# NAVAL AVIATION NEWS

45th Year of Publication

AUGUST 1964

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# MARINES BRANCH OUT IN 'PINE TREE'

**Land, envelop, assault and neutralize! Marine infantrymen debark from helos during the vertical envelopment stage of Operation 'Pine Tree' at Camp Pendleton, Calif. 'Pine Tree' was the 1964 version of the brigade-size operation in which West Coast air and ground join annually. Each exercise is strenuous and realistic. Despite the fact that this year's operation involved 11,000 Marines, there were no serious casualties. 'Pine Tree' was a safe and productive exercise, according to BGen. E. H. Hurst, MEB Commander.**

## ■ COVER

Charles F. Goodline, PH3, photographed Tom Daines, AN, working on one of the status boards aboard the USS Saratoga (CVA-60). Read how men like Daines are trained at the Naval Air Technical Training Center, Glynco, Georgia, on pp. 19-23.


# NAVAL AVIATION NEWS

Selected BEST INTERNAL PERIODICAL 1963-64 by Federal Editors Assoc.

FORTY-FIFTH YEAR OF PUBLICATION AUGUST 1964


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# NAVAL AVIATION NEWS

## Antarctic Emergency is Met

### VX-6 Air Evacs Man in Mid-Winter

A VX-6 ski-equipped C-130 *Hercules*, piloted by Lt. Robert V. Mayer, made an unprecedented mid-winter flight to McMurdo Station in the Antarctic and successfully evacuated as injured SeaBee.

The injured man, Bethel L. McMullen, BU1, suffered a fractured spine with paralysis of his legs, cerebral concussion and scalp lacerations when he fell from the second floor of McMurdo's firehouse. The accident occurred two days after the mid-winter mark.

McMurdo Station went into isolation last March 5 when the icebreaker USS *Glacier* departed the area. Normally, this isolation is not broken until late September or early October when VX-6 planes commence summer support activities.

The only previous unscheduled break in Antarctic isolation occurred in April 1961 when VX-6 planes air-evacuated Leonid P. Kouperov, an exchange Soviet scientist, who was ill at Byrd Station. At that time of year, there is still a small amount of light to fly by.

The decision to attempt the all-night flying mercy mission to McMurdo was made by RAdm. James R. Reedy, commanding the Navy's Antarctic Support Forces. Two planes launched from their home station, NAS QUONSET POINT, and flew to Christchurch, New Zealand, to await favorable weather conditions. They stopped at Washington, D.C., en route to embark a team of specialists from the Bethesda (Md.) Naval Medical Center.

Only one of the two C-130's proceeded to the ice, the other remaining at Christchurch for back-up. McMullen was taken aboard immediately after the aircraft landed at McMurdo and flown to Christchurch and transferred to a hospital there. Their mission completed, the VX-6 planes returned to Quonset.

**THE ROYAL AUSTRALIAN** *and British Royal Air Forces joined with the U.S. Navy recently in exercises with the Seventh Fleet. In formation are an SP-2H Neptune from Australia, a British Shackleton bomber and an SP-5M Marlin of VP-48 based at Sangley Point. Exercise "Ligtas" was the 27th in a continuing series of joint SEATO military operations since 1956. The Australian aircraft came from Canberra while the British planes flew in from Singapore.*

## John F. Kennedy (CVA-67)

### New Carrier to Honor Late CinC

The latest *Forrestal*-class aircraft carrier authorized and now under construction is to be named USS *John F. Kennedy* (CVA-67). This decision was reached by President Johnson, who made the announcement at the White House in June.

The carrier is being built by Newport News Shipbuilding and Dry Dock Company and will be conventionally powered, displacing 80,700 tons. The *John F. Kennedy* will be the eighth *Forrestal*-class attack aircraft carrier authorized or put in commission by the Navy.

The new carrier will be equipped with a mechanical weapons-handling system that will permit rapid transfer of aircraft ordnance and missiles to the ship's antiaircraft defensive system. This is a major new development in aircraft carrier design.

## Vigilantes in Pacific Fleet

### Deploy Aboard Ranger CVA-61

In June, six sleek new RA-5C *Vigilante* reconnaissance bombers from NAS Sanford, Fla., landed aboard the attack carrier, USS *Ranger*. Thus Reconnaissance Attack Squadron Five (RVAH-5, formerly VAH-5), sporting a new name, a new mission and a new aircraft, became the first unit to deploy at sea, with the RA-5C Mach 2 *Vigilante*, and the first East Coast unit in recent times to deploy aboard a carrier in the Pacific.

In addition to its new mission of tactical reconnaissance, the RA-5C retains the elaborate all-weather bombing system of its predecessor, A-5A,

**THE FIRST** *stained glass window in the Naval Aviation Memorial chapel at NAS Pensacola was dedicated by Capt. William S. Noce, CHC, CNATra and CNABaTra Chaplain, in the presence of 50 members of the Early Naval Aviators Association who sponsored the window. The window depicting the Crucifixion is centered over the entrance to the Chapel. Shown above left to right are: (1st row) A. K. Warren (183), P. J. Byrne (CAP-10), K. R. Smith (87), P. E. Gillespie (2288), J. C. Cline (1832), E. C. B. Gould (68), D. S. Ingalls (85), R. C. Mudge (298), E. H. McKitterick (39), G. Gardner (343); (2nd row) G. D. Dumas (198), J. M. Vorys (73), B. G. Leighton (40), F. H. Gage (526), A. S. Preil (538), H. A. Rowen (200), R. T. Whitney (393), K. B. Keyes (182), T. H. Chapman (249); (3rd row) J. J. Schieffelin (124), R. L. Ireland (84), E. R. Greenfield (218), G. S. Hodges (253), F. W. Keith (379), G. Crompton (100), T. M. Bergin (232), R. Leban (277), J. W. Green (CAP 134); (4th row), R. N. Hyde (181), W. L. Hamlen (101), C. B. Dushane (400), D. Alvord (225), R. L. Atwood (292), D. M. Rose (262), Noel Chadwick (107), C. R. Wood (9172—he holds, in addition, the distinction of being Helicopter Pilot No. 3), C. P. Mason (52), Roland Paredo (188).*

## VP-46 Assigned to Adak

### First Patrol Squadron at Station

Patrol Squadron 46 became the first patrol squadron ever to deploy to the U. S. Naval Station, Adak, Alaska, with the recent completion of its deployment from NAS MOFFETT FIELD, Calif.

VP-46 relieved VP-2 which had been officially deployed to Kodiak, Alaska, with a detachment at Adak.

The squadron was commissioned in September 1931 and had undergone eight changes in name before receiving her present designation in September 1948. It has run through 11 different models of aircraft, making the change to landbased planes in May 1961.

The squadron, which has flown the P-3A *Orion* since January 1963, was the first on the West Coast with the new submarine hunter-killer aircraft.

The squadron includes 9 planes, 55 officers and 285 men. It is commanded by Cdr. Tom E. Sulick, a former test pilot at NATC PATUXENT RIVER, Md.

## VX-1 is Outstanding Unit

### Cited for Fifth Consecutive Year

Air Development Squadron One has succeeded in achieving a score of "Outstanding" during its Annual Administrative Material Inspection for the fifth consecutive year.

The squadron was inspected by RAdm. Robert Goldthwaite, ComFAir Jacksonville. After inspection, Adm. Goldthwaite said, "VX-1 has the finest appearance of any group it has been my privilege to inspect."

## NavCad Classes Honored

### Are Members of Naval Air Museum

Aviation Officer Candidate Classes 7-64 and 9-64 became the first Pre-Flight School classes to be given the honor of becoming lifetime members of the Naval Aviation Museum at Pensacola, Florida. A presentation of $100 to the Museum from each class made this possible. The checks were recently presented to Adm. D. F. Smith, CNABaTra, in special ceremonies.

Students of the Naval School of Pre-Flight tour the museum as a part of their indoctrination into Naval Aviation. The museum was commissioned a year ago on June 8, 1963.

**FIRST TRI-SERVICE** *LTV Vought XC-142A VTOL assault transport was rolled out recently and is now undergoing pre-flight tests and check-outs. Shown with wing up for vertical take-offs and landings, the XC-142A will fly 430 miles per hour in conventional flight with the wing down. Four G.E. 2850-horsepower T-64 turboprops drive the interconnected propellers and tail propeller (for pitch control in VTOL flight). Payload for VTOL missions is four tons.*

# GRAMPAW PETTIBONE

## Sad Story

An A-4B departed a naval air station for what should have been a routine cross-country training flight. The flight had been requested, approved, briefed, planned and filed as an IFR cross country training flight to a midwest NAS. The pilot was cleared IFR at 31,000 feet, but very shortly after takeoff he cancelled his IFR, reporting that he had a compass malfunction and would proceed VFR. Approximately one hour later he requested and received a change of flight plan to an Air Force base over 900 miles away and filed for an en route time of 2+00 hours with 2+30 hours of fuel remaining.

There was no further communication between the pilot and control agencies for the next hour and 20 minutes. Then he requested the winds at 35,000 and 40,000 feet.

Approximately 2+30 hours after refilling in the air, the pilot contacted the control tower at the destination field and informed them he was 15 miles out and requested landing instructions. He also reported fluctuating fuel pressure and requested the status of the VORTAC serving the field. The tower advised him that the VORTAC was down for maintenance and that a NOTAM stating it would be out of service was sent the day before. The pilot then requested a DF steer and the tower controller gave him a heading to the field.

Some 10 minutes after initial contact with the Air Force tower, the pilot reported a flame-out and indicated he would not be able to make the field. The tower informed him that there were no auxiliary fields near his position and that the bailout/ejection area was 10 miles northeast. At this time the pilot informed the tower that he was passing through 9000 feet. A short time later the aircraft crashed in the desert nine miles east of the Air Force Base. The pilot ejected at an estimated altitude of a little more than 10 feet above the ground and was fatally injured.

*Grampaw Pettibone says:*

**Great balls of fire, what waste! This well trained and experienced lad made some real bad moves on this flight and after they accumulated to the point of no return, he made the fatal mistake of staying with the aircraft until he was too low to eject safely.**

**Most of us have committed errors hard to explain, but this pilot's decisions from takeoff to flame-out are beyond reason. Here's a pilot whose demonstrated ability and personal conduct were such that his cross-country request was approved without reservation; yet he cancels his instrument flight plan just after takeoff, proceeds VFR through APC, with insufficient fuel and no NOTAM info, changes his flight plan to a field several hundred miles away and overflies good en route fuel stops trying to make his new destination.**

**Poor judgment and lack of professionalism were the primary factors in this accident. Several Navy and FAA directives were violated; but neither NATOPS nor any other publication ever was written to take the place of a pilot's *judgment*.**

## Memo from Gramps

**Your ole grey-haired friend has been receivin' some pretty shockin' bits of info that are beginnin' to add up to the sad situation that some of our flight crews are allowed to fly without proper flight gear. I'll grant you, this is pretty hard to believe after all that's been said and written on the subject, but evidently it's goin' on in some outfits.**

**One of the weakest excuses in the world has been offered for the situation and that's "to save dollars." Now I'm for operating aircraft or doin' anything else for just as few bucks as possible, but when it comes to safety and survival gear that's carryin' things too far. This gear was designed and bought to "save lives."**

**Competition between squadrons on just who can operate their birds the cheapest is great, but it's just plain false economy when a squadron commander tries to save "B" money by not providing flight personnel with all items of safety and survival gear.**

**It appears to me the only way a topnotch plane commander can feel about flight gear for his crew is: If you don't have it, get it; if you don't know how to use it, find out; otherwise—YOU DON'T GO.**

## Hairy Hurry

An A-3A pilot was scheduled for a flight from a midwest AF base to a West Coast naval air station with an 0800 departure. The purpose of the flight was to deliver two passengers and several pieces of aircraft test equipment to the naval air station.

Departure was delayed until 0930 due to en route weather. Shortly after the plane was airborne, it was discovered that the landing gear would not retract. The aircraft was landed and returned to the parking area for repairs. For the next few hours, the pilot waited for maintenance personnel to correct the gripe, but at approximately 1400 he was informed that the A-3 would not be available. The trip would have to be made in an A-1E.

Owing to the extended delay and a switch to a slower aircraft, the pilot and his passengers hurriedly switched the test equipment and personal gear into the *Skyraider* for the trip. Al-



ILLUSTRATED BY Osborn

though it was to be a five-hour flight extending well past the evening meal hour, no effort was made to obtain box lunches. Furthermore, the pilot refused to allow the duty officer to send his DD-175 to base operations via the duty driver with the explanation that he would taxi by and have one of his passengers run it in.

The passenger who was to occupy the right front seat was an experienced *Skyraider* crewman, but the other passenger had never flown in the aircraft before. He was given a few quick bits of information and told to strap into the right seat of the rear passenger compartment. The test equipment had been loaded on the left side of the compartment with no attempt made to secure the gear.

The pilot informed the passenger in the right seat that no checks other than to insure the wings were spread and locked would be made in the chocks. Immediately after the engine was started, the pilot spread the wings and signaled for the chocks to be pulled. The aircraft was then taxied to base operations where the right seat passenger hurriedly delivered the DD-175 to the clearance desk.

Upon receiving clearance, the aircraft was taxied to the approach end of the duty runway where the pilot quickly went through the takeoff check list mounted on the instrument panel. Following a brief run-up and wing check, the tower cleared the pilot for takeoff. A rolling takeoff was made and the aircraft became airborne in a three-point attitude after an extremely short takeoff roll. A nose-high attitude was maintained for a few seconds, then the aircraft drifted left and started to slowly roll in the same direction. The pilot applied full right rudder and right aileron in an effort to level the wings but the controls had little effect.

Shortly thereafter the aircraft entered an abrupt descending left roll at an altitude of 75 to 100 feet. The aircraft contacted the ground in a 90° bank shearing the left wing just outboard of the wing fold. The engine separated from the aircraft after the propeller blades sheared and the hub dug into the dirt. The fuselage slid to a stop in an unright attitude with the nose pointed slightly left of the line of motion. Almost immediately fire broke out on the left side and quickly spread over the remaining forward part of the aircraft.

The pilot abandoned the aircraft from the left side through the most intense flame and heat and was quickly followed by the passengers who got out on the right side. The passenger encountered difficulty in jettisoning the rear canopy but was successful on the second attempt.

The pilot was injured severely with second and third degree burns on his face, neck, hands and arms. Both passengers, though not injured as badly as the pilot, suffered first and second degree burns on the hands and face.


***Grampaw Pettibone says:***

**This lad broke almost all the rules in the book before he balled this one up. That he and his passengers are lucky to be able to tell about it is the understatement of the year.**

**The pilot was in such a hurry to get this little show on the road that he would not let the duty officer deliver his DD-175 to operations; failed to secure the cargo in the aft compartment; did not brief his passengers on emergency procedures; taxied at excessive speed; needed only seven minutes to taxi a mile, file a flight plan, conduct pretakeoff checks and become airborne; made a three-point takeoff following minimum ground roll and failed to recognize the left drift and slow left roll as stall warnings.**

**NATOPS procedures took a beating when the aircraft was not stopped on the runway, lined up and MAP increased to field pressure to heat the engine and spark plug cores uniformly. In addition, the aircraft was not allowed to fly itself off in a flat attitude but was pulled off in a three point attitude.**

**Just to insure that nothing connected with the fiasco would resemble a professional approach to flying, this lad was *not* wearing a *hard hat* and *none* of the three wore *flight gloves.***

**NATOPS not only took a severe beating on this one, but so did pilot technique, good judgment and plain old common sense. You just don't pull boners like this without penalties And this was a very high one.**


**BEFORE REWORK,** *this UH-2A Seasprite from Ream Field looked as if it would never again live up to its name. It crashed in June 1963.*


**AFTER REWORK,** *six months later, at North Island's O&R Department, it looked like new. Staff members check paperwork prior to flight test.*

# MAKING HELICOPTERS AS GOOD AS NEW

**By Elretta Sudsbury**

THE SCARLET-NOSED, grey-hulled *Sea King* hovered over the test ramp of the Overhaul and Repair Department, NAS NORTH ISLAND. The military-civilian ground check crew watched confidently as the twin turboshaft engines roared with strong rhythm.

Like giant maple branches, the rotor blades spun as the helicopter lifted, then drifted lazily across the sky. Another product of the centralized "whirlybird" activity was being test flown before return to service.

All the Navy and Marine helicopters of the western area are reworked from induction to flight test in two hangars and the surrounding paved area on the bay side of North Island.

O&R has recently completed this self-contained aircraft rework complex as part of a plant-wide project to increase product quality while at the same time reducing cost and compressing out-of-service time of all aircraft.

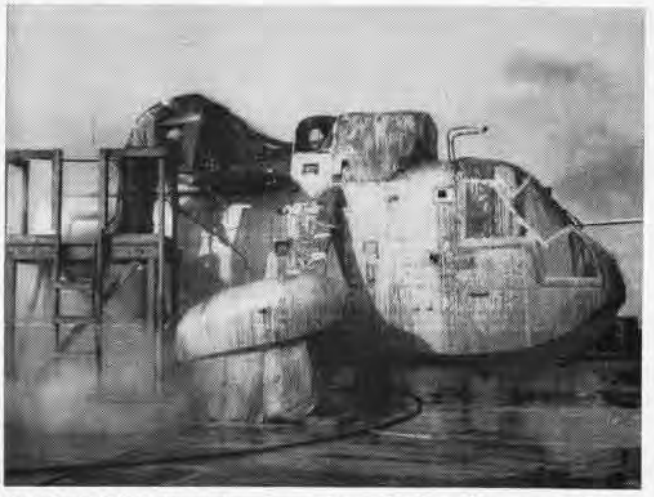
**Photos by Josephine Munar, PH2, and Carol Bunch, AN**

Since the centralized helicopter operation was established, productivity has increased and morale is noticeably high.

During calendar year 1963, O&R processed 120 helicopters through Progressive Aircraft Rework (PAR) or overhaul. Current work includes the H-3 *Sea King* and H-34 *Seahorse*, plus the beginning of a new program, the H-2 *Seasprite*.

The centralized helo operation helps O&R to more effectively produce the highly diversified complex workload. In addition to rotary wing aircraft,


**ON THE O&R CHECK LINE,** *big Sikorsky H-34 Sea Horses and H-3 Sea Kings are being made ready for flight test. Helicopters land on this same ramp when due for rework. Methods of quality control are carefully followed throughout the total program of repair and rework.*



**PROCESS DIVISION** *workers face a big task when they strip and clean an H-3 Sea King. Paint is washed off, leaving a clean metal skin.*

**EPOXY-PAINTED** *copter is ready for the curing oven. Discussing finish are Capt. H. F. Daniels, Jr., (C), Clarence Sjurson, C. E. Isler.*

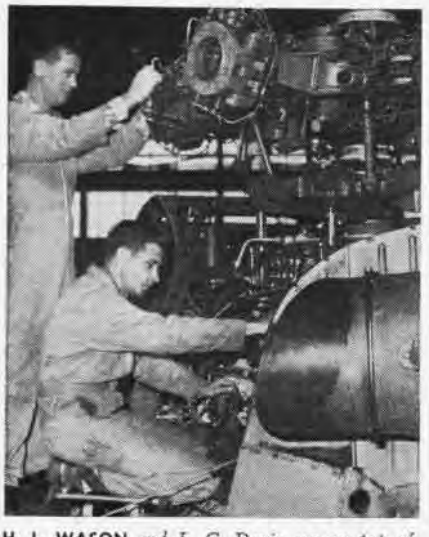
**DENNIS OLSON,** *O&R mechanic, replaces damaged section of skin for Seahorse engine doors.*

North Island reworks jet fighters, cargo and ASW aircraft, plus jet engines, accessories and components.

Crash-damage overhaul is an important facet of the work. Such projects bordering on the miraculous have been performed by O&R. For example, last June a Kaman UH-2A *Seasprite* crashed at Ream Field and was broken like a china toy. North Island was designated overhaul point for the aircraft, but the pilot rework was still one year in the future. Employees had little training and no experience with the *Seasprite*. To complicate matters further, they had limited technical data.

What happened? Early in January 1964 the *Seasprite* went back in service—flying proof of the workmanship of Overhaul and Repair personnel.

**C. F. GEFFERS,** *O&R inspector, is checking the instrument installation in the Sikorsky H-3.*



**H. L. WASON** *and L. C. Davis are on top of the H-3 in order to install the transmission.*

**DAVIS** *and Julio Garcia install the twin T-58 engines on the H-3 during assembly stage.*

**MECHANIC ARREGUI** *is attaching new skin to a crash-damaged UH-2A which is in overhaul.*

Capt. J. F. Daniels, Jr., O&R Officer, commenting on the *Seasprite* overhaul, said, "The achievement was made possible by the outstanding technical and professional competence of the O&R work force." He commended the Kaman representative, Donald Lockridge, for his valuable assistance throughout the project.

### Typical Rework Operation Observed

The basic processing cycle is generally standard for all models of helos reworked by O&R. Whether overhaul of an H-34 or PAR (Progressive Aircraft Rework) of an H-3, the Fleet customer is getting a high quality product when he contracts for work at the whirlybird facility on North Island.

The flow pattern of each helo program is developed during a pilot rework in which skills and facilities, space, tooling, engineering data, and other requirements are proved. Helos and all other major programs are on mechanized production control. Manhour norms are assigned to work units so that shop loading is effective.

Rotary-winged aircraft requiring rework land on the ramp by the O&R Helicopter Shop. Aircraft Examiners perform dynamic check-out of systems. Then major components requiring rework are removed so that they can be efficiently routed for processing concurrent with aircraft.

If painting is required, the helos are stripped and cleaned down to shining skin, then towed about 75 feet for final disassembly and further examination and evaluation. Removed parts are transported to various shops for repair or replacement.

After hand cleaning of places where "black boxes" and other equipment have been removed, the fuselages are rolled inside the building and positioned for structural repair and assembly.

Several "in family" support shops give rapid, personalized service to the helicopter assembly docks, plus shortening the material flow line. A metal repair shop does extensive work on aircraft that are undergoing complete overhaul. Another shop builds up quick engine change units (QEC's) for installation. Still another performs small parts repair.

### Systematic Assembly Performed

Helicopter assembly docks at North Island are arranged so that each aircraft is an independent project, although all are supported by centralized Material, Dispatch, Workload, Quality Control, Production Engineering, and Aeronautical Engineering personnel. The production supervisor over the entire helo rework operation is Foreman Harry Frye of the Repair and Ground Check Division. Quartermen are John Hill and D.K. Solomon. The man who has the responsibility of production control is D. L. Hennis.

While the first stage of assembly is underway, components removed for repair or replacement flow back to a finished parts storeroom near the assembly dock. In orderly fashion, according to a plan developed during the pilot overhaul, the craftsmen put the aircraft together. Electrical, electronic, and hydraulic systems are checked out at the assembly dock.

Employees find the helo work interesting and skill developing. Two craftsmen, waist deep in the unbuttoned nose of an H-3, were asked what they were doing. "Checking the electronic systems. Did you know," he went on, "this bird has twelve electronic systems for communication, navigation, and subtracking. They are integrated so if one fails the others take over. We went to school and learned to do this."

He is one of the many O&R employees who received specialized technical training ahead of new work programs. This is essential if the craft skills of the O&R Department are to keep ahead of complex new weapons systems. A space-age Navy demands a space-age rework plant, and O&R NORTH ISLAND is such an installation.

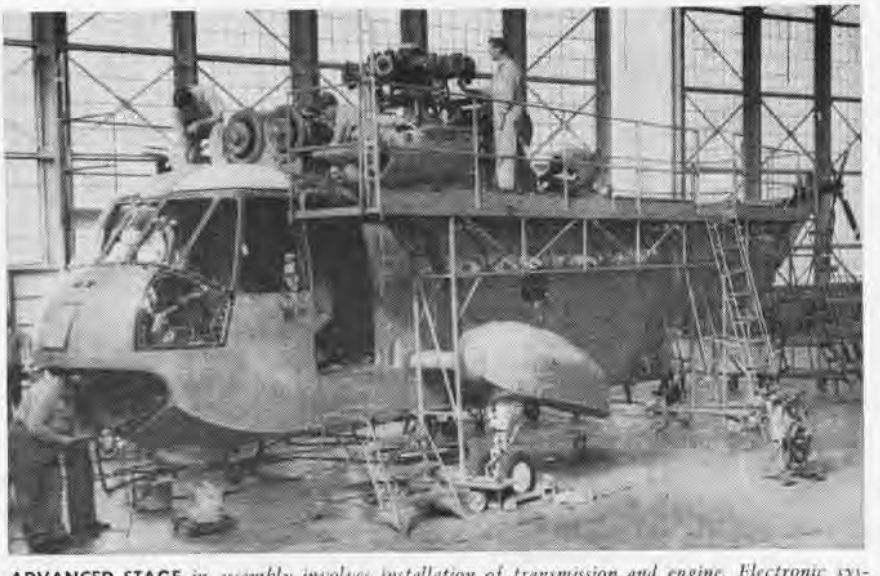
### Helo Blade Repair-Test Facility

Rotor blades of the helos are repaired in a Metal Division shop with controlled atmospheric conditions. Overhaul of helo blades at O&R North Island is highly systematized, as the shop processes about 330 main rotor and 200 tail rotor blades each quarter. Some are for Fleet support stock, others from aircraft undergoing rework there.

The blades go through screening, disassembly, stripping, repair, painting, and static balance in the blade shop. The next step is test. The helo main rotor blade test tower is the only one of its kind in the Department of Defense. Completed in 1963 at a cost of about one million dollars, it is equipped to dynamically track and balance blades up to 100 feet rotor diameter—larger than any now in use.

### Curing Oven

When assembly except for rotor blade installation is complete and fuel check and final inspection have been made, aircraft leave the helo area for



**ADVANCED STAGE** *in assembly involves installation of transmission and engine. Electronic systems check-out is underway. Inspector in pilot's compartment checks instrument installation.*

**MILITARY - CIVILIAN** *ground crew swarms over H-3 during thorough pre-flight testing.*

**REWORKED** *helo is ready for liftoff. Ground crew will remove chocks on pilot's signal.*

**GEORGE TRAVERS,** *O&R mechanic who is H-3 plane captain, and Lt. E. C. Alexander, make the final check of transmission, rotor head, and engines before approving H-3 for test flight.*

the first and only time. They are moved to the paint hangar about four blocks away and are epoxy-polymide painted.

Epoxy finish is a plastic type which is extremely hard. It is impervious to oil, solvents, and other materials which soften lacquers formerly used on aircraft. It will not become brittle and takes bending and stretching with no damage.

The epoxy-painted aircraft are dried in a paint curing oven opened last year at O&R. The oversized stove, warmed to 120° F by steam coil heaters, is the first epoxy-drying facility in the Navy. It will hold two aircraft. Paint dries in four hours whereas natural drying would require 72 hours.

The aircraft look like new when they are moved from the metal-lined curing oven. The next step is weight and balance tests, then a return to the centralized facility. The helicopters are arranged in a neat row of six or seven on the ground check line for installation of blades, then test.

### Wind-Up by Military-Civilian Team

A joint military and civilian crew of the O&R Department looks with critical eye at every inspectable inch of the aircraft. First the production team checks, then the Quality Control personnel perform a final acceptance inspection to assure soundness and completion of work. Inspectors also pre-flight test the helos to make sure all systems are functioning properly. When the O.K. is given by Quality Control, the aircraft are ready for the first flight test.

O&R helo test pilots are Lt. W. R. Eason and Lt. E. C. Alexander. Flight crewmen are also from O&R. The pilots make hover tests over the ramp, then take the aircraft out to put them through a thorough flight test.

When the pilots certify that O&R has produced another high quality rework job, aircraft are ready for final acceptance by the squadron pilots, who can "fly with confidence."

Thus, the rework cycle of each aircraft ends. A few steps behind are others: H-3 *Sea Kings* and H-34 *Seahorses*, plus the beginning of the H-2 *Seasprites*. They form an orderly parade of helicopters being moved smoothly, efficiently, back to service with the Fleet from the centralized "whirlybird" rework facility at Naval Air Station, North Island.


**END PRODUCT** *of the NAS North Island facility is a craft ready to take to the air. The boast of this centralized operation is that it makes West Coast helicopters just as good as new.*

# F-111 PROGRAM PROGRESS IS REPORTED

COMPONENTS for the F-111 (TFX) Air Force/Navy tactical fighter plane are taking shape in contractor plants across the nation, it was reported from headquarters, Air Force Systems Command, Andrews AFB, Maryland.

BGen. J. L. Zoeckler, deputy for the F-111 at Aeronautical Systems Division, Wright-Patterson AFB, Ohio, says the Air Force version of the tactical fighter—the F-111A—is slated to fly within a year. The Navy version—the F-111B—should be flying within two years, according to Gen. Zoeckler.

Since the program's start, the ASD System Program Office (SPO), the General Dynamics/Grumman team, two other associate contractors, and a host of subcontractors and suppliers have worked steadily to build the airplane.

Wind tunnel tests are well along and thoughts are turning to the rollout of the first aircraft in less than a year.

The F-111, born as the "TFX" (for Tactical Fighter Experimental), will be an unusual vehicle, in addition to the fact that it will be the first tactical fighter ever designed for two services. With a variable sweep wing which will extend or retract during different phases of flight, it will be capable of flying at two and one-half times the speed of sound, supersonic flight at ground level, and landing on short runways at speeds slower than many present-day fighters.

Parenthetically, the TFX name is being dropped in favor of the official designation, F-111. As with all recent military aircraft development programs, there will be no experimental "X" models. Even with its novel, variable sweep wings, the F-111 program follows the pattern established for more conventional types. It will be a production airplane to be operated by the USAF's tactical air forces and from carrier decks by the Navy.

The contract calls for delivery of 23 airplanes, 18 of which are the Air Force "A" version, and five the Navy "B" version. In announcing the $1.1 billion contract, the Department of Defense said that later production contracts would very certainly make it a multibillion dollar program.

F-111, FORMERLY 'TFX,' WILL BE FIRST TACTICAL FIGHTER DESIGNED FOR TWO SERVICES

The F-111 will be a two-man tactiful fighter, powered by two Pratt & Whitney JTF-10A-20 turbo-fan engines. It will carry conventional or nuclear weapons, including the latest air-to-surface and air-to-air tactical weapons and be capable of flying nonstop transoceanic deployments.

Variable sweep wings go a long way toward providing the best aerodynamic characteristics throughout the F-111's speed range. With wings forward, it will land on short runways with approach speeds well below most current land-based fighters. For supersonic flight, the wings will be retracted. Low landing speed will increase its safety of operation.

These characteristics will apply to both Air Force and Navy versions of the airplane, which will be almost carbon copies of each other in their configurations. If it were possible, every part and component would be compatible, but the different missions make this impossible.

For example, landing and arresting gear may be different to allow the Air Force version to land on runways and the Navy version to land on carriers as well as runways. Other differences may be dictated by the different missions or weapons carried by each of the aircraft.

"Still," said Gen. Zoeckler, whose SPO keeps a careful watch on such things, "two versions will be about 80 percent compatible. The Department of Defense emphasized the advantages of maximum "commonality" when the TFX program was originally established. The Department estimated that taking advantage of component compatibility could save $1 billion under the cost of developing and operating two separate aircraft.

The program figuratively got off the ground in November 1962 when the Air Force amended General Dynamics' letter contract to start development of the aircraft. Though Grumman Aircraft officially is considered the No. 1 subcontractor, it is actually a part of the General Dynamics/Grumman team. The USAF version of the F-111 is being assembled at the General Dynamics Fort Worth (Texas) plant, and the Navy version will be assembled at the Grumman Long Island (New York) plant.

Two associate subcontractors were signed and literally hundreds of part suppliers were brought into the picture. Today there are 17 major subcontractors doing business with 6,703 suppliers scattered throughout 44 states. In fact, small companies with fewer than 500 employees account for two-thirds of the contracts awarded under the program and the number is growing. At the start, the Department of Defense said development of the F-111 would surpass any


**ARTIST'S DRAWING SHOWS DIFFERENT POSITIONS OF F-111'S VARIABLE SWEEP WINGS**

fighter aircraft program since World War II in both numbers and dollars —and the prediction is coming true.

The test program brings in additional agencies plus a host of contractors. The extensive wind tunnel testing is about three-fifths through the scheduled 21,000 hours that will be logged before the end of the development program.

Involved is the testing of 30 models, including 10 force models, 12 propulsion models and 8 structural models.

General Dynamics' Fort Worth plant will be the test scene for breadboard models of avionics equipment. The *Phoenix* missile system for the Navy version will undergo tests at both Hughes Aircraft Company plant, Culver City, Calif., and at the Naval Missile Center, Point Mugu, Calif.

Today, Gen. Zoeckler directs a staff of 172 persons in the SPO, consisting of Air Force, Navy and civilian personnel. Through Col. Max Boyer, the Air Force plant representative, Gen. Zoeckler has another 150 to 200 Air Force and Navy personnel at the General Dynamics plant. In the SPO is a contingent of seven Navy officers headed by Capt. Donald C. Davis.

They coordinate the efforts of many BuWeps personnel with those of the SPO to insure that the F-111B will meet Navy carrier and mission requirements. Under Capt. Aubrey R. Seiler as BuWeps and CNM Program Manager, BuWeps personnel manage the *Phoenix* missile system development and play an active role in guiding the airframe program. BuWeps engineers have worked directly with their Air Force counterparts in establishing airframe and airframe system design objectives for the F-111's designers and play a necessary part in evaluating trade-offs between commonality and meeting Navy requirements.

One of the unusual features of the F-111 tactical fighter is its escape system. If the two-man crew finds it necessary to abandon the aircraft, they will not eject in their seats individually as they would in other multi-place aircraft. Instead, they will go together, taking with them their seats, the entire crew compartment, and a portion of the fuselage and wings.

Thus, the crew compartment will become an escape capsule. The parts of the fuselage and wing remaining attached to the capsule will provide inflight stability during ejection and deceleration.

The crew will be able to control the ejection sequence manually, but normally the entire operation will be automatic with the pulling of the escape system handle by either man.

When the lever is pulled, a shaped charge, described as an "exploding wire," will "cut through" the supporting metal of the aircraft's fuselage much as a welder's cutting torch. Simultaneously, the escape pod's rocket motor will ignite and develop sufficient thrust to complete pod separation and also propel the crew compartment clear of the disabled aircraft.

During separation and descent to the ground, the pod's emergency support systems will provide life supporting oxygen to the crew. For quick retrieval of the downed airmen, the pod will automatically dispense radar chaff and switch on an emergency transceiver radio and flashing beacon.

A drogue parachute will deploy almost immediately to decelerate the pod during high speed ejection and stabilize it during its descent. A main parachute, similar to the one employed by the Mercury space capsule, will lower the pod to the ground. A shock absorbing material, attached to the bottom of the pod, plus the moderate speed of descent, will reduce the landing impact to a "jolt" comparable to that experienced by a paratrooper hitting the ground.

The escape system has some other unusual features. Besides a capability of escape from any altitude and speed condition, including zero altitude and/or zero speed, the pod can be separated under water.

For example, if the aircraft is forced to ditch in water and sinks, the escape mechanism will automatically separate the crew compartment at a predetermined depth. The rocket motor will be bypassed during this underwater ejection sequence and the pod will rise to the surface and float. Should the escape pod land at sea after ejection in flight, a water sensing switch in the escape mechanism will activate its flotation system.

Finally, after the pod has landed on land or water, the crew will use the complete survival equipment contained within the compartment to subsist until they are picked up.

This system is being developed by McDonnell Aircraft Corporation under a subcontract to General Dynamics. Included in the development program will be parachute and capsule drop tests at El Centro, California, and deceleration and ejection tests of the capsule on the sled track at the Air Force Missile Development Center at Holloman AFB, New Mexico.

## Chutists Claim New Record

### Made Night Jump at 44,100 Feet

Nine Marine parachutists have claimed a new world's record for seven, eight and nine-man team jumps at night after free-falling from 44,100 feet to 1800 feet before deploying their chutes. The current record of 41,500 feet was set by Russian chutists in 1961.

The jump, made June 6 at Ft. Bragg, N.C., must be confirmed by the Parachute Club of America and Federation Aeronautique Internationale before being officially recognized.

A KC-130F *Hercules* transport from the 2nd Marine Aircraft Wing at Cherry Point flew the team in their record-breaking feat. Preparations for the jump began in May under the guidance of team captain, 1st. Lt. R.A. Mathews, Jr. The chutists jumped into 65-degree below zero sky and lighted flares at 20,000 and 5000 feet during the free-fall. Ground crewmen also used flares to mark the drop zone.

Jumping with Lt. Mathews were Sgt.'s Ralph J. Larsen and Robert L. Armstrong, Jr.; Cpl.'s Andre B. Smith, Edward A. Mikelatitis, Robert J. Reinhard, Dennis N. McCarthy, and Thomas A. Dougher; and LCpl. Roy J. Bertalovitz.

## New Sea Cadet Squadron

### 'Top Hatters' Become Eighth Unit

The Navy League's first Sea Cadet Squadron in the Tidewater area, the *Top Hatters*, was commissioned in June. Ceremonies marking the event were held at the Naval Air Reserve Training Unit, NAS NORFOLK.

Named for the oldest fighter squadron in Navy, the *Top Hatters*' unit was formed during a six-month effort by the Navy League (Hampton Roads Council), the Naval Sea Cadet Committee headed by Mr. Roy R. Charles, Navy League President for the local Council, and Capt. Frank M. McAfee, NARTU's C.O. Cadets were recruited from eight local junior and senior high schools. They will have an educational opportunity based on NARTU's Airman Recruit Training Syllabus.

The unit consists of 40 young men between the ages of 14 and 16, and seven officers led by Cdr. Homer S. Brockman, Jr., a retired aviator who also heads the Industrial Arts Department at Frank W. Cox High School.

At the ceremony, RAdm. E. B. Taylor, Commandant of the Fifth Naval District, inspected the officers and cadets. RAdm. William J. Catlett, Jr., USN (Ret.), Executive Director of the Naval Sea Cadet Corps, read the commissioning warrant.

The *Top Hatters* are the eighth unit to join Sea Cadets Squadrons already operating at South Weymouth, Glenview, Dallas, Seattle, Lakehurst, Jacksonville and Alameda.

Shown in the photo taken at the *Top Hatters* commissioning are RAdm. Catlett, Capt. McAfee, RAdm. Taylor, a Sea Cadet next to unit insignia, Cdr. Brockman, Mr. Charles and committee members William Woodley, Sam Northern and E.N. Underwood.

GROUP WHICH HELPED FORM TOP HATTERS POSE WITH INSIGNIA AT NARTU NORFOLK

## Capt. McCampbell Retires

### WW II Ace Won Medal of Honor

WW II's top Navy "ace" and Medal of Honor winner, Capt. David McCampbell, retired from the Navy June 30.

In ceremonies at the North American Air Defense Command, Gen. John K. Gerhart, USAF, NORAD Commander in Chief, awarded Capt. McCampbell the Joint Services Commendation Medal for his contributions to the command as Deputy Chief of Staff for programs.

In addition to the Medal of Honor, Capt. McCampbell also holds five of the Navy's top awards, the Navy Cross, Silver Star, Legion of Merit, three DFC's and the Air Medal.

Capt. McCampbell was credited with downing 34 enemy aircraft in WW II, nine of them in one flight, a feat never equalled in the annals of combat aviation.

## VMA-225 Adds a Laurel

### A-4 Unit Wins an Efficiency Award

VMA-225, based at Cherry Point as a unit of the 2nd Marine Aircraft Wing, has been selected for the Commandant of the Marine Corps Efficiency Award for fiscal 1963. Commanded by LCol. Robert W. Baker, the *Vagabond* squadron was commended for outstanding mission performance and accident-free flying. Cited by BGen. Paul J. Fontana, 2nd Wing Commanding General, for the "type of professionalism traditionally expected of Marine units," VMA-225 has also recorded a number of "firsts." These include: first Marine Attack squadron to fly day and night operations from the nuclear carrier, USS *Enterprise;* first to conduct a Trans-Atlantic training flight to Rota, Spain; first East Coast squadron to operate independently from a Small Airfield for Tactical Support (SATS); and the first Marine squadron to conduct night operations from the short strip.

From April through June 1963, the unit won every air-to-ground competitive exercise it entered. Her A-4 *Skyhawks* took "Top Gun" awards in day and night bombing, rocket and *Bullpup* missile firing, strafing, etc.

# EL COYOTE RIDES THE OCEAN RANGE

**By Sam Polson, JOC**


**CREW OF THE ASWEPS** *aircraft, an especially modified EC-121K named "El Coyote," pose at NATC Patuxent River. Men are assigned to Project Magnet which provides crews for the plane.*

IN KEEPING a wary eye on troubled world situations, many experts are agreed that a large percentage of future limited conflicts—should they occur—will be staged at sea. These same experts forsee a colossal cat-and-mouse game played between aggressor submarine forces and the Free World's antisubmarine warfare defenses when, and if, these battles take place.

A good example of these predictions were voiced by Secretary of the Navy Paul H. Nitze recently when he said: "I have the view that one of the more likely scenarios, in the '60's and '70's, is a war at sea, resulting from probing enemy aggression. In such an event we should need, I think, to rely on ASW forces, across the spectrum. Our nuclear submarines and patrol aircraft squadrons would have to exact attrition from transiting submarines. Our hunter-killer forces would have to be used as the strategic forces of such a limited war. . . ."

The Secretary later gave the opinion that, despite the excellent ASW systems now entering the Fleet, our hunter-killer forces still need further improvement.

One major ASW "improvement" now being perfected hinges largely on a handful of officers and enlisted men who also launch Project *Magnet* flights from Naval Air Test Center, Patuxent River, Md. The program utilizing this unit for its development and testing is the Navy Oceanographic Office's Antisubmarine Warfare Environmental Prediction Systems—or ASWEPS.

Under study for two years, these systems will eventually enable patrol planes, working in conjunction with surface and sub-surface forces, to chart ocean temperatures and conditions to an extremely fine degree. Armed with such knowledge, these forces will be able to locate and destroy submerged enemy vessels more rapidly and accurately.

Although primarily noted for their globe-girdling aerial junkets to chart the oceans' magnetic fields of force, the men of Project *Magnet* are also responsible for the maintenance and upkeep of the specially-designed EC-121K aircraft they affectionately call "El Coyote." In the ASWEPS program, this task is all-important, for it is "El Coyote" that serves as the platform from which the oceanographic scientists perform all their airborne studies. Without the constant availability of this unique *Warning Star*, ASWEPS probes could not be made.

To the casual observer, the responsibility for either mission assigned to Project *Magnet* would appear to be a staggering load for the 17 officers and 42 enlisted men who make up the unit's slim ranks. Combined, the duties of charting nearly 70 per cent of the earth's surface (as is the case with the "magnetic" mission) and the tasks demanded by the ASWEPS program, these responsibilities seem almost impossible to bear.

To the men themselves, though, such is not the case. As one of the Navy crew of old-timers put it, "Our job is basic. We keep the planes ready and take the scientists where they have to go. It's as simple as that."

The actual performance of the Navy men's duties can hardly be covered by such a disarmingly simplified statement, however. "El Coyote's" enlisted crew, usually 12 in number, often finds itself faced with situations most others would not relish. It is not unusual, the crewmen admit, to see AE's, AD's, and AM's working their jobs interchangeably.

That they can take these seemingly unfamiliar duties in stride was pointed out when one of the crew said, "We know these planes so well that it's hard not to help out *wherever* we're needed." A requisite for joining this select Navy group is that new men be fully qualified in the types of aircraft it uses: the EC-131K and the C-54. Whenever possible, the men are hand-picked by the unit's officer-in-charge, LCdr. John B. Childers.

"In such a small outfit," says LCdr. Childers, "our men have to be versatile. We can't afford to have one man that isn't."

The crews also work interchangeably between the lengthy magnetic hops, which sometimes take them completely around the world, and the shorter low-altitude ASWEPS flights.

"This serves as a change-of-pace for our men," Childers volunteered. "It evens up the flight time and keeps them flexible."

The ASWEPS operations are normally made over the eastern seaboard's


**'FEW THINGS ABOUT THIS WAVE MEASUREMENT STUFF THAT DON'T SIT TOO WELL . . . .'** *(Cartoon by Dick Shaw, reproduced from "Lockheed Reports" by permission of the editor.)*


**EL COYOTE** *is the startling cartoon character selected by the crew to decorate the plane.*

coastal waters, with occasional trips to the Bermuda and Nassau areas.

In a paper presented at the Great Lakes Navy Research and Development Clinic, Ohio State University, Robert A. Peloquin of the Naval Oceanographic Office, noted the value of these flights.

"Synoptic data collection is the major asset of the airborne platform," he said. "The airborne platform is ideal for surveying large oceanic areas in relatively short time periods, permitting coverage of as much as 10,000 square miles in an eight-hour flight.

"Major efforts have been concentrated on measurement of sea surface temperature with the Barnes airborne radiation thermometer. Energy radiated from the water surface in the 8- to 13-micron portion of the infrared band is referenced to a black body to provide a measurement of the absolute temperature of the sea surface."

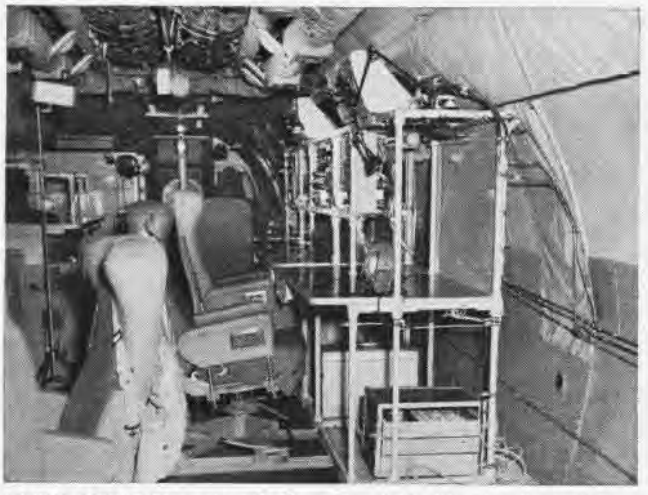
Difficulties are encountered. "Comparisons of the airborne radiation thermometer with mercury thermometers are difficult, mainly because they do not measure the same environment. The infrared technique measures only .01mm of the surface layer, whereas mercury thermometers and thermistors measure a layer of six inches or greater. Instrument accurracy is affected by atmospheric conditions. Water vapor content of the atmosphere is known to cause increase or decrease of temperature values."

Accurate wave data, significant to environmental prediction, are important for the extension of our basic knowledge of the nature of ocean waves. Aircraft equipped with accurate wave-measuring instruments could fill this need, Peloquin suggests. Requirements for such data are constantly increasing.

Aircraft sensors also collect meteorological data for wave generation and air-sea energy studies. Sensors for wave height, temperature versus depth, solar radiation, and improved meteorological measurements are included in the current "El Coyote" flights.

Some future needs in the Navy Oceano program were cited by Peloquin. "Requirements for rapid data collection are increasing rapidly," he stated. "As the Oceanographic Prediction System expands, new and improved sensors will be required. These sensors, to be integrated into ASW aircraft, must be compact, lightweight, and vibration resistent.

"The radiation thermometer should have the capability to correct atmos-



**AT THE FORWARD** *section of the cabin of the Warning Star, the unmanned equipment viewed aft, shows compactness of working space.*

**AFT VIEW,** *looking forward, shows the Airborne Radiation Thermometer console, left, sonobuoy and BTS launchers, center, storage at right.*

**IN FLIGHT,** *the Warning Star cockpit is a busy station. The ASWEPS trips are made over Eastern Seaboard waters and near Nassau, Bermuda.*

**CHECKING EL COYOTE'S** *course are Lt. H. J. Demers and Ltjg. R. E. Jacobs, assigned to the ASWEP's flight. The hops are usually short.*

pheric effects automatically. Present size of the Airborne Radiation Thermometer must be reduced for installation in Fleet aircraft. The expendable bathythermograph (used during the "El Coyote" flights) should also be reduced in size and weight to permit a larger number to be carried on aircraft."

Compactness is emphasized in Peloquin's paper when he discusses the equipment. "The wave height recorder definitely needs reduction in size before it can be utilized in all types of Fleet patrol aircraft. Compact navigational computers are required to position the aircraft. Both navigational and oceanographic data will require a lightweight digital recording system. Lastly, automatic data transmission must also be considered."

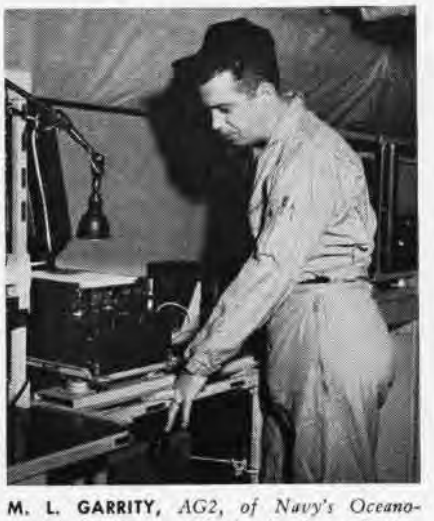
Even though the complicated ASWEPS equipment is handled exclusively by the Oceanographic Office's scientists, its operation is dependent, to a large degree, on "El Coyote" and her military crew. The *Super Connie's* electrical and hydraulic systems must be in perfect order or the expensive and complex gear is rendered practically useless.

For this reason, the military and civilian segments of the crew must work together and harmoniously to insure successful operation in ASWEPS development. Both parties are emphatic when asked about this phase of their work: "We definitely have no problem here!" they say assuredly.

ASWEPS is designed to provide oceanographic prediction capability for ASW forces. Platforms, such as fleet ships, moored automatic buoys, and fixed rotary-winged aircraft, will collect and transmit oceanographic and meterological data to central units for use in environmental prediction.

In looking to the future, if the grim predictions of forthcoming crises must be, the ASWEPS program could easily be the key to keeping the Free World Free. Whenever a successful submarine "kill" is made, the operating ASW forces—and the entire world in general—could certainly owe a debt of gratitude to a strangely-configured *Super Connie* named "El Coyote" and the men who keep her flying.

**ELECTRICAL** *components of gear aboard are checked in flight by J. G. Strickland, AT1.*



**M. L. GARRITY,** *AG2, of Navy's Oceanographic Office, records local solar radiation.*

**TAKING** *navigational fix is Ens. R. E. Jacobs who is assisted by K. H. Churchill, AMCS.*

# PENSACOLA CELEBRATES ANNIVERSARY

**AMONG THE DISPLAYS** *at NAS Pensacola's 50th Anniversary celebration was this North American-built A-5 Vigilante. About 50,000 people viewed the air show while more than 100,000 people toured the air station to see the numerous aviation exhibits displayed.*

**RADM. D. S. INGALLS** *(Ret.), Naval Aviator 85, is shown T-39 by Lt. Larry Simpson.*

ONE OF THE most spectacular air shows in NAS PENSACOLA's history was witnessed by a crowd of nearly 50,000 people in June at the station's Open House 50th Anniversary Celebration. Cloudless skies and 98-degree temperature prevailed throughout the exhibition which began with the roar of an F-4 *Phantom's* maximum performance takeoff.

The McDonnell fighter went through a series of maneuvers and was followed by an F-8 *Crusader* with a similar routine. Next, a quartet of T-2 *Buckeyes* from VT-4 based at Sherman Field executed a precision flyover, high speed passes and a carrier break-up and landing sequence. Then, 16 T-28's from Saufley Field's VT-5 flew by in a tight diamond formation. VT-1, also from Saufley, came next with a baker's dozen of T-34's in another diamond disposition.

Navy Capt. Dick Schram put on his famous "Flying Professor" act, reminiscent of the barnstorming '30's. Ellyson Field's Flying Crickets from HT-8 participated with demonstrations of helicopter techniques. And, in their final public appearance at Pensacola, the *Chuting Stars* parachute team dove from its C-117 *Skytrain* performing a colorful series of descents.

Bill Farnoff ran his F8F *Bearcat* through exciting maneuvers and the renowned *Blue Angels*, in their F-11 *Tigers*, were the show's final curtain.

**CONGRESSMAN** *L. Mendel Rivers presents Congressional plaque to NAS C.O., Capt. P. F. Bedell, honoring Golden Anniversary.*

**VISITORS WATCH** *as a T-2 Buckeye, basic jet training aircraft, is launched from the deck of aircraft carrier, USS Lexington.*

## Inland Reach Demonstrated

### Planes Launch from Lant, Pac CVA's

The Navy's *Inland Reach* capability was demonstrated conclusively when 32 Navy jet fighters and attack planes launched from attack aircraft carriers in the Atlantic and the Pacific. The planes conducted a simulated strike on NAS DALLAS.

The strike was part of a Naval air demonstration staged in conjunction with the National Convention of the Navy League of the United States.

Participating in the strike, the *Saratoga* (CVA-60) launched 16 aircraft near Norfolk as the *Coral Sea* (CVA-43) launched a similar number while off San Diego. The planes roared low over the "target" simultaneously while ground planted explosives indicated the attack's success.

After the attack, some of the aircraft of two units climbed to their cruising altitude and made a non-stop return to their respective carriers. Tanker aircraft rendezvoused with the returning planes for inflight refueling.

The *Inland Reach* concept is based on the geographical fact that, excluding the USSR, 90 per cent of the remaining areas of the world, where limited conflict is most likely, lies within 500 miles of a seacoast.

The Atlantic Fleet aircraft, making the simulated attack against Dallas, made a 2000-mile non-stop round trip, while the PacFleet force went 2600 miles.

The *Inland Reach* strike aircraft ranged from supersonic photo planes to low level attack aircraft and included the world's fastest operational fighter, the F-4 *Phantom II*. Also participating in the attack were the A-5 *Vigilante*, capable of Mach 2 flight, and the A-6 *Intruder*.

The Navy's smallest carrier-based aircraft, the A4 *Skyhawk*, was also in on the attack, along with two LTV F-8 *Crusader* fighter-photo aircraft.

## Gooney, Going, Going, Gone

### DEW System Upsets the Squatters

In the joint use of air space over Midway Island, there have been over 2000 collisions between aircraft and albatross (gooney birds) since 1958, when accurate records were started. The war between man and beast—or bird and bird—may now be over.

United States Navy

AIRCREWMAN CERTIFICATE

This Certifies That

_____

Having Fulfilled Established Requirements is Hereby Designated an Aircrewman

Qualified as _____ This ___ day of _____ 19__

_____ _____

ISSUING ACTIVITY COMMANDING OFFICER

**BUPERS NOTICE 1510** *authorizes certification of all Aircrewmen by Commanding Officers. NavPer's Form 4044 (New B-64), the form used, is available at Cognizance "I" stock points.*

Midway is the breeding ground for some 200,000 albatross each year. It is also the site of a U.S. naval station and an important link in the Distant Early Warning System.

Last March, as a result of studies conducted by the Fish and Wildlife Service, Seabees began grading and stabilization work on the runway areas, scheduled to be completed October 1.

Over the years, many methods were tried to discourage the birds from nesting and soaring over the runways. Scarecrows, flares, mortar shells, bazookas, and high frequency sound were tried, with no success. Relocation of some of the birds to another island was also useless; the birds flew back to Midway.

Studies of the problem indicated that the greatest number of birds were soaring in areas where the topography was such as to deflect the wind and create updrafts. Also noted was the fact that the birds did not nest on paved areas.

Based on these studies, a 30-acre area was leveled and paved in 1961, in accordance with plans prepared by the District Public Works Office, 14 ND. This markedly decreased the number of birds over the runways.

Thereupon further observations were made. These determined the most likely nesting areas of all birds involved in collisions with aircraft. Approximately $500,000 was obtained for leveling more sand dunes and paving 130 additional acres.

In general, the work being accomplished now consists of leveling the sand dunes adjacent to the runways and paving the nesting areas with a five-inch thick mixed-in-place soil-cement mixture. A large part of the area being paved will be graded and treated with a bituminous seal coat. This will serve as a water catchment area. Rainwater is the primary source of fresh water on the island.

## Officer Given Air Medal

### Cited for Viet Nam Achievements

Lt. Robert L. Edgerton was awarded the Navy Air Medal in May for meritorious achievement in aerial flight observation during combat support missions for the Republic of Vietnam. Capt. Nicolas A. Evans, C.O. of the Naval Airborne Project PRESS Operations Group (NAPOG), made the presentation at Hickam Air Force Base, NAPOG's headquarters.

Lt. Edgerton was commended for operating airborne radar during 20 missions in South Vietnam between August 14 and September 19, 1962. He is now a NAPOG engineer.

# SH-3A MAKES 5000 WATER LANDINGS


WITH CAPT. FROSSARD OF NATC PATUXENT RIVER AT THE CONTROLS, SH-3A SEA KING, BUNO. 148973, LOGS ITS 5000TH WATER LANDING

**By Lt. Tom Kelly, USN**

On May 6, Helicopter Squadron One's SH-3A, Bureau Number 148973, made its 5000th water landing at Patuxent River, Md. Capt. C. F. Frossard, Director of the Weapons Systems Test Division at the Naval Air Test Center, made the historic landing as part of a water-landing training syllabus given to HS-1 instructor pilots, Lt. Hi Bronson and Lt. Brad Butcher.

During the last year, HS-1 has been conducting the water landing training syllabus under the direction of ComNavAirLant and has qualified approximately 250 helicopter pilots in AirLant ASW helicopter squadrons. In addition to training the Fleet pilots, HS-1 has trained each student pilot attached to the squadron's RAG in water landing.

The syllabus consists of a lecture, a training film, photographs and a 45-minute flight during which the student participates in 15 landings. The inflight training portion consists of vertical landings, water taxying, run on landings, single engine takeoffs (simulated), single engine landing (simulated) and simulated loss of an engine in a hover at 40 feet, 20 feet and 10 feet.

In addition to Capt. Frossard, 14 other helicopter pilots attached to Flight Test, Service Test and Weapons Systems Test Divisions at NATC were qualified during the four days that Lt. Bronson and Lt. Butcher were at Patuxent River. Cdr. J. M. Wondergem, C.O. of HS-1, also visited the Weapons Systems Test Division.

Students gain a feeling of confidence in the waterborne capabilities of the SH-3A and in their ability to handle an emergency landing involving a single engine landing and takeoff.

**THE NAVAL AIR STATION** *at Glynco, Brunswick, Ga., had its beginnings as a Naval facility in World War II when airships used it as a base from which they flew thousands of hours of patrols searching for German U-boats. Not a single Glynco airship was lost while on duty.*

# GLYNCO'S SERVICES VITAL TO TRAINING

**By Marie Pfeiffer**

FROM A SMALL, unnoticed military base which got its start 20 years ago in the poet Sidney Lanier's "Marshes of Glynn," to one of the most intricate training centers in the U. S. Navy today—that's the story of the Naval Air Station, Glynco, Ga. It is built on a 4500-acre tract and has a plant value of $56 million, with ample space for expansion.

NAS GLYNCO recently won the chief of Naval Air Technical Training's award, "Admiral's Plaque," for fiscal year 1964. The trophy, established in 1962, is annually awarded to one of the nine Technical Training Command activities which exceeds the others in over-all efficiency of operation. The key to the award is the annual Administration/Material Inspection. Capt. M. C. Norton, Jr., commands NAS GLYNCO.

With all the associated operational departments of a major air station, Glynco's primary task today is to maintain and operate facilities and to provide material support operations for aviation activities and units of the U. S. Naval Air Technical Training Command. This includes the busy, almost unique Naval Air Technical Training Center (NATTC) which trains personnel for the entire Fleet. Blackshoes and Brownshoes are completely intermingled.

Naval Air Technical Training Center is in the "command and control" training business in a big way. Big, because nearly 4000 students per year are processed through a variety of courses; basic, because it is a starting point for individuals rather than crews, particularly those manning the Combat Information Centers (CIC) throughout the Fleet.

Technical training programs at NATTC which are supported by Glynco are geared to provide basic, advanced, and specialized training for officers and enlisted personnel in Air Intercept Control (AIC) and Combat Information Center (CIC) operations; and in the maintenance procedures and repairing of related equipment.

The Air Intercept Control School trains officers and enlisted personnel of the Navy and Marine Corps to become designated Air Intercept Controllers. For six to seven weeks, these trainees spend many hours in concentrated classroom work plus hours upon hours in the "black hole" saddled to the radar console, or as it is sometimes called, "the green-eyed monster." After the initial classroom instruction, the trainee masters the fundamentals of air intercept control utilizing synthetic trainers and "bugs." When a student passes his "ready for actuals" check, he is permitted to continue his training by controlling "live" jet aircraft called "actuals." This same procedure is followed for each type intercept that the controllers may encounter when assigned to the Fleet. Types of intercepts include lead pursuit,

**IN BOTH** *the CIC and ATC schools, radar plays an important role. Officers and men must become familiar with its uses and capabilities.*

**WORKING OUT** *an antisubmarine warfare problem, student officers plot positions of a simulated submarine contact on dead reckoning tracer.*

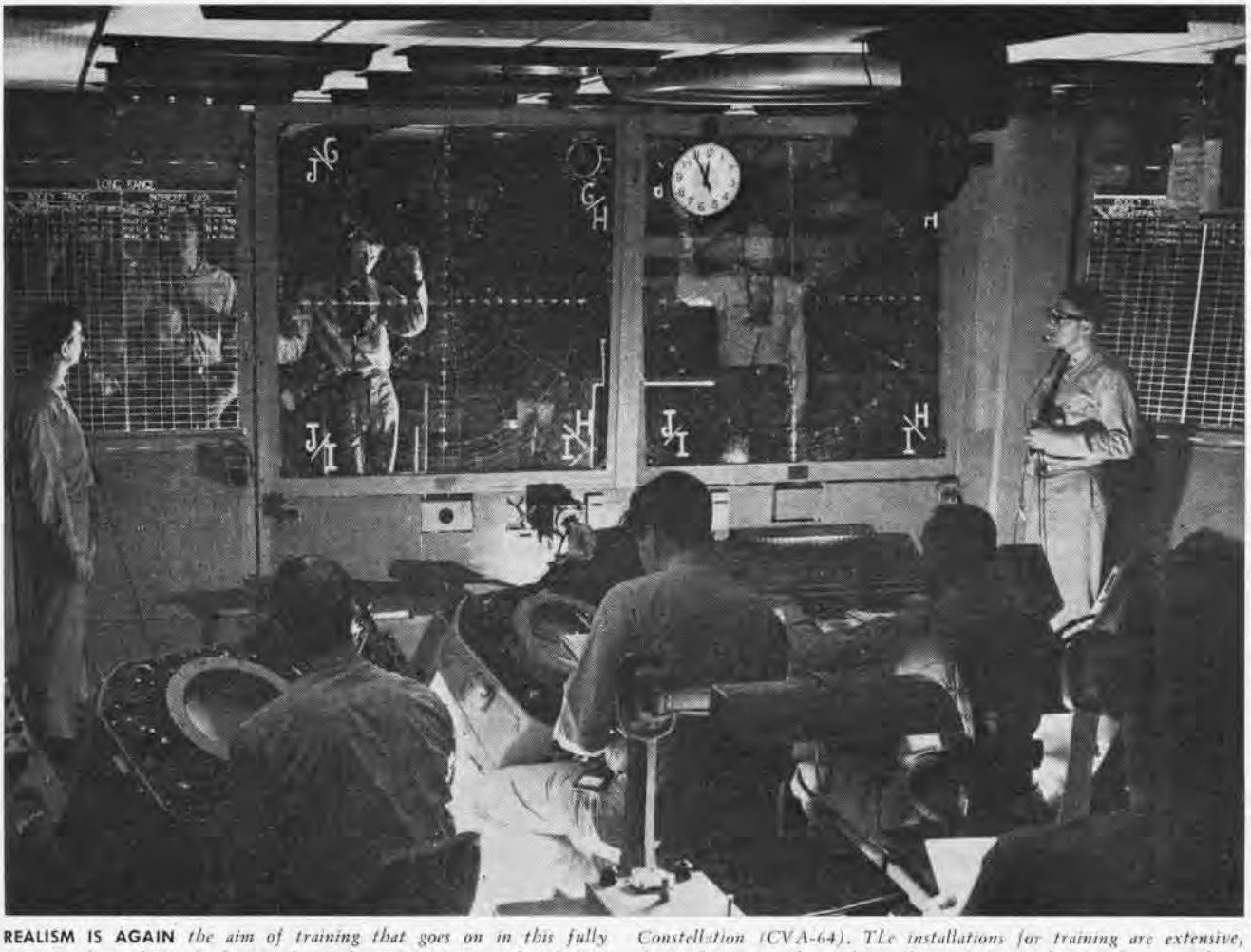
lead collision, head-on, pattern and broadcast. The lead pursuit and lead collision intercepts involve various angles depending on the type aircraft, electronic equipment and weapons systems employed.

While learning to manipulate the dials of the console and to interpret the radar presentations, the AIC trainee simultaneously educates his own hearing system. His ears are bombarded with weird sounds, distracting side tones and electronic interferences which he must learn to filter automatically.

During the "actuals" phase, an instructor is assigned to each AIC trainee controlling a "live" aircraft. Maximum efficiency is the constant goal, for the training cost is $35,000 per trainee, or in excess of $1000 per day. The major part of expense results from providing jet aircraft to serve as friend and foe during the "actuals." Three times a day, launches of eight planes leave the Glynco runway to take station over the Atlantic and follow the commands of the AIC trainee. Six "live" intercepts are conducted simultaneously during each 2½ hour cycle.

In addition to learning to control the intercept, the AIC trainee learns to control the aircraft to and from the operating area during good and bad weather. He learns to transfer

**IN A MOCKUP** *of the EC-121K, which is called a Cadillac trainer, both AT enlisted and AEW-ECM officer students are trained. Every effort has been made to make the classroom an authentic representation of the Super Connie fuselage. A rounded hull provides realism.*



**REALISM IS AGAIN** *the aim of training that goes on in this fully operational mockup of the Combat Information Center aboard USS Constellation (CVA-64). The installations for training are extensive, designed to give the students thorough knowledge in their specialties.*

control to civilian approach control (FAA) facilities. The associated subjects of meteorology, flight physiology, identification friend or foe (IFF), electronic warfare, anti-air warfare, weapons systems, aircraft characteristics, etc., are thoroughly covered.

NATTC's Combat Information Center produces both shipboard and airborne CIC specialists, air controllers for both intercept and anti-submarine warfare, and the very latest of combat specialists—the Radar Intercept Operator (RIO) who flies in the back seat of the F-4B.

The RIO is a front-row program now in the Navy. The obsolete F-10B's are being phased out and replaced by the T-39D's, and the RIO graduate takes his place in the Fleet as half of the crew in the world's fastest airplane coming off the production line, the F-4 *Phantom II*. The RIO's have gained newspaper fame through the trials of Ens. Jensen, the officer who flies with Buz Sawyer in the comics.

In comparison with CIC's in WW II, a large ship's CIC today is much more complex. It is a maze of radar sets and communication gear, brightly colored display boards, numerous personnel and split-second operation. The CIC officer, by scanning the plotting boards, can see the progressive action of ships and aircraft throughout the combat area.

The broad functions of CIC are collection, display, evaluation and dissemination of combat information. In Fleet operations, each major combatant unit has assigned to it a group of fighter type aircraft for the protection of the Fleet from enemy attack. These groups of aircraft are known as combat air patrols (CAP). If the air plot or air status board indicates a radar contact with either an unidentified aircraft or aircraft identified as enemy—called "bogey" —one of the CIC's will be directed to intercept the contact with the CAP assigned to it for control. An air controller will then utilize the information on his radar screen to direct or control the CAP pilots into an attacking position. To accomplish its mission, CIC must be ready to operate instantly, hence its maintenance personnel are trained to repair any piece of the complex gear on the spot, and quickly.

The use of mockups was introduced more than 10 years ago to CIC training. Now at NATTC GLYNCO, there are many replicas of the various types of CIC's on combatant ships. The mockup facilitates the CIC officer's transition from the training situation to the operational situation and his usefulness to his ship and to the Navy is enhanced thereby. Some of the "ships" housed in the CIC building, referred to colloquially as the "T" building, are: *Boston*

**IN BLIMP HANGAR,** *a student in GCA maintenance course trouble-shoots a radar unit.*

(CAG-1), *Hancock* (CVA-19), *Constellation* (CVA-64), *Coral Sea* (CVA-43), *Worcester* (CL-144), *Allen M. Sumner* (DD-692), *Eugene A. Greene* (DDR-711), *Carpenter* (DDE-825), *Dealey* (DE-1006), and *Rasher* (SSR-269).

The only enlisted training conducted at the CIC Schools is the Aviation Electronic Technicians' Early Warning (Airborne CIC Operators) Course. The first enlisted training conducted at the CIC Schools began in 1957 when instruction in the Air Controller, Early Warning Course, was first presented. The addition of this course to the CIC Officers' Schools resulted in the word "Officers" being deleted from the title of the school. In 1960 the Air Controller Course was replaced by the Aviation Electronic Technicians' Early Warning (Airborne CIC Operators) Course.

In October 1961, the CIC School's several dozen training aircraft of a variety of types, both jet and prop, were transferred to the custody of Commanding Officer, NAS GLYNCO. All personnel and equipment of the Aircraft Maintenance Department of the CIC Schools were similarly transferred.

The year 1964 introduces a number of significant developments. The addition of the Naval Tactical Data Systems (NTDS) Operational Course is in prospect. It represents a comprehensive modernization of the methods by which CIC operations are conducted. Essentially, NTDS is a computerized CIC which provides a capability for making a larger number of air intercepts at any given time and improves the quality or accuracy of those intercepts. The NTDS reduces the reaction time of a naval force from a matter of minutes to seconds. Another course, also imminent, the Airborne Tactical Data Systems (ATDS) Course, will train personnel for systems that are contained within aircraft. Such a system provides the capability for completely automatic air intercepts. The ATDS can effectively prosecute air intercepts independently or it can operate in conjunction with NTDS.

The second major division of the Naval Air Technical Training Center, the Air Traffice Control School, was transferred to the Center from Olathe, Kansas, in 1962. ATC trains Naval Aviators and Aviation Ground Officers to man the Navy and Marine Corps control centers, both at air stations and on board aircraft carriers. ATC's student rosters include Coast Guardsmen, Marines, and Army men who train as aircontrolmen and ground controlled approach (GCA) personnel. In GCA, the operators, the technicians and the mechanics who maintain the trailers are taught their trades. ATC also trains the officers who must supervise the control towers, the ground and carrier controlled approach units, and the air traffic centers. ATC has its own airplanes to use in support of air control and GCA training.

In addition to the AIC, CIC and ATC technical courses, the Center's

**A RADAR** *Intercept Officer instuctor talks with his student on stair well of a T-39.*

**TWO GCA** *students in a trailer are at work conducing approaches of actual aircraft.*

activities include programs in aviation safety and in leadership principles and practices. A Marine Corps representative acts as liaison between the Commanding Officer of the Center and the Commandant, Marine Corps, to assure a full quota of Marine students. He also serves on all trainee advisory boards when Marine students are involved. In matters of particular concern to Waves, a women's representative advises and assists the Commanding Officer.

Glynco's instructors and student pilots log about 3000 hours per month in flight time—or about 36,000 hours per year!

The station currently provides ground control approach services, operates and maintains the Townsend Target area; maintains the station's navigational aids; serves as a reserve helium stocking point; and provides for the shipment of household effects for Glynco's naval personnel. Under the Refined Aeronautical Support Program (RASP), Glynco utilizes the centralized stock reporting system and large scale computers at NAS JACKSONVILLE for accounting and inventory control purposes.

Several factors entered into the selection in July 1942 of the present location of the station: the accessibility to the Atlantic Ocean; the lack of hazards to air navigation; the availability of good water, adequate electric power, rail transportation; and the clear approaches offered by the Marshes of Glynn. The choice was made by the board of naval officer

established by the Bureau of Aeronautics (now Bureau of Naval Weapons) to select a site for a lighter-than-air station. Because of the German U-boat threat in WW II, protection of the Atlantic seaboard shipping lanes had become a high priority project. Establishing airship operations along the coastal shipping lanes off the coast of South Carolina, Georgia and Florida was urgent.

For the most part, the Glynco County site selected for the naval air station, near Brunswick in an area known as the Golden Isles, was covered with pine and palmetto and entirely wooded except for a few small homesteads. The soil was soft and swampy. Initial construction, began on September 15, 1942, was hampered when trucks and equipment were mired in the muck at every turn.

To facilitate the construction of the two large hangars, the largest known wooden structures of their type in the world, a railroad spur track connecting the air station with the railroad junction serviced by three major railroad networks was constructed. Railroad service went into operation as early as October 21, 1943.

The station's first Airship Squadron arrived at Glynco and started operations in February 1943. During the war, Glynco was an integral part of the antisubmarine network. Squadrons based at Glynco flew countless missions covering convoys and searching the seas for German U-boats. Throughout the thousands of hours of patrol flown by these squadrons, not a single airship was lost while on duty.

At the conclusion of WW II, Glynco's two large airship hangars became an airplane and aeronautical storage point. In the late 40's when millions of military personnel returned to civilian life, activity at Glynco was sharply curtailed. Consequently, in July 1945, the station was reclassified as a naval air facility and eventually reduced for a period to a maintenance status.

In 1952, a decision was reached in the Navy Department to move the Combat Information Center (CIC) School from Glenview, Ill., to Glynco. In preparation for this relocation, a program of expansion got underway at NAS GLYNCO from 1953 through 1955. New construction projects included an 8000-foot jet airstrip, operations building, barracks, bachelor officers quarters, enlisted mess, and a multi-million dollar CIC training building.

**THE LOW WING,** *twin jet T-39D aircraft, configured for a crew of six, first went into operation at NAS Glynco on August 9, 1963, to train radar intercept students from NATTC. These T-39D's have just been pre-flighted and one will soon be on a training mission.*

Upon arrival at Glynco, the CIC changed its name to the U. S. Naval CIC School. The name was changed again on January 1, 1962, to NATTC with the arrival of the Air Traffic Control School from Olathe, Kans., to become the second half of NATTC. Both CIC and ATC have their own superintendents of training.

At the outbreak of hostilities in Korea, the Navy's ranks began to swell, and increased emphasis was placed on the airship program. In August of 1951, Airship Squadron Two was transferred from NAS LAKEHURST, N.J., to Glynco. This gave Glynco at that time the distinction of being the only air station having every type of aircraft operating from its base—the airship or blimp, the conventional prop-type airplane, the jet, and the helicopter.

In the spring of 1953, Glynco became a member of the Naval Air Training Command. Its military control was changed from Commander, Naval Air Bases, Sixth Naval District, to the Chief of Naval Air Technical Training, who has remained in control since that time. The Combat Information Center School, later to be redesignated as a Naval Air Technical Training Center, became a separate command from the Naval Air Station in April 1955.

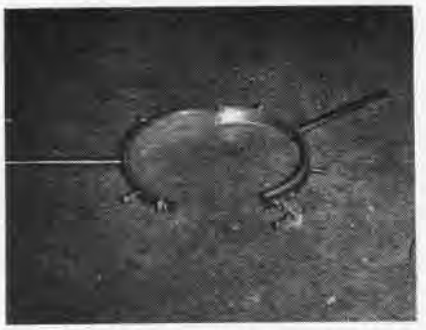
So it came to pass that NAS GLYNCO had three tenant commands aboard at the end of 1958: the U.S. Naval Airship Training Command; the U.S. Naval Combat Information Center School, both elements of the Naval Air Training Command; and Airship Squadron Two, a Fleet unit.

On November 30, 1959, the two lighter-than-air units stationed at Glynco were disestablished. This closed the chapter on lighter-than-air activity at this command. These were the last of the blimps at Glynco. The station, however, maintained a lighter-than-air facility capable of handling and providing service to occasional visting airships, and continued to act as a stock point for helium.

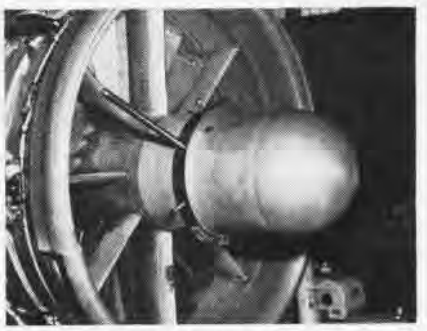
Expansion at Glynco within the past five years has included a Denver-type hangar for the Aircraft and Maintenance Department; and a $500,000 addition to the Naval Air Technical Training Command "T" Building which houses the U. S. Naval CIC School. Station facilities also include 10 barracks for enlisted men, 186 rooms at the BOQ, and 307 public quarters aboard the station for officer and enlisted personnel with dependents. The General Mess for enlisted personnel is a $500,000 structure with a capacity for feeding 1500 men. At the noon meal, Glynco actually feeds, on an average, 1200 personnel.

Bureau of Naval Weapons, responsible for management control of the air station, assigns specific tasks, such as maintenance of station and transient aircraft, and aircraft maintenance support equipment; performance as an all-weather air station; provision of search and rescue services; and special air logistic, administration and other operational support for tenant activities.

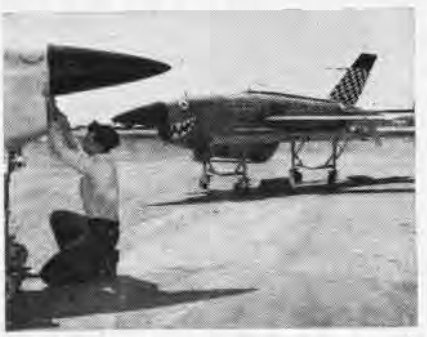
The present Commanding Officer, Capt. Norton, is the 17th officer to command growing Glynco since it was commissioned in 1943. NAS GLYNCO has come a long way from its modest beginning in 1942 to its present status as an important link in the chain of national defense.



**THIS SIMPLE** *device speeds removal of the nose dome of J79-GE-8/8A engine (below).*



**LCPL. G. W. DUDLEY,** *of the H&MS-24 power plants shop at MCAS Cherry Point, has designed a special tool (above) for removing the nose cone of J79-GE-8/8A engine for a saving of some 35 man-hours a month.*



**THIS RYAN FIREBEE** *has completed its record-breaking 36th flight in the Pacific Missile Range where it was guided by remote control at Pt. Mugu. Parachute decals on the jet target's fuselage denote its landing total.*

## HUP's are Retired by HU-2

### Helicopter Had Admirable Record

HU-2, based at NAS LAKEHURST, has announced the retirement of the UH-25 helicopter. Referred to as "Old Reliable," the *Hup* established an admirable record through its service years beginning in 1949.

Since that time, HU-2 has rescued 352 people from the sea alone, with the *Hup*. Many civilian personnel have also been saved with the UH-25. In 1962, when floods ravaged Long Beach Island in New Jersey, hundreds were rescued. One *Hup*, for example, carried 549 people to safety in a day.

In 15 years of duty, the UH-25 excelled in the performance of missions, rescuing downed airmen, delivering the mail or evacuating disaster victims.

## Unit Now Decommissioned

### Trained 10,000 for the Skywarriors

Naval Air Maintenance Training Detachment (NAMTD) 1072 (A3) based at Sanford, Fla., was decommissioned in June. The training unit was formed in 1954 as A-3 *Skywarrior* attack bombers were being prepared for induction into the Fleet.

Originally based at Patuxent River, the detachment was transferred to NAS JACKSONVILLE and in 1956 to NAS SANFORD. More than 10,000 students were instructed.

All future training for this weapons system will be performed by Det. 1073, Whidbey Island, Wash.

## LPD-7 Contract Awarded

### Amphib Transport Docks Ordered

BUSHIPS is awarding a $69,774,000 fixed-price contract to the Puget Sound Bridge and Dry Dock Company, Seattle, Wash., for the construction of three amphibious transport docks (LPD-11, -12, and -13), authorized in the Fiscal Year 1964 Shipbuilding and Conversion Program.

These docks are repeats of LPD's in previous programs. They will be of the LPD-7 class which has an over-all length of 569 feet, a maximum beam of 84 feet, and an approximate full load displacement of 16,900 tons.

LPD's are designed to carry combat troops with their equipment and the landing craft as well as transport helicopters to carry them ashore. Both landing craft and helicopters may be launched while the ship is underway. Ten of these ships are under construction or completed.

## New Forklift is Designed

### Assists in Taking Plane X Rays

Three metalsmiths from NAAS SAUFLEY's station airframes division have devised an hydraulic forklift which expedites X-ray techniques on aircraft. An X-ray, used to detect discrepancies in a plane's structure, can now be taken without disassembling aircraft sections.

C.D. Stultz, AMCS, conceived the idea after noting the considerable time and hazard involved when rigging X-ray gear. Jerry Love, AMH1, and J. D. Stilwell, AMS2, helped Stultz make the lift out of spare parts.

Before the men devised the lift, X-ray gear was adjusted into place by any means available. Many times even chairs were used to stabilize the equipment. The lift, in addition to reducing physical danger, saves time in maneuvering gear for each exposure.

The lift is portable and can be moved quickly. It is operated by a hand lever which pressurizes the actuating cylinder raising the fork stem. The stem may be placed at the adjusting base at various levels giving greater versatility.

The lift is constructed so the X-ray cylinder can be rotated 360 degrees.

**VU-7'S LAST UB-26** *Invader is piped "over-the-side" at NAS North Island with US-2C's acting as "sideboys." The Tracker has replaced the Invader as the primary surface-to-air gunnery tow aircraft in the Pacific Fleet. This Invader, originally assigned to the Air Force, has been in the Navy inventory since 1945. Still in good flying condition, the aircraft was transferred back to the U.S. Air Force.*

# LAKEHURST RIGGER SCHOOL'S 20,000TH JUMP

JUMPMASTER AND STUDENT JUMPERS HAVE JUST LEFT AIRCRAFT

PARACHUTE RIGGER B. E. KAPP PULLS RIP CORD AFTER FREE FALL

JUMP DAY, that day to which all students in the Parachute Rigger School look forward to with some trepidation, comes during the seventh week of the 16-week cruise. Though the student rigger realizes that a parachute jump has been performed by thousands before him and is not one of the most difficult feats, that first jump is not easy. No one is going to pull that rip cord for him, no static lines are used, and it is his own right hand that will cause the chute to open.

On April 13, that day came to B. E. Kapp, AN, a student in the school at Lakehurst, N.J. He made the 20,000th free-fall parachute jump since the school was founded in 1924 by Aviation Chief Riggers Alva F. Starr and Lyman H. Ford. (The latter became president of one of the world's largest parachute manufacturing companies.)

The Parachute Rigger School is the only one of its kind in the Navy and Marine Corps today. At the time it was founded, parachuting was considered dangerous, and a high percentage of the Navy pilots were riding their crippled planes all the way down instead of bailing out at a safe altitude. The two chiefs decided that free-fall parachute jump should be a Navy or Marine Corps Parachute Rigger until he had completed a jump with a chute he had packed himself. This rule installed confidence in both trainees and pilots. There has not been one parachute failure in 20,000 jumps.

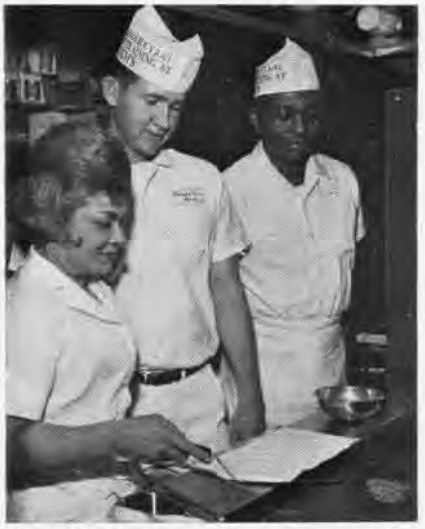
In the first nine weeks of the course, the student learns to assemble, rig, pack and maintain Navy parachutes. His physical training, two hours daily, includes two and three-mile runs, vigorous calisthenics and practice parachute landing falls. He is psychologically prepared, for his first jump may be made on his first time aboard an aircraft.

The injury rate, such as sprained or broken bones, has been slight, one-half of one per cent. The preparation is thorough, and to enforce safety rules, the school has six qualified jumpmasters, headed at the present time by CPO Lew DeYong.

After the jump, the students finish their 16-week course with such subjects as ejection seats, testing and maintenance of aircraft oxygen and carbon dioxide systems, and the fitting and maintenance of anti-exposure and pressure suits. They also learn to maintain survival equipment—life-rafts, life vests, air/sea rescue equip-

A BEAUTIFUL SIGHT—PARACHUTE OPENING

# RANGER'S SPEEDY 'BURGER LINE



**THE PROPER WAY** *to grill a hamburg is demonstrated by Mrs. Rosie Evangelista of Zim's.*

**By John D. Burlage, JO1**

**THE SPEEDY WAY** *to nutritious food is tried by seaman Terry E. Smith aboard the Ranger.*

THERE'S A NEW WORD coined aboard CVA-61, "Rangerburger," and it has raised morale in the aircraft carrier higher than when the first liberty call was sounded. Like the legendary phoenix bird, it grew out of a small disaster and matured into a time-saving, hunger-sating concept.

Last August, fire gutted *Ranger's* forward galley, then used as a ship's store. Cdr. Douglas G. Aitken, Supply Officer aboard, consulted with CWO Robert F. Hoffsetz, Commissary Officer, and the two laid out plans for a high-speed, "high class" hamburger stand.

Work on the conversion started when the carrier was undergoing a six-month overhaul at the San Francisco Naval Shipyard. Much of the equipment in the galley had to be salvaged.

"We removed 12 ovens and left four," Cdr. Aitken said. "Two grills remain out of the four that were originally in the galley. Two of the four fryers were renovated, and two refrigerators were installed. Personnel assigned to the ship's E and R Divisions, along with some from A Division, worked hard to get the speed line open."

Infra-red lamps were installed to keep the food warm, a fireproof awning was put over the serving line, and new tops were put on 25 mess tables.

Five enlisted men who normally handle food in the course of their duties were chosen to receive special training in the preparation of hamburgers. They were sent on temporary additional duty to various Zim's restaurants in the San Francisco area.

The speedy feeding line dispenses hamburgers and french fries to crewmembers, along with light deserts—free. It supplements the ship's regular chow lines and is designed to provide a convenient means for flight crews and others pressed for time. It has shortened considerably the line to the ship's after mess decks.

Instead of impatient in-line opinions heard in chow lines, servers hear a pleasant "Make mine with onions."

**SUPER SERVICE** *is given by Clifford R. Williamson, CS2, and Burrel Jones, SD3, during TAD training period. Mrs. Evangelista looks on.*

**SATISFACTION** *is registered by Ranger men as they hoe into hamburgers and salad. The speed line permits more leisure during lunch hour.*

## *Antisubmarine Carrier Report*

# CHAMP'S GAS KING AND HIS GANG

**DAILY READING** *of a fuel sample aboard the Lake Champlain is made by Walter Dixon, ABF2. To ascertain its purity, he uses an Aeronautical Engine Laboratory contaminated fuel detector.*

**By Ltjg. Donald C. Rutherford**

WHEN LTJG. CLYDE K. THOMAS, gas king for aircraft carrier *Lake Champlain*, reported to the Quonset Point-based ASW carrier, he did more than change types of carrier (he was on the CVA, USS *Ranger*); he changed oceans as well.

The move from Pacific to Atlantic was not as significant, however, as the move from the "top gun in the West" to the "greatest of the straightest." In moving from a fast-moving CVA to a moderately paced CVS, Ltjg. Thomas reduced his work day at sea from 18 hours to 12. He has also taken on a more dangerous task.

The work aboard *Lake Champlain* is more dangerous because highly explosive aviation gasoline is stored throughout the ship. The CVS has two pump rooms and two filters for avgas while the CVA has only one of each.

The job aboard *Lake Champlain* is less time-consuming because the *Champ's* aircraft are launched in four-hour cycles whereas *Ranger's* aircraft were launched in 1½-hour cycles.

The bulk of the fuel aboard *Lake Champlain* is avgas because the Atlantic ASW carrier doesn't fly fixed wing jet aircraft—only twin-jet SH-3A helicopters. The *Champ's* fixed wing aircraft, S-2's and EA-1's, use aviation gasoline while *Ranger's* aircraft, chiefly jet-powered, use JP-5. Aviation gasoline has a very low flash point (−40 degrees E) while JP-5 is a high grade kerosene with a flash point of 140 degrees.

**APPLYING** *a gasoline hose to an aircraft is Russell J. Flanigan, AA, in the V-4 Division.*

Owing to the explosive hazard aboard *Lake Champlain*, the 57 men working for Ltjg. Thomas in V-4 Division must be especially conscientious—likewise for all the crew members of *Lake Champlain*. When the word is passed for the smoking lamp to be put out while refueling aircraft or venting the gasoline system, the smoking lamp *must* be put out. And it is.

The gasmen must be conscientious in other areas. They must be sure that no water or other foreign matter is mixed with the gasoline put into the aircraft.

**ESMON TUCKER,** *III, AA, crawls on the wing of an S-2A Tracker to fill the fuel tanks.*

"It seems these aircraft won't run on water," Ltjg. Thomas says. "And when an engine fails because of foreign matter in the gasoline tank, it's our fault. This costs the government several million dollars."

When an aircraft engine fails or malfunctions, seldom an occurrence

aboard *Lake Champlain*, the first thing checked is the gasoline station out of which the fuel for the aircraft was taken. Careful records of all refueling must be maintained. It is the responsibility of the filter operator to keep a running log of pressure in the filter which is an indication of the condition of 120 filter elements inside the filter, as well as the pressure being sent topside.

Checks are made on the storage tanks every morning to make sure there is no foreign matter in the tanks. One of the rough things about quality control of gas going into the various tanks is that those gauging it can't see it; they can only sample it.

"When you see it," says Cdr. Gilbert L. Tracy, *Lake Champlain's* air officer, "if it's not in a sample bottle, it's like dynamite. The only person who should see the gasoline is the man on the wing of the plane who is putting it in. With complete pressure fueling, nobody should see it."

The gasmen are always on the alert for leaks and other "crises." Crises include a fuel leak that must be repaired in a hurry, a plane that has to be defueled, or a station that requires a minor repair. The byword in V-4 Division is, "Isolate the leak, clean up and make repairs." The leak must be isolated to get rid of the explosive hazard and fumes and to preserve the space into which it leaks. JP-5 and avgas eat paint off the deck, so it is mandatory that the leak is cleaned up promptly or the deck will have to be repainted. (More work.)

**LTJG. C. K. THOMAS** *inspects JP-5 tanks in the Champ. He is V-4 Division Officer.*

A clean deck is a much safer deck.

A constant problem to the gas men is the persistent requirement to repair ground wires and ground clips to prevent static sparks from starting a fire. Most of the repair work that is done by V-4 is other than routine. Another byword of the division is, "Fix it and stand by for the next crisis."

Another constant headache to the gasmen is keeping clean. The 2½-inch rubber hose used for fueling rubs off quite easily. The red-shirted V-4'ers have to drag the hose all over the flight deck. Their hands and clothes are usually a smutty black when they are working and they usually smell of JP-5 and avgas. However, if any fuel is spilled on the men, an immediate change of clothing is required. Men in V-4 Division must have six pair of dungarees in their sea bags. Other sailors are required to keep but four. Red sweat shirts are changed at least once a week, but "hose handlers need clean shirts every time I see them," Ltjg. Thomas says.

It's tough keeping the gasmen in shoes. A pair of flight deck shoes is designed to last six months, but the fuel king wears them out in three. Much of this wear is due to running with the hoses. Many people think the V-4'ers run with the hoses because they are in a hurry to fuel the planes. They are, but the truth is that the hoses are much easier to move after they pick up a little bit of momentum.

To be really effective and efficient in the fueling business, everyone needs to have a general knowledge of the fueling stations in order to be able to describe what appears to require repair. Repair is the number one job most of the time.

Since there are more spaces than people in the fuel systems aboard *Lake Champlain*, fueling commitments don't allow for any spare people without putting an *extra* burden on someone else.

The "below decks" spaces are manned 24 hours a day during flight quarters. "We never close," Ltjg. Thomas says. Below decks there are 10-inch valves and 600 gallon-per-minute pumps which handle tremendous capacities and pressures. With a fueling system pressurized, there is a great

**THREE MEN** *from the V-4 Division race across flight deck, hauling hose. Momentum of the run tends to lighten weight of the hose.*

**THE STRENUOUSNESS** *of life in the V-4 Division is illustrated by Clayton D. Temple, AA, perched atop a Tracker's wing during refueling.*

**THE INHERENT** *danger of fire when avgas is pumped is met by Ashley L. Rowe, AN, who stands by the aircraft with a CO2 bottle ready.*

**REPAIR WORK** *on a hose is accomplished by Dixon, Edward J. Pollick, AN, and Richard L. Ponzini, AN, on flight deck of "Champ."*

deal of work involved—lining up the right tanks and insuring clean fuel by maintaining bulk stores. When a fire breaks out anywhere aboard *Lake Champlain*, the complete avgas system is drained back into the tanks and the piping is filled with inert gas to protect the ship.

The fuel crews work hard and sometimes this work seems futile. When "flight quarters" is sounded, all aircraft are checked for fuel load and topped off as required. Sometimes this may involve pulling out 200 feet of hose to put five gallons of gas in an airplane.

Special care must be taken in underway replenishment. Aviation gasoline is pumped at a thousand gallons a minute through a six-inch hose. Before any valves are open for transfer, the hose must be filled with fuel to prevent explosive vapors or an air lock from forming. Then the valves must be open at the proper time to prevent the bursting of the hoses. Capt. Clarence A. Blouin, Commanding Officer of *Lake Champlain*, says, "Bursting of hose is one of the most dangerous things in the Fleet."

Although there is a lot of hard work involved with fuel, a lot of the time is boring "stand by" time. When general quarters sounds, the people are sealed in below decks. In underway replenishment, refueling personnel are at their stations well ahead of the time the tanker comes alongside, usually as much as an hour.

Despite the danger involved in their work, the men of V-4 Division aren't afraid. When they see a puddle of avgas, they don't run from it. They pick up a swab andclean it up.

Despite the frequent hard work and boredom, the men enjoy working in V-4 and feel their work is important.

Filter operator William Schweigert, AN, feels his job is important "because my job is to prevent bad gas."

Phone talker Carl Ayotte, AN, feels his work is important too. "They put me where I was needed," he says, "and I like it." Leslie Howerd, another AN, fuels planes and sets up fueling stations. He feels his job is "as hard or easy as you want it to be."

Very little training is done off the ship. "Very, very few people are received from school or sent to school." Ltjg. Thomas says. "Ninety-five percent of the training is done aboard ship starting with the airman just out of basic training. We can't afford to send men to school. They learn here fast."

One thing about the ABF rate is that it requires a lot of sea duty. W. W. Dixon, ABF2, has been on *Lake Champlain* four years. "It's worth being at sea," he says. "You make rate quicker and learn more."

Individual reactions and motivations differ among men in *Lake Champlain's* fuel gang. But it is apparent that the long hours of strenuous work add fuel to the fires of dedication.

**A SAMPLE** *of JP-5 is taken by Stanley E. Adams, AR (L), and John H. Cullinane, AA.*

**Photos by Gerald Sansavera, PH3**

**CROUCHED** *on the wing of a Tracker, Tucker awaits the delivery of a Champ gasoline hose.*

# SELECTED AIR RESERVE

**NAVAL AIR** *Assoc. Pres., Capt. J. J. Gleeson, CNARestra's Capt. L. W. Mather, pose with trophy designed by E. Fleischnik, ADC.*

**NARTU NORFOLK C.O.**, *Capt. F. M. McAfee presents C. W. Hill, ADRI, commendation for work in NARTU-sponsored Explorer Post.*

### Real Tough Captain

Reserve Capt. James R. Smith is 57 years old but had no trouble this summer in completing the Navy's one-week course in survival, escape and evasion at FAETU's Pacific Detachment Three Survival School, NAS BARBER'S POINT. The Captain has achieved a formidable record throughout a civilian and military career, especially in the field of parachuting.

He has jumped from blimps, helicopters, fighters, transports and bomber air craft. He has landed in the Atlantic Ocean 22 times and made 55 service-connected free-fall jumps. His latest jump was from 10,000 feet when he used a 40-second delay and a steerable canopy.

In nearly twenty years of service, Capt. Smith has made some "firsts." He was the first to make an experimental bail-out from the F7F-2 *Tigercat*, a Marine nightfighter, in 1945. He also jumped with a parachute designed for use with the first of the German jet planes.

He was formerly the O-in-C of the Parachute Experimental Unit and U.S. Navy Parachute Riggers School at NAS LAKEHURST in 1946. One of his students at the time, Harold D. Carder, is now a lieutenant and was Survival Officer when Capt. Smith went through FAETU's course.

Capt. Smith is presently atached to Reserve Air Wing Staff 77, NAS LOS ALAMITOS as BUWEPS liaison officer. In civilian life he is swimming and water polo coach at Fullerton District College and a co-developer of a "senior citizens" community.

### Safety Trophy Announced

The Naval Air Association of Brooklyn, N.Y., has donated a trophy to the Naval Air Reserve Training Command in Glenview, Ill., for use in the annual awards program. NARTU's and Naval Air Stations scattered throughout the U.S. are eligible to win the trophy.

The award will be presented for outstanding achievement in aviation safety including aircraft preventive maintenance, safety improvement recommendations for survival and ground equipment, and accident reduction both on the ground and in the air.

Presentation of the trophy will be made annually in September beginning with a winner from fiscal 1964. Called the "Naval Air Association Safety Trophy," the award will be retained on a temporary custody basis by the recipient for a year. A miniature of the trophy will be provided for permanent retention.

Weight factors used in selecting the winning station or unit are: combat readiness, 30 per cent; annual safety inspection, 60 per cent; aviation safety contributions, 10 per cent.

### Willow Grove Renews Program

After an absence of five years, the Naval Air Reserve's 85-day Accelerated Training Program has returned to NAS WILLOW GROVE. In late June, approximately 45 men began the "Recruit-to-Airman" phase of a course which continues through Labor Day. Each man is an enlistee in the two-by-six program whereby he serves a six-year enlistment with a two-year active duty obligation.

After September, the reservists will drill as Weekend Warriors. They begin Basic Rate Training in June, 1965. This phase will take place at one of several Navy schools according to rate preference of the enlistee.

Designed for two summer vacation periods, this program offers motivated personnel a sound opportunity to prepare for active duty. Graduates of the program are rated Third Class Petty Officers before a Fleet tour.

## Caribbean Cruise for VA-879

More than 100 reservists and active duty support personnel flew to Roosevelt Roads this summer when VA-879 from NARTU ALAMEDA reported for a training cruise. Pilots flew 14 A-4B *Skyhawks* to the Carribbean base while other personnel were airlifted in C-54 transports along with supplies and maintenance equipment.

The group also acted as goodwill ambassadors. They presented greetings to the city of San Juan and the Governor of the Territory of Puerto Rico from San Francisco's mayor and the Governor of California.

The squadron conducted two weeks of exercises including rocket and bombing practice. Personnel also toured the area and received a crest and scroll of the city of San Juan Bautista.

VA-879 is the first NARTU ALAMEDA jet squadron to cruise in the Caribbean. C.O. is LCdr. Bill Elliott.

## Colonel Commended

Col. Robert L. Rathbun received the Navy Commendation Medal with a combat "V" for action against the Viet Cong insurgents in Vietnam. Col. Rathbun is C.O. of the Marine Air Reserve Training Detachment at NAS GROSSE ILE. BGen. Hugh M. Elwood, commanding general of MARTC, made the presentation.

Holder of two Distinguished Flying Crosses for action in WW II, Col. Rathburn personally led his helicopter unit on 90 missions. His squadron totaled 2543 hours in flight support for the Vietnamese Army.

## Reunion in New Orleans

An unexpected reunion occurred after 22 years when American Football League Commissioner Joe Foss landed at NAS NEW ORLEANS to fill a speaking engagement with the local Chamber of Commerce. Waiting to greet Foss was 1st. Sgt. Lloyd A Casey of MARTD NEW ORLEANS who served with the former ace during WW II.

On Guadalcanal, Sgt. Casey helped keep the planes flying while Foss, then a USMC captain, shot down 26 Japanese aircraft to break Capt. Eddie Rickenbacker's American WW I record of 25. The two men were members of VMF-121 which was credited with 164 enemy aircraft in a 122-day period of fighting.

Foss served two terms as Governor of South Dakota and has headed the American Football League since 1959. He is a BGen. in Air National Guard.

**VA-879 LTS.** *Dave Luna, Dewey Powell and Dennis Heckerson check map before flight.*

**COMMANDING GENERAL** *of MARTC, BGen. H. M. Elwood, pins medal on Col. Rathbun.*

**THIS LINE MULE** *seldom exceeds five mph., but seat belts worn by M. H. Aube, ADRI, and W. E. Brock, AMS2, driving, provide good advertising as NARTU at Norfolk assists in current drive to "Buckle-Up for Safety."*

## Barber's Point is Busy

NAS BARBER'S POINT has been and will continue to be especially busy this summer and through mid-September as more than 1200 officers and men from 12 Weekend Warrior squadrons conduct training. Units began arriving in late June for two weeks duty assigned to increase ASW capabilities. Pilots and crews are expected to fly a total of 4100 hours during this period.

Sixteen planes were shipped to Barber's Point aboard aircraft carriers. These included ten S-2 *Trackers* and six SH-34 helicopters. Personnel from the reserve squadrons are transported by the Third Marine Air Wing, Patrol Squadron 21, and Naval Air Reserve Training aircraft.

Coordinating operations is Detachment Alfa of the CNAResTra staff which is commanded by Cdr. Arthur T. Ditmyer. While in the Hawaiian area, the Detachment is controlled by Commander, Fleet Air Wing Two, at Barber's Point.

## Mission of Mercy

Quick action by the Navy aided in saving a 20-year old college student's life last June after he was bitten by a coral snake in Louisiana. A call went out to the Florida State Board of Health in Jacksonville for serum needed in treatment of James R. Killingsworth of Louisiana Tech College.

The Navy was notified and immediately dispatched a helicopter from nearby Mayport flown by Cdr. G.C. Peebles, operations officer. He landed in the Gator Bowl to pick up the serum, then rushed it to NARTU JACKSONVILLE. From there, LCdr. Donald E. Kough, the unit's VA training officer, flew the serum to England AFB in an A-4 *Skyhawk*. State police met him and took the serum to Baptist Hospital in Alexandria, La., where it was successfully used on the student. He was later reported to be in good condition.

The time from call for help to serum delivery was about three hours.

# AT SEA WITH THE CARRIERS

**THE WORLD'S FIRST** *nuclear powered task force steams through the smooth waters of the Mediterranean Sea and is commanded by RAdm. Bernard M. Strean. At left of CVAN-65 is guided missile frigate Bainbridge (DLGN-25); right is missile cruiser Long Beach (CLGN-9).*

## ATLANTIC FLEET

### Enterprise (CVAN-65)

A helicopter detachment aboard the *Enterprise* tossed a dunking party at Cannes, France. For it, formal attire gave way to survival gear as pilots of Air Wing Six practiced emergency rescue operations. A release from the *Big E* indicated everyone had a ball, including a ship-wide TV audience.

The in-port party gave the pilots a chance to check out their survival equipment under controlled conditions, simulating an unexpected water landing. A brisk wind and a slight chop in the bay added realism to the session.

Some 24 pilots jumped from a ship's boat in pairs, and then bobbed in the water until a UH-2A *Seasprite* helo swung by to pick them up. Some held to a line trailing the utility boat to simulate being dragged through the water by a parachute. All practiced activating various signal devices.

To aid the training of the helo crews (of HU-2 Detachment 65), the pilots were instructed to affect helplessness during the rescue phase. This required the use of immobile pickup techniques, in which helo crewmen enter the water to place an injured or unconscious man in a hoisting sling.

**THE GLADIATORS** *of VA-106 in CVA-38 had a surprise for RAdm. Goldthwaite, inspecting.*

Each rescue crewman completed at least one immobile pickup, and each detachment copilot had refresher training in live hoists. Some pilots enjoyed the ride so much, they reentered the water for seconds.

While all this commotion was going on in and above the water, Cdr. W. E. Somerville, assistant air officer, and Gerald Brillhart, AM2, a HU-2 crewman, talked to the *Enterprise* crew from the ship's closed circuit TV studio. They described the sling and rescue seat, the proper method of using them, and the importance of crewman-victim cooperation. Since every sailor on board is a potential man overboard, the demonstration and explanation provided valuable training for all hands.

### Lexington (CVS-16)

Capt. Quentin C. Crommelin relieved Capt. J. M. Miller as Com-

**MORE THAN** *130,000 persons boarded the Lexington at Pensacola when the air station held an open house celebrating its Golden Anniversary.*

**SHARING A MILESTONE** *is the crew of an LPH-7-based Sea Horse which made a record landing. From left: Burrows, Sullivan, Murphy.*

manding Officer of the *Lexington*. Captain Crommelin previously commanded the ammunition ship *USS Shasta* (AE-6). Captain Miller proceeded to Washington, D.C., and a billet with the State Department's State-Defense Exchange Program.

## Forrestal (CVA-59)

For accomplishing 108 night carrier landings in six hours, VMA-331 received a "well done" from VAdm. Paul H. Ramsey, Commander, Naval Air Force, Atlantic. The landings were made aboard the *Forrestal*.

VAdm. Ramsey's message read: "Capt. Michael J. Hanley, Jr., Commanding Officer of the *Forrestal*, expressed high regard for VMA-331 as a result of the squadron's performance while aboard the carrier for qualifications. Indicative of the skill and spirit of VMA-331 was their completion of 108 night carrier landings in a continuous six-hour period by 18 pilots and 12 A-4E Douglas *Skyhawk* aircraft. Well done and a hearty welcome to our team."

This is believed to be the highest number of carrier qualifications in such a period aboard the *Forrestal*, exceeding the previous high of 89.

Another "first" was established by the *Bumblebee* pilots aboard the carrier. In a one and one-half hour period, 69 arrested landings were made.

Commanded by LCol. Stanley H. Carpenter, the squadron conducted two weeks of field mirror landing practice before boarding the ship.

## Independence (CVA-62)

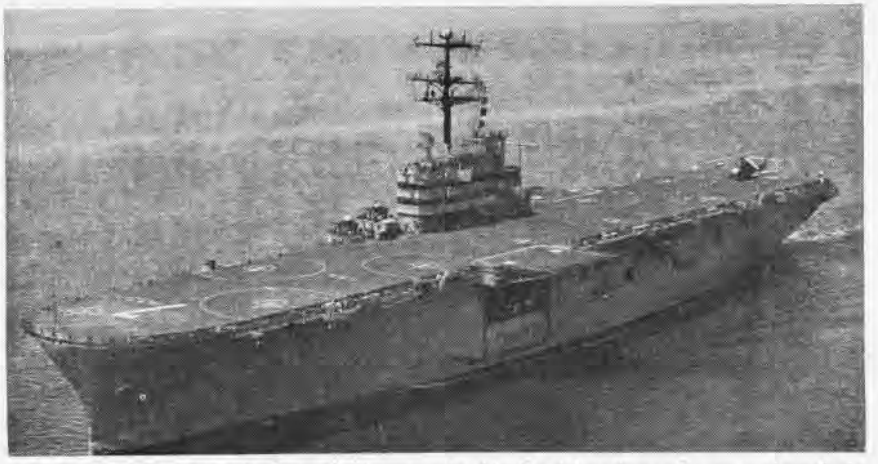
A trial project was inaugurated aboard the *Independence* when a two-man optometric team embarked to assist regular ship's company dispensary personnel in caring for the eye needs of carrier and Air Wing personnel. If the project is successful, it is possible the program will be expanded to include other units.

Lt. Frank R. Toscano, MSC, and his assistant, Michael Carey, HN, flew aboard from their home station, NAS NORFOLK. Because of the carrier's heavy training schedule and short in-port periods, the ship's company Medical Department finds it difficult to adequately handle the large number of men requiring eye examinations.

Air Force exchange pilot, Capt. Ronald J. Dinn, recorded the 62,000th landing on CVA-62.

## Guadalcanal (LPH-7)

Cdr. Patrick L. Sullivan, X.O. of the *Guadalcanal*, made the ship's 10,000th accident-free helicopter landing aboard. With Maj. Edward S. Murphy, USMC, copiloting, and Edward H. Burrows, ADR2, in the crew, the landing was made in the ship's SH-34J *Sea Horse*. *Guadalcanal's* first landing was also made by Cdr. Sullivan, who landed a Vertol HRB aboard the day before the ship was commissioned.



**THE SLEEK, TRIM LINES** *of the amphibious assault ship Guadalcanal are shown as she sails by the east coast en route to the Philadelphia Naval Shipyard for 45-day post availability period.*

## Essex (CVS-9)

*Essex*, subbing for *Lake Champlain*, embarked 312 Midshipmen for a seven-week training cruise, during which she visited LeHavre, France, Copenhagen, Denmark; and Portsmouth, England. The carrier spent six or seven days in each port visited.

The 30,000th accident free starboard catapult shot was made by Ltjg. Richard W. Cooper of VAW-12 in an E-1B *Tracer*.

## Franklin D. Roosevelt (CVA-42)

Ltjg. Patrick J. Bourke of VA-172 logged the 128,000th landing aboard the *FDR* in an A-4C *Skyhawk*.

## Saratoga (CVA-60)

*Saratoga's* 85,000th landing was made by Ltjg. Frank Brown of VF-31 in an F-4B *Phantom*. This was followed a few weeks later by another cake-cutting caper when Ltjg. C. W. Galbreath logged the 86,000th landing in an A-4C *Skyhawk*. He serves in VA-34.

# PACIFIC FLEET

## Valley Forge (LPH-8)

The 50,000th helicopter landing on the *Valley Forge* was made by LCol. Robert V. Reese, the X.O. of Marine Medium Helicopter Squadron 361.

**PHILIPPINE** *President Macapagal is piped aboard the Valley Forge for SEATO exercises.*

## Yorktown (CVS-10)

Men aboard the *Yorktown* are now worshiping in what they term "the finest chapel afloat in the Pacific."

Previously, the old crew's lounge and the chapel were one and the same. It was a makeshift affair, and had to be set up for every service. When services were held, those not attending were forced to leave and wander about the ship in search of a place to rest. Moreover, the ship reports, the setting-up for church usually took longer than the service itself.

Now, after a five-month overhaul, the carrier has a new lounge and a new chapel—each in separate spaces. The chapel features pine paneling, air conditioning, new draperies, paint and tile. There is a new carpeted, raised altar in addition to a new lectern and altar fixtures.

The *Yorktown* is now flagship for RAdm. Kenneth L. Veth, Commander, Antisubmarine Warfare Group Three. He will maintain his flag aboard during the scheduled Far East tour.

**FIRST LPH** *to issue JP-5 to jets in the Pacific is LPH-8. Fuels officer gives green stamp.*

## Ticonderoga (CVA-14)

During an Unrep with the *Herbert J. Thomas* (DDR-883), *Tico's* Dental Department gummed up some work commendably and gave shipboard journalists a story they could sink their teeth in.

Two men in the *Thomas* had teeth aching. Soon as the replenishment got underway, they were highlined to the *Tico*, rushed to the alerted Dental Department, were "de-toothed," and returned to their ship before the replenishment operation was completed. The whole thing, including the operations, took 44 minutes.

Ivan E. Gray, AMCS, leading chief of the V-6 Division, led a project started last November. The Air Department was required to provide spaces for CVW-5's storage, maintenance shops and offices. On one of six wire cages constructed in the aft section of *Tico's* hangar bay 3 is a sign identifying the builders. It reads: "Constructed by V-6 Burning & Pounding Ass'n. Liberty time cheerfully contributed to provide a home for CVW-5."

While the carrier underwent her ORI, Capt. Damon W. Cooper, commanding the *Pine Island*, flew aboard for a brief visit. He relieved Capt. J. P. Weinel as skipper of the *Ti* last month.

**LT. R. B. BALL** *of VFP-63 grins after he recorded the Ticonderoga's 60,000th landing.*

Primary Flight Control broke the news to Lt. R. F. Ball of VFP-63's Det *Bravo*. When he touched down in an RF-8A *Crusader*, he recorded the carrier's 60,000th arrested landing. It was a night flight.

## Bon Homme Richard (CVA-31)

The aviator's log book maintained by Lt. Bruce C. Morehouse of VF-194 indicates he is indeed a Naval Aviator. The book discloses he has recorded 2000 accident-free hours in the F-8 *Crusader*. Before reporting to the squadron, he was a flight instructor with VF-124. The 2000th hour was reached while the *Bon Homme Richard*, in which his squadron is assigned, was deployed to the Indian Ocean as


**LT. MOREHOUSE** *is congratulated by his C.O., Cdr. Billy Phillips, for having logged 2000 flight hours in the F-8 Crusader aircraft.*

**AIR FORCE CADETS** *aboard the Hornet receive instruction on the operation of the aircraft catapult from fuels officer, Ens. R. L. Waline.*

part of the Concord Squadron (see NANEWS, July 1964, p. 17). Lt. Morehouse was designated a Naval Aviator in October 1956.

## Princeton (LPH-5)

Bobby Hudson, BM2, has seen the *Princeton's* mission change from an attack carrier to an antisubmarine warfare carrier to an amphibious assault ship. His vantage point was authoritative: right aboard ship. Last June he picked up orders to Commander in Chief, Atlantic Fleet, and left his home of the last nine years, the *Princeton*.

Hudson reported aboard in September 1954, fresh out of boot camp. Since then, he served under 11 different commanding officers. In leaving, regretfully, he indicated he'd like to have made one more cruise aboard, to make it an even decade of service in the same ship.

Capt. Paul J. Knapp, commanding, noted on his departure, "It is the solid performance and dedication to duty displayed by young men like Hudson which makes service in the Amphibious Navy so richly rewarding. From all of your shipmates, well done and smooth sailing."

## Hancock (CVA-19)

*Hancock's* major overhaul at San Francisco Naval Shipyard is completed. She underwent refresher training off San Diego and returned to home port Alameda. While in the San Diego area, she celebrated (June 9) her twentieth anniversary in commission. She is PacFleet's oldest aircraft carrier (Lant's *Essex* has seniority) and is the Navy's oldest attack carrier.

In addition to the shipyard work reported in the May issue of NANEWS, *Hancock's* arresting gear system was replaced with one which will allow an increase in landing speed of aircraft and make possible safer landings. About 20,000 linear feet of wood was replaced on the flight deck and 20,000 square feet of aluminum added to provide a more durable and longer-lasting flight deck. The flight deck was also widened in places.

Capt. Arthur J. Brassfield is Commanding Officer of the *Hancock*.

## Kitty Hawk (CVA-63)

The Assistant Secretary of the Navy for Financial Management, the Honorable Victor M. Longstreet, and RAdm. F. G. Bennett, Assistant Comptroller of the Navy, accompanied VAdm. Thomas H. Moorer, Commander Seventh Fleet, on an overnight stay in the *Kitty Hawk*. Purpose of the visit was to familiarize the Secretary with the mission of the Fleet.

In ceremonies aboard the *Kitty Hawk*, VAdm. Roy L. Johnson assumed command of the U.S. Seventh Fleet, relieving VAdm. Thomas H. Moorer, who assumes duties in Pearl Harbor as Commander in Chief, U.S. Pacific Fleet. In 1955, Adm. Johnson became the first commanding officer of the *Forrestal*. His last assignment was as Deputy Commander in Chief, U.S. Pacific Fleet.

## Constellation (CVA-64)

As *Constellation* departed for her WestPac tour, Capt. Frederic A. Bardshar, commanding the carrier, learned he had been selected for Rear Admiral.

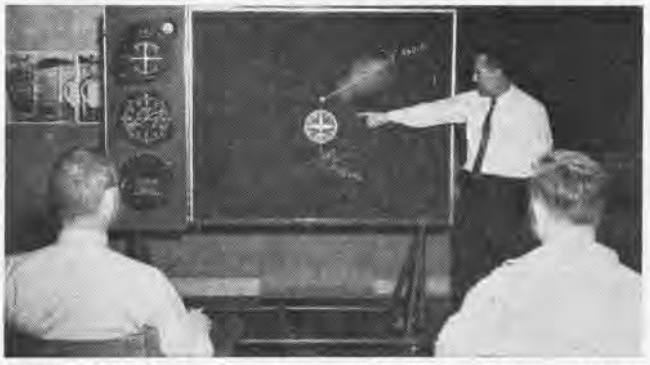
Newly formed Carrier Division Nine, comprised of the *Constellation*, Carrier Air Wing 14, and two destroyers, is commanded by RAdm. William S. Guest. On reaching the Seventh Fleet, the Division was joined and rounded out by an oiler, an ammunition ship, a supply ship and a reefer.

LCdr. Fred Ferrazzaro, Operations Officer for VF-142, logged the carrier's 24,000th landing. Ltjg. Hugh Sarver flew as his RIO. The squadron also logged the 21,000th landing (Cdr. C. H. Brown with Ltjg. T. S. Slater); the 22,000th (Lt. J. C. Tibbs with Ens. L. W. Branchflower).

## Hornet (CVS-12)

*Hornet* hosted 261 Air Force Academy cadets for a week of naval orientation. Most of the Falcon Cadets had completed their first year at the academy. Their instruction began with lectures on vital aspects of shipboard procedure and was followed with extensive tours of the ship, observation of night and day air operations, and films explaining the role of the Navy. The carrier is commanded by Capt. J. I. Hardy.

# NAO PROGRAM ANSWERS EXPANDING NEEDS



**CORPUS CHRISTI** *instructor explains TACAN procedures to NAO's. In 12-week course students specialize in five major types of navigation.*

**STUDENTS GET** *80 hours in "Flying Classrooms" working on navigation at Corpus Christi. They fly 20 hours in five aircraft at Pensacola.*

***It is 2340 somewhere in the Mediterranean. A merchant ship has sighted what she believes may be a Russian submarine. U. S. Navy authorities are alerted and a decision is made quickly. "Search and find."***

***The word is flashed to surface ships of the Sixth Fleet and relayed to the air station at Sicily where a patrol plane squadron responds. A buzzer sounds, springing an ASW ready crew into action. Fifteen minutes later their SP-2H Neptune is clawing for altitude en route to the contact point.***

***"Nav, pilot. Give me a heading to datum from the 60-mile fix," orders the plane commander.***

***"Nav, aye. Stand by," comes the reply. Seconds later a course has been determined and the navigator reports, "Steer 079, ETA datum 0209."***

***In less than an hour, the Navy has swung into action a surface/air team of submarine hunters. In the Neptune, the navigator moves to his battle station to coordinate the search for ships and planes.***

***Once in the area, sonobuoys are dropped. Minutes later the sub's position is pinpointed. The Neptune sweeps low over the surface, searchlights blazing in the night, to check the ship's course, speed and hull number. It is identified as a French submarine and no action is needed.***

**By Carolyn Barrett, JO3**

THIS PARTICULAR mission featured a comparatively new breed of men, the Naval Aviation Officer (NAO). With the advent of complex electronic equipment and newer and faster airplanes, theirs is a vital role. Today, in answer to the growing need for NAO's, the Navy is improving and constantly expanding the instruction syllabus for them.

Training begins at Pensacola where NAO's undergo pre-flight instruction identical to that of student aviators. For those who are officers, the syllabus lasts six weeks. Cadets take a 16-week curriculum. After this, students report to the basic NAO training school, also at Pensacola, for an eight-week course divided into four phases.

These include academic instruction in navigation, aviation electronics, communications, air intelligence, leadership, special weapons and meteorology; flight survival; flight training during which students fly about 20 hours in five types of aircraft (T-34, T-28, TC-45J, S-2A, T-1A); and special training which emphasizes ASW operations and maintenance procedures.

After basic training, students branch out to a variety of schools. Some report to Memphis for instruction in electronics and become ground specialists. Others train for billets as radar intercept officers, airborne controllers, bombardiers, ASW tactical coordinators or air intelligence officers.

About 70 per cent, however, report to CNAVanTra at NAS CORPUS CHRISTI. Here they attend 12 weeks of school and graduate as specialists in aerial navigation. They receive advanced instruction in ASW, flight rules and regulations and meterology, but the emphasis is on five types of navigation which they will use in the Fleet. These types are: dead reckoning, celestial, LORAN, grid and pressure pattern. The NAO gets practical experience by solving navigation problems during 80 hours of flight in converted C-117D's called "Flying Classrooms." According to their type training, NAO's are assigned billets in VF, VAW, VW, VR, VQ, VP, VA or VAH squadrons in the Fleet.

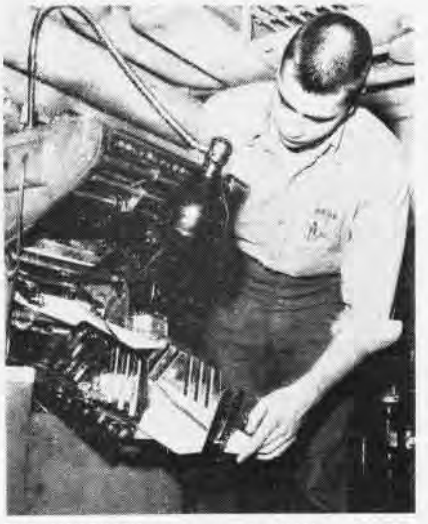
LAST MARCH the Basic Naval Aviation Officer School at NAS PENSACOLA graduated its 100th class. More than 2300 men have been trained at the school since it was established in 1960. Every two weeks another class completes the initial stage of a syllabus which will eventually lead them to a variety of assignments in the Fleet. The Navy, recognizing the need for NAO's, recently took steps to elevate the status and importance of the men who fly, but not at the controls, of today's sophisticated aircraft.

OPNAV Instruction 3710.15D has been issued and places flying NAO's (Naval Aviation Observers) in a DIFOT category similar to that of aviators. Previously, the NAO in a non-operational billet had no flight-time requirements and subsequently received no flight pay. The instruction directs them to maintain flight proficiency regardless of assignments, thereby assuring that they remain in an acceptable state of combat readiness throughout their careers.

Before the NAO program gained momentum, aircrewmen billets were regarded as temporary in nature. Now that significant attention has been directed toward those who fill NAO billets, career opportunities have been increased. Also, morale has improved and, as a result, the Navy is realizing a higher performance factor so necessary in the electronic and supersonic Fleets of the U.S. Navy.

**KEY CHECKS** *a job order brought to him by S. W. Hoder, PHAN, from photo laboratory.*

**THE LETTERPRESS,** *which is run by W. R. Brown, SN, is set and operated by hand.*



**THE MULTILITH** *press prints POD and other forms. It is operated by J. J. Annan, AN.*

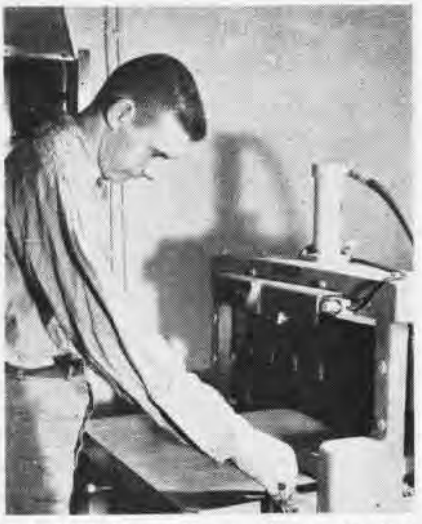
# THINK INK AND 'ROLL THE PRESSES'

AIRMAN JOHNSON picked up a copy of the ship's paper, spotted his name in it and mailed the paper home. Earlier, the chief stood before him at morning muster and read the Plan of the Day. Later, his division officer initialed a supply request and Johnson obtained some striping.

It was a day like any other day aboard a carrier the size of USS *Constellation* (CVA-64)—at sea or in port. Were it a holiday, such as Thanksgiving or Christmas, Johnson would have studied the handsomely printed menu and, like as not, would have sent a copy of it home, too. This would let the folks know he did not go hungry on this special day.

The ship's newspaper, the POD, the supply request, the menu, and hundreds of other reproduced papers, announcements, forms, and special items are produced daily in the carrier's print shop. The versatility and variety of the workmen and jobs are a testimonial to the professional skill of the carrier's printers and lithographers, as well as to the modern equipment which the USS *Constellation* provides.

The *Connie's* print shop is equipped to produce both offset and letterpress printing, to make halftones for the reproduction of pictures, to collate, fold and trim large pages. Under direction of Carlton B. Key, LI1, eight men produce an average of 10,000 pieces of printed material a day. "They care enough to print the best."



**THE CUTTING** *machine is adjusted by N.A. Belmer, LI3, to trim 700 sheets at once.*

**THE ENGRAVING** *camera, set by J. R. Mudd, LI3, is used for photo offset printing jobs.*

**STUDYING** *a negative for photo offset, S. J. Jablonski, SN, looks for clarity and flaws.*


## Weather Contests Are Won

### Naval Service Gives Out Awards

ANNUALLY, the Naval Weather Service takes a calculated look at the overall observational performances of units in the field and dispassionately hands out kudos and brickbats. In recently publishing the 1963 tally, the Service described the surface units work as solid and the shipboard upper air units as disappointing.

In OPNAV Notice 3590 of June 4, 1964, the award winners in the various categories were listed. NAS ATSUGI, Japan, competing with 73 other units qualifying, won the Excellence award in Surface Observations (Shore Station). Excellence in Surface Observations (Ship) went to USS *Valley Forge* (LPH-8).

Excellence in Upper Air Observations (Shore Station) went to Fleet Weather Central, Kenitra, Morocco, while the ship unit award in the same category went to USS *Kretchmer* (DER-329).

NAF NAPLES received the Outstanding Performance Award for "the high level of performance of duties by Weather Service personnel of the NAF; for their comprehensive and accurate flight briefing program for both U.S. Navy and NATO military pilots; for the effectiveness of their services to Fleet units; and for their demonstrated capability in leadership, training, administration and community relations."

Special Merit Awards went to Airborne Early Warning Squadrons One and Four "for continued outstanding performance, over a two-year period, in the hazardous missions of Hurricane/Typhoon Reconnaissance."

To be eligible in the competition, land stations were required to make 2000 surface observations, while the ships were required to take only 400. In the Upper Air Observations categories, land stations were required to take a minimum 200 soundings, while the ships need a minimum of 80.

In commenting on the competition, the Weather Service noted that brilliant surface performances were turned in by Quonset Point, Miramar, Whiting Field, Kaneohe Bay, Olathe, China Lake, Pensacola (Sherman Field), Yokosuka, New Iberia, *Valley Forge* and *Hornet*.

"The ultimate performance, however," said the Weather Service, "was that of NAS ATSUGI. In a photo-finish with Quonset Point (both had 0.0 per cent discrepancies), Atsugi could point with pride to an unbelievable 8760 observations with no accountable error. Quonset, with only four errors, had to be content with the place position. In all, a record 23 stations and four ships equalled or bettered the goal of 0.5 per cent discrepancies."

## VP-1 Bombs Ice in Alaska

### Jam Threatened Eskimo Villages

Patrol Squadron One based at NS KODIAK used precision bombing to relieve an ice jam which had formed at the junction of the rampant Kuskokwim River and Aniak slough, 350 miles northwest of Kodiak. Crews Five, Eight and Eleven, commanded by LCdr. E.J. Christensen and Lts.' J.W. Ciboci and J.J. Plesur, respectively, attacked the ice on June 1, from 2000 feet using 500-lb bombs. The weapons were of the armor-piercing, delayed-firing type which exploded beneath the ice.

Overflow of the 550-mile long Kuskokwin River, caused by the ice block near Aniak, had formed a huge lake above Aniak and endangered the Eskimo villages of Russian Mission and Napaimuit. VP-1 crews have performed similar missions in the past.

## PERSONAL GLIMPSES

# Editor's Corner

**PHILOSOPHY FOR CLIMBERS. Under recreational notes published in the NAS Atsugi, Japan, *Sky Writer*, Jess Green wrote: "The recreation center will feature a two-day mountain climbing trip to Mt. Fuji. I had the experience to go on one of these trips and I can say that you will never regret going. Remember the old saying, 'He who never climbs Fuji is a fool. He who climbs it twice, a fool.' "**

*Add to your Vocabulary.* The word THIXOTROPIC is becoming more common in the space glossary. The term is applied to liquid fuels which are jelled or semi-solid in storage but which become liquid when pumped. The *Aerojet Booster* explains, "A thixotropic rocket fuel will (1) hold solid particles of high energy additive suspended evenly throughout, (2) seal the tank if punctured, and (3) keep pressure at pump intake constant despite violent changes in speed or attitude during engine operations."

**BEWARE THE OVERFRIENDLIES. In advance of his ship's return to CONUS after a Pacific tour, the commanding officer of the USS *Midway*, Capt. W. Wright, told his crew (via an editorial in the *Midway West*) to watch out for the "over friendlies."**

**"The natives of these United States are known to be very friendly, particularly towards sailors. So it is this friendliness that I want to warn you about."**

**Citing examples of how "your worst enemy may be the man who puts his arm around your shoulder," Capt. Wright cautioned his men about unscrupulous salesmen, shysters, women, and the no-money-down promotions incident to the American way of life.**

**"Now if I have scared you," he concluded, 'please don't jump ship while we are still in WestPac. Don't be afraid of the friendly land to the east. Actually, 99 per cent of the people are sincerely friendly. It's just the one per cent I'm talking about. So be alert."**

*And why not . . .?* Among recipients of Mother's Day cards this year was the Master at Arms, Barracks 18, NAS Los Alamitos. According to the station newspaper, *Crew's News*, "The men felt they should show their fondness and appreciation for the MAA who takes such excellent care of them and their needs. Congratulation, Mother Joe!"

**GET ALL THE FACTS. When a seaman aboard the USS *Bennington* received a telegram recently, there was mild titillation among the communicators—until the facts were known. The wire said, "Congratulations. It's a girl. Mother and daughter okay. Exact image born April 20." The unmarried sailor corrected false impressions by reporting it was his horse that was the subject of the wire.**

*Alfonse and Gaston.* When the *Ranger* sailed out the Golden Gate recently, three visiting Canadian destroyers chanced to be heading westward, too. As a friendly gesture, the C.O. of the carrier, Capt. W.E. Lemos, ordered a visual signal sent to the three "escorts." "Thank you for your excellent protection during our sortie." The Canadians, according to a story published in the *Ranger's* newspaper, came back, "Thank you, but we thought YOU were protecting US."

**AIRPLANES ARE FLEXIBLE, TOO. This month's rare photo is that of an A-3B Skywarrior taking on fuel from the smaller A-4C *Skyhawk*. The picture was snapped when the *Saratoga*-based *Skywarrior's* tailhook failed to extend properly, necessitating a trip to a runway on land. Thanks to the re-fueling from the tanker, the crew made an uneventful landing at Sardinia in the Med.**

*Life Can Be Beautiful.* Journalist John Burlage, USS *Ranger*, reported the following as a true-life vignette: A sailor ran pell mell down the pier but, just 40 feet shy of his mark, the carrier's brow (gangway) was lifted away by a crane. "There he was—thinking horrible thoughts about what they do to sailors who miss ship's movements." At that moment, however, a friendly NAS Alameda forklift operator saw his plight and said, "Climb aboard." The sailor clambered onto the forks and the operator started punching buttons. "If was a beautiful sight to see. The forklift reached the ship's forward elevator with its unlikely cargo at main deck level. The sailor hopped off, turned, snapped a sharp salute to his smiling benefactor, and disappeared into the ship."

**BARBERSHOPPING AT SEA. The carrier *Shangri La*, during its recent Med cruise, was represented at many social functions ashore by a barbershop quartet known as "Three Wings and a Tooth." Reason for the intriguing group title: three of the singers were pilots, one a dentist.**

*Another Cake, Another Reason.* Not to be outdone by X000th landings, X000th cat shots and even record commode cleaners, the Combat Information Center on the USS *Enterprise* came up with a new reason for a cake. The ship's CIC plotted its 2000th surface target and promptly called for the ship's bakers. As the CIC division officer, Lt. A.J. Lacklen, pointed out, "It's a record for nuclear powered carriers."

**CRYPTIC NOTE FROM A MAINTENANCE OFFICER. Writing in his monthly letter to the squadron's home base, a VFP lieutenant wrote, "The item most needed during an eight-month cruise is not available through normal supply channels." No explanation given . . . or needed.**

MUCH-NEEDED GULP

# LETTERS

**Book Wanted**

SIR: A friend of mine has a copy of a book entitled, "The Evolution of Aircraft Carriers," by Scot MacDonald. I want to obtain a copy of my own. Would you please let me know where I may obtain it?

GEORGE ROGERS

Chicago, Ill.

' Simply send a check or money order in the amount of 55 cents to the Superintendent of Documents, Government Printing Office, Washington, D.C., specifying "The Evolution of Aircraft Carriers." The book is a compilation of the series of articles in Naval Aviation News which ran between February 1962 and November 1963.

**Mothers and Sons**

SIRS:

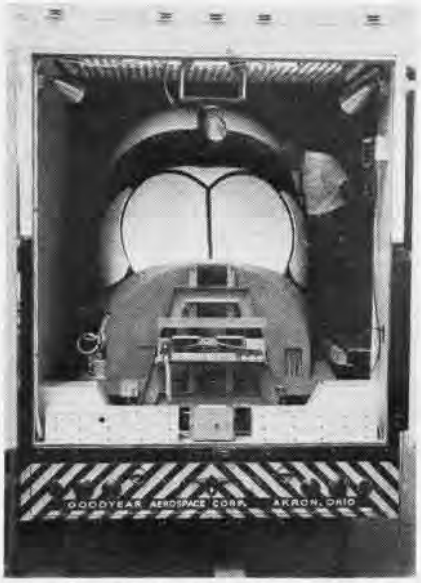
I read the article, "Eight Sons, Three Mothers," with a great deal of interest in the May issue. I know there must be many mothers with more than one son as a Naval Aviator. However, I couldn't resist this opportunity to write to you about our two sons, both Naval Aviators. Mrs. Scott and myself are very proud of our two boys and the job they are doing. Lt. P.J. Scott is serving with VF-143, and Lt. T.W. Scott is serving with VF-124. It would be very interesting to know how many multiple aviator families there are.

I enjoy reading *Naval Aviation News* and eagerly await the next copy.

S.A. Scott

Fresno 26, California

' We certainly appreciate hearing from those who have several of their family in the Navy. Thank you for writing.




**UNVEILED AT NAS OCEANA** *recently is this A-6A weapons systems trainer. Built by Goodyear Aerospace Corporation, the device simulates operations of the Intruder attack bomber and has elaborate computer network.*

**You're Right!**

SIRS: Being an aircraft electrician on A-4 aircraft, I was quick to recognize the photo of an A-4B incorrectly termed an A-4C on page 16 of the June issue.

The approach light is clearly visible on the nose landing gear strut. A-4C aircraft have their approach lights on the leading edge of the starboard wing. Also A-4C's do not have a hole in the tip of the nose as is pictured in the photo.

Score one for me.

CHARLES F. GREENE
NAS QUONSET POINT O&R

' Score 100 for you! We didn't even see a light fixture.

## Memorial Fund Announced

### USS Essex Appeals to Shipmates

The Navy's oldest operating aircraft carrier, USS *Essex* (CVS-9), has launched a campaign to memorialize the distinguished service rendered to America by the four ships which have borne that name. In conjunction with the current money-raising drive for the Army-Navy Museum, to be built on the site of the Pemberton House in Philadelphia, the carrier is attempting to raise funds to sponsor an "*Essex* Room" at the museum.

The room would be a tribute to *Essex*-named ships which have served their country since 1799. The Salem frigate, *Essex* I, was commanded by such Naval luminaries as David Porter and Edward Preble. *Essex* II was an ironclad in the Civil War and a leader in revolutionary types of sea warfare. *Essex* III marked the transition from sail to steam and used both means of propulsion. Launched in 1870, she provided 60 years of service.

CVS-9 has also achieved an impressive record. She served in the Pacific in WW II, Korea, Dien Bien Phu, Lebanon, Formosa and Cuba.

An appeal is directed to all former *Essex* shipmates and friends to contribute to this two-pronged campaign. Contributions will aid in the establishment of a much-needed museum in which the memorabilia of the early Navy will be a constant reminder of our nation's seafaring heritage. And these donations will also help to immortalize the name of one of the Navy's most distinguished line of ships. Contributions should be sent to:

Essex Naval Museum Fund
USS Essex (CVS-9)
Fleet Post Office
New York, New York

Every contribution will be acknowledged by the ship on behalf of the thousands of men who lived and died in the defense of their country on the *Essex*.

## Contract System Improved

### ASO Method Simplifies Paper Work

The Navy's Aviation Supply Office (ASO) in Philadelphia has begun a one-year test of a simplified purchase contract method. The system is designed to reduce the length of typical 20-page contracts to seven pages.

An estimated 3500 fixed-price contracts will be issued using the new method which employs reference numbers keyed to a Standard Contract Clause Book. Previously, about 100 clauses were included in all or most contracts.

This deviation from normal procedure was approved by the Armed Service Procurement Regulation Committee of the Department of Defense. Should the system prove satisfactory, other agencies may utilize it.

The clause book will be automatically distributed to all firms doing business with the Philadelphia activity.

## Kawanago Quits for School

### First USFJ Employee after WW II

Shinsuke Kawanago, ending 18 years service at NAS ATSUGI, Japan, has returned to senior high school classrooms he left as an instructor years ago. According to the Japanese government, he was the first Japanese employed by U.S. Forces in Japan.

In August, 1945, he was sent to Atsugi by the Japanese Foreign Office as a Field Interpreter with the official party that arranged the reception of Gen. Douglas MacArthur. He was employed by NAS ATSUGI from that day until his retirement.

Kawanago recruited the first labor assistance required by U.S. Forces in 1945. This was a difficult task because of the confusion in immediate post-war Japan.

Atsugi was placed on a standby status until the outbreak of the Korean Conflict in 1950. At that time, the Navy selected Atsugi for its major air facility in the Far East to support United Nations efforts in Korea.

The air station was again faced with an immediate, full-scale critical shortage of experienced employees. Kawanago initiated a recruiting drive and supplied the station with 300 employees within a two-week period.


# SQUADRON INSIGNIA

Naval Auxiliary Air Station Chase Field, Beeville, Tex., has been a training site for student aviators since 1943. Presently, VT-24, VT-25 and VT-26 instruct future jet flyers in F-11 Tigers or TF-9J Cougars. Jets streak through traditional Navy wings on the station's insignia, symbolically depicting Chase Field's mission in preparing men for Fleet duty in the far corners of the earth.


NAVAL AVIATION

# NEWS

## AT SEA WITH THE CARRIERS

## MEMO FOR

*All P. I. O.'s and C. O.'s:*

*Editors rarely cry. But what would be YOUR reaction if you received the following note from a carrier sailor:*

*'Dear Sir: I just want to call your attention to the fact that somewhere at sea is the carrier _____.* Embarked in CAW ____. The combination of these two makes a unit that is hard to beat. However, in reading back issues of Naval Aviation News, I noticed that somehow she was omitted from your carrier section. If I read the wrong issues, forgive me. I just wanted to mention the fact that we are out here and going strong. Please don't misunderstand this letter. I'm not complaining about your publication. It is a fine job and I enjoy it. However, when I mention _____ and CAW ____, I would be embarrassed if I had to explain what I was referring to. She's a grand old lady, sir.'*

*** Names have been omitted to protect the guilty. The rest is true. Is your carrier's news being sent in to Naval Aviation News every month?**

AS YOU TRAVEL / TELL US