

NAVAL AVIATION

# NEWS

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a 24-hour Mission  
Royal Navy F-4K Squadron  
aboard CVA-60 in Med.*



**FEBRUARY 1970**

NavAir No. 00-75R-3





## TO THE FUTURE!

'In today's Navy, we enjoy an ever-increasing number of young men who possess more education than ever before. We owe it to the Navy to give these young people an opportunity to employ their talents and capabilities . . . . The Navy recognizes the importance of the individual . . . and I expect every man, whether he's a seaman or admiral, to receive the proper recognition, dignity and freedom he deserves.'

- Admiral Thomas H. Moorer, Chief of Naval Operations

# NAVAL AVIATION NEWS

Vice Admiral Thomas F. Connolly  
Deputy Chief of Naval Operations (Air)

Rear Admiral G. E. Miller  
Assistant Deputy Chief of Naval Operations (Air)

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*The beginning of a new era and the end of an old are the subjects of two companion articles, by NANews' associate editors JOC James Johnston and Michael McDonell, the first of the P-3C's and the last of the active-duty P-2's.*

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## COVERS

While photographing a Royal Navy Squadron aboard Saratoga for this month's lead feature, PH1 Robert W. Milton caught one of the British pilots manning his F-4K. On the back cover, PHC B. M. Andersen used the low Antarctic light to his advantage in depicting the problems of aircraft maintenance at the South Pole.

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# NAVAL AVIATION NEWS

## Major Change in ASW Activities Quonset Point is New Home for Some

Carrier air antisubmarine activities along the East Coast are now concentrated at NAS Quonset Point, R.I.

According to Rear Admiral Joseph B. Tibbets, Commander Fleet Air Quonset and Commander Hunter-Killer Force, U.S. Atlantic Fleet, "This consolidation will provide more efficient management practices, better training, planning and maintenance support for all air units concerned." He emphasized that long-range savings, without a decrease in antisubmarine warfare capabilities, will be realized from this consolidation.

The reorganization involved the decommissioning of Carrier Antisubmarine Air Group 52, which was homebased at Quonset Point, and the relocating of Carrier Antisubmarine Air Group 56 from NAS Norfolk, Va., to Quonset. Carrier Antisubmarine Air Group 54, presently assigned to Quonset, will remain as part of the new organization.

Admiral Tibbets said the reason for the shift of commands will ensure maximum readiness and availability of aircraft in conjunction with existing employment schedules.

Under the old organization each air group consisted of three ASW squadrons, two with fixed-wing aircraft and one with helicopters. Now each air group is made up of three fixed-wing and two helicopter squadrons.

Most of the personnel and aircraft from deactivated Air Group 52 will go to Air Groups 54 and 56.

According to present plans, Air Group 56 will be embarked in USS *Intrepid* and Air Group 54 will be as-



**A GATHERING OF EAGLES** discusses the NC-4 flight at the annual Wright Brothers Memorial Banquet in Beverly Hills, Calif. Special guest, E. S. "Smokey" Rhoads, one of the last surviving crewmembers of the first flight across the Atlantic in 1919, was presented a watercolor painting by Vice Admiral Thomas F. Connolly, DCNO(Air). From left to right, listening to Mr. Rhoads, are A. Scott Crossfield, veteran X-15 pilot; Neil Armstrong, first man on the moon; and Admiral Connolly. Each received the 1969 Kitty Hawk Memorial Award for Distinguished Achievement in Military Aviation from the Los Angeles Chamber of Commerce.

signed to USS *Wasp*. Both of these ships are now homeported at Quonset Point.

## Lt. Kyzar Wins Ingalls Award Named Pensacola's Top Instructor

Lt. Sammy B. Kyzar has been selected as the top instructor at the Naval Air Training Command, NAS Pensacola, Fla., and received the Navy League's David S. Ingalls award.

A former enlisted submariner, Lt. Kyzar, was accepted in the NavCad program in 1962 and completed the advanced training eight weeks ahead of his class, to set a syllabus completion record of 12 weeks and 3 days.

After winning his wings, the lieutenant deployed with VP-22 and flew

P-3A's throughout the Pacific before returning to Pensacola.

As a flight instructor, Lt. Kyzar is enthusiastic about his students: "They are in the top five percent of American manhood." He is equally enthusiastic about his job and the Navy: "A lot of guys were getting out and flying for airlines. I told them if they wanted to be bus drivers, that was fine, but it was not for me. You can't beat the Navy for flying."

## VT-31 Claims a Safety Record 150,000 Hours Without an Accident

VT-31, NAS Corpus Christi, Texas, marked the passage of 150,000 accident-free flight hours recently.

Since June 1965, the men and offi-

cers of the squadron have been working toward this goal which represents the combined efforts of over 140 flight instructors and nearly 1,200 enlisted men who fly and work on the "stoofs" (S-2F's).

The amount of work that goes into producing 150,000 flight hours is tremendous. Each hour flown is the result of several hours' preparation. Maintenance personnel must prepare, pre-flight and, in many cases, work off discrepancies on the aircraft prior to launch. Pilots spend considerable amounts of time briefing and debriefing students and then more time inspecting the plane they are to fly that day. But if the effort is tremendous, the results are fantastic.

Statistically, 150,000 hours without an accident look impressive, but the other statistics are equally impressive. During the four-and-a-half years of accident-free operations, VT-31 has graduated over 1,000 Naval Aviators. To do this, there were 77,000 student flights and 385,953 landings.

Twice during this period, in 1966 and 1968, the squadron received the CNO Safety Award.

## Computer Aids in Navigation New Map Display System for A-7E

The A-7E *Corsair II*'s now being delivered to the Navy are equipped with a new projected map display system weighing just over 40 pounds, which enables a pilot to locate his exact position over a million-square-mile area.

The A-7E is the Navy's first operational aircraft to use the new navigation system which replaces the roller map installed in earlier-model A-7's.

Tied to the IBM-TC-2 digital computer which is the heart of the plane's navigation system, the map display will store on 35mm film a million square miles of a selected area of the earth. A single roll of map film can cover one-third of the area of the United States on a scale of 1:500,000, and the entire United States on a scale of 1:2,000,000.

The system consists of two main units: a pilot's display unit and an electronics assembly unit fed by the digital computer. The computer tells the system which area of the film to project on the display scope—the area the pilot is flying over.



A-7E'S NEW MAP DISPLAY SYSTEM

On the pilot's display unit, a center circle indicates the plane's position. An azimuth ring and bearing-to-destination needle on the outer portion of the map display give the pilot additional navigation information. A range readout tells him how far away he is from the target he set into the computer originally.

A "look-ahead" feature enables the pilot to designate and fly to any selected point in the large area covered by the projected map system. This feature gives a fly-over position update to the navigation system.

## HC-6 Aids Tunisian Flood Victims



TUNISIAN flood victims crowd around field to welcome HC-6 helicopters, above. A work line was set up to unload supplies.

By JOC Jerry Dean

Photographs by PH1 Warren Poole

After five years of severe drought, the North African country of Tunisia recently suffered from a torrential, ten-day rain that caused extensive floods and left in its wake seas of mud.

When the rain subsided, the Navy moved in to help the hundreds left homeless by the flood.

Two HC-6 *Sea Knights* from USS



*Concord* (AFS-5) ferried medical personnel from the hospital ship *SS Hope*, and more than 22,000 pounds of food and medical supplies to four Tunisian cities.

On one flight, Lt. John Olmstead landed at Sidi Bou Ali where he and his crew were surrounded by more than 800 cheering Tunisians, anxious to help unload the badly needed supplies. The town had been isolated for a week and without water for four days. A child came out of the crowd and offered Olmstead a crust of bread, which he accepted and, in return, gave the boy an apple from his flight lunch.

The long flight hours were rewarded with happy young faces wherever the crew landed. Children do not understand the political aspects of a working world—but they do understand friendship and kindness.

The memory of the Navy helicopter men whose quick action saved their families from possible disaster will linger.



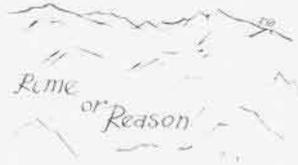
# GRAMPAW PETTIBONE

## Missing Tail Feathers

Two senior officers, currently at the controls of a couple of LMD's (large mahogany desks), still found it exciting to arc around the sky in the T-28B *Trojan*. Things didn't really get exciting, however, until they were back in the traffic pattern doing touch-and-go landings and were advised by the tower that their left horizontal stabilizer was missing. A hasty final landing followed and upon inspection, sure enough, not a sign of the tail piece or elevator. The right one was also crumpled and severely warped.

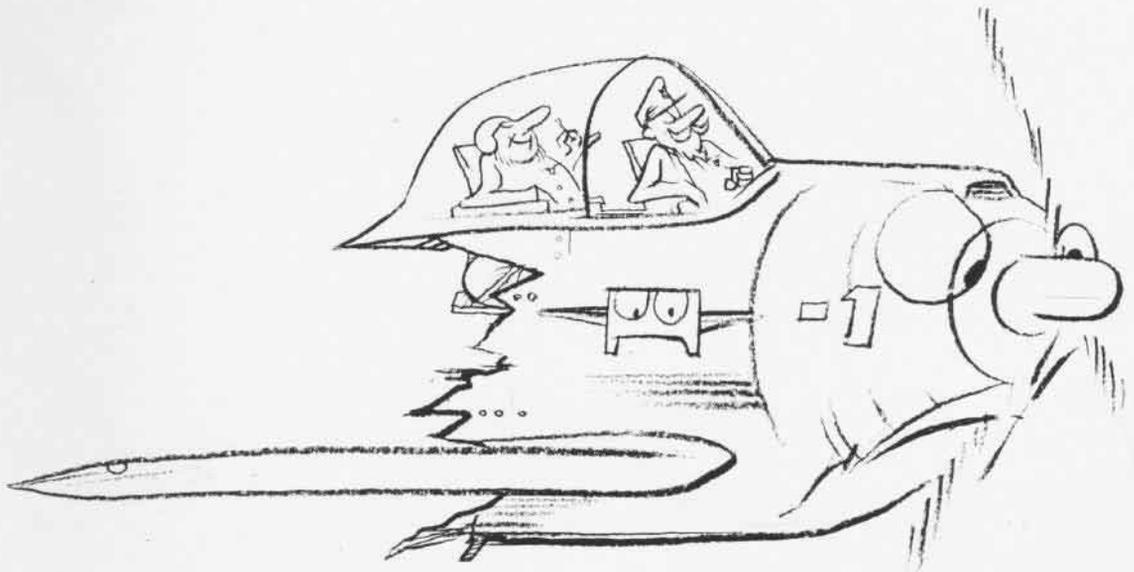
The flight had been scheduled as a NATOPS check but, in order to liven things up a little, they climbed to 10,000 feet, and the copilot in the rear seat did a left spin, losing about 3,000 feet. He then climbed the *Trojan* back

up to 10,000 feet and did another spin to the right. Both maneuvers were normal with no excessive forces of any kind involved. Following this, he executed two smooth aileron rolls. Then the pilot took the controls and demonstrated some high-speed accelerated



stalls. Pushing over to reach 6 to 7,000 feet and 200 knots, he banked the aircraft to 90 degrees and pulled back on the stick. As the plane started to buffet, the pilot felt the stick "pop" back. He immediately released the back pressure and the *Trojan* rolled lazily through about 180 degrees. The accelerometer read 6.2 G's. The copilot then took the controls and repeated the same maneuver to the left. No unusual forces were felt by either pilot.

The desk pilots then returned to home field to perform practice emergency landing approaches. The first was to a wave-off. As they touched and went on the next approach, ground observers noticed the missing stabilizer and notified the tower who advised the pilot of his missing tail feathers. An uneventful landing followed.





Grampaw Pettibone says:

Holy Mackerel dere! What's going on back there in the land of CRT (combat readiness training)? These ham-fisted jet jockeys musta' been thinkin' pure thoughts all week. How they could fly a T-28 around the sky for half an hour with a missing tail and not know it is beyond me. Could they really be that rusty? Three years behind a desk don't make a guy the world's hottest fighter pilot.

The accident board determined that the stab failed due to excessive G loading with not a sign of any fatigue. Maximum permissible smooth air acceleration in a symmetrical pullout is 5 G's at 170 knots. According to the operations flight strength chart, this *Trojan* was overstressed by at least 2 G's.

Who got the down on the NATOPS check? They pretty obviously hadn't read the book and didn't even know what maneuvers were required, let alone proper operating procedures and limitations.

Fly carefully guys. It's not just cars or aircraft that can be recalled by their makers. The defect in this case was certainly not in the aircraft structure.

## Whitewash

Lt. Coolstone was launched at 2350 hours one dark night in his F-8J *Crusader* from the small deck of a deployed 27C-class CVA. His was the second aircraft on a barrier combat air patrol mission. It was his second flight that day; however, he had gotten seven and one-half hours sleep in between.

Immediately after the catapult stroke, the afterburner blew out. However, a re-light was obtained, and the mission then proceeded normally — with one exception. The airborne tanker was unable to get its drogue out, so the flight couldn't refuel. Heading back to the ship early, the flight of two was immediately diverted to a shore air station for refueling and told to catch a later recovery.

After refueling in the pits ashore, they were airborne again in about 20 minutes. Marshal instructions were given by the carrier for a normal Case III (IFR) carrier controlled approach recovery at 0315.

The flight leader trapped on his first pass, but Lt. Coolstone forgot to lower his hook and made a touch-and-go instead. On his next two passes, he let the aircraft go a little high, in close,

and thus bolted each time. Still using the approach power compensator automatic throttle (APC), on the next pass, he started a little high, went low halfway down and corrected back to the glide path. When the LSO said, "Don't go high," in close, he pushed over, but too much. The APC brought the power way back and the *Crusader* headed for the spud locker.

An immediate wave-off was given by the LSO on the radio and with lights. The pilot went to full power, but an excessive sink rate had been established, and the plane struck the ramp at 0332. The starboard main landing gear was sheared off and the port gear, tailhook and aft fuselage were damaged. The lieutenant was able to keep the aircraft flying as it went off the angled deck and was instructed to divert ashore. He had enough fuel for a clean bingo but couldn't get his gear up. A tanker was directed to rendezvous with him but, after join-up, the *Crusader* driver couldn't get his refueling probe out.

By then it was too late. Not enough fuel remained to make it ashore, and it was too far back to the carrier. Heading back toward the ship while they rigged the barricade, Lt. Coolstone reached 16 miles out at 5,000 feet

when the fuel gauge reached 0. He advised all, by radio, that it was time to leave and ejected. The time was 0358.

He was picked up by the plane guard helo and returned uninjured to the CVA by 0419.



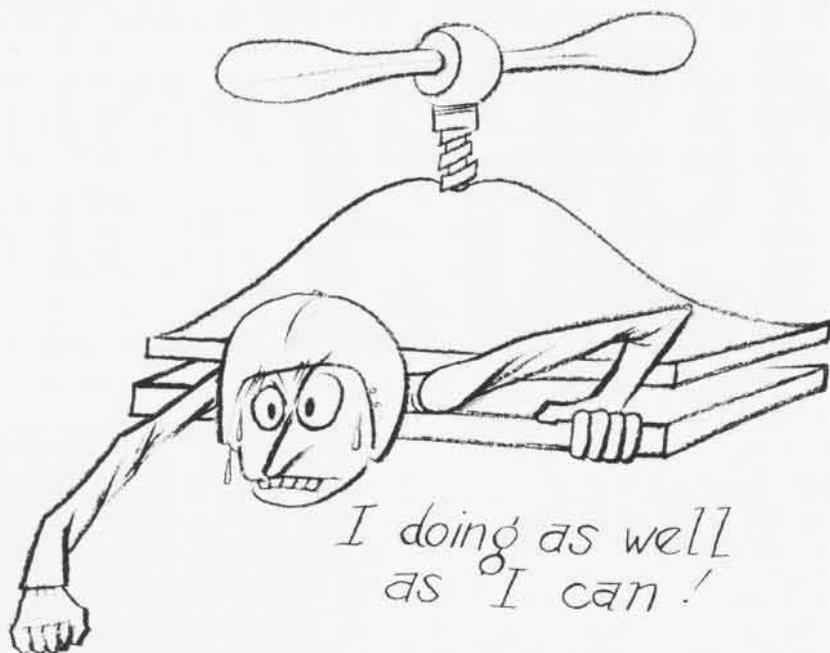
Grampaw Pettibone says:

Giminentlies guys! Seems to me there have been other flights like this one in the past few years. Bet we run out of F-8's before we run out of small carriers.

The gaps, omissions and commissions in this accident report would fill a book. The board chose to railroad the poor pilot who was just a victim of circumstances prescribed by his superiors. The poor guy erred because he was beat. He'd spent over four hours in the cockpit on this flight and certainly was doin' his best to avoid an accident. Where was his buddy, the pri-fly observer? No one on deck seemed to be very concerned about the condition of that aircraft after the ramp strike. They might'a told him he'd lost a landing gear and to check for a hydraulic failure, before binging him toward the beach.

Half the accidents we have are caused by other people in the chain of command over which the guy in the cockpit has no control. Was this mission really worth the risk? Or could it have been handled some other way?

Confucius says: "Kindly do not touch electric heater with wet hands until you have paid your bill." Or was that the proprietor of the hotel I stayed at in Japan last cruise?



# 1969

## NAVAL AVIATION IN REVIEW

By Clarke Van Vleet, Historian, DCNO(Air)

Naval Aviation's 58th year of operation was one of progress and achievement. Through the best use of men, money and materials, the Navy continued to develop an air arm long enough and strong enough to help keep peace throughout most of the world and to contain an aggressor, who remained persistent in a small part of it.

Major trends and events included defensive operations off Vietnam, submarine surveillance of the Atlantic and Mediterranean, support missions for various scientific explorations and the recovery of 12 astronauts of the *Apollo* program. An unprecedented number of awards for valor and achievement also attested to the attainments of Naval Aviation during 1969.

To keep down the costs, yet keep up the guard, Naval Aviation adhered to a policy of economy, within the funds available, to meet varied training and operational requirements. While major developments included the introduction of advanced equipment and the retirement of old, most new aircraft were merely modernized versions of former models.

### Aircraft

For example, the Sikorsky CH-53D *Sea Stallion*, delivered to the Marines in March, possessed many improvements over its predecessor, including more powerful engines, giving it better altitude and hot weather performance. It carries 38 combat troops and, with its power loading system, can hoist aboard a ton of palletized cargo per minute.

In June, Navy and Marine student pilots began flying the new version of the Douglas *Skyhawk* in Training Squadron 21. The power steering for taxiing and automatic pilot for increased flight efficiency are among the



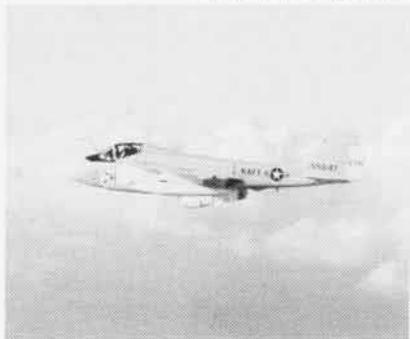
CH-53D



TA-4J



RA-5C



A-6C with new TRIM

TA-4J's attributes. Also in June, VT-9 first received North American Rockwell's T-2C twin jet *Buckeye* trainer with its modern electronic and radio equipment and GE J-85 engines.

The A-7E *Corsair II* built by LTV, was assigned in July to Attack Squadron 122. This model was developed for precision support of troops and tactical zone bombing. It is fitted with a device which presents continuous solutions for bombing and navigation on a transparent mirror before the pilot's eyes. He thus can concentrate on his mission without looking down at instruments.

Lockheed's newest antisubmarine airplane, the P-3C *Orion*, was delivered

to Patrol Squadron 30 in June. The "flying computer" houses more than 300 pieces of avionics equipment and can automatically detect, classify, localize and attack targets. The land-based plane will be assigned to fleet units during 1970 (pp. 24-25).

The first of five supersonic trainers, Northrop T-38 *Talons*, were delivered to the Test Pilot School (TPS) at Patuxent River in October. Rolling only 2,300 feet for takeoff, climbing initially at 30,800 feet per minute, and possessing remarkable turning performance at medium to high altitudes, its trouble-free performance and low maintenance requirements "make it a welcome addition to the school."

TPS received two Schweizer X-26A gliders last spring to inaugurate a course in soaring. An inexpensive instructional plane, it enhances test pilot skill in unpowered flight. In addition, TPS obtained two QT-2PC II Schweizer gliders modified by Lockheed to incorporate a 100 hp. engine with an overhead shaft to a wooden prop. The QT, quiet plane, is noisy in the cockpit but cannot be heard from the ground at cruising altitudes because of the slow-turning propeller and a muffling system for the exhaust.

John Glenn's famous plane, #144608, was among those taken from mothballs for remodeling. He broke the transcontinental speed record in July 1957 by averaging 723½ mph in the three-hour-and-23-minute flight. At last report, Light Photographic Squadron 63 was scheduled to receive Glenn's plane, one of 73 redesignated RF-8G's.

In January, the Navy, which has developed no new fighter planes in the past ten years, awarded Grumman a contract for development of the

was unveiled in October; Bell's twin-engine AH-1J *Sea Cobra* which features a three-barrel, turret mounted 20mm cannon capable of firing 750 rounds per minute. It cruises at 185 mph and dives at 219 mph. Production deliveries will begin in mid-1970.

#### Equipment

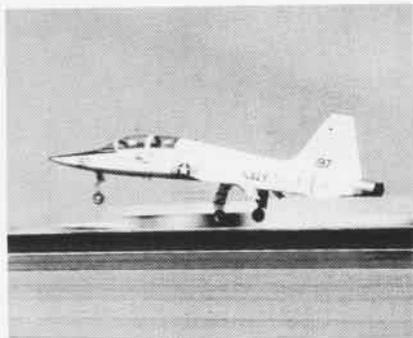
Various technical devices for improved flight training, air operations and safety became operational in 1969. Among them was the Automatic Carrier Landing System — a "hands



P-3C



X-26A



T-38



S-3A



F-14A mockup



AH-1J

The first Grumman A-6C *Intruder* went to the fleet in December. It improves the night capability of the all-weather A-6A with infrared and low-light-level television sensors developed under Navy's Program TRIM (trails, roads, interdiction multi-sensor).

Because of the increased need for reconnaissance and photographic aircraft, together with other demands in Vietnam, a new production and remanufacturing program for older model aircraft was also underway. Over 400 planes were involved, including North American Rockwell's RA-5C *Vigilante*, LTV's RF-8A *Crusader* and others of the series.

F-14 — a twin-tailed, variable-sweeping plane — to replace the F-4 *Phantom* by the mid-70's.

To replace the S-2 *Tracker* which has served for more than 15 years, Lockheed is developing a turbo-fan powered antisubmarine plane, the carrier-based S-3A.

The Marines made plans for obtaining 12 Hawker Siddeley AV-6B jet *Harriers* which can fly up, down, sideways, backwards and pivot at a mid-air standstill. These characteristics fulfill a need for close V/STOL support aircraft where quick availability and minimum runway requirements are important.

Another helicopter for the Marines

off" method first used operationally in June aboard *Saratoga* (CVA-60).

Known as AN/SPN-42, it involves a computer, and a radar which locks on to the aircraft and literally flies it to a landing on the deck. The pilot maneuvers his plane into the regular carrier approach landing pattern and, at a point from two to eight miles aft of the carrier, the device takes over.

An operational flight trainer for the TA-4J was installed in July at NAS Kingsville, with others scheduled there and at Chase Field during 1970. The trainer consists of four identical but independently operated cockpits and instructor stations. Known as Device 2F90, it simulates all aspects of flight.

Malfunction insertion, under control of the instructor, is included.

Last spring, Norfolk Naval Shipyard installed a deck edge fire-fighting system on the *Franklin D. Roosevelt* to utilize the new sea water-compatible, fire-fighting chemical, light water, now officially termed Aqueous Film Forming Foam (AFFF). Only fresh water had been compatible with light water until, in the fall of 1968, a salt water mix was found which permits the anti-fire formula to be used with sea water on board ship.

During overhaul late last year, *America* had its NBC washdown system adjusted to utilize AFFF. (The system consists of an array of water spray nozzles covering the flight deck of a carrier to wash off nuclear, bacteriological or chemical contamination.) All attack carriers are scheduled to be adjusted and outfitted for AFFF, with *Kitty Hawk* and *Enterprise* next on the list.

In the field of aviation ships, the Navy launched its newest in May, the USS *Inchon* (LPH-12), an 18,000-ton carrier for assault helicopter operations. Designed to carry approximately 2,000 Leathernecks and their vehicles, as well as 32 assault helicopters, the *Inchon* will help fill part of the gap caused by the decommissioning of three LPH veterans during fiscal year 1970.

In May, a contract was let to Litton Industries for the construction of a new multi-purpose amphibious warfare ship (LHA). When complete and delivered in 1973, the new LHA will perform a mission currently required of four different amphibious types — assault, transport dock, cargo and dock landing ships. Big as battleships, the proposed nine LHA's will cancel the need for some 20 specialized ships.

Work continued at Norfolk on the second nuclear-powered attack carrier, the *Nimitz* (CVAN-68). She is to join the fleet in 1972 as the first of a new class which will employ a two-reactor nuclear propulsion plant with a fuel capacity for 13 years of uninterrupted operations.

#### Reduction in Operating Forces

Balanced with the above plans were significant reductions and retirements of men, units and equipment. To consolidate the forces and cut operating costs, 25 units and air facilities were decommissioned during the year.



*America* tries out the new fire-fighting, sea-water mix light water in her washdown system.

Among them was VP-21, the *Blackjacks*, which had seen 26 years of continuous service.

*Randolph* and *Essex*, which first achieved fame in WW II as attack carriers and were later converted to antisubmarine flattops, were decommissioned on February 13 and June 30, respectively, and the amphibious assault ship, *Boxer*, was retired on December 1. Other aviation veterans with more than 20 year's service, *Bennington*, *Kearsarge*, *Valley Forge* and *Princeton*, are scheduled for retirement early in 1970.

Strength forecasts issued in October called for a Navy consisting of 695,000 personnel and 771 ships by the end of fiscal year 1970, down 81,000 personnel and 115 ships from mid-1969. Naval Aviation contributed to these cost-saving reductions with antisubmarine carriers reduced from seven to four, and amphibious assault ships from ten to seven by July 1970.

#### Project 703

*Project 703* (defense cuts of up to \$3 billion in FY 1970) influenced almost every facet of the aviation community. It required the early release of many 13XX reserve officers and also entailed reassignment or rotation of active duty officers who were in squadrons or units programmed for decommissioning. Most actions were tied to force level reductions and were planned to meet the manpower reduction goals while exerting a minimum impact on aviation. This was being accomplished while preserving the Navy's ability to carry out its worldwide commitments.

#### Vietnam

As readjustment set in, elements of Naval Aviation continued to participate in operations around the globe from support missions in Vietnam, NATO responsibilities and *Apollo* re-

coveries to scientific assignments over both polar regions. Nine attack carriers, three antisubmarine carriers, and five amphibious assault ships served for various periods with the Seventh Fleet in the Western Pacific.

*Skyhawk*, *Intruder*, *Corsair*, *Phantom* and *Crusader* aircraft supported American and South Vietnamese ground forces by attacking enemy troop positions, bunkers, tunnels and caves, infiltration and supply routes, trenchlines, supply caches, and logistic sampans. Navy *Huey* helicopters protected U.S. Riverine Patrols, and the versatile OV-10A *Bronco* of Light Attack Squadron Four, commissioned in January, was introduced into the naval forces.

#### Deep Freeze

Naval Aviation also carried out national responsibilities in colder climes. The last ski-equipped LC-130F *Hercules* departed Williams Field, McMurdo Station, in March, thus ending Antarctic air operations for *Deep Freeze 69*, the 14th consecutive season in which Antarctic Development Squadron Six had contributed its skills to aid in exploration and scientific investigation of the "bottom of the world." A true workhorse was the LH-34D *Seahorse* which performed photographic missions, ice reconnais-

sance, search and rescue work, and even aided scientists in a roundup of penguins.

While Neil Armstrong made a "great leap for mankind" when he stepped on the moon in July, others made a "great leap for womankind" when the first females ever to step on the South Pole, five scientists and a correspondent, landed there in a *Hercules* on November 12, a month after *Deep Freeze 70* began. The women arrived 40 years to the month after Admiral Byrd's first flight over the Pole.

#### Scientific Missions

Other scientific missions included the geomagnetic survey of waters off the coast of Korea by Oceanographic Development Squadron Eight for use by the U.S. charting services and an economic commission of the United Nations. VXN-8 also continued Project *Birdseye*, a polar ice-survey in the Arctic to gather ice-flow information. Last fall it provided photographic and ice surveillance for SS *Manhattan* during the ship's record voyage from the East Coast to Alaska through the ice-packed Northwest Passage.

#### Apollo Recoveries

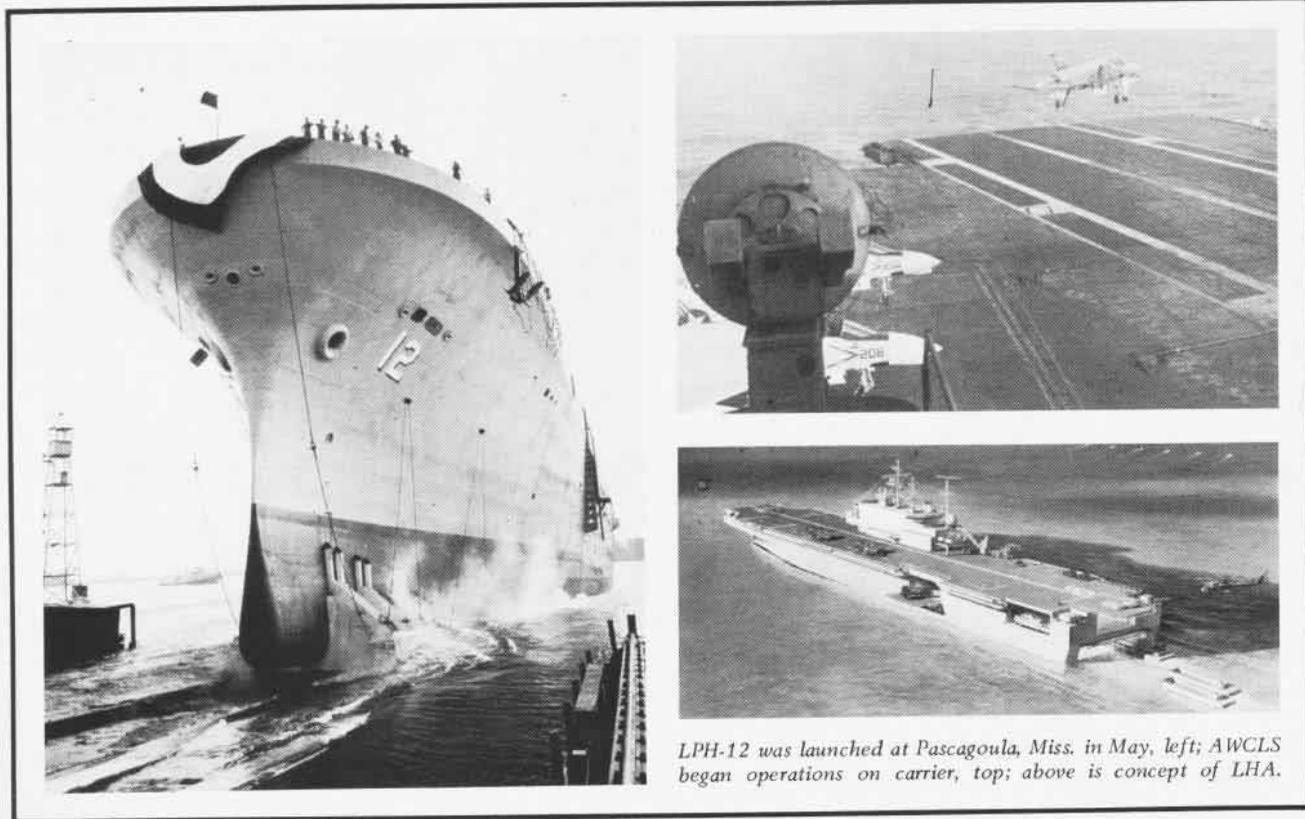
Perhaps the most sensational operations were those connected with the

recoveries of 12 NASA astronauts and their four spacecraft *Apollo*s 9, 10, 11 and 12 in March, May, July and November. Helicopter squadrons, HS-3 and HS-4, from *Guadalcanal*, *Princeton* and *Hornet*, retrieved the spacemen and their craft. Months of recovery training had been required, and as many as 28 ships stood by in both oceans, with planes and destroyers changing positions on each orbit in case NASA directed an unexpected emergency splashdown.

#### Incidents

The year, however, was also marked by serious incidents and tragedy. An explosion aboard *Enterprise* on January 14 caused fires and the detonation of ordnance on the flight deck, taking the lives of 27 men and injuring 85 others. The holocaust which blew or melted several holes in the two-inch steel deck resulted in a 20-day repair period.

Three months to the day after the *Enterprise* fire, Communist North Korean jets shot down a Navy EC-121 *Constellation* which was on a routine reconnaissance patrol over the Sea of Japan. The entire 31-man crew was killed. U.S. response was the creation of Task Force 71 to protect such flights over those international waters. Initially, the show of force consisted



LPH-12 was launched at Pascagoula, Miss. in May, left; AWCLS began operations on carrier, top; above is concept of LHA.

of the carriers *Enterprise*, *Ticonderoga*, *Ranger* and *Hornet* with cruiser and destroyer screens.

#### Weather

In mid-August, Hurricane *Camille* swept into the Gulf Coast, sideswiping Naval Air Stations Pensacola, and Whiting, Ellyson and Saufley Fields. A large number of aircraft were evacuated to fields as far away as New York and Denver while other planes were secured in hangars.

These installations then provided emergency aid and assistance to disaster-area communities. Helicopter Training Squadron Eight received a personal letter of "thanks and commendation" from President Nixon for the services it rendered during the disaster.

#### Weather Research

That same month, Hurricane *Debbie* threatened the coast. Participants in Operation *Storm Fury* studied *Debbie* and on August 18 and 20, the first hurricane seeding operations in five years were conducted by six A-6 *Intruders* from Attack Squadron 176, NAS Oceana, Va.

Controlled and vectored in and out of the storm area by Navy WC-121N's of the *Hurricane Hunters* of Weather Reconnaissance Squadron Four at Jacksonville, the A-6's dispensed silver iodide crystals and igniters which released heat as some of the storm's moisture was frozen, thus changing the energy structure of the hurricane. *Storm Fury* is a joint Department of Commerce/DOD program to explore the dynamics of hurricanes.

#### Some Highlights

Briefly, some of the other special events and developments during the year included:

- The new Navy Parachute Team, designated in March, performed before 140,000 spectators during the year.
- Secretary of the Navy John Chafee spoke at the 50th anniversary ceremonies on May 8, commemorating the first trans-Atlantic flight by man in the Navy's NC-4 flying boat.
- President Nixon spent Armed Forces Day aboard *Saratoga*, followed by his visit to *Hornet* in July for the *Apollo 11* splashdown.
- Marine pilots, Lieutenant Colonel R. L. Lewis and Maj. C. L. Phillips, set a new distance record in the *Bronco* of over 2,500 miles.



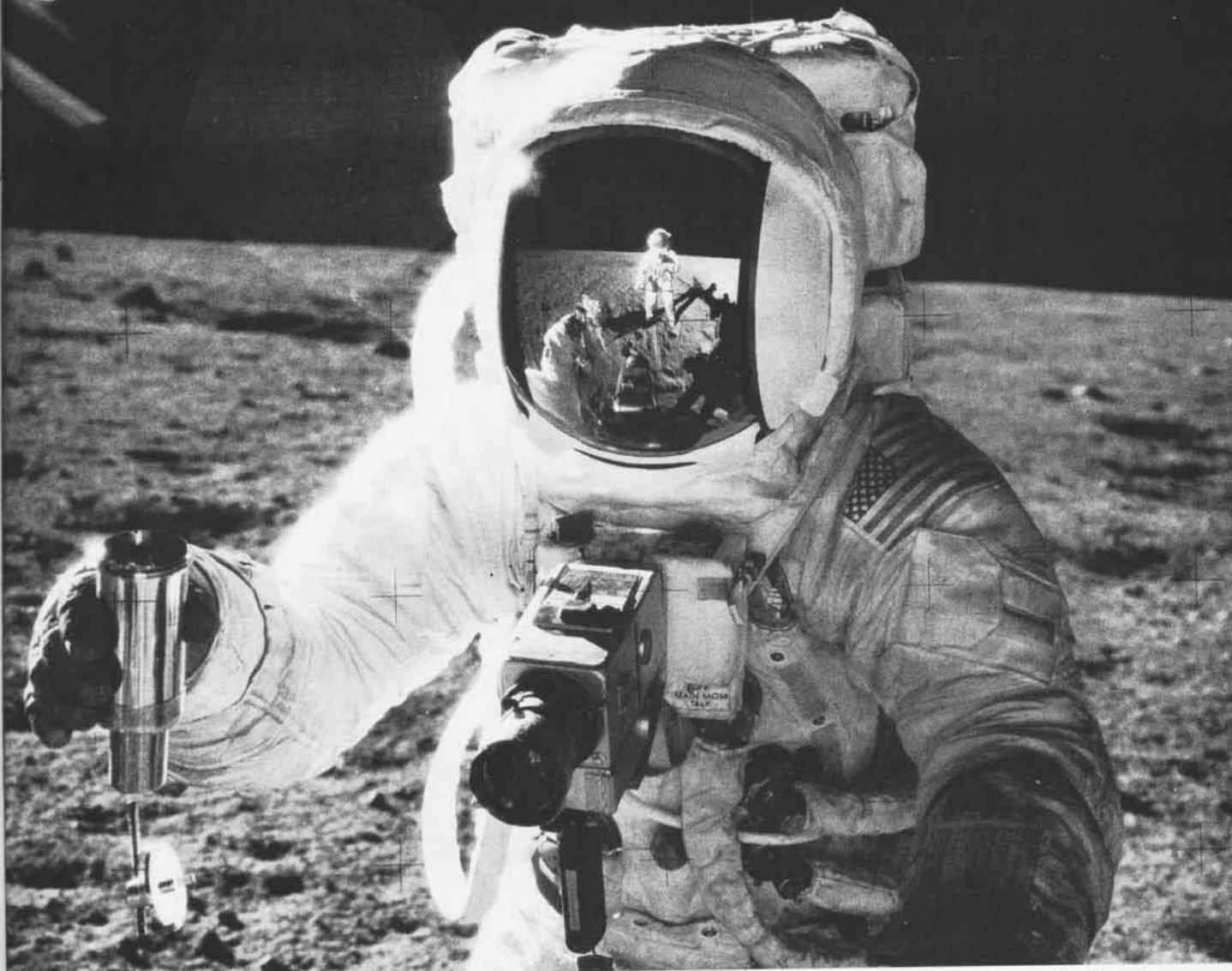
Vietnam operations varied from squadron sorties off carriers in the Tonkin Gulf to inland waterway patrols by the Seawolves who provided air cover for U.S. Riverine Forces, above.



LC-130F warms up during Deep Freeze operations at the South Pole. Ski-equipped planes continued support of scientific missions.



Hurricane Hunters controlled seeding of Debbie in the first such operation in five years, dropping silver iodide in the storm area.



Three of the four men who walked on the moon are, or were, Naval Aviators. All Apollo astronauts have been recovered by Navy forces.

- The Presidential Unit Citation, the highest award any combat unit may receive, was bestowed on the following units for previously performed action: Detachments 21, 25 and 29 of Helicopter Combat Support Squadron One and the carrier *Kitty Hawk* (CVA-63) and her embarked Carrier Air Wing 11.

#### Safety

Many other significant events, awards and records were scored by the men and units of Naval Aviation dur-

ing 1969. Space does not permit citing them all, but the Naval Air Training Command had an outstanding record in air safety. In keen competition with all fleet units of Naval Aviation, CNAtra was awarded the coveted CNO Readiness Through Safety Trophy. The command's accident rate was 0.67, representing a reduction of 29 percent as well as 35.5 percent fewer fatalities over the preceding year, despite a nine percent increase in flight activity.

#### Medals of Honor

Two awards made during the year were for previous actions above and beyond the call of duty. In ceremonies at the White House in January, President Johnson presented the Medal of Honor to the first two Naval Aviators to receive the nation's highest award in the Vietnam conflict: Lt. Clyde E. Lassen, USN, and Maj. Stephen W. Pless, USMC.

Lt. Lassen, on June 16, 1968, in a



*Lt. Col. Robert L. Lewis and Maj. Charles L. Phillips pose beside the OV-10A in which they set a new class distance record, flying from Newfoundland to England — 2,522 miles.*



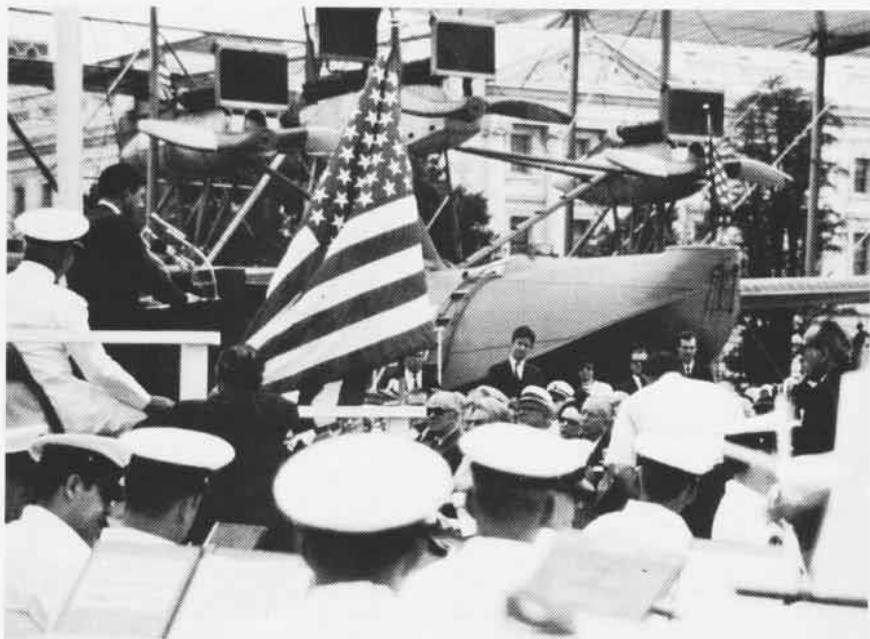
*President Johnson presents the Medal of Honor to Lt. Lassen, above. Other Naval Aviator who was so honored was Maj. Pless, USMC.*



damaged helicopter, low on fuel, and the target of heavy enemy fire, piloted his craft into the rice paddies at night in his third attempt to rescue two downed pilots. He further exposed himself by turning on the landing lights to help the stranded aviators locate his helicopter. Only then did he succeed in evacuating them.

Maj. Pless, flying his helicopter into intense enemy fire on August 19, 1967, drove 40 to 50 enemy back with his own rocket and machine-gun fire in order to touch down on a beach where four wounded American soldiers were surrounded. After picking up the men, his overloaded 'copter settled back into the water four times before he finally got the bullet-torn helo airborne.

This brief account tells of but a few of the many successes, adventures and incidents in Naval Aviation during its 58th year. There were many others, effectively and loyally performed, that everyone can be proud of.



*Secretary of the Navy John H. Chafee addresses large crowd attending commemoration ceremony of the NC-4 flight. The aircraft was put on public display on the Mall in Washington, D.C.*

# Adrian O. Van Wyen Retires DCNO (Air) Historian -25 Years



Adrian O. Van Wyen

By Lee Pearson  
NavAirSysCom Historian

According to an old proverb, history is to an organization as memory is to an individual. For the last quarter-century, naval air officials, as well as historians and writers, have relied heavily upon Aviation Historian Adrian O. Van Wyen to explain and interpret the history of U.S. Naval Aviation.

Adrian Van Wyen is a native of Long Island with a BA and BS in Education and an MA in Industrial Arts from Kent State University, Kent, Ohio. He remained at Kent as a member of the faculty and, during the early WW II period, he became Coordinator of Civilian Pilot Training and Advisor on Military Service Matters. In 1944, he was commissioned in the Naval Reserve and assigned to the Aviation History Unit in DCNO(Air). After demobilization, he remained in that position as an aviation historian. He has been head of the unit since 1952.

Van is a person of substance as well as an impeccable scholar. The depth of his knowledge and quickness of his perception are belied by his outgoing friendliness. The critical acumen with which he dissects a manuscript or an idea is well hidden by the warmth and interest with which he discusses it. A natural teacher, he has the rare ability to lead.

Naval Aviation owes much to Van. He prepared or contributed to many of the Navy's monographs on the history of Naval Aviation. "Air Task Organization, Pacific Ocean Area" and a similar study on the Atlantic are basic reference sources of WW II, as is his "History of Fleet Air Wings."

Many authors have acknowledged his accuracy and his patient assistance in their endeavors. They include Rear Admiral S. E. Morison, Rear Admiral George van Deurs, Robert Sherrod, Captain Edward P. Stafford and Thomas G. Miller.

He has prepared articles on Naval Aviation for several issues of the *Aerospace Yearbook* and the *Britannica Book of the Year*. He has contributed historical data for many official studies of Naval Aviation and was co-author of *U.S. Naval Aviation 1910-1960*. One of his many contributions to *Naval Aviation News* was his annual chronology. The *NA News* staff frequently refers to the voluminous collection of historical data he compiled. Van developed, wrote and edited most of the *NA News* series "Naval Aviation in WW I."

Adrian Van Wyen, a man of many talents, is a twentieth century counterpart of Goethe's "universal man." He is an artist of great ability, a humanist, and possesses a ready sense of humor as well as an incisive mind. His skill as a historian and artist begins with a sense of design and proportion and combines with the ability to perceive the overall effect and the importance of detail.

He has worked as a free lance artist and designer, given lessons in ceramics to slum children in Washington, D. C., and sings in the choir of the First Congregational Church. Those of us who have been fortunate enough to work with him on a day by day basis, consider him a true friend and an exceptionally able colleague.

## TA-4J Carrier Quals

# ... a long way from a shrimp cocktail

**D**rop what you're doing, pick up your camera, and report to operations for transportation to the *Wasp*."

This message found me elbow deep in shrimp, preparing for a big staff party. But, upon receiving my assignment, all thoughts of parties left my mind and were replaced by the image of a TA-4J *Skyhawk* making its first carrier landing.

Before I knew it, I was strapping

### Text and Photographs by AN Murray Judson

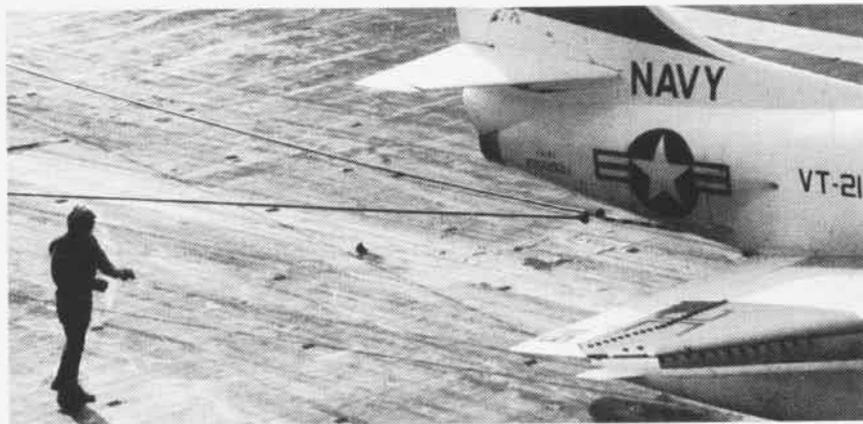
myself into the seat of a TWA (Trans Wasp Airways) taxi for the 90-mile hop to the carrier.

Across from me sat the only other passenger, a civilian who was also bracing for his first tailhook landing. As I sat there with my ears still popping from the takeoff and looked at all the emergency equipment, a feeling of

anticipation came over me.

The pilot signaled to look out the starboard window as we moved into a hold position and circled the *Wasp* while the rescue helo took off. The huge carrier looked like a toy boat churning out an aqua path in a bathtub full of royal blue water. We made a final circle and approached the floating runway.

My ears popped and my stomach noted the quick drop in altitude.



Suddenly the engines roared and "Wham!" we were there. I tore out of my straps and Mae West and headed for the island. Now within the safety of the superstructure, I made my way to the 07 level with the help of a ship's journalist. He gave me the full tour; then, with almost an hour to kill before the A-4's arrived, chow sounded like a good idea. As we went down through the maze of ladders and passageways, I thought, "a man could starve to death trying to find the mess hall aboard a carrier."

I was worried about being informed of the arrival of the jets but, when they landed, I knew my worry had been in vain. The jet blasts were so loud below decks that I was convinced I would lose my hearing when I went topside. After picking up ear plugs at the dispensary, I made my way back to the 07 level for pictures of the *Skyhawks*.

Three sleek orange and white A-4's were circling the carrier. They followed each other in the flight pattern and onto the deck. Alien-looking men, dressed in earphones, goggles and brightly colored suits to designate their jobs, directed the aircraft forward for launch; it took about two hours to qualify the pilots.

A few minutes after the last A-4 headed home, the COD wheeled onto the catapult and I was homeward bound.

I was worn out from walking around that small city, and from the excitement of my first tailhook landing, but I would go again tomorrow. It's more exciting than cleaning shrimp.



*It was the first carrier qualifications for the TA-4J since VT-21 took first delivery on the dual-seated Skyhawks last summer. Airman Judson shows how the student pilots did in this series. Left to right: flight deck personnel position a TA-4J for launch; it leaves the Wasp deck; one catches the wire; a director signals the pilot forward; the last one comes aboard.*

# Saratoga: a ship



Last Fall, the Royal Navy's Omegas of Fighter Squadron 892, right, embarked in Saratoga for extensive operational training in the Mediterranean. The primary purpose was to test the British Phantoms, with their Rolls-Royce engines, during normal carrier operations. But it also provided an opportunity for an exchange of ideas between fighter pilots from two strong NATO Allies. On the following pages, an Omega Royal Naval Aviator and a U.S. Navy Atlantic Fleet Combat Camera Group photojournalist combine creative efforts to illustrate the success of the tour.

By LCdr. Harold Lipscomb, Royal Navy  
Photos by PHI Robert W. Milton, USN



# with a 24-hour mission



**S**aratoga — the sixth United States vessel to bear the name, can only be defined as a “Super Carrier.” One of two strike carriers attached to the Sixth Fleet in the Mediterranean, she pounds a beat which stretches right across the sea from one end to the other, at never less than 15 minutes notice, ready for any eventuality.

The personnel you meet on board are very conscious that in the past the USN has learned a great deal from our Fleet Air Arm; they recite with respect RN developments such as the angled deck, steam catapult, mirror sight, etc., all improvements the Americans have put to good advantage. Yet, they omit to say, with conventional carriers of 83,000 tons like the *Saratoga* and nuclear carriers of the size of *Enterprise* costing 160 million pounds upwards, that they have progressed way beyond all bounds of conception.

If the aim of any Navy is to “rule the waves,” then the U.S. Navy has made every endeavour to do this using strike forces to achieve what they call “Sea Supremacy,” forging it with the same technological dedication as they have applied to the space programme which has so captured the imagination of the world.

In this atomic and missile age, it is quite unthinkable that Allied Forces should not control critical sea areas such as the Mediterranean. *Saratoga*, carrying the world’s most modern combat aircraft, has a mobility of firepower which goes a long way in providing the necessary safeguard.

*Saratoga*’s mission describes the ocean areas of the world as the “life lines of democracy” and says that the strike carrier has a high degree of surviveability to retaliate against any aggressor, pointing out the virtual invulnerability to a surprise ballistic missile attack when at sea — and the *Saratoga* is at sea the majority of the time.

Undoubtedly the *Saratoga's* ability to move as much as 600 miles in 24 hours, provides much of this immunity because ballistic missiles require a fixed target. It is not surprising, therefore, that the men of *Saratoga* have an infinite faith in the carrier concept, but it is still staggering to find out how convinced they are; some even go so far as to say that in decades ahead the only manned combat aircraft flying will be carrier-based. One does not presume to speak to them about phasing out the RN carriers – the question would be inconceivable.

What makes people think this way? It is only by seeing a giant carrier like *Saratoga* working operationally that one can fathom such reasoning. Our own carriers – *Ark Royal*, *Eagle* and *Hermes* – were all laid down before 1945 and offer little assistance in this direction. In fact, because of their smaller size, they tend to blind one to the advances in design the Americans have accomplished.

The recent detachment of four 892 Squadron *Phantoms* to the *Saratoga* has certainly enlightened the officers and ratings concerned. What impressed them, though, was not simply the opportunity of operating from a four-acre flight deck, nor being in a ship which could provide such facilities as a fully automatic hands-off landing – these were actually known statistics. It was the new and different methods of operation which have revolutionized everything in Naval Aviation, right down to man management. Behind this awakening, there is a realization that the Americans, with ships like the *Saratoga*, are a generation ahead.

Perhaps before coming to conclusions, one should look at *Saratoga* objectively. A ship with over 4,500 souls on board, one of the largest warships ever built, equipped with the most up-to-date facilities to handle her brood of over 90 aircraft, has to be complex. Nevertheless, it is the ease of operation and the outward simplicity of routine which brings home the lessons.

*Saratoga's* arsenal of eight squadrons and four search and rescue helicopters (*Angels*), fly from the deck



with such smooth uniformity, that one has to investigate the mechanics behind the structure.

At the centre of the flying organization is Air Ops. The Royal Navy has no exact equivalent in one position in a carrier, but the functions are that of planning and air traffic control. In two large spacious rooms – one with radar displays for departure control and carrier control approach and the other with display boards where the planning and scheduling of movements is done – the whole of the flying is coordinated. Specialist requirements like strike operations, air direction, tactical signals, surface plots and radar surveillance are the responsibility of the operations officer.

Each day air ops produces an air plan which is passed to the squadrons, telling them what aircraft will be launched, giving times, missions, fuel loads: in fact, it shows in graph form the whole picture of the next day's flying. During normal working-up exercises, the *Saratoga* has found the

90-minute cycle to be the most suited to her needs. Every 90 minutes she will launch and recover aircraft. With four catapults and a very generous angle of ten degrees, the sequence of events can be completed within 20 minutes.

One of the most impressive factors about watching such departments as air ops at work, is to see how the application of strict rules for assembling necessary information, coupled with the use of television, has cut the incessant telephone calls which so hamper any administration.

The order to man aircraft comes from air ops 30 minutes before the launch. Once airborne, the responsibility for the aircraft will be assumed by the controlling authority.

In good weather during the day, the aircraft will return to *Saratoga* visually. But under IMC conditions or at night, they will recover by CCA from air ops. The pilots will be given an expected approach time at a certain marshaling position and will be given



the option of recovery by three different methods: (1) a positive talk down on Spin 42 or 35 radar to 3/4's of a mile when the LSO takes over until the "meat ball" is sighted; (2) by a similar system to ILS approach, and flying the needles to the 3/4's of a mile position; (3) a fully automatic landing.

There are two *Phantom* F-4J squadrons aboard the *Saratoga*. Most of their aircraft are new, possibly having come off the production lines only 12 months ago. Although they resemble the F-4A, the first version of the *Phantom* which came out some ten years ago, the advances in weapons, the new engines and the latest Westinghouse radar have up-dated the J in such a way that even today it still has no equal as an interceptor. The *Phantom* is also probably the most versatile aircraft ever built and the *Saratoga* pilots will not fail to remind you of the *Phantom's* excellence in the attack role.

VF-103, or the *Sluggers*, as the

squadron likes to be known, was a marvellous host to the RN *Phantom* squadron, going to infinite trouble to assist in every possible way. Perhaps this kind of hospitality derives from their humility, which they say stops them from claiming to be the finest fighter squadron; instead, they declare that they find sufficient pride in setting the standard for others!

The structure of a squadron like VF-103 is quite different from any in our Fleet Air Arm. The commanding officer is a full commander; so is his executive officer. The rest of the aircrew breaks down into three departments: administration, operations and maintenance. Each has a lieutenant commander at the head. Junior squadron officers will be rotated from one department to the other every six months. This forms part of their career planning which starts from the day they join the squadron as a lieutenant junior grade and follows through appointment to appointment until they get ultimate command.

Ninety-five percent of the time, the pilot and flight observer will be teamed up to fly together as a permanent crew, minor changes occurring in cases of sickness and leave. There is little doubt that leaving the crews together contributes towards greater efficiency and is followed where possible in the RN. The policy in VF-103 was also to keep crews in the same sections and divisions. In this way the leader knows his team, and it has the added bonus of cutting down much of the unnecessary patter on the RT.

Squadron briefings in *Saratoga* are very much simplified by having in each ready room a teletype machine which displays weather information and operational procedure notices; this system not only saves time but also manpower. During big exercises or when the need arises, it is possible to brief as many as 35 crews in the air intelligence centre. The ready room is the centre of the working and social life of a squadron. In adjoining compartments, the maintenance administration is carried out and nearby will be the other associated offices. This keeps the squadron together and although one might say that this isolates them from the rest of the ship, experience shows that it builds up the team spirit which is so necessary. It also encourages the squadrons to compete for the highest professional standard among themselves. One last (relaxing) point about the ready room is that each of the aircrew has his own tilt back easy chair with his name on it.

After catapulting off, the *Phantoms* will rendezvous at 5,000 feet with a *Skywarrior* familiarly called the *Spin Tanker* and will take on something in the region of 2,000 pounds of fuel, the approximate amount equal to that used on the launch. This becomes so much like second nature to the pilots, that they complete the operation in seven minutes after takeoff and are then free to continue their mission. The *Spin Tanker* is often recovered in the same sequence and may be airborne for as short a time as 20 minutes. However, at night, the *Skywarrior* will stay up throughout the detail as an added safety measure.

Returning to the carrier on com-



In the VF-103 ready room aboard *Saratoga*, above left, an Omega flight leader briefs Royal Navy pilots. At left, British plane captains help pilot and RIO into Phantom and, above, a director moves jet onto catapult.

pletion of their mission, the aircraft join a holding pattern — the F-4's at 2,000 feet, the *Corsairs* at 3,000, and so on. In daytime the flight leaders are expected to be able to read the deck and position themselves in the landing pattern overhead the carrier three minutes before Charlie time, the rough duration it takes to the ramp. Once in the circuit at 600 feet, the LSO will pick up the pilot on RT at the 180 degree position and will give him assistance until he calls on sight, with side number, type and fuel state. A standard call might be "203 *Phantom* ball 5.8."



There are, it seems, only minor differences between landing on a British carrier and landing on *Saratoga*. RN pilots reckon the distances from the ramp to the first wire are approximately the same. Also, the spacing between the wires is similar. They also go so far as to suggest that it might be easier to line a *Phantom* up on the *Ark Royal's* flight deck since the angle is slightly less. Regardless of these small differences, landing on any carrier calls for precision flying, especially when you consider one is working to tolerances of ten and not thousands of feet.

All landings on *Saratoga* are televised. Accuracy is judged by filming through a cross which marks the correct flight path. Anyone watching the television system can see immediately how good an approach is. This is one

of the finest landing aids as it gives the pilot the chance to learn from his mistakes when the recorded video tape is played back in the ready room. It is also invaluable in the case of accidents, because it records the date, time, wind velocity over the deck and the airspeed of the aircraft. The latter is calculated by radar from the rate of closure.

While *Saratoga's* *Phantoms* earn freedom of operation in the air, let us next consider her strength which unquestionably rests with her squadrons of A-6A *Intruder* and A-7B *Corsair* aircraft. One of the most interesting points to note about these aircraft is that they are subsonic. However, by today's standards this combination of aircraft is the most devastating imaginable. The *USN Aviation News* [*Naval Aviation News*] gives the best explana-

tion of the operation of subsonic aircraft in the attack role by showing that they do not need the speed of the interceptor.

The flight deck control officer, one of the key men, positions the aircraft on deck and in the hangar (which is about 40 percent the size of the flight deck). With so many aircraft to "play" with, he writes his instructions in diagram form, adhering to the "air plan" and has this duplicated and handed to the directors for action after each land on.

*Saratoga* usually launches her first four aircraft in about 45 seconds; thereafter, one every 30 seconds, as it takes about two minutes to get an aircraft set up on the catapult. Supposing there are 22 aircraft to be launched at 1500, then the first plane expecting



A British F-4K Phantom with Rolls-Royce engines is launched from USS Saratoga (CVA-60) during operations with the 6th Fleet in the Med

to be arrested will be given a Charlie time to land of 1512. If someone isn't presenting themselves to the deck on Charlie time to land, then the air boss will want to know why.

One innovation which is cutting down the time it takes to launch aircraft is the nose tow gear which does away with the bridle. At the moment, only the newer planes like the *Corsair* and *Intruder* can use this method on the catapults. The USN hopes to extend this way of launching aircraft, but this is liable to take time as the whole stress of the launch is imposed on the oleo and the nose leg of the aircraft has to be specially designed. On the *Saratoga*, the heavy aircraft like the *Phantoms* and *Vigi-*

*lantes* tend to use the bow catapults, while the lighter aircraft using the nose tow gear will go off from the waist.

The flight deck control officer, in order to position aircraft correctly, has an intricate communications system, via hand signals, from the pilot and intercom with the directors to inform him of the serviceability of the aircraft as soon as it lands. If the aircraft is down (unserviceable) it is liable to be taken by lift to the hangar below or, if it has only minor deficiencies, towed to the trash pile, an area reserved on deck next to the island for aircraft not going on the next launch. At night a much slower launching procedure is used because aircraft taking off are flying in IMC and have to be identified

on radar by the departure controller in air ops.

While the RN *Phantom* team was on board, *Saratoga* carried out its 136,000th arrested landing. The arrestor wire crew celebrated the event with a cake, something they do every 1,000 landings. The pilot and flight observer making the landing are invited to do the honours by cutting the cake. While the carrier is at sea, these celebrations come around about once a month and it gives a good idea of the amount of flying *Saratoga* does.

Life onboard is, of course, totally dominated by the flying programme made out by air ops. The sound of aircraft being launched and recovered is heard throughout the ship. The men

are continuously working watches, following a routine which differs little from carrier to carrier. It is in fact very easy to live in *Saratoga* and, although ships in the USN are dry, there are many compensating factors which outweigh the need to abstain from drinking. There is no need to spend any money while at sea: laundry, dry cleaning, haircuts, shoe repairs and tailoring are all free. Enlisted men do not pay for their food, and officers receive an allowance to pay their monthly mess bills. The accommodation is spacious with the exception of the junior enlisted men who have simply a bunk space in what they call berthing compartments. Since they are not allowed civilian clothes when away from the United States, their bunk space has been designed to take all their kit folded underneath the mattress. There is also only limited hanging space in these berthing compartments, this being reserved for pea coats, the woolen uniform coats worn in winter.

The food is good and plentiful, comparing favourably with the standard in any ship. Only unusual aspect from a British point of view is that one is expected to eat so early, the last meal being served at 1800. Those going hungry can, however, purchase light snacks in the gedunk which sells in true drugstore fashion — ice cream sodas, popcorn, cookies, candy, etc. The officers have their own sandwich bar which opens after 2200. One privilege which, regretfully, does not apply in the RN, is that the customs do not tax goods purchased by personnel at sea when the ship has been away from home waters for more than 120 days. There are some exceptions to this, particularly in the case of spirits, cigars and perfume, where a generous allowance is made. One of the results of this concession is that it is possible to buy almost anything through one of the eight shops on board. What is not held in stock can be ordered by catalogue and will be brought to *Saratoga* free of state or federal tax.

So vast is the carrier, that it takes about two weeks to get climatized to working on board; one also needs this time to find one's way around. Al-

though there are two moving staircases descending through five decks to help conserve energy, one does seem to be forever clambering over "knee knockers" (the damage control risers along the passages) as well as going up and down ladders. A simple method of numbering decks and compartments does assist; nevertheless, there are quite a few people who do not get to know the whole ship as one tends to leave off the visiting list the boiler rooms and the less comfortable working spaces.

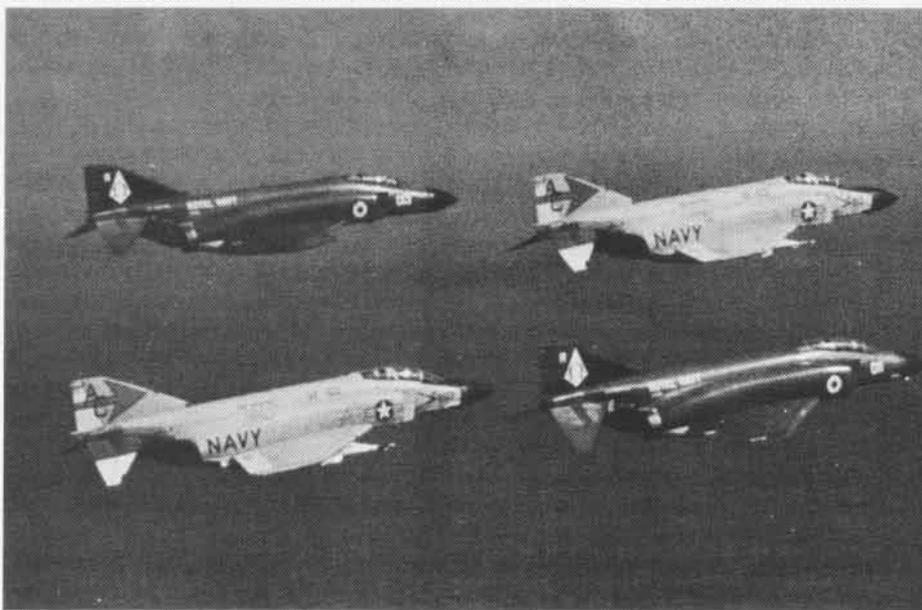
As you discover *Saratoga*, you can't fail to be amazed by the scale of the ship, nor how on earth such a huge man-of-war can be kept so clean. Yet all the working spaces and compartments are subjected to the same competent attention the men give to everything in this carrier, and there are systematic routines for painting and cleaning ship. One of the spotless places is the sick bay or hospital, as it is called. In fact, it is so well equipped with almost every facility that any small town would be envious. There is an intensive care unit with such equipment as heart monitoring systems, suction machines and positions to give oxygen under pressure or free flow, a modern X-ray room, a special E.N.T. section, a marvellous operating theatre, an isolation ward and all the associated waiting rooms and offices.

With four doctors and 41 hospital corpsmen and berthing spaces for 80 patients, the ship is well prepared. Yet, with so many men on board one needs to be. Statistics show, that since the 1st of July over 40 minor operations have been performed. Just as impressive as the hospital is the dental department which copes with up to 200 patients a week in five separate surgeries. The dental department also has its own prosthetic laboratory where dentures are made.

While every care is taken to keep *Saratoga's* men fit, their welfare is also looked after with similar proficiency. A daily newspaper and monthly magazine are produced by the public affairs office, 17 movies are shown every night, a TV network shows films and a radio broadcasts on four channels.

Yes, the mighty *Saratoga* is a *Super Carrier*. From its commanding officer, Captain Warren O'Neil, right down to the men who work on the ship's boilers, there is a cool, efficient approach to working this ship. Maintaining the necessary high standards both in the air and below decks is a challenge: one which has to have a cause. Captain O'Neil says there are three ways a country can influence nations for the sake of freedom. They are aid, trade and power. *Saratoga's* task is to deploy the power in the cause of freedom — a 24-hour mission of peace.

U.S. and British Naval Aviators join up for a NATO formation during operation from Sara



If you saw the film 2001: A Space Odyssey, and chose not to believe in HAL 9000, the incredible computer, read no further. On the other hand, if you give credence to some of that, or if you are among those who have received a computerized bank statement which implied bodily harm by an army of computers if you didn't imme-

diately correct an overdraft of \$0.00 in your account, read on. Because, you see, this is the story of a remarkable computer and one of the men with whom it works. Buno 156523, whose life center is a Univac ASQ-114, is one of the first P-3C's assigned to VP-56, the Navy's first operational P-3C squadron. Commander Melvin Meltzer

recently relieved Commander John J. McIntyre as squadron commanding officer. On these pages, Univac ASQ-114, with the help of Ltjg. Jim Gray (a VP-56 pilot), tells his story to NANews associate editors Mike McDonnell and JOC Jim Johnston. It is a fascinating account of an ASW Odyssey: 1970. It is happening now.

# I am Buno 156523

**B**uno 156523 stood boldly in the dim light of the VP-56 hangar at NATC Patuxent River, Md. Outside, it was cold and windy — the overcast skies threatened snow. At first glance 156523 looks like any other P-3 Orion: sleek, stubby-winged, sturdy. The red, white and blue stripes on the tail, bearing the title "P-3C" and the subtle changes in the fuselage are the only apparent indications that this is the elite of ASW aircraft.

"This airplane is accurate to within a gnat's eyebrow," Ltjg. Jim Gray breaks the almost eerie silence surrounding Buno 156523. He obviously is enthusiastic about this airplane — it seems they are almost friends.

Inside the fuselage, the interior is lit up and, at the green glow of the TACCO's multi-purpose display (MPD), Gray begins to explain the aircraft:

"The essence of the problem in any ASW airplane that we've had before now is that we have had too much information for the human operators to assimilate and use. So what we have done with the P-3C is integrate all the sensors, feed the information into the

computer and then let the computer do the work. The computer presents the solutions and information automatically."

As he talked, Gray pushed buttons on the MPD and operated a small ball-like instrument that described lines. The glowing screen became a mass of circles, lines and symbols. The word "error" flashed on.

"You wouldn't have the screen this cluttered," Gray went on, and he sagely nodded (as if we knew), "I just did this for your purposes."

He went on explaining, but in the low hum of the computer memory banks that lined the port side of the interior, we two novices thought we heard a soft, metallic voice.

"You're doing swell, Jim, but these two do not know a Doppler system from an SSQ-41. Although I'm programmed to compute on a highly technical level to trained crews, I will make an exception in the case of you two gentlemen. Just nod your heads at the appropriate inflections in Lt. Gray's voice and listen to me:

"I am a Univac ASQ-114, miniaturized, airborne, general purpose,

digital computer. You may call me 'U.' I accept information from both manual and sensor input sources. I am programmed to process this information and to produce the requested results."

"The key to the whole thing is really navigation," Gray intoned.

"What the lieutenant says is true, gentlemen. That and communications. What required a navigator and radio operator in the other P-3 series is now accomplished by a single crewman, with my assistance. In the field of communications, I store message information, code and transmit data link messages, and transcribe messages for display. To aid in navigation, I calculate the radar position, maintain continuous real time dead-reckoning position, and maintain sundry positions that may be of use, such as sonobuoys, targets, etc. I also provide navigation information for short-range as well as long-range routes."

"And, it will automatically give you a flight plan," Gray continued.

The computer circuitry flashed red.

"Thanks, Jim. That's right gentlemen; simply enter the flight plan information and I'll create a 'fly-to' point for the pilot. Of course, the pilot doesn't have to listen to my 'commands,' but if I were linked to the autopilot, I could fly this airplane anywhere. But then, that is what pilots are for, is it not?"

"As you know, ASW is the job of detecting, locating and, if instructed, destroying hostile submarines. To detect and locate the target, sensors are used. The searchlight used on the

*In the dimly lit VP-56 hangar at Patuxent River, Buno 156523 stands boldly with a friend.*



earlier P-3's has been replaced by a low-light-level television system and the magnetic anomaly detector used to detect disturbances in the earth's magnetic surface (i.e. the metal hull of a submarine) has been improved so the target can be pinpointed prior to the attack. A new reconnaissance camera has been installed in 156523's nose in addition to the existing one located in the after section of the fuselage.

"I provide the display of these sensory devices in addition to selecting sonobuoy receivers and computing Julie ranges and fixes."

"The computer will give you an inventory and status of all the different weapons on board the airplane."

"Right. And it is an impressive array of weaponry, gentlemen. The P-3C can carry everything from air-to-surface missiles to torpedoes. With the information that I have received and stored, I can run a check on my inventory, select the weapons appropriate to the mission, program and release the weapons automatically at a predetermined point — insuring, of course, a high hit probability — and then inform one of my assistants in the after compartment, the ordnance-man, to replenish my inventory from on board stores, of which I also keep track."

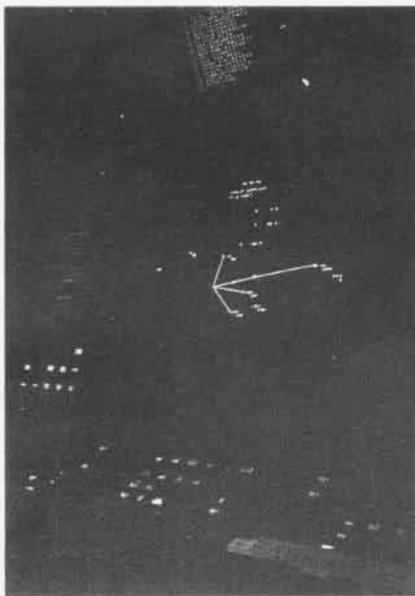
"The plane commander has the option of overriding the automatic firing sequence," Gray offered.

The computer momentarily fell silent.

"The main difference between the P-3C and the earlier P-3's is avionics," U continued.

"My role has been described, but to perform my mission, the problem of my maintenance must be met. Again, I do my part by performing tests and failure diagnoses on myself as well as on the other equipment. I also give those on board my status via a program checkout indication."

A mysterious click is emitted from inside the console and the computer's circuitry flickers momentarily. The ambient green glow of the MPD scope fills with cabalistic-like symbols — the teletype breaks into a staccato chatter. Engulfed in light and sound, we stand mesmerized in front of the "cybernetic" creation.



A view of the multi-purpose display is seen above. From this station the TACCO makes tactical decisions from the information supplied by the computer. Above right, Ltjg. Jim Gray describes the P-3C and its capabilities. At right, the computer-fed ASA-66 tactical data display provides the pilot and copilot with sonobuoy positions, fly-to points, aircraft position, and other tactical information.

"Bum scoop," the soft voice mutters, "it almost blew my mind, figuratively speaking, of course."

We nodded in sympathy.

"Kindly forgive my outburst; I am ready to continue now.

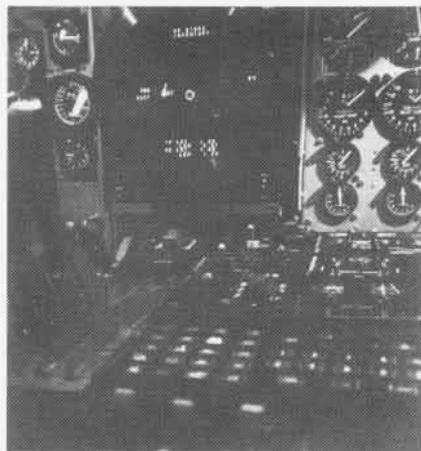
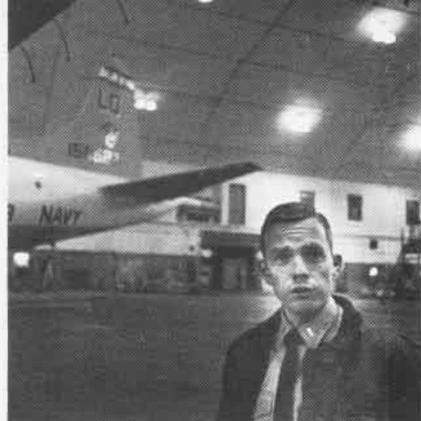
"It might appear that I do most everything aboard the aircraft; this is not true. *Man* makes the P-3C work. By recording information, storing it, and giving it when needed, I allow the TACCO and the crew the time they need to perform a function for which I am not programmed — the process of sound and timely decisions."

"When being relieved on patrol by another P-3C, we can establish a data link with the relief aircraft and transfer all of the information stored in the computer in a matter of a few milliseconds," Lt. Gray said.

"No problem at all," said the computer.

Gray went on: "As you can see, the P-3C is a gentleman's airplane." Moving aft, Gray points out the well-equipped galley with its dinette area, coffee pot, stoves and bunks.

"Creature comforts are quite neces-



sary to insure crew endurance in view of our extended mission capability," the computer said. "The interior has been designed to be spacious, and the location of equipment has been well planned. We even have an electromechanical ladder installed in a track. I think that is all, gentlemen, but if you can remember one thing about this aircraft, remember this: I do not control. I assist. That is all. Thank you." Click.

The hum of the aircraft seemed louder.

"Any questions?" Lt. Gray queries.

"You seem to know the aircraft pretty well, lieutenant."

"You have to like it to really know it well, and I like it."

"Have you always wanted to be a Naval Aviator?"

"Ever since I was a kid."

"What was your major in college?"

"Journalism."

We blushed with pride and left Patuxent River. As we drove in silence toward Washington, we listened in vain for the voice of the computerized fuel injection system.

## ...and, from another era, last P-2 phase-out begins—VP-23 transitions to Orions



Commander Raymond L. Christensen, VP-23 commanding officer

Going to the P-3 from the P-2 is like going from a Model T to a Cadillac. The *Orion* is a high-altitude, high-performance airplane. It has a great deal of power: it's the first airplane I've ever flown which has more power than is really necessary to fly. It's just a fantastic aircraft," Commander Raymond L. Christensen told *NANews* only two days before he assumed command of VP-23.

As executive officer of the Brunswick, Maine-based, *Neptune* squadron, Cdr. Christensen had flown to NATC Patuxent River — where VP-23 crews are transitioning to P-3B *Orions* in the East Coast replacement air group squadron, VP-30 — on squadron business, when he was interviewed.

When the transition is complete (scheduled for early this summer) the era of the *Neptune*, which spans some 20 years of ASW flying, will end. Over the past few years, SP-2H's have gradually replaced older *Neptunes* in the reserve training program and, while nearly all of the active VP squadrons have transitioned to *Orions*, others — including VP-23's sister squadron, VP-21 — have been decommissioned.

With its long and varied history, the *Neptune* has etched a place for itself in the lives of the men who flew it.

"I think, to a man, all the P-2 pilots are happy to go into the *Orion*. It's really quite a thrill. Of course, there is a lot of nostalgia about the old P-2. We rather hate to see it go. The *Neptune* is a fine airplane but the *Orion* is an easier airplane to fly, much more

sensitive, much faster, and it has a lot more power," Cdr. Christensen said.

VP-23's transition began last November, shortly after the squadron returned from a Mediterranean deployment where a VP-23 plane flew the *Neptune's* last recorded operational ASW mission.

"About a year and a half ago, VP-23 was selected to be decommissioned and went through a stand-down process, losing about half of its officers and enlisted men," the commander said. "Then the decision was reversed and VP-23 remained on active duty. We built the squadron back up and deployed last June for a very fine four-and-one-half-month tour in Sigonella, Sicily."

During the deployment, VP-23 operated with U.S. and NATO forces in fleet exercises and was responsible for keeping watch over the largest concentration of Soviet submarines and warships ever assembled in the Mediter-

anean in recent years.

With the transition, the squadron's complement of approximately 350 officers and enlisted men will remain basically the same. The talents within the aircraft crews will vary to cope with the new equipment and engines in the *Orion*.

A *Neptune* crew has four officers and seven enlisted men whereas an *Orion* crew has four officers and eight enlisted men. The major difference is in crew stations and assignments.

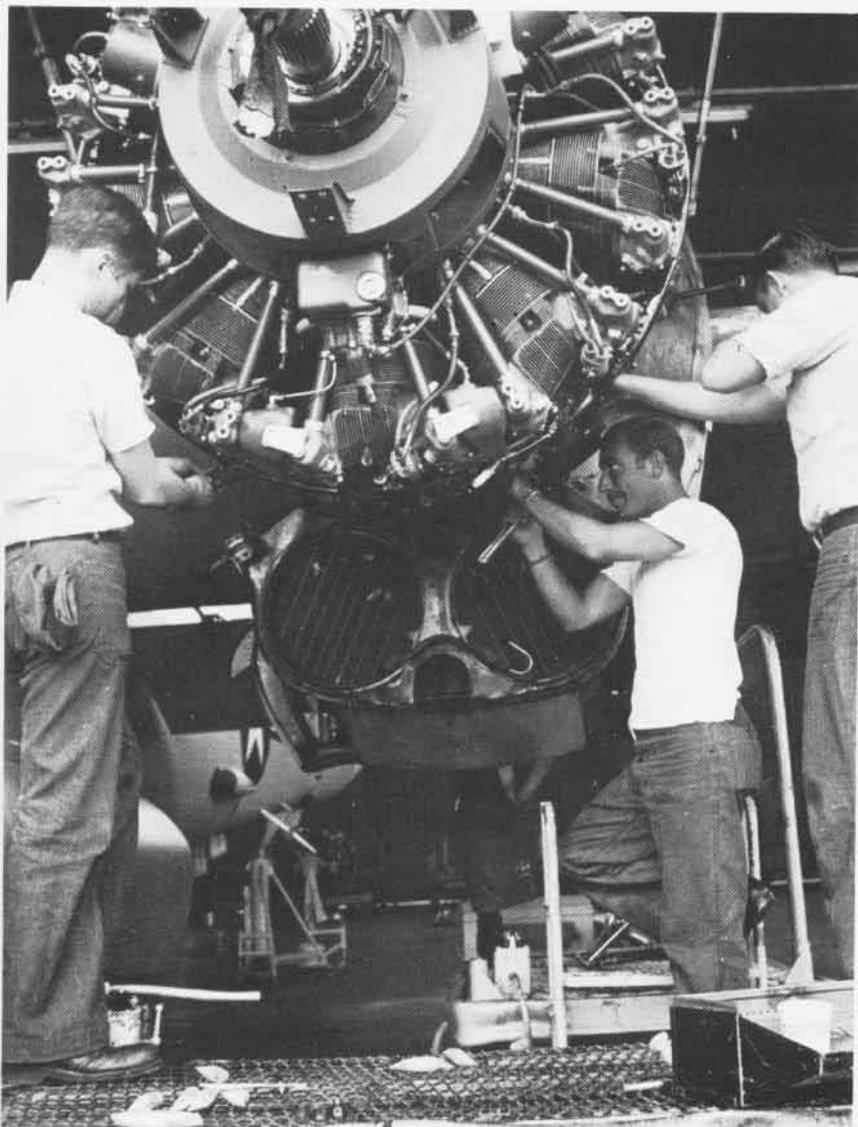
VP-23 has been based at NAS Brunswick since May 1952, deploying to bases in Central and South America, the Caribbean, Newfoundland, Greenland, Iceland, Northern and Southern Europe, Africa and the Middle East.

With a reputation as one of the Atlantic Fleet's top squadrons, VP-23 won the Battle Efficiency E for three consecutive years — 1963-1965 — in one of the most unusual instances in Naval Aviation history.





A VP-23 Neptune flies surveillance over a Soviet destroyer in the Mediterranean, left. Neptune 2,000 Hour Club members of VP-23 above, display certificates from Lockheed.



VP-23 mechanics, above, repair one of Neptune's reciprocating engines in the squadron hangar at Brunswick. Lower left, in a symbolic picture, a P-3 noses a P-2 out of the new era in ASW.

## The Tale of the Truculent Turtle

By JOC S. R. Moore

The Navy ended an era last fall when a P-2 Neptune completed its final Mediterranean patrol.

The Neptune, often called the "workhorse of Naval Aviation," has set some surprising records since its first flight in 1945.

In 1954, a P2V lost one of its two engines between Hawaii and California but continued to a 1,200-mile record for single-engine flight by a multi-engine aircraft.

Older Navy men still recall the year 1946 and the fabulous flight of the *Truculent Turtle*.

The *Turtle* flew non-stop from Perth, Australia, to Columbus, Ohio. The 11,236 mile trip took 55 hours and 15 minutes and averaged 203.4 miles an hour despite a heavy load of fuel, four men and a kangaroo.

The crew of the flat-sided Lockheed said they were "a little disappointed that we weren't able to go on to Washington and maybe stretch it to Bermuda."

The *Turtle* had 100 gallons of fuel left when it landed, but the crew "didn't feel it was worth landing in a cow pasture." They already had the record.



# SELECTED

## USAF Honors Captain Wyatt

A Naval Reserve officer has received the Air Force Commendation Medal in recognition of his service in counseling military personnel from all services seeking a civilian "second career" following retirement.

Captain Frederic A. Wyatt, USNR, senior naval Reservist at NAS Los Alamitos, received the award prior to conducting a career counseling lecture at Andrews Air Force Base, Washington, D.C. Making the presentation was Brigadier General David V. Miller, USAF, Deputy Chief of Staff/Personnel, Air Force Systems Command.

Captain Wyatt serves as the representative of the Chief of Naval Personnel in providing pre-retirement counseling to military personnel. The counseling program, Operation *Highline*, is conducted under the sponsorship of the Navy League of the United States.

In making his presentations, Captain Wyatt has traveled from Hickam

AFB, Hawaii, to the Naval Base, Key West, Fla., and from NAS Brunswick, Maine, to the Marine Corps Base, Camp Pendleton, Calif., interviewing, counseling and advising military personnel.

## NAF Detroit Commissioned

Recalling a great past and envisioning an even greater future, Captain George Koen, commanding officer, addressed remarks to Navy and Marine personnel assembled to witness the official commissioning ceremonies of the Naval Air Facility, Detroit.

In keeping with tradition, a Navy color guard raised the national flag over the new facility, giving it official status.

Earlier in the afternoon, a smaller ceremony officially closed NAS Grosse Ile, which had been operational since 1927.

As Grosse Ile closed, so closed a memorable period of Naval Aviation

history. But its short runways could no longer accommodate many types of aircraft, particularly the modern jets. The pride of the new facility will be a Reserve squadron of A-4B *Skyhawks*.

## Reservists Get Key to City

Petty Officers Stanley Ellison and Jimmy Wooten recently were presented with the keys to the city of Memphis by Mayor Henry Loeb, along with a certificate of appreciation from the Memphis Chamber of Commerce for their humanitarian spirit in quickly coming to the aid of an automobile accident victim.

When Mrs. Gene Kinney of Memphis, Tenn., lost control of her compact car while leaving an expressway, the vehicle rolled over several times before coming to rest, trapping her inside. Though several cars passed the accident scene, none stopped to offer assistance; that is, none until Ellison and Wooten arrived and freed Mrs.



**CAPTAIN** George Koen, C.O. of NAF Detroit, delivers the colors to PN2 Norbert Graham at commissioning ceremonies of the new Reserve station. Located at Selfridge AFB, it replaces NAS Grosse Ile.



**AOC** Walter J. Michaelin, on active duty with VS-34N3 at NARTU Lakehurst, found time to fit a six-year re-enlistment into his busy schedule. Chief Michaelin already has 18 years of military service.

# AIR RESERVE

Kinney from her car.

In addition to civilian recognition, the two Reservists also received letters of commendation from Captain Glen H. Wallace, commanding officer of NARTU Memphis.

## Historians Visit NAS New York

Historians, famed flyers and aviation buffs concerned with the historical relations between Floyd Bennett Field and the borough of Brooklyn in which it lies, gathered recently at NAS New York which now occupies the old municipal airport.

After a luncheon, the group was shown an original newsreel film of the NC-4, the first aircraft to cross the Atlantic. The NC-4 left on its record-making flight from the former Rockaway Naval Air Station which was

located directly across Jamaica Bay from Floyd Bennett Field.

The main speaker, Dr. James Kelly, borough historian of Brooklyn, spoke about the welcome given "Wrong Way" Corrigan on his return to Brooklyn following his flight from Floyd Bennett.

Additional commentary on the field's past was provided by many others who attended the meeting and who had participated in historic events at what is now NAS New York.

## A-4C Joins CNAResTra Aircraft

Lt. Paul B. Carr, VA-20G2 at NARTU Alameda, opened a new phase in Naval Air Reserve attack aviation when he made the first Reserve training command flight in the A-4C.

With the introduction of the later

model *Skyhawk* at Alameda, the earlier A-4B began its phase-out. The newer aircraft is designed to carry both conventional and nuclear ordnance.

## F-8K at Dallas

VMF-112, NAS Dallas, Texas, is the first Marine Air Reserve Fighter Squadron to receive the F-8K *Crusader*.

The F-8K's are older model F-8's that have been remanufactured and modified to meet Marine Corps and Navy requirements through 1975. The new configuration includes redesigned center and outer wing panels and improvements in the landing gear and armament system.

VMF-112 was also the first Marine Air Reserve fighter squadron to receive the F-8A *Crusaders*, in 1963.



*NARTU Washington personnel portray the responsibility of the 18 Naval Air Reserve activities across the U.S. to recruit and process applicants for aviation officer programs. The task requires team*

*effort beginning with the C.O. and involving recruiting, PAO, medical and clerical personnel. Visits to colleges by information teams and indoctrination flights for students aid in attracting applicants.*

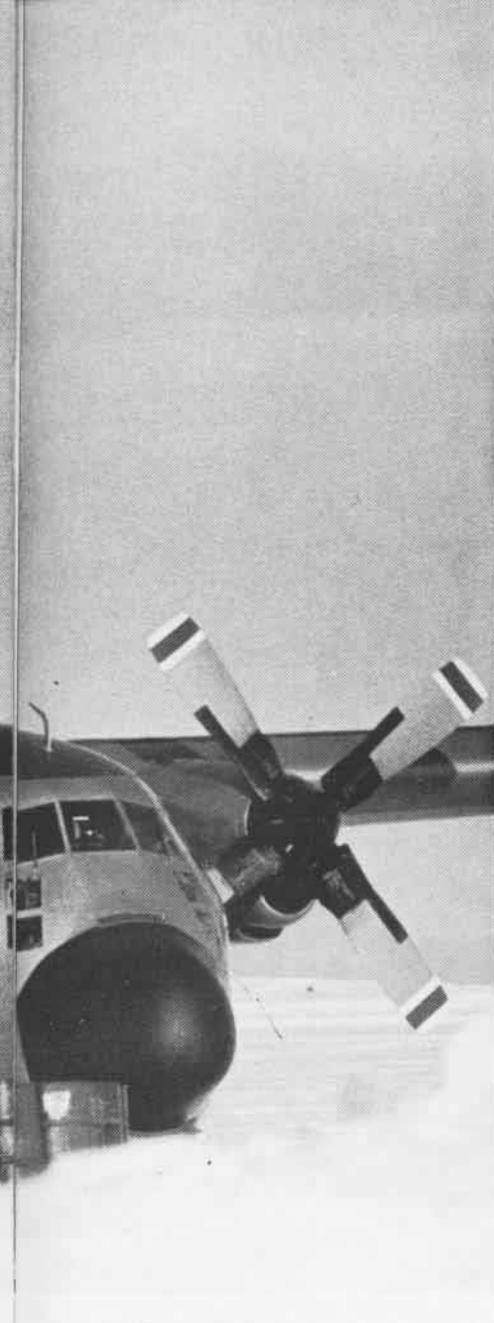


Refueling a C-130 in Antarctica:

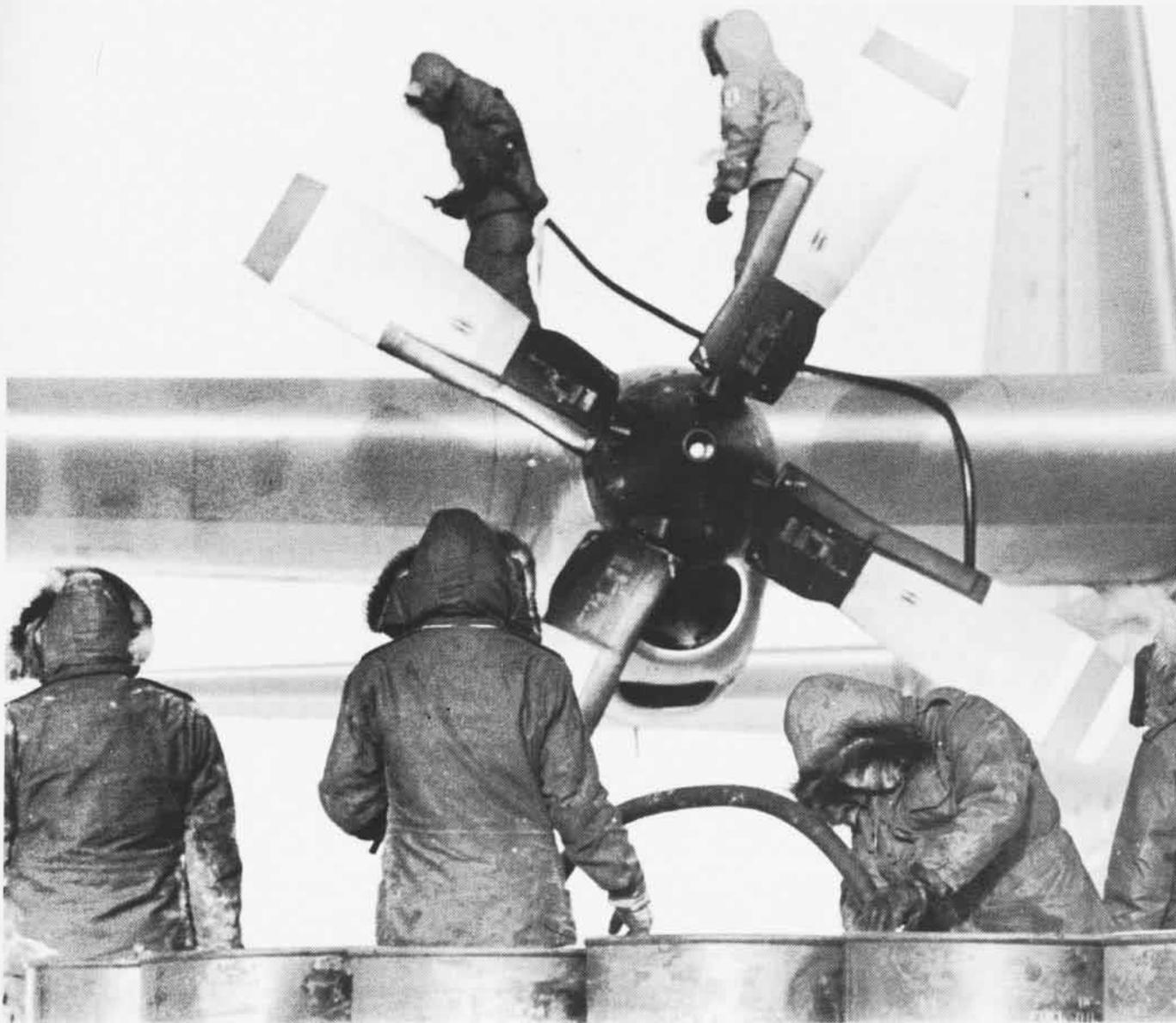
# A Routine Job Made Difficult by the Elements

A Photographic Essay  
by PHC B. M. Andersen

The C-130 Hercules has been around since 1952, when the Air Force signed a contract with Lockheed to begin development. Over the past 13 years, the big, four-engined turboprops have gained a reputation as workhorses in the Navy, Air Force, Marine Corps and Coast Guard. They deliver huge cargoes anywhere in the world, can be easily adapted to electronic surveillance missions, and their long endurance makes them good search and rescue planes. Perhaps one of the most unique missions assigned to the Hercules is in Antarctic Development Squadron Six, where the sturdy and reliable "Hercs," fitted with skis for landing on snow and ice, have become legend for their mid-winter aerial mercy flights to the ice: flying cargoes and crews to all points of the south polar region and maintaining peak readiness in some of the most adverse weather conditions in the world—in







Antarctica—where the routine is made difficult by the elements. In this photographic essay, the photographer illustrates the problems of refueling an LC-130 at the South Pole. At Byrd Station, one of the White Continent's far-reaching outposts, some 800 miles from McMurdo, a Navy line crew gasses a Hercules from 50 gallon drums which were flown in on another plane—after their arrival at McMurdo by icebreaker. With an average temperature of 57 degrees below zero, no plane can sit idle very long. The crews must be careful with the equipment and take precautions not necessary in warmer climates. But like all the other places in the world, despite the extreme cold, the fuel gangs go about their jobs swiftly, keeping the old workhorses flying, day after day, between McMurdo Station and the far reaches of the continent.

# at Sea with the Carriers



## ATLANTIC FLEET

### *Yorktown (CVS-10)*

Thousands of Kiel residents stood in the bitter cold waiting to tour *Yorktown* when she visited that German city recently.

Local police authorities estimated 70,000 persons jammed the access streets leading to *Yorktown's* pier. After some 5,000 visitors had been accommodated, the chief of police requested that visiting be concluded since available police were unable to control the great crowd mobbing the pier, causing a serious traffic jam in the city's streets. Many *Yorktown* senior officers expressed the view that this must have been one of the largest crowds ever to attempt to visit a U.S. warship in a single day.

The previous day a German grandfather and his young grandson traveled 180 kilometers to visit the ship but arrived one day early. A naval officer,

departing the ship, noticed the crying child and offered his assistance. The resulting tour of the ship, accompanied with refreshments, provided the U.S. Navy with two more enthusiastic supporters.

Rear Admiral J. Lloyd Abbot, Jr., ComCarDiv-16, and Captain W. F. Chaires, *Yorktown's* commanding officer, expressed pleasure at the enthusiasm of the visitors and the hospitality shown by the city to the *Fighting Lady's* crew.

### *Saratoga (CVA-60)*

*Saratoga* crewman AN James V. D'Ambrosia found out the hard way where the members of HC-2 earned the name "Angels of the Fleet."

D'Ambrosia, wearing a flight deck headset that muffles sounds, failed to hear an F-4 *Phantom* turning up, and he and the blast from the engines met on an elevator aboard *Saratoga* during flight operations. Things happened so fast then that he is not positive about

**USS JOHN F. KENNEDY (CVA-67)** and *USS Joseph P. Kennedy (DD-850)* are the subject of this painting by naval artist Arthur Beaumont who used Navy ship plans and sketches made at Newport News to create the picture. The original hangs in Allen Center, at the Naval Base, Long Beach, Calif. A color print was presented to Caroline Kennedy at the JFK's commissioning in 1968.

what happened, but the young airman thinks a foot hit once before he went over the side. He also grabbed for a safety net but the force which sent him over was too strong, and he was ripped from his brief handhold and fell into the sea.

A few minutes later, D'Ambrosia was aboard one of the *Seasprites* flown by HC-2's detachment assigned to *Saratoga*. The intervening minutes, however, were a nightmare to D'Ambrosia who later said he had thought it was "one of those things that can't happen to me."

## *Boxer (LPH-4)*

*Boxer* was decommissioned on December 1. In its 25 years of service, the 888-foot amphibious assault ship claimed several records:

First carrier to use jet aircraft, first ship to launch guided missiles in combat, first ship to launch and recover a night helicopter amphibious assault force, first amphibious assault ship to recover spacecraft, and first carrier to transit the Suez Canal four times in a year. The *Busy Bee* also claims to have steamed more miles than any other ship, transferred more ammunition at sea in one hour, landed more helicopters, and launched more missions during the Korean conflict.

Built in Newport News, Va., too late to fight in World War II, *Boxer* was commissioned April 16, 1945: the fifth American warship to bear that name.

## *Wasp (CVS-18)*

USS *Wasp* turned 26 years old recently. The eighth ship of the line to bear her name, she recently completed a ten-day at-sea period in the Atlantic, during which an ORI was conducted.

Captain John F. Gillooly is the ship's commanding officer.

## *John F. Kennedy (CVA-67)*

Two high ranking American officials in Europe recently visited *John F. Kennedy* for a close look at the NATO striking force.

Flown aboard as the carrier steamed north of Sicily were the Honorable Kenneth Rush, U.S. Ambassador to West Germany, and Admiral W. F. A. Wendt, Commander-in-Chief, U.S. Naval Forces, Europe. They were accompanied by Vice Admiral David C. Richardson, Commander Sixth Fleet.

The three were also accompanied by several ranking West German officials, including Vice Admiral Karl Hetz, Commander-in-Chief of the Fleet of the Federal German Navy; Walther L. Kiep, member of the West German Parliament from Frankfurt; Dr. Guenther Bode of the Ministry of

Defense; Dr. Ulrich Sahn of the Federal Chancellor's office; and Dr. Friedel-Bruno Gutt, member of the Hamburg Senate.

The group was met by Rear Admiral Jack M. James, ComCarDiv-2, and Captain Julian S. Lake, *Kennedy's* commanding officer.

The visit to *Kennedy* included a tour of the ship as well as briefings on her capabilities and mission.

## *America (CVA-66)*

*America* returned to Norfolk recently after nine months of overhaul and a three-week shakedown cruise. This marks the end of the carrier's first extended at-sea period since entering the Norfolk Naval Shipyard, Portsmouth, Va., last January.

During the nine-month overhaul, *America's* machinery and equipment underwent extensive repairs and modifications. The two major projects undertaken were a modernization of the ship's weapons handling system and the installation of a highly efficient fire-fighting system. Work was performed by shipyard workers and *America's* personnel and was completed ahead of schedule.

# PACIFIC FLEET

## *Princeton (LPH-5)*

During the final months of 1969, *Princeton* undertook her last operation before deactivation when she deployed to the Aleutian Islands in support of the Atomic Energy Commission's nuclear test on Amchitka Island.

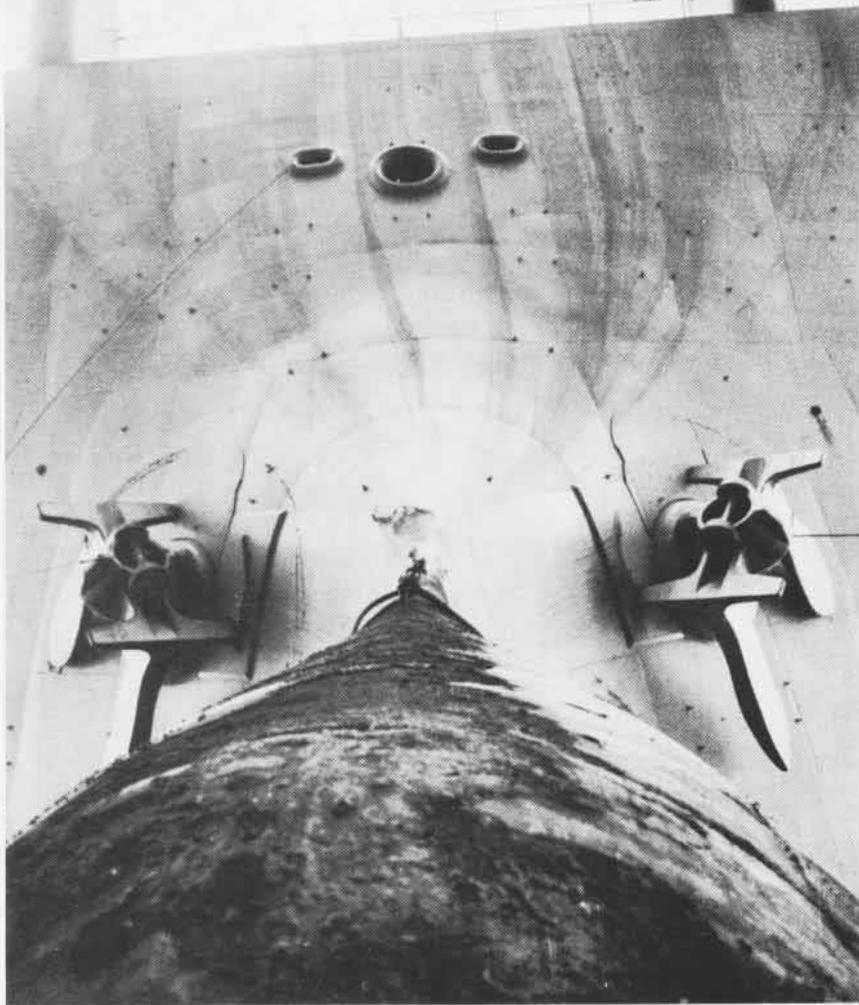
Deactivated in January, *Princeton*, commanded by Captain Franklin T. Stephens, found her last task to be one of the most challenging and unique in her 24 years of service.

She was the home for over 200 civilian Amchitka evacuees brought on board by the embarked helicopter squadron detachment from HMM-163. At the time of the underground nuclear detonation, LPH-5 was on station seven miles off the coast of Amchitka Island, some twenty-five miles from ground zero.



**HIGH ABOVE** *Saratoga*, a *Seasprite* of HC-2 Det. 60 stands ready for rescue if called upon. AN *James V. D'Ambrosia* learned its nickname the hard way when he fell overboard and was rescued by the Fleet Angel in minutes. A VAQ-33 plane captain registers his opinion as an F-4B streaks past, below. The last VAQ-33 Spads were embarked onboard *Kennedy* for their twilight cruise.





**AN UNUSUAL** view of *Kitty Hawk*, above, as she undergoes overhaul at Puget Sound, Wash. Marine LCpl. Rippert visits 15-year-old Fuchi Yashitake after donating a pint of blood to the injured boy, left.



### *Bennington (CVS-20)*

*Bennington* is undergoing decommissioning at the Puget Sound Naval Shipyard as a result of the recent military budget cutback. She entered drydock for hull preservation work. All supplies were offloaded, and berthing and engineering spaces have been preserved.

*Bennington*, commissioned on August 6, 1944, was deactivated in January.

### *Kitty Hawk (CVA-63)*

Captain Earl F. Godfrey relieved Captain J. F. Davis as commanding officer of *Kitty Hawk* during cere-

monies aboard the ship recently.

*Kitty Hawk* is presently undergoing a nine-month overhaul at the Puget Sound Naval Shipyard, Bremerton, Wash. The overhaul is scheduled for completion in July.

### *Hancock (CVA-19)*

VA-55 has made all the round-number landings on the *Hancock* recently. Lt. Paul Van Houten made the 129,000th and, before that, Commander Lawler trapped for the 128,000th landing.

*Hancock* is in the midst of her fifth combat deployment to Vietnam. She finished her second period in the Tonkin Gulf in October and visited Sasebo, Japan, two times before returning to the line.

It cost Marine LCpl. David A. Rippert a pint of blood and his green barracks cap, but the Marine is sure he got what he wanted — friendship with a Japanese family.

While *Hancock* was visiting Sasebo, Rippert answered a call from the ship's sick bay for type AB blood. The ship left the southwestern Japan seaport two days later, and Rippert thought little more of the donation.

A week later, *Hancock* returned, and Rippert was invited to meet the person he had helped, a 15-year-old boy whose spleen had been ruptured playing soccer.

The meeting between the 20-year-old Marine and the youth, Fuchi Yashitake, took place at Fuchi's bedside in Sasebo Municipal Hospital. Through an interpreter, Rippert learned that his blood and that of Fuchi's father has been the only AB negative type available when it was needed.

During their hospital meeting Rippert told his new friend that he was now part Marine through the transfusion. Then he placed his green barracks cap on Fuchi's head to illustrate his meaning.

As the Marine walked through the hospital front door after the visit, he was loaded down with flowers, a gift, and, most important to him, an invitation to dinner at the Yashitake home the next time *Hancock* returns to Sasebo.

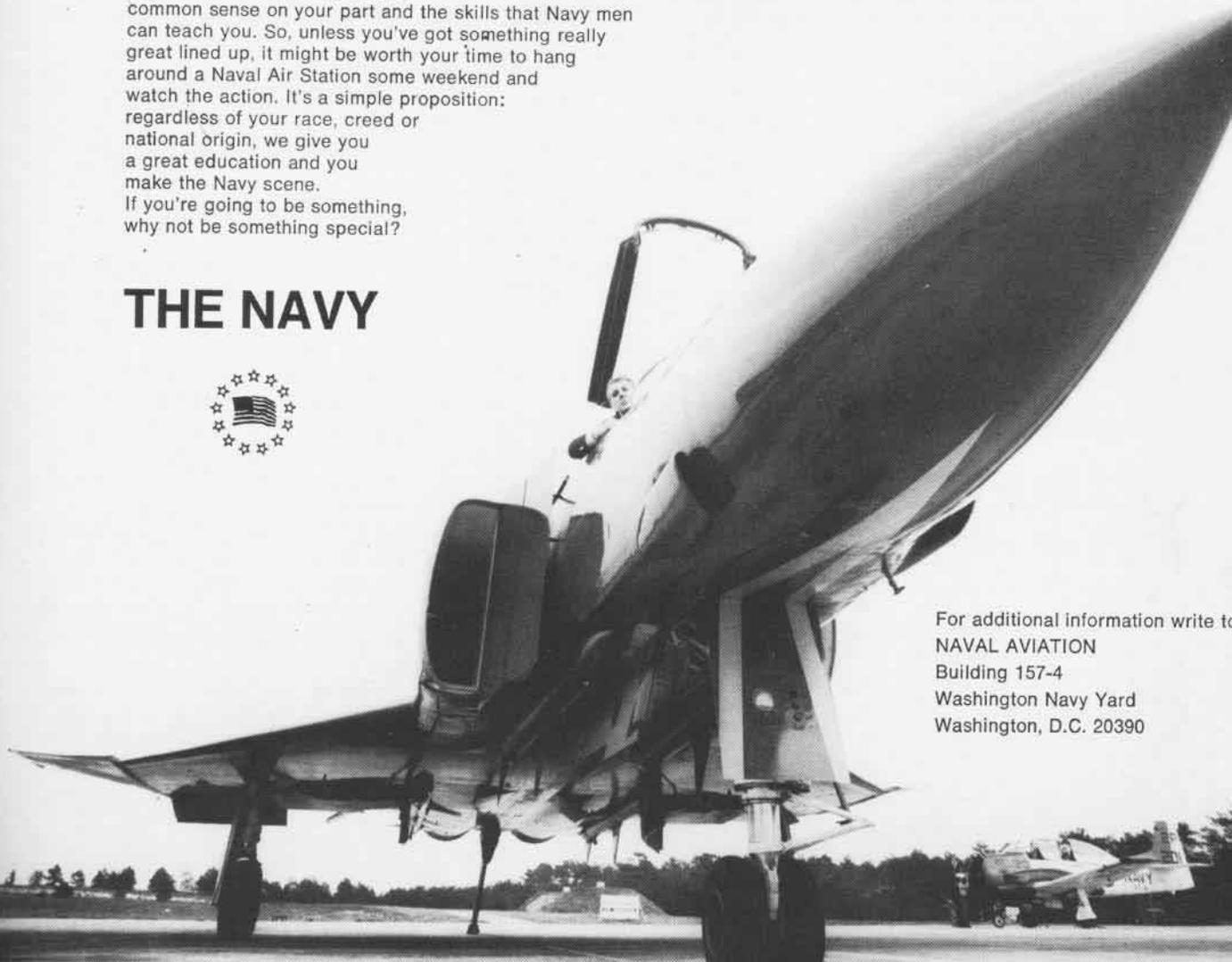
# It does 0 to 150 in 2.1 seconds. So we don't hand over the keys to just any kid that comes along.

And if you really hit the floorboard it will do 1600 miles an hour. Almost twice as fast as your voice can reach someone sitting in the same room. It takes more than a nice sense of balance and a healthy ego to fly one. It takes a good education, a desire, and common sense on your part and the skills that Navy men can teach you. So, unless you've got something really great lined up, it might be worth your time to hang around a Naval Air Station some weekend and watch the action. It's a simple proposition: regardless of your race, creed or national origin, we give you a great education and you make the Navy scene. If you're going to be something, why not be something special?

## THE NAVY



For additional information write to  
NAVAL AVIATION  
Building 157-4  
Washington Navy Yard  
Washington, D.C. 20390



# SNOWFLAKES



SNOW, WHETHER ON THE FLIGHT DECK OR RUNWAY, IS NO MORE THAN THE CRYSTALLIZATION OF WATER VAPOR IN THE AIR INTO GEOMETRICAL FORMS.

WHILE CLEANING SNOW OFF YOUR AIRPLANE, NOTE THAT THE FUNDAMENTAL FORM OF SNOW-FLAKES IS HEXAGONAL. ALTHOUGH SIMILAR IN DESIGN, NO TWO CRYSTALS HAVE EVER BEEN FOUND TO BE IDENTICAL.



SNOWFLAKES ARE USUALLY MADE UP OF CRYSTALS OR CRYSTAL FRAGMENTS WHICH, IN STILL AIR AND ON RARE OCCASIONS, HAVE GROWN TO AS MUCH AS TEN INCHES IN DIAMETER WHILE FALLING.

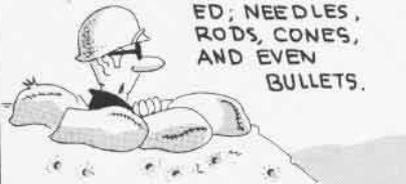
FALLING SINGLE CRYSTALS ARE EXTREMELY RARE EXCEPT IN INORDINATELY COLD REGIONS SUCH AS ANTARCTICA.



THE ACTUAL SIZES OF THE ICE CRYSTALS DEPEND UPON THE ATMOSPHERE THROUGH WHICH THEY ARE FALLING; HOWEVER, THEY NORMALLY RANGE FROM 3/1,000 OF AN INCH TO 1/5TH OF AN INCH.

*offman*

IN ADDITION TO THE HEXAGON-SHAPED CRYSTALS WHICH MAKE UP THE SNOWFLAKE, OTHER CRYSTAL FORMS HAVE BEEN OBSERVED; NEEDLES, RODS, CONES, AND EVEN BULLETS.



active duty. If you know anyone who would like to correspond with me, please give him my name and address. If you do not know of anyone, please put my name and address in *Naval Aviation News*. Thank you very much.

Bill Brandt  
P.O. Box 41  
Stetts City, Mo. 65756

## Kudos

Being associated with a group as dynamic as Naval Aviation, it is natural that progress would create change. How a publication as perfect as *Naval Aviation News* could improve is hard to believe.

Once again, I would appreciate hearing from your vast, worldwide readership in locating the following: (1) A Grumman F6F *Hellcat* tailhook, and (2) any issues of *NA News*, 1947 and prior. My thanks.

Please keep the brown shoe bible at her best!!

Bude Donato  
16800 Saticoy  
West Van Nuys, Calif. 91406

## 'Red Rippers' Claim a First Pilot Has Three Sets of Navy Wings

The *Red Rippers* of VF-11, NAS Oceana, Va., have what they believe to be a first. Lt. Gary N. Cook is believed to be the only man in the Navy with three sets of Navy wings. He has been designated an ASW aircrewman, a Naval Aviation Observer (RIO) and is now a Naval Aviator.

Lt. Cook entered the service in 1961. He earned his first set of wings in December 1962 as an ASW aircrewman in the SP-2E *Neptunes* of VP-28. After 11 months and 500 flight hours, he became an Officer Candidate Airman (OCAN) at NAS Pensacola, Fla. In October 1964, Lt. Cook received his commission as an ensign and his second set of wings. He reported to VF-74 as an RIO. In April 1966, he entered flight training at Pensacola. In February 1968, Gary completed his second tour with the replacement air group, VF-101, as a Naval Aviator and reported to VF-11.

During his seven years in Naval Aviation, Lt. Gary Cook has accumulated almost 1,800 flying hours, nearly 900 in the F-4B *Phantom*, and he recently made his 300th arrested landing aboard USS *Forrestal*.

# Letters

## Kingfisher?

The USS *North Carolina* Battleship Commission recently procured from the Air Museum of Canada parts of a wrecked OS2U *Kingfisher* which had been recovered from Vancouver Island where it had lain for many years.

The Commission wishes to rebuild the plane for exhibition on the fantail catapult area of the battleship at Wilmington, N.C. Some of the wrecked plane's parts are miss-

ing, including the right wing, wing pontoons and instrument panel.

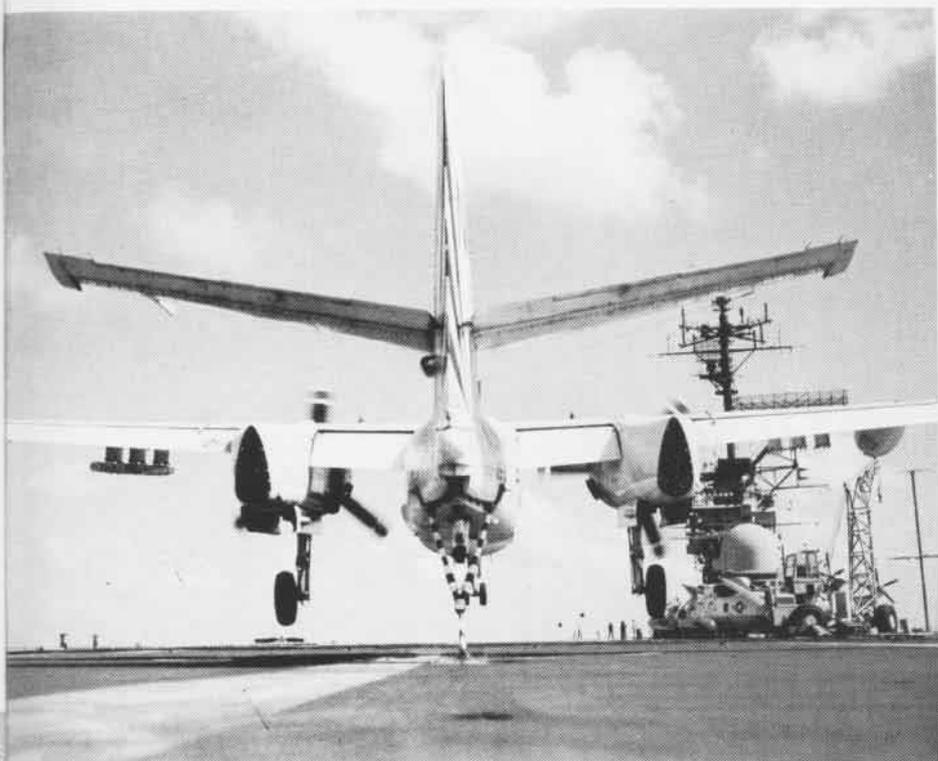
Anyone knowing of the whereabouts of such parts in usable or repairable condition is requested to contact the Commission at Wilmington or the undersigned.

Arthur L. Schoeni  
LTV Aerospace Corporation  
P.O. Box 5907  
Dallas, Texas 75222

## Any Pen Pals?

I am a 15-year-old high school student and am very interested in Naval Aviation. I plan to become a Marine Corps Aviator. I would like to correspond with a Naval Aviator on

# EDITOR'S CORNER



## TOP PHOTOS OF 1969

Selecting a winner for the third annual Best Picture Award was again difficult. We ran more pictures this year than in any previous year in the history of *Naval Aviation News* and the content and quality of submissions continue to improve.

About 12 pictures emerged as the "Best of '69." The choice had to be narrowed down to three. The final choices were difficult. However, after it was over, three had accumulated more votes and were easier to recall than the others.

PHCM Walter M. Cox's picture of an S-2 recovery aboard *Hornet* was a unanimous choice for the Top Picture Award. It is one of a sequence shot with a motorized camera fitted with a wide angle lens. Chief Cox presently is serving at the Naval Exam Center.

PH1 Chip Maury was a close second

with his picture of the *Leap Frogs*, UDT skydiving team, during an exhibition in California. Maury, himself a skydiver, shot the picture while he was in UDT-11. He is now attending the Navy photojournalism course at Syracuse University.

"A Bronco Pilot is Briefed," one of a series we ran in September, won third place honors for PHC Arthur Hill of ComNavForV PAO. Hill's excellent photographic essay on the Navy's only light attack squadron operating in Vietnam received wide coverage.

Chief Cox will receive a plaque for *Naval Aviation News*' "Best Picture of 1969," while Hill and Maury will be presented certificates of merit.

Our congratulations and thanks to these photographers and the many others who continue to send us better pictures of Naval Aviation.



ONE OF 71 GRADUATES of the Navy's Syracuse photojournalism program has a claim to fame of a different nature. PHC B. M. Andersen of the Atlantic Fleet Combat Camera Group travelled pole to pole during 1969 as he practiced his craft. In April, while aboard *USS Whale* (SSN-638), he was at the North Pole, and just six months later, in November, he was plying his trade at the South Pole.

Chief Andersen is a regular contributor to *NA News*. His most recent photo essay, dealing with the problem of refueling an LC-130 in the Antarctic, appears on pages 30-33 of this issue.





## SQUADRON INSIGNIA



The origins of VF-14 go back almost to the beginning of Naval Aviation. Its record of continuous active service began in September 1919, making it over 50 years old and the oldest active squadron in the Navy. Since commissioning, the 'Tophatters' of VF-14 have flown 21 different types of aircraft, have had their designation changed 14 times, operated from 16 different aircraft carriers and several battleships, and have had 46 commanding officers.

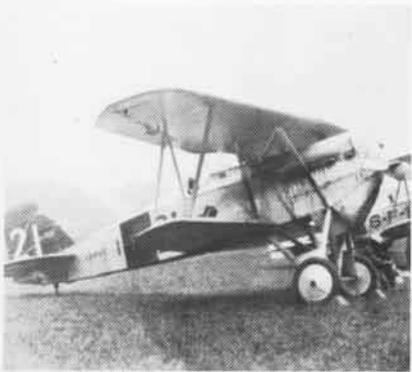
The squadron which is home-



based at NAS Oceana, Virginia, is commanded by Commander Kenneth B. Stafford.

In the photograph above are

the F-4B Phantoms which the squadron has had since 1963. On the opposite page, clockwise, the Tophatters' first flying C.O., Captain H. C. Mustin, as he appeared in 1919; a squadron photo taken aboard Saratoga in 1928; F2B's flown by the Tophatters, 1927-1930; an SB2U flown during squadron's VB days just before WW II; the squadron received its first F4B in 1932; the two place F9C-4 was flown in 1930; in 1927 the FB-5 was the Tophatters' aircraft; and the TS-1 was used in 1923.



NAVAL AVIATION

# NEWS

