three-bay aircraft could remain in the air for up to six hours. In almost all cases the armament consisted of two fixed machine guns and one moveable gun. Loading the ammunition belt was done in different ways and was generally not done by the flight crews themselves. The sequence usually used by the armorers was: three all-metal rounds, three incendiary bullets, and two or three explosive bullets. After it was forbidden to use explosive ammunition, that type was no longer used. Individual crews had their belts loaded with a mixture of five all-metal and two incendiary rounds.

The daily routine at the seaplane station began when the station commander published the plan of the day and issued orders for special missions. He was assisted by his adjutant and by an administrative officer, who took care of all the paper work and had all documentation prepared for the station commander's signature. Individual Staffelkapitäns were subordinate in all respects to the station commander, a fact that held true even though in other operational matters the squadron leaders reported to a higher level of command. The squadrons were supported by various station functions, such as the technical section, which was headed by an engineer. Likewise, photographic intelligence came under the station's photographic officer – and weapons, ammunition, replacements and supplies were other departments run by station officers.

For all functions pertaining to the seaplane station itself, the station commander – who, in the case of Zeebrugge, was Kapitänleutnant Christiansen – was responsible to a group commander. In our case that was Kapitänleutnant von Tschirski und von Bëgendorf. That officer's adjutant was Oberleutnant zur See Killinger, well known as the author of *Ostseefliegers Adventures of a Baltic Flyer*, in which he describes how he was shot down over the Baltic, captured by the Russians, thrown into the Peter-Paul Fortress and escaped to travel through Japan, America and England before finally returning to Germany. The group commander in charge of aviation was under the officer in charge of aviation in Brugges, who, in turn, reported to the Marinekorps under Admiral von Schröder.

Now to my own aviation training. Although I wanted very much to become a pilot and had requested flight training, both the Navy and the Army had a great need for observers. So I was sent to the II. Seeflieger-Abteilung in Wilhelmshaven to take a course in basic engine knowledge, wireless telegraphy (which was especially important in the Navy, where the ability to quickly send and receive messages was a factor in promotion), seamanship training in knots and splicing, use and reading of nautical maps, sailing, wind reckoning and drift, and emergency procedures at sea.

After completing that course, I was sent to the observer school in Altenburg, Saxony, in order to also become familiar with implements used by land-based observers. Here I gained experience in overland flights planned through the practical use of reconnaissance photos and setting out for defined targets. And all of this was done in an old B-type aircraft, in which the observer sat in the forward cockpit and used a 50-centimeter focal length camera that required the observer to scramble halfway out of the airplane, between the engine and the wing, in order to line up the camera on a plane perpendicular to the ground. The aircraft used were old *Albatros*, Hansa-Brandenburg and L.V.G. types that were deemed good enough for beginners.

Upon completion of this course, I was posted to the observation and bombing school at Wiek a/Rügen, where bomb dropping, tracking objects at sea and other subjects were among the curricula. After finishing this course, the students received orders to a deep sea fishing boat, where they were required to demonstrate their newly gained knowledge and practice of seamanship – including scrubbing the decks, standing a bridge watch, steering a course and compensating for a side wind, rowing, moving cannon into place, working in the galley and on the cleaning detail, and rigging a hammock. All of these fine arts were practiced during a voyage from Stralsund above Wolgut, to Bing a/Rügen, Warnemünde, Fehmarn, Kiel, Flensburg and Apenrade, all the way back to Stralsund. The training was formally completed with graduation exercises aboard the training vessel SMS *Kehrwieder*. When we returned to our point of departure, our orders to individual aviation duty assignments awaited us.

I was assigned to Warnemünde and thereby had the good fortune to be at the primary test facility for seaplanes, where one could personally see the newest aircraft types – and, if one were very lucky, there might be a chance to fly in one of the new aircraft. However, my own duty consisted of reconnaissance flights over the Baltic Sea in the Warnemünde-Fehmarn sector all the way to Gjedsen and the southern tip of Sweden and along Rügen-Warnemünde, observing our own, neutral and, eventually, enemy maritime traffic. Now and then a Russian submarine would stray into our area, but it would very quickly disappear.

With the closing of the command at Warnemünde, I was to be transferred to a greatly desired command in Turkey. I already had the telegrammed orders in my hands when the orders were countermanded and, in September 1917, I was redirected to Zeebrugge. There, I would be immediately assigned to serve as the squadron's photo officer and deputy commanding officer.

In comparison to the other stations where I had served, Zeebrugge was of course much more involved with front-line activities and thereby more varied and interesting. Since I was detailed to fly the day after my arrival at the I. Seeflugstation, I was awakened early to report to the officer of the watch (a position that changed daily), who was stationed in a hotel right at the end of the Mole, which was a breakwater-type area. After the day's flight crews had reported in, the commanding officer delivered an early briefing, while the aircraft engines were being warmed up and two cranes were used to place the aircraft into the water. Subsequently, each aircraft taxied into position and,

at the commanding officer's hand signal, they took off together and headed out on their assigned mission.

Until the station commander arrived, the officer of the watch carried out all of the orders in the plan of the day. He also recorded all of the occurrences that took place during his watch, such as bombing attacks, aircraft used on sorties, etc. Since all of the officers were billeted in the Grand Hotel, the officer of the watch, during the night of an enemy attack, could muster them, as well as personnel at the air station and enlisted men and petty officers in barracks or billeted aboard the troopship SMS *Bury* to ensure the security of the aircraft and equipment.

The officer of the watch on duty during the night of April 22-23, 1918, was faced with exactly that responsibility when a large British naval force attempted a daring operation against our positions at Zeebrugge. Under cover of night and fog, added to by their own smoke-making apparatus, the British attempted to scuttle a cement-laden ship in the canal lock, which would shut off the entrance to the docks at Bruges, and to land a force of Royal Marines on the Mole.

When the attack began, the officer of the watch hurriedly mustered as many men as he could to repel the enemy. At the air station we had only machine guns, so the only heavy artillery available was a 3/4-inch gun emplacement set up at the head of the Mole to defend that emplacement. That gun was in such a position that it made good use of the curvature and height of the Mole to reach the attacking force. Indeed, this 3/4-in. rapid fire gun must have had a devastating effect on the nearby British ships and troops waiting to go ashore; there were heavy casualties among the Royal Marines and only a few of them actually reached the Mole, where they were immediately overwhelmed by our own forces. I later saw a photo that showed only 10 ground troops to have been taken prisoner. The dead were laid to rest in a cemetery alongside the church where our own dead had been buried.

Incidentally, in 1960 my wife and I were on a trip through that part of Europe, thus giving me an opportunity to again visit the old cities where I was stationed during two world wars and to spend an hour of silent reflection at the graves of my fallen comrades. In the churchyard at Zeebrugge I first came upon the graves of the British soldiers, all in a row and neatly decorated with flowers. Then I saw that the graves of the fallen Germans were tended with every bit as much care as was accorded our former opponents. I simply had to express my sincerest thanks for this comradely service to the Englishmen present. Although my command of English is awkward, I believe they understood my stammered words and my firm handshakes. I should also note that it seemed such a shame that these boys fell during a raid that did not really adversely affect our submarine operations. The sunken cruiser posed no obstacle to the submarine stationed at Bruges and they could pass freely by it.

As previously mentioned, during WW I we had no separate air arm in the contemporary sense. Rather, the officers and enlisted men were detached from their regular units and consequently not counted as part of the on-board strength. That is, these people were no longer of interest to their original units and that fact affected their eventual promotions.

In my own case I was detached from my regiment as a Vizefeldwebel der Reserve. At that point my previously planned course as a future officer would have to be realized some other way. When I was at the Mole and happened to meet my former company commander, who had gone on to become regimental adjutant, he wondered why I had not yet been promoted to officer's rank, as had the other men with whom I had taken the various courses. After my uncertain status had been clarified for him, events were quickly set in motion and I became a lieutenant.

Something similar happened to Kapitänleutnant Christiansen, who in civilian life had been a "sailor of many voyages," that is, he had his license as a merchant marine ship's captain. He also became a licensed airplane pilot. With those credentials he entered naval aviation and was assigned to the seaplane station at List auf Sylt. At first he was promoted to lieutenant, but did not belong to the unrestricted line officers' corps, who all had the words "zur See" after their titles of rank. They were also the only group to wear the naval officer's dirk initiated by the Czar of Russia, while all other naval officers – those from the naval artillery, medical corps, engineer corps and naval infantry – wore the long saber.

In any event, Krischan soon became renowned for his splendid leadership abilities and successes, and he was promoted to Oberleutnant. When on December 11, 1917, he was presented the *Orden Pour le mérite*, the so-called "Blue Max," and also became a Kapitänleutnant, we all wanted to see him promoted into the sea-going naval officers' group. But Krischan declined and wore the uniform and long saber of the naval artillery, which in the eyes

In this W.12, Lt. Becht, C.O. of 2nd C-Staffel, one of three units at Zeebrugge, returns from mission to British coast where he landed, rescued downed pilot, who clambored aboard and rode back to Belgium on pontoon. Observer/gunner stands at his station behind top wing.

of the Navy, was not zur See.

In contrast to today's German armed forces, during World War I both officers and enlisted men wore a weapon of some sort as part of their uniform. In the Navy, we wore our weapon "umgeschnallt" (literally "strapped around," or worn outside the uniform jacket with a leather belt and cross strap). From 1914 through 1918, the long naval sword ordinarily worn this way by officers and petty officers was replaced by a short bayonet with a sword knot.

Another uniform change instituted at that time was the elimination of the officers' light gray overcoat. It gave way to the same field gray overcoat worn by other ranks, as the officers' color alone could be easily recognized in battle by the enemy and it is apparent that this distinction accounted for the high officer casualty rate at the beginning of the war. Simultaneous with that change, the officers' silver shoulder tab was changed to a less noticeable matte silver-colored device. At the close of the war the regimental numbers were omitted from shoulder straps and shoulder tabs in order to not reveal the originating regimental designation of men killed or captured.

At the Flanders seaplane station there were two squadrons under the command of Kapitänleutnant Christiansen, of which one was actually led by him on missions, while the second was led by Lt. Becht. As a relatively new observer, I was first attached to Lt. Becht's squadron and served as deputy squadron commander and photo officer. With the loss of Krischan's observer, whose name I have since forgotten, I was assigned to fly with Christiansen.

It was almost routine with us that whenever Krischan took off, something would happen. Thus, on gray overcast mornings, always flying with the sun at his back, he succeeded in reaching the English coast early and finding maritime traffic there. He would then surprise the enemy and attain some great success, such as on July 6, 1918, when he sank the British submarine C 25. When he surfaced, the British submarine skipper must have been completely surprised by the German airplanes overhead, as it seemed he never thought to stop traveling on the surface and dive to safety beneath the waves. Either that, or during the first burst of machine-gun fire, his diving planes must have been shot away.

During our attack, one of the submarine crewmen came out into the conning tower with a machine gun and attempted to ward us off. Since the submarine was now going full speed ahead, that reinforced the thought that the boat had been rendered unable to dive when the five Hansa-Brandenburgs first opened fire. As we later learned firsthand during a test on the docks at Bruges, the SMK (for Stahlmantelgeschosse, or steel-jacketed) bullets could penetrate the smooth pressurized hull of the submarine.

When Christiansen's squadron sent back a wireless message relating their success, aircraft of the second squadron took off loaded with 11 to 22-lb. bombs. They found the British submarine being towed by a sister boat, E 51. As soon as the leading submarine spotted the second wave of our aircraft, the towline was immediately severed and the undamaged submarine made a crash dive beneath the water. Now the second squadron also went after the stricken C 25 with machine-gun fire and bombs, and also logged a number of hits on it. We were satisfied that the boat had been put out of action.

Earlier, the squadron definitely destroyed the semi-rigid airship C 27, which was probably out on an antisubmarine patrol along the coast on December 11, 1917, when Christiansen led the attack against it. With the first shots fired at it, the airship began to catch fire amidships and then plunged burning into the sea.

We were also victorious over the Curtiss flying boats that we encountered over the sea and subsequently engaged in aerial combat. We suffered no casualties and only a few hits during these battles. We were able to demolish one of the craft in a formation of Curtiss flying boats because we had the advantage of speed and maneuverability. Unfortunately, our limited fuel supply kept us from pursuing the rest of the flight of reconnaissance aircraft and so we were unable to determine whether further casualties had been caused on these occasions.

Translator's note: The official German Navy publication, Communications in the Area of Aerial Combat, credits Christiansen's squadron with at least the following victories:

12 July 1917 2000 hours Dutch ship *Agina*
1 Oct 1917 1710 hours Curtiss Flying Boat
11 Dec 1917 1010 hours C 27 semi-rigid airship
15 Feb 1918 1100 hours Curtiss Flying Boat*
16 Feb 1918 Curtiss Flying Boat
25 Mar 1918 0555 hours Curtiss Flying Boat
4 July 1918 0610 hours 2 Curtiss Flying Boats
6 July 1918 1245 hours Submarine C 25
18 July 1918 2 Short seaplanes
31 July 1918 Curtiss Flying Boat

(*Two Curtiss H.12B flying boats, N.4338 and N.4339, departed Felixstowe at 0845 hours on February 15, 1918. One contained four Royal Naval Air Service crewmen, the other, three RNAS members and a U.S. Navy pilot, Ens. Albert D. Sturtevant. During the encounter with German seaplanes, Sturtevant's aircraft was shot down and he and his three comrades perished. Sturtevant thus became the first U.S. Naval Aviation combat casualty of WW I. His last flight and subsequent efforts to obtain more details of the incident were recounted in Ralph D. Paine's *The First Yale Unit* (Vol. II, Cambridge, 1925, pp. 89-118). The crew of the other aircraft claimed that both flying boats had been attacked by "ten Hun seaplanes" (p. 93) that separated the two craft and shot one down. Paine was skeptical of Christiansen's report that his and two other aircraft had attacked both Curtiss boats; in fact, Paine obliquely called the German a liar on that point, since to do otherwise would infer that Sturtevant had been deserted by his comrade. It should be noted, however, that a normal German seaplane sortie consisted of three to five aircraft.)

(concluded in the next issue)

Cross Helo

What are STANAG, HOSTAC, NATO, IAN? Most Navy people know that NATO stands for the North Atlantic Treaty Organization, but they are not familiar with the others. This article explains these acronyms and their relationship to each other in the area of helicopter operations from air-capable ships.

HOSTAC is a NATO acronym covering helicopter operations from ships other than aircraft carriers. A HOSTAC working party, which meets each year, has been in existence for about seven years. It was formed by the NATO naval board to bring into focus within a single group the various NATO efforts involved in helicopter operations.

IAN is short for Inter-American Navies. While this is not a formalized organization, the term was accepted as a means to identify countries attending the first IAN HOSTAC conference in Washington, D.C., in August 1979. The countries were Argentina, Brazil, Canada, Chile, Colombia, Peru, Uruguay, United States, Venezuela and Ecuador (not represented at this meeting). These navies have supported one another in various exercises for years. The operations are conducted to ensure protection of shipping and sea lanes around the Western Hemisphere. The most notable is the annual *Unitas* exercise between various South American navies and a U.S. Navy task group circumnavigating the continent.

STANAG is the NATO acronym for Standardization Agreement. The agreements are developed to ensure that equipment, receptacles, operating procedures, phraseology, mechanically-related pressures and the like are the same within NATO ships, aircraft and facilities, and to provide for cross-deck operations. While all STANAGS are not ratified or adopted by all NATO nations, many have existed for years.

STANAGs are identified by a number and title. The following STANAGs are referenced in the HOSTAC Resume and Supplement, Allied Procedural Publication-2 (APP-2). Those nations that ratified these have agreed to modify their aircraft, equipment, or facilities to ensure greater compatibility.

STANAG 1162 – Vertical replenishment operating area marking clearances and lighting.

1211 – Shipboard helicopter facility designations.

1230 – Shipboard approach procedures for helicopters.

1236 – Glide slope indicators for helicopter operations from NATO ships.

1237 – Inspection of aviation facilities for helicopter operations from ships other than aircraft carriers.

3054 – Characteristics of compressed air for technical purposes, supply pressure and hoses.

3105 – Aircraft pressure fueling connections.

3117 – Aircraft marshaling signals.

3149 – Minimum quality surveillance of petroleum products.

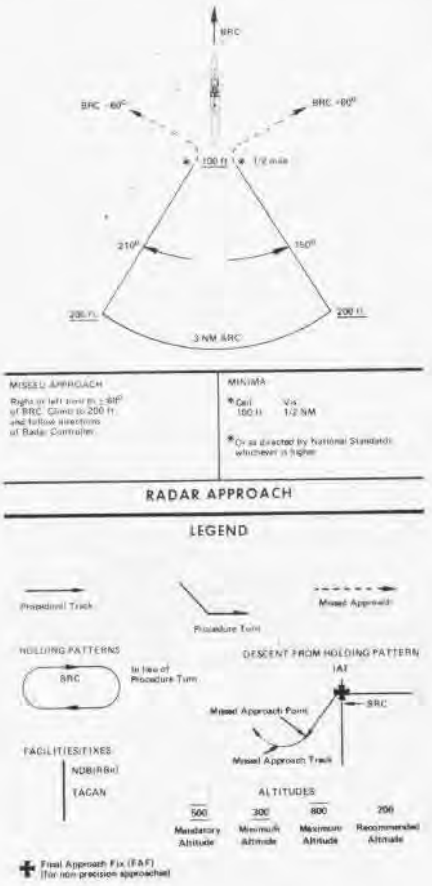
3302 – Connectors for 28-Volt DC servicing power.

3303 – Connectors for 115/200 Volts, 400 Hz, 3-phase AC servicing power.

3212 – Diameters for gravity filling orifices.

(In draft form) – Shipboard helicopter in-flight refueling operating area marking clearances and lighting.

1095 – Picketing or aircraft tie-



Deck Ops

By Howard Ziemer

down fittings for shipborne aircraft.

When these STANAGs are referenced in either the APP-2 HOSTAC Resume or its Supplement, users can be assured that those nations' ships, facilities or aircraft can operate safely in the area covered by the particular STANAG.

The HOSTAC working party is now developing, maintaining, and updating pertinent information. Other STANAGs are also being developed. Most are of a technical nature and not readily available or of direct concern to the operating forces afloat. They do constitute the primary tool for maintaining a degree of inter-nation conformity in configuration and operational procedures.

The U.S. Navy members of the HOSTAC working party are representatives from the Naval Air Systems Command; Navy Tactical Doctrine Activity; Commander Naval Air Force, Atlantic Fleet; and the Naval Air Engineering Center. These members are responsible for ensuring that proposed, modified, and ratified STANAGs are in the best interest of the U.S. Navy in its commitments to NATO.

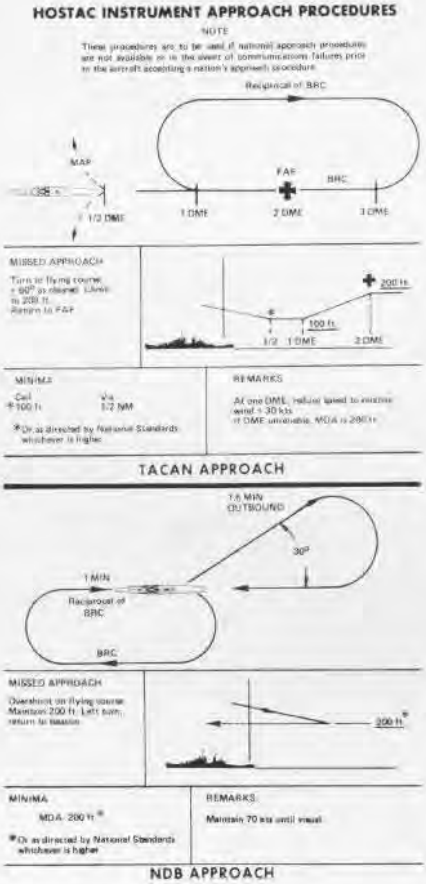
The primary effort of this working party so far has been the development of the APP-2 HOSTAC Resume and Supplement. The resume contains information about each nation's helicopters, their flight procedures, national standards for lighting and marking flight decks, and other data which enhance efforts to conduct cross-deck operations.

The supplement, issued every six months, is designed to be carried by aircrews and provides cross-deck information. It includes sketches of flight decks, a ship silhouette, aviation facilities available (fuel, electric power, tie-downs, light, etc.) flight procedures, and a NATO interoperability matrix.

This matrix, probably the most important effort of the HOSTAC working party, was first published on June 1, 1979. It identifies all NATO ship and helicopter combinations that the nations have bilaterally agreed will be acceptable for landing or vertical replenishment operations in daytime, visual meteorological conditions. By reference to this chart, operational commanders may conduct operations indicated without requesting approval of higher authority, subject only to national regulations. The United Kingdom and the Commander in Chief U.S. Atlantic Fleet have individually accepted this matrix as constituting their approval for cross-deck operations between their ships and helicopters and those of Belgium, Denmark, France, the Netherlands, Norway, Portugal, the United Kingdom and the U.S. The matrix will be revised as facilities and operational procedures dictate.

The Inter-American Navies have recently adopted the HOSTAC format and procedures. Separate IAN HOSTAC Resumes and Supplements are being produced to cover the following 10 countries: Argentina, Brazil, Canada, Chile, Colombia, Ecuador, Peru, United States, Uruguay and Venezuela. The U.S. and Canadian portions of the APP-2 will be duplicated in these new publications. Other IAN countries may be added as applicable. So far, no IAN HOSTAC matrix has been developed.

The IANs are reviewing all Standardization Agreements for applicability to their own operations. This would allow cross-deck operations among the IANs and NATO countries.



Letters

Aircrew Wings

Regarding the letter entitled "Wings" from AT2 Mansfield, we feel it is time the enlisted aircrewman gets the recognition he deserves, not only in your magazine but in all the commands. He has to work harder and is paid less to stay proficient in his particular aviation aircrew rating. In some instances, he works in conjunction with pilots and NFOs to keep them proficient. Not only would we like to see *our* wings in your magazine but also articles on enlisted aircrewmen in their individual squadrons and positions.

ATC A1 Bartlett
AT1 Pete Pearce
AMH1 Phil Minor
AW1 Larry Grondzki
AW1 Mike Taylor
AO2 Neal Rosenstrom
CNavRes P-3 Natops Evaluation Team
NAS Willow Grove, Pa. 19090

Ed's Note: We're working on the wings. We agree about the articles. PAOs and enlisted men, how about sending us some? We depend on you in the field for much of our material.

Referring to the letter entitled "Wings" in the January 1980 issue, I agree with AT2 Mansfield. As a Naval Aircrewman, I know the feeling of pride that comes with the privilege of wearing the gold wings of a Naval Aircrewman. This is a status not given to everyone, but one that must be earned. I feel it is time that Naval Aircrewman wings be placed alongside those of the Naval Aviator and Naval Flight Officer.

AO1 John J. Cotthaus
Safety/Natops Petty Officer
VP-68

OS2U Kingfisher

The largest naval ship's museum in the world is searching for a Vought-Sikorsky OS2U *Kingfisher* spotting aircraft, to replace the one currently on exhibit there. The *Kingfisher* that is now on board the battleship *Massachusetts*, by prior agreement, must be returned to the National Air and Space Museum in Washington, D.C., in the near future.

Anyone knowing the whereabouts of an OS2U or parts thereof that might be available, please contact: Mr. Paul S. Vaitses, Jr., Executive Vice President, Battleship Massachusetts, Battleship Cove, Fall River, Mass. 02721. Telephone: 617-678-1100.

Naval Aviation News is seeking any sea story, anecdotal-type information on the venerable A-1 *Skyraider* for use by an author researching for a book tentatively titled *The Skyraider at War*. Combat stories from Korean and Southeast Asian fighting are particularly desired. But any tales from those who liked, worked on, or flew the *Skyraider* would be appreciated. Please send *Skyraider* memoirs to *Naval Aviation News*, Bldg. 146, Washington Navy Yard, Washington, D.C. 20374.

The First and Only?

In your December 1979 issue, you referred to VR-24 as the "first and only squadron to operate all the basic types of aircraft: helos, props and jets." This statement is false. VX-1 also operates all basic aircraft types and has done so for several years now. The ASW pioneers of VX-1 fly the following aircraft: P-3C, S-3A, SH-2F and SH-3H.

VX-1 is responsible for conducting operational evaluations of all airborne ASW systems within the Navy, including land-based and sea-based aircraft, and fixed and rotary wing types.

Just thought your readers would like to know.

Paul Alfieri
Electrical Engineering Dept.
U.S. Naval Academy
Annapolis, Md. 21402

Naval Aviation Ball

The Seventh Annual Naval Aviation Ball, sponsored by the Deputy Chief of Naval Operations (Air Warfare), will be held in the Capital Room, Officers' Club, Bolling AFB, Washington, D.C. on April 16, 1980. Cocktails at 1900, dinner at 2030, and entertainment and dancing until midnight. All active duty Naval and Marine Corps Aviators in the Washington, D.C., area will receive invitations, and are encouraged to attend the aviation community's social event of the year. For information please contact: Chairman, Capt. M. M. Scott, 202-695-9544; or Cdr. Pete Vollmer, 202-695-1840.

Kudos

I liked your centerfold in the November 1979 issue. I am interested in the old style bomber aircraft. The only thing I found wrong was your article "Three at Sea" [*America, Eisenhower* and *Kitty Hawk*]. It would probably take all three to top *Midway*. In seven years in the Navy, I have never seen a better vessel.

Your magazine, especially old Grampaw Pettibone, is good. Keep up the good work.

PO1 Richard Jorgensen
G-4 Division
USS Midway (CV-41)
FPO San Francisco 96601

Reunions

The Naval Test Pilot School will hold its 32nd annual reunion and symposium at Patuxent River, Md., on May 3. The program will feature presentations on current aeronautical topics and updates on major test and evaluation projects at NATC. Alumni are asked to send their current mailing addresses to the U.S. Naval Test Pilot School, Naval Air Test Center, Patuxent River, Md. 20670, to ensure delivery of their invitations.

USS *Knapp* (DD-653) shipmates, who served together during WW II, will hold their 10th reunion at the Drake Oakbrook Hotel, Oakbrook, Ill., July 11-13. Other WW II shipmates and those who served aboard in later years are invited to attend also. Contact Francis Wickenheiser, 1109 Pleasure Road, Lancaster, Pa. 17601, for reservations and information.

USS *Niblack* (DD-424) reunion will take place in Boston, Mass., May 9 and 10. Contact Charles D. Root, Jr., 6601 Wissahickon Avenue, Philadelphia, Pa. 19119. This will be the first reunion since WW II.

VPB-216 (PBM) reunion on May 1, 1980, at the Sheraton National Hotel, Arlington, Va., in conjunction with annual meeting of the Association of Naval Aviation, Inc. Contact Bob Smith, 6468 W. 85 Place, Los Angeles, Calif. 90045, 213-645-1791; or Dick Gingrich, 468 E. Baltimore St., Greencastle, Pa. 17225, 717-597-8250.

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Established in June 1956, Attack Squadron 56 flies A-7E Corsair IIs and is tasked with special weapons delivery and strike missions. In its insignia, the boomerang denotes a swift, accurate attack capability and the potential for immediate retaliation against an aggressor. The arrow reflects speed and electron rings emphasize the modern electronic equipment available in the squadron's A-7s.

In its nearly 24 years, VA-56 has operated the F9F Cougar, FJ-4B Fury, A-4 Skyhawk and A-7A/B Corsair II. The squadron nickname, Champions, stems from a 1959 attack squadron, air-to-ground weapons competition in Yuma, Ariz., when VA-56, representing the West Coast, defeated the East Coast opponent. Skipper Cdr. Leon C. Bryant and his Champs are currently deployed with CVW-5 aboard Midway, which is home-ported in Yokosuka, Japan.

SQUADRON INSIGNIA

LTJG ODDJOB HIRATA

MIDWAY