
NAVAL AVIATION
NEWS
LT BULLET RICHARDSON
LTJG ROCKY BE
EJECTION SEAT
EJECTION SEAT
FEBRUARY 1977

NAVAL AVIATION NEWS

FIFTY-NINTH YEAR OF PUBLICATION

Covers -- Front, photo of VF-211 Tomcat on training hop was provided by Grumman Aerospace Corporation. Back cover view of CH-46 Sea Knight hauling cargo in the Pacific was recorded by PH1 John R. Sheppard. Lt. Peter Mersky took this picture of a VFP-306 RF-8G on USS Ranger's catapult last November. VA-304 Corsair is in foreground. See pages 16-17 for Mersky's account of CVWR-30's recent milestone cruise.

editor's corner

Family Affair. As a lieutenant commander in 1946, Ron Burgess was USS *Roosevelt's* meteorological officer. He forecast the weather for CV-42's first jet aircraft launch. "We required a minimum of 30 knots of wind over the deck to launch the XFD-1 *Phantom,*" remembers Burgess. "As usual the weather was not cooperating. With half our boilers on the line, we had only 27 knots. I had briefed the captain that the natural wind was not going to increase. He decided to light off the remaining boilers. The *Phantom* was lined up on centerline at the stern. We weren't sure how much deck roll was required. As it turned out, the plane was flying long before it reached the bow."

On a recent visit, Burgess met with sons Ken, a lieutenant commander, left, and Ross, a lieutenant, aboard the carrier. Ross flies F-4Ns with *Roosevelt*-based VF-111. Ken, transferred before CV-42's last deployment, flew with VF-51.

Asked his reactions about *Roosevelt* today compared to yesteryear, Burgess declared, "This was one hot ship back in 1946. The biggest difference is the air conditioning. I think the only air-conditioned space then was the combat information center."

Sky Ship — The Akron Era is the title of Thom Hook's latest book. Author of *Shenandoah Saga*, Hook tells the story of the airship *Akron* which sank in the Atlantic in a storm off New Jersey in 1933. Only three of the 76 crew members survived. Hook documents a case for a weakness in upper fin design leading to failure of the empennage due to gusts in the storm minutes before *Akron* struck the ocean. The book is accentuated with many photographs. *Sky Ship* is published by Airshow Publishers, Annapolis, Md. 21402.

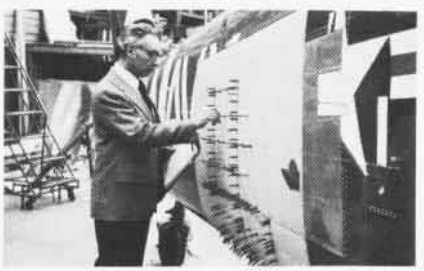
Obnoxious Matter. "That obnoxious matter of paint peeling off the leading edges of the lower wings of Scouting Three's SBC s proved to be no longer obnoxious when one bright lad (typical VS-3 product!) experimented and found the following method of touching up the bare spots quite satisfactory: apply the aluminum paint with a rag and immediately rub in with a dry clean cloth. This takes off the excess paint and just fills in the bare spot. Formerly the bare spots were touched up with a brush, but this was quite unsatisfactory due to the mottled appearance which resulted. This new method not only produces a very pleasing, blended appearance, it is also quite durable." Quoted from a BuAer *Newsletter* dated October 1, 1938.

Airframes personnel take note.

What's This? It's Capt. Walter

Thompson, USMC, a bombardier-navigator in Cherry Point-based VMA(AW)-533. He's in the right seat of a squadron A-6 *Intruder* peering at his radar screen through a flexible shield which blocks out unwanted light.

And This? Mr. Gene Santon of Kaman Aerospace Corporation is a quality assurance specialist inspecting sheet metal repair on a *Seasprite*. As the caption indicated, looks like airframe acupuncture to us.



Standby to Launch. Seems USS *Boxer* was having some aircraft availability problems during the Korean War. VA-65's Ens. William Videto was therefore selected to get airborne anyway he could. Lt. A. B. Kreutz, squadron maintenance officer, volunteered to launch him. In truth, Art Schoeni, former *Naval Aviation News* editor, was aboard *Boxer* in the early Fifties and staged the picture.

NAVAL AVIATION NEWS did you know?

Oblique Wing Flight Tests

NASA engineers have begun flight testing a remotely piloted research vehicle (RPRV) which can fly with the wing at various oblique angles to the flight path. The flight test program is a joint effort of NASA's Dryden Flight Research Center, Edwards, Calif., and NASA's Ames Research Center, Mountain View, Calif. Its purpose is to verify theoretical, wind tunnel and flight simulator studies made at Ames for flight characteristics of oblique wing aircraft. The RPRV is the first oblique wing aircraft to fly equipped with instrumentation to record the flight characteristics of the aircraft.

Dr. Robert T. Jones, senior scientist at Ames, has advanced the concept of the oblique wing for supersonic aircraft of the future to help alleviate the sonic boom problem and increase the energy effectiveness of supersonic aircraft. Dr. Jones proposed transport aircraft with a pivoting straight wing mounted on top of the fuselage. The wing can be turned to various oblique angles for best performance at different light speeds. For slower flight, the wing is positioned at right angles to the fuselage, allowing landings and takeoffs with a minimum of power and much less noise than present day supersonic transports. For higher speeds, the wing is rotated with respect to the fuselage to gain the high-speed efficiency of the swept-wing design.

The RPRV technique was developed by engineers at the Dryden Flight Research Center as a means of flight testing high-risk technology without the associated risks to test pilots. It involves flying large-scale models of the test aircraft by a test pilot located in a ground cockpit complete with flight controls and instruments. The pilot is able to fly the model through the desired test maneuvers using radar, television and telemetry.

Striping

A ponderous rig, moving along at two to five miles an hour, striped about 50 miles of runway and taxiway at the Pacific Missile Test Center in about two days. With six guns going full blast, the computerized rig uses almost 100 gallons of paint an hour.

The rig is operated by Phil Lawson and Merle Roberts, painters from McClellan AFB near Sacramento.

Lawson drives the rig and Roberts rides at the back console using switches, buttons and knobs to select the width of the stripe, the pressure of the guns and the flow of glass beads which are blasted into the paint. The beads are spheres less than one-hundredth of an inch in diameter. When light hits them at an angle, they glow as brightly as a fluorescent tube.

Lawson and Roberts travel throughout California, Oregon, Nevada and Washington to do their work at Navy, Air Force and Army bases.

Super Stallion

The CH-53E *Super Stallion* made its first appearance at NATC Patuxent River the latter part of November. A second one arrived later. The aircraft are undergoing Board of Inspection and Survey trials which will continue until March. One of the helos is scheduled to be flown to HMX-1 at

NAVAL AVIATION NEWS did you know?

Quantico for operational testing by the Marine Corps.

The triple-turbine-powered CH-53E is a growth version of the present twin-turbine H-53, built primarily for the Marine Corps. It will carry 16-ton loads or accommodate up to 56 troops. It has seven blades instead of six, and flies at speeds up to 195 miles per hour.

Targets The Navy has awarded a contract to Northrop Corporation for continued production of MQM-74C *Chukar IIs*. The high-performance, remotely-

controlled targets are used in the antiaircraft training of missile and ground gunnery crews. Northrop has produced more than 650 *Chukar IIs* for the Navy and defense forces of other nations.

Awards Two squadrons of Carrier Air Wing Eight are winners of top awards for FY 1976. VF-74 was named recipient of the Admiral Joseph Clifton Award as Navy's top fighter squadron. VA-82 received the Admiral C. Wade McClusky Award for operational and safety performance. The awards were presented in ceremonies aboard USS *Nimitz*, the Clifton award by Deputy Secretary of Defense William Clements, and the McClusky award by Secretary of the Navy J. William Middendorf II.

Pri-Fly Changes The Naval Air Systems Command has begun a program to analyze a critical area of shipboard activity, the primary flight control station. The purpose of the study is to make changes that will facilitate accurate decision-making

during launch, recovery and handling operations. The program is being conducted by the Naval Air Engineering Center, Lakehurst under project manager Andy Benedetto.

An NAEC team visited *America, Enterprise, Kitty Hawk, Ranger* and *Nimitz* to observe pri-fly operations and discuss any functional difficulties. Back in Hangar 3 at NAEC a mock-up was constructed, a duplicate of the *Nimitz* pri-fly. Material was secured from USS *Hancock* which has been decommissioned, and from USS *Gatling* which has been in mothballs for over 10 years. Surplus and salvage equipment came from the branch aviation supply office and some material was obtained through an exchange with the Smithsonian Institution.

Since many of the problems are people-oriented and pertain to the pri-fly environment, NAEC mechanical engineer Neal Senholzi and aerospace engineer Tak Po Sit feel the mock-up is vital to their work. They often visit it to get a feel for the equipment they are working on, and consider it a lab for human engineering.

The study so far has offered changes as minor as adding carpet to reduce the noise level and as major as redesigning the interior of pri-fly. An even greater change involves raising the entire station one level and making it circular to allow 360-degree visibility, as in an airport's control tower.

Since communications are vital in pri-fly, the study also focused on changes in that area. A recommendation was made to equip flight deck personnel with VHF headsets (only supervisory personnel would be able to transmit as well as receive) which would eliminate unnecessary delays when seconds are critical. Other recommendations have to do with digital readouts for display of launch and recovery data, back-up circuits for some systems, an integrated communication console for the air officer and a rack-track-type video display panel for launch and recovery tallying of aircraft.

While some changes are already being tested in the fleet, those which

involve shipboard alterations must be proposed to the Naval Sea Systems Command for incorporation into future carrier design or for shipboard modifications to carriers now in the fleet. NAEC has already made recommendations to NavAir and NavSea for changes in *Vinson* (CVN-70).

Left to right in the mock-up are Sit, Senholzi and Benedetto.

grampaw pettibone

It's in the Book

A Marine Aviator was scheduled as part of a two-plane, low-level training flight in an A-4M *Skyhawk*. He was scheduled to brief and lead the flight but another pilot was the designated flight leader. The brief was in accordance with the Natops briefing guide.

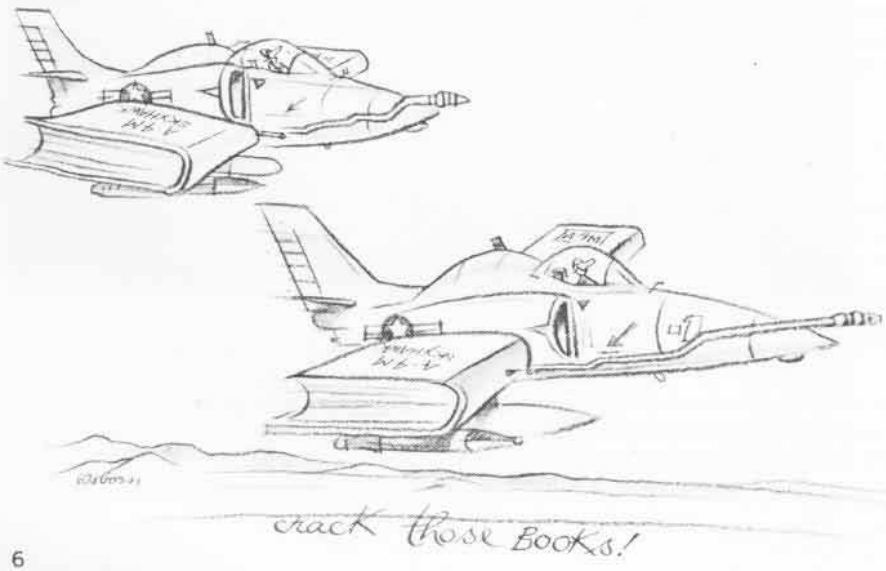
Aircraft preflight, start and taxi were on time and without incident. An abbreviated automatic flight control system (AFCS) check was conducted by the pilot prior to taking the active runway. The mandatory steps were performed in this check and no discrepancies were noted. Section takeoff was routine and a climb was established.

The flight leveled off at flight level 230 and the pilot placed the AFCS in standby. The wingman performed a cross-under from left to right and observed the lead aircraft's elevator flutter momentarily. He inquired if lead had engaged the AFCS. Lead replied, "No, it must be the yaw dampener." The flight proceeded to the next vortac where a descent was planned so that the VFR portion of the flight plan could be conducted.

The descent began. The wingman followed in loose cruise formation. As the aircraft were passing flight level 210, the leader performed a 360-degree roll to the left to increase his rate of descent and to observe his position in relation to the low-level start point.

Up to this time, the leader had experienced no control abnormalities coming out of the roll. Now, at approximately 300 knots, the nose of his *Skyhawk* began to rise. He countered with forward stick and noted that the nose trim was in the vicinity of zero and not coming up. There was not enough forward stick available, so he used the stick trim button in an attempt to trim nose down. The pilot then began getting erratic input movements in the control stick. He stated that throughout the incident the stick wanted to do its own thing, moving in all quadrants.

The aircraft's nose continued to rise through the horizon and the pilot utilized rudders to do a barrel-roll-type recovery to the left. The aircraft emerged from this maneuver, left wing down, in a left-hand spiral, 60-80 degrees nose low. The pilot reduced power and extended speed brakes. He tried to visually check disengagement of the stab aug, but was unsuccessful due to the movement of his body. He was attempting to pull the nose up to the horizon when he transmitted, "I'm going to disconnect." The wingman replied, "Go ahead." The pilot saw all his emergency T-handles in front of him but, because of the aircraft's movement, could not reach the emergency generator. He said that he disconnected as a last resort, just prior to ejection, utilizing the upper ejection handle. The pilot sustained injuries during the ejection.



Grampaw Pettibone says:

Holy mackerel! When all was said and done and the investigation was completed, there was more to this than meets the eyeball. First of all, due to a lack of knowledge, the pilot incorrectly diagnosed his problem and took incorrect action! Yes, by gummit, there was a failure. But if this lad knew the book, correct action would have saved this machine! He didn't get a lotta help from his wingman, either (who, as you recall, was the designated flight leader)—maybe he doesn't know the book either. All in all, a bad show—which we can do without!

ILLUSTRATED BY Osborn

Amateur Time

Two Marine Aviators were scheduled for a familiarization flight in the OV-10 *Bronco*. This was the PUI's (pilot under instruction) fifth sortie. Brief and preflight activities were without incident. The initial phase of the flight was completed as scheduled and the *Bronco* entered the pattern for practice touch and go's.

The PUI completed a simulated single-engine touch and go and departed the pattern. He then reentered, performed two no-flap, two half-flap and one simulated single-engine touch and go. The instructor pilot (IP) then took control and demonstrated a full-flap landing to a stop and go, followed by a half-flap takeoff.

When safely airborne, the IP requested that the PUI raise the gear. At 110 kts, the IP raised the flaps and gave control of the aircraft to the PUI, who was to perform a full-flap touch and go.

The PUI took control, lowered full flaps on downwind and flew an abnormally wide pattern. The IP was leaning around the right side of the cockpit advising the PUI with regard to his flight pattern and could not see the gear indicators or wheels warning light. Additionally, the IP did not check the main gear visually.

The PUI failed to read the landing checklist to the IP (he had done so on all previous approaches) and reported "three down and locked" to the tower. The approach was flown 5-10 knots fast all the way. A crash crewman noted the gear-up situation and attempted to contact the tower but was unsuccessful.

The aircraft continued its descent until the left prop struck the runway. The PUI was in the process of raising the flaps for a touch and go. At first the IP thought a tire had blown. He took control at which time the right prop and drop tank struck the runway. The IP then feathered both engines and landed the aircraft on the drop tanks. Both pilots left the aircraft in the normal manner.

Grampaw Pettibone says:

Great gallopin' ghosts! I guess some fellers are just too *smart* to use those checklists.

For the life of me, I can't understand how two — not one — aviators can allow themselves to be lulled into this type of accident. A flyer who develops the proper habit of using the checklist stands less of a chance of omitting it. On the other hand, if he has often been haphazard about it — he may miss it at a critical time. There are enough distractions around to catch even the gent with good habit patterns, let alone those gents with poor ones!!

Who Held the Bag?

While taxiing along the runway after a landing, an FG-1 pilot experienced brake trouble and was not able to maintain directional control. He called the tower and was told to cut the engine and stand by. While waiting for assistance the pilot remained in the cockpit and, in his own words, "stood up so that other planes could see me." A few minutes later an F6F came barreling down the taxi strip and apparently didn't see the FG, nor its pilot, in time to avert a collision. The FG was completely destroyed, with

the pilot barely managing to scramble out of the cockpit in time to save himself.

Grampaw Pettibone says:

Let's see who was to blame. *First*, the tower for not warning the F6F pilot about the stalled plane on the runway. *Second*, the F6F pilot, for not observing safe taxi procedure. *Last*, but not least, the FG pilot himself. He should have humped himself out of his plane and gone to the side of the runway, ready to flag down any approaching plane — using his skivvies, if necessary. Expenses for replacement planes and for military funerals would be considerably reduced if this procedure were followed whenever an airplane stalls on an airfield runway, the taxi strip or line. (August 1944)

By Wes Pryce
Assistant Naval Aviation Historian

The following is a compilation of major achievements, milestones and events which took place in Naval Aviation in 1976.

January

9 Vice Admiral Charles Rosendahl, USN (Ret.), received the first Jean Pierre Blanchard Award for pioneering achievement in American Aviation. The award was made by Deptford Township, N.J., as part of its Bicentennial celebration commemorating the first flight of a gas balloon, from American soil. The flight was made on January 9, 1793, by the celebrated aeronaut whose name graces the award. Adm. Rosendahl was a key figure in the development of the U.S. airship program. During his career he commanded the airships *Akron* and *Los Angeles*, and was the senior surviving officer of the *Shenandoah* when it crashed in 1925. He was a major architect of the Navy's WW II airship program and in 1943 became Chief of Naval Airship Training.

14 A Navy-operated LC-130 *Hercules* — tail number 159129 — was recovered by a Lockheed/Navy team from the top of an Antarctic ice dome. Dome Charlie, 11,900 feet above sea level, is one of three ice domes near the Prince Albert Mountain Range. The four-man team from Lockheed and 16-man Navy team had to pool their efforts in order to repair and recover the damaged aircraft a year after it was damaged. A second LC-130 *Hercules*, tail number 319, was also damaged and left to be rescued during the next operating season, 1976-1977.

28 The Navy awarded a contract for full-scale development of the F-18 fighter to the McDonnell Douglas Corporation. The twin-engine F-18 will be developed and built by McDonnell Douglas and Northrop Corporations. DOD plans call for purchase of 800 F-18s for Navy and Marine Corps use. The F-18 will have a top speed in excess of Mach 1.8 and a combat ceiling of about 50,000 feet. Its performance will be superior to that of the F-4 *Phantom II* and the

A-7 *Corsair II*, both of which it is designed to replace. The aircraft will carry *Sidewinder* and *Sparrow* missiles and an M61 20mm gun mounted in its nose.

February

14 *Operation Deep Freeze 76* ended when the last LC-130 *Hercules*, BuNo 159131 of Antarctic Development Squadron Six, departed from McMurdo Station, Antarctica, for Christchurch, New Zealand. Despite reduced LC-130 air support because of aircraft accidents and damage, air operations were considered successful. The LC-130s flew over 2,000 hours during the operating season in support of the National Science Foundation's research program.

18 The night attack weapon system which is under development at the Naval Weapons Center, China Lake demonstrated its accuracy and effectiveness against a moving target when it scored a direct hit on a moving M-48 tank at night. In an earlier test, it accomplished another direct hit on a stationary M-53 self-propelled gun. In both tests, hits were recorded directly on the engine compartment of each target vehicle. The system is composed of a modified air-to-surface *Maverick* missile equipped with a long wavelength, non-imaging guidance unit. It will enhance the performance of night tactical and strike aircraft.

25 A long distance flight record for Northrop's F-5E *Talon* tactical fighter was set by LCdr. James Ruliffson, C.O. of the Naval Fighter Weapons School. The 1,565-nautical-mile flight between NAS Miramar, Calif., and NAS Pensacola, Fla., non-stop, was made with refueling in 3 hours and 10 minutes.

March

1 For nearly two weeks, *Valiant Heritage*, a five-nation exercise involving 41 ships, 200 aircraft and about 18,000 men was conducted off the southern California coast. Naval forces from the U.S., Great Britain, Canada, Australia and New Zealand participated. Operations included ASW drills, air defense, at-sea rearming and replenishment, carrier operations, missile firings and simulated air attacks against participating ships. Commanding the exercise was Vice Admiral Robert P. Coogan, Commander, Third Fleet, in USS *Enterprise*.

2 Two VS-22 Lockheed S-3A *Vikings* landed aboard USS *Saratoga* off the coast of Rendizi, Italy, completing the first Atlantic crossing by this type of aircraft. The two aircraft left NAS Cecil Field and made stops at NAS Bermuda, NAS Lajes and NS Rota before touching down on *Saratoga*.

4 Rear Admiral James B. Stockdale received the Congressional Medal of Honor for "conspicuous gallantry and intrepidity at the risk of his life." RAdm. Stockdale received this country's highest award for the example he set as the senior naval officer in the prisoner of war camps of North Vietnam. He was shot down in September 1965 and not repatriated until February 1973. RAdm. Stockdale was promoted to captain while a prisoner of war.

18 The Deputy Director of Defense Research and Engineering (Test and Evaluation) gave the full production go-ahead for the AN/APS-125 radar used in the airborne early warning aircraft system. It is designed to detect targets at longer distances and at all velocities. It automatically detects and tracks in all environments, especially overland. It has an improved surface-surveillance capability and provides high-speed target processing. It is anticipated that the AN/APS-125 will be operational in the fleet in 1977.

April

1 Patuxent River Air Field was dedicated in honor of the late Vice Admiral Frederick M. Trapnell (1902-1975). VAdm. Trapnell was a pioneer jet test pilot and was instrumental in the formalization of test pilot training at the Patuxent River facility. In 1949, he took command of the test center. In 1948, he helped establish the Test Pilot Training Division that eventually evolved into the Naval Test Pilot School. VAdm. Trapnell was the Navy's first jet pilot to fly the experimental XP-59A on April 21, 1943, at Muroc outside of Edwards AFB.

19 A *Condor* missile completed a successful free flight during the final systems validation at the

Naval Weapons Center, China Lake, Calif. The missile was launched from an A-6 *Intruder* 30 miles from the target. It made a series of preprogrammed moves before being manually guided to an impact area 10 feet from the target. *Condor* is an automatic homing air-to-surface missile. Contract development of the *Condor* began in June 1966.

May

1 Vice Admiral Forrest S. Petersen, formerly Vice Chief of Naval Material, became Deputy Chief of Naval Operations (Air Warfare). VAdm. Petersen relieved Vice Admiral William D. Houser who had served as DCNO (Air Warfare) since August 1972. VAdm. Houser retired.

28 Navy helicopters assisted in the Philippine disaster relief effort in the flood ravaged areas of Central Luzon. Over 1,900 persons were evacuated by Navy and Air Force helicopters. The helos, acting at the request of the Republic of the Philippines government, also transported more than 370,000 pounds of disaster relief supplies and 9,340 gallons of fuel. Participating Navy units included helicopter crews from HS-4 aboard USS *Ranger*, and detachments from HC-3 on *Camden*, *Mars*, *White Plains* and at NAS Cubi Point.

29 USS *Tarawa* (LHA-1) was commissioned. The second U.S. Navy ship to carry the name of the WW II battle, *Tarawa* exemplifies the latest development of the amphibious assault ship. She is the largest, fastest and most versatile amphibious ship in the fleet. She measures 820 feet long and weighs 39,000 tons and is capable of traveling anywhere on the seas at a sustained speed of 20 knots or more. She is equipped to handle about 25 helicopters, most of which will be CH-46 *Sea Knights*, supplemented by CH-53 *Sea Stallions* and UH-1 *Hueys*. *Tarawa* may also be adapted to employ AV-8 *Harriers* and can transport four 135-foot landing crafts.

June

6 The tactical version of the *Tomahawk* cruise missile using the Terrain Contour Matching Navigation System was successfully test fired from under the wing of an A-6 *Intruder*. The flight lasted 61 minutes and covered 188 nautical miles before the missile was parachuted back to earth for further evaluation. The *Tomahawk* is a long-range weapons system with strategic and tactical application and is designed to fit into submarine torpedo tubes. It can be launched from a variety of existing submarines, surface ships, tactical and strategic aircraft, and land platforms.

25 The Navy's low volume ramjet (LVRJ) made its fifth consecutive successful flight thereby completing the advanced development program with all objectives achieved. The LVRJ is a propulsion system designed to more than double the effectiveness of tactical missiles. The last flight exceeded 100 miles at a cruise altitude of 30,000 feet and at a speed exceeding the muzzle velocity of a high-powered rifle bullet. Unlike the bullet, it sustains its speed all the way to the target.

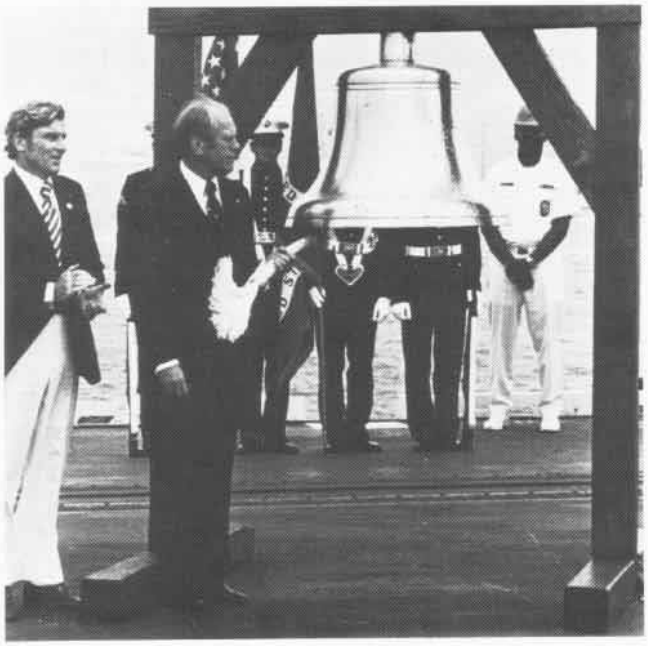
30 The Brown Shoe Navy became history when brown shoes were stricken from the officers' and chiefs' uniforms. Thus ended a tradition initially distinguishing Naval Aviators from the surface officers.

July

1 The new National Air and Space Museum of the Smithsonian Institution opened its doors to the public in Washington, D.C. The structure is

85 feet high with a total exhibition space of 190,000 square feet in addition to a spacearium, theatre, library and cafeteria. A cavalcade of aircraft and space vehicles depicts the evolution of aviation. One of the most popular displays is the Navy's Sea-Air Operations Hall, which includes Navy aircraft past and present and a "you are there" mock-up of an aircraft carrier depicting flight operations as seen from the bridge and pri-fly.

4 President Gerald Ford led the nation in celebrating its 200th birthday aboard USS *Forrestal* in New York Harbor. From this vantage point, he observed the fleet of tall ships, four-masted riggers from all over the world.



6 USS *Coral Sea* was presented the Meritorious Unit Commendation for her actions during the Mayaguez Crisis in May 1975. *Coral Sea* played a major role in the return of SS *Mayaguez* after Cambodian gunboats had seized the merchant ship on the high seas off the coast of Cambodia. *Coral Sea* gave air support to the landing of Marines at Koh Tang Island as CVW-15 conducted strikes on specified military targets.

8 LAMPS MK III (light airborne multi-purpose system) program was under development with the first land-based tests, designed to evaluate the latest weapons systems for future LAMPS MK III helicopters, performed by two YSH-3J *Sea Kings* at Patuxent River. This was followed by ship-based tests aboard USS *Mt. Baker* (AE-34) during September and October. This program uses helicopters to seek out and destroy a potential enemy while it is still far from the ship and well over the horizon.

9 A major step toward extending the effectiveness and life of the CH-46 *Sea Knight* was taken with the delivery of the first two CH-46E prototypes. The modified aircraft are fitted with T-58-GE-16 engines, an Omega-Doppler navigation system, new crashworthy pilot and copilot seats, a combat crashworthy fuel system, a new rescue hoist and an infrared suppressor for engine exhaust. These improvements are calculated to extend the life of the *Sea Knight* fleet into the 1990s.

12 The Douglas DC-3, perhaps the most famous transport plane of all time, was phased out of naval service as the second of two C-117s arrived at Davis Monthan Air Force Base, Ariz., the boneyard for obsolete military aircraft. With only one set of propellers available, the two planes were able to make the flight from Pensacola to Arizona only after members of VRF-31 returned the propellers to Pensacola (following the first delivery in June) in order that they could be used on the second plane.

18 The Soviet Union's only full fledged aircraft carrier, the 40,000 ton *Kiev*, sailed into the Mediterranean for the first time. Shortly after dawn, the 879-foot-long floating fortress slipped out

of the Black Sea where it was built. *Kiev* was believed to have been carrying 25-30 military planes and a similar number of helicopters. A sister ship, *Minsk*, also is being constructed in the Black Sea shipyards. Indications are that a third large aircraft carrier is being built in the Leningrad area.

27 USS *America* and other elements of the Sixth Fleet supported the evacuation of 160 Americans and 148 other nationals from war-torn Beirut, Lebanon. The amphibious transport ship *Coronado* arrived in Athens with the evacuees on July 29.

Deputy Secretary of Defense, William P. Clements, Jr., announced that he has approved the basic flight demonstration phase of the Navy's proposed program for development of the AV-8B *Harrier* for the Marine Corps. The AV-8B, an improvement of the 8A, will fulfill light attack aircraft requirements. The objective of the new program is to approximately double the performance of the present *Harrier*, primarily through aerodynamic improvements in the wing and intake areas, the addition of lift improvement devices and various other modifications. If development goes as planned, the new *Harrier* will be introduced into the inventory in the early 1980s.

August

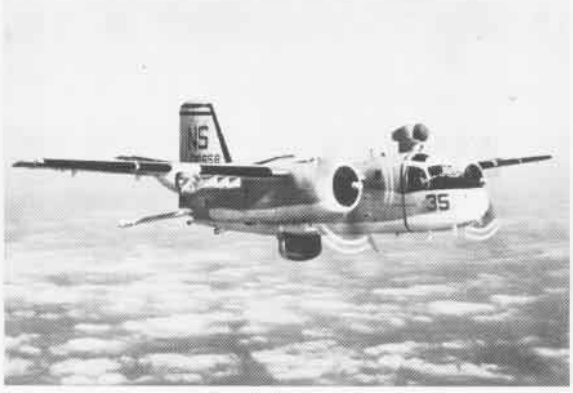
13 The Navy's last operational seaplane, an HU-16 *Albatross*, made its last landing at Pensacola before it was turned over to the Naval Aviation Museum at Pensacola. This 25-year old *Albatross* was flown to Pensacola from Guantanamo Bay, Cuba, with Commander Charles Larzelere as pilot, LCdr. Mike Burke, copilot, and ADRC Joe Saldivar, all members of VRF-31.

18 The first helicopter training simulator purchased by the Navy was accepted at Fleet Aviation Specialized Operational Training Group, Atlantic Fleet. The SH-2F weapons systems trainer is configured to the light airborne multipurpose system. The flight simulator combines a trainer with a four-window visual presentation plus a sensor-station training compartment.

21 A Navy task force headed by *Midway* made a show of force off the coast of Korea in response to the brutal killings of two U.S. officers by North Korean guards on August 18. Twenty-six helicopter gunships backed by F-4 *Phantoms* and USAF F-111s and B-52s circled overhead while a force of 300 U.S. and South Korean soldiers were positioned in the area where the incident occurred.

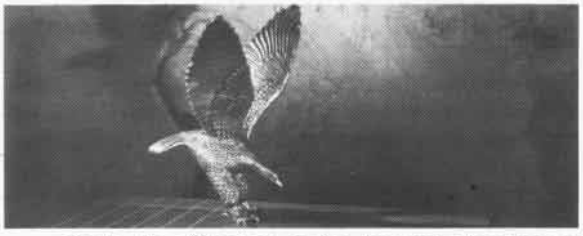
24 An aerospace engineer, Mr. J. T. Matsuo, at the National Parachute Test Range, El Centro, Calif., received a cash award for his most recent patents on parachute designs. His four-line-release concept will soon be incorporated in the Navy's escape systems. This new design consists of having the parachutist release four of the lines at the rear of the canopy after the chute has been safely deployed, thereby increasing stability and maneuverability.

29 The S-2 *Tracker* was withdrawn from operating squadrons as the last aircraft, BuNo 152374,



was transferred from VS-37 custody. Many of the pilots who flew the *Tracker* credit it with being the Navy's most versatile airplane in its era. In more than 20 years service, S-2 aircraft have flown over six million hours and made almost three-quarter million carrier landings with an overall accident rate of only .69 per 10,000 hours.

31 Admiral Noel Gaylor, retiring CinCPac, passed the Gray Eagle Trophy to Rear Admiral Martin D. Carmody in a ceremony aboard USS *Ranger* in Pearl Harbor. RAdm. Carmody, Inspector General of the Navy, became the 26th Gray



Eagle, the officer on active duty who has been a Naval Aviator the longest. During his career RAdm. Carmody flew in combat in WW II and Korea and was C.O. of *Kitty Hawk* in Vietnam. Adm. Gaylor, the first man in history to receive three Navy crosses, had been the Gray Eagle since August 1975.

The National Parachute and Test Range began flight-testing the Teledyne Ryan STAR (ship-deployable, tactical remotely piloted vehicle). STAR is an exploratory development project administered by the Naval Surface Weapons Center, Dahlgren, Va., for the Naval Air Systems Command. Its purpose is to develop technology and demonstrate the feasibility of low-cost miniature remotely-piloted vehicles for operation from ships for real-time tactical reconnaissance and targeting missions.

September

2 Through the joint cooperation of NAS Brunswick, VP-44 and the residents of the state of Maine, 4,500 pounds of clothing and medical supplies were collected and delivered to Homestead AFB, Fla., for shipment to earthquake victims in Guatemala. Included were a complete operating room, X-ray unit, baby cribs and assorted clothing. Two P-3As from VP-44 flew the donations to Homestead.

6 A Soviet MiG-25 *Foxbat* was landed at Hakodate Airport in Japan by a defecting Soviet pilot. This afforded Japanese and U.S. officials a firsthand look at Russia's superjet. The *Foxbat* is capable of Mach 3.2 speed and has an altitude ceiling in excess of 70,000 feet.

10 The U.S. Navy participated in a major NATO exercise in the Atlantic off the coast of Scotland. Two hundred fifty ships from the various NATO nations participated in *Teamwork 76*. On September 14, one of *John F. Kennedy's* F-14s accidentally fell into the Atlantic. Apparently, the *Tomcat's* engines malfunctioned while the aircraft was awaiting launch. The two crewmen ejected safely as the aircraft veered off the side of the deck into the water. The F-14 was equipped with a *Phoenix* missile. Retrieval operations were initiated immediately.

17 NASA unveiled its new space shuttle. President Ford chose the name *Enterprise* for the craft. There are 28 astronauts in the space program at present. Of these, 12 have either a Navy or Marine Corps background. Approach and landing tests are scheduled to begin in July 1977 with the first operational flight of the shuttle projected for mid-1980.

22 President Ford signed legislation appropriating $104.3 billion for defense in FY 1977, a sum $3.6 billion less than had been requested by the President, but almost $14 billion more than the FY 1976 appropriation. The bill cleared the House on September 9 and the Senate September 13. Among the items denied was $102.8 million for six US-3A transport planes capable of landing on aircraft carriers. The bill set payroll funding to allow the following manpower strengths: Army, 789,000; Navy, 540,000; Marine Corps, 192,000; Air Force, 571,000. Included were further development funds of $350 million for the country's fourth nuclear-powered carrier, *Carl Vinson;* 65 million for six A-6E early warning aircraft; 693.7 million for 36 F-14 fighters; and 346.9 million for research and development of the F-18.

29 The Navy's STAR system air vehicle achieved mini-RPV automatic terminal guidance during land-based testing at the National Parachute Test Range, El Centro, Calif. These tests were designed to verify the feasibility of operating a mini remotely-piloted vehicle aboard non-

aviation surface combatants and to provide a data base for launch and recovery techniques and define shipboard interface requirements.

30 USS *Oriskany*, last of the *Essex*-class attack carriers, was decommissioned at San Francisco. Commissioned September 25, 1950, she saw considerable action in both the Korean and Vietnam conflicts, earning, among other awards, the Navy Unit Commendation, National Defense Service Medal, Korean Presidential Unit Citation and the Republic of Vietnam Campaign Medal.

October

13 A *Tomahawk*, launched from an A-6 *Intruder*, set a new record for duration. The *Tomahawk* flew at varying speeds and performed climb and descent maneuvers. This was the 12th in a series of test flights which were to provide detailed engineering information on the missile's aerodynamic qualities for precise performance and range determinations.

27 Vice Admiral C. E. Rosendahl, USN (Ret.), accepted for the Airship Association the deed to 13.9 acres on Naval Air Station, Lakehurst, N.J., as the site for location of the Airship Museum. The ceremony took place at Lakehurst with the other trustees of the association present, all of whom were in the Navy's airship program during WW II.

29 Vice Admiral F. S. Petersen, DCNO(Air Warfare), relieved Vice Admiral Kent Lee as Commander, Naval Air Systems Command. VAdm. Lee retired. Vice Admiral Frederick C. Turner succeeded VAdm. Peterson as DCNO(Air Warfare).

30 NR-1, the Navy's nuclear-powered research submarine, located and picked up the *Phoenix* missile which had dislodged from the F-14 when it had accidentally rolled off the deck of the *John F. Kennedy* in September. More than six weeks of searching, which had been hampered by bad weather, were culminated when the 13-foot-long missile was hoisted aboard the *Sunbird* which then headed for Holy Loch, Scotland. Efforts were continuing to bring the *Tomcat* to the surface.

November

5 Bell Helicopter Textron turned over to the Marine Corps for further testing the latest model of the AH-1T *Sea Cobra*. The new version offers an improved payload of 4,392 pounds over the present 2,739. Maximum gross weight of the AH-1T is 14,000 pounds compared to 10,000 for the AH-1J. Plans call for production models to join the fleet by October 1977.

11 After nearly two months of weather-plagued efforts, the F-14 *Tomcat* lost off *John F. Kennedy* September 14 was finally hoisted out of the North Atlantic off the coast of Scotland.

15 A *Tomahawk* was successfully free-fall launched in its 13th test flight. The missile was released from the wing of an A-6 *Intruder*, started its engines in mid-air and flew one hour and 17 minutes completing a series of performance flight tests over the Pacific Missile Test Center's Sea Test Range.

December

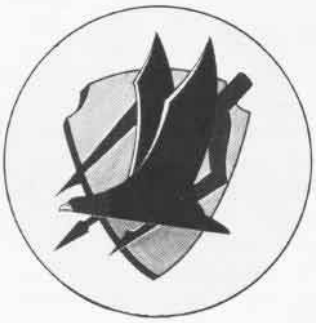
8 A *Tomahawk* cruise missile, using a radar-seeking guidance system, was successfully fired from under the wing of an A-6 *Intruder*. The missile's flight covered 420 miles at low altitude to make a simulated attack on a target ship.

AWARDS

Joseph Clifton

VF-74

Wade McClusky



VA-82

Jimmy Thach

VS-21

Robert Hanson

VMFA-323

Disestablished

NAS Saufley Field	December 1
Carrier Antisubmarine Air Group 70	June 30
Air Antisubmarine Squadron 72	June 30
Air Antisubmarine Squadron 73	June 30
Reconnaissance Attack Squadron 13	June 30
Helicopter Combat Support Squadron One, Det 5	June 1
Training Squadron One	October 1
Training Squadron Five	October 1
USS *Oriskany*	September 30

Commissioned

Tactical Electronic Warfare Squadron 138	February 27
Fleet Logistics Support Squadron 55	April 1
Helicopter Antisubmarine Squadron Nine	June 4
Helicopter Attack Squadron, Light Four	July 1
Patrol Squadron 93	July 1
Fleet Logistics Support Squadron 56	July 1
Fleet Logistics Support Squadron 30	August 1
Carrier Group Eight	October 1
Air Antisubmarine Squadron 35	October 1
USS *Tarawa*	May 29

Redesignations

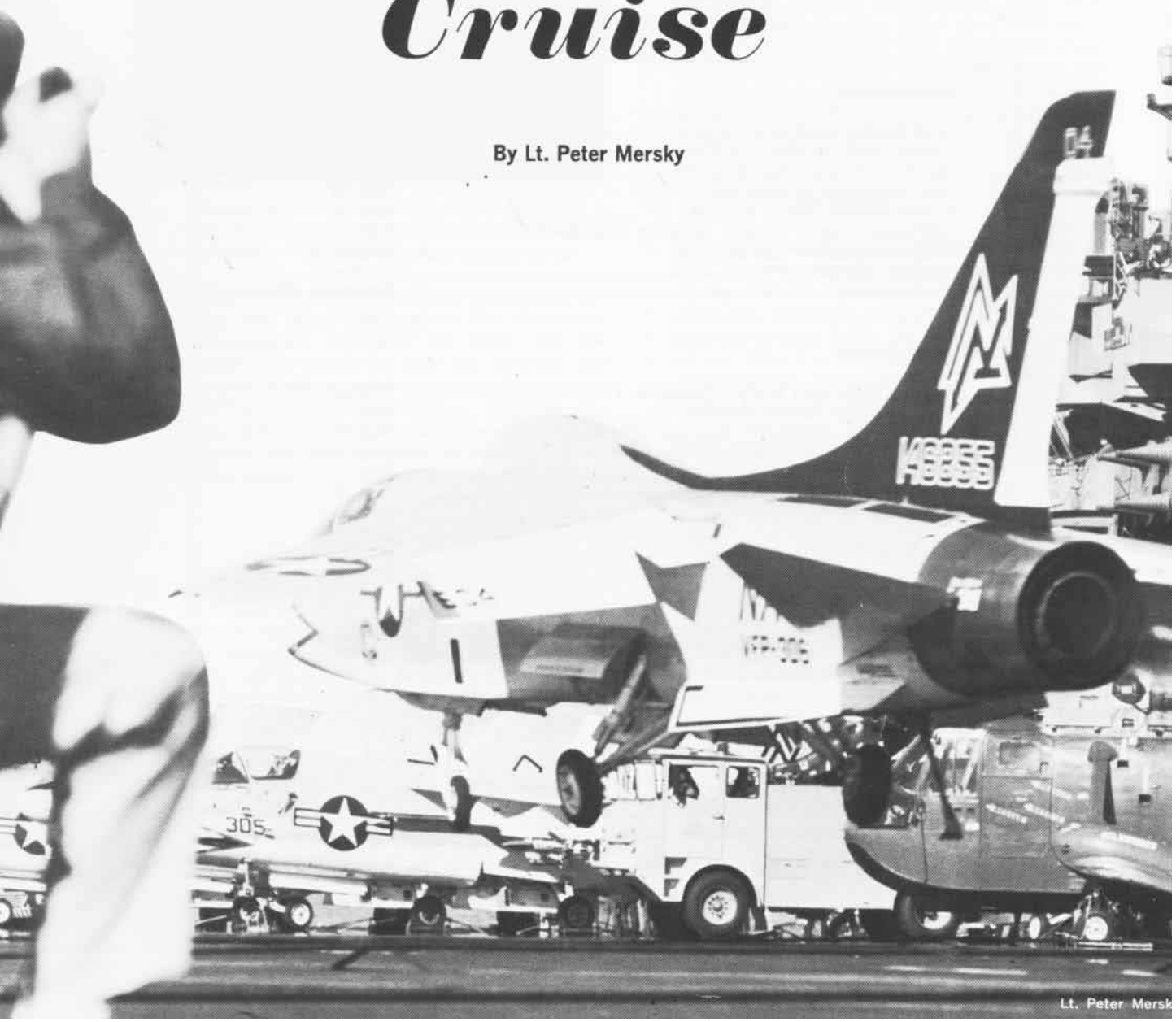
Changes in the Naval Aviation mission resulted in the renaming of certain units: all Fleet Tactical Support Squadrons were redesignated Fleet Logistics Support Squadrons; Attack Carrier Air Wings 2, 3, 5, 6, 7, 8, 15, 17 and 19 became Carrier Air Wings; Attack Carrier Air Wings Reserve 20 and 30 became Carrier Air Wings Reserve—all on April 1.

On November 15, MCAS Quantico became MCAF Quantico.

Contributing to the review was Elsie Goins of the Naval Air Systems Command history office.

Reserve Carrier Cruise

By Lt. Peter Mersky



Lt. Peter Mersk

On November 9, 1976, the eight squadrons that comprise Carrier Air Wing Reserve 30 left San Diego aboard USS *Ranger* (CV-61) to conduct 10 days of operations which were billed as a first for the Naval Air Reserves—a reserve air wing underway operational readiness evaluation.

Aboard *Ranger* were three attack squadrons, VAs 303 and 304, Alameda, and 305, Point Mugu. They worked with VAW-88, North Island, VAQ-308, Alameda, and VFs 301 and 302, Miramar. Filling out the wing was VFP-306, NAF Washington, D.C.

For some of the men the sailing from North Island down San Diego Bay must have brought back memories of earlier deployments to Asian waters, but this time the ocean 100 miles off southern California provided all the room necessary to show off the Navy's tactical air reserves.

Each squadron brought its own special mission and expertise.

VFP-306 in its supersonic RF-8G *Crusaders* provided pre- and post-strike reconnaissance photos; the F-4s of VFs 301 and 302 participated in Alpha strikes and escort missions. The A-7s of the three attack squadrons flew strikes and mining exercises off the coast and against the various California ranges. VAW-88's E-1s provided ELINT support.

Augmenting the wing was HC-9 from the Helicopter Wing Reserve, North Island. It acted as plane guard and conducted search and rescue ops.

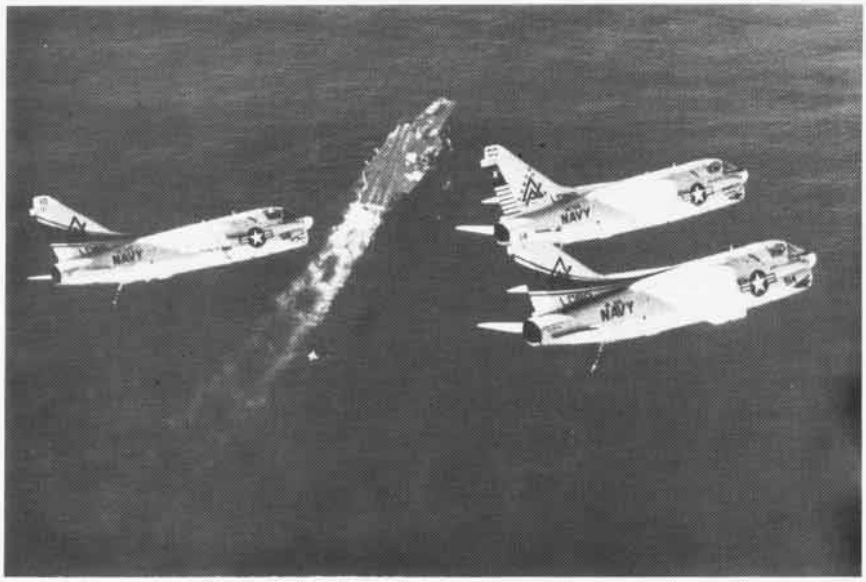
Another unit aiding in the exercise was VRC-1421 from North Island, which provided logistic support and personnel transportation to and from the carrier with its C-1 CODs.

It was a total reserve show. No fleet squadrons were involved. Even the tanking duties were handled by the KA-3s of VAQ-308.

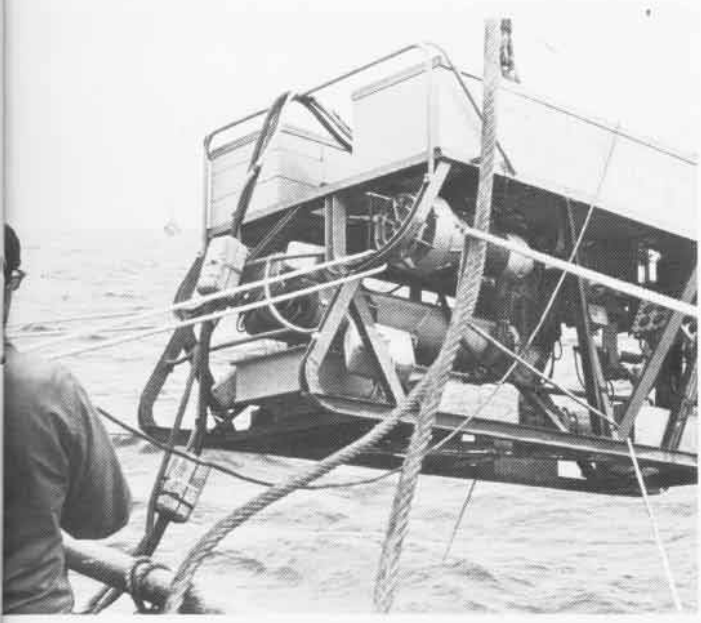
The squadrons logged over 1,100 sorties on the cruise during day and night ops. VF-302 won the Golden Tail Hook Award for the best landing performance among the eight units.

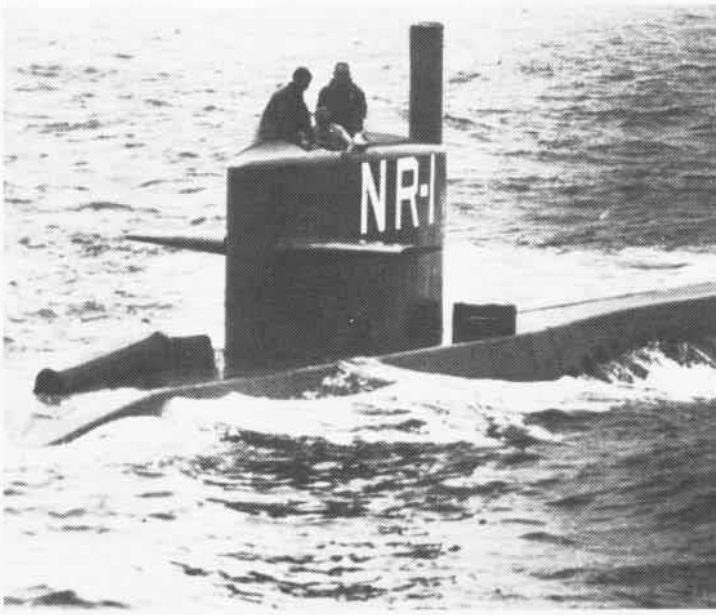
It was an important test of the reserves' ability to become part of the fleet. Many months and long hours had gone into preparation. And the 1,800 men and 71 aircraft of the wing were up to the challenge.

Commander Norm Campbell, Commander of the Wing, expressed his pride when he said, "We expected much and they delivered. I'm proud of the squadrons."



These scenes were repeated many times as CVWR-30 deployed aboard Ranger. VFP-306 Crusader shoots past LSO on its way to snagging a wire, opposite page; left, VA-305 Corsairs fly over Ranger; above, VF-302 Phantom is readied for cat shot; below left, HC-9 Sea King flies plane guard; below, VAW-88 E-1B Tracer is set for takeoff.





TOMCAT RECOVERY

Both the F-14 *Tomcat* and the *Phoenix* missile that were lost overboard from the aircraft carrier *John F. Kennedy* off the coast of Scotland on September 14, 1976, have been recovered. The aircraft was assigned to Fighter Squadron 32, home-based at NAS Oceana, Va.

The *Tomcat* was first located on October 15 in about 1,900 feet of water some 75 miles northwest of Scapa Flow, Orkney Islands, by the fleet tug *Shakori*. It was retrieved onboard that ship on November 11, capping an eight-week recovery operation that had been hampered by near gale force winds and 20-foot seas. The *Phoenix*, attached to the F-14 when it was lost, was recovered October 31. The deep submergence and ocean engineering vessel NR-1 located the missile and, with help from the submarine rescue ship *Sunbird*, successfully recovered it.

The mishap occurred at 2:15 p.m. GMT on September 14 aboard *Kennedy*. The two crew members had taxied their *Tomcat* to arming position just short of the catapult when the engines malfunctioned and went to increased power. The aircraft became uncontrollable. It lunged forward and sideways, rolled free of the flight deck and plunged into the water. The pilot and Naval Flight Officer successfuly ejected and landed on the carrier's flight deck, with minor injuries. Three sailors on the deck were also injured.

When the plane was first spotted, weeks later, it was resting upside down on the ocean floor with two of its three landing gear in position. Through closed-circuit television cameras, the plane appeared to have sustained minor damage but was entangled in a fishing net. This and hazardous weather conditions on the surface prolonged the recovery operations for nearly eight weeks.

In conducting salvage operations, the Navy used a number of civilian vessels and crews, technical representatives and hard-hat divers. In addition to *Shakori*, equipped with side-scanning sonar and precision Decca navigation, Navy units included CURV III, a cable-controlled, underwater recovery vehicle with closed-circuit television, the NR-1 and *Sunbird*.

After several attempts to raise the F-14 failed because of weather conditions, including a heavy sea state, the aircraft was towed approximately three miles before the towing line parted and the plane settled to a depth of about 1,500 feet. As the weather calmed, the aircraft was again towed, and this time successfully retrieved from shallow waters by the heavy grab ship *Taurus*. The *Tomcat* suffered substantial damage during the towing operations.

Commander Allison J. Holifield, officer in charge of NR-1, later described the F-14 search operation as being akin to "looking for a needle in a grassy front yard with only the aid of a penlight." And he added that at about 1,800 feet the water was calm, unlike that on the surface.

An investigation is being held to determine the cause of the accident.

The *Kingfisher* achieved its main recognition during WW II when, as a seaplane piloted by daring crews, it plucked many downed airmen from Pacific waters. Frequently this was done under heavy enemy fire, and not infrequently the load or circumstances were such that the return trip was made taxiing. This claim to fame overshadowed its other distinguishing mark — it was the monoplane that replaced biplanes operating from the Navy's battleships.

Vought was given a contract to build the XOS2U-1 prototype in March 1937. Two other VOS prototypes ordered in the same period were both biplanes. Neither went into production.

Vought's engineers designed the smallest possible monoplane to do the observation/scout mission, using the P&W R-985 Wasp Jr. engine in preference to larger engines used in other designs. To provide the needed lift from a cantilever monoplane wing, drooped ailerons were used along with the flaps. Spoilers were used for low-speed lateral control. With its compact size, its wings were non-folding, unlike those of its contemporaries and successors operating in the shipboard role. Increased use of metal construction over previous Vought designs was featured and extensive use was made of spot welding in its fuselage construction. Typical of U.S. Navy catapult scouts, it was convertible from a standard single main float seaplane to a fixed landing gear landplane.

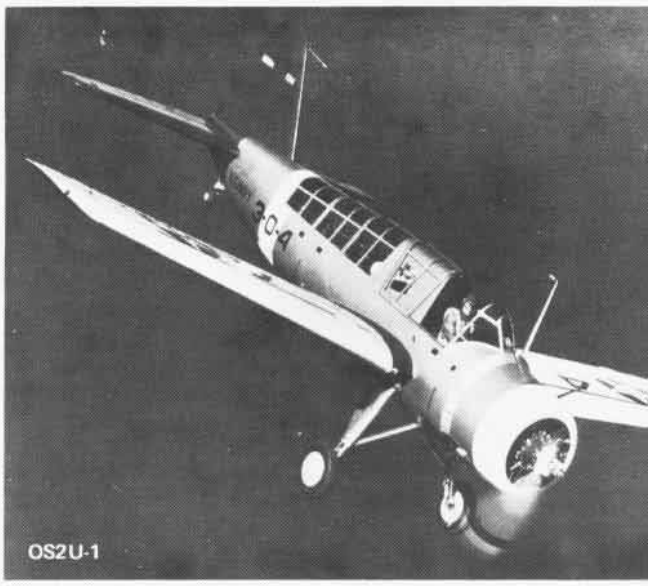
After Navy trials of the XOS2U-1 in 1938, 54 production OS2U-1s were ordered from the by then combined Vought-Sikorsky Aircraft. The first of these went into service in August 1940 with VO-4, a battleship-based observation squadron. Successive orders for the very similar -2s and -3s followed, and 300 were also built by the Naval Aircraft Factory as OS2N-1s, duplicates of the OS2U-3s. With the pre-Pearl Harbor buildup and some foreign deliveries under lend-lease, a total of 1,519 *Kingfishers* were delivered before production ceased in late 1942.

In both the U.S. Navy and foreign service, as either a landplane or seaplane, *Kingfishers* were used in all manner of over-ocean scout and patrol duties, even carrying bombs or depth charges on offshore ASW missions.

While their role as scout planes catapult-launched from the Navy's capital ships was their most dramatic duty when the war began, their later use was shifted more and more to the search and rescue mission. Flying them as seaplanes, their pilots and radiomen/gunners were given the job of rescuing downed U.S. flyers whether adrift at sea or on sometimes unfriendly island shores.

In all their roles, they continued in service through the war period, and beyond — in some countries, well beyond. Today a handful survive, those in this country being carried on battleships which themselves are now famed reminders of a past age.


OS2U-2


OS2U-1

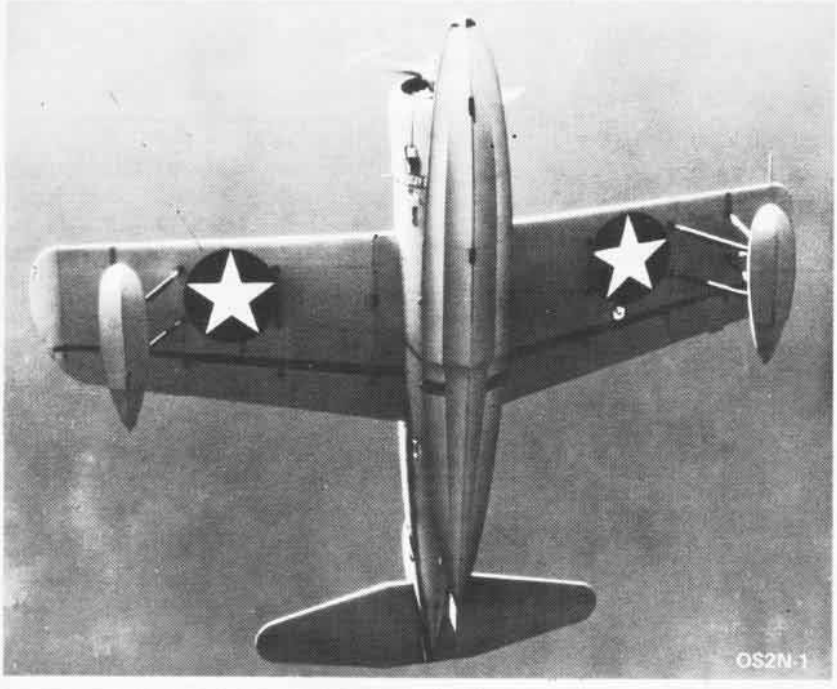
KINGFISHER

OS2U

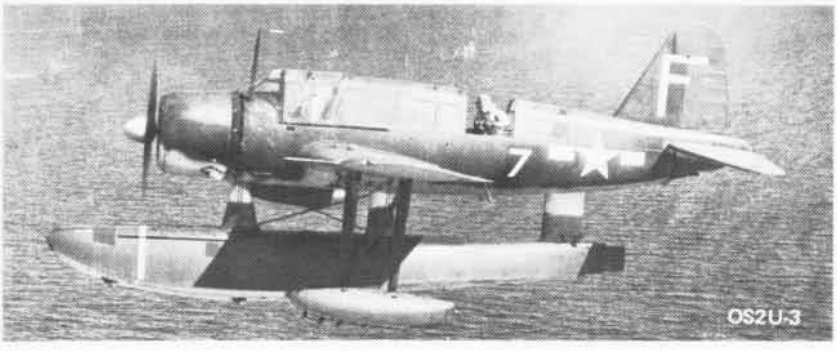
Dimensions, -2 and -3		typical
Span		35′11″
Length	seaplane	33′7″
	landplane	30′1″
Height	seaplane	15′0″
	landplane	12′11″
Engine: -1 P&W R-985-48		450 hp
-2 P&W R-985-50		450 hp
-3 P&W R-985-AN-2		450 hp
Performance, -2 and -3		typical
Max speed	seaplane	170 mph
	landplane	177 mph
Service ceiling	seaplane	16,000′
	landplane	17,100′
Max range	seaplane	1,485 miles
	landplane	825 miles

Armament (all):
one .30 machine gun, fixed
one .30 machine gun, flexible
two 100-lb. bombs

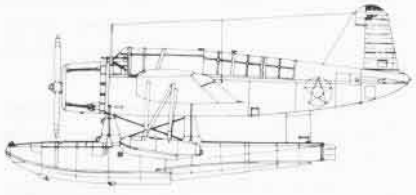
OS2U-1

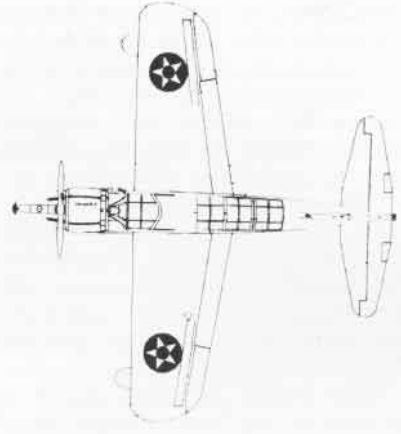


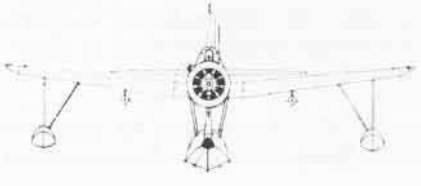
OS2N-1



OS2U-3







We Get

and many of them are interesting and informative. And every once in awhile we get one that enlarges our perspective of something we have written about. It just happened that in the space of a couple of weeks we received two of the sort that are an editor's delight.

The letter about aviation in Italy falls into that category.

The letter from Art Schoeni, also a welcome surprise, started us thinking about a telephone call we received from NAEC Lakehurst shortly after we printed the ejection seat story. So we have included the information that Lakehurst sent us about Furtek.

I read in *Naval Aviation News*, April 1976, page 25, an interesting article about American Naval Aviation in Italy during the first World War — "Porto Corsini 1918."

Here is some more information that I extracted from official papers of the time.

"In 1918, following a request of the Italian Government, a detachment of U.S. Naval Aviation was sent to the flight school at the lake of Bolsena (about 30 miles north of Rome) to be trained in flying boat piloting, maintenance and maneuvering. The commanding officer of American Naval Aviation in Italy was, at that time, Lt. J. Lansing Callan.

"The school was opened in January 1918 and worked continually until November 11, 1918, when it had on strength 11 American naval officers and 69 enlisted men, with 8 flying boats, having totally executed 5,540 training flights.

"The trained personnel started to be sent to the Porto Corsini Naval Air Station in June 1918 and on July 1, 1918, that station began its operative service, wholly manned by American Navy people, flying Italian aircraft.

"It was also planned to man with U.S. Navy flyers the Pescara Naval Air Station (about 100 miles east of Rome on the Adriatic coast) but, at the time of the armistice, the station was not yet completed.

"On October 18, 1918, the U.S. Government offered, for operations against Pola and Cattaro, 210 aircraft and about 1,000 men for surveillance of the French coasts. This offer was gladly accepted by Italy and work was started to barrack these people at Poveglia (Venice) and on the nearby islands, but on November 2, 1918, the American government cancelled this projected operation owing to the closing stages of the war.

"The Porto Corsini NAS started its service with 27 American naval officers and 300 enlisted men flying Franco-British-Aviation (built in Italy under license) maritime reconnaissance flying boats and Macchi M. 5 fighter flying boats.

"The main tasks were the daily surveillance over the coasts and the courses toward Pola, and bombing and escort missions, especially over Pola and Parenzo.

"In January 1919, the Americans left the station to go back to the States."

Here are a few statistics about American activity at the Porto Corsini NAS:

Bombing missions	19
Reconnaissance and escort missions	27
Station defense pursuit missions	4
Surveillance missions	367
Training flights	328
Bomb load dropped on the enemy (in pounds)	1,980
Average efficient aircraft	15
Aircraft lost	1

It may be that these missions, especially the bombing ones, seem too few, but it should be considered that U.S. Naval Aviation came to Italy when the war was coming to the end.

However, these actions show the gallantry of the American Navy flyers, enthusiastic about flying and fighting for victory.

Personnel awarded Italian decorations were Ensigns C. H. Hamman and G. Ludlow, the Silver Medal for bravery, ". . . for an epic fight in the skies of Pola against numerous and battle-trained enemies," and Captain C. Russel Train and LCdr. Callan, the Cross for war merit, ". . . for the ardent enthusiasm put in the organization of the American Aviation in Italy." (The names may not be spelled correctly.)

Lieutenant Giampaolo Angeloni,
Italian Navy
via Sonnino 147
09100 Cagliari, Italy

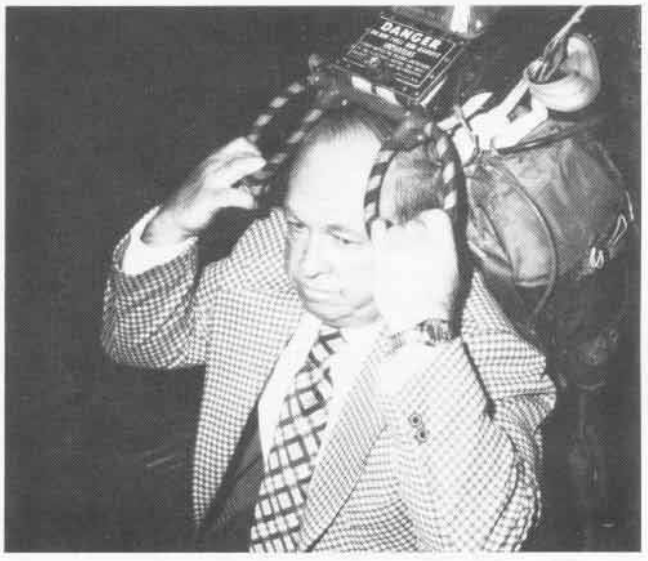
Your feature in the October issue about Chubby Furtek's first ejection from a Navy plane rang a bell with me. A couple of the pix you used were ones I had taken at the time I went up to Lakehurst to cover the ejection test. Like everyone else, I sweated it out when he fell 3,500 feet before he got out of the seat and opened his own chute. That last 1,500 feet seemed awfully close to the ground.

As a result when I hurried out to where he had landed and asked him to kiss his parachute, I am sure he was more than willing to do it. The resultant picture I used on the *News* front cover that month [January, 1947]. I wonder where he is now. He formerly was an enlisted man.

The reason for this letter is to turn over to you a bunch of negatives I shot before and after the ejection. I don't know how I happened to have these in my file as I did not keep a bunch of other pix I took while on the *News* and wished later I had retained. So, for what they are worth, here they are.

Arthur L. Schoeni
339 W. Montana Ave.
Dallas, Texas 75224

Letters . . .



Furtek as he appeared on the January 1947 cover of NANews and on a recent visit to NAEC Lakehurst.

From the *Air Scoop* (NAEC Lakehurst):

He was short, chubby, balding, soft-spoken, humble and even somewhat shy. That was 30 years ago. He is very much the same today: a far cry from the adventure-seeking hero stereotype that Hollywood has given us. In fact, he was and is an unlikely looking candidate to make Naval Aviation history — but he did.

According to Furtek, things did not happen exactly as they were supposed to. The seat had its own 28-foot parachute which was supposed to deploy automatically — it did. Furtek was wearing a seat-pack as well as a reserve chest-pack parachute, and was to manually disengage himself from the ejection seat once the seat's chute fully deployed — which it didn't.

"For some reason or other," he explains, "every written account of the test said the seat failed to automatically separate. It wasn't supposed to. However, the trouble came when I realized that I had 'a streamer' (the chute is extracted but doesn't fully open) in the seat chute. It was planned that I should have had an open chute by 4,500 feet, maybe a little lower, and then part with the seat and activate my personal chute.

"However, when I saw I had a streamer, I disengaged myself and free-fell to 1,500 feet before pulling my ripcord. I wanted to be as far away as possible from the streamer — I didn't want it to foul my chute.

"But, once I had a full chute, I realized I was now falling slower than the seat-streamer and was afraid it would hit mine and collapse it. Fortunately, it didn't. It passed in front of me by about 20 feet or so. I finally landed safely — in some pine trees," he laughs.

Furtek's first tour of duty at Navy Lakehurst (there were three) began on New Year's Eve of 1940. He became a lighter-than-air ship (LTA) mechanic and later volunteered for parachute rigger (PR) school, which was also based at Navy Lakehurst. As a PR school graduate, he made his first jump in 1941.

Furtek then became an LTA blimp pilot as an enlisted man and was later commissioned, as were nearly all enlisted aviation pilots at that time. He served as an LTA pilot in Africa and returned to the United States in 1945. He was attending Combat Information Center/Fighter Director School at Pearl Harbor when the war ended.

He returned to Lakehurst in 1946 as personnel officer and parachutist assigned to the Naval Air Technical Training Center. It was at this time he learned that the Bureau of Aeronautics was seeking volunteers for an ejection seat testing program.

Following his history-making tests, he was transferred and returned to Lakehurst for the last time in 1957. He was assigned to ZW-1, an early-warning blimp squadron.

Furtek retired on June 1, 1964, as a full commander while serving as Lakehurst's administrative officer. During his last tour, he attended Trenton State College at night in order to get his degree so that he could teach.

Today he teaches the fifth grade in the New Jersey school system.

VC-10's Challengers

By Lt. James A. Noone, USNR

A black fighting lion superimposed on a red, white and blue background is the *Challengers'* insignia. It was adopted in 1969.

The original emblem (of VU-10) was a *Proud Pelican* pulling a target sleeve symbolic of the squadron's mission of providing utility services such as attack simulation and target towing for fleet ships.

In the Sixties when the unit transitioned from FJ-3s, F-8 *Crusaders* replaced the *Fury*. A crusader's cross on a shield was chosen as more appropriate.

The attack simulation and other support work of fleet composite units may not be as glamorous as that of carrier operations, but at Guantanamo Bay, Cuba, the *Challengers* of Fleet Composite Squadron Ten think of themselves as "the VC with a difference."

The difference is that VC-10, with its TA-4J *Skyhawks*, is the only fleet composite squadron with a combat mission. In addition to the standard fleet services that VC units usually provide, the *Challengers* are responsible for supplying air-to-ground support in the event of an attack.

VC-10 has a "lean and mean" image that its members are proud of. Although it is the smallest flying command in the Atlantic Fleet, it routinely flies more hours than larger squadrons.

"We like to think of ourselves as something special," says Commander Kenneth A. MacGillivray, C.O., " and the squadron members have good reason for pride. Their performance, often under difficult circumstances, has consistently been first-rate."

And VC-10 faced an additional challenge in May 1975 when its entire personality was altered.

That was when the first of the squadron's nine A-4s began to arrive. Over the next few months, the *Skyhawks* replaced its F-8K *Crusaders*. Then VC-10 was given the mission of providing air-to-ground support to the Navy and Marine Corps forces that would defend the base in case of an attack.

Concurrent with this face-lifting, squadron personnel manpower was reduced approximately 50 percent, bringing it to its current level of 14 officers and 90 enlisted men.

Although VC-10 wound up with fewer planes and personnel, it still had to carry approximately the same workload. For example, in 1974 the squadron had 1,475 hours of flight time in its 12 F-8s and 2,138 hours in six US-2 *Trackers*. Total flight time during the 1975 transition was 2,536 hours. For the first nine months of 1976 — with nine A-4s and only one US-2 — the total was 2,368 hours.

The fleet support mission of VC-10 is mainly the simulation of aircraft and missile attacks to help NATO, Navy and Coast Guard ships training in the Guantanamo Bay area sharpen their combat skills. VC-10 also provides aircraft for air-intercept training

VC-10 Skyhawk fires a Zuni during combat training exercise, left. Above, a TA-4J conducts training exercise with German destroyer.

of ASW center personnel. It works closely with Marine Corps personnel who comprise the ground defense force of the base. Aircraft and ordnance are always in a state of readiness. Frequent base defense scenarios are enacted, using Marine ground or airborne controllers to call in live ordnance on designated impact areas.

It was the need to train ships in surface-to-air gunnery that led to the formation of utility squadrons during WW II. The original forerunner of VC-10 was Utility Squadron 16 (VU-16), commissioned at San Juan, Puerto Rico, on October 26, 1943. The following year the squadron moved to Miami where it assisted in training the pilots and crewmen of the naval air operational training command. It operated JM *Marauders*.

In April 1945, the squadron shifted to Guantanamo Bay and has been there ever since. It has the longest service in a single overseas home-port location of any squadron in the Navy.

On August 16, 1946, the squadron was redesignated Utility Squadron Ten (VU-10). In the Fifties, it received its first jets, F9F *Cougars*. They made training more realistic, helping air controllers on ships maintain proficiency in handling jet interceptors.

During 1958, the *Cougars* were replaced by FJ-3 *Furies*. That year VU-10 achieved some 12,000 flight hours and completed more than 7,700 separate missions.

As U.S. relations with Cuba reached a crisis point in the early Sixties, VU-10 was given the added mission of providing air support for the defense of Guantanamo. For several months in early 1961, the squadron also flew air escort for unarmed planes operating in the area.

In November 1961, VU-10 began transitioning to F-8 *Crusaders* and, by the following spring, was dependent on the fighter for all defense and service flights requiring jets.

During the Cuban Missile Crisis in October 1962, the squadron was the primary air defense force for the base and kept aircraft in the air around the clock for three days.

On July 1, 1965, the squadron was redesignated Fleet Composite Squadron Ten.

The Sixties also witnessed several changes in the squadron's F-8s, from F-8As to F-8Bs to F-8Ds, back to F-8As and, finally, F-8Ks. The -K featured a number of refinements. Throughout all these transitions, the squadron maintained a 24-hour vigil in defense of the base and air and sea traffic in the area.

During the 1970s the squadron ran up an impressive safety record. It received an award in November 1975 from ComNavAirLant for seven years of accident-free operations.

In addition to the other changes in 1975, the squadron was placed under the administrative control of Commander Tactical Support Wing One, Norfolk, remaining under the operational control of Commander Fleet Air Caribbean.

Among the problems with which VC-10 has had to contend from time to time at its isolated location has been the difficulty in obtaining replacement parts for its aircraft. To overcome this, the squadron has pursued what its skipper calls "aggressive procurement."

As an example, the squadron faced a problem during the transition from the F-8s to the non-radar A-4 *Skyhawks* in that the frequency of the F-8 radar had been the primary simulator for cruise missile guidance used in ship electronic warfare training.

The squadron needed a replacement. Several kinds of emitters were tried but none proved satisfactory. After weeks of experimentation, it was established that a pod-type emitter provided sufficient output and range. Carrying the unit externally under the wings, however, reduced the speed of the A-4 to well below that of the missile it was supposed to be simulating.

Undaunted, the squadron worked with the Pacific Missile Test Center at NAS Point Mugu, Calif., to develop a nose-mounted version of the pod which permitted the aircraft to maneuver like the missile as well as to emit the required energy. The solution, which proved to be an inexpensive one, was subsequently adopted by a sister squadron.

One of the 1976 highlights for VC-10 was the support that it gave to Task Force 200, which started for the July 4 International Naval Review in New York from the Caribbean. The squadron's *Skyhawks* provided a variety of training services as the task force got underway, from multi-plane raid simulations to night antiship missile profiles.

Most of VC-10's work isn't so conspicuous. The squadron continues with its vital day-to-day chores, servicing Navy ships (54 of them through October) and staying combat ready. The tasks may appear mundane but are vital to fleet readiness.

touch and go

Project Magnet

In September 1976 a Navy *Orion* was seen at the Ottawa International Airport, Canada, and El Paso International, Texas. By Christmas, the same plane had been seen in Ogden, Omaha, Dallas, San Francisco, San Diego and Denver. It was also observed flying over Mexico. It will soon be seen over each of the continental states.

Its mission is to study the strengths and effects of the magnetic forces within the U.S. Results of the study will assist in preparing navigation charts outlining the magnetic field in this area. These charts can then be used to correct deviations of magnetic compass readings in military and civilian (commercial and private) aircraft, and thus contribute to safer flying.

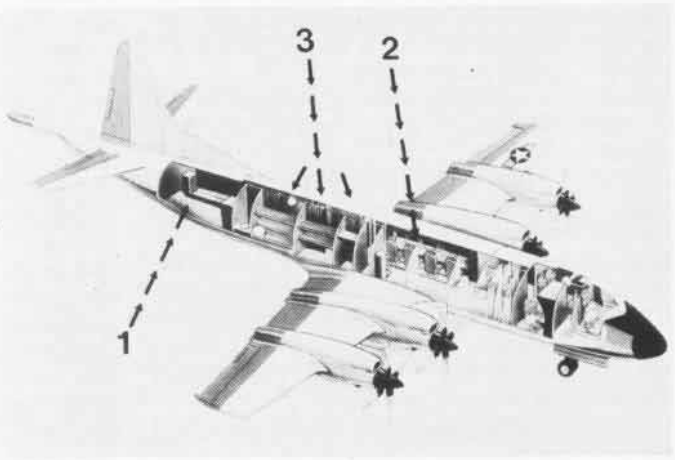
The P-3, laden with electronic, scientific and navigation equipment, belongs to Oceanographic Development Squadron Eight (VXN-8), based at NAS Patuxent River. VXN-8 is the Free World's only aviation squadron devoted solely to airborne oceanographic and geomagnetic research. It is tasked with three special projects.

Project *Birdseye* is ice reconnaissance and ice research in the world's polar regions; Project *Outpost Seascan* calls for airborne data observations of the oceans; and Project *Magnet* is the reason for the present intensive operations over the continental U.S. Only one plane is used to conduct research for each project throughout the world. These projects are under the direction of the Naval Oceanographic Office, Suitland, Md.

The *Orion* has a crew of 12 Navy men. Traveling with them is a smaller number of civilian scientists. Mr. Keith Archer, pictured, is the senior scientific representative for this study.

This mock-up shows the stations where the scientists will be collecting their data. The main magnetic data gathering component is located at station 1. Without this piece of gear, the plane cannot carry out its mission. The central data storage computer is housed at station 2. It records all magnetic readings gathered by scientific equipment plus inputs from the plane's navigation system. Station 3 is the area where the scientists work when airborne. They can monitor all equipment from this point.

A survey of this type by the P-3 and its aircrew is expensive and painstaking. But the benefit is for all whether you're a military or private pilot or a commercial traveler. JOC Jerry Babb



Second C-9B Squadron

VR-56 was established at Norfolk last July and became the second Naval Air Reserve C-9B squadron. (Alameda's VR-55 was the first.) The unit reports operationally and administratively to Commander Reserve Tactical Support Wing, New Orleans. For scheduling, VR-56 is managed by Commander Tactical Support Wing One.

VR-56 has 60 active duty personnel. Complementing them are 34 officer and 126 enlisted selected air reservists. The weekend warriors commute from as far away as Illinois and Connecticut. Their occupations vary. They are farmers, attorneys, airline pilots, school teachers, policemen and civil service workers.

Primarily, VR-56 supports the daily logistic requirements of the Chief of Naval Reserve and the fleet commanders. SARs help maintain and fly the aircraft throughout the week, not just weekends.

The *Skytrain II* is a Douglas-built transport which can fly at 495 knots up to 35,000 feet. It can carry 90 passengers in addition to a crew of six or 28,000 pounds of cargo. It is similar to the commercial DC-9 except that it has additional fuel tanks. It also has the Carousal IV Inertial and Omega Navigation Systems which provide the *Skytrain* with excellent overwater capability. An on-site Douglas supply support center enhances mission readiness and aircraft availability.

VR-56's C.O. is Captain R. W. Traub, an Ozark Airlines captain. Officer in charge is Cdr. E. E. Shiflett.

Board of Inspection and Survey

The CH-53E helicopter is the 49th aircraft in the last 10 years to be placed under the unsparing microscope of the Board of Inspection and Survey (BIS) at NATC Patuxent River. Created years ago by the Secretary of the Navy, BIS gives an independent and impartial "third party look" at every new ship and aircraft.

BIS is a sub-board of the main office in Washington, D.C. There are other sub-boards in Norfolk and San Diego for ships and service craft, but the NATC sub-board is the only one responsible for aircraft. The local sub-board is staffed by three officers and a secretary.

"Obviously we three do not have the expertise to adequately examine every aircraft," explains Captain Roger M. Boh, Jr., senior member of the board. "The Navy simply can't afford the luxury of maintaining a technically competent staff capable of performing our mission. We are given the authority to call upon the services of almost anyone we deem necessary in order to provide a final technical assessment as an independent agency."

Usually those called upon — the officers, civilians and enlisted personnel—are the ones who have been in on the development and testing of that aircraft from its inception.

During this final examination, called a service acceptance trial, tests are conducted in somewhat the same manner as a college professor giving a "final" to his students.

"Just like the professor, we know where the problem areas are because of all the testing that has been done by NATC and others before it gets to us," explains Capt. Boh. "Earlier testing may make it unnecessary to retest in some areas if we are able to accept the results of previous evaluations. Our examination is still extensive and comprehensive, but some of it may have been started or even completed earlier."

As an aircraft struggles through the test and evaluation wringer at NATC, it experiences hundreds of major and minor tests by many experts. One of the major tests is called a Navy Preliminary Evaluation (NPE). The data collected during these NPEs is evaluated by BIS and usually accepted as adequate for the service acceptance trial, unless problem areas are discovered. One of the responsibilities of the NPE team is to determine if the

aircraft is ready for BIS.

"We realize the Navy is going to base its decision on our recommendations," says Capt. Boh, "so we make the service acceptance trials as meaningful as possible. We feel a sincere obligation to the people in the fleet who will have to live with the aircraft. Besides, we are fleet people, and so are most of the people we select to help us give this final exam."

Aviation Medical Officer

The flight surgeon has been the mainstay of the aviation community medical care program since the late 1920s. To date, the Flight Surgeon Program at NAS Pensacola has trained nearly 4,000 physicians. Their numbers have rapidly dwindled within the Navy, however, since the all-volunteer concept ended the physician draft in 1972. Billets have also been cut in half — from 400 to approximately 200. As a result, less specialized aviation medical duties have now been assigned to Aviation Medical Officers. This frees the flight surgeon for more specialized aeromedical problems and service with the carrier Navy.

The AMO four-week program was initiated in 1974 by Captain Frank Austin, Head of Aerospace Medicine, and implemented by Captain Frank Dully, Chief of Academic Services of the Naval Aerospace Medical Institute at Pensacola.

Today, the AMO is involved in aviation accident investigation, medical review boards and preventive medicine.

The AMO concept has also attracted reserve phycians. Presently the graduates are about half and half. The knowledge gained enables the reserve physician to extend care to the air reserve community.

Finally, AMO training has proved valuable to the Navy family-practice physician. With this training, the family practice can be extended to include the aviator, along with his family. The curriculum also provides the previously designated flight surgeon a means of refreshing his knowledge of aviation medicine. It is therefore of value as a first exposure course in aviation medicine and as a continuing education program. In addition, it is relatively inexpensive.

On the other side of the coin, the AMO does have limitations. He may not serve as a member of the pilot disposition board or convene a local board of flight surgeons. In addition, he is not on flight status and therefore is not authorized flight pay.

Lt. James W. Allen, Jr.

Fruit Loops Toucan

There are currently eight TC-4Cs operated by the Navy and Marine Corps. Used for training bombardier/navigators in the A-6 weapon system, three of these aircraft are assigned to VA-128.

What makes the TC-4C stand out is its nose. Fondly called the *Fruit Loops Toucan*, the TC-4C nose radome section is an actual A-6 radome with an *Intruder* fuselage forward bulkhead that is faired into the nose of the *Gulfstream* fuselage. Despite the nose modifications, the aircraft handles the same.

The TC-4C is basically a standard *Gulfstream I* powered by two Rolls-Royce dart turboprop engines and

modified for the purpose of training A-6 crew members. The aft cabin is furnished with a simulated A-6 cockpit and three repeater consoles for B/Ns.

The great advantage of the TC-4C is that it allows close observation and instruction in navigation and trouble-shooting. Two pilots, an instructor and two student B/Ns normally fly a typical four-hour mission.

First Flying School

The site of the first military flying school, now part of NAS North Island, has been designated California Registered Historical Landmark No. 818. This commemorative plaque is located near the ocean at gate five on Ocean Boulevard. It reads in part: The flat lands beyond have been a part of aviation history since Glenn Curtiss founded the first military flying school in America on January 17, 1911. The Army operated Rockwell Field until January 31, 1939. The Navy commissioned the air station on November 8, 1917.

Jump For Life

As the *Hercules* C-130 circles above NAS Point Mugu, the back cargo door opens wide and seven yellow-clad men leap into the picture-window-view of the California coastline.

Parachutes stream out, snap open and float down toward the red X target. The voices of the men reach the ground before their feet.

The seven are members of Antarctic Development Squadron Six's pararescue team, established by the Chief of Naval Operations in 1956 to provide pararescue capabilities in Antarctica, where the squadron is presently deployed.

PRC Richard Spaulding, a master parachutist, is the team's senior jumpmaster and instructor. Other members are: AE1 Don Loper, MS1 Joel Mateo, AM1 Tim O'Connor, AD2 Mike Troxel, PH3 Paul Dearing, and YN3 Tad Jones. All team members are volunteers. Besides parachuting training, they participate in a week-long ice and snow survival course in Antarctica, mountain and rock rescue training and an extensive first aid course as part of their never-ending training.

So far the team has never been called upon to serve as a pararescue team in Antarctica. It has, however, assisted in various rescue operations, such as pulling people out of crevices. On "the ice," parachutes are used as a last resort—when the area cannot be reached by helicopters or other means. Chief Spaulding explains that the team is "an insurance policy you hope you never use."

PEOPLE PLANES AND PLACES

The Navy Commendation Medal is presented to Lt. Richard D. Norris of VRF-31 by Capt. G. R. Olson, ComTacSupWing One. While on a routine aircraft ferry mission, Lt. Norris had an electrical failure in his AH-1J *Cobra* helicopter. The cockpit suddenly filled with smoke and toxic fumes from a fire. His canopy would not lock in the open position, so Lt. Norris piloted with one hand and held the canopy open with the other. He landed "blind," in a farmer's field.

Alpha — the designation that every P-3 antisubmarine flight crew strives to achieve. The hallmark of ASW excellence. When every crew in a squadron reaches the coveted Alpha status, it signifies achievement of a goal that took many long hours of hard teamwork from every man and woman within that squadron.

The *Boomerangers* of VP-48 recently accomplished this. Everyone of VP-48's 12 flight crews is Alpha qualified.

To accomplish this, crew members must become adept in ASW inflight and weapons systems trainers, weapons loading, surveillance flights, attend crew briefings and lectures, and study Natops and coordinated operations. Finally comes the ultimate test — the aircrew against the submarine operating in a free-play scenario.

Each aircrewman must also complete months of individual training conducted by the experts at VP-31, at the Fleet Aviation Specialized Operational Training Group, Pacific Fleet, Det Moffett and the Tactical Training Team. All these ingredients make up the recipe for a successful, efficient Alpha crew.

NAS Bermuda recently received the Atlantic Fleet retention program's Golden Anchor. In honor of the occasion, a shell-and-barnacle-encrusted anchor was retrieved from the bottom of St. George's Harbor. Capt. T. K. Anaston, C.O., left, and Cdr. B. L. Schattner, Public Works,

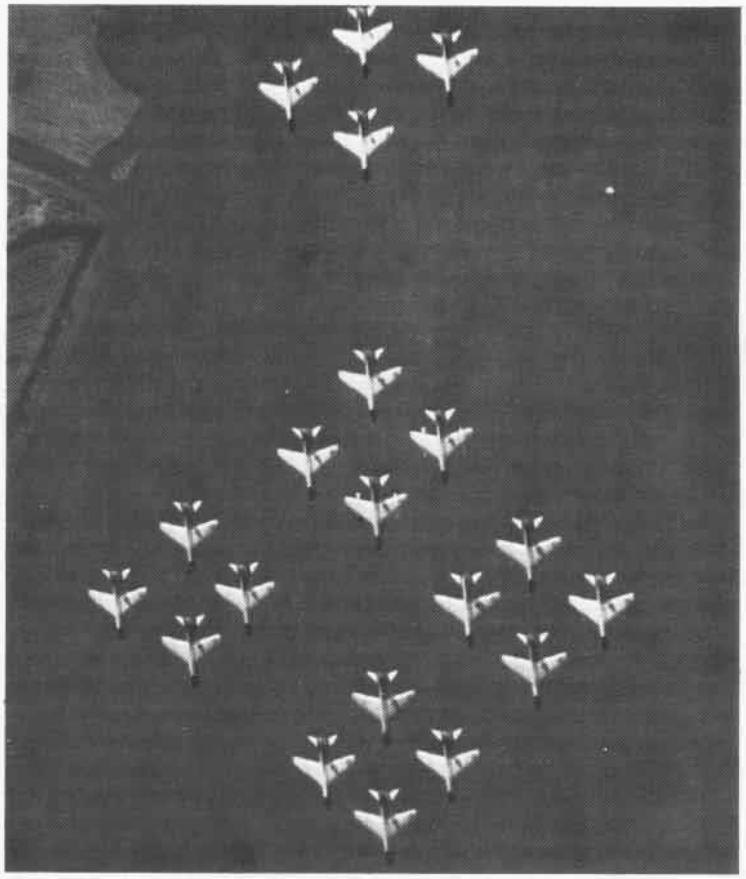
assisted. The 15-ton anchor, origin unknown, was cleaned, sandblasted and painted a distinctive gold. It has been placed in front of the administration building as a continuing reminder of its significance and as an incentive for all station members to win it again in the present competitive cycle.

As they say, "If you're not having fun, you're not doing it right." Their philosophy is that the Navy should and can be an enjoyable experience as well as a rewarding profession.

A VT-21 TA-4J *Skyhawk* is being hoisted by helo to *Lexington* for transport to the maintenance facility at Pensacola.

AQCS Larry Draeger, leading chief petty officer and senior enlisted advisor of VA-93 aboard *Midway* in Yokosuka, Japan, is all smiles after competing in the 11th annual Japan National Team Bowling Championships. Larry reports with pride that he was the only non-Japanese competitor and the very first American to reach the national finals in any bowling tournament in Japan. The national tournament was composed of the top 44 men's and 42 women's teams in Japan. His five-man team finished 11th in the tournament and he was 19th overall.

Led by *Eagle One*, Cdr. Ken Dickerson, VA-122, gave the NAS Lemoore operations area a demonstration of precision flying on November 2 with a 24-plane flyover of squadron aircraft that included 20 A-7s, pictured here, 3 T-28s and a T-39. The *Flying Eagles'* mission is training replacement pilots and maintenance personnel for the A-7E *Corsair II*.



Changes of command:

VA-82: Cdr. T. A. Mercer relieved Cdr. D. P. Dunbar, Jr.

VA-153: Cdr. Larry Price relieved Cdr. Robert Hofford.

VA-215: Cdr. G. L. Harter relieved Cdr. J. J. Schultz.

VP-31: Cdr. R. F. Green relieved Capt. G. W. Mackay.

VP-46: Cdr. H. D. Svoboda, Jr., relieved Cdr. J. J. Hernandez.

VP-24: Cdr. L. H. Grafel relieved Cdr. S. F. Gallo.

VF-142: Cdr. R. L. McFillen relieved Cdr. J. L. Unruh.

HS-84: Cdr. V. E. Chrismas relieved Cdr. D. W. Hodge.

NAS Lakehurst: Capt. A. C. Phillips relieved Capt. G. J. Ketchmark.

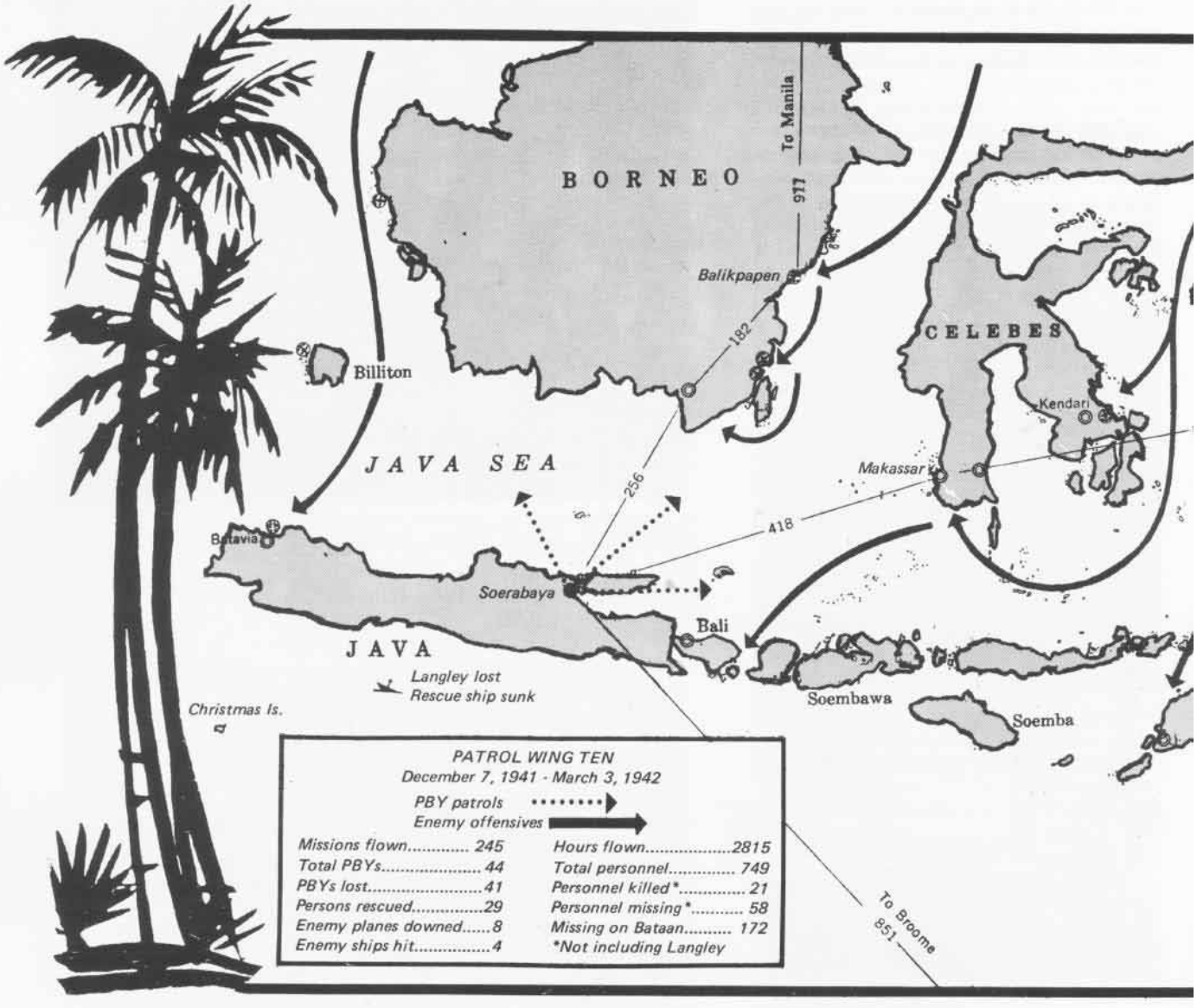
HCT-16: Cdr. J. R. Walker relieved Cdr. D. J. Calder.

PBYs on the Periphery...

South Pacific Saga

the story of Patrol Wing Ten

By Clarke Van Vleet, Aviation Historian



The essentials are:

What? The experiences of Patrol Wing Ten's pilots who began WW II in the Philippines with 28 PBY *Catalinas*, lost 16 of them there, and then moved to the Dutch East Indies. Reinforced, another 25 were lost by March 3, 1942.

Why? PatWing-10 was forced to evacuate Manila because Japan gained quick air superiority and the *Catalina* crews were called upon to perform rear guard actions against the advancing enemy.

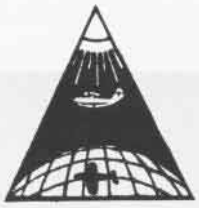
Who? PatWing-10 Commander, Captain Frank Wagner, his successor, John Peterson, and such pilots and crewmen as Deede, Dawley, Christman, McLawhorn, Richardson, Brannowsky, Bull, Hargrave, Moorer and many others.

When? Following the departures of the tenders *Langley*, *Childs*, *Heron* and *Preston*, personnel flew south December 15, 1941, regrouping to continue the struggle against Japan's expanding periphery.

Where? They moved from Manila to such South Sea islands and inlets as Balikpapen, Borneo, Soerabaya, Java, Ambon Island in the Banda Sea, and eventually on to Darwin and Perth, Australia.

After being forced to leave the Philippines, the PBYs of PatWing-10 arrived at Balikpapen on December 19 and hopped on to Soerabaya, Java, the next day. The remnants of the organization's two units, Patrol Squadrons 101 and 102 with 12 planes, were merged. Some of those planes were then sent 900 miles to Ambon Island where the Dutch maintained an excellent seaplane base.

The first major counteraction was staged two days after Christmas when six PBYs headed north to attack a force of two Japanese cruisers, two destroyers and three transports. But a group of 15-18 *Zeros* swooped in on the formation, shooting down four


VP-102


VP-22


VP-101

of them, including one piloted by Lt. LeRoy Deede. Floating about, full of machine-gun holes and ack-ack punctures which were plugged with life preservers and pieces of mattress, the crippled *Cat* was found by Ens. Duncan Campbell's PBY, which rescued the crew.

Two others, piloted by Lieutenants Jack Dawley and E. L. Christman had gotten through fighters and flak to drop 500-pounders on the Japanese ships before the pilots pushed their riddled planes another 20 miles where they crash-splashed into the sea. Both crews swam, paddled or waded to nearby islands and then made their way from isle to isle, back to the safety of north Borneo, whence the Dutch hustled them on to Java.

Another drama occurred during the attack. AD McLawhorn, in one of the planes, saw both waist gunners killed at their positions. Shoving the bodies aside, McLawhorn manned their 50-caliber machine guns alternately, first on one side, then the other, whichever had the most attacking *Zeros*. Suddenly, an enemy 20mm shell pierced the plane, smashed into and ignited a container of 50-caliber ammunition. Bullets began popping off in all directions. McLawhorn grabbed the exploding box of 50 calibers in his arms and heaved it overboard. When he finally made it to Java, he showed the scars of seven wounds.

There were other close calls. A wingmate told of AD C. M. Richardson whose plane was followed home one night by the Japanese and attacked after it landed on the water. "Richardson was manning the bow turret. The Japanese made their runs directly at him, nine fighters, taking turns. Richardson's procedure was to wait until he could see the slants of their eyes before firing. He could see the tracers coming straight for him by the splashes they made in the water. He would dodge to one side of the turret as they went by. Part of his machine gun was shot away and afterwards over 700 bullet holes were counted in the plane. He was only wounded in the hand and leg."

Commander John Peterson took over the wing on January 6th as Capt. Wagner moved to higher duties at Soerabaya. Five days later, the unit at Ambon was reinforced by VP-22, which flew out from Hawaii with 11 planes. Among the pilots was one who would eventually become a very important person not only in Naval Aviation but also in the highest military circles of America. More on him later.

On January 15, the Allies formed the joint command ABDA — Australian, British, Dutch, American. Pat-Wing-10 set up a key communication link throughout the main sea lanes into which the enemy was continually

'He manned the 30-caliber machine guns alternately, first on one side, then the other, whichever had the most Zeros.'

probing. Detachments of planes and signal ships were positioned along the chain of islands from Soerabaya to Ambon. The patrolling PBYs obtained reconnaissance information and sent it to the ships which relayed it to ABDA in Java. From there, Allied surface ships and submarines and U.S. Army bombers were directed on appropriate missions. Before the very noses of the advancing Japanese, the *Catalinas* were also picking up parties of Dutch demolition squads left behind to destroy strategic objectives and rescuing downed U.S. Army bomber crews and their own shipmates from enemy waters or isolated islands.

The Dutch turned over five of their PBYs to PatWing-10 in mid-January, bringing to 22 the number of planes in the previously broken but now restored wing. The Japanese offensive gained momentum and it wasn't long before the unit was back on the severely wounded list. In the next two weeks seven PBYs were lost. Patrol Wing Ten's war diary reads: "11 January: Plane #28 shot down by two Japanese fighters. Crew abandoned ship. Plane sunk. Crew rescued after five days in rubber life raft. 15 January: Heavy air raid on Ambon by 26 Japanese bombers and 10 fighters. Planes 7, 8 and 10 damaged or destroyed."

The drama on VP-22's plane #3, lost January 16, resembled a movie or TV script. Attacked by 12 twin-engined enemies, the pilot put the PBY into such a steep dive that the fabric was shorn from the wings. Four of the eight men went over the side in their chutes. But Lt. Clarence Brannowsky, third reserve pilot, noted the rest of the crew was not going to make it out. While the *Cat* was still plummeting, he crawled to the controls. "I was very fortunate in making a good landing as the fabric on the wings was missing. The Japanese started strafing us and, although one of the bullets had hit me in the back, all of us were able to swim to our rubber boat. They strafed us for about 20 minutes. They had learned an American sign and, leaning over their cockpits, used it. It was the one in which the thumb is applied to the nose. When the attack let up, we rowed to an island."

The enemy tide kept rolling south except for the eddy around the holdouts on Bataan. Discouraging reports continued. The unit's diary notes: "25 January: Planes #22-P-5, 7 and 11 destroyed at Ambon. 4 February: Air raid on Soerabaya. Considerable damage. Plane #43 strafed and burned on water. Plane #14 caught fire in hangar and burned completely. Plane #45 attacked by fighters and base has lost contact with him. Plane #22-P-6 shot down over Ambon. 6 February: Japanese radio reports finding PBY with one radioman aboard on water off Balikpapen. Believe it to be Ens. Hendricks' plane."

By mid-February, the wing's aircraft again numbered only 12, the inventory it had retreated with on December 15, despite reinforcements in mid-January. Since the beginning of the war, PatWing-10 had lost 32 *Catalinas*, including the new ones from VP-22.

During February, enemy offensives into the Java and Banda Seas resulted in the Japanese establishing positions virtually on Australia's doorstep. By this time, the wing had six of its planes at Soerabaya and another half dozen at Darwin, which had been evacuated when Ambon fell. Operational and reconnaissance flights were resumed from the Australian port.

On the flight by VP-22-P-6 the last words of Lt. Dick Bull were: "FOJ." Decoded this meant, "I am being attacked by enemy planes." He then came through in open English, indicating real trouble: "Enemy detachment, including carriers, at Ambon." Nothing more was heard of Bull until two months later when his copilot, Ens. Bill Hargrave, showed up in Australia. After being forced to land, the plane had been strafed and it blew up. Bull's body was never found by those who swam ashore. But his last words had confirmed the presence of enemy aircraft carriers.

The planes from those carriers struck on February 19, smashing Darwin with 240 bomber, torpedo and fighter aircraft. Eight ships were sunk, nine damaged. Three more PBYs were shattered. The port was left in shambles. It was evacuated by the townspeople, although there was not much left to leave. It was the most massive raid by the Japanese since Pearl Harbor.

The diary reads: "USS *Preston* at Darwin bombed. One direct hit with 100-pound bomb. Hole in main deck about four feet in diameter. Eleven enlisted men killed. Plane #18 on patrol not heard from. All three planes on water being strafed by several dive bombers. Still no word from #18. During attack USS *Peary* bombed and sunk. Approximately 80 casualties. Plane #18, Lt. T. H. Moorer, not heard from. Believed shot down while on patrol by Japanese fighters."

Tom Moorer had indeed been intercepted and shot down by the same enemy planes headed for an attack on Darwin. But he and his crew were rescued by a passing Philippine freighter which the Japanese also attacked and sank. The enemy had dumped Moorer in the drink twice in one day. The wounded plane commander and crew paddled and sailed a lifeboat to an island where their big SOS scrawled on the sandy beach attracted the attention of an Australian patrol plane. Subsequently, a subchaser arrived and dispatched a dinghy. Just at that moment a Japanese flying boat roared over the horizon and scored a near miss on the rescue ship. Moorer and his men beat a hasty retreat to the island. The subchaser withdrew but returned later to finally retrieve the *Catalina* crew. Three times was not an unlucky number for Moorer and his men.

Later in 1942, Frank Wagner, then an admiral, related the following: "Moorer and his men were saved and ultimately worked their way back to Australia. When I saw Moorer about two weeks later I asked him why he reported the Japanese carrier as 'a big one.' He said because she carried at least 62 airplanes. I asked him how he knew there were 62 airplanes and he said, 'Every one of them attacked me.'" Little did Wagner realize then that Thomas Hinman Moorer was to become Chief of Naval Operations, 1967-70, and Chairman of the Joint Chiefs of Staff, 1970-74.

Patrol Wing Ten's diary had this stark entry February 26: "No patrols today as there are no planes available. Of the three at Soerabaya one will not be ready to fly tomorrow morning. The second can fly but has no radio. The third plane can fly but has radio receiver only and floats cannot be raised or lowered. Of the

Moorer, third from left and above. Below are the enemy flying boats.

three planes at Broome (Australia), two are badly in need of engines but can fly. The third one is good and will proceed to Soerabaya tomorrow."

The next day, America's fighting aviation community suffered a double disaster. While delivering a deck load of 32 Army P-40 *Warhawks* to the retreating forces on Java, USS *Langley* was spotted 75 miles south of the island by the enemy whose bombers administered a beating to the gallant ship and her valuable cargo. Seldom had such a ship been hit so severely by a single salvo. Of the nine bombs dropped, five were direct hits and two were damaging near misses. As the tender floundered, the radioman tapped out, "Mamma said there would be days like this. She must have known." Thus, Naval Aviation's first aircraft carrier, *Langley*, commissioned in 1922 as CV-1, converted in 1936 to the tender AV-3, met her demise.

The mortally wounded ship was given the *coup de grace* by the destroyer USS *Whipple* which also saved the crew, except for 16 men. Later, the survivors were transferred to another rescue ship, the tanker *Pecos*. But, as in the Moorer episode, this rescue vessel too was sunk. On the lee of Christmas Island, enemy planes from the carrier *Soryu* sank the *Pecos*. Of the some 700 men aboard, including the survivors of the *Langley*, only 230 were saved.

As the enemy overran Java, the remaining planes of PatWing-10 were used to evacuate personnel to western Australia. One such plane — badly shot up and with its starboard engine loose in its frame — carried 30 persons and over 600 pounds of gear from Java to Broome in 10 hours and 20 minutes. It was strafed and sunk two days later during a Japanese raid. The unit was left with three aircraft.

Because of their tenacious fighting during the first three months of the war — with no protection by fighter cover, sparse logistic support, and against the odds of many more enemy men and machines — VPs 22, 101 and 102 won Presidential Unit Citations.

Before receiving the awards, however, Patrol Wing Ten would be rebuilt to fly and fight once more.

THE AVIATION MAINTENANCE

ADMINISTRATIONMAN

The majority of enlisted ratings involved with servicing aircraft work either on the flight deck or flight line. There is one very important and essential rating, however, which operates behind the scenes.

It involves management and administrative tasks in support of the Navy Air mission. When one considers the thousands of aircraft being used in the Navy's worldwide operations, the clerical duties involved become staggering.

This clerical specialist is the Aviation Maintenance Administrationman (AZ). The rating's 13-year existence mirrors the tremendous growth and rapid technological changes that Naval Aviation has gone through since the 1950s.

During that decade, every major function of the aircraft maintenance program was either initiated, reviewed or modified. Development of sophisticated jet power plants, electronics and hydraulic systems required new maintenance programs completely divorced from earlier wartime perform-whenever-possible standards. Complex preventive maintenance scheduling quadrupled in frequency. The number of technical publications mushroomed from a few well-worn bulletins to literally hundreds of volumes comprising an entire library, with frequent updating of information.

As a result, men in the AD, AM, AT and AE ratings were tasked with increasing requirements to perform vital support and administration functions. Researchers found serious problems in aviation maintenance administration that adversely affected combat readiness.

Armed with this information and that of various study groups, the Navy proposed a solution by creating the Aviation Maintenance Administrationman in 1963. In 1967, it added a new NEC, AZ-6313 3-M System Data Analyst. Today there are some 3,200 men and women serving in the AZ rating.

The AZ lives in a paper world. But one where each piece of paper stands for something vital.

A Maintenance Action Form spells out the work to be done. Without it the work will not get done properly and the mission will suffer. Without correctly executed inspection forms the aircraft has no history. Its readiness to execute the mission is unknown, or at least questionable.

These pieces of paper spell out the what, the where and the when of aircraft maintenance programs: what part goes to what place at what time. AZs prepare these forms and route them to their proper destinations.

They maintain technical libraries, answer requests for forms, publications and microfilms. They also keep records of the history, operation, maintenance and transfer of each aircraft. With these complete records at their fingertips, it is natural for the AZs to fall heir to another significant function. They keep records on aircraft parts' failures, analyze trends of aircraft and system component failures and prepare reports on these.

AZs are assigned to staff duty with one of the major fleet commands, work with an aircraft overhaul and repair activity or with one of the many smaller fleet aviation activities.

Their training can be on the job or in a classroom at NTTC Meridian, Miss. They learn to type, schedule aircraft inspections, log changes and modifications, set up and maintain aircraft status boards, requisition publications, forms, microfilm and organize these elements into a technical library. They also learn how to prepare reports and correspondence.

The AZ rating is not large in number, but its importance to the Navy is enormous. The AZs support, record and interpret the vital maintenance work being done in support of the Navy Air mission.

NAVAL AVIATION NEWS letters

VF-1

It was with a great deal of interest that I read your article "Prelude to the Big Bombs" in the July 1976 issue of *Naval Aviation News*. I was with VF-1 during that time and your article certainly brought back memories.

So much so that I went to my library at home and pulled an old copy of *Fighting Squadron One* which covered the period October 1944 through October 1945. Obviously, I read it from cover to cover that night.

The material for the book was gathered as USS *Bennington* returned to the U.S. after the war and was given to a printer in the San Francisco area, who mailed a copy to each member of the squadron. An interesting sidelight of the whole affair is that the squadron had at one time served in Fallon, Nev., and had picked up a slot machine. The slot machine profits paid for the book. I am not too sure of what happened to the slot machine!

To add a little more Navy tradition in our family, our son Scott received his Wings of Gold in June 1976 at Corpus Christi, Texas.

Ralph G. Kelly
P.O. Box 1285
Canoga Park, Calif. 91304

Invitation

The Navy Helicopter Association invites representatives of industry and the military to submit papers for presentation at its annual convention to be held in San Diego, Calif., in May. Although this year's theme will focus on the evolution of helicopter to multi-mission VTOL, papers of both general and limited interest will be welcome on any subject related to helicopters and multi-mission VTOL and should not exceed 30 minutes. Audio and visual aids will be provided. Abstracts should be submitted to reach the Navy Helicopter Association, HSL-35, NAS North Island, San Diego, Calif. 92135 no later than March 15. Authors of selected papers will be notified by April 15.

The *Red Rippers* of Fighter Squadron 11 will hold their 50th reunion the weekend of March 12 at NAS Oceana. Former *Red Rippers* are invited to contact VF-11, FPO New York,N.Y. 09501 or telephone 804-425-3434 for further information.

Sea and Air

The September 1976 issue just arrived and I was more than interested in your (Captain Wilbur's) article about the Smithsonian Air Museum, especially since I had talked to you about it some years back when you were searching around for ideas about what to put in it to represent the Navy.

Your story makes it sound as though you came up with a winner. Also, I can see behind the scenes where mucho manhours went into it before anything began to jell. I can hardly wait till I can get to visit the place, having suffered through the dingy little quonset hut museum for so long. Your story on the whole program was outstanding.

Congrats on the continuing job you and the clan keep turning out. I feel I keep pretty current with Naval Aviation by reading the mag.

Incidentally, I think the ideas used in the Smithsonian display are excellent. As an alumnus of about 20 trips on aircraft carriers, I know that the sound and fury can be pretty stunning. The exhibit will be good for the Navy and Naval Air.

Art Schoeni

Ed's Note: Mr. Schoeni is a former editor of *Naval Aviation News*.

LAMPS

In the October issue of *NANews* a short blurb on LAMPs MK III appeared in your "Did You Know" section. The article implies that LCdr. Don Wright stated that LAMPS helos are designed to locate missile-firing patrol boats and attack them before they can fire their missiles. Unless I am mistaken, we have created a large market for potential Medal of Honor winners in that the SH-2F is currently configured without any type of known weapon to attack surface vessels. (History has, however, shown that the H-2 auxiliary fuel tank is a formidable weapon if jettisoned at the appropriate time.)

This lack of self-protection or offensive weaponry for the H-2 is a serious matter and should not be ignored any longer. LCdr. Wade Turner of HSL-32, in his end of cruise report (1973), was the first to point this out.

To date, I know of no action taken on his valuable and timely input to the LAMPS MK I program.

Brian Buzzell, Lt.

Wings

Appearing each month on the inside back cover of *Naval Aviation News* are various squadron insignia accompanied by the Naval Aviator and Naval Flight Officer Wings of Gold. Clearly missing are the enlisted aircrew "Wings," equally coveted and respected.

Many of the missions performed by naval aircraft could not get off the ground, so to speak, without the flight engineers, radiomen, radar operators, sensor technicians and photographers. If this does not seem too important, just ask the pilot or NFO, who got pulled out of the cold, cruel ocean, whose smiling face he saw first.

Kenneth H. Winter II, AW1, USNR-R
VP-68
P.O. Box 121
Topsham, Maine 04086

Ed's Note: Heartily concur. We don't mean to slight any group. Similar comments have been made. We're not sure there's an easy solution but we're investigating ways to ensure fair treatment for all hands.

Photo Traders

I collect pictures of Navy ships and have over 150 8x10 glossy pictures of Navy planes. I am wondering if anyone is interested and if we could get a "deal" going.

Bob Higgins
99 Ashford Drive
Syosset, New York 11791

Published monthly by the Chief of Naval Operations and Naval Air Systems Command in accordance with NavExos P-35. Offices: 801 N. Randolph St., Arlington, Va. 22203. Phone: 202-692-4819, autovon: 222-4819. Annual subscription: $12.85, check or money order ($3.25 additional for foreign mailing) sent direct to Superintendent of Documents, Government Printing Office, Washington, D.C. 20402. Single copy is $1.25 from the same address.

SQUADRON INSIGNIA

Marine Air Traffic Control Unit 66 operates at MCAS Futema, Okinawa. NAF Detroit is home base for Patrol Squadron 93 and its P-3As. At Whidbey Island, Tactical Electronic Warfare Squadron 138 flies EA-6Bs. Fleet Composite Squadron Six at NAS Norfolk provides aerial targets for training aviation units. Fighter Squadron 1221 is a Miramar-based reserve unit flying F-4s. Advanced Jet Training Squadron 202, also a reserve group, drills at Naval Air Reserve Detachment, New York.

NAVAL AVIATION
NEWS